

2 · 0 · 1 · 2
O C E A N
S C I E N C E S
M E E T I N G



February 20–24, 2012

Salt Palace Convention Center
Salt Lake City, Utah, USA

www.sgmeet.com/osm2012



THE OCEANOGRAPHY SOCIETY

ASLO

AGU
American Geophysical Union

PROGRAM BOOK

Contents

Welcome to the 2012 Ocean Sciences Meeting.....	2	Computer Equipment.....	17
Meeting Sponsors.....	2	Speaker Ready Room.....	17
Past Ocean Sciences Meetings.....	2	Bring a Backup.....	17
2012 OSM Organizers.....	3	During Your Presentation.....	17
About Salt Lake City.....	3	Audio-Visual Equipment.....	17
Meeting Venue.....	3	Security.....	17
Daily Newspapers and Addendum to the Conference Program.....	4	Poster Presentations.....	17
Social Events.....	4	OSM 2012 Supporters.....	18
Opening Welcome Mixer Reception.....	4	OSM 2012 Exhibits.....	18
Jam Session.....	4	Sponsors and Exhibitors.....	18
RPM Challenge for Ocean Sciences.....	4	Media/Press.....	22
A Special Thank You.....	4	At the Meeting.....	22
Plenary Lectures and Presentations.....	4	Concessions.....	22
Dr. Mark R. Abbott, Oregon State University.....	4	Breaks and Refreshments.....	22
Dr. Kelly Benoit-Bird, Oregon State University.....	5	Coat Check.....	22
Dr. Demian Chapman, Stony Brook University.....	5	Messages.....	22
Dr. Mick Follows, Massachusetts Institute of Technology.....	5	Business Center.....	22
Dr. Chris Reddy, Woods Hole Oceanographic Institution.....	6	Internet.....	22
Award Lectures.....	6	ATM Machines.....	22
TOS - Munk Award Lecture.....	6	Parking.....	22
AGU - Rachel Carson Award Lecture.....	6	Special Needs.....	23
AGU – Sverdrup Award Lecture.....	7	Emergencies.....	23
Poster Sessions.....	7	Family Room.....	23
Film Festival.....	7	Child Care Information.....	23
Auxiliary Meetings.....	7	For More Information.....	23
Workshops and Town Hall Meetings.....	8	At A Glance Schedules.....	24-28
Opportunities for Students and Early Career Participants.....	15	Monday At A Glance.....	24
Outstanding Student Presentation Awards.....	15	Tuesday At A Glance.....	25
Student Social Mixer.....	15	Wednesday At A Glance.....	26
Student Workshops.....	16	Thursday At A Glance.....	27
Student Career Center and Lounge.....	16	Friday At A Glance.....	28
ASLO Multicultural Program.....	16	Session Schedules.....	29-125
Early Career Mixer.....	16	Monday, February 20 - Orals.....	29
Oral Presentations.....	16	Monday, February 20 - Posters.....	38
Advance Submission.....	16	Tuesday, February 21 - Orals.....	51
File Formats.....	16	Tuesday, February 21 - Posters.....	60
Microsoft PowerPoint Tips.....	16	Wednesday, February 22 - Orals.....	72
Fonts.....	16	Wednesday, February 22 - Posters.....	74
Images.....	16	Thursday, February 23 - Orals.....	87
Video/Audio.....	16	Thursday, February 23 - Posters.....	97
Apple Macintosh Users.....	17	Friday, February 24 - Orals.....	119
Laptops.....	17	Downtown Salt Lake City Area Map.....	126
Presentation Room.....	17	Salt Palace Convention Center Map.....	127
		Author Index.....	130

Welcome to the 2012 Ocean Sciences Meeting

On behalf of the program committee, we welcome you to the 2012 Ocean Sciences Meeting.

The meeting includes over 3,000 oral and poster presentations plus plenary talks. Plenaries have been grouped on Wednesday morning to allow some time for session participants to “reenergize” and get excited by topics probably outside their daily attention. We encourage participants to put posters up on Monday and leave them up for the entire meeting to maximize the exposure of their material; specific times for each group of poster presenters to be available to talk about their posters have been scheduled between 16:00 and 18:00 on Monday through Thursday. This poster discussion-time was chosen so that it did not conflict with oral sessions or scheduled supplemental activities. The poster sessions also include receptions to provide opportunities to make professional connections in a social setting. Supplemental activities are scheduled during the lunch break or early evening after the poster sessions.

We hope that you find the meeting exciting, informative and relevant.

Meeting Co-Chairs,

Mel Briscoe (TOS)
Consortium for Ocean Leadership

Eric Itsweire (AGU)
National Science Foundation

Mary Scranton (ASLO)
Stony Brook University

Meeting Sponsors

The Oceanography Society

The Oceanography Society was founded in 1988 to disseminate knowledge of oceanography and its application through research and education, to promote communication among oceanographers, and to provide a constituency for consensus-building across all the disciplines of the field. In addition to sponsoring scientific conferences, TOS presents prestigious awards such as TOS Fellows, The Walter Munk Award presented in recognition of distinguished research in ocean acoustics, and The Jerlov Award for contributions to the field of ocean optics. OCEANOGRAPHY magazine, published quarterly by TOS, has become widely respected throughout the marine science community.

American Geophysical Union

The American Geophysical Union (AGU) is an international scientific society with over 60,000 members representing over 148 countries, committed to advancing Earth and space science. Established in 1919 as a committee within the National Research Council of the National Academy of Sciences, AGU was independently incorporated in 1972. Since its founding, AGU is dedicated to furthering the sciences of geophysics through the individual efforts of our members and in cooperation with

other national and international scientific organizations. These goals are met through publishing scientific journals and other technical publications, sponsoring scientific meetings of various sizes throughout the year and a variety of other educational and scientific activities.

The purpose of the American Geophysical Union is to promote discovery in Earth and space science for the benefit of humanity. AGU galvanizes a community of Earth and space scientists that collaboratively advances and communicates science and its power to ensure a sustainable future. For more information or to join AGU, please visit www.agu.org.

Please! No recording of individual talks or sessions.

Audio taping, videotaping, or photographing of presentations is not allowed at the meeting.

Thank you for your cooperation.

Association for the Sciences of Limnology and Oceanography

For more than 50 years, ASLO has been a leading professional organization for researchers and educators in the field of aquatic science, working to provide for their needs at all phases of professional

development. ASLO is best known for its highly rated research journals, its interdisciplinary meetings and its special symposia. The society supports increasingly important programs in public education and outreach, and public policy. It strives to encourage student participation and to increase opportunities for minorities in the aquatic sciences.

Historically, ASLO has been known as The American Society of Limnology and Oceanography. In 2011, the ASLO membership voted overwhelmingly in favor of changing the name of the society to the Association for the Sciences of Limnology and Oceanography to better represent its international membership.

Past Ocean Sciences Meetings

This is the 16th Ocean Sciences Meeting and is a joint meeting of TOS, AGU and ASLO.

Past meetings include:

- The 15th Ocean Sciences Meeting, a joint meeting of AGU, ASLO and TOS was held 22-26 February 2010 at the Oregon Convention Center in Portland, Oregon.
- The 14th Ocean Sciences Meeting, a joint meeting of AGU, ASLO, TOS, and ERF was held 2-7 March 2008 at the Orange County Convention Center in Orlando, Florida.
- The 13th Ocean Sciences Meeting, a joint meeting of ASLO, ERF, TOS and AGU, was held 20-24 February 2006, at the Hawaii Convention Center located in Honolulu, Hawaii.
- The 12th Ocean Sciences Meeting was held for the first time in Portland, Oregon, 26-30 January 2004, at the Oregon Convention Center and was sponsored by AGU. An alternate Ocean Sciences Conference was held in Honolulu, Hawaii, 13-20 February 2004, and was jointly sponsored by ASLO and TOS.
- The 11th Ocean Sciences Meeting, a joint meeting of ASLO and AGU, was held 11-15 February 2002 at the Hawaii Convention Center in Honolulu, Hawaii.
- The 10th Ocean Sciences Meeting, a joint meeting of ASLO and AGU, was held 24-28 January 2000 in San Antonio, Texas.
- The 9th Ocean Sciences Meeting, a joint meeting of ASLO and AGU, was held 9-13 February 1998 in San Diego, California.

- The 8th Ocean Sciences Meeting, a joint meeting of ASLO and AGU took place 12-16 February 1996 in San Diego, California.
- The 7th Ocean Sciences Meeting, a joint meeting of ASLO and AGU was held 21-23 February 1994 in San Diego, California.
- The 6th Ocean Sciences Meeting, a joint meeting of ASLO and AGU, was held 12-16 February 1992 in New Orleans, Louisiana.

2012 OSM Organizers

Meeting Co-Chairs:

Mel Briscoe (TOS)

Consortium for Ocean Leadership
mbriscoe@oceanleadership.org

Eric Itsweire (AGU)

National Science Foundation
eitsweir@nsf.gov

Mary Scranton (ASLO)

Stony Brook University
mscranton@notes.cc.sunysb.edu

Organizing Committee:

Kay Bidle

Rutgers University
bidle@marine.rutgers.edu

Amy Burgess

Western Washington University
burgesa@students.wvu.edu

Regina Easley

University of South Florida
reasley@marine.usf.edu

Ken Golden

University of Utah
golden@math.utah.edu

Peter Huybers

Harvard University
phuybers@fas.harvard.edu

Kimberly Keats

Memorial University
kkeats@mun.ca

Susanne Keeley

AGU
SKeeley@agu.org

Jim Lerczak

Oregon State University
jlerczak@coas.oregonstate.edu

Jim McManus

Oregon State University
mcmanus@coas.oregonstate.edu

Jenny Ramarui

TOS
jenny@tos.org

Helen Schneider-Lemay

ASLO
business@aslo.org

Julie Vanderhoff

Brigham Young University
jvanderhoff@byu.edu

Brenda Weaver

AGU
bweaver@agu.org

Cheryl Ann Zimmer

University of California, Los Angeles
cazimmer@biology.ucla.edu

About Salt Lake City

While you are in Salt Lake City for the great science to be presented at the meeting as well as the opportunities to get together with your colleagues from the sponsoring societies, you will want to take advantage of the beauty, attractions, culture, and fun that this city has to offer.

Visitor Information Centers are conveniently located in downtown Salt Lake at the Salt Palace Convention Center. You will be pleased to know that Salt Lake City offers a wide variety of restaurants, bars, pubs and night clubs within the downtown area and beyond. Restaurants, bars and clubs all offer full bar service. The minimum age to purchase or consume alcohol in Salt Lake City is 21. Most clubs and lounges in the City are open from 11:00 am until 2 am.

The Salt Lake City Convention and Visitors Bureau will be on site during the meeting to make suggestions and to help meeting participants with questions.

The light rail system includes several stops in the convention/hotel district. Attendees will find it easy to get around Salt Lake City. Whether heading a couple blocks to the Gateway Center for shopping and entertainment, or historic attractions around downtown, the light rail system is quick, easy and free of charge within the downtown area!

A map of the downtown SLC area is located on page 126 of this program.

Meeting Venue

The Salt Palace Convention Center (SPCC) combines spacious meeting facilities with 21st-century environmental technology. Containing 675,000 square feet of conference area, management strives to reduce, reuse and recycle. The 2006 expansion of SPCC was awarded the U.S. Green Building Council's Silver LEED status for being designed and constructed utilizing environmentally responsible techniques. A key component of this planning utilizes water efficient landscaping which has reduced anticipated water needs for the facility's landscaping by 50 percent.

Hotels, restaurants and other venues are in close proximity to the Salt Palace Convention Center. Over 140 restaurants, bars, nightclubs and brew pubs are within walking distance. The TRAX light rail system offers free fares in the convention district.

A map of the SPCC is located on page 127 of this program.

Daily Newspapers and Addendum to the Conference Program

In addition to this conference program book, daily newspapers which summarize each day's scientific program will be available on tables near the entrance to the exhibit hall. Changes to the scientific program will be published on an addendum that will be posted on message boards in that same location.

Social Events

Opening Welcome Mixer Reception

Sunday, 19 February 2012, 19:00 – 21:00, South Foyer

The opening welcome mixer reception will be held on Sunday, 19 February 2012. Conference registration will be open just prior to the reception to allow you to pick up your conference materials. Light hors d'oeuvres and a cash bar are available.

Jam Session

Tuesday, 21 February 2012, 20:00 to 24:00
Lumpy's Downtown Salt Lake City (145 W. Pierpont Avenue)

This event will be an opportunity to enjoy the musical talents of fellow scientists. Having occurred during the 2010 meeting, quite a following has developed among both musicians and audience members. Relax at the jam session and spend time in a variety of ways - visiting with colleagues or performing with other scientists-musicians and providing an entertaining evening for everyone. Check <http://www.sgmeet.com/osm2012> for current information.

Musicians are invited to bring musical instruments and join the performance on the evening of Tuesday, 21 February 2012

RPM Challenge for Ocean Sciences

Monday, 20 February - Friday, 21 February, Room 151 F

Organizers: Timothy Moore, University of New Hampshire, timothy.moore@unh.edu; Michael Novak, NASA, michaelgeza@gmail.com

During the month of February, musicians from around the world - both professional and amateur - will be responding to the RPM Challenge (<http://www.rpmchallenge.com>). The challenge is to record a CD of original music during the month of February. We will be offering the chance to musicians who will be attending Ocean Sciences 2012 to record an original song for a joint Ocean Science contribution to the RPM Challenge. We will not have amplifiers, so logistically are limited to guitar or acoustic instruments only. All styles of music are welcome. To arrange a time for recording your contribution in a room at the Salt Palace Convention Center, please contact Tim Moore or Mike Novak.

A Special Thank You

The Ocean Sciences Meeting would like to thank Microsoft for providing support for technical equipment used in Poster Session 138: Networked Posters - A Means to Bring Interactivity to the Poster Session.

Plenary Lectures and Presentations

Wednesday, 22 February, 8:00 to 12:30, Ballrooms A-H

Dr. Mark R. Abbott Oregon State University, Corvallis, Oregon

Graduate Education in the Ocean Sciences

Presentation: Many of our graduate programs are based on a discipline-centric view of the ocean, which, although they provide a solid foundation of core knowledge, may not adequately prepare our students for an interdisciplinary future. Moreover, there are pressures for our graduate students to focus on narrower areas of research as well as technical specialization. But in the face of increasingly complex scientific questions that emerge from the study of complex, nonlinear systems, how should our graduate programs evolve? How might we go about fostering interdisciplinary science as well as collaboration, while retaining the solid foundation of fundamental knowledge and individual achievement? The challenges of a networked-world are also having substantial impacts on our scientific processes of data gathering, analysis and publication. It is not just the rapid increases in data volume and complexity; it is a revolution in our fundamental assumptions about data, knowledge, and collaboration. Our graduate programs need to respond to the changing nature of the science, the new tools that are available for both research and education, and the new careers that our students will pursue. Although we cannot neglect the fundamentals, we cannot simply train our students the same way that we were taught. New approaches are emerging, and the ocean sciences community should begin a conversation on these issues.

Biography: Mark R. Abbott is Dean and Professor in the College of Oceanic and Atmospheric Sciences at Oregon State University. He received his B.S. in Conservation of Natural Resources from the University of California, Berkeley, in 1974 and his Ph.D. in Ecology from the University of California, Davis, in 1978. He has been at OSU since 1988 and has been Dean of the College since 2001. Prior to coming to OSU, he was a member of the technical staff at the Jet Propulsion Laboratory and a research oceanographer at Scripps Institution of Oceanography. His research focuses on the interaction of biological and physical processes in the upper ocean and relies on both remote sensing and field observations. His work led to the inclusion of chlorophyll fluorescence bands in MODIS (the Moderate Resolution Imaging Spectroradiometer on NASA's EOS Terra and Aqua satellites) to support next-generation ocean primary productivity algorithms that used these fluorescence data to estimate the physiological health of upper ocean phytoplankton. He is funded by the Office of Naval Research (ONR) to explore advanced computer architectures for use in undersea platforms. He is serving a six-year term on the National Science Board, which oversees the National Science Foundation and provides scientific advice to the White House and to Congress. He is vice chair of the Oregon Global Warming Commission, which is leading the state's efforts in mitigation and adaptation strategies in response to climate change. He is a member of the Board of Trustees for the Consortium for Ocean Leadership as well as the Board of Trustees for the University Corporation for Atmospheric Research. He is President-Elect of The Oceanography Society.

Dr. Kelly Benoit-Bird Oregon State University, Corvallis, Oregon

Causes and Consequences of Heterogeneity of Organisms in the Ocean: From Phytoplankton to Dolphins

Presentation: In the ocean, most resources are heterogeneously distributed and highly dynamic. This patchiness in time and space has significant consequences for population dynamics, trophic interactions, community organization and stability, the cycling of elements, and our ability to measure these processes and manage marine ecosystems. Using a combination of acoustical, optical, and other oceanographic techniques, work on the food chain involving phytoplankton, copepods, mesopelagic micronekton, and spinner dolphins (*Stenella longirostris*) has shown that both physical and biological processes can play a role in forming patches in this system. At all trophic levels, patches in this food chain have ecological consequences that are greater than their biomass alone would predict; patchiness regulates the structure of the food web as well as the animals' behavior. The importance of spatial pattern in ecosystems has long been recognized and its effects on predator-prey pairs has been examined in a number of previous studies, however, we now know that patchiness can be a dominant force regulating an entire system.

Biography: Dr. Kelly Benoit-Bird, an Associate Professor in the College of Oceanic and Atmospheric Sciences at Oregon State University, is the author or co-author of more than 35 journal publications applying acoustics to study the ecology of pelagic ocean ecosystems. Her work examines a wide range of animals including zooplankton, fish, squid, and marine mammals, in all cases emphasizing the mechanisms creating spatial and temporal dynamics in pelagic marine ecosystems, the effects these dynamics have on interactions between organisms, and the mechanisms animals use to cope with these patterns. She has been involved in the development of several new optical and acoustical instruments and has made fundamental acoustical measurements of a variety of species in the process of addressing ecological processes in the ocean. In 2010, Kelly was awarded a MacArthur Fellowship, commonly referred to as a "genius award" for her "exceptional creativity and promise for important future advances based on a track record of significant accomplishment". Her work has also been recognized by the Acoustical Society of America with the 2009 R. Bruce Lindsay Award for "contributions to marine ecological acoustics" and the American Geophysical Union which awarded her the 2008 Ocean Sciences Early Career Award for "innovative application of acoustical techniques". Kelly is also the recipient of a United States Presidential Early Career Award for Scientists and Engineers, a Young Investigator Award from the U.S. Office of Naval Research, and a U.S. National Academy of Sciences Kavli Frontiers Fellowship.

Dr. Demian Chapman Stony Brook University, Stony Brook, New York

Biology in a Bowl: Studying Sharks to Save Them from Becoming Shark Fin Soup

Presentation: Each year tens of millions of sharks are killed and their fins are exported to Asia, where they are used to make the luxury dish shark fin soup. Fetching up to US \$100 per bowl, this soup is the caviar of Asia and fuels an international trade that is vast, lucrative and deeply secretive. Many sharks take a decade or more to mature and have a few pups per

litter, which explains why these top predators are now disappearing from oceans all around the world as a result of this trade. I will detail how basic research into the biology, morphology and genetics of sharks is now being adapted to help save these animals. Studies of the evolutionary relationships between sharks and the morphology of their fins are providing critical data that can be used to answer the question: what species does the shark fin or the soup come from? This is a central question for law enforcement as some of the more vulnerable species become protected (e.g., the great white shark, *Carcharodon carcharias*). Methods to trace fins from the Asian markets or soup bowls back to the shark's birthplace are also needed to establish stock specific catch limits. I will show how the development of the world's first shark family tree from field studies in the Bahamas has revealed that females return to breed in their own birthplace. I will discuss how this remarkable behavior eventually generates a site-specific mitochondrial "DNA Zipcode" that we can map and use to determine where shark fins are coming from. As science advances our ability to monitor the fin trade, the burden is now beginning to shift to policy-makers to see that these advances are employed to reverse declines in these threatened marine predators.

Biography: Dr. Demian Chapman is a shark scientist with the Institute for Ocean Conservation Science at Stony Brook University. His research includes development of genetic testing for tissue identification from the great white shark. This led to a successful proposal to list the great white species on the Convention on International Trade in Endangered Species (CITES). He is the author or co-author of numerous journal publications regarding a variety of sharks and their relatives. Dr. Chapman received his doctorate from Nova Southeastern University in 2007.

Dr. Mick Follows Massachusetts Institute of Technology, Cambridge, Massachusetts

Modeling Marine Microbes: From Molecules to Ecosystems

Presentation: Communities of marine micro-organisms are diverse, ecologically complex and live in a turbulent fluid environment. They modulate the global cycles of elements, including climatically significant carbon and sulfur, and form a critical part of the food web regulating marine resources. How are marine microbial communities structured and organized in space and time? What is their role in biogeochemical cycles? How do they respond to environmental changes? Mathematical and numerical models provide avenues for synthesizing empirical understanding and exploring the interactions of complex and complicated systems. We will discuss, through specific examples, how ecological and biogeochemical models are being used to address these fundamental questions.

The phenomena significant in organizing microbial communities span scales from sub-cellular metabolic networks, which mediate resource and energy trade-offs for individuals, to global circulation patterns, which regulate resource supply. Accordingly, relevant empirical constraints are provided by a wide variety of laboratory and field measurements, increasingly based on molecular techniques. To interpret these data and provide a cross-scale synthesis, models of marine microbial systems are bringing together eclectic tools from geophysical fluid dynamics, cell biology, theoretical ecology, and marine chemistry. We will illustrate how "self-organizing", trait-based models can capture,

and help to interpret, the functional biogeography of marine microbes. Examples will include nitrogen fixing phytoplankton, how resource competition for nitrogen and iron at the large scale, and iron allocation at the cellular scale, regulate their habitat. We will discuss the need for mechanistic models of heterotrophic microbes and the respiration of organic matter throughout the water column, and the prospect of integrating genome-informed, metabolic reconstructions with large-scale ecosystem and biogeochemistry models.

Biography: Mick Follows is an oceanographer working in the Department of Earth, Atmospheric and Planetary Sciences at the Massachusetts Institute of Technology. He studied Physics as an undergraduate at the University of Leeds in the UK, and earned a Ph.D. in Atmospheric Sciences at the University of East Anglia in 1991. After a year as a Royal Society Post-doctoral Fellow hosted at the Max Planck Institute for Atmospheric Chemistry in Mainz, Germany, working on models of ozone in the lower atmosphere, he joined what is now the Program in Atmospheres, Oceans and Climate at MIT as a post-doc in 1992 and began studying ocean biogeochemical cycles. He has remained there since and is now a Senior Research Scientist. He uses data analysis, simple models and numerical simulations to understand and interpret the global ocean cycles of elements including carbon and iron. Fascinated by the biological and ecological aspects of marine biogeochemical cycles, he has spent recent years learning about and modeling marine micro-organisms and the organization of their communities in the ocean.

Dr. Chris Reddy Woods Hole Oceanographic Institution, Woods Hole, Massachusetts

How Did We Do: Academia's Contributions to the Gulf of Mexico Oil Spill

Presentation: When the Deepwater Horizon disaster occurred, marine scientists, most with little background in oil spills, became quickly involved and delivered ideas, initial results, and data to decision makers. These contributions can be traced back to the training, research, and experience of basic marine science allowing academia to make important contributions when applied problems arise

Biography: Christopher Reddy is a senior scientist in the Department of Marine Chemistry and Geochemistry and Director of the Coastal Ocean Institute at Woods Hole Oceanographic Institution. He studies oil spills, including those that have occurred in 1969, 1974, 1996, 2003, 2007 (two), and the *Deepwater Horizon*. According to a 2010 survey by Thomson Reuters, Dr. Reddy is one of the top cited and published scientists studying oil spill effects.

He has testified once for the *National Commission on the BP Deepwater Horizon*, twice for US Congress on the *Deepwater Horizon*, and briefed numerous staffers and leaders in the executive branch. Dr. Reddy has written eight op-eds on the *Deepwater Horizon*. He was an academic liaison at the *Unified Area Command* during the *Deepwater Horizon*.

Dr. Reddy has received many honors including being a Kavli Fellow, awarded in 2009 and 2010 by the National Academy of Sciences, Aldo Leopold Leadership Fellow (2006), and Office of Naval Research Young Investigator Program Award (2003). He received his Ph.D. in chemical oceanography from the University of Rhode Island in 1997 and an executive education certificate from MIT Sloan's School of Business in 2010.

Award Lectures

TOS - Munk Award Lecture: The Ocean As a Complex Acoustic Medium

Session 135: Imaging the Ocean Interior: From Seismics to Optics
Wednesday, 22 February 2012, 14:00, Room 250

The Walter Munk Award is granted jointly by The Oceanography Society, the Office of Naval Research and the Office of the Oceanographer of the Navy. Recipients are selected based on their significant original contributions to the understanding of physical ocean processes related to sound in the sea; significant original contributions to the application of acoustic methods to that understanding; and/or outstanding service that fosters research in ocean science and instrumentation contributing to the above.

We congratulate the most recent recipient of The Munk Award:

Dr. William A. Kuperman, Scripps Institution of Oceanography, La Jolla, California, USA

Modern ocean acoustics and acoustical oceanography are often associated with the forward and inverse acoustics problems, respectively. The forward problem deals with understanding the physics of acoustic propagation, scattering and noise given the ocean environment while the inverse problem is concerned with determining the ocean environment from acoustics. Further, a traditional goal of ocean acoustics is finding an acoustic source or scatterer as opposed to acoustical oceanography's goal of "finding" oceanographic parameters. While appearing as opposites, the inverse problem requires extremely detailed knowledge of the forward problem so that one of the main spinoffs (maybe even the most important one to date) from acoustical oceanography has been our increased understanding of the forward problem. Intuitively, ocean complexity should play an inhibiting role in both approaches. However, as explained in this review, ocean complexity is actually an enabling factor to the goals of both areas.

AGU - Rachel Carson Award Lecture: Significance and Insignificance of the 2011 Mississippi Flood to Surrounding Waters

Session 031: Biogeochemical Cycles of Continental Margins:
Drivers and Impacts
Tuesday, 21 February, 10:30, Ballroom J

Rachel Louise Carson was an American marine biologist, and an author of widely read books on the sea and ecological themes. Rachel Carson is remembered mainly for her last work, *Silent Spring*, published in 1962, two years before her death. This controversial work, which examined in alarming detail the environmental damage caused by the widespread use of chemical pesticides, led to a greater public awareness of the need to preserve and maintain our weakened environment. Her work also helped to bring about increased state and national regulation of the manufacture, use, and disposal of chemical pesticides.

We congratulate this year's winner:

Nancy N. Rabalais, Louisiana Universities Marine Consortium, Chauvin, Louisiana, USA

The flood of the Mississippi River in 2011 broke many freshwater discharge and nutrient load records. The MR drainage contributes 90+% of

the sediment, nutrients and fresh water to the northern Gulf of Mexico, and its influence reaches thousands of kilometers away. The record flow forced breaking levees in Missouri and opening major spillways, the Morganza into the Atchafalaya River basin and the Bonnet Carré north of the city of New Orleans into Lake Pontchartrain, and proffered expectations of dense harmful algal blooms in receiving waters and the largest to-date 'dead zone' (area of low oxygen) offshore. Not all expectations were realized, with lower than expected chlorophyll biomass and HAB concentrations in Lake Pontchartrain (high flushing and high turbidity) and a smaller area of shelf hypoxia (tropical storm action and ocean currents). More detrimental effects were the severity and volume of low oxygen elsewhere, noxious and harmful algal blooms west and east of the delta, and large, persistent areas of low oxygen east of the delta in summer. The 2011 scenario mirrors climate change expectations for the watershed.

AGU – Sverdrup Award Lecture: Long-Term Changes in the Role of Zooplankton in Ocean Biogeochemical Processes

Session 039: Ocean Biogeochemistry Time-Series and Climate
Thursday, 23 February, 10:30, Location: Ballroom B

In 1951, Harald Ulrik Sverdrup received AGU's highest honor, the William Bowie Medal. Sverdrup was an honest, unassuming, pious, hard-working, humorous and humane investigator of the atmosphere and the oceans as evident through his research, teaching and public service. His lasting reputation and the continued influence of his publications attest to his success.

We congratulate this year's winner:

Deborah K. Steinberg, Virginia Institute of Marine Science, Gloucester Point, Virginia, USA

Zooplankton play an integral role in the cycling of elements in the sea through their grazing and metabolism. Zooplankton time series reflecting climate or other environmentally-influenced changes in zooplankton biomass and community structure can be used to determine associated changes in biogeochemical cycling, and to predict future changes. Analysis of time series from diverse environments, including the Bermuda Atlantic Time-series Study and the Palmer Antarctica Long-Term Ecological Research program, indicates long-term changes in zooplankton export processes, such as fecal pellet production and diel vertical migration. These changes can have significant effects on the magnitude of the biological pump, which regulates in part atmospheric carbon dioxide and hence can impact climate. Changes in zooplankton community structure also affects the quality and quantity of dissolved inorganic and organic matter they produce, which in turn can affect microbial communities. The role of some major taxa (common to both ecosystems is the significance of gelatinous zooplankton—salp blooms, to export), and process rates in major habitats (mesopelagic zone) are still needed to better incorporate the role of zooplankton into predictive biogeochemical models.

Poster Sessions

Poster sessions will take place Monday through Thursday from 16:00 to 18:00 in the Exhibit/Poster Area. Sessions are arranged in the poster hall according to primary session category. In addition, attempts have been made to group sessions according to secondary session category. Posters

are separated into two main areas: area A to the left of the poster hall entrances and exhibit booths; and area B to the right of entrances and exhibit booths. Poster numbering begins in area A at the row closest to the hall entrances and continues sequentially along rows toward the back of the hall. Numbering continues in area B, again starting with the row closest to the entrance and proceeding along rows to the back of the hall.

Posters are available for viewing Monday through Friday.

Film Festival

EVS04: The S-Factor 2 – Ocean Sciences Film Festival

Sunday, February 19, 14:00 – 17:00, Ballroom I

Organizers: Jonathan Sharp, University of Delaware, jsharp@udel.edu
Interest in public outreach is growing within the marine sciences community. However, most of us need to learn more about how to use popular media, like video, and to make our messages interesting and compelling to a non-technical public.

Building upon previous efforts at the 2010 Portland Ocean Sciences Meeting, the 2011 Puerto Rico ASLO Aquatic Sciences Meeting, and the 2011 San Francisco AGU Fall Meeting, there will be another Film Festival at the Salt Lake City 2012 Ocean Sciences Meeting. Marine Biologist turned Hollywood filmmaker, Randy Olson will again be the primary communications expert. Similar to the second event, there will be a website blog for posting the videos and for an interactive discussion of them before the meeting. Following the innovation from the AGU meeting, we will call this the S-Factor 2 (S = Science, like the TV talent show X-Factor). Randy will bring Brian Palermo (acting instructor, story-line expert, actor – most recently in *The Social Network*) and Dorrie Barton (movie script consultant and actress – many movie and TV appearances) who will join him as a panel for the evaluations of the videos. This brings an exciting element to the workshop and gives multiple eyes from experts who act in, write, and produce TV and movies with broad public audience appeal. In addition, it is probable that panel members can be available after the meeting as consultants for specific video projects to anyone interested.

Please consider submitting a video. Like in the past, the rules are: the video should not exceed 5 minutes, be submitted in *You Tube* format, and be aimed at a level that is understandable and interesting to the general public. If you want to submit, send to jsharp@udel.edu. See you in Salt Lake City when Hollywood comes to Ocean Sciences. For more information visit: <http://www.aquaticsci.net/?cat=108>

Auxiliary Meetings

EVT01: Ocean Education Funding Opportunities Available Through NSF-EHR-DUE – An Informational Meeting

Tuesday, February 21, 12:30 – 14:00, Ballroom C

Organizers: Jeffrey Ryan, University of South Florida, ryan@mail.usf.edu

The Transforming Undergraduate Education in STEM (TUES) Program and other funding opportunities available through the Division of Undergraduate Education (DUE) at the National Science Foundation offer under-utilized means to support curricular innovation in ocean science education. This informational session, facilitated by a former Program Officer in NSF-DUE, will provide information about the

TUES program and other funding opportunities, as well about support for investigators seeking to write and submit competitive grant proposals for these programs available through the Resources to Transform Undergraduate Geoscience Education (RTUGeoEd) project. A light lunch will be served.

For more information visit: <http://www.buffalostate.edu/rtugeoed>, or contact the organizers.

EVT04: NSF OCE REU Networking Lunch

Tuesday, February 21, 12:30 - 14:00, Room 250 F

Organizers: Russell Cuhel, UW-Milwaukee, rcuhel@uwm.edu; Carmen Aguilar, UW-Milwaukee, aguilar@uwm.edu

Invited NSF-supported undergraduate participants in the meeting and its REU poster session meet with scientists and former REU students to learn meeting navigation and networking skills.

EVT10: National IOOS HF Radar Technical Steering Team (Meeting by Invitation Only)

Tuesday, February 21, 18:00 – 21:00, Room 251 A, B, D, E

Organizer: Jack Harlan, jack.harlan@noaa.gov

EVT11: Ocean Leadership Scoping Group (by invitation only)

Tuesday, February 21, 18:00 – 21:00, Room 151 E

Organizer: Julie Farver, jfarver@oceanleadership.org

EVT14: USGS Copper River Plume Project (by Invitation only)

Tuesday, February 21, 18:00 – 21:00, Room 151 A, B, C, G

Organizers: John Crusius, USGS at Univ. of Washington, jcrusius@usgs.gov; Rob Campbell, Prince William Sound Science Center, rcampbell@pwssc.org

A meeting of a group of researchers working on a joint project on the Copper River plume and adjacent region of the Gulf of Alaska.

EVW07: Research Experiences for Undergraduates (REU) Coordinator Meeting

Wednesday, February 22, 12:30 – 14:00, Room 150E

Organizer: Lisa Rom, elrom@nsf.gov

This meeting will provide the PI's and other faculty who are working with the NSF REU Site program a chance to discuss common issues related to REU Site management. Informal discussion topics will include managing student recruitment, applications, diversity, mentoring, and evaluation. Anyone interested in learning more about the NSF REU Site Program is welcome to attend. Please bring a lunch and your best ideas! Contact Lisa Rom elrom@nsf.gov or 703-292-7709 with questions.

EVW13: U.S. Repeat Hydrography Oversight (Committee Meeting)

Wednesday, February 22, 18:00 – 21:00, Ballroom J

Organizer: Lynne Talley, ltalley@ucsd.edu

EVTH01: TOS Business Meeting

Thursday, February 23, 12:30 – 14:00, Ballroom I

Organizer: Jenny Ramarui, The Oceanography Society, jenny@tos.org

Business Meeting open to members of The Oceanography Society.

EVTH02: L&O e-Lecture Editorial Board (Committee Meeting)

Thursday, February 23, 12:30 – 14:00, Room 151 D

Organizer: Jennifer Cherrier (Lolectures-editor@aslo.org)

Editorial Board Meeting. For more information visit: <http://www.aslo.org/lectures/>

EVTH10: Humor and Science: A Comical Look at Ourselves

Thursday, February 23, 18:00 – 20:00, Room 250 A, B, D, E

Organizers: Jules S. Jaffe, Scripps Inst. of Oceanography/UCSD, jules@mpl.ucsd.edu; Peter J. S. Franks, Scripps Inst. of Oceanography/UCSD, pfranks@ucsd.edu

This independent, evening session, outside of the scientific program, will be devoted to finding the humor in science, and presenting a lighter side of ourselves and our research to our colleagues. We solicit 15-minute satirical presentations exposing the humorous underbelly of our field in the vein of “The Onion,” the “Annals of Improbable Research,” or “The Far Side” cartoons. Talks will marry the keen observational powers of the scientist and humorist to show how alternate interpretations of facts can lead to fascinating and humorous conclusions. As examples of talks, the co-conveners are planning on presenting “The Gefilte Oceanographer” (Jaffe) and “The Great Sunglass Die-off of 2009” (Franks). We invite our community to participate in a forum that will permit us to convey a different, entertaining, and thought-provoking view of ourselves and our culture, however we will discourage and even reject talks “in progress” that are vindictive and personal.

Workshops and Town Hall Meetings

EVS01: COESEE Professional Development for Scientists (Workshop)

Sunday, February 19, 8:00 – 17:00, Hotel Monaco

Organizers: Janice McDonnell, Rutgers University, mcdonnel@marine.rutgers.edu; Carrie Ferraro, Rutgers University, ferraro@marine.rutgers.edu

Scientists are increasingly being asked to communicate the “broader impacts” of their work. This workshop will build the foundation for attendees to think creatively about how their research will impact their education goals and, conversely, how their education activities will feed back into their research. When research and education are effectively interconnected, the process of discovery can help stimulate learning and the resulting research can be communicated to a broader audience.

For more information visit: <http://coseenow.net/blog/2011/09/pdworkshopfo>

EVS03: Ocean Policy and Management: Workshop Complementing Session 139 (Workshop)

Sunday, February 19, 13:00 – 17:00, Room 151 A, B, C, G

Organizers: Hal Batchelder, hbatchelder@coas.oregonstate.edu; Suzanne Lawrence, Suzanne@suzannelawrence.net; and Peter Fox, pfox@cs.rpi.edu

The purpose of this workshop is to foster partnerships in support of a Global Large Marine Ecosystem Knowledge Network. Our goal is to strengthen links and best practices information sharing within and among Regional Ocean Governance practitioners and sustainability scientists in US and other international efforts. The workshop will engage high level representatives from the US National Marine Fisheries Science Centers as well as representatives from NOAA's Regional Ocean Governance Network (<http://www.csc.noaa.gov/oceangovernance/>) such as the Gulf of Mexico Alliance and the West Coast Governors Agreement for Ocean Health. International participants will include representatives from the UNESCO-IOC Capacity Building Program, the Global Environmental Facility/UNDP Large Marine Ecosystem Program in the Caribbean, and the Executive Director of the Benguela Current Commission in South Africa.

For more information visit: <http://www.lmenet.net>

EVM01: National Ocean Policy (Town Hall)

Monday, February 20, 12:30 – 14:00, Room 151 A, B, C, G

Organizers: Kristan Uhlenbrock, AGU, kuhlenbrock@agu.org; Susan Roberts, Ocean Studies Board, sroberts@nas.edu; Lora Clarke, National Ocean Council OST-IPC, Lora.Clarke@noaa.gov

Our first National Policy for the Stewardship of the Ocean, Our Coasts, and the Great Lakes, commonly referred to as the National Ocean Policy (NOP), sets forth a principle to “use the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes, and enhance humanity’s capacity to understand, respond, and adapt to a changing global environment.” Scientists have an important role to continue to provide sound advice and innovative research to ensure the NOP sustains a course of science-based decisions.

AGU and the National Academy of Sciences Ocean Studies Board in collaboration with the National Ocean Council's Ocean Science and Technology Interagency Policy Committee (OST-IPC) and Ocean Resource Management Interagency Policy Committee (ORM-IPC) are excited to present this town hall showcasing leading policymakers and managers who make decisions based on scientific conclusions. Our panelists will discuss the importance of science in the NOP, provide an update to the policy, and create a dialogue with participants on where we are headed. The NOP sets forth overarching guiding principles for United States management decisions and actions affecting the ocean, our coasts, and the Great Lakes. This town hall will provide a forum for discussion of the Implementation Plan that is being developed by the OST-IPC and the ORM-IPC to achieve nine priority objectives. These objectives include: Ecosystem-Based Management; Coastal and Marine Spatial Planning; Inform Decisions and Improve Understanding; Coordinate and Support; Resiliency and Adaptation to Climate Change and Ocean Acidification; Regional Ecosystem Protection and Restoration; Water Quality and Sustainable Practices on Land; Changing Conditions in the Arctic; and Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure.

For more information visit: <http://www.whitehouse.gov/oceans>

EVM02: ASLOMP/COSEE Young Investigator Luncheon

Monday, February 20, 12:30 – 14:00, Room 250 A, B, D, E

Organizers: Liesl Hotaling, COSEE, lieslhotaling@yahoo.com; Ben Cuker, Hampton University, benjamin.cuker@hamptonu.edu

This lunch time workshop, sponsored by the COSEE Network and the ASLO Multicultural Program, will provide information for young investigators about the COSEE Network, education and outreach opportunities within the Network, and scholarship and fellowship opportunities.

EVM03: Ladder of Scientific Success-Deconstructing (Workshop)

Monday, February 20, 12:30 – 14:00, Room 251 A, B, D, E

Organizers: Bob Chen, University of Massachusetts - Boston, bob.chen@umb.edu; Adrienne Sponberg, ASLO, sponberg@aslo.org

Deconstruct your science (Make it simple!). In this workshop you will learn and apply concept mapping skills to help you: 1) visually represent your science in a “bigger picture” context, 2) simplify your research goals and communicate them to others, and 3) promote effective dialogue with various audiences. Concept mapping will help you in writing collaborative proposals, improving your presentations, teaching effectively, and focusing your science on questions of societal significance. This session will be presented by Annette DeCharon, COSEE Ocean Systems. Lunch will be provided to the first 50 participants.

For more information visit: <http://www.coseeocean.net>

EVM04: Career-Life Balance Initiatives (Town Hall)

Monday, February 20, 12:30 – 14:00, Room 150 A, B, C, G

Organizers: Victoria Coles, University of Maryland Center for Environmental Science, vcoles@umces.edu; Susan Lozier, Duke University, mslozier@duke.edu; Susanne Neuer, Arizona State University, susanne.neuer@asu.edu

Data collected by MPOWIR (Mentoring Physical Oceanography Women to Increase Retention) over the past four years indicates that 46% of women see balancing work and family as ‘nearly impossible’ or ‘impossible’, with only 24% of women rating it as ‘possible’ or ‘very possible’. While these views are sobering, NSF’s recent announcement of the Career-Life Balance Initiative and the rise in mentoring networks are promising signs. At this Town Hall sponsored by MPOWIR and AWIS (Association for Women in Science), invited speakers will discuss institutional and personal avenues toward achieving this balance. A panel discussion will follow. Also, lunch will be provided for the first 75 attendees.

Monday’s event will be followed by a reception and discussion on Thursday February 23rd at 6:00 pm. Thursday’s event will provide a forum for sharing strategies on how to achieve a satisfying work life balance particularly in the context of an oceanography career.

For more information on the sponsoring groups visit: <http://www.mpowir.org> and <http://www.awis.org>.

EVM05: Communicating Your Science: Challenges and Opportunities with Ocean Acidification (Workshop)

Monday, February 20, 18:00 – 19:30, Room 151 A, B, C, G

Organizers: Kristan Uhlenbrock, AGU, kuhlenbrock@agu.org; Chad English, COMPASS, cenglish@COMPASSonline.org; Heather Galindo, COMPASS, hgalindo@COMPASSonline.org

Dubbed the evil twin of climate change, ocean acidification is the focus of a rapidly growing community of researchers who seek to understand how the phenomenon will play out and the resulting implications for marine ecosystems. As the impacts of acidification begin to be understood and felt by ocean users, the demand for researchers to communicate the substance and meaning of the science will grow. However, as recent policy discussions related to climate change have shown, the challenge of communicating science is not always straightforward. Join us as we hear perspectives on three very different aspects of communicating the science of ocean acidification. Drawing on past experiences and presenting recent data on public perception of the issue, our panelists will lead us into a discussion of how and when scientists should consider sharing their science in this rapidly evolving field.

Sarah Simpson (Contributing Editor, Scientific American) will discuss the past, present, and future of OA in the media; Scott Doney (Senior Scientist, Woods Hole Oceanographic Institution) will share insights on communicating about research in a policy context; and Lisa Dropkin (Principal, Edge Research) will present results of a survey on public perceptions about ocean acidification. Together, these three perspectives will kick off a lively discussion with the audience about what works, what doesn't, and what role scientists should play in connecting the science to policymakers, the media and the public.

We encourage workshop participants to register at <http://www.surveymonkey.com/s/LJNMZC9>.

EVM06: The Future of Ocean Color Remote Sensing (Town Hall)

Monday, February 20, 18:00 – 19:30, Room 250 A, B, D, E

Organizers: Claudia Mengelt, National Academy of Sciences, cmengelt@nas.edu; James A. Yoder, Woods Hole Oceanographic Institution, jyoder@whoi.edu; Paul DiGiorgio, NOAA/NESDIS, paul.digiorgio@noaa.gov

Ocean color remote sensing is an important tool for detecting regional to global trends and patterns in ocean biology and biogeochemistry. Scientists have made important discoveries during the SeaWiFS/MODIS era that have transformed the field. With the demise of SeaWiFS and the aging MODIS and MERIS sensors, the research community is preparing to transition to a new generation of satellites. Some of the new sensors, such as VIIRS, will potentially extend the SeaWiFS/MODIS time series for global coverage. Others offer new measurement capabilities that will, for example, improve imaging of coastal waters. During this town hall, convened by the National Academy of Sciences, we will provide a brief summary of the NAS report entitled "Assessing the Requirements for Sustained Ocean Color Research and Operations" and discuss recent developments with VIIRS on NPP and future missions. We invite participants to share results, algorithms, and/or approaches to ocean color product development that will contribute to the successful transition to the next generation of sensors.

For more information about the report or the town hall visit: <http://nas-sites.org/earthobservations>

EVM07: The Role of Social Media in Ocean Science and Conservation (Workshop)

Monday, February 20, 18:00 – 19:30, Room 251 A, B, D, E

Organizers: Miriam Goldstein, Scripps Institution of Oceanography, UCSD, mgoldstein@ucsd.edu; Andrew Thaler, Duke University, andrew.david.thaler@gmail.com; Rick MacPherson, Coral Reef Alliance, rmacpherson@coral.org, Holly Bik, University of California at Davis, hbik@ucdavis.edu

Social media platforms have made it possible to access and disseminate information quickly, while bypassing gatekeepers common to traditional media. Ease of accessibility and the pervasiveness of social media provides a powerful tool for reaching many people directly. Experts can interact with the general public, leaving it to the audience to judge the value of their work. These tools for education, outreach, and activism have drawbacks. Without the quality control provided by editors and fact checkers, misinformation can be rampant and credibility compromised. Complicated messages can be difficult to deliver, target audiences can be challenging to segment, and there are few metrics for success. The objective of this session is for participants to share and discuss their experiences using social media for public outreach. We encourage participants to present specific examples, challenges, and lessons learned, and to discuss positive or negative interactions with online media. We also encourage broader, conceptual discussions of the role of social media in scientific and conservation discourse. This workshop will be a moderated but informal discussion, and we encourage participation from all attendees.

For more information visit: <http://science-social-media.wikispaces.com/>

EVM09: Current Progress towards Development of a Global Ocean Biogeochemical Observing System (Town Hall)

Monday, February 20, 18:00 – 21:00, Ballroom A

Organizer: Kenneth Johnson, johnson@mbari.org

A "town hall" meeting to inform interested community members about efforts to develop a global ocean biogeochemical observing system that is similar to Argo and to solicit community input regarding priorities and implementation strategies for such a global system. We would have a short description of prior planning, brief updates regarding funded and planned "regional scale" observing systems experiments, and updates on technical developments. This would be integrated with an effort to solicit community input on next steps, pieces that might be missing, etc.

EVM10: Developing Strategies for Long-Term Research in the Gulf of Mexico (Town Hall)

Monday, February 20, 18:00 – 21:00, Ballroom B

Organizers: Monty Graham, monty.graham@usm.edu; Mike Roman, roman@umces.edu; Joe Montoya, joseph.montoya@biology.gatech.edu; Stephan Howden, stephan.howden@usm.edu

On the heels of hurricanes, historic floods and oil spills, and facing a changing climate, relative sea level rise and increasing pressure on resources, the Gulf of Mexico is in critical need of coordinated, comprehensive long-term research planning. This Town Hall will initiate a broad-scale, grass roots effort to create a set of scientifically driven long-term research plans for the Gulf. Participants will engage in this initial discussion to establish a framework and process for long-term research planning.

EVT02: Ladder of Scientific Success-Understand (Workshop)

Tuesday, February 21, 12:30 – 14:00, Room 251 A, B, D, E

Organizers: Bob Chen, University of Massachusetts - Boston, bob.chen@umb.edu; Adrienne Sponberg, ASLO, sponberg@aslo.org

Understand How People Learn. What does research about the mind, the brain, and the processes of learning say about how people learn? In this workshop, we will take a critical look at how people learn, perceive, and value science. Understand the differences between novice and experts. Explore what is and what is not an accurate view of science. If you are going to teach, it is critical to think about the nature of science, how it can be communicated, and how people learn science. This session will be presented by Catherine Halverson, COSEE California. Lunch will be provided to the first 115 participants.

For more information visit: <http://www.coseeocean.net>

EVT03: PO.DAAC - Fusion of NASA Ocean Data and Services (Workshop)

Tuesday, February 21, 12:30 – 14:00, Ballroom G

Organizers: Michelle Gierach, Jet Propulsion Laboratory/California Institute of Technology, michelle.gierach@jpl.nasa.gov; Charles Thompson, Jet Propulsion Laboratory/California Institute of Technology, Charles.K.Thompson@jpl.nasa.gov

The Physical Oceanography Distributed Active Archive Center (PO.DAAC) is the archive, distribution, and user/science services center for NASA's satellite oceanographic data. PO.DAAC data holdings are focused on measurements related to ocean surface topography, ocean winds, ocean temperature, gravity, ocean currents and circulation, and salinity. During the past year, PO.DAAC has deployed a new web portal to facilitate data discovery and user interactions, as well as several new tools and services for data access and visualization. This workshop will showcase these new capabilities through an interactive demonstration, providing users with an outlet to learn how to successfully navigate and use these services for scientific applications. PO.DAAC scientists and developers will be on hand to also answer general questions related to PO.DAAC/NASA data and services.

For more information visit: <http://podaac.jpl.nasa.gov/>

EVT05: Funding of applied environmental science at BOEM (Town Hall)

Tuesday, February 21, 12:30 – 14:00, Ballroom E

Organizers: Brad Blythe, BOEM, brad.blythe@boem.gov; Guillermo Auad, BOEM, guillermo.auad@boem.gov

The presentation will address the recent reorganizational changes of the BOEM, funding avenues and opportunities, and highlights of recent and ongoing studies in social sciences, physical, chemical and biological oceanography, and marine ecology and archaeology.

EVT06: Velocity Measurements from Gliders (Workshop)

Tuesday, February 21, 12:30 – 14:00, Ballroom F

Organizers: Judah Goldberg, NortekUSA, judah@nortekusa.com; Peter Rusello, NortekUSA, pj@nortekusa.com

This workshop presents an overview of the measurement and analysis methods using broad band and pulse coherent acoustic Doppler current profilers to observe mean velocity, turbulence, and acoustic backscatter

from a variety of moving platforms, with a focus on glider applications. Invited speakers will give presentations on their work in this new field.

Observations of mean current velocity and turbulence in coastal and open seas are inherently important for a wide range of scientific studies. Intrinsically difficult to measure, particularly over long temporal and spatial scales, velocity measurements have typically been constrained to data sets from individual moorings or expensive field programs. New equipment and advanced analysis methods have been developed to make observations of mean and turbulent velocity from moving platforms such as ocean gliders and vertical profilers.

For more information visit: http://www.nortekusa.com/glider_workshop

EVT07: Data Management for Scientists: Reduce your workload, reuse your ideas, recycle your data (Workshop)

Tuesday, February 21, 12:30 – 14:00, Ballroom H

Organizer: Carly Strasser, carly.strasser@ucop.edu

Although graduate students learn about methods for collecting data, there is less emphasis on managing the resulting data effectively. This is an increasingly important skill set: funding agencies have begun to require data management plans, and journals are requiring that data pertaining to published articles be accessible. Scientists with good data management skills will be able to maximize the productivity of their own research program, effectively and efficiently share their data with the scientific community, and potentially benefit from the re-use of their data by others. The purpose of this workshop is to give attendees a set of practical tools for organizing and sharing their data through all parts of the research cycle. The target audience is early-career scientists (graduate students, post-docs) but is open to any researchers who would benefit from developing better data management skills. Topics will include data structure, quality control, data documentation, and the importance of good data management practices for data sharing, collaboration, and data re-use.

For more information: <http://dcxlib.org> or <http://www.carlystrasser.net>

EVT08: Ocean Observatories Initiative: Information and Community Opportunities (Informational Talk)

Tuesday, February 21, 12:30 – 14:00, Ballroom D

Organizer: Kerry Beck, kbeck@oceanleadership.org

The National Science Foundation-funded Ocean Observatories Initiative (OOI) will deliver high quality data and data products that will address critical science-driven questions and lead to a better understanding and management of our oceans for a 25-year-plus time period within an expandable architecture that can meet emerging technical advances in ocean science. This event will include discussion of progress on the OOI program to date and information on how to become involved.

For more information visit: <http://www.oceanobservatories.org>

EVT09: Overcoming the Cultural Gap Between Scientists and the Public (Panel Discussion)

Tuesday, February 21, 18:00 – 21:00, Ballroom I

Organizers: Jonathan Sharp, University of Delaware (jsharp@udel.edu) and Adrienne Sponberg, ASLO, (sponberg@aslo.org).

There is growing awareness of the critical need for marine scientists to communicate results and implications of their research in a more successful fashion than is occurring today. This panel discussion will have a

sociological approach and discusses public attitudes toward environmental science and toward scientists. A major goal for this event is to help scientists understand that for communication to be effective, there have to be two parties involved: the communicator and the audience. The science communicator needs assistance in understanding that the “public” has different levels of science literacy, different beliefs, and different cultural leanings than the technically-trained scientist. There have been several recent academic projects, books, and blogs by media professionals and communicators addressing these cultural considerations. The panel participants are nationally well-recognized experts on communicating environmental issues to the public and on public attitudes about science. The panelists are Dan Kahan from Yale Law School, Max Bykoff from University of Colorado Center for Science and Technology Policy, and Richard Harris from NPR, who will also serve as moderator. By viewing environmental science communication through the eyes of experts outside of the ocean science community, attendees will have a better understanding of why previous and existing communication strategies have faltered and how to engage in more productive discussions about science with non-technical audiences.

For more information visit: <http://www.aquaticsci.net/?cat=109>

EVT12: The Future CLIVAR: Help chart the course (Town Hall)

Tuesday, February 21, 18:00 – 20:00, Room 250 A, B, D, E

Organizers: Valery Detemmerman, WCRP, vdetemmerman@wmo.int; Martin Visbeck, IFM GEOMAR, mvisbeck@ifm-geomar.de

CLIVAR is the World Climate Research Programme project that addresses Climate Variability and Predictability, with a particular focus on the role of ocean-atmosphere interactions in climate. International CLIVAR seeks to identify major emerging climate science questions and to facilitate international coordination, cooperation and capacity building to address these issues. CLIVAR of the future will be more cross-disciplinary and will need to build the application of CLIVAR/ocean science to societal needs. This town hall meeting will provide an opportunity to explore new directions for CLIVAR, with a focus on the role of the oceans in climate and on climate of the oceans. Input is sought on new ideas and projects that could form the focus of the next big international exploration of the ocean, its role in climate and the impact of climate on the oceans. Join the discussion on the OSM facebook page.

For more information visit: <http://www.clivar.org>

EVT13: Observing and modeling the Arctic and North Atlantic Oceans – past experiences and future priorities (Workshop)

Tuesday, February 21, 18:00 – 21:00, Room 150 A, B, C, G

Organizers: Igor Yashayaev, Igor.Yashayaev@dfo-mpo.gc.ca; Entcho Demirov, entcho@mun.ca; Dagmar Kieke, dkieke@physik.uni-bremen.de; and Dan Seidov, Dan.Seidov@noaa.gov

In 2012 we celebrate two anniversaries of the events that affected marine practice, exploration and research for many generations ahead. The first event is the sinking of RMS Titanic 100 years ago. This tragedy brought awareness and raised attention to processes on both shallow and deep waters even not affected by seasonal ice cover, which led to the initiation of the International Ice Patrol Survey, the first precedent of seasonal and annual monitoring of the northwest Atlantic spanning for nearly half a century, including the Labrador Sea, a part of which was the famous OWS Bravo.

2012 is also the 50th anniversary of the memorable Erika Dan’s survey delivering for the first time a broad-scale vision of how the waters formed by wintertime processes and mixing in the high-latitude areas (Labrador Sea Water, dense deep overflows from the Nordic Seas) spread across the Atlantic Ocean to fill the deep basins surveyed by Erika Dan in 1962.

The past five decades brought new developments of oceanographic instrumentation and remote sensing technologies, expansion of the ocean observing network, synergy of real-ocean data and numeric models. These and other developments (e.g., in tracer oceanography) have greatly improved our knowledge on unprecedented oceanic changes in the Arctic and subpolar North Atlantic environment. From what began as mostly national efforts the scientific community has recently moved towards interdisciplinary and inter-institutional projects and strategies serving to monitor the Arctic and Subarctic region. We believe that coordination and if possible synchronization of existing and proposed observational programs will improve our understanding of key processes responsible for the observed variability and thus skills of ocean and climate models.

The goal of our workshop is to summarize priorities in existing observational programs and modeling efforts, identify key locations, processes and strategies for optimization of both field work and numerical simulations. We hope that this workshop will serve as a platform to stimulate new and advance existing collaboration in the subpolar and polar regions in data, model as well as data-model inter-comparison studies.

Special attention will be paid to the Arctic and North Atlantic oceanographic surveys under way or still being planned for 2012 - allowing us to pay a modest tribute to the two events of the past century that we mentioned above.

Brief contributions on the ongoing and planned activities in the region as well as data and model syntheses are kindly invited. Please contact the organizers of the 032 session and this workshop.

EVT15: ConCOAC: Connecting Chemical Oceanography with Analytical Chemistry (Town Hall)

Tuesday, February 21, 18:00 - 21:00, Ballroom J

Organizers: Chris Measures, University of Hawaii, chrism@soest.hawaii.edu; Maxime Grand, University of Hawaii, maxime@hawaii.edu

We are developing a new program to connect experts from analytical chemistry with oceanographers to adapt newly available technology to the determination of parameters in seawater that are of interest to oceanography. The goal of the town hall is to alert the broader community to our open science meeting, the first component of this new program. We seek community input into workshop design particularly from young scientists who will become active members of this bridge between the fields.

EVW01: Science Journalism: From Ship to Shore to the News (Workshop)

Wednesday, February 22, 12:30 – 14:00, Room 150 A, B, C, G

Organizers: Cheryl Lyn Dybas, National Science Foundation, cdybas@nsf.gov

Participants in this workshop will learn how to present science in an interesting way while retaining factual accuracy – the key to good science communication and science journalism. The workshop explores writing for a non-scientific audience.

EVW02: Creation of Tsinghua Ocean Science and Technology (Town Hall)

Wednesday, February 22, 12:30 – 14:00, Room 151 A, B, C, G

Organizers: Daoyi Chen, Graduate School at Shenzhen, Tsinghua University, chen.daoyi@sz.tsinghua.edu.cn

An introduction will be given for the progress made so far in the creation of Tsinghua Ocean Science and technology program. Discussions will be focused on the future research directions. Questions will be answered on various issues including international collaboration and recruitment.

EVW03: Ladder for Scientific Success – Building New Knowledge (Workshop)

Wednesday, February 22, 12:30pm – 14:00, Room 250 A, B, D, E

Organizers: Bob Chen, University of Massachusetts – Boston, bob.chen@umb.edu; Adrienne Sponberg, ASLO, sponberg@aslo.org

Build New Knowledge in a Diversity of Learners. Learners build an understanding of the world around them through their experiences, motivation, and social interactions both face-to-face and online. This workshop focuses on how people make sense of the world around them and the implications for how you can effectively share your science. In this session, we will explore communication techniques from questioning strategies to online social network tools to broaden the impacts of your research. This session will be presented by Janice McDonnell, COSEE Networked Ocean World. Lunch will be provided to the first 115 participants.

For more information visit: <http://www.coseeocean.net>

EVW04: U.S. National Oceanographic Data Center – Next Generation of Ocean Products & Services (Town Hall)

Wednesday, February 22, 12:30pm – 14:00, Room 251 A, B, D, E

Organizers: Margarita Gregg, U.S. NOAA/NODC, margarita.gregg@noaa.gov; Michelle Newlin, U.S. NODC, michele.newlin@noaa.gov, andy.allegria@noaa.gov, Kelly.Logan@noaa.gov, angela.sallis@noaa.gov

This event will provide an update to the ocean community of the next generation products and services provided by the U.S. National Oceanographic Data Center. The National Oceanographic Data Center (NODC) is one of the three national environmental data centers operated by the U.S. National Oceanic and Atmospheric Administration (NOAA). The NODC manages the world's largest collection of publicly available oceanographic data and provides end to end services for satellite, in situ, model, video and other types of ocean data and information. This presentation is for both current and future users of NODC data and products. We will discuss how NODC is meeting its challenge to handle complex, high volume ocean data from satellites, high resolution ship and buoy data, autonomous vehicles, and model output. NODC is taking advantage of latest technologies to enable discovery of our archives and developing tools to integrate data in a seamless manner for easy access to a variety of users. Through NODC archive, access and stewardship services, these ocean data are being reused to answer questions about many important issues including climate change, ocean phenomena, and management of coastal and marine resources.

For more information visit: <http://www.nodc.noaa.gov> or on Facebook: <http://www.facebook.com/noaa.nodc>

EVW05: Interagency Ocean Observation Committee (Town Hall)

Wednesday, February 22, 12:30 – 14:00, Ballroom I

Organizers: Nicholas Rome, Consortium for Ocean Leadership, nrome@oceanleadership.org; Josh Young, Consortium for Ocean Leadership, jyoung@oceanleadership.org

The Interagency Ocean Observation Committee (IOOC) is bringing together ocean observers, researchers, and data managers to discuss how to shape the next decade of ocean observing. This town hall is an opportunity for Ocean Sciences '12 attendees to participate in the Integrated Ocean Observing System Summit being held in the fall. The IOOC will seek audience input during facilitated discussions and look to attendees for suggestions on enhancing marine research, operations, and funding.

EVW06: Ocean Observatories Initiative: Information and Community Opportunities (Informational Talk)

Wednesday, February 22, 12:30 – 14:00, Ballroom J

Organizer: Kerry Beck, kbeck@oceanleadership.org

The National Science Foundation-funded Ocean Observatories Initiative (OOI) will deliver high quality data and data products that will address critical science-driven questions and lead to a better understanding and management of our oceans for a 25-year-plus time period within an expandable architecture that can meet emerging technical advances in ocean science. This event will include discussion of progress on the OOI program to date and information on how to become involved.

For more information visit: <http://www.oceanobservatories.org>

EVW08: The Future of Radiocarbon in the Ocean Sciences (Town Hall)

Wednesday, February 22, 18:00 – 21:00, Room 150 A, B, C, G

Organizer: Ann McNichol, amcnichol@whoi.edu

The use of radiocarbon to study fundamental processes in the oceans, from the role of the oceans in climate to understanding the cycling of carbon in diverse marine reservoirs, has exploded. Developments, e.g. measuring smaller samples and providing lower precision “reconnaissance” measurements, continue to broaden its use. We will discuss recent advances as well as the state of the art for routine measurements, and invite input on future measurement needs in the ocean sciences.

EVW09: US Arctic GEOTRACES (Town Hall)

Wednesday, February 22, 18:00 – 21:00, Room 151 A, B, C, G

Organizers: David Kadko, University of Miami, dkadko@rsmas.miami.edu; Robert Anderson, Lamont-Doherty Earth Observatory, boba@ldeo.columbia.edu

GEOTRACES is an international program focused on understanding the cycling of trace elements and isotopes in the oceans. Since the inception of this program, there has been strong interest in carrying out studies in the Arctic Ocean. The Arctic Ocean is at the epicenter of climate change, and warming climate will likely have a profound impact on the carbon budget, geochemical cycles, and ecosystem of the Arctic. Furthermore, these changes will ultimately be felt globally, through feedbacks related, for example, to melting ice and release of carbon from permafrost. This interest has led to national and international discussions, and planning

has begun for a multi-national, multi-icebreaker, GEOTRACES field effort to the Arctic likely in 2015. The US will be an active participant in this endeavor. The purpose of this meeting is to provide an update on the status of the planning process and to solicit input from the community.

For more information visit: <http://www.geotraces.org/news/news/1-news-/308-us-geotraces-arctic-planning-and-information-events>

EVW10: New Frontiers in Ocean Exploration: NOAA's Program of Telepresence-enabled Systematic Exploration (Town Hall)

Wednesday, February 22, 18:00 – 19:30, Room 250 A, B, D, E

Organizers: Craig Russell, NOAA Office of Ocean Exploration & Research, craig.russell@noaa.gov; Katherine Croff Bell, Ocean Exploration Trust, kcroff@gso.uri.edu

The NOAA Office of Ocean Exploration and Research (OER) was created to increase the nation's understanding of unknown and poorly known ocean areas and phenomena, generate new lines of scientific inquiry and research, increase the pace and efficiency of ocean exploration through the use of advanced techniques and technologies, and disseminate discoveries and findings to a broad spectrum of users. The NOAA Ship Okeanos Explorer and the Ocean Exploration Trust's (OET) Exploration Vessel Nautilus are currently conducting telepresence-enabled exploration. Equipped with sonar equipment and remotely operated vehicles, the ships transmit information to shore-based Exploration Command Centers (ECC) and over the Internet to broadly distributed teams of explorers. The systematic exploration paradigm involves surveying large areas to provide high-resolution maps of the seafloor. These maps are used to define areas to be explored in greater detail using advanced remotely operated vehicles outfitted with high-definition video cameras and an array of oceanographic sensors. Using the OER and OET vessels, explorers investigate new ocean areas and phenomena from shore-based ECCs equipped to receive video, data and information in real-time. Systematic exploration is also designed to engage the public and stimulate the imagination by engaging them in the excitement of real-time exploration and discovery.

EVW11: Communicating the Broader Impacts of your Research using Visual Tools – A Workshop for Graduate Students (Workshop)

Wednesday, February 22, 18:00 – 21:00 (Light snacks will be provided.), Room 251 A, B, D, E

Organizer: Coral Gehrke, COSEE – Pacific Partnerships, cgehrke@uoregon.edu

One of the keys to communicating your work with any audience is making your science relevant and interesting. Whether you are trying to communicate to policy and decision makers, school groups, undergraduates, or public audiences, concept maps and other visual tools can help you organize your work into themes for communicating. This workshop, designed for graduate students, will introduce techniques and online tools for identifying and communicating the big ideas behind your work in ways that make it relevant and interesting without over simplifying it. Participants will identify important audiences, map out key components of their work, and develop strategies for communicating with their maps. Participants in previous workshops have created presentations for their graduate committees, developed tools for communicating to K12 teachers, developed communication strategies

with policy makers, and come to better understand how their work fits in to their colleagues work.

For more information visit: <http://www.coseepacificpartnerships.org>

EVTH03: Ladder of Scientific Success–Broaden (Workshop)

Thursday, February 23, 12:30 – 14:00, Room 250 A, B, D, E

Organizers: Bob Chen, University of Massachusetts - Boston, bob.chen@umb.edu; Adrienne Sponberg, ASLO, sponberg@aslo.org

Broaden Your Impacts Through Effective Networking. Your research is important. It can be used to connect with a diversity of potential collaborators to impact a wide variety of audiences. This workshop will focus on broadening the impacts of your research by enhancing your professional networks in purposeful ways. Learn effective techniques and increase your capacity to effectively engage a broader audience in your science to increase its impact. This session will be presented by Karen Stephenson, Network International and Bob Chen, COSEE OCEAN. Lunch will be provided to the first 175 participants.

For more information visit: <http://www.coseeocean.net>

EVTH06: The Distributed Biological Observatory (DBO): A Change Detection Array in the Pacific Arctic Region (Town Hall)

Thursday, February 23, 12:30 – 14:00, Room 251 A, B, D, E

Organizer: Jackie Grebmeier, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory, jgrebmei@umces.edu

To more systematically track the broad biological response to sea ice retreat and associated environmental change, an international consortium of scientists are developing a coordinated "Distributed Biological Observatory" (DBO) that includes selected biological measurements at multiple trophic levels in the Pacific Arctic. These measurements are being made simultaneously with hydrographic surveys and satellite observations. The DBO currently focuses on five regional biological "hotspot" locations along a latitudinal gradient. Hydrographic transects were occupied from spring to fall in 2010 and 2011 during a pilot program at two sites in the southern Chukchi Sea and Barrow Canyon, and provide repeat collections of water parameters and multiple biological trophic level parameters seasonally. This sampling indicates freshening and warming as Pacific seawater transits northward over the spring to fall season as sea ice retreats, with impacts on both plankton and benthic prey bases for larger marine mammals and seabirds. As the DBO moves to an implementation phase, the intent is to serve as a change detection array for the identification and consistent monitoring of biophysical responses to climate change. Multiple participants in the DBO effort will provide updates on the field program, results and future plans during this open Town Hall session. Further information on the DBO can be found at the DBO website <http://www.arctic.noaa.gov/dbo/> and at the Pacific Arctic Group website <http://pag.arcticportal.org/>.

EVTH07: Ocean Observatories Initiative: Information and Community Opportunities (Informational Talk)

Thursday, February 23, 12:30 – 14:00, Ballroom D

Organizer: Kerry Beck, kbeck@oceanleadership.org

The National Science Foundation-funded Ocean Observatories Initiative (OOI) will deliver high quality data and data products that will address critical science-driven questions and lead to a better understanding and

management of our oceans for a 25-year-plus time period within an expandable architecture that can meet emerging technical advances in ocean science. This event will include discussion of progress on the OOI program to date and information on how to become involved.

For more information visit: <http://www.oceanobservatories.org>

EVTH08: Ocean Sciences, Nanotechnology, and the NNIN (Workshop)

Thursday, February 23, 12:30 – 14:00, Ballroom F

Organizer: Helene Craigg, helenec@umich.edu

From simple technologies to complex micro/nano-enabled sensors, the NSF National Nanotechnology Infrastructure Network (NNIN) offers a wide range of capabilities and expertise to the ocean sciences community. Sensors typically detect, monitor and respond to physico-chemical parameters of interest to DoD, DARPA, Homeland Security and the NIH. Although the same technologies hold enormous potential for studying any aquatic system at the local, national and global scales, they have not fully transitioned to this field, chiefly because geoscientists and nanotechnologists are unaware of each others' needs and capabilities. Participants to this workshop will learn what capabilities are available within the micro/nanotechnology community and what they could bring to their research projects. The ultimate goal of this workshop is to bring the two communities of aquatic sciences and micro/nanotechnology together to create further collaborations. NNIN has a booth at the meeting (Booth #49). Lunch will be served.

Please register at: <http://lnf.umich.edu/nnin-at-michigan/index.php/event-registration/?event=oceansci-workshop>.

For more information visit: <http://www.lnf.umich.edu/nnin>

EVTH09: Work-life balance in Oceanography (Town Hall)

Thursday, February 23, 18:00 – 19:30, Room 150 A, B, C, G

Organizers: Susanne Neuer, Arizona State University, susanne.neuer@asu.edu, Victoria Coles, University of Maryland Center for Environmental Science, vcoles@umces.edu

Despite relatively high numbers of female PhD students, there is still a high attrition for women progressing from postdoctoral to faculty positions. These issues are particularly severe in oceanography, where long absences from families are often required to participate in cruises or field work. This event is a follow-on of Monday's luncheon on the same topic, and provides an open forum for exploring strategies on how to achieve a satisfying work life balance particularly in the context of an oceanography career. Refreshments are provided. Sponsor: AWIS (Association for Women in Science), MPOWIR (Mentoring Physical Oceanography Women to Increase Retention).

For more information visit: <http://www.awis.org>; <http://mpowir.org>

EVTH11: ALOHA Cabled Observatory (Workshop)

Thursday, February 23, 18:00 – 20:00, Ballroom A

Organizer: Roger Lukas, rlukas@hawaii.edu

Discussions of abyssal experiment possibilities at Station ALOHA
For more information visit: <http://aloha.manoa.hawaii.edu>

EVTH12: Multi-sensor Improved SSTs (MISST) for IOOS Remote Sensing Systems (Workshop)

Thursday, February 23, 18:00 – 20:00, Ballroom B

Organizer: Chelle Gentemann, gentemann@remss.com

The Multi-sensor Improved Sea-Surface Temperature (MISST) for IOOS project builds on the successful partnership developed for the MISST for GODAE project (2004-2009). The objectives of this project are to (1) improve and continue generation of satellite SST data and SST analyses in the IOOS DMAC and CF compliant Group for High Resolution Sea Surface Temperature (GHRSSST) Data Specification GDS format; (2) distribute and archive these data; and (3) use this improved SST data in applications, many specifically targeted for the Integrated Ocean Observing System (IOOS).

The partnership consists of 28 scientists from industry, academia, and government with wide ranging experience spanning the initial calibration of satellite sensors, development of SST algorithms, assessment of SST uncertainties, production of NRT satellite data, research into data fusion methodologies and the production of blended data sets, research into diurnal warming and the cool skin effect which both affect satellite SST measurements, and applications that utilize SSTs.

This workshop will be used to coordinate research and activities for this project.

For more information visit: <http://www.misst.org>

Special Opportunities for Students and Early Career Participants

In order to register as a student, you should be enrolled as a student in a college or university and currently attending classes. Early career participants are defined as individuals with less than 10 years since their last graduation.

Outstanding Student Presentation Awards

TOS, AGU, and ASLO are co-sponsoring awards for outstanding posters and oral presentations by students at the 2012 Ocean Sciences Meeting. To be eligible, a student must be a member of one of the sponsoring societies and first author on research that has not been presented previously at other scientific meetings. Presentations will be judged on the basis of innovation/scientific insight, quality of experimental design/methods, and clarity/effectiveness of presentation. There is no need to apply; all eligible presentations will be evaluated in consideration for the awards.

Student Social Mixer

Monday, February 20, 18:00 to 19:30, South Foyer

All students are invited to come meet with other students and future colleagues in a fun, relaxed setting. Senior scientists are also invited to attend and meet with students on an informal basis. Beverages and snacks will be available.

Student Workshops

Tuesday, 21 February 2012, and Thursday, 23 February 2012
12:30 to 14:00, Ballrooms A & B

Student workshops on a variety of topics related to career development will be held on Tuesday and Thursday over lunch. Workshop topics include: Ethics in Science; Outlooks in Oceanography; Presentation Design & Delivery; and Network Science and Collaborations. A limited number of lunches will be provided on a first-come, first-served basis. Flyers outlining all student activities will be provided at the Registration Desk and Student Lounge, and will include additional information about the workshop topics and speakers.

Student Career Center and Lounge

Monday – Friday, Exhibit Hall

A large area near the society booths in the exhibit hall will be reserved for the Student Career Center and Lounge, where students can access career information, relax and check email, and meet with other students. Bulletin Boards will be provided for posting CVs (one page only), as well as information on upcoming meetings, educational opportunities, and job announcements.

ASLO Multicultural Program

Since its start in 1990 the ASLO Multicultural Program has brought over 750 diverse undergraduate and graduate students to the annual ASLO meetings. Many have gone on for advanced degrees and several have served on the ASLO BOD and various committees. The program features a pre-conference dinner and field trip, meeting-mentors to help guide the students, a student-symposium, and various other activities. The goal of the program is to increase the human diversity of aquatic scientists. This year 65 students will participate. For more information, please contact Dr. Benjamin Cuker by email: Benjamin.Cuker@hamptonu.edu.

Early Career Mixer

Monday, 20 February 2012, 18:00 to 19:30, North Foyer - SPCC

A “meet and mix” reception is planned and organized by members of the ASLO early career committee to give early career members an opportunity to provide feedback on various topics relevant to them, including any concerns or expectations as an early career member. This is a social gathering for all early career members to get to know each other and to network. Refreshments will be served.

Oral Presentations

Advance Submission

Prior to the meeting, speakers received an email with login credentials and instructions to submit online. Please make sure to upload all media files required for your presentation. Any necessary video or audio files not included in your online upload folder along with your PowerPoint will cause your presentation to fail in the meeting room. Please see the

list of preferred media formats below. Speakers who submit in advance will have a faster check in at the Presentation Room. Although online submission may not be required, it is strongly encouraged.

Submissions will also be accepted on-site in the Presentation Room, Room 251 C at the Salt Palace Convention Center, and you also can upload to the Web site throughout the conference.

File Formats

The following presentation file types are acceptable for online submission:

- Microsoft Office PowerPoint (.ppt), (.pptx)
- Adobe Acrobat (.pdf)

Microsoft PowerPoint Tips

PowerPoint embeds image files directly into the file when you save them, while video files are not embedded. Only a link is made to the video file. Copy the video clips you want to insert into the same folder as the PowerPoint file. This will eliminate the problem of PowerPoint losing the link to the file. Be certain to bring the video files and the PowerPoint files to the meeting.

Fonts

Arial and Helvetica are recommended for clarity and compatibility. Confirm a font size of AT LEAST 24 points for body text and 36 – 40 points for headings. Light colored text on a dark background is advised. Avoid using red or green. Confirm that the maximum number of lines in text slides is no more than 6 or 7.

Images

The size of the screen will be 1024 x 768 pixels, meaning that any image with more pixels in the X or Y coordinate that is more than that will not be displayed. The image will be altered by PowerPoint to fit. Large images (i.e. 2000 x 1500 pixels) which are created with digital cameras and scanners will make the resulting PowerPoint file very large. This may cause the presentation to load slowly. This can be avoided by inserting images with the following properties:

Format = (.jpg)
Recommended Size = (800x600 pixels)
Compression Setting = 8 (High quality)

Use the “Insert” feature of PowerPoint to add images to your presentations. Do not copy/paste them into the slide or click and drag.

Video/Audio

List of Preferred Media (Video/Audio) Formats: .wmv, .mpg, .avi, .mov

Please try to keep the video files size to less than 20MB if possible. Use short video segments when needed.

List of Specific Compatible Codecs:

- Microsoft - RLE, Video1, Windows Media Series 8 and 9
- Divx 3/4/5

- Intel Indeo Video <= v.5.11
- TechSmith Screen Capture Codec
- Huffiyuv Lossless Codec
- Asus Video Codec, On2VP3, ATI VCR and YV12 Codecs
- Cinepak, MJPEG

Apple Macintosh Users

Apple Macintosh users can also upload PowerPoint presentations to the website. Speakers creating presentations using Apple Keynote (.key) will need to bring their files directly to the Presentation Room to have them loaded to the network. PSAV will have a Macintosh computer in each breakout room.

Laptops

Personal laptops cannot be used in the meeting rooms. You must upload your files in the Presentation Room at all times regardless of arrival time. PSAV support staff will be available to transfer from your laptop if needed. Please make sure you bring laptop video port adapters and power cables with you. Always bring a backup of the presentation on flash drive/memory stick or disc to the Presentation Room.

Presentation Room

All speakers must check in at the Presentation Room, Room 251C, preferably the day before your session to preview your presentation.

Presentation Room Hours of Operation:

Sunday, 19 February 2012:	13:00 to 21:00
Monday, 20 February 2012:	7:00 to 19:00
Tuesday, 21 February 2012:	7:00 to 19:00
Wednesday, 22 February 2012:	7:00 to 19:00
Thursday, 23 February 2012:	7:00 to 19:00
Friday, 24 February 2012:	7:00 to 16:00

If you are checking in on the day of your session, please come by at least 4 hours prior to the start of your session. PSAV technicians will assist with the upload of your files and provide the opportunity to preview and/or edit the presentation as necessary. **If you are unavoidably delayed, you must still go directly to the Presentation Room. Do not bring a laptop or other media device to the session room.**

Computer Equipment

The Presentation Room and all meeting rooms will be equipped with both a Windows 7 based PCs with Microsoft PowerPoint 2010 and an Apple Macintosh with Keynote '09. Verification of proper performance in the Presentation Room is essential, particularly if video and animation is included in the presentation. Please note that Internet access will not be available during your presentation.

Speaker Ready Room

A speaker ready/practice room is available in Room 251 F. It will be open during all hours of the meeting including Sunday from 13:00 to 21:00, Monday through Thursday from 7:00 to 19:00 and on Friday from 7:00 to 16:00. You may practice or review your presentation in this room.

Bring a Backup

Be sure to bring a backup copy of your presentation with you to the meeting. If you plan to upload files on-site, bring two copies. USB/Flash drives are preferred.

When reviewing your presentation in the Presentation Room, make sure all fonts, images, and animations appear as expected and that all audio or video clips are working properly. The computers in the meeting rooms are the same as the computers in the Presentation Room, therefore:

IF THE PRESENTATION DOES NOT PLAY PROPERLY IN THE PRESENTATION ROOM, IT WILL NOT PLAY PROPERLY IN THE MEETING ROOM.

During Your Presentation

Each meeting room will be staffed with a PSAV technician who will assist with starting each presentation. Once the presentation is launched, the speaker will control the program from the podium using a computer mouse or the up/down/right/left keys on a keyboard.

Audio-Visual Equipment

Each session room will be equipped with a screen, LCD projector, computer, sound system, timer and laser pointer. All presentations will be preloaded into the computer by the A/V staff for the session room. Student volunteers and A/V staff members will be available to assist and to provide full instructions on using the presentation system in the oral session rooms.

Security

Speakers are required to provide identification in order to submit their presentation as well as to access it in the Presentation Room. Recording devices such as cameras are not permitted in the Presentation Room. All presentation files are deleted at the end of the conference, unless permission has been granted to the conference association to retain the presentation files.

Poster Presentations

Posters will be placed on 4'x8' poster boards in the Exhibit/Poster Hall. There will be two posters per side so posters must be no larger than 4'x4' (48 inches high by 48 inches wide). If your poster exceeds these specifications, it may be subject to removal. Posters will adhere to the boards using push pins that will be provided.

Posters will be displayed in specific session groupings for the entire meeting to maximize opportunities for viewing. Specific times for interactions with the presenters will be assigned at times not in conflict with oral presentations.

Poster numbers are included in this program. Poster presenters also were notified of their poster number and the assigned time and day for presenting their poster well in advance of the meeting. You will be expected to be available to present your poster during your designated poster session. Poster presenters are asked to adhere to the designated set-up, display, and tear-down instructions and times.

Poster Set-up Time: Sunday, 19 February, 12:00 to 17:00

Posters on Display: Monday through Thursday, 20 February
through 23 February, 08:00 to 18:00 and
Friday, 24 February, 08:00 to 12:00

Poster Teardown Times: Thursday, 23 February, immediately
following the conclusion of the
poster session at 18:00 or from
12:00 to 16:00 on Friday, 24 February

Important note regarding poster presentations: The convention decorator may discard posters if the presenting author does not dismantle them according to tear-down instructions and times.

For your convenience, arrangements for posters to be printed in Salt Lake City can be made through the business center located within the Salt Palace Convention Center. For more information and to make arrangements, please contact the Salt Palace Convention Center Business Center by calling 801-534-6301, fax 801-534-6305, or e-mail the business center at businesscenter@saltpalace.com. Also, FedEx Kinko's has several business centers in Salt Lake City, including one within three blocks of the Salt Palace Convention Center at 19 East 200 South. Contact FedEx Kinko's by telephone at 801-533-9444 or send an e-mail to usa2401@fedex.com. Normally, this service takes 24 to 48 hours and weekend hours may vary. Materials will need to be submitted in PDF format. It is very important that you make poster printing arrangements in advance by calling to verify the requirements.

OSM 2012 SUPPORTERS

The Living Planet Aquarium

The Living Planet Aquarium offers free entry to Ocean Sciences Meeting participants upon presentation of your conference name badge. The Aquarium strives to engage people to explore, discover and learn about Earth's diverse ecosystems through educational and entertaining aquatic exhibits. Don't miss the penguins, river otters, sharks, stingrays and much more!

The Living Planet Aquarium is located approximately 15 miles south of downtown Salt Lake City at:

725 East 10600 South
Sandy, UT 84094-4409
(801) 355-3474

Times of operation: 10:00 to 18:00
www.thelivingplanet.com

OSM 2012 Exhibits

Exhibits will be open in the Exhibit Hall on the following days and times:

Monday, February 20, 2012.....8:00 to 18:00
Tuesday, February 21, 2012.....8:00 to 18:00
Wednesday, February 22, 2012.....8:00 to 18:00
Thursday, February 23, 2012.....8:00 to 18:00
Friday, February 24, 2012.....8:00 to 12:00

Sponsors and Exhibitors

Sponsors:

The Oceanography Society

P.O. Box 1931
Rockville, MD 20849-1931
Phone: 301-251-7708
Fax: 301-251-7709
Contact: Jennifer Ramarui
Email: info@tos.org
Website: www.oceanography.org

American Geophysical Union

2000 Florida Avenue N.W.
Washington, DC 20009-1277
Contact: Tekiyah Ward
Phone: 202-462-6900
Fax: 202-328-0566
Email: service@agu.org
Website: www.agu.org

Association for the Sciences of Limnology and Oceanography

5400 Bosque Boulevard, Suite 680
Waco, TX 79710-4446
Contact: Helen Schneider Lemay
Phone: 254-399-9635
Fax: 254-776-3767
Email: business@aslo.org
Website: www.aslo.org

Exhibitors:

Aanderaa Data Instruments, Inc. (Booth No. 53)

182 East Street, Suite B
Attleboro, MA 02703
Contact: Richard Butler
Phone: 508-226-9300
Fax: 508-226-9306
Email: richard.m.butler@xyleminc.com

American Meteorological Society (Booth No. 28)

1120 G. Street NW
Washington, DC 20005
Contact: Kira Nugnes
Phone: 202-737-1043
Fax: 202-737-0445
Email: dcmeetings@ametsoc.org

Battelle (Booth No. 26)

505 King Ave
Columbus, OH, 43201
Contact: Laura Mrozinski
Phone: 410-306-8680
Fax: 614-458-6762
E-Mail: mrozinskiL@battelle.org

CODAR Ocean Sensors (Booth No. 9)

1914 Plymouth St
Mountain View, CA 94043
Contact: Laura Pederson
Phone: 408-773-8240
Email: laura@codar.com

Cambridge University Press (Booth No. 29)

32 Avenue of the American
New York, NY 10013-2473
Contact: James Murphy
Phone: 212-924-3900, ext. 5074
Email: jmurphy@cambridge.org

Center for Dark Energy Biosphere Investigations (Booth No. 4)

3616 Trousdale Pkwy
University of Southern California
Los Angeles, CA 90089-0371
Contact: Rosalynn Sylvan
Phone: 213-740-3997
Fax: 213-740-8123
Email: rosalyy@usc.edu

**Center for Ocean Sciences Education Excellence (COSEE)
(Booth No. 14, 15, 16)**

Office of Marine Programs
University of Rhode Island
Narragansett Bay Office
Narragansett, RI 02882
Contact: Liesl Hotaling, Adrienne Sponberg
Phone: 732-492-0182
Email: lieslhotaling@yahoo.com, asponberg@aslo.org
<http://www.cosee.net>

Consortium for Ocean Leadership (Booth No. 57, 58, 59)

1201 New York Avenue NW
4th Floor
Washington, DC 20005
Contact: Kristin Kracke
Phone: 202-787-1644
Fax: 202-332-8687
Email: kkracke@oceanleadership.org
<http://www.oceanleadership.org>

EXC "Future Ocean" CAU Kiel (Booth No. 27)

Olshausenstr 40
Kiel, Germany 24098
Contact: Nancy Smith
Phone: +49-431-880-4933
Fax: +49-431-880-2539
Email: nsmith@uv.uni-kiel.de
<http://www.futureocean.org>

EofE Ultrasonics Co., Ltd. (Booth No. 40)

303 Business Incubation Center
Korea Aerospace University
Deokyang-Gu, Goyang-Si
Kyounggi-Do 412-791
Korea
Contact: Dr. Doowon Choi
Phone: 82-2-3158-3178
Fax: 82-2-3158-3179
Email: dchoi.eofe@gmail.com
<http://ultrasonics.co.kr>

Elementar Americas, Inc. (Booth No. 1)

520 Fellowship Road
Suite D-408
Mt. Laurel, NJ 08057
Contact: Steve Sharp
Phone: 856-787-0022, ext. 211
Fax: 856-787-0055
Email: s_sharp@elementar-inc.com

Fluid Imaging Technologies, Inc. (Booth No. 46, 47)

65 Forest Falls Dr
Yarmouth, ME 04096
Contact: Faith Baker
Phone: 207-846-6100
Fax: 207-846-6110
Email: faith@fluidimaging.com

Gulf of Mexico Research Initiative (Booth No. 56)

1201 New York Avenue NW
4th Floor
Washington, DC 20005
Contact: Kristin Kracke
Phone: 202-787-1644
Fax: 202-332-8687
Email: kkracke@oceanleadership.org
<http://www.gulfresearchinitiative.org>

Imaging Science Research, Inc. (Booth No. 39)

15 Sixth Avenue
Southern Shores, NC 27949
Contact: Dennis Trizna
Phone: 703-801-1417
Email: dennis@isr-sensing.com

iRobot Corporation (Booth No. 31)

8 Crosby Drive
Bedford, MA 01730
Contact: Jonathan Lesser
Phone: 781-430-3570
Fax: 781-430-3898
Email: jlesser@irobot.com
<http://www.irobot.com>

JFE Advantech Co., Ltd. (Booth No. 68)

7-2-3, Ibukidai-Higashimachi, Nishi-ku
Hyogo 651-2242
JAPAN
Contact: Hua Li
Phone: +81-78-9978686
Fax: +81-78-997-8609
Email: lihua@jfe-advantech.co.jp

Kongsberg Underwater Technology, Inc. (Booth No. 2)

19210 33rd Avenue West, Suite A
Lynwood, WA 98036-4749
Contact: Rich Patterson
Phone: 425-712-1107
Fax: 425-712-1197
Email: Darlene.burt@kongsberg.com

LI-COR Biosciences (Booth No. 42)

4647 Superior Street
Lincoln, NE 68504
Contact: Ashlee Muller
Phone: 402-467-0787
Fax: 402-467-0831
Email: ashlee.muller@licor.com

MetOcean Data Systems (Booth No. 36)

21 Thornhill Drive
Dartmouth, Nova Scotia
Canada B3B 1R9
Contact: Tony Chedrawy
Phone: 902-468-2505
Fax: 902-468-4442
Email: tony@metocean.com

Myriax (Booth No.54)

Hobart, TAS
Australia 7001
Contact: Hugh Pederson
Phone: +61 03 62 31 5588
Fax: +61 03 62 34 1822
Email: sales@myriax.com

NASA (Booth No. 10, 11, 24, 25)

300 E Street SW
Washington, DC 20546-0001
Contact: Winnie Humberson
Email: winnie.h.humberson@nasa.gov

National Nanotechnology Infrastructure Network (Booth No. 49)

University of Michigan
1301 Beal Ave, 2219 EECS Building
Ann Arbor, MI 48109
Contact: Helene Craig
Phone: 734-615-9665
Email: helenc@umich.edu

NOAA National Oceanographic Data Ctr. (Booth Nos. 5, 6)

SSMC3 E/0c
1315 East-West Hwy
Silver Spring, MD 20910
Contact: Andy Allegra
Phone: 301-713-3277, ext. 152
Fax: 301-713-3302
Email: andy.allegra@noaa.gov

Naval Research Laboratory (Booth No. 17, 18)

4555 Overlook Ave., SW
Code 3430
Washington, DC 20375
Contact: Cindy Allen
Email: cindy.allen@nrl.navy.mil

Ocean Networks Canada (Booth No. 44, 45)

2300 McKenzie Ave
TEF Building #155
Victoria, BC V8W 2Y2
Canada
Contact: Leslie Elliott
Phone: 250-472-5357
Fax: 250-472-5370
Email: elliottl@uvic.ca

Office of Naval Research (Booth No. 19, 20)

875 N. Randolph St
Arlington, VA 22203
Contact: Cindy Barner
Phone: 703-696-52009
Fax: 703-58-5940
Email: cind.barner.ctr@navy.mil

Onset Computer Corporation (Booth No. 60)

Marketing Communications
470 MacArthur Boulevard
Bourne, MA 02532
Contact: Cynthia Selby
Phone: 508-743-3100
Fax: 508-759-9100
Email: Cynthia_Selby@onsetcomp.com

Oregon State Univ. Marine Council (Booth No. 55)

322 Kerr Administration Building
Corvallis, OR 97331
Contact: Jenna Borberg
Phone: 541-737-4440
Email: jenna.borberg@oregonstate.edu

Oxford University Press (Booth No. 21)

2001 Evans Rd
Cary, NC 27513
Contact: Erin Norris
Phone: 919-677-0977
Fax: 919-677-1714
Email: erin.norris@oup.com

RBR Ltd. (Booth No. 48)

27 Monk Street
Ottawa, ON
Canada K1S 3Y7
Contact: Mark Vist
Phone: 613-233-1621
Fax: 613-233-4100
Email: info@rbr-global.com

Rockland Scientific, Inc. (Booth No. 38)

520 Dupplin Road
Victoria, BC V8Z 1C1
Canada
Contact: Fabian Wolk
Phone: 250-370-1688
Fax: 250-370-0234
Email: fabian@rocklandscientific.com

Satlantic (Booth No. (Booth No. 32, 33, 34, 35))

3481 North Garginal Road
Halifax, Nova Scotia
Canada B3K 5X8
Contact: Geoff MacIntyre
Phone: 902-492-4780
Fax: 902-492-4781
Email: zara@satlantic.com

Sea-Bird Electronics, Inc. (Booth No. 32, 33, 34, 35)

13431 NE 20th Street
Bellevue, Washington 98005 USA
Tel: 425-643-9866
Direct Line: 425-644-3244
Fax: 425-643-9954
Email: clwin@seabird.com

Sequoia Scientific, Inc. (Booth No. 23)

2700 Richards Road, #107
Bellevue, WA 98005
Contact: Ole Mikkelsen
Phone: 425-641-0944
Fax: 425-643-0595
Email: ole.mikkelsen@sequoiasci.com

Shoals Marine Lab (Booth No. 3)

Cornell University
Wing Hall 403
Ithaca, NY 14853
Contact: Ian Hewson
Phone: 607-255-0151
Fax: 607-255-3904
Email: hewson@cornell.edu

Springer (Booth No. 30)

233 Spring Street
New York, NY 10013
Contact: Acasia Delmau
Phone: 212-460-1500
Fax: 201-348-4505
Email: Minerva.Rodriguez@springer.com

Takuvik Joint International Laboratory (Booth No. 50)

Université Laval/CNRS
1045 rue de la Médecine
Pavillon Alexandre Vachon, Suite 2078
Université Laval
Québec, Québec G1V 0A6
Contact: Debra Christiansen-Stowe
Phone: 418-656-2131, ext. 5193
Fax: 418-656-2339
Email: debra.christiansen-stowe@takuvik.ulaval.ca

Teledyne KD Instruments (Booth No. 12)

14020 Stowe Drive
Poway, CA 92064
Contact: Lisa Galloway
Phone: 858-842-2695
Fax: 858-842-2822
Email: lgalloway@teledyne.com

Thermo Scientific (Booth No. 43)

355 River Oaks Pkwy
San Jose, CA 95134
Contact: Alexander (Sandy) Elliott
Phone: 612-747-3293
E-Mail: sandy@elliottmg.com

Turner Designs (Booth No. 37)

845 W. Maude Avenue
Sunnyvale, CA 94085
Contact: Jenifer Sluga
Phone: 408-749-0994, ext. 101
Fax: 408-749-0998
Email: marketing@turnerdesigns.com

Unisense (Booth No. 13 & 22)

Tueager 1
Aarhus DK-8200
Denmark
Contact: Thomas Rattenborg
Phone: +45-8944-9500
Fax: +45-8944-9549
Email: tr@unisense.com

University of Chicago Press (Booth No. 7)

1427 E. 60th Street
Chicago, IL 60637
Contact: Levi Stahl
Phone: 773-702-0289
Fax: 773-702-9756
Email: lstahl@press.uchicago.edu

WetLabs (Booth No. 32, 33, 34, 35)

620 Applegate Street
Philomath, OR 973710
Contact: Julie Rodriguez
Phone: 541-929-5650, ext. 44
Fax: 541-929-5277
Email: julie@wetlabs.com

Woods Hole Oceanographic Institution (Booth No. 8)

266 Woods Hole Road
Woods Hole, MA 02543
Contact: Janet Fields
Phone: 508-289-2950
Fax: 508-457-2188
Email: jfields@whoi.edu

YSI (Booth No. 51, 52)

1700 Brannum Lane
Yellow Springs, Ohio 45387-1107
Contact: Lyndsey McDermand
Phone: 937.767.7241 x248
Email: lmcdermand@ysi.com
<http://www.ysi.com>

Media/Press

On-Site Press Room/Interview Room

Monday–Thursday: 08:00–18:00, Friday: 08:00–12:00, Room 150 D

The press workroom will be equipped with a telephone, computer with Internet access and a printer for use by members of the media only. A room for conducting interviews will also be available upon request. Presenters are welcome to display press releases in this room if desired.

For further information, please contact:

Kristin Kracke
Cell: 336.255.9884
kkracke@oceanleadership.org

At the Meeting

Concessions

You will have several choices for food at the Salt Palace Convention Center. For quick options, concession stands will be open beginning with coffee kiosks open daily, Monday through Friday, from 7:30 to approximately 17:30. The kiosks will be located near the South Entrance escalator on Level 1, outside Exhibit Hall D and outside the Ken Knight Boardroom on Level 2. You will be able to grab your favorite coffee selection, hot tea and cocoa plus bagels, muffins, juice, sweets and fruits.

The Hall A café will be open daily from 10:30 to approximately 15:00. This will be in addition to the concession stands that are built-in at the back of the exhibit hall. These concessions will offer a wide selection of made to order sandwiches, hot Panini grilled sandwiches, pasta, rice bowls, variety of Mexican foods as well as snacks, fruits and beverages.

A quick snack and sandwich “grab ‘n’ go” kiosk will be open in the main concourse area, too.

Breaks and Refreshments

Breaks with coffee service will be available Monday through Friday from 10:00-10:30. With the exception of Wednesday morning during the plenary session, all morning breaks will be in the Exhibit Hall.

On Wednesday morning, breaks will be in two locations, outside the ballroom in the North Foyer and in the Exhibit Hall. Monday through Thursday afternoon breaks will feature free beer (while supplies last) and will be in the Exhibit Hall for the first hour of the poster session.

Coat Check

An attended coat check area will be located in the South Foyer of the Salt Palace outside Exhibit Hall E. Attendees may check their own items for \$2 per item checked. This area will be open and available for luggage hold on Friday, 24 February, from 7:00 to 16:30.

Messages

Message boards will be located outside the Exhibit/Poster Hall. Feel free to post messages as well as to check these boards if you are expecting a message during the meeting.

Business Center

The Salt Palace Business Center is located inside the convention center on the 2nd floor (Northeast end), near Rooms 253 and 254. They offer a full range of business services that are convenient and competitively priced, including copying, printing and faxing, office supplies, small package shipping and receiving, and limited production services. Contact the business center for details at (801) 534-6301.

Internet

Complimentary wireless service will be available from noon on Sunday, 19 February, through the conclusion of the meeting on Friday. This service will be available outside the meeting rooms in the lower concourse areas and in the Exhibit/Poster Hall. There will be adequate service for all participants via multiple access points throughout the Salt Palace. Access may be limited at times due to the number of users on the Internet at any one point. User access information will be available at the meeting.

ATM Machines

Official currency of the United States is the dollar, denoted by USD (\$). An Automatic Teller Machine (ATM) is located in the North Ballroom Foyer of the SPCC. Additional ATMs are located throughout the downtown area as well. Locations may be found at <http://visa.via.infonow.net/locator/global/jsp/SearchPage.jsp> for Visa and www.mastercard.us/cardholder-services/atm-locator.html for MasterCard.

Parking

The Salt Palace Convention Center offers two convenient, fully-staffed underground parking garages. The first is a 600 stall garage located at 185 West 200 South. The second is a 400 stall garage located at 50 South 300 West. Bicycle parking racks are located in the parking garages and in various places around the Salt Palace. A parking lot fee of \$12 will be charged each time you enter the parking garage at the Salt Palace. The following is a link to the parking garages: <http://www.visitsaltlake.com/saltpalace/parking/>

Special Needs

If you have a disability or limitation that may require special consideration in order to fully participate in the meeting, please contact the

OSM Business Office to see how we can accommodate your needs. Call 254-776-3550 or contact us via e-mail at osm2012@sgmeet.com. You may also go to the conference registration desk in the East Registration Area of the Salt Palace during the meeting as well.

Emergencies

If medical assistance is needed, the EMT Room at the Salt Palace is located in the main concourse across from Room 150 A. In case of an emergency, please do not call 911 on your own. Call Salt Palace Security at 385-468-2220 or call the event manager at 385-468-2209. You may also notify a member of the conference management staff immediately.

Family Room

There will be a family room in Room 254 C at the Salt Palace Convention Center. This is a room where you may go to relax with your children if you bring them to the convention center. Please keep in mind that this is not a room for child care and no service is offered in this room. You may not leave children unattended.

Child Care Information

On-site childcare for children ages 6 months to 12 years will be available in Room 254 AB of the Salt Palace Convention Center from 07:30 to 18:30 Monday through Thursday and on Friday from 07:30 – 16:30. Arrangements need to be made on an individual basis and in advance through ACCENT on Arrangements, Inc. You can call ACCENT on Children's Arrangements at 504-524-0188 or email: registration@accentoca.com. The deadline for advance registration is 10 February 2012. Rates for registration after that date are subject to increase. Although every effort will be made to accommodate registrations after that date

and on-site, there is no guarantee that ACCENT can accept children unless they are pre-registered. ACCENT will accommodate your child or children based on availability, as long as staffing ratios are maintained. If ACCENT has already received the maximum number of reservations for a certain day/time, their ability to accept "drop-ins" would be limited. For this reason, early registration is strongly encouraged.

Program costs include morning and afternoon snacks and juice, entertainment, and craft materials. Lunch is not included. However, a lunch can be purchased when registering, or parents can send or bring a lunch to their child.

While parents will need to pay a fee (either half or full day) for each child, organizers have made a commitment to support those parents with young children and will subsidize a large portion of the care. The meeting organizers assume no responsibility or liability for services rendered.

For More Information

For more information on the 2012 Ocean Sciences Meeting, address all correspondence and questions regarding registration, conference logistics, and hotel accommodations to:

2012 Ocean Sciences Meeting
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446
Phone: 254-776-3550
Fax: 254-776-3767
E-mail: osm2012@sgmeet.com

If your questions pertain to the program, please contact one of the meeting chairs. If you need information regarding content of a particular session, please contact the appropriate session organizer.

Monday At A Glance

Room	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Ballroom E	Ballroom F	Ballroom G	Ballroom H	Ballroom I	Ballroom J	150	151	250	251	Room	
7:00-17:00															7:00-17:00	
08:00-10:00	045: Oceanic Oxygen Content: Observed Physical and Chemical Processes and Climate Related Changes in the Past, Present and Future	057: Biogeochemical Cycling of Micronutrient Trace Elements	048: Ocean Surface Boundary Layers	137: Biodiversity Biogeochemistry and Ecology: Establishing Linkages Between Molecular Diversity and Ecosystem Functioning	146: Zooplankton Feeding Ecology and the Biological Carbon Pump in the Ocean	098: The Critical Importance of Community Building in the Ocean Sciences	021: Modeling and Observing the Tides in the Ocean	068: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	004: The Southern Ocean and its Role in the Climate System	109: Integrating Oceanography and Animal Tracking - the Ocean Tracking Network	071: Deep-Sea Conservation Impartatives in the 21st Century	085: Development of a Global Ocean Biogeochemical Observing System Based on Proliferating Floats and Gliders	126: Links Between Estuarine and Coastal Processes	006: Advances in Coastal Ocean Modeling, Analysis, and Prediction	08:00-10:00	
10:00-10:30	MORNING BREAK															
10:30-12:30	045: Oceanic Oxygen Content: Observed Physical and Chemical Processes and Climate Related Changes in the Past, Present and Future	057: Biogeochemical Cycling of Micronutrient Trace Elements	048: Ocean Surface Boundary Layers	137: Biodiversity Biogeochemistry and Ecology: Establishing Linkages Between Molecular Diversity and Ecosystem Functioning	171: Phytoplankton Fluorescence: Filling the Gap between Observations and Understanding	036: COSEE Using Measure the Impacts of Education/ Outreach	021: Modeling and Observing the Tides in the Ocean	068: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	004: The Southern Ocean and its Role in the Climate System	010: Ocean Observing Systems - Regional and Global	086: Climate Change Impacts on Living Marine Resources	151: Low Latitude Riverine Influence and Impact on Ocean Biogeochemistry	126: Links Between Estuarine and Coastal Processes	006: Advances in Coastal Ocean Modeling, Analysis, and Prediction	10:30-12:30	
12:30-14:00	ASLO/PM/COSEE Young Investigator Luncheon - 250A, B, D, E Ladder of Scientific Success-Deconstructing (Workshop) - 251A, B, D, E Career - Life Balance Initiatives (Town Hall) - 150A, B, C, G National Ocean Policy (Town Hall) - 151A, B, C, G															
14:00-16:00	014: Ocean Deoxygenation and Coastal Hypoxia in a Changing World	049: Advances in the Oceanography of Trace Elements in the Atlantic and Polar Oceans	173: Ocean Surface Waves and Interactions with Currents and Winds	124: New Insights into the early life stages and reproductive dynamics of large marine vertebrates	072: Plankton Phenology: Drivers, Variability and Impacts	073: Compound Interest: Research + Energy + Outreach = Career and Personal Yield	092: Advances in Ocean Salinity Remote Sensing: Initial Results from the Aquarius/SAC-D and SMOS Satellite Missions	068: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	004: The Southern Ocean and its Role in the Climate System	010: Ocean Observing Systems - Regional and Global	139: Governing Across Scales: Innovative Stewardship of Earth Systems: Creating a Global Large Marine Ecos Knowledge Network	100: Linking Biogeochemical Processes to Estuarine Physical Dynamics	121: Remote Sensing of the Coastal Ocean using Hyperspectral and Geostationary Satellite Imagery	006: Advances in Coastal Ocean Modeling, Analysis, and Prediction	14:00-16:00	
16:00-18:00	004: The Southern Ocean and its Role in the Climate System	006: Advances in Coastal Ocean Modeling, Analysis, and Prediction	010: Ocean Observing Systems - Regional and Global	014: Ocean Deoxygenation and Coastal Hypoxia in a Changing World	028: Comparing Physical Processes in Large Lakes and Shallow Inland/Marginal Seas	036: COSEE: Using Evaluation to Measure the Impacts of Education/ Outreach	048: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	071: Deep-Sea Conservation Imperatives in the 21st Century	072: Plankton Phenology: Drivers, Variability and Impacts	073: Compound Interest: Research + Energy + Outreach = Career and Personal Yield	085: Development of a Global Ocean Biogeochemical Observing System Based on Proliferating Floats and Gliders	086: Climate Change Impacts on Living Marine Resources	091: Direct Measurement of Air-Sea Fluxes, Surface Waves and Oceanic Boundary Layer Turbulence (Posters Only)	092: Advances in Ocean Salinity Remote Sensing: Initial Results from the Aquarius/SAC-D and SMOS Satellite Missions	093: Pathways to Ocean Sciences: Broadening Participation in Summer Research for Undergraduate Programs	16:00-18:00
18:00-19:30	AFTERNOON BEER BREAK AND POSTER SESSION															
18:00-19:30	098: The Critical Importance of Community Building in the Ocean Sciences															
18:00-19:30	100: Linking Biogeochemical Processes to Estuarine Physical Dynamics															
18:00-19:30	109: Integrating Oceanography and Animal Tracking - the Ocean Tracking Network															
18:00-19:30	119: Advances in Monitoring the Ocean's Heat and Salt Balance															
18:00-19:30	124: New Insights into the early life stages and reproductive dynamics of large marine vertebrates															
18:00-19:30	126: Links between Estuarine and Coastal Processes															
18:00-19:30	137: Phytoplankton Fluorescence: Filling the Gap between Observations and Understanding															
18:00-19:30	138: Networked Posters - A Means to Bring Interactivity to the Poster Session (Posters Only)															
18:00-19:30	139: Governing Across Scales: Innovative Stewardship of Earth Systems															
18:00-19:30	146: Zooplankton Feeding Ecology and the Biological Carbon Pump in the Ocean															
18:00-19:30	151: Low Latitude Riverine Influence and Impact on Ocean Biogeochemistry															
18:00-19:30	173: Ocean Surface Waves and Interactions with Currents and Winds															
18:00-19:30	193: Education, scientific outreach, scientific workforce															
18:00-19:30	Student Mixer - South Foyer															
18:00-19:30	Communicated Your Science, Challenges and Opportunities with Ocean Acidification (Workshop) - 151A, B, C, G															
18:00-19:30	Current Progress towards Development of a Global Ocean Biogeochemical Observing System (Town Hall) - Ballroom A															
18:00-19:30	The Future of Ocean Color Remote Sensing (Town Hall) - 250A, B, D, E															
18:00-19:30	The Role of Social Media in Ocean Science and Conservation (Workshop) - 251A, B, D, E															
18:00-19:30	Developing Strategies for Long-Term Research in the Gulf of Mexico (Town Hall) - Ballroom B															

Tuesday At A Glance

Room	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Ballroom E	Ballroom F	Ballroom G	Ballroom H	Ballroom I	Ballroom J	150	151	250	251	Room	
7:00-17:00						Registration - East Registration Area									7:00-17:00	
8:00-10:00	016: Dynamics and Observations of Submesoscale Oceanic Processes	097: Mixing and Transport Due to Nonlinear Internal Gravity Waves	023: Dissolved Organic Matter and the 'Hidden' Carbon Cycle	153: Chemical Signposts that Mediate Interactions of Free-living and Host-associated Microbes	002: ASIOMP Student Symposium	035: Using Data from Autonomous Vehicles and Drifters to Support Education and Outreach	018: Oceanic Uplake of Heat and Greenhouse Gases: Dynamic and Thermodynamic Controls and Inferences from Tracers	068: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	031: Biogeochemical Cycles of Continental Margins: Drivers and Impacts	037: Operational Applications of Ocean Satellite Observations	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	037: Operational Applications of Ocean Satellite Observations	029: Sediment Transport and Deposition in Lakes, Estuaries, and Shallow Shelves	006: Advances in Coastal Ocean Modelling, Analysis, and Prediction	8:00-10:00	
10:00-10:30						MORNING BREAK										10:00-10:30
10:30-12:30	016: Dynamics and Observations of Submesoscale Oceanic Processes	097: Mixing and Transport Due to Nonlinear Internal Gravity Waves	042: Eddy Correlation and New Approaches for Measuring Fluxes in the Aquatic Environment	153: Chemical Signposts that Mediate Interactions of Free-living and Host-associated Microbes	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	102: Live from the Ocean: Engaging Public in Active Research Projects at Sea	059: Ocean Climate Data Records	068: Air-Sea Interactions in Western Boundary Current Systems and Marginal Seas	031: Biogeochemical Cycles of Continental Margins: Drivers and Impacts	047: Integrative Power of Ocean Observatories: Recent Insights and Future Directions	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	047: Integrative Power of Ocean Observatories: Recent Insights and Future Directions	029: Sediment Transport and Deposition in Lakes, Estuaries, and Shallow Shelves	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	10:30-12:30	
12:30-14:00						Student Forum and Lunch #1 and #2 - Ballrooms A & B										12:30-14:00
12:30-14:00						Ocean Education Funding Opportunities Available Through NSF-EHR-DUE - An Informational Meeting - Ballroom C										12:30-14:00
12:30-14:00						PO DAAC - Fusion of NASA Ocean Data and Services (Workshop) - Ballroom G										12:30-14:00
12:30-14:00						Funding of Applied Environmental Science at BOEM - Ballroom E										12:30-14:00
12:30-14:00						Data Management for Scientists: Reduce your workload, reuse your ideas, recycle your data (Workshop) - Ballroom H										12:30-14:00
12:30-14:00						Ocean Observatories Initiative: Information and Community Opportunities (Informational Talk) - Ballroom D										12:30-14:00
12:30-14:00						NSF OCE REU Networking Lunch - 250 F										12:30-14:00
12:30-14:00						Velocity Measurements from Gliders - Ballroom F										12:30-14:00
14:00-16:00	016: Dynamics and Observations of Turbulence and Its Impact on Air-Sea Fluxes	118: Upper Ocean Processes	001: Gases as Tracers of Oceanic Processes	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	14:00-16:00	
16:00-18:00						AFTERNOON BEER BREAK AND POSTER SESSION										16:00-18:00
	001: Gases as Tracers of Oceanic Processes	002: ASIOMP Student Symposium	023: Dissolved Organic Matter and the 'Hidden' Carbon Cycle	153: Chemical Signposts that Mediate Interactions of Free-living and Host-associated Microbes	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	024: Sources, Transformation, and Sinks of Black Carbon in the Ocean	029: Sediment Transport and Deposition in Lakes, Estuaries, and Shallow Shelves	026: Sources, Transformation, and Sinks of Black Carbon in the Ocean	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	029: Sediment Transport and Deposition in Lakes, Estuaries, and Shallow Shelves	026: Sources, Transformation, and Sinks of Black Carbon in the Ocean	024: Sources, Transformation, and Sinks of Black Carbon in the Ocean	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	033: Biogeochemical Cycles of Continental Margins: Drivers and Impacts	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	033: Biogeochemical Cycles of Continental Margins: Drivers and Impacts	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	035: Using Data from Autonomous Vehicles and Drifters to Support Education and Outreach	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	035: Using Data from Autonomous Vehicles and Drifters to Support Education and Outreach	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	042: Eddy Correlation and New Approaches for Measuring Fluxes in the Aquatic Environment	047: Integrative Power of Ocean Observatories: Recent Insights and Future Directions	042: Eddy Correlation and New Approaches for Measuring Fluxes in the Aquatic Environment	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	047: Integrative Power of Ocean Observatories: Recent Insights and Future Directions	059: Ocean Climate Data Records	047: Integrative Power of Ocean Observatories: Recent Insights and Future Directions	136: Top Predator Distributions: Variability and Fisheries	088: Consequences of the March 11, 2011 earthquake, Tsunami and Fukushima nuclear power plant on the ocean	117: Communicating a Changing Ocean: Challenges and Opportunities Facing Scientists and Decision Makers	104: Improvements in Understanding Tropical Atlantic Climate Variability and Predictability: Past Behavior, Observations and Climate Models	084: Advances in Flow-Topography Interactions	033: Oceanographic Processes at the Antarctic Continental Margins: Drivers and Impacts	038: Changing Biogeochemistry and Ecosystems in the Western North Pacific Continental Margins Under Climate Change and Anthropogenic Forcing	032: The Arctic and Subpolar North Atlantic as the Pacemakers for Climate Change	148: Recent Advances in In Situ Chemical and Biological Measurements in Marine Environments	064: Oceanography in 2030	145: Physical, Chemical, and Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, and Outer Shelf and Continental Slope)	16:00-18:00	
	064: Oceanography in 2030					The Future CLIVAR: Help chart the course (Town Hall) - 250A, B, D, E										16:00-18:00
						Overcoming the Cultural Gap Between Scientists and the Public (panel discussion) - Ballroom I										16:00-18:00
						USGS Copper River Plume Project (by invitation only) - 151A, B, C, G										16:00-18:00
						Ocean Leadership: Scoping Group (by invitation only) - Room 151 E										16:00-18:00
						Observing and modeling the Arctic and North Atlantic Oceans - past experiences and future priorities (Workshop) - 150										16:00-18:00
						National IODS HF Radar Technical Steering Team (by invitation only) - 251 A, B, D, E										16:00-18:00
						ConCOMC: Connecting Chemical Oceanography with Analytical Chemistry (Town Hall) - Ballroom J										16:00-18:00

Wednesday At A Glance

Room	Ballroom I	Ballroom J	150	151	250	251	Room
7:00-7:00							7:00-7:00
			Registration - East Registration Area				
			PLENARY SESSIONS - BALLROOMS A-H				
8:00-10:00			Demetrius Chapman, Stony Brook University - <i>biology in a bowl: Studying Sharks to save them from Shark Fin Soup</i>				8:00-10:00
			Mark Abbott, Oregon State University - <i>Graduate Education in the Ocean Sciences</i>				
			Mick Follows, Massachusetts Institute of Technology - <i>Modeling Marine Microbes: From Molecules to Ecosystems</i>				
10:00-10:30			MORNING BREAK				10:00-10:30
10:30-12:30			Kelly Benoit-Bird, Oregon State University - <i>Causes and Consequences of Heterogeneity of Organisms in the Ocean: From Phytoplankton to Dolphins</i>				10:30-12:30
			Chris Reddy, Woods-Hole Oceanographic Institute - <i>How Did We Do: Academia's Contributions to the Gulf of Mexico Oil Spill</i>				
			Science Journalism: From Ship to Shore to the News (Workshop) - 150 A, B, C, G				
			Creation of Tsinghan Ocean Science and Technology (Town Hall) - 151 A, B, C, G				
			Lodder for Scientific Success - Building New Knowledge (Workshop) - 250 A, B, D, E				
			Research Experiences for Undergraduates (REU) Coordinator Meeting - 150 E				
12:30-14:00			Ocean Observatories Initiative: Information and Community Opportunities (Informational talk) - Ballroom J				12:30-14:00
			U.S. National Oceanographic Data Center - Next Generation of Ocean Products & Services (Town Hall) - 251 A, B, D, E				
			Interagency Ocean Observation Committee (Town Hall) - Ballroom I				
14:00-16:00	057: Biogeochemical Cycling of Micronutrient Trace Elements	162: Advances in Phylogeography and Connectivity of Marine Metazoans	165: Climate Change Impacts on the Bering Sea and Related Polar Seas: From Observation to Prediction	135: Imaging the Ocean Interior From Seismics to Optics	16: Dynamics and Observations of Submesoscale Oceanic Processes		14:00-16:00
16:00-18:00			AFTERNOON BEER BREAK AND POSTER SESSION				16:00-18:00
009: Ocean Observing, Sensors and Platforms	015: Nearshore Processes	016: Dynamics and Observations of Submesoscale Oceanic Processes	024: Fecal Pellets of Copepods and Tunicates: Different (Micro) Worlds	041: Methods and Applications of Data Assimilation for Ocean Biogeochemistry	049: Advances in the	051: Compatible Analytic, Mathematical and Laboratory Modeling of Basic Oceanic Processes	057: Biogeochemical Cycling of Micronutrient Trace Elements
063: Ocean Exploration	075: Optics and Acoustics in Turbulent Sediment Suspensions	077: Data Systems that Support the US National Policy for the Stewardship of the Ocean, Coasts, and Great Lakes	083: Using Satellites and In Situ Data Public Archives for Ocean Biology Research	084: Advances in Flow Tomography Interactions	087: Ocean-Atmosphere Processes of Monsoon Dynamics	094: Oceanic Impacts of Orographic Flows: Emphasizing Two-Way Coupling and Feedback Mechanisms	095: Detection & Analysis of Mesoscale & Submesoscale Eddies from Observational Data & Numerical
113: Dynamics of the Deep Gulf of Mexico	128: Sensitivity Analysis, Data Assimilation and Uncertainty Quantification in Ocean Modelling	129: Mechanisms of Nutrient Assimilation and Metabolism in Harmful Algal Bloom (HAB) Species					
18:00-19:30			New Frontiers in Ocean Exploration: NOAA's Program of Telepresence-enabled Systematic Exploration (Town Hall) - 250 A, B, D, E				18:00-19:30
18:00-19:00			The Future of Radiocarbon in the Ocean Sciences (Town Hall) - 150 A, B, C, G				18:00-19:00
18:00-19:00			Communicating the Broader Impacts of your Research using Visual Tools - A Workshop for Graduate Students - 251 A, B, D, E				18:00-19:00
18:00-19:00			U.S. Repeat Hydrography Oversight (Committee Meeting) - Ballroom J				18:00-19:00
			US Arctic GEOTRACES (Town Hall) - 151 A, B, C, G				
			197: General Session: Oil Spill, Gulf of Mexico				

Thursday At A Glance

Room	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Ballroom E	Ballroom F	Ballroom G	Ballroom H	Ballroom I	Ballroom J	150	151	250	251	Room
7:00-8:00															7:00-8:00
7:00-17:00															7:00-17:00
	105 Breakfast (Innovation Only) - South Tower Registration - East Registration Area														
8:00-10:00	128. Compound-specific amino acid analysis: a rapidly evolving tool for ecology. Role in the paleoceanography and biogeochemical cycle research	039. Ocean Biogeochemistry Time-Series and Climate	005. Metal Speciation in the Ocean: Metal-Binding Ligand Composition and Transport of Metals through the Marine Environment	141. Improving the Representation of Plankton Ecology in Earth System Models	078. The Fate of Discharged Hydrocarbons from the Macondo Reservoir and its Impacts to Gulf Ecosystems	099. Temporal and Spatial Scales of Sea Surface Temperature Variability and its Impacts on Air-Sea Interactions, Weather, and Climate	003. The Response of Marine Calcifiers to Global Climate Change and Ocean Acidification	007. High-Resolution Geochemical Proxies of Global Change: Progress, Problems, and Utility	015. Nearshore Processes	066. Western Pacific Ocean Circulation and Air-sea Interactions	075. Optics and Acoustics in Turbulent Sediment Suspensions	115. Western Antarctic Ocean Ecosystems: Chemical, Physical, and Biological Connections	110. Dynamics of Fjords and High Latitude Estuaries	142. Oceanic Fronts: Modeling and Applications	8:00-10:00
10:00-10:30	MORNING BREAK														
10:30-12:30	128. Compound-specific amino acid analysis: a rapidly evolving tool for ecology. Role in the paleoceanography and biogeochemical cycle research	039. Ocean Biogeochemistry Time-Series and Climate	061. Coastal Oceanography through Integrated Data Analysis	177. Gelatinous Plankton, Ecology, Physiology and Economic Impact in the Changing World Ocean	078. The Fate of Discharged Hydrocarbons from the Macondo Reservoir and its Impacts to Gulf Ecosystems	022. Air-Sea Interactions of Typhoons in the Western North Pacific Ocean and Neighboring Seas	125. Ocean acidification in coastal and estuarine environments	007. High-Resolution Geochemical Proxies of Global Change: Progress, Problems, and Utility	015. Nearshore Processes	066. Western Pacific Ocean Circulation and Air-sea Interactions	067. Altered Estuaries: Processes, Restoration, and Management	186. General Session: Biological oceanography, biogeochemistry, and aquatic biology	008. Arctic Ocean Boundary Currents: Observations, Modeling	095. Detection and Analysis of Mesoscale and Submesoscale Eddies from Observational Data and Numerical Products	10:30-12:30
12:30-14:00	105 Business Meeting - Ballroom I														
12:30-14:00	L&O e-Lecture Editorial Board (Committee Meeting) - 151 D														
12:30-14:00	The Distributed Biological Observatory (DBO): A Change Detection Array in the Pacific Arctic Region (Town Hall) - 251 A,B,D,E														
12:30-14:00	Ocean Observatories Initiative: Information and Community Opportunities (Informational Talk) - Ballroom D														
12:30-14:00	Empower your research in Ocean Sciences with the NSF National Nanotechnology Infrastructure Network (NNIN) - Ballroom F														
12:30-14:00	Ladder of Scientific Success: Broaden (Workshop) - 250 A,B,D,E														
12:30-14:00	Student Forum and Lunch #3 and #4 - Ballroom A & B														
14:00-16:00	050. Linking the Optical and Chemical Properties of Dissolved Organic Matter in Natural Waters	074. The Changing Ocean Carbon Cycle: Data Synthesis, Analyses and Modelling	161. Characterizing the Variability of the Coastal Ocean and its Implications	157. Understanding Plankton Biogeochemistry by Putting Functional Traits on the Map	030. Gulf of Mexico Circulation & Ecosystem Numerical Modelling	060. Marine Gas Hydrate Deposits: Research, Monitoring Strategies and Present-Day Knowledge	125. Ocean acidification in coastal and estuarine environments	152. Polar Marine Microbial Ecology	015. Nearshore Processes	066. Western Pacific Ocean Circulation and Air-sea Interactions	067. Altered Estuaries: Processes, Restoration, and Management	186. General Session: Biological oceanography, biogeochemistry, and aquatic biology	122. Climate change impacts on the high-latitude ocean	133. Jets, Plumes, Eddies, and Waves as a Link Between Anisotropic Mesoscale Ocean Dynamics and General Circulation	14:00-16:00
16:00-18:00	AFTERNOON BEER BREAK AND POSTER SESSION														
	003. The Response of Marine Calcifiers to Global Climate Change and Ocean Acidification														
	005. Metal Speciation in the Ocean: Metal-Binding Ligand Composition and Role in the Transport of Metals through the Marine Environment														
	007. High-Resolution Geochemical Proxies of Global Change: Progress, Problems, and Utility														
	008. Arctic Ocean Boundary Currents: Observations, Theory and Modelling														
	011. Biology, Biogeochemistry, and Bio-optics of the Pacific Sector of the Arctic Ocean														
	012. The Chukchi Sea Region: Rapid Changes in the Pacific Gateway to the Arctic														
	020. Theory, Modelling, and Observations of remote-sensed propagating waves and eddies														
	022. Air-Sea Interactions of Typhoons in the Western North Pacific Ocean and Neighboring Seas														
	030. Gulf of Mexico Circulation & Ecosystem Numerical Modelling														
	039. Ocean Biogeochemistry Time-Series and Climate														
	040. Biogeochemistry of DOM in the Arctic Ocean														
	044. Advancing Satellite Ocean Color Science for Global and Coastal Research														
	046. Understanding the Biological Consequences of Ocean Acidification in a Holistic Global Change Context														
	050. Linking the Optical and Chemical Properties of Dissolved Organic Matter in Natural Waters														
	053. Nitrogen and Carbon Cycling in the Eastern Tropical Pacific Ocean: Linking the OMZ to the open ocean														
	054. Mapping and Characterizing the Seafloor Using Acoustics: Bringing spatial data up from the depths (Posters Only)														
	056. Biology and Chemistry in a High CO2 World														
	058. Integrated Observational and Modeling Studies of Marine Ecosystems														
	060. Marine Gas Hydrate Deposits: Research, Monitoring Strategies and Present-Day Knowledge														
	061. Coastal Oceanography through Integrated Data Analysis														
	065. Physical - Ecological Interactions in Inland Waters														
	066. Western Pacific Ocean Circulation and Air-sea Interactions														
	067. Altered Estuaries: Processes, Restoration, and Management														
	074. The Changing Ocean Carbon Cycle: Data Synthesis, Analyses and Modelling														
18:00-19:30	Work-life balance in Oceanography (Town Hall) - 150 A,B,C,G														
18:00-20:00	Humor and Science: A Comical Look at Outsiders - 250 A,B,D,E														
18:00-20:00	ALOHA Cabled Observatory (Workshop) - Ballroom A														
18:00-20:00	Multi-sensor Improved SSTr (MISSr) for IODS Workshop - Ballroom B														

Friday At A Glance

Room	BALLROOM A	BALLROOM B	BALLROOM C	BALLROOM D	BALLROOM E	BALLROOM F	BALLROOM G	BALLROOM H	BALLROOM I	BALLROOM J	Room
7:00-16:00	Registration - East Registration Area										
08:00-10:00	147: Infusing Biogeochemistry with Ecosystem Science	044: Advancing Satellite Ocean Color Science for Global and Coastal Research	105: Vertical Flow in the Ocean	116: Recent advances in linking the microbiology and biogeochemistry of oxygen-deficient zones	065: Physical - Ecological Interactions in Inland Waters	012: The Chukchi Sea Region: Rapid Changes in the Pacific Gateway to the Arctic	046: Understanding the Biological Consequences of Ocean Acidification in a Holistic, Global Change Context	020: Theory, Modelling, and Observations of remote-sensed propagating waves and eddies	015: Near-shore Processes	058: Integrated Observational And Modelling Studies Of Marine Ecosystems	7:00-16:00 08:00-10:00
10:00-10:30	MORNING BREAK										
10:30-12:30	096: The Biological Basis and Geochemical Consequences of Non-Redfield N:P Ratios in the Ocean	044: Advancing Satellite Ocean Color Science for Global and Coastal Research	090: Enhanced Regions of Mixing in the Coastal and Deep Ocean	080: Coastal Connections: Advances in the Understanding of the Interaction of Fluvial and Marine Systems	065: Physical - Ecological Interactions in Inland Waters	012: The Chukchi Sea Region: Rapid Changes in the Pacific Gateway to the Arctic	056: Biology and Chemistry in a High CO2 World	128: Sensitivity Analysis, Data Assimilation and Uncertainty Quantification in Ocean Modelling	015: Near-shore Processes	106: Global Mode Waters: Physical and Biogeochemical Processes, Variability and Impacts.	10:00-10:30 10:30-12:30
12:30-14:00	LUNCH BREAK										
14:00-16:00	053: Nitrogen and Carbon Cycling in the Eastern Tropical Pacific Ocean: Linking the OMZ to the open ocean	011: Biology, Biogeochemistry, and Bio-optics of the Pacific Sector of the Arctic Ocean	090: Enhanced Regions of Mixing in the Coastal and Deep Ocean	080: Coastal Connections: Advances in the Understanding of the Interaction of Fluvial and Marine Systems	065: Physical - Ecological Interactions in Inland Waters	012: The Chukchi Sea Region: Rapid Changes in the Pacific Gateway to the Arctic	056: Biology and Chemistry in a High CO2 World	128: Sensitivity Analysis, Data Assimilation and Uncertainty Quantification in Ocean Modelling	015: Near-shore Processes	106: Global Mode Waters: Physical and Biogeochemical Processes, Variability and Impacts.	12:30-14:00 14:00-16:00

Monday, February 20 - Orals

004 The Southern Ocean And Its Role In The Climate System

Chair(s): Stephanie Downes, sdownes@princeton.edu
Nicole Jeffery, njeffery@lanl.gov
Joellen Russell, jrussell@email.arizona.edu
Wilbert Weijer, wilbert@lanl.gov

Location: Ballroom I

- 08:00 Newman, L.; Meredith, M. P.; Gunn, J.; Sparrow, M.; Urban, E.; Rintoul, S. R.; On behalf of the SOOS community, .: THE SOUTHERN OCEAN OBSERVING SYSTEM: TOWARDS IMPLEMENTATION
- 08:15 Gray, A. R.; Riser, S. C.: THE CIRCULATION OF THE UPPER SOUTHERN OCEAN OBSERVED FROM PROFILING FLOATS
- 08:30 Chereskin, T. K.; Mazloff, M. R.; Millar, J. J.; Firing, Y. L.: A COMPARISON OF RECENT OBSERVATIONS IN DRAKE PASSAGE FROM THE CDRAKE EXPERIMENT TO THE SOUTHERN OCEAN STATE ESTIMATE
- 08:45 Shuckburgh, E. F.; Wang, Z.; Sallee, J. B.; Bracegirdle, T. J.: ASSESSING CMIP5 SIMULATIONS OF SOUTHERN OCEAN CIRCULATION AND CARBON UPTAKE
- 09:00 Froelicher, T. L.; Sarmiento, J. L.; Downes, S. M.; Rodgers, K. B.; Zanoski, H.: ANTHROPOGENIC OCEAN HEAT AND CARBON UPTAKE IN CMIP5 EARTH SYSTEM MODELS: THE ROLE OF SYSTEMATIC AND RANDOM UNCERTAINTY
- 09:15 Russell, J. L.; Delworth, T. L.; Dixon, K. W.; Rosati, A.: THE UPTAKE AND STORAGE OF HEAT BY THE SOUTHERN OCEAN IN THE GFDL CM2.5 HIGH-RESOLUTION COUPLED CLIMATE MODEL
- 09:30 Hecht, M. W.; Sloyan, B. M.; Weijer, W.; Maltrud, M. E.; Jeffery, N.; Hartin, C. A.; van Sebille, E.; Wainer, I.; Landrum, L.: THE SOUTHERN OCEAN AND ITS CLIMATE IN CCSM4
- 09:45 Lovenduski, N. S.; Long, M. C.: SOUTHERN OCEAN MERIDIONAL OVERTURNING AND AIR-SEA CO₂ FLUX VARIABILITY IN THE COMMUNITY EARTH SYSTEM MODEL
- 10:30 Hogg, A. M.; Shakespeare, C. J.: A NEW CONCEPTUAL MODEL FOR THE ANTARCTIC CIRCUMPOLAR CURRENT
- 10:45 Morrison, A. K.; Hogg, A. M.; Ward, M. L.: INTERPLAY BETWEEN THE ZONAL MOMENTUM BALANCE AND OVERTURNING IN THE SOUTHERN OCEAN
- 11:00 Katsumata, K.; Sloyan, B. M.; Masuda, S.: DECREASE IN THE ANTARCTIC CIRCUMPOLAR CURRENT TRANSPORT FROM THE 1990S TO THE 2000S
- 11:15 Patara, L.; Böning, C.; Biastoch, A.: THE RESPONSE OF THE ANTARCTIC CIRCUMPOLAR CURRENT TO WIND CHANGES IN PRESENT AND FUTURE OCEAN SIMULATIONS
- 11:30 Kim, Y.; Orsi, A. H.: ON THE SELECTIVE REGIONAL RESPONSE OF THE ANTARCTIC CIRCUMPOLAR CURRENT FRONTS TO ATMOSPHERIC AND OCEANIC VARIABILITY
- 11:45 Stephenson, G. R.; Gille, S. T.; Sprintall, J.: INTERANNUAL VARIABILITY OF UPPER-OCEAN HEAT CONTENT IN DRAKE PASSAGE
- 12:00 Chidichimo, M. P.; Donohue, K. A.; Watts, D. R.; Tracey, K. L.: BAROCLINIC TRANSPORT ACROSS DRAKE PASSAGE FROM THE CDRAKE ARRAY
- 12:15 Vivier, F.; Park, Y. H.; Sekma, H.: VARIABILITY OF THE ACC TRANSPORT ACROSS THE KERGUELEN PLATEAU
- 14:00 Kamenkovich, I. V.; Radko, T.: ROLE OF THE SOUTHERN OCEAN IN SETTING THE ATLANTIC STRATIFICATION AND MERIDIONAL OVERTURNING CIRCULATION
- 14:15 Wolfe, C. L.; Cessi, P.: MULTIDECADAL OSCILLATIONS AND MULTIPLE EQUILIBRIA IN THE ADIABATIC REGIME
- 14:30 Latif, M.; Martin, T.; Park, W.: MULTI-CENTENNIAL SOUTHERN OCEAN VARIABILITY AND GLOBAL IMPACTS IN THE KIEL CLIMATE MODEL
- 14:45 Yuan, X.; Yonekura, E.: DECADAL VARIABILITY IN THE SOUTHERN HEMISPHERE

- 15:00 Waterman, S.; Naveira Garabato, A. C.; Polzin, K. L.: OBSERVATIONS OF INTERNAL WAVES AND TURBULENCE IN THE ANTARCTIC CIRCUMPOLAR CURRENT
- 15:15 Lenn, Y. D.; Brannigan, L.; Rippeth, T. P.; Chereskin, T. K.; McDonagh, E.: GENERATION OF NEAR-INERTIAL SHEAR SPIKES CONDUCTIVE TO MIXING AT THE BASE OF THE SOUTHERN OCEAN MIXED LAYER
- 15:30 Klocker, A.; Ferrari, R.; LaCasce, J. H.: SUPPRESSION OF EDDY DIFFUSIVITIES ACROSS THE ANTARCTIC CIRCUMPOLAR CURRENT
- 15:45 Gent, P. R.; Bryan, F. O.: CAN SOUTHERN OCEAN EDDY EFFECTS BE PARAMETERIZED IN CLIMATE MODELS?

006 Advances In Coastal Ocean Modeling, Analysis, and Prediction

Chair(s): Villy Kourafalou, vkourafalou@rsmas.miami.edu
Pierre De Mey, demey-redir@neyak.org
Ruoying He, rhe@ncsu.edu
Alex Kurapov, kurapov@coas.oregonstate.edu

Location: Room 251

- 08:00 Aulov, O.; Halem, M.: HUMAN SENSOR NETWORKS FOR IMPROVED OIL SPILL PREDICTIONS
- 08:15 Young, C.; Liang, Y.; Tseng, Y.: APPLICATION OF THE THIRD-ORDER RAW-FILTERED LEAPFROG SCHEME FOR OCEAN MODELING
- 08:30 Reckinger, S. M.; Vasilyev, O. V.; Fox-Kemper, B.: SHALLOW WATER MODEL USING ADAPTIVE WAVELET COLLOCATION METHOD
- 08:45 Shchepetkin, A. E.: NUMERICALLY ACCURATE TREATMENT OF BOTTOM DRAG IN OCEAN MODELS WITH MODE AND TIME SPLITTING
- 09:00 Vitousek, S.; Fringer, O. B.: GRID RESOLUTION REQUIREMENTS IN MODELING INTERNAL WAVES
- 09:15 Peng, M.; Feyen, J.; Taylor, A.; Aikman, F.: STORM SURGE ENSEMBLE MODELING USING A SUITE OF HURRICANE WIND MODELS
- 09:30 De Mey, P. J.; He, R.; Kourafalou, V.; Kurapov, A.: SESSION OVERVIEW: ADVANCES IN COASTAL OCEAN MODELING, ANALYSIS, AND PREDICTION
- 10:30 Li, Z.; Chao, Y.; Farrara, J. D.; McWilliams, J. C.; Ide, K.: A MULTI-SCALE THREE-DIMENSIONAL VARIATIONAL DATA ASSIMILATION SCHEME AND ITS APPLICATION TO COASTAL OCEANS
- 10:45 Kurapov, A. L.; Yu, P.; Erofeeva, S.; Kosro, P. M.: EFFECTS OF ASSIMILATING GOES SST, ALONGTRACK ALTIMETRY, AND HIGH-FREQUENCY RADAR SURFACE CURRENTS ON THE COASTAL OCEAN SURFACE TOPOGRAPHY
- 11:00 Panteleev, G.; Yaremchuk, M.; Nechaev, ; Koldunov, ; Lemieux, J. F.; Francis, O. P.: PERFORMANCE OF THE ADJOINTLESS 4DVAR TECHNIQUE WITH COMMUNITY MODELS
- 11:15 Xu, F. H.; Oey, L. Y.: A DATA-ASSIMILATED CIRCULATION MODEL OF THE NORTHWESTERN ATLANTIC OCEAN USING THE NEW MPI-VERSION OF THE PRINCETON OCEAN MODEL
- 11:30 Halliwell, G. R.; Kourafalou, V. H.; Srinivasan, A.; Le Henaff, M.; Yang, H.; Willey, D.; Atlas, R. M.: DEVELOPMENT AND EVALUATION OF AN OCEAN OSSE SYSTEM FOR THE GULF OF MEXICO
- 11:45 Tonani, M.; Fratianni, C.; Guarneri, A.; Oddo, P.; Adani, M.; Dobricic, S.; Drudi, M.; Grandi, A.; Lyubartsev, V.; Pinardi, N.: THE MEDITERRANEAN AND ADRIATIC MARINE FORECASTING SYSTEM
- 12:00 Brenner, S.; Gertman, I.: THE DEVELOPMENT OF OPERATIONAL FORECASTING FOR THE SOUTHEASTERN MEDITERRANEAN SHELF REGION
- 12:15 Peng, S.; Li, Y.; Xie, L.: ADJUSTING THE WIND STRESS DRAG COEFFICIENT IN STORM SURGE FORECASTING USING AN ADJOINT TECHNIQUE
- 14:00 Zamudio, L.; Metzger, E. J.; Hogan, P.: MODELING THE SEASONAL AND INTERANNUAL VARIABILITY OF THE NORTHERN GULF OF CALIFORNIA SALINITY
- 14:15 Vaz, A. C.; Richards, K. J.; Paris, C. B.; Jia, Y.: FLOW VARIABILITY AND ITS IMPACT ON CONNECTIVITY FOR THE ISLAND OF HAWAII

- 14:30 Kim, S.; Kurapov, A. L.; Oke, P. R.: MODELING UPWELLING ALONG THE BONNEY COAST (SOUTHERN AUSTRALIA)
- 14:45 Jianzhong Ge, G.; Pingxing Ding, .; Changsheng Chen, .; Pengfei Xue, .; Lunyu Wu, .: THE EAST CHINA SEA AND CHANGJIANG ESTUARY FVCOM MODEL SYSTEM: DEVELOPMENT, VALIDATION AND APPLICATION
- 15:00 Zheng, L.; Weisberg, R. H.: MODELING THE COASTAL OCEAN CIRCULATION BY DOWNSCALING FROM THE DEEP OCEAN, ACROSS THE CONTINENTAL SHELF AND INTO THE ESTUARIES
- 15:15 Ayoub, N. K.; Herbert, G.; Lamouroux, J.; De Mey, P.; Marsaleix, P.; Lyard, F.: COASTAL OCEAN RESPONSE TO WINTER STORMS IN THE BAY OF BISCAY (NORTH EAST ATLANTIC): IMPACT OF ATMOSPHERIC FORCING UNCERTAINTIES
- 15:30 Kassem, S.; Ozkan-Haller, H. T.: PREDICTING WAVE-CURRENT INTERACTIONS AT THE MOUTH OF THE COLUMBIA RIVER, OR
- 15:45 Horsburgh, K. J.; Williams, J. A.; Wilson, C.; Maskell, J.: THE PERFECT STORM SURGE: DETAILED DYNAMICAL CONDITIONS FOR EXTREME SEA LEVELS

010 Ocean Observing Systems -- Regional And Global

Chair(s): Albert Fischer, a.fischer@unesco.org
Eric Lindstrom, eric.j.lindstrom@nasa.gov
Ru Morrison, ru.morrison@neracoos.org
Suzanne Skelley, suzanne.skelley@noaa.gov
Harvey Seim, hseim@email.unc.edu
Michael S. Tomlinson, tomlinson86@q.com
Eric Heinen De Carlo, PhD, edecarlo@soest.hawaii.edu
James T. Potemra, PhD, jimp@hawaii.edu

Location: Ballroom J

- 10:30 Fischer, A. S.; Lindstrom, E. J.; Gunn, J.: THE FRAMEWORK FOR OCEAN OBSERVING: BEST PRACTICES FOR THE GLOBAL OCEAN OBSERVING SYSTEM
- 10:45 Fine, R.; Garzoli, S.; Heimbach, P.; Johnson, G. C.; King, B. A.; Palmer, M. D.; Riser, S. C.; Sloyan, B.; Stammer, D.: THE RATIONALE FOR A SUSTAINED DEEP OCEAN OBSERVING SYSTEM: OCEAN AND CLIMATE PHYSICS
- 11:00 Wanninkhof, R.; Park, G. H.; Takahashi, T.; Feely, R. A.; Bullister, J. L.; Doney, S. L.; Tanhua, T.: CHANGES IN DEEP-WATER CO₂ CONCENTRATIONS OVER THE LAST TWO TO THREE DECADES
- 11:15 Antje Boetius, .; Lisa Levin, A.; Myriam Sibuet, .; Andrea McCurdy, L.: BIOLOGICAL AND ECOSYSTEM OBSERVATION OF THE DEEP OCEAN
- 11:30 DiGiacomo, P.; Malone, T. C.: EXPANDING GOOS TO INFORM ECOSYSTEM BASED APPROACHES (EBAS) TO MANAGING HUMAN USES OF MARINE ECOSYSTEM GOODS AND SERVICES AND ADAPTING TO CLIMATE CHANGE
- 11:45 Quintrell, J.; Price, H.; Rosenfeld, L.: A VISION FOR THE FUTURE: A NATIONAL SYNTHESIS OF REGIONAL OBSERVING PLANS
- 12:00 McCammom, M. E.; Schoch, G. C.; Dugan, D. G.: DESIGNING AN OCEAN OBSERVING SYSTEM FOR THE FUTURE: AN INNOVATIVE APPROACH IN ALASKA
- 12:15 Newton, J. A.; Martin, D. L.: NANOOS: SERVING THE PACIFIC NORTHWEST
- 14:00 Mickett, J. B.; Alford, M. H.; Newton, J. A.; Devol, A. H.: THE NANOOS NORTHWEST ENHANCED MOORED OBSERVATORY: A NOVEL THREE-TIERED APPROACH TO OBSERVATIONS ON THE WASHINGTON COAST
- 14:15 Jochens, A. E.: PARTNERING TO BUILD THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM
- 14:30 Kuska, G. E.; Crowley, M.: MARACOOS INTO THE 21ST CENTURY: MOVING FROM OBSERVING TO FORECASTING IN ORDER TO SAVE LIVES, PROTECT LIVELIHOODS, AND BOOST THE ECONOMY IN THE MID-ATLANTIC
- 14:45 Dekker, T. J.; DePinto, J. V.; Ruberg, S.; Schwab, D.; Colton, M.; Read, J.; Booth, N.: DESIGNING THE ENTERPRISE ARCHITECTURE OF THE GREAT LAKES OBSERVING SYSTEM
- 15:00 Peri, F.; Jiang, M.; Zhou, M.; Chen, R. F.: A REAL-TIME SEA-LEVEL MONITORING NETWORK FOR MASSACHUSETTS BAY

- 15:15 Jones, B. H.; Thomas, J. O.; Rudnick, D. L.; Terrill, E. J.; Washburn, L.; Dillon, A.: Understanding of harmful algal bloom processes through ocean observing – examples from the Southern California Coastal Ocean Observing System
- 15:30 De Carlo, E. H.; Tomlinson, M. S.; McManus, M. A.; Pawlak, E.; Drupp, P. S.; Timmerman, R.; Jaramillo, S.: PACIOOS – “BUILD IT AND THEY WILL USE IT”
- 15:45 Seim, H. E.; Skelley, S.; Lindstrom, E.; Miller, J.: PANEL DISCUSSION OF DESIGNING OCEAN, COASTAL, AND GREAT LAKES OBSERVING SYSTEMS TO ADDRESS SOCIETAL ISSUES

014 Ocean Deoxygenation and Coastal Hypoxia In a Changing World

Chair(s): Nancy N Rabalais, nrabalais@lumcon.edu
Daniel Conley, daniel.conley@geol.lu.se
Francis Chan, chanft@science.oregonstate.edu

Location: Ballroom A

- 14:00 Gilbert, D.: OXYGEN TRENDS IN THE GLOBAL OCEAN
- 14:30 Klump, J. V.; Waples, J. T.; Anderson, P. D.; Valenta, T.; Kennedy, J.; Bravo, H.; Fermanich, K.; Baumgart, P.; Vimont, D.; Lorenz, D.: RECENT OBSERVATIONS OF HYPOXIA IN GREEN BAY, LAKE MICHIGAN AND POTENTIAL LONG TERM CLIMATE CHANGE IMPACTS
- 14:45 Sharp, J. H.; Voynova, Y.; Pimenta, A.: IS CLIMATE CHANGE CAUSING BOTTOM WATER HYPOXIA IN THE DELAWARE BAY?
- 15:00 Moffitt, S. E.; Hill, T. M.: DEGLACIAL FORCING OF EASTERN-BOUNDARY CURRENT OXYGENATION AND BENTHIC ECOLOGY
- 15:15 Caballero Alfonso, A. M.; Carstensen, J.; Conley, D.: LONG-TERM DEVELOPMENT OF HYPOXIA IN THE BALTIC SEA COASTAL ZONE
- 15:30 Conley, D. J.; Carstensen, J.; Gustafsson, B.: HYPOXIA IN A HISTORICAL PERSPECTIVE – INDICATORS OF CHANGE
- 15:45 Maranger, R.; Altabet, M.; Bristowe, L.; Gilbert, D.; Mucci, A.; Sundby, B.: OXYGEN AND DI-NITROGEN (N₂) DYNAMICS IN THE HYPOXIC ZONE OF THE ST-LAWRENCE ESTUARY

021 Modeling and Observing the Tides In the Ocean

Chair(s): James Richman, richman@nrlssc.navy.mil
Brian Arbic, arbic@umich.edu
Patrick Cummins, Patrick.Cummins@dfp-mpo.gc.ca
Malte Mueller, mmueller@uvic.ca

Location: Ballroom G

- 08:00 Ray, R. D.: MODELING AND OBSERVING BAROTROPIC AND BAROCLINIC TIDES: A GLOBAL PERSPECTIVE
- 08:30 Shriver, J. E.; Arbic, B. K.; Richman, J. G.; Ray, R. D.; Metzger, E. J.; Wallcraft, A. J.; Timko, P. G.: COMPARISON OF INTERNAL TIDES IN A HIGH RESOLUTION GLOBAL OCEAN CIRCULATION MODEL WITH ALTIMETRIC ESTIMATES
- 08:45 Timko, P. G.; Arbic, B. K.; Richman, J. R.: EVALUATING THE SKILL OF MODEL TIDAL CURRENTS IN DYNAMICALLY ACTIVE OCEAN REGIONS
- 09:00 Zhao, Z.; Alford, M.; Girton, J.; Rainville, L.; Simmons, H.: GLOBAL MODE-ONE M2 INTERNAL TIDES ESTIMATED FROM MULTI-SATELLITE ALTIMETRY
- 09:15 Ansong, J. K.; Arbic, B. K.; Alford, M. H.; Simmons, H. L.; Timko, P. G.; Metzger, E. J.; Shriver, J. F.; Wallcraft, A. J.: GEOGRAPHIC DISTRIBUTION OF DIURNAL AND SEMI-DIURNAL PARAMETRIC SUBHARMONIC INSTABILITY IN A GLOBAL OCEAN CIRCULATION MODEL
- 09:30 Griffiths, S. D.: LOCAL AND GLOBAL MODELING OF INTERNAL AND BAROTROPIC TIDES
- 09:45 Kelly, S. M.; Jones, N. L.; Nash, J. D.: COUPLING EQUATIONS FOR LINEAR TIDES
- 10:30 Qiang Li, Q.; Cheng Ma, C.; Xiong, J.: INTERNAL TIDE GENERATION WITHIN THE GEOSTROPHIC BACKGROUND
- 10:45 Richman, J. G.; chu, P. Y.: IMPACT OF INTERNAL TIDES ON THE BOUNDARY CONDITIONS FOR A REGIONAL MODEL OF THE NW AUSTRALIA SHELF

- 11:00 Hall, R. A.; Carter, G. S.: SENSITIVITY OF TIDAL BAROTROPIC-TO-BAROCLINIC ENERGY CONVERSION TO DOMAIN SIZE IN A REGION MODEL
- 11:15 Jeon, C.; Varlamov, S. M.; Yoon, J. H.; Park, J. H.; Kim, Y. H.; Min, H. S.; Lee, J. H.; Morimoto, A.: IMPACTS OF OCEANIC CURRENTS ON THE M2 INTERNAL TIDE IN THE EAST/JAPAN SEA
- 11:30 Jay, D. A.; Talke, S. A.; Devlin, A.; Zaron, E.: SEPARATING DECADAL-SCALE FLUCTUATIONS FROM LONGER-TERM TRENDS IN TIDAL PROPERTIES
- 11:45 Zhang, S.; Alford, M. H.: INTERNAL TIDES AND MIXING ON THE WASHINGTON COAST
- 12:00 Wilson, C.: CHLOROPHYLL ANOMALIES ALONG THE 30NN CRITICAL LATITUDE IN THE NE PACIFIC
- 12:15 Lukas, R.; Santiago-Mandujano, E.; Nosse, C.; Firing, E.; Luther, D.; Alford, M.; Howe, B.; Duennebie, F.: SURPRISING ABYSSAL TIDAL SIGNALS AT STATION ALOHA

036 COSEE: Using Evaluation To Measure The Impacts Of Education/Outreach

Chair(s): Patricia Kwon, pkwon@aqmd.gov
 Andrea Anderson, andrea@soundviewevaluation.com
 Diana Payne, diana.payne@uconn.edu
 Shawn Rowe, shawn.rowe@oregonstate.edu

Location: Ballroom F

- 10:30 Schofield, O. M.; Kohut, J.; Glenn, S. M.: WHAT HAS COSEE NOW MEANT TO OUR RESEARCH AND OUTREACH EFFORTS?
- 10:45 Kane, T. L.; Kwon, P.; Fong, P.: ADVENTURE IN THE SOUTH PACIFIC: UCLA'S MARINE BIOLOGY QUARTER AND COSEE-WEST PARTNER TO DEVELOP STRONG RESEARCH AND COMMUNICATION SKILLS IN YOUNG SCIENTISTS
- 11:00 Anderson, A.; Stahr, E.: IMPACT OF EXPERIENTIAL OCEAN SCIENCE EDUCATION ON SCIENTIST-VOLUNTEERS' KNOWLEDGE, TEACHING CAPACITIES AND NSF BROADER-IMPACTS ENDEAVORS
- 11:15 Anderson, A.; Dorph, R.; Kwon, P.; Van Dyk, P.; Plude, D.; Parsons, C.: HOW DOES PARTICIPATION IN EDUCATIONAL OUTREACH BENEFIT SCIENTISTS?
- 11:45 Babb, I. G.; Rader, L.; Matis, K.; Payne, D. L.: COSEE-TEK TEACHER TECHNOLOGY EXPERIENCE: A CATALYST FOR LEARNING AND COMMUNICATING OCEAN SCIENCE AND TECHNOLOGY
- 12:00 Kwon, P. S.; Companion, C.; deCharon, A.; Simms, E.; Repa, J. T.: SCIENTISTS MENTORING GRADUATE STUDENTS ON RESEARCH AND TEACHING THROUGH COSEE CONCEPT MAPPING COLLABORATIVE WORKSHOPS
- 12:15 Bourexis, P. S.; Cetrulo, B.: THE RESEARCH EXPERIENCE FOR PRESERVICE TEACHERS (REPT) PROGRAM IN COSEE FLORIDA

045 Oceanic Oxygen Content: Observed Physical And Chemical Processes And Climate Related Changes In The Past, Present And Future

Chair(s): Lothar Stramma, lstramma@ifm-geomar.de
 Sabine Mecking, smecking@apl.washington.edu
 Denis Gilbert, Denis.Gilbert@dfm-mpo.gc.ca
 Ralph Keeling, rkeeling@ucsd.edu

Location: Ballroom A

- 08:00 Gruber, N.; Stendardo, I.; Kroppenske Artman, L.: OCEAN DEOXYGENATION - STATUS AND TRENDS
- 08:30 Frenzel, H.; Deutsch, C.; Brix, H.; Ito, T.; Thompson, L.: A CLIMATIC PULSE IN THE HEART OF THE OXYGEN MINIMUM ZONE
- 08:45 Ferreira, D.; Follows, M.; Marshall, J.: HOW DO OCEAN CIRCULATION AND BASIN GEOMETRY REGULATE THE LARGE-SCALE DISTRIBUTION OF DISSOLVED OXYGEN IN THE GLOBAL OCEAN?
- 09:00 Schwarzkopf, F. U.; Böning, C. W.: VENTILATION PATHWAYS OF WATERS INTO THE PACIFIC AND ATLANTIC OXYGEN MINIMUM ZONES FROM HIGH RESOLUTION NESTED MODELS

- 09:15 Martinez-Rey, J.; Tagliabue, A.; Bopp, L.; Gehlen, M.: MARINE NITROUS OXIDE EMISSIONS IN FUTURE OCEAN'S BIOGEOCHEMISTRY: EFFECTS OF CLIMATE CHANGE, OCEAN ACIDIFICATION AND ATMOSPHERIC NITROGEN DEPOSITION
- 09:30 Schmittner, A.; Somes, C.; Kienast, M.; Galbraith, E.: USING NITROGEN ISOTOPES TO RECONSTRUCT PAST CYCLING OF NITROGEN AND OXYGEN IN THE OCEAN
- 09:45 Cancelled
- 10:30 Riser, S. C.; Drucker, R.: THE USE OF DISSOLVED OXYGEN SENSORS ON PROFILING FLOATS: TECHNICAL CHALLENGES AND DATA QUALITY
- 10:45 Ono, T.; Whitney, F.; Bograd, S.: RELATING LONG-TERM NUTRIENT TRENDS TO NORTH PACIFIC SUBSURFACE OXYGEN DECLINES
- 11:00 Emerson, S.; Quay, P.; Howard, E.: SEASONAL CYCLES OF SURFACE-OCEAN OXYGEN CONCENTRATION: DETERMINING THE BIOLOGICAL PUMP USING REMOTE MEASUREMENTS
- 11:15 Barth, J. A.; Pierce, S. D.; Chan, F.: HYPOXIA OVER THE CONTINENTAL SHELF IN THE NORTHEAST PACIFIC OCEAN
- 11:30 Crawford, W. R.; Peña, M. A.: HYPOXIA ON THE CANADIAN WEST COAST CONTINENTAL MARGIN
- 11:45 Stendardo, L.; Gruber, N.; Kieke, D.; Rhein, M.: INTERANNUAL VARIABILITY AND TRENDS IN OXYGEN IN THE MODE AND INTERMEDIATE WATER OF THE SUBPOLAR NORTH ATLANTIC OCEAN
- 12:00 Brandt, P.; Funk, A.; Hormann, V.; Dengler, M.; Greatbatch, R. J.; Didwischus, S. H.; Toole, J. M.: VENTILATION OF THE TROPICAL ATLANTIC BY EQUATORIAL DEEP JETS
- 12:15 Mecking, S.; Johnson, G. C.; Bullister, J. L.; Macdonald, A. M.: DECADAL CHANGES IN OXYGEN AND TEMPERATURE-SALINITY RELATIONS ALONG 32SS IN THE INDIAN OCEAN THROUGH 2009

048 Ocean Surface Boundary Layers

Chair(s): Baylor Fox-Kemper, bfk@colorado.edu
 Stephen Belcher, s.e.belcher@reading.ac.uk
 Eric D'Asaro, dasaro@apl.washington.edu
 Alberto C. Naveira Garabato, acng@noc.soton.ac.uk

Location: Ballroom C

- 08:00 Santiago-Mandujano, E.; Nosse, C. T.; Weller, R. A.; Plueddemann, A. J.; Lukas, R. B.: OBSERVATIONS AND MODELING OF THE MIXED LAYER AT STATION ALOHA
- 08:15 Savelyev, I. B.; Chalikov, D.; Maxeiner, E.: TURBULENCE PRODUCTION BY NON-BREAKING WAVES
- 08:30 Van Roekel, L. P.; Fox-Kemper, B.; Sullivan, P. P.; Hamlington, P. E.; Haney, S. R.: THE FORM AND ORIENTATION OF LANGMUIR CELLS FOR MISALIGNED WIND AND WAVES
- 08:45 Cole, S. T.; Timmermans, M. L.; Toole, J. M.; Thwaites, F. T.; Krishfield, R. A.: EKMAN VEERING, INERTIAL MOTIONS, AND TURBULENT FLUXES IN ARCTIC SURFACE WATERS UNDER SEA-ICE
- 09:00 Sullivan, P. P.; Romero, L.; Melville, W. K.; McWilliams, J. C.: SIGNATURES OF LANGMUIR TURBULENCE IN THE HURRICANE OBL
- 09:15 Kukulka, T.; Plueddemann, A. J.; Trowbridge, J. H.; Sullivan, P. P.: THE INFLUENCE OF CROSSWIND TIDAL CURRENTS ON LANGMUIR CIRCULATION IN A SHALLOW OCEAN
- 09:30 Gremes-Cordero, S.; Drennan, W.: DOPBEAM MEASUREMENTS OF TURBULENT KINETIC ENERGY DISSIPATION RATES NEAR THE OCEAN SURFACE
- 09:45 Wang, B.; Liao, Q.; Xiao, J.; Bootsma, H. A.; Wu, C. H.: MEASUREMENT OF THE STRUCTURE OF TURBULENCE IN A WIND WAVE BOUNDARY LAYER WITH AN IN SITU PIV SYSTEM
- 10:30 Hughes, P. J.; Bourassa, M. A.: INFLUENCE OF SST ON SURFACE WINDS: BAROCLINIC VS. STABILITY IMPACTS
- 10:45 Harcourt, R. R.: A SECOND MOMENT CLOSURE MODEL OF LANGMUIR TURBULENCE
- 11:00 Takagaki, N. T.; Shimada, S. S.; Kuramoto, T. K.; Iwano, K. I.; Kurose, R. K.; Komori, S. K.: MOMENTUM TRANSFER AT THE AIR-WATER INTERFACE IN EXTREMELY-HIGH WIND CONDITIONS

- 11:15 Belcher, S. E.; Grant, A. L.; Fox-Kemper, B.; Van Roekel, L.; Sullivan, P.; Large, B.; Hines, A.; Calvert, D.; Rutgersson, A.; Bidlot, J.: A GLOBAL PERSPECTIVE ON MIXING IN THE OCEAN SURFACE BOUNDARY LAYER
- 11:30 Fan, Y.; Griffies, S.: OCEAN SURFACE GRAVITY WAVE EFFECTS ON GLOBAL CLIMATE SIMULATIONS
- 11:45 Endoh, T.; Matsuno, T.; Yoshikawa, Y.; Tsutsumi, E.: ESTIMATES OF THE TURBULENT KINETIC ENERGY BUDGET IN THE CONVECTIVE BOUNDARY LAYER
- 12:00 Hamlington, P. E.; Van Roekel, L.; Sullivan, P. P.; Fox-Kemper, B.: LANGMUIR-SUBMESOSCALE INTERACTIONS: MULTISCALE SIMULATIONS WITH THE CRAIK-LEIBOVICH EQUATIONS
- 12:15 Chini, G. P.; Zhang, Z.: LANGMUIR CIRCULATION: AN AGENT FOR VERTICAL RE-STRATIFICATION?

049 Advances In The Oceanography Of Trace Elements And Isotopes In The Atlantic And Polar Oceans

Chair(s): Micha Rijkenberg, Micha.Rijkenberg@nioz.nl
 Rob Middag, Rob.Middag@nioz.nl
 Stephanie Owens, sowens@whoi.edu
 Patricia C-mara Mor, Patricia.Camara@uab.cat

Location: Ballroom B

- 14:00 De Baar, H.; Keijzer, E.; Laan, M.; Laan, P.; Middag, R.; Bruland, K.; Biller, D.; Lamborg, C.: PERFORMANCE OF NOVEL ULTRACLEAN PRISTINE SAMPLERS FOR TRACE METALS IN THE GEOTRACES PROGRAM: INTERCOMPARISON WITH GOFLO SAMPLERS AT THE BERMUDA ATLANTIC SITE
- 14:15 Bowman, K. L.; Hammerschmidt, C. R.; Lamborg, C. H.: U.S. GEOTRACES: DISTRIBUTION OF MERCURY SPECIES ACROSS A ZONAL SECTION OF THE NORTH ATLANTIC
- 14:30 Middag, R.; Van Aken, H. M.; De Baar, H. J.: DISSOLVED ALUMINIUM IN THE WEST-ATLANTIC OCEAN FROM GREENLAND TO THE FALKLAND ISLANDS / MALVINAS
- 14:45 Church, T. M.; Rigaud, S. B.; Choi, H. Y.; Puigcorbe, V.; Bermejo, M.; Masque, P.; Gerringa, L.; Rijkenberg, M.; Middag, R.: PROCESSES LEADING TO 210-PO AND 210-PB DISEQUILIBRIUM ALONG THE GEOTRACES MERIDIONAL TRANSECT OF THE WESTERN NORTH ATLANTIC
- 15:00 Puigcorbé, V.; Masqué, P.; Owens, S.; Buesseler, K. O.; Rutgers van der Loeff, M.; Stimac, I.; Kretschmer, S.; Rijkenberg, M.; Gerringa, L.; Benitez-Nelson, C. R.: ²³⁴TH: ²³⁸U DISEQUILIBRIUM ALONG THE WESTERN ATLANTIC OCEAN DURING GEOTRACES AG02 AND POC EXPORT FLUX ESTIMATES
- 15:15 Hayes, C. T.; Anderson, R. F.; Fleisher, M. Q.; Robinson, L. F.; Cheng, H.; Edwards, R. L.; Moran, S. B.: PA AND TH DISTRIBUTIONS ALONG THE GEOTRACES NORTH ATLANTIC TRANSECT
- 15:30 Morris, P. J.; Charette, M. A.; Buesseler, K. O.; Hatta, M.; Henderson, P.; Measures, C. I.; Moore, W. S.; Murray, J.; Owens, S. A.; Zhou, K.: RADIUM DERIVED MIXING RATES AND TRACE ELEMENT FLUXES IN THE NORTH ATLANTIC OCEAN
- 15:45 Rijkenberg, M.; Gerringa, L.; Laan, P.; Schoemann, V.; Middag, R.; van Heuven, S.; Salt, L.; de Jong, J.; van Aken, H.; de Baar, H.: THE DISTRIBUTION OF DISSOLVED IRON IN THE WESTERN ATLANTIC OCEAN

057 Biogeochemical Cycling Of Micronutrient Trace Elements

Chair(s): Maeve Lohan, maeve.lohan@plymouth.ac.uk
 Andrew Bowie, Andrew.Bowie@utas.edu.au
 Toshi Gamo, gamo@aori.u-toyko.ac.jp
 Greg Cutter, gcutter@odu.edu

Location: Ballroom B

- 08:00 Bowie, A. R.; Butler, E. C.; Lannuzel, D.; Remenyi, T. A.; Tagliabue, A.; Bloomfield, C.; Watson, R.; O'Sullivan, J.: MICRONUTRIENT TRACE ELEMENTS IN THE AUSTRALIAN SECTOR OF THE SOUTHERN OCEAN: MERIDIONAL DISTRIBUTIONS AND SEASONALITY
- 08:15 Ellwood, M. J.; Nodder, S.; Boyd, P.; King, A.; Hutchins, H.; Wilhelm, S.: DISSOLVED AND PARTICULATE METAL CYCLING DURING THE ANNUAL SUBTROPICAL SPRING BLOOM, EAST OF NEW ZEALAND

- 08:30 Remenyi, T. A.; Bowie, A. R.; Lannuzel, D.; Butler, E. C.; Nesterenko, P. N.; Haddad, P. R.; Wagoner, T.: ALUMINIUM IN THE SUBANTARCTIC SOUTHERN OCEAN SOUTH OF AUSTRALIA: REGIONAL COMPARISONS DURING SUMMER
- 08:45 Heller, M. I.; Wuttig, K.; Croot, P. L.: EXAMINATION OF KEY PROCESSES INVOLVED IN THE BIOCHEMICAL CYCLING OF MANGANESE IN THE OCEAN
- 09:00 Cullen, J. T.; Zhou, J.; Ramirez, R. E.: THE REDOX SPECIATION OF DISSOLVED IRON IN SEAWATER OF THE ARCTIC OCEAN: OBSERVATIONS FROM THE CANADIAN GEOTRACES-IPY EXPEDITION IN THE BEAUFORT SEA
- 09:15 Kondo, Y.; Moffett, J. W.: IRON REDOX CYCLING AND SUBSURFACE OFFSHORE TRANSPORT IN THE EASTERN TROPICAL PACIFIC OXYGEN MINIMUM ZONE
- 09:30 Achterberg, E. P.; Wake, B.; Schlossr, C.; Klar, J.; Forryan, A.; Honey, D.; Milne, A.; Lohan, M.; Chance, R.; Baker, A. R.: GEOTRACES A06 CRUISE: TRACE METAL BIOGEOCHEMISTRY IN THE (SUB-) TROPICAL NORTH ATLANTIC OCEAN
- 09:45 Fitzsimmons, J. N.; Boyle, E. A.: IRON COLLOIDS: INTERCALIBRATION AND TROPICAL NORTH ATLANTIC DISTRIBUTION
- 10:30 LABATUT, M.; RADIC, A.; LACAN, F.; POITRASSON, F.; MURRAY, J.: OCEANIC CYCLE OF FE IN THE WESTERN EQUATORIAL PACIFIC: INSIGHTS FROM ITS ISOTOPIC COMPOSITION IN THE DISSOLVED AND PARTICULATE FRACTIONS.
- 10:45 Conway, T. M.; John, S. G.; Rosenberg, A. D.: IRON ISOTOPE PROFILES FROM THE GEOTRACES NORTH ATLANTIC TRANSECT AND A NEW METHOD FOR SIMULTANEOUS DETERMINATION OF MULTIPLE TRACE METAL ISOTOPES IN SEAWATER
- 11:00 Homoky, W. B.; John, S. G.; Woodward, E. M.; Hsieh, Y. T.; Thompson, J.; Mills, R. A.: THE ISOTOPE COMPOSITION AND FLUX OF IRON FROM MARINE SEDIMENTS TO THE EASTERN SOUTH ATLANTIC (GEOTRACES A10)
- 11:15 John, S. G.; King, A. L.; Hutchins, D. A.; Adkins, J. F.; Wasson, A.; Fu, F.: THE BIOLOGICAL FRACTIONATION OF FE ISOTOPES BY THE DIATOMS T. PSEUDONANA AND T. OCEANICA IN CULTURE
- 11:30 New, A. M.; Zheng, H.; Kustka, A. B.: INVESTIGATING FE ACQUISITION PROTEINS IN THALASSIOSIRA PSEUDONANA BY CELL SURFACE BIOTINYLAATION COUPLED WITH MASS SPECTROMETRY
- 11:45 Ho, T. Y.; Chu, T.: INTERRELATED INFLUENCE OF NI AND LIGHT ON TRICHODESMIUM GROWTH
- 12:00 Semeniuk, D. M.; Posacka, A.; Orians, K. J.; Maldonado, M. T.: THE ROLE OF IN SITU COPPER LIGANDS IN DETERMINING THE BIOAVAILABILITY OF COPPER TO AN OCEANIC PHYTOPLANKTON COMMUNITY
- 12:15 Jacquot, J. E.; Moffett, J. W.; Kondo, Y.: COPPER BIOGEOCHEMISTRY IN REGIMES WITH HIGH NITRIFICATION ACTIVITY: EASTERN TROPICAL SOUTH PACIFIC AND THE HOOD CANAL

068 Air-Sea Interactions In Western Boundary Current Systems And Marginal Seas

Chair(s): Hisashi NAKAMURA, hisashi@atmos.rcast.u-tokyo.ac.jp
 Hisashi Nakamura, hisashi@atmos.rcast.u-tokyo.ac.jp
 Meghan F. Cronin, Meghan.F.Cronin@noaa.gov
 Shoshiro Minobe, minobe@mail.sci.hokudai.ac.jp
 Shang-Ping Xie, xie@hawaii.edu

Location: Ballroom H

- 08:00 Schneider, N.; Qiu, b.; Kilpatrick, T.: SPIN-DOWN AS A KEY TO THE RESPONSE OF THE MID-LATITUDE LOWER TROPOSPHERE TO SEA SURFACE TEMPERATURE FRONTS
- 08:15 Codron, F.; Brachet, S.; Feliks, Y.; Ghil, M.; Le Treut, H.; Simonnet, E.: ATMOSPHERIC CIRCULATIONS INDUCED BY A MID-LATITUDE SST FRONT: A GCM STUDY
- 08:30 Putrasahan, D. A.; Miller, A. J.; Seo, H.: COUPLED OCEAN-ATMOSPHERE INTERACTIONS AND LOCAL IMPACT OF MESOSCALE SST ON ATMOSPHERIC BOUNDARY LAYER ALONG KUROSHIO CURRENT SYSTEM

- 08:45 Kawai, Y.; Tomita, H.: LOW-LEVEL ATMOSPHERIC RESPONSE TO THE SEA SURFACE TEMPERATURE FRONT OF THE KUROSHIO EXTENSION
- 09:00 Koracin, D. R.; Vellore, R. K.; Mejia, J. F.; Jiang, J.; Dorman, C. E.; Cerovecki, I.; McClean, J.; Hendershott, M. C.: MESOSCALE ATMOSPHERIC AND OCEAN DYNAMICS OVER KUROSHIO EXTENSION REGION
- 09:15 Iizuka, S.: IMPACT OF A FINE SCALE SST OVER THE KUROSHIO EXTENSION REGION TO WINTERTIME RAINFALL
- 09:30 Miyama, T.; Nonaka, M.; Nakamura, H.; Kuwano-Yoshida, A.: RAINBAND IN THE EAST CHINA SEA SUSTAINED BY THE WARM SEA SURFACE TEMPERATURE OF THE KUROSHIO
- 09:45 Czaja, A.; Blunt, N.: A NEW MECHANISM FOR OCEAN ATMOSPHERE COUPLING IN MIDLATITUDES
- 10:30 Gulev, S. K.; Belyaev, K. P.: EXTREME TURBULENT HEAT FLUXES IN WESTERN BOUNDARY CURRENTS: A NEW FRAMEWORK FOR QUANTIFICATION AND ANALYSIS
- 10:45 Kleiss, J. M.; Kelly, K. A.; Thompson, L.; Edson, J. B.: AN IN-SITU BASED ASSESSMENT OF QUIKSCAT WIND VECTORS OVER WESTERN BOUNDARY CURRENTS
- 11:00 Chu, P. Y.; Wang, D. W.; Allard, R. A.: IMPACT OF ATMOSPHERE CURRENT AND WAVE INTERACTIONS IN KUROSHIO AND OKINAWA TROUGH REGION DURING THE 2007 TYPHOON SEASON
- 11:15 Bond, N. A.; Cronin, M. F.; Kawai, Y.: THE WIND FORCING OF NEAR-INERTIAL WAVES AT THE KUROSHIO EXTENSION OBSERVATORY (KEO) AND JAMSTEC KUROSHIO EXTENSION OBSERVATORY (JKEO)
- 11:30 Uehara, H.; Kruts, A. A.; Volkov, Y. N.; Nakamura, T.; Ono, T.; Mitsudera, H.: INTERANNUAL VARIATIONS IN THE DENSE SHELF WATER IN THE SEA OF OKHOTSK
- 11:45 Wu, L.; Zhang, L.: COUPLED OCEAN-ATMOSPHERE RESPONSES TO RECENT FRESHWATER FLUX CHANGES OVER THE KUROSHIO-OYASHIO EXTENSION REGION
- 12:00 Treguier, A. M.; Deshayes, J.; Lique, C.: MECHANISMS OF EDDY-MEAN FLOW COMPENSATION IN THE GULF STREAM
- 12:15 Thompson, L.; Kelly, K. A.; Booth, J. F.; Menemenlis, D.: SEASONAL COUPLING IN THE GULF STREAM REGION BETWEEN THE ATMOSPHERE AND THE OCEAN
- 14:00 O'Neill, L. W.: BUOY OBSERVATIONS OF THE SURFACE HEAT FLUX AND WIND STRESS RESPONSES TO SST FRONTS
- 14:15 Tomas, R. A.; Bryan, F. O.; Small, R. J.: SCALE DEPENDENCE OF OCEAN-ATMOSPHERE COUPLING
- 14:30 Komori, N.; Taguchi, B.; Kuwano-Yoshida, A.; Nonaka, M.; Takaya, K.; Ohfuchi, W.; Nakamura, H.: COUPLING COEFFICIENTS AROUND THE MID-LATITUDE SST FRONTS IN A COUPLED ATMOSPHERE-OCEAN AND A STAND-ALONE ATMOSPHERIC GCMs
- 14:45 Liu, J. W.; Zhang, S. P.; Xie, S. P.: TWO KINDS OF SURFACE WIND RESPONSE TO THE EAST CHINA SEA KUROSHIO FRONT
- 15:00 Zhang, S. P.: THE FORMATION OF A SURFACE ANTICYCLONE IN THE SPRING YELLOW AND EAST CHINA SEAS
- 15:15 He, R.; Nelson, J. S.: EFFECT OF THE GULF STREAM ON WINTER EXTRATROPICAL CYCLONE OUTBREAKS
- 15:30 Atsuhiko, I.; Shin'ichiro, K.: A ROLE OF THE YELLOW AND EAST CHINA SEAS ON THE DEEPENING OF WINTER MIDLATITUDE CYCLONES PASSING OVER THE EAST ASIA
- 15:45 Joyce, T. M.; Kwon, Y. O.: EXAMINATION OF THE INFLUENCE OF THE PATH OF KUROSHIO ON MERIDIONAL EDDY TRANSPORT OF SENSIBLE AND LATENT HEAT IN THE TROPOSPHERE

071 Deep-Sea Conservation Imperatives In The 21st Century

Chair(s): Lisa A. Levin, llevin@ucsd.edu
Cindy Van Dover, clv3@duke.edu
Jeff Ardron, Jeff.Ardron@Marine-Conservation.org
Craig R. Smith, craigsmi@hawaii.edu

Location: Room 150

- 08:00 Levin, L. A.; Van Dover, C. L.; Ardron, J.; Smith, C. R.: A CALL FOR DEEP-OCEAN STEWARDSHIP

- 08:15 Gehlen, M.; Roy, T.; Barry, J.; Bopp, L.; Joos, F.; Orr, J.; Segsneider, J.: POTENTIAL IMPACTS OF OCEAN-ACIDIFICATION ON DEEP-SEA ECOSYSTEMS.
- 08:30 Kvassnes, A. J.; Sweetman, A. K.; Hobæk, A.; Thorseth, I. H.; Bolam, S.: IMPTAIL – IMPROVED SUBMARINE TAILING PLACEMENTS (STPS) IN NORWEGIAN FJORDS
- 08:45 Colaco, A.; Tempera, F.; Cardigos, F.; Serrão Santos, R.: THE AZORES MARINE PARK: DEEP-SEA FEATURES AND MULTI-PURPOSE MARINE PROTECTED AREAS
- 09:00 Kitazato, H.; Fujikura, K.; Takai, K.: HOW DOES MEGA-EARTHQUAKE AND TSUNAMIS DISTURB CONTINENTAL MARGIN ECOSYSTEMS? : LESSON FROM TOHOKU MEGAQUAKE MARCH 11, 2011
- 09:15 Mullineaux, L. S.; Le Bris, N.; Mills, S. W.; Secrist, G.; Bayer, S. R.; Siu, N.; Beaulieu, S. E.: INITIAL PIONEERS MATTER: NON-DETERMINISTIC SUCCESSION AFTER CATASTROPHIC DISTURBANCE AT A DEEP-SEA HYDROTHERMAL VENT
- 09:30 Nye, V. E.; Copley, J. T.; Marsh, L.; Tyler, P. A.: BIOGEOGRAPHIC PATTERNS AT HYDROTHERMAL VENTS: FILLING IN THE GAPS AND EXAMINING THE INFLUENCE OF LIFE-HISTORY BIOLOGY
- 09:45 Van Dover, C. L.; Boudreau, D.; Kemm, M.; Kovacs, K.; Vidra, R.: RESTORATION SCIENCE IN THE DEEP SEA: A CALL FOR A ROADMAP TOWARD REALISTIC GOALS AND EXPECTATIONS

072 Plankton Phenology: Drivers, Variability And Impacts

Chair(s): Stephanie Henson, S.Henson@noc.ac.uk
Rubao Ji, rji@whoi.edu
Martin Edwards, maed@sahfos.ac.uk
Marie-Fanny Racault, mfrt@pml.ac.uk

Location: Ballroom E

- 14:00 Varpe, Ø.: FITNESS AND PHENOLOGY: PLANKTON ADAPTATIONS TO SEASONAL CYCLES
- 14:30 Ferrari, R.; Merrifield, S.; Taylor, J.: WHAT PHYSICS TRIGGERS PHYTOPLANKTON BLOOMS?
- 14:45 Asch, R. G.: DETECTING INTERANNUAL CHANGES IN PHENOLOGY WITH REMOTELY SENSED DATA: A COMPARISON OF THREE METHODS
- 15:00 Cole, H. S.; Henson, S. A.; Martin, A. P.; Yool, A.: INTERANNUAL VARIABILITY IN GLOBAL PHYTOPLANKTON PHENOLOGY
- 15:15 Racault, M. E.; Platt, T.; Sathyendranath, S.: LONG-TERM CHANGES IN PHYTOPLANKTON PHENOLOGY IN THE NORTH ATLANTIC
- 15:30 Poulton, N. J.; Thompson, B. P.; Tupper, B.; Cucci, T. L.; Thier, E.; Gilg, I.; Haugen, E. M.; Sieracki, M. E.: PHENOLOGY OF PLANKTON DURING A TEN YEAR STUDY IN BOOTHBAY HARBOR, MAINE USA
- 15:45 Ji, R.; Jin, M.; Varpe, Ø.: PHENOLOGY OF SEA ICE AND OCEAN ALGAL BLOOMS IN THE ARCTIC

073 Compound Interest: Research + Energy + Outreach = Career And Personal Yield

Chair(s): Liesl Hotaling, lieslhotaling@yahoo.com
Gail Scowcroft, gailschow@gso.uri.edu

Location: Ballroom F

- 14:00 Knowlton, C. W.; Scowcroft, G.: A MODEL FOR SCIENTIST INVOLVEMENT IN ONLINE RESOURCE DEVELOPMENT
- 14:15 Ferraro, C. A.; Hotaling, L.; Lichtenwalner, C. S.; Shapiro, A. D.; Yoder, J. A.; McDonnell, J. D.: VIRTUAL TOOLS TO AID SCIENTISTS IN DEVELOPING BROADER IMPACT PROJECTS
- 14:30 Coleman, D. E.; Scowcroft, G. A.; Knowlton, C.; Matis, K. E.; McMillan, W.; Haynes, S. E.: EXPLORING INNER SPACE – EDUCATIONAL KIOSKS AND COMMAND STATIONS FOR INTERACTING WITH OCEAN EXPLORATION CONTENT IN AQUARIUM SETTINGS
- 14:45 Shapiro, A. D.: SCIENCE + MULTIMEDIA = YOU
- 15:00 Smith, L. K.; Lynds, S.; Buhr, S. M.; Duguay, L.; Harcourt, P.; Kwon, P.: COSEE WEST – COLORADO COLLABORATIVE: USING SCIENTISTS' RESEARCH INTEREST TO DRIVE TEACHER PROFESSIONAL DEVELOPMENT WORKSHOPS

- 15:15 Garay, L. V.; Yager, P.: THE BROAD-SPECTRUM BENEFITS OF RESEARCH PARTNERSHIPS BETWEEN TEACHERS AND MARINE SCIENTISTS
- 15:30 Dover-Good, L. H.; Mileham, M. A.: WHO'S HELPING WHOM? THE MULTIFACETED VALUE OF ENGAGING OCEAN SCIENTISTS IN PROFESSIONAL LEARNING COMMUNITITES.
- 15:45 Adams, L. G.; Taylor, A.: COASTAL MONITORING PARTNERSHIP BETWEEN A UNIVERSITY SCIENTIST, A LOCAL HIGH SCHOOL, AND A MUSEUM USING THE BASIC OBSERVATION BUOY (BOB).

085 Development Of A Global Ocean Biogeochemical Observing System Based On Profiling Floats And Gliders

Chair(s): Kenneth S. Johnson, johnson@mbari.org
Mary Jane Perry, perrymj@maine.edu
Herve Claustre, claustre@obs-vlfr.fr

Location: Room 151

- 08:00 Sarmiento, J. L.; Russell, J.; Talley, L.: PROPOSAL FOR A SOUTHERN OCEAN BIOGEOCHEMICAL OBSERVATION AND MODELING PROGRAM
- 08:30 Alkire, M. B.; D'Asaro, E.; Lee, C.; Perry, M. J.; Gray, A.; Cetinic, I.; Briggs, N.; Rehm, E.; Kaiser, J.; González-Posada, A.: ESTIMATES OF NET COMMUNITY PRODUCTION AND EXPORT VIA LAGRANGIAN MEASUREMENTS OF O₂, NO₃, AND POC THROUGH THE EVOLUTION OF A SPRING BLOOM
- 08:45 Cancelled
- 09:00 Johnson, K. S.; Riser, S. C.: HOW PRECISELY CAN NET COMMUNITY PRODUCTION BE OBSERVED WITH OXYGEN SENSORS ON PROFILING FLOATS
- 09:15 Xing, X.; Claustre, H.; Morel, A.; Antoine, D.; D'ortenzio, F.; Poteau, A.; Mignot, A.: RETRIEVAL OF ACCURATE CHLOROPHYLL-A CONCENTRATION AND CDOM ABSORPTION FROM BIO-OPTICAL PROFILING FLOATS (BIO-ARGO) IN VARIOUS OPEN OCEAN WATERS
- 09:30 Bishop, J. K.; Wood, T. J.: AUTONOMOUS EXPLORATION OF CARBON FLUX SEDIMENTATION IN THE TWILIGHT ZONE
- 09:45 Kanzow, T.; Krahnmann, G.; Karstensen, J.; Funk, A.; Ohde, T.: GLIDER FLEET-BASED, MULTI-PARAMETER OBSERVATIONS IN THE TROPICAL NORTHEAST ATLANTIC

086 Climate Change Impacts On Living Marine Resources

Chair(s): Vincent Saba, vincent.saba@noaa.gov
Charles Stock, charles.stock@noaa.gov
Anne Hollowed, Anne.Hollowed@noaa.gov

Location: Room 150

- 10:30 Sydeaman, W. J.; Poloczanska, E. S.; Brown, C. J.; Kiessling, W.; Buckley, L.; Burrows, M. T.; Moore, P.; Schoeman, D. S.; Richardson, A. J.: CLIMATE CHANGE IMPRINTS ON MARINE LIFE BASED ON LONG-TERM OBSERVATIONS
- 10:45 Gomes, H. R.; Goes, J. I.; Matondkar, S. P.; Basu, S.; Parab, S. G.; Dwivedi, R. M.; Thoppil, P. G.: SHRINKING SNOW CAPS AND RISING TIDES - RESPONSE OF THE ARABIAN SEA ECOSYSTEM TO CLIMATE CHANGE
- 11:00 Cancelled
- 11:15 Logan, C. A.; Dunne, J.; Eakin, C. M.; Donner, S. D.: RECOMMENDATION FOR A REVISED CORAL BLEACHING THRESHOLD
- 11:30 Kaplan, M.; Mooney, T. A.: EFFECTS OF ELEVATED CO₂ CONDITIONS ON PARALARVAL LONGFIN SQUID (*LOLIGO PEALII*) DEVELOPMENT AND EARLY LIFE
- 11:45 Saba, V. S.; Stock, C. A.; Spotila, J. R.; Paladino, F. V.; Santidrián Tomillo, P.: PROJECTED RESPONSE OF EASTERN PACIFIC LEATHERBACK TURTLES TO CLIMATE CHANGE: RECONCILING TERRESTRIAL VS. OCEANIC IMPACTS
- 12:00 Woodworth, P. A.; Blanchard, J. L.; Dunne, J. P.; Polovina, J. J.: USING A SIZE-BASED ECOSYSTEM MODEL DRIVEN BY A CLIMATE MODEL TO PROJECT THE CONSEQUENCES OF CLIMATE CHANGE ON FISH ABUNDANCE AND FISHERIES IN THE NORTH PACIFIC

- 12:15 Ballerini, T.; Ruzicka, J. J.; Gaichas, S.; Steele, J. H.; Collie, J. S.: COMPARISONS OF UPPER TROPHIC LEVEL RESPONSES TO MODIFICATIONS IN LOWER TROPHIC LEVEL COMPOSITION IN FOUR US-GLOBEC STUDY REGIONS

092 Advances In Ocean Salinity Remote Sensing: Initial Results From The Aquarius/SAC-D And SMOS Satellite Missions

Chair(s): Gary Lagerloef, Lager@esr.org
Yi Chao, Yi.Chao@jpl.nasa.gov
Jordi Font, jfont@icm.csic.es
Sandra Torrusio, storrusio@conae.gov.ar

Location: Ballroom G

- 14:00 Lagerloef, G. S.; Lindstrom, E. J.; Torrusio, S.; LeVine, D. M.; Rabolli, M.; Chao, Y.; deCharon, A.; Wentz, F.; Yueh, S.; Kao, H. Y.: AQUARIUS SATELLITE SALINITY MEASUREMENTS; PRELIMINARY RESULTS OF THE FIRST SIX MONTHS
- 14:15 Meissner, T.; Wentz, F.; Lagerloef, G.; Levine, D.: THE AQUARIUS SALINITY RETRIEVAL ALGORITHM: CALIBRATION AND VALIDATION
- 14:30 Banks, C.; Gommenginger, C.; Snaith, H.; Srokosz, M.: SMOS SEA SURFACE SALINITY: PERILS, PROGRESS AND PRODUCTS
- 14:45 Ballabrera, J.; Font, J.; Gabarró, C.; Gourrion, J.; Hoareau, N.; Martínez, J.; Portabella, M.; Umberto, M.; Turiel, A.: DEVELOPMENT OF SMOS LEVELS 3 AND 4 SEA SURFACE SALINITY MAPS
- 15:00 Vandemark, D.; Reul, N.; Chapron, B.; Arduin, F.; Feng, H.: EVALUATING THE IMPACT OF OCEAN GRAVITY WAVE VARIABILITY ON AQUARIUS SATELLITE MEASUREMENTS
- 15:15 Giulivi, C. F.; Gordon, A. L.; Busecke, J.: OCEAN SURFACE SALINITY TEXTURE WITHIN THE SUBTROPICAL REGIME
- 15:30 Anderson, J. E.; Riser, S. C.: VARIABILITY OF THE NEAR-SURFACE STRUCTURE OF TEMPERATURE AND SALINITY: OBSERVATIONS FROM PROFILING FLOATS
- 15:45 Asher, W. E.; Jessup, A. T.; Branch, R.; Clark, D.: OBSERVATION OF SALINITY GRADIENTS IN THE TOP FIVE METERS OF THE OCEAN SURFACE

098 The Critical Importance Of Community Building In The Ocean Sciences

Chair(s): Charna Meth, cmeth@oceanleadership.org
Kristin Ludwig, kristin.a.ludwig@gmail.com

Location: Ballroom F

- 08:00 Yarincik, K.; Mannix, H.: COMMUNITY BUILDING IN MARINE BIOLOGICAL RESEARCH: LESSONS LEARNED FROM THE CENSUS OF MARINE LIFE
- 08:15 German, C. R.; Baker, M. C.; Ramirez-Llodra, E. Z.; Tyler, P. A.: DEEP REALM RESEARCH BEYOND THE CENSUS OF MARINE LIFE: A TRANS-PACIFIC ROAD MAP
- 08:30 Daly, K. L.; Benway, H. M.: THE OCEAN CARBON AND BIOGEOCHEMISTRY PROGRAM: BUILDING A COMMUNITY FROM THE BOTTOM UP
- 08:45 Meth, C.; Ludwig, K.: IODP: ENGAGING NEW STAKEHOLDERS WHILE MAINTAINING ESTABLISHED RELATIONSHIPS
- 09:00 Trapp, J. M.; Libes, S. M.: BUILDING A WATER QUALITY CONSORTIUM IN THE GRAND STRAND OF NORTHEASTERN SOUTH CAROLINA AND SOUTH EASTERN NORTH CAROLINA
- 09:15 Miller, A. L.; Zimmermann, L. A.: THE NATIONAL OCEANOGRAPHIC PARTNERSHIP PROGRAM: BUILDING A COMMUNITY THROUGH COLLABORATION WITH FEDERAL AGENCIES, ACADEMIA AND INDUSTRY
- 09:30 Galindo, H. M.; McLeod, K. L.: MINDING THE GAP: AMPLIFYING THE VOICE OF SCIENCE IN THE WIDER WORLD
- 09:45 Murphy, S. J.; DeLuca, C.; Cinquini, L.: THE EARTH SYSTEM COG COLLABORATION ENVIRONMENT

100 Linking Biogeochemical Processes To Estuarine Physical Dynamics

Chair(s): Christopher Sommerfield, cs@udel.edu
Elizabeth Canuel, ecanuel@vims.edu
Robert Chant, chant@marine.rutgers.edu
Elizabeth Sikes, sikes@marine.rutgers.edu

Location: Room 151

- 14:00 Scully, M. E.: OBSERVATIONS OF WIND-DRIVEN VENTILATION AND VERTICAL OXYGEN FLUX IN CHESAPEAKE BAY
- 14:15 Ferrón, S.; Ho, D. T.; Engel, V. C.; Vázquez-Rodríguez, M.; Reid, M. C.; Larsen, L. G.; Palya, A.; Cawley, K.; He, D.; Jaffé, R.: DYNAMICS OF ORGANIC AND INORGANIC CARBON IN A MANGROVE-DOMINATED ESTUARINE SYSTEM (SHARK RIVER, FLORIDA)
- 14:30 García Tigreros, F.; Yvon-Lewis, S. A.; Bianchi, T. S.; Shields, M.; Wanninkhof, R.; Pierrot, D.: EFFECTS OF THE 2011 MISSISSIPPI RIVER FLOOD ON CO₂ FLUXES IN THE LOUISIANA COASTAL ZONE; LINKAGES WITH RIVERINE DOM INPUTS
- 14:45 Ford, P. W.; Oubelkheir, K.; Steven, A.; Carlin, G. D.: QUANTIFYING THE NET FLUXES OF DISSOLVED ORGANIC CARBON AND DISSOLVED NUTRIENTS THROUGH AN ESTUARY
- 15:00 Hermes, A. L.; Sikes, E. L.; Chant, R. J.: INSIGHTS INTO SEASONAL ORGANIC CARBON CYCLING IN THE DELAWARE ESTUARY FROM N-ALKANE BIOMARKERS AND STABLE CARBON ISOTOPES
- 15:15 Salisbury, S. K.; Canuel, E. A.; Anderson, I. C.; Tobias, C. R.; Stanhope, J. W.; Hardison, A. K.: CHARACTERIZATION OF EXTRACELLULAR POLYMERIC SUBSTANCES (EPS) PRODUCED BY BENTHIC MICROALGAE UNDER DIFFERENT PHYSICAL REGIMES
- 15:30 Sommerfield, C. K.; Duval, D. I.: RADIOIODINE (I-131) AS A TRACER OF ESTUARINE TRANSPORT PROCESSES
- 15:45 Harris, C. K.; Fennel, K.; Hetland, R. D.; Wilson, R.: COUPLING SEDIMENT TRANSPORT TO BIOGEOCHEMICAL PROCESSES: EFFECTS OF RESUSPENSION ON OXYGEN CONSUMPTION

109 Integrating Oceanography And Animal Tracking - The Ocean Tracking Network

Chair(s): Sara Iverson, Sara.Iverson@Dal.Ca
John Kocik, jkocik@mercury.wh.who.edu
David Welch, david.welch@kintama.com
Daniela Turk, daniela.turk@Dal.Ca

Location: Ballroom J

- 08:00 Welch, D. W.: MAKING OCEAN MEASUREMENTS COST-EFFECTIVE & POLICY RELEVANT: DESIGN & OPERATION OF LARGE-SCALE MARINE TELEMETRY ARRAYS FOR IMPROVED FISHERIES SCIENCE
- 08:15 Whoriskey, F. G.: OTN: THE OVERVIEW
- 08:30 Sheng, J.; Ohashi, K.: NUMERICAL STUDY OF CIRCULATION AND PARTICLE MOVEMENTS IN THE GULF OF ST. LAWRENCE AND SCOTIAN SHELF
- 08:45 Bennett, R. H.; Cowley, P. D.; Childs, A. R.; Gouws, G.; Reid, K.; Bloomer, P.; Naesje, T. F.; Goschen, W. S.: FROM ESTUARIES TO OCEANS: A MULTI-DISCIPLINARY ASSESSMENT OF THE MOVEMENTS AND MIGRATIONS OF AN ENDEMIC FISHERY SPECIES IN SOUTH AFRICA
- 09:00 Babcock, R. C.; Patterson, T. A.; Pillans, R. D.: INCLUDING HABITATS IN ESTIMATES OF UTILIZATION DISTRIBUTIONS FOR ACOUSTICALLY TAGGED REEF FISH
- 09:15 Beguer, M.; Benchetrit, J.; Castonguay, M.; Hatin, D.; Verreault, G.; Bourque, J. F.; Jonsen, I.; Thompson, K.; Sheng, J.; Dodson, J. J.: MULTIPLE APPROACHES TO ELUCIDATE THE MIGRATION OF THE AMERICAN EEL (*ANGUILLA ROSTRATA*) FROM THE ST-LAWRENCE RIVER TO THE SARGASSO SEA
- 09:30 Huff, D. D.; Lindley, S. T.; Wells, B. K.: RANGE-WIDE, SEASONAL DISTRIBUTION OF GREEN STURGEON HABITAT IN THE PACIFIC OCEAN DERIVED FROM ACOUSTIC TAG DATA AND A REGIONAL OCEANOGRAPHIC MODELING SYSTEM
- 09:45 Iverson, S. J.; Lidgard, D. C.; Bowen, W. D.; Jonsen, I. D.; Mills Flemming, J.; Fennel, K.: BIOPROBES AND RECIEVERS IN THE OCEAN TRACKING NETWORK (OTN): GREY SEALS AS BIOLOGICAL AND OCEANOGRAPHIC SAMPLERS

121 Remote Sensing Of The Coastal Ocean Using Hyperspectral And Geostationary Satellite Imagers

Chair(s): Curtiss Davis, cdavis@coas.oregonstate.edu
Yu-Hwan Ahn, yhahn@kordi.re.kr
Jeffrey Bowles, jeffrey.bowles@nrl.navy.mil
Robert Arnone, robert.arnone@nrlssc.navy.mil

Location: Room 250

- 14:00 Ahn, Y. H.; Ryu, J. H.; Park, Y. J.: GEOSTATIONARY OCEAN COLOR IMAGER FOR THE KOREAN WATERS: OVERVIEW AND OCEAN APPLICATIONS
- 14:15 Davis, C. O.; Tuffillaro, N. B.; Nahorniak, J.; Corson, M. R.; Gao, B. C.; Lucke, R.; Lee, Z. P.: HYPERSPECTRAL IMAGER FOR THE COASTAL OCEAN (HICO): OVERVIEW AND COASTAL OCEAN APPLICATIONS
- 14:30 Szekielda, K. H.; Moses, W.; Bowles, J.; Corson, M.; Bennett, E.; Li, R. R.: EUTROPHICATION AND SUSPENDED MATTER IN THE YANGTZE RIVER EFFLUENT AND HANGZHOU BAY OBSERVED WITH THE HYPERSPECTRAL IMAGER FOR THE COASTAL OCEAN (HICO)
- 14:30 Zimmerman, R. C.; Hill, V. J.; Bissett, P.; Kohler, D.: COMPARING THE UTILITY OF BOTH HYPERSPECTRAL AND MULTISPECTRAL SENSORS FOR INVESTIGATION OF NEARSHORE COASTAL ENVIRONMENTS
- 14:45 Neukermans, G.; Ruddick, K.; Greenwood, N.: DIURNAL VARIABILITY OF TURBIDITY AND LIGHT ATTENUATION IN THE SOUTHERN NORTH SEA FROM THE SEVIRI GEOSTATIONARY SENSOR
- 15:00 Lee, Z.; Arnone, R.; Ahn, Y.; Davis, C.; Ma, R.; Martinolich, P.: SPATIAL AND TEMPORAL VARIATIONS OF TAIHU LAKE BIOPHYSICAL PROPERTIES: A CASE STUDY FOR THE PREPARATION OF GEO-CAPE
- 15:15 Bowles, J. H.; Gillis, D.; Lamela, G. M.; Patterson, K. W.: RETRIEVAL OF IOPS, BATHYMETRY, AND BOTTOM TYPE INFORMATION FROM HICO DATA
- 15:30 Antoine, D.: EUROPEAN PROSPECTS FOR A GEOSTATIONARY OCEAN COLOR SENSOR: THE "OCEAN COLOR ADVANCED PERMANENT IMAGER" (OCAPI)
- 15:45 Arnone, R. A.; Fargion, G.; Lawson, A.; Lee, Z.; Martinolich, P.; Bowers, J.; Ladner, S.; Davis, C.: MONITORING OCEAN WATER LEAVING RADIANCE FOR INTER - SATELLITE CONTINUITY

124 New Insights Into The Early Life Stages And Reproductive Dynamics Of Large Marine Vertebrates

Chair(s): Joel Llopiz, jllopez@whoi.edu
Barbara Muhling, barbara.muhling@noaa.gov
Kate Mansfield, kate.mansfield@noaa.gov
Lesley Thorne, lesley.thorne@duke.edu

Location: Ballroom D

- 14:00 Block, B. A.; Wilson, S.; Carlisle, A.; Jorgensen, S.; Shillinger, G.; Reeb, C.: MAPPING BREEDING AREAS, SPAWNING SITE FIDELITY, AND OCEANOGRAPHIC PREFERENCES WITH ELECTRONIC TAGS ON TOP PREDATORS
- 14:30 Muhling, B. A.; Liu, Y.; Lee, S. K.; Lamkin, J. T.; Offer, M. A.: SPRING SPAWNING GROUNDS OF ATLANTIC TUNAS IN THE NORTHERN GULF OF MEXICO: ENVIRONMENTAL CONSTRAINTS AND RESPONSE TO CLIMATE CHANGE
- 14:45 Mansfield, K. L.; Wynneken, J.: SATELLITE TELEMETRY PROVIDES INSIGHT TO THE SEA TURTLE "LOST YEARS"
- 15:00 Lopez-Castro, M. C.; Bjorndal, K. A.; Bolten, A. B.; Kamenov, G.: USE OF TRACE ELEMENTS TO REVEAL SEA TURTLE POPULATION CONNECTIVITY BETWEEN OCEANIC AND NERITIC FORAGING AREAS IN THE ATLANTIC
- 15:15 Brooks, A.; Pratt, Jr., H. L.; Pratt, T.; Carlson, N.; Brooks, E. J.: SPATIOTEMPORAL TRENDS OF MATING AGGREGATIONS IN NURSE SHARKS (*GINGLYMOSTOMA CIRRATUM*) AROUND CAPE ELEUTHERA, THE BAHAMAS
- 15:30 Höfle, H.; van Damme, C. J.; Fox, C. J.; Munk, P.: HOW HYDROGRAPHY AND SPATIAL DEPENDENCY CONTROL THE DISTRIBUTION OF FISH EGGS AND LARVAE IN THE NORTH SEA

- 15:45 Glaser, S. M.; Fogarty, M. J.; Liu, H.; Ye, H.; Sugihara, G.: THE IMPORTANCE OF NONLINEAR POPULATION DYNAMICS TO EARLY LIFE HISTORY STAGES OF MARINE FISHES

126 Links Between Estuarine And Coastal Processes

Chair(s): David A. Sutherland, dsuth@uoregon.edu
James A. Lerczak, jlerczak@coas.oregonstate.edu
Elizabeth W. North, enorth@umces.edu
Parker MacCready, pmacc@uw.edu

Location: 250

- 08:00 MacDonald, D. G.; Carlson, J. O.; Goodman, L.: CONTROL VOLUME, MICROSTRUCTURE, AND OVERTURNS: UNRAVELING THE HETEROGENEITY OF TURBULENCE IN A NEAR-FIELD RIVER PLUME
- 08:15 Chen, S. N.; Geyer, W. R.: ACROSS-STREAM MOMENTUM BUDGET OF POSITIVELY AND NEGATIVELY BUOYANT RIVER OUTFLOWS
- 08:30 Giddings, S. N.; MacCready, P.; Banas, N. S.; Davis, K. A.; Hickey, B. M.: ENHANCEMENT OF REVERSE ESTUARINE CIRCULATION EVENTS AND COASTAL CONNECTIVITY DUE TO PLUME INTRUSIONS FROM AN ALONGSHORE ESTUARY
- 08:45 Peterson, T. D.; Herfort, L.; Kahn, P.; Maier, M. A.; Riseman, S. F.; Zuber, P.; Needoba, J. A.; Baptista, A. M.: SEASONAL VARIATIONS IN THE CONTRIBUTION OF MARINE PLANKTON TO THE FOOD WEB OF THE COLUMBIA RIVER ESTUARY IN THE U.S. PACIFIC NORTHWEST
- 09:00 Kilcher, L. E.; Nash, J. D.; Moum, J. N.: THE ROLE OF TURBULENCE STRESS DIVERGENCE IN DECELERATING A RIVER PLUME
- 09:15 Palma, E. D.; Matano, R. P.: THE MAGELLAN PLUME
- 09:30 McFadden, L. E.; Campbell, R. W.; Causey, D.; Welker, J.: DISTRIBUTION AND ECOLOGY OF ZOOPLANKTON AND JUVENILE PELAGIC FISHES IN THE COPPER RIVER PLUME
- 09:45 Rao, S. A.; Pringle, J. M.; Austin, J. A.: WEATHER-BAND FLUCTUATIONS IN THE WIND REDUCES THE ESTUARY-OCEAN EXCHANGE AND INCREASES ESTUARINE RESIDENCE TIME
- 10:30 Ralston, D. K.: PHYSICAL CONTROLS ON AN ESTUARINE HARMFUL ALGAL BLOOM
- 10:45 Dagg, M. J.; Roberts, B. J.; Semmler, C. M.: LINKAGE BETWEEN MARSH-DERIVED DISSOLVED ORGANIC CARBON (DOC) AND ECOSYSTEMS IN A NEARBY BAY AND THE COASTAL OCEAN.
- 11:00 Park, K.; Kim, C.: A MODELING STUDY OF WATER AND SALT EXCHANGE FOR A HIGHLY STRATIFIED NORTHERN GULF OF MEXICO ESTUARY
- 11:15 Horner-Devine, A. R.; Chickadel, C. C.: MIXING AND INSTABILITY IN A RIVER PLUME FRONT
- 11:30 Jurisa, J. T.; Chant, R. J.: MIXING AND STRUCTURE OF A BUOYANT RIVER PLUME SUBJECTED TO OFFSHORE WINDS
- 11:45 Davis, K. A.; Banas, N. S.; MacCready, P.; Giddings, S. N.; Hickey, B. M.: FRESHWATER INPUTS AND COASTAL PRODUCTIVITY IN THE PACIFIC NORTHWEST.
- 12:00 North, E. W.; Long, W.; Schlag, Z.: TRANSPORT AND EXCHANGE OF BLUE CRAB (*CALLINECTES SAPIDUS*) LARVAE IN THE MIDDLE ATLANTIC BIGHT
- 12:15 Dugdale, R.; Parker, A. E.: ANTHROPOGENIC AMMONIUM ECOSYSTEM EFFECTS: FROM RIVER TO ESTUARY TO COASTAL OCEAN.
- B1657 Wu, H.; Zhu, J.; Shen, H.; Wang, H.: TIDAL MODULATION ON THE CHANGJIANG RIVER PLUME IN SUMMER

127 Phytoplankton Fluorescence: Filling The Gap Between Observations And Understanding

Chair(s): Alexander Chekalyuk, chekaluk@lede.columbia.edu
Yannick Huot, yannick.huot@usherbrooke.ca

Location: Ballroom E

- 10:30 Chekalyuk, A.; Huot, Y.: PHYTOPLANKTON FLUORESCENCE: FILLING THE GAP BETWEEN OBSERVATIONS AND UNDERSTANDING
- 11:00 Kromkamp, J. C.; Silsbe, G.: THE PROTOOL PROJECT: A TOOL FOR AUTOMATED PRIMARY PRODUCTION MEASUREMENTS OF PHYTOPLANKTON

- 11:15 Quigg, A.; Zhao, Y.; McInness, A.; Jiang, Y.; Bianchi, T.; Dimarco, S.: ASSESSING PHYTOPLANKTON PHYSIOLOGY AND PRIMARY PRODUCTION IN THE NORTHERN GULF OF MEXICO: TRADITIONAL VERSUS IN VIVO CHLOROPHYLL FLUORESCENCE METHODS
- 11:30 Prášil, O.; Kotabová, E.; Felcmanová, K.; Luhanová, D.; Kana, R.: WHEN PHOTOCHEMICAL YIELD UNCOUPLES FROM PHOTOSYNTHESIS
- 11:45 Gorbunov, M. Y.; Kuzminov, F. I.; Fadeev, V. V.; Dongun Kim, J.; Falkowski, P. G.: MECHANISMS OF NON-PHOTOCHEMICAL QUENCHING OF FLUORESCENCE IN CYANOBACTERIA
- 12:00 Huot, Y.; Franz, B. A.: NEW ALGORITHM FOR REMOTE SENSING OF VARIABILITY IN THE QUANTUM YIELD OF CHLOROPHYLL FLUORESCENCE
- 12:15 Laney, S. R.: A new dynamical modeling framework for interpreting phytoplankton natural fluorescence

137 Biodiversity, Biogeochemistry And Ecology: Establishing Linkages Between Molecular Diversity And Ecosystem Functioning

Chair(s): Zackary Johnson, zij@duke.edu
Maureen Coleman, mlcoleman@uchicago.edu

Location: Ballroom D

- 08:00 Sieracki, M. E.; Stepanauskas, R.; Yoon, H. S.; Massana, R.; Poulton, N. J.; Logares, R.: DIVERSITY OF THE DOMINANT MARINE NANO- AND PICOEUKARYOTES - THE SINGLE CELL PERSPECTIVE FROM THE TARA OCEANS EXPEDITION
- 08:15 Lin, Y.; Johnson, Z.: ESTIMATING THE GROWTH RATE AND BIOGEOCHEMISTRY OF GENETICALLY DIVERSE PROCHLOROCCUS USING RRNA/RDNA RATIOS
- 08:30 Grim, S. L.; Kirchner, D. L.; Campbell, B. J.: LINKING ACTIVITY AND COMMUNITY STRUCTURE OF BACTERIAL ASSEMBLAGES IN THE SARGASSO SEA AND MID-ATLANTIC BIGHT
- 08:45 Goebel, N. L.; Edwards, C. A.; Follows, M. J.; Zehr, J. P.: LINKING PHYTOPLANKTON BIODIVERSITY AND PRODUCTIVITY IN AN ECOSYSTEM MODEL OF THE CALIFORNIA CURRENT SYSTEM
- 09:00 Hogle, S. L.; Hopkinson, B. M.; Barbeau, K. A.; Dupont, C. L.: COMPARATIVE PROKARYOTIC METAGENOMICS ACROSS SUBSURFACE CHLOROPHYLL MAXIMA IN THE SOUTHERN CALIFORNIA BIGHT
- 09:15 Becker, J. W.; Repeta, D. J.; Rappé, M. S.; Johnson, C. G.; Berube, P. M.; Chisholm, S. W.; Waterbury, J. B.: CHARACTERIZATION AND LABILITY OF DISSOLVED ORGANIC MATTER PRODUCED BY MARINE PHYTOPLANKTON: LINKING BIOLOGICAL AND CHEMICAL DIVERSITY
- 09:30 Gutiérrez Rodríguez, A.; Slack, G. W.; Daniels, E.; Stuart, R. K.; Vedamati, J.; Moffet, J. W.; Palenik, B.; Landry, M. R.: MOLECULAR AND ECOLOGICAL DIVERSITY OF PICOCYANOBACTERIAL POPULATIONS IN THE COSTA RICA DOME
- 09:45 Wegley Kelly, L.; Barott, K. L.; Carlson, C. A.; Dinsdale, E. A.; Haas, A. F.; Leichter, J. J.; Nelson, C. E.; Rodriguez-Mueller, B.; Smith, J. E.; Rohwer, F.: BIOGEOGRAPHY AND BIODIVERSITY OF THE MICROBIAL COMMUNITIES ASSOCIATED WITH CENTRAL PACIFIC CORAL ATOLLS
- 10:30 Fay, S. A.; Gast, R. J.; DeVaul, S. B.; Sanders, R. W.: STUDYING TROPHIC COMPARTMENTS OF EUKARYOTIC MICROBIAL FOOD WEBS USING A THYMIDINE ANALOG AND ENVIRONMENTAL DNA SEQUENCING
- 10:45 Konotchick, T.; Dupont, C. L.; Valas, R. E.; Badger, J. H.; Allen, A. E.: TRANSCRIPTIONAL PROFILING OF THE GIANT KELP, *MACROCYSTIS PYRIFERA*, SPANNING WATER-COLUMN GRADIENTS IN LIGHT, TEMPERATURE, AND NUTRIENTS
- 11:00 Michelou, V. K.; Carporaso, J. G.; Knight, R.; Palumbi, S. R.: THE ECOLOGY OF MICROBIAL COMMUNITIES ASSOCIATED WITH THE GIANT KELP *MACROCYSTIS PYRIFERA*
- 11:15 Sison-Mangus, M. P.; Jiang, S.: THE MICROBIOME OF MARINE DIATOMS: IS IT INFLUENCED BY ALGAL HOST PHYLOGENY?
- 11:30 Cancelled

- 11:45 Vallino, J. J.; Fernández González, N.; Huber, J. A.: USE OF METHANOTROPHIC MICROCOSMS, TAG SEQUENCING AND THERMODYNAMIC METABOLIC MODELS TO EXAMINE STRUCTURE-FUNCTION RELATIONSHIPS
- 12:00 Bowen, J. L.; Weisman, D.; Yasuda, M.: FUNCTIONAL GENE PYROSEQUENCING: CHARACTERIZING THE DISTRIBUTION AND DIVERSITY OF THE NIRS GENE AND ITS ROLE IN DENITRIFICATION OF COASTAL MARINE SEDIMENTS
- 12:15 Bender, S. J.; Durkin, C. A.; Schruth, D. M.; Morales, R. L.; Armbrust, E. V.: IDENTIFYING SHARED RESPONSES TO NITRATE STARVATION AMONG THREE DIATOMS USING WHOLE-CELL TRANSCRIPTOMICS

139 Governing Across Scales: Innovative Stewardship Of Earth Systems: Creating A Global Large Marine Ecosystem Knowledge Network

Chair(s): Harold P. Batchelder, hbatchelder@coas.oregonstate.edu
Peter Fox, pfox@rpi.edu
Suzanne Lawrence, suzanne@suzannelawrence.net
Oran Young, oran.young@gmail.com

Location: Room 150

- 14:00 Haupt, A. J.; Bailey, B.; Barminski, J.; DeBruyckere, L.; Hallenbeck, T. R.; Vierra, A.; Lovewell, M. A.; Stein, J.; Stoike, S.; Strauss, A.: THE WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH: CONNECTING SCIENCE TO POLICY TO BETTER MANAGE THE CALIFORNIA CURRENT LARGE MARINE ECOSYSTEM
- 14:15 Stein, J. E.; Levin, P.; Wells, B.; Werner, F.: THE CALIFORNIA CURRENT LARGE MARINE ECOSYSTEM'S INTEGRATED ECOSYSTEM ASSESSMENT (CCIEA): PRESENT STATUS AND NEXT STEPS
- 14:30 Werner, F. E.; Wells, B. K.; Levin, P. S.; Stein, J. E.: THE CALIFORNIA CURRENT LARGE MARINE ECOSYSTEM'S INTEGRATED ECOSYSTEM ASSESSMENT (CCIEA): A CASE STUDY ON CALIFORNIA SALMON
- 14:45 Bass, P.: GULF OF MEXICO ALLIANCE
- 15:00 Duda, A.; Sherman, K.: A GLOBAL APPROACH TO THE ASSESSMENT AND MANAGEMENT OF LARGE MARINE ECOSYSTEMS
- 15:15 Hamukuaya, H.: THE APPLICATION OF LME CONCEPT FOR ECOSYSTEM-BASED MANAGEMENT IN THE BENGUELA CURRENT LARGE MARINE ECOSYSTEM
- 15:30 Mahon, R.; Fanning, L.; McConney, P.: OCEAN GOVERNANCE IN THE WIDER CARIBBEAN REGION: IS AN EFFECTIVE REGIME COMPLEX EMERGING?

146 Zooplankton Feeding Ecology And The Biological Carbon Pump In The Ocean

Chair(s): Stephanie Wilson, sewilso6@asu.edu
Susanne Neuer, susanne.neuer@asu.edu

Location: Ballroom E

- 08:00 Jackson, G. A.; Checkley, Jr., D. M.; Petrik, C. M.: VERTICAL DISTRIBUTIONS OF AGGREGATE PARTICLES AND IMPLICATIONS FOR ZOOPLANKTON FEEDING IN THE EUPHOTIC ZONE.
- 08:15 Gleiber, M. R.; Steinberg, D. K.; Ducklow, H. W.: TIME SERIES OF VERTICAL FLUX OF ZOOPLANKTON FECAL PELLETS ON THE CONTINENTAL SHELF OF THE WESTERN ANTARCTIC PENINSULA
- 08:30 Hernández-León, S.; Fraile-Nuez, E.; Teira, E.; Reche, I.; Gasol, J.; Pernice, M.; Gomes, A.; Sarmiento, H.; Agustí, S.; Duarte, C.: ZOOPLANKTON, MICRONEKTON AND THE BIOLOGICAL PUMP: BEYOND THE MESOPELAGIC ZONE
- 08:45 Shelton, N. L.; Condon, R. H.; Wilson, S. E.; Neuer, S.; Lomas, M. W.; Smith, S. R.; Kramer, L.; Carassou, L.; Richardson, T. L.: CONTRASTING ROLES OF GELATINOUS AND CRUSTACEAN ZOOPLANKTON AS MEDIATORS OF CARBON PATHWAYS IN OLIGOTROPHIC FOOD WEBS
- 09:00 Wilson, S. E.; Neuer, S.: WINTER AND SPRING DIETS OF SARGASSO SEA MESOZOOPLANKTON ANALYZED USING DNA-BASED MOLECULAR TECHNIQUES
- 09:30 Hudson, J. M.; Steinberg, D. K.; Sutton, T. T.; Graves, J. E.: FEEDING ECOLOGY AND CARBON TRANSPORT OF DIEL VERTICALLY MIGRATING MYCTOPHIDS FROM THE NORTHERN MID-ATLANTIC RIDGE

- 09:45 Cass, C. J.; Daly, K. L.; Wakeham, S. G.: FEEDING ECOLOGY AND METABOLISM OF EUCALANUS INERMIS IN THE EASTERN TROPICAL PACIFIC OCEAN: IMPLICATIONS FOR VERTICAL CARBON TRANSPORT

151 Low Latitude Riverine Influence And Impact On Ocean Biogeochemistry

Chair(s): Will Berelson, berelson@usc.edu
Ajit Subramaniam, ajit@ldeo.columbia.edu

Location: Room 151

- 10:30 Yager, P. L.; Coles, V. J.; Goes, J.; Montoya, J.; Steinberg, D.; Berelson, W.; Hood, R.; Capone, D.; Carpenter, E.: ANACONDAS: AMAZON INFLUENCE ON THE ATLANTIC: CARBON EXPORT FROM NITROGEN FIXATION BY DIATOM SYMBIOSES
- 10:45 Coles, V. J.; Brooks, M. T.; Hood, R. R.; Montoya, J. P.; Stukel, M. R.; Yager, P. L.: THE ROLE OF THE AMAZON RIVER PLUME IN STRUCTURING UPPER OCEAN STRATIFICATION, BIOCHEMISTRY, AND BIOLOGICAL COMMUNITIES IN THE WESTERN TROPICAL NORTH ATLANTIC
- 11:00 Cardona, Y.; Bracco, A.: INTERANNUAL VARIABILITY OF THE MISSISSIPPI-ATCAFALAYA RUNOFF AND TRANSPORT PATHWAYS IN THE GULF OF MEXICO
- 11:15 Goes, J. J.; Gomes, H. R.; Chekalyuk, A.; Carpenter, E. J.; Montoya, J. P.; Coles, V.; Yager, P. L.; Hafez, M.: BIOGEOGRAPHY AND ECOPHYSIOLOGY OF PHYTOPLANKTON COMMUNITIES OF THE AMAZON RIVER PLUME
- 11:30 Knapke, E. M.; Collier, K.; Hoppe, K.; Montoya, J. P.; Villareal, T.: INFLUENCE OF MISSISSIPPI RIVER PLUME ON DISTRIBUTIONS OF DIAZOTROPHS IN THE GULF OF MEXICO
- 11:45 Conroy, B. J.; Steinberg, D. K.: ZOOPLANKTON COMMUNITY COMPOSITION IN THE AMAZON RIVER PLUME AND WESTERN TROPICAL NORTH ATLANTIC
- 12:00 Yeung, L. Y.; Berelson, W. M.; Young, E. D.; Prokopenko, M. G.; Coles, V. J.; Montoya, J. P.; Carpenter, E. J.; Yager, P. L.: IMPACT OF DIATOM-DIAZOTROPH ASSOCIATIONS ON CARBON EXPORT IN THE AMAZON RIVER PLUME
- 12:15 Chong, L. S.; Berelson, W. M.; Rollins, N. E.; McManus, J.: FOOTPRINTS IN THE MUD: PATTERNS OF ORGANIC MATTER DEPOSITION IDENTIFIED BY PORE WATER CHEMICAL SIGNATURES IN SEDIMENTS UNDERLYING THE AMAZON RIVER PLUME

173 Ocean Surface Waves And Interactions With Currents And Winds

Chair(s): William Perrie, william.perrie@dfo-mpo.gc.ca
Ryan Mulligan, mulliganr@civil.queensu.ca

Location: Ballroom C

- 14:00 Ardhuin, E.; Bennis, A. C.: WAVE-CURRENT INTERACTIONS IN THREE DIMENSIONS: THE FIRST FEW STEPS ON THE PATH FROM THEORY TO PRACTICAL APPLICATIONS
- 14:30 Melville, W. K.; Romero, L.; Kleiss, J. M.: SPECTRAL ENERGY DISSIPATION DUE TO SURFACE-WAVE BREAKING IN THE GULF OF TEHUANTEPEC EXPERIMENT (GOTEX).
- 14:45 Anguelova, M. D.; Hwang, P. A.: SEPARATING WHITECAP FRACTION OF ACTIVE WAVE BREAKING FROM SATELLITE ESTIMATES OF TOTAL WHITECAP FRACTION
- 15:00 Callaghan, A. H.; Deane, G. B.; Stokes, M. D.: VARIABLE DECAY RATES OF WHITECAP FOAM AND ITS IMPLICATIONS FOR WHITECAP COVERAGE PARAMETERISATIONS AND SCATTER
- 15:15 Webb, A.; Fox-Kemper, B.: GLOBAL STOKES DRIFT AND CLIMATE WAVE MODELS
- 15:30 Romero, L.; Lenain, L.; Melville, W. K.; Terrill, E.; Kim, S. Y.: WAVE-CURRENT INTERACTION NEAR A SST FRONT
- 15:45 Henderson, S. M.; Mullarney, J. C.: WAVE-GENERATED, WIND-MIXED NEAR-SURFACE SHEAR OBSERVED OVER A TIDAL FLAT

Monday, February 20 - Posters

004 The Southern Ocean And Its Role In The Climate System

Chair(s): Stephanie Downes, sdownes@princeton.edu
 Nicole Jeffery, njeffery@lanl.gov
 Joellen Russell, jrussell@email.arizona.edu
 Wilbert Weijer, wilbert@lanl.gov

Location: Exhibit/Poster Hall

- B2033 Lindsay, K.; Long, M. C.; Doney, S. C.: THE IMPACT OF CLIMATE CHANGE ON THE SOUTHERN OCEAN CARBON CYCLE IN CESM1-(BGC) CMIP5 EXPERIMENTS
- B2034 Meredith, M. P.; Gordon, A. L.; Naveira-Garabato, A. C.; Abrahamson, E. P.; Huber, B. A.; Jullion, L.; Venables, H. J.: SYNCHRONOUS INTENSIFICATION AND WARMING OF ANTARCTIC BOTTOM WATER OUTFLOW FROM THE WEDDELL GYRE
- B2035 Vallis, G. K.; Nikurashin, Max, M.: THE CONTROLLING ROLE OF THE ACC ON THE STRATIFICATION OF THE WORLDS OCEAN
- B2036 Goncalves, R. C.; Campos, E. D.: WIND INDUCED CHANGES ON THE AGULHAS SYSTEM
- B2037 Munday, D. R.; Johnson, H. L.; Marshall, D. P.; Daines, S.: THE IMPACT OF SOUTHERN OCEAN PHYSICS ON OCEAN CARBON STORAGE AND ATMOSPHERIC PCO₂
- B2038 Joubert, W. R.; Bender, M. I.; Cassar, N.; Thomalla, S. J.; Monteiro, P. M.: A RE-EXAMINATION OF LIGHT LIMITATION AS A KEY FACTOR LIMITING PHYTOPLANKTON PRODUCTIVITY IN THE SOUTHERN OCEAN.
- B2039 Wolfe, C. L.; Cessi, P.: THE ADIABATIC POLE-TO-POLE OVERTURNING CIRCULATION
- B2040 Simon Yang, S.; Eric Galbraith, e.: GLOBAL IMPACTS OF THE ANTARCTIC CIRCUMPOLAR CURRENT APPEARANCE ON NUTRIENT DISTRIBUTIONS AND BIOGEOCHEMISTRY
- B2041 Lauderdale, J. M.; Naveira Garabato, A. C.; Oliver, K. I.; Williams, R. G.: THE ROLE OF THE SOUTHERN OCEAN IN THE GLOBAL CARBON CYCLE AND ATMOSPHERIC CARBON DIOXIDE CHANGE
- B2042 Bowen, A.; Mayer, L.; Yoerger, D.; German, C.; Kinsey, J.: LIGHTLY TETHERED UNMANNED UNDERWATER VEHICLE FOR UNDER-ICE EXPLORATION
- B2043 Kilbourne, B. E.; Girton, J. B.: SOUTHERN OCEAN FINESTRUCTURE: SPATIAL AND TEMPORAL VARIABILITY OF NEAR-INERTIAL WAVES AND MIXING
- B2044 Campin, J. M.; Hill, C.; Ferreira, D.; Marshall, J.; Abernathey, R.: SIMULATING THE ADIABATIC INTERIOR OF THE SOUTHERN OCEAN WITH AN EDDYING Z-COORDINATE MODEL
- B2045 Campos, E. J.: TRENDS IN MOC AND MERIDIONAL HEATH TRANSPORT IN THE SOUTH ATLANTIC IN A NUMERICAL EXPERIMENT WITH HYCOM FOR 1960 – 2010
- B2046 Gebler, M.; Boebel, O.; Macrander, A.; Schröter, J.; Wolff, J. O.: TRANSPORT VARIABILITY OF THE ACC AND TELECONNECTION WITH THE SOUTHERN ANNULAR MODE (SAM) SOUTH OF AFRICA
- B2047 Chen, H. C.; Tseng, Y. H.: SOUTHERN HEMISPHERE EXTRA-TROPICAL FORCING ON ENSO - OBSERVATION AND MODEL COMPARISONS
- B2048 Kemp, A.; Grigorov, I.; Naveira Garabato, A. C.; Oliver, K.: ORBITAL FORCING CONTROLS ON ANTARCTIC POLAR FRONT MIGRATION AND DEEP CIRCULATION CHANGE OVER THE PAST MILLION YEARS
- B2049 Mazloff, M. R.: ON THE SENSITIVITY OF THE DRAKE PASSAGE TRANSPORT TO AIR-SEA MOMENTUM FLUX
- B2050 Beal, L. M.; Biastoch, A.; de Ruijter, W. P.; Zahn, R.; Peeters, F.; Rouault, M.: AGULHAS LEAKAGE, SOUTHERN HEMISPHERE WESTERLIES, AND CLIMATE CHANGE
- B2051 Haertel, P. T.; Fedorov, A. V.: CAN SOUTHERN OCEAN PROCESSES MAINTAIN STRATIFICATION, OVERTURNING, AND HEAT TRANSPORT IN AN OCEAN WITH AN ADIABATIC INTERIOR?

- B2052 Sweeney, C.; Guilderson, T.; Takahashi, T.; Lovenduski, N.; Majkut, J.; Sarmiento, J. L.; Key, R. M.: OBSERVATIONAL EVIDENCE OF AN INCREASE IN VERTICAL MIXING SOUTH OF THE POLAR FRONT IN THE SOUTHERN OCEAN USING OBSERVATIONS OF RADIOCARBON AND SURFACE CO₂.
- B2053 Weijer, W.; Jeffery, N.; Sloyan, B. M.: SURFACE CLIMATOLOGY OF THE SOUTHERN OCEAN IN THE CCSM4
- B2054 Kennelly, M. A.; Watts, D. R.; Tracey, K. L.; Donohue, K. A.: CURRENT-METER PERFORMANCE COMPARISON IN HIGH CURRENT CONDITIONS IN DRAKE PASSAGE
- B2055 Simmons, C. T.; Mysak, L. A.; Mathews, H. D.: AN INVESTIGATION OF CARBON CYCLE DYNAMICS FROM THE LAST GLACIAL MAXIMUM TO THE PRESENT USING AN EARTH SYSTEM MODEL OF INTERMEDIATE COMPLEXITY
- B2056 Cheng, X.; Xie, S.; Qi, Y.: INTERANNUAL VARIABILITY OF HIGH-WIND OCCURRENCE IN THE SOUTHERN INDIAN OCEAN
- B2057 Swift, J. H.; Orsi, A. H.: A CTD/HYDROGRAPHIC SECTION ACROSS 67SS IN THE FAR SOUTH PACIFIC OCEAN
- B2058 Firing, Y. L.; Chereskin, T. K.; Watts, D. R.; Tracey, K. L.: EDDY FLUXES AND VORTICITY BALANCE IN DRAKE PASSAGE
- B2059 Stadnyk, A. D.; Vizcaino, A.; Dunbar, R.; Mucciarone, D. A.; LeRoy, S. L.: PALEOCLIMATE IMPLICATIONS OF AN ISOTOPIC ANALYSIS OF EARLY HOLOCENE SEDIMENTS FROM LAGO FAGNANO, TIERRA DEL FUEGO
- B2060 Kobayashi, T.; Mizuno, K.; Suga, T.: LONG-TERM VARIATIONS OF SURFACE AND INTERMEDIATE WATERS IN THE SOUTHERN INDIAN OCEAN ALONG 32S
- B2061 Margolin, A. R.; Lovenduski, N. S.; Pierpont, C. G.: DECADAL CHANGE AND REGIONAL TRENDS OF PH THROUGHOUT THE SOUTHERN OCEAN
- B2062 Strutton, P. G.: PHYSICAL AND BIOLOGICAL RESPONSE OF THE SOUTHERN OCEAN TO THE SOUTHERN ANNULAR MODE: 1997 TO 2011
- B2063 Balwada, D.; Speer, K.; Owens, B.: MIXING IN THE ACC: SUBSURFACE FLOAT DISPERSION AND TOPOGRAPHY
- B2064 Jones, D. C.; Ito, T.; Birner, T.: MULTIPLE JETS AND DENSITY FRONTS IN AN IDEALIZED MODEL OF THE SOUTHERN OCEAN
- B2065 Oliveira, F. S.; Campos, E. D.: THE INFLUENCE OF AGULHAS CURRENT FLOW IN THE SOUTH ATLANTIC CIRCULATION

006 Advances In Coastal Ocean Modeling, Analysis, And Prediction

Chair(s): Villy Kourafalou, vkourafalou@rsmas.miami.edu
 Pierre De Mey, demey-redir@neyak.org
 Ruoying He, rhe@ncsu.edu
 Alex Kurapov, kurapov@coas.oregonstate.edu

Location: Exhibit/Poster Hall

- B1216 Fain, I. V.; Masson, D.: MODELING THE LOCAL AND REMOTE FORCING OF THE OCEAN CIRCULATION OFF THE COAST OF BRITISH COLUMBIA AND WASHINGTON STATE
- B1217 Seo, G. H.; Cho, Y.K.; Choi, B. J.: A REANALYSIS OF OCEAN CLIMATE VARIATION USING ENKF IN THE NORTHWEST PACIFIC
- B1218 Liu, G.; Chen, M.; Kumar, A.; Eakin, C. M.: APPLICATION OF A NUMERICAL PREDICTION MODEL TO CORAL REEF ECOSYSTEMS: A SEASONAL CORAL BLEACHING THERMAL STRESS OUTLOOK SYSTEM
- B1219 WANG, Q.; WANG, Y. X.: DIFFERENT ROLES OF EKMAN PUMPING IN THE WEST AND EAST SEGMENTS OF THE SOUTH CHINA SEA WARM CURRENT
- B1220 Choi, J.; Monfort, C.; Sampson, B.; Gay, P.: PREDICTING TROPICAL CYCLONE STORM SURGE CONSISTENT WITH NAVY TROPICAL CYCLONE FORECASTS USING DELFT3D
- B1221 Keen, T. R.; Campbell, T. J.: SIMULATING THE ESTUARY TURBIDITY MAXIMUM WITH AN ADAPTIVE MESH CFD MODEL (GERRIS)

- B1222 Lopez, J. E.; Baptista, A. M.; Spitz, Y.: ENHANCING MODELING SKILL OF THE VERTICAL STRUCTURE AND TRAPPING ABILITY OF DENSITY GRADIENTS IN THE LOWER COLUMBIA RIVER ESTUARY
- B1223 Rostaminia, M.; Baptista, A. M.; Spitz, Y.: IMPACT OF CHANGES IN CLIMATE AND HYDROPOWER OPERATIONS ON HABITAT OPPORTUNITY AND SURVIVAL OF COLUMBIA RIVER JUVENILE CHINOOK SALMON
- B1224 Kim, C.; Cho, Y.; Seo, G.; Choi, B.; Jung, K.: TIDAL EFFECT IN PREDICTIONS OF OIL SPILL TRAJECTORIES IN THE YELLOW SEA
- B1225 Inazu, D.; Hino, R.; Fujimoto, H.: GLOBAL BAROTROPIC OCEAN MODELING DRIVEN BY SYNOPTIC ATMOSPHERIC DISTURBANCES: VALIDATION USING GLOBAL IN-SITU OCEAN BOTTOM PRESSURE DATA
- B1226 Melling, G. J.; Dix, J. K.; Turnock, S. R.; Whitehouse, R. J.: NUMERICAL MODELLING OF SCOUR USING CFD-BASED METHODS – APPROACHES AND CHALLENGES
- B1227 Signell, R. P.: RECENT ADVANCES IN DATA DELIVERY AND ACCESS TOOLS FOR COASTAL OCEAN MODELERS
- B1228 Lee, J.; Kim, T.; Kang, T.; Jang, S.: INTENSIVE STUDY OF SWELLS IN THE SEMI-ENCLOSED SEA USING NUMERICAL MODEL AND MEASUREMENT DATA.
- B1229 Edwards, K. L.; Lalejini, D. M.; Weidemann, A. D.; Incze, M. L.; Holman, R. A.; Goosen, R. D.; Allard, R. A.: THE IMPORTANCE OF BATHYMETRY IN HIGH RESOLUTION LITTORAL MODELING
- B1230 Bell, C. W.; Dale, A. C.: USING AN OPEN WATER TIDAL RACE TO TEST SUB-GRIDSACLE PARAMETERISATIONS OF HORIZONTAL EDDY VISCOSITY IN COASTAL OCEAN MODELS.
- B1231 Fayman, P. A.; Kurapov, A. L.; Allen, J. S.; Egbert, G. D.; Shearman, R. K.: HIGH-RESOLUTION MODELING OF CIRCULATION ALONG THE US WEST COAST
- B1232 Palóczy, A.; Biló, T. C.; Silveira, I. A.; Calado, L.; Mattos, R.; Soutelino, R. G.; Rocha, C. B.; Castro, B. M.: THE CABO FRIO COASTAL DOWNWELLING
- B1233 Kwon, K. K.; Choi, B. J.; Lee, S. H.; Whang Cho-Rrong, .; Kim, J. K.: EFFECTS OF TIDE AND WIND ON THE EASTERN BOUNDARY CURRENT OF THE YELLOW SEA IN SUMMER
- B1234 Li, Y. N.; Peng, S. Q.; Yang, W.: NUMERICAL SIMULATION OF STRUCTURES AND VARIABILITIES OF THE EASTERN COAST UPWELLING OFF THE HAINAN ISLAND USING QUIKSCAT WINDS
- B1235 Androulidakis, Y.; Kourafalou, V.: PARAMETERIZATION OF THE DARDANELLES OUTFLOW IN THE AEGEAN SEA FROM THE BLACK SEA WATER BUDGET
- B1236 Junker, T.; Fennel, W.: WIND CURL DRIVEN UPWELLING, THE EXAMPLE OF THE BENGUELA SYSTEM
- B1237 Zhang, X.; Hetland, R. D.; Marta-Almeida, M.; DiMarco, S. F.: INVESTIGATION OF FRESHWATER TRANSPORT ON THE TEXAS-LOUISIANA SHELF USING A HIGH-RESOLUTION MODEL
- B1238 Marie, L.; Aumaitre, S.; Bourras, D.; Cuypers, Y.; Morisset, S.; Rasche, N.; Szekely, T.; Chapron, B.: SEA SURFACE OBSERVATIONS IN THE VICINITY OF A SHELF SEA FRONT
- B1239 Yin, Y.; Lin, X.; He, R.: THE DYNAMICS OF YELLOW SEA WARM CURRENT
- B1240 Zong, H.; Ding, P.: MODELING STUDY OF TEMPERATURE STRUCTURE IN JINPU BAY
- B1241 Cross, S. L.; Harding, J. M.; Parsons, A. R.: RETROSPECTIVE ACCESS TO OPERATIONAL U.S. OCEAN MODEL PRODUCTS THROUGH THE OCEANNOMADS SYSTEM
- B1242 Liu, Q.; Luo, Y.; Rothstein, L. M.: A MODELING STUDY OF THE SEASONAL VARIABILITY OF THE CIRCULATION IN THE RHODE ISLAND SOUND AND BLOCK ISLAND SOUND
- B1243 Kilcher, L.; Li, Y.; Kelley, N.: PRELIMINARY FEASIBILITY STUDY OF CHARACTERIZING IN-FLOW IN A POTENTIAL TIDAL POWER SITE

010 Ocean Observing Systems -- Regional And Global

- Chair(s): Albert Fischer, a.fischer@unesco.org
Eric Lindstrom, eric.j.lindstrom@nasa.gov
Ru Morrison, ru.morrison@neracoos.org
Suzanne Skelley, suzanne.skelley@noaa.gov
Harvey Seim, hseim@email.unc.edu
Michael S. Tomlinson, tomlinson86@q.com
Eric Heinen De Carlo, PhD, edecarlo@soest.hawaii.edu
James T. Potemra, PhD, jimp@hawaii.edu
- Location: Exhibit/Poster Hall
- B1091 Tomlinson, M. S.; De Carlo, E. H.; McManus, M. A.; Pawlak, G.; Drupp, P.; Timmerman, R. E.; Jaramillo, S.: WHAT HAVE WE LEARNED FROM "ROUTINE" IOOS MONITORING?
- B1092 Thoroughgood, C. A.; Kuska, G. E.: STAKEHOLDER ENGAGEMENT—A CRITICAL ELEMENT TO MARACOOS SUCCESS
- B1093 Korniyuk, N. N.; Dewey, R. K.; Tunncliffe, V.: SEASONAL VARIATIONS FROM A COASTAL OBSERVATORY: SIX YEARS OF HIGH-RESOLUTION DATA
- B1094 Potemra, J. T.; Wong, S.: CASE STUDY FOR IOOS DATA INTEGRATION: NEARSHORE CONDITIONS AT WAIALAE-KAHALA BEACH PARK, OAHU
- B1095 Drupp, P. S.; De Carlo, E. H.; Mackenzie, F. T.; Tomlinson, M. S.; Musielewicz, S.; Maenner-Jones, S.; Sabine, C.; Feely, R. A.; Shamberger, K.: IN-SITU PCO₂ MONITORING IN A CORAL REEF ENVIRONMENT: EFFECTS OF OCEAN ACIDIFICATION ON BIOGEOCHEMICAL AND PHYSICAL PROCESSES
- B1096 Zhang, X.; Church, J. A.: LINEAR TREND OF REGIONAL SEA LEVEL CHANGE IN THE PACIFIC OCEAN AND ITS RELATIONSHIP WITH BACKGROUND DECADEAL OSCILLATION
- B1097 Ponte, R. M.: AN ASSESSMENT OF DEEP STERIC HEIGHT VARIABILITY OVER THE GLOBAL OCEAN
- B1098 Morrison, J. R.; Shyka, T.; Durette, C.: AN ISSUE-DRIVEN OBSERVING SYSTEM PLAN FOR THE NORTHEASTERN REGIONAL ASSOCIATION OF COASTAL OCEAN OBSERVING SYSTEMS (NERACOOS)
- B1099 Batten, S. D.; GACS Board of Governance, .; Edwards, M.: INITIATION OF A GLOBAL ALLIANCE OF CONTINUOUS PLANKTON RECORDER SURVEYS (GACS)
- B1100 Checkley, D. M.; Jackson, G. A.; McKinnon, A. D.; Pedersen, O. P.; Petrik, C. M.; Record, N. R.; Tande, K. S.; Trudnowska, E.: SIZE SPECTRUM PARAMETERS AS POSSIBLE ESSENTIAL OCEAN VARIABLES
- B1101 Gray, G. B.; Heitsenrether, R. M.: NOAA'S TEST AND EVALUATION OF CONDUCTIVITY/TEMPERATURE SENSORS FOR MONITORING SALINITY AT LONG TERM COASTAL OBSERVATORIES
- B1102 Hernandez, D.; Subramanian, V.; Trembl, M.: A TEN-YEAR PLAN TO BUILD AN END-TO-END REGIONAL COASTAL OBSERVING SYSTEM (RCOOS) FOR THE SOUTHEAST REGION OF THE U.S.
- B1103 Send, U.; Weller, R.: OCEANSITES: SUSTAINED PLATFORMS FOR OBSERVING THE DEEP OCEAN AND BIOGEOCHEMICAL AND ECOSYSTEM PARAMETERS.
- B1104 Pawlak, G.; DeCarlo, E. H.; Fram, J. P.; Glazer, B. T.; McManus, M. A.; Sansone, F. J.; Stanton, T. P.; Wells, J. R.: THE KILO NALU OBSERVATORY: SEVEN YEARS OF DISCOVERY
- B1105 Ingle, S.; du Vall, K.; DiMarco, S. F.; Jochen, A.: SUSTAINED CABLED OCEAN OBSERVING SYSTEMS FOR MANAGING FISHERIES WEALTH IN THE SEA OF OMAN AND ARABIAN SEA
- B1106 Shellito, S. M.; Hanley, K.; Vandemark, D.; Irish, J.: CHARACTERIZING PHYTOPLANKTON BLOOMS IN THE COASTAL OCEAN USING AUTONOMOUS OXYGEN-DERIVED NET COMMUNITY METABOLISM OBSERVATIONS
- B1107 Horii, T.; Ueki, I.; Hanawa, K.: CHANGES IN ATMOSPHERIC INTRASEASONAL FORCING AND EQUATORIAL OCEAN HEAT CONTENT IN THE RECENT DECADE
- B1108 GROOM Consortium; Karstensen, J.; Testor, P.; Mauri, E.; Heywood, K.; Hayes, D.: GLIDERS FOR RESEARCH, OCEAN OBSERVATION AND MANAGEMENT - GROOM
- B1109 Mihaly, S. F.: OBSERVATIONS OF HYDROTHERMAL VENT MODIFIED CIRCULATION OVER ROUGH TOPOGRAPHY WITH THE NEPTUNE CANADA CABLED OBSERVATORY MOORINGS.

B1110 Canals, M. E.; Morell, J.; Corredor, J.; Mercado, A.; Aponte, L.; Anselmi, C.; Gonzalez, J.: ADVANCING THE CARIBBEAN COASTAL OCEAN OBSERVING SYSTEM

014 Ocean Deoxygenation And Coastal Hypoxia In A Changing World

Chair(s): Nancy N Rabalais, nrabalais@lumcon.edu
Daniel Conley, daniel.conley@geol.lu.se
Francis Chan, chanft@science.oregonstate.edu

Location: Exhibit/Poster Hall

- B0945 Cuker, B. E.; Cutter, G. C.: N-LOADNG, CHLOROPHYLL AND PERSISTENT HYPOXIA IN THE CHESAPEAKE BAY
- B0946 Matabos, M.; Tunnickliffe, V.; Dean, C.; Juniper, S. K.: OBSERVING A YEAR OF BENTHIC COMMUNITY RESPONSES TO FLUCTUATING HYPOXIC CONDITIONS THROUGH THE VENUS CABLED NETWORK
- B0947 Wishner, K. E.; Outram, D.; Seibel, B.; Daly, K.: BOUNDARY EFFECTS OF OXYGEN MINIMUM ZONE EXPANSION ON ZOOPLANKTON IN THE EASTERN TROPICAL NORTH PACIFIC
- B0948 Johnson, S.; Brill, R.: INVESTIGATION OF THE HYPOXIA TOLERANCE OF BLUE CRAB (CALLINECTES SAPIDUS)
- B0949 Trapp, J. M.; Libes, S. M.; Kindelberger, S. A.; Sanger, D.: NEARSHORE HYPOXIA IN THE COASTAL WATERS OF LONG BAY, SOUTH CAROLINA
- B0950 Viso, R. E.; Peterson, R. N.; Libes, S. M.; Hutchins, P. R.; Peterson, L.; Gregorcyk, K. L.; Lewis, B.; McCoy, C. A.: THE ROLE OF SUBMARINE GROUNDWATER DISCHARGE IN DEVELOPMENT OF NEARSHORE HYPOXIA
- B0951 Gundersen, K.; Howden, S.; Redalje, D.; Lohrenz, S.: RIVER DISCHARGE, STRATIFICATION AND SHELF WATER HYPOXIA IN THE MISSISSIPPI BIGHT
- B0952 Wakefield, W. W.; Keller, A. A.; Simon, V. H.; Barth, J. A.; Chan, F.; Pierce, S. D.; Ciannelli, L.: DEMERSAL FISH BIOMASS IN RELATION TO EXPANSION AND SHOALING OF THE OXYGEN MINIMUM ZONE OFF THE U.S. WEST COAST
- B0953 Kim, L.; Min, D.: VARIABILITY OF SUMMERTIME DENITRIFICATION RATES AT THE
- B0954 Goggins, L.: DETERMINING EGG HATCHING SUCCESS OF ACARTIA TONSA UNDER CONTROLLED HYPOXIC AND NORMOXIC CONDITIONS
- B0955 Pierson, J. J.; Roman, M. R.; Kimmel, D. G.; Elliott, D.; Boicourt, W.; Jahn, G.; Barba, A.: OIL, FLOODS, AND HYPOXIA: ZOOPLANKTON DYNAMICS IN THE NORTHERN GULF OF MEXICO IN 2010 AND 2011
- B0956 Hutchins, P. R.; Smith, E. M.; Koepfler, E. T.; Peterson, R. N.; Viso, R. E.: METABOLIC CONSEQUENCES OF SURFACE RUNOFF AND GROUNDWATER INPUT TO A COASTAL MICROBIAL COMMUNITY: CONTRASTING EFFECTS OF TERRESTRIAL LANDSCAPES AND FLOW
- B0957 Tarpley, D.; Xu, K.; Libes, S.; Sanger, D.: POTENTIAL ATMOSPHERIC AND OCEANOGRAPHIC CONTROLS ON THE FORMATION OF HYPOXIA IN THE COASTAL WATER OF MYRTLE BEACH, SOUTH CAROLINA, USA
- B0958 Venegas, R. M.; Letelier, R.; Giovannoni, S.; Ulloa, O.; Barth, J.; Pizarro, O.; Chan, F.; Mix, A.; Lange, C.; Farias, L.: MULTIDISCIPLINARY STUDIES IN OXYGEN MINIMUM ZONES: ADVANCES FROM THE MI_LOCO PROJECT
- B0959 Reed, D. C.; Slomp, C. P.; Gustafsson, B. G.: LONG-TERM IMPACTS OF OXYGEN DEPLETION ON SEDIMENTARY PHOSPHORUS CYCLING: A MODELLING ANALYSIS

B0960 Berger, S. A.; Birsa, L. M.; Frischer, M. E.: RESILIANCE OF THE SKIDAWAY RIVER ESTUARY; CAN HUMAN INDUCED ECOSYSTEM IMPAIRMENT BE REVERSED IN A WELL-MIXED SUBTROPICAL ESTUARY?

021 Modeling And Observing The Tides In The Ocean

Chair(s): James Richman, richman@nrlssc.navy.mil
Brian Arbic, arbic@umich.edu
Patrick Cummins, Patrick.Cummins@dfp-mpo.gc.ca
Malte Mueller, mmueller@uvic.ca

Location: Exhibit/Poster Hall

- B2097 Berlianty, D.; Yanagi, T.: TIDE AND TIDAL CURRENT IN THE BALI STRAIT, INDONESIA
- B2098 Pelling, H. E.; Green, J. M.: SEA LEVEL RISE AND RESONANCE IN THE GULF OF MAINE
- B2099 Killett, B.; Wahr, J.; Desai, S. D.; Yuan, D.; Watkins, M.: GLOBAL OCEAN TIDES FROM GRACE SATELLITE ACCELERATIONS
- B2100 Bozec, A.; Gouillon, F.; Chassignet, E. P.: MODELING BAROCLINIC TIDES IN THE GULF OF MEXICO
- B2101 Robertson, R.: CRITICAL CONCERNS AND LATITUDES: TIDAL EFFECTS ON ICE SHELVES OF THE AMUNDSEN SEA
- B2102 Talke, S. A.; Jay, D. A.; Zaron, E. D.: A POSSIBLE ROLE OF LOCAL, ANTHROPOGENIC MODIFICATION OF ESTUARIES IN THE OBSERVED SECULAR CHANGE TO TIDES
- B2103 Quaresma, L. S.; Pichon, A.: THE SCATTERING OF INTERNAL TIDES OVER ABRUPT CONTINENTAL SHELF FEATURES
- B2104 Mueller, M.: SENSITIVITY OF OCEAN TIDES TO CLIMATE RELATED PROCESSES
- B2105 Makarim, S.; Susanto, R. D.; Adi, T. R.; Sulisty, B.: INDICATION OF M2 INTERNAL TIDE IN LIFAMATOLA PASSAGE, LOMBOK AND KARIMATA STRAITS, INDONESIA
- B2106 Ponte, A. L.; Cornuelle, B. D.: TIDAL MODELING IN THE SOUTHERN CALIFORNIA BIGHT: SENSITIVITY TO DOMAIN SIZE
- B2107 Skiba, A. W.; Zeng, L.; Arbic, B. K.; Mueller, M.; Godwin, W. J.; Rivera, B.: ON THE RESONANCE AND SHELF/OPEN-OCEAN COUPLING OF THE GLOBAL DIURNAL TIDES
- B2108 Bao, M.; Xue, H.: EVALUATING THE TIDAL STREAM POWER AND IMPACTS OF POWER EXTRACTION IN COBSCOOK AND PASSAMAQUODDY BAYS
- B2109 Wetzel, A. N.; Arbic, B. K.; Ceroveck, I.; Hendershott, M. C.; Karsten, R. H.; Molinari, J. F.: ON STRATIFICATION, BAROTROPIC TIDES, AND SECULAR CHANGES IN SURFACE TIDAL ELEVATIONS: REALISTIC NUMERICAL SIMULATIONS AND IDEALIZED MODELS
- B2110 Wang, B.; Hirose, N.; Moon, J.; Yuan, D.: THE WEAK INFLUENCE OF THE TIDAL RESIDUAL CURRENTS ON LAGRANGIAN TRAJECTORIES IN THE SOUTHWESTERN YELLOW SEA
- B2111 Erofeeva, S. Y.; Egbert, G. D.: COMBINING LOCAL HIGH RESOLUTION AND GLOBAL TIDAL SOLUTIONS: DEVELOPMENT OF TPX07-ATLAS
- B2112 Egbert, G. D.; Erofeeva, S. Y.; Zaron, E. D.: MAPPING M2 INTERNAL TIDES USING A DATA-ASSIMILATIVE REDUCED GRAVITY MODEL
- B2113 Niwa, Y.; Hibiya, T.: ESTIMATION OF BAROCLINIC TIDE ENERGY AVAILABLE FOR DEEP OCEAN MIXING BASED ON THREE-DIMENSIONAL GLOBAL NUMERICAL SIMULATIONS
- B2114 Uehara, K.: HANDLING OF SUBGRID SCALE TOPOGRAPHIES IN AN OCEAN-TIDE MODEL
- B2115 Green, J. M.; Nycander, J.: COMPARISON OF INTERNAL WAVE DRAG PARAMETERIZATIONS FOR TIDAL MODELS
- B2116 Qi, S.; Zaron, E. D.: USE OF INTERNATIONAL HYDROGRAPHIC OFFICE TIDAL DATA FOR IMPROVED TIDAL PREDICTION

028 Comparing Physical Processes In Large Lakes And Shallow Inland/Marginal Seas

Chair(s): Dmitry Beletsky, beletsky@umich.edu
Chin Wu, chinwu@engr.wisc.edu
Cary Troy, troy@purdue.edu
Ram Rao, ram.yerubandi@ec.gc.ca

Location: Exhibit/Poster Hall

- B1630 [Bai, X.](#); Wang, J.: MODELING CIRCULATION AND THERMAL STRUCTURE IN THE GREAT LAKES WITH FVCOM
- B1631 [Cossu, R.](#); Wells, M. G.: POTENTIAL FOR SEDIMENT RESUSPENSION DUE TO LARGE AMPLITUDE INTERNAL SEICHES IN LAKE SIMCOE, CANADA.
- B1632 [Beletsky, D.](#); Hu, H.; Wang, J.: MODELING WINTER CIRCULATION IN LAKE ERIE
- B1633 [Troy, C. D.](#); Ahmed, S. A.; Choi, J.; Hsieh, T. C.; Hawley, N.: NEAR-INERTIAL POINCARÉ WAVES IN LAKE MICHIGAN: SPATIAL AND TEMPORAL STRUCTURE
- B1634 [Luo, L.](#); Wang, J.: MODELING SPRING BLOOMS IN SOUTHERN LAKE MICHIGAN
- B1635 [Scheu, K. R.](#); Fringer, O. B.; Monismith, S. G.; Lin, D.; Luthy, R. G.: ROTATIONAL EFFECTS ON SEDIMENT AND DDT TRANSPORT WITHIN A LARGE LAKE (LAKE MAGGIORE, ITALY)
- B1636 [Ahmed, S.](#); Troy, C. D.: IDENTIFICATION AND ANALYSIS OF INTERNAL POINCARÉ WAVE STRUCTURE IN LAKE MICHIGAN
- B1637 [Li-Feng Lu, L.](#); Keiko Takahashi, K.: A NUMERICAL STUDY ON THE STRATIFICATION AND MIXING PROCESSES IN THE TOKYO BAY, JAPAN
- B1638 [Bouffard, D.](#); [Boegman, L.](#); Yerubandi, R. R.: INSTABILITY OF NEAR-INERTIAL POINCARÉ WAVES IN LARGE LAKES AND INLAND SEAS
- B1639 [Anderson, E. J.](#); Beletsky, D.; Schwab, D. J.: INVESTIGATING NEARSHORE HYDRODYNAMICS IN LAKE ERIE: TRANSPORT AND PLUME DYNAMICS NEAR TRIBUTARY MOUTHS AND ASSOCIATED AREAS OF CONCERN (AOC)
- B1640 [Hamidi, S. A.](#); [Bravo, H. R.](#); Klump, J. V.; Waples, J. W.; Schwab, D. J.; Beletsky, D.; Anderson, E.; Kennedy, J.; Valenta, T.: CIRCULATION AND THERMAL REGIME IN GREEN BAY, LAKE MICHIGAN
- B1641 [Wu, C. H.](#); Anderson, J. D.: ROLE OF HIGH FREQUENCY WAVES ON BED EROSION IN THE SHEBOYGAN ESTUARY, WISCONSIN

036 COSEE: Using Evaluation To Measure The Impacts Of Education/Outreach

Chair(s): Patricia Kwon, pkwon@aqmd.gov
Andrea Anderson, andrea@soundviewevaluation.com
Diana Payne, diana.payne@uconn.edu
Shawn Rowe, shawn.rowe@oregonstate.edu

Location: Exhibit/Poster Hall

- B0668 [Whitley, L. N.](#); Tuddenham, P.; Bishop, T.: COSEE-WEST ONLINE WORKSHOPS: HELPING SCIENTISTS BRING THEIR RESEARCH TO BROADER AUDIENCES.
- B0669 [Gardner, K.](#); Florio, K. B.; Clark, H. R.; Parsons, C.; Lichtenwalner, C. S.: INCREASING UNDER-REPRESENTED HIGH SCHOOL STUDENTS' OCEAN AWARENESS AND KNOWLEDGE: RESULTS OF LIBERTY SCIENCE CENTER'S APPROACH
- B0670 [Kennison, R. L.](#); Kwon, P.; Harcourt, P.; Whitley, L.; Noda, G.; Chilton, L.; Duguay, L.; Fong, P.; Tuddenham, P.; Bishop, T.: COSEE-WEST OCEAN OBSERVING INSTITUTE: USING ONLINE DATA IN THE CLASSROOM
- B0671 [Chung, J.](#); [Dorph, R.](#); Nagy Catz, K.: THE OCEAN LITERACY PRINCIPLES—UNDERSTANDING THE IMPACT OF THIS EDUCATOR-SCIENTIST COLLABORATION ON PUBLIC UNDERSTANDING OF SCIENCE
- B0672 [Dover-Good, L. H.](#); Rowe, S. M.: PAYING IT FORWARD: ENGAGING SCIENTISTS IN COMMUNICATING OCEAN SCIENCE TO VOLUNTEER INTERPRETERS.
- B0673 [Deutscher, R. R.](#); [Peach, C.](#): WHAT WE HAVE LEARNED: CONNECTING SCIENTISTS WITH STUDENTS THROUGH THE USE OF COMMUNICATIONS TECHNOLOGY

045 Oceanic Oxygen Content: Observed Physical And Chemical Processes And Climate Related Changes In The Past, Present And Future

Chair(s): Lothar Stramma, lstramma@ifm-geomar.de
Sabine Mecking, smecking@apl.washington.edu
Denis Gilbert, Denis.Gilbert@dfo-mpo.gc.ca
Ralph Keeling, rkeeling@ucsd.edu

Location: Exhibit/Poster Hall

- B1561 [Cummins, P. E.](#); Masson, D.: EKMAN PUMPING AND VARIABILITY OF DISSOLVED OXYGEN BELOW THE MIXED LAYER AT STATION P
- B1562 [Nelson, N. B.](#); Siegel, D. A.; Carlson, C. A.; Swan, C. M.: CDOM AS A DEEP OCEAN PROXY FOR OXYGEN AND AOU
- B1563 [Stramma, L.](#); Schmidtko, S.; Oeschies, A.: TROPICAL AND SUBTROPICAL OCEAN OXYGEN CHANGES, OBSERVATION TO MODEL COMPARISON
- B1564 [Yu, Z.](#); McCreary, J. P.; Hood, R. R.; Vinayachandran, P. N.; Ishida, A.; Richards, K.: ON THE EASTWARD SHIFT OF THE ARABIAN SEA OXYGEN MINIMUM ZONE
- B1565 [Ridder, N. N.](#); Rodgers, K. B.; Sarmiento, J. L.; Harrison, M. J.; Dunne, J. P.; Griffies, S. M.; England, M. H.: IMPACT OF DIFFERENT DIAPYCNAL DIFFUSIVITY PARAMETERIZATION SCHEMES ON OXYGEN CONCENTRATIONS IN THE EAST PACIFIC OXYGEN MINIMUM ZONES IN A GLOBAL OCEAN MODEL
- B1566 [Zamora, L. M.](#); Oeschies, A.; Bange, H. W.; Craig, J. D.: SIMULATED IMPACTS OF OCEAN DEOXYGENATION ON FUTURE MARINE NITROUS OXIDE EMISSIONS USING A NEW DATA-BASED DESCRIPTION OF MARINE N₂O PRODUCTION
- B1567 [Andrews, O. D.](#); Buitenhuis, E. T.; Bindoff, N.; Le Quéré, C.: TOWARDS THE ATTRIBUTION OF RECENT TRENDS IN OCEANIC OXYGEN TO CLIMATE CHANGE AND VARIABILITY
- B1568 [Gilbert, D.](#); Thierry, V.; Riser, S. C.: DYNAMIC O₂ ERRORS AS ESTIMATED FROM SHIP-BASED CTD CASTS, AND SOME MODELING
- B1569 [Grasse, P.](#); Ryabenko, E.; Ehlert, C.; Frank, M.: COMPARISON BETWEEN SILICON AND NITRATE ISOTOPES IN THE UPWELLING AREA OFF PERU
- B1570 [Schmidt, M.](#); Eggert, A.; Mohrholz, V.; Auel, H.: PHYSICAL AND BIOLOGICAL CONTROLS OF NUTRIENT AND OXYGEN CYCLING IN THE SOUTH AFRICAN EASTERN BOUNDARY CURRENTS
- B1571 [Monteiro, F. M.](#); Ridgwell, A.: STRONG REGULATION OF THE OCEANIC OXYGEN CONTENT BY MARINE PRODUCTIVITY: LESSONS FROM THE PAST
- B1572 [Karstensen, J.](#); Fiedler, B.; Brandt, P.; Koertzienger, A.; Kanzow, T.; Zantopp, R.; Wallace, D.; Krahnmann, G. W.; Visbeck, M.; Bange, H.: LOW OXYGEN EDDIES IN THE OPEN NORTH ATLANTIC OCEAN
- B1573 [Maze, G.](#); Thierry, V.; Mercier, H.; Perez, F. E.: MASS, NUTRIENTS AND OXYGEN BUDGETS FOR THE NORTH EASTERN ATLANTIC OCEAN
- B1574 [Gutknecht, E.](#); Dadou, I.; Marchesiello, P.; Cambon, G.; Machu, E.; Rixen, T.; Kock, A.; Flohr, A.; Paulmier, A.; Lavik, G.: NITROGEN TRANSFERS IN THE NAMIBIAN UPWELLING SYSTEM WITHIN THE OXYGEN MINIMUM ZONE: A 3-D COUPLED PHYSICAL/BIOGEOCHEMICAL MODELLING APPROACH
- B1575 [Duteil, O.](#); Koeve, W.; Oeschies, A.: PREFORMED AND TOTAL PHOSPHATE IN OGCMs: CAN RIGHT TOTAL CONCENTRATION BE WRONG? IMPLICATIONS ON SUBOXIA EXTENSION
- B1576 [Moore, J. K.](#): PHYSICAL AND BIOLOGICAL CONTROLS ON OXYGEN MINIMUM ZONES IN THE CESM/CCSM OCEAN MODEL
- B1577 [Takano, Y.](#); Ito, T.; Deutsch, C.: TEMPORAL VARIABILITY OF OXYGEN IN THE UPPER OCEAN
- B1578 [Griggs, G. L.](#); Schoepfer, S. D.; Ward, P. D.; Henderson, C. M.: SPATIAL AND TEMPORAL VARIABILITY IN PERMIAN AND TRIASSIC COASTAL UPWELLING ALONG WESTERN NORTH AMERICA: EVIDENCE FROM THE CANADIAN ROCKIES
- B1579 [Min, D.](#); Xue, J.: DECADE-SCALE DISSOLVED OXYGEN CHANGES IN THE THREE MID-LATITUDE MARGINAL SEAS

- B1580 Schoepfer, S. D.; Algeo, T.; Griggs, G. L.: GLOBAL SPATIAL AND TEMPORAL PATTERNS OF INCREASED NITROGEN LIMITATION ACROSS THE PERMIAN-TRIASSIC BOUNDARY
- B1581 Czeschel, R.; Stramma, L.; Johnson, G. C.: LONG-TERM OXYGEN CHANGES IN THE EQUATORIAL EASTERN PACIFIC
- B1582 Kumamoto, Y.; Aramaki, T.; Tanaka, S.; Zhang, J.: CENTENNIAL-SCALE OXYGEN DECREASE IN DEEP WATER OF A MARGINAL SEA OF THE NORTHWESTERN PACIFIC: JAPAN SEA
- B1583 Nam, S. H.; Kim, H. J.; Send, U.; Kim, Y. Y.; Lankhorst, M.: CHANGES IN DISSOLVED OXYGEN CONTENT OBSERVED IN THE EASTERN PACIFIC DURING THE TRANSITION FROM 2009-2010 EL NINO TO 2010-2011 LA NINA
- B1584 Sadler, J. W.; Johnson, R. J.: OCEANIC DE-OXYGENATION AS EVIDENCED BY TIME SERIES DATA OFF BERMUDA
- B1585 Dadou, I.; Gutknecht, E.; Le Vu, B.; Garcon, V.; Machu, E.; Sudre, J.; Rixen, T.; Kock, A.; Flohr, A.; Lavik, G.: INFLUENCE OF KEY PARAMETERS ON PROCESSES ASSOCIATED WITH THE OXYGEN MINIMUM ZONE IN THE UPWELLING OFF NAMIBIA USING A 3-D MODEL
- B1586 Siedlecki, S. A.; Banas, N.; Davis, K. A.; Giddings, S.; MacCready, P.; Connolly, T.; Hickey, B.: THE ROLE OF THE SLOPE CURRENTS IN SEASONAL OXYGEN VARIABILITY ON THE PACIFIC NORTHWEST CONTINENTAL SHELVES

048 Ocean Surface Boundary Layers

Chair(s): Baylor Fox-Kemper, bfk@colorado.edu
 Stephen Belcher, s.e.belcher@reading.ac.uk
 Eric D'Asaro, dasaro@apl.washington.edu
 Baylor Fox-Kemper, bfk@colorado.edu
 Alberto C. Naveira Garabato, acng@noc.soton.ac.uk

Location: Exhibit/Poster Hall

- B1826 Roach, C. J.; Phillips, H. E.; Bindoff, N. L.; Rintoul, S. R.: THE RELATIONSHIP BETWEEN WIND STRESS AND EKMAN CURRENTS IN THE ANTARCTIC CIRCUMPOLAR CURRENT
- B1827 Czerski, H.: The effect of natural ocean surfactants on bubble fragmentation and coalescence
- B1828 Brüggemann, N.; Eden, C.: A CLOSURE FOR SUB-MESO-SCALE PROCESSES IN THE OCEAN SURFACE MIXED LAYER
- B1829 Haus, B. K.; Donelan, M. A.; Fairall, C. W.; Sarafraz, A.: SPRAY EFFECTS ON HIGH-WIND SPEED MOMENTUM FLUXES IN BOTH MARINE AND FRESH WATER
- B1830 Woods, S.; Hou, W.; Jarosz, E.; Goode, W.; Weidemann, A.: TURBULENCE MICROSTRUCTURE OBSERVATIONS FROM THE EASTERN FLORIDA COAST AND BAHAMAS
- B1831 Gayen, B.; Sarkar, S.: UPPER OCEAN TURBULENCE RESULTING FROM THE INTERACTION OF AN INTERNAL WAVE BEAM WITH A PYCNOCLINE
- B1832 Yoshikawa, Y.; Ide, Y.: THE WIND-DRIVEN TURBULENCE AND FLOW UNDER SURFACE HEATING
- B1833 Grant, A. L.; Belcher, S. E.: SHEAR TURBULENCE BELOW THE BASE OF THE WELL-MIXED LAYER.
- B1834 Zheng, Y.; Bourassa, M. A.; Hughes, P.: HOW TEMPERATURE AND ROUGHNESS CHANGES DUE TO A SLICK INFLUENCE THE MOTION OF SURFACE OIL SLICK: AN IDEALIZED STUDY
- B1835 Guo, X.; Shen, L.: NUMERICAL STUDY OF THE INFLUENCE OF SURFACE WAVES ON TURBULENCE IN THE UPPER OCEAN
- B1836 Sawicka, E.; Dubranna, J. L.; Stramski, D.; Darecki, M.: POWER SPECTRA OF UNDERWATER IRRADIANCE FLUCTUATIONS CAUSED BY SURFACE WAVES
- B1837 Johnson, G. C.; Schmidtko, S.; Lyman, J. M.: RELATIVE CONTRIBUTIONS OF TEMPERATURE AND SALINITY TO SEASONAL MIXED LAYER DENSITY CHANGES AND HORIZONTAL DENSITY GRADIENTS
- B1838 Wenegrat, J. O.; McPhaden, M. J.: NEAR-SURFACE MIXING AT 0NN, 23WW INFERRED FROM ADCP AND WIND STRESS DATA
- B1839 Halkides, D. J.; Waliser, D. E.; Lee, T.: MIXED-LAYER TEMPERATURE BUDGETS IN THE CENTRAL TROPICAL INDIAN OCEAN ON INTRA-SEASONAL TIMESCALES

- B1840 Richter, D. H.; Sullivan, P. P.: SEA SPRAY DYNAMICS IN THE MARINE BOUNDARY LAYER
- B1841 Fernandes, F. P.; Wendell Brown, W. S.: USING A SIMPLE CONVECTION MODEL TO DIAGNOSE GULF OF MAINE WINTER MIXED LAYER VARIABILITY.
- B1842 Zhang, Z.; Chini, G. P.; Julien, K.: AN ASYMPTOTICALLY MOTIVATED MEAN-FIELD MODEL OF LANGMUIR CIRCULATION
- B1843 Ramachandran, S.; Tandon, A.; Mahadevan, A.: SUBMESOSCALE-RESOLVING SIMULATIONS USING AN ANISOTROPIC SMAGORINSKY SUBGRID MODEL
- B1844 Wilson, S. J.; Send, U.: MOORED OPTICAL ATTENUATION MEASUREMENTS IN THE CALIFORNIA CURRENT SYSTEM

068 Air-Sea Interactions In Western Boundary Current Systems And Marginal Seas

Chair(s): Hisashi NAKAMURA, hisashi@atmos.rcast.u-tokyo.ac.jp
 Hisashi Nakamura, hisashi@atmos.rcast.u-tokyo.ac.jp
 Meghan F. Cronin, Meghan.F.Cronin@noaa.gov
 Shoshiro Minobe, minobe@mail.sci.hokudai.ac.jp
 Shang-Ping Xie, xie@hawaii.edu

Location: Exhibit/Poster Hall

- B1872 Ogawa, E.; Nakamura, H.; Nishii, K.; Miyasaka, T.; Kuwano-Yoshida, A.: DEPENDENCE OF THE AXES OF TROPOSPHERIC WESTERLIES AND STORMTRACKS ON THE LATITUDE OF AN EXTRATROPICAL OCEANIC FRONT AS REVEALED FROM IDEALIZED AGCM EXPERIMENTS
- B1873 Gan, B.; Wu, L.: MODULATION OF ATMOSPHERIC RESPONSE TO NORTH PACIFIC SST FROM GLOBAL WARMING: A STATISTICAL ASSESSMENT
- B1874 Smirnov, D.; Vimont, D. J.: EXTRATROPICAL FORCING OF TROPICAL ATLANTIC CLIMATE VARIABILITY DURING BOREAL FALL
- B1875 SMALL, R. J.; TOMAS, R.; BRYAN, F. O.: COMMUNITY ATMOSPHERE MODEL SIMULATIONS OF THE RESPONSE TO OCEAN FRONTS.
- B1876 Kilpatrick, T. J.; Schneider, N.; Qiu, B.: ATMOSPHERIC EKMAN PUMPING ABOVE AN SST FRONT
- B1877 Takatama, K.; Minobe, S.; Inatsu, M.; Small, R. J.: CONTRIBUTIONS OF MECHANISMS OF SURFACE WIND RESPONSE TO THE GULF STREAM IN A REGIONAL ATMOSPHERIC MODEL
- B1878 Yoshioka, M. K.; Aiki, H.; Tsuboki, K.; Ohfuchi, W.; Tachibana, Y.: INTENSITY SUPPRESSION OF TYPHOONS IN THREE-DIMENSIONAL ATMOSPHERE-OCEAN COUPLED EXPERIMENTS
- B1879 Sasaki, H.; Taguchi, B.; Komori, N.; Masumoto, Y.: A ROLE OF LOCAL AIR-SEA INTERACTIONS INDUCED BY HIGH SST BAND ON THE HAWAIIAN LEE COUNTERCURRENT
- B1880 Shinsuke, I.; Atsuhiko, I.; Shin'ichiro, K.: A REGIONAL AIR-SEA COUPLED MODEL ADOPTED OVER THE WINTER YELLOW AND EAST CHINA SEAS
- B1881 Tomita, H.; Kawai, Y.; Konda, M.; Nakamura, H.: ATMOSPHERIC RESPONSES TO THE KUROSHIO EXTENSION FRONT OBSERVED BY CROSS-FRONT IN-SITU OCEAN, ATMOSPHERE AND AIR-SEA FLUX OBSERVATIONS
- B1882 Shi, R.; Guo, X.; Takeoka, H.: INFLUENCES OF TIDAL FRONTS ON COASTAL WINDS OVER AN INLAND SEA
- B1883 Bigorre, S.; Weller, R. A.: ONE YEAR IN THE GULF STREAM: HIGH-RESOLUTION MEASUREMENTS OF AIR-SEA INTERACTION FROM A SURFACE MOORING
- B1884 Jung, u. j.; Chang, k. i.: EVALUATION OF SURFACE HEAT FLUX FROM GLOBAL REANALYSIS PRODUCTS IN THE EAST ASIAN MARGINAL SEAS
- B1885 Rudzin, J. E.; Morey, S. L.; Bourassa, M. A.; Smith, S. R.: INFLUENCE OF ATMOSPHERIC COLD AIR OUTBREAKS ON UPPER OCEAN THERMAL VARIABILITY OF THE FLORIDA STRAITS
- B1886 Hosoda, S.; Nonaka, M.; Tomita, T.; Taguchi, B.; Tomita, H.; Iwasaka, N.: HEAT STORAGE CAPABILITY BELOW THE SEASONAL THERMOCLINE FOR THE SEASONAL SEA SURFACE HEAT EXCHANGE IN THE NORTH PACIFIC OCEAN

- B1887 Na, H.; Park, J.; Lee, H.; Watts, D. R.: NEAR 13-DAY BAROTROPIC OCEAN RESPONSE TO THE ATMOSPHERIC FORCING IN THE NORTHWESTERN PACIFIC
- B1888 Uehara, K.; Oka, E.; Konda, M.; Kobashi, F.; Iwasaka, N.; Tanimoto, Y.; Kutsuwada, K.; Kubota, M.: DAILY VARIATION OF TURBULENT KINETIC ENERGY OBSERVED AT A FIXED POINT NORTH OF THE KUROSHIO EXTENSION
- B1889 Konda, M.; Ono, T.; Karino, Y.; Uehara, K.; Kutsuwada, K.; Kameda, T.; Masujima, M.; Tsukamoto, O.; Kondo, F.; Iwakasa, N.: OCEAN MIXING LAYER VARIATION AS INDICATED BY THE MEASUREMENT OF THE DISSIPATION RATE IN THE KUROSHIO EXTENSION REGION
- B1890 Manda, A.; Moteki, Q.: MIXED LAYER HEAT BUDGET IN THE EAST CHINA SEA
- B1891 Fujisaki, A.; Wang, J.; Mitsudera, H.: ICE-OCEAN COUPLED MODEL WITH 1KM GRIDS TO STUDY THE DENSE SHELF WATER TRANSPORT IN THE SEA OF OKHOTSK
- B1892 Sofianos, S.; Vervatis, V.: THE RESPONSE OF THE AEGEAN AND LEVANTINE SEAS TO CHANGES OF THE AIR-SEA FLUXES
- B1893 zhai, p.; bower, a.: DIPOLE GENERATION IN THE RED SEA FORCED BY THE TOKAR WIND JET IN SUMMER
- B1894 Hebert, D.; Ullman, D. S.; Sutyrin, G.; Rossby, H. T.: WHAT IS HAPPENING AT THE NORTHWEST CORNER OF THE NORTH ATLANTIC CURRENT?
- B1895 Sugimoto, S.; Hanawa, K.: RELATIONSHIP BETWEEN THE PATH OF THE KUROSHIO IN THE SOUTH OF JAPAN AND THE PATH OF THE KUROSHIO EXTENSION IN THE EAST
- B1896 Soeyanto, E.; Guo, X.; Ono, J.; Miyazawa, Y.: DECADAL VARIABILITY IN THE SEA LEVEL AND KUROSHIO TRANSPORT IN THE EAST CHINA SEA DETECTED BY A DATA ASSIMILATION OCEAN MODEL
- B1898 Usui, N.; Tsujino, H.; Nakano, H.: LONG-TERM VARIABILITY OF THE KUROSHIO LARGE MEANDER
- B1899 Nakano, H.; Tsujino, H.; Sakamoto, K.: TRACERS IN COLD-CORE EDDIES DETACHED FROM THE KUROSHIO EXTENSION
- B1900 Sue, Y.; Kubokawa, A.: LATITUDE OF EASTWARD JET PREMATURELY SEPARATED FROM THE WESTERN BOUNDARY IN A TWO-LAYER QG MODEL

071 Deep-Sea Conservation Imperatives In The 21st Century

- Chair(s): Lisa A. Levin, lleavin@ucsd.edu
Cindy Van Dover, clv3@duke.edu
Jeff Ardron, Jeff.Ardron@Marine-Conservation.org
Craig R. Smith, craigsmi@hawaii.edu
- Location: Exhibit/Poster Hall
- A0487 LaBella, A. L.; Clarke, J.; Plouviez, S.; Cunningham, C.: PTHE USE OF NEXT GENERATION SEQUENCING AND BIOINFORMATICS PIPELINES TO BUILD INFORMATIVE ALLELIC NETWORKS FOR INFERRING DEEP-SEA MIGRATION
- A0488 Mills, S. W.; Mullineaux, L. S.; Beaulieu, S. E.; Adams, D. K.: SEVERE AND PERSISTENT EFFECTS OF DISTURBANCE ON LARVAL SUPPLY AT VENTS: PATTERNS IN THE PLANKTON AFTER THE 2006 ERUPTION ON THE EAST PACIFIC RISE
- A0489 Clarke, J. W.: A COMPARISON OF ON-SITE AND REMOTE EXPLORATION IN THE DEEP OCEAN
- A0490 Smith, K. A.; Dunne, J. P.; Sarmiento, J. L.; Sarmiento, J. L.: CLIMATE CHANGE IMPACTS ON THE MESOPELAGIC HABITAT AREA ABOVE OXYGEN MINIMUM ZONES
- A0491 De Leo, F. C.; Smith, C. R.; Vetter, E. W.; Rowden, A. A.; McGranaghan, M.: SUBMARINE CANYONS AS HOTSPOT OF BENTHIC BIODIVERSITY: EFFECTS OF LOCAL VS. LANDSCAPE HABITAT HETEROGENEITY
- A0492 Valette-Silver, N. J.; Smith, G.; Pomponi, S.; Baden, D.; Shepard, A.; Potts, T.; Christie, D.; Wiltshire, J.; Highsmith, R.; Babb, I.: THE NATIONAL UNDERSEA RESEARCH PROGRAM (NURP): RECENT DISCOVERIES
- A0493 Sweetman, A. K.; Levin, L. A.; Schander, C.: FOOD WEB STRUCTURE OF MACROFAUNA AT ARCTIC HYDROTHERMAL VENTS

- A0494 Bernardino, A. E.; Levin, L. A.; Thurber, A. R.; Smith, C. R.: COMPARATIVE COMPOSITION AND DIVERSITY OF SEDIMENT MACROFAUNA AT DEEP-SEA VENTS, SEEPS AND ORGANIC FALLS
- A0495 Beaulieu, S. E.; Baker, E. T.; German, C. R.: ON THE GLOBAL DISTRIBUTION OF HYDROTHERMAL VENT FIELDS: ONE DECADE LATER
- A0496 Yoerger, D. R.; Kinsey, J. C.; Pizarro, O.; Kaiser, C.; Camilli, R.: HIGH RESOLUTION IMAGING, MAPPING, AND CHEMICAL SENSING FROM AN AUTONOMOUS UNDERWATER VEHICLE

072 Plankton Phenology: Drivers, Variability And Impacts

- Chair(s): Stephanie Henson, S.Henson@noc.ac.uk
Rubao Ji, rji@whoi.edu
Martin Edwards, maed@sahfos.ac.uk
Marie-Fanny Racault, mfrt@pml.ac.uk
- Location: Exhibit/Poster Hall
- A0423 Brody, S. R.; Dunne, J. P.; Cassar, N.; Lozier, M. S.: EXAMINING PHYTOPLANKTON BLOOM PHENOLOGY IN THE SOUTHERN OCEAN
- A0424 Thomas, A. C.; Mendelsohn, R.; Weatherbee, R.: SATELLITE ESTIMATES OF CHLOROPHYLL PHENOLOGY IN THE CALIFORNIA CURRENT
- A0425 Zimmer, C. A.; Zimmer, R. K.: THE LAST LAP: REGULATION OF NEAR-BED MEROPLANKTON TRANSPORT
- A0426 Brown, K. L.; Kana, T. M.; Alexander, J.; Glibert, P. M.: N AND P ACCUMULATION IN THALASSIOSIRA PSEUDONANA UNDER DIFFERENT N:P SUPPLY RATIOS AT SATURATING CONCENTRATIONS: IMPLICATIONS FOR FOOD WEBS
- A0427 Grigor, J. J.; Varpe, Ø.: SEX-SPECIFIC ZOOPLANKTON PHENOLOGY: PROTANDROUS DIAPAUSE EMERGENCE AND MIGRATION IN *CALANUS* SPP.
- A0428 Li, B.; Peterson, T. D.; Needoba, J. A.; Herfort, L.; Roegner, C. G.; Zuber, P.: INFLUENCE OF UPWELLING AND PREY ABUNDANCE ON THE TIMING AND SPATIAL DISTRIBUTION OF MYRIONECTA RUBRA BLOOMS IN THE LOWER COLUMBIA RIVER ESTUARY
- A0429 Sasaoka, K.; Chiba, S.; Saino, T.: CLIMATIC FORCING AND PHYTOPLANKTON PHENOLOGY OVER THE SUBARCTIC NORTH PACIFIC FROM 1998 TO 2006, AS OBSERVED FROM OCEAN COLOR DATA
- A0430 Henson, S. A.; Lampitt, R. S.; Johns, D.: DECADAL VARIABILITY IN PHYTOPLANKTON POPULATIONS IN RESPONSE TO THE NORTH ATLANTIC OSCILLATION AND IMPLICATIONS FOR ORGANIC CARBON FLUX
- A0431 Doblin, M. A.; Hassler, C.; Seymour, J.; Brown, M.; Pernice, M.; Clementson, L.; Petrou, K.: A NUTRIENT PARADOX: CLIMATE INDUCED DECLINE IN SILICATE BUT NO APPARENT IMPLICATIONS FOR PHYTOPLANKTON PRODUCTIVITY
- A0432 Genin, A.; Lindemann, Y.; Zarubin, M.; Kolesnikov, I.: ABANDONING SVERDRUP'S CRITICAL DEPTH? PERHAPS, BUT FOR A DIFFERENT REASON
- A0433 Blythe, J. N.: HYPOTHESIS ON CONTROLS OF RECRUITMENT PHENOLOGY AS IT RELATES TO PLANKTONIC STAGES IN THE INTERTIDAL BARNACLE
- A0434 George, J. A.; Gobler, C. J.; Lonsdale, D. J.: EFFECTS OF TEMPERATURE ON MICROZOOPLANKTON GRAZING AND INITIATION OF THE SPRING BLOOM IN LONG ISLAND SOUND
- A0435 Runge, J. A.; Maps, F.; Pershing, A. J.; Leising, A.; Kimmel, D.; Pierson, J. J.: PHENOLOGY AND PERSISTENCE OF *CALANUS FINMARCHICUS* UNDER CLIMATE FORCING IN THE GULF OF MAINE
- A0436 McInnes, A. S.; Nunnally, C.; Rowe, G. T.; Davis, R.; Quigg, A.: INITIATION AND IMPACTS OF AN ANNUAL NOCTILUCA BLOOM IN SIMPSON BAY, PRINCE WILLIAM SOUND, ALASKA: CONTRIBUTIONS TO THE FOOD WEB
- A0437 Norrbin, M. E.; Davis, C. S.; Ji, R.: SPATIAL PARTITIONING BETWEEN ZOOPLANKTON SPECIES IN NORTH NORWEGIAN FJORDS
- A0438 Gregory Lough, R. G.; Trond Kristiansen, ; Rubao Ji, .: DO WARM YEARS PROMOTE GREATER GROWTH AND SURVIVAL OF LARVAL COD ON GEORGES BANK?

- A0439 Waite, J. N.; Mueter, F. J.: SPATIO-TEMPORAL ANALYSIS OF CHLOROPHYLL- CONCENTRATIONS IN THE GULF OF ALASKA, 1998–2010
- A0440 Dorman, J. G.; Powell, T. M.; Sydean, W. J.; Bograd, S. J.: IMPACTS OF LARGE TIME SCALE ATMOSPHERIC FORCING (PDO AND NPGO) ON *EUPHAUSIA PACIFICA* POPULATION BIOLOGY IN THE CALIFORNIA CURRENT FROM 1991-2008
- A0441 van Dongen-Vogels, V.; Seymour, J. R.; Paterson, J.; Middleton, J. F.; Mitchell, J. G.; Seuront, L.: HYDROCLIMATIC FORCING AND TEMPORAL DYNAMICS IN MICROBIAL AND VIRAL ABUNDANCES: LINKAGES AMONG THE MICROBIAL FOODWEB COMPONENTS IN SOUTH AUSTRALIAN SHELF WATERS

073 Compound Interest: Research + Energy + Outreach = Career And Personal Yield

Chair(s): Liesl Hotaling, lieslhotaling@yahoo.com
Gail Scowcroft, gailschow@gso.uri.edu

Location: Exhibit/Poster Hall

- B0681 Hotaling, L. A.; Lowes, S.; Stolkin, R. A.; Lin, P.; Bonner, J. S.; Kirkey, W.; Ojo, T.: SENSE IT: STUDENT-CREATED WATER QUALITY SENSORS
- B0682 Diederick, L. K.; Paul, V. J.: BUILDING AN OCEAN LEARNING NETWORK: FOSTERING COLLABORATIONS WITH THE INFORMAL SCIENCE COMMUNITY
- B0683 Gehrke, C. L.; Apple, J. L.; Hadfield, M. G.; Cheung, I.; Hodder, J.: INTEGRATING RESEARCH AND EDUCATION FOR BROADER IMPACTS: PROMOTING RESEARCH INVESTIGATIONS IN THE MARINE ENVIRONMENT- INTERNSHIPS FOR COMMUNITY COLLEGE STUDENTS
- B0684 Aguilar, C.; Cuhel, R. L.: TREASURE AT ANY AGE: WORKING WITH REAL SCIENTISTS EXPLORING A LOCAL SHIPWRECK TO UNDERSTAND ECOSYSTEM CHANGES OVER TIME
- B0685 Cetrulo, B.; Capers, J.; Cook, S.: CONNECTING OCEAN SCIENTISTS WITH FUTURE EDUCATORS – COSEE FLORIDA'S RESEARCH EXPERIENCE FOR PRE-SERVICE TEACHERS
- B0686 Ballerini, T.; Baseman, J.; Costa, E. S.; Schmale, J.; Pavlov, A. K.; Provencher, J.; Tsukernik, M.; Wood C.L., C. L.; Zaika, Y.: APECS: A SUCCESSFUL WAY TO PROMOTE LEADERS DEVELOPMENT AND CONTRIBUTE TO OUTREACH THROUGH FORMAL/INFORMAL EDUCATION PATHWAYS
- B0687 Miller, M.; Rowe, S. M.; Mileham, M. A.: INTERACTIONS BETWEEN NOAA SCIENTISTS, EXPLAINERS, AND VISITORS AT THE EXPLORATORIUM
- B0688 Christensen, A. H.: ENGAGING STUDENTS, EDUCATORS, AND SCIENTISTS IN A COMMUNITY OF PRACTICE.

085 Development Of A Global Ocean Biogeochemical Observing System Based On Profiling Floats And Gliders

Chair(s): Kenneth S. Johnson, johnson@mbari.org
Mary Jane Perry, perrymj@maine.edu
Herve Claustre, claustre@obs-vlfr.fr

Location: Exhibit/Poster Hall

- B1185 Leymarie, E.; Hello, Y.; Penker'h, C.; Ogé, A.; Poteau, A.; Argentino, J. F.; Sukhovich, A.; Taillandier, V.; Claustre, H.; Nolet, G.: A NEW ELECTRONIC BOARD FOR PROFILING FLOATS DEDICATED TO MULTIDISCIPLINARY DATA ACQUISITION
- B1186 Poteau, A. P.; D'Ortenzio, F.; Claustre, H.; Xing, X.; Lavigne, H.; Mignot, A.: DATA QUALITY CONTROL (REAL-TIME AND DELAYED MODE) ON BIOGEOCHEMICAL DATA ACQUIRED BY AUTONOMOUS PLATFORMS:
- B1187 Taillandier, V.; Claustre, H.; D'Ortenzio, F.; Poteau, A.; Besson, F.; Testor, P.; Lepage, Y.: GLIDER DEPLOYED BIO-OPTICAL INSTRUMENTS: LESSONS LEARNT AFTER 5-YEAR SAMPLING ACROSS THE LIGURIAN FRONT
- B1188 Brown, K. M.; Sorrentino, D. A.; Lewis, M. R.; Barnard, A. H.; Koegler, J.; Moore, C.; DeDonato, M. P.; Boss, E.; Gerbi, G. P.; Claustre, H.: BIOGEOCHEMICAL SENSING SYSTEMS FOR AUTONOMOUS PROFILING FLOATS

- B1189 Orrico, C. M.; Bishop, J. K.; Wood, T. J.; Weiss, G.; Strubhar, W.; Barnard, A. H.; Derr, A.; Moore, C.: ACCURATELY RESOLVING PIC AND POC FROM AUTONOMOUS FLOATS
- B1190 Matrai, P. A.; Steele, M.; Swift, D.; Riser, S.; Johnson, K.: THE AUTONOMOUS POLAR PRODUCTIVITY SAMPLING SYSTEM (APSS)
- B1191 Claustre, H.; Xing, x.; Dortenzio, F.; Poteau, A.; Martinez, E.; Mignot, A.; Not, E.: ISLAND EFFECT: A BIO-ARGO FLOAT INVESTIGATION IN THE MARQUESAS ISLAND PLUME
- B1192 Mignot, A.; Claustre, H.; Poteau, A.: SEASONAL VARIABILITY OF THE DEEP CHLOROPHYLL MAXIMUM DYNAMICS IN THE PACIFIC SUB-TROPICAL GYRES
- B1193 Petrik, C. M.; Jackson, G. A.; Checkley, D. M.: ASSESSING AGGREGATE DISTRIBUTIONS AND FLUXES USING THE SOLOPC
- B1194 Kaufman, D. E.; O'Connell, D. J.; Friedrichs, M. A.; Smith, W. O.; Heywood, K. J.; Queste, B. Y.: AN INVESTIGATION OF MODIFIED CIRCUMPOLAR DEEP WATER THROUGH AUTONOMOUS GLIDER MEASUREMENTS IN THE ROSS SEA
- B1195 Plant, J. N.; Johnson, K. S.; Sakamoto, C. M.; Coletti, L. J.; Jannasch, H. W.; Swift, D.; Riser, S. C.: PRODUCTIVITY IN THE GREENLAND SEA: PRELIMINARY RESULTS FROM AN APEX PROFILING FLOAT
- B1196 Suga, T.; Sato, K.; Hosoda, S.; Kobayashi, T.; Kobashi, F.; Matsuo, N.; Nakajima, H.; Toyama, K.; Saino, T.: BIOGEOCHEMICAL IMPACT OF MESOSCALE DISTURBANCE IN THE SUBTROPICAL NORTH PACIFIC
- B1197 Barrera, C.; Rueda, M. J.; Moran, R.; Santana, R.; Lorenzo, A.; Cardona, L.; De Manzano, A.; Llinas, O.: ESTOC SITE: IMPROVING ITS PERMANENT TIME-SERIES OCEAN OBSERVING PROGRAM WITH UNDERWATER GLIDERS
- B1198 Vega-Moreno, D.; Gomez, M.; Santana, R.; Cardona, L.; Barrera, C.; Rueda, M.; Llinas, O.: LOOKING THE BEST ROUTE FOR A THERMAL GLIDER IN THE NORTH ATLANTIC
- B1199 Walker-Brown, C.; Kaiser, J.; Heywood, K.; Robinson, C.; Barton, D.; Queste, B.: AN ASSESSMENT OF BIOGEOCHEMICAL VARIABILITY OF THE GALICIAN CONTINENTAL SHELF ON WEEKLY TIMESCALES USING A SEAGLIDER
- B1200 Lee, C. M.; Briggs, N.; Cetinic, I.; D'Asaro, E. A.; Perry, M.: STRATEGIES FOR AUTONOMOUS SENSORS
- B1201 Perry, M. J.; Gudmundsson, K.; Alkire, M.; D'Asaro, E.; Cetinic, I.; Rehm, E.; Lee, C. M.: ESTIMATES OF NET PHYTOPLANKTON PRODUCTIVITY (NPP) AND NET COMMUNITY PRODUCTIVITY (NCP) FROM A LAGRANGIAN MIX-LAYER FLOAT
- B1202 Takeshita, Y.; Martz, T.: ASSESSMENT OF A 1D MODEL FOR INTERPRETATION OF PROFILING FLOAT OXYGEN DATA

086 Climate Change Impacts On Living Marine Resources

Chair(s): Vincent Saba, vincent.saba@noaa.gov
Charles Stock, charles.stock@noaa.gov
Anne Hollowed, Anne.Hollowed@noaa.gov

Location: Exhibit/Poster Hall

- A0442 Ramos-Chavez, J. C.; Walsh, E. J.: GENETIC STRUCTURE IN SWARMS OF THE TROPICAL MYSID *MYSIDIUM GRACILE* (CRUSTACEA)
- A0443 Kuo, T. C.; Nye, J.; Dulvy, N. K.; Mueter, F.; Hsieh, C. H.: ENVIRONMENTAL SENSITIVITY OF LATITUDINAL SHIFTS IN MARINE FISHES DEPENDS ON LATITUDE AND FISHING EFFECTS
- A0444 Riley, S. A.; Hazelkorn, R.; Cox, T.; Pertrree, R.; Kovacs, C.: TEMPORAL TRENDS IN BEGGING BEHAVIOR OF COMMON BOTTLENOSE DOLPHINS (*TURSIOPS TRUNCATUS*) IN WATERS AROUND SAVANNAH, GEORGIA
- A0445 Hagenson, N. L.; Whitehead, R. F.; Oliver, J. A.; Szmant, A. M.: RESPONSES OF MONTASTRAEA FAVOLOLATA CALCIFICATION, RESPIRATION AND PHOTOSYNTHESIS TO SEAWATER CHEMISTRY CHANGES SIMULATING THE EFFECTS OF OCEAN ACIDIFICAT
- A0446 Hollowed, A. B.; Stock, C.: TRADE-OFFS ASSOCIATED WITH MODELING FISH AND SHELLFISH RESPONSES TO CLIMATE CHANGE IN GLOBAL CLIMATE MODELS OR EARTH SYSTEMS MODELS

- A0447 [Yeager, D. E.](#): THE EFFECTS OF HYPOXIA ON VERTICAL DISTRIBUTION OF CHESAPEAKE BAY ACARTIA TONSA
- A0448 [Levin, L.](#); [Novoa, A.](#); [Tanner, C.](#): EFFECTS OF OCEAN ACIDIFICATION ON THE GROWTH AND SURVIVAL OF SEA URCHIN STRONGYLOCENTROTUS PURPURATUS LARVAE
- A0449 [XU, Y.](#); [Chant, R.](#); [Schofield, O. M.](#): DECADAL VARIABILITY OF CLIMATE AND WINTER PHYTOPLANKTON BLOOM IN THE MID-ATLANTIC BIGHT
- A0450 [Marinov, I.](#); [Bernardello, R.](#); [Russell, J.](#); [Goodman, P. J.](#): RESPONSE OF OCEAN ECOLOGY TO CLIMATE CHANGE: AN INITIAL IPCC AR5 EARTH SYSTEM MODEL INTER-COMPARISON
- A0451 [Syamsuddin, M. L.](#); [Saitoh, S.](#); [Hirawake, T.](#): OCEAN CLIMATE VARIABILITY IMPACTS ON BIGEYE TUNA (THUNNUS OBESUS) CATCH IN THE SOUTHERN INDONESIAN SEAS
- A0452 [Sylvander, P.](#); [Snoeijs, P.](#); [Häubner, N.](#); [Sundström, M.](#): THIAMINE DYNAMICS IN THE BALTIC SEA - FROM PHYTOPLANKTON TO TOP PREDATORS
- A0453 [Hofmann, E. E.](#); [Castruccio, F.](#); [Haidvogel, D. B.](#); [Klinck, J. M.](#); [Mann, R.](#); [Munroe, D. M.](#); [Narvaez, D.](#); [Powell, E. N.](#): INTERACTIONS OF BEHAVIOR, GROWTH AND CIRCULATION ON DISPERSAL OF MARINE LARVAE
- A0454 [Schroeder, I. D.](#); [Wells, B. K.](#): EL-NIPO'S ROLE ON KLAMATH RIVER CHINOOK SALMON ABUNDANCES
- A0455 [Zhang, X.](#); [Haidvogel, D.](#); [Powell, E.](#); [Klinck, J.](#); [Mann, R.](#): COUPLED PHYSICAL/BIOLOGICAL MODELING OF ATLANTIC SURFLAM LARVAL TRANSPORT AND RESPONSES TO A WARMING WORLD IN THE MIDDLE ATLANTIC BIGHT

091 Direct Measurement Of Air-Sea Fluxes, Surface Waves And Oceanic Boundary Layer Turbulence (Posters Only)

Chair(s): [Doug Vandemark, doug.vandemark@unh.edu](#)
[Will Drennan, wdrennan@rsmas.miami.edu](#)
[Jim Edson, james.edson@uconn.edu](#)
[J. Tom Farrar, jfarrar@whoi.edu](#)

Location: Exhibit/Poster Hall

- B1901 [Naoya Suzuki, N.](#); [Yoshiaki Toba, Y.](#); [Satoru Komori, S.](#); [Naohisa Takagaki, N.](#); [Hiroshi Yoshioka, H.](#): VARIATION OF THE DRAG COEFFICIENT INVESTIGATED USING TOWER-BASED LONG PERIOD MEASUREMENTS
- B1902 [Wolk, E.](#); [Lourenço, A.](#); [Bouruet-Aubertot, P.](#); [Cuyppers, Y.](#); [Crise, A.](#); [Dengler, M.](#); [Lueck, R. G.](#): MICROSTRUCTURE VELOCITY SHEAR MEASUREMENTS FROM AN ARGO FLOAT
- B1903 [Emond, M.](#); [Vandemark, D.](#); [Shellito, S.](#); [Irish, J.](#): EVALUATION OF DIRECT COVARIANCE AIR-SEA CO₂ FLUX MEASUREMENTS IN THE COASTAL OCEAN
- B1904 [Williams, N. J.](#); [Drennan, W. M.](#); [Graber, H. C.](#); [Ramos, R. J.](#); [Brooks, I. M.](#); [Norris, S. J.](#); [Sproson, D. A.](#): AIR-SEA MEASUREMENTS FROM MOORED SURFACE BUOYS IN THE PACIFIC DURING THE 2010 TYPHOON SEASON
- B1905 [Reineman, B. D.](#); [Lenain, L.](#); [Melville, W. K.](#): DEVELOPMENT OF INSTRUMENTATION FOR DIRECT OBSERVATIONS OF AIR-SEA INTERACTIONS FROM LAND- AND SHIP-BASED UNMANNED AIRBORNE SYSTEMS
- B1906 [Kieffer, D.](#); [Schaper, J.](#); [Rocholz, R.](#); [Zappa, C. J.](#); [Asher, W. E.](#); [Jessup, A. T.](#); [Jähne, B.](#): TWO-DIMENSIONAL WATER SURFACE TOPOGRAPHY MEASUREMENTS IN THE FIELD WITH THE REFLECTIVE STEREO SLOPE GAUGE
- B1907 [Hensley, W.](#); [Heitsenrether, R. M.](#): INTERPRETING MEASUREMENTS OF VISIBILITY, RELATIVE HUMIDITY, AND SOLAR IRRADIANCE IN COASTAL ENVIRONMENTS
- B1908 [Zhang, X.](#); [Cox, C. S.](#): THE SKEWNESS OF SEA-SURFACE SLOPE AND WIND STRESS
- B1909 [Zappa, C. J.](#); [Farrar, J. T.](#); [Weller, R. A.](#); [Straneo, F.](#); [Moffat, C. F.](#): OBSERVATIONS OF UPPER-OCEAN TURBULENCE DURING THE VOCALS EXPERIMENT

092 Advances In Ocean Salinity Remote Sensing: Initial Results From The Aquarius/SAC-D And SMOS Satellite Missions

Chair(s): [Gary Lagerloef, Lager@esr.org](#)
[Yi Chao, Yi.Chao@jpl.nasa.gov](#)
[Jordi Font, jfont@icm.csic.es](#)
[Sandra Torrusio, storrusio@conae.gov.ar](#)

Location: Exhibit/Poster Hall

- B1810 [Bulusu, S.](#); [Nyadjro, E. S.](#): INDIAN OCEAN SALT TRANSPORT USING SATELLITE OBSERVATIONS AND MODEL SIMULATIONS
- B1811 [Kim, S. B.](#); [Chan, S.](#); [Yueh, S. H.](#); [Lee, J. H.](#): IMPROVING SEA SURFACE SALINITY RETRIEVAL OVER THE EAST CHINA SEA USING THE LAND SURFACE SIMULATION AND THE AQUARIUS RADIOMETER DATA
- B1812 [Chao, Y.](#); [Li, Z.](#); [Li, P.](#); [Tang, B.](#): BLENDING SEA SURFACE SALINITY DATA FROM IN SITU PLATFORMS AND MULTIPLE SATELLITES
- B1813 [Aretxabaleta, A. L.](#); [Gourrion, J.](#); [Guimbard, S.](#); [Sabia, R.](#); [Gabarró, C.](#); [González, V.](#); [Martínez, J.](#); [Font, J.](#): DATA QUALITY IMPROVEMENTS FOR SATELLITE SEA SURFACE SALINITY DATA
- B1814 [Kao, H.](#); [Lagerloef, G.](#): MONITORING THE WESTERN EQUATORIAL PACIFIC SALINITY FRONT USING HIGH-RESOLUTION AQUARIUS SATELLITE MEASUREMENT
- B1815 [Zhou, J.](#); [Bingham, F. M.](#); [Fuentes, M.](#): STATISTICAL EVALUATION OF OCEAN REMOTE SENSING SALINITY MEASUREMENTS: A COMPARISON BETWEEN AQUARIUS AND *IN SITU* OBSERVATIONS

093 Pathways To Ocean Sciences: Broadening Participation In Summer Research For Undergraduate Programs

Chair(s): [Allyson Fauver, afauver@ibparticipation.org](#)
[Allyson Fauver, afauver@ibparticipation.org](#)
[Thomas Windham, thomas.windham@comcast.net](#)
[Janice McDonnell, mcdonnel@marine.rutgers.edu](#)
[Ashanti Johnson, ajohnson@ibparticipation.org](#)

Location: Exhibit/Poster Hall

- B0700 [Moser, F. C.](#); [Kramer, J. G.](#); [Allen, J. R.](#): STRATEGIES FOR BROADENING PARTICIPATION IN THE MARYLAND SEA GRANT REU PROGRAM
- B0701 [Lunsford, T. L.](#); [Sullivan, D. E.](#): BARRIERS TO STUDENT PARTICIPATION IN AT-SEA INTERNSHIPS
- B0702 [Fields, D. M.](#); [Fowler, R. A.](#): GULF OF MAINE AND THE WORLD OCEAN REU: ATTRACTING AND RETAINING MINORITY STUDENTS IN OCEAN SCIENCES
- B0703 [Fauver, A.](#); [Johnson, A.](#); [Detrick, L.](#); [Valaitis, S.](#); [Thomas, S.](#); [Siegfried, D.](#); [Cash, C.](#): PATHWAYS TO OCEAN SCIENCES: BROADENING PARTICIPATION IN OCEAN SCIENCES REU PROGRAMS
- B0704 [Rom, E. L.](#); [Patino, L.](#); [Weiler, C. S.](#); [Sanchez, S.](#); [Colon, Y.](#); [Antell, L.](#): AN ANALYSIS OF NSF OCEAN SCIENCES RESEARCH EXPERIENCE FOR UNDERGRADUATE SITE PROGRAMS FROM 2009 THROUGH 2011
- B0705 [Campbell, L. E.](#); [Thomas, C. J.](#); [Spence, L.](#): USING PARTNERSHIPS TO INCREASE DIVERSITY IN THE OCEAN SCIENCE WORKFORCE: NC OPT-ED AND COSEE SE
- B0706 [DeFares, B. A.](#); [Pullen, J. D.](#): MARITIME SECURITY SUMMER RESEARCH: DIVERSITY INITIATIVES
- B0707 [Jearld, Jr., A.](#): THE WOODS HOLE PARTNERSHIP EDUCATION PROGRAM: INCREASING DIVERSITY IN THE OCEAN AND ENVIRONMENTAL SCIENCES IN ONE INFLUENTIAL SCIENCE COMMUNITY
- B0708 [Newton, R.](#); [Vincent, S.](#); [Dutt, K.](#); [Allen, K.](#): THE LAMONT DOHERTY SECONDARY SCHOOL FIELD RESEARCH PROGRAM

098 The Critical Importance Of Community Building In The Ocean Sciences

Chair(s): [Charna Meth, cmeth@oceanleadership.org](#)
[Kristin Ludwig, kristin.a.ludwig@gmail.com](#)

Location: Exhibit/Poster Hall

- B0716 [Kappel, E. S.](#); [Ramarui, J.](#): OCEANOGRAPHY MAGAZINE AS A VEHICLE FOR COMMUNICATION IN THE OCEAN SCIENCES

- B0717 [2011 C-MORE Summer Course Cruise Collective: SCALES OF VARIABILITY AT STATION ALOHA](#)
- B0718 [Rivero-Calle, S.; Goyens, C.; Dave, A.; Seegers, B.; Omand, M.; Chase, A. P.; Vandermeulen, R.: OCEAN OPTICS SUMMER COURSE: BUILDING A COMMUNITY OF OPTICAL OCEANOGRAPHERS](#)
- B0719 [Sienkiewicz, J. M.; Ji, M.; Siebers, A. L.; Daniels, R.; Brown, C. W.; Feyen, J. C.; Bub, F. L.; Glazewski, M.; Moore, D.; Cosgrove, R.: OPERATIONAL OCEANOGRAPHY AT THE NOAA OCEAN PREDICTION CENTER, A COMMUNITY APPROACH](#)
- B0720 [Vandehey, A. K.; Strub, P. T.; Mikulak, S.; Risien, C.; Kurapov, A.: SCIENCE SPILLED IN THE GRASS ROOTS: SERENDIPITOUS BOTTOM UP AND TOP DOWN DISCOVERY](#)

100 Linking Biogeochemical Processes To Estuarine Physical Dynamics

Chair(s): Christopher Sommerfield, cs@udel.edu
Elizabeth Canuel, ecanuel@vims.edu
Robert Chant, chant@marine.rutgers.edu
Elizabeth Sikes, sikes@marine.rutgers.edu

Location: Exhibit/Poster Hall

- B1587 [Canuel, E. A.; Cammer, S. S.; McIntosh, H.; Pondell, C. R.: CLIMATE CHANGE IMPACTS ON THE ORGANIC CARBON CYCLE AT THE LAND-OCEAN INTERFACE](#)
- B1588 [McIntosh, H. A.; Littrel, P. R.; Bauer, J. E.; Canuel, E. A.: SOURCES AND COMPOSITION OF PARTICULATE AND DISSOLVED ORGANIC MATTER IN THE DELAWARE ESTUARY](#)
- B1589 [Ziervogel, K.; Cable, J. E.; Wang, X. C.; Lyons, G.: MICROBIAL ENZYMATIC ACTIVITIES AND SECONDARY PRODUCTION IN GROUNDWATERS OF THE ECOFINA-AUCILLA RIVER TIDAL CREEK-MARSH-HAMMOCK SYSTEM](#)
- B1590 [Cochran, E. M.; Gardner, W. D.; Richardson, M. J.; DiMarco, S. F.: OPTICS AND COMPOSITION OF PARTICULATE MATTER IN HYPOXIC AREAS OF THE TEXAS/LOUISIANA SHELF](#)
- B1591 [Babbin, A. R.; Ward, B. B.: SEDIMENT NITROGEN CYCLING FOLLOWING A SIMULATED DISCHARGE EVENT](#)
- B1592 [Saccomanno, V.; Tzortziou, M.; Neale, P. J.: TIDAL MARSH OUTWELLING OF DISSOLVED CARBON AND NITROGEN IN THE CHESAPEAKE BAY: INFLUENCES ON ESTUARINE BIOGEOCHEMICAL AND OPTICAL GRADIENTS](#)
- B1593 [Yu, S.; White, B.; Arnosti, C.; Camassa, R.; McLaughlin, R.; Prairie, J.: SETTLING OF POROUS PARTICLE CLOUDS IN STRATIFICATION: A PROXY FOR MARINE SNOW](#)
- B1594 [Percuoco, V. P.; Kalnejais, L. H.; Wengrove, M.; Foster, D.: THE ROLE OF SHORT TERM SEDIMENT RESUSPENSION ON THE RELEASE OF NUTRIENTS AND METALS FROM ESTUARINE SEDIMENTS](#)
- B1595 [Friedrichs, C. T.; Friedrichs, M. A.; Bever, A. J.; Scully, M. E.; Long, W.: RESULTS OF THE US IOOS TESTBED FOR COMPARISON OF HYDRODYNAMIC AND DISSOLVED OXYGEN MODELS OF THE CHESAPEAKE BAY](#)
- B1596 [Prugue, R.; Schreiber, M.; Levitan, D.: APATITE DISSOLUTION RATES AS A FUNCTION OF GRAIN SIZE](#)
- B1597 [Voynova, Y. G.; Sharp, J. H.: FERRY MONITORING CAPTURES DELAWARE BAY RESPONSE TO SUMMER VARIABILITY AND TO HURRICANE IRENE AND TROPICAL STORM LEE](#)
- B1598 [Nidzieko, N. J.: TIDAL CONTROL OF BENTHIC NITRATE REMOVAL IN A MESOTIDAL ESTUARY](#)
- B1599 [Shen, J.; Hong, B.; Kuo, A.: USING TRANSPORT TIMESCALES TO INTERPRET ESTUARINE EUTROPHICATION OF THE CHESAPEAKE BAY](#)
- B1600 [Wang, Z. A.; Hoering, K. A.: TEMPORAL AND SPATIAL VARIABILITIES OF THE RIVERINE INORGANIC CARBON SYSTEM IN THE MACKENZIE RIVER AND BEYOND](#)
- B1601 [Gardner, B.; Chen, R. F.; Jiang, M.: THIN SURFACE LAYER TRANSPORT OF CHROMOPHORIC DISSOLVED ORGANIC MATTER \(CDOM\) IN ESTUARIES](#)

109 Integrating Oceanography And Animal Tracking - The Ocean Tracking Network

Chair(s): Sara Iverson, Sara.Iverson@Dal.Ca
John Kocik, jkocik@mercury.wh.whoi.edu
David Welch, david.welch@kintama.com
Daniela Turk, daniela.turk@Dal.Ca

Location: Exhibit/Poster Hall

- B1618 [Cimino, M. A.; Oliver, M. J.; Fraser, W.; Irwin, A.; Miller, D.: CLIMATE MIGRATION CHANGES PENGUIN DISTRIBUTIONS ON THE WEST ANTARCTIC PENINSULA](#)
- B1619 [Oliver, M. J.; Irwin, A.; Moline, M. A.; Fraser, W.; Patterson, D.; Schofield, O.; Kohut, J.: ADPLIE PENGUIN FORAGING BEHAVIOR AFFECTED BY LOCAL TIDES](#)
- B1620 [Haulsee, D. E.; Oliver, M. J.; Wetherbee, B.; Fox, D. A.: MAPPING SPATIOTEMPORAL PATTERNS IN TIGER SHARK HABITATS USING SATELLITE TECHNOLOGY](#)
- B1622 [Hassan Moustahfid, H.; Churchill Grimes, ; John Kocik, ; Barbara Block, ; Kim Holland, ; John Payne, ; Dwayne Fox, ; Andrew Seitz, ; Charles Alexander, : TOWARD A U.S. ANIMAL TELEMETRY OBSERVING NETWORK FOR OUR OCEANS, COASTS AND GREAT LAKES](#)
- B1623 [Hatcher, B. G.; Leguizamón Vélez, M. E.: PLUGGING THE HOLES: EVALUATIONS AND DESIGNS FOR ACOUSTIC ARRAY INTEGRITY IN A COMPLEX COASTAL ECOSYSTEM](#)
- B1624 [Bedard, J. M.; Vagle, S.; Williams, W.; Klymak, J. M.: PHYSICAL OCEANOGRAPHY IN CUMBERLAND SOUND; AN IMPORTANT OTN STUDY SITE](#)
- B1625 [Branton, R. M.; Mihoff, M.; Bajona, B.; Dufault, S.; Jones, B.: OCEAN TRACKING NETWORK ACTIVITIES IN CANADA'S BAY OF FUNDY](#)
- B1626 [Turk, D.; Bedard, J. M.; Thomas, H.; Vagle, S.; McGillis, W. R.: SUMMERTIME PCO₂ IN THE CUMBERLAND SOUND IN THE EASTERN ARCTIC](#)
- B1627 [O'Dor, R.; Steward, J.: SQUID ROCKET SCIENCE](#)
- B1628 [Springer, A. M.; Sterling, J. T.; Iverson, S. J.; Johnson, S. P.; Pelland, N.: NORTHERN PINNIPED ROLES AS BIOPROBES: WINTERTIME OCEANOGRAPHIC CHARACTERISTICS OF THE BERING SEA AND NORTHERN NORTH PACIFIC OCEAN](#)
- B1629 [Brosnan, I. G.: IMPACT OF OCEAN CONDITIONS ON ENDANGERED SALMON RESIDENCE IN A RIVER PLUME: PRELIMINARY RESULTS AND MANAGEMENT IMPLICATIONS FROM A MARINE TELEMETRY ARRAY](#)

119 Advances In Monitoring The Ocean's Heat And Salt Balance

Chair(s): Sydney Levitus, Sydney.Levitus@noaa.gov

Location: Exhibit/Poster Hall

- B1386 [Cheng, L. J.; Zhu, J.; Sriver, R. L.: OCEAN MIXING AND AIR-SEA HEAT FLUXES CAUSED BY TROPICAL CYCLONES ON BASIN AND ANNUAL SCALE](#)
- B1387 [Vargas, M.; Wijffels, S.; Meyers, G.; Holbrook, N. J.: USING REANALYSIS AND TIDE-GAUGE DATA TO DETERMINE OCEAN DECADAL CLIMATE VARIABILITY SINCE 1950](#)
- B1388 [Houpt, L.; Testor, P.; Durrieu de Madron, X.: THERMOHALINE VARIABILITY IN THE NORTHWESTERN MEDITERRANEAN BASIN OVER THE RECENT PERIOD \(2007-2011\) FROM IN-SITU MEASUREMENTS.](#)
- B1389 [Lyman, J. M.; Johnson, G. C.: HISTORICAL GLOBAL UPPER OCEAN HEAT CONTENT RELATIVE TO ARGO](#)
- B1390 [Skloris, N.; Marsh, R.: LONG-TERM GLOBAL OCEAN SALINITY CHANGES IN RELATION TO SURFACE FRESHWATER BUDGET CHANGES](#)
- B1391 [Chu, P. C.; Sun, L. C.; Fan, C. W.: SPATIAL AND TEMPORAL VARIABILITY OF GLOBAL OCEAN HEAT/FRESHWATER CONTENT IDENTIFIED FROM GTSP](#)
- B1392 [Schanze, J. J.; Schmitt, R. W.; Yu, L. L.: BUOYANCY FLUXES AND CABBELING IN THE GLOBAL OCEAN](#)
- B1393 [Katsura, S.; Oka, E.: THE VARIATION OF THE NORTH PACIFIC TROPICAL WATER IN ITS FORMATION REGION, 2003-10](#)

- B1394 [von Schuckmann, K. S.](#); Le Traon, P. Y.: ESTIMATION OF GLOBAL OCEAN INDICATORS FROM ARGO WITH FOCUS ON REGIONAL AND DEEP OCEAN CONTRIBUTIONS
- B1395 [Helber, R. W.](#); Richman, J. G.; Carnes, M. R.; Barron, C. N.; Hurlburt, H. E.; Boyer, T. P.: TEMPERATURE VERSUS SALINITY GRADIENTS BELOW THE OCEAN MIXED LAYER
- B1396 [Durack, P. J.](#); Wijffels, S. E.; Matear, R. J.: OCEAN SALINITIES REVEAL STRONG WATER CYCLE INTENSIFICATION DURING 1950-2000

121 Remote Sensing Of The Coastal Ocean Using Hyperspectral And Geostationary Satellite Imagers

Chair(s): Curtiss Davis, cdavis@coas.oregonstate.edu
 Yu-Hwan Ahn, yhahn@kordi.re.kr
 Jeffrey Bowles, jeffrey.bowles@nrl.navy.mil
 Robert Arnone, robert.arnone@nrlssc.navy.mil

Location: Exhibit/Poster Hall

- B1285 [Asanuma, I.](#); Zhang, X.: A NEW ALGORITHM FOR ESTIMATING COLORED DISSOLVED ORGANIC MATTER ABSORPTION IN COMPLEX COASTAL WATERS OF TOKYO BAY FROM HYPERSPECTRAL DATA
- B1286 [Lucas, M. Q.](#); Goodman, J. A.: UTILIZING SPECTRAL CHARACTERISTICS OF THE DOMINANT REEF SPECIES IN SOUTHWESTERN PUERTO RICO TO SUPPORT HYPERSPECTRAL ASSESSMENT OF REEF BIODIVERSITY
- B1287 [Kheireddine, M.](#); Antoine, D.: POTENTIAL OF GEOSTATIONARY OCEAN COLOR OBSERVATIONS FOR THE RETRIEVAL OF THE DIEL VARIABILITY OF OCEANIC OPTICAL PROPERTIES
- B1288 [Agrawal, Y. C.](#); Pottsmith, H. C.; Slade, W.: A SUBMERSIBLE OPTICAL VSF SENSOR WITH POLARIZATION
- B1289 [Guild, L. S.](#); Dungan, J. L.; Edwards, M. R.; Russell, P. B.; Morrow, J.; Hooker, S. B.; Myers, J. S.; Kudela, R.; Dunagan, S. E.; Soulage, M.: FIRST FLIGHT OF NASA'S COASTAL AND OCEAN AIRBORNE SCIENCE TESTBED (COAST)
- B1290 [Guenther, B. M.](#): CHARACTERISTICS OF THE VIIRS OCEAN COLOR MEASUREMENTS
- B1291 [Palacios, S. L.](#); Peterson, T. D.; Sosik, H. M.; Kudela, R. M.: DISCRIMINATING PHYTOPLANKTON TAXA STARTING FROM FIRST PRINCIPLES OF AQUATIC OPTICS AND ENDING AT REMOTE SENSING IMAGERY
- B1292 [Trees, C. C.](#); Arnone, R.: LIDAR OBSERVATIONS OF OPTICAL AND PHYSICAL PROPERTIES (LOOPP)
- B1293 [Mishra, S.](#); Mishra, D. R.: BIO-OPTICAL INVERSION MODEL FOR RETRIEVING PHYCOCYANIN CONCENTRATION IN CYANOBACTERIA DOMINATED WATERS
- B1294 [Fargion, G. S.](#); Arnone, R.; Lander, S.; Lawson, A.; Lee, Z.; Martinolich, P.; Weidemann, A.; Zibordi, G.: REAL TIME CAL/VAL WITH SATELLITE VALIDATION NAVY TOOL (SAVANT)
- B1295 [Lee, K. R.](#); Olsen, R. C.; Kruse, F. A.: USING WORLDVIEW-2 IMAGERY ACQUIRED AT MULTIPLE ANGLES TO DETERMINE OCEAN DEPTH NEAR OAHU, HAWAII
- B1296 [Sanjuan, V.](#); McKee, D.; Trees, C.; Zibordi, G.: ALGORITHM, DATA PROTOCOL AND MERGING FOR HYPERSPECTRAL FREE FALLING RADIOMETERS
- B1297 [Lewis, M. D.](#); Arnone, B.; Gould, R. W.; Weidemann, A. D.; Ladner, S. D.; Amin, R.; Patterson, K. W.; Lamela, G.; Casey, B.; Lee, Z.: BATHYMETRY ESTIMATIONS USING THE HYPERSPECTRAL IMAGER FOR COASTAL OCEANS (HICO) DATA
- B1298 [Patterson, K. W.](#); Bowles, J. H.: HICO CALIBRATION ANALYSIS TWO YEARS POST LAUNCH
- B1299 [Moses, W. J.](#); Bowles, J. H.; Lucke, R. L.; Corson, M. R.: IMPACT OF SENSOR NOISE ON THE ACCURACY OF BIOPHYSICAL PARAMETER ESTIMATION IN OPTICALLY COMPLEX WATERS USING SPACEBORNE SENSORS
- B1300 [Tufflaro, N.](#); Davis, C. O.: NEW PRODUCTS AND AUTOMATED MATCH-UPS FOR THE COASTAL COLUMBIA RIVER
- B1301 [Gao, B.](#); Li, R.: HICO ON-ORBIT CALIBRATION AND DATA CORRECTION

- B1302 [Corson, M. R.](#); Lucke, R. L.; Davis, C. O.; Bowles, J. H.; Gao, B. C.; Li, R. R.; Montes, M. J.; Snyder, W. A.; Wagner, E. J.: THE HYPERSPECTRAL IMAGER FOR THE COASTAL OCEAN (HICO) - A NEW VIEW OF THE COASTAL ZONE FROM THE INTERNATIONAL SPACE STATION
- B1303 [Amin, R.](#); Lewis, D.; Gould, R.; Hou, W.; Arnone, R.: REMOTE SENSING PRODUCTS DERIVED FROM MODIS, MERIS AND HICO: A COMPARISON STUDY
- B1304 [Ladner, S.](#); Jolliff, J.; Arnone, R.; Gould, R.; Rowley, C.; Lewis, D.; Casey, B.; Martinolich, P.: COMBINING HIGH-RESOLUTION HICO AND GOCI IMAGERY WITH OCEAN CIRCULATION MODELS: TOWARDS A FULLY-3D ADVECTION-DIFFUSION-REACTION FORECAST CAPABILITY
- B1305 [Aurin, D. A.](#); Mannino, A.: QUANTIFYING SPATIAL RESOLUTION REQUIREMENTS FOR SATELLITE-BASED DETECTION OF BIOGEOCHEMICAL VARIABILITY IN RIVER PLUMES.

124 New Insights Into The Early Life Stages And Reproductive Dynamics Of Large Marine Vertebrates

Chair(s): Joel Llopiz, jllopez@whoi.edu
 Barbara Muhling, barbara.muhling@noaa.gov
 Kate Mansfield, kate.mansfield@noaa.gov
 Lesley Thorne, lesley.thorne@duke.edu

Location: Exhibit/Poster Hall

- A0456 [Lamkin, J. T.](#); Muhling, B.; Carillo, L.; Roffer, M.; Nero, W.; Habtes, S.: A COMPARISON OF LARVAL BLUEFIN TUNA HABITAT IN THE NORTHERN GULF OF MEXICO AND WESTERN CARIBBEAN
- A0457 [Kline, T. C.](#): FOOD SOURCES UTILIZED BY HERRING IN RELATION TO OTHER JUVENILE FISHES REARING IN NURSERY HABITATS DURING THE HIGH LATITUDE WINTER
- A0458 [Leising, A. W.](#); Walther, S. M.: LINKAGES BETWEEN LARGE-SCALE CLIMATE SIGNALS AND THE REPRODUCTIVE SUCCESS AND SURVIVAL OF LARVAL STAGES OF COASTAL MARINE FISH
- A0459 [Llopiz, J. K.](#); Hobday, A. J.; Maury, O.: AN UPDATE ON CLITOP, THE IMBER REGIONAL ACTIVITY FOCUSING ON CLIMATE IMPACTS ON OCEANIC TOP PREDATORS
- A0460 [Frias-Torres, S.](#): BEHAVIORAL ECOLOGY OF GOLIATH GROUPEL SPAWNING AGGREGATIONS
- A0461 [Basilio, A. J.](#); Laurel, B. J.: SUBSTRATE PREFERENCE AND DELAY IN SETTLEMENT OF LARVAL NORTHERN ROCK SOLE
- A0462 [Opdal, A. E.](#); Jørgensen, C.: SPAWNING MIGRATIONS IN NORTHEAST ARCTIC COD FLUCTUATE WITH POPULATION STRUCTURE
- A0463 [Habtes, S. Y.](#); Muller-Karger, F. E.; Roffer, M. A.; Lamkin, J. T.; Lindo, D.; Muhling, B. A.; Upton, M. A.; Gawlikowski, G. J.: IMPORTANCE OF MESOSCALE FEATURES IN THE GULF OF MEXICO ON LARVAL PELAGIC FISH ABUNDANCE

126 Links Between Estuarine And Coastal Processes

Chair(s): David A. Sutherland, dsuth@uoregon.edu
 James A. Lerczak, jlerczak@coas.oregonstate.edu
 Elizabeth W. North, enorth@umces.edu
 Parker MacCready, pmacc@uw.edu

Location: Exhibit/Poster Hall

- B1659 [Farquharson, G.](#); Plant, W. J.: THE EFFECT OF WIND ON CURRENTS IN THE COLUMBIA RIVER
- B1660 [Arnott, K. D.](#); Valle-Levinson, A.; Chant, R.; Li, M.: COMPARISON OF INTRATIDAL VARIATIONS OF SHEAR PRODUCTION, TURBULENCE DISSIPATION, AND MIXING ACROSS AN ESTUARY
- B1661 [Scott, K. R.](#); Canals, M.; Velez, F. J.: COASTAL EROSION AND BEACH MORPHOLOGY CHANGES IN RINCON, PUERTO RICO
- B1662 [Hetzl, Y. L.](#); Pattiaratchi, C. B.; Lowe, R. J.; Hofmeister, R.: WIND AND TIDAL INFLUENCES ON EXCHANGE IN A LARGE INVERSE ESTUARY IN WESTERN AUSTRALIA
- B1663 [Holleman, R. C.](#); Stacey, M. T.: TRANSIENT DISPERSIVE PROCESSES IN CHANNEL-SHOAL ESTUARIES

- B1664 Greenfield, D. L.; Bergquist, D.; Brock, L. M.; Felber, J.; Keppler, C.; Ragland, J.: LINKING PHYTOPLANKTON ASSEMBLAGE VARIABILITY AND NUTRIENT LOADING WITH LAND USE: A 3-YEAR STUDY OF THE ASHEPOO-COMBAHEE-EDISTO (ACE) BASIN, SOUTH CAROLINA, USA
- B1665 Honegger, D. A.; Haller, M. C.; Aguilar, H.; Lerczak, J. A.; Teague, C. C.: REMOTE OBSERVATIONS OF SURFACE CURRENT STRUCTURE AT AN ENGINEERED TIDAL INLET MOUTH
- B1666 Yuan, Y.; Horner-Devine, A. R.: MIXING AND SPREADING IN A LABORATORY SCALE RIVER PLUME
- B1667 Basdurak, N. B.; Nidzieko, N.; Largier, J.: PARTICLE TRANSPORT MODELING OF SMALL RIVER PLUMES OFF CALIFORNIA APPLIED TO MARINE PATHOGEN FATE
- B1668 Buckley, M. E.; Tankersley, R. A.; Zabriskie, K. G.; Wassick, A. C.: TIMING OF LARVAL RELEASE, SALINITY TOLERANCE, AND PHOTOTACTIC BEHAVIOR IN THE GREEN PORCELAIN CRAB *PETROLISTHES ARMATUS*
- B1669 Kakoulaki, G.; Macdonald, D.: THE USE OF SURFACE DRIFTERS FOR "TRACKING" MIXING AND SPREADING IN THE MERRIMACK RIVER PLUME.
- B1670 Terada, K.; Koibuchi, Y.; Kutsumi, M.; Shimizu, K.; Isobe, M.: DIFFERENCES AMONG WATER QUALITIES IN AN URBAN RIVER AND TWO MANGROVE RIVERS OBSERVED IN ISHIGAKI ISLAND, JAPAN.
- B1671 Thibodeaux, C.; Voynova, Y.; Sharp, J. H.: INVESTIGATING THE SPATIAL AND TEMPORAL VARIABILITY OF PRIMARY PRODUCTIVITY AT THE MOUTH OF THE DELAWARE ESTUARY
- B1672 Wang, J.; Macdonald, D.; Kakoulaki, G.: THE INFLUENCE OF DISCHARGE, WIND AND TIDES ON NEAR- TO MID-FIELD PLUME DYNAMICS
- B1673 Wang, Y. C.; Guo, X. Y.; Liu, Z.; Gao, H. W.: STUDY ON RAPID RESPONSE OF RIVER PLUME TO ABRUPT CHANGES IN RIVER DISCHARGE
- B1674 Welle, P.; Baptista, A. M.; Spitz, Y.; Lopez, J. E.; Needoba, J. A.; Peterson, T. D.; Seaton, C.: UNDERSTANDING OXYGEN VARIABILITY IN RELATION TO BIOLOGICAL PROCESSES IN THE COLUMBIA RIVER ESTUARY THROUGH A BIOPHYSICAL MODEL
- B1675 Toberman, M.; Inall, M.; Boyd, T.; Dale, A.; Bell, C.: HORIZONTAL EVOLUTION OF TIDALLY MODULATED BUOYANT PLUMES AS OBSERVED WITH AN AUV BASED MICROSTRUCTURE PROFILER.
- B1676 Jia, Y.; Yankovsky, A. E.: THE IMPACT OF AMBIENT STRATIFICATION ON FRESHWATER TRANSPORT IN A RIVER PLUME
- B1677 Pfeiffer-Herbert, A. S.; Kincaid, C. R.; Bergondo, D. L.; Collie, J. S.; Ullman, D. S.: EXCHANGE ACROSS AN ESTUARINE-SHELF INTERFACE: IMPLICATIONS FOR LARVAL TRANSPORT
- B1678 Vandermeulen, R. A.; Gundersen, K.: COMMUNITY GROWTH PHYSIOLOGY AND NUTRIENT CHEMISTRY IN AN ESTUARINE COASTAL ENVIRONMENT IN THE NORTHERN GULF OF MEXICO
- A0576 Zhao, Y.; McInnes, A.; Jiang, Y. L.; Li, B.; Bianchi, T.; DiMarco, S.; Quigg, A.: DIEL VARIATIONS OF PHYTOPLANKTON PRODUCTIVITY AND PHYSIOLOGY IN THE NORTHERN GULF OF MEXICO: INFLUENCE OF RIVERINE INPUTS VERSUS OPEN WATERS.
- A0577 Jakobsen, H. H.; Markager, S.; Henriksen, P.: ANNUAL DYNAMICS OF CARBON TO CHLOROPHYLL RATIO IN TEMPERATE COASTAL WATERS
- A0579 Kim, B. G.; Cho, Y. K.; Kim, S. I.: AN APPLICATION OF OPTIMAL INTERPOLATION TO SATELLITE OBSERVED CHLOROPHYLL-A AND ITS SPATIAL-TEMPORAL VARIATION
- A0580 Eduantes, B.; Sin, Y.: VARIABILITY OF FLUORESCENCE-BASED PHYSIOLOGICAL PARAMETERS OF THE PHYTOPLANKTON PHOTOSYNTHESIS IN A TEMPERATE RIVER-ESTUARINE ENVIRONMENT
- A0581 Goldman, E. A.; Swanstrom, J. A.; Abernathy, E. A.; Richardson, T. L.; Sosik, H. M.; Shaw, T. J.; Myrick, M. L.: A SHIP-BASED INSTRUMENT FOR THE DISCRIMINATION OF PHYTOPLANKTON TAXA USING SPECTRAL FLUORESCENCE SIGNATURES AND IMAGING MULTIVARIATE OPTICAL COMPUTING (IMOC)

137 Biodiversity, Biogeochemistry And Ecology: Establishing Linkages Between Molecular Diversity And Ecosystem Functioning

Chair(s): Zackary Johnson, zj@duke.edu

Maureen Coleman, mlcoleman@uchicago.edu

Location: Exhibit/Poster Hall

- A0497 Kurata, N.; Vella, K.; Tartar, A.; Matt, S.; Soloviev, A.; Shivji, M.; Perrie, W.: COMPARATIVE ANALYSIS OF MARINE BACTERIAL COMPOSITION BETWEEN THE SEA SURFACE MICROLAYER AND SUBSURFACE WATER IN THE STRAITS OF FLORIDA
- A0498 Allers, E.; Moraru, C. L.; Dude Duhaime, M. B.; Beneze, E. L.; Solonenko, N.; Amann, R. I.; Sullivan, M. B.: DETECTING VIRAL INFECTION AT THE SINGLE CELL LEVEL WITH PHAGE FISH
- A0499 Chénard, C.; Suttle, C. A.: VIRUSES INFECTING FRESHWATER FILAMENTOUS CYANOBACTERIA REPRESENT A PREVIOUSLY UNRECOGNIZED EVOLUTIONARY LINEAGE OF CYANOPHAGES
- A0500 Simon, H. M.; Smith, M. W.; Maier, M. A.; Suci, D.; Peterson, T. D.; Bradstreet, T.; Nakayama, J.: USE OF A HIGH RESOLUTION MICROARRAY ASSAY AND INTEGRATED SUMSCORE DATA ANALYSIS TO ASSESS TAXONOMIC DIVERSITY OF PSEUDONITZSCHIA SPP. (BACILLARIOPHYCEAE)
- A0501 Gaynus, C. J.; Okulate, M.: ISOLATION AND CHARACTERIZATION OF BACTERIAL SAMPLES FROM ASSATEAGUE ISLAND MARYLAND
- A0502 Carini, P.; Steindler, L.; Beszteri, S.; Giovannoni, S. J.: ORGANIC FACTORS REQUIRED FOR SAR11 GROWTH.
- A0503 Hunt, D. E.; Lin, Y.; Tringe, S. G.; Johnson, Z. I.: DIVERSITY AND ACTIVITY OF BACTERIOPANKTON IN THE NORTH PACIFIC (STATION ALOHA)
- A0504 Noh, J. H.; Choi, D. H.; Hahm, M. S.; Lee, C. M.: LATITUDINAL AND VERTICAL DISTRIBUTION OF *SYNECHOCOCCUS* LINEAGES BELONGING TO SUB-CLUSTER 5.1 IN THE WESTERN NORTH PACIFIC OCEAN
- A0505 Johnson, Z. I.; Lin, Y.; Zisner, E. R.: THE MOLECULAR DIVERSITY AND BIOGEOGRAPHY OF PROCHLOROCOCCUS, THE DOMINANT OPEN OCEAN PHOTOSYNTHETIC MICROBE
- A0506 Bradley, N. M.; Williams, H. N.: BACTERIAL COMMUNITY STRUCTURE OF A FRESHWATER SPRING IMPACTED BY HYDRILLA
- A0507 Neibauer, J.; Bridoux, M. C.; Ingalls, A. E.; Nunn, B. L.; Keil, R.: COMPARATIVE METAPROTEOMIC CHARACTERIZATION OF MARINE PARTICULATE PROTEINS IN PRODUCTIVE SHELF WATERS AND OLIGOTROPHIC OFFSHORE WATERS.
- A0508 Foong, L. P.; Kuwata, M.; Suzuki, T.; Toda, T.: HIGH RESOLUTION SCANNING ELECTRON MICROSCOPY BY OBSERVATION OF CHROMOSOME MORPHOLOGY IN A COSMOPOLITAN COPEPOD, EUTERPINA ACUTIFRONS (DANA, 1848)

127 Phytoplankton Fluorescence: Filling The Gap Between Observations And Understanding

Chair(s): Alexander Chekalyuk, chekaluk@ledeo.columbia.edu

Yannick Huot, yannick.huot@usherbrooke.ca

Location: Exhibit/Poster Hall

- A0572 Berges, J. A.; Kozik, C. R.; Choi, C. J.; Franklin, D. J.; Sandgren, C. D.: OVERCOMING COMPLICATIONS POSED BY DEAD CELLS IN INTERPRETING FLUORESCENCE MEASUREMENTS IN NATURAL PHYTOPLANKTON ASSEMBLAGES
- A0573 Al Shehhi, M. R.; Gherboudj, I.; Ghedira, H.: CALIBRATION AND VALIDATION OF MODIS-BASED OC3 MODEL FOR RED TIDE DETECTION AND MONITORING IN THE ARABIAN GULF
- A0574 Fujiki, T.; Matsumoto, K.; Wakita, M.; Saino, T.: PHYTOPLANKTON DISTRIBUTION AND PHOTO-PHYSIOLOGICAL STATE IN TROPICAL AND SUBTROPICAL WESTERN NORTH PACIFIC
- A0575 Barnard, A.; Chekalyuk, A.; Derr, A.; Strubhar, W.; Hafez, M.; Pearson, J.; Orrico, C.; Moore, C.: AQUATIC LASER FLUORESCENCE ANALYZER (ALFA): A NEW INSTRUMENT FOR CHARACTERIZATION OF NATURAL AQUATIC ENVIRONMENTS

- A0509 Kok, S. P.; Tsuchiya, K.; Yasuda, I.; Toda, T.; Kurosawa, N.: SPATIAL VARIABILITY OF PROTISTAN MICROPLANKTON DIVERSITY ALONG KUROSHIO CURRENT ANALYZED BY 18S RIBOSOMAL DNA CLONE ANALYSIS
- A0510 Schenck, R. O.; Brum, J. R.; Sullivan, M. B.: QUANTITATIVE MORPHOLOGICAL CHARACTERIZATION OF VIRAL COMMUNITIES THROUGHOUT THE GLOBAL OCEANS
- A0511 2011 C-MORE Summer Course Genome Collective: COMPARATIVE GENOMICS OF RHODOBACTERACEAE SP. HIMB11 REVEALS METABOLIC SPECIALIZATION IN A COASTAL, MARINE ISOLATE
- A0512 Thompson, A.; Foster, R.; Krupke, A.; Musat, N.; Carter, B.; Kuypers, M.; Zehr, J.: NUTRIENT TRANSFER BETWEEN UNICELLULAR NITROGEN-FIXING CYANOBACTERIUM GROUP A (UCYN-A) AND A PICOEUKARYOTE HOST
- A0513 Vergin, K. L.; Beszteri, B.; Monier, A.; Thrash, J. C.; Treusch, A. H.; Worden, A. Z.; Kilpert, F.; Giovannoni, S. J.: HIGH RESOLUTION SAR11 ECOTYPE DYNAMICS AT THE BERMUDA ATLANTIC TIME-SERIES STUDY SITE
- A0514 Jungbluth, M. J.; Lenz, P. H.; Goetze, E.: A NOVEL MOLECULAR METHOD TO ENUMERATE COPEPOD NAUPLII IN FIELD POPULATIONS
- A0515 Shah, S. R.; Pependorf, K. J.; Van Mooy, B. A.: STABLE CARBON ISOTOPIC COMPOSITION OF INTACT POLAR LIPIDS IN THE SARGASSO SEA
- A0516 Callaghan, M. E.; Miner, B.: PREDATOR INDUCED HATCHING-PLASTICITY IN NUDIBRANCH SPECIES ARMINA CALIFORNIA

138 Networked Posters - A Means To Bring Interactivity To The Poster Session (Posters Only)

Chair(s): Mark Abbott, mark@coas.oregonstate.edu
Dan Fay, Dan.Fay@microsoft.com

Location: Exhibit/Poster Hall

- B1326 Bartlett, K. P.; Dewey, R. K.; Korniyuk, N. N.; Denman, K.; Tunncliffe, V.: VENUS: LIVE DATA FROM A COASTAL OBSERVATORY
- B1327 Poteau, A. P.; Claustre, H.; Groleau, Y.; Scheurle, C.; Mangin, A.: AN INTERACTIVE MAP AS SCIENTIFIC AND OPERATIVE TOOL FOR OCEANOGRAPHIC AUTONOMOUS OBSERVATIONS, NETWORKING AND OUTREACH
- B1328 Li, P. P.; Vu, Q.; Chao, Y.; Farrara, J.; Li, Z.; Zhang, H.; Tang, B.; Wang, X.: INTERACTIVE VISUALIZATION AND ANALYSIS OF NEAR REAL-TIME OCEAN OBSERVATIONS AND OCEAN FORECAST MODELS
- B1329 Fatland, D. R.; Stubbins, A.; Spencer, R.; Bellingham, J.; kawale, J.: ABSTRACT DATA VISUALIZATION IN A GEOSPATIAL CONTEXT
- B1330 Futrelle, J.; Sosik, H. M.: IMAGING FLOWCYTOBOT DASHBOARD: WEB-BASED SUMMARIZATION, BROWSING, AND ACCESS TO NEAR-REALTIME PHYTOPLANKTON IMAGERY

139 Governing Across Scales: Innovative Stewardship Of Earth Systems: Creating A Global Large Marine Ecosystem Knowledge Network

Chair(s): Harold P. Batchelder, hbatchelder@coas.oregonstate.edu
Peter Fox, pfox@rpi.edu
Suzanne Lawrence, suzanne@suzannelawrence.net
Oran Young, oran.young@gmail.com

Location: Exhibit/Poster Hall

- A0517 Batchelder, H. P.; Lawrence, S. J.; Young, O.; Halpern, B. S.; Fox, P. A.: BUILDING A GLOBAL NETWORK FOR SUSTAINABILITY-SCIENCE IN LARGE MARINE ECOSYSTEMS (LMES)
- A0518 Eckert, G. L.: MARINE ECOSYSTEM-BASED GRADUATE EDUCATION IN ALASKA AS A BEST PRACTICE TO MOVING ECOSYSTEM-BASED MANAGEMENT FROM PAPER TO PRACTICE
- A0519 Bell, R. J.; Fogarty, M. J.; Collie, J. S.: DYNAMICS IN MARINE ECOSYSTEMS
- A0520 Lawrence, S. J.: TOWARD A GLOBAL LARGE MARINE ECOSYSTEM SUSTAINABILITY-SCIENCE LEARNING AND KNOWLEDGE NETWORK: DEFINING NEW PARTNERSHIPS, CREATING NEW OPPORTUNITIES

- A0521 Terrill, E. J.; Kim, S. Y.; Otero, M.; Jones, B.; Washburn, L.; Moline, M. A.; Paduan, J. D.; Garfield, N.; Largier, J. L.; Kosro, M.: ROLE OF A NETWORKED OCEAN IN ASSESSING LARGE MARINE ECOSYSTEMS - MONITORING OCEAN CURRENTS AT A CASCADE OF SCALES WITH HF RADAR
- A0522 Fox, P. A.; Batchelder, H.; Lawrence, S. J.; Maffei, A.; Young, O.: INFORMATION MODELS FOR DEVELOPMENT AND EVOLUTION OF COMPLEX MULTI-SCALE KNOWLEDGE NETWORKS FOR MARINE ECOSYSTEMS?
- A0523 Morgan, L. E.; Moffitt, R. A.; Elizabeth, R.: A NEW GLOBAL MARINE PROTECTED AREAS ATLAS AND ASSESSMENT

146 Zooplankton Feeding Ecology And The Biological Carbon Pump In The Ocean

Chair(s): Stephanie Wilson, sewilso6@asu.edu
Susanne Neuer, susanne.neuer@asu.edu

Location: Exhibit/Poster Hall

- A0612 Fields, D. M.; Shema, S. D.; Woll, C. I.; Milligan, A. J.: DO THE SILICIFIED WALLS OF DIATOMS CONFER PROTECTION AGAINST COPEPOD GRAZING?
- A0613 Kayfetz, K. R.; Kimmerer, W. J.: AN ANALYSIS OF COPEPOD FEEDING USING FLOWCAM
- A0614 Tiselius, P.; Hansen, B. W.; Calliari, D.: ZOOPLANKTON AS TRANSFORMERS: FATTY ACID CONTENT AND CONVERSION FROM SESTON TO BENTHOS
- A0615 Schoener, D. M.; McManus, G. B.: GROSS GROWTH EFFICIENCY OF MIXOTROPHIC AND HETEROTROPHIC CILIATES: RELATIVE CONTRIBUTION OF GRAZING AND PHOTOSYNTHESIS
- A0616 Hong, J.; Talapatra, S.; Katz, J.; Tester, P. A.; Waggett, R. J.; Place, A.: SPECIES SPECIFIC VARIATIONS IN COPEPOD GRAZING BEHAVIOR RESULTING FROM EXPOSURE TOXIC DINOFLAGELLATE
- A0617 Nakatomi, N.; Nakajima, R.; Yoshida, T.; Sonoda, K.; Yamamoto, S.; Othman BHR, ; Zaleha, K.; Effendy AWM, ; Noor Azhar, M. S.; Toda, T.: CONTRIBUTION OF CORAL-DERIVED ORGANIC MATTERS AND POM AS CARBON SOURCES FOR REEF-ZOOPLANKTON COMMUNITIES
- A0618 bianchi, d.; stock, c.; sarmiento, j. l.; galbraith, e. d.: ZOOPLANKTON DIEL VERTICAL MIGRATION IN A SIZE STRUCTURED MODEL OF THE MARINE ECOSYSTEM: CONTROLS AND IMPACTS ON THE BIOLOGICAL PUMP
- A0619 Schleier, S. L.; Van Alstyne, K.: *ELLIPROCHLORIS MARINA* AND *SYMBIODINIUM MUSCATINEI*: CO-HABITANTS IN *ANTHOPELURA XANTHOGRAMMICA* AND *A. ELEGANTISSIMA*
- A0620 Correia, L.; Engels, M.; Piwinski, S.; Cheng, L.; Zettler, E.: HALOBATES IN THE EASTERN TROPICAL PACIFIC 1967-2010: AN UPDATE ON DENSITY AND EVIDENCE FOR SEASONAL RANGE SHIFT

151 Low Latitude Riverine Influence And Impact On Ocean Biogeochemistry

Chair(s): Will Berelson, berelson@usc.edu
Ajit Subramaniam, ajit@ldeo.columbia.edu

Location: Exhibit/Poster Hall

- B0978 Kalmbach, A. J.; Benner, I.; Carpenter, E. J.: CARBON UPTAKE AND RELEASE BY PHYTOPLANKTON COMMUNITIES IN THE AMAZON RIVER PLUME
- B0979 Subramaniam, A.; Villareal, T. A.; Bracco, A.; Montoya, J. P.: CHARACTERIZING THE 2011 GREAT FLOOD PLUME OF THE MISSISSIPPI RIVER
- B0980 Pyle, A.; Brown, C.; Villareal, T. A.: GROWTH AND NITROGEN-FIXATION RATES IN LABORATORY CULTURES OF THE DIAZOTROPHIC *HEMIAULUS-RICHELIA* SYMBIOSIS.
- B0981 Brooks, M. T.; Coles, V. J.; Stukel, M. R.; Hood, R. R.: MODELING THE AMAZON RIVER PLUME

- B0982 Hood, R. R.; Coles, V. J.; Brooks, M. T.; Stukel, M. R.: MODELING EMERGENT MICROBIAL COMMUNITY STRUCTURE AND BIOGEOCHEMICAL CYCLING IN THE AMAZON RIVER AND PLUME
- B0983 Green, J. L.; Yager, P. L.; Miller, W. L.; Goes, J.; Medeiros, P.: EFFECTS OF SUNLIGHT ON THE AMAZON RIVER PLUME: EXPLORING THE DYNAMIC RELATIONSHIP BETWEEN PHOTOCHEMISTRY AND THE MICROBIAL RESPONSE
- B0984 Hopkins, J. A.; Coles, V. J.; Goes, J. I.: QUANTIFYING THE PROPAGATION OF THE AMAZON RIVER PLUME IN THE WESTERN TROPICAL NORTH ATLANTIC
- B0985 Morando Jr, M. B.; Foster, R. A.; Tiahlo, M.; Landrum, J.; Gunderson, T. E.; Capone, D. G.: PHOSPHATE LIMITATION AND P UPTAKE IN TRICHODESMIUM SPP. ALONG A TRANSECT OF THE AMAZON RIVER PLUME
- B0986 Barada, L. P.; Capone, D. G.; Sanudo-Wilhelmy, S. A.: DISTRIBUTION OF B VITAMINS IN THE WESTERN TROPICAL NORTH ATLANTIC
- B0987 Zielinski, B. L.; Sharma, S.; Smith, C. B.; Satinsky, B. M.; Fortunato, C.; Doherty, M.; Coles, V.; Crump, B.; Yager, T.; Moran, M. A.: MAKING THE CONNECTION BETWEEN METATRANSCRIPTOMICS AND BIOGEOCHEMICAL CYCLES IN THE AMAZON RIVER PLUME
- B0988 Medeiros, P. M.; Ward, N.; Niggemann, J.; Yager, P. L.; Krusche, A. V.; Dittmar, T.: TRACKING THE FATE OF DISSOLVED ORGANIC MATTER IN THE AMAZON RIVER TO OCEAN CONTINUUM
- B0989 Weber, S. C.; Goes, J. I.; Carpenter, E. J.; Coles, V. J.; Montoya, J. P.: SPATIAL VARIATION IN NUTRIENTS, PIGMENTS, PARTICLES, AND PHYTOPLANKTON ABUNDANCE IN THE AMAZON RIVER PLUME

173 Ocean Surface Waves And Interactions With Currents And Winds

Chair(s): William Perrie, william.perrie@dfo-mpo.gc.ca
Ryan Mulligan, mulliganr@civil.queensu.ca

Location: Exhibit/Poster Hall

- B1501 Thomson, J.; Schwendeman, M.; Gemmrich, J.: OBSERVATIONS OF FETCH-LIMITED WAVE EVOLUTION
- B1502 Hayes, A. G.; Lorenz, R. D.; Donelan, M. A.: AIR-SEA INTERACTIONS ON TITAN: WIND DRIVEN CAPILLARY-GRAVITY WAVES; HARD TO DETECT OR NON-EXISTENT?
- B1503 Kang, K.; Lee, G.; Ryoo, S.: PROPAGATION OF THE WIND WAVE WITH STRONG TIDE IN THE WEST COAST OF KOREA
- B1504 Bennis, A. C.; Dumas, F.; Ardhuin, F.; Blanke, B.: MIXING, BOTTOM FRICTION, AND THE VERTICAL STRUCTURE SURF ZONE FLOWS
- B1505 Liao, Y. P.; Singha, A.; Kaihatu, J. M.; Sadr, R.: ESTIMATION OF WAVE PROPERTIES FOR THE PERSIAN GULF USING VIDEO IMAGERY
- B1506 Aiki, H.; Greatbatch, R. J.: THICKNESS WEIGHTED MEAN THEORY FOR THE EFFECT OF SURFACE GRAVITY WAVES ON MEAN FLOWS IN THE UPPER OCEAN
- B1507 Hwang, P. A.; Ocampo-Torres, F. J.; García-Nava, H.: PARAMETERIZATIONS OF THE OCEAN SURFACE FRICTION COEFFICIENT
- B1508 Grare, L.; Lenain, L.; Huang, Z. C.; Melville, W. K.: COHERENT MEASUREMENTS OF OCEAN SURFACE WAVES AND WIND FOR HIGH WIND AND WAVE CONDITIONS.
- B1509 Dong, Z.; Kirby, J. T.: A VORTEX FORCE FORMULATION FOR WAVES PROPAGATING ON STRONGLY SHEARED FLOWS
- B1510 Basovich, A.: ROLE OF ADVECTION IN DEVELOPMENT OF CIRCULATIONS CAUSED BY INTERACTION OF SURFACE WAVES AND INHOMOGENEOUS CURRENTS

- B1511 Yang, D.; Meneveau, C.; Shen, L.: DYNAMIC MODELING OF SEA-SURFACE ROUGHNESS FOR LARGE-EDDY SIMULATION OF WIND OVER OCEAN SURFACE WAVES
- B1512 Deane, G. B.; Stokes, M. D.: MODEL CALCULATIONS OF BUBBLE FRAGMENTATION IN BREAKING WAVES AND COMPARISON WITH LABORATORY DATA
- B1513 Buckley, M.; Veron, F.: LABORATORY STUDY OF THE WIND STRUCTURE OVER SURFACE WAVES
- B1514 Lenain, L.; Melville, K. W.; Reineman, B.; Statom, N.; Castel, D.: HIGH-RESOLUTION AIRBORNE WAVEFORM LIDAR FOR OCEANOGRAPHIC RESEARCH
- B1515 Curcic, M.; Chen, S. S.: TOWARD A UNIFIED AIR-SEA INTERFACE FOR FULLY COUPLED ATMOSPHERE-WAVE-OCEAN MODELS AND TROPICAL CYCLONES PREDICTION
- B1516 Schwendeman, M. S.; Thomson, J.; Gemmrich, J. R.: SPECTRAL ENERGY DISSIPATION IN BROAD-BAND WAVE FIELDS
- B1517 Gay, P.; Choi, J.: AN EVALUATION OF THE PERFORMANCE OF SWAN WAVE PREDICTIONS USING OFFSHORE U.S. BUOYS
- B1518 Paget, A. C.: WHITECAP COVERAGE USING EQUIVALENT NEUTRAL WINDS

193 Education, Scientific Outreach, Scientific Workforce

Chair(s): Emmanuel Boss, emmanuel.boss@maine.edu

Location: Exhibit/Poster Hall

- B0730 Neeley, A.; Arellano, A. R.; Powers, L.: OCEAN OPTICS SUMMER COURSE 2011: WHAT TWENTY STUDENTS LEARNED ABOUT CALIBRATION AND VALIDATION IN THREE WEEKS.
- B0731 Tankersley, R. A.; Bourexis, P.; Kaser, J. S.: DOES PRACTICE MAKE PERFECT? ROLE OF TRAINING AND FEEDBACK IN IMPROVING SCIENTISTS' PRESENTATION SKILLS
- B0733 Weinstein Knowlton, S. E.; Fogleman, J.; Reichsman, F.: HIGHER EDUCATION FACULTY/SCIENTIST INVOLVEMENT IN A G6-12 SCIENCE EDUCATION PARTNERSHIP PROJECT
- B0734 King, B. D.; Broad, M.; Blazek, M.; Salyer, S.: SUSTAINABILITY WITHIN AQUATIC CAPTIVITY: FINDING A BALANCE BETWEEN SUSTAINABLE BUSINESS PRACTICES AND MARINE ANIMAL CARE AT AQUARIUM OF THE BAY, SAN FRANCISCO
- B0735 Eubanks, E. D.; Oberbauer, S.; Brower, P. M.; Chiste, M. J.; Guinan, K. G.; Severtson, A. M.: STUDENTS OF TEACHER RESEARCHER EXPERIENCES (SOTRE)
- B0736 Miller, A. L.; McDuff, R.: ASSESSING THE STATE OF GRADUATE PROGRAMS IN THE OCEAN SCIENCES
- B0737 Alberts, J. C.; Whitledge, T.: UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM- THE CURRENT AND FUTURE FLEET
- B0738 Apple, J. K.; Wicks, C.; Dennison, B.: CREATING CONCEPTUAL DIAGRAMS WITH ADOBE ILLUSTRATOR: AN IMPORTANT COMMUNICATION TOOL FOR PRE-CAREER SCIENTISTS
- B0739 Boss, E. S.; Loftin, J.: ENGINEERING LITERACY FOR UNDERGRADUATE IN MARINE SCIENCES - THE CASE FOR HANDS ON
- B0740 Miller, E. P.; Barker, R.; Hartnet, A.; Böttger, L.; Welter, E.; Andresen, C.; Matzanke, B. F.; Küpper, F. C.; Carrano, C. J.: A MULTIDISCIPLINARY STUDY OF IRON TRANSPORT AND STORAGE IN MARINE ALGAE
- B0741 Schmitt, J. G.: USING THE SEDIMENT SOURCE-SINK CONCEPTUAL MODEL TO INTEGRATE OCEANS AND CONTINENTS IN THE LAND-GRANT UNIVERSITY SCIENCE CURRICULUM
- B0742 Fedenczuk, T.; Nosal, E.: EDUCATIONAL COLLABORATION AND RESEARCH BETWEEN ISLAND, COASTAL, AND ARCTIC INSTITUTIONS.

Tuesday, February 21 - Orals

001 Gases As Tracers Of Oceanic Processes

Chair(s): Roberta Hamme, rhamme@uvic.ca
David Ho, ho@hawaii.edu

Location: Ballroom C

- 14:00 Tanhua, T.; Banyte, D.; Wallace, D. W.; Krahnmann, G.; Karstensen, J.; Schneider, A.; Stramma, L.; Visbeck, M.: VERTICAL MIXING IN THE TROPICAL NORTH ATLANTIC; RESULTS FROM A LARGE SCALE TRACER RELEASE EXPERIMENT
- 14:15 Shao, A. E.; Mecking, S.; Thompson, L.; Sonnerup, R. E.: MODELING THE MIXED LAYER SATURATIONS OF CFC-11, CFC-12, AND SF6
- 14:30 Gebbie, G.: A GLOBAL ESTIMATE OF OCEAN AGE AND TRANSIT TIMES INFERRED FROM RADIOCARBON OBSERVATIONS
- 14:45 Graven, H. D.; Gruber, N.; Key, R.; Khatiwala, S.: CHANGING CONTROLS ON OCEANIC RADIOCARBON: NEW INSIGHTS ON SHALLOW-TO-DEEP OCEAN EXCHANGE AND ANTHROPOGENIC CO₂ UPTAKE
- 15:00 Stephens, B. B.; Keeling, R. F.; Brailsford, G.; Manning, A. C.; Mikaloff-Fletcher, S.; Patra, P. K.; Bent, J.; Sweeney, C.: LONG-TERM OBSERVATIONS OF ATMOSPHERIC O₂:CO₂ RATIOS OVER THE SOUTHERN OCEAN
- 15:15 Yang, M.; Archer, S. D.; Blomquist, B. W.; Ho, D. T.; Lance, V. P.: LAGRANGIAN EVOLUTION OF A BIOTIC AND AN ABIOTIC GAS TRACER IN THE SOUTHERN OCEAN – THE EFFECTS OF PHYTOPLANKTON COMMUNITY SHIFT AND PHYSICAL MIXING
- 15:30 Hamme, R. C.; Cassar, N.; Bender, M. L.; Lance, V. P.; Strutton, P. G.; Sabine, C. L.; Ho, D. T.; Hargreaves, B. R.: RAPID CHANGES IN DISSOLVED O₂/AR IN A LAGRANGIAN TRACER PATCH REVEAL A SYSTEM FAR FROM STEADY-STATE
- 15:45 Fraser, M. J.; Moore, R. M.: DISSOLVED HYDROGEN CONCENTRATIONS IN THE NORTH AND SOUTH ATLANTIC: A POSSIBLE INDICATOR OF NITROGEN FIXATION.

002 ASLOMP Student Symposium

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: Ballroom E

- 08:00 Manrique-Hernández, H.; Ortiz-Zayas, J. R.; Heartsill-Scalley, T.; Barreto-Orta, M.: ASSESSING RIPARIAN STRUCTURE AND COMPOSITION IN A RESTORED TROPICAL CREEK
- 08:15 Sahu Teli, J. L.; Sutter, L.; Perry, J. E.: SALT MARSH DYNAMICS: ASSESSING VEGETATION ALONG THE YORK RIVER
- 08:30 Kramp, H. E.; Lindholm, J.; Knight, A.: HABITAT ASSOCIATIONS OF SPOTTED RATFISH (*HYDROLAGUS COLLIEI*) IN THE MONTEREY BAY NATIONAL MARINE SANCTUARY
- 08:45 Seagroves, E. E.; Horodysky, A. Z.; Brill, R. W.; Johnson, A. K.: VISUAL ECOPHYSIOLOGY OF TAUTOG (*TAUTOGA ONTIS*)
- 09:00 Watkins, J. A.; Arnott, S.; Roumillat, W.; Hein, J.; Williams, A.: HEALTH ASSESSMENT AND SEX RATIO OF THE AMERICAN EEL, ANGUILLA ROSTRATA, IN THE SOUTH CAROLINA TRIBUTARIES
- 09:15 Murray, J. R.; Young, S. J.; Williams, H. N.: OBSERVING THE INFLUENCE OF ALGAL BLOOMS ON THE BACTERIAL COMMUNITY STRUCTURE WITHIN IN A FRESHWATER COMMUNITY LAKE
- 09:30 Mosley, C. M.; Roth, M. S.; Deheyn, D. D.: EFFECTS OF COPPER EXPOSURE ON THE *ACROPORA YONGEI* CORAL FLUORESCENCE
- 09:45 Gibson, E. S.; Durbin, E. G.: IDENTIFICATION OF THE TWO ACARTIA TONSA POPULATIONS LOCATED IN NARRAGANSETT BAY AND ANALYSIS OF THE BIOLOGICAL DIFFERENCES PRESENT BETWEEN THEM

004 The Southern Ocean And Its Role In The Climate System

Chair(s): Stephanie Downes, sdownes@princeton.edu
Nicole Jeffery, njeffery@lanl.gov
Joellen Russell, jrussell@email.arizona.edu
Wilbert Weijer, wilbert@lanl.gov

Location: Ballroom I

- 08:00 Jullion, L.; Naveira Garabato, A. C.; Meredith, M. P.; King, B. A.; Courtois, P.: RECENT DECADEAL-SCALE FRESHENING OF THE ANTARCTIC BOTTOM WATER EXPORTED FROM THE WEDDELL SEA
- 08:15 Orsi, A. H.; Wiederwohl, C. L.; Swift, J. H.: EVOLVING CHARACTERISTICS OF THE SOUTHERN PACIFIC OCEAN
- 08:30 Deb, P.; Dash, M. K.; Samanta, D.; Pandey, P. C.: INTRUSION OF ANTARCTIC MELT WATER AND ITS EFFECT ON UPPER OCEAN VARIABILITY IN THE SOUTHERN INDIAN OCEAN
- 08:45 Lin, J. T.; Golden, K. M.; Furse, C.; Lubbers, D.: FLUID PERMEABILITY AND THE STRUCTURE OF ANTARCTIC SEA ICE
- 09:00 Gully, A.; Golden, K. M.; Lin, J.; Sampson, C.; Eicken, H.; Ingham, M.; Worby, A. P.: CRITICAL BEHAVIOR OF FLUID AND ELECTRICAL TRANSPORT IN SEA ICE
- 09:15 Lee, T.; Boening, C.: EXTREME OCEANIC AND ATMOSPHERIC ANOMALIES IN THE SOUTH PACIFIC AND WESTERN ANTARCTICA ASSOCIATED WITH THE 2009-10 EL NINO
- 09:30 Boening, C.; Lee, T.: THE IMPACTS OF CENTRAL- AND EASTERN-PACIFIC EL NINO EVENTS ON THE SOUTHERN OCEAN
- 09:45 Le Sommer, J.; Zika, J. D.; Molines, J. M.; Barnier, B.; Dufour, C. O.; Penduff, T.; Vivier, F.: ON THE ROLE OF EDDIES IN THE SOUTHERN OCEAN TEMPERATURE RESPONSE TO THE SOUTHERN ANNULAR MODE.
- 10:30 Sprattall, J.; Sweeney, C.: WARM, PCO₂ ENRICHED WATERS UPWELL IN DRAKE PASSAGE DURING LA NINA BUT NOT DURING POSITIVE SAM EVENTS
- 10:45 Dufour, C. O.; Le Sommer, J.; Gehlen, M.; Orr, J. C.; Simeon, J.; Molines, J. M.; Barnier, B.: ON-EDDY COMPENSATION OF ENHANCED SEA-TO-AIR CO₂ FLUXES DURING POSITIVE PHASES OF THE SAM
- 11:00 Rodgers, K. B.; Aumont, O.; Iudicone, D.; Wanninkhof, R.: STORMINESS CONTROLS ON SOUTHERN OCEAN BIOGEOCHEMISTRY AND ECOSYSTEMS
- 11:15 Carranza, M. M.; Gille, S. T.: THE INFLUENCE OF WINDS AND SEA SURFACE TEMPERATURE ON SUMMER CHLOROPHYLL-A THROUGH MIXED LAYER DEPTH DYNAMICS IN THE SOUTHERN OCEAN
- 11:30 Frenger, J.; Gruber, N.; Knutti, R.; Münnich, M.: ON THE IMPACT OF EDDIES ON THE SOUTHERN OCEAN CHLOROPHYLL DISTRIBUTION
- 11:45 Thomalla, S. J.; Fauchereau, N.; Tagliabue, A.; Monteiro, P. M.; Swart, S.; Bopp, L.: BOTTOM UP CONTROLS OF PHYTOPLANKTON BIOMASS IN THE SOUTHERN OCEAN AT SEASONAL AND SUB-SEASONAL TIME SCALES
- 12:00 Death, R. M.; Monteiro, F. M.; Wadham, J. L.; Ridgwell, A.; Tranter, M.: MODELLING NUTRIENT RELEASE TO THE SOUTHERN OCEAN FROM THE ANTARCTIC ICE SHEET.
- 12:15 Huang, K.; Ducklow, H.; Bender, M. L.: SPATIAL AND INTER-ANNUAL VARIABILITY OF NCP AND GPP IN THE WESTERN ANTARCTIC PENINSULA REGION, 2008-2011

006 Advances In Coastal Ocean Modeling, Analysis, and Prediction

Chair(s): Villy Kourafalou, vkourafalou@rsmas.miami.edu
Pierre De Mey, demey-redir@neyak.org
Ruoying He, rhe@ncsu.edu
Alex Kurapov, kurapov@coas.oregonstate.edu

Location: Room 251

- 08:00 Szekely, T.; Marie, L.: NUMERICAL MODEL AND OBSERVATIONS OF INTERACTIONS BETWEEN A COASTAL SHELF TIDAL FRONT AND A BARTROPIC JET.
- 08:15 Wei, H.; Yuan, C. Y.; Luo, X. F.; Zhang, Z. H.; Lu/Youyu, Y. Y.: FORCING MECHANISMS OF OCEAN TEMPERATURE AND CIRCULATION VARIATIONS IN THE YELLOW SEA

- 08:30 Teng, Y. C.; Wang, H.: A NUMERICAL STUDY OF THE EFFECT OF OCEANIC BOTTOM BOUNDARY LAYER DYNAMICS ON FORERUNNER DURING HURRICANE IKE IN THE NORTHERN GULF OF MEXICO
- 08:45 Kourafalou, V. H.; Kang, H.; Hogan, P.; Smedstad, O. M.: ON THE ROLE OF LOOP CURRENT EDDIES IN ALTERING THE OIL PATHWAYS DURING THE DEEPWATER HORIZON OIL SPILL
- 09:00 Paris, C. B.; Le Hénaff, M.; Aman, Z. M.; Helgers, J.; Wang, D. P.; Subramaniam, A.; Kourafalou, V. H.; Srinivasan, A.; Hogan, P. J.: THREE-DIMENSIONAL EVOLUTION OF THE MACONDO WELL BLOWOUT: A NESTED NUMERICAL APPROACH TO THE TRANSPORT OF OIL
- 09:15 Xu, J.; Patchen, R.: HYPOXIA MODELING IN THE NORTHERN GULF OF MEXICO
- 09:30 Feng, Y.; George, J. A.; DiMarco, S. F.; Hetland, R.; Fennel, K.; Friedrichs, M. A.: UNDERSTANDING HYPOXIC AREA VARIABILITY IN THE NORTHERN GULF OF MEXICO FROM A THREE-DIMENSIONAL COUPLED PHYSICAL-BIOGEOCHEMICAL MODEL
- 09:45 Gan, J.: COUPLED CIRCULATION AND BIOGEOCHEMISTRY MODELING SYSTEM IN THE CHINA SEAS: BASIN-SHELF-ESTUARY INTERACTION

013 Oceanic Uptake Of Heat And Greenhouse Gases: Dynamic And Thermodynamic Controls And Inferences From Tracers

Chair(s): Geoffrey (Jake) Gebbie, ggebbie@whoi.edu
Mark Holzer, mholzer@unsw.edu.au
William Smethie, bsmeth@ldeo.columbia.edu
Laure Zanna, zanna@atm.ox.ac.uk

Location: Ballroom G

- 08:00 Purkey, S. G.; Johnson, G. C.: A SLOW DOWN OF ANTARCTIC BOTTOM WATER PRODUCTION AND CIRCULATION BETWEEN THE 1980S AND 2000S
- 08:15 Waugh, D. W.; Primeau, F.; DeVries, T.; Holzer, M.: DECADAL CHANGES IN VENTILATION OF SOUTHERN OCEANS INFERRED FROM CFC MEASUREMENTS.
- 08:30 Ayers, J. M.; Lozier, M. S.: THE IMPORTANCE OF GEOSTROPHIC ADVECTION IN REGULATING THE NORTH PACIFIC CARBON SINK
- 08:45 Williams, R. G.; Roussenov, V.; Smith, D.; Lozier, M. S.: A MECHANISTIC VIEW OF HOW HEAT TRANSPORT VARIES IN THE NORTH ATLANTIC OCEAN
- 09:00 Abernathy, R. P.; Marshall, J.: GLOBAL ESTIMATES OF EDDY MIXING RATES AND IMPLICATIONS FOR TRACER UPTAKE
- 09:15 DeVries, T. J.; Primeau, F. W.: DYNAMICALLY- AND OBSERVATIONALLY-CONSTRAINED ESTIMATES OF WATER-MASS DISTRIBUTIONS AND AGES IN THE GLOBAL OCEAN
- 09:30 Zika, J. D.; England, M. H.; Sijp, W. P.: OCEAN CIRCULATION AND CHANGE IN THERMOHALINE COORDINATES
- 09:45 Zhang, Y.; Vallis, G. K.: OCEAN HEAT UPTAKE IN NON-EDDYING AND EDDYING SIMULATIONS

016 Dynamics And Observations Of Submesoscale Oceanic Processes

Chair(s): Tamay M. Ozgokmen, tozgokmen@rsmas.miami.edu
M. Jeroen Molemaker, nmolem@atmos.ucla.edu
James C. McWilliams, jcm@atmos.ucla.edu
Eric D'Asaro, dasaro@apl.washington.edu

Location: Ballroom A

- 08:00 McWilliams, J. C.: SUBMESOSCALE PHENOMENA, DYNAMICS, AND CONSEQUENCES
- 08:30 Sundermeyer, M. A.; Birch, D. A.; Ledwell, J. R.; Terray, E. A.; Levine, M. D.; Pierce, S.: STUDIES OF SMALL-SCALE LATERAL DISPERSION IN THE OCEAN
- 08:45 Levine, M. D.; Cervantes, B. K.; Pierce, S. D.; Ledwell, J. R.; Sundermeyer, M. A.; Birch, D. A.: HORIZONTAL AND VERTICAL DIFFUSIVITY ESTIMATED FROM A DYE STREAK

- 09:00 Concannon, B. M.; Terray, E. A.; Sundermeyer, M. A.; Levine, M. D.; Ledwell, J. R.: LIDAR STUDIES OF SMALL-SCALE LATERAL DISPERSION IN THE OCEAN
- 09:15 Lauffenburger, N. E.; Sanford, T. B.; Lien, R.: SEPARATING INTERNAL WAVES AND VORTICAL MOTIONS IN THE OPEN OCEAN
- 09:30 Kunze, E.: FINESCALE TOWYOS IN THE SARGASSO SEA
- 09:45 Poulain, P. M.; Gerin, R.; Mauri, E.; Zambianchi, E.; Falco, P.; Griffa, A.; Schroeder, K.; Ozgokmen, T.; Haza, A.; Mortier, L.: CONTEMPORANEOUS OBSERVATIONS OF MESOSCALE AND SUBMESOSCALE PROCESSES WITH DRIFTERS AND A GLIDER
- 10:30 Baschek, B.; Molemaker, M. J.; Holt, B.; Ohlmann, C.; Vagle, S.; Smith, G. B.; Marmorino, G. O.; Rhea, W. J.; Miller, W. D.: HIGH-RESOLUTION IN SITU AND AERIAL MEASUREMENTS OF SUBMESOSCALE EDDIES, FRONTS, AND FILAMENTS
- 10:45 Holt, B.; Baschek, B.; Molemaker, M. J.; Marmorino, G.; Smith, G.: AIRBORNE SAR RAPID-REPEAT OBSERVATIONS OF SMALL-SCALE EDDIES OBTAINED DURING THE SUBMESOSCALE EXPERIMENT-1 IN THE SOUTHERN CALIFORNIA BIGHT
- 11:00 Smith, G. B.; Marmorino, G. O.; Miller, W. D.; Baschek, B.: TEMPORAL EVOLUTION OF SUBMESOSCALE EDDIES NEAR SANTA CATALINA ISLAND
- 11:15 Ohlmann, J. C.: SUBMESOSCALE FLOWS OFF THE CALIFORNIA COAST: DIFFERENTIAL KINEMATIC PROPERTY CALCULATIONS FROM LAGRANGIAN OBSERVATIONS
- 11:30 Bower, A. S.; Hendry, R. M.; Amrhein, D. E.; Lilly, J. M.: DIRECT OBSERVATIONS OF FORMATION AND PROPAGATION OF SUBPOLAR EDDIES INTO THE SUBTROPICAL NORTH ATLANTIC
- 11:45 Timmermans, M. L.; Cole, S.; Toole, J. M.: HORIZONTAL DENSITY STRUCTURE AND RESTRATIFICATION OF THE ARCTIC OCEAN SURFACE LAYER
- 12:00 Nycander, J.: ENERGY CONVERSION AND MIXING ENERGY WITH A NONLINEAR EQUATION OF STATE
- 12:15 Fan, Z.: IS THE SMALL-SCALE TURBULENCE AN EXCLUSIVE BREAKING PRODUCT OF OCEANIC INTERNAL WAVES?
- 14:00 Ozgokmen, T. M.; Poje, A. C.; Fischer, P. F.; Ryan, E.: ON THE INFLUENCE OF MESOSCALE SHEAR ON SURFACE MIXED-LAYER INSTABILITIES
- 14:15 Taylor, J.; Smith, K. S.; Ferrari, R.: THE STRUCTURE OF THE THREE-DIMENSIONAL TRACER CASCADE IN 'IDENTICAL' BOUSSINESQ AND QG SIMULATIONS
- 14:30 Skyllingstad, E. D.; Samelson, R. M.: BAROCLINIC INSTABILITY AND TURBULENT MIXING IN THE OCEAN BOUNDARY LAYER
- 14:45 Molemaker, M. J.; McWilliams, J. C.: SUB-MESOSCALE INSTABILITIES ON THE RIM OF A MESOSCALE EDDY
- 15:00 Malecha, Z.; Chini, G. P.; Julien, K.: MULTISCALE ANALYSIS AND SIMULATION OF THE WIND-DRIVEN OCEAN SURFACE BOUNDARY LAYER
- 15:15 Lelong, M. P.; Birch, D. A.; Sundermeyer, M. A.: SUBMESOSCALE LATERAL DISPERSION IN FLOWS DOMINATED BY INTERNAL WAVES
- 15:30 Hua, L.; Menesguen, C.; Schopp, R.; Carton, X.; Aiki, H.: DYNAMICS AND ENERGETICS OF PERSISTENT LAYERING SURROUNDING COMPACT VORTICES
- 15:45 Tandon, A.; Nagai, T.; Kunze, E.; Mahadevan, A.: SPONTANEOUS GENERATION OF NEAR-INERTIAL WAVES FROM KUROSHIO FRONT INSTABILITIES

023 Dissolved Organic Matter And The 'Hidden' Carbon Cycle

Chair(s): Andy Ridgwell, andy@seao2.org
Dennis Hansell, dhansell@rsmas.miami.edu
Sandra Arndt, san.arndt@gmail.com
Ellen Druffel, edruffel@uci.edu

Location: Ballroom C

- 08:00 Hansell, D. A.; Carlson, C. A.: CONSIDERING THE NON-CONSERVATIVE BEHAVIOR OF REFRACTORY DOC IN THE MODERN DEEP OCEAN: OPENING WINDOWS TO ITS DYNAMICS IN ANCIENT OCEANS

- 08:15 Niggemann, J.; Gerdt, G.; Dittmar, T.: HOW DYNAMIC IS "REFRACTORY" DOM? - A GEO-METABOLOMIC APPROACH
- 08:30 Walker, B. D.; Beaupre, S. R.; Guilderson, T. P.; Druffel, E. R.; McCarthy, M. D.: MOLECULAR SIZE AS A MASTER VARIABLE GOVERNING THE AGE OF THE MARINE DISSOLVED ORGANIC CARBON RESERVOIR
- 08:45 Komada, T.; Burdige, D. J.; Crispo, S. M.; Druffel, E. R.; Griffin, S.; Johnson, L.; Johnson, L.: RADIOCARBON SIGNATURES OF DISSOLVED ORGANIC CARBON (DOC) IN SANTA MONICA BASIN SEDIMENTS AND IMPLICATIONS FOR THE ROLE OF SEDIMENTS IN THE OCEANIC DOC CYCLE
- 09:00 Rothman, D. H.: THE MYSTERIOUS DYNAMICS OF DISSOLVED ORGANIC CARBON IN THE ANCIENT CARBON CYCLE
- 09:30 Sexton, P. E.; Norris, R. D.; Wilson, P. A.; Paelike, H.; Westerhold, T.; Roehl, U.; Bolton, C. T.; Gibbs, S.: EOCENE GLOBAL WARMING EVENTS DRIVEN BY VENTILATION OF OCEANIC DISSOLVED ORGANIC CARBON
- 09:45 Johnston, D. T.; Macdonald, F. A.; Gill, B. C.; Hoffman, P. F.; Schrag, D. P.: THE ROLE OF DOC IN THE NEOPROTEROZOIC CARBON CYCLE

029 Sediment Transport And Deposition In Lakes, Estuaries, And Shallow Shelves

Chair(s): Nathan Hawley, nathan.hawley@noaa.gov
Courtney K. Harris, ckharris@vims.edu
Lawrence P. Sanford, lsanford@umces.edu

Location: 250

- 08:00 Mikkelsen, O. A.; Agrawal, Y. C.: GRAIN SIZE DISTRIBUTION AND SEDIMENT FLUX STRUCTURE IN A RIVER PROFILE, MEASURED WITH A LISST-SL INSTRUMENT
- 08:15 Garwood, J. C.; Hill, P. S.; Law, B. A.: BIOFILMS AND SIZE SORTING OF INTERTIDAL SEDIMENT DURING EROSION.
- 08:30 Hooshmand, A.; Horner-Devine, A. R.; Ogston, A. S.: EXPERIMENTAL INVESTIGATION OF TURBULENCE AND SUSPENDED SEDIMENT IN THE WAVE BOTTOM BOUNDARY LAYER
- 08:45 Todd, D. J.; Souza, A.; Jago, C. F.: TURBULENCE-CONTROLLED FLOCCULATION IN A MACRO-TIDAL ESTUARY
- 09:00 Lacy, J. R.; Gladding, S.; Brand, A. J.; Collignon, A. G.; Stacey, M. T.: SUSPENDED SEDIMENT TRANSPORT FROM SHALLOWS TO CHANNEL IN AN ESTUARY
- 09:15 Sanford, L. P.; Newell, R. I.; Richardson, J. E.; Suttles, S. E.; Haghshenas, S. A.; Kwon, S. R.: SEDIMENT TRANSPORT PROCESSES AND DISPERSION OF BIODEPOSITS FROM A SHALLOW OYSTER AQUACULTURE SITE
- 09:30 Safak, I.; Wiberg, P. L.: HYDRODYNAMICS AND WAVE-ENHANCED SEDIMENT TRANSPORT IN A BARRIER ISLAND-LAGOON-MARSH SYSTEM: A MODEL APPLICATION ON THE EASTERN SHORE OF VIRGINIA
- 09:45 Palinkas, C. M.; Barth, N.; Koch, E. W.; Shafer, D. J.: DETERMINING THE INFLUENCE OF BREAKWATERS ON NEARSHORE SEDIMENTATION IN CHESAPEAKE BAY: METHODS AND OBSERVATIONS
- 10:30 Orpin, A. R.; Walsh, J. P.; Corbett, D. R.; Ogston, A. S.; Hale, R. P.; Kiker, J. M.; Moriarty, J. M.; Harris, C. K.: FLOODS, OCEAN STORMS AND STRATIGRAPHIC VARIABILITY OVER A YEAR-LONG EXPERIMENT ON THE MUDDY AND ENERGETIC WAIPAOA RIVER MARGIN
- 10:45 Hale, R. P.; Ogston, A. S.; Walsh, J. P.; Orpin, A. R.: ANNUAL TRENDS IN SEDIMENT FLUX ON THE WAIPAOA RIVER MARGIN, NZ
- 11:00 Corbett, D. R.; Walsh, J. P.; Orpin, A.; Ogston, A.; Kiker, J.; Hale, R.; Moriarty, J.; Harris, C. K.: AN INVESTIGATION OF SPATIAL AND TEMPORAL VARIABILITY OF SURFACE SEABED PROPERTIES AND ERODIBILITY ON THE WAIPAOA RIVER MARGIN, NEW ZEALAND
- 11:15 Walsh, J. P.; Corbett, D. R.; Kiker, J. M.; Young, D.; Orpin, A.: CHARACTER AND VARIABILITY OF SHELF EVENT STRATA ON THE WAIPAOA AND MISSISSIPPI RIVER MARGINS
- 11:30 Hsu, T. L.; Chen, J.; Geyer, W. R.: ON THE OCCURRENCE OF LOW CONCENTRATION HYPERPYCNAL FLOW

- 11:45 Hawley, N.: OBSERVATIONS OF SEDIMENT TRANSPORT DURING THE WINTER IN THE LAURENTIAN GREAT LAKES
- 12:00 Woodruff, J. D.; Kratz, L.; Yellen, B.; Martini, A.: TIDAL CONTROLS ON THE TRAPPING OF HURRICANE IRENE SEDIMENTS IN THE LOWER CONNECTICUT RIVER
- 12:15 Savidge, D. K.; Gargett, A. E.; Voulgaris, G.: TURBULENT PROCESSES AFFECTING THE SEABED AND SEDIMENT TRANSPORT ON THE MID-SHELF: LANGMUIR SUPERCELLS, CONVECTION AND TIDES FROM A TWO YEAR VADCP DEPLOYMENT

031 Biogeochemical Cycles Of Continental Margins: Drivers And Impacts

Chair(s): Antonio Mannino, antonio.mannino@nasa.gov
Cécile Cathalot, C.Cathalot@nioo.knaw.nl
Marjorie Friedrichs, marjy@vims.edu
Peter Griffith, peter.c.griffith@nasa.gov

Location: Ballroom J

- 08:00 Hales, B.; Alin, S.; cai, W. J.; Coble, P.; Lohrenz, S.; Mathis, J.; Mckinley, G.; Najjar, R.: CARBON CYCLING IN OCEAN MARGINS: A TUTORIAL
- 08:30 McKinley, G. A.; Bennington, V.; Urban, N. R.: PHYSICAL DRIVERS OF BIOGEOCHEMICAL AND CARBON CYCLING IN LAKE SUPERIOR
- 08:45 Lohrenz, S. E.; Cai, W. J.; Tian, H.; He, R.; Hopkinson, C. S.; Xue, Z.; Fennel, K.; Howden, S. D.: COUPLED TERRESTRIAL-OCEAN MODELING OF CLIMATE AND LAND USE CHANGE IMPACTS ON BIOGEOCHEMICAL AND ECOSYSTEM PROCESSES IN THE MISSISSIPPI BASIN AND GULF OF MEXICO
- 09:00 Monacci, N.; Mathis, J. T.; Evans, W.; Bates, N. R.; Sabine, C. L.; Juranek, L. W.; Takahashi, T.: CONSTRAINING CO₂ BUDGETS IN THE CONTINENTAL SHELF SEAS OF ALASKA: NEW INSIGHTS FROM MOORINGS AND OCEAN TIME-SERIES
- 09:15 Turi, G.; Lachkar, Z.; Gruber, N.: THE CARBON BUDGET OF THE CENTRAL CALIFORNIA CURRENT SYSTEM
- 09:30 Friedrichs, M.; The U.S. ECoS Team, : COASTAL CARBON FLUXES ALONG THE U.S. EASTERN CONTINENTAL SHELF DERIVED FROM A COUPLED BIOGEOCHEMICAL-CIRCULATION MODEL
- 09:45 Xue, J.; Friedrichs, M.; Mannino, A.; Cahill, B.; Wilkin, J.; Lee, C.; Fennel, K.; Hofmann, E.; Najjar, R.; Hyde, K.: THE EFFECT OF RIVER DISCHARGE ON THE CARBON CYCLING OF THE US EASTERN CONTINENTAL SHELF: RESULTS FROM A THREE-DIMENSIONAL MODEL STUDY
- 10:30 Rabalais, N. N.: RACHEL CARSON AWARD LECTURE - SIGNIFICANCE AND INSIGNIFICANCE OF THE 2011 MISSISSIPPI FLOOD TO SURROUNDING WATERS
- 11:00 Roberts, B. J.; Luthringer, J. E.; Warner, T. R.; Semmler, C. M.; Burgin, A. J.; Kolker, A. S.; Rosenheim, B. E.; Rabalais, N. N.: THE 2011 ATCHAFALAYA RIVER FLOOD AND A POSSIBLE ALTERED SYSTEM STATE FOR THE ATCHAFALAYA RIVER DELTA ESTUARY
- 11:15 Fichot, C. G.; Benner, R.: THE SPECTRAL SLOPE COEFFICIENT OF CDOM ($S_{275,295}$) AS A TRACER OF TERRIGENOUS DOC IN RIVER-INFLUENCED OCEAN MARGINS
- 11:30 Chen, R. F.; Gardner, G. B.; Wang, X. C.; Peri, F.: SOURCES OF OUTWELLED DISSOLVED ORGANIC MATTER IN SALT MARSHES
- 11:45 Mulholland, M. R.; Bernhardt, P. W.; Saryk, C. J.; Mannino, A.; Hyde, K.: SEASONAL AND INTERANNUAL VARIABILITY IN PRIMARY PRODUCTIVITY AND N UPTAKE ALONG THE NORTHEASTERN U.S. CONTINENTAL MARGIN
- 12:00 Needoba, J. A.; Maier, M. A.; Moeller, F. U.; Peterson, T. D.; Barnard, A. H.; Morace, J. L.; Baptista, A. M.: QUANTIFYING NET TRANSPORT OF RIVER NUTRIENTS AND ORGANIC CARBON TO THE COLUMBIA RIVER ESTUARY USING IN SITU SENSORS
- 12:15 Goni, M.; Hastings, R.; Wheatcroft, R.; Steingass, S.; Smith, S.; Hatten, J.; Borgeld, J.; Pasternack, G.; Gray, A.; Watson, E.: DELIVERY AND ACCUMULATION OF PARTICULATE ORGANIC MATTER ALONG THE WEST COAST OF NORTH AMERICA: THE IMPORTANCE OF SMALL MOUNTAINOUS RIVERS

032 The Arctic And Subpolar North Atlantic As The Pacemakers For Climate Change

Chair(s): Igor Yashayaev, Igor.Yashayaev@dfp-mpo.gc.ca
Dan Seidov, Dan.Seidov@noaa.gov
Dagmar Kieke, dkieke@physik.uni-bremen.de
Entcho Demirov, entcho@mun.ca

Location: Room 150

- 08:00 Proshutinsky, A.; Krishfield, R.; Timmermans, M. L.; Toole, J. M.: FRESH WATER TRANSFORMATIONS AND DYNAMICS IN THE ARCTIC OCEAN
- 08:15 Newton, R.; Schlosser, P.; Mortlock, R.; Babbin, A.: CHANGING FRESHWATER SOURCES TO THE CANADIAN BASIN: 1989 TO 2005
- 08:30 Smethie, W. M.; Schlosser, P.; Steele, M.; Friedrich, R.; Newton, B.; Motz, E.; Lee, H.; Fowler, C.: TRANSFER OF FRESHWATER FROM THE 2007 SEA ICE MELT EVENT BETWEEN THE BEAUFORT AND LINCOLN SEAS: PATHWAYS AND TRANSFER TIME
- 08:45 Seidov, D.; Smolyar, I.; Arzayus, K.; Boyer, T.; Levitus, S.; Zweng, M.: NEW ESTIMATES OF MULTIDECADAL THERMOHALINE VARIABILITY IN BARENTS AND NORDIC SEAS FROM WORLD OCEAN DATABASE
- 09:00 Chepurin, G. A.; Carton, J. A.; Reagan, J.: TRACKING ANOMALOUS SEA SURFACE TEMPERATURE VARIABILITY OF THE NORDIC SEAS, 1982-2010
- 09:15 Glessmer, M. S.; Eldevik, T.; Nilsen, J. E.: NORDIC SEAS FRESHWATER ANOMALIES TRACED BACK TO THE ATLANTIC INFLOW?
- 09:30 De Boer, A. M.: A HOLISTIC VIEW ON ARCTIC-SUBARCTIC VOLUME FLUXES.
- 09:45 Holliday, N. P.; Bacon, S.; Aksenov, Y.; de Cuevas, B.; Colbourne, E.; Lee, C.; Curry, B.; de Steur, L.; Hansen, E.: REDUCTION IN ARCTIC OCEAN FRESHWATER EXPORT
- 10:30 Dickson, R. R.; Osterhus, S.; Klages, M.: ABYSSAL WARMING IN THE NORDIC SEAS
- 10:45 Jochumsen, K.; Quadfasel, D.; Käse, R. H.; Valdimarsson, H.: VARIATIONS OF THE DENMARK STRAIT OVERFLOW
- 11:00 Visbeck, M.; Fischer, J.; Kanzow, T.; Zantopp, R.: CHANGES IN NEAR-BOTTOM LABRADOR SEA OUTFLOW?
- 11:15 Straneo, F.; Andresen, C.; Sutherland, D.; Holte, J.: IMPACT OF ARCTIC AND ATLANTIC VARIABILITY ON GREENLAND'S GLACIERS
- 11:30 Behrens, E.; Böning, C. W.; Biastoch, A.: HOW IMPORTANT ARE MESOSCALE EDDIES IN DETERMINING THE SUBPOLAR DEEPWATER FORMATION, FRESHWATER DISTRIBUTION AND AMOC RESPONSE IN GREENLAND MELTING SCENARIOS?
- 11:45 Langehaug, H. R.; Rhines, P. B.; Eldevik, T.; Mignot, J.; Lohmann, K.: WATER MASS TRANSFORMATION AND THE NORTH ATLANTIC CURRENT IN THREE MULTI-CENTURY CLIMATE MODEL SIMULATIONS
- 12:00 Xu, X.; Schmitz, W. J.; Hurlburt, H. E.; Hogan, P. J.: TRANSPORT OF THE SUBPOLAR NORTH ATLANTIC FROM EDDY-RESOLVING SIMULATIONS
- 12:15 Yeager, S. G.; Karspeck, A.; Danabasoglu, G.; Tribbia, J.; Teng, H.: A CCSM4 DECADAL PREDICTION CASE STUDY: LATE 20TH CENTURY NORTH ATLANTIC OCEAN HEAT CONTENT
- 14:00 Hakkinen, S. M.; Rhines, P. B.; Worthen, D. L.: COHERENT MULTIDECADAL ATMOSPHERIC AND OCEANIC VARIABILITY IN THE NORTH ATLANTIC: BLOCKING CORRESPONDS WITH WARM SUBPOLAR OCEAN
- 14:15 Demirov, E.; Yashayaev, I.; Hausier, T.; Lundrigan, S.; Harlick, A.: MODEL STUDY OF THE MECHANISM OF RECENT CHANGES IN THE LABRADOR SEA
- 14:30 Kieke, D.; Rhein, M.; Yashayaev, I.; Steinfeldt, R.; Azetsu-Scott, K.: DECADAL VARIABILITY OF LABRADOR SEA WATER FORMATION INFERRED FROM CHLOROFLUOROCARBON TIME SERIES
- 14:45 Yashayaev, I.; Demirov, E.; Kieke, D.; Loder, J. W.; Morales Maqueda, M. A.: RECENT HYDROGRAPHIC DEVELOPMENTS IN THE LABRADOR SEA AND VARIABILITY IN THE PROPERTIES OF THE DEEP WESTERN BOUNDARY CURRENT DOWNSTREAM

- 15:00 Mercier, H.; Lherminier, P.; Gourcuff, C.; Sarafanov, A.; Falina, A.; Daniault, N.; Gaillard, F.; Ferron, B.; Thierry, V.: VARIABILITY OF THE CIRCULATION AND HEAT TRANSPORT FROM SIX OCCUPATIONS OF THE A25 GREENLAND-PORTUGAL OVIDE SECTION BETWEEN 1997 AND 2010
- 15:15 Fedorov, A. V.; Sevellec, F.: THE LEADING, INTERDECADAL MODE OF THE ATLANTIC MERIDIONAL OVERTURNING CIRCULATION IN A HIERARCHY OF OCEAN AND COUPLED MODELS
- 15:30 Rhein, M.; Steinfeldt, R.; Kieke, D.: THE DEEP WESTERN BOUNDARY CURRENT AND THE CIRCULATION OF NEWLY FORMED DEEP WATER
- 15:45 Zhang, D.; McPhaden, M. J.; Cheng, W.; Biastoch, A.; Delworth, T.: CONNECTION BETWEEN T/S DECADAL VARIATIONS IN THE SUBPOLAR NORTH ATLANTIC AND THE TROPICAL ATLANTIC AMOC

033 Oceanographic Processes At The Antarctic Continental Margins

Chair(s): Robin Muench, rmuench@esr.org
Eileen Hofmann, hofmann@ccpo.ou.edu
Anna Wählén, anna.wahlin@gu.se
Laurie Padman, padman@esr.org

Location: Ballroom I

- 14:00 Costa, D. P.: FROM ICE-SHEETS TO TOP PREDATORS: THE IMPORTANCE OF CONTINENTAL MARGINS IN THE PHYSICS AND BIOLOGY OF THE SOUTHERN OCEAN
- 14:30 Timmermann, R.; Hellmer, H. H.: PROJECTIONS OF ICE SHELF BASAL MELTING IN A GLOBAL FINITE-ELEMENT SEA ICE--ICE SHELF--OCEAN MODEL
- 14:45 Gordon, A. L.; Huber, B. A.; Busecke, J.: SEASONAL AND INTERANNUAL FLUCTUATIONS OF BOTTOM WATER EXPORT FROM THE WESTERN ROSS SEA
- 15:00 Dohan, K.; Wählén, A. K.; Muench, R. D.; Kalén, O.: THE ROLE OF ACC EDDIES AND WINDS IN ACROSS-SHELF WARM DEEP WATER TRANSPORT IN THE AMUNDSEN SEA
- 15:15 Schlosser, P.; Pasqualini, A.; Winckler, G.; Jacobs, S.: TRANSFER OF SUBGLACIAL WATER ACROSS THE GROUNDING LINE OF THE ROSS ICE SHELF: INDICATIONS FROM HELIUM ISOTOPE DATA
- 15:30 Pinones, A.; Hofmann, E. E.; Daly, K. L.; Dinniman, M. S.; Klinck, J. M.: MODELING EARLY LIFE STAGES OF ANTARCTIC KRILL UNDER PRESENT AND FUTURE ENVIRONMENTAL CONDITIONS ON THE WEST ANTARCTIC PENINSULA
- 15:45 Cape, M. R.; Vernet, M.; Scambos, T.; Domack, E.; Truffer, M.: THE RELATIONSHIP BETWEEN SURFACE METEOROLOGICAL OBSERVATIONS AND MODES OF CLIMATE VARIABILITY IN THE LARSEN ICE SHELF SYSTEM, ANTARCTICA

035 Using Data From Autonomous Vehicles And Drifters To Support Education And Outreach

Chair(s): James A. Yoder, jyoder@whoi.edu
Janice McDonnell, mcdonnel@marine.rutgers.edu

Location: Ballroom F

- 08:00 Maughan, T. G.; Rajan, K.; Bellingham, J. G.; McCann, M.; Cline, D.; Gomes, K.; O'Reilly, T.; Edgington, D.; Das, J.; Chavez, F.: OCEANOGRAPHIC DECISION SUPPORT SYSTEM, A TOOL TO IMPROVE EFFICIENCY OF BIOLOGICAL OCEAN STUDY
- 08:15 Johnson, K. S.; Matsumoto, G.; Scheurle, C.; Claustre, H.; Perry, M. J.; Riser, S.: UNDERSTANDING OCEAN CHEMISTRY AND BIOLOGY USING REAL-TIME DATA FROM PROFILING FLOATS
- 08:30 Crowley, M. E.; Glenn, S. M.; Lichtenwalner, C. S.; McDonnell, J.; deCharon, A.; Wieclawek, J.; Companion, C.; Levenson, S.; Rude, A.; McCurdy, A.: THE OCEAN OBSERVATORIES INITIATIVE EDUCATION AND PUBLIC ENGAGEMENT: DELIVERING REAL TIME DATA FOR TRANSFORMATIVE LEARNING IN THE UNDERGRADUATE CLASSROOM
- 08:45 Glenn, S. M.; Schofield, O.; Kohut, J.; McDonnell, J.; Gardner, K.: THE USE OF REAL-TIME DATA FROM GLOBALLY-DISTRIBUTED GLIDER MISSIONS IN THE UNDERGRADUATE CLASSROOM

- 09:00 Kohut, J. T.; Clark, H.; Gardner, K.; Lichtenwalner, C. S.; Florio, K.; Parsons, C.; McDonnell, J.: AUV RESEARCH AND EDUCATION IN THE ROSS SEA: SCIENTISTS SHARE RESEARCH EXPERIENCE WITH MIDDLE SCHOOL TEACHERS AND STUDENTS
- 09:15 Parsons, C. M.; Kohut, J.; McDonnell, J.; Florio, K.; Gardner, K.; Clark, H.; Lichtenwalner, S.: AUV RESEARCH AND EDUCATION IN THE ROSS SEA: A BROADER IMPACTS EVALUATION REPORT
- 09:30 Cetinic, J.; Companion, C.; deCharon, A.; Herren, C.; D'Asaro, E.; Lee, C.; Mahadevan, A.; Omand, M.; Perry, M. J.; Poulton, N.: NORTH ATLANTIC BLOOM 2008 WEBINAR SERIES
- 09:45 Simoniello, C.; Lembke, C.; Kirkpatrick, G. J.; Weisberg, R. H.; Kirkpatrick, B. A.; Jochens, A. E.; Howard, M. K.; Walker, S.; Szczechowski, C.: AUTONOMOUS UNDERWATER VEHICLES IN THE GCOOS-RA FOOTPRINT: A HOOK FOR TEACHING HOW DATA ARE USED IN THE REAL WORLD

037 Operational Applications Of Ocean Satellite Observations

Chair(s): Margaret Srinivasan, margaret.srinivasan@jpl.nasa.gov
Dr. Robert Leben, leben@colorado.edu

Location: Room 151

- 08:00 Powell, B. S.: OVERVIEW OF SATELLITE OBSERVATIONS AND THEIR EFFECTIVENESS IN OPERATIONAL MODELING
- 08:30 Strub, P. T.; Kurapov, A.; Venegas, R.; Yu, P.; Risien, C.; Mikulak, S.: IF YOU BUILD IT
- 08:45 Hafner, J.; Maximenko, N.; Woodring, D.; Woolaway, C.; Mackey, J.; Centurioni, L.; Eriksen, M.: REAL TIME MODELING AND OBSERVATIONS OF THE 2011 TSUNAMI DEBRIS FROM JAPAN
- 09:00 Rogachev, K. A.: SATELLITE AND DIRECT OBSERVATIONS OF HEADLAND EDDIES ASSOCIATED WITH A BOWHEAD WHALE FEEDING HOTSPOT IN THE SEA OF OKHOTSK
- 09:15 Eakin, C. M.; Liu, G.; Rauenzahn, J. L.; Burgess, T.; Christensen, T. R.; Heron, S. E.; Li, J.; Lucas, E. Y.; Skirving, W. J.; Strong, A. E.: NOAA CORAL REEF WATCH'S DECISION SUPPORT SYSTEM: A GLOBAL VIEW TO HELP MANAGERS PROTECT CORAL REEFS IN A CHANGING CLIMATE
- 09:30 Urquhart, E. A.; Hoffman, M. J.; Zaitchik, B. F.; Guikema, S. D.; Geiger, E. F.: REMOTELY SENSED ESTIMATES OF SURFACE SALINITY AND ENVIRONMENTAL VIBRIO IN THE CHESAPEAKE BAY
- 09:45 Stuart, K. M.; Long, D. G.: ICEBERG AND OCEAN CURRENT MODELING

038 Changing Biogeochemistry And Ecosystems In The Western North Pacific Continental Margins Under Climate Change And Anthropogenic Forcing

Chair(s): Kon-Kee Liu, kkliu@ncu.edu.tw
Minhan Dai, mdai@xmu.edu.cn
Gwo-Ching Gong, gong@ntou.edu.tw
Chih-Hau Hsieh, chsieh@ntu.edu.tw
Hiroaki Saito, hsaito@affrc.go.jp

Location: Ballroom J

- 14:00 Dai, M.; Xu, Y.; Han, A.: REDFIELD OR NON-REDFIELD NUTRIENT CONSUMPTION IN THE OCEAN
- 14:15 Umezawa, Y.; Yamaguchi, A.; Ishizaka, J.; Hasegawa, T.; Yoshimura, H.; Morii, Y.; Yamawaki, N.: SEASONAL SHIFT OF THE CONTRIBUTION OF CHANGJIANG RIVER AND KUROSHIO WATER TO NUTRIENT DYNAMICS AT THE CONTINENTAL SHELF OF EAST CHINA SEA
- 14:30 Chou, W.; Gong, G.: AN EUTROPHICATION-INDUCED CHANGE IN SEASONAL CO₂ UPTAKE IN THE CHANGJIANG PLUME AREA AND THE IMPACTED SHELF OF THE EAST CHINA SEA
- 14:45 Cancelled
- 15:00 Yeh, Y. C.; Gong, G. C.; Hsieh, C. H.: BIOGEOGRAPHY OF BACTERIAL COMMUNITY ALONG AN ENVIRONMENTAL GRADIENT IN THE SOUTHERN EAST CHINA SEA
- 15:15 Shang, S. L.; Li, L.: PHYTOPLANKTON BLOOM IN THE LUZON STRAIT BORDERING THE KUROSHIO DURING THE NORTHEAST MONSOON

- 15:30 Kim, T. W.; Lee, K.; Najjar, R. G.; Jeong, H. D.; Jeong, H. J.: INCREASING N ABUNDANCE RELATIVE TO P IN THE NORTHWESTERN PACIFIC OCEAN DUE TO ANTHROPOGENIC NITROGEN DEPOSITION
- 15:45 Saito, H.: HORIZONTAL VARIABILITY IN NITROGEN DYNAMICS IN THE KUROSHIO EXTENSION REGION

042 Eddy Correlation And New Impending Approaches For Measuring Fluxes In The Aquatic Environment

Chair(s): Peter Berg, pb8n@virginia.edu
Markus Huettel, mhuettel@fsu.edu

Location: Ballroom C

- 10:30 Reimers, C. E.; Ozkan-Haller, H. T.: ASSESSING THE CONTRIBUTIONS OF SURFACE AND INTERNAL WAVE MOTIONS TO EDDY OXYGEN FLUXES MEASURED ON CONTINENTAL SHELVES
- 10:45 Long, M. H.; Berg, P.; de Beer, D.; Ziemann, J. C.: METABOLISM OF SUBTROPICAL CORAL REEFS AND SEAGRASS BEDS DETERMINED BY EDDY CORRELATION
- 11:00 Xiao, J.; Liao, Q.; Bootsma, H. A.; Wang, B.: IN SITU MEASUREMENTS OF FLUXES OF PARTICLES AND DISSOLVED PHOSPHORS OVER A QUAGGA MUSSEL BED IN LAKE MICHIGAN
- 11:15 Koopmans, D.; Berg, P.: COASTAL STREAM ECOSYSTEM METABOLISM: A COMPARISON OF THE CONVENTIONAL OPEN WATER TECHNIQUE AND EDDY CORRELATION
- 11:30 Donis, D.; Holtappels, M.; Wenzhoefer, F.: BENTHIC EXCHANGE RATES MEASURED WITH EDDY CORRELATION SYSTEM IN EXTREME ENVIRONMENTS
- 11:45 Rheuban, J. E.; Berg, P.; McGlathery, K. J.: SEASONAL METABOLIC RATES IN RESTORED TEMPERATE SEAGRASS BEDS ON A MEADOW SCALE MEASURED WITH THE EDDY CORRELATION TECHNIQUE
- 12:00 Sansone, E. J.; Fram, J. P.; Glazer, B. T.: SEDIMENT FLUXES IN PERMEABLE SEDIMENTS CALCULATED FROM TEMPERATURE-VERIFIED MODELING OF POREWATER MOTION COMBINED WITH IN-SITU CHEMICAL MEASUREMENTS
- 12:15 Huettel, M.; Chipman, L.; Berg, P.; Meyer, V.; Klimant, I.; Glud, R. N.; Wenzhoefer, F.: EDDY CORRELATION MEASUREMENTS WITH FAST OXYGEN OPTODES

047 Integrative Power Of Ocean Observatories: Recent Insights And Future Directions

Chair(s): Steven G. Ackleson, sackleson@oceanleadership.org
Mairi Best, mmrbest@uvic.ca
Emmanuel Boss, emmanuel.boss@maine.edu
Richard Dewey, rdewey@uvic.ca

Location: Room 151

- 10:30 Ackleson, S. G.: OCEAN OBSERVATORIES: EVOLUTION AND FUTURE DIRECTIONS
- 10:45 Moran, K.; Barnes, C. R.: CABLED OCEAN OBSERVATORIES: PERSPECTIVES FROM NEPTUNE CANADA
- 11:00 Denman, K. L.; Dewey, R. W.; Thompson, K.; Tunnicliffe, V.; Wallace, D.: TRANSFORMING THE VENUS COASTAL OBSERVING NETWORK INTO A REAL TIME OPERATIONAL ENVIRONMENTAL AND OCEAN FORECASTING SYSTEM
- 11:15 Howe, B. M.; Lukas, R.; Deunneber, E.: ALOHA CABLED OBSERVATORY: EARLY RESULTS INCLUDING ACOUSTICS
- 11:30 Everett, J.; Roughan, M.; Galibert, G.; Doblin, M.; Walsh, I. D.: ADVANCES IN INCORPORATING BIO-OPTICAL DATA IN LONG TERM OBSERVING SYSTEMS. CHALLENGES AND SOLUTIONS
- 11:45 Roesler, C. S.; Barnard, A. H.; Pettigrew, N. P.: PHYTOPLANKTON DYNAMICS IN THE GULF OF MAINE: WHAT TEN YEARS OF HOURLY OBSERVATIONS AT SEVEN LOCATIONS REVEALS
- 12:00 O'Donnell, J.: CIRCULATION, MIXING AND THE VARIABILITY IN DO IN LONG ISLAND SOUND
- 12:15 Glenn, S. M.; Schofield, O.; Kohut, J.; Roarty, H.; Kerfoot, J.; Oliver, M.; Seim, H.; Boicourt, W.; Brown, W.; Atkinson, L.: IMPACT OF OCEAN OBSERVATIONS ON HURRICANE IRENE INTENSITY FORECASTS

059 Ocean Climate Data Records

Chair(s): Kenneth S. Casey, kenneth.casey@noaa.gov
Edward Kearns, Ed.Kearns@noaa.gov
Carig Donlon, craig.donlon@esa.int

Location: Ballroom G

- 10:30 Merchant, C. J.; Embury, O.; Rayner, N.: A CLIMATE DATA RECORD FOR SEA SURFACE TEMPERATURE FROM ALONG TRACK SCANNING RADIOMETERS
- 10:45 Lumpkin, R.; Grodsky, S.; Carton, J.: SPURIOUS TRENDS IN GLOBAL SURFACE DRIFTER CURRENTS
- 11:00 Wentz, F. J.; Hilburn, K. A.; Ricciardulli, L.; Smith, D. K.: A NEW SATELLITE WIND CLIMATOLOGY FROM QUIKSCAT, WINDSAT, AMSR-E AND SSM/I
- 11:15 Scharroo, R.; Leuliette, E. W.; Lillibridge, J. L.; Mitchum, G. T.; Byrne, D. A.: DEVELOPMENT OF AN ALTIMETRIC SEA LEVEL CLIMATE DATA RECORD: CURRENT STATUS
- 11:30 Melin, E.; Sclap, G.; Zibordi, G.: CONSISTENCY OF THE MULTI-MISSION RECORD OF OCEAN COLOR MARINE REFLECTANCE FOR CLIMATE RESEARCH
- 11:45 Hay, C. C.; Morrow, E.; Kopp, R. E.; Mitrovica, J. X.: SEA LEVEL FINGERPRINTING OF POLAR ICE MASS VARIATIONS: A NEW FORMALISM FOR ESTIMATING THE SOURCES OF GLOBAL SEA LEVEL CHANGE
- 12:00 Rayner, N. A.; Kennedy, J. J.; Good, S. A.: USING ENSEMBLES TO BETTER UNDERSTAND HISTORICAL OCEAN CLIMATE VARIABILITY AND CHANGE
- 12:15 Hamlington, B. D.; Leben, R. R.; Kim, K. Y.: CREATING A SEA LEVEL THEMATIC CLIMATE DATA RECORD USING NON-SEA LEVEL MEASUREMENTS

064 Oceanography In 2030

Chair(s): Peter Cornillon, pcornillon@me.com
Mark Abbott, mark@coas.oregonstate.edu

Location: Room 250

- 14:00 Delaney, J. R.; Kelley, D. S.: UNDERSTANDING THE PLANETARY LIFE SUPPORT SYSTEM: NEXT-GENERATION SCIENCE IN THE OCEAN BASINS
- 14:15 Meinig, C.; Cronin, M. F.: OCEANOGRAPHY IN 2030: OBSERVING THE OCEANS WITH LIMITED SHIPTIME
- 14:30 Rosby, T.: VISUALIZING AND QUANTIFYING OCEANIC MOTION
- 14:45 Bellingham, J. G.: OCEAN SCIENCE IN A CROWDED WORLD
- 15:00 Jenkins, B. D.; Rynearson, T. A.; Dyhrman, S. T.; Saito, M. A.; Chappell, P. D.; Whitney, L. P.; Alexander, H.; Bertrand, E. M.: FROM LAB TO LAUNCH: INTEGRATING BIOMARKERS DERIVED FROM GENOMICS AND PROTEOMICS APPROACHES INTO REMOTE OBSERVING PLATFORMS
- 15:15 Timmermans, M. L.; Krishfield, R.; Laney, S.; Proshutinsky, A.; Toole, J.: OBSERVING THE RAPIDLY-EVOLVING ARCTIC OCEAN ENVIRONMENT
- 15:30 Lindstrom, E. J.; Fu, L.; Gierlach, M.; Lee, T.: PHYSICAL OCEANOGRAPHY FROM SPACE IN 2030
- 15:45 Leinen, M. S.: OCEANOGRAPHY IN 2030: CHANGING OCEAN SCIENCE WITH SOCIAL MEDIA

068 Air-Sea Interactions In Western Boundary Current Systems And Marginal Seas

Chair(s): Hisashi Nakamura, hisashi@atmos.rcast.u-tokyo.ac.jp
Meghan F. Cronin, Meghan.F.Cronin@noaa.gov
Shoshiro Minobe, minobe@mail.sci.hokudai.ac.jp
Shang-Ping Xie, xie@hawaii.edu

Location: Ballroom H

- 08:00 Gelderloos, R.; Straneo, F.; Katsman, C. A.: POSITIVE SURFACE FEEDBACKS DURING A SHUTDOWN OF DEEP CONVECTION: LESSONS FROM THE GREAT SALINITY ANOMALY

- 08:15 Thomas, M. D.; de Boer, A. M.; Stevens, D. P.; Johnson, H. L.: UPPER OCEAN MANIFESTATIONS OF A REDUCING MERIDIONAL OVERTURNING CIRCULATION
- 08:30 Wang, H.; Legg, S.; Hallberg, R.: THE CONTRIBUTION OF ATMOSPHERIC FORCING TO DECADAL VARIATIONS OF THE NORDIC OVERFLOWS
- 08:45 Durgadoo, J. V.; Biastoch, A.: UNRAVELLING THE INFLUENCE OF THE SOUTHERN HEMISPHERE WINDS ON THE AGULHAS CURRENT SYSTEM
- 09:00 Sasaki, Y. N.; Schneider, N.: INTERANNUAL TO DECADAL GULF STREAM VARIABILITY IN AN EDDY-RESOLVING OCEAN MODEL
- 09:15 Hsieh, J.; Li, M.; Saravanan, R.; Chang, P.: IMPACT OF THE GULF STREAM SST FRONT ON NORTH ATLANTIC CLIMATE VARIABILITY: A HIGH-RESOLUTION REGIONAL MODEL STUDY
- 09:30 Omrani, N.; Keenlyside, N. S.; Bader, J.; Manzini, E.; Otterå, O. H.: THE IMPORTANCE OF THE STRATOSPHERE FOR WINTERTIME ATMOSPHERIC RESPONSE TO ATLANTIC MULTI-DECADAL VARIABILITY
- 09:45 Keenlyside, N.; Gulev, S. K.; Latif, M.; Koltermann, K. P.: NORTH ATLANTIC OCEAN CONTROL ON SURFACE HEAT FLUX AT MULTIDECADAL TIMESCALES
- 10:30 Qiu, B.; Chen, S.; Schneider, N.; Taguchi, B.: DECADAL PREDICTIONS OF THE DYNAMIC STATE OF THE KUROSHIO EXTENSION SYSTEM
- 10:45 Taguchi, B.; Schneider, N.: PROPAGATION FEATURES OF DECADAL-SCALE SUBSURFACE SIGNALS IN THE NORTH PACIFIC OCEAN
- 11:00 Nonaka, M.; Sasaki, H.; Taguchi, B.; Nakamura, H.: INTRINSIC AND WIND-DRIVEN INTERANNUAL VARIABILITY IN THE KUROSHIO EXTENSION IN AN EDDY-RESOLVING OGCM
- 11:15 Shen, M. L.; Tseng, Y. H.; Jan, S.; Young, C. C.: LONG-TERM VARIABILITY OF THE KUROSHIO TRANSPORT EAST OF TAIWAN AND THE CLIMATE IT CONVEYS
- 11:30 Cancelled
- 11:45 Liu, Z.; Wen, N.; Fan, L.; Shin, S. I.; Liu, Q. Y.: ASSESSING ATMOSPHERIC RESPONSE TO SURFACE FORCING IN THE OBSERVATION: CROSS-VALIDATION USING GEFA, LIM AND FDT.
- 12:00 Minobe, S.: DETECTING DECADAL CLIMATE PHASE REVERSAL IN NEAR PAST: IMPLICATIONS OF RECENT NORTH PACIFIC CLIMATE VARIABILITY
- 12:15 Nakamura, H.; Miyasaka, T.; Taguchi, B.; Nonaka, M.: LONG-TERM MODULATIONS IN THE DECADAL CLIMATE VARIABILITY OVER THE NORTH PACIFIC: OBSERVATIONS AND A COUPLED MODEL SIMULATION

084 Advances In Flow-Topography Interactions

Chair(s): Andrew Thompson, aft26@cam.ac.uk
Igor Kamenkovich, ikamenkovich@rsmas.miami.edu
Stephanie Waterman, stephanie.n.waterman@gmail.com

Location: Ballroom H

- 14:00 Rhines, P. B.: CONTROL OF THE OCEAN CIRCULATION BY BOUNDARIES AND TOPOGRAPHY
- 14:15 Spall, M. A.: INFLUENCES OF PRECIPITATION ON WATER MASS TRANSFORMATION AND MERIDIONAL OVERTURNING IN MARGINAL SEAS
- 14:30 Cancelled
- 14:45 Warner, S. J.; MacCready, P.; Moum, J. N.; Nash, J. D.; Moulin, A.: PARAMETERIZING ENERGY CONVERSION ON ROUGH TOPOGRAPHY USING BOTTOM PRESSURE SENSORS TO MEASURE FORM DRAG
- 15:00 Marshall, D. P.: ROSSBY WORMHOLES
- 15:15 Wilson, C.: THE ROLE OF TOPOGRAPHY AND DYNAMICAL BARRIERS IN THE EDDY SATURATION MODEL OF THE ANTARCTIC CIRCUMPOLAR CURRENT
- 15:30 Nikurashin, M.; Vallis, G.; Adcroft, A.: THE ROLE OF TOPOGRAPHY IN DISSIPATION OF GEOSTROPHIC EDDIES IN THE SOUTHERN OCEAN
- 15:45 Chassignet, E. P.; Bozec, A.; Hurlburt, H. E.: IMPACT OF RESOLUTION ON THE GULF STREAM SEPARATION AND PATHWAY

088 Consequences Of The March 11, 2011 Earthquake, Tsunami And Fukushima Nuclear Power Plant On The Ocean

Chair(s): Ken Buesseler, kbuesseler@whoii.edu
Motoyoshi Ikeda, mikedai@ees.hokudai.ac.jp

Location: Ballroom E

- 10:30 Aoyama, M.; Tsumune, D.; Hamajima, Y.: BUDGETS AND TEMPORAL CHANGE OF RADIOCAESIUM DISTRIBUTION RELEASED FROM FUKUSHIMA NPP ACCIDENTS IN THE NORTH PACIFIC OCEAN
- 11:00 Honda, M. C.; Aono, T.; Aoyama, M.; Hamajima, Y.; Kawakami, H.; Kitamura, M.; Masumoto, Y.; Miyazawa, Y.; Takigawa, M.; Saino, T.: DIFFUSION OF ARTIFICIAL CAESIUM-134 AND -137 IN THE WESTERN NORTH PACIFIC ONE MONTH AFTER THE FUKUSHIMA ACCIDENT
- 11:15 Hong, G. H.; Kim, Y. I.; Lee, H. M.; Aramaki, T.; Kim, S. H.; Shim, W. J.: ARRIVAL OF RADIOCAESIUM FROM THE DAMAGED FUKUSHIMA DAI-ICHI NUCLEAR REACTORS OF IN THE SEAS LOCATED IN THE WEST OF FUKUSHIMA
- 11:30 Buesseler, K.; Jayne, S.; Fisher, N.; Higley, K.; Guilderson, T.; Nishikawa, J.; Uematsu, M.; Masque, P.; Dulaiova, H.; Aoyama, M.: IMPACTS OF THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANTS ON THE OCEAN
- 11:45 Jayne, S. R.; Rypina, I. I.; Douglass, E. M.; Buesseler, K. O.; Jacobs, G. A.; Coelho, E. E.; Rowley, C. D.; Peggion, G.: TRACING THE CIRCULATION AROUND FUKUSHIMA
- 12:00 Baumann, Z. A.; Baumann, H.; Nishikawa, J.; George, J.; Miyamoto, H.; Buesseler, K. O.; Fisher, N. S.: BIOACCUMULATION BY ZOOPLANKTON AND MICRONEKTONIC FISH OF FUKUSHIMA RELEASED CESIUM AND SILVER RADIOISOTOPES IN JAPANESE COASTAL WATERS
- 12:15 Nishikawa, J.; Fisher, N. S.; Miyamoto, H.; Baumann, H.; Baumann, Z.; Buesseler, K. O.; George, J.; Tsuda, A.; Uematsu, M.: TRENDS IN COMMUNITY STRUCTURE OF ZOOPLANKTON AND MICRONEKTON FROM WATERS NEARBY FUKUSHIMA AND THEIR RELATION TO BIOACCUMULATED CESIUM RADIONUCLIDES
- 14:00 Kanda, J.; Ishimaru, T.; Ito, Y.; Aono, T.; Watanabe, Y. W.; Aoyama, M.; Hamajima, Y.; Tsuda, A.; Uematsu, M.; Igarashi, S.: CESIUM-137 DISPERSION AND BIOLOGICAL TRANSFER IN PELAGIC AND BENTHIC ECOSYSTEMS OFF THE COAST OF FUKUSHIMA
- 14:15 Nagao, S.; Hamataka, K.; Iwata, M.; Tanaka, K.; Hayakawa, K.; Yoshida, S.; Inoue, M.; Hamajima, Y.; Yamamoto, M.: SPATIAL DISTRIBUTION OF RADIOACTIVITY OF CS-134 AND CS-137 IN SEAWATERS FROM COASTAL AREA OFF THE FUKUSHIMA IN JAPAN TO NORTHWESTERN PACI
- 14:30 Chen, C.; Lai, Z.; Beardsley, R. C.; Lin, H.; Sasaki, J.; Lin, J.; Ji, R.: MODEL ASSESSMENT OF INUNDATION AT THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT FACILITY AND INITIAL SPREAD OF RADIONUCLIDES IN THE COASTAL OCEAN
- 14:45 Tsumune, D.; Tsubono, T.; Aoyama, M.; Hirose, K.: DISTRIBUTION OF ¹³⁷CS FROM THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT SIMULATED NUMERICALLY BY A REGIONAL OCEAN MODEL
- 15:00 Tolman, H. L.; Garaffo, Z.; Mehra, A.; Rivin, I.; Kim, H. C.; Spindler, T.: OCEAN PLUME AND TRACER MODELING FOR THE FUKUSHIMA DAI-ICHI EVENT
- 15:15 Ikeda, M.: ATTEMPT OF MODEL INTER-COMPARISON PROJECT FOR RADIONUCLIDE DISTRIBUTIONS FROM FUKUSHIMA-I
- 15:30 Casacuberta, N.; Masqué, P.; Garcia-Orellana, J.; Lopez-Castillo, E.; Garcia-Tenorio, R.; Pike, S.; Buesseler, K. O.: PRESENCE AND FATE OF SR-90 IN SEAWATER OFF JAPAN AS A CONSEQUENCE OF THE FUKUSHIMA DAI-ICHI NUCLEAR ACCIDENT
- 15:45 Guilderson, T. P.; Tumey, S. J.; Broek, T.; Brown, T. A.: INFLUENCE OF THE FUKUSHIMA EVENT ON THE I29-IODINE CONTENT OF WESTERN PACIFIC WATERS

097 Mixing And Transport Due To Nonlinear Internal Gravity Waves

Chair(s): Oliver Fringer, fringer@stanford.edu
Subhas Karan Venayagamoorthy, vskaran@engr.colostate.edu

Location: Ballroom B

- 08:00 Moum, J. N.: ADVANCES IN OCEANIC NONLINEAR INTERNAL WAVES: HIGHLIGHTS OF THE NEW MILLENIUM
- 08:30 Pickering, A. I.; Alford, M. H.: MOORED OBSERVATIONS OF INTERNAL TIDES IN LUZON STRAIT
- 08:45 Simmons, H. S.; Matthew, M. H.; Mackinnon, J. A.; Martini, K. I.; Nash, J. D.; St. Laurent, L. C.: SIMULATIONS AND OBSERVATIONS OF STRONG BAROCLINIC GENERATION AND NONLINEAR WAVES IN THE SOUTH CHINA SEA
- 09:00 Peacock, T.; Mercier, M.; Gostiaux, L.; Saidi, S. J.; Sommeria, J.; Didelle, H.; Viboud, S.; Helfrich, K.; Dauxois, T.: A REALISTIC, LARGE-SCALE LABORATORY EXPERIMENTAL STUDY OF INTERNAL TIDE GENERATION AT THE LUZON STRAIT.
- 09:15 Farmer, D. M.; Park, J. H.; Li, Q.; Yang, Y. J.: NONLINEAR INTERNAL WAVES IN THE SOUTH CHINA SEA DURING WINTER 2010–2011
- 09:30 Ramp, S. R.; Yang, Y. J.; Reeder, D. B.; Bahr, F. L.: OBSERVATIONS OF MODE-2 NONLINEAR INTERNAL WAVES OVER THE NORTHERN HENG-CHUN RIDGE SOUTH OF TAIWAN
- 09:45 Liu, Z.; Thorpe, S. A.; Smyth, W. D.: INSTABILITY AND HYDRAULICS OF TURBULENT STRATIFIED SHEAR FLOWS
- 10:30 Nash, J. D.; Lim, B.; Moum, J. N.; Alford, M. H.: ANATOMY OF TURBULENCE IN A BREAKING INTERNAL TIDE
- 10:45 Fu, K. H.; St. Laurent, L.; Simmons, H.; Sun, O.; Thurnherr, A.: TURBULENCE DISSIPATION RATE AND MIXING ON THE LAN-YU RIDGE OF THE LUZON PASSAGE
- 11:00 Buijsman, M. C.; Legg, S.; Klymak, J. M.: DOUBLE RIDGE INTERNAL TIDE INTERFERENCE AND ITS EFFECT ON TURBULENT DISSIPATION IN LUZON STRAIT
- 11:15 Sakai, T.; Diamessis, P. J.; Jacobs, G. B.: TOWARDS LARGE-EDDY SIMULATIONS OF THE TURBULENT BOTTOM BOUNDARY LAYER UNDER A NONLINEAR INTERNAL WAVE OF DEPRESSION
- 11:30 Maxeiner, E.; Smith, G. B.; Marmorino, G.; Savelyev, I. B.: LABORATORY STUDY OF THERMAL IMPRINTS OF BREAKING INTERNAL WAVES USING INFRARED IMAGERY
- 11:45 Sarkar, S.; Gayen, B.; Rapaka, N.: TURBULENCE AND WAVES DURING GENERATION OF INTERNAL TIDES AT CRITICAL SLOPES
- 12:00 Pineda, J.; Starczak, V. S.; Helfrich, K.; da Silva, J.; Thompson, M.; Wiley, D.: FISH AND SHARK RESPONSES TO NON-LINEAR INTERNAL WAVES: FORAGING AND VERTICAL RE-DISTRIBUTION
- 12:15 Sharples, J.; Tweddle, J. F.; Palmer, M. R.; Inall, M. E.; Davidson, K.: INTERNAL WAVES OVER A SHELF SEA BANK AND THE CONSEQUENCES FOR NUTRIENT SUPPLIES INTO THE SEASONAL THERMOCLINE

102 Live From The Ocean: Engaging Students And The Public In Active Research Projects At Sea

Chair(s): Sharon Katz Cooper, scooper@oceanleadership.org
Leslie Peart, lpeart@oceanleadership.org
Jennifer Collins, jcollins@oceanleadership.org

Location: Ballroom F

- 10:30 Pearl, L. W.; Periera, H.; Kane, J.: IT'S ALL IN WHO YOU KNOW – TEACHERS CONNECTING STUDENTS TO SCIENTISTS AT SEA IN REAL TIME
- 10:45 Bell, K. L.; Ballard, R. D.; Witten, A. B.: INSPIRING THE NEXT GENERATION THROUGH REAL TIME ACCESS TO OCEAN EXPLORATION
- 11:00 Kostel, K.: SCIENCE COMMUNICATION IN TIMES OF CRISIS: OUTREACH LESSONS FROM THE GULF OF MEXICO AND THE PACIFIC COAST OF JAPAN
- 11:15 Davidson, E. R.; Ewing, N. R.; Searle, R.: OCEAN NETWORKS CANADA OBSERVATORY: BRINGING THE MYSTERIOUS DEEP-SEA TO SHORE-BASED AUDIENCES THROUGH SOCIAL MEDIA, REAL-TIME DATA AND EDUCATION

- 11:30 Louis, M. E.; Bolint, H.; Moore, D. A.; Scott, C. A.: OCEANSWIDE: USING REMOTE OPERATED VEHICLES (ROVS) FOR INTERACTIVE SCIENCE AND TECHNOLOGY OUTREACH
- 11:45 Ristuben, K. R.: MARINE EDUCATION THROUGH THE EYES OF AN ARTIST; TRANSLATING SCIENTIFIC DATA THROUGH NEW MEDIA
- 12:00 Fundis, A. T.; Kelley, D. S.; Proskurowski, G.; Stoermer, M.; Sautter, L. R.; Delaney, J. R.: REAL-TIME PUBLIC AND STUDENT ENGAGEMENT DURING THE OCEAN OBSERVATORIES INITIATIVE'S VISIONS 2011 EXPEDITION TO AXIAL SEAMOUNT
- 12:15 Haddad, A. G.; Turner, M. K.; Samuelson, L.; Magnusson, J.; IODP Expedition 336 Scientific Party, .: CLASSROOM CONNECTION: A SHIP-TO-SHORE INITIATIVE TO ENGAGE SPECIAL EDUCATION STUDENTS IN OCEANOGRAPHIC RESEARCH

104 Improvements In Understanding Tropical Atlantic Climate Variability And Predictability: Past Behavior, Observations And Climate Models

Chair(s): Salil Mahajan, mahajans@ornl.gov
Takeshi Doi, Takeshi.Doi@noaa.gov
Ernesto Munoz, emunoz@ucar.edu
Kelly H Kilbourne, kilbourn@umces.edu

Location: Ballroom G

- 14:00 Saravanan, R.: SIMULATING AND UNDERSTANDING THE ROLE OF TROPICAL ATLANTIC VARIABILITY IN THE CLIMATE SYSTEM
- 14:30 Ding, H.; Keenlyside, N.; Latif, M.; Wahl, S.; Park, W.: SENSITIVITY OF EQUATORIAL ATLANTIC VARIABILITY TO MEAN STATE BIASES
- 14:45 Tokinaga, H.; Xie, S.: WEAKENING OF THE EQUATORIAL ATLANTIC COLD TONGUE OVER THE PAST SIX DECADES
- 15:00 Johns, W. E.; Brandt, P.; Funk, A.; Bourles, B.: ZONAL VARIATIONS OF THE ATLANTIC EQUATORIAL UNDERCURRENT DURING 2007-2011
- 15:15 Doi, T.; Vecchi, G. A.; Rosati, A. J.; Delworth, T. L.: TROPICAL ATLANTIC CLIMATE FOR A COARSE AND A HIGH RESOLUTION COUPLED CLIMATE MODEL
- 15:30 Page, B. P.; Coles, V. J.; Goes, J.; Yager, P.: SURFACE MEASUREMENTS OF P(CO₂) IN THE WESTERN TROPICAL NORTH ATLANTIC: QUANTIFYING THE INFLUENCE OF THE AMAZON RIVER PLUME ON GAS EXCHANGE
- 15:45 Tzortzi, E.; Gommenginger, C. P.; Srokosz, M. A.; Josey, S.: HOW DOES SURFACE SALINITY AND RAIN AFFECT THE NORTH ATLANTIC OCEAN CIRCULATION?

117 Communicating A Changing Ocean: Challenges And Opportunities Facing Scientists And Decision Makers

Chair(s): Martha McConnell, mcconnell@gmail.com
Susan Roberts, sroberts@nas.edu

Location: Ballroom F

- 14:00 English, C. A.: CHANGING OCEANS, CHANGING ROLES: THE CHALLENGES AND OPPORTUNITIES FOR SCIENTIST COMMUNICATORS IN THE 21ST CENTURY
- 14:15 Cramer, C. B.; Griswold, A.; Shapiro, A. D.; Uiterwyk, K.; Chen, R. F.: THE 3-MINUTE SOLUTION: COMMUNICATING YOUR RESEARCH IN SHORT, EFFECTIVE VIDEOS
- 14:30 Finzi Hart, J. A.; Grifman, P. M.; Moser, S. C.: CLIMATE CHANGE INFORMATION NEEDS IDENTIFIED BY CALIFORNIA COASTAL MANAGERS
- 14:45 Protopapadakis, L. A.: IMPROVING SCIENCE COMMUNICATION IN COMPLICATED, STAKEHOLDER-INVOLVED, OCEAN AND COASTAL MANAGEMENT PROCESSES
- 15:00 Baird, B. E.: COMMUNICATING SCIENCE TO DECISION MAKERS: PERSPECTIVES FROM A RECOVERING MANAGER OF OCEAN AND COASTAL POLICY
- 15:15 Meisels, G. G.; Muller-Karger, F.; Feldman, A. G.; Ryan, J.: COMMUNICATING SEA LEVEL RISE
- 15:30 Boyd, P. W.; Law, C. S.; Doney, S. C.: A CLIMATE CHANGE ATLAS FOR THE OCEAN

- 15:45 Sutton, A. J.; Conathan, M.; English, C. A.; Mace, A.; Meyer, J. J.: PUPS IN THE SHARK TANK: SKILLS MARINE STUDIES GRADUATES DEVELOP WHILE NAVIGATING WASHINGTON'S POLITICAL WATERS

118 Upper Ocean Turbulence And Its Impact On Air-Sea Fluxes

Chair(s): Brian Ward, bward@nuigalway.ie
Ann Gargett, gargettann@gmail.com
Kai Christensen, kaihc@met.no

Location: Ballroom B

- 14:00 Gemmrich, J.; Thomson, J.; Vagle, S.: BREAKING WAVES, TURBULENCE AND BUBBLES
- 14:15 Liang, J. H.; McWilliams, J. C.; Sullivan, P. P.; Baschek, B.: SUBSURFACE BUBBLE DISTRIBUTION AND ITS IMPLICATION FOR BOUNDARY LAYER TURBULENCE AND AIR-SEA GAS TRANSFER
- 14:30 Sutherland, P.; Melville, W. K.; Lenain, L.; Statom, N.: MEASUREMENTS OF NEAR-SURFACE WAVE COHERENT TURBULENCE IN THE PRESENCE OF BREAKING WAVES
- 14:45 Garbe, C. S.; Schnieders, J.: STRUCTURE OF SMALL-SCALE TURBULENCES AT THE FREE AIR-WATER INTERFACE
- 15:00 Broström, G.; Christensen, K. H.; Ward, B.; Röhrs, J.; Drivdal, M.; Sutherland, G.; Sætra, Ø.; Hole, L. R.; Sundby, S.; Fer, I.: WAVES, MIXING, AND DRIFT IN THE UPPER OCEAN
- 15:15 Akan, C.; Tejada-Martinez, A. E.; Grosch, C. E.: SURFACE MASS TRANSFER IN LES OF LARGE SCALE AND SMALL SCALE LANGMUIR CIRCULATION
- 15:30 Clayson, C. A.: WAVE EFFECTS AND STABLE BOUNDARY LAYERS ON AIR-SEA FLUXES
- 15:45 Ward, B.; Callaghan, A. H.; Sutherland, G.; Miller, S.; Christensen, K.; Broström, G.; Sætra, Ø.; Lilly, J.: RESPONSE OF UPPER OCEAN TO FORCING PARAMETERS

136 Top Predator Distributions: Variability And Fisheries

Chair(s): Daniel Palacios, daniel.palacios@noaa.gov
Mark Baumgartner, mbaumgartner@whoi.edu
Steven Bograd, steven.bograd@noaa.gov
Elliott Hazen, elliot.hazen@noaa.gov
George Shillinger, georges@stanford.edu

Location: Ballroom D

- 14:00 Sterling, J. T.; Springer, A. M.; Iverson, S. J.; Johnson, S. P.; Pelland, N.; Johnson, D. S.: THE SUN, MOON, WIND, AND BIOLOGICAL IMPERATIVE—SHAPING CONTRASTING WINTERTIME MIGRATION AND FORAGING STRATEGIES OF NORTHERN FUR SEALS (CALLORHINUS URSINUS)
- 14:15 Tosh, C. A.; Steyn, J.; Bornemann, H.; van den Hoff, J.; Stewart, B.; Plötz, J.; Bester, M. N.: DEFINING MARINE HABITATS FOR SOUTHERN ELEPHANT SEALS: JUVENILE RESPONSES TO VARIABILITY
- 14:30 Stewart, J. S.; Hazen, E. L.; Foley, D. G.; Bograd, S. J.; Gilly, W. F.: MODELING MARINE PREDATOR MIGRATION DURING RANGE EXPANSION: HUMBOLDT SQUID (DOSIDICUS GIGAS) IN THE CALIFORNIA CURRENT SYSTEM
- 14:45 Thorne, L. H.; Hodge, L. W.; Read, A. J.: COMBINING PASSIVE ACOUSTICS AND SATELLITE OCEANOGRAPHY TO EVALUATE CETACEAN HABITAT USE IN THE SOUTH ATLANTIC BIGHT
- 15:00 Costa, D. P.; Robinson, P. W.; Crocker, D. E.; Fowler, M.; Goetsch, C.; Hassrick, J.; Simmons, S. E.; Teutschel, N.; Peterson, S. H.: FORAGING BEHAVIOR OF A WIDELY RANGING MESO-PELAGIC TOP PREDATOR, THE NORTHERN ELEPHANT SEAL
- 15:15 Pyenson, N. D.: WHAT DOES THE FOSSIL RECORD OF MARINE MAMMALS TELL US ABOUT THE EVOLUTION OF TOP OCEAN PREDATORS?
- 15:30 Foote, A. D.; Gilbert, M. T.: USING ANCIENT DNA TO MONITOR THE RESPONSE OF MARINE MAMMALS DURING PAST CLIMATE CHANGE.
- 15:45 Jørgensen, S. J.; Estess, E. E.; Arnoldi, N. S.; Rückert, M.; Messié, M.; Block, B. A.: CLUSTER ANALYSIS OF WHITE SHARK DIVING PATTERNS: LINKING DISTINCT BEHAVIORAL MODES TO OCEANOGRAPHIC PROCESSES

145 Physical, Chemical, And Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, And Outer Shelf And Continental Slope)

Chair(s): Melanie Fewings, fewings@msi.ucsb.edu
Erika McPhee-Shaw, eshaw@mlml.calstate.edu
Roger Samelson, rsamelson@coas.oregonstate.edu
R. Kipp Shearman, shearman@coas.oregonstate.edu

Location: Room 251

- 10:30 Brink, K. H.: CROSS-SHELF TRANSPORTS: THE PROBLEM THAT DOES NOT DIE
- 11:00 Osborne, J. J.; Kurapov, A. L.; Egbert, G. D.; Kosro, P. M.: MODELING SLOPE-SHELF INTERACTIONS IN THE COASTAL OCEAN
- 11:15 Todd, R. E.; Gawarkiewicz, G. G.; Owens, W. B.: FINESCALE OBSERVATIONS OF THE MIDDLE ATLANTIC BIGHT SHELFBREAK AND SLOPE
- 11:30 Moniz, R. J.; Fong, D. A.; Monismith, S. G.; Woodson, C. B.; Willis, S. K.; Stacey, M. T.; McManus, M. A.: LATERAL DISPERSION IN THE THERMOCLINE ON THE INNER SHELF OF NORTHERN MONTEREY BAY
- 11:45 Horwitz, R. M.; Lentz, S. J.: THE EFFECT OF STRATIFICATION ON WIND-DRIVEN, CROSS-SHELF CIRCULATION ON THE INNER SHELF
- 12:00 Tuthill, L. K.; Wells, J. R.; Pawlak, G.; Monismith, S. G.; Merrifield, M.: CROSS-SHORE THERMALLY-DRIVEN EXCHANGE ON TWO CORAL REEF SHORELINES
- 12:15 Monismith, S. G.; Walter, L. M.; Hench, J. L.: WAVES, STOKES DRIFT AND WAVE DRIVEN FLOW OVER A CORAL REEF
- 14:00 Jeandel, C.; Behra, P.; Oelkers, E.; Sonke, J.; Jones, M.: PARTICLE/DISSOLVE EXCHANGE PROCESSES AT THE LAND TO OCEAN BOUNDARY: HOW TO IMPROVE OUR UNDERSTANDING OF THE PROCESSES?
- 14:15 Hopkins, J.; Sharples, J.; Huthnance, J. M.: A NEW CROSS-SHELF EXCHANGE MECHANISM: ON-SHELF ADVECTION OF SLOPE WATER WITHIN DISCRETE PYCNOCLINE TRAPPED LENSES
- 14:30 Xu, J. P.; Barry, J. P.; Paull, C. K.: A SLOW-MOVING TURBIDITY CURRENT IN MONTEREY SUBMARINE CANYON
- 14:45 Harrison, C. S.; Siegel, D. A.; Mitarai, S.: THE TATTERED CURTAIN HYPOTHESIS REVISITED
- 15:00 Lucas, A. J.; Kudela, R.; Pitcher, G. C.; Probyn, T. A.: CONTRASTING SEMIDIURNAL AND INERTIAL MODES OF NUTRIENT FLUX AND COASTAL PHYTOPLANKTON DYNAMICS.
- 15:15 Jackson, J. M.; Rainville, L.; Roberts, M. J.; McQuaid, C.; Lutjeharms, J. R.: BIO-PHYSICAL INTERACTIONS BETWEEN THE AGULHAS CURRENT AND AGULHAS BANK, SOUTH AFRICA, IN SEPTEMBER 2010
- 15:30 Adams, K. A.; Barth, J.: HIGH- TO LOW- FREQUENCY VARIABILITY OF MOORED TEMPERATURE, CURRENTS AND DISSOLVED OXYGEN ACROSS CENTRAL OREGON'S COASTAL OCEAN
- 15:45 Pringle, J. M.: EVOLUTIONARY PRESSURES ON DISPERSAL DRIVE COASTAL ORGANISMS TO EXPLOIT THE BOUNDARIES BETWEEN THE INNER- AND MID-SHELF

148 Recent Advances In In Situ Chemical And Biological Measurements In Marine Environments

Chair(s): Martial Taillefert, mtaillef@eas.gatech.edu
Brian Glazer, glazer@hawaii.edu

Location: Room 151

- 14:00 Koch, C. R.; Ingle, J. D.; Moore, C. C.; Barnard, A. H.: CYCLE-NH4 AMMONIUM MEASUREMENTS FOR LONG-TERM MOORED APPLICATIONS WITH HIGH-TEMPORAL RESOLUTION SAMPLING: VALIDATION AND DEMONSTRATION
- 14:15 Liu, X.; Byrne, R. H.; Yates, K. K.; Kaltenbacker, E. A.; Adornato, L.: IN-SITU SPECTROPHOTOMETRIC MEASUREMENT OF DISSOLVED INORGANIC CARBON IN A BIOFOULING-PRONE REGION
- 14:30 Jonca, J.; Fernandez, V. L.; Thouron, D.; Paulmier, A.; Graco, M.; Garçon, V.: ELECTROCHEMICAL PHOSPHATE MONITORING: FIRST STEPS TO CREATE AN ELECTROCHEMICAL SENSOR WITH AN APPLICATION IN THE OMZ OFFSHORE PERU.

- 14:45 Briggs, N. T.; Slade, W. H.; Perry, M. J.; Boss, E.; Poulton, N.; Sieracki, M.; Lee, C.; D'Asaro, E.: ESTIMATING PHYTOPLANKTON SIZE FROM HIGH-FREQUENCY FLUCTUATIONS IN SIMPLE OPTICAL MEASUREMENTS
- 15:00 Geiger, E. E.; Cimino, M. A.; MacDonald, D.; Oliver, M. J.; Luther, G. W.: DETERMINATION OF PHYTOPLANKTON PHYSIOLOGY FROM THE OXIC THROUGH THE ANOXIC ZONE IN THE CHESAPEAKE BAY USING IN SITU FIRE FLUOROMETRY AND VOLTAMMETRY
- 15:15 Nuzzio, D. B.; Beckler, J. S.; Tallifert, M.: A NEW IN SITU INSTRUMENT FOR THE SIMULTANEOUS COLLECTION OF VOLTAMMETRIC AND CHROMATOGRAPHIC DATA IN MARINE ENVIRONMENTS
- 15:30 Wankel, S. D.; Girguis, P. R.: IN SITU MEASUREMENTS OF VOLATILE CONCENTRATIONS AND STABLE ISOTOPIC COMPOSITION: LINKING BIOGEOCHEMISTRY AND MICROBIAL ECOLOGY IN THE DEEP SEA
- 15:45 Glazer, B. T.: IN SITU ELECTROCHEMISTRY IN EXTREME ENVIRONMENTS: FROM SEAFLOOR HYDROTHERMAL VENTS TO THE DEEP SUBSURFACE BIOSPHERE

153 Chemical Signals That Mediate Interactions Of Free Living Organisms And Host Associated Microbes

Chair(s): Karla Heidelberg, kheidelb@usc.edu
Graham Ferrier, gferrier@ucla.edu
Ryan Ferrer, ferrer1@spu.edu
Torston Thomas, t.thomas@unsw.edu.au

Location: Ballroom D

- 08:00 Van Alstyne, K. L.; Middleton, J.; Moritsch, M.; Smith, N.: CHEMICAL SIGNALING BY ULVOID GREEN ALGAE
- 08:15 Ferrer, R. P.; Lunsford, E. T.: THE EFFECTS OF ULVOID DOPAMINE RELEASE ON BARNACLE FEEDING BEHAVIOR
- 08:30 Stratil, S.; Knecht, H.; Nasrolahi, A.; Jacob, J.; Friedrichs, A.; Wahl, M.: EFFECTS OF ENVIRONMENTAL STRESS ON THE COMMUNITY COMPOSITION AND FOULING MODULATING ROLE OF EPIBIOTIC BIOFILMS ON THE BROWN ALGA *FUCUS VESICULOSUS*
- 08:45 Abrego, D.; Motti, C.; Siboni, N.; Tapiolas, D.; Tebben, J.; Harder, T.: SCENT OF A PARTNER: RESPONSES OF SYMBIODINIUM TO CORAL CUES
- 09:00 Paul, V. J.: ALGAL CHEMICAL DEFENSES: FROM COMPOUNDS TO COMMUNITIES
- 09:15 Bickel, S. L.; Tang, K. W.; Grossart, H. P.: ZOOPLANKTON-ASSOCIATED BACTERIAL ABUNDANCE AND COMMUNITY COMPOSITION IN THE YORK RIVER TRIBUTARY OF CHESAPEAKE BAY
- 09:30 Gärdes, A.; Yarimizu, K.; Miller, E.; Polido, G.; Carrano, C. C.: THE ROLE OF PHOTOREACTIVE SIDEROPHORES IN ALGAE-BACTERIA INTERACTIONS *IN SITU*
- 09:45 Nevitt, G. A.: NEW FRONTIERS IN THE CHEMICAL ECOLOGY OF PROCELLARIIFORM SEABIRDS
- 10:30 Ferrier, G. A.; Zimmer, C. A.; Zimmer, R. K.: COMMUNITY ECOLOGY: HOW OPPOSING DEMOGRAPHIC PROCESSES ARE CONTROLLED BY ONE, AND THE SAME, MOLECULE
- 10:45 Zimmer, R. K.; Ferrier, G. A.; Zimmer, C. A.: SENSORY EXPLOITATION AS A MECHANISM STRUCTURING MARINE COMMUNITIES
- 11:00 Hewson, I.; Aragundi, W. M.; Donelan, R. P.; Eaglesham, J.; Li, W.; Moyer, J. K.; Ng, G.; Thompson, P. D.; Hairston, N. G.: VIRAL DIVERSITY AND ECOLOGY IN AQUATIC METAZOA: EVIDENCE FOR VIRAL ROLES IN HOST MICROBIOMES
- 11:15 Bidle, K. D.; Vardi, A.; Haramaty, L.; Van Mooy, B. A.; Fredricks, H. F.; Larsen, A.; Kimmance, S.; DiTullio, G. R.: A HOST-VIRUS CHEMICAL ARMS RACE AT SEA: PLACING SUBCELLULAR CONTROLS OF CELL FATE INTO AN ECOLOGICAL AND BIOGEOCHEMICAL CONTEXT
- 11:30 Cancelled
- 11:45 Arellano, S. M.; Mullineaux, L. S.; Anderson, E. J.; Helfrich, K.; McGann, B. J.; Wheeler, J. D.: SWIMMING BEHAVIORS OF BARNACLE LARVAE IN RESPONSE TO WATERBORNE SETTLEMENT CUES
- 12:00 Crimaldi, J. P.; Bell, A. E.: HOOKING UP: THE ROLE OF FLUID STIRRING AND CHEMOTAXIS IN EXTERNAL FERTILIZATION STRATEGIES
- 12:15 Reidenbach, M. A.; Koehl, M. A.: TEMPORAL AND SPATIAL ODOR PATTERNS SAMPLED BY LOBSTERS AND CRABS IN A TURBULENT PLUME

Tuesday, February 21 - Posters

001 Gases As Tracers Of Oceanic Processes

Chair(s): Roberta Hamme, rhamme@uvic.ca
David Ho, ho@hawaii.edu

Location: Exhibit/Poster Hall

- B1519 Thibodeaux, L. J.; Lohmann, R.: A NEW TURBULENT DIFFUSION BOX MODEL FOR ASSESSING CHEMODYNAMICS IN MARINE SURFACE WATERS: A PFOA TRANSPORT APPLICATION
- B1520 Groeskamp, S.; Meijers, A. J.; Sloyan, B. M.; McDougall, T. J.: RECENT PROGRESS ON THE TRACER CONTOUR INVERSE METHOD
- B1521 Trossman, D. S.; Thompson, L.; Mecking, S.; Warner, M. J.; Skiba, A. W.; Zeng, L.; Arbic, B. K.: TOWARDS PARAMETERIZING ALONG-ISOPYCNAL DIFFUSIVITY AND FINDING BEST ESTIMATES OF MODE WATER VENTILATION IN THE NORTH ATLANTIC AND SOUTHERN OCEANS
- B1522 Sasaki, K.; Murata, A.; Watanabe, S.; Fukasawa, M.: SPREADING VELOCITIES OF CHLOROFLUOROCARBONS IN LOWER CIRCUMPOLAR DEEP WATER IN THE SOUTH PACIFIC
- B1523 Reed, A. C.; Warner, M. J.; Bullister, J. L.; Rintoul, S. R.; Rolf, S.: EVOLUTION OF WATER MASSES' CHLOROFLUOROCARBON INVENTORIES FROM 1991 TO 2008 ALONG THE SR3 WOCE HYDROGRAPHIC SECTION
- B1524 Schneider, L.; Kieke, D.; Rhein, M.; Huhn, O.; Steinfeldt, R.; Klein, B.: FORMATION OF ANTARCTIC INTERMEDIATE WATER IN THE SOUTH ATLANTIC
- B1525 Holzer, M.; Primeau, F.: IMPROVED CONSTRAINTS ON TRANSIT TIME DISTRIBUTIONS FROM ARGON 39: A MAXIMUM ENTROPY APPROACH
- B1526 Umlauf, L.; Holtermann, P. L.; Tanhua, T.; Schmale, O.; Rehder, G.; Waniek, J. J.: THE BALTIC SEA TRACER RELEASE EXPERIMENT
- B1527 Bullister, J. L.; Wisegarver, D. P.; Sonnerup, R. E.: DISSOLVED NITROUS OXIDE IN THE SUBSURFACE WATERS OF THE SOUTH ATLANTIC OCEAN
- B1528 Townsend-Small, A.; Prokopenko, M. G.; Berelson, W. M.; Chong, L.: NITROUS OXIDE DYNAMICS IN COASTAL WATERS OF THE EASTERN PACIFIC (MEXICO, CALIFORNIA, AND OREGON)
- B1529 Charoenpong, C. N.; Bristow, L. A.; Altabet, M. A.; Berelson, W. M.; Prokopenko, M. G.; Larkum, J. A.: NITROGEN-LOSS PATHWAYS IN THE SAN PEDRO AND SANTA MONICA BASINS DETECTED FROM N_2 /AR RATIOS AND NITRATE ISOTOPES
- B1530 Schulz-Bull, D. E.; Orlikowska, .: BIOGEOCHEMISTRY AND CARBON ISOTOPE DETERMINATION OF NATURAL AND ANTHROPOGENIC VOLATILE HALOCARBONS IN SEAWATER
- B1531 Manning, C. C.; Stanley, R. H.; Lott, D. E.: DESIGN AND TESTING OF A PORTABLE MASS SPECTROMETER FOR SHIPBOARD MEASUREMENT OF DISSOLVED NOBLE GASES
- B1532 Tempest, K. E.; Emerson, S. R.; Stump, C. L.: KINETIC ISOTOPIIC FRACTIONATION OF ARGON AND NEON DURING AIR-WATER GAS TRANSFER
- B1533 Nicholson, D. P.; Stanley, R. H.; Doney, S. C.; Lima, I. D.: ASSESSING TRIPLE OXYGEN ISOTOPES IN A GLOBAL MODEL
- B1534 Jonsson, B. E.; Doney, S. C.; Dunne, J.; Bender, M. L.: EVALUATION OF SOUTHERN OCEAN O_2 /AR-BASED NCP MEASUREMENTS IN A MODEL FRAMEWORK
- B1535 Lockwood, D. E.; Quay, P. D.; Feely, R. A.: CONTINUOUS ESTIMATES OF NET COMMUNITY PRODUCTIVITY AND AIR-SEA CO_2 FLUX ACROSS THE NORTH PACIFIC TRANSITION ZONE
- B1536 Mikaloff Fletcher, S. E.; Rodgers, K. B.; Sarmiento, J. L.; Majkut, J.; Gnanadesikan, A.: THE INFLUENCE OF SOUTHERN OCEAN DYNAMICS ON LATITUDINAL GRADIENTS IN ATMOSPHERIC RADIOCARBON
- B1537 Manizza, M.; Keeling, R. F.; Gille, S. T.; Sprintall, J.; Mazloff, M.: ON THE SEASONAL RELATIONSHIP BETWEEN AIR-SEA GAS FLUXES AND ATMOSPHERIC OBSERVATIONS: THE SOUTHERN OCEAN CASE

- B1538 Bent, J. D.; Stephens, B. B.; Keeling, R. F.; Patra, P. K.; Mikaloff-Fletcher, S. E.: ASSESSING BIOGEOCHEMICAL MODELS WITH HIGH-RESOLUTION AIRBORNE OBSERVATIONS OF THE O_2/N_2 RATIO OVER THE SOUTHERN OCEAN
- B1539 Yamagishi, H.; Tohjima, Y.; Mukai, H.; Nojiri, Y.; Miyazaki, C.; Katsumata, K.: OBSERVATION OF ATMOSPHERIC OXYGEN/NITROGEN RATIO ON BOARD A CARGO SHIP BY USING GAS CHROMATOGRAPHY/THERMAL CONDUCTIVITY DETECTOR

002 ASLOMP Student Symposium

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: Exhibit/Poster Hall

- B0661 Burgess, A. K.; Sulkln, S. D.: ALGAL TOXIN TRANSFER IN MARINE PLANKTONIC FOOD WEBS: A LOOK AT NUTRITIONAL DEFICIENCIES, TOXICITY EFFECTS, TOXIN RESISTANCE, FEEDING RATES & PREFERENCES
- B0662 Lopez, L. M.; Johnson, A. K.; Wolfer, H. M.: BLOOD CHEMISTRY VALUES FOR ATLANTIC CROAKER (*MICROPOGONIAS UNDULATUS*) UNDER NORMOXIC AND SEVERE HYPOXIC CONDITONS
- B0663 Kinder, T.; Mesner, N. O.; Larese-Casanova, M.; Lott, K.: USING SHORT TERM ENVIRONMENTAL EDUCATION PROGRAMS TO INCREASE STUDENT LEARNING AND ELICIT POSITIVE ATTITUDE CHANGE
- B0664 McGeachy, C. T.; Cullen, D.; Stevens, B. G.: EVALUATION OF BLACK SEA BASS (*CENTROPRISTIS STRIATA*) BEHAVIORAL INTERACTIONS IN AND AROUND TRAPS USING IN SITU VIDEO
- B0665 Leeuw, T.: IN-SITU MEASUREMENTS OF PHYTOPLANKTON FLUORESCENCE USING LOW COST ELECTRONICS
- B0666 Castro-Ortiz, M. C.: ENVIRONMENTAL CAMPAIGN, EDUCATION AND COMMUNITY OUTREACH: SOUL OF BAHIA
- B0667 Ortiz-Santiago, V. M.; Colbert, S.: *HOLOTHURIA* (SEA CUCUMBERS) DISTRIBUTION BASED ON THE PHYSICAL-CHEMICAL PROPERTIES OF SEDIMENTS

013 Oceanic Uptake Of Heat And Greenhouse Gases: Dynamic And Thermodynamic Controls And Inferences From Tracers

Chair(s): Geoffrey (Jake) Gebbie, ggebbie@whoi.edu
Mark Holzer, mholzer@unsw.edu.au
William Smethie, bsmeth@ldeo.columbia.edu
Laure Zanna, zanna@atm.ox.ac.uk

Location: Exhibit/Poster Hall

- B1540 Jochum, M.; Moore, K.; Peacock, S.; Lindsay, K.: GLACIAL - INTERGLACIAL CHANGES TO THE AIR-SEA CARBON FLUXES: THE EQUATORIAL HYPOTHESIS
- B1541 Bryan, F. O.; Gent, P. R.; Tomas, R.: OCEAN HEAT UPTAKE IN EDDY-RESOLVED AND EDDY-PARAMETERIZED CLIMATE SIMULATIONS
- B1542 Song, Y. T.: DEEP OCEAN WARMING AND ITS SENSITIVITY TO SURFACE HEAT FLUX
- B1543 Kwon, E. Y.; Sarmiento, J. L.; Toggweiler, J. R.; DeVries, T.: THE CONTROL OF ATMOSPHERIC CO_2 CONCENTRATION BY GLOBAL OCEAN VENTILATION CHANGE
- B1544 McDougall, T. J.: THE INTERNATIONAL THERMODYNAMIC EQUATION OF SEAWATER (TEOS-10): USING THE NEW SALINITY AND TEMPERATURE VARIABLES
- B1545 Evans, G. R.; McDonagh, E. L.; King, B. A.; Bakker, D. C.; Bryden, H. L.; Achterberg, E. P.; Speer, K. G.; Stinchcombe, M. C.: DISSOLVED INORGANIC CARBON VARIABILITY IN THE SOUTH ATLANTIC SECTOR OF THE SOUTHERN OCEAN
- B1546 Primeau, F.; DeVries, T.: CAPTURING STOMMEL'S DEMON WITH A GLOBAL WATER MASS ANALYSIS
- B1547 Bardin, A. M.; Lindsay, K.; Primeau, F. W.: VENTILATION CHARACTERISTICS OF THE CESM OCEAN COMPONENT
- B1548 Wang, D.; Marshall, J.; Hill, C. N.: SENSITIVITY OF MODEL OCEAN HEAT UPTAKE TO THE REPRESENTATION OF THE OCEAN'S MESOSCALE

- B1549 Scott, J. R.; Dutkiewicz, S.; Sokolov, A. P.; Forest, C. E.: QUANTIFYING UNCERTAINTY IN THE UPTAKE OF HEAT AND CARBON IN THE 21ST CENTURY
- B1550 Jochum, M.; Briegleb, B.; Danabasoglu, G.; Large, W. G.; Alford, M.: NEAR-INERTIAL WAVE DRIVEN MIXING AND CLIMATE
- B1551 Miller, M. D.; Adkins, J. F.; Menemenlis, D.; Schodlok, M. P.: THE ROLE OF ICE SHELVES IN SETTING GLACIAL OCEAN BOTTOM WATER SALINITY
- B1552 Dunne, J. P.; Adcroft, A. J.; Griffies, S. M.; Hallberg, R. W.; John, J. G.; Krasting, J. P.; Stouffer, R. J.: OCEAN UPTAKE OF ANTHROPOGENIC HEAT AND CARBON IN TWO EARTH SYSTEM MODELS OF ALTERNATIVE OCEAN PHYSICAL CONFIGURATION
- B1553 Bates, S. C.; Fox-Kemper, B.; Jayne, S. R.; Large, W. G.; Stevenson, S.; Yeager, S. G.: AIR-SEA FLUX CONTROL ON OCEANIC HEAT UPTAKE
- B1554 Fuckar, N. S.; Xie, S.; Farneti, R.: INFLUENCE OF THE EXTRATROPICAL OCEAN CIRCULATION AND SURFACE HEAT EXCHANGE ON THE TROPICAL CLIMATE IN A SECTOR COUPLED CLIMATE MODEL
- B1555 Oka, A.; Abe-Ouchi, A.; Chikamoto, M. O.; Ide, T.: INVESTIGATION ON MECHANISMS CONTROLLING ATMOSPHERIC CARBON DIOXIDE CONCENTRATION AND EXPORT PRODUCTION AT THE LGM BY USING AN BIOGEOCHEMICAL OCEAN MODEL
- B1556 Ivanova, D.; Sperber, K.; Gleckler, P.; Bryan, F.: DYNAMIC AND THERMODYNAMIC CONTROLS OF ENSO ASSOCIATED ANOMALIES OF THE UPPER OCEAN HEAT UPTAKE IN TROPICAL PACIFIC

023 Dissolved Organic Matter And The 'Hidden' Carbon Cycle

Chair(s): Andy Ridgwell, andy@seao2.org
Dennis Hansell, dhansell@rsmas.miami.edu
Sandra Arndt, san.arndt@gmail.com
Ellen Druffel, edruffel@uci.edu

Location: Exhibit/Poster Hall

- A0041 Reynolds, S. E.; Mahaffey, C.; Williams, R. G.: DISSOLVED ORGANIC MATTER, AN IMPORTANT PHOSPHORUS SOURCE IN OLIGOTROPHIC GYRES
- A0042 Burdige, D. J.; Komada, T.: LINKAGES BETWEEN SULFATE REDUCTION AND METHANOGENESIS IN MARINE SEDIMENTS THROUGH DISSOLVED ORGANIC CARBON INTERMEDIATES
- A0043 Hatton, A. D.; Shenoy, D.; Hart, M. C.; Green, D. H.: CAN DOC INFLUENCE THE AVAILABILITY OF THE CLIMATE FEEDBACK GAS DMS?
- A0044 Thornton, D. C.; Brooks, S. D.; Deng, C.; Vidaurre, G.: MARINE DISSOLVED ORGANIC MATTER (DOM) AS A COMPONENT OF MARINE AEROSOL AND CLOUD CONDENSATION NUCLEI (CCN) OVER THE PACIFIC OCEAN
- A0045 Mopper, K.; Helms, J. R.; Schmidt-Rohr, K.; Mao, J.: IMPACT OF PHOTO-FLOCCULATION OF TERRESTRIAL DISSOLVED ORGANIC MATTER AND IRON ON THE MARINE DOM POOL
- A0046 Eichinger, M.; Céa, B.; Van Wambeke, F.; Grégori, G.; Charrière, B.; Lefèvre, D.: MODELING BACTERIAL GROWTH EFFICIENCY (BGE) TAKING BACTERIALLY-DERIVED DOC INTO ACCOUNT
- A0047 Seidel, M.; Riedel, T.; Waska, H.; Suryaputra, I.; Beck, M.; Dittmar, T.: PROCESSING OF DISSOLVED ORGANIC MATTER IN PERMEABLE SEDIMENTS OF THE COASTAL NORTH SEA
- A0048 Helms, J. R.; Chen, H.; Green, N. W.; Stubbins, A.; Perdue, E. M.; Hatcher, P. G.; Mopper, K.; Mao, J.: CHARACTERIZATION OF THE MAIN FRACTION OF DISSOLVED ORGANIC MATTER FROM DIVERSE OCEANIC ENVIRONMENTS BY REVERSE OSMOSIS COUPLED WITH ELECTRODIALYSIS
- A0049 Koch, B. P.; Geibert, W.; Lechtenfeld, O. J.; Witt, M.; Fahl, K.: NATURAL RADIATION MODIFIES THE STRUCTURE OF ORGANIC MATTER IN AQUEOUS SYSTEMS
- A0050 Wear, E. K.; Carlson, C. A.; James, A. K.; Windecker, L. A.; Brzezinski, M. A.: BACTERIOPLANKTON COMMUNITY RESPONSE TO GRADIENTS IN DISSOLVED ORGANIC MATTER BIOAVAILABILITY IN A COASTAL UPWELLING SYSTEM

- A0051 Windecker, L. A.; Brzezinski, M. A.; Wear, E. K.; Carlson, C. A.; Jones, J. L.: PRODUCTION OF DISSOLVED ORGANIC MATTER BY THE DIATOM *CHAETOCEROS SOCIALIS* UNDER SILICATE AND NITRATE STRESS
- A0052 Follett, C. L.; Repeta, D. J.; Rothman, D. H.; Forney, D. C.; Xu, L.: ESTIMATING THE ISOTOPIC DISTRIBUTION OF DISSOLVED ORGANIC MATTER
- A0053 Beaupre, S. R.: INFERRING THE GLOBAL DISTRIBUTION OF MARINE DISSOLVED ORGANIC RADIOCARBON
- A0054 Jiang, G.: DISSOLVED ORGANIC CARBON IN EDIACARAN-EARLY CAMBRIAN OCEAN
- A0055 Mao, J.; Benner, R.; Schmidt-rohr, K.: CHEMICAL AND NANOMETER-SCALE STRUCTURES OF MARINE AND PHYTOPLANKTON-PRODUCED ULTRAFILTERED DISSOLVED ORGANIC MATTER INVESTIGATED BY ADVANCED SOLID-STATE NMR
- A0056 Abdulla, H. A.; Mopper, K.; Hatcher, P. G.: TRANSFORMATION OF TERRESTRIAL POLYCARBOXYLATE COMPOUNDS: THE "FORGOTTEN" COMPONENT
- A0057 Zheng, Q.; Jiao, N.: UNMASKING THE NATURE OF OCEAN DOM THROUGH THE MICROBIAL CARBON PUMP ---- FROM GENES TO ECOSYSTEMS
- A0058 Li, Q.; Jiao, N. Z.: REVISITING OCEAN IRON LIMITATION UNDER VARIOUS SCENARIOS
- A0059 Kim, T.; Kim, G.: DISSOLVED ORGANIC CARBON (DOC) AND NITROGEN (DON) IN THE EAST/JAPAN SEA
- A0060 Kim, J.; Kim, T.; Kim, G.: DISSOLVED ORGANIC CARBON (DOC) IN THE SOUTHWESTERN EAST/JAPAN SEA
- A0061 Ji, J.; Jiao, N.: VIRUS-MEDIATED TRANSFORMATION OF ORGANIC CARBON IN THE SURFACE WATER OF THE WESTERN PACIFIC
- A0062 Ren, R.; Li, Z.; Guo, J.; Jiao, N.: RESPONSE OF BACTERIAL UPTAKE OF ORGANIC CARBON IN NITROGEN ENRICHED MESOCOSMS
- A0063 Ridgwell, A.; Arndt, S.; Cole, G.: EVOLUTION OF THE OCEAN'S "BIOLOGICAL PUMP"
- A0064 Santinelli, C.; Pollard, P.; Lavezza, R.; Ribera d'Alcalà, M.: DISSOLVED ORGANIC CARBON (DOC) DYNAMICS IN THE MEDITERRANEAN SEA

026 Sources, Transformation, And Sinks Of Black Carbon In The Ocean

Chair(s): Rainer Lohmann, lohmann@gso.uri.edu
Carrie Masiello, masiello@rice.edu

Location: Exhibit/Poster Hall

- A0065 Dittmar, T.; Paeng, J.; Stubbins, A.; Niggemann, J.: THE THERMO-CARBON PUMP: MILLENNIUM-SCALE STABILIZATION OF MARINE DISSOLVED ORGANIC MATTER THROUGH THERMOGENESIS
- A0066 Coppola, A. I.; Druffel, E. M.: ISOLATION OF BLACK CARBON FROM MARINE DISSOLVED ORGANIC CARBON USING A REVISED SOLID PHASE EXTRACTION METHOD
- A0067 Stubbins, A.; Niggemann, J.; Dittmar, T.: PHOTOREACTIVITY OF DISSOLVED BLACK CARBON
- A0068 Pohl, K. A.: A COMPARISON OF FLUVIAL AND AEOLIAN TRANSPORTED BLACK CARBON TO DEEP MARINE SEDIMENTS IN THE EQUATORIAL ATLANTIC
- A0069 Masiello, C. A.; Driver, L. E.; Gonnermann, H. M.; Dugan, B.; Chuang, V. J.; Liu, Z.; Zygourakis, K.: BLACK CARBON: DOES IT SINK OR FLOAT?
- A0070 Ding, Y.; Jaffe, R.; Niggemann, J.; Dittmar, T.: THE UBIQUITY OF DISSOLVED BLACK CARBON IN FRESHWATER ENVIRONMENTS.
- A0071 Lohmann, R.; Pohl, K.; Sullivan, J.; Feichter, J.; Kloster, S.: BLACK CARBON IN THE SURFACE MIXED LAYER ACROSS THE NORTH ATLANTIC OCEAN

029 Sediment Transport And Deposition In Lakes, Estuaries, And Shallow Shelves

Chair(s): Nathan Hawley, nathan.hawley@noaa.gov
Courtney K. Harris, ckharris@vims.edu
Lawrence P. Sanford, lsanford@umces.edu

Location: Exhibit/Poster Hall

- B0804 Pidduck, E. L.; Fitzsimons, M. F.; Manning, A. J.; Nimmo-Smith, A.; Verney, R.; Worsfold, P. J.; Souza, A. J.: SEDIMENT-NUTRIENT DYNAMICS OF THE TURBIDITY MAXIMUM ZONE
- B0805 Cross, J.; Nimmo Smith, W. A.; Hosegood, P. J.; Torres, R.: INVESTIGATING THE TEMPORAL VARIABILITY OF SUSPENDED PARTICLE POPULATIONS IN A SHALLOW SHELF SEA
- B0806 Simmons, G. M.; Voulgaris, G.: CHARACTERIZATION OF WAVE ENERGY LEVELS IN ESTUARINE WATERS FOR PARTICULATE DISPERSION STUDY: CASE STUDY WINYAH BAY, SC
- B0807 Ono, J.; Guo, X.: SEASONAL AND TIDAL VARIATIONS OF SUSPENDED PARTICULATE MATTER IN THE EAST CHINA SEA
- B0808 Wang, D.: EARLY DIAGENETIC PROCESSES OF MOLYBDENUM UNDER REDUCING ENVIRONMENTS
- B0809 Shi, E.; Kirby, J. T.; Misra, S.; Vittori, G.; Ramsey, J.: PROCESS FILTERING AND INPUT FILTERING IN MODELING OF SANDPIT-INDUCED MORPHOLOGICAL EVOLUTION
- B0810 Yu, X.; Ozdemir, E.; Cheng, Z.; Hsu, T.; Balachandrar, S.: NUMERICAL SIMULATION ON FINE SEDIMENT TRANSPORT IN THE OSCILLATORY BOUNDARY LAYER – THE ROLE OF RHEOLOGY AND PARTICLE INERTIA
- B0811 Pondell, C. R.; Canuel, E. A.; Beck, A. J.; Louchouart, P.: RESPONSE OF ORGANIC CARBON ACCUMULATION IN ENGLEBRIGHT LAKE, CA TO CLIMATE AND ANTHROPOGENIC IMPACTS IN THE WATERSHED
- B0812 Mulligan, R. P.; Smith, P. C.; Hill, P. S.; Tao, J.; Wu, Y.; Bugden, G.; van Proosdij, D.: SUSPENDED SEDIMENT PROCESSES IN MINAS BASIN, THE BAY OF FUNDY
- B0813 Boyd, B. M.; Sommerfield, C. K.: COMPARISON OF NATURAL AND IMPOUNDED MARSH ACCRETION RATES IN COASTAL DELAWARE
- B0814 Eglinton, A. J.; Palinkas, C. M.; Koch, E. W.: POTENTIAL SEDIMENT EXCHANGE BETWEEN MARSHES AND ADJACENT SUBMERSED AQUATIC VEGETATION (SAV) BEDS IN CHINCOTEAGUE BAY (MD)
- B0815 Storlazzi, C. D.; Field, M. E.; Draut, A. E.; Hoeke, R. K.: UNDERSTANDING THE DELIVERY, RESIDENCE TIME, AND ADVECTION OF FLUVIAL SEDIMENT OUT OF A CORAL REEF-LINED EMBAYMENT THROUGH EMPIRICAL OBSERVATIONS AND MODELING
- B0816 Downing-Kunz, M. A.; Shellenbarger, G. G.; Morgan, T. L.; Wright, S. A.; Schoellhamer, D. H.: SUSPENDED-SEDIMENT DYNAMICS IN THE TIDAL REACH OF A SAN FRANCISCO BAY TRIBUTARY
- B0817 MacVean, L. J.; Lacy, J. R.: ESTUARINE SEDIMENT DYNAMICS IN INTERTIDAL AND SUBTIDAL ENVIRONMENTS: DIFFERENCES AND SIMILARITIES IN FORCING AND RESPONSE
- B0818 Lavenère-Wanderley, A. A.; Siegle, E.: WAVE INDUCED SEDIMENT TRANSPORT ON SOUTH BAHIA CONTINENTAL SHELF, BRAZIL
- B0819 Shellenbarger, G. G.; Wright, S. A.; Schoellhamer, D. H.: SEDIMENT BUDGET FOR THE FAR SOUTHERN REACH OF SAN FRANCISCO BAY: IMPORTANCE OF HYDRODYNAMICS TO THE SUPPLY OF SEDIMENT AVAILABLE FOR HABITAT RESTORATION
- B0820 Vizcaino, A.; Dunbar, R. B.; Jimenez-Espejo, F.; Wahl/Dave, D.; Mucciarone, D.; Guilderson, T.; Moy, C.: SOUTHERN HEMISPHERE WESTERLIES IN THE MID-LATE HOLOCENE
- B0821 Macduff, S. D.; Wolanski, E.; Richmond, R. H.: INVASIVE ALGA REMOVAL ACCELERATES SEDIMENT FLUSHING IN MAUNALUA BAY, HAWAII
- B0822 Chen, J.; Hsu, T.; Shi, F.: NUMERICAL MODELING OF HYDRODYNAMICS AND SEDIMENT TRANSPORT OF NEW RIVER INLET (NC) USING NEARCOM-TVD
- B0823 Padilla, D. J.; Dinnel, P. A.: DOES SMART SPONGE EFFECTIVELY REMOVE TOXICITY FROM STORM WATER?

- B0824 Greitl, L. R.; Ali, A.; Birkholz, N. F.; Cox, D.; Grodin, M.; Reinsch, C.; Rosen, N.; Stowell, M. A.; Trotter, T.; Wambaugh, Z.: USING TOWED SENSOR OBSERVATIONS TO MODEL THE DISTRIBUTIONS OF TOTAL SUSPENDED SOLIDS IN HUMBOLDT BAY, CALIFORNIA DURING THE SPRING-SUMMER TRANSITION
- B0825 Fricke, A. T.; Sheets, B. A.; Nittrouer, C. A.; Allison, M. A.; Ogston, A. S.: LINKING DELTAIC AND DEEP-WATER SEDIMENTATION IN LAKE CHELAN, WA
- B0826 Humberston, J. L.; Sommerfield, C. K.: RADIONUCLIDE INDICATORS OF SEASONAL SEDIMENT DEPOSITION IN THE DELAWARE ESTUARY
- B0827 Wiberg, P. L.; Safak, I.: MODELING SEDIMENT EXCHANGE BETWEEN TIDAL CHANNELS AND ADJACENT FLATS OR MARSHES OVER VARYING TIDAL RANGES
- B0828 McKeon, M. A.; Horner-Devine, A. R.: CONTAMINATED SEDIMENT TRANSPORT IN THE STRONGLY STRATIFIED DUWAMISH RIVER ESTUARY
- B0829 Wong, P. L.; Variano, E. A.; Kondolf, G. M.: PARTICLE FALL VELOCITY IN IN-STREAM EMERGENT VEGETATION

031 Biogeochemical Cycles Of Continental Margins: Drivers And Impacts

Chair(s): Antonio Mannino, antonio.mannino@nasa.gov
Cécile Cathalot, C.Cathalot@nioo.knaw.nl
Marjorie Friedrichs, marjy@vims.edu
Peter Griffith, peter.c.griffith@nasa.gov

Location: Exhibit/Poster Hall

- B1018 Laurent, A.; Fennel, K.; Hu, J.; Hetland, R.: SIMULATING PHOSPHORUS LIMITATION IN THE NORTHERN GULF OF MEXICO
- B1019 Fuchsman, C. A.; Devol, A. H.; Chase, J.; Reimers, C. E.: BENTHIC FLUXES ON THE OREGON SHELF
- B1020 Chakraborty, S.; Lohrenz, S. E.: PHYTOPLANKTON COMMUNITY DISTRIBUTION AND LIGHT ABSORPTION PROPERTIES IN THE NORTHERN GULF OF MEXICO
- B1021 Bakker, D. C.; Lee, G. A.: SUMMERTIME CARBON EXCHANGES ON THE NORTHWESTERN EUROPEAN SHELF
- B1023 Pather, S.; Altabet, M. A.; Pfister, C.; Larkum, J. A.: THE CONTRIBUTION OF MUSSEL EXCRETION TO COASTAL PRIMARY PRODUCTION DETERMINED USING STABLE ISOTOPE TRACERS
- B1024 Skrabal, S. A.; Gliniski, D. A.; Larson, L. A.; Wetterauer, A. M.; Avery, G. B.; Kieber, R. J.; Mead, R. N.: PHOTOCHEMICAL FLUXES OF DISSOLVED COPPER AND ORGANIC MATTER FROM RESUSPENDED SEDIMENTS AS SOURCES TO RIVERINE AND COASTAL ENVIRONMENTS
- B1025 Novak, M. G.; Mannino, A.: MODELING THE DISTRIBUTION OF POC AND DOC FROM DISCRETE AND ATOMOUS UNDERWAY MEASUREMENTS COLLECTED SEASONALLY IN THE NORTHEASTERN US CONTINENTAL MARGIN
- B1027 Colman, A. S.; Blake, R. E.: MODELING THE OXYGEN ISOTOPE COMPOSITION OF PHOSPHATE IN AQUATIC ECOSYSTEMS
- B1028 Munro, D. R.; Quay, P. D.: ESTIMATES OF BIOLOGICAL PRODUCTION AND EXPORT EFFICIENCY IN THE COASTAL OCEAN BASED ON THE OXYGEN TRIPLE ISOTOPE METHOD AND O₂:AR GAS RATIO
- B1029 Salisbury, J.; Vandemark, D.; Hunt, C. W.; Shellito, S.: STRONG OCEANIC CO₂ VARIABILITY YET A NET AIR-SEA FLUX BALANCE – AN EVALUATION OF THE CONTROLS ON MIXED LAYER PCO₂ IN THE GULF OF MAINE
- B1030 Schneeweis, M.; Wang, X.; Chen, R. F.: THE CONTRIBUTION OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) BY SPARTINA SPECIES RHIZOMES TO THE NEPONSET RIVER ESTUARY
- B1031 Widner, B.; Mulholland, M. R.: CYANATE CONCENTRATIONS IN THE CHESAPEAKE BAY
- B1032 Rushdi, A. I.; DouAbul, A. A.; Simoneit, B. R.: CHARACTERISTICS, LEVELS AND SOURCES OF LIPID TRACERS IN SEDIMENTS FROM THE SHATT AL-ARAB RIVER OF IRAQ AND THE NORTHERN PART OF THE ARABIAN GULF

- B1033 Shen, Y.; Fichot, C. G.; Benner, R.: FLOODPLAIN INFLUENCES ON DISSOLVED ORGANIC MATTER COMPOSITION AND EXPORT FROM THE LOWER MISSISSIPPI-ATCHAFALAYA RIVER SYSTEM
- B1034 Orcutt, K. M.; Burnett, P. F.; Gundersen, K.: MOLECULAR DETECTION OF UNICELLULAR N-FIXING CYANOBACTERIA IN THE NORTHERN GULF OF MEXICO
- B1035 Huang, W. J.; Cai, W. J.; Castelao, R.; Wang, Y.; Lohrenz, S. E.: IMPACTS OF A WIND-DRIVEN, CROSS-SHELF LARGE RIVER PLUME ON BIOLOGICAL PRODUCTION AND CO₂ UPTAKE IN THE GULF OF MEXICO
- B1036 Strong, A. L.; Arrigo, K. R.: UNDERSTANDING CARBON EXCHANGE UNDER GLOBAL CHANGE: RECENT ESTIMATES OF AIR-SEA CO₂ FLUX ON THE CHUKCHI SEA SHELF
- B1037 Powers, L. C.; Miller, W. L.: SPATIOTEMPORAL VARIABILITY OF THE PHOTOCHEMICAL EFFICIENCY OF CO₂ AND CO PRODUCTION IN THE NORTHERN GULF OF MEXICO: ESTIMATING THE IMPACT ON CARBON CYCLES

032 The Arctic And Subpolar North Atlantic As The Pacemakers For Climate Change

Chair(s): Igor Yashayaev, Igor.Yashayaev@dfm-mpo.gc.ca
Dan Seidov, Dan.Seidov@noaa.gov
Dagmar Kieke, dkieke@physik.uni-bremen.de
Entcho Demirov, entcho@mun.ca

Location: Exhibit/Poster Hall

- B1780 Peralta-Ferriz, C.; Morison, J. H.; Wallace, J. M.; Kwok, R.; Zhang, J.; Bonin, J. A.; Chambers, D. P.: ARCTIC OCEAN CIRCULATION PATTERNS DERIVED FROM OBSERVED AND MODELED OCEAN BOTTOM PRESSURE ANOMALIES
- B1781 Green, C. L.; Green, J. M.; Bigg, G. R.: CLIMATIC CONSEQUENCES OF ICE SHEET COLLAPSE IN THE ARCTIC
- B1783 Lundrigan, S. E.; Demirov, E.: MODEL STUDY OF THE IMPACT OF THE NORDIC SEAS DYNAMICS ON MERIDIONAL HEAT AND WATER TRANSPORT
- B1784 Soiland, H.; Rosby, T.: OBSERVATIONS OF AN INTENSE ANTICYCLONIC EDDY IN THE NORWEGIAN SEA
- B1785 Flagg, C. N.; Rosby, T.: ON THE STRUCTURE OF CURRENTS IN THE FAROE-SHETLAND CHANNEL AND OVER THE ICELAND-FAROE RIDGE
- B1787 Wekerle, C.; Wang, Q.; Danilov, S.; Schröter, J.; Jung, T.: VARIABILITY OF FRESHWATER TRANSPORTS THROUGH THE CANADIAN ARCTIC ARCHIPELAGO
- B1788 Maslowski, W.; McGeehan, T. P.: CONTROL MECHANISMS OF VOLUME AND FRESHWATER EXPORT THROUGH THE CANADIAN ARCTIC ARCHIPELAGO
- B1789 Curry, B.; Lee, C. M.; Petrie, B.; Gobat, J.: OBSERVATIONAL STUDY OF THE FLUX AND WATER MASS VARIABILITY THROUGH DAVIS STRAIT
- B1790 Muenchow, A.: OCEANIC CLIMATE CHANGE OFF WESTERN GREENLAND: FACT OR FICTION?
- B1791 Maltrud, M. E.; Weijer, W.; Hecht, M. W.; Dijkstra, H. A.; Kliphuis, M.: RESPONSE OF THE ATLANTIC OCEAN CIRCULATION TO GREENLAND ICE SHEET MELTING
- B1792 Roth, C.; Behrens, E.; Biastoch, A.: THE IMPACT OF THE ATLANTIC-ARCTIC EXCHANGE ON RISING OCEAN BOTTOM TEMPERATURES AND THE FATE OF GAS HYDRATES
- B1793 Hauser, T. P.; Demirov, E.: FACTORS CONTRIBUTING TO THE ATMOSPHERIC DECADEAL WARMING OF SUB-POLAR NORTH ATLANTIC 2001 - 2011
- B1794 Mao, C.; Holliday, N. P.; Bacon, S.: DECADEAL CHANGES IN THE ANNUAL CYCLE OF SEA SURFACE TEMPERATURE IN THE SUBPOLAR NORTH ATLANTIC
- B1795 Felli Li, E.; Young-Heon Jo, Y.; W. Timothy Liu, ; Xiao-Hai Yan, X.: VARIABILITY IN THE SEA SURFACE HEIGHT ANOMALY OF THE NORTH ATLANTIC SUBPOLAR GYRE FROM THE 1990S TO THE 2000S
- B1796 Fan, X.; Send, U.; Karstensen, J.: QUANTIFYING THE CONTRIBUTION OF MESOSCALE ANTICYCLONES TO THE IRMINGER SEA HEAT AND FRESHWATER BUDGETS

- B1797 Jo, Y.; Li, F.; Yan, X.: DOWNSCALEING LONG-TERM VARIABILITY OF SUBSURFACE THERMAL STRUCTURES OT REGIONAL SCALES IN THE SUBPOLAR NORTH ATLANTIC
- B1798 Scheinert, M.; Behrens, E.; Biastoch, A.; Böning, C. W.: CAUSES OF DECADEAL SHIFTS IN THE FRESHWATER AND HEAT BUDGET OF THE SUBPOLAR NORTH ATLANTIC
- B1799 Luo, H.; Bracco, A.; Yashayaev, I.; Di Lorenzo, E.: MODEL INVESTIGATION OF THE INTERANNUAL VARIABILITY OF POTENTIAL TEMPERATURE IN THE CENTRAL LABRADOR SEA
- B1800 Nolan, G. D.; Fennell, S.; Rose, G.; Yashayaev, I.: CONNECTIVITY OF LABRADOR SEA WATER BETWEEN THE EASTERN AND WESTERN NORTH ATLANTIC BASINS
- B1801 Roessler, A.; Rhein, M.; Kieke, D.; Mertens, C.: VARIABILITY OF THE NORTH ATLANTIC CURRENT AT THE MID ATLANTIC RIDGE BETWEEN 2006 AND 2010
- B1802 Howe, N.; Haines, K.: THE ROLE OF SALINITY IN NORTH ATLANTIC DECADEAL VARIABILITY SIMULATED IN A COUPLED CLIMATE MODEL
- B1803 Danabasoglu, G.; Yeager, S. G.; Kwon, Y. O.; Tribbia, J. J.; Phillips, A.; Hurrell, J.: VARIABILITY OF THE ATLANTIC MERIDIONAL OVERTURNING CIRCULATION IN CCSM4
- B1804 Cheng, W.; Zhang, D.: ASSESSING ATLANTIC OVERTURNING CIRCULATION (AMOC) IN CMP5 MODELS
- B1805 Buckley, M. W.; Ferreira, D.; Campin, J. M.: DECADEAL VARIABILITY OF THE ATLANTIC MERIDIONAL OVERTURNING CIRCULATION
- B1806 Tulloch, R.; Marshall, J.: AMOC, THE MANN EDDY AND RECONSTRUCTING 20TH CENTURY AMOC VARIABILITY FROM DATA
- B1807 Klinger, B. A.: A CAUSE OF INTER-MODEL VARIATION IN 21ST CENTURY MERIDIONAL OVERTURNING PROJECTIONS
- B1808 Arzel, O.; England, M. H.; Colin de Verdière, A.; Huck, T.: ABRUPT MILLENNIAL VARIABILITY AND INTERDECADEAL-INTERSTADIAL OSCILLATIONS IN A GLOBAL COUPLED MODEL: SENSITIVITY TO THE BACKGROUND CLIMATE STATE
- B1809 Sein, D. V.; Mikolajewicz, U.; Groeger, M.; Maier-Reimer, E.: DOWNSCALING OF CLIMATE CHANGE A1B SCENARIO PROJECTION ON NORTH ATLANTIC OCEAN – ATMOSPHERE SYSTEM

033 Oceanographic Processes At The Antarctic Continental Margins

Chair(s): Robin Muench, rmuench@esr.org
Eileen Hofmann, hofmann@ccpo.ou.edu
Anna Wählin, anna.wahlin@gu.se
Laurie Padman, padman@esr.org

Location: Exhibit/Poster Hall

- B2009 Lee, J.; Ha, H.; Hong, C.; Kim, T.; Lee, S.: A HYDROGRAPHIC SURVEY IN THE CENTRAL AMUNDSEN SEA SHELF IN 2010-2011
- B2010 Muench, R. D.; Wählin, A. K.; Bjork, G.; Arneborg, L.; Alsén, H.: SOME IMPLICATIONS OF BOTTOM EKMAN LAYER DYNAMICS FOR CROSS SHELF EXCHANGE IN THE AMUNDSEN SEA
- B2011 Wiederwohl, C. L.; Orsi, A. H.: ASSESSING THE INFLUENCE OF HEAT AND FRESHWATER ANOMALIES ON DEEP AND BOTTOM WATERS OF THE ROSS SEA
- B2012 Dutrieux, P.; Jenkins, A.; Jacobs, S. S.: OBSERVATIONS BENEATH PINE ISLAND GLACIER, WEST ANTARCTICA
- B2013 Mack, S.; Klinck, J.; Padman, L.: OBSERVING A DIURNAL TIDAL EFFECT ON SEA ICE CONCENTRATION IN THE ROSS SEA USING AMSR-E SATELLITE DATA
- B2014 St-Laurent, P.; Klinck, J. M.; Dinniman, M. S.: CROSS-SHELF EXCHANGES INDUCED BY TROUGHS
- B2015 Springer, S. R.; Padman, L.; Dinniman, M. S.; Klinck, J. M.: ANTARCTIC BOTTOM WATER PRODUCTION IN THE ROSS SEA: MODEL SENSITIVITY STUDIES
- B2016 Østerhus, S.; Strand, K. O.; Gamelsrød, T.: LONG TERM VARIATIONS OF THE ICE SHELF WATER IN THE SOUTHERN WEDDELL SEA

- B2017 Graham, J. A.; Heywood, K. J.; Chavanne, C.; Tamura, T.: SEASONAL CYCLE OF TEMPERATURE AND SALINITY ACROSS THE ANTARCTIC CONTINENTAL SHELF AND SLOPE IN THE SOUTHEASTERN WEDDELL SEA
- B2018 Genest, G.; Orsi, A. H.; Wiederwohl, C. L.; Kim, Y.: OCEAN-ICE SHELF INTERACTIONS IN THE EASTERN ROSS SEA
- B2019 Padman, L.; Fricker, H. A.: MODES OF MASS LOSS FROM ANTARCTIC PENINSULA ICE SHELVES
- B2020 Wahlin, A. K.; Ha, H. K.; Arneborg, L.; Bjork, G.; Muench, R.; Dohan, K.: CIRCULATION OF CIRCUMPOLAR DEEP WATER ON THE WESTERN AMUNDSEN SHELF
- B2021 Dinniman, M. S.; Klinck, J. M.; Smith, Jr., W. O.: SENSITIVITY OF MODIFIED CIRCUMPOLAR DEEP WATER IN THE ROSS SEA TO CHANGES IN THE SURFACE WINDS
- B2022 Losch, M.; Heimbach, P.: MELT RATE SENSITIVITIES UNDERNEATH PINE ISLAND ICE SHELF DERIVED FROM AN ADJOINT GENERAL CIRCULATION MODEL
- B2023 Arzeno, I. B.; Beardsley, R. C.; Owens, B.; Limeburner, R.; Padman, L.; Williams, M.; Stewart, C.; Lee, C.: LOOKING UNDER THE ROSS ICE SHELF: TIDAL AND SUBTIDAL VARIABILITY
- B2024 Klinck, J. M.; Costa, D. P.; Hofmann, E. E.; Dinniman, M. S.: OBSERVATIONS FROM SEALS REVEAL OCEAN SPATIAL AND TEMPORAL VARIABILITY ON THE SHELF WEST OF THE ANTARCTIC PENINSULA
- B2025 Kohut, J. T.; Hunter, E.; Huber, B.: SMALL SCALE VARIABILITY OF THE CROSS SHELF FLOW OVER THE OUTER SHELF OF THE ROSS SEA
- B2026 Stanton, T. P.; Shaw, W. J.; Bindschadler, R.; Truffer, M.; Holland, D.; McPhee, M.; Anandakrishnan, S.; Behar, A.: PRELIMINARY OBSERVATIONS OF OCEAN / ICE INTERACTION BENEATH THE PINE ISLAND ICE SHELF, ANTARCTICA
- B2028 Mortenson, E. A.; Speer, K.; Orsi, A.: GENERATION AND EARLY DEVELOPMENT OF THE ANTARCTIC SLOPE FRONT (ASF) THROUGH TOPOGRAPHY AND EXCHANGE ALONG THE PACIFIC CONTINENTAL MARGINS
- B2029 Shi, J.; Zheng, S.; Cheng, Y.; Jiao, Y.; Hou, J.: OUTFLOW WATER OBSERVED IN AUSTRAL SUMMER IN FRONT OF THE AMERY ICE SHELF, ANTARCTICA
- B2030 Kalen, O.; Wahlin, A.; Dohan, K.; Arneborg, L.; Bjork, G.; Muench, R.: REMOTE AND LOCAL METEOROLOGICAL FORCING OF WARM DEEP WATER INFLOWS ON THE AMUNDSEN SHELF
- B2031 Le Bel, D. A.; Zappa, C. J.; Budillon, G.; Gordon, A.: VARIABILITY OF LOCALLY-PRODUCED WATER MASSES WITHIN THE TERRA NOVA BAY POLYNIA
- B2032 Brown, S. M.; Zappa, C. J.; Maslanik, J.; Cassano, J. J.: INVESTIGATING OCEAN SURFACE PROCESSES WITHIN A POLYNIA FROM AN UNMANNED AIRBORNE VEHICLE

035 Using Data From Autonomous Vehicles And Drifters To Support Education And Outreach

Chair(s): James A. Yoder, jyoder@whoi.edu
Janice McDonnell, mcdonnell@marine.rutgers.edu

Location: Exhibit/Poster Hall

- B0674 Sullivan, D. E.; Hochstaedter, A.: OBSERVING OCEAN PROCESSES WITH STUDENT-BUILT OCEAN DRIFTERS AND TIME ANIMATIONS IN GOOGLE EARTH
- B0675 Ryan, J. P.; Barr, N. S.; Fulton-Bennett, K.; Fierstein, D.: RESEARCH WITH AUTONOMOUS UNDERWATER VEHICLES INFORMS EDUCATIONAL RESOURCE ABOUT HARMFUL ALGAL BLOOMS
- B0676 Claustre, H.; Scheurle, C.; Oceanographic Autonomous Observations, : A FRENCH OUTREACH INITIATIVE INCLUDING OCEANOGRAPHIC AUTONOMOUS OBSERVATIONS
- B0677 Lorenz, R. D.; Stofan, E.; Turtle, E. P.; Beisser, K.; Buckley, M.: DRIFTER ON AN ALIEN SEA : EDUCATION AND OUTREACH ON THE TITAN MARE EXPLORER

- B0678 Kukulya, A. L.; Austin, T.; Yoder, J.: USING A REMUS-100 AUV TO INSPIRE CURIOSITY AND ENTHUSIASM IN 6-12TH GRADE STUDENTS BY ENGAGING IN A REAL- WORLD SCIENCE, ENGINEERING AND TECHNOLOGY PROGRAM
- B0679 McDonnell, J. D.; Lichtenwalner, C. S.; deCharon, A.; Companion, C.; Risien, C.; Kilb, D.; Fundis, A.; McCurdy, A.; Glenn, S.: AN ASSESSMENT OF REAL-TIME DATA USE IN UNDERGRADUATE CLASSROOMS
- B0680 Lichtenwalner, C. S.; Florio, K.; McDonnell, J.; Gardner, K.; Clark, H.; Parsons, C.; Hotaling, L.: CONSTRUCTING A FRAMEWORK TO CLASSIFY OCEAN DATA ACTIVITIES: A TOOL FOR CONTENT DEVELOPERS, DATA TRANSLATORS AND EDUCATORS

037 Operational Applications Of Ocean Satellite Observations

Chair(s): Margaret Srinivasan, margaret.srinivasan@jpl.nasa.gov
Dr. Robert Leben, leben@colorado.edu

Location: Exhibit/Poster Hall

- B1420 Lucas, E. Y.; Strong, A. E.; Eakin, C. M.; Rauen Zahn, J. L.; Chang, P. S.; Laszlo, I.; Maturi, E.; Miller, L.; Pichel, W.; Wang, M.: TAKING A GLIMPSE INTO THE FUTURE: ENHANCED SATELLITE REMOTE SENSING FOR CORAL REEF MANAGEMENT
- B1421 Setou, T.; Kuroda, H.; Azumaya, T.; Itoh, S.; Kakehi, S.; Inagake, D.; Shimizu, M.; Hiroe, Y.; Taneda, T.; Okazaki, M.: APPLICATION OF A 3D-VAR DATA ASSIMILATION SCHEME TO AN EDDY-RESOLVING WESTERN NORTH PACIFIC MODEL BASED ON ROMS
- B1422 Bayler, E.; Behringer, D.; Hundermark, B.; Mehra, A.; Nadiga, S.: APPLICATION OF NEW SATELLITE OCEAN COLOR DATA IN GLOBAL OCEAN MODEL SIMULATIONS
- B1423 Leben, R. R.; LoDolce, G. C.: THE NEW CCAR "EDDY" OCEAN DATA SERVER
- B1424 Pradal, M. S.; Zaron, E. D.: BOTTOM TOPOGRAPHY MAPPING VIA ASSIMILATION OF SEA SURFACE HEIGHT DATA
- B1425 Tang, B.; Chao, Y.; Li, Z.; Li, P.; Vu, Q.; Zhang, H.: A GLOBAL 1-KM SEA SURFACE TEMPERATURE PRODUCT BLENDING SATELLITE AND IN SITU OBSERVATIONS
- B1426 Choi, B. J.; Jung, H. S.; Lee, K. H.; Byun, D. S.; Chang, K. I.: SURFACE GEOSTROPHIC CURRENT ESTIMATED FROM ALTIMETER AND SURFACE DRIFTER DATA IN THE JAPAN/EAST SEA
- B1427 Vega-Rodriguez, M.; Muller-Karger, F.; Li, J.; Eakin, C. M.; Guild, L.; Hu, C.; Lynds, S.; Heron, S.; Quiles-Perez, G. A.; Ruzicka, R.: DEVELOPING HIGH-RESOLUTION THERMAL STRESS INDICES TO ENHANCE REGIONAL CORAL BLEACHING FORCASTS THROUGH NOAA'S CORAL REEF WATCH DECISION-SUPPORT-SYSTEM
- B1428 Pujol, M. I.; Rio, M. H.; Renaudie, C.; Faugère, Y.; Dibarboure, G.; Labroue, S.; Morrow, R.; Lambin, J.; Bronner, E.; D'Ovidio, F.: A KERGUELEN REGIONAL SEA LEVEL PRODUCT TO SUPPORT THE KEOPS2 EXPERIMENT
- B1429 Gould, R. W.; Coelho, E.; Shulman, I.; McCarthy, S.; Ladner, S. D.; Cayula, S.; Sakalaukus, P.: ENSEMBLE APPROACH TO FORECAST SATELLITE BIO-OPTICAL PROPERTIES AND UNCERTAINTIES
- B1430 Daniels, R. M.; Sienkiewicz, J. M.; Ji, M.: ASSESSMENT OF SST ANALYSES IN SUPPORT OF OCEAN FORECASTING AT THE NOAA OCEAN PREDICTION CENTER
- B1431 Hyde, K. J.; Fogarty, M. J.; Melrose, D. C.; Hare, J. A.; Mannino, A.; Mulholland, M. R.: ANALYZING SATELLITE DERIVED PHYTOPLANKTON FUNCTIONAL GROUP ESTIMATES FOR USE IN FISHERY PRODUCTION MODELS
- B1432 Barron, C. N.; Helber, R. W.; Townsend, T. L.; Carrier, M. J.; Dastugue, J. M.; Smedstad, O. M.: OPERATIONAL NAVY OCEAN FORECASTING USING ISOP PROJECTION OF SATELLITE ALTIMETRY AND SURFACE TEMPERATURE
- B1433 Sienkiewicz, J. M.; Jelenak, Z.; Chang, P. S.; Folmer, M.; Albright, B.: THE OPERATIONAL USE OF SCATTEROMETER OCEAN SURFACE VECTOR WINDS IN EXTREME WINTER OCEAN STORMS
- B1434 Li, J.; Eakin, C. M.; Vega_Rodriguez, M.; Muller-Karger, F.; Liu, G.; Heron, S. F.; Guild, L. S.; Wood, L.; Lynds, S.; Christensen, T. R.: A NEW GLOBAL HIGH-RESOLUTION CORAL THERMAL STRESS PRODUCT SUITE BASED ON NOAA NESDIS'S OPERATIONAL HIGH-RESOLUTION SST PRODUCTS

- B1435 Lellouche, J. M.; Le Galloudec, O.; Tranchant, B.; Greiner, E.; Bricaud, C.; Dreviron, M.; Regnier, C.; Reffray, G.; Levier, B.; Chanut, J.: OVERVIEW AND RECENT IMPROVEMENTS OF THE GLOBAL AND REGIONAL MERCATOR OCEAN OPERATIONAL SYSTEMS
- B1436 Ferry, N.; Parent, L.; Garric, G.; Bricaud, C.; Drillet, Y.; Barnier, B.; Dussin, R.; Molines, J. J.; Jourdain, N.; Cabanes, C.: GLORYS 1/4P GLOBAL OCEAN REANALYSES AND SIMULATIONS OF THE PERIOD 1992-PRESENT
- B1437 Wang, X.; Chao, Y.; Tang, B.; Li, Z.; Wu, Z.: REGIONAL SEA LEVEL ANOMALY PROCESSING IN THE GULF OF MEXICO
- B1438 Nechaev, D.; Pantelev, G.; Yaremchuk, M.; Luchin, V.; Kikuchi, T.: DYNAMIC TOPOGRAPHY OF THE BERING SEA AND TRANSPORT ESTIMATES THROUGH THE MAJOR ALEUTIAN PASSES

038 Changing Biogeochemistry And Ecosystems In The Western North Pacific Continental Margins Under Climate Change And Anthropogenic Forcing

Chair(s): Kon-Kee Liu, kklui@ncu.edu.tw
Minhan Dai, mdai@xmu.edu.cn
Gwo-Ching Gong, gcgong@ntou.edu.tw
Chih-Hau Hsieh, chsieh@ntu.edu.tw
Hiroaki Saito, hsaito@affrc.go.jp

Location: Exhibit/Poster Hall

- 15:45 Saito, H.: HORIZONTAL VARIABILITY IN NITROGEN DYNAMICS IN THE KUROSHIO EXTENSION REGION
- B1267 Liu, K. K.; Lee, H. J.; Gong, G. C.; Teng, Y. C.; Yeh, T. Z.: IMPACTS OF ANTHROPOGENIC NUTRIENTS ON THE BIOGEOCHEMISTRY AND PRIMARY PRODUCTIVITY OF THE EAST CHINA SEA
- B1268 Hung, C. C.; Tseng, C. W.: SUMMER PARTICULATE ORGANIC CARBON FLUX IN THE EAST CHINA SEA
- B1269 Chang, F. H.; Marquis, E. C.; Gong, G. C.; Hsieh, C. H.: MICROZOOPLANKTON GRAZING IMPACT IN THE SOUTHERN EAST CHINA SEA
- B1270 Gong, G.: PHOTOSYNTHESIS-IRRADIANCE RELATIONSHIPS IN SEAWATER OF THE EAST CHINA SEA IN THE CONTRAST SEASON (WINTER AND SUMMER)
- B1271 Marquis, E.; Garcia-Comas, C.; Teng, W.; Chang, F.; Gong, G.; Hsieh, C.: DOES CHANGJIANG DISCHARGE INFLUENCE NANO-MICROPLANKTON SIZE STRUCTURE IN THE EAST CHINA SEA?
- B1272 Lin, K. Y.; Gong, K. C.; Hsieh, C. H.: COPEPOD COMMUNITY GROWTH RATES IN RELATION TO BODY SIZE, TEMPERATURE, AND FOOD AVAILABILITY IN THE EAST CHINA SEA - A TEST OF METABOLIC THEORY
- B1273 Lee, M. A.; Chen, W. Y.; Chen, Y. K.; Lo, N.; Liu, D. C.: THE SUMMER ASSEMBLAGE OF LARVAL FISHES IN THE WATERS OF EAST CHINA SEA SHELF AND TAIWAN IN 2007
- B1274 Du, C.; Dai, M.: KUROSHIO DETERMINED NUTRIENT INVENTORY IN THE UPPER NORTHERN SOUTH CHINA SEA?
- B1275 Tsai, A. Y.; Gong, G. C.: EFFECTS OF VIRAL LYSIS ON BACTERIAL MORTALITY IN WESTERN SUBTROPICAL PACIFIC COASTAL WATER
- B1276 Cao, Z.; Frank, M.; Dai, M.; Grasse, P.; Ehlert, C.: SILICON ISOTOPE CONSTRAINTS ON SOURCES AND UTILIZATION OF SILICATE IN THE NORTHERN SOUTH CHINA SEA
- B1277 Lee, C. S.; Wang, C. K.; Wen, L. S.: DISTRIBUTION AND PERTURBATION OF DISSOLVED SILVER IN WESTERN PACIFIC MARGINAL SEAS: FROM HEAD WATERS TO THE OPEN OCEAN
- B1278 Guo, X. Y.; Zhu, X. H.; Wu, Q. S.; Huang, D. J.: THE KUROSHIO NUTRIENT STREAM AND ITS TEMPORAL VARIATION IN THE EAST CHINA SEA
- B1279 Hsu, T. C.; Hsiao, S. Y.; Tseng, Y. F.; Liu, J. W.; Dai, M.; Kao, S. J.: HETEROTROPHIC RESPIRATION AND DENITRIFICATION OF SEDIMENTS IN THE LOW OXYGEN AREA OFF THE CHANGJIANG (YANGTZE RIVER) ESTUARY
- B1280 Tseng, Y. F.; Hsu, T. C.; Hsiao, S. Y.; Lin, J.; Dai, M. H.; Shiah, F. K.; Kao, S. J.: BULK ALKALINE PHOSPHATASE ACTIVITY ASSAY ON PHOSPHORUS DEFICIENCY OF PLANKTON IN THE CHANGJIANG RIVER ESTUARY AFTER TYPHOON DISTURBANCE

- B1281 Yasuki, N.; Suzuki, K.; Tsuda, A.: RESPONSES OF LOWER TROPHIC ORGANISMS TO TYPHOON PASSAGE IN THE EAST CHINA SEA
- B1282 Chen, C.; Gong, G.: SEASONAL VARIATION OF ORGANIC CARBON CONSUMPTION BY PLANKTONIC COMMUNITIES IN THE EAST CHINA SEA
- B1283 Sasai, Y.; Sasaki, H.: MONSOON-DRIVEN UPWELLING EFFECT ON THE PHYTOPLANKTON BLOOMS IN THE SOUTHEAST ASIA SEAS: AN EDDY-RESOLVING PHYSICAL-BIOLOGICAL MODEL STUDY
- B1284 Okunishi, T.; Ambe, D.; Ito, S.; Kuroda, H.; Setou, T.; Yoshie, N.: A MODELING STUDY OF MARINE ECOSYSTEMS IN THE NORTH PACIFIC

042 Eddy Correlation And New Impending Approaches For Measuring Fluxes In The Aquatic Environment

Chair(s): Peter Berg, pb8n@virginia.edu
Markus Huettel, mhuettel@fsu.edu

Location: Exhibit/Poster Hall

- B1557 Berg, P.; Long, M.; Rheuban, J.; Koopmans, D.; Huettel, M.: DYNAMIC CHANGES IN EDDY CORRELATION MEASUREMENTS OF BENTHIC OXYGEN FLUXES
- B1559 Lueck, R. G.; Wolk, F.; Ackerman, J. D.: OXYGEN AND HEAT FLUX IN THE BENTHIC BOUNDARY LAYER OF A SHALLOW LAKE
- B1560 Chotikarn, P.; Steven, A.; Baird, M.; Carlin, G.; Ralph, P. J.: EFFECT OF TEMPERATURE AND LIGHT ON OXYGEN DYNAMICS IN SEAGRASSES UNDER CONTROLLED FLOW USING EDDY CORRELATION SYSTEM

047 Integrative Power Of Ocean Observatories: Recent Insights And Future Directions

Chair(s): Steven G. Ackleson, sackleson@oceanleadership.org
Mairi Best, mmbest@uvic.ca
Emmanuel Boss, emmanuel.boss@maine.edu
Richard Dewey, rdewey@uvic.ca

Location: Exhibit/Poster Hall

- B1126 Vardaro, M. F.; Barth, J. A.; Schofield, O.; Luther, D. S.; Kelley, D. S.: OCEAN OBSERVATORIES INITIATIVE SAMPLING STRATEGY AND CORE INSTRUMENTATION
- B1127 Risien, C. M.; Mazzini, P. L.; Barth, J. A.: OBSERVATIONS OF ANOMALOUS NEAR-SURFACE LOW-SALINITY PULSES OFF THE CENTRAL OREGON COAST
- B1128 Lankhorst, M.; Kim, H.: COMPARING AUTOMATIC VERSUS HUMAN-CREATED QC FLAGS OF OCEANOGRAPHIC MOORING DATA AND APPLICABILITY TO THE OOI
- B1129 Neely, M. B.; Heilman, L. A.; Stamey, B. A.; Ferlino, A. F.: OOI: ANNOUNCEMENT OF CORE INSTRUMENT MODELS AND LOCATIONS
- B1130 Cowles, T. J.; Banahan, S.: OCEAN OBSERVATORIES INITIATIVE: CONSTRUCTION PROGRESS UPDATE
- B1131 Heilman, L. A.; Banahan, S.; Webster, S. E.; Fram, J. P.; Vardaro, M. F.; Proskurovski, G.; Bergen, W.; Ackleson, S. G.; Neely, M. B.: SCIENCE AND DATA PRODUCTS FROM THE OCEAN OBSERVATORIES INITIATIVE (OOI)
- B1132 Kelley, D. S.; Delaney, J. R.; RSN-OOI TEAM, .: BUILDING A HIGH-POWER AND HIGH-BANDWIDTH CABLED OBSERVATORY ON AN ACTIVE UNDERWATER VOLCANO: AXIAL SEAMOUNT
- B1133 Dever, E. P.; Barth, J. A.; Plueddemann, A. J.; Schofield, O.; Send, U.: THE ROLES OF COASTAL GLIDERS IN THE OCEAN OBSERVATORIES INITIATIVE
- B1134 Fram, J. P.; Dever, E. P.: NEW OOI PLATFORMS FOR LONG-TERM SAMPLING OF THE ENTIRE WATER COLUMN IN ROUGH SEAS NEAR THE COAST
- B1135 Garaba, S. P.; Schulz, J.; Wernand, M. R.; Zielinski, O.: SEABORNE HYPERSPECTRAL REMOTE SENSING: AUTOMATED SUNGLINT FLAGGING AND FOREL-ULE CLASSIFICATION
- B1136 Kim, H.; Send, U.: PHYSICAL AND BIOLOGICAL RESPONSES DURING THE 2009-2011 ENSO EVENTS IN THE SOUTHERN CALIFORNIA CURRENT

- B1137 SCHMIDT, A.; Gangopadhyay, A.; AGEL, L.; SCHOFIELD, O.; CLARK, J.; BROWN, W.: SENSITIVITY OF MODEL FORECAST TO GLIDER AND CODAR ASSIMILATION IN WESTERN NORTH ATLANTIC
- B1138 Zabotin, N. A.; Godin, O. A.; Sheehan, A.; Yang, Z.; Collins, J. A.: APPLICATION OF WAVE INTERFEROMETRY TO EXPERIMENTAL INVESTIGATION OF INFRAGRAVITY WAVES OFF NEW ZEALAND
- B1139 Juniper, S. K.; Matabos, M.; Robert, K.; Dean, C.; Aguzzi, J.; Tunncliffe, V.: STUDY OF TEMPORAL VARIABILITY IN BENTHIC COMMUNITIES' DYNAMIC USING SEAFLOOR IMAGERY
- B1140 Blumberg, A. E.; Gopalakrishnan, G.: ASSIMILATION OF HF RADAR-DERIVED SURFACE CURRENTS ON TIDAL-TIMESCALES
- B1141 Brown, W.; Schofield, O.; Glenn, S.; Kohut, J.; Boicourt, W.; Flagg, C.; Gangopadhyay, A.; Xu, Y.: AN OBSERVATIONAL/MODELING INVESTIGATION OF THE MID-ATLANTIC COLD POOL EVOLUTION AND VARIABILITY
- B1142 Seaton, C.; Baptista, A. M.; Lopez, J. E.; Riseman, S.; Wilkin, M.: DEVELOPMENT OF AN ESTUARINE TURBIDITY MAXIMUM WATCH: FROM PROCESS UNDERSTANDING TO OPERATIONAL IMPLEMENTATION

059 Ocean Climate Data Records

Chair(s): Kenneth S. Casey, kenneth.casey@noaa.gov
Edward Kearns, Ed.Kearns@noaa.gov
Carig Donlon, craig.donlon@esa.int

Location: Exhibit/Poster Hall

- B1111 Casey, K. S.; Evans, R. H.: THE AVHRR PATHFINDER SEA SURFACE TEMPERATURE CLIMATE DATA RECORD
- B1112 Smith, D. K.; Li, X.; Keiser, K.: A CLIMATOLOGY OF MOUNTAIN GAP WIND JETS AND RELATED COASTAL UPWELLING BASED ON ANALYSIS OF SATELLITE CLIMATE DATA RECORDS
- B1113 Moroni, D. E.; Hausman, J. K.; Vazquez, J.; Armstrong, E. M.: IDENTIFYING AND ASSESSING CLIMATE DATA RECORDS DISTRIBUTED IN A NASA DATA CENTER
- B1114 Privalsky, V.; Fortus, M. I.; Komchatov, V. F.: ON TREND ANALYSIS IN GEOPHYSICAL TIME SERIES WITH APPLICATION TO SEA SURFACE TEMPERATURE
- B1115 Banzon, V. E.; Reynolds, R. W.: NIGHTTIME AND DAYTIME-ONLY OPTIMALLY INTERPOLATED SST ANALYSES
- B1116 Chapman, D.; Nguyen, P.; Halem, M.; Avery, J. K.: A NEAR FUNDAMENTAL DECADAL DATA RECORD OF AIRS INFRARED BRIGHTNESS TEMPERATURES
- B1117 Barton, E. D.; Roy, C.; Field, D.: CANARY CURRENT UPWELLING: MORE OR LESS?
- B1118 Byrne, D. A.; Leuliette, E. W.; Lillibridge, J.; Mitchum, G. T.; Scharroo, R.: DEVELOPMENT OF AN ALTIMETRIC SEA LEVEL CLIMATE DATA RECORD: FUTURE PLANS
- B1119 Smith, S. R.; Woodruff, S. D.; Worley, S.; Freeman, E.: IVAD – ENHANCING MARINE CLIMATE DATA RECORDS
- B1120 Kearns, E. J.; Privette, J. L.; Bates, J. J.; Gance, W. J.: PROGRESS OF NOAA'S CLIMATE DATA RECORD PROGRAM
- B1121 Long, D. G.: THE WIND SCATTEROMETER CLIMATE RECORD PATHFINDER
- B1122 Guan, L.; Zhang, K.; Yang, Z.: IN SITU MEASUREMENTS OF SKIN SST FOR SATELLITE SST CLIMATE DATA RECORD
- B1123 Magerman, J.; Najjar, R.; Mann, M. E.; Cronin, T. M.: LATE-HOLOCENE NORTH ATLANTIC SEA-SURFACE TEMPERATURE VARIABILITY
- B1124 Diggs, S. C.; Swift, J. H.; Kappa, J.; Fields, J. C.; Berys, C.; Shen, M. Y.; Muus, D.; Anderson, S.; Calderon, T.; Shen, A. Y.: THE CLIVAR AND CARBON HYDROGRAPHIC DATA OFFICE
- B1125 Berys, C.; Diggs, S. C.; Fields, J. C.; Shen, M.; Chan, I.; Kappa, J.; Piercy, S.: SEAHUNT: THE INTERACTIVE HYDROGRAPHIC CRUISE TRACKING SYSTEM

064 Oceanography In 2030

Chair(s): Peter Cornillon, pcornillon@me.com
Mark Abbott, mark@coas.oregonstate.edu

Location: Exhibit/Poster Hall

- B1071 Freeman, A.; Holt, B.; Zlotnicki, V.: FUTURE OCEAN MEASUREMENTS FROM SPACE
- B1072 Orcutt, J. A.: DISRUPTIVE TECHNOLOGIES AND IMPACTS ON OCEANOGRAPHY IN 2030
- B1073 Worcester, P. E.; Munk, W. H.: OCEANOGRAPHY IN 2030: THE ROLE OF ACOUSTICS IN OBSERVING THE OCEAN
- B1074 Cornillon, P. C.; Farmer, D.; Roman, C.; Ginis, I.; Grilli, S.: AN AIIR-SEA FLUX EXPERIMENT FOR 2030
- B1075 SHATOVA, O.; Kowek, D.; Conte, M. H.; Weber, J. C.: INFLUENCE OF MESOSCALE EDDIES ON ZOOPLANKTON FECAL PELLET FLUX IN THE DEEP SARGASSO SEA
- B1076 Mooers, C. N.: REGIONAL TESTBEDS: A NEW COLLABORATIVE PARADIGM
- B1077 Eriksen, C. C.: DEEPGLIDER: ENABLING AUTONOMOUS DEEP OCEAN FULL WATER COLUMN HYDROGRAPHY
- B1078 Coleman, D. E.; Elliott, K. P.; Bell, K. C.; Martinez, C.; Ballard, R. D.: REMOTE OBSERVATIONAL OCEANOGRAPHY USING SHIPS OF EXPLORATION AND SATELLITE/INTERNET2 TELEPRESENCE SYSTEMS

088 Consequences Of The March 11, 2011 Earthquake, Tsunami And Fukushima Nuclear Power Plant On The Ocean

Chair(s): Ken Buesseler, kbuesseler@whoi.edu
Motoyoshi Ikeda, mikedai@ees.hokudai.ac.jp

Location: Exhibit/Poster Hall

- B1000 Garraffo, Z. D.; Kim, H. C.; Mehra, A.; Spindler, T.; Tolman, H.: TRACER MODELING WITH THE HYBRID COORDINATES OCEAN MODEL (HYCOM).
- B1001 Kawakami, H.; Honda, M. C.; Saino, T.; Watanabe, S.: FUKUSHIMA RADIOACTIVITY FOUND IN THE MARINE SNOW AT THE DEEP LAYER IN THE WESTERN NORTH PACIFIC
- B1002 Dulaiova, H.; Kamenik, J.; Statna, K.: RADIONUCLIDE LEVELS IN THE CENTRAL PACIFIC OCEAN AFTER THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT ACCIDENT
- B1003 Miyazawa, Y.; Masumoto, Y.; Varlamov, S. M.; Miyama, T.; Takigawa, M.; Honda, M.: TRANSPORT SIMULATIONS OF THE RADIONUCLIDE FROM THE SHELF TO OPEN OCEAN AROUND FUKUSHIMA
- B1004 Lanerolle, L. W.; Patchen, R. C.; Mehra, A.; Tolman, H. L.; Cortinas, J. V.: NUMERICAL MODELING OF THE FATE OF OCEANIC RADIONUCLIDES
- B1005 Yahnker, C.; Nelson, G.: UNDERWATER RADIATION DETECTION USING A PRINCETON GAMMA TECH INSTRUMENTS SCINTILLATION DETECTOR ON AN IROBOT SEAGLIDER AUV
- B1006 Coelho, E. F.; Peggion, G.; Rowley, C.; Jacobs, G.; Hogan, P.: PLUME SIMULATIONS USING OCEAN MODEL ENSEMBLES FOR THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT
- B1007 Choi, Y.; Kida, S.; Takahashi, K.: THE DISPERSION OF RADIOACTIVE WATER RELEASED FROM THE FUKUSHIMA DAIICHI NUCLEAR POWER-PLANTS
- B1008 Beardsley, R. C.; Chen, C.; Lai, Z.; Sasaki, J.; Lin, H.; Lin, J.; Ji, R.: US-JAPAN COLLABORATIVE RESEARCH ON THE MARCH 11, 2011 EARTHQUAKE, TSUNAMI INUNDATION AND INITIAL SPREAD OF FUKUSHIMA RADIONUCLIDES INTO THE PACIFIC OCEAN
- B1009 Lai, Z.; Chen, C.; Beardsley, R. C.; Lin, H.; Sasaki, J.: MODEL ASSESSMENT OF 2011 JAPAN TSUNAMI AND COASTAL INUNDATION PROCESSES
- B1010 Dasher, D. H.; Jewett, S.; Hamilton, T.: RADIONUCLIDE FALLOUT LEVELS FROM THE FUKUSHIMA DAIICHI NUCLEAR DISASTER IN THE ALEUTIAN ISLANDS AND WESTERN COASTAL REGIONS OF ALASKA

- B1011 Breier, C. E.; Henderson, P. B.; Pike, S. M.; Rypina, I. I.; Charette, M. A.; Buesseler, K. O.; Jayne, S. R.: RESOLVING FALLOUT VERSUS RUNOFF SOURCES OF FUKUSHIMA RADIOACTIVITY USING RADIUM ISOTOPES
- B1012 Pike, S. M.; Buesseler, K. O.; Breier, C.; Duliaova, H.: QUANTIFICATION OF CESIUM IN SEAWATER OFF JAPAN USING EXTRACTION WITH PAN-AMP RESIN AND QUANTIFICATION VIA GAMMA SPECTROSCOPY
- B1013 Tsubono, T.; Tsumune, D.; Aoyama, M.; Hirose, K.: ESTIMATION OF THE AMOUNT OF CAESIUM-137 DIRECTLY RELEASED FROM THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT BY SENSITIVITY ANALYSIS
- B1014 Yoshida, S.; Jayne, S. R.; Macdonald, A. M.; Buesseler, K.: VELOCITY AND HYDROGRAPHIC FEATURES OF THE KUROSHIO-OYASHIO CONFLUENCE ZONE
- B1015 Henry, C. L.; Kenna, T. C.; Masqué, P.; Casacuberta, N.; Buesseler, K. O.: EVALUATION OF A TRANSURANIC COMPONENT IN REACTOR DERIVED RELEASES FROM FUKUSHIMA DAI-ICHI TO THE MARINE ENVIRONMENT
- B1016 Aono, T.; Zheng, J.; Zhang, J.; Obata, H.; Honda, M. C.; Kawakami, H.; Kanda, J.; Ishimaru, T.: RADIONUCLIDE IN THE COASTAL AREA OFF FUKUSHIMA
- B1017 Yang, W. F.; Guo, L. D.: RESIDENCE TIME OF ATMOSPHERIC RADIOIODINE (¹³¹I) FROM THE FUKUSHIMA ACCIDENT

097 Mixing And Transport Due To Nonlinear Internal Gravity Waves

- Chair(s): Oliver Fringer, fringer@stanford.edu
Subhas Karan Venayagamoorthy, vskaran@engr.colostate.edu
- Location: Exhibit/Poster Hall
- B2165 Mohrholz, V.; Heene, T.: ACTION OF NONLINEAR INTERNAL WAVES AT THE NAMIBIAN SHELF
- B2166 Lerczak, J. A.; Shearman, R. K.: MOMENTUM TRANSFER TO MEAN FLOWS BY SHOALING, NONLINEAR INTERNAL WAVES
- B2167 Trigo Cabrita Gil, G.; Fringer, O. B.: Lagrangian- and Eulerian-mean effects in progressive internal gravity waves
- B2168 Venayagamoorthy, S. K.; Stretch, D. D.: MIXING IN STRATIFIED TURBULENCE
- B2169 Huang, X.; Zhao, W.; Tian, C.; Tian, J.; Yang, Q.: OBSERVED TYPE-A AND TYPE-B INTERNAL SOLITARY WAVES IN SOUTH CHINA SEA
- B2170 Camassa, R.; Tiron, R.; Viotti, C.: SELF-INDUCED SHEAR FLOWS BY INTERNAL WAVES
- B2171 Hennon, T. D.; Riser, S. C.; Alford, M. H.: GLOBAL OBSERVATIONS OF INTERNAL WAVES BY ARGO FLOATS
- B2172 Trockel, D. E.; Miller, G. H.; Largier, J. L.: NEARSHORE SHOALING OF INTERNAL WAVES
- B2173 Ram, A.; Jachec, S. M.: LAB-SCALE NUMERICAL SIMULATION OF INTERNAL TIDE GENERATION AT AN INCISED GAUSSIAN RIDGE
- B2174 Lamb, K. G.; Subich, C.: SHEAR INSTABILITIES IN INTERNAL SOLITARY WAVES
- B2175 Gallacher, P. C.; Schaferkotter, M. R.: NONHYDROSTATIC HINDCASTS OF NONLINEAR INTERNAL WAVES IN THE LUZON STRAITS AND NORTHERN SOUTH CHINA SEA – TIDES AND THE KUROSHIO
- B2176 Matt, S.; Fujimura, A.; Soloviev, A.: RESONANT INTERACTION OF NEAR-SURFACE BUOYANCY DRIVEN CURRENTS WITH AMBIENT STRATIFICATION
- B2177 Cuyppers, Y.; Bouruet Aubertot, P.; Lunven, M.; Sourriceau, M.; Velo-Suarez, L.; Lourenco, A.; Pasquet, S.; Lazure, P.: NON LINEAR INTERNAL TIDES, SOLITARY WAVES AND TURBULENT MIXING IN THE CONTINENTAL SHELF OF SOUTH BRITANNY
- B2178 Martini, K. L.; Stoudt, C. A.; Simmons, H. A.; Hutchings, J. K.: NEAR-INERTIAL INTERNAL WAVES AND MIXING ON THE BEAUFORT CONTINENTAL SLOPE
- B2179 Fruman, M. D.; Achatz, U.; Hickel, S.; Remmler, S.; Rieper, F.: LARGE-EDDY SIMULATION OF BREAKING INERTIA-GRAVITY WAVES
- B2180 Wain, D. J.; Kohn, M. S.; Scanlon, J. A.; Rehmann, C. R.: BOUNDARY-INTERIOR EXCHANGE DRIVEN BY INTERNAL WAVES IN LAKES

- B2181 Moore, C. D.; Hult, E. L.; Koseff, J. R.: CONDITIONS FOR BOLUS FORMATION FROM BREAKING INTERNAL WAVES ON SHELF SLOPES
- B2182 Inoue, R.; Lien, R.; Moum, J. N.: INTERNAL WAVES, SHEAR INSTABILITY, AND TURBULENCE BELOW THE SURFACE MIXED LAYER OF EQUATORIAL PACIFIC
- B2183 Mercier, M. J.; Gostiaux, L.; Saidi, S. J.; Sommeria, J.; Didelle, H.; Viboud, S.; Helfrich, K. R.; Dauvois, T.; Peacock, T.: INTERNAL TIDE GENERATION IN A LARGE-SCALE LABORATORY EXPERIMENTAL STUDY OF THE LUZON STRAIT
- B2184 Chalamalla, V.; Gayen, B.; Scotti, A.; Sarkar, S.: EFFECT OF OFF-CRITICALITY ON THE EVOLUTION OF INTERNAL WAVES REFLECTED FROM A SLOPE.

102 Live From The Ocean: Engaging Students And The Public In Active Research Projects At Sea

- Chair(s): Sharon Katz Cooper, scooper@oceanleadership.org
Leslie Peart, lpeart@oceanleadership.org
Jennifer Collins, jcollins@oceanleadership.org
- Location: Exhibit/Poster Hall
- B0689 Botella, J.; Swift, J.; Warburton, J.: SUGGESTIONS TO HELP TEACHERS ACHIEVE MORE WHILE DOING OUTREACH
- B0691 Joyce, P.; Proskurowski, G.; Lavender Law, K.; Schrum, H.; Elliott, S.: BLOGGING FROM SEA
- B0692 Hams, J. E.: PROJECT DYNAMO: INVESTIGATING GLOBAL WEATHER AND CLIMATE SYSTEMS IN THE INDIAN OCEAN
- B0693 Cooper, S. K.; Peart, L.: LIVE FROM THE OCEAN: AN OVERVIEW OF RECENT EXPERIENCES
- B0694 Warburton, J.; Larson, A.: FROM SEA TO SHORE – SHIP-BASED TEACHER RESEARCH EXPERIENCES
- B0695 Brennon, R. E.: HOW SCIENTISTS CAN INSPIRE OUR YOUTH
- B0696 Florio, K. B.; Gardner, K.; Clark, H. R.; Kohut, J. T.; Lichtenwalner, C. S.; Parsons, C.; McDonnell, J. D.: AUV RESEARCH AND EDUCATION IN THE ROSS SEA: TEACHER PREPARATION ENHANCES STUDENT ENGAGEMENT AND UNDERSTANDING OF MISSION SCIENCE
- B0697 Magnusson, J.; Orcutt, B.; Haddad, A.; IODP Expedition 336 Science Party, .: EFFECTIVE PRACTICES FOR CONNECTING SHIPBOARD RESEARCH WITH SHORE-BASED SCIENCE EDUCATION
- B0698 Fowler, R. A.: LEARNING FROM SCIENTISTS AT SEA: THE GREAT BELT RESEARCH CRUISE AS AN INTERDISCIPLINARY TEACHING TOOL
- B0699 McKay, M. C.; Albrecht, M.: IMPROVING STUDENT UNDERSTANDING OF POLAR ENVIRONMENTAL PHENOMENA USING AUTHENTIC OCEANOGRAPHIC, CLIMATIC, AND POLAR DATA. TURING STUDENTS INTO SCIENTISTS.

104 Improvements In Understanding Tropical Atlantic Climate Variability And Predictability: Past Behavior, Observations And Climate Models

- Chair(s): Salil Mahajan, mahajans@ornl.gov
Takeshi Doi, Takeshi.Doi@noaa.gov
Ernesto Munoz, emunoz@ucar.edu
Kelly H Kilbourne, kilbourn@umces.edu
- Location: Exhibit/Poster Hall
- B1482 Yang, Y.; Wu, L.; Fang, C.: WILL GLOBAL WARMING SUPPRESS NORTH ATLANTIC TRIPOLE DECADEAL VARIABILITY?
- B1483 Luebbecke, J. E.; McPhaden, M. J.: ON THE INCONSISTENT RELATIONSHIP BETWEEN PACIFIC AND ATLANTIC NINOS
- B1484 Foltz, G. R.; McPhaden, M. J.; Lumpkin, R.: A STRONG ATLANTIC MERIDIONAL MODE EVENT IN 2009: THE ROLE OF MIXED LAYER DYNAMICS
- B1486 Funk, A.; Brandt, P.; Didwischus, S. H.; Kemena, T. P.; Greatbatch, R. J.: INTERANNUAL SURFACE FLOW VARIABILITY IN THE EQUATORIAL ATLANTIC OCEAN
- B1487 Zanna, L.: FORECAST SKILL AND PREDICTABILITY OF OBSERVED ATLANTIC SEA SURFACE TEMPERATURES

- B1488 Grodsky, S. A.; Carton, J. A.; Nigam, S.; Okumura, Y. M.: TROPICAL ATLANTIC BIASES IN CCSM4
- B1489 Kilbourne, K. H.: A SYNTHESIS OF CARIBBEAN PROXY SEA SURFACE TEMPERATURE RECORDS SINCE THE LATE MEDIEVAL PERIOD
- B1490 Munoz, E.: A REVIEW OF CLIMATE INDICES OF THE TROPICAL ATLANTIC
- B1491 Mahajan, S.; Evans, K. J.; Truesdale, J. E.; Hack, J. J.; Lamarque, J. F.: AEROSOL-INDUCED VARIABILITY OVER THE TROPICAL ATLANTIC AND AFRICA
- B1492 Lau, J. A.; Donner, S. D.: ENSO TELECONNECTIONS IN THE CARIBBEAN: INCORPORATING AND DIFFERENTIATING THE INFLUENCE OF CENTRAL PACIFIC ENSO EVENTS UPON SEA SURFACE TEMPERATURES
- B1493 Behl, M.; Nof, D.; Van Gorder, S.: THE ROBUSTNESS OF THE HEAT RELEASED FROM THE ATLANTIC MERIDIONAL OVERTURNING CELL TO THE ATMOSPHERE

117 Communicating A Changing Ocean: Challenges And Opportunities Facing Scientists And Decision Makers

Chair(s): Martha McConnell, mc.mccconnell@gmail.com
Susan Roberts, sroberts@nas.edu

Location: Exhibit/Poster Hall

- B0709 Spillman, C. M.; Jones, D. A.; Amjadali, A.; Kuleshov, Y.: COMMUNICATING CLIMATE SCIENCE AND DELIVERING SEASONAL FORECAST PRODUCTS FOR CLIMATE CHANGE ADAPTATION IN THE WESTERN PACIFIC
- B0710 Coelho, E. F.; Rowley, C.; Hogan, P.; Jacobs, G.: STOCHASTIC PLUME SIMULATIONS IN THE GULF OF MEXICO DURING THE DEEPWATER HORIZON OIL & GAS GUSHER EVENT
- B0711 Lippiatt, S. M.; Morishige, C.: GARBAGE PATCHES: SOUND SCIENCE AND MARINE DEBRIS
- B0712 De Baar, H.; Van Heuven, S.: MARINE ECOSYSTEMS IN A HIGH-CO₂ WORLD: BALANCING BETWEEN SINCERE SCIENTIFIC CONCERN AND OVERSTATEMENT THAT MAY INCITE CLIMATE SCEPTICISM
- B0713 Mullins-Perry, R. L.; DiMarco, S. F.: OCEAN ... WHAT OCEAN? THE NEAREST COAST IS 200 MILES AWAY! EFFECTIVE STRATEGIES FOR TEACHING LAND-LOCKED K-12 COMMUNITIES OCEAN STEWARDSHIP
- B0714 Parker, B. B.: RAISING PUBLIC AWARENESS ABOUT THE IMPACT OF THE GLOBAL OCEAN ON OUR LIVES (AND THE IMPORTANCE OF OCEAN SCIENCE) THROUGH "POPULAR" NONFICTION BOOKS
- B0715 Loe, Y.; Baker, M.; Sweeney, K.: CREATING COMPELLING INFORMATION GRAPHICS TO COMMUNICATE OCEAN SCIENCE

118 Upper Ocean Turbulence And Its Impact On Air-Sea Fluxes

Chair(s): Brian Ward, bward@nuigalway.ie
Ann Gargett, gargettann@gmail.com
Kai Christensen, kaihc@met.no

Location: Exhibit/Poster Hall

- B1919 Monahan, E. C.; Vlahos, P.: TESTING AIR-SEA EXCHANGE PARAMETERIZATIONS THAT INCORPORATE CHEMICAL AND PHYSICAL PROCESSES OPERATING ON SMALL SPATIAL AND TEMPORAL SCALES
- B1920 Christensen, K. H.; Röhrs, J.; Ward, B.; Drivdal, M.; Broström, G.: SURFACE WAVE MEASUREMENTS USING SHIP MOUNTED ULTRASONIC ALTIMETER
- B1921 Bakhoday Paskyabi, M.; Fer, L.; Jenkins, A. D.: OBSERVATION AND SIMULATION OF TURBULENCE IN THE OCEAN SURFACE BOUNDARY LAYER
- B1922 Röhrs, J.; Christensen, K. H.; Hole, L. R.; Broström, G.; Drivdal, M.; Sundby, S.: OBSERVATIONS OF SURFACE WAVE EFFECTS AND IMPACTS ON DRIFTER TRAJECTORIES

- B1923 Martinat, G.; Grosch, C. E.; Tejada-Martinez, A. E.: MODELLING OF THE INTERACTION BETWEEN LANGMUIR CIRCULATION AND A TIDAL CURRENT THROUGH LES COMPUTATIONS.
- B1924 Sutherland, G.; Ward, B.; Christensen, K.; Saetra, O.; Brostromm, G.; Drivdal, M.; Sanchez, X.: SCALING TURBULENCE IN THE UPPER OCEAN: MEASUREMENTS FROM A VERTICALLY RISING MICROSTRUCTURE PROFILER
- B1925 Tejada-Martinez, A. E.; Akan, C.; Smyth, R.; Neale, P. J.: LES OF UPPER OCEAN LANGMUIR TURBULENCE: IMPACT OF WAVELENGTH OF SURFACE WAVES
- B1926 Sinha, N.; Tejada-Martinez, A. E.; Grosch, C. E.: EVALUATION OF K-PPSILOIN MODEL IN SIMULATIONS OF FULL DEPTH LANGMUIR CIRCULATION
- B1927 Nguyen, S.; Robert, P.; Smith, J. A.: OBSERVATIONS OF DIURNAL RESTRATIFICATION WITH WIND, WAVES, AND LANGMUIR CIRCULATIONS

136 Top Predator Distributions: Variability And Fisheries

Chair(s): Daniel Palacios, daniel.palacios@noaa.gov
Mark Baumgartner, mbaumgartner@whoi.edu
Steven Bograd, steven.bograd@noaa.gov
Elliott Hazen, elliot.hazen@noaa.gov
George Shillinger, georges@stanford.edu

Location: Exhibit/Poster Hall

- A0593 Crawford, K.; Harper, S.; Zeller, D.: RECONSTRUCTION OF MARINE FISHERIES CATCHES FOR TUVALU (1950-2009)
- A0594 Spillman, C. M.; Hobday, A. J.; Hartog, J. R.; Alves, O.; Hudson, D. A.: SEASONAL FORECASTING TO SUPPORT THE MANAGEMENT OF WILD FISHERIES AND AQUACULTURE IN AUSTRALIA
- A0595 Širovic, A.; Williams, L. N.; Kerosky, S. M.; Wiggins, S. M.; Hildebrand, J. A.: TEMPORAL SEPARATION OF FIN WHALE CALLS ACROSS THE EASTERN NORTH PACIFIC
- A0596 Zador, S.; Inanelli, J.; Hunt, G. L.: NORTHERN FUR SEALS AT THE PRIBILOF ISLANDS: POPULATION CHANGES WITH RESPECT TO FISH AND FISHING ACTIVITY
- A0597 Hazen, E. L.; Jorgensen, S.; Rykaczewski, R.; Foley, D.; Shaffer, S.; Bograd, S. J.; Costa, D.; Block, B.: PACIFIC TOP PREDATOR HABITAT SHIFTS IN A CHANGING CLIMATE
- A0598 Bograd, S. J.; Shillinger, G. L.; Di Lorenzo, E.; Luo, H.; Hazen, E. L.; Bailey, H.; Spotila, J. R.: ON THE DISPERSAL OF LEATHERBACK TURTLE HATCHLINGS FROM MESO-AMERICAN NESTING BEACHES
- A0599 Messié, M.; Block, B. A.; Jorgensen, S. J.; Dewar, H.; Chavez, F. P.: HORIZONTAL AND VERTICAL DISTRIBUTION OF SHARKS AS CHARACTERIZED BY THE TOPP PROGRAM IN RELATION TO PACIFIC OXYGEN MINIMUM ZONES
- A0600 Palacios, D. M.; Mate, B. R.; Bailey, H.; Irvine, L.; Bograd, S. J.; Costa, D. P.: USING HABITAT MODELS TO INFER THE DISTRIBUTION AND MOVEMENT BEHAVIOR OF NORTHEAST PACIFIC BLUE WHALES FROM SATELLITE TAGGING DATA AND REMOTE SENSING
- A0601 Fiedler, P.; Redfern, J.; Hall, C.; Van Noord, J.; Ballance, L.: EFFECTS OF DISTURBANCE ON A PELAGIC ECOSYSTEM FROM THE PHYSICAL ENVIRONMENT TO TOP PREDATORS
- A0602 Shillinger, G. L.; Swithenbank, A. M.; Bailey, H.; Bograd, S. J.; Castleton, M. R.; Palacios, D. M.; Spotila, J. R.; Paladino, F. V.; Piedra, R.; Block, B. A.: VERTICAL AND HORIZONTAL HABITAT PREFERENCES OF POST-NESTING LEATHERBACK TURTLES IN THE SOUTH PACIFIC OCEAN
- A0603 de Vos, A.; Pattiaratchi, C.; Harcourt, R.: INTER-ANNUAL VARIABILITY IN THE DISTRIBUTION OF BLUE WHALES OFF SOUTHERN SRI LANKA
- A0604 Houghton, J. D.; Hays, G. C.; Doyle, T. K.; Harrod, C.: OCEANIC GELATA PROVIDE A MOSAIC OF PREY FIELDS FOR RANGING LEATHERBACK TURTLES: INSIGHTS FROM DEEP-WATER NET TOWS AND ANIMAL-BORNE SENSORS
- A0605 Willis-Norton, E. M.; Hazen, E. L.; Bograd, S. J.; Shillinger, G.; Rykaczewski, R. R.; Bailey, H.: CLIMATE CHANGE IMPACTS ON THE HABITAT OF AN ENDANGERED SPECIES: THE LEATHERBACK TURTLE IN THE SOUTH PACIFIC

- A0606 Warren, J. D.; Parks, S. E.: QUANTIFICATION OF ZOOPLANKTON PREY ABUNDANCE AND THE BEHAVIOR OF NORTH ATLANTIC RIGHT WHALES IN CAPE COD BAY
- A0607 Carlisle, A. B.; Goldman, K. J.; Madigan, D. J.; Kline, T. C.; Block, B. A.: RECONSTRUCTING THE LIFE OF A PELAGIC SHARK USING STABLE ISOTOPE ANALYSIS
- A0609 O'Hern, J. E.: BIOLOGICAL INDICATIONS OF PHYSICAL OCEANOGRAPHIC FEATURES: CETACEAN DISTRIBUTION AND SMALL SCALE FRONTAL BOUNDARIES OBSERVED USING MODIS OCEAN COLOR
- A0610 Fleming, A. H.; Yack, T. M.; Barlow, J.: MODELING OF DALL'S PORPOISE HABITAT PREFERENCES: USING ACOUSTIC DETECTIONS TO IMPROVE ECOLOGICAL UNDERSTANDING
- A0611 Johnston, M. L.; O'Hern, J. E.; Biggs, D.; Pinto, E.: TUNA-DOLPHIN-BIRD FEEDING ASSEMBLAGES IN THE GALAPAGOS ISLANDS AND THEIR RESPONSE TO THE PHYSICAL CHARACTERISTICS OF THE UPPER WATER COLUMN

145 Physical, Chemical, And Biological Connections Between Coastal Zones (The Surfzone, Inner, Middle, And Outer Shelf And Continental Slope)

Chair(s): Melanie Fewings, fewings@msi.ucsb.edu
Erika McPhee-Shaw, eshaw@mlml.calstate.edu
Roger Samelson, rsamelson@coas.oregonstate.edu
R. Kipp Shearman, shearman@coas.oregonstate.edu

Location: Exhibit/Poster Hall

- B1699 Alnajjar, M. W.; Woodson, C. B.; Monismith, S. G.; Koseff, J. R.; Genin, A.; Litvin, S.; Moniz, R. J.; Walter, R. K.; Dunckley, J.; Leary, P. R.: HYDRODYNAMICS OF A HEADLAND KELP FOREST
- B1700 Li, Q.; Guo, X.; Koizumi, Y.; Takeoka, H.: SPATIAL DISTRIBUTION AND TEMPORAL VARIATIONS IN NUTRIENTS AND THEIR RELATION WITH PHYSICAL PROCESSES IN A CHANNEL BETWEEN AN INLAND SEA AND OPEN OCEAN
- B1701 Connolly, T. P.; Hickey, B. M.: TOPOGRAPHIC EFFECTS ON SOURCE WATER DISTRIBUTION OVER THE WASHINGTON SHELF
- B1702 Cheriton, O. M.; McPhee-Shaw, E. E.; Stanton, T. P.; Shaw, W. J.; Bellingham, J. G.: BENTHIC SHELF EXCHANGE AND OBSERVATIONS OF BOTTOM BOUNDARY LAYER INTRUSIONS IN SOUTHERN MONTEREY BAY, CALIFORNIA, USA
- B1703 Brink, K. H.: BUOYANCY ARREST AND STEADY CROSS-SHELF FLOW
- B1704 Zhang, W. G.; McGillicuddy, D. J.; Gawarkiewicz, G. G.; Wilkin, J. L.: CLIMATOLOGICAL MEAN CIRCULATION AND BIOLOGICAL PRODUCTION AT THE NEW ENGLAND SHELF BREAK
- B1705 Willis, S. K.; Stacey, M. T.; Monismith, S. G.; Fong, D. A.; McManus, M. A.; Moniz, R. J.: CHARACTERIZATION OF TURBULENT MIXING ON THE STRATIFIED INNER SHELF OF MONTEREY BAY
- B1706 Mazzini, P. L.; Barth, J. A.: A COMPARISON BETWEEN WIND AND TOPOGRAPHICALLY INDUCED VERTICAL VELOCITIES IN THE SOUTH AND SOUTHEAST BRAZILIAN CONTINENTAL SHELVES
- B1707 Panton, A.; Mahaffey, C.; Sharples, J.; Montagnes, D.: CARBON DYNAMICS AND WATER COLUMN STABILITY IN COASTAL AND SHELF SEAS
- B1708 Williams, C. A.; Sharples, J.; Mahaffey, C.; Rippeth, T.: WIND-DRIVEN NUTRIENT FLUXES IN SHELF SEAS
- B1709 Abram, L. C.; Sharples, J.; Wolff, G. A.; Frid, L. J.: BOTTOMS UP! EXAMINING THE BASE OF THE FOOD WEB IN SHELF SEAS
- B1710 Cowen, R. K.; Greer, A. T.; Guigand, C. M.; McManus, M. A.; Sevdjian, J.; Timmerman, A.; Woodson, C. B.; Monismith, S. G.; Fong, D. A.: PHYSICAL PROCESSES DRIVING FINESCALE BIOLOGICAL PATCHINESS IN AN INNER SHELF, HIGH PRODUCTIVITY ENVIRONMENT: ACOUSTIC AND OPTICAL MEASUREMENTS
- B1711 Rousseau Tristan, T.; Jeandel Catherine, J.; Sonke Jeroen, J. E.; Chmeleff Jerome, J.; Boaventura Geraldo, G. R.; Van-Beeck Pieter, P.; Souhaut Marc, M.: ND ISOTOPES IN THE WESTERN EQUATORIAL ATLANTIC WATER MASSES: AMAZON RIVER AND MARGIN CONTRIBUTIONS (AMANDES PROGRAMME).

- B1712 Noble, M. A.; Rosenberger, K. J.; Robinson, G. L.: SPATIAL AND TEMPORAL STRUCTURES IN WIND-FORCED, NEARSHORE TRANSPORT PATTERNS IN THE CENTRAL SOUTHERN CALIFORNIA BIGHT
- B1713 Dzwonkowski, B.; Park, K.; Jiang, L.: ACROSS-SHELF SURFACE TRANSPORT AND VELOCITY STRUCTURE ON THE ALABAMA SHELF
- B1714 Rodriguez, G. E.: ALGAL FROND EMERGENCE RATES AND LIFE SPANS: INSIGHT FROM THEORY AND EXPERIMENTATION
- B1715 Grenier, M.; Jeandel, C.; Lacan, F.; Cravatte, C.; Durand, F.: FROM THE SUBTROPICS TO THE EQUATORIAL PACIFIC: ALONG THE ROUTE, THE NEODYMIUM RELATES.
- B1716 Kirincich, A. R.: OBSERVATIONS OF THE ROLE OF REYNOLDS STRESSES IN ACROSS-SHELF EXCHANGE DYNAMICS.
- B1717 Gawarkiewicz, G.; Bahr, F.; Kukulya, A.; Marquette, C.; Linder, C.; Grothues, T.; Dobarro, J.: CROSS-SHELF STRUCTURE ON THE CONTINENTAL SHELF NORTH OF CAPE HATTERAS: IMPACT FROM RECENT FLOODING
- B1718 Fong, D. A.; Woodson, C. B.; Moniz, R. J.; Monismith, S. G.; Willis, S. K.; Stacey, M. T.; McManus, M. A.: CONNECTING LOCAL AND REGIONAL SCALE HYDRODYNAMICS IN MONTEREY BAY
- B1719 Gong, Y.; He, R.; Gawarkiewicz, G.; Savidge, D.: NUMERICAL INVESTIGATION OF COASTAL CIRCULATION DYNAMICS NEAR CAPE HATTERAS, NORTH CAROLINA
- B1720 McPhee-Shaw, E. E.: ARE THERE INTERNAL WAVE "BEACHES" ON CONTINENTAL SLOPES AND SHELVES?
- B1721 Fujimura, A. G.; Reniers, A. J.; Paris, C. B.; Shanks, A. L.; MacMahan, J. H.; Morgan, S. G.: MODELING APPROACH FOR TRANSPORT OF BARNACLE LARVAE IN SURF ZONE
- B1722 Leichter, J. J.; Wyatt, A. J.; Carlson, C.; Nelson, C.; Haas, A.; Wegley, L.; Quistad, S.; Smith, J.; Rohwer, F.: DECREASING DISSOLVED ORGANIC CARBON CONCENTRATIONS COUPLED TO INCREASING INORGANIC NUTRIENTS OVER SHALLOW CORAL REEF COMMUNITIES, MOOREA, FRENCH POLYNESIA

149 Research Experiences Of Undergraduates In Aquatic Sciences (Posters Only)

Chair(s): Russell Cuhel, rcuhel@uwm.edu
Carmen Aguilar, aguilar@uwm.edu

Location: Exhibit/Poster Hall

- A0117 Stelma, S. A.; Kumar, A.: A STUDY OF STRATIFICATION EFFECTS ON MID-SHELF WATERS OFF DELMARVA
- A0118 Burcicki, D. M.; Kumar, A.: INTER-ANNUAL VARIATIONS IN TEMPERATURE, SALINITY AND OXYGEN OFF WALLOPS ISLAND, VA
- A0119 Kaplan, M.; Mooney, T. A.: EFFECTS OF ELEVATED CO₂ CONDITIONS ON PARALARVAL LONGFIN SQUID (*LOLIGO PEALEII*) DEVELOPMENT AND EARLY LIFE
- A0120 Cruz-Marrero, W.; Sotka, E.: RELATIVE GROWTH RATE OF THE INVASIVE SEAWEED *GRACILARIA VERMICULOPHYLLA* AND ITS ASSOCIATION WITH THE POLYCHAETE *DIOPATRA CUPREA*
- A0121 Rivera-Vázquez, Y.; Dimond, J.; Bingham, B. L.: EFFECTS OF "HOST FACTOR" ON PRODUCTIVITY OF ZOOXANTHELLAE AND ZOOCHLORELLAE IN THE ANEMONE *ANTHOPELEURA ELEGANTISSIMA*
- A0122 Darer, A.; Chappell, P. D.; Jenkins, B. D.: A GENE-BASED INDICATOR OF IRON LIMITATION IN THE DIATOM *THALASSIOSIRA OCEANICA*
- A0123 Minicucci, T. J.; Olson, M. B.: OCEAN ACIDIFICATION INDIRECTLY EFFECTS MICROZOOPLANKTON GRAZERS VIA PCO₂-INDUCED ALTERATIONS TO PREY STATE
- A0124 Edebeli, J.; Wang, Z. A.: A SIMPLIFIED SPECTROPHOTOMETRIC METHOD FOR MEASUREMENT OF SEAWATER ALKALINITY
- A0125 Sayre-McCord, R. T.; Beaulieu, S. E.; Jiang, H.: THREE DIMENSIONAL RECONSTRUCTION OF LARVAL SWIMMING TRAJECTORIES WITH APPLICATION TO RANDOM WALK DIFFUSIVITY
- A0126 Entwistle, C.; Chant, R.: THE ROLE OF LATERAL FLOWS IN DRIVING TIDAL PERIOD ESTUARINE STRATIFICATION

- TUESDAY**
- A0127 Foretich, M. A.; Weissburg, M. J.; Dove, A.: BEHAVIORAL RESPONSE OF WHALE SHARKS (*RHINCODON TYPUS*) TO ODOR PLUMES: IMPLICATIONS FOR FORAGING ECOLOGY
- A0128 Gilroy, A. R.; Gille, S. T.; Mazloff, M. R.: OCEANIC HEAT SOURCES NEAR PINE ISLAND GLACIER, ANTARCTICA
- A0129 Woehlke, S. A.; Burgaud, G.; Edgcomb, V.; Biddle, J.: DEFINING MARINE FUNGI: CULTIVATION TESTS OF FUNGI ALONG A SALINITY GRADIENT OF THE DELAWARE BAY
- A0130 Chichlowski, E.; Consi, T. R.: SPECTROSCOPY IN UNDERWATER ENVIRONMENTS AND ROBOTIC CAMPAIGNS
- A0131 Wei, E.; Kraatz, L. M.; Friedrichs, C.: SPRING-NEAP VARIATION IN FECAL PELLET PROPERTIES WITHIN SURFICIAL SEDIMENT OF THE YORK RIVER ESTUARY, VIRGINIA
- A0132 Warner, T. R.; Primer, S. B.; Roberts, B. J.: NITROGEN FERTILIZATION EFFECTS ON N₂O FLUXES AND POTENTIAL DENITRIFICATION RATES IN GULF COAST BALDCYPRESS SWAMPS
- A0133 Curtis, D. A.; Lovko, V.: THE EFFECT OF NUTRIENTS AND IRRADIANCE ON DINFLAGELLATE AND DIATOM PIGMENTS AND THE IMPLICATIONS FOR SPECTROSCOPIC CHARACTERIZATION
- A0134 Lemanski, J. R.: THE EFFECTS OF THE 2010 BP OIL SPILL/ DEEPWATER HORIZON INCIDENT ON DEEP-SEA MACROFAUNA COMMUNITIES
- A0135 Dexter, E. D.; Martin, B.; Collins, A.; de Putron, S.; Andersson, A.: CALCIFICATION RATES UNDER DIFFERENT CO₂ LEVELS FOR THREE BERMUDIAN CORALS MEASURED *IN SITU* AND IN AQUARIA
- A0136 Yeakel, K. L.; Hench, J. L.: DEVELOPMENT OF A WAVE MODEL FOR THE NORTH SHORE OF MOOREA: UNDERSTANDING WAVE ENERGY DISSIPATION IN A CORAL REEF LAGOON
- A0137 Stowell, M. A.; Ciannelli, L.; Prah, F. G.: LIPID CONTENT AND COMPOSITION OF JUVENILE ENGLISH SOLE *PAROPHRYX VETULUS* IN RELATION TO DISSOLVED OXYGEN AND ESTUARINE VERSUS COASTAL HABITATS
- A0138 Graw, M.; Briggs, B. R.; Brodie, E.; Hyun, J. H.; Bahk, J.; Kim, S.; Colwell, F. S.: MICROBIAL COMMUNITY DISTRIBUTION IN METHANE-BEARING SEDIMENTS FROM THE ULLEUNG BASIN
- A0139 Kwon, S. R.; Sanford, L. P.: MASS BALANCE ANALYSIS OF OYSTER BIODEPOSITS
- A0140 Arzeno, I. B.; Beardsley, R.; Owens, B.; Limeburner, R.; Padman, L.; Williams, M.; Stewart, C.; Lee, C.; Dinniman, M.; Springer, S.: TIDES UNDER THE ROSS ICE SHELF FRONT: CONTRIBUTIONS TO MIXING AND MELTING
- A0141 Messerman, N. A.; Wahle, R. A.: OCEAN ACIDIFICATION AND SPERM MOTILITY IN THE GIANT SEA SCALLOP, *PLACOPECTEN MAGELLANICUS*
- A0142 Snedeker, A.; Villareal, T.: PROKARYOTIC ABUNDANCE, SALINITY GRADIENTS, AND PRIMARY PRODUCTION IN THE NORTHERN GULF OF MEXICO
- A0143 Williams, A.; Roumillat, B.; Arnott, S.: COMPARING THE SIZE, AGE AND HEALTH OF AMERICAN EELS (*ANGUILLA ROSTRATA*) COLLECTED FROM SOUTH CAROLINA TRIBUTARIES.
- A0144 Bruce, J. S.; Hara, T.; Ginis, I.; Reichl, B.: STOKES DRIFT DUE TO OCEAN SURFACE WAVES UNDER TROPICAL CYCLONE (HURRICANE) CONDITIONS
- A0145 Ward, E. M.; Subramaniam, A.: WHAT HAPPENED TO ALL OF THE OIL? CHASING OXYGEN ANOMALIES IN THE GULF OF MEXICO
- A0146 Kramer, L.; Hernandez, H.; Powers, S.; Drymon, M.: EXAMINING TROPHIC DYNAMICS WITHIN FLOATING SARGASSUM COMMUNITIES OF THE NORTHERN GULF OF MEXICO USING PREDATOR-PREY MESOCOSM EXPERIMENTS
- A0147 Padalino, S. J.; Bomeisl, L. P.; Meissner, R. J.: FRESHWATER EFFLUENT TRACKING WITH GPS DRIFT BUOYS
- A0148 Kordell, T. R.; Vaillancourt, R. B.: OPTICAL PROPERTIES OF COASTAL WATERS: ASSESSING THE ROLE OF RIVERINE INPUT ON THE TRANSPORT OF DISSOLVED CARBON TO THE COASTAL OCEAN OFF THE DEL

- A0149 Lee, E. M.; Bristow, L. A.; Altabet, M. A.; Charoenpong, C. N.; Larkum, J. A.; Pather, S.: LONG-TERM STORAGE AND ANALYSIS OF NITRITE OXYGEN ISOTOPES IN SEAWATER
- A0150 Murry, N. M.; Mizioro, M. R.; Kumar, A.: AIRBORNE LIDAR DATA ASSESSMENT OF WALLOPS ISLAND, VIRGINIA
- A0151 Roberts, E.; Franck, V. M.: POSSIBLE EFFECTS OF A PROPOSED GEOENGINEERING PROJECT ON THE OCCURRENCE OF SEASONAL DIATOM BLOOMS IN THE NORTH PACIFIC SUBTROPICAL GYRE

153 Chemical Signals That Mediate Interactions Of Free Living Organisms And Host Associated Microbes

Chair(s): Karla Heidelberg, kheidelb@usc.edu
Graham Ferrier, gferrier@ucla.edu
Ryan Ferrer, ferrer1@spu.edu
Torston Thomas, t.thomas@unsw.edu.au

Location: Exhibit/Poster Hall

- A0464 Crandall, J. B.; Teece, M. A.: CHEMICAL SIGNALS OF PHOTOSYNTHESIS - TRANSLOCATION OF PHOTOSYNTHATES BETWEEN CORAL SYMBIONT AND HOST AT DIFFERENT DEPTHS
- A0465 Chen, H.; young, S.; Williams, H. N.: PREY BACTERIAL SPECIES ORDER THE COMMUNITY STRUCTURE OF THEIR PREDATOR, *BACTERIOVORAX*
- A0466 Dunlap, D. S.; Breitbart, M.; Hewson, I.: EVIDENCE FOR VIRUS INFECTION IN THE CALANOID COPEPODS *A. TONSA* AND *L. AESTIVA* IN TAMPA BAY, FLORIDA
- A0467 Dimond, J. L.; Holzman, B. J.; Bingham, B. L.: DO THICKER HOST TISSUES REDUCE SYMBIONT STRESS IN CNIDARIAN-ALGAL SYMBIOSES?
- A0468 Dziallas, C.; Grossart, H. P.; Nielsen, T. G.; Tang, K. W.: COMPOSITION AND FUNCTIONAL DIVERSITY OF COPEPOD-ASSOCIATED PROKARYOTE COMMUNITIES IN A GREENLANDIC FJORD
- A0469 Motschman, J. D.; Bona, S. R.; Chang, W.; Strickler, J. R.: OPTICAL MICROFLUIDICS: OBSERVING ZOOPLANKTON BEHAVIOR IN THE PRESENCE OF MICROBUBBLES
- A0470 Frade, P. R.; Bergauer, K.; Herndl, G. J.: DIVERSITY AND COMMUNITY STRUCTURE OF CORAL-ASSOCIATED BACTERIA AND ARCHAEA: INTERSPECIFIC, VERTICAL AND SPATIAL VARIATION
- A0471 Edwards, B. R.; Sofen, L. E.; May, A. L.; Campagna, S. R.; Popenoerff, K. J.; Van Mooy, B.: THE EFFECTS OF POLYUNSATURATED ALDEHYDES ON THE MICROBIAL COMMUNITIES ASSOCIATED WITH SINKING POM FROM THE SARGASSO SEA DURING A SPRING BLOOM
- A0472 Ianora, A.; Roncalli, V.; Carotenuto, Y.; Romano, G.; Lauritano, C.; Miralto, A.: IMPACT OF NON-VOLATILE DIATOM OXYLIPINS ON THE REPRODUCTIVE SUCCESS OF THE COPEPOD *TEMORA STYLIFERA*
- A0473 Nejstgaard, J. C.; Pohnert, G.; Amin, R. M.; Augustin, C.; Båmstedt, U.; Barofsky, A.; Bergkvist, J.; Calbet, A.; Carotenuto, Y.; et al., .: FROM METABOLOMICS TO NATURAL PLANKTON FOOD WEBS INTERACTIONS. CONCLUSIONS FROM A CROSS-DISCIPLINARY IN SITU MESOCOSM EXPERIMENT.
- A0474 Cruz López, R.; Ruiz de la Torre, M. C.; de La Rosa, L.; Maske, H.: THE MICROBIAL COMMUNITY ASSOCIATED WITH A RED TIDE FORMING DINOFLEAGELLATES, APPLICATION OF COMBINATORIAL LABELING FLUORESCENCE IN SITU HYBRIDIZATION

154 Contemporary Issues In Estuarine Physics (Posters Only)

Chair(s): Robert Chant, chant@marine.rutgers.edu
Daniel Codiga, d.codiga@gso.uri.edu
Greg Gerbi, ggerbi@skidmore.edu
Michael M. Whitney, Michael.Whitney@uconn.edu

Location: Exhibit/Poster Hall

- B1679 Einolf, A. E.; Lerczak, J. A.; Haller, M. C.: TIDALLY-DEPENDENT STRATIFICATION, SHEAR AND SECONDARY CURRENTS IN YAQUINA BAY ESTUARY, OREGON

- B1680 Li, M.; Liu, W.; Cheng, P.; Chant, R.; Valle-Levinson, A.: LATERAL CIRCULATION IN JAMES RIVER ESTUARY AND ITS EFFECT ON ESTUARINE EXCHANGE FLOWS: A NUMERICAL MODELING STUDY
- B1681 Cheng, P.; Li, M.; Najjar, R.: ESTUARINE RESPONSE TO SEA-LEVEL RISE: A NUMERICAL STUDY OF CHESAPEAKE AND DELAWARE BAYS
- B1682 Guerra, G. E.; Valle-Levinson, A.: CURVATURE EFFECTS ON WATER EXCHANGE AT THE ENTRANCE TO A TROPICAL ESTUARY
- B1683 Collignon, A. G.; Stacey, M. T.: LATERAL ADVECTION OF MOMENTUM AT THE SHOAL-CHANNEL INTERFACE IN A PARTIALLY-STRATIFIED ESTUARY
- B1684 Codiga, D. L.: RELATING TIDAL CYCLES OF STRATIFICATION, SHEAR, AND TURBULENCE TO ESTUARINE RESIDUAL FLOW
- B1685 Gleichauf, K. T.; Wolfram, P. J.; Monismith, S. G.; Fringer, O. B.; Monsen, N. E.; Bayen, A. M.: SMALL-SCALE HYDRODYNAMICS IN TIDAL RIVER JUNCTIONS IN THE SACRAMENTO-SAN JOAQUIN RIVER DELTA
- B1686 Ullman, D. S.; Codiga, D. L.; Whitney, M. M.: LATERAL AND INTRATIDAL VARIABILITY IN CURRENTS, HYDROGRAPHY, AND VERTICAL MIXING IN A WIDE ESTUARY.
- B1687 Weltmer, M. A.; MacMahan, J. H.; Reniers, A. J.; Thornton, E. B.: MODELED SENSITIVITIES OF TIDAL INTRUSION FRONTS TO BATHYMETRIC AND DENSIMETRIC VARIATION
- B1688 Aristizabal, M. E.; Chant, R.: MECHANISMS CONTROLLING STRATIFICATION AT TIDAL TIME SCALES IN DELAWARE BAY ESTUARY.
- B1689 Hunter, E. J.; Chant, R. J.; Valle-Levinson, A.: LAGRANGIAN OBSERVATIONS IN THE JAMES RIVER ESTUARY - 2010: DYE INJECTIONS, LATERAL MIXING AND THE SPIRNG-NEAP CYCLE.
- B1690 Chant, R. J.; Guo, J. D.; Hunter, E.; Valle-Levinson, A.: DYNAMICS OF LATERAL CIRCULATION IN A COASTAL PLAIN ESTUARY.
- B1691 Fandel, C. L.; Lippmann, T. C.; Irish, J. D.: OBSERVATIONS OF FLOW STRUCTURE AROUND POCKMARKS IN BELFAST BAY, MAINE
- B1692 Shutta, J.; MacCready, P.: DOES MIXING CONTROL ESTUARINE EXCHANGE FLOW?

164 International Education And Outreach Activities

- Chair(s): Bob Chen, Bob.Chen@umb.edu
Melissa Ryan, melissa.oceantechnology@gmail.com
- Location: Exhibit/Poster Hall
- B0721 deCharon, A.; Rabolli, M.; Chao, Y.; Lagerloef, G.; Torrusio, S.: AQUARIUS/SAC-D SATELLITE MISSION – U.S AND ARGENTINA WORKING TOGETHER TO UNDERSTAND OUR OCEANS
- B0722 King, E. H.; Dai, M. H.; Cao, W. Q.; Chen, M. R.; Liu, M.: COSEE CHINA: ENCOURAGING CHINA TO
- B0723 Richardson, M. J.; Gardner, W. D.: FIELD-BASED LABORATORIES IN OCEANOGRAPHY AND GEOLOGY DURING A STUDY ABROAD SEMESTER IN ITALY
- B0724 Chen, R. F.; Wang, X. C.; Dia, M.; Gao, H.: COSEE GOES INTERNATIONAL: COSEE CHINA
- B0725 Searle, D. R.: OCEAN NETWORKS CANADA OBSERVATORY: ENCOURAGING NATIONAL AND INTERNATIONAL MARINE EDUCATION
- B0726 Sciandra, A.; Claustre, H.; Scheurle, C.; Raulet, E.; Oceanographic Autonomous Observations group, .: FRENCH INITIATIVES WITH A MEDITERRANEAN-WIDE PERSPECTIVE FOR EDUCATION AND OUTREACH
- B0727 Magar, V.; Greaves, D. M.; Simmonds, D. J.; Raby, A. C.; Pan, S.: AN OUTREACH CASE STUDY ON COASTAL ENGINEERING AND MARINE RENEWABLES
- B0728 Santinelli, C.: TRAVELS ON BOARD THE R/V "URANIA". OUTREACH ACTIVITY WITH 10-12 YEARS OLD CHILDREN
- B0729 Brooks, A.: LEADERSHIP EFFECTING CHANGE: RESEARCH, OUTREACH AND EDUCATION IN THE BAHAMAS

166 Redox And Coordination Chemistry Of Iron In Marine Systems

- Chair(s): Katherine Barbeau, kbarbeau@ucsd.edu
Location: Exhibit/Poster Hall
- A0025 Schallenberg, C.; Zhou, J.; Cullen, J. T.: REDOX PARTITIONING OF IRON IN THE NORTHEAST SUBARCTIC PACIFIC OCEAN
- A0026 Vedamati, J.; Moffett, J. W.: DISSOLVED IRON REDOX CHEMISTRY IN THE OXYGEN MINIMUM ZONE (OMZ) OF THE COSTA RICA UPWELLING DOME.
- A0027 Hopkinson, B. M.; Hogle, S.; Barbeau, K. A.: INSIGHTS INTO IRON SPECIATION FROM THE IRON TRANSPORTERS IN MARINE BACTERIAL GENOMES
- A0028 Santana-Casiano, J. M.; González-Dávila, M.; González, A. G.; Rico, M.; López, A.: OXIDATION OF FE(II) IN THE PRESENCE OF INDIVIDUAL LIGANDS FROM *PHAEODACTYLUM TRICORNUTUM*
- A0029 Roe, K. L.; Barbeau, K. B.; Mann, E. L.; Haygood, M. G.: *TRICHODESMIUM* IRON ACQUISITION MECHANISMS: INORGANIC IRON VS. FERRIC CITRATE
- A0030 Barbeau, K. A.; Bundy, R. M.: PHOTOCHEMICAL DEGRADATION OF STRONG NATURAL IRON-BINDING LIGANDS IN THE CALIFORNIA CURRENT SYSTEM
- A0031 Guo, L. D.; Chen, M.; Roberts, K. A.; Santschi, P. H.: REDOX CONTROL OF THE PARTITIONING AND SCAVENGING OF FE(II,III) AND PA(IV, V) IN SEAWATER: ROLE OF NATURAL ORGANIC MATTER
- A0032 Fujii, M.; Dang, T. C.; Rose, A. L.; Waite, T. D.: EFFECT OF NATURAL ORGANIC MATTER ON IRON UPTAKE BY MICROCYSTIS AERUGINOSA

187 General Session: Chemical Oceanography, Aquatic Chemistry

- Location: Exhibit/Poster Hall
- A0033 Harvey, H. R.; Nunn, B. L.; Faux, J. F.; Moore, E. K.; Goodlett, D. L.: A METHODOLOGY FOR PROTEIN EXTRACTION AND PROTEOMIC CHARACTERIZATION IN MARINE MATRICES
- A0034 Wei-Haas, M. L.; SanClements, M. D.; Smith, H.; Foreman, C. M.; McKnight, D. M.; Chin, Y. P.: TRANSFORMATION OF SUPRAGLACIAL DISSOLVED ORGANIC CARBON FROM THE COTTON GLACIER, ANTARCTICA
- A0035 Jackson, K. J.; Benjamin, W.: SCALES, A NONLETHAL ALTERNATIVE TO MUSCLE TISSUE FOR OBSERVING 13C AND 15N STABLE ISOTOPES OF ATLANTIC CROAKER
- A0036 Hoering, K. A.; Wang, Z. A.; Luttazi, C. F.; Lawson, G. L.: DIRECT OBSERVATION OF OCEAN ACIDIFICATION IN THE NORTHWEST ATLANTIC BETWEEN 2003 AND 2011
- A0037 Kaltenbacher, E. A.; Adornato, L. R.; Byrne, R. H.; Gray, K.: MODELED AND EXPERIMENTAL PERFORMANCE PREDICTIONS AND CAUTIONS FOR TYPE I AND TYPE II LIQUID CORE WAVEGUIDES
- A0038 Martin, W. R.; McCorkle, D. C.: THE RADIOCARBON CONTENT OF DECOMPOSING ORGANIC MATTER IN SEDIMENTS OF THE CONTINENTAL MARGIN IN THE NORTHWEST ATLANTIC OCEAN.
- A0039 Krishnamurthy, N.; Landing, W. M.; Caffrey, J. M.: RAINFALL DEPOSITION OF MERCURY AND OTHER TRACE ELEMENTS TO THE NORTHERN GULF OF MEXICO AND CONTRIBUTIONS FROM LOCAL AND REGIONAL ANTHROPOGENIC SOURCES
- A0040 Keil, R. G.; Myers-Pigg, A. N.; van der Elst, K.; Neibauer, J.; Forrest, B.; Belcher, A. C.; Biladeau, C.; Van Mooy, B.: COMPARATIVE ORGANIC GEOCHEMISTRY OF SINKING PARTICLES COLLECTED USING NET TRAPS DEPLOYED IN OLIGOTROPHIC, COASTAL AND FJORD SETTINGS

Wednesday, February 22 - Orals

015 Nearshore Processes

Chair(s): Jennifer L. Irish, jirish@vt.edu
Alex Apotsos, aapotsos@gmail.com

Location: Ballroom I

- 14:00 Feng, Z.; Reniers, A.; Haus, B. K.; Solo-Gabriele, H. M.: MODELING RELEASE, TRANSPORT AND INACTIVATION OF FECAL INDICATOR BACTERIA AT AN EMBAYED NON-POINT SOURCE SUBTROPICAL BEACH
- 14:15 Morgan, S. G.; Alan, S.; MacMahan, J.; Reneirs, A.; Brown, J.; Griesemer, C.: DIFFERENTIAL TRANSPORT ACROSS THE SURF ZONE OF REFLECTIVE AND DISSIPATIVE SHORES AS A DETERMINANT OF LARVAL SUPPLY
- 14:30 Shanks, A. L.; Morgan, S.; MacMahan, J.; Reniers, A.; Brown, J.; Ziccarelli, L.: PHYTOPLANKTON ABUNDANCE AS AN INDICATOR OF EXCHANGE OF SURF ZONE WITH OFFSHORE WATER AT A DISSIPATIVE AND REFLECTIVE SHORE AND LARVAL TRANSPORT AND SETTLEMENT
- 14:45 Becker, J. M.; Merrifield, M. A.; Ford, M. R.: WATER LEVEL EFFECTS ON WAVE DRIVEN INUNDATION: MARSHALL ISLANDS
- 15:00 Dunkley, J. E.; Koseff, J. R.; Genin, A.; Monismith, S. G.; Woodson, C. B.; Lindemann, Y.; Zarubin, M.: THE FINE SCALE HYDRODYNAMICS OF A SLOPING CORAL REEF: EILAT, ISRAEL.
- 15:15 Rinehimer, J. P.; Thomson, J.; Chickadel, C. C.: THE ROLE OF TIDAL FLATS IN THE COASTAL HEAT BUDGET: SOURCE OR SINK?
- 15:30 Squibb, M. E.; Monismith, S. G.; Woodson, C. B.: OBSERVING VERTICAL MIXING BY SHOALING INTERNAL WAVES IN THE NEARSHORE
- 15:45 Dalyander, P. S.; Butman, B.: DEVELOPING SHELF-WIDE ESTIMATES OF BOTTOM STRESS FOR THE U.S. EAST COAST AND GULF OF MEXICO USING THE SWAN NUMERICAL WAVE MODEL

016 Dynamics And Observations Of Submesoscale Oceanic Processes

Chair(s): Tamay M. Ozgokmen, tozgokmen@rsmas.miami.edu
M. Jeroen Molemaker, nmolem@atmos.ucla.edu
James C. McWilliams, jcm@atmos.ucla.edu
Eric D'Asaro, dasaro@apl.washington.edu

Location: Room 251

- 14:00 Taylor, J. R.; Ferrari, R.: SUBMESOSCALE RESTRATIFICATION TRIGGERS PHYTOPLANKTON BLOOMS AT OCEAN FRONTS.
- 14:15 Fox-Kemper, B.; Hamlington, P. E.; Van Roekel, L.; Sullivan, P. P.: PARAMETERIZATION OF SUBMESOSCALE AND LANGMUIR-SCALE PROCESSES AND INTERACTIONS
- 14:30 Paulo Calil, P.; Yawei Luo, Y.; Ivan Lima, I.; Scott Doney, S. C.: BIOLOGICAL RELEVANCE OF SUBMESOSCALE DYNAMICS IN THE HIGHLY STRATIFIED, OLIGOTROPHIC OCEAN
- 14:45 Bracco, A.; Cardona, Y.; Zhong, Y.: SUBMESOSCALE PROCESSES IN THE GULF OF MEXICO
- 15:00 Jacobs, G.; Bartels, B.; Spence, P.; Barron, C.; Helber, R.; Fabre, J.: PREDICTABILITY OF FRONTGENESIS FILAMENTS IN THE MIXED LAYER
- 15:15 Restrepo, J. M.; Dawson, C.; Venkataramani, S.; Mariano, A. F.: REQUIREMENTS OF A MINIMAL MODEL FOR MESOSCALE OCEAN-SURFACE OIL SLICKS
- 15:30 Keating, S. R.; Majda, A. J.; Smith, K. S.: STOCHASTIC SUPERRESOLUTION OF THE UPPER OCEAN FLOW FIELD ESTIMATED FROM SATELLITE ALTIMETRY
- 15:45 Gaultier, L.; Verron, J.; Brasseur, P.; Brankart, J. M.: ON THE USE OF SUB-MESOSCALE TRACER INFORMATION AND MESOSCALE ALTIMETRIC FIELD FOR THE CONTROL OF OCEAN CIRCULATIONS

057 Biogeochemical Cycling Of Micronutrient Trace Elements

Chair(s): Maeve Lohan, maeve.lohan@plymouth.ac.uk
Andrew Bowie, Andrew.Bowie@utas.edu.au
Toshi Gamo, gamo@aori.u-toyko.ac.jp
Greg Cutter, gcutter@odu.edu

Location: Ballroom J

- 14:00 Landing, W. M.; Kadko, D. C.; Kilgore, B.; Galfond, B.; Krishnamurthy, N.: A NOVEL TRACER TECHNIQUE TO QUANTIFY THE ATMOSPHERIC FLUX OF TRACE ELEMENTS TO THE OCEANS
- 14:15 Anderson, R. E.; Hayes, C. T.; Fleisher, M. Q.; Robinson, L. F.; Huang, K. F.; Edwards, R. L.; Cheng, H.; Moran, S. B.; Gersonde, R.; Hatta, M.: AEROSOL SUPPLY OF SOLUBLE TRACE ELEMENTS TO THE OCEAN EVALUATED USING PAIRED THORIUM ISOTOPES
- 14:30 Sun, J.; Borunda, A.; Kaplan, M.; Winckler, G.; Sambrotto, R. N.; Bostick, B. C.: CHARACTERIZING PARTICULATE IRON SPECIATION IN DUSTS AND SEDIMENTS AND ITS EFFECT ON IRON SOLUBILITY IN THE OCEAN
- 14:45 Slemons, L.; Resing, J.; Murray, J. W.: PARTICULATE IRON, ALUMINUM, AND MANGANESE IN THE PACIFIC EQUATORIAL UNDERCURRENT AND LOW LATITUDE WESTERN BOUNDARY CURRENT SOURCES
- 15:00 Misumi, K.; Lindsay, K.; Moore, K.; Doney, S. C.: EVALUATING THE IMPACTS OF SPATIALLY-VARYING IRON-BINDING LIGAND CONCENTRATIONS ON DISSOLVED IRON DISTRIBUTIONS IN THE GLOBAL OCEAN
- 15:15 Jiang, M.; Barbeau, K. A.; Measures, C. I.; Selph, K. E.; Azam, F.; Zhou, M.: THE ROLE OF IRON LIGANDS IN CONTROLLING SOUTHERN OCEAN FE CYCLING AND PRIMARY PRODUCTIVITY: A MODELING STUDY
- 15:30 Nishioka, J.; Obata, H.; Tsumune, D.: EVIDENCE OF EXTENSIVE WIDESPREAD OF HYDROTHERMAL DISSOLVED IRON IN THE INDIAN OCEAN
- 15:45 Wurl, O.; Phillips, M.; Zimmer, L.; Cutter, G.: ARSENIC BIOGEOCHEMISTRY IN THE NORTH ATLANTIC OCEAN: RELATIONSHIP TO PHOSPHATE STRESS

135 Imaging The Ocean Interior: From Seismics To Optics

Chair(s): Robert Pinkel, rpinkel@ucsd.edu
Steven Holbrook, SteveH@uwoyo.edu

Location: Room 250

- 14:00 Kuperman, W. A.: Munk Award Lecture - THE OCEAN AS A COMPLEX ACOUSTIC MEDIUM
- 14:30 Gorman, A. R.; Cooper, J. K.; Smillie, M. W.; Holbrook, W. S.; Vennell, R.; Bowman, M. H.: SEISMIC IMAGING OF WATER MASS MIXING PROCESSES ASSOCIATED WITH THE SUBTROPICAL FRONT SOUTHEAST OF NEW ZEALAND
- 14:45 Smith, J. A.; Pinkel, R.: IMAGING WAVES, FRONTS, AND MIXED LAYER DYNAMICS WITH PHASED ARRAY SONARS
- 15:00 Lavery, A. C.; Geyer, W. R.; Scully, M. E.; Lawson, G. L.; Wiebe, P. H.; Lee, W. J.; Stanton, T. K.; Fincke, J. R.: DEVELOPMENT OF HIGH-FREQUENCY BROADBAND ACOUSTIC SCATTERING TECHNIQUES FOR IMAGING, CLASSIFICATION, AND QUANTIFICATION OF STRATIFIED TURBULENCE AND ZOOPLANKTON
- 15:15 Jaffe, J. S.; Roberts, P. L.; Briseño-Avena, C.; Genin, A.; Lindemann, Y.; Simonet, F.: ZOOPS-O: A COMBINED WIDE-BAND ACOUSTIC AND OPTICAL ZOOPLANKTON IMAGING SYSTEM
- 15:30 Worcester, P. E.; Munk, W. H.; Cornuelle, B. D.; Dzieciuch, M. A.; Wage, K. E.: EXPLORING AN UNDER-ICE OCEAN CAVITY WITH SOUND
- 15:45 Holbrook, W. S.; von Lanken, A.; Fortin, W.; Simmons, H.; St. Laurent, L.; Schmitt, R.; Eakin, D.: IMAGING THE GENERATION SITES AND INTERNAL STRUCTURE OF LARGE NON-LINEAR INTERNAL WAVES ACROSS THE LUZON PASSAGE AND SOUTH CHINA SEA

162 Advances In Phylogeography And Connectivity Of Marine Metazoans

Chair(s): Ann Bucklin, ann.bucklin@uconn.edu
Timothy Shank, tshank@whoi.edu

Location: Room 150

- 14:00 Crandall, K. A.; Bracken-Grissom, H.: NEXT-GEN PHYLOGEOGRAPHY
- 14:15 Goetze, E.; Norton, E. L.: LIMITS TO DISPERSAL FOR MARINE PLANKTON
- 14:30 Blanco-Bercial, L.; Cornils, A.; Copley, N. J.; Bucklin, A.: A QUESTION OF SCALE: CONNECTIVITY OF PLANKTONIC COPEPOD POPULATIONS WITHIN AND BETWEEN OCEAN BASINS
- 14:45 Jacobson, A. J.; Thaler, A. D.; Sophie Plouviez, S. C.; Schultz, T. F.; Van Dover, C. L.: POPULATION GENETICS OF DEEP-SEA LIMPETS FROM HYDROTHERMAL VENTS IN THE SOUTHWESTERN PACIFIC
- 15:00 Herrera, S.; Sanchez, J. A.; Shank, T. M.: SPATIAL PATTERNS OF GENETIC VARIATION IN THE WIDESPREAD COLD-WATER BUBBLEGUM CORAL *PARAGORGIA ARBOREA*
- 15:15 Hauff, M. J.; Oleksiak, M. F.; Sponaugle, S.; Cowen, R. K.: SINGLE-NUCLEOTIDE POLYMORPHISMS (SNPS) SHED LIGHT ON TRANSPORT-RELATED CONDITION AND CONNECTIVITY IN CORAL REEF FISH LARVAE
- 15:30 Haupt, A. J.; Micheli, F.; Palumbi, S. R.: CONCORDANT PHYLOGEOGRAPHIC PATTERNS ASSOCIATED WITH THE MAJOR HEADLAND OF CAPE MENDOCINO IN NORTHERN CALIFORNIA
- 15:45 Burton, R. S.: CONSEQUENCES OF RESTRICTED GENE FLOW ACROSS A BROAD GEOGRAPHIC RANGE: OUT-BREEDING DEPRESSION AND LOCAL ADAPTATION IN AN INTERTIDAL COPEPOD

165 Climate Change Impacts On The Bering Sea And Related Polar Seas: From Observation To Prediction

Chair(s): Thomas Van Pelt, tvanpelt@nprb.org
Michael W. Lomas, Michael.Lomas@bios.edu
Mike Sigler, mike.sigler@noaa.gov

Location: Room 151

- 14:00 Lomas, M. W.: INFLUENCE OF SEASONAL SEA ICE VARIABILITY ON CARBON AND ENERGY FLOW IN THE BERING SEA ECOSYSTEM
- 14:30 Cooper, L. W.; Fishbach, A. S.; Gradinger, R.; Grebmeier, J. M.; Jay, C. V.; Kuletz, K.; Lovvorn, J. R.; Sexson, M.: NEW INSIGHTS ON THE NORTHERN BERING SEA ECOSYSTEM FROM EARLY SEASONAL SAMPLING IN MARCH 2008, 2009 AND 2010
- 14:45 Danielson, S.; Weingartner, T.; Aagaard, K.; Zhang, J.; Stabeno, P.: CIRCULATION DYNAMICS OF THE CENTRAL EASTERN BERING SEA SHELF
- 15:00 Baumann, M. S.; Moran, S. B.; Kelly, R. P.; Lomas, M. W.; Shull, D. H.: SEASONAL PARTICLE RETENTION ON THE EASTERN BERING SEA SHELF EVALUATED USING TH-234
- 15:15 Campbell, R. G.; Ashjian, C. A.; Sherr, E. B.; Sherr, B. E.; Alatalo, P.; Gelfman, C.; Ross, C.; Van Keuren, D.: FEEDING AND REPRODUCTION OF MESOZOPLANKTON IN THE BERING SEA DURING SPRING SEA-ICE CONDITIONS
- 15:30 McIntosh, N. E.; Benoit-Bird, K. J.; Heppell, S. A.: SPATIAL VARIATION IN THE SMALL-SCALE DISTRIBUTION OF JUVENILE WALLEYE POLLOCK (*THELAGRA CHALCOGRAMMA*) IN THE SOUTHEASTERN BERING SEA
- 15:45 Gibson, G. A.; Hermann, A. J.; Hedstrom, K.; Curchitser, E.: PREDICTING THE IMPACTS OF CHANGING ENVIRONMENTAL CONDITIONS ON LOWER TROPHIC LEVEL ECOSYSTEM DYNAMICS IN THE BERING SEA.

Wednesday, February 22 - Posters

009 Ocean Observing: Sensors And Platforms

Chair(s): Mike DeGrandpre, michael.degrandpre@umontana.edu
Todd Martz, tmartz@ucsd.edu

Location: Exhibit/Poster Hall

- A0090 Aßmann, S.; Frank, C.; Körtzinger, A.: SPECTROPHOTOMETRIC SEAWATER pH AND ALKALINITY DETERMINATION FOR USE IN UNDERWAY MEASURING SYSTEMS
- A0091 Hackett, E. E.; Fullerton, A. M.; Merrill, C. F.; Fu, T. C.: COMPARISON OF DOPPLER- AND RADAR CROSS SECTION-BASED WAVE HEIGHT SPECTRA FOR LOW SEA STATES
- A0092 Whitledge, T. E.: R/V SIKULIAQ: A NEW ICE-CAPABLE RESOURCE FOR THE UNOLS FLEET
- A0093 Keen, R.; Brando, V.; Daniel, P.; McKenzie, D.; Woodward, L.; Palmer, R.; Mills, D.; Slivkoff, M.; Klonowski, W.: THE ESTABLISHMENT OF AUTONOMOUS SHIP BASED OCEAN COLOR OBSERVATIONS ON AUSTRALIAN RESEARCH VESSELS.
- A0094 Easson, G. L.; Lutken, C. B.; Sleeper, K. G.; Macelloni, L.; D'Emidio, M.: GAS HYDRATES OBSERVATORY AT MISSISSIPPI CANYON 118
- A0095 Martz, T. R.: AUTONOMOUS OBSERVATIONS OF PH DYNAMICS ACROSS MULTIPLE ECOSYSTEMS
- A0096 DeGrandpre, M. D.; Gray, S. C.; Harris, K.; Beatty, C. M.: INORGANIC CARBON AND CALCIUM CARBONATE SATURATION STATES: CALCULATION FROM IN SITU PH AND PCO₂ DATA
- A0097 Bushinsky, S. M.; Emerson, S.: DEVELOPMENT OF A MOORING BASED IN-SITU CALIBRATION SYSTEM FOR AANDERAA OXYGEN SENSORS
- A0098 Zhang, A.; Burke, P.: NOAA'S COASTAL OCEAN OPERATIONAL FORECAST SYSTEMS
- A0099 Fassbender, A. J.; Sabine, C. L.; Meinig, C.; McLain, P.; Lawrence-Slavas, N.: AUTONOMOUS DISSOLVED INORGANIC CARBON MEASUREMENTS ON A MOORED BUOY
- A0100 Fietzek, P.; Fiedler, B.; Körtzinger, A.: SENSOR EVALUATION OF THE HYDRO-CO₂ FROM VARIOUS FIELD TESTS
- A0101 Bresnahan, P. J.; Martz, T. R.; Lebon, G. T.; Czikowsky, M. J.; Almeida, J. L.: UNDERWAY MEASUREMENTS OF DISSOLVED INORGANIC CARBON, PH, AND PCO₂ DURING THE NORTH ATLANTIC BLOOM
- A0102 Coppini, G.; Lyubartsev, V.; Pinardi, N.; Montanari, G.; Rinaldi, A.; Serra, S.; Guarneri, A.: ADRIATIC SEA DECISION SUPPORT SYSTEM (ADRI-DSS)
- A0103 Hobson, B. W.; Bellingham, J. G.; Godin, M.; Kieft, B.; Hoover, T.; McEwen, R.; Erickson, J.; Zhang, Y.: CAPABILITIES AND FIELD EXPERIENCE OF MBARI'S TETHYS LONG RANGE AUV
- A0104 Reiter, J. M.; Murphy, D.; Larson, N.: DRIFT MEASUREMENTS OF PRESSURE SENSORS

015 Nearshore Processes

Chair(s): Jennifer L. Irish, jirish@vt.edu
Alex Apotsos, aapotsos@gmail.com

Location: Exhibit/Poster Hall

- B0830 Su, C.; Hsu, H.; Cheng, Y.; Tseng, J.: FAST TRANSPORT OF SEDIMENTS FROM SHALLOW WATERS TO DEEP SEA: OBSERVATIONS OFF SOUTHWESTERN TAIWAN
- B0831 Neill, S. P.; Reche, P. D.; Davies, A. G.; Iglesias, G.: IMPACT OF WAVE ENERGY ARRAYS ON BEACH PROCESSES
- B0832 Ferguson, B. K.; Dababneh, J.; Barton, D. J.: TSUNAMI FLOODING DUE TO A PROBABLE MAXIMUM EARTHQUAKE IN THE MAKRAN SUBDUCTION ZONE
- B0833 Dababneh, J.; Ferguson, B. K.; Barton, D. J.: STORM SURGE MODELING IN THE CHESAPEAKE BAY DUE TO THE PROBABLE MAXIMUM HURRICANE
- B0834 Merrifield, M. A.; Ford, M. R.; Becker, J. M.: THE IMPACT OF SEA-LEVEL RISE ON WAVE-DRIVEN INUNDATION EVENTS AT THE MARSHALL ISLANDS
- B0835 DiMarco, S. F.; Mullins-Perry, R. L.; Li, B.; Chapman, P.; Howard, M. K.; Zhang, X.: THE EFFECTS OF UPWELLING-FAVORABLE WIND FORCING ON THE EVOLUTION OF STRATIFICATION AND OXYGEN CONCENTRATION OF THE NORTHERN GULF OF MEXICO IN SUMMER 2011
- B0836 Jaramillo, S.; Pawlak, G.: COMPARISON OF BED ROUGHNESS AND HYDRODYNAMICS OBSERVATIONS FOR FOUR TROPICAL REEFS
- B0837 Paternostro, C. L.; Lepp, J. G.; Glebushko, K.; Burke, P. B.: TSUNAMI-FORCED CURRENTS AROUND THE HAWAIIAN ISLANDS GENERATED BY THE GREAT EAST JAPAN EARTHQUAKE
- B0838 Kumar, A.: WALLOPS BARRIER ISLAND SYSTEM AND SEA LEVEL RISE
- B0839 McKenna, L. A.; Lippmann, T. C.; Gallagher, E. L.: OBSERVATIONS OF BEDFORM EVOLUTION IN AN INLET
- B0840 Zhou, W.; Wang, Q.; Wang, D.: DYNAMICS OF THE CURRENTS SEPARATION AROUND DONGSHA ISLANDS
- B0841 Frank, D. P.; Foster, D. L.; Chou, P. H.: IN-SITU MEASUREMENTS WITHIN MOBILE BED LAYERS WITH "ELECTRONIC PEBBLES"
- B0842 Cox, N.; Irish, J. L.: THE INFLUENCE OF NEARSHORE BARS ON INFRAGRAVITY ENERGY AT THE SHORELINE
- B0843 Chariw, J. E.; Sabetta, M. J.; Oakley, A. J.; Cornell, S. R.: MONITORING IN SITU TIDAL RANGE AND SURFACE AQUIFER RECHARGE AND DISCHARGE ON WALLOPS ISLAND, VIRGINIA
- B0844 Keen, A. S.; Holman, R. A.; Reuben, J.: OPTICAL ESTIMATION OF BREAKING WAVE INDUCED DISSIPATION
- B0845 Orescanin, M. M.; Raubenheimer, B.; Elgar, S.: CIRCULATION AND BATHYMETRIC EVOLUTION IN KATAMA BAY AND INLET, MA
- B0846 Senechal, N.; Peron, C.: WEEKLY TO YEARLY SHORELINE DYNAMICS OF AN INTERMEDIATE MESOTIDAL SANDY BEACH
- B0847 Sangermano, J. J.; Cheng, Z.; Hsu, T. J.: AN IDEALIZED 3D NUMERICAL STUDY ON THE GENERATION OF LARGE COHERENT STRUCTURES DUE TO A TSUNAMI WAVE
- B0848 Cheng, Z.; Hsu, T. J.; Sou, I. M.; Calantoni, J.: A 3D EULERIAN-EULERIAN TWO-PHASE MODEL FOR SEDIMENT TRANSPORT
- B0849 Zhou, Z.; Hsu, T. J.; Torres-Freyermuth, A.: ON WAVE-CURRENT INTERACTION AND ITS EFFECT ON FLOW TURBULENCE AND SEDIMENT TRANSPORT
- B0850 Rennie, S. E.; Brandt, A.: CONSTRUCTION OF PROBABILISTIC EXPERT SYSTEM TO PREDICT SCOUR BURIAL
- B0851 Gon, C. J.; MacMahan, J. H.; Reniers, A. J.; Herbers, T. H.: TIDAL WAVE REFLECTANCE AND NON-LINEAR TRANSFER IN THE ELKHORN SLOUGH, CA
- B0852 MacMahan, J. H.; Reniers, A. J.; Brown, J. A.; Watson, D.; Herbers, T.; Gallagher, E.; Thornton, E. B.; Shanks, A.; Morgan, S.: WAVES AND CURRENTS MEASURED ON A STEEP, REFLECTIVE BEACH
- B0853 Wren, P. A.: MEASUREMENTS OF SAND TRANSPORT OFFSHORE OF A RENOURISHED BEACH, MYRTLE BEACH, SOUTH CAROLINA
- B0854 Johnson, K. W.; Dellapenna, T.: SEDIMENT TRANSPORT ON THE CONTINENTAL SHELF AS A RESPONSE TO LARGE SCALE EPISODIC EVENTS. AN INVESTIGATION OF HURRICANE IKE'S EFFECT ON GALVESTON ISLAND.
- B0855 Moulton, M. R.; Elgar, S.; Raubenheimer, B.: EFFECTS OF LARGE BOTTOM SLOPES ON SEDIMENT TRANSPORT AND BED LEVEL CHANGES IN HOLES IN THE SURFZONE
- B0856 Spydell, M. S.; Feddersen, F.; McMahan, J.; Guza, R. T.: SURFZONE VERTICAL VORTICITY AT IMPERIAL BEACH DERIVED FROM GPS-TRACKED DRIFTERS
- B0857 Day, A.; Henderson, S. H.; Mullarney, J. C.: INVESTIGATING THE ROLE OF BAROCLINIC FLOWS IN TIDAL CHANNEL MORPHOLOGY AND SEDIMENT TRANSPORT.
- B0858 Wilson, G. W.; Özkan-Haller, H. T.; Holman, R. A.; Kurapov, A. L.: SURF ZONE DATA ASSIMILATION AND BATHYMETRIC INVERSION FROM VIDEO REMOTE SENSING

- B0859 [Holman, R. A.](#); Stanley, J.: OPTICAL ESTIMATION OF THE FRACTION OF BREAKING WAVES
- B0860 [Keshtpoor, M.](#); Puleo, J. A.; Shi, F.: MODELING TURBULENCE AND SEDIMENT TRANSPORT NEAR DEEP SCOUR HOLES WITHIN A TIDAL INLET
- B0861 [Hally-Rosendahl, K.](#); Feddersen, F.; Guza, R. T.: SURFZONE AND INNER-SHELF TRACER EXCHANGE
- B0862 [Pearman, D. W.](#); Janssen, T. T.; Herbers, T. H.; Jessen, P. F.: LAGRANGIAN BUOY MEASUREMENTS OF WAVE-CURRENT INTERACTIONS
- B0863 [Parker, K. R.](#); Chen, Q. J.; Jadhav, R.; Bouanchaud, J.; Chatagnier, J.; Zhang, G.: FIELD MONITORING OF STORM IMPACTS ON MARSH EDGE STABILITY IN SOUTH LOUISIANA
- B0864 [Vélez, F. J.](#); Canals, M. F.; Scott, K.: NUMERICAL MODELING AND FIELD OBSERVATIONS OF NEARSHORE HYDRODYNAMICS IN RINCNN, PUERTO RICO
- B0865 [Templeton, C. K.](#); Maio, C. V.; Gontz, A. M.: GEOSPATIAL AND GEOPHYSICAL ANALYSIS OF THE EVOLUTION OF A TRANSGRESSIVE SHORE-OBLIQUE SPIT, PLYMOUTH LONG BEACH, PLYMOUTH, MASSACHUSETTS, USA
- B0866 [Brown, J. A.](#); MacMahan, J. H.; Reniers, A.: RIP CURRENT VERTICAL STRUCTURE
- B0867 [McNinch, J. E.](#); [Slocum, R. K.](#): METHODS FOR EXTRACTING BEACH EVOLUTION, RUNUP, AND WAVE BORE HEIGHTS FROM AN AUTOMATED TERRESTRIAL LASER SCANNER
- B0868 [Zhao, L.](#); Wang, J.; Wei, H.: VARIABLE DIFFUSION BOUNDARY LAYER AND DIFFUSION FLUX AT SEDIMENT-WATER INTERFACE IN RESPONSE TO DYNAMIC FORCING IN A TIDAL FLAT
- B0869 [Lourenço, T. S.](#); Siegle, E.: EFFECTS OF INTERANNUAL WAVE CLIMATE VARIATION ON THE SOUTHERN COAST OF BRAZIL
- B0870 [Woodlief, V. A.](#); Cornell, S. R.; Sabetta, M.; Sergent, E.; McGilliard, E.; Oakley, A.: A GIS ANALYSIS OF THE CHINCOTEAGUE INLET EDDY AND ITS IMPACT ON THE SHORELINE MORPHOLOGY OF NORTHERN WALLOPS ISLAND, EASTERN SHORE VIRGINIA
- B0871 [Jang, S.](#); Kim, T.; Park, S.: EXPERIMENTAL STUDY OF WAVE SET-UP AND CURRENTS ON THE MACRO-INTERTIDAL BEACH
- B0872 [Bateman, S. P.](#); Calantoni, J.; Hsu, T. J.: TWO-PHASE EULER-LAGRANGE SIMULATIONS FOR SHEET FLOW TRANSPORT OF MIXED-SIZE SEDIMENTS
- B0873 [Penko, A. M.](#); Calantoni, J.: THREE-DIMENSIONAL VORTEX DYNAMICS OVER EVOLVING RIPPLED BEDS
- B0874 [Landon, K. C.](#); Ozkan-Haller, H. T.; Wilson, G. W.: DEPTH INVERSION USING DRIFTER OBSERVATIONS ON THE KOOTENAI RIVER
- B0875 [Rahter, B. A.](#); Merrifield, M. A.; Becker, J. M.: WAVE-FORCED FLOW OVER A SHALLOW REEF FLAT ON KWAJALEIN ATOLL
- B0876 [Clark, S. J.](#); Merrifield, M. A.; Becker, J. M.: THE INFLUENCE OF A CROSS-REEF CHANNEL ON CIRCULATION OVER A FRINGING REEF AT IPAN, GUAM
- B0877 [Cynn, M. J.](#); Jaramillo, S.; Pawlak, G.: HYDRODYNAMIC ROUGHNESS AND BED STRESS OVER CORAL REEFS
- B0878 [Kraatz, S. G.](#); Tang, H.: HIGH-RESOLUTION PREDICTION OF NEARSHORE TIDAL ENERGY AT NEW JERSEY COASTLINES
- B0879 [Van Ormondt, M.](#); Kim, S. Y.; Hibler, L.; Terrill, E.; [Van Dongeren, A. R.](#): MODELING THE CONTROLLING HYDRODYNAMICS OF A COASTAL PLUME
- B2067 [Ezer, T.](#); Heyman, W. D.; Houser, C.: OBSERVATIONS AND HIGH-RESOLUTION MODELING OF SMALL-SCALE FLOW-TOPOGRAPHY INTERACTIONS NEAR CARIBBEAN CORAL REEFS
- B2068 [Beron-Vera, F. J.](#); Haller, G.: UNIFIED THEORY OF LAGRANGIAN COHERENT STRUCTURES
- B2069 [Haza, A. C.](#); Ozgokmen, T. M.; Griffa, A.; Garraffo, Z. D.; Piterberg, L.: PARAMETRIZATION OF SUBMESOSCALE PARTICLE TRANSPORT IN THE GULF STREAM REGION USING LAGRANGIAN SUBGRIDS SCALE MODELS
- B2070 [Schroeder, K.](#); [Griffa, A.](#); Haza, A.; Özgökmen, T.; Chiggiato, J.; Zanasca, P.; Molcard, A.; Borghini, M.; Poulain, P. M.; Gerin, R.: RELATIVE DISPERSION IN THE SUBMESOSCALE RANGE FROM DRIFTER MEASUREMENTS IN THE NORTHWESTERN MEDITERRANEAN SEA
- B2071 [Koch, A. O.](#); Helber, R. W.; Richman, J. G.; Barron, C. N.: EVOLUTION OF THE HORIZONTAL DENSITY COMPENSATION: A MODELING PERSPECTIVE
- B2072 [Veneziani, M.](#); Griffa, A.; Garraffo, Z.; Mensa, J.: MODELING OF SUBMESOSCALE PROCESSES AND BARRIER LAYER FORMATION IN THE TROPICAL SOUTH ATLANTIC
- B2073 [Hiester, H. R.](#); Piggott, M. D.; Allison, P. A.: ADAPTIVE MESHES AS A TOOL FOR SUBMESOSCALE OCEAN MODELING
- B2074 [Nencioli, E.](#); Petrenko, A.; Doglioli, A.; d'Ovidio, F.; Testor, P.; Kersale, M.; Bouffard, J.: A MULTI-PLATFORM APPROACH TO INVESTIGATE SUBMESOSCALE STRUCTURES IN A COASTAL REGION AND THEIR IMPACTS IN REGULATING CROSS-SHELF EXCHANGES
- B2075 [Baumert, H. Z.](#); [Peters, H.](#): A CLOSURE FOR MEAN SHEAR- AND INTERNAL WAVE-DRIVEN TURBULENCE: A PROGRESS REPORT
- B2076 [Mensa, J. A.](#); Garraffo, Z.; Griffa, A.; Özgökmen, T. M.; Veneziani, M.: SEASONALITY OF THE SUBMESOSCALE DYNAMICS IN THE GULF STREAM REGION.
- B2077 [Roberts, P. L.](#); Jaffe, J. S.; Rodriguez-Pinto, I.; Glatts, R.; Franks, P. J.: LOCALIZING SWARMS OF MINIATURE VEHICLES FOR STUDYING SUBMESOSCALE DYNAMICS : A STATUS REPORT
- B2078 [Leclair, M.](#); Grisouard, N.; Gostiaux, L.; Staquet, C.; Auclair, F.: REFLEXION OF A PLANE WAVE ONTO A SLOPE AND WAVE-INDUCED MEAN FLOW
- B2079 [Dunphy, M. W.](#); Lamb, K. G.: EXCITATION OF MODE-TWO INTERNAL WAVES BY A MODE-ONE INTERNAL WAVE AND A MESOSCALE EDDY
- B2080 [Xie, X. H.](#); Cuypers, Y.; Bouruet-Aubertot, P.; Pichon, A.; Lourenco, A.; Ferron, B.: GENERATION AND PROPAGATION OF INTERNAL TIDES AND SOLITARY WAVES IN THE SHELF EDGE OF THE BAY OF BISCAY
- B2081 [Nadiga, B. T.](#); Straub, D. N.: NEAR INERTIAL OSCILLATIONS AND ENERGY BALANCE IN A PRIMITIVE EQUATION OCEAN MODEL
- B2082 [Shay, L. K.](#); Martinez-Pedraja, J.; Archer, M. R.; Haus, B. K.; Parks, A. B.: SUBMESOSCALE SURFACE CURRENT VARIABILITY ALONG THE FLORIDA CURRENT
- B2083 [Blackhurst, T. D.](#); [Vanderhoff, J. C.](#): INTERNAL WAVE PROPAGATION IN AN ACCELERATING SHEAR FLOW
- B2084 [Brunner-Suzuki, A. E.](#); Sundermeyer, M. A.; Lelong, M. P.: VORTICAL MODE STIRRING, INTERNAL WAVES, AND THE INVERSE ENERGY CASCADE
- B2085 [Arobone, E.](#); Sarkar, S.: INVESTIGATION OF A STRATIFIED BAROTROPIC MIXING LAYER WITH COORDINATE SYSTEM ROTATION
- B2086 [Nakamura, T.](#); Nishioka, J.; Ono, T.; Mitsudera, H.: WINTER MIXED LAYER DEVELOPMENT BY SUBTROPICAL WATER INTRUSION OVER SUBARCTIC WATER AND ASSOCIATED IRON SUPPLY
- B2087 [Chien, M. H.](#); Yang, S. C.; Tseng, Y. H.: THE ENERGY CONVERSION IN KUROSHIO-OYASHIO EXTENSION BASED ON A 1/16 DEGREE EDDY-RESOLVING GLOBAL OCEAN CIRCULATION MODEL
- B2088 [Goodman, L.](#): SUBMESOSCALE SPATIAL VARIABILITY OF OCEAN TURBULENCE
- B2089 [Hoecker-Martinez, M. S.](#); Smyth, W. D.: KELVIN-HELMHOLTZ OVERTURN BOUNDARY IN VISCOUS FLOWS
- B2090 [Cervantes, B. T.](#); Levine, M. D.; Pierce, S. D.; Ledwell, J. R.: FLUORESCEN DYE STUDIES IN THE SARGASSO SEA

016 Dynamics And Observations Of Submesoscale Oceanic Processes

Chair(s): Tamay M. Ozgokmen, tozgokmen@rsmas.miami.edu
 M. Jeroen Molemaker, nmolem@atmos.ucla.edu
 James C. McWilliams, jcm@atmos.ucla.edu
 Eric D'Asaro, dasaro@apl.washington.edu

Location: Exhibit/Poster Hall

- B2066 [Arbic, B. K.](#); Richman, J. G.; Shriver, J. F.; Metzger, E. J.; Wallcraft, A. J.: IMPACT OF INTERNAL TIDES ON THE WAVENUMBER SPECTRUM OF SEA SURFACE HEIGHT

- B2091 Wang, C.; Pawlowicz, R.: PROPAGATION SPEEDS OF STRONGLY NONLINEAR NEAR-SURFACE INTERNAL WAVES IN THE STRAIT OF GEORGIA
- B2092 Hee -Won Yang, H. W.; Yang-Ki Cho, .; Gwang-Ho Seo, .: EFFECT OF THE WIND STRESS ON THE VARIABILITY OF THE YELLOW SEA BOTTOM COLD WATER IN SUMMER
- B2093 Bilo, T. C.; Palocz, A.; Rocha, C. B.; Silveira, I. C.; Ceccopieri, W.: ON THE BRAZIL CURRENT SYSTEM OFF SOUTHEAST BRAZIL (22S): TOP - BOTTOM DIRECT VELOCITY MEASUREMENTS
- B2094 Mukherjee, S.; Ramachandran, S.; Tandon, A.; Mahadevan, A.: INTERCOMPARISON OF 1-D TURBULENCE CLOSURE MODELS WITH LARGE EDDY SIMULATION: APPLICATIONS TO SUBMESOSCALE PROCESSES
- B2095 Abramczyk, M.; Molemaker, M. J.; Baschek, B.: SURFACE VELOCITIES IN A SUBMESOSCALE SPIRAL EDDY DERIVED FROM AERIAL SEA SURFACE TEMPERATURE (SST) MEASUREMENTS
- B2096 Rago, T. A.; Margolina, T.; Collins, C. A.: LAGRANGIAN MEASUREMENT OF CONTINUITY OF SUBSURFACE UNDERCURRENT FLOW ALONG THE WESTERN UNITED STATES

024 Fecal Pellets Of Copepods And Tunicates: Different (Micro)Worlds

- Chair(s): Marion Koester, koesterm@uni-greifswald.de
Gustav-Adolf Paffenhofer, gustav.paffenhofer@skio.usg.edu
Jay Brandes, Jay.brandes@skio.usg.edu
- Location: Exhibit/Poster Hall
- A0162 Lee, R. E.; Paffenhofer, G. A.; Koester, M.: OIL DROPLETS IN FECAL PELLETS OF DOLIOLIDS AFTER UPTAKE OF DISPERSED OIL
- A0163 Koester, M.; Paffenhofer, G. A.: DOES O₂ CONSUMPTION DIFFER WITH COMPOSITION OF FAECAL PELLETS?
- A0164 Paffenhofer, G. A.; Koester, M.; Schlueter, R.: CHARACTERIZATION OF FAECAL PELLETS
- A0165 Ditchfield, A. K.; Clark, N.; Wilson, S. T.; Hart, M. C.; Green, D. H.; Hatton, A. D.: THE ROLE OF FECAL PELLET MICRO-ENVIRONMENTS IN OCEANIC METHANE PRODUCTION
- A0167 Brandes, J. A.; Frischer, M.; Köster, M.; Paffenhofer, G.: STABLE ISOTOPIC COMPOSITION OF DOLIOLIDS AND THEIR FECAL PELLETS
- A0168 Lyons, M. M.; Dobbs, F. C.: DIFFERENTIAL UTILIZATION OF CARBON SUBSTRATES BY AGGREGATE-ASSOCIATED AND WATER-ASSOCIATED HETEROTROPHIC BACTERIAL COMMUNITIES
- A0169 El Shaffey, H.; Thompson, M. E.; Walters, T. L.; Paffenhofer, G. A.; Frischer, M. E.: BACTERIAL COMMUNITIES ASSOCIATED WITH THE PELAGIC TUNICATE D. GEGENBAURI AND THEIR FECAL PELLETS: WHAT IS THEIR ORIGIN?
- A0170 Urban-Rich, J.: ZOOPLANKTON FECAL PELLET GUIDE (ZFP GUIDE): AN INTERNET-BASED RESOURCE TO HELP IN THE IDENTIFICATION AND STUDY OF COPEPOD AND TUNICATE FECAL PELLETS.

034 Long Waves On Continental Shelves

- Chair(s): Alexander Yankovsky, ayankovsky@geol.sc.edu
Andrew Kennedy, andrew.kennedy@nd.edu
- Location: Exhibit/Poster Hall
- B1693 Kennedy, A. B.; Joannes Westerink, .; Mark Hope, .; Uriah Gravois, .; Brian Zachry, .: FORERUNNER SURGE AND SHELF WAVES IN ADVANCE OF TROPICAL CYCLONES
- B1694 Lynett, P. J.: NONLINEAR AND VISCOUS TSUNAMI TRANSFORMATION OVER SHALLOW SHELVES
- B1695 Yankovsky, A. E.: EVOLUTION OF STORM SURGE INDUCED BY A TRANSLATING ATMOSPHERIC CYCLONE IN THE PRESENCE OF A BENDING COASTLINE
- B1696 Mied, R. P.; Schulz, W. J.; Snow, C. M.: MODELING CONTINENTAL SHELF WAVES IN THE MID-ATLANTIC BIGHT
- B1697 Soloviev, A.; Yankovsky, A.; McCreary, Jr., J. P.: DYNAMICS OF SOUTHWARD FLOW UNDER THE FLORIDA CURRENT AND COASTAL CURRENT IN THE STRAITS OF FLORIDA

- B1698 Park, M.; Savenije, H. H.: TIDAL WAVE PROPAGATION CHARACTERISTICS AROUND THE ASAN BAY, A STRONGLY CONVERGENT BAY IN THE WEST COAST OF KOREA

041 Methods And Applications Of Data Assimilation For Ocean Biogeochemistry

- Chair(s): Katja Fennel, katja.fennel@dal.ca
Micheal Dowd, mdowd@mathstat.dal.ca
Richard Matear, Richard.Matear@csiro.au
- Location: Exhibit/Poster Hall
- A0105 Hu, J.; Fennel, K.; Mattern, J. P.; Wilkin, J.: THE LOCALIZED ENSEMBLE KALMAN FILTER APPLIED TO A 3-DIMENSIONAL BIOLOGICAL MODEL OF THE MIDDLE ATLANTIC BIGHT
- A0106 Mattern, J. P.; Fennel, K.; Dowd, M.: TEMPORAL AND SPATIAL DEPENDENCE OF PLANKTON PARAMETERS IN A BIOLOGICAL OCEAN MODEL
- A0107 Jones, E. M.; Murray, L.; Parslow, J.; Campbell, E.; Cressie, N.; Margvelashvili, N.: BIOPHYSICAL-STATISTICAL MODELING: A QUANTITATIVE METHOD FOR ADDRESSING UNCERTAINTY IN MARINE BIOGEOCHEMICAL MODELS.
- A0108 Song, H.; Edwards, C. A.; Moore, A. M.; Fiechter, J.: LOGNORMAL 4-DIMENSIONAL VARIATIONAL ASSIMILATION FOR BIOGEOCHEMICAL VARIABLES
- A0109 Bianucci, L.; Fennel, K.; Mattern, J. P.: AN EMULATOR APPROACH FOR CONSTRAINING NET PHYTOPLANKTON GROWTH RATES IN THE NORTH ATLANTIC IN WINTER
- A0110 Kidston, M.; Matear, R.; Baird, M. E.: PHYTOPLANKTON GROWTH IN THE AUSTRALIAN SECTOR OF THE SOUTHERN OCEAN, EXAMINED BY OPTIMISING ECOSYSTEM MODEL PARAMETERS.
- A0111 Dwivedi, S.; Haine, T.; Del Castillo, C.: A BIOCHEMICAL UPPER OCEAN STATE ESTIMATE IN THE SOUTHERN OCEAN GASEX REGION
- A0112 Weir, B.; Miller, R. N.; Spitz, Y. H.: IMPLICIT CALIBRATION OF A MARINE ECOLOGICAL MODEL TO THE BERMUDA ATLANTIC TIME SERIES
- A0113 Briggs, J.; Dowd, M.; Meyer, R.: A PARTICLE FILTER FOR HIGH DIMENSIONAL SYSTEMS WITH APPLICATION TO OCEAN BIOGEOCHEMISTRY
- A0114 Sasse, T. P.; McNeil, B. I.; Abramowitz, G.: A NOVEL METHOD TO QUANTIFY GLOBAL AIR-SEA CO₂ FLUXES AND SEASONAL CARBON/PH DYNAMICS VIA NEURAL NETWORK ANALYSIS OF MIXED-LAYER HYDROGRAPHIC CARBON DATA
- A0115 DeDonato, M.; Wallace, B.; Fargher, H. E.: SCHEDULING SENSORS FOR BIO-GEO-CHEMICAL PROFILING FLOATS
- A0116 Xiao, Y.; Friedrichs, M.: A DATA ASSIMILATIVE INTER-MODEL COMPARISON OF THE LOWER TROPHIC LEVEL ECOSYSTEM ON THE NORTHEAST U.S. CONTINENTAL SHELF

049 Advances In The Oceanography Of Trace Elements And Isotopes In The Atlantic And Polar Oceans

- Chair(s): Micha Rijkenberg, Micha.Rijkenberg@nioz.nl
Rob Middag, Rob.Middag@nioz.nl
Stephanie Owens, sowens@whoi.edu
Patricia C-mara Mor, Patricia.Camara@uab.cat
- Location: Exhibit/Poster Hall
- A0013 GARCIA-SOLSONA, E.; LABATUT, M.; LACAN, F.; PRADOUX, C.; VANCE, D.; JEANDEL, C.: DISTRIBUTION OF REE AND ND ISOTOPES ALONG THE BONUS GOODHOPE SECTION IN THE SOUTHEAST ATLANTIC OCEAN
- A0014 Grand, M. M.; Measures, C. I.; Ruzicka, J.; Oliveira, H. M.: AN INNOVATIVE METHOD FOR THE DETERMINATION OF TRACE ZINC IN SEAWATER USING MICRO-SEQUENTIAL INJECTION AND A NOVEL FLUORESCENT PROBE
- A0015 Roca-Martí, M.; Masque, P.; Camara-Mor, P.; Garcia-Orellana, J.; Friedrich, J.; Rutgers van der Loeff, M.: DISTRIBUTION OF PB-210 AND PO-210 IN THE WATER COLUMN OF THE ARCTIC OCEAN

- A0016 Boyle, E. A.; Echegoyen-Sanz, Y.; Reuer, M. K.; Kayser, R.: THE EVOLVING ATLANTIC PB AND PB ISOTOPE DISTRIBUTION
- A0017 Biller, D. V.; Bruland, K. W.: VERTICAL TRACE METAL PROFILES FROM THE U.S. GEOTRACES INTER-CALIBRATION BASELINE STATIONS USING A NOVEL MULTI-ELEMENT METHOD
- A0018 Tuerena, R. E.; Ganeshram, R. S.; Geibert, W.; Fallick, A. E.; Tait, A.; Dougans, J.; Woodward, E. M.: UK GEOTRACES: COUPLED NITROGEN AND OXYGEN ISOTOPES TRACE NITRATE MOVEMENT WITHIN SOUTH ATLANTIC WATER MASSES (40SS).
- A0019 Fitzgerald, W. F.; Hammerschmidt, C. R.; Bowman, K. L.; O'Donnell, J.; Balcom, P. H.: HIGH RESOLUTION DISTRIBUTIONS AND FLUXES OF MONOMETHYL AND DIMETHYL MERCURY ON THE CONTINENTAL MARGIN OF THE NORTHWEST ATLANTIC OCEAN
- A0020 Kenna, T. C.; Masque, P.; Camara-Mor, P.; Puigcorb , P.; Garcia-Orellana, J.; Frank, M.; Rijkenberg, M.; Gerringa, L.; de Baar, H.; Henry, C. L.: ANTHROPOGENIC RADIONUCLIDES IN THE ATLANTIC: GEOTRACES SECTIONS A11 AND A02
- A0021 Stichel, T.; Pahnke, K.; Goldstein, S. L.; Hartman, A. E.; Scher, H. D.: GEOTRACES NORTH ATLANTIC SECTION – ND ISOTOPE DISTRIBUTION: SOURCES, SINKS AND INTERNAL CYCLING
- A0022 Maiti, K.; Buesseler, K. O.; Zhou, K.; Charette, M. A.: DETERMINATION OF PARTICULATE AND DISSOLVED THORIUM-228 USING DELAYED COINCIDENCE COUNTER
- A0023 Hammerschmidt, C. R.; Bowman, K. L.; Fitzgerald, W. F.: BENTHIC METHYLMERCURY EFFLUX ON THE CONTINENTAL MARGIN OF THE NORTHWEST ATLANTIC OCEAN
- A0024 Seguret, M.; Schofield, O.; Sherrell, R. M.: IRON LIMITATION AND TRACE METAL DISTRIBUTIONS IN SHELF WATERS OF THE WESTERN ANTARCTIC PENINSULA
- A0244 Smail, E. A.; Cutter, L. C.; Webb, E. A.; Moffett, J. W.; Sa nudo-Wilhelmy, S. A.: HIGH VARIABILITY IN GEOGRAPHICAL AND DEPTH DISTRIBUTION OF MULTIPLE DISSOLVED B-VITAMINS IN THE EASTERN TROPICAL SOUTH PACIFIC
- A0245 Yayoi Hongo, Y.; Hajime Obata, .; Toshitaka Gamo, .: RARE EARTH ELEMENTS DISTRIBUTION AND WATER MASS CHARACTERIZATION IN THE PACIFIC
- A0246 Norisuye, K.; Yamamoto, J.; Takano, S.; Sohrin, Y.: DISTRIBUTION OF DISSOLVED BISMUTH IN THE WESTERN NORTH PACIFIC
- A0247 Zimmer, L. A.; Gipson, B.; Wurl, O.; Cutter, G.: DISTRIBUTIONS OF NANOMOLAR REACTIVE PHOSPHATE AND ALKALINE PHOSPHATASE ACROSS NORTH ATLANTIC SURFACE WATERS
- A0248 Holmes, C. W.: DUST FERTILIZATION OF THE WESTERN ATLANTIC BIOTA: A BIOCHEMICAL MODEL
- A0249 Kustka, A. B.; New, A. M.: TOWARDS TRACKING INTRACELLULAR IRON IN MARINE PHYTOPLANKTON
- A0250 Queroue, E.; Bowie, A. R.; Lannuzel, D.; Van der Merwe, P.; Townsend, A. T.; Sarthou, G.; Bucciarelli, E.: PHYSICAL AND BIOLOGICAL CONTROLS ON THE DISTRIBUTION OF TRACE METALS (FE, CU, MN) AROUND KERGUELEN ISLANDS (SOUTHERN OCEAN)
- A0251 Yamada, M.; Zheng, J.: VERTICAL DISTRIBUTION OF PU ISOTOPES IN THE EQUATORIAL PACIFIC OCEAN
- A0252 Thompson, C. M.; Ellwood, M. J.; Wille, M.: STABLE COPPER ISOTOPE MEASUREMENT IN SEAWATER AND PRELIMINARY RESULTS FROM THE TASMAN SEA
- A0253 Aguilar-Islas, A. M.; Buck, K. N.: THE FRACTIONAL SOLUBILITY OF AEROSOL-DERIVED IRON IN SEAWATER
- A0254 Takano, S. T.; Sohrin, Y. S.; Hirata, T. H.; Tanimizu, M. T.: DEVELOPMENT OF A SIMPLE PRETREATMENT METHOD USING NOBIAS CHELATE-PA1 RESIN FOR MEASUREMENT OF COPPER ISOTOPIC COMPOSITION IN SEAWATER
- A0255 Chung, J. L.; Lin, P. S.; Lee, C. S.; Wen, L. S.: BIO-CONCENTRATION, BIO-MAGNIFICATION AND TROPIC TRANSFER OF TRACE METALS OF MARINE ZOOPLANKTONS: ACTIVE OR PASSIVE
- A0256 Morton, P. L.; Landing, W. M.; Milne, A.: FINAL RESULTS FROM THE 2008 GEOTRACES AEROSOL INTERCALIBRATION STUDY
- A0257 Shelley, R. U.; Landing, W. M.; Morton, P. L.: SOLUBILITY OF TRACE METALS FROM NORTH ATLANTIC AEROSOL DUSTS
- A0258 Kanna, N.; Murayama, A.; Toyota, T.; Nishioka, J.: QUANTITATIVE EVALUATION OF IRON AND NUTRIENTS IN SEA ICE IN THE SOUTHERN SEA OF OKHOTSK
- A0259 Obata, H.; Tazoe, H.; Sato, H.; Nagai, H.; Gamo, T.: DISTRIBUTION OF NEODIMIUM ISOTOPIC COMPOSITION IN SURFACE WATERS OF THE WESTERN SOUTH PACIFIC
- A0260 Cha, H.; Cho, J.; Choi, M.: THE DISTRIBUTION OF MANGANESE IN THE SOUTHWESTERN EAST/JAPAN SEA
- A0261 Vandermark, A. R.; Church, T. M.; Conte, M. H.: SEASONAL DISTRIBUTION OF FE, MN AND ZN IN THE SARGASSO SEA IN RESPONSE TO ATMOSPHERIC INPUT
- A0262 Milne, A.; Lohan, M.; Achterberg, E. P.: DISSOLVED COBALT DISTRIBUTIONS IN THE (SUB-) TROPICAL ATLANTIC OCEAN AS PART OF THE UK GEOTRACES A06 CRUISE
- A0263 Buck, C. S.; Landing, W. M.; Resing, J. A.; Buck, N.: ON THE SIZE DISTRIBUTION, COMPOSITION, AND SOLUBILITY OF PACIFIC OCEAN AEROSOLS
- A0264 Ussher, S. J.; Marsay, C. M.; Sedwick, P. N.; Achterberg, E. P.; Worsfold, P. J.: SPATIAL AND TEMPORAL TRENDS IN SOLUBLE, COLLOIDAL AND LABILE PARTICULATE IRON IN THE ATLANTIC OCEAN.
- A0265 Richter, D. J.; Hildebrand, M.; Charles, C. D.: AFFECT OF CD, CU, AND ZN ON DIATOM PHOSPHORUS BUDGETS
- A0266 Posacka, A. M.; Maldonado, M. T.; Cullen, J. T.; Orians, K.: FINE RESOLUTION SPATIAL VARIABILITY OF THE TOTAL DISSOLVED COPPER IN THE NORTHEAST SUBARCTIC PACIFIC
- A0267 McAlister, J. A.; Charters, J. W.; Orians, K. J.: PB CONCENTRATIONS AND ISOTOPIC COMPOSITION IN TIME AND SPACE ALONG LINE P IN THE NORTHEAST PACIFIC OCEAN

051 Compatible Analytic, Mathematical And Laboratory Modeling Of Basic Oceanic Processes

Chair(s): Yuli D. Chashechkin, chakin@ipmnet.ru
Iaroslav V. Zagumennyi, zagumennyi@gmail.com
Victor E. Prohorov, Prohorov@ipmnet.ru

Location: Exhibit/Poster Hall

- B2117 Morten, A. M.; Arbic, B. K.; Doering, C. R.; Flierl, G. R.; Scott, R. B.: INVERSE CASCADE OF KINETIC ENERGY IN TWO-DIMENSIONAL TURBULENCE IN THE FREQUENCY DOMAIN
- B2118 Shemer, L.; Zavadsky, A.: LABORATORY STUDY OF TURBULENT BOUNDARY LAYER IN WIND OVER WATER WAVES
- B2119 Barkan, R.; Winters, K. B.; Llewellyn Smith, S. G.: ROTATING HORIZONTAL CONVECTION
- B2120 Radko, T.; Smith, D. P.: EQUILIBRIUM TRANSPORT IN DOUBLE-DIFFUSIVE CONVECTION
- B2121 Grisouard, N.; Staquet, C.; Gostiaux, L.; Staquet, C.; Auclair, F.: LOCAL GENERATION OF INTERNAL SOLITARY WAVES IN A PYCNOCLINE
- B2123 Rypina, I. I.; Scott, S.; Pratt, L. J.; Brown, M. G.: IDENTIFYING LAGRANGIAN COHERENT STRUCTURES USING TRAJECTORY COMPLEXITY METHODS
- B2124 Ostrovsky, L. A.; Charnotsky, M. I.; Ermakov, S. A.: WIND STRESS VARIATION OVER THE HORIZONTALLY VARIABLE ROUGHNESS ON OCEAN SURFACE: THEORY AND EXPERIMENT

057 Biogeochemical Cycling Of Micronutrient Trace Elements

Chair(s): Maeve Lohan, maeve.lohan@plymouth.ac.uk
Andrew Bowie, Andrew.Bowie@utas.edu.au
Toshi Gamo, gamo@aori.u-toyko.ac.jp
Greg Cutter, gcutter@odu.edu

Location: Exhibit/Poster Hall

- A0243 Carrasco, G.; Boyle, E. A.; Nurhati, I.; Gevao, B.; Matrouk, K.; al-Ghadban, A. N.: LEAD, CADMIUM AND COPPER CONCENTRATIONS AND LEAD ISOTOPIC DISTRIBUTION IN SEAWATER, SEDIMENTS AND CORAL IN THE NORTHERN PERSIAN (ARABIAN) GULF NEAR KUWAIT

063 Ocean Exploration

Chair(s): Nicolas Alvarado, nicolas.alvarado@noaa.gov
Reginald Beach, Reginald.Beach@noaa.gov

Location: Exhibit/Poster Hall

- B1164 Iken, K.; Konar, B.: A COMPARISON OF NEARSHORE KELP HABITATS ACROSS THE ALASKAN ARCTIC COAST
- B1165 Birch, J. M.; Jensen, S.; Pargett, D.; Preston, C.; Roman, B.; Ussler, W.; Girguis, P.; Orphan, V.; Scholin, C.: TRACKING MICROBIAL CHANGES IN THE DEEP OCEAN; LESSONS LEARNED FROM THE D-ESP
- B1166 Lorenz, R. D.: EXPLORATION OF TITAN'S SEAS
- B1167 Ruberg, S. A.; Biddanda, B. A.; Baskaran, M. M.; Black, T.; Green, R.; Hawley, N. H.; Johengen, T.; Kendall, S. T.; Klump, V.; Nold, S. C.: EXPLORATION OF SHALLOW AND DEEP WATER SUBMERGED SINKHOLE ECOSYSTEMS IN THE THUNDER BAY NATIONAL MARINE SANCTUARY
- B1168 Bell, K. L.; Ballard, R. D.; Coleman, D. F.; Roman, C. N.; Brennan, M. L.: NEW FRONTIERS IN OCEAN EXPLORATION: THE 2010 AND 2011 E/V NAUTILUS FIELD SEASONS
- B1169 Akkaynak, D.: DIVERS4OCEANOGRAPHY.ORG: A PLATFORM TO COLLECT SCUBA DIVE COMPUTER DATA IN ORDER TO BUILD LONG-RUNNING ARCHIVES FOR SURFACE OCEAN TEMPERATURE OBSERVATIONS
- B1170 Locker, S.; Reed, J.; Farington, S.; Harter, S.; Hine, A.; Dunn, S.; Shinn, E.: STICKY GROUNDS – HARDBOTTOM MESOPHOTIC HABITAT ON THE WEST FLORIDA OUTER CONTINENTAL SHELF
- B1171 Hanisak, M. D.; Frank, T. M.: "OCEAN DISCOVERY" CRUISES: AT-SEA RESEARCH OPPORTUNITIES FOR THE NEXT GENERATION OF SCIENTISTS.
- B1172 Craig, J.; Jamieson, A. J.; Priede, I. G.: BIOLUMINESCENCE IN THE NEAR SEAFLOOR REGION OF THE DEEP SEA.
- B1173 Ault, J. S.; Shay, L. K.; Luo, J.; Brewster, J.; Meyers, P.; Harvey, C.: INTEGRATING ANIMAL BORNE SENSORS WITH SMARTS CLIMATOLOGY MODEL IMPROVES FORECASTS OF HURRICANE INTENSITY AND FISHERY DYNAMICS
- B1174 Flood, R. D.; Lidén, K.; Jakobsson, M.: EXPLORING UNDERWATER FEATURES AT BIRKA, A VIKING HARBOR, USING A ULTRA HIGH RESOLUTION MULTIBEAM ECHOSOUNDER
- B1175 Leitner, A. L.; Wakefield, W. W.; Brodeur, R. D.: EXPLORATION OF ASTORIA CANYON: HABITAT ASSOCIATIONS IN DEEP-WATER DEMERSAL FISHES
- B1176 Brooks, E. J.; Brooks, A.; Williams, S.; Chapman, D.; Howey-Jordan, L.; Jordan, L.; Abercrombie, D.; Grubbs, D.: THE DIVERSITY, DISTRIBUTION AND DEMOGRAPHIC POPULATION STRUCTURE OF DEEP WATER ELASMOBRANCHS IN THE NORTHEAST EXUMA SOUND, THE BAHAMAS.

075 Optics And Acoustics In Turbulent Sediment Suspensions

Chair(s): Paul Hill, paul.hill@dal.ca
Peter Traykovski, ptraykovski@whoi.edu
David Bowers, oss063@bangor.ac.uk
Wayne Slade, wayne.slade@gmail.com

Location: Exhibit/Poster Hall

- B0913 Hou, W.; Woods, S.; Jarosz, E.; Goode, W.; Weidemann, A.: UNDERWATER OPTICAL TURBULENCE AND IMPACTS ON BEAM SCINTILLATION
- B0914 Slade, W. H.; Briggs, N.; Boss, E.: HIGH-FREQUENCY FLUCTUATIONS IN OPTICAL MEASUREMENTS REFLECT CHANGES IN PARTICLE SIZE DISTRIBUTION IN A BOTTOM NEPHELOID LAYER
- B0915 Stavn, R. H.: FRACTAL DIMENSIONS, CLAY MINERAL AGGREGATES, OPTICAL MODELS OF SUSPENDED SEDIMENT, AND THEIR APPLICATIONS
- B0916 Hill, P. S.; Bowers, D. G.; Braithwaite, K. M.: PARTICLE COMPOSITION AND THE AREA-TO-MASS RATIO OF SUSPENDED MARINE PARTICLES
- B0917 Nootz, G.; Dalglish, F. R.; Rhodes, W. T.; Hou, W. W.; Vuorenkoski, A. K.; Metzger, B.; Ramos, B.: THE INFLUENCE OF OCEANIC OPTICAL TURBULANCES ON THE PROPAGATION OF LIGHT

- B0918 Traykovski, P.; Trowbridge, J.: OBSERVATIONS OF WAVE BOUNDARY LAYER TURBULENCE AND SEDIMENT SUSPENSION
- B0919 Bowers, D. G.; Braithwaite, K. M.; Nimmo-Smith, W. A.; Graham, G. W.: BACKSCATTERING OF LIGHT BY SUSPENDED PARTICLES
- B0920 Conley, D. C.; Buscombe, D.; Nimmo-Smith, A.: NEW UNDERSTANDING OF SEDIMENT SUSPENSION IN THE NEARSHORE FROM CROSS-COMPARISONS OF DIVERSE SENSORS.
- B0921 Zedel, L.; Hay, A. E.: AN EVALUATION OF DOPPLER SONAR FOR SAMPLING BEDLOAD TRANSPORT
- B0922 Cartwright, G. M.; Friedrichs, C. T.: DUAL USE OF A SEDIMENT MIXING TANK FOR CALIBRATING ACOUSTIC BACKSCATTER AND DIRECT DOPPLER MEASUREMENT OF SETTLING VELOCITY

077 Data Systems That Support The US National Policy For The Stewardship Of The Ocean, Coasts, And Great Lakes

Chair(s): Cynthia L. Chandler, cchandler@whoi.edu
Matthew K. Howard, mkhoward@tamu.edu

Location: Exhibit/Poster Hall

- B1079 Chandler, C. L.; Groman, R. C.; Allison, M. D.; Glover, D. M.; Wiebe, P. H.; Gegg, S. R.: BIOLOGICAL AND CHEMICAL OCEANOGRAPHY DATA RESOURCES FOR COASTAL AND MARINE SPATIAL PLANNING
- B1080 Mesick, S. M.; Gottfried, S. T.; Mize, J. L.: USE CASE STUDY FOR MANAGEMENT OF SCIENTIFIC DATA AND INFORMATION USING ISO STANDARDS
- B1081 Blythe, J. N.; Lee, O.; Goldstein, P.; Collins, D.: DIVERSE DATA SYSTEMS FOR BIODIVERSITY DATA, A CASE STUDY OF MARINE MAMMAL OBSERVER DATA
- B1082 Arko, R. A.; Hummon, J. M.; Paver, C. R.; Clark, P. D.: ROLLING DECK TO REPOSITORY (R2R): STEWARDSHIP OF ADCP DATA FROM THE U.S. ACADEMIC FLEET
- B1083 Dorfman, D. S.; Hourigan, T. F.; Shepard, A.: INTEGRATING AND PRESENTING INFORMATION FROM DEEP-SEA CORAL AND SPONGE SURVEYS - MAKING DATA RELEVANT TO MANAGEMENT
- B1084 Howard, M. K.; Jochens, A. E.; Kobara, S.; Gayanilo, F. C.; Baum, S. K.; Simoniello, C.: THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM (GCOOS): A DATA STEWARDSHIP COOPERATIVE SUPPORTING A HEALTHY GULF
- B1085 Smith, S. R.; Bourassa, M. A.; Rolph, J.; Briggs, K.; Jackson, D.: SAMOS – SUPPORTING MARINE ATMOSPHERE-OCEAN RESEARCH
- B1086 Bochenek, R. J.: DEVELOPING REGIONAL TOOLS FOR DATA INTEGRATION
- B1087 Varner, J.; Neufeld, D.; McLean, S.; Lightsom, F.; Miller, G.; Wozencraft, J.; Sylvester, C.; Wiggins, C. E.: A PROTOTYPE ELEVATION DATA GEOPORTAL FOR U.S. OCEAN AND COASTAL MAPPING
- B1088 Fox, C. G.; Arenson, R.; McLean, S. J.; Taylor, L. A.; Rice, G.; Armstrong, A.; Pica, J.; Price, D.: AN OVERVIEW OF THE NOAA INTEGRATED APPROACH TO OCEAN AND COASTAL MAPPING
- B1089 Allison, M. D.; Chandler, C. L.; Groman, R. C.; Wiebe, P. H.; Galvarino, C. R.: DATA MANAGEMENT AND DATA AVAILABILITY IN SUPPORT OF ECOSYSTEM BASED MANAGEMENT AND MARINE SPATIAL PLANNING
- B1090 McCann, M. P.; Hofmann, A. F.; Harmon, T. C.; Gil, Y.: SCIENTIFIC WORKFLOWS: THE KEY TO CONVERGENCE?

083 Using Satellite And In Situ Data Public Archives For Ocean Biology Research

Chair(s): Watson Gregg, watson.gregg@nasa.gov
Margarita Gregg, margarita.gregg@noaa.gov

Location: Exhibit/Poster Hall

- B1177 Rousseaux, C. S.; Gregg, W. W.: CLIMATE VARIABILITY AND PHYTOPLANKTON IN THE PACIFIC OCEAN
- B1178 Gregg, W.: MODELING AND ASSIMILATING OCEAN COLOR RADIANCES

- B1179 Parsons, A. R.; Ko, D. S.; Cross, S. L.; Carleton, C. D.; Pritchard, A. T.: CORRELATING PERTURBATIONS OF ENVIRONMENTAL PARAMETERS WITHIN THE NORTHERN GULF OF MEXICO
- B1180 Lavigne, H.; D'Ortenzio, F.; Claustre, H.; Poteau, A.: TOWARDS A MERGED SATELLITE AND IN SITU FLUORESCENCE CHLOROPHYLL PRODUCT
- B1181 Conkright, M.; Parsons, A.; Arzayus, K.; Garcia, H.; Levitus, S.; Seidov, D.; Boyer, T.; Baranova, O.; Byrne, D.; Byrne, D.: ANALYSIS OF NON-CLIMATOLOGICAL CHLOROPHYLL DATA BASED ON THE WORLD OCEAN DATABASE
- B1182 Boyce, D. G.; Lewis, M. R.; Worm, B.: INTEGRATING GLOBAL PHYTOPLANKTON DATA FROM 1890 TO 2010
- B1183 Fornwall, M. D.; goldstein, P.: OBIS-USA: A NATION BIOLOGICAL DATA RESOURCE FOR ANALYSIS AND MODELING
- B1184 Angel-Benavides, I. M.; Garcia, C. A.; Dogliotti, A. I.: INFLUENCE OF OCEAN COLOR DATA REPROCESSINGS ON SATELLITE-DERIVED CHLOROPHYLL CONCENTRATIONS IN THE PATAGONIA ARGENTINEAN SEA
- B2140 Sun, S.; Bleck, R.: DEVELOPMENT AND EVALUATION OF OCEAN-CLIMATE MODELS: NEW WAYS OF DISCRETIZING A COUPLED OCEAN-ATMOSPHERE MODEL
- B2141 Thompson, A. E.; Sallée, J. B.: JET TRANSITIONS NEAR TOPOGRAPHY: IMPACTS ON TRANSPORT IN THE ANTARCTIC CIRCUMPOLAR CURRENT
- B2142 Bleck, R.: DEVELOPMENT AND EVALUATION OF OCEAN-CLIMATE MODELS: AN IMPLEMENTATION OF GM FOR UNSTRUCTURED VERTICAL GRIDS
- B2143 Decloedt, T. M.; Luther, D. S.: A COMPARISON OF TOPOGRAPHY-CATALYSED DIAPYCNAL MIXING PARAMETERIZATIONS TO OBSERVATIONS
- B2144 Chen, C.; Kamenkovich, I.: IMPORTANCE OF BOTTOM TOPOGRAPHY IN THE DYNAMICS OF MESOSCALE EDDIES AND JETS
- B2145 Petersen, M. R.; Ringler, T. D.; Maltrud, M. E.; Jones, P. W.; Jacobsen, D. W.: A VARIABLE RESOLUTION GLOBAL OCEAN MODEL
- B2146 Nakamura, H. R.; Liu, Z.; Nishina, A.; Wimbush, M.; Park, J. H.: DEEP OVERFLOW THROUGH THE KERAMA GAP CONNECTING THE EAST CHINA SEA AND THE PHILIPPINE SEA
- B2147 Labreuche, P.; Le Sommer, J.; Staquet, C.: INTERACTION OF INTERNAL LEE WAVES WITH BOTTOM-TRAPPED INERTIAL OSCILLATIONS IN THE SOUTHERN OCEAN

084 Advances In Flow-Topography Interactions

Chair(s): Andrew Thompson, aft26@cam.ac.uk
Igor Kamenkovich, ikamenkovich@rsmas.miami.edu
Stephanie Waterman, stephanie.n.waterman@gmail.com

Location: Exhibit/Poster Hall

- B2125 Moum, J. N.; Stoeber, U.; Nash, J. D.: DOWNSLOPE FLOWS AND BERNOULLI: TOWARD A DIRECT MEASURE OF TOPOGRAPHIC FORM DRAG
- B2126 Chapman, C. C.; Hogg, A. M.: RAPID VARIABILITY OF OCEANIC JETS DRIVEN BY EDDY-TOPOGRAPHY INTERACTION
- B2127 Chang, M.; Tang, T.: KUROSHIO-INDUCED WAKE IN THE LEE OF GREEN ISLAND
- B2128 Andres, M.: INTERACTION OF BAROTROPIC PLANETARY ROSSBY WAVES WITH OCEAN RIDGES
- B2129 Pérez-Brunius, P.; García-Carrillo, P.; Dubranna, J.; Candela, J.; Sandoval, E.; Sheinbaum, J.: TOPOGRAPHIC CONTROL OF THE CYCLONIC CIRCULATION IN THE SOUTHERN GULF OF MEXICO
- B2130 Dell, R. W.; Pratt, L. W.: IT'S COMPLICATED: VARYING TOPOGRAPHY AND THE ABYSSAL BOTTOM BOUNDARY LAYER
- B2131 Zhang, J.; Kelly, K. A.; Thompson, L.: CONTRIBUTIONS TO LARGE-SCALE SEA LEVEL CHANGES IN THE NORTH ATLANTIC OCEAN
- B2132 Huck, T.; Colin de Verdière, A.; Ferjani, D.: MULTIDECADAL OSCILLATIONS OF THE MERIDIONAL OVERTURNING CIRCULATION IN PRESENCE OF BOTTOM TOPOGRAPHY AND STOCHASTIC ATMOSPHERIC FORCING
- B2133 McVicar, A.; Allison, P. A.; Piggott, M.; Czaja, A.: THE INTERACTION OF TOPOGRAPHY WITH THE MEAN FLOW: THE IMPORTANCE OF BOUNDARY RESOLUTION.
- B2134 Nayak, A. R.; Li, C.; Choi, D.; Katz, J.: WAVE-CURRENT INTERACTION AND BOTTOM TOPOGRAPHICAL INFLUENCE ON TURBULENCE IN THE COASTAL OCEAN BOTTOM BOUNDARY LAYER
- B2135 Allen, S. E.; Swart, N. C.; Greenan, B. J.: ANOMALOUSLY STRONG TIDES IN THE GULLY, A SUBMARINE CANYON ON THE NOVA SCOTIA SHELF
- B2136 Park, J. H.; Watts, D. R.: THE ROLE OF KOSHU SEAMOUNT IN GENERATING THE KUROSHIO LARGE MEANDER SOUTH OF JAPAN FROM DATA-ASSIMILATED HYCOM OUTPUTS
- B2137 Liang, X.; Thurnherr, A. M.: EDDY-MODULATED INTERNAL WAVES AND MIXING ON A MID-OCEAN RIDGE
- B2138 Grisouard, N.; Bühler, O.: OCEANIC MEAN FLOWS FORCED BY TOPOGRAPHICALLY GENERATED INTERNAL WAVES
- B2139 Whitney, M. M.; Jia, Y.; McManus, P.: SILL EFFECTS ON PHYSICAL DYNAMICS IN LONG ISLAND SOUND

087 Ocean-Atmosphere Processes Of Monsoon Dynamics

Chair(s): Hemantha Wijesekera, hemantha.wijesekera@nrlssc.navy.mil
Harindra Joseph Fernando, Harindra.J.Fernando.10@nd.edu
Raghu Murtugudde, ragu@essic.umd.edu
Debasis Sengupta, dsen@caos.iisc.ernet.in

Location: Exhibit/Poster Hall

- B1450 Samanta, D.; Dash, M. K.; Deb, P.; Pandey, P. C.: AXIAL CHANGE IN LATENT HEAT FLUX AND SEA SURFACE TEMPERATURE DURING CONTRASTING INDIAN MONSOON YEARS
- B1451 Murtugudde, R.: MONSOONS AND AIR-SEA INTERACTIONS AT INTRASEASONAL-TO-DECADAL TIME-SCALES
- B1452 Du, Y.; Zhang, Y.: INTERANNUAL VARIABILITY OF THE ZONAL WATER EXCHANGE IN CENTRAL INDIAN OCEAN
- B1453 Kida, S.; Wijffels, S.; Takahashi, K.: THE IMPACT OF THE INDONESIA THROUGHFLOW AND TIDAL MIXING ON THE SEASONAL CYCLE OF THE SEA SURFACE TEMPERATURE IN THE INDONESIA SEAS
- B1454 Xie, S. P.; Chowdary, J.; Tokinaga, H.; Zheng, X. T.; Du, Y.: INDIAN OCEAN CAPACITOR EFFECT FOR THE PAST 140 YEARS: NATURAL VARIABILITY AND CLIMATE CHANGE
- B1455 Yao, F.; Hoteit, I.: INTER-ANNUAL VARIABILITY OF THE SUMMER INTRUSION OF GULF OF ADEN INTERMEDIATE WATER IN THE RED SEA
- B1456 Jensen, T. G.; Chen, S.; Flatau, M.; Shinoda, T.: COUPLED MODELING OF AIR-SEA INTERACTION IN THE INDIAN OCEAN DURING MJO EVENTS IN 2009
- B1457 Trenary, L. L.; Han, W.: LOCAL VERSUS REMOTE FORCING OF INTRASEASONAL-TO-INTERANNUAL SEA LEVEL AND THERMOCLINE VARIABILITY OF THE SOUTHERN INDIAN OCEAN
- B1458 Majumder, S.; Tandon, A.; Rudnick, D.; Mahadevan, A.: UPPER OCEAN NEAR-INERTIAL KINETIC ENERGY BUDGET FOR THE ARABIAN SEA EXPERIMENT
- B1459 Ogata, T.; Xie, S.: SEMI-ANNUAL CYCLE IN ZONAL WIND OVER THE EQUATORIAL INDIAN OCEAN
- B1460 Zhuang, W.; Feng, M.; Du, Y.: LOW-FREQUENCY SEA LEVEL VARIABILITY IN THE SOUTHERN INDIAN OCEAN

094 Oceanic Impacts Of Orographic Flows: Emphasizing Two-Way Coupling And Feedback Mechanisms

Chair(s): Rui M. A. Caldeira, rcaldeira@cimar.up.pt
Julie Pullen, julie@theworldisyourcocean.net
Vanda Grubišić, vanda.grubisic@univie.ac.at

Location: Exhibit/Poster Hall

- B1910 Moore, G.; Pickart, R.: ATMOSPHERIC FLOW DISTORTION IN THE GULF OF ANADYR: CAPE NAVARIN TIP JETS AND THEIR IMPACT ON OCEANIC CIRCULATION
- B1911 Allard, R. A.; Smith, T.; Campbell, T.; Martin, P.; Rogers, W. E.; Book, J.; Wang, J. C.: OCEAN-WAVE COUPLED MODELING OF THE ADRIATIC SEA
- B1912 Budgell, W. P.; Smedsrud, L. H.; Ådlandsvik, B.; Sandvik, A. D.; Warner, J. C.: COUPLED AIR-SEA-ICE MODELLING OF THE SVALBARD REGION
- B1913 Renault, L.; Chiggiato, J.; Vizoso, G.; Ruiz, S.; Gomez, M.; Warner, J. C.; Tintore, J.: OCEAN-ATMOSPHERE-WAVE COUPLING: EXTREME EVENT ANALYSIS, FORECAST AND EFFECT IN THE MEDITERRANEAN SEA IN MAY 2010
- B1914 Caldeira, R. M.; Couvelard, X.; Tome, R.; Sangra, P.: WIND MEDIATED EDDY DEFORMATION AND EDDY CONFINEMENT IN THE WAKE OF A MOUNTAINOUS ISLAND
- B1915 Kim, H. S.; Lozano, C.; Sims, J.; Iredell, D.: NUMERICAL STUDY ON THE OCEAN EFFECT ON HURRICANE INTENSITY
- B1916 Curchitser, E. N.; Small, R. J.; Kauffman, B.; Hedstrom, K.; Alexander, M.; Large, W.: EMBEDDING A HIGH RESOLUTION REGIONAL OCEAN MODEL OF THE NORTH-EAST PACIFIC IN A COUPLED GLOBAL CLIMATE MODEL
- B1917 Pullen, J. D.; Doyle, J. D.; May, P. W.; Flament, P.: TERRAIN EFFECTS ON OCEAN AND ATMOSPHERE FLOWS IN THE PHILIPPINES
- B1918 Sachspenger, J.; Grubisic, V.; Caldeira, R.: THE ATMOSPHERIC WAKE OF MADEIRA ISLAND

095 Detection And Analysis Of Mesoscale And Submesoscale Eddies From Observational Data And Numerical Products

Chair(s): Changming Dong, cdong@atmos.ucla.edu
Sung Yong Kim, syongkim@mpl.ucsd.edu
Pablo Sangra, psangra@dfs.ulpgc.es
Milena Veneziani, milena@ucsc.edu

Location: Exhibit/Poster Hall

- B2148 McCaffrey, K. L.; Fox-Kemper, B.: OBSERVED OCEAN TURBULENCE SPECTRA FROM ARGO PROFILING FLOATS
- B2149 Kim, S.: OBSERVATIONS OF FRONTAL-SCALE SECONDARY CIRCULATION ASSOCIATED WITH DRIFTING SUBMESOSCALE EDDIES
- B2150 Escudier, R.; Pascual, A.; Chelton, D. B.; Schlax, M. G.; Tintore, J.: A NEW CENSUS OF EDDIES IN THE WESTERN MEDITERRANEAN FROM SATELLITE ALTIMETRY
- B2151 Miranda, J. A.; Flierl, G. R.; Silveira, I. A.: THE INTERACTION BETWEEN THE BRAZIL CURRENT AND TOPOGRAPHY FROM A QUASI-GEOSTROPHIC MODEL
- B2152 Krelling, A. M.; Silveira, I. A.; Marin, F. O.; Soutelino, R. G.: THE POTIGUAR EDDY
- B2153 Costa, V. S.; Paiva, A. M.: MODIFICATIONS OF A SOUTH ATLANTIC OCEAN WARM-RING BY AIR-SEA INTERACTION
- B2154 Kang, D.; Curchitser, E. N.: ON THE INTERANNUAL AND DECADAL VARIABILITY OF THE GULF STREAM
- B2155 Johnson, R. J.; Evans, D. G.; McGillicuddy, D. J.; Bates, N. R.; Lomas, M. W.; Knap, A. H.: OBSERVATIONS OF MESOSCALE EDDIES NEAR THE BERMUDA ATLANTIC TIME-SERIES STUDY SITE AND IMPLICATIONS FOR THE LOCAL HYDROGRAPHY AND NUTRIENT BUDGETS
- B2156 Liu, Y.; Dong, C.; Guan, Y.; Chen, D.; McWilliams, J.: EDDY ANALYSIS IN THE SUBTROPICAL ZONAL BAND OF THE NORTH PACIFIC OCEAN

- B2157 Lin, X.; Dong, C.; Guan, Y.; Chen, D.: THREE-DIMENSIONAL OCEANIC EDDY ANALYSIS IN THE SOUTH CHINA SEA FROM A NUMERICAL PRODUCT
- B2158 Zhou, K.; Dai, M.; Zhao, D.; Cai, P.: DIFFERENT ENHANCEMENT OF PARTICLE EXPORT OBSERVED IN FIVE MESO-SCALE EDDIES IN SOUTH CHINA SEA
- B2159 Gao, J.; Xue, H.; Xiu, P.; Chai, F.; Shi, M.; Zhao, D.; Guo, P.: EDDIES IN THE NORTHWESTERN SOUTH CHINA SEA
- B2160 Soutelino, R. G.; Gangopadhyay, A.; Silveira, I. A.: EDDY FORMATION MECHANISMS IN A WESTERN BOUNDARY CURRENT-UNDERCURRENT SYSTEM WITH COMPLEX TOPOGRAPHY
- B2161 Bachman, S.; Fox-Kemper, B.: A MESOSCALE EDDY PARAMETERIZATION CHALLENGE SUITE: EADY-LIKE MODEL RESULTS
- B2162 Macdonald, H. S.; Roughan, M.; Baird, M. E.; Wilkin, J.: ANATOMY OF A FLOODING WARM-CORE EDDY
- B2163 Chen, K.; He, R.: DATA-ASSIMILATIVE MODELING INVESTIGATION OF GULF STREAM WARM-CORE RING INTERACTION WITH CONTINENTAL SHELF AND SLOPE
- B2164 zhang, W.; Yan, X.; Jo, Y.; Li, F.: INTERFERENCE BETWEEN TOPOGRAPHY CONFINED SUB-MESOSCALE EDDIES AND LABRADOR SEA DEEP CONVECTION

113 Dynamics Of The Deep Gulf Of Mexico

Chair(s): Dmitry Dukhovskoy, ddukhovskoy@fsu.edu
Steven Morey, smorey@fsu.edu
Cortis Cooper, cortcooper@chevron.com

Location: Exhibit/Poster Hall

- B1331 Donohue, K. A.; Leben, R.; Hamilton, P.; Watts, D. R.: UPPER-LOWER LAYER COUPLING IN LOOP CURRENT EDDIES EKMAN AND FRANKLIN
- B1332 Hamilton, P.; Leben, R. R.; Donohue, K. A.; Sheinbaum, J.; Candela, J.: CYCLONE DEVELOPMENT DURING THE DETACHMENTS OF LOOP CURRENT EDDIES EKMAN AND FRANKLIN: A HISTORICAL PERSPECTIVE
- B1333 Rosburg, K.; Donohue, K. A.; Chassignet, E.: PERFORMANCE EVALUATION OF HYCOM GULF OF MEXICO MODEL
- B1334 Dukhovskoy, D. S.; Morey, S. L.: DYNAMICS OF INTENSE NEAR-BOTTOM CURRENTS ALONG THE SIGSBEE ESCARPMENT, NORTHERN GULF OF MEXICO
- B1335 Morey, S. L.; Dukhovskoy, D. S.: SIMULATIONS OF DEEP CURRENTS ALONG THE SIGSBEE ESCARPMENT USING A MULTI-MODEL NESTING APPROACH
- B1336 Vogel, M. J.; Morey, S.; Dukhovskoy, D.: AN INVESTIGATION OF FINE-SCALE SPATIAL VARIABILITY OF NEAR-BOTTOM CURRENTS ALONG THE SIGSBEE ESCARPMENT
- B1337 Lugo-Fernández, A.; Green, R. E.: PEERING INTO THE GULF OF MEXICO'S CIRCULATION
- B1338 Pallás-Sanz, E.; Candela, J.; Sheinbaum, J.; Ochoa, J.: NEAR-INERTIAL WAVE WAKES OF HURRICANES GUSTAV AND IKE OVER THE LOOP CURRENT
- B1339 Crout, R. L.: NEAR-BOTTOM OCEAN CURRENT PROFILES IN THE NORTHERN GULF OF MEXICO
- B1340 Dietrich, D. E.; Korotenko, K. A.; Bowman, M. J.; Abouali, M.; Bowman, H.: GULF OF MEXICO BLOWOUT SCENARIOS USING A COUPLED CIRCULATION-OIL TRANSPORT/DISPERSION MODEL
- B1341 Le Henaff, M.; Kourafalou, V. H.; Morel, Y.; Srinivasan, A.: INTENSIFICATION OF THE LOOP CURRENT FRONTAL EDDIES IN THE NORTHERN GULF OF MEXICO: ROLE OF THE TOPOGRAPHY

128 Sensitivity Analysis, Data Assimilation And Uncertainty Quantification In Ocean Modeling

Chair(s): Ibrahim Hoteit, ibrahim.hoteit@kaust.edu.sa
Bruce Cornuelle, bdc@ucsd.edu
Mohamed Iskandarani, miskandarani@rsmas.miami.edu

Location: Exhibit/Poster Hall

- B1351 [Karspeck, A. R.](#); Yeager, S.; Hoar, T.; Anderson, J.; Collins, N.; Raeder, K.; Danabasoglu, G.; Tribbia, J.: POP/DART: AN ENSEMBLE DATA ASSIMILATION SYSTEM FOR THE OCEAN COMPONENT OF CESM.
- B1352 [Hoteit, I.](#); Luo, X.; Pham, D. T.: PARTICLE KALMAN FILTERING: A NON-GAUSSIAN BAYESIAN FRAMEWORK FOR ENSEMBLE KALMAN FILTERS
- B1353 [Tokmakian, R. T.](#); Challenor, P. G.: UNCERTAINTY IN MODELED UPPER OCEAN HEAT CONTENT CHANGE
- B1354 [Nerger, L.](#); Hiller, W.; Schroeter, J.: THE ERROR-SUBSPACE TRANSFORM KALMAN FILTER
- B1355 [Yan, C.](#); Zhu, J.; Xie, J.: OCEAN REANALYSIS IN THE INDIAN AND WEST PACIFIC OCEANS
- B1356 [Dail, H.](#); Wunsch, C.: ATMOSPHERIC FORCING AND DEEP OCEAN CONDITIONS: ARE THEY IN EQUILIBRIUM FOR THE MODERN ATLANTIC?
- B1357 [Subramanian, A. C.](#); Hoteit, I.; Cornuelle, B. D.; Song, H.: LINEAR VS NONLINEAR FILTERING WITH SCALE SELECTIVE CORRECTIONS
- B1358 [Lunde, B.](#); Bub, F.; Coelho, E.; Smith, S.: REDUCING MODEL UNCERTAINTY AT THE NAVAL OCEANOGRAPHIC OFFICE USING THE NAVY COUPLED OCEAN DATA ASSIMILATION SYSTEM
- B1359 [Muscarella, P. A.](#); Carrier, M. J.; Ngodock, H. E.: A MULTI-SCALE THREE-DIMENSIONAL VARIATIONAL DATA ASSIMILATION SCHEME (MS-3DVAR) IN THE KUROSHIO EXTENSION
- B1360 [Chang, Y. S.](#); Zhang, S.; Rosati, A.; Delworth, T. L.; Stern, W. F.: AN ASSESSMENT OF OCEANIC VARIABILITY FOR 1960-2010 FROM THE GFDL ENSEMBLE COUPLED DATA ASSIMILATION
- B1361 Ngodock, H. E.; [Carrier, M. J.](#); Smith, S.; Yaremchuk, M.; Muscarella, P.: GENERALIZED INVERSION OF SATELLITE AND IN-SITU OBSERVATIONS IN THE MONTEREY BAY USING THE NAVY COASTAL OCEAN MODEL (NCOM)
- B1362 [Bouttier, P. A.](#); Blayo, E.; Verron, J.: IMPACT OF NON-LINEARITIES ON AN INCREMENTAL 4D-VAR DATA ASSIMILATION METHOD IN A HIGH RESOLUTION NUMERICAL OCEAN MODEL
- B1363 [Jan Saynisch, J.](#); Maik Thomas, M.: COMBINING GEODETIC OBSERVATIONS WITH A MODEL OF OCEAN DYNAMICS - AN ASSIMILATION APPROACH.
- B1364 [Vidard, A.](#); Vigilant, F.: EXTENSIVE VALIDATION AND DIAGNOSTICS FOR THE TANGENT AND ADJOINT MODELS
- B1365 [Ueno, G.](#): AN ITERATIVE METHOD FOR ESTIMATING OBSERVATION ERROR COVARIANCE MATRIX
- B1366 [Neveu, E.](#); Debreu, L.; Le Dimet, F. X.: MULTIGRID METHODS FOR VARIATIONAL DATA ASSIMILATION. THEORY AND EXPERIMENTS ON A SHALLOW WATER MODEL.
- B1367 [Hoffman, M. J.](#); Haine, T.; Ide, K.: A 2003 REANALYSIS OF THE CHESAPEAKE BAY USING SATELLITE AND IN SITU DATA
- B1368 [Thacker, W. C.](#); Srinivasan, A.; Iskandarani, M.; Knio, O. M.; Le Henaff, M.: PROPAGATING OCEANOGRAPHIC UNCERTAINTIES USING THE METHOD OF POLYNOMIAL CHAOS EXPANSION
- B1369 [Stone, R. E.](#); Chu, P. C.; Fan, C.: PROFILE STABILIZATION WITH A DEPTH VARYING ADJUSTMENT SCALE
- B1370 [Freychet, N.](#); [Cosme, E.](#); Kpemlie, E.; Brasseur, P.; Brankart, J.; Verron, J.: ASSESSMENT OF A REDUCED RANK SMOOTHER IMPLEMENTATION WITH A 1/4 DEGREE OCEAN MODEL
- B1371 [Liang, X. S.](#): UNCERTAINTY GENERATION IN OCEANIC AND ATMOSPHERIC MODELS

- B1372 [Xu, D. Z.](#); Zhu, J.; Qi, Y. Q.; Li, X. C.: IMPACT OF MEAN DYNAMIC TOPOGRAPHY ON SLA ASSIMILATION IN THE SOUTH CHINA SEA BASED ON AN EDDY-RESOLVING MODEL
- B1373 [Sugiura, N.](#); Masuda, S.; Ishikawa, Y.; Fujii, Y.; Igarashi, H.; Hiyoshi, Y.; Sasaki, Y.; Kamachi, M.; Awaji, T.: A TREATMENT OF UNSTABLE MODES IN 4D-VAR DATA ASSIMILATION
- B1374 [Kwak, M.](#); Cho, Y.; Seo, G.; Choi, B.: DATA ASSIMILATION OF HF RADAR IN THE SEA OFF THE KEUM RIVER ESTUARY, WEST COAST OF KOREA
- B1375 [Rowley, C. D.](#); Richman, J. G.; Coelho, E. F.: BOUNDARY CONDITION UNCERTAINTY IN THE NRL RELOCATABLE OCEAN ENSEMBLE FORECAST SYSTEM
- B1376 [Zhang, H.](#); Menemenlis, D.; Forget, F.; Heimbach, P.; Hill, C.; Campin, J.: A GLOBAL, EDDYING, DYNAMICALLY-CONSISTENT, OCEAN AND SEA ICE STATE ESTIMATE OBTAINED USING ADJOINT METHOD

129 Mechanisms Of Nutrient Assimilation And Metabolism In Harmful Algal Bloom (HAB) Species

Chair(s): Christopher Gobler, Christopher.Gobler@stonybrook.edu

Location: Exhibit/Poster Hall

- A0582 [Kana, T. M.](#): *PROOCENTRUM MINIMUM* MAINTAINS HIGH PHOTOSYNTHETIC ELECTRON TRANSPORT UNDER PCO₂ STRESS (HIGH PH) BY REDUCING OXYGEN.
- A0584 [Glibert, P. M.](#); Burkholder, J. M.; Kana, T. M.: EFFECTS OF NUTRIENTS FORMS, RATIOS AND STOICHIOMETRY ON PELAGIC AND BENTHIC *PROOCENTRUM* SPP.
- A0585 [Blakely, M. D.](#); Kudela, R. M.: VERTICAL MIGRATION AS A MECHANISM TO ASSIMILATE IRON BY THE HAB DINOFLAGELLATE *AKASHIWO SANGUINEA*
- A0586 [Dyhrman, S. T.](#); Wurch, L. L.; Gobler, C. J.; Bertrand, E.; Saito, M.: TRANSCRIPTOME AND PROTEOME PROFILING IDENTIFIES PATHWAYS OF NUTRIENT METABOLISM IN *AUREOCOCCUS ANOPHAGEFFERENS*.
- A0587 [Procise, L. A.](#); Mulholland, M. R.: AUTOTROPHIC, OSMOTROPHIC, AND PHAGOTROPHIC CARBON UPTAKE BY THE RED-TIDE DINOFLAGELLATE *KARENIA BREVIS*
- A0588 [Harke, M. J.](#); Berry, D. L.; Ammerman, J. W.; Gobler, C. J.: MOLECULAR MARKERS OF NITROGEN AND PHOSPHORUS LIMITATION IN *MICROCYSTIS AERUGINOSA*
- A0589 [Stewart, J. J.](#); [Coyne, K. J.](#): SEQUENCE AND EXPRESSION ANALYSIS OF UNIQUE NITRATE REDUCTASES IN HARMFUL RAPHIIDOPHYTE SPECIES
- A0590 [Doll, C.](#); Greenfield, D. I.: DETERMINING FACTORS THAT INFLUENCE MOLECULAR QUANTIFICATION OF THE HARMFUL RAPHIIDOPHYTE HETEROSIGMA *AKASHIWO* USING A SANDWICH HYBRIDIZATION ASSAY (SHA)
- A0591 [Gobler, C. J.](#); Dyhrman, S. T.: DEFINING THE NICHE OF HARMFUL ALGAE VIA ECOGENOMICS AND TRANSCRIPTOMICS
- A0592 [Lelong, A.](#); Bucciarelli, E.; Hegaret, H.; Soudant, P.: IRON AND COPPER LIMITATIONS DRIVE METABOLIC STRATEGIES OF THE MARINE DIATOM PSEUDO-NITZSCHIA DELICATISSIMA

130 Active Learning Approaches To Teach Concepts In Ocean Sciences

Chair(s): Emmanuel S Boss, emmanuel.boss@maine.edu
Sharon Franks, sfranks@ucsd.edu
Peter Franks, pfranks@ucsd.edu
Lee Karp-Boss, lee.karp-boss@maine.edu

Location: Exhibit/Poster Hall

- A0152 [Brey, J. A.](#); Geer, I. W.; Moran, J. M.; Mills, E. W.; Nugnes, K. A.: AMS OCEAN, WEATHER, AND CLIMATE STUDIES: RAISING EARTH SCIENCE LITERACY ONE STUDENT AT A TIME

- A0153 Halversen, C.; Simms, E.; McDonnell, J.; Strang, C.: COMMUNICATING OCEAN SCIENCES COLLEGE COURSES: SCIENCE FACULTY AND EDUCATORS WORKING AND LEARNING TOGETHER
- A0154 Bradassi, F.; Cumani, F.; Riccaboni, R.; Fauville, G.; Dupont, S.; Bressan, G.: E-CO₂ SCHOOL LAB: A SCIENTIFIC VIRTUAL EXPERIENCE FOR STUDENTS.
- A0155 Warner, S. J.: USING DENSITY TANKS IN THE CLASSROOM TO DEEPEN STUDENTS' UNDERSTANDING OF ESTUARINE CIRCULATION
- A0156 Gravinese, P. M.; Boleman, C. L.; Buckley, M. E.; Marston, A.; Muse, E.: CORALS ON ACID: INQUIRY-BASED OCEAN ACIDIFICATION LESSON PLANS
- A0157 Goodwin, M. H.: EASY ELECTRONICS FOR TEACHING OCEAN SCIENCE
- A0158 Acker, J. G.; Zalles, D.; Krumhansl, R.: USING THE NASA GIOVANNI DICCE PORTAL TO INVESTIGATE LAND-OCEAN LINKAGES WITH SATELLITE AND MODEL DATA
- A0160 Chan, K.; Rocap, G.: SCIENTIFIC PROCESS IN PRACTICE, AN ACTIVITY BASED SEMINAR FOR BEGINNING OCEANOGRAPHY MAJORS
- A0161 Franck, V. M.; Barrett, J. L.: A CONSERVATION-BASED GROUP RESEARCH PROJECT IN A REQUIRED UNDERGRADUATE LABORATORY COURSE

131 Research Needs For Coastal And Marine Spatial Planning

Chair(s): Barry Costa-Pierce, bcp@gso.uri.edu

Location: Exhibit/Poster Hall

- B1065 Costa-Pierce, B. A.; McCann, J.: FUTURE OCEAN USES IMPORTANT FOR COASTAL AND MARINE SPATIAL PLANNING
- B1066 Oliver, M. J.; Irwin, A.; Kohut, J.; Manderson, J.: A DYNAMIC BIOME CONCEPT TO ASSIST IN MARINE SPATIAL PLANNING
- B1067 Valentín Del Río, C. R.; Negrón Ruiz, G.; Meléndez Díaz, J.; Sáez, L.: ANALYSIS AND RETROSPECTIVE OF THE MANAGEMENT METHODOLOGIES IMPLEMENTED FOR THE CONTROL OF THE LIONFISH (PTERIOS SPP) IN PUERTO RICO.
- B1068 Negrón Ruiz, G.; Valentín Del Río, C. R.; Meléndez, J. O.; Sáez, L. R.: ANALYSIS OF CAPTURE METHODS USED TO CONTROL THE POPULATION OF LIONFISH (PTERIOS SPP) IN PUERTO RICO
- B1069 Borberg, J. M.; Brandt, S. B.: ENGAGING THE ACADEMIC RESEARCH COMMUNITY IN OREGON'S COASTAL AND MARINE SPATIAL PLANNING EFFORTS
- B1070 Borrelli, M.; Brown, T. L.: NEARSHORE RESOURCE CHARACTERIZATION MAPS: MARINE SPATIAL PLANNING, CAPACITY BUILDING AND COASTAL SCIENCE IN MASSACHUSETTS

133 Jets, Plumes, Eddies, And Waves As A Link Between Anisotropic Mesoscale Ocean Dynamics And General Circulation

Chair(s): Nikolai Maximenko, maximenk@hawaii.edu
Niklas Schneider, nschneid@hawaii.edu
Emanuele Di Lorenzo, edl@gatech.edu

Location: Exhibit/Poster Hall

- B2195 Buckingham, C. E.; Cornillon, P. C.: EDDIES AS A SOURCE OF STRIATIONS IN TIME-AVERAGED SEA LEVEL ANOMALY
- B2196 Chen, R.; Flierl, G. R.; Wunsch, C. I.: INTERPRETING THERMOCLINE STRIATIONS IN THE SUBTROPICAL GYRE FROM THE PERSPECTIVE OF MIXING/TRANSPORT, AND THE ENERGY SPECTRUM
- B2197 Zharkov, V.; Nof, D.; Arruda, W.; Ortiz, J.; Paldor, N.; Chassignet, E.: THE ARRESTED AGULHAS RETROFLECTION
- B2198 Muller, A. A.; Mohrholz, V.; Schmidt, M.: QUANTIFYING THE OFFSHORE TRANSPORT ASSOCIATED WITH A NORTHERN BENGUELA UPWELLING FILAMENT DURING OCTOBER 2010.
- B2199 Eden, C.: A CLOSURE FOR MESO-SCALE EDDY FLUXES DRIVING ZONAL JETS

- B2200 Davis, A. M.; DiLorenzo, E.: LOW-FREQUENCY EDDY DYNAMICS IN THE CALIFORNIA CURRENT SYSTEM
- B2201 Cravatte, S.; Kessler, W. S.; Marin, F.: INTERMEDIATE ZONAL JETS IN THE EQUATORIAL PACIFIC OCEAN OBSERVED BY ARGO FLOATS
- B2202 Maddison, J. R.; Marshall, D. P.: A GEOMETRIC INTERPRETATION OF EDDY FLUXES IN THE FORMATION OF OCEAN JETS
- B2203 Bricaud, C.; Bourdallé-Badie, R.; Drillet, Y.; Garric, J.; Legalloudec, O.: EVALUATION OF THE MESO SCALE ACTIVITY IN THE MERCATOR-OCEAN GLOBAL EDDY-RESOLVING MODEL (1/12).
- B2204 Smith, C. A.; Speer, K. G.: LABORATORY TESTING OF DYNAMICAL SYSTEMS CHARACTERIZATIONS OF GEOPHYSICAL FLOWS

135 Imaging The Ocean Interior: From Seismics To Optics

Chair(s): Robert Pinkel, rpinkel@ucsd.edu
Steven Holbrook, SteveH@uwyo.edu

Location: Exhibit/Poster Hall

- B1439 Buffett, G. G.; Klaeschen, D.: FIRST SEISMIC IMAGES OF THERMOHALINE STAIRCASES IN THE TYRRHENIAN SEA
- B1440 Cooper, J. K.; Gorman, A. R.; Holbrook, W. S.: IMAGES AND TEMPERATURE STRUCTURE OF THE SUBTROPICAL FRONT OFFSHORE NEW ZEALAND FROM SEISMIC OCEANOGRAPHY
- B1441 wiebe, P. H.; Lawson, G. L.; Wurtzell, K.; Lavery, A. C.: BIOGEOGRAPHIC VARIATIONS IN DIEL VERTICAL MIGRATION DETERMINED FROM HIGH-FREQUENCY MULTI-FREQUENCY ACOUSTIC BACKSCATTERING IN THE NORTHWEST ATLANTIC OCEAN.
- B1442 Padhi, A.; Blacic, T. M.; Fortin, W. E.; Holbrook, W. S.; Mallick, S.: 2-D TEMPERATURE IMAGES OF OCEANIC FINE STRUCTURE FROM PRESTACK WAVEFORM INVERSION OF SEISMIC OCEANOGRAPHY DATA
- B1443 Maske, H.; Ochoa-de la Torre, J.; Almeda-Jauregui, C. O.: A SIMPLE, MANUALLY-OPERATED, FREE-RISING CTD; COMPARISON WITH CONVENTIONAL CTD.
- B1444 van Haren, H.; Gostiaux, L.: DETAILED INTERNAL WAVE MIXING ABOVE A DEEP-OCEAN SLOPE
- B1445 Sato, M.; Dower, J.; Kunze, E.; Dewey, R.: INTER- AND INTRA-ANNUAL VARIABILITY OF DIEL VERTICAL MIGRATION IN A COASTAL INLET
- B1446 Pinkel, R.; Smith, J. A.; Sun, O.; Goldin, M. A.: IMAGING THE OCEAN VELOCITY FIELD WITH DOPPLER SONAR
- B1447 Fortin, W. E.; Holbrook, W. S.; Eakin, D.; Schmitt, R. W.: INTERNAL WAVE ENERGY AND TURBULENT BREAKDOWN OF LEE WAVES GENERATED OFFSHORE COSTA RICA THROUGH SEISMIC OCEANOGRAPHY
- B1448 VonLanken, A.; Holbrook, W. S.; Simmons, H.; Fortin, W. E.; Eakin, D.; St. Laurent, L.: INVESTIGATION OF NONLINEAR INTERNAL WAVE (NLIW) MOTION IN THE SOUTH CHINA SEA
- B1449 Pizarro, O.; Jakuba, M. V.; Flemming, N.; Sakellariou, D.; Henderson, J.; Johnson-Roberson, M.; Mahon, I.; Toohey, L.; Dansereau, D.; Lees, C.: AUV-ASSISTED CHARACTERIZATION OF BEACHROCK FORMATIONS IN VATIKA BAY, LACONIA, GREECE AND THEIR RELEVANCE TO LOCAL SEA LEVEL CHANGES AND BRONZE AGE SETTLEMENTS

142 Oceanic Fronts: Observations, Modeling, And Applications

Chair(s): Alex Horner-Devine, arhd@uw.edu
Igor M. Belkin, igormbelkin@gmail.com
Jonathan Nash, nash@coas.oregonstate.edu
Peter C. Cornillon, pcornillon@gso.uri.edu
Dongxiao Wang, dxwang@scsio.ac.cn

Location: Exhibit/Poster Hall

- B2205 Wu, C.; Hsin, Y.; Chiang, T.: THERMAL FRONTS OFF NORTHERN TAIWAN
- B2206 Palmer, M. R.; Mahaffey, C.; Polton, J.: DEVELOPMENT AND EVOLUTION OF THE RIVER MERSEY PLUME: AN OCEAN GLIDER'S PERSPECTIVE
- B2207 Chekalyuk, A.; Landry, M.; Goericke, R.; Taylor, A.; Hafez, M.: LASER FLUORESCENCE PHYTOPLANKTON ANALYSIS ACROSS A FRONTAL ZONE IN THE CALIFORNIA CURRENT ECOSYSTEM

- B2208 Cole, K. L.; Hetland, R. D.: RIVER PLUME SOURCE-FRONT CONNECTIVITY
- B2209 Lan, K.W.; Chang, Y.; Lee, M. A.; Belkin, I.; Nishida, T.: OCEANIC THERMAL FRONTS AND NET PRIMARY PRODUCTION ASSOCIATED WITH LONGLINE CATCHES OF ALBACORE TUNA (THUNNUS ALALUNGA) IN THE SOUTHERN INDIAN OCEAN
- B2210 Walter, R. K.; Woodson, C. B.; Monismith, S. G.: INTERNAL BORE-LIKE FEATURES AND TURBULENT MIXING ON THE INNER SHELF OF SOUTHERN MONTEREY BAY
- B2211 Zhang, Y.; Ryan, J. P.; Harvey, J. B.; Godin, M. A.; Bellingham, J. G.; Messie, M.; Pennington, J. T.; Chavez, F. P.: THE MONTEREY BAY UPWELLING SHADOW FRONTAL COMPLEX: RESULTS FROM AN ECOSYSTEM PROCESS STUDY
- B2212 Rouault, M. J.; Penven, P.: STUDYING THE VARIABILITY OF THE AGULHAS CURRENT USING SATELLITE REMOTE SENSING OBSERVATIONS
- B2213 Castelao, R. M.: SEA SURFACE TEMPERATURE FRONTS AND WIND STRESS CURL VARIABILITY NEAR A CAPE
- B2214 Mask, A.: FRONTAL CREATION AND DETECTION IN THE GALAPAGOS REGIONAL NAVY COASTAL OCEAN MODEL
- B2215 McClatchie, S.; Cowen, R. K.; Nieto, K. M.; Greer, A.; Luo, J. Y.; Guigand, C.; Demer, D. A.; Griffith, D. A.; Rudnick, D. L.: RESOLUTION OF FINE BIOLOGICAL STRUCTURE INCLUDING SMALL NARCOMEDUSAE ACROSS A FRONT IN THE SOUTHERN CALIFORNIA BIGHT
- B2216 Nagai, T.; Tandon, A.; Yamazaki, H.; Doubell, M. J.; Gallager, S.: ELEVATED TURBULENT DISSIPATION IN THE KUROSHIO FRONT THERMOCLINE
- B2217 Komatsu, K.; Yasuda, I.; Itoh, S.; Ikeya, T.; Kaneko, H.; Hidaka, K.; Yagi, M.; Osafune, S.; Nishikawa, H.; Nonomura, T.: FORMATION MECHANISMS AND BIOGEOCHEMICAL IMPACTS OF THE NUTRIENT STREAM IN THE KUROSHIO JET REGION
- B2218 Armstrong, E. M.; Vazquez, J.; Chin, T. M.: COMPARISONS OF REGIONAL SEA SURFACE TEMPERATURE GRADIENTS FROM MODIS AND AVHRR
- B2219 Yang, W.; Wang, D.: UPWELLING FRONTS AROUND HAINAN ISLAND IN THE NORTHWESTERN SOUTH CHINA SEA IN SUMMERS OF 2002-2010
- B2220 Smati, H. E.; Menkes, C. E.; Pagano, M.; Allain, V.; Rodier, M.; Josse, E.; Marchesiello, P.; Leborgne, R.; Kestenare, E.; Radenac, M. H.: PLANKTON AGGREGATION IN A MESOSCALE EDDY AND A FRONT IN WATERS OFF NEW CALEDONIA (SOUTHWESTERN PACIFIC)
- B2221 Rocha, C. B.; Silveira, I. C.; Gangopadhyay, A.: A METHOD TO DERIVE THREE-DIMENSIONAL TEMPERATURE AND SALINITY FIELDS FROM AVISO'S GEOSTROPHIC VELOCITIES IN THE BRAZIL CURRENT (22-28S)
- B2222 Nieto, K. M.; McClatchie, S.; Weber, E. D.: MESOSCALE FRONTS IN THE CALIFORNIA CURRENT SYSTEM AND THEIR RELATION TO THE DISTRIBUTION OF SMALL PELAGIC FISH LARVAE
- B2223 Matano, R. P.; Palma, E. D.: SHELFBREAK FRONTS AND CROSS-SHELF EXCHANGES IN WESTERN BOUNDARY REGIONS
- B2225 Calado, L.; Domingues, R. M.; Watanabe, W. B.; Godoi, V. A.; Serrato, G. M.; Oliveira, E. N.: SHORT RANGE FORECASTING USING FEATURE MODEL TECHNIQUE FOR BRAZIL CURRENT EDDIES OFFSHORE CABO FRIO, RJ
- B2226 Vazquez, J.; Dewitte, B.; Chin, T. M.; Armstrong, E. M.; Purca, S.; ALBURQUEQUE, E.: A COMPARISON OF SST GRADIENTS OFF THE PERUVIAN COAST: THE IMPACT OF GOING TO HIGHER RESOLUTIONS
- B2227 Ramos Musalem, A. K.; Helfrich, K. R.; White, B. L.: EVOLUTION OF SHALLOW, HORIZONTAL SHEAR LAYERS WITH A HORIZONTAL DENSITY CONTRAST
- B2228 Ohman, M. D.: USE OF A FREE-FALL MOVING VESSEL PROFILER TO CHARACTERIZE FRONTAL GRADIENTS IN THE CALIFORNIA CURRENT ECOSYSTEM

- B2229 Belkin, I. M.; Shotwell, S. K.: PROPAGATION OF SST ANOMALIES ALONG THE NORTH PACIFIC POLAR FRONT AND THEIR IMPACT ON THE GULF OF ALASKA, ALEUTIANS, AND BERING SEA ECOSYSTEMS
- B2230 Hu, J.; Zhang, F.; Pi, Q.: OCEANIC FRONTS IN THE TAIWAN STRAIT

143 Modeling Oceanic Pollutant Transport

Chair(s): Peter Murphy, Peter.Murphy@noaa.gov
Amy MacFadyen, Amy.MacFadyen@noaa.gov

Location: Exhibit/Poster Hall

- B1377 Maderich, V.; Brovchenko, I.; Jung, K. T.: OIL SPREADING IN INSTANTANEOUS AND CONTINUOUS SPILLS ON ROTATING EARTH
- B1378 Jung, K. T.; Maderich, V.; Brovchenko, I.; Kim, Y. H.; Kim, K. O.: MULTISCALE AND MULTIPHASE LAGRANGIAN MODELLING OF THE RADIOACTIVITY DISPERSION IN THE SEA AFTER ACCIDENT AT THE FUKUSHIMA NPP
- B1379 Jung, K. T.; Kim, K. O.; Maderich, V.; Brovchenko, I.; Shim, W. J.; Yang, C. S.; Cho, Y. K.; You, S. H.: OIL SPILL MODELLING IN TIDAL SEA OF COMPLICATED GEOMETRY: "HEBEI SPIRIT (YELLOW SEA, 2007) CASE STUDY
- B1380 Guinasso, N. L.; Wade, T. L.; Sweet, S. T.; DiMarco, S. F.: PRINCIPAL COMPONENT CHARACTERIZATION OF FLUORESCENCE SPECTRA FROM SEAWATER SAMPLES COLLECTED DURING THE DEEP WATER HORIZON OIL SPILL
- B1381 Toner, M.: STATISTICS OF MODEL DRIFT ACCURACY: RESULTS FROM THE DEEPWATER HORIZON AND
- B1382 Carson, H. S.; Lamson, M. R.: URBAN SOURCES AND REMOTE SINKS OF MARINE DEBRIS ON HAWAII ISLAND
- B1383 Drevillon, M.; Derval, C.; Drillet, Y.; Durand, E.; Greiner, E.; Law Chune, S.; Marsaleix, P.; Paradis, D.; Reffray, G.; Scott, R.: DRIFT APPLICATIONS USING MERCATOR OCEAN/MYOCEAN GLOBAL OCEAN ANALYSIS AND FORECAST
- B1384 Qian, H.; He, R.: MODELING THE CIRCULATION AND TRANSPORT CONNECTIVITY IN THE INTRA-AMERICAS SEA
- B1385 Maximenko, N.; Hafner, J.; Lumpkin, R.: DYNAMICS OF MARINE DEBRIS, SIMULATED WITH NUMERICAL MODELS

144 Recent Advances And Challenges In Using Adaptive Sampling To Quantify Process And Test Oceanographic Hypothesis

Chair(s): James H. Churnside, James.H.Churnside@ESRL.NOAA.Gov

Location: Exhibit/Poster Hall

- B1203 Churnside, J. H.; Brown, E. D.; Parker-Stetter, S.; Horne, J. K.; Hunt, Jr., G. L.; Hillgruber, N.; Sigler, M. F.; Vollenweider, J. J.: ADAPTIVE SAMPLING OF A BIOLOGICAL HOT SPOT IN THE BERING SEA USING AERIAL SURVEILLANCE
- B1204 Weidemann, A.; Churnside, J.; Donaghay, J.; Sullivan, J.; Hulbert, M.; Quaid, A.; Goode, W.: IT'S A BIG POND OUT THERE: USE OF MULTIPLE ASSETS AND SAMPLING STRATEGIES TO INVESTIGATE TRANSIENT PATCHY BIO-OPTICAL LAYERS
- B1205 Baptista, A. M.; Simon, H.; Smit, M.; Herfort, L.; Seaton, C.; Li, B.; Peterson, T. D.; Needoba, J. A.; Crump, B. C.; Zuber, P.: ADAPTIVE SAMPLING STRATEGIES TO CHARACTERIZE MICROBIAL COMMUNITIES IN A DYNAMIC ESTUARY
- B1206 Talapatra, S.; Hong, J.; McFarland, M.; Nayak, A.; Cao, Z.; Katz, J.; Sullivan, J.; Twardowski, M.; Rines, J.; Donaghay, P.: EFFECTS OF BIO-PHYSICAL INTERACTIONS ON PARTICLE DISTRIBUTIONS REVEALED BY IN SITU DIGITAL HOLOGRAPHY, ADAPTIVE SAMPLING AND PROFILING OF BULK WATER PROPERTIES
- B1208 Donaghay, P. L.: RECENT ADVANCES AND CHALLENGES IN USING ADAPTIVE SAMPLING TO QUANTIFY PROCESS AND TEST OCEANOGRAPHIC HYPOTHESIS
- B1209 McFarland, M. N.; Rines, J.; Donaghay, P. L.; Sullivan, J. M.: SCANNING FLOW CYTOMETRIC ANALYSIS OF THE MORPHOLOGICAL AND BIO-OPTICAL CHARACTERISTICS OF HETEROGENEOUS MARINE PHYTOPLANKTON COMMUNITIES

148 Recent Advances In In Situ Chemical And Biological Measurements In Marine Environments

Chair(s): Martial Taillefer, mtaille@eas.gatech.edu
Brian Glazer, glazer@hawaii.edu

Location: Exhibit/Poster Hall

- A0340 Patsavas, M. C.; Liu, X.; Byrne, R. H.: IMPROVEMENTS IN SEAWATER CARBON SYSTEM MEASUREMENTS BASED ON THE USE OF SULFONEPHTHALEIN INDICATOR DYES
- A0341 Beckler, J. S.; Nuzzio, D. B.; Taillefer, M.: DEVELOPMENT OF AN ANION-EXCHANGE TECHNIQUE FOR IN-SITU HIGH PRESSURE LIQUID CHROMATOGRAPHY MEASUREMENTS OF MAJOR ANIONS IN MARINE WATERS
- A0334 Easley, R. A.; Patsavas, M. C.; Liu, X.; Ding, X.; Yang, B.; Kaltenbacher, E. A.; Adornato, L. A.; Byrne, R. H.; Greeley, D.; Feely, R. A.: EMPIRICAL OPTIMIZATION OF THE SPECTROPHOTOMETRIC MEASUREMENT OF CARBONATE ION IN SEAWATER USING FIELD OBSERVATIONS
- A0335 Senft-Grupp, S.; Ng, C.; Hemond, H. F.: AN OPTICAL SENSOR DEPLOYED ON BOARD AUTONOMOUS UNDERWATER VEHICLES (AUVS) FOR AQUATIC CHEMISTRY MEASUREMENTS
- A0336 Chase, A. P.; Omand, M. M.; Dave, A.; Freitas, F. H.; Reisinger, A.; Arellano, A. R.: OBTAINING QUALITY AC-S METER SPECTRA: A METHOD FOR TEMPERATURE AND RESIDUAL SCATTERING CORRECTIONS
- A0337 Meyer, D.; Prien, R. D.; Dellwig, O.; Schulz-Bull, D. E.: HIGH RESOLUTION DATA FOR DISSOLVED MANGANESE(II) IN THE WATER COLUMN OF THE CENTRAL BALTIC SEA USING A NEW WET CHEMICAL IN SITU ANALYZER
- A0338 Szmant, A. M.; Whitehead, R. F.; Murphy, B.; Mazel, C.: CISME: NEW TECHNOLOGY DEVELOPMENT TO MEASURE CORAL IN SITU METABOLISM
- A0339 Zhu, Q.; Aller, R. C.: TWO-DIMENSIONAL FERROUS IRON DISTRIBUTIONS IN MARINE SEDIMENTS REVEALED BY A NOVEL PLANAR OPTICAL SENSOR

156 Satellite Remote Sensing Of The Physical And Biogeochemical Processes Of The Ocean And Their Interactions

Chair(s): Prof Tim Liu, w.t.liu@jpl.nasa.gov

Location: Exhibit/Poster Hall

- B1143 Liu, W. T.; Xie, X.: SPACEBASED OBSERVATION OF CARBON DIOXIDE PARTIAL PRESSURE AT OCEAN SURFACE
- B1144 Gierach, M. M.; Lee, T.: BIOPHYSICAL RESPONSE TO ENSO DIVERSITY IN THE EASTERN TROPICAL PACIFIC OCEAN
- B1145 Garbe, C. S.; Garçon, V.; Butz, A.; Yahia, H.; Sudre, J.; Dewitte, B.; Paulmier, A.; Dadou, I.: CLIMATICALLY-ACTIVE GASES IN THE EASTERN BOUNDARY UPWELLING AND OXYGEN MINIMUM ZONE (OMZ) SYSTEMS
- B1146 Yan, X. H.; Jo, Y. H.; Sha, J.; Liu, W. T.; Oliver, M. J.; Shatley, M. C.; Jiang, L.: (INVITED) REMOTE SENSING OF COASTAL PLUMES AND ALGAL BLOOMS: RECENT EVENTS OF PHYSICAL-BIOLOGICAL COUPLING IN THE MID ATLANTIC BIGHT COASTAL REGIONS*
- B1147 Raitsos, D. E.; Hoteit, I.; Brewin J.W. Robert, R. J.; Stenichkov, G.: REMOTE SENSING THE PHYTOPLANKTON PATTERNS OF THE RED SEA
- B1148 Bourassa, M. A.; Scott, J. P.: AN INTERCOMPARISON OF SURFACE TURBULENT HEAT FLUXES IN WARM CORE SECLUSIONS
- B1149 Qazi, W. A.; Emery, W. J.: OCEAN SURFACE CURRENTS FROM FEATURE TRACKING OF BIOGENIC SURFACE SLICKS IN SAR INTENSITY IMAGES
- B1150 Romero-Centeno, R. R.; Zavala-Hidalgo, J. Z.: SEASONAL CYCLE OF THE CHLOROPHYLL-A CONCENTRATION IN THE GULF OF CALIFORNIA AND ITS RELATION WITH PHYSICAL PROCESSES

- B1151 Lavender, S.; Borg, A.; Jackson, J.; Kent, C.; Bourg, L.; Ottaviani, G.; Goryl, P.: THE IMPORTANCE OF QUALITY CONTROL FOR SCIENCE: SPACEBORNE MEDIUM RESOLUTION OPTICAL SENSORS

- B1152 Denton, E. B.; Wiggert, J.: EPISODIC CROSS-SHELF TRANSPORT IN THE NORTHERN GULF OF MEXICO

158 Shedding Light On The Dark Ocean: Advances In Linking Physical And Microbial Oceanography To Biogeochemistry

Chair(s): Alexander B. Bochdansky, ABochdan@odu.edu
Javier Aristegui, jaristegui@dbio.ulpgc.es
Dennis Hansell, dhansell@rsmas.miami.edu

Location: Exhibit/Poster Hall

- A0342 Ollins, H. C.; Frank, K. L.; Rogers, D. R.; Girguis, P. R.: MEASUREMENTS OF MICROBIAL PRIMARY PRODUCTIVITY IN HYDROTHERMAL VENT SULFIDES
- A0343 Lekunberri, I.; Sintés, E.; De Corte, D.; Yokokawa, T.; Herndl, G. J.: VERTICAL AND HORIZONTAL PATTERNS OF BACTERIAL AND ARCHAEAL COMMUNITIES ALONG THE ROMANCHE FRACTURE ZONE IN THE TROPICAL ATLANTIC
- A0344 Baltar, E.; Reinthaler, T.; Lekunberri, I.; Herndl, G. J.; Pinhassi, J.: PROKARYOTIC FUNCTION AND DIVERSITY RESPONSE TO DIFFERENT AMENDMENTS IN THE SUBTROPICAL NORTH ATLANTIC OXYGEN MINIMUM ZONE
- A0345 Bergauer, K.; Herndl, G. J.: MAJOR AUTOTROPHIC POTENTIAL IN DEEP-SEA PROKARYOTES IN THE NORTH ATLANTIC
- A0346 Jiao, N.; Luo, T.; Zhang, R.; Yan, W.; Tian, J.; Yuan, D.; Yang, Q.; Sun, J.; Hu, D.; Wang, P.: LINKING PHYSICAL AND MICROBIAL OCEANOGRAPHY THROUGH PICOPLANKTON EXPORT TO THE DARK OCEAN
- A0347 Smith, K. A.; Stock, C. A.; Dunne, J. P.; Sarmiento, J. L.: ATTACHED BACTERIA FLUX AS A MECHANISTIC CONTROL ON MESOPELAGIC PARTICLE REMINERALIZATION
- A0348 Swan, B. K.; Chaffin, M. D.; Martinez-Garcia, M.; Masland, D. P.; Lluésma Gomez, M.; Poulton, N. J.; Sieracki, M. E.; Stepanauskas, R.: WHOLE GENOME ANALYSIS OF UNCULTURED, AMMONIA-OXIDIZING MARINE GROUP I ARCHAEA FROM THE MESOPELAGIC USING SINGLE-CELL GENOMICS
- A0349 Bochdansky, A. B.; Herndl, G. J.: VISUAL BASIN-SCALE SURVEY OF DEEP-SEA PARTICLES (200 – 6000 M) IN THE TROPICAL AND SUBTROPICAL ATLANTIC OCEAN USING A DIGITAL INLINE HOLOGRAPHIC MICROSCOPE

162 Advances In Phylogeography And Connectivity Of Marine Metazoans

Chair(s): Ann Bucklin, ann.bucklin@uconn.edu
Timothy Shank, tshank@whoi.edu

Location: Exhibit/Poster Hall

- A0524 Winkelmann, I.; Gilbert, M. T.: PHYLOGEOGRAPHY AND POPULATION MITOGENOMICS OF THE GIANT SQUID *ARCHITEUTHIS DUX*
- A0525 Thaler, A. D.; Zelnio, K. A.: AN ASSESSMENT OF MICROSATELLITE MARKERS FOR CONSERVATION AND MANAGEMENT
- A0526 Bucklin, A. C.; Shank, T. M.: POPULATION CONNECTIVITY IN PELAGIC AND BENTHIC MARINE COMMUNITIES: COMPARATIVE ANALYSIS USING DNA BARCODES TO NEXT-GEN SEQUENCING
- A0527 Walz, K. R.; Osborn, K. J.; Sherlock, R. E.; Robison, B. H.: PANMIXIA OF A MESO/BATHYPELAGIC GELATINOUS ZOOPLANKTER: POPULATION DYNAMICS AND DISTRIBUTION OF *POEOBIUS MESERES*
- A0528 Unal, E.; Bucklin, A.: POPULATION GENETIC DIVERSITY AND STRUCTURE OF THE COPEPOD *CALANUS FINMARCHICUS* ACROSS THE NORTH ATLANTIC BASIN

165 Climate Change Impacts On The Bering Sea And Related Polar Seas: From Observation To Prediction

Chair(s): Thomas Van Pelt, ivanpelt@nprb.org
 Michael W. Lomas, Michael.Lomas@bios.edu
 Mike Sigler, mike.sigler@noaa.gov

Location: Exhibit/Poster Hall

- A0382 [Pleuthner, R. L.](#); Lessard, E. J.; Schatz, M. J.; Shaw, C. T.; Harvey, H. R.: DIETARY HISTORY AND LIPID RETENTION IN BERING SEA EUPHAUSIIDS – A SEASONAL STUDY
- A0383 Sigler, M. F.; [Van Pelt, T. L.](#); Wiese, F. K.: ROAD MAP: MANAGING OUTCOMES IN THE ECOSYSTEM-SCALE 'BERING SEA PROJECT' MARINE RESEARCH PROGRAM
- A0384 [Morales, L. V.](#); Granger, J.; Sigman, D. M.; Prokopenko, M. G.; Plessen, B.: ELEVATED 15N/14N IN PARTICULATE ORGANIC MATTER, ZOOPLANKTON, AND DIATOM FRUSTULE-BOUND NITROGEN FROM THE ICE COVERED WATER COLUMN OF THE BERING SEA SHELF
- A0385 [Gemery, L.](#); Cooper, L. W.; Cronin, T. M.: BENTHIC OSTRACODE ASSEMBLAGES IN THE BERING SEA FROM 1976 TO 2010
- A0386 [McGillivray, P. A.](#); Wackowski, S.: CLIMATE CHANGE EFFECTS ON ICE RIDGING: RESULTS FROM ICEBREAKER DEPLOYED SMALL UNMANNED AIRCRAFT SURVEYS IN THE ARCTIC
- A0387 [Chang, B. X.](#); Devol, A. H.; Sigman, D. M.: AN EXAMINATION OF BENTHIC NITROGEN CYCLING USING THE ISOTOPIC COMPOSITION OF AMMONIUM IN BERING SEA POREWATERS
- A0388 [Hu, H.](#); Wang, J.: MODELING POLYNYA IN THE BERING SEA
- A0389 [Kolts, J. M.](#); Lovvorn, J. R.: OCEANOGRAPHIC AND DEMOGRAPHIC MECHANISMS AFFECTING POPULATION STRUCTURE OF SNOW CRABS (*CHIONOECETES OPILIO*) IN COLD WATERS OF THE NORTHERN BERING SEA
- A0390 [Lovvorn, J. R.](#); Anderson, E. M.; Grebmeier, J. M.; Cooper, L. W.; Kolts, J. M.; North, C. A.: CHANGING WINDS AND DISPERSION OF PACK ICE AFFECT ACCESS TO PREY AND PHYSIOLOGICAL CONDITION OF BOTTOM-FEEDING MARINE BIRDS
- A0391 [Cokelet, E. D.](#): POLEWARD THERMOHALINE CIRCULATION ON THE SOUTHEAST BERING SEA SHELF
- A0392 [Hermann, A. J.](#); Gibson, G. A.; Bond, N. A.; Curchitser, E. N.; Hestrom, K.; Cheng, W.; Wang, M.; Stabeno, P. J.; Eisner, L.; Janout, M.: A MULTIVARIATE ANALYSIS OF OBSERVED AND MODELED BIOPHYSICAL VARIABILITY ON THE BERING SEA SHELF: MULTIDECADAL HINDCASTS (1969-2009) AND FORECASTS (2010-2040)
- A0393 [Sullivan, M. E.](#); Salo, S. A.; Stabeno, P. J.; Mordy, C. A.: SPRING ICE AND SALT FLUX IN THE EASTERN BERING SEA MARGINAL ICE ZONE
- A0394 [Horak, R. E.](#); Whitney, H.; Mordy, C.; Shull, D.; Devol, A. H.: THE IMPACT OF WIDESPREAD SEDIMENTARY DENITRIFICATION ON THE BERING SEA SHELF
- A0395 [Mordy, C. W.](#); Lomas, M.: THE IMPACT OF SEA-ICE ON BOTTOM-UP AND TOP-DOWN CONTROLS OF CRUSTACEAN ZOOPLANKTON AND THE MEDIATION OF CARBON AND ENERGY FLOW IN THE EASTERN BERING SEA
- A0396 [Pinchuk, A. I.](#); Coyle, K. O.: VARIABILITY IN CALANUS SPP. POPULATIONS ON THE EASTERN BERING SEA SHELF DURING THE RECENT COLD PHASE
- A0397 [Gradinger, R.](#); Bluhm, B. A.; Iken, K.: SEDIMENTATION PROCESSES UNDER THE SEASONAL SEA ICE OF THE BERING SEA
- A0398 [Deans, N. L.](#); Matsumoto, G.; Warburton, J.; Sigman, M.; Dugan, D.; Anderson, A.: THE BERING SEA ECOSYSTEM WORKSHOP - A MODEL FOR TRANSFORMING ECOSYSTEM SCIENCE INTO EDUCATIONAL RESOURCES
- A0399 [Lessard, E. J.](#); Schatz, M. J.; Shaw, C. T.; Foy, M. S.: SEASONAL AND INTERANNUAL VARIABILITY IN EUPHAUSIID DIETS AND FEEDING RATES IN THE EASTERN BERING SEA
- A0400 [Hervieux, G.](#); Curchitser, E. N.; Stock, C. A.; Castruccio, F. S.: A HIGH-RESOLUTION REGIONAL MODEL FOR THE BERING SEA ECOSYSTEM

170 Adaptive Sampling Of Coastal Waters Using Gliders And Autonomous Underwater Vehicles (AUVs): Novel Integration Of Oceanography And Engineering Research

Chair(s): Fumin Zhang, fumin@gatech.edu

Location: Exhibit/Poster Hall

- B1315 [Erofeev, A.](#); Barth, J. A.; Shearman, R. K.; Kurokawa, Z.; Adams, K.; Ordonez, C.; Mazzini, P.; Welch, T. P.: SAMPLING THE DYNAMIC OREGON COASTAL OCEAN WITH UNDERWATER GLIDERS
- B1316 Fries, D. P.; Barton, G.; Hendrick, G.; Gregson, B.; [Hotelling, L. A.](#); Paul, J.; Sanderson, A.; Blidberg, R.: SOLAR ROBOTIC MATERIAL SAMPLER SYSTEM FOR ADAPTIVE SAMPLING OF CHEMICAL, BIOLOGICAL AND PHYSICAL PARTICLES
- B1317 [Frolov, S.](#); Bellingham, J. G.: COMPACT OCEAN MODELS ENHANCE ONBOARD AUTONOMY OF UNDERWATER VEHICLES
- B1318 [Johnson, N. D.](#); Lucas, K.; Costello, J. H.; Colin, S. P.: QUANTITATIVE ANALYSIS OF FLEXIBLE MARGINS IN ANIMAL PROPULSORS
- B1319 [Seitz, A. C.](#); Danielson, S.; Statscewich, H.; Winsor, P.: LOCATING ACOUSTIC-TAGGED FISHES AND DESCRIBING THEIR ENVIRONMENT USING AN AUTONOMOUS UNDERWATER VEHICLE
- B1320 [Green, D.](#); Jones, C.; Manley, J.: EXTENDING THE REACH OF MULTIDISCIPLINARY SEAFLOOR OBSERVATORIES
- B1321 [Sydney, N. J.](#); Paley, D. A.: MULTI-VEHICLE OPTIMIZATION AND CONTROL FOR SPATIOTEMPORAL SAMPLING
- B1322 [Edwards, C. R.](#); Chang, D.; Szwajkowska, K.; Zhang, F.: IMPLEMENTATION OF A GLIDER COORDINATED CONTROL SYSTEM (GCCS) IN LONG BAY, SC
- B1323 [Lembke, C.](#); Weisberg, R.; Liu, Y.; English, D.: GLIDER AND OTHER OBSERVATIONS OF ANOMALOUS UPWELLING ON THE WEST FLORIDA SHELF IN SPRING/SUMMER 2010
- B1324 [Szwajkowska, K.](#); Chang, D.; Zhang, F.; Edwards, C. R.: PATH PLANNING FOR UNDERWATER GLIDERS WITH GUIDANCE FROM OCEAN MODELS
- B1325 [Chang, D.](#); Szwajkowska, K.; Zhang, F.; Edwards, C. R.: THE GLIDER COORDINATED CONTROL SYSTEMS FOR STUDY OF PERSISTENT WINTERTIME PHYTOPLANKTON BLOOMS NEAR LONG BAY, SC.

171 Acoustical Applications For Ocean Observing Systems

Chair(s): Sue Moore, sue.moore@noaa.gov
 Brandon Southall, Brandon.Southall@sea-inc.net

Location: Exhibit/Poster Hall

- B1153 [Smedstad, L. E.](#); Heaney, K. D.; Peggion, G.; Barron, C. N.; Coelho, E. F.: GLIDER OBSERVATION SYSTEM SIMULATION EXPERIMENTS USING A GENETIC ALGORITHM SOFTWARE
- B1154 [Dewey, R. K.](#); Bartlett, K. B.; Macoun, P.: ACTIVE AND PASSIVE ACOUSTIC SYSTEMS ON A CABLED OCEAN OBSERVATORY
- B1155 [Kloser, R. J.](#); Ryan, T.; Downie, R.; Keith, G.: BIO-ACOUSTIC OBSERVING SYSTEM AT BASIN SCALES PART OF AUSTRALIA'S INTEGRATED MARINE OBSERVING SYSTEM.
- B1156 [Wang, Z.](#); DiMarco, S. F.; Al-Kharusi, L. H.; Ingle, S.: THE EFFECTS OF PHYSICAL PROCESSES ON DAILY TO SEASONAL VARIABILITY OF MESOPELAGIC FISH LAYERS FROM ADCP BACKSCATTER INTENSITY DATA
- B1157 [Lawson, G. L.](#); Lavery, A. C.; Wiebe, P. H.; Copley, N. J.: ACOUSTIC STUDIES OF EUPHAUSIID ECOLOGY IN THE GULF OF MAINE AND IMPLICATIONS FOR OCEAN OBSERVATORIES
- B1158 [Fincke, J. R.](#); Lavery, A. C.; Lawson, G. L.; Wiebe, P. H.; Jaffre, F.; Packard, G. J.: A HIGH-FREQUENCY, BROADBAND ACOUSTIC BACKSCATTERING SYSTEM FOR IMAGING, CLASSIFICATION, AND QUANTIFICATION OF WATER-COLUMN SCATTERERS FROM AUTONOMOUS VEHICLES
- B1159 [Nystuen, J. A.](#); Riser, S. C.; Wen, T.; Swift, D.: INTERPRETED ACOUSTIC OCEAN OBSERVATIONS FROM ARGO FLOATS
- B1160 [Southall, B. L.](#); Clark, C.; Daley, K.; Moore, S.; Payne, R.; Stafford, K.; Stoermer, M.; Willcock, W.; Delaney, J.: ACOUSTIC MONITORING OF MARINE LIFE WITH A FIBER-OPTIC, OCEAN OBSERVING NETWORK

- B1161 Ross, T.; Lee, W. J.; Keiser, J.; Lopez, A. L.; Greene, C.: BROADBAND ACOUSTICS ON THE VENUS OBSERVATORY IN SAANICH INLET
- B1162 Schillinger, D. J.; Hay, A. E.: PERSISTENT MYSTERY PITS ON THE SEAFLOOR OF THE UPPER CONTINENTAL MARGIN
- B1163 Van Uffelen, L. J.; Nosal, E. M.; Howe, B. M.; Carter, G. S.: ACOUSTIC SEAGLIDERS IN THE PHILIPPINE SEA

174 Ecosystem Science In The Gulf Of Mexico: Knowledge Gaps, Science Needs, And Long-Term Plans For The Future

Chair(s): Rebecca Green, rebecca.green@boemre.gov
Alan Leonardi, alan.leonardi@noaa.gov

Location: Exhibit/Poster Hall

- A0529 Henry, L. V.; Torres, J. J.: TEMPERATURE EFFECTS ON THE METABOLISM OF THE DEEP-SEA STONY CORAL, LOPHELIA PERTUSA
- A0530 Schrum, H. N.; Aguilera, E.; Card, E.; Downer, M.; Dwyer, A.; Hawke, E.; King, C.; Walsh, B.; Joyce, P.: BIOGEOCHEMICAL AND PHYSICAL CONDITIONS IN THE GULF OF MEXICO DURING THE 2011 MISSISSIPPI RIVER FLOODING EVENT
- A0531 Fry, B.: TRACING THE CARBON LINKAGES BETWEEN MISSISSIPPI RIVER NUTRIENT INPUTS AND HYPOXIA FORMATION ON THE LOUISIANA CONTINENTAL SHELF
- A0532 Dausman, A. M.; Walker, S. E.; Lavoie, D.: SUPPORTING GULF OF MEXICO ECOSYSTEM RESTORATION: ISSUES AND CHALLENGES IDENTIFIED BY THE GULF COAST ECOSYSTEM RESTORATION TASK FORCE SCIENCE TEAM
- A0533 Mohan, J. A.; Walther, B. D.; Thomas, P.: USING OTOLITH CHEMISTRY AS A NOVEL PROXY OF HYPOXIC EXPOSURE IN A MARINE FISH
- A0534 Bik, H. M.; Halanych, K. M.; Sharma, J.; Thomas, W. K.: RAPID BIODIVERSITY ASSESSMENT OF MICROBIAL EUKARYOTES USING HIGH-THROUGHPUT SEQUENCING: A CASE STUDY FROM THE BP OIL SPILL

180 Arctic-Subarctic Interactions

Chair(s): Ken Drinkwater, ken.drinkwater@imr.no
Tom Haine, thomas.haine@jhu.edu

Location: Exhibit/Poster Hall

- B2000 Bisagni, J. J.: SHELF WATER SALINITY VARIABILITY: EASTERN NEWFOUNDLAND TO CAPE HATTERAS, AND POSSIBLE FRESHWATER SOURCES
- B2001 McEachen, H. J.; Okkonen, S. R.; Hopcroft, R. R.: A COMPARISON OF ZOOPLANKTON ABUNDANCE AT THREE BERING SEA MOORINGS

- B2002 Bacon, S.; Tsubouchi, T.; Torres-Valdes, S.; Naveira-Garabato, A. C.: THE ARCTIC OCEAN IN SUMMER: A NEAR-SYNOPTIC INVERSE MODEL OF BOUNDARY FLUXES OF HEAT, FRESHWATER AND NUTRIENTS
- B2003 Carroll, M. L.; Ambrose, W. G.; Locke, W. L.; Ryan, S. K.; Johnson, B. J.: READING BETWEEN THE LINES: BIVALVE GROWTH RATE AND ISOTOPIC VARIABILITY ACROSS THE BARENTS SEA POLAR FRONT
- B2004 Kikuchi, T.; Itoh, M.; Eert, J.; Williams, W. J.: XCTD HYDROGRAPHIC MEASUREMENT DURING UNCLOS 2011 CRUISE
- B2005 Wang, Q.; Myers, P. G.; Bush, A. B.: SEASONAL CIRCULATION IN THE CANADIAN ARCTIC ARCHIPELAGO
- B2006 Drinkwater, K. E.: ON THE ROLE OF ADVECTION ON THE ECOLOGY OF ARCTIC AND SUBARCTIC SEAS
- B2007 Lavrentyev, P. J.; Franze, G.; Solovyev, K.; Sevinsen, C.: CARBON FLUX THROUGH THE MICROBIAL FOOD WEB IN THE BARENTS SEA
- B2008 Myers, P. G.; Hu, X.: FRESHWATER PATHWAYS IN THE ARCTIC AND SUB-POLAR NORTH ATLANTIC

197 General Session: Oil Spill, Gulf Of Mexico

Location: Exhibit/Poster Hall

- B1210 Li, Y.; Zhu, J.; Wang, H.: THE COMPARISON OF TWO DIFFERENT VERTICAL DIFFUSION SCHEMES CONSIDERING THE WAVES INFLUENCE IN THREE-DIMENSION OIL-SPILL TRANSPORTATION MODEL
- B1211 Johnson, D. M.; Allen, L. E.; Farris, K. J.; Patterson, W.; Tarnecki, J.; Jagoe, C. H.: DETECTION OF FISH BILE METABOLITES BY FLUORESCENCE FROM THE NORTHERN GULF OF MEXICO DEEPWATER HORIZON OIL SPILL
- B1212 Beegle-Krause, C. J.; Payne, J. R.: PHYSICAL TRANSPORT AND CHEMICAL BEHAVIOR OF DISPERSED OIL: STATE OF KNOWLEDGE AND RESEARCH NEEDS RELATED TO FUTURE OIL SPILL RESPONSE
- B1213 Zavala-Hidalgo, J.; Romero-Centeno, R.; Galvanovskis, E.: RECONSTRUCTION OF THE DEEPWATER HORIZON OIL SPILL AND ITS POSSIBLE IMPACT IN MEXICAN COASTS AND WATERS
- B1214 Hogan, P. J.; Thoppil, P.; Rowley, C. D.: ENSEMBLE OCEAN FORECASTING IN THE GULF OF MEXICO
- B1215 Vuorenkoski, A. K.; Ouyang, B.; Britton, W. B.; Dalgleish, F. R.: MULTI-DIMENSIONAL CHARACTERIZATION OF HYDROCARBON FLUORESCENCE EMISSION IN MARINE ENVIRONMENT

Thursday, February 23 – Orals

003 The Response Of Marine Calcifiers To Global Climate Change And Ocean Acidification

Chair(s): Nick Kamenos, nick.kamenos@glasgow.ac.uk
Maggie Cusack, maggie.cusack@glasgow.ac.uk
J Murray Roberts, J.M.Roberts@hw.ac.uk

Location: Ballroom G

- 08:00 Zeebe, R. E.; Paquay, F.: LARGE-SCALE OCEAN ALKALIZATION FOR MITIGATING CLIMATE CHANGE AND OCEAN ACIDIFICATION?
- 08:15 Hennige, S. L.; Wicks, L. C.; Kamenos, N. K.; Roberts, J. M.: ACCLIMATION OF THE COLD WATER CORAL *LOPHELIA PERTUSA* TO PREDICTED RISES IN ATMOSPHERIC CO₂ AND SEA TEMPERATURES
- 08:30 Schalkhauser, B.; Stemmer, K.; Bock, C.; Lannig, G.: HOW KING SCALLOPS RESPONSE TO OCEAN WARMING AND ACIDIFICATION
- 08:45 Stark, A. K.; Treydte, S.; Heilmayer, O.; Brey, T.; Pörtner, H. O.: RESPONSES OF AN ARCTIC BIVALVE TO OCEAN ACIDIFICATION AND WARMING
- 09:00 LaVigne, M.; Hill, T. M.; Sanford, E.; Gaylord, B. P.; Russell, A. D.; Lenz, E.; Young, M.; Hofelt, J.: TRACE ELEMENTAL COMPOSITION AND THE EFFECT OF CO₂ ON JUVENILE PURPLE SEA URCHIN CALCITE (*STRONGYLOCENTROTUS PURPURATUS*).
- 09:15 Burdett, H. L.; Scheibling, R. E.; Hatton, A. D.; Kamenos, N. A.: MIGHT CLIMATE PLAY A ROLE IN URCHIN-MEDIATED EXPORT OF DMSP IN EASTERN CANADA?
- 09:30 Jones, B. M.; Iglesias-Rodriguez, M. D.; Skipp, P. J.; Edwards, R. J.; Greaves, M. J.; Young, J. R.; Elderfield, H.; O'Connor, C. D.: INVESTIGATING THE EFFECTS OF OCEAN ACIDIFICATION USING POST-GENOMIC TOOLS; *EMILIANA HUXLEYI* NZEH EXHIBITS A LIMITED PROTEOMIC RESPONSE TO HIGH CO₂
- 09:45 Donohue, P.; Stahl, H.; Roberts, M.; Cusack, M.; Kamenos, N.: APPLICATION OF PROTEOMICS TO ASSESS THE SYNERGISTIC EFFECTS OF ELEVATED TEMPERATURE AND OCEAN ACIDIFICATION ON TEMPERATE MARINE CALCIFYING ORGANISMS

005 Metal Speciation In The Ocean: Metal-Binding Ligand Composition And Role In The Transport Of Metals Through The Marine Environment

Chair(s): Sylvia Sander, sylvia.sander@otago.ac.nz
Constant van den Berg, vandenbergliverpool.ac.uk
Kristen Buck, kristen.buck@bios.edu

Location: Ballroom C

- 08:00 Lohan, M. C.: ORGANIC LIGANDS- A KEY CONTROL ON TRACE METAL BIOGEOCHEMISTRY IN THE OCEAN
- 08:15 Donat, J. R.; Carrasco, G.; Duffaut Espinosa, L. A.; Morton, P. L.: SOURCES AND TRANSPORT OF ZINC AND CADMIUM AND THEIR COMPLEXING LIGANDS IN THE ATLANTIC AND PACIFIC OCEANS: DIFFERENTIAL LIGAND DECAY IN SPECIFIC WATER MASSES
- 08:30 Taillefert, M.; Jones, M. E.; Beckler, J. S.: THE FLUX OF SOLUBLE ORGANIC-IRON(III) COMPLEXES FROM ESTUARINE SEDIMENTS REPRESENTS A SOURCE OF STABLE IRON(III) TO THE CONTINENTAL SHELF
- 08:45 Bundy, R. M.; Barbeau, K. A.; Buck, K. N.: SOURCES OF STRONG COPPER-BINDING LIGANDS IN ANTARCTIC PENINSULA SURFACE WATERS
- 09:00 Amin, S. A.; Moffett, J. W.; Martens-Habben, W.; Stahl, D. A.; Armbrust, E. V.: COPPER LIMITATION AND TOXICITY IN THE MARINE AMMONIA OXIDIZING ARCHAEON *NITROSOPHILUM* *MARITIMUS*
- 09:15 Lechtenfeld, O. J.; Koch, B. P.; Geibert, W.; Witt, M.; Ludwischowski, K. U.; Kattner, G.: INORGANICS IN ORGANICS: QUANTIFICATION OF ORGANIC PHOSPHORUS AND SULFUR AND TRACE ELEMENT SPECIATION IN NATURAL ORGANIC MATTER USING HPLC-ICP-MS

- 09:30 Waska, H.; Koschinsky, A.; Brumsack, H. J.; Ruiz-Chancho, M. J.; Dittmar, T.: A NOVEL MOLECULAR APPROACH FOR THE IDENTIFICATION OF DISSOLVED METAL-ORGANIC COMPLEXES IN NATURAL WATERS
- 09:45 Farst, C.; Landing, W. M.; Stenson, A.; Buck, K.: NATURAL MARINE SIDEROPHORE ISOLATION THROUGH IMMOBILIZED METAL AFFINITY CHROMATOGRAPHY WITH ELECTROSPRAY MASS SPECTROMETRIC ANALYSIS

007 High-Resolution Geochemical Proxies Of Global Change: Progress, Problems, And Utility

Chair(s): Alan D. Wanamaker Jr, adw@iastate.edu
David P. Gillikin, gillikid@union.edu

Location: Ballroom H

- 08:00 Ostermann, D. R.; Goodkin, N. E.: NEW HEAVY & LIGHT STABLE ISOTOPIC CARBONATE STANDARDS FOR PALEOCEANOGRAPHIC PROXY INTERCALIBRATIONS
- 08:15 Cusack, M.: BRACHIOPODS RECORDING SEAWATER TEMPERATURE – A MATTER OF MATURATION?
- 08:30 Wejnert, K. E.; Thunell, R. C.; Bizimis, M.; Pellechia, P.; Astor, Y.: SEASONAL VARIABILITY IN B SPECIATION AND B/CA IN PLANKTONIC FORAMINIFERA FROM THE CARIACO BASIN, VENEZUELA
- 08:45 Evans, D.; Müller, W.; Renema, W.: 'DEEP TIME' FORAMINIFERA MG/CA PALEOTHERMOMETRY – ACCURATELY CORRECTING FOR SECULAR CHANGES IN THE MG/CA RATIO OF CENOZOIC SEAWATER
- 09:00 Jonkers, L.; de Nooijer, L.; Reichart, G.; Zahn, R.: THE EFFECT OF ENCRUSTATION ON THE TRACE ELEMENT COMPOSITION OF *M. DUTERTREI*, IMPLICATIONS FOR RECONSTRUCTING PAST SEA WATER TEMPERATURE
- 09:15 Vernet, M.; Cape, M.; Matrai, P. A.; Gle, C.; Leventer, A.; Jeong, S.; Domack, E.; Christ, D.; Brachfeld, S.; Natter, C.: DMSP IN HOLOCENE SEDIMENTS AS A PROXY FOR OCEANIC PALEOPRODUCTIVITY
- 09:30 DeLong, K. L.; Quinn, T. M.; Taylor, F. W.; Shen, C. C.; Lin, K.: ASSESSING SOURCES OF ERROR IN CORAL BASE PALEOCLIMATE RECONSTRUCTIONS FROM REPRODUCING CORAL SR/CA VARIATIONS
- 09:45 Stevenson, S. L.; McGregor, H. V.; Phipps, S.; Fox-Kemper, B.: AN ASSESSMENT OF CORAL-BASED ENSO RECONSTRUCTION ACCURACY: IMPLICATIONS FOR HOLOCENE MODEL VALIDATION
- 10:30 Williams, B.; Halfar, J.; Hetzinger, S.; Adey, W. H.; Steneck, R. S.; Lebednik, P. A.; Chan, P.; Coughlin, A.: VARIABLE CONTROLS ON SUBARCTIC CORALLINE ALGAL GROWTH
- 10:45 Griffin, S. M.; Lower, E. E.; Black, B. A.; Kreutz, K. J.; Wanamaker Jr, A. D.: THE USE OF CROSSDATED CHRONOLOGIES TO CONSTRAIN GEOCHEMICAL AND AGE MODEL DATA
- 11:00 Irvine, G. V.; Hallmann, N.; Schoene, B. R.; Burchell, M.; Cokelet, E. D.; Hilton, M. R.; Schaaf, J. M.: APPLICATION OF A BIVALVE GROWTH-TEMPERATURE MODEL TO IMPROVE UNDERSTANDING OF THE ALASKA COASTAL CURRENT: FROM THE PRESENT TO THE PAST TO THE FUTURE
- 11:15 Vetter, L.; Spero, H. J.; Eggins, S. M.: MEASURING HOURLY CALCIFICATION IN LIVING PLANKTONIC FORAMINIFERA USING LA-ICPMS
- 11:30 Tems, C. E.; Berelson, W. M.; Prokopenko, M.; McManus, J.: A COMPARATIVE HIGH-RESOLUTION STUDY OF 115N IN SEDIMENTS FROM THE PESCADERO SLOPE, GULF OF CALIFORNIA, AND SANTA MONICA BASIN, CALIFORNIA BORDERLAND
- 11:45 Griffin, H. L.; Kemp, A. E.; Pearce, R.; Thurow, J. W.: PALAEOCEANOGRAPHIC SIGNIFICANCE OF EXCEPTIONAL LAMINAE OF AZPEITIA NODULIFERA IN LATE QUATERNARY ANNUALLY LAMINATED SEDIMENTS FROM THE GULF OF CALIFORNIA
- 12:00 Andrus, C. E.; Thompson, V. D.: RECONSTRUCTING ESTUARINE PALEOCLIMATE FROM MIDDEN SAMPLES: CHALLENGES OF TRANSPORTATION ACROSS SALINITY GRADIENTS.

12:15 Surge, D.; Barrett, J.: VIKING AGE SHELLS RECORD MARINE CLIMATIC SEASONALITY DURING THE MEDIEVAL CLIMATE ANOMALY, ORKNEY ISLANDS, SCOTLAND

008 Arctic Ocean Boundary Currents: Observations, Theory And Modeling

Chair(s): Mary-Louise Timmermans, mary-louise.timmermans@yale.edu
Sheldon Bacon, s.bacon@noc.ac.uk
Robert Pickart, rpickart@whoi.edu

Location: Room 250

10:30 Aksenov, Y.; Nurser, A. G.; Bacon, S.; Coward, A. C.; Ivanov, V. V.; Polyakov, I. V.; Naveira-Garabato, A. C.; Beszczynska-Moeller, A.: THE ARCTIC BOUNDARY CURRENT FROM EDDY-PERMITTING AND EDDY-RESOLVING OCEAN MODELS

10:45 Dmitrenko, I. A.; Kirillov, S. A.; Ivanov, V. V.; Rudels, B.; Serra, N.; Koldunov, N. V.: MODIFIED HALOCLINE WATER OVER THE LAPTEV SEA CONTINENTAL MARGIN

11:00 Janout, M. A.; Hölemann, J.; Krumpen, T.: RECENT OBSERVATIONS OF WARM AND SALINE UNDER-ICE CROSS-SHORE TRANSPORT ON THE LAPTEV SEA SHELF

11:15 Gao, G.; Chen, C.; Proshutinsky, A.; Beardsley, R.; Lai, Z.; Lin, H.: MODELING STUDIES OF ICE-OCEAN INTERACTION AT THE EDGE OF LAND-FAST ICE

11:30 Pickart, R. S.; Spall, M. A.; Schulze, L. M.; Moore, G. W.: DYNAMICS OF WIND-FORCED UPWELLING IN THE ALASKAN BEAUFORT SEA AND ASSOCIATED SHELF-BASIN FLUXES

11:45 Kasper, J. L.; Pickart, R. S.; Weingartner, T. J.: IMPACT OF ICE COVER ON WIND-FORCED EXCHANGE IN THE ALASKAN BEAUFORT SEA

12:00 Magaldi, M. G.; Haine, T. W.; Pickart, R. S.: ON THE NATURE AND VARIABILITY OF THE EAST GREENLAND SPILL JET

12:15 Våge, K.; Pickart, R. S.; Spall, M. A.; Valdimarsson, H.; Jónsson, S.; Torres, D. J.; Østerhus, S.; Eldevik, T.: A NEW OVERTURNING LOOP FOR THE FORMATION OF DENMARK STRAIT OVERFLOW WATER

015 Nearshore Processes

Chair(s): Jennifer L. Irish, jirish@vt.edu
Alex Apotsos, aapotsos@gmail.com

Location: Ballroom I

08:00 Smit, P. B.; Janssen, T. T.: COHERENT INTERFERENCE IN RANDOM WAVES

08:15 Tian, M.; Sheremet, A.; Smith, J. M.: A HYPERBOLIC NONLINEAR WAVE MODEL BASED ON THE STREAM FUNCTION FORMULATION

08:30 Orzech, M.; Veeramony, J.; Ngodock, H.: A DISCRETIZED NUMERICAL ADJOINT TO SWAN: NONLINEAR SOURCES AND SINKS

08:45 Haas, K. A.; Waner, J. C.: COUPLED-OCEAN-ATMOSPHERE-WAVE MODELING OF WEATHER FRONTS

09:00 Sinclair, A. M.: MEASUREMENT OF 3-D FREE SURFACE ACCELERATIONS OF PLUNGING BREAKERS IN THE SURF ZONE BY A NOVEL LAGRANGIAN FLOAT AND COMPARISON TO GPUSPH MODEL DATA

09:15 Mullarney, J. C.; Henderson, S. M.: WAVE-FORCED MOTION OF SUBMERGED SINGLE-STEM VEGETATION

09:30 Ozeren, Y.; Wren, D. G.: EXPERIMENTAL INVESTIGATION OF WAVE ATTENUATION THROUGH VEGETATION

09:45 Smith, H. D.; Cox, D.; Albert, D.; Chakrabarti, A.: WAVE DAMPING, VELOCITY, AND TURBULENCE PROFILES IN COASTAL VEGETATION

10:30 Guza, R. T.; Feddersen, F.; O'Reilly, W. C.; Flick, R. E.: THE EFFECT ON RUNUP OF INCIDENT WAVE DIRECTIONAL AND FREQUENCY BANDWIDTH

10:45 Geiman, J. D.; Kirby, J. T.: WAVE GROUP FORCING OF A RIP CURRENT SYSTEM

11:00 Hansen, J. E.; Jones, I. S.; Janssen, T. T.; Barnard, P. L.: OBSERVATIONS OF PRESSURE-GRADIENT DOMINATED ALONGSHORE CIRCULATION AT AN EXPOSED OCEAN BEACH

11:15 Barroso, C. P.; Holman, R. H.; Siegle, E. S.: SWASH-CUSPS INTERACTIONS ON A REFLECTIVE BEACH

11:30 Rogers, J. S.; Monismith, S. G.; Feddersen, F.; Storz, C. D.: WAVE-DRIVEN HYDRODYNAMICS OF SPUR-AND-GROOVE FORMATIONS ON A CORAL REEF

11:45 Smallegan, S. M.; Haas, K. A.; List, J. H.: EFFECTS OF LONGSHORE NON-UNIFORMITIES IN A BAR TROUGH SYSTEM ON LONGSHORE CURRENTS

12:00 Kumar, N.; Voulgaris, G.; List, J. H.; Warner, J. C.: CROSS-SHORE AND ALONGSHORE VARIATION OF WIND AND WAVE-DRIVEN FLOWS IN THE INNER-SHELF AND SURF ZONE AT THE TIP OF CAPE HATTERAS, NC

12:15 Chicakdel, C. C.; Jessup, A. T.; Carini, R. J.: THERMAL IMAGING OF THE SURFZONE DURING SURF ZONE OPTICS

14:00 Grasso, F.; Ruessink, B. G.: IMPORTANCE OF VERTICAL TURBULENT TRANSPORT TO TURBULENCE DYNAMICS IN A NATURAL SURF ZONE

14:15 Feddersen, F.; Guza, R. T.: VERTICAL STRUCTURE OF TURBULENCE UNDER SURFZONE BREAKING WAVES

14:30 Ma, G.; Kirby, J. T.; Shi, F.: NUMERICAL STUDY OF TURBULENT BUBBLY FLOW UNDER SURFZONE BREAKING WAVES

14:45 Clark, D. B.; Elgar, S.; Raubenheimer, B.: OBSERVATIONS OF SURFZONE VORTICITY

15:00 Ting, F. C.: LARGE-SCALE NEAR-BED TURBULENT FLOW STRUCTURES UNDER PLUNGING WAVES

15:15 Hay, A. E.; Zedel, L.; Cheel, R.; Dillon, J.: ON THE VERTICAL AND TEMPORAL STRUCTURE OF FLOW AND STRESS WITHIN THE TURBULENT OSCILLATORY BOUNDARY LAYER ABOVE EVOLVING SAND RIPPLES

15:30 Cox, D. T.; Yoon, H. D.: INTERMITTENT TURBULENCE AND SEDIMENT SUSPENSION IN THE SURF ZONE AND IMPLICATIONS FOR ONSHORE SEDIMENT TRANSPORT

15:45 Parra, S. M.; Valle-Levinson, A.; Mariño, I.; Enriquez, C.: TIDE AND WAVE-INDUCED VARIATIONS IN TURBULENT KINETIC ENERGY AT A BUOYANT JET DISCHARGE

022 Air-Sea Interactions Of Typhoons In The Western North Pacific Ocean And Neighboring Seas

Chair(s): Hans C Graber, hgraber@rsmas.miami.edu
I-I Lin, iilin@as.ntu.edu.tw
Eric D'Asaro, dasaro@apl.washington.edu
David Tweng-Yung Tang, tyt@ntu.edu.tw

Location: Ballroom F

10:30 Lin, I. I.: OCEAN'S IMPACT ON THE INTENSITY OF THREE RECENT TYPHOONS (FANAPI, MALAKAS, AND MEGI) – RESULTS FROM THE ITOP FIELD EXPERIMENT

10:45 Chang, Y.; TANG, T. Y.; CHAO, S.; KO, D. S.: OCEANIC THERMAL VARIATIONS UNDER TYPHOON LUPIT (2009)

11:00 Chen, S. S.; Lee, C. Y.; Kerns, B.: MULTI-SCALE COUPLED OBSERVATIONS AND MODELING OF TYPHOON FANAPI (2010)

11:15 Mrvaljevic, R. K.; Black, P. G.; D'Asaro, E. A.; Lee, C. M.; Lien, R. C.; Morzel, J.; Niiler, P. P.; Rainville, L.; Sanford, T. B.: WHAT HAPPENED TO THE WAKE OF TYPHOON FANAPI (2010)?

11:30 Haney, S. R.; Fox-Kemper, B.; Bachman, S.; Cooper, B.; Kupper, S.; McCaffrey, K. L.; Stevenson, S.; Van Roekel, L. P.; Webb, A.; Ferrari, R.: HURRICANE WAKE RESTRATIFICATION MECHANISMS

11:45 Smith, T. A.; Chen, S.; Campbell, T.; Rogers, E.; Wang, D.; Allard, R.: AIR-SEA-WAVE COUPLED MODELING OF WESTERN NORTH PACIFIC TYPHOON FANAPI (SEPTEMBER 2010)

12:00 Suzuki, N.; Hara, T.; Sullivan, P. P.: IMPACTS OF BREAKING WAVES ON AIRFLOW AT HIGH WIND CONDITIONS

12:15 Guan, Y. P.; Zhang, H.: RELATIONSHIP BETWEEN THE SOUTH CHINA SEA SUMMER MONSOON AND THE FIRST-LANDFALL TROPICAL CYCLONE OVER MAINLAND CHINA

030 Gulf Of Mexico Circulation & Ecosystem Numerical Modeling

Chair(s): Christopher N. K. Mooers, cmooers@cecs.pdx.edu
 Patrick Hogan, pat.hogan@nrlssc.navy.mil
 Leo Oey, lyo@princeton.edu
 Claire Paris, cparis@rsmas.miami.edu

Location: Ballroom E

- 14:00 Green, R. E.; Lugo-Fernández, A.: THE EVOLVING SCIENCE OF ECOSYSTEM MODELING IN THE GULF OF MEXICO: FROM CIRCULATION TO POPULATIONS
- 14:30 Chang, Y. L.; Oey, L. Y.: WHY DOES THE LOOP CURRENT HAVE SEASONAL PREFERENCES FOR SHEDDING EDDIES?
- 14:45 Olascoaga, M. J.; Haller, G.: A MODERN LAGRANGIAN VIEW OF THE DEEPWATER HORIZON OIL SPILL
- 15:00 Mooers, C. N.; Zaron, E. D.; Howard, M.; Chao, Y.; Cornuelle, B.; He, R.; Ko, D. S.; Oey, L.; Mehra, A.; Patchen, R.: THE GULF OF MEXICO PILOT PREDICTION PROJECT (GOMEX-PPP)
- 15:15 Ko, D. S.: A LONG-TERM OCEAN FORECAST EXPERIMENT FOR GULF OF MEXICO APPLYING IASNFS
- 15:30 Xue, Z.; He, R.; Fennel, K.; Cai, W.; Lohrenz, S.: MODELING SEASONAL AND INTERANNUAL VARIABILITY OF CIRCULATION AND BIOGEOCHEMICAL PROCESSES IN THE GULF OF MEXICO
- 15:45 Walker, N. D.; Leben, R. R.; Brickley, P. J.; Coholan, P. D.; Pilley, C. T.; Raghunathan, V. V.; D'Sa, E. J.; Hoffman, N. G.; Sharma, N.; Graber, H. C.: ASSESSMENT OF A CYCLONIC EDDY MERGING EVENT ALONG THE LOOP CURRENT FRONT AND ITS ROLE IN THE OFFSHORE ENTRAINMENT OF DEEPWATER HORIZON SURFACE OIL

039 Ocean Biogeochemistry Time-Series And Climate

Chair(s): Frank Muller-Karger, carib@marine.usf.edu
 Matthew Church, mjchurch@hawaii.edu
 Michael Lomas, michael.lomas@bios.edu
 Gordon Taylor, gtaylor@notes.cc.sunysb.edu

Location: Ballroom B

- 08:00 Olafsson, I.; Olafsdottir, S. R.; Benoit-Cattin, A.; Danielsen, M.: CARBON CHEMISTRY VARIATIONS AT THE ICELAND SEA TIME SERIES STATION
- 08:15 Brix, H.; Currie, K. I.; Mikaloff Fletcher, S. E.: TRENDS AND SEASONAL VARIABILITY OF THE CARBON CYCLE IN SUBANTARCTIC SURFACE WATER IN THE SOUTH WEST PACIFIC
- 08:30 MARTINEZ, E.; ANTOINE, D.; RAITOS, D.: DECADEAL VARIABILITY OF PHYTOPLANKTON ABUNDANCE IN THE SUBPOLAR NORTH ATLANTIC THROUGH ATMOSPHERIC AND OCEANIC CONNECTIONS
- 08:45 White, A. E.; Whitmire, A. L.; Letelier, R. M.; Kavanaugh, M. T.; Church, M. J.: TIME-SERIES ANALYSES OF PRIMARY PRODUCTIVITY AS A FUNCTION OF ABSORPTION, PIGMENT BASED PHYTOPLANKTON DIVERSITY AND PARTICLE SIZE DISTRIBUTIONS
- 09:00 Pasulka, A. P.; Landry, M. R.; Taniguchi, D. A.; Taylor, A. G.; Church, M. J.: TEMPORAL DYNAMICS OF PHYTOPLANKTON AND HETEROTROPHIC PROTISTS AT STATION ALOHA
- 09:15 Ciavatta, S.; Halsband-Lenk, C.; Widdicombe, C.; Coombs, S.; Sims, D.; Smyth, T.: CHANGES IN THE TROPHIC DYNAMICS OF THE WESTERN ENGLISH CHANNEL
- 09:30 Billiot, A.; Jones, J. B.; Burbank, R.; Schultz, L.; Muller-Karger, F.; Spruce, J.: ANALYZING THE EFFECTS OF CLIMATE CHANGE ON SEA SURFACE TEMPERATURE IN MONITORING CORAL REEF HEALTH IN THE FLORIDA KEYS USING SEA SURFACE TEMPERATURE DATA
- 09:45 Chow, C. T.; Sachdeva, R.; Cram, J. A.; Fuhrman, J. A.: VIRAL CONTROL OF AUTOTROPHIC VS. HETEROTROPHIC BACTERIA IN THE SURFACE OCEAN: ECOLOGICAL NETWORKS LINKING VIRUSES AND BACTERIA
- 10:30 Steinberg, D. K.: Sverdrup Award Lecture - LONG-TERM CHANGES IN THE ROLE OF ZOOPLANKTON IN OCEAN BIOGEOCHEMICAL PROCESSES
- 10:45 Best, C. H.; Purdie, D. A.; Lomas, M. W.: TEMPORAL VARIABILITY IN THE BIOGEOCHEMICAL COMPOSITION OF MICROPLANKTON IN THE SARGASSO SEA

- 11:00 Owens, S. A.; Buesseler, K. O.; Lamborg, C. H.; Valdes, J.; Lomas, M. W.; Johnson, R. J.; Steinberg, D. K.; Siegel, D. A.: A NEW RECORD OF PARTICLE FLUX AT THE BERMUDA ATLANTIC TIME-SERIES SITE FROM NEUTRALLY BUOYANT SEDIMENT TRAPS
- 11:15 Conte, M. H.; Weber, J. C.: THE CLIMATOLOGY OF THE DEEP SARGASSO SEA
- 11:30 Carlson, C. A.; Hansell, D. A.; Goldberg, S. J.: LONG-TERM ACCUMULATION OF DOC IN THE UPPER LAYER AT BATS
- 11:45 Taylor, G. T.; Muller-Karger, F.; Thunell, R. C.; Scranton, M. I.; Astor, Y.; Varela, R.; Troccoli Ghinaglia, L.; Lorenzoni, L.; Fanning, K. A.; Hameed, S.: ECOSYSTEM RESPONSES IN THE SOUTHERN CARIBBEAN SEA TO GLOBAL CLIMATE CHANGE: RESULTS FROM CARIACO OCEAN TIME-SERIES
- 12:00 Omand, M. M.; Mahadevan, A.: VERTICAL STRUCTURE AND PRODUCTIVITY FROM THE CARIACO TIME SERIES: IMPLICATIONS FOR INTERPRETING SATELLITE OCEAN COLOR
- 12:15 Roe, H. S.; Laffoley, D. A.: THE SARGASSO SEA-A SUITABLE CASE FOR INTERNATIONAL PROTECTION?

050 Linking The Optical And Chemical Properties Of Dissolved Organic Matter In Natural Waters

Chair(s): Christopher Osburn, closburn@ncsu.edu
 Colin Stedmon, cost@aqu.dtu.dk
 Robert G.M. Spencer, rspencer@whrc.org

Location: Ballroom A

- 14:00 Stubbins, A.: BIOGEOCHEMICAL INTERPRETATIONS OF COLORED DISSOLVED ORGANIC MATTER OPTICAL SIGNATURES
- 14:30 Jaffe, R.; Maie, N.; Yamashita, Y.; Cooper, W.; Dittmar, T.; Dodds, W.; Jones, J.; Myoshi, T.; Podorski, D.; Watanabe, A.: DISSOLVED ORGANIC MATTER IN HEADWATER STREAMS: COMPOSITIONAL VARIABILITY ACROSS CLIMATIC REGIONS.
- 14:45 Cammer, S. S.; Canuel, E. A.; Reay, W. G.: USING EXCITATION EMISSION SPECTROSCOPY TO ASSESS THE POTENTIAL IMPACT OF RIVERINE DISSOLVED ORGANIC MATTER ON BIOGEOCHEMICAL PROCESSES
- 15:00 Osburn, C. L.: CALIBRATING OPTICAL AND CHEMICAL PROXIES FOR TERRESTRIAL DISSOLVED ORGANIC MATTER IN ESTUARIES AND COASTAL WATERS
- 15:15 Shank, G. C.; Liu, Q.: CDOM DISTRIBUTION AND PHOTOREACTIVITY IN NORTHERN GULF OF MEXICO SHELF WATERS DURING SUMMER 2011
- 15:30 Bergamaschi, B. A.; Krabbenhoft, D. P.; Aiken, G. R.; Patton, E.; Rumbold, D. G.; Orem, W. H.: TIDAL TRANSPORT OF TOTAL MERCURY, METHYLMERCURY, AND DISSOLVED ORGANIC CARBON FROM A MANGROVE MARSH MEASURED USING CDOM FLUORESCENCE
- 15:45 Mannino, A.; Dyda, R. Y.; Hernes, P. J.: BIOGEOCHEMICAL AND OPTICAL ANALYSIS OF COASTAL DOM FOR SATELLITE RETRIEVAL OF TERRIGENOUS DOM IN THE U.S. MIDDLE ATLANTIC BIGHT

060 Marine Gas Hydrate Deposits: Research, Monitoring Strategies And Present-Day Knowledge

Chair(s): Ray Highsmith, ray@olemiss.edu
 Laura Lapham, laura.lapham@biology.au.dk
 Leonardo Macelloni, lmacello@olemiss.edu
 Marta Torres, mtorres@coas.oregonstate.edu

Location: Ballroom F

- 14:00 Solomon, E. A.: CONSTRAINING METHANE DYNAMICS AT GAS HYDRATE SYSTEMS THROUGH LONG-TERM INTERDISCIPLINARY MONITORING AT CABLED OBSERVATORIES
- 14:30 de Beer, D.; Boetius, A.; Feseker, T.; Foucher, J.; German, C.; Mienert, J.; Wenzhoefer, F.; Olu, K.: ONE YEAR OBSERVATIONS ON MUD VOLCANISM OF A COLD SEEP, THE HAKON MOSBY MUD VOLCANO (HMMV)
- 14:45 Levin, L. A.; Mendoza, G. M.; Grupe, B.; Gonzalez, J.; Rouse, G.; Pasulka, A.; Orphan, V.: THE CARBONATE NATION: LIVING ROCKS ASSOCIATED WITH GAS HYDRATES

- 15:00 Biddle, J. E.; Lloyd, K. G.; Lapham, L.; Twing, K. I.; Martin, C.; Underwood, S.; Teske, A. P.: ARCHAEL DIVERSITY PATTERNS IN RELATION TO HYDROCARBON SEEPAGE IN THE GULF OF MEXICO
- 15:15 Pohlman, J. W.; Kessler, J. D.; Maue, C.; Ruppel, C. D.; Brothers, L. L.; Yvon-Lewis, S. A.; Sparrow, K.; Bergeron, E.; Worley, C.: METHANE FLUXES TO THE ATMOSPHERE OVER THAWING PERMAFROST IN THE SHALLOW BEAUFORT SEA, ALASKA
- 15:30 Wilson, R. M.; Lapham, L. L.; Martens, C.; Chanton, J. P.; Mendlovitz, H.; Sleeper, K.; Riedel, M.: TIME-SERIES METHANE MONITORING IN GASSY SEDIMENTS AND THE BENTHIC BOUNDARY LAYER
- 15:45 Scranton, M. I.; Guida, V.; Gong, D.; Kessler, J.; Rona, P.: METHANE VENTING IN THE HUDSON CANYON: HYDRATE DESTABILIZATION OR SOMETHING ELSE?

061 Coastal Oceanography Through Integrated Data Analysis

Chair(s): Yonggang Liu, yliu@marine.usf.edu

Ryan M. McCabe, rmccabe@ocean.washington.edu

Location: Ballroom C

- 10:30 Li, C.; Rabalais, N.; Chen, C.; Lin, H.; Liu, B.; Gibson, B.: COASTAL CURRENT AND FLUSHING OF LOUISIANA BAYS: INFORMATION FROM TIDAL PASS DEPLOYMENTS, OFFSHORE WAVCIS/LUMCON STATIONS, AND SIMULATIONS USING FVCOM
- 10:45 Washburn, L.; Dellaripa, N. W.; Brzezinski, M. A.: WATER MASS SUBDUCTION AND EDDY EFFECTS ON PHYTOPLANKTON DISTRIBUTIONS IN THE SANTA BARBARA CHANNEL, CALIFORNIA
- 11:00 Roughan, M.; Morris, B. D.; Schaeffer, A.: USING HIGH-RESOLUTION OCEAN TIMESERIES DATA TO GIVE CONTEXT TO LONG TERM HYDROGRAPHIC SAMPLING OFF PORT HACKING, NSW, AUSTRALIA.
- 11:15 Huang, D.; Zeng, D.; Ni, X.: LONG-SHORE AND CROSS-SHORE CIRCULATION OBSERVED BY AN ARRAY OF ADCP MOORING AND THEIR RESPONSE TO WIND IN THE SOUTHERN EAST CHINA SEA DURING WINTER 2008
- 11:30 Ebuchi, N.; Fukamachi, Y.; Ohshima, K. I.; Wakatsuchi, M.: MONITORING OF THE SOYA WARM CURRENT USING HF OCEAN RADARS, SATELLITE ALTIMETRY, COASTAL TIDE GAUGES, AND BOTTOM-MOUNTED ADCPS
- 11:45 Liu, Y.; Weisberg, R. H.: SEASONAL VARIATION OF CURRENTS AND SEA LEVEL ON THE WEST FLORIDA SHELF AS REVEALED BY LONG-TERM MOORINGS
- 12:00 Suanda, S. H.; Barth, J. A.: OBSERVATIONS OF HIGH-FREQUENCY INTERNAL WAVES ACROSS THE OREGON INNER SHELF
- 12:15 Seegers, B. N.; Scholin, C. A.; Roberston, G. L.; Howard, M. D.; Seubert, E. L.; Caron, D. A.; Jones, B. H.: THE ROLE OF COASTAL OCEAN DYNAMICS IN THE INITIATION AND TRANSPORT OF HARMFUL ALGAL BLOOMS IN SOUTHERN CALIFORNIA

066 Western Pacific Ocean Circulation And Air-Sea Interactions

Chair(s): Fan Wang, fwang@qdio.ac.cn

Kentaro Ando, andouk@jamstec.go.jp

Dongchull Jeon, dcjeon@kordi.re.kr

Janet Sprintall, jsprintall@ucsd.edu

Sophie Cravatte, sophie.cravatte@ird.fr

Location: Ballroom J

- 08:00 Hu, D.: REVIEW OF STUDY ON OCEAN CIRCULATION IN THE WESTERN PACIFIC AND ITS ROLE IN CLIMATE—PAST, PRESENT AND FUTURE
- 08:30 Chen, S.; Qiu, B.: MULTI-DECADAL SEA LEVEL AND GYRE CIRCULATION VARIABILITY IN THE NORTHWESTERN TROPICAL PACIFIC OCEAN
- 08:45 JEON, D.; KIM, E.: NEW FINDING OF THE NORTH EQUATORIAL UNDERCURRENT IN THE WESTERN PACIFIC OCEAN
- 09:00 Wang, F.; Hu, D.: VARIATIONS OF CURRENTS OFF MINDANAO FROM A SUBSURFACE ADCP MOORING

- 09:15 Yuji Kashino, Y.; Saulo Soares, .; Li Yao, .; Wei Chuanjie, .; Lukijanto, .; Gentio Harsono, .; Valeriano Borja, .: ON-BOARD OBSERVATIONS IN THE SOUTHERNMOST PHILIPPINE SEA IN SUMMER 2011 - RESULTS FROM R/V MIRAI CRUISE, MR11-06 -
- 09:30 Villanoy, C. L.; Cabrera, O.; Alabia, I.; Gordon, A.; Flament, P.: CHLOROPHYLL DISTRIBUTIONS IN THE ORIGIN OF THE KUROSHIO
- 09:45 Li, Y.; Wang, F.: SPREADING, CONVERSION, AND SPICINESS VARIATION OF THE NORTH PACIFIC TROPICAL WATER IN THE PHILIPPINE SEA
- 10:30 Kessler, W. S.; Sophie Cravatte, S.: CIRCULATION OF THE CORAL SEA FROM MAPPED ARGO TRAJECTORIES
- 10:45 Hasegawa, T.; Ando, K.; Mizuno, K.; Lukas, R.; Taguchi, B.; Sasaki, H.; Miyama, T.; Luo, J.: COASTAL UPWELLING AND UPPER OCEAN CIRCULATION IN THE BISMARCK SEA - OBSERVATION AND MODEL SIMULATION -
- 11:00 Richards, K. J.; Kashino, Y.; Natarov, A.: MIXING IN THE WESTERN EQUATORIAL PACIFIC AND ITS MODULATION BY ENSO
- 11:15 Zilberman, N. V.; Roemmich, D. H.; Gille, S. T.: THE MEAN AND THE TIME-VARIABILITY OF THE MERIDIONAL OVERTURNING CIRCULATION IN THE SOUTH PACIFIC OCEAN
- 11:30 Alexander, M. A.; Deser, C.; Capotondi, A.; Scott, J. D.: THE INFLUENCE OF VARIABILITY IN THE NORTH PACIFIC AND TROPICAL WEST PACIFIC ON ENSO
- 11:45 Shinoda, T.; Hurlburt, H. E.; Metzger, E. J.: ANOMALOUS OCEAN CIRCULATION IN THE WESTERN TROPICAL PACIFIC ASSOCIATED WITH LA NINA MODOKI
- 12:00 Cancelled
- 12:15 Sun, Y.; Sun, D.; Wu, L.: EVIDENCE FROM CLIMATE MODELS FOR A ROLE OF ENSO EVENTS IN SHAPING THE CLIMATOLOGICAL SIZE AND TEMPERATURE OF THE WARM-POOL
- 14:00 Tseng, W. L.; Tsuang, B. J.; Keenlyside, N.; Hsu, H. H.; Tu, C. Y.: OCEAN-ATMOSPHERE INTERACTION KEY ASPECT OF THE MADDEN-JULIAN OSCILLATION
- 14:15 Oey, L. Y.; Chang, Y. L.: THE PHILIPPINES-TAIWAN OSCILLATION: MONSOON-LIKE INTERANNUAL OSCILLATION OF THE SUBTROPICAL-TROPICAL WESTERN PACIFIC WIND SYSTEM AND ITS IMPACT ON THE OCEAN
- 14:30 Vélez-Belchí, P.; Centurioni, L. R.; Lee, D. K.; Jan, S.; Kim, Y. Y.; Niiler, P. P.: EDDY-INDUCED KUROSHIO INTRUSIONS IN THE EAST CHINA SEA SHELF
- 14:45 Liu, Q. Y.; Lu, J. Y.; Jia, Y. L.; Xu, L. X.: KUROSHIO DEFORMATION IN THE LUZON STRAIT AND ITS DYNAMIC EFFECT
- 15:00 Susanto, R. D.; Fang, G.; Adi, T. R.; Wei, Z.: SEASONAL VARIABILITY OF SOUTH CHINA SEA THROUGHFLOW
- 15:15 Zhou, H.: VARIATIONS OF THE NORTH EQUATORIAL CURRENT BIFURCATION INDUCED BY MESOSCALE EDDIES
- 15:30 Solera, L.; Villanoy, C.; Sprintall, J.: POTENTIAL PERTURBATION OF SEA SURFACE HEIGHTS IN THE INTERIOR OF THE PHILIPPINE ARCHIPELAGO BY ROSSBY WAVES
- 15:45 Cabrera, O.; Villanoy, C.: BARRIER LAYER DYNAMICS IN THE EASTERN SULU SEA

067 Altered Estuaries: Processes, Restoration, And Management

Chair(s): Guan-hong Lee, ghlee@inha.ac.kr

Aswani K. Volety, avolety@fgcu.edu

Timothy M. Dellapenna, dellapet@tamug.edu

Location: Room 150

- 10:30 Lee, G.: ALTERED ESTUARIES: OVERVIEW
- 10:45 Lee, C.; Cho, H.: AN INTEGRATED APPROACH TO DEVELOP ENVIRONMENTAL MANAGEMENT STRATEGY FOR THE ESTUARIES WITH RIVER-MOUTH BARRAGES IN THE REPUBLIC OF KOREA
- 11:00 RHEW, H.; Lee, G.: MAGNITUDE-FREQUENCY RELATIONSHIPS BETWEEN RAINFALL AND EXTREME FRESHWATER DISCHARGE IN THE ALTERED YEONGSAN ESTUARY, KOREA

- 11:15 Kim, J. W.; Woo, S. B.; Yoon, B. I.; Lee, D. W.: SPATIAL AND TEMPORAL PATTERN OF RIVER FLOW AND VERTICAL STRATIFICATION ACCORDING TO SEA GATE OPERATION IN THE YEOUNGSAN RIVER, SOUTH KOREA
- 11:30 Park, H.; Lee, G.: CHANGE ON THE HYDROPHIC AND CURRENT PROFILES DUE TO FRESHWATER DISCHARGE IN THE ALTERED YEONGSAN ESTUARY, KOREA
- 11:45 Choi, H. J.; Kim, T. H.; Lee, H. J.; Woo, J. S.; Khim, J. S.: INFLUENCE OF FRESHWATER INFLOWS ON THE NUTRIENT DYNAMICS AND WATER QUALITY IN YEONGSAN RIVER ESTUARY, KOREA
- 12:00 Choi, T. J.; Lee, J.; An, S.: OCCURRENCE OF HYPOXIA AND ROLE OF OXYGEN DEMAND IN WATER COLUMN AND SEDIMENT IN YEONGSAN ESTUARY
- 12:15 Cho, C. W.; Woo, S. B.; Song, Y. S.; Kim, T. I.; Choi, H. S.; Han, J. S.: MODELING OF HYPOXIA FORMATION IN YEONGSAN RIVER ESTUARY, KOREA (USING 3-D MODEL)
- 14:00 Dellapenna, T. M.: WHERE HAVE ALL THE OYSTERS GONE: NATURAL AND ANTHROPOGENICALLY CAUSES FOR DRASTIC OYSTER REEF LOSSES IN GULF OF MEXICO ESTUARIES
- 14:15 Turner, R. E.; Kearney, M.; Riter, A.: RIVER DIVERSIONS IN THE MISSISSIPPI DELTA MAKE MARSHES MORE VULNERABLE
- 14:30 Wilkerson, E.; Dugdale, R.; Parker, A.; Marchi, A.; Blaser, S.; Taberski, K.: ALTERED SAN FRANCISCO ESTUARY: HOW WASTE WATER TREATMENT PRACTICES NEGATIVELY INFLUENCE THE PELAGIC FOOD WEB
- 14:45 Lee, J.; An, S.: EFFECT OF SUBMERGENCE AND SALINITY ON THE DISTRIBUTION OF *PHRAGMITES AUSTRALIS* IN TIDAL MARSHES OF THE REPUBLIC OF KOREA
- 15:00 Kroeger, K. D.; Fernandez, C.; Russoniello, C.; Andres, A. S.; Bratton, J. F.; Bohlke, J. K.; Konikow, L.; Michael, H. A.: DENITRIFICATION AND NITROGEN LOADING AT THE AQUIFER/ESTUARY INTERFACE: THE ROLE OF COASTAL HYDROLOGY AND IMPLICATIONS FOR MANAGEMENT OF NITROGEN LOADS
- 15:15 Genet, H.; Mortazavi, B.: INFLUENCE OF RIVER FLOW VARIABILITY ON PRIMARY PRODUCTION, RESPIRATION AND NET ECOSYSTEM METABOLISM IN A RIVER DOMINATED SUBTROPICAL ESTUARY
- 15:30 Romine, J. G.; Perry, R. W.; Blake, A.; Johnston, S.: EFFECTIVENESS OF A NON-PHYSICAL BARRIER ON ROUTE ENTRAINMENT OF MIGRATING JUVENILE SALMONIDS IN THE SACRAMENTO-SAN JOAQUIN RIVER DELTA.
- 15:45 Kane, T. L.: EXTREME NITROGEN ENRICHMENT SUPPRESSES N-FIXATION AND DRAMATICALLY ENHANCES DENITRIFICATION, BUT NOT ENOUGH

074 The Changing Ocean Carbon Cycle: Data Syntheses, Analyses And Modeling

Chair(s): Nicolas Gruber, nicolas.gruber@env.ethz.ch
Dorothee Bakker, D.Bakker@uea.ac.uk
Chris Sabine, Chris.Sabine@noaa.gov
Toste Tanhua, ttanhua@ifm-geomar.de

Location: Ballroom B

- 14:00 Gruber, N.; Clement, D.; Tanhua, T.; Ishii, M.; Key, R. M.; Rodgers, K.; Wanninkhof, R.; Hoppema, M.; Perez, F. F.; van Heuven, S.: TOWARD A GLOBAL DATA-BASED ESTIMATE OF THE OCEANIC ACCUMULATION OF ANTHROPOGENIC CO₂ SINCE THE WOCE ERA
- 14:15 Goodkin, N. E.; Levine, N. M.; Doney, S. C.; Wanninkhof, R.: IMPACTS OF TEMPORAL CO₂ AND CLIMATE TRENDS ON THE DETECTION OF OCEAN ANTHROPOGENIC CO₂ ACCUMULATION
- 14:30 Fay, A. R.; McKinley, G. A.: ESTIMATING GLOBAL OCEAN CARBON TRENDS USING IN-SITU PCO₂ OBSERVATIONS, 1981-2010
- 14:45 van Heuven, S.; Hoppema, M.; de Baar, H.; Meijer, H.: QUANTIFYING THE RATE OF STORAGE OF ANTHROPOGENIC CARBON IN THE SOUTH ATLANTIC OCEAN. A WATERMASS-BASED ESTIMATE FROM 35 YEARS OF INTERIOR OCEAN CARBON DATA.

- 15:00 Quay, P.; Sonnerup, R.: DISTINGUISHING BETWEEN ANTHROPOGENIC CO₂ UPTAKE AND ACCUMULATION IN THE OCEAN BASED ON ¹³C MEASUREMENTS
- 15:15 Majkut, J. D.; Sarmiento, J. L.: ESTIMATING GLOBAL AIR-SEA CO₂ FLUX BY INVERTING SURFACE MEASUREMENT DATABASES.
- 15:30 Gao, Z.; Chen, L.; Sun, H.: COMPARISON OF DECADAL CHANGES IN THE CARBON SINK AND POTENTIAL RESPONSES TO CLIMATE CHANGE IN THE WESTERN ARCTIC OCEAN AND THE SOUTHERN OCEAN
- 15:45 Wallace, D.: SHALLOW-DEPTH CALCIUM CARBONATE DISSOLUTION: FACT OR FICTION?

075 Optics And Acoustics In Turbulent Sediment Suspensions

Chair(s): Paul Hill, paul.hill@dal.ca
Peter Traykovski, ptraykovski@whoi.edu
David Bowers, oss063@bangor.ac.uk
Wayne Slade, wayne.slade@gmail.com

Location: Room 150

- 08:00 Boss, E. S.: OPTICS AND ACOUSTICS OF SEDIMENT SUSPENSIONS
- 08:30 Davies, E. J.; Graham, G. W.; Nimmo-Smith, W. A.: TOWARDS UNDERSTANDING PARTICLE SIZE DISTRIBUTIONS DERIVED FROM LASER DIFFRACTION
- 08:45 Jackson, S. E.; Jago, C. F.; Old, C.: TURBULENCE CONTROL OF FLOC SIZE IN THE RIVER-ESTUARY TRANSITION ZONE (RETZ)
- 09:00 Sherwood, C. R.; Boss, E. S.: NEAR-BOTTOM PROFILES OF OPTICAL AND ACOUSTIC PROPERTIES OF SUSPENDED PARTICLES AND TURBULENCE
- 09:15 Bourrin, E.; Durreiu de Madron, X.; Mahiouz, K.; Beguery, L.; Houpert, L.: SEDIMENT RESUSPENSION OBSERVED BY AN OPTICAL SLOCUM GLIDER DURING A TYPICAL MEDITERRANEAN WINTER STORM
- 09:30 Moate, B. D.; Thorne, P. D.: INTERPRETING ACOUSTIC BACKSCATTER FROM SUSPENDED SEDIMENTS OF DIFFERENT AND MIXED MINERALOGICAL COMPOSITION
- 09:45 Sottolichio, A.; Hurther, D.; Laguionie, P.: SEDIMENT CONCENTRATION IN ESTUARINE FLUID MUD BY ACOUSTIC DOPPLER AND LASER OPTIC MEASUREMENTS

078 The Fate Of Discharged Hydrocarbons From The Macondo Reservoir And The Impacts To Gulf Ecosystems

Chair(s): Joel Kostka, jkostka@fsu.edu
Markus Huettel, mhuettel@fsu.edu
Ian MacDonald, imacdonald@fsu.edu
Samantha Joye, mandyjoye@gmail.com

Location: Ballroom E

- 08:00 MacDonald, I. R.: FATE AND EFFECT OF THE MACONDO HYDROCARBON DISCHARGE
- 08:30 Reddy, C. M.: FROM PIPE TO THE BEACH: WEATHERING OF MACONDO WELL OIL
- 08:45 Hazen, T. C.: ECOGENOMICS OF THE DEEPWATER HORIZON SPILL
- 09:00 Redmond, M. C.; Tavormina, P. L.; Orphan, V. J.; Valentine, D. L.: HYDROCARBON-OXIDIZING BACTERIA IN DEEP WATER OIL AND GAS PLUMES AFTER THE DEEPWATER HORIZON OIL SPILL
- 09:15 Crespo-Medina, M.; Vossmeier, A.; Hunter, K.; Battles, J. J.; Montoya, J. P.; Asper, V.; Diercks, A.; Villareal, T.; Joye, S. B.: WATER COLUMN METHANE DYNAMICS IN RESPONSE TO THE DEEPWATER HORIZON HYDROCARBON SPILL
- 09:30 Yang, T.; Nigro, L. M.; Gutierrez, J. A.; D'Ambrosio, L.; Joye, S. B.; Highsmith, R.; Teske, A. P.: WATER COLUMN BACTERIAL COMMUNITY STRUCTURE NEAR THE MACONDO WELLHEAD BEFORE, DURING AND AFTER THE DEEPWATER HORIZON BLOWOUT
- 09:45 Montoya, J. P.; Subramaniam, A.; Crespo-Medina, M.; Bracco, A.; Villareal, T. A.; Joye, S. B.: THE DEEPWATER HORIZON OIL SPILL AND PELAGIC FOODWEBS IN THE NORTHERN GULF OF MEXICO: WHAT DO ELEMENTS AND ISOTOPES TELL US ABOUT OIL, PLUMES, AND ZOOPLANKTON?

- 10:30 Jeffrey, W. H.; Rosanbalm, J. L.; Baskerville, T. C.; Chauhan, A.; Cherrier, J.; Ederington-Hagy, M. C.: THE EFFECT OF OIL AND DISPERSED OIL ON MICROBIAL PRODUCTION AND CARBON FLOW
- 10:45 Grubbs, R. D.; Gelsleichter, J. A.; Heithaus, M. R.; Gastrich, K.; Cotton, C. F.: DEMERSAL FISH ASSEMBLAGES ASSOCIATED WITH DESOTO CANYON AND THE CONTINENTAL SLOPE OF THE EASTERN GULF OF MEXICO RELATIVE TO THE DEEPWATER HORIZON OIL SPILL
- 11:00 Hollander, D. J.; Flower, B.; Larson, R.; Brooks, G.; Romero, I.; Zinzola, N.; Means, Z.: DEPOSITION, DISTRIBUTION AND FATE OF MACONDO OIL IN THE SEDIMENTS OF THE NORTHEASTERN GULF OF MEXICO
- 11:15 Kostka, J. E.; Huettel, M.; Prakash, O.; Green, S.; Kaba, J.; Hagan, C.; Wells, B.; Overholt, W.; Canion, A.: THE FATE OF DEEPWATER HORIZON OIL IN FLORIDA SANDY BEACHES: CAN OIL-EATING MICROBES HELP TO CLEAN UP THE MESS?
- 11:30 Newton, R. L.; Alm, E. W.; Huse, S. M.; Morrison, H. G.; Sogin, M. L.; McLellan, S. L.: BEACH SAND MICROBIAL COMMUNITY VARIATION AS AN INDICATOR OF ECOSYSTEM DISTURBANCE
- 11:45 Mortazavi, B.; Horel, A.; Sobczyk, P.; Powell, J.; Beazley, M.: MARINE ORGANIC SUBSTRATES ENHANCE MICROBIAL DEGRADATION OF MACONDO (MC252) CRUDE OIL; EVIDENCE FROM STABLE ISOTOPES AND BIOMARKERS
- 12:00 Fredericq, S.; Schmidt, W. E.: EFFECTS OF THE APRIL 2010 DEEPWATER HORIZON CRUDE OIL SPILL ON OFFSHORE SEAWEED DIVERSITY IN THE NW GULF OF MEXICO
- 12:15 Felder, D. L.; Chistoserdov, A. Y.; Bracken-Grissom, H. D.; Thoma, B. P.; Palacios-Theil, E.; Crandall, K. A.: ASSESSMENT OF DEEPWATER HORIZON SPILL IMPACTS ON BENTHIC DECAPOD CRUSTACEANS, 60-2000M

095 Detection And Analysis Of Mesoscale And Submesoscale Eddies From Observational Data And Numerical Products

Chair(s): Changming Dong, cdong@atmos.ucla.edu
 Sung Yong Kim, syongkim@mpl.ucsd.edu
 Pablo Sangra, psangra@dfis.ulpgc.es
 Milena Veneziani, milena@ucsc.edu

Location: Room 251

- 10:30 Veneziani, M.; Dong, C.: AN OVERVIEW OF TECHNIQUES USED TO DETECT AND CHARACTERIZE OCEANIC EDDIES
- 11:00 Isern-Fontanet, J.; González-Haro, C.: IDENTIFICATION OF VORTICES AND RECONSTRUCTION OF THEIR DYNAMICS FROM COMBINED SSH AND SST SATELLITE OBSERVATIONS
- 11:15 Pelland, N. A.; Eriksen, C. C.; Lee, C. M.: SUBTHERMOCLINE EDDIES OVER THE WASHINGTON CONTINENTAL SLOPE AS OBSERVED BY SEAGLIDER, 2003-09
- 11:30 Chen, G.; Wang, D.; Chu, X.: EDDY-INDUCED HEAT AND SALT TRANSPORTS IN THE SOUTH CHINA SEA
- 11:45 Lindo-Atichati, D.; Muller-Karger, F. E.; Goni, G.; Sangrà, P.; Muhling, B. A.; Bringas, F.; Habtes, S.; Lamkin, J.; Roffer, M. A.: EFFECT OF MESOSCALE EDDIES AND CHLOROPHYLL ON LARVAL FISH ASSEMBLAGES IN THE GULF OF MEXICO: IMPLICATIONS FOR ATLANTIC BLUEFIN TUNA (*THUNNUS THYNNUS*)
- 12:00 Archer, M. R.; Martinez-Pedraja, J.; Shay, L. K.; Parks, A. B.: APPLICATION OF HIGH FREQUENCY (HF) RADAR AND THE OKUBO-WEISS PARAMETER TO ANALYZE SUBMESOSCALE VARIABILITY IN THE FLORIDA CURRENT
- 12:15 Dong, C.; Liu, Y.; McWilliams, J.; Chen, D.: HEAT AND FRESHWATER TRANSPORTS BY EDDY MOVEMENTS

099 Temporal And Spatial Scales Of Sea Surface Temperature Variability And Its Impacts On Air-Sea Interactions, Weather, And Climate

Chair(s): Gary A. Wick, gary.a.wick@noaa.gov
 Chelle Gentemann, gentemann@remss.com
 Andrew T. Jessup, jessup@apl.washington.edu
 Carol Anne Clayson, clayson@met.fsu.edu

Location: Ballroom F

- 08:00 Minnett, P. J.: VARIABILITY OF THE SEA-SURFACE TEMPERATURE: AN OVERVIEW
- 08:30 Kaiser-Weiss, A. K.; Minnett, P. J.; Donlon, C. J.: SCALES OF SST VARIABILITY IN GHRSTS DATA
- 08:45 Steele, M.; Rigor, I.; Ermold, W.: THE FIRST IN SITU HIGH RESOLUTION SST OBSERVATIONS IN THE ARCTIC OCEAN
- 09:00 Zhu, X.; Minnett, P. J.; Hendee, J. C.; Manfrino, C.; Berkemans, R.: COASTAL DIURNAL WARMING
- 09:15 Sandery, P. A.; OKane, T. J.; Brassington, G. B.; Freeman, H. M.: ANALYZING SST CHANGES IN RESPONSE TO EXTREME WEATHER
- 09:30 Reynolds, R. W.; Chelton, D. B.; Menemenlis, D.: OBJECTIVE DETERMINATION OF FEATURE RESOLUTION IN AN SST ANALYSIS
- 09:45 Divakaran, P.; Brassington, G. B.; Walsh, K.: MESOSCALE QUASI-ZONAL ALIGNMENTS IN SST SPATIAL CORRELATION ELLIPSES, ITS LINK TO OCEAN 'STRIATIONS' AND NON-LINEAR AIR-SEA COUPLING

110 Dynamics Of Fjords And High Latitude Estuaries

Chair(s): Rocky Geyer, rgeyer@whoi.edu
 Parker MacCready, pmacc@uw.edu
 Lars Arneborg, laar@gvc.gu.se
 Fiama Straneo, fstraneo@whoi.edu

Location: 250

- 08:00 MacCready, P.; Sutherland, D. A.; Geyer, W. R.; Banas, N. S.: IS BAROCLINIC EXCHANGE THROUGH STRAITS INCREASED BY ROUGH TOPOGRAPHY?
- 08:15 Sutherland, D. A.; Straneo, F.: DYNAMICS OF A MAJOR OUTLET GLACIER FJORD SYSTEM: CIRCULATION AND VARIABILITY IN SERMILIK FJORD, SE GREENLAND
- 08:30 Boldt, K. V.; Hallet, B.; Nittrouer, C. A.; Barker, A. D.: RAPID GLACIAL-MARINE SEDIMENTATION AND EFFECTS ON GLACIER MELTING AND FJORD HYDROGRAPHY: COLUMBIA GLACIER FJORD, AK
- 08:45 Alexander, C. R.; Windom, H. L.; Naidu, S. A.: ESTUARINE PROCESSES IN THE ANADYR SYSTEM, CHUKOTKA, RUSSIA
- 09:00 Hudson, B.; Overeem, I.; McGrath, D.; Syvitski, J. P.: TOWARDS UNDERSTANDING THE DYNAMICS OF FRESHWATER AND SEDIMENT FLUX FROM THE GREENLAND ICE SHEET TO THE COAST WITH MODIS IMAGERY AND OCEANOGRAPHIC SURVEYS
- 09:15 Inall, M. E.; Cottier, F. R.; Murray, T.; Scharrer, K.; Sole, A.: TURBULENT MIXING AND HEAT DELIVERY IN A SE GREENLAND FJORD: THE ROLE OF PSW.
- 09:30 Jackson, R. H.; Straneo, F.; Sutherland, D. A.: CIRCULATION AND MIXING IN GREENLAND'S GLACIAL FJORDS INFERRED FROM PATHWAYS AND TRANSFORMATION OF GLACIALLY MODIFIED WATERS
- 09:45 Arneborg, L.; Staalstrom, A.; Broström, G.; Liljebadh, B.: MIXING IN FJORDS AND THE RELATION BETWEEN LOCAL ENERGY DISSIPATION AT A FJORD SILL AND RADIATED INTERNAL TIDES

115 Western Antarctic Ocean Ecosystems: Chemical, Physical, And Biological Connections

Chair(s): Matthew M. Mills, mmmills@stanford.edu
Ken Mankoff, kmankoff@ucsc.edu
Ted Maksym, emak@bas.ac.uk

Location: Room 151

- 08:00 Stammerjohn, S. E.: AN OVERVIEW OF ICE-OCEAN-ECOSYSTEM INTERACTIONS AND CHANGES IN THE WESTERN ANTARCTIC OCEAN
- 08:30 Zhou, M.; Zhu, Y.; Measures, C.; Hatta, K.; Selph, K. E.; Charette, M.; Gille, S.; Frants, M.; Jiang, M.; Mitchell, B. G.: MESOSCALE CIRCULATION ON THE SHELF SLOPE REGION NORTH OF ELEPHANT ISLAND, SOUTHERN DRAKE PASSAGE, AND ITS IMPACTS ON IRON TRANSPORT
- 08:45 Alderkamp, A. C.; Van Dijken, G. L.; Lowry, K. E.; Schofield, O.; Sherrill, R. M.; Yager, P. L.; Arrigo, K. R.: IRON AND LIGHT EFFECTS ON PHYTOPLANKTON PRIMARY PRODUCTIVITY IN THE AMUNDSEN SEA (ANTARCTICA)
- 09:00 Garzio, M. J.; Kahl, L. A.; Miles, T. N.; Coleman, K.; Schofield, O. M.: FEEDBACKS BETWEEN HIGH PHYTOPLANKTON BIOMASS AND THE IN SITU HEAT BUDGET
- 09:15 Smyth, R. L.; Neale, P. J.; Akan, C.; Tejada-Martinez, A. E.: INTERACTION BETWEEN VERTICAL MIXING AND UV INHIBITION OF PHYTOPLANKTON PHOTOSYNTHESIS IN THE ROSS SEA POLYNIA: A LARGE EDDY SIMULATION STUDY
- 09:30 Asher, E. C.; Dacey, J. W.; Mills, M. M.; Arrigo, K. R.; Tortell, P. D.: HIGH CONCENTRATIONS AND TURNOVER RATES OF DMS, DMSP, AND DMSO IN ANTARCTIC SEA ICE
- 09:45 Saenz, B. T.; Arrigo, K. R.; Stammerjohn, S. E.: CONSIDERATION OF VOID SPACE IN RIDGED SEA ICE AFFECTS ESTIMATES OF ICE THICKNESS AND ALGAL PRODUCTION

122 Climate Change Impacts On The High-Latitude Ocean

Chair(s): John Crusius, jcrusius@usgs.gov
Rob Campbell, rcampbell@pwwssc.org
Andrew Schroth, aschroth@usgs.gov

Location: Room 250

- 14:00 Wang, S.; Moore, J. K.; Bailey, D.; Lindsay, K.; Holland, M.: IMPACTS OF SEA ICE ON THE IRON CYCLE AND MARINE ECOSYSTEMS
- 14:15 Wang, Y.; Xue, H.; Cousins, S.; Chai, F.: A MODEL STUDY OF THE COPPER RIVER PLUME AND ITS EFFECT ON THE NORTHERN GULF OF ALASKA
- 14:30 Schroth, A. W.; Crusius, J.; Campbell, R. W.; Kroeger, K. D.; Osburn, C. L.; Hoyer, I. R.: SEASONAL FLUCTUATION AND ESTUARINE REMOVAL OF RIVERINE IRON FLUXES TO THE GULF OF ALASKA
- 14:45 Crusius, J.; Schroth, A. W.; Campbell, R. W.: POSSIBLE CLIMATE CHANGE IMPACTS ON SUPPLY OF MICRONUTRIENT IRON TO THE GULF OF ALASKA
- 15:00 Campbell, R. W.; Crusius, J.; Schroth, A.: LINKING MELTING ICE TO VARIABILITY IN THE COPPER RIVER PLUME AND COASTAL GULF OF ALASKA
- 15:15 Cross, J. N.; Mathis, J. T.; Bates, N. R.: CARBONATE MINERAL SUPPRESSION AND OCEAN ACIDIFICATION IN THE EASTERN BERING SEA
- 15:30 McNeil, B. I.; Sweeney, C.; Tagliabue, A.; Gibson, J.: ANTARCTIC COASTAL OCEAN ACIDIFICATION: THE LARGE DISPARITY BETWEEN NATURAL AND ANTHROPOGENIC DRIVERS, IMPACTS AND RESILIENCE
- 15:45 Saba, G. K.; Coleman, K.; Garzio, M. J.; Miles, T. N.; Jones, B. M.; Iglesias-Rodriguez, D.; Erickson, M.; Ducklow, H. W.; Schofield, O.: DIFFERENTIAL RESPONSE OF NATURAL PHYTOPLANKTON COMMUNITIES TO ENHANCED CARBON DIOXIDE (CO₂) ALONG THE WESTERN ANTARCTIC PENINSULA

123 Compound-Specific Amino Acid Analysis: A Rapidly Evolving Tool For Ecology, Paleoceanography And Biogeochemical Cycle Research

Chair(s): Matthew McCarthy, mccarthy@pmc.ucsc.edu
Brian Popp, popp@hawaii.edu
Marilyn Fogel, m.fogel@gl.ciw.edu

Location: Ballroom A

- 08:00 Fogel, M. L.: COMPOUND-SPECIFIC AMINO ACIDS: A RAPIDLY EVOLVING FIELD IN ECOLOGY, PALEOCEANOGRAPHY AND BIOGEOCHEMICAL CYCLE RESEARCH
- 08:15 Larsen, T.; Ventura, M.; Piatkowski, U.; Andersen, N.; McCarthy, M.: AMINO ACID ¹³C PATTERNS AS BIOMARKERS OF BIOSYNTHETIC ORIGIN IN MARINE ECOSYSTEMS
- 08:30 Arthur, K. E.; Kelez, S.; McCarthy, M. D.; Lehman, J.; Larsen, T.; Popp, B. N.: ISOTOPIC CLUES TO THE BIOSYNTHETIC ORIGIN OF ESSENTIAL AMINO ACIDS IN HIND-GUT FERMENTING SEA TURTLES
- 08:45 Della Ripa, L. A.; Landry, M. R.; Décima, M.; Bradley, C. J.; Popp, B. N.: PREDATOR-PREY SIZE RELATIONSHIPS IN PELAGIC ECOSYSTEMS: TESTING THE 10:1 HYPOTHESIS WITH MESOZOOPLANKTON FROM THREE REGIONS
- 09:00 Choy, C. A.; Drazen, J. C.; Popp, B. N.; Davison, P. C.; Flynn, A.; Hoffman, J. C.; McClain-Counts, J. P.; Miller, T. W.; Ross, S. W.; Sutton, T. T.: GLOBAL COMPARISON OF TROPHIC POSITIONS OF MESOPELAGIC MYCTOPHIDS AND STOMIIDS USING AMINO ACID NITROGEN ISOTOPIC ANALYSES
- 09:15 McMahon, K. W.; Berumen, M. L.; Thorrold, S. R.: FUNCTIONAL CONNECTIVITY OF CORAL REEF FISHES IN A RED SEA CORAL REEF SEASCAPE ASSESSED BY COMPOUND-SPECIFIC STABLE ISOTOPE ANALYSIS
- 09:30 Baker, D. M.; Fogel, M. L.: COMPOUND-SPECIFIC ANALYSES OF CORAL AMINO ACIDS SHED LIGHT ON A THREATENED SYMBIOSIS
- 09:45 Sherwood, O. A.; Batista, F. C.; Guilderson, T. P.; McCarthy, M. D.: AMINO ACID-SPECIFIC NITROGEN ISOTOPIC COMPOSITION OF DEEP-SEA CORALS: UNRAVELING PALEO-NITROGEN CYCLE INTERACTIONS
- 10:30 Chikaraishi, Y.; Ogawa, N. O.; Takano, Y.; Tsuchiya, M.; Ohkouchi, N.: ACCURATE AND PRECISE DETERMINATION OF TROPHIC POSITION OF ORGANISMS BASED ON NITROGEN ISOTOPIC COMPOSITION OF AMINO ACIDS
- 10:45 Hoan, D. K.; Popp, B. N.; Drazen, J. C.; Hussey, N. E.; Kim, S. L.; Wallsgrave, N. J.; Humphreys, R. L.: COMPOUND SPECIFIC ISOTOPE ANALYSIS IN FOOD WEB STUDIES: THE NEED FOR ACCURATE ESTIMATES OF TROPHIC ENRICHMENT FACTORS
- 11:00 Revill, A. T.; Leeming, R.; Popp, B. N.; Robbins, J.; Halliday, I.: MODELLING NITROGEN TURN-OVER BETWEEN FISH PREDATOR AND PREY USING CSIA OF AMINO ACIDS
- 11:15 Décima, M.; Landry, M. R.; Popp, B. N.: USING LINEAR MIXED-EFFECTS (LME) MODELS TO DISTINGUISH BASELINE AND TROPHIC ¹⁵N ENRICHMENT: ENSO EFFECTS ON ZOOPLANKTON IN THE CALIFORNIA CURRENT
- 11:30 Ruiz-Cooley, R. J.; McCarthy, M. D.: PARADIGMS IN ESTIMATING TROPHIC POSITION USING COMPOUND-SPECIFIC ¹⁵N OF AMINO ACIDS: DATA FROM SPERM WHALES (PHYSETER MACROCEPHALUS), AN APEX PREDATOR
- 11:45 Bridoux, M. C.; Keil, R.; Ingalls, A. E.: DIVERSITY AND ENVIRONMENTAL DISTRIBUTION OF LONG CHAIN POLYAMINES: ROLE IN GLOBAL BIOGEOCHEMICAL CYCLES AND PALEOCEANOGRAPHIC RECONSTRUCTION
- 12:00 Calleja, M. L.; McCarthy, M. D.: CHANGES IN COMPOUND SPECIFIC ¹⁵N AMINO ACID SIGNATURES AND D/L RATIOS IN MARINE DISSOLVED ORGANIC MATTER INDUCED BY HETEROTROPHIC BACTERIAL REWORKING
- 12:15 Ohkouchi, N.; Chikaraishi, Y.; Ogawa, N. O.; Tsuchiya, M.; Yoshida, T.; Lindsay, D.; Fujiwara, Y.; Kitamura, M.; Yamamoto, H.; Fujikura, K.: ARE CHEMOSYNTHETIC COMMUNITIES SUPPORTED 100% BY NITROGEN FROM THE SUBSEAFLOOR? EVIDENCE FROM NITROGEN ISOTOPIC COMPOSITION OF AMINO ACIDS

125 Ocean Acidification In Coastal And Estuarine Environments

Chair(s): Simone Alin, simone.r.alin@noaa.gov
 Adrienne Sutton, adrienne.sutton@noaa.gov
 Francis Chan, chanft@science.oregonstate.edu
 George Waldbusser, waldbuss@coas.oregonstate.edu

Location: Ballroom G

- 10:30 [Feely, R. A.](#); Alin, S. A.; Juranek, L. W.; Hales, B.: IMPACTS OF UPWELLING, OCEAN ACIDIFICATION AND RESPIRATION ON ARAGONITE SATURATION ALONG THE WASHINGTON-OREGON-CALIFORNIA CONTINENTAL MARGIN IN LATE SUMMER 2011
- 10:45 [Russell, A. D.](#); Blanchette, C.; Chan, F.; Chavez, F.; Friedrich, G.; Hill, T. M.; McManus, M. A.; Menge, B.; Raimondi, P.; Sanford, E. D.: VARIABILITY IN PH, T, AND O₂ IN NEARSHORE WATERS OF THE OREGON-CALIFORNIA COAST AND IMPLICATIONS FOR COASTAL BENTHIC CALCIFIERS
- 11:00 [Hauri, C.](#); Gruber, N.; Vogt, M.; Doney, S. C.; Feely, R. A.; Lachkar, Z.; Leinweber, A.; McDonnell, A. M.; Munnich, M.; Plattner, G. K.: TRANSITION DECADES FOR OCEAN ACIDIFICATION IN THE CALIFORNIA CURRENT SYSTEM
- 11:15 [Cai, W.](#); Huang, W.; Hu, X.: HOW DO STORMS INFLUENCE THE INTERACTION BETWEEN COASTAL EUTROPHICATION AND OCEAN ACIDIFICATION?
- 11:30 [Shaw, E. C.](#); McNeil, B. I.; Tilbrook, B.; Matear, R.: BIOLOGICAL PROCESSES AMPLIFY THE IMPACTS OF OCEAN ACIDIFICATION IN COASTAL ECOSYSTEMS
- 11:45 [Reisdorph, S. C.](#); Mathis, J. T.; Monacci, N. M.; Danielson, S.; Sharman, L.: THE IMPACTS OF CLIMATE INDUCED DEGLACIATION ON OCEAN ACIDIFICATION IN GLACIER BAY, ALASKA: INSIGHTS FROM A NEW OCEAN TIME-SERIES
- 12:00 [Evans, W.](#); Mathis, J. T.; Winsor, P.; Whitedge, T. E.; Statscewich, H.: A REGRESSION MODELING APPROACH FOR STUDYING CARBONATE SATURATION STATES ON THE NORTHERN GULF OF ALASKA SHELF
- 12:15 [Phillips, J. C.](#); McKinley, G. A.: LEARNING FROM THE GLOBAL OCEANS: THE ECOLOGICAL IMPACTS OF CO₂ ACIDIFICATION OF LAKE SUPERIOR AND LAKE MICHIGAN
- 14:00 [McCorkle, D. C.](#); Weidman, C.; Cohen, A. L.: TIME SERIES OF PCO₂, PH AND ARAGONITE SATURATION STATE IN WAQUOIT BAY NATIONAL ESTUARINE RESEARCH RESERVE – "ESTUARINE ACIDIFICATION" AND SHELLFISH
- 14:15 [Manzello, D. P.](#); Enochs, I. C.; Melo, N.; Johns, L.; Graham, D.; Gledhill, D. K.; Hendee, J. C.; Wanninkhof, R.: OCEAN ACIDIFICATION REFUGIA OF THE FLORIDA REEF TRACT
- 14:30 [Hofmann, G. E.](#); Martz, T. R.; Matson, P. G.; Yu, P. C.: CONTEXTUALIZING CO₂ EXPOSURE EXPERIMENTS ON SEA URCHIN LARVAE WITH NATURAL VARIABILITY IN SEAWATER CHEMISTRY: STUDIES FROM TWO COASTAL REGIONS
- 14:45 [Melzner, E.](#); Thomsen, J.; Casties, I.; Pansch, C.; Wahl, M.; Gutowska, M. A.; Koertzing, A.: MYTILID MUSSELS SUCCESSFULLY COMPETE IN A CO₂ ENRICHED, ESTUARINE COASTAL HABITAT
- 15:00 [Brunner, E. L.](#); Waldbusser, G. G.; Hales, B.; Haley, B. A.; Prah, F. G.: LARVAL CRASSOSTREA GIGAS CALCIFICATION, BIOCHEMISTRY AND GROWTH: TOWARD AN ENERGETIC MECHANISM FOR ACIDIFICATION IMPACTS
- 15:15 [Kline, D. L.](#); Schneider, K.; Teneva, L.; Miard, T.; Chai, A.; Marker, M.; Mitchell, B. G.; Dunbar, R.; Dove, S.; Hoegh-Guldberg, O.: A SHORT-TERM IN SITU CO₂ ENRICHMENT EXPERIMENT AT HERON ISLAND (GBR) CAUSED DECLINING CALCIFICATION OF CRUSTOSE CORALLINE ALGAE
- 15:30 [Okazaki, R. R.](#); Towle, E. K.; Langdon, C.; Cuning, R.; Winter, R.: EFFECTS OF TEMPERATURE AND PCO₂ EFFECTS ON TEN CARIBBEAN CORAL SPECIES.
- 15:45 [Filina, J.](#); Koch, M.; Peach, K.; Charneco, M.; Dutra, E.: ELEVATED TEMPERATURE/PCO₂ SYNERGISTIC EFFECTS ON TROPICAL MARINE MACROALGAE AND SEAGRASSES

133 Jets, Plumes, Eddies, And Waves As A Link Between Anisotropic Mesoscale Ocean Dynamics And General Circulation

Chair(s): Nikolai Maximenko, maximenk@hawaii.edu
 Niklas Schneider, nschneid@hawaii.edu
 Emanuele Di Lorenzo, edl@gatech.edu

Location: Room 251

- 14:00 [Maximenko, N.](#): OCEAN STRIATIONS AS A CROSSROAD OF MULTIPLE PHYSICS
- 14:15 [Di Lorenzo, E.](#); Belmadani, A.; Luo, H.; Melnichenko, O.; Schneider, N.; Maximenko, N. A.: THE EMERGENCE OF STRIATIONS IN THE NORTH PACIFIC CIRCULATION
- 14:30 [Melnichenko, O.](#); Maximenko, N.; Sasaki, H.: A CASE STUDY OF MULTIPLE, MIGRATING QUASI-ZONAL JETS IN THE EASTERN NORTH PACIFIC
- 14:45 [Straub, D. N.](#); Nadiga, B. T.: ZONAL JETS AND ENERGY CASCADES IN THE BAROCLINIC DOUBLE GYRE PROBLEM
- 15:00 [Galperin, B.](#); Sukoriansky, S.; Dikovskaya, N.: MEAN FLOWS AND WAVES IN BETA-PLANE TURBULENCE
- 15:15 [Ivanov, L. M.](#); Collins, C. A.; Margolina, T.: SELF-ORGANIZED SYSTEM OF JETS, WAVES AND EDDIES OFF CALIFORNIA
- 15:30 [Lilly, J. M.](#); Danioux, E.; Dohan, K.; Early, J. J.; Elipot, S.; Lelong, M. P.; Lumpkin, R.; Olhede, S. C.; Perez, R. C.; Sykulski, A.: GLOBAL ANALYSIS OF WAVES AND EDDIES IN SURFACE DRIFTER TRAJECTORIES
- 15:45 [Rypina, I. L.](#); Kamenkovich, I.; Berloff, P.; Pratt, L. J.: EDDY-INDUCED PARTICLE DISPERSION IN THE UPPER-OCEAN NORTH ATLANTIC

141 Improving The Representation Of Plankton Ecology In Earth System Models

Chair(s): Irina Marinov, imarinov@sas.upenn.edu
 Zhi-Ping Mei, zmei@umces.edu
 Tihomir Kostadinov, tiho@eri.ucsb.edu
 Anand Gnanadesikan, gnanades@ju.edu

Location: Ballroom D

- 08:00 [Moore, J. K.](#): INCORPORATING PLANKTON FUNCTIONAL GROUPS INTO EARTH SYSTEM MODELS
- 08:30 [Smith, S. L.](#); Pahlow, M.; Merico, A.; Wirtz, K. W.; Oschlies, A.: OPTIMALITY-BASED MODELING OF PLANKTON FOR USE IN EARTH-SYSTEM MODELING
- 08:45 [Talmay, D.](#); Blackford, J. C.; Hardman-Mountford, N. J.; Geider, R. J.: PHYTOPLANKTON RESOURCE ALLOCATIONS PREDICT ADAPTATION TO THE LIGHT ENVIRONMENT
- 09:00 [Armstrong, R. A.](#): GENERALIZED OPTIMALITY SOLUTIONS FOR NUTRIENT TRADEOFFS IN PHOTOACCLIMATION AND PHOTOSYNTHESIS IN GEIDER ET AL. (1998)-TYPE MODELS
- 09:15 [Glover, D. M.](#); Doney, S. C.; Lima, I.; Lindsay, K.: ASSESSING THE IMPACT OF OCEAN ACIDIFICATION ON MARINE PLANKTONIC CALCIFICATION USING SATELLITE ANALYSIS AND EARTH SYSTEM MODELING
- 09:30 [Galbraith, E. D.](#); Bianchi, D.; Carozza, D.: TESTING THE BIOGEOCHEMICAL IMPACTS OF UPPER TROPHIC LEVELS WITH A STRUCTURALLY EFFICIENT GLOBAL MODEL
- 09:45 Le Quéré, C.; Buitenhuis, E. T.; Moriarty, R.; [Vogt, M.](#): IMPORTANT ROLE OF PLANKTON DIVERSITY FOR GLOBAL OCEAN BIOGEOCHEMISTRY

142 Oceanic Fronts: Observations, Modeling, And Applications

Chair(s): Alex Horner-Devine, arhd@uw.edu
 Igor M. Belkin, igormbelkin@gmail.com
 Jonathan Nash, nash@coas.oregonstate.edu
 Peter C. Cornillon, pcornillon@gsu.uri.edu
 Dongxiao Wang, dxwang@scsio.ac.cn

Location: Room 251

- 08:00 [Vlahos, P.](#): BIOGEOCHEMISTRY OF FRONTAL ZONES
- 08:15 [Clayton, S. A.](#); Lin, Y. C.; Nagai, T.; Worden, A. Z.; Follows, M. J.: THE KUROSHIO FRONT: ECOLOGICAL BARRIER OR BLENDER?

- 08:30 Ryan, J. P.; McPhee-Shaw, E.: BOTTOM BOUNDARY LAYER SEPARATION IN A DENSITY FRONT GENERATED BY CANYON-TO-SHELF TRANSPORT
- 08:45 Johnston, S.; Rudnick, D.; Pallas-Sanz, E.: ELEVATED MIXING AT A FRONT
- 09:00 Cenedese, C.: LABORATORY EXPERIMENTS ON THE STABILITY OF TWO ADJACENT BUOYANT COASTAL CURRENTS
- 09:15 Graham, R. M.; de Boer, A. M.; Heywood, K. J.; Chapman, M. R.; Stevens, D. P.: DO SOUTHERN OCEAN FRONTS FOLLOW MERIDIONAL SHIFTS IN THE SOUTHERN HEMISPHERE WESTERLY WINDS?
- 09:30 White, B. L.; Helfrich, K. R.: GRAVITY CURRENT FRONTS IN STRATIFICATION: HYDRAULIC RESONANCE, NONLINEAR INTERNAL WAVES, AND ENERGETICS
- 09:45 Powell, J. R.; Ohman, M. D.; Davis, R. E.: THE USE OF AUTONOMOUS GLIDERS TO OBSERVE CROSS-FRONTAL CHANGES IN ZOOPLANKTON DISTRIBUTIONS, HABITAT CHARACTERISTICS, AND DIEL VERTICAL MIGRATION BEHAVIOR

152 Polar Marine Microbial Ecology

Chair(s): Rebecca J. Gast , rgast@whoi.edu
Robert W. Sanders, sanders1@temple.edu
David A. Caron, dcaron@usc.edu

Location: Ballroom H

- 14:00 Brum, J. R.; Ducklow, H. W.; Sullivan, M. B.: MARINE VIRAL SURVIVAL SKILLS: HOW OCEANIC MICROBIAL VIRUSES SUCCEED IN THE SOUTHERN OCEAN
- 14:15 Bowman, J. S.; Larose, C.; Vogel, T.; Deming, J. W.: EVIDENCE FOR STRONG SELECTIVE ENRICHMENT OF BACTERIA WITHIN FROST FLOWERS ON THE SURFACE OF ARCTIC SEA ICE
- 14:30 Price, L. M.; Steinberg, D. K.; Ducklow, H. W.: MICROZOOPLANKTON COMMUNITY STRUCTURE AND GRAZING IMPACT ALONG THE WESTERN ANTARCTIC PENINSULA
- 14:45 Menden-Deuer, S.; Lawrence, C. M.: HETEROTROPHIC PROTIST GRAZING RATE AND TEMPERATURE RESPONSE DURING AN ARCTIC PHYTOPLANKTON SPRING BLOOM
- 15:00 Sanders, R. W.; Gast, R. J.: CHANGES IN LATITUDE - BACTERIVORY BY MIXOTROPHIC PROTISTS IN THE ROSS AND BEAUFORT SEAS
- 15:15 Caron, D. A.: LOW TEMPERATURE CONSTRAINS GROWTH RATE BUT NOT GROWTH EFFICIENCY OR INSTANTANEOUS GRAZING RATE OF ANTARCTIC MICROZOOPLANKTON
- 15:30 Michel, C.; Niemi, A.; Wiktor, J.; Poulin, M.; Aslam, S.; Underwood, G. J.: BIOCHEMICAL COMPOSITION OF ARCTIC FIRST-YEAR SEA ICE: SCALES OF VARIABILITY AND IMPLICATIONS FOR CARBON CYCLING
- 15:45 Sackett, O. E.; Petrou, K.; Reedy, B.; DeGrazia, A.; Hill, R.; Doblin, M.; Beardall, J.; Heraud, P.; Ralph, P.: MACROMOLECULAR FLEXIBILITY: KEY TO SUCCESS IN THE SEA ICE ENVIRONMENT?

157 Understanding Plankton Biogeography By Putting Functional Traits On The Map

Chair(s): Andrew David Barton, adbarton@MIT.EDU
Elena Litchman, litchman@msu.edu
Andrew J. Pershing, andrew.pershing@maine.edu

Location: Ballroom D

- 14:00 Aksnes, D. L.; Fiksen, Ø.; Cao, F. J.: THE HALF SATURATION CONSTANT - A DYSFUNCTIONAL TRAIT?
- 14:15 Irwin, A. J.; Nelles, A. M.; Finkel, Z. V.: PHYTOPLANKTON NICHES ESTIMATED FROM FIELD DATA
- 14:30 Cancelled
- 14:45 Clark, J. R.; Daines, S. J.; Lenton, T. M.: CONTROLS ON PHYTOPLANKTON CELL SIZE DISTRIBUTIONS IN CONTRASTING PHYSICAL ENVIRONMENTS
- 15:00 O'Brien, C. J.; Vogt, M.; Gruber, N.; Peloquin, J.: GLOBAL COCCOLITHOPHORE DISTRIBUTIONS: THE ROLE OF INTERSPECIFIC NICHE DIVERSITY
- 15:15 Record, N. R.; Pershing, A. J.; Maps, F.: EMERGENT COPEPOD COMMUNITIES IN AN ADAPTIVE TRAIT-BASED MODEL

- 15:30 Stegert, C.; Ji, R.; Davis, C. S.: COMPARATIVE STUDY OF THE BIOGEOGRAPHY AND LIFE HISTORY OF NORTH ATLANTIC COPEPODS
- 15:45 Smith, C.; Ross, T.: TURBULENT DISSIPATION AND ITS ROLE IN COPEPOD BIOGEOGRAPHY.

161 Characterizing The Variability Of The Coastal Ocean And Its Implications

Chair(s): Sung Yong Kim, syongkim@mpl.ucsd.edu
Anthony Kirincich , akirincich@whoi.edu

Location: Ballroom C

- 14:00 Edwards, C. A.; Raghukumar, K.; Song, H.; Moore, A. M.; Goebel, N. L.; Broquet, G.; Veneziani, M.: FOUR-DIMENSIONAL VARIATIONAL DATA ASSIMILATION IN THE CALIFORNIA CURRENT SYSTEM AND ITS IMPACT ON ECOSYSTEM STATE VARIABLES
- 14:15 Hickey, B. M.; Geier, S. L.; Kachel, N. B.; Ramp, S. R.; Kosro, P. M.: ALONGCOAST STRUCTURE OF SEASONAL WATER PROPERTIES AND VELOCITY ON THE NORTHERN CALIFORNIA CURRENT SHELF
- 14:30 Rossi, V.; Feng, M.; Pattiaratchi, C.; Roughan, M.; Waite, A. M.: UPWELLING OVER NORTH-WESTERN AUSTRALIA: COMPLEX INTERACTIONS BETWEEN THE SURFACE AND SUB-SURFACE CIRCULATION IN THE LEEUWIN CURRENT.
- 14:45 Thompson, P. R.; Mitchum, G. T.: LOW FREQUENCY COASTAL SEA LEVEL ALONG THE AMERICAS
- 15:00 Brubaker, J. M.; Wilkerson, C. N.: SEA LEVEL ANOMALIES WITH A TIME SCALE OF WEEKS IN CHESAPEAKE BAY AND ALONG THE MID-ATLANTIC COAST
- 15:15 Schofield, O. M.; Kohut, J.; Saba, G.; Manderson, J.; Oliver, M.; Glenn, S. M.: PHYTOPLANKTON DYNAMICS AND BOTTOM WATER OXYGEN DURING AN EXCEPTIONAL BLOOM IN THE SUMMER OF 2011
- 15:30 Woodson, C. B.; Monismith, S. G.: SPATIO-TEMPORAL VARIABILITY IN CROSS-SHELF EXCHANGE AND MIXING ACROSS THE MONTEREY BAY, CA WITH IMPLICATIONS FOR CLIMATE CHANGE IMPACTS
- 15:45 Gargett, A. E.: UNTANGLING THE TIME-DEPENDENT MIXTURE OF FORCES GENERATING TURBULENCE IN SHALLOW SHELF SEAS

177 Gelatinous Plankton: Ecology, Physiology And Economic Impact In The Changing World Ocean

Chair(s): Anthony G. Moss, mossant@auburn.edu
Jamie Seymour, Assoc. Professor, jamie.seymour@jcu.edu.au

Location: Ballroom D

- 10:30 Doubleday, A. J.; Hopcroft, R. R.: DECADAL ESTIMATES OF PRODUCTIVITY BY PTEROPODS AND LARVACEANS IN THE COASTAL GULF OF ALASKA
- 10:45 Luo, J. Y.; Greer, A. T.; Guigand, C.; McClatchie, S.; Cowen, R. K.: THE FINE SCALE DISTRIBUTION OF SIPHONOPHORES AND A NARCOMEDUSAE BLOOM ACROSS A FRONT IN THE SOUTHERN CALIFORNIA BIGHT
- 11:00 Bi, H.; Cook, S.; Yu, H.; Benfield, M. C.; Houde, E.: FINE SCALE SPATIAL DISTRIBUTION OF SMALL CTENOPHORE, *MNEMIOPSIS LEIDYI*, IN CHESAPEAKE BAY
- 11:15 Fleming, N.; Houghton, J.; Newton, J.; Harrod, C.: TROPHIC COMPLEXITIES IN A DIVERSE GELATINOUS COMMUNITY: AN ISOTOPIC PERSPECTIVE.
- 11:30 Lilley, M. K.; Beggs, S. E.; Doyle, T. D.; Hobson, V. J.; Stromberg, K. H.; Hays, G. C.: GLOBAL PATTERNS OF EPIPELAGIC GELATINOUS ZOOPLANKTON BIOMASS: CURRENTLY ACCESSIBLE DATA FORMS A FRAGMENTED PICTURE
- 11:45 Waduwawara, S.; Welch, C.; Thurow, B.; Moss, A. G.: THREE-DIMENSIONAL ANALYSIS OF PARTICLE TRANSPORT AT FLUID INTERFACES BY *MNEMIOPSIS*
- 12:00 Sutherland, K. R.; Dabiri, J. O.; Costello, J. H.; Colin, S. P.: FLUID INTERACTIONS DURING PREDATION BY THE INVASIVE CTENOPHORE *MNEMIOPSIS LEIDYI*

12:15 Gemmell, B. J.; Costello, J.; Colin, S.; Dabiri, J.; Adhikari, D.; Troolin, D.; Sheng, J.; Longmire, E.: POSITION CONTROL IN JELLYFISH: ABANDONING RADIAL SYMMETRY TO CREATE INCLINED, ASYMMETRIC VORTEX RINGS

186 General Session: Biological Oceanography, Aquatic Biology

Chair(s): Jeff Shimeta, jeff.shimeta@rmit.edu.au

Location: 151

10:30 Shimeta, J.; Cutajar, J.; Watson, M. G.; Vlamis, T.: INFLUENCES OF BIOFILM-ASSOCIATED CILIATES ON THE SETTLEMENT OF MARINE INVERTEBRATE LARVAE

10:45 Jumars, P. A.: ASPIRATIONS GREAT AND SMALL: REYNOLDS-NUMBER DEPENDENCE IN SPATIAL STRUCTURE OF SIPHON FLOWS

11:00 Roman, M.; Elliot, D.; Pierson, J.: HYPOXIA: REFUGE OR DEAD ZONE FOR COPEPODS?

11:15 Nordström, M. C.; Currin, C. A.; Talley, T. S.; Whitcraft, C. R.; Levin, L. A.: ISOTOPIC INSIGHTS INTO TROPHIC SUCCESSION IN A DEVELOPING SALT MARSH

11:30 Hutchinson-Delgado, Y. M.; Sherman, C.: MICROBIALITES AS POSSIBLE FRAMEWORK CONTRIBUTORS FOR MESOPHOTIC CORAL ECOSYSTEMS (MCES)

11:45 Fragoso Vázquez, J. L.; Gregg, M.; Takabayashi, M.: CORAL GROWTH ANOMALIES AT WAIOPAE, HAWAII

12:00 Hanson, K. M.; Leichter, J. J.: PLANKTIVOROUS FISH LINK OCEANIC AND CORAL REEF FOOD WEBS

12:15 Mooney, T. A.; Streets, A.; Hanlon, R. T.: PHYSIOLOGICAL AND BEHAVIORAL RESPONSES TO SOUND IN THE LONGFIN SQUID (*LOLIGO PEALEII*)

14:00 Vermont, A. L.; Matrai, P.; Fields, D.; Shema, S.; Rauschenberg, C.: DIMETHYLSULFONIOPROPIONATE (DMSP) RELEASE DURING MESOZOOPLANKTON GRAZING: A GRAZING DETERRENT?

14:15 Campbell, J. R.; Buskey, E. J.: THE ROLE OF PROTOZOAN GRAZERS IN HARMFUL ALGAL BLOOM DYNAMICS

14:30 Harvey, E. L.; Menden-Deuer, S.: PREDATOR-PREY INTERACTIONS AND SALINITY TOLERANCE CAN IMPACT HARMFUL ALGAL BLOOM FORMATION IN *HETEROSIGMA AKASHIWO*

14:45 Strickler, J. R.; Nihongi Ziarek, A.; Chang, W. J.; Sheng, J.: CHEMOSENSORY GRAZING BY CALANOID COPEPODS #2

15:00 Hylander, S.; Kjørboe, T.: WHEN AND WHY ARE ZOOPLANKTON PIGMENTED?

15:15 Hynes, A. M.; Blythe, B. J.; Binder, B. J.: A DAY IN THE LIFE OF A PHYTOPLANKTER: AN INDIVIDUAL-BASED MODEL OF DIEL CYCLING IN *PROCHLOROCOCCUS*

15:30 Olley, J. T.; O'Donnell, J. P.; Schalles, J. F.: CLOSE-RANGE REMOTE SENSING AND HPLC ANALYSIS OF COASTAL PHYTOPLANKTON ON THE ATLANTIC AND GULF COASTS

15:45 Ryabenko, E.; Kock, A.; Bange, H. W.; Altabet, M. A.; Wallace, D. W.: CONTRASTING BIOGEOCHEMISTRY OF NITROGEN IN THE ATLANTIC AND PACIFIC OXYGEN MINIMUM ZONES

Thursday, February 23 - Posters

003 The Response Of Marine Calcifiers To Global Climate Change And Ocean Acidification

Chair(s): Nick Kamenos, nick.kamenos@glasgow.ac.uk
Maggie Cusack, maggie.cusack@glasgow.ac.uk
J Murray Roberts, J.M.Roberts@hw.ac.uk

Location: Exhibit/Poster Hall

- B0743 Comeau, D. S.; Gimre, K.; Kurtze, D.; Restrepo, J. M.: OCEANIC TRANSPORT AND ITS ROLE ON THE SNOW BALL EARTH HYPOTHESIS
- B0744 Misarti, N.; Borrero, L. A.; San Roman, M.; L'Heureux, L.; Maschner, H. D.; Morello, F.; Borrazzo, K.; Torres, J.; Finney, B.: ECOSYSTEM CHANGE ALONG SOUTHERN COASTLINES OF ARGENTINA AND CHILE; STABLE ISOTOPE ANALYSES OVER THOUSANDS OF YEARS USING ARCHAEOLOGICAL REMAINS
- B0745 Wolhowe, M. D.; Prah, F. G.: A BIOMARKER PERSPECTIVE ON COCCOLITHOPHORID PRODUCTION AND EXPORT IN A STRATIFIED SEA
- B0746 Kamenos, N. A.; Hoey, T. B.; Nienow, P.; Fallick, A. E.; Claverie, T.: CHANGES IN RUNOFF FROM THE GREENLAND ICE SHEET RECORDED IN RED CORALLINE ALGAE
- B0747 Zavala Lopez, A.: THE EFFECT OF TEMPERATURE ON THE EMERGENCE OF THREE COMMON TREMATODE SPECIES INFECTING THE CALIFORNIA HORN SNAIL *CERITHIDEA CALIFORNICA*
- B0748 Bernardello, R.; Marinov, I.; Sarmiento, J. L.: RESPONSE OF THE OCEAN CARBON PUMPS TO CHANGES IN OCEAN CIRCULATION IN 21ST CENTURY CLIMATE CHANGE SIMULATIONS
- B0749 López-Figueroa, N. B.; Colón-Rivera, R. J.; Feagin, R.: USING ISOTOPE HYDROLOGY TO UNDERSTAND THE IMPACTS OF CLIMATE CHANGE TO COASTAL WETLANDS IN PUERTO RICO.
- B0750 Descoteaux, R.; Hardy, S. M.; Iken, K.; Mathis, J. T.: EFFECTS OF OCEAN ACIDIFICATION ON LARVAL DEVELOPMENT IN ALASKAN CRABS
- B0751 Dorfman, R. E.; Benner, I.; Komada, T.; Stillman, J.; Carpenter, E.: STRAIN-SPECIFIC RESPONSES TO NITROGEN SOURCE IN THE COCCOLITHOPHORE *EMILIANA HUXLEYI*
- B0752 Okimura, K. M.; Benner, I.; Lefebvre, S. C.; Komada, T.; Stillman, J. H.; Carpenter, E. J.: EFFECT OF OCEAN ACIDIFICATION ON CELLULAR PHYSIOLOGY AND RELEASE OF DOM AND TEP IN TWO STRAINS OF *EMILIANA HUXLEYI*
- B0753 Takayama, K.; Igeta, Y.; Yamazaki, K.; Watanabe, T.: MARINE ECOSYSTEM RESPONSES TO THE CLIMATE WARMING SIMULATION IN THE JAPAN SEA
- B0754 Schulte, J.; Najjar, R.: AN ASSESSMENT OF MID-ATLANTIC STREAMFLOW AND ITS RELATIONSHIP TO THE NORTH ATLANTIC OSCILLATION AND THE PACIFIC NORTH-AMERICAN TELECONNECTION PATTERN

005 Metal Speciation In The Ocean: Metal-Binding Ligand Composition And Role In The Transport Of Metals Through The Marine Environment

Chair(s): Sylvia Sander, sylvia.sander@otago.ac.nz
Constant van den Berg, vandenbergliverpool.ac.uk
Kristen Buck, kristen.buck@bios.edu

Location: Exhibit/Poster Hall

- A0001 Christenson, E. A.; Schijf, J.: STABILITY OF CADMIUM COMPLEXES WITH THE SIDEROPHORE DESFERRIOXAMINE B AT 0.7 M IONIC STRENGTH
- A0002 Buck, K. N.; Sohst, B. M.; Sedwick, P. N.: THE ORGANIC COMPLEXATION OF DISSOLVED FE ON LEG 1 OF THE US GEOTRACES NORTH ATLANTIC SECTION

- A0003 Sander, S. G.; Koschinsky, A.: THE IMPACT OF ORGANIC LIGANDS ON THE TRANSFER OF TRACE METALS FROM HYDROTHERMAL VENTS INTO THE OCEAN
- A0004 van den Berg, C. M.; Casteletti, A.: METAL COMPETITION FOR LIGANDS IN SEAWATER
- A0005 Moffett, J. W.; Jacquot, J. E.; Kondo, Y.: DISSOLVED COPPER AND COPPER SPECIATION ON THE US GEOTRACES N. ATLANTIC SECTION
- A0006 Chuang, C.; Xu, C.; Zhang, S.; Jiang, Y.; Ho, Y.; Wen, L.; Hung, C.; Schwehr, K. A.; Quigg, A.; Santschi, P. H.: EXAMINING THE BINDING OF RADIONUCLIDES WITH MARINE BIOPOLYMERS, A COMPARATIVE STUDY ON TH, PA, BE, PO AND PB ISOTOPES
- A0007 Hassler, C.; Norman, L.; Watson, R.; Doblin, M.; Nichols, C.; McTainsh, G.; Clementson, L.; Schoemann, V.: IMPACT OF VARIOUS IRON SOURCES TO TASMAN SEA PHYTOPLANKTON: FROM BIOAVAILABILITY TO COMMUNITY SHIFT
- A0008 Noble, A. E.; Saito, M. A.: INSIGHT INTO THE CHEMICAL SPECIATION OF COBALT IN THE NORTH ATLANTIC
- A0009 Boiteau, R. M.; Fitzsimmons, J. N.; Repeta, D. J.; Boyle, E. A.: CHARACTERIZATION OF ORGANIC LIGANDS IN CULTURES AND SEAWATER BY HPLC-ICP-MS
- A0010 Huang, Y. H.; Lee, C. S.; Wen, L. S.: CHEMICAL REACTIVITY AND SPECIATION OF DISSOLVED COPPER IN WEST PHILIPPINE SEA
- A0011 Takeda, S.; Kondo, Y.: ORGANIC COMPLEXATION OF IRON IN THE PACIFIC OCEAN
- A0012 Smith, L. B.; Sun, J.; McKee, K.; Sambrotto, R. N.; Bostick, B. C.: DIFFERENTIAL UTILIZATION OF IRON MINERALS BY MARINE PHYTOPLANKTON

007 High-Resolution Geochemical Proxies Of Global Change: Progress, Problems, And Utility

Chair(s): Alan D. Wanamaker Jr, adw@iastate.edu
David P. Gillikin, gillikid@union.edu

Location: Exhibit/Poster Hall

- B0923 Winkelstern, I. Z.; Surge, D. M.: NEW PLIOCENE ISOTOPE SCLEROCRONOLOGY DATA FROM THE US MID ATLANTIC COASTAL PLAIN
- B0924 Walther, B. D.; Rowley, J.: EFFECTS OF DROUGHTS AND FLOODS ON SUBTROPICAL ESTUARIES RECORDED BY HIGH FREQUENCY RECORDS OF STABLE ISOTOPE RATIOS IN OYSTER SHELL CARBONATE
- B0925 Chen, J.; Chough, S. K.: GEOCHEMICAL, SEDIMENTOLOGICAL, AND STRATIGRAPHIC REFLECTIONS OF A LATE CAMBRIAN GLOBAL PALEOCEANOGRAPHIC EVENT
- B0926 Carré, M.; Sachs, J. P.; Schauer, A.; Elliott Rodriguez, W.; Cardenas Ramos, F.: EL NIÑO-SOUTHERN OSCILLATION VARIABILITY AND OCEAN TEMPERATURE SEASONALITY RECORDED BY SHORT-LIVED MARINE MOLLUSK SHELLS FROM PERU
- B0927 Hennekam, R.; Jilbert, T.; De Lange, G. J.: HIGH RESOLUTION RECONSTRUCTION OF PALEOENVIRONMENTAL VARIABILITY DURING THE LAST 20 KYR IN THE SOUTH EAST LEVANTINE BASIN, EASTERN MEDITERRANEAN
- B0928 Gillikin, D. P.; Lorrain, A.; Bouillon, S.; Versteegh, E. A.; Yambélé, A.; Graniero, L.; Charles, D.; Jolivet, A.: NITROGEN ISOTOPES IN THE ORGANIC MATRIX OF BIVALVE SHELLS: A RECORDER OF ANTHROPOGENIC NITROGEN POLLUTION.
- B0929 HYUN, S.; KIM, J. K.; YOO, H. S.: PALEOCEANOGRAPHIC ENVIRONMENTAL EVOLUTION IN THE EAST SEA (JAPAN SEA) SINCE THE LAST 400 KYR
- B0930 Goudeau, M. S.; Grauel, A. L.; Tessarolo, C.; Leider, A.; Chen, L.; Bernasconi, S. M.; Versteegh, G. J.; Zonneveld, K. A.; De Lange, G. J.: HIGH-RESOLUTION PALEO-ENVIRONMENTAL CHANGES OBSERVED BY DETAILED XRF CORE SCANNING IN HOLOCENE (0-16 KA CAL. BP) SEDIMENTS FROM THE CENTRAL MEDITERRANEAN

- B0931 De Lange, G. J.; Slomp, C.; Crudeli, D.; Corselli, C.; Principato, M. S.; Erba, E.; Thomson, J.; Reitz, A.: BASIN-WIDE SYNCHRONOUS FORMATION AND REDOX-CONTROLLED PRESERVATION OF MEDITERRANEAN SAPROPEL S1
- B0932 Fan, D.; Liu, M.; Zhang, X.; Wang, L.; Yang, Z.: HIGH-RESOLUTION SEDIMENTARY RECORD OF DIATOM PRIMARY PRODUCTIVITY OF THE LATEST 60 YEARS IN YANGTZE RIVER ESTUARY AND ITS RESPONSES TO GLOBAL CHANGES
- B0933 Black, H. D.; Andrus, C. F.; Cobb, R. M.: THE PROCESSES OF TAPHONOMY AND DIAGENESIS ON THE DEEP-SEA HYDROCORAL *STYLASTER ERIBESCENS* FOSSILS FROM THE CHARLESTON BUMP
- B0934 Beirne, E. C.; Wanamaker Jr., A. D.: COMPARISON OF HIGH TO LOW LATITUDE PROXY RECONSTRUCTIONS OF DELTA $^{13}C_{DIC}$ THROUGH THE LAST MILLENNIUM
- B0935 Schöne, B. R.; Radermacher, P.; Zhang, Z.: CRYSTAL FABRICS AND ELEMENT IMPURITIES IN SHELLS OF *ARCTICA ISLANDICA* – IMPLICATIONS FOR PALEOCLIMATE RECONSTRUCTIONS
- B0936 Lower, E. E.; Griffin, S. M.; Kreuz, K. J.; Wanamaker Jr., A. D.: RECONSTRUCTING LATE HOLOCENE HYDROGRAPHIC VARIABILITY IN THE GULF OF MAINE, USA: IMPLICATIONS FOR THE NORTH ATLANTIC CLIMATE DYNAMICS
- B0937 Bian, N.; Martin, P.; Pfister, C.; Colman, A.: INVESTIGATING ENVIRONMENTAL CHANGES OVER THE PAST 1000 YEARS IN WASHINGTON COASTAL REGION: HIGH RESOLUTION STABLE ISOTOPE STUDY ON MYTILUS CALIFORNIANUS SHELLS
- B0938 Cobb, R. M.; Andrus, C. F.; Kozdon, R.; Valley, J. W.: SIMS ANALYSIS OF PRIMARY AND INFILLED AREAS WITHIN *STYLASTER ERIBESCENS* COLONIES
- B0939 Hwang, J.; Manganini, S. J.; Montluçon, D. B.; Kim, M.; Eglinton, T. I.: ALKENONE UNSATURATION AND FLUXES ON THE NORTHWEST ATLANTIC MARGIN
- B0940 Teng, C. K.; Liu, Z.; Walther, B. D.: TEMPORAL DISTRIBUTION OF TOTAL HYDROLYZABLE AMINO ACIDS IN THE EASTERN OYSTER, *CRASSOSTREA VIRGINICA*
- B0941 Mette, M. J.; Shrumm, K. N.; Ambrose Jr., W. G.; Retelle, M. J.; Carroll, M. L.; Griffin, S. M.; Wanamaker Jr., A. D.: SHELL GROWTH STRONGLY COUPLED WITH POSITIVE ARCTIC OSCILLATION AND NORTH ATLANTIC OSCILLATION PHASES: INSIGHTS FROM A SCLEROCHRONOLOGICAL AND GEOCHEMICAL STUDY
- B0942 Nieto-Moreno, V.; Martínez-Ruiz, E.; Willmot, V.; García-Orellana, J.; Masqué, P.; Gallego-Torres, D.; Sinninghe Damsté, J. S.: WESTERN MEDITERRANEAN SEA SURFACE TEMPERATURES DURING THE LAST TWO MILLENNIA: A BIOMARKER APPROACH
- B0943 Lee, K. E.; Lee, S.; Park, Y.; Harada, N.: SEASON AND DEPTH OF ALKENONE PRODUCTION IN THE EAST SEA/JAPAN SEA AND EAST CHINA SEA
- B0944 Miller, A. J.; Allison, M. A.; Bianchi, T. S.; Marcantonio, E.: AN EXAMINATION OF INORGANIC PROXIES OF LATE HOLOCENE PALEOCLIMATE IN SEDIMENT CORES FROM SIMPSON'S LAGOON, BEAUFORT SEA, ALASKA
- B1744 Nguyen, A. T.; Heimbach, P.; Ponte, R.; Fenty, I.: PROGRESS AND ASSESSMENT OF THE ARCTIC AND SUB-POLAR NORTH ATLANTIC STATE ESTIMATE
- B1745 Okkonen, S.; Stafford, K.: BELUGA WHALE VOCALIZATIONS ALONG THE ALASKA COASTAL CURRENT FRONT
- B1746 Williams, W. J.; Mellling, H.; Carmack, E. C.: UPWELLING CIRCULATION ON THE CANADIAN BEAUFORT SHELF
- B1747 von Appen, W. J.; Pickart, R. S.: A CASE STUDY OF TWO DENMARK STRAIT OVERFLOW WATER EDDIES AND THEIR IMPACT ON SHELF-BASIN EXCHANGE
- B1748 Lu, Y.; Holloway, G.; Lei, J.: IMPACTS OF VERTICAL MOMENTUM MIXING IN AN ARCTIC OCEAN MODEL
- B1749 Rampal, P.; Heimbach, P.; Kwok, R.; Menemenlis, D.: MODELING THE ARCTIC SEA ICE AGE
- B1750 Lique, C.; Steele, M.: ON THE SEASONAL CYCLE OF THE ATLANTIC WATER TEMPERATURE WITHIN THE ARCTIC BASIN.
- B1751 DeHaan, C.: ARCTIC OCEAN BOUNDARY CURRENTS IN THE ARCTIC CAP NOWCAST/FORECAST SYSTEM
- B1752 Kirillov, S.; Dmitrenko, I.; Ivanov, V.; Aksenov, Y.: THE WIND-DRIVEN CURRENT AMPLIFICATION OVER THE EASTERN FLANK OF ST. ANNA TROUGH: OBSERVATIONAL DATA AND RESULTS OF NUMERICAL MODELING
- B1753 Zhao, J. P.; Zhang, J. L.; Zhang, S. G.; Li, T.; Jiao, Y. T.: TRANSPOLAR FLOW OF ARCTIC INTERMEDIATE WATER WITH UPWARD MOVEMENT -- OBSERVATION AND MODELING
- B1754 Jin, M.; Hutchings, J.; Kawaguchi, Y.; Kikuchi, T.: VALIDATION OF CESM ICE-OCEAN MODEL IN THE ARCTIC: UPPER OCEAN THERMOCLINE AND SEA ICE
- B1755 Mahadevan, A.; Woodgate, R.; Matrai, P.; Wang, M.; Rainville, L.: WIND- AND EDDY-ENHANCED PRODUCTIVITY AT THE ICE EDGE: MODEL-BASED PROCESS STUDIES IN THE BEAUFORT SEA

011 Biology, Biogeochemistry, And Bio-Optics Of The Pacific Sector Of The Arctic Ocean

Chair(s): Donald Perovich, donald.k.perovich@usace.army.mil
Kevin R. Arrigo, arrigo@stanford.edu
Marcel Babin, Marcel.Babin@takuvik.ulaval.ca

Location: Exhibit/Poster Hall

- A0401 Ortega-Retuerta, E.; Joux, F.; Jeffrey, W. H.; Ghiglione, J. F.: EXPLORING BACTERIOPLANKTON DIVERSITY IN THE CANADIAN ARCTIC: PATTERNS OF BACTERIAL COMMUNITIES FROM THE MACKENZIE RIVER TO THE BEAUFORT SEA
- A0402 Matsuoka, A.; Hooker, S. B.; Laney, S.; Neeley, A.; Ortega-Retuerta, E.; Bricaud, A.; Mills, M.; Arrigo, K. R.; Babin, M.: SIGNATURES OF MYCOSPORINE-LIKE AMINO ACIDS (MAAS) IN LIGHT ABSORPTION SPECTRA OF COLORED DISSOLVED ORGANIC MATTER (CDOM) IN ICE MELT CHUKCHI SEA WATER
- A0403 Polashenski, C.; Perovich, D.; Frey, K.; Wood, C.; Dadic, R.; Light, B.; Kelly, H.; Mayer, D.; Trusel, L.; Webster, M.: MORPHOLOGICAL PROPERTIES OF THE ICE IN THE CHUKCHI AND BEAUFORT SEAS DURING THE 2010 AND 2011 ICESCAPE MISSIONS
- A0404 Forest, A.; Babin, M.; Stemann, L.; Picheral, M.; Sampei, M.; Fortier, L.; Per Sahlín, J.: PHYSICAL AND BIOLOGICAL DETERMINANTS OF VERTICAL FLUXES OF PARTICULATE ORGANIC CARBON AND NITROGEN ACROSS THE ARCTIC SHELF-BASIN SYSTEM (BEAUFORT SEA)
- A0405 Benner, R.; Fichot, C. G.: TRACING TERRIGENOUS DOC INPUTS TO THE SOUTHEASTERN BEAUFORT SEA
- A0406 Naik, P.; D'Sa, E. J.; Gomes, H. D. R.; Goés, J. I.; Mouw, C. B.: MODELING OF REMOTE SENSING REFLECTANCE AND DIFFUSE ATTENUATION COEFFICIENT IN THE SOUTHEASTERN BERING SEA
- A0407 Light, B.; Webster, M.; Perovich, D.; Polashenski, C.; Dadic, R.: TRANSMITTANCE OF SOLAR RADIATION THROUGH PONDED ARCTIC SEA ICE

008 Arctic Ocean Boundary Currents: Observations, Theory And Modeling

Chair(s): Mary-Louise Timmermans, mary-louise.timmermans@yale.edu
Sheldon Bacon, s.bacon@noc.ac.uk
Robert Pickart, rpickart@whoi.edu

Location: Exhibit/Poster Hall

- B1741 Guthrie, J. D.; Morison, J. H.; Fer, I.; Meyer, A. K.: MIXING IN THE CENTRAL ARCTIC OCEAN IN RECENT YEARS
- B1742 Lee, H.; Hwang, B.; Kwon, M.: A SEA ICE-OCEAN COUPLED MODELING OF THE OCEANIC CIRCULATION IN THE ARCTIC OCEAN
- B1743 de Steur, L.; Hansen, E.; Mauritzen, C.; Beszczynska-Moeller, A.: VARIABILITY IN THE EAST GREENLAND CURRENT IN FRAM STRAIT: 1997-2009

- A0408 Chaves, J. E.; Freeman, S. A.; Neeley, A. R.; Thomas, C. S.; Werdell, J. P.; McClain, C. R.: BIO-OPTICAL PROPERTIES AND IN-WATER CONSTITUENT RELATIONSHIPS IN THE IN THE CHUKCHI AND BEAUFORT REGIONS OF THE ARCTIC OCEAN
- A0409 Prokopenko, M. G.; Granger, J.; Long, M. C.; Mordy, C. W.; Ladd, C.: NET AND GROSS OXYGEN PRODUCTION AND POTENTIAL CARBON EXPORT EFFICIENCY OF SPRING BLOOMS ON THE EASTERN BERING SEA SHELF
- A0410 Varela, D. E.; Crawford, D. W.; Wyatt, S. N.; Wrohan, I. A.; Cefarelli, A. O.: LOW CARBON TO NITROGEN RATIOS IN THE EUPHOTIC ZONE OF THE ARCTIC OCEAN
- A0411 Ehn, J. K.; Reynolds, R. A.; Stramski, D.; Doxaran, D.; Babin, M.: DYNAMICS OF SUSPENDED PARTICULATE MATTER IN THE CANADIAN BEAUFORT SEA INFERRED FROM OPTICAL BEAM ATTENUATION: IMPACT OF WIND, RIVER INFLOW, AND ICE MELT
- A0412 Tatarkiewicz, J. J.; Reynolds, R. A.; Stramski, D.: COUNTING AND SIZING OF COLLOIDAL PARTICLES IN THE ARCTIC OCEAN
- A0413 Weiss, E.; Schieber, B.; Du, N.; Knowles, B.; Mitchell, B. G.: FLUORESCENCE EXCITATION-EMISSION MATRICES OF CDOM IN THE CHUKCHI AND BEAUFORT SEAS
- A0414 Palmer, M. A.; Van Dijken, G. L.; Mitchell, B. G.; Seegers, B. J.; Arrigo, K. R.: SPATIAL AND TEMPORAL VARIABILITY OF PHOTOSYNTHETIC PARAMETERS DURING ICESCAPE 2010-2011
- A0415 Baer, S. E.; Connelly, T. L.; Bronk, D. A.: NITROGEN UPTAKE DYNAMICS IN ARCTIC LANDFAST ICE
- A0416 Perovich, D. K.; Light, B.; Webster, M.; Polashenski, C. M.; Dadic, R.: FIELD OBSERVATIONS OF THE OPTICAL PROPERTIES OF MELTING FIRST YEAR ICE
- A0417 Connelly, T. L.; Sines, K. A.; Yager, P. L.: A THREE-SEASON STUDY OF HETEROTROPHIC MICROBIAL ACTIVITY AND THE RESPONSE TO SHORT-TERM WARMING IN A NEAR-SHORE ARCTIC ENVIRONMENT
- A0418 Mundy, C. J.; Gosselin, M.; Gratton, Y.: THE ROLE OF ENVIRONMENTAL FACTORS ON PHYTOPLANKTON BLOOM INITIATION UNDER THE LANDFAST ICE NEAR RESOLUTE BAY, NUNAVUT
- A0419 Van Dijken, G. L.; Mitchell, B. G.; Seegers, B.; Mills, M. M.; Brown, Z. W.; Lowry, K. E.; Arrigo, K. R.: SUMMER PRIMARY PRODUCTION IN THE CHUKCHI SEA DURING ICESCAPE 2010-2011
- A0420 Lowry, K. E.; Mills, M. M.; Pickart, R. S.; van Dijken, G. L.; Brown, Z. W.; Palmer, M. A.; Arrigo, K. R.: A CHARACTERIZATION OF BIOGEOCHEMICAL PROPERTIES IN THE CHUKCHI SEA: RESULTS FROM ICESCAPE 2010-2011
- A0421 Raimbault, P.; Tremblay, J. E.; Garcia, N.: DISTRIBUTION OF NUTRIENTS AND ORGANIC CARBON, NITROGEN AND PHOSPHORUS IN THE SOUTHEAST BEAUFORT SEA: IMPLICATIONS FOR PRIMARY PRODUCTION
- A0422 Wood, C. L.; Frey, K. E.: OPTICAL CHARACTERISTICS OF CHROMOPHORIC DISSOLVED ORGANIC MATTER ASSOCIATED WITH SEA ICE IN THE CHUKCHI AND BEAUFORT SEAS
- B1758 Stoudt, C. A.; Martini, K. I.; Simmons, H. L.: SEA ICE RESPONSE TO ATMOSPHERIC STORMS
- B1760 Travers, C. S.; Woodgate, R. A.; Weingartner, T. J.; Rigor, I. G.: QUANTIFYING THE FRESHWATER FLUX OF SEA-ICE BETWEEN THE PACIFIC AND THE ARCTIC FROM MOORED ACOUSTIC DOPPLER CURRENT PROFILER DATA IN THE BERING STRAIT
- B1761 Du, L.; ZHAO, J.; ZUO, J.; ZHANG, S.: VARIATION OF THE NEAR BOTTOM CURRENT THROUGH BERING STRAIT AND ITS RELATIONSHIP WITH ARCTIC SEA ICE CHANGE
- B1762 Whitefield, J. D.; Winsor, P.; Weingartner, T. J.: BERING STRAIT THROUGHFLOW FROM A GLOBAL OCEAN MODEL
- B1763 Ortiz, J. D.; Nof, D.; Polyak, L.; St-Onge, G.; Lisé-Pronovost, A.; Naidu, S.; Darby, D.; Brachfeld, S.: THE PALEOFLOW THROUGH BERING STRAIT IS FORCED BY THE SOUTHERN OCEAN WINDS
- B1764 Potter, R. A.; Weingartner, T. J.; Statscewich, H.; Winsor, P.: SURFACE CURRENTS IN THE NORTHEAST CHUKCHI SEA
- B1765 Wang, J.; Hu, H.: MODELING ICE-COVERED MARINE ECOSYSTEM IN THE BERING AND CHUKCHI SEAS
- B1766 Nishino, S.; Kikuchi, T.; Itoh, M.; Kawaguchi, Y.; Yamamoto-Kawai, M.; Hirawake, T.; Aoyama, M.: ARCTIC OCEAN CIRCULATION AND EDDIES CHARACTERIZING NUTRIENT AND PHYTOPLANKTON DISTRIBUTIONS IN THE CANADA BASIN
- B1767 Souza, A. C.; Gardner, W. S.; Dunton, K. H.: WATER COLUMN NITROGEN DYNAMICS IN THE EASTERN CHUKCHI SEA
- B1768 Tait, Z. S.; Baylor, V. D.; Sipler, R. E.; Roberts, Q. N.; Bronk, D. A.; Frischer, M. E.: WILL PERMAFROST MELTING IMPOSE NITROGEN LIMITATION ON COASTAL BACTERIAL COMMUNITIES IN THE WESTERN ARCTIC?
- B1769 Jewett, S. C.; Dasher, D.; Norcross, B.; Morgan, T. C.: ALASKA MONITORING AND ASSESSMENT PROGRAM (AKMAP): PRELIMINARY FINDINGS FROM THE COASTAL NORTHEASTERN CHUKCHI SEA, 2010-2011
- B1770 Day, R. H.; Aerts, L. A.; Blanchard, A. L.; Gall, A. E.; Hopcroft, R. R.; Weingartner, T. J.; Wisdom, S. S.; Rea, C. L.; Macrander, A. M.; Eldoy, S.: THE OFFSHORE NORTHEASTERN CHUKCHI SEA: A COMPLEX HIGH-LATITUDE ECOSYSTEM
- B1771 Rutzen, J.; Hopcroft, R. R.; Huettmann, F.: PREDICTING PAN-ARCTIC ZOOPLANKTON ABUNDANCE AT THE SPECIES LEVEL
- B1772 Matsuno, K.; Yamaguchi, A.; Imai, I.: BODY CHEMICAL CONTENTS AND GUT PIGMENTS OF COPEPODS IN THE WESTERN ARCTIC OCEAN DURING SUMMERS OF 2008 AND 2010
- B1773 Grebmeier, J. M.; Cooper, L. W.: BENTHIC CARBON CYCLING IN THE CHUKCHI SEA: STATUS AND TRENDS IN A CHANGING ECOSYSTEM
- B1774 McTigue, N. D.; Dunton, K. H.: TROPHODYNAMICS AND CARBON ASSIMILATION PATHWAYS IN BENTHIC COMMUNITIES IN THE NORTHEASTERN CHUKCHI SEA, ALASKA
- B1775 Tu, K. L.; Blanchard, A. L.: ISOTOPIC FOOD WEB COMPARISONS OF TWO SURVEY SITES IN THE NORTHEASTERN CHUKCHI SEA
- B1776 Hajduk, M. M.; Blanchard, A. L.: TEMPORAL TRENDS OF BENTHIC FAUNA IN THE NORTHEASTERN CHUKCHI SEA, 2008-2010
- B1777 Wilt, L. M.; Grebmeier, J. M.; Cooper, L. W.: CALORIC VALUE OF CHUKCHI WALRUS PREY ORGANISMS: SPATIAL VARIATION AND RELATION TO WALRUS FORAGING FROM SHORE AND OFFSHORE ICE
- B1778 Taylor, K. A.; Harvey, H. R.: TROPHIC LINKAGES IN NORTHERN NEPTUNE WHELKS (*NEPTUNEA HEROS*) OF THE CHUKCHI SEA USING ISOTOPIC AND LIPID BIOMARKERS
- B1779 Fox, A. L.; Hughes, E. A.; Trocine, R. P.; Trefry, J. H.; McTigue, N. D.; Lasorsa, B. K.; Konar, B.: BIOMAGNIFICATION OF MERCURY AND ARSENIC IN THE EASTERN CHUKCHI SEA
- B1756 Underhill, V. R.; Wood, K. R.; Mahoney, A.: VARIATIONS IN SUMMERTIME SEA ICE ALONG THE CHUKCHI COAST SINCE 1849
- B1757 Golden, K. M.; Hohenegger, C.; Alali, B.; Steffen, K. R.; Perovich, D. K.: TRANSITION IN THE GLOBAL GEOMETRY OF ARCTIC MELT PONDS

012 The Chukchi Sea Region: Rapid Changes In The Pacific Gateway To The Arctic

Chair(s): Jacqueline E. Grebmeier, jgrebmei@umces.edu
 Russell R. Hopcroft, hopcroft@ims.uaf.edu
 Sue E. Moore, sue.moore@noaa.gov
 Robert S. Pickart, rpickart@whoi.edu
 Bill Williams, bill.williams@dfo-mpo.gc.ca

Location: Exhibit/Poster Hall

020 Theory, Modelling, And Observations Of Remote-Sensed Propagating Waves And Eddies

Chair(s): Dr. Subrahmanyam Bulusu, sbulusu@geol.sc.edu
Dr. Remi Tailleux, R.G.J.Tailleux@reading.ac.uk

Location: Exhibit/Poster Hall

- B1397 Godin, O. A.: A NEW TYPE OF WAVE MOTION IN INHOMOGENEOUS, COMPRESSIBLE FLUIDS IN A GRAVITY FIELD
- B1398 Ueno, H.; Yasuda, I.; Itoh, S.; Onishi, H.; Hiroe, Y.; Suga, T.; Oka, E.: MODIFICATION OF A KENAI EDDY ALONG THE ALASKAN STREAM
- B1399 Bishop, S. P.; Watts, D. R.; Donohue, K. A.: DIVERGENT EDDY HEAT FLUXES IN THE KUROSHIO EXTENSION 143°-149°E
- B1400 Watts, D. R.; Donohue, K. A.; Tracey, K. L.: THE SLOWLY VARYING MEAN KUROSHIO EXTENSION CURRENT TRANSPORT FROM SEA SURFACE TO SEA FLOOR
- B1401 Guozhen Zha, Z.; Yijun He, H.; Qingyou He, H.; Tan Yu, Y.: DETERMINATION OF THE OCEAN INTERNAL WAVE PROPERTIES FROM NAUTICAL X-BAND RADAR OBSERVATIONS
- B1402 Piecuch, C. G.; Ponte, R. M.: DYNAMICAL INFLUENCE OF BUOYANCY FORCING ON INTERANNUAL TROPICAL SEA LEVEL VARIABILITY
- B1403 Plant, W. J.; Farquharson, G.: ORIGINS OF FEATURES IN WAVENUMBER-FREQUENCY SPECTRA OF SPACE-TIME IMAGES OF THE OCEAN
- B1404 Xue, J.; Lund, B.; Graber, H. C.: INTERNAL SOLITARY WAVE AMPLITUDE ESTIMATION FROM SAR AND NAUTICAL X-BAND RADAR IMAGES IN THE MID-ATLANTIC BIGHT
- B1405 Evans, D. G.; Johnson, R. J.: IMPACTS OF PLANETARY WAVES ON THE BERMUDA ATLANTIC TIME SERIES STUDY
- B1406 Tailleux, R.; Hunt, F.; Hirschi, J.: ON THE VERTICAL STRUCTURE OF WESTWARD PROPAGATING ROSSBY WAVES AND EDDIES
- B1407 McClean, J. L.: MESOSCALE AIR-SEA INTERACTIONS IN A FINE RESOLUTION EARTH SYSTEM MODEL
- B1408 Wang, D.; Li, M.; Wang, H.: ROLE OF MESOSCALE EDDIES IN HEAT TRANSPORT IN THE SOUTH CHINA SEA
- B1409 Wang, F.: INTERACTIONS OF MESOSCALE SSH FEATURES OBSERVED BY SATELLITE ALTIMETRY
- B1410 Wortham, C. J.; Wunsch, C. I.: IMPACT OF TOPOGRAPHY ON THE PROPAGATION AND VERTICAL STRUCTURE OF LONG ROSSBY WAVES
- B1411 Lu, H.; Oey, L.: INSTABILITY OF THE SUBTROPICAL COUNTER CURRENT AND THE GENERATION OF EDDIES
- B1413 Tracey, K. L.; Watts, D. R.; Donohue, K. A.: DEEP EDDIES MODULATE FRONTAL MEANDER GROWTH IN THE KUROSHIO EXTENSION
- B1414 Pujiana, K.; Gordon, A. L.: INTRASEASONAL VARIABILITY IN MAKASSAR STRAIT: FLOW INSTABILITY-GENERATED EDDIES AND REMOTE WIND-FORCED INTERNAL KELVIN WAVES
- B1415 Laurindo, L. C.; Polito, P. S.: EVALUATION OF THE MODAL COMPOSITION OF THE OCEAN'S GEOSTROPHIC INTERIOR
- B1416 Kenji Shimizu, K.: A VERTICAL MODE APPROACH TO LONG BAROCLINIC ROSSBY WAVES OVER TOPOGRAPHY
- B1417 Zamorski, S. E.; Donohue, K. A.: KUROSHIO EXTENSION MEANDERS: MODEL DATA-INTERCOMPARISON
- B1418 Monger, B. C.; Hogg, N. G.: REGIONAL AND SEASONAL DIFFERENCES IN THE IMPACT OF MESOSCALE OCEAN EDDIES ON SATELLITE ESTIMATES OF SURFACE CHLOROPHYLL AND PRIMARY PRODUCTION
- B1419 Volkov, D. L.; Belonenko, T. V.; Foux, V. R.; Landerer, F. W.: WAVES AND EDDIES IN THE NORWEGIAN SEA OBSERVED WITH SATELLITE ALTIMETRY

022 Air-Sea Interactions Of Typhoons In The Western North Pacific Ocean And Neighboring Seas

Chair(s): Hans C Graber, hgraber@rsmas.miami.edu
I-I Lin, iilin@as.ntu.edu.tw
Eric D'Asaro, dasaro@apl.washington.edu
David Tweng-Yung Tang, tyt@ntu.edu.tw

Location: Exhibit/Poster Hall

- B1816 Yan, Y. E.; Qi, Y. Q.; Zhou, W.: MODULATION OF SST RESPONSE TO TROPICAL CYCLONES BY THE SUMMER UPWELLING IN THE NORTHERN SOUTH CHINA SEA
- B1817 Zhang, W. Z.; Hong, H. S.: THE MECHANISM OF TYPHOONS ENHANCING NORTHWARD TRANSPORT THROUGH THE TAIWAN STRAIT, CHINA
- B1818 Miyamoto, Y.; Takemi, T.: AN EFFECTIVE RADIUS OF THE SEA SURFACE ENTHALPY FLUX FOR THE MAINTENANCE OF A TROPICAL CYCLONE
- B1819 Ramos, R. J.; Graber, H. C.; Drennan, W. M.; Williams, N. J.: WIND MEASUREMENTS FROM ASIS AND EASI BUOYS DURING THE ITOP EXPERIMENT
- B1820 Potter, H.; Drennan, W. M.; Gierach, M. M.; Graber, H. C.; Ramos, R. J.; Williams, N. J.; Collins, C. O.: UPPER OCEAN RESPONSE TO TYPHOONS DURING THE 2010 SEASON
- B1821 Lund, B.; Graber, H. C.; Drennan, W. M.; Williams, N. J.; Ramos, R. R.; Collins, C. O.; Herrera, A.; Terrill, E. J.: WIND AND WAVE RETRIEVAL FROM MARINE X-BAND RADAR DATA UNDER TYPHOON CONDITIONS
- B1822 Collins, C. O.; Graber, H. C.; Drennan, W. M.; Williams, N. J.; Ramos, R. J.; Lund, B.; Herrera, A.: IN SITU MEASUREMENTS OF SURFACE GRAVITY WAVES IN TYPHOON CONDITIONS
- B1823 Harbitz, C. R.; Riser, S. C.: OBSERVING THE UPPER OCEAN RESPONSE TO GLOBAL TROPICAL CYCLONES USING ARGO FLOATS
- B1824 Min, H. S.; Kang, S. K.: LARGE EDDY SIMULATION OF OCEAN RESPONSE TO A TYPHOON IN THE EAST CHINA SEA
- B1825 Shibano, R.; Yamanaka, Y.; Okada, N.; Chuda, T.; Suzuki, S.; Niino, H.; Toratani, M.: RESPONSES OF MARINE ECOSYSTEM TO TYPHOON PASSAGES IN THE WESTERN SUBTROPICAL NORTH PACIFIC

030 Gulf Of Mexico Circulation & Ecosystem Numerical Modeling

Chair(s): Christopher N. K. Mooers, cmooers@cecs.pdx.edu
Patrick Hogan, pat.hogan@nrlssc.navy.mil
Leo Oey, lyo@princeton.edu
Claire Paris, cparis@rsmas.miami.edu

Location: Exhibit/Poster Hall

- B1342 Liu, Y.; Lee, S. K.; Muhling, B. A.; Lamkin, J. T.; Enfield, D. B.: IMPACTS OF NATURAL AND FORCED CLIMATE VARIABILITY ON THE GULF OF MEXICO
- B1343 Zhong, Y.; Bracco, A.: LOOP EDDIES, AGEOSTROPHIC VELOCITIES AND THEIR IMPACTS ON PRIMARY PRODUCTIVITY IN THE GULF OF MEXICO
- B1344 Todd, A. C.; Chassignet, E. P.; Morey, S. L.: CIRCULATION DYNAMICS AND LARVAL TRANSPORT MECHANISMS IN THE FLORIDA BIG BEND REGION
- B1345 Mildner, T. C.; Eden, C.; Czeschel, L.: FLORIDA STRAIT TRANSPORT VARIABILITY DRIVEN BY INTERNAL OCEAN DYNAMICS
- B1346 Farrara, J. D.; Chao, Y.; Li, Z.; Wang, X.; Zhang, H.; Li, P.; He, R.; Qian, H.: A ROMS-BASED DATA ASSIMILATING OCEAN FORECAST SYSTEM FOR THE GULF OF MEXICO
- B1347 Gopalakrishnan, G.; Cornuelle, B.; Hoteit, I.; Rudnick, D.; Owens, W.: STATE ESTIMATES AND FORECASTS IN THE GULF OF MEXICO
- B1348 Wiggert, J. D.; Harding, J. M.; Bub, F. L.; Fitzpatrick, P. J.; Woodard, K. C.: EVALUATION OF THE AMSEAS GULF OF MEXICO/CARIBBEAN REGIONAL FORECAST SYSTEM: A SURA SUPER-REGIONAL MODELING TESTBED ACTIVITY
- B1349 Zaron, E. D.; Mooers, C. N.; Howard, M. K.; Chao, Y.; Cornuelle, B.; He, R.; Ko, D. S.; Mehra, A.; Oey, L. Y.; Patchen, R.: GULF OF MEXICO PILOT PREDICTION PROJECT (GOMEX-PPP): FORECAST SKILL AND MODEL INTERCOMPARISONS

B1350 Howard, M. K.; Zaron, E.; Mooers, C.; Chao, Y.; Cornuelle, B.; He, R.; Ko, D.; Oey, L.; Mehra, A.; Patchen, R.: GULF OF MEXICO PILOT PREDICTION PROJECT (GOMEX-PPP): MODEL-DATA COMPARISONS

039 Ocean Biogeochemistry Time-Series And Climate

Chair(s): Frank Muller-Karger, carib@marine.usf.edu
Matthew Church, mjchurch@hawaii.edu
Michael Lomas, michael.lomas@bios.edu
Gordon Taylor, gtaylor@notes.cc.sunysb.edu

Location: Exhibit/Poster Hall

- A0171 Fründt, B.; Müller, T. J.; Schulz-Bull, D. E.; Waniek, J. J.: DECADAL VARIABILITY IN THE THERMOCLINE OF THE AZORES FRONT REGION AND ITS IMPACT ON DEEP OCEAN PARTICLE FLUX
- A0172 Brust, J.; Schulz-Bull, D. E.; Conte, M.; Kuss, J.; Waniek, J. J.: BARITE IN SINKING PARTICULATE MATTER IN THE WATER COLUMN OF THE SUBTROPICAL NORTH ATLANTIC OCEAN
- A0173 Muller-Karger, F. E.; Varela, R.; Thunell, R.; Astor, Y.; Scranton, M.; Taylor, G. T.; Lorenzoni, L.; Fanning, K. A.; Montes, E.; Rueda, D.: THE CARIACO OCEAN TIME SERIES PROGRAM
- A0174 Trahanovsky, K. A.; Whitley, T. E.: NUTRIENT DYNAMICS IN A PRODUCTIVE DOWNWELLING SYSTEM: THE COASTAL GULF OF ALASKA 1998-2010
- A0175 Tomaso, D. J.; Najjar, R. G.: A HYDROGRAPHIC CLIMATOLOGY FOR COASTAL WATERS OF THE EASTERN UNITED STATES
- A0176 Cuhel, R. L.; Aguilar, C.; Horton, A.: BORING CAN BE GREAT: TIME SERIES ANALYSIS OF AN INVASIVE SPECIES' STRUCTURE AND TISSUE COMPOSITION ENABLES IMPACT ASSESSMENT
- A0177 Horton, A.; Aguilar, C.; Cuhel, R. L.: FIRST GENERATIONS OF INVASION: POPULATION STRUCTURE, COHORTS, IN SITU GROWTH RATES, AND PATCHINESS IN A BENTHIC BIVALVE COMMUNITY
- A0178 Aguilar, C.; Cuhel, R. L.: TIME SERIES ANALYSIS SPANS SUDDEN LAKE MICHIGAN OLIGOTROPHICATION: EPISODIC CLIMATE EVENTS ARE CLEARER NOW
- A0179 Signori, C. N.; Guimaraes, G. P.; van Weerelt, M.; Rego, B. C.; Pollery, R. G.; Enrich-Prast, A.: CHEMOSYNTHESIS AND BACTERIAL PRODUCTION IN A EUTROPHIC TROPICAL ESTUARY
- A0180 Tadokoro, K.: DECADAL-SCALE VARIATION IN PHOSPHATE CONCENTRATION IN THE WESTERN NORTH PACIFIC FROM 1950S TO PRESENT
- A0181 Kress, N.; Gertman, I.; Herut, B.: WILL THE TEMPORAL CHANGES IN THE VERTICAL DISTRIBUTION OF NUTRIENTS IN THE LEVANTINE BASIN (EASTERN MEDITERRANEAN) AFFECT THE UPPER LAYER'S BIOLOGY?
- A0182 Gledhill, D. K.; Corredor, J.; Meléndez, M. O.; Sabine, C.; Musielewicz, S.; Hendee, J.: THREE YEAR TIME-SERIES OF CARBONATE CHEMISTRY DYNAMICS AND BIOGEOCHEMICAL PROCESSES WITHIN A TROPICAL ATLANTIC CORAL REEF ENVIRONMENT
- A0183 Dore, J. E.; Lukas, R.; Church, M. J.; Sadler, D. W.; Karl, D. M.: CONSISTENT TRENDS AND PATTERNS OF INTERANNUAL VARIABILITY IN SURFACE OCEAN CO₂ AT CONTRASTING SITES WINDWARD AND LEEWARD OF THE HAWAIIAN ISLANDS
- A0184 Lin, H.; Lin, T.: THE SUCCESSION AND STABLE ISOTOPES IN MODERN PLANKTONIC FORAMINIFERA: RECORDS FROM SEDIMENT TRAPS AND PLANKTON TOWS
- A0185 Matsumoto, K.; Fujiki, T.; Honda, M. C.; Kawakami, H.; Wakita, M.; Kitamura, M.: SUBSURFACE CHLOROPHYLL MAXIMUM IN THE WESTERN PACIFIC SUBARCTIC GYRE DURING EARLY SUMMER
- A0186 Van Meerssche, E. S.; Johnson, R. J.; Lomas, M. W.; Bates, N. R.; Knap, A. H.: QUALITATIVE VARIABILITY OF PHYTOPLANKTON BIOMASS AND COMMUNITY STRUCTURE OF THE SARGASSO SEA BASED ON PIGMENT ANALYSIS
- A0187 Siswanto, E. S.: INFLUENCE OF INDIAN OCEAN DIPOLE ON OCEAN BIOLOGY IN THE EASTERN INDIAN OCEAN

A0188 Acker, J. G.; Shen, S.; Leptoukh, G. G.; Lee, Z.: USING NASA'S GIOVANNI SYSTEM TO SIMULATE TIME-SERIES STATIONS IN THE OUTFLOW REGION OF CALIFORNIA'S EEL RIVER

A0189 Nosse, C. T.; Santiago-Mandujano, F.; Lukas, R. B.; Dore, J. E.; Weller, R. A.; Plueddemann, A. J.: RECENT STRONG INTERANNUAL VARIATION DISRUPTED PYCNOCLINE AND ABYSSAL SALINITY TRENDS AT STATION ALOHA

040 Biogeochemistry Of DOM In The Arctic Ocean

Chair(s): Céline Guèguen, celinegueguen@trentu.ca
Mats Granskog, mats.granskog@npolar.no
Colin A. Stedmon, cst@dmu.dk

Location: Exhibit/Poster Hall

- A0234 Hölemann, J.; Heim, B.; Novikhin, A.; Loginova, A.; Martynov, F.; Janout, M.; Koch, B.: DISTRIBUTION AND POTENTIAL IMPACTS OF COLORED DISSOLVED ORGANIC MATTER (CDOM) IN THE LAPTEV SEA (SIBERIAN ARCTIC)
- A0235 Pavlov, A. K.; Granskog, M. A.; Stedmon, C. A.; Ivanov, B. V.; Falk-Petersen, S.: THE SPECTRAL OPTICAL PROPERTIES AND RELATIVE RADIANT HEATING CONTRIBUTION OF DISSOLVED AND PARTICULATE MATTER IN THE SURFACE WATERS ACROSS THE FRAM STRAIT
- A0236 Sipler, R. E.; Connelly, T. L.; Bronk, D. A.: TUNDRA-DERIVED HUMICS AS A SOURCE OF NITROGEN AND CARBON TO COASTAL MICROBIAL POPULATIONS
- A0237 Hill, V. J.: CHROMOPHORIC DISSOLVED ORGANIC MATERIAL (CDOM) IN ARCTIC SURFACE WATERS, IMPLICATIONS FOR SOLAR HEATING
- A0238 Walker, S. A.; Amon, R. M.; Stedmon, C. A.: SEASONAL CHANGES IN THE OPTICAL PROPERTIES OF DISSOLVED ORGANIC MATTER (DOM) IN LARGE ARCTIC RIVERS
- A0239 Tucker, A. N.; McCallister, S. L.: METABOLIC FATE OF SOIL DERIVED DISSOLVED ORGANIC CARBON IN THE HIGH-LATITUDE KONGSFJORD SYSTEM
- A0240 Amon, R. M.: TRACING DISSOLVED ORGANIC CARBON FROM THE ARCTIC WATERSHEDS TO THE ARCTIC OCEAN
- A0241 Guèguen, C.; McCullough, G.; Barber, D. G.: HYDROGRAPHIC AND BIOGEOCHEMICAL CONTROLS ON COLORED DISSOLVED ORGANIC MATTER DISTRIBUTION IN THE HUDSON BAY SYSTEM
- A0242 D'Sa, E. J.; Goes, J. I.; Naik, P.; Mouw, C. B.; Gomes, H. R.: CDOM ABSORPTION AND FLUORESCENCE OPTICAL PROPERTIES IN THE SOUTHEASTERN BERING SEA DURING SUMMERS OF 2008 AND 2009

044 Advancing Satellite Ocean Color Science For Global And Coastal Research

Chair(s): Bryan A. Franz, bryan.a.franz@nasa.gov
Vincent Vantrepotte, Vincent.Vantrepotte@univ-littoral.fr
Frédéric Mélin, frederic.melin@jrc.ec.europa.eu
Stéphane Maritorena, stephane@eri.ucsb.edu

Location: Exhibit/Poster Hall

- A0546 Smart, J. H.; Rennie, S. E.: STATISTICAL COMPARISON OF HISTORICAL INSITU MEASUREMENTS TO SATELLITE OCEAN COLOR
- A0547 Shi, W.; Wang, M.: SATELLITE VIEWS OF THE BOHAI SEA, YELLOW SEA, AND EAST CHINA SEA
- A0548 Smirnov, A.; Holben, B. N.; Giles, D. M.; Slutsker, I.; O'Neill, N. T.; Eck, T. F.; Sayer, A. M.; Sakerin, S. M.; Courcoux, Y.; Kinne, S.: MARITIME AEROSOL NETWORK AS A COMPONENT OF AERONET – A USEFUL TOOL FOR SATELLITE REMOTE SENSING VALIDATION AND OCEAN COLOR STUDIES
- A0549 Condal, A. R.; Ardisson, P. L.: PRINCIPAL COMPONENTS ANALYSIS OF NASA CHLOROPHYLL SATELLITE MAPS IN THE GULF OF MEXICO, BAHAMAS, AND WESTERN CARIBBEAN (1979- 2010)
- A0550 Ahmed, S.; Gilerson, A.; Hlaing, S.; Tonizzo, A.; Weidemann, A.; Arnone, R. A.: MERGING MULTI & HYPER- SPECTRAL POLARIZED MEASUREMENTS FROM LONG ISLAND SOUND COASTAL OBSERVATORY: VALIDATION OF SATELLITE OCEAN COLOR SENSORS & IOP RETRIEVALS

- A0551 Isada, T.; Hirawake, T.; Suzuki, K.; Saitoh, S.: IDENTIFICATION OF THE DIATOMS BLOOM IN THE COASTAL WATERS BY USING HYPERSPECTRAL APPROACH.
- A0552 Vantrepotte, V.; Loisel, H.; Desailly, D.; Mériaux, X.: COASTAL WATERS OPTICAL CLASSIFICATION: INTEREST FOR MONITORING WATER MASSES QUALITY AND OPTIMIZING BIO-OPTICAL INVERSION ALGORITHMS
- A0553 McCarthy, S. C.; Gould, R. W.; Shulman, I.; Penta, B.: INTERCOMPARISON OF AEROSOL MODEL SELECTION FOR MODIS, SEAWIFS, AND MERIS OCEAN COLOR IMAGERY
- A0554 Ioannou, I.; Gilerson, A.; Tonizzo, A.; Hlaing, S.; Gross, B.; Moshary, F.; Ahmed, S.: NEURAL NETWORK MODELING OF THE OCEAN COLOR INVERSE PROBLEM
- A0555 Estapa, M. L.; Boss, E. S.; Roesler, C. S.; Schaeffer, B. A.: SUSPENDED SEDIMENT CONCENTRATION AND OPTICAL PROPERTY OBSERVATIONS OF MIXED-TURBIDITY, COASTAL WATERS THROUGH MULTISPECTRAL OCEAN COLOR INVERSION
- A0556 Zhang, X.; Asanuma, I.; Zheng, Z.: correlation OF AEROSOL OPTICAL THICKNESS AND CHLOROPHYLL-A CONCENTRATION ALL OVER THE WORLD
- A0557 Smith, C.; Thomalla, S.; Waldron, H.; Bernard, S.; Lucas, M.: A BIO-OPTICAL APPROACH TO PHYTOPLANKTON COMMUNITY STRUCTURE, PRIMARY PRODUCTION AND CARBON EXPORT IN THE SOUTHERN OCEAN
- A0559 Kostadinov, T. S.; Siegel, D. A.; Maritorena, S.; Guillocheau, N.: MULTI-PROXY CHARACTERIZATION OF SUSPENDED PARTICLE SIZE AND COMPOSITION IN THE SANTA BARBARA CHANNEL, CALIFORNIA
- A0560 Dong, Q.; Lee, Z.: IMPACT OF HUMAN ACTIVITIES ON THE COASTAL ECOSYSTEM: A CASE STUDY OF THE NORTHERN GULF OF MEXICO AFTER HURRICANE KATRINA
- A0561 Feng, H.; Lu, K.; Li, L.: SPATIAL PATTERNS AND TEMPORAL SCALES FROM SPECTRAL ANALYSIS OF REMOTE-SENSED SEA SURFACE CHLOROPHYLL AND TEMPERATURE IMAGERY IN THE MID-ATLANTIC BIGHT
- A0562 Milutinovic, S.; Bertino, L.: ASSESSMENT AND PROPAGATION OF UNCERTAINTIES IN INPUT TERMS THROUGH AN OCEAN-COLOUR-BASED MODEL OF PRIMARY PRODUCTIVITY
- A0563 Amabile Ferreira, A.; Áurea Ciotti,.; Carlos Garcia,.; Annick Bricaud,.; Bernard Gentili,.: TEMPORAL VARIABILITY OF SEAWIFS-DERIVED CHLOROPHYLL-A AND A CELL SIZE PARAMETER OF PHYTOPLANKTON ALONG THE PATAGONIAN SHELF-BREAK, FROM 1998 TO 2009.
- A0564 Mengelt, C.; Yoder, J. A.; Antoine, D.; Siegel, D. A.; Evans, R. H.; Moble, C.; Sarmiento, J. L.; Sathyendranath, S.; Schueler, C. F.; Wilson, C.: REQUIREMENTS TO SUSTAIN GLOBAL OCEAN COLOR OBSERVATIONS
- A0565 Delgado, A. L.; Loisel, H.; Jamet, C.; Piccolo, M. C.; Perillo, G. M.: INTER-ANNUAL ANALYSIS OF SURFACE TEMPERATURE, CHLOROPHYLL-A AND INHERENT OPTICAL PROPERTIES FROM SATELLITE OBSERVATIONS IN THE SW OF BUENOS AIRES (ARGENTINA)
- A0566 Goyens, C.; Jamet, C.; Loisel, H.: INTER-COMPARISON AND VALIDATION OF FOUR MODIS-AQUA ATMOSPHERIC CORRECTION ALGORITHMS USING AERONET-OC IN-SITU DATA
- A0567 Bowers, J. B.; Arnone, R. A.; Lawson, A.; Martinolich, P.; Ladner, S.; Fargion, G.; Lee, Z.; Davis, C. O.: TRENDING OF THE COASTAL "GAIN" AT DIFFERENT TIME SCALES USING TOA RADIANCE (LT/ VLT) FOR OCEAN COLOR SENSORS.
- A0568 Lance, V. P.; Mannino, A.: NASA OCEAN COLOR DATA IN THE GULF OF MEXICO: QUANTITATIVE SELECTION OF ALGORITHMS AND EXPLORATION OF CARBON-TO-CHLOROPHYLL PHYTOPLANKTON PHYSIOLOGY.
- A0569 Graff, J. R.; Milligan, A. J.; Behrenfeld, M. J.: VALIDATING SATELLITE DERIVED ESTIMATES OF PHYTOPLANKTON CARBON
- A0570 Rivero-Calle, S.; Goyens, C.; Seegers, B.; Freitas, F. H.; Cao, F.; Mischra, S.; Vandermeulen, R.: CLOSURE IN CALIBRATION AND VALIDATION OF OCEAN COLOR REMOTE-SENSING: OCEAN OPTICS SUMMER COURSE 2011

- A0571 Moore, T. S.; Dowell, M. D.: A NEW METHOD FOR DETECTING COCCOLITHOPHORE BLOOMS

046 Understanding The Biological Consequences Of Ocean Acidification In A Holistic Global Change Context

Chair(s): David Hutchins, dahutch@usc.edu
Philip Boyd, Pboyd@chemistry.otago.ac.nz
Shannon Meseck, smeseck@clam.mi.nmfs.gov
Adina Paytan, apaytan@ucsc.edu

Location: Exhibit/Poster Hall

- A0190 Strzepek, R. F.; Hunter, K. A.; Frew, R. D.; Harrison, P. J.; Boyd, P. W.: ABSENCE OF IRON-LIGHT CO-LIMITATION IN SOUTHERN OCEAN PHYTOPLANKTON
- A0191 Middelburg, J. J.; de Kluijver, A.; Soetaert, K.; Czerny, J.; Schulz, K. G.; Riebesell, U.: A 13C LABELLING STUDY OF CARBON FLUXES IN ARCTIC PLANKTON COMMUNITIES UNDER ELEVATED CO₂ LEVELS
- A0192 Nisumaa, A. M.; Gattuso, J. P.: EPOCA/EUR-OCEANS DATA COMPILATION ON THE BIOLOGICAL RESPONSE TO OCEAN ACIDIFICATION: DESCRIPTION AND APPLICATIONS
- A0193 Hurd, C. L.; Cornwall, C. E.; Currie, K.; Hepburn, C. D.; McGraw, C. M.; Hunter, K. A.; Boyd, P. W.: DIFFERENTIAL SUSCEPTIBILITY OF COASTAL CALCIFIERS TO OCEAN ACIDIFICATION
- A0194 Bulsecu, A. N.; Langdon, C.; Gray, M.: THE EFFECTS OF ACUTE HIGH PCO₂ EXPOSURE ON GROWTH AND SURVIVAL OF *CRASSOSTREA GIGÁS* LARVAE
- A0195 Yara, Y.; Vogt, M.; Hauri, C.; Steinacher, M.; Fujii, M.; Yamano, H.; Yamanaka, Y. Y.; Gruber, N.: EFFECTS OF RISING SEA SURFACE TEMPERATURE AND OCEAN ACIDIFICATION ON CORALS
- A0196 Gradoville, M. R.; White, A. E.; Zirbel, M. J.; Böttjer, D.; Church, M. J.; Letelier, R. M.: METABOLIC RESPONSE OF *TRICHODESMIUM* AND *CROCOSPHAERA* TO PCO₂ PERTURBATIONS ON MULTIPLE TIME SCALES
- A0197 Stinson, C. M.; Hurst, T.: THE EFFECTS OF OCEAN ACIDIFICATION ON THE GROWTH OF EARLY LIFE STAGE WALLEYE POLLOCK, *THELAGRA CHALCOGRAMMA*
- A0198 Wilcox Freeburg, E. D.; Rhyne, A.; Hannigan, R. E.: A COMPARISON BETWEEN TWO CO₂ CONTROLLER SYSTEMS FOR DEPLOYMENT IN OCEAN ACIDIFICATION RESEARCH
- A0199 Garcia, N. S.; Fu, F. X.; Yu, E. K.; Breene, C. L.; Bernhardt, P. W.; Mulholland, M. R.; Sohm, J. A.; Webb, E. A.; Hutchins, D. A.: RESPONSES OF MARINE N₂ FIXATION TO INTERACTIVE GLOBAL CHANGE EFFECTS: *TRICHODESMIUM* AND *CROCOSPHAERA* COMPARED AND CONTRASTED
- A0200 Gutowska, M. A.; Suffrian, K.; Fischer, N.; Himmerkus, N.; Mulisch, M.; Bleich, M.: UNTANGLING THE COMPLEXITY BEHIND COCCOLITHOPHORE CALCIFICATION SENSITIVITY TO OA: INSIGHTS FROM THE CELLULAR PHYSIOLOGY OF LITH MORPHOGENESIS.
- A0201 Lomas, M. W.; Hopkinson, B. M.; Losh, J. L.; Ryan, D. E.; Shi, D.; Xu, Y.; Morel, F. M.: EFFECT OF OCEAN ACIDIFICATION ON CYANOBACTERIA IN THE SUBTROPICAL NORTH ATLANTIC
- A0202 Siu, N.; Apple, J. K.; Moyer, C. L.: CONSEQUENCES OF INCREASED TEMPERATURE AND PCO₂ ON HETEROTROPHIC BACTERIOPLANKTON COMPOSITION AND METABOLISM
- A0203 Yamamoto, A.; Kawamiya, M.; Ishida, A.; Yamanaka, Y.; Watanabe, S.: IMPACT OF RAPID SEA-ICE REDUCTION IN THE ARCTIC OCEAN ON THE RATE OF OCEAN ACIDIFICATION
- A0204 McGraw, C. M.; Law, C. S.; Breitbarth, E.; Hoffmann, L.; Hunter, K. A.: TRACE-METAL CLEAN AUTOMATED CULTURE SYSTEM FOR OCEAN ACIDIFICATION EXPERIMENTS
- A0205 Yoshimura, T.; Sugie, K.; Endo, H.; Suzuki, K.: IMPACTS OF OCEAN ACIDIFICATION ON IRON-DEFICIENT PHYTOPLANKTON ASSEMBLAGES AND ORGANIC MATTER PRODUCTION IN OPEN SUBARCTIC WATERS
- A0206 Matthew Ware, M. W.; J. Keith Moore, J. K.: THREATS TO THE CORALS OF THE GALPAGOS ISLANDS AND THE EASTERN EQUATORIAL PACIFIC OCEAN

- A0207 Wu, Y.; Campbell, D. A.; Finkel, Z. V.: INFLUENCE OF CO₂ ON THE SIZE SCALING OF GROWTH RATE AND ELEMENTAL COMPOSITION IN MARINE DIATOMS
- A0208 Passow, U.; Fairfield, C.: GROWTH RESPONSE OF A DIATOM TO CHANGING OCEANIC ENVIRONMENTS
- A0209 Hikami, M.; Ushie, H.; Irie, T.; Fujita, K.; Kuroyanagi, A.; Sakai, K.; Nojiri, Y.; Suzuki, A.; Kawahata, H.: DIFFERENT EFFECTS OF OCEAN ACIDIFICATION ON CALCIFICATION OF ALGAL-SYMBIONT LARGER BENTHIC FORAMINIFERS
- A0210 Lee, C.; Engel, A.; Cisternas, C.; Wurst, M.; Endres, S.; Tang, T.: NO EFFECT OF CO₂ ON ELEMENTAL STOICHIOMETRY AND TEP PRODUCTION OF *EMILIANA HUXLEYI* IN NUTRIENT-LIMITED CHEMOSTATS

050 Linking The Optical And Chemical Properties Of Dissolved Organic Matter In Natural Waters

Chair(s): Christopher Osburn, cloburn@ncsu.edu
Colin Stedmon, cost@aqu.dtu.dk
Robert G.M. Spencer, rspencer@whrc.org

Location: Exhibit/Poster Hall

- B0990 Suryaputra, I. A.; Santos, I. R.; Dittmar, T.: HOW USEFUL ARE ESTUARINE MODELS TO EXPLAIN THE DYNAMICS OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) IN SUBTERRANEAN ESTUARIES?
- B0991 Zhou, Z.; Guo, L.; He, H.: UV AND FLUORESCENCE CHARACTERISTICS OF DOM FROM THE GULF OF MEXICO 5 MONTHS AFTER THE DEEPWATER HORIZON OIL SPILL
- B0992 Granskog, M. A.: CHANGES IN TERRESTRIAL CDOM ABSORPTION SPECTRAL SLOPES WITH MIXING AND REMOVAL (HUDSON BAY, CANADA)
- B0993 Arellano, A. R.; Coble, P. G.; Conmy, R. N.: INVESTIGATION OF INPUTS OF CARBON, NUTRIENTS, AND GROUNDWATER IN COASTAL FLORIDA USING COLORED DISSOLVED ORGANIC MATTER
- B0994 Zablocka, M.; Kowalczyk, P.: ASSESSMENT OF THE DISSOLVED ORGANIC MATTER COMPOSITION IN THE SOUTHERN BALTIC SEA WATERS WITH USE OF FLUORESCENCE SPECTROSCOPY AND PARALLEL FACTOR ANALYSIS.
- B0995 Kowalczyk, P.; Zablocka, M.; Röttgers, R.; Tilstone, G. H.: COMPOSITION OF THE DISSOLVED ORGANIC MATTER ALONG THE ATLANTIC MERIDIONAL TRANSECT WITH USE OF FLUORESCENCE SPECTROSCOPY AND PARALLEL FACTOR ANALYSIS.
- B0996 Anderson, A. M.; Roesler, C. S.: ULTRA-VIOLET ABSORPTION SPECTRA: OPTICAL RETRIEVAL OF NITRATE CONCENTRATIONS IN HIGH CDOM WATERS
- B0997 Wakui, Y.; Zhang, X.; Asanuma, I.: CDOM AND SS IN COMPLEX WATERS OF THE TOKYO BAY
- B0998 Andrew, A. A.; Del Vecchio, R.; Subramaniam, A.; Blough, N. V.: CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) FROM THE EQUATORIAL ATLANTIC OCEAN: OPTICAL PROPERTIES AND POTENTIAL ORIGIN
- B0999 Spencer, R. G.; Stubbins, A.; Hernes, P.; Mann, P. J.; Dyda, R. Y.; Aiken, G. R.; Striegl, R. G.; Wickland, K. P.; Six, J.; Holmes, R. M.: LINKING CHROMOPHORIC DISSOLVED ORGANIC MATTER CHARACTERISTICS TO ECOSYSTEM BIOGEOCHEMISTRY

053 Nitrogen And Carbon Cycling In The Eastern Tropical Pacific Ocean: Linking The OMZ To The Open Ocean

Chair(s): Angela Knapp, aknapp@rsmas.miami.edu
Alyson Santoro, asantoro@umces.edu
Rachel Foster, rfoster@mpi-bremen.de
Sophie Bonnet, Sophie.BONNET@univmed.fr

Location: Exhibit/Poster Hall

- A0350 Haskell II, W. Z.; Kadko, D.; Berelson, W. M.; Hammond, D. E.; Knapp, A. N.; Capone, D. G.: UPWELLING VELOCITIES AND EDDY DIFFUSIVITY FROM 7BE MEASUREMENTS USED TO COMPARE VERTICAL NUTRIENT FLUXES TO EXPORT POC FLUX IN THE ETSP
- A0351 Landolfi, A.; Koeve, W.; Dietze, H.; Oschlies, A.: THE TP* CONVEYOR
- A0352 Smith, J. M.; Casciotti, K. L.; Francis, C. F.: NITRIFICATION IN UPWELLING INFLUENCED WATERS: A SPATIO-TEMPORAL STUDY IN MONTEREY BAY
- A0353 Letscher, R. T.; Knapp, A. N.; Hansell, D. A.: DIFFERENTIAL CYCLING OF DOC AND DON ACROSS THE EASTERN TROPICAL SOUTH PACIFIC
- A0354 Beman, J. M.; Carolan, M. T.: MICROBIAL NITROGEN, CARBON, AND SULFUR CYCLING IN THE EASTERN TROPICAL NORTH PACIFIC OXYGEN MINIMUM ZONE
- A0355 Turk-Kubo, K. A.; Bonnet, S.; Dekaezemaeker, J.; Foster, R.; Liss, A.; Capone, D. G.; Zehr, J. P.: NITROGEN FIXATION AND THE DIVERSITY, ABUNDANCE AND NITROGENASE (NIFH) GENE EXPRESSION OF DIAZOTROPHS IN THE EASTERN TROPICAL SOUTH PACIFIC
- A0356 Santoro, A. E.; Buchwald, C.; Casciotti, K. L.: NITRIFICATION AND NITROUS OXIDE PRODUCTION IN THE EASTERN TROPICAL SOUTH PACIFIC: INSIGHTS FROM STABLE ISOTOPE RATIOS AND DIRECT RATE MEASUREMENTS
- A0357 Liss, A. M.; Tiahlo, M.; Sañudo-Wilhelmy, S. A.; Capone, D. G.: THE INFLUENCE OF NICKEL ON NITROGEN AND CARBON FIXATION RATES IN THE EASTERN TROPICAL SOUTH PACIFIC
- A0358 Hammond, D. E.; Prokopenko, M. G.; Yeung, L. Y.; Berelson, W. M.; Stanley, R.; Haskell II, W. Z.; Knapp, A. N.; Rollins, N.; Young, E. D.; Capone, D. G.: NET COMMUNITY AND GROSS PHOTOSYNTHETIC PRODUCTION RATES IN THE ETSP, BASED ON O₂/AR RATIOS AND TRIPLE OXYGEN ISOTOPIIC COMPOSITION OF DISSOLVED O₂
- A0359 Seegers, B. J.; Smail, E. A.; Sañudo-Wilhelmy, S. A.: DISTRIBUTION OF TRACE ELEMENTS IN THE EASTERN TROPICAL SOUTH PACIFIC

054 Mapping And Characterizing The Seafloor Using Acoustics: Bringing Spatial Data Up From The Depths (Posters Only)

Chair(s): Paul R. Cooper, paul.cooper@caris.com
Miles G. Logsdon, mlog@u.washington.edu
Leslie R. Sautter, sautterl@cofc.edu

Location: Exhibit/Poster Hall

- B0782 Poppe, L. J.; Ackerman, S. D.; McMullen, K. Y.; Schaefer, J. D.: SEDIMENTARY ENVIRONMENTS AND PROCESSES OFFSHORE IN EASTERN LONG ISLAND SOUND
- B0783 Paduan, J. B.; Clague, D. A.; Caress, D. W.: LAVA PONDS ON SOUTH RIFT OF AXIAL VOLCANO: AUV MAPPING REVEALS ELABORATE, EXTENSIVE COMPLEX
- B0784 Smythe, M. G.; Bierce, P. J.; Sautter, L. R.; Harris, M. S.: BATHYMETRIC ANALYSIS OF BULLS SCARP, A COMPLEX SHELF-EDGE PROMONTORY EXTENDING INTO THE GULF STREAM OFF CHARLESTON, SC
- B0786 Munoz, Y. P.; Wellner, J. S.; Mead, K. A.: COMPARISON OF GLACIAL GEOMORPHIC FEATURES IN ANTARCTIC PENINSULA FJORDS BASED ON MULTIBEAM SWATH BATHYMETRY DATA
- B0787 Kist, J. K.; Royal, J.: USE OF AN EM3002 MULTIBEAM SONAR IN UNDERWATER ARCHAEOLOGICAL RESEARCH
- B0788 Sautter, L. R.; Logsdon, M.; Cooper, P. R.; Mode, J.; Harris, M. S.: SEAMAP: A COLLABORATIVE, UNDERGRADUATE-FOCUSED SEAFLOOR MAPPING PROGRAM

- B0789** Cooper, P. R.; Logsdon, M.; Hersey, J.: ASSESSING DATA COLLECTION, SPATIAL AND TEMPORAL PATTERNS IN CROWD SOURCE BATHYMETRIC DATA
- B0790** Bassett, C. S.; Thomson, J.; Polagye, B.: AMBIENT NOISE FROM GRAVEL AND COBBLES SHIFTING UNDER FAST CURRENTS
- B0791** Prescott, M. M.; Logsdon, M. G.: SEAFLOOR TERRAIN AND SEDIMENT CHARACTERIZATION AT MOLOKAI, LOIHI, AND CROSS SEAMOUNT VIA SEAFLOOR MAPPING
- B0792** Allison, M. A.; Goff, J. A.; Gulick, S. P.; Davis, M. B.; Duncan, D. D.; Sastrup, S.; Brewer, J.: HIGH-RESOLUTION SEAFLOOR AND SUBBOTTOM MAPPING OF UPPER MISSISSIPPI CANYON: RESULTS FROM THE 2011 UTIG MARINE GEOLOGY & GEOPHYSICS FIELD COURSE
- B0793** Rembert, J. R.; Niergarth, J.; McFall, G.; Sautter, L. R.: TEMPORAL VARIATIONS IN BATHYMETRY AND MORPHOLOGY AT GRAY'S REEF NATIONAL MARINE SANCTUARY
- B0794** Clarke, S.; Hubble, T.; Airey, D.; Yu, P.; Keene, J.; Webster, J.; Boyd, R.; Shipboard Party SS12/2008: GEOLOGICALLY RECENT SUBMARINE LANDSLIDES FROM THE SOUTHEASTERN AUSTRALIAN CONTINENTAL MARGIN - PRELIMINARY FINDINGS
- B0795** Hubble, T.; Yu, P.; Clarke, S.; Airey, D.; Webster, J.; Keene, J.; Shipboard Party SS12/2008: A CONCEPTUAL MODEL FOR THE ONSET AND OCCURRENCE OF SUBMARINE LANDSLIDES ON THE SOUTHEASTERN AUSTRALIAN CONTINENTAL MARGIN.
- B0796** Weidner, E. E.; Hacking, A. B.; Prescott, M.; Logsdon, M. G.: EFFECTS OF DATA RESOLUTION ON ASSESSING THE SCALE OF SEAFLOOR STRUCTURE
- B0797** Pirtle, J. L.; Weber, T. C.; Wilson, C. D.; Rooper, C. N.: SEAFLOOR CHARACTERIZATION FOR TRAWLABILITY AND FISH HABITAT USING THE SIMRAD ME70 MULTIBEAM ECHOSOUNDER IN THE GULF OF ALASKA
- B0798** Hoy, S. K.; Scanlon, K. M.: NEW EXPLORATORY MULTIBEAM DATA IN THE DRAKE PASSAGE
- B0799** Roth, G. E.; Noormets, R.; Powell, R. D.; Brigham-Grette, J.: MULTIBEAM MEASUREMENTS OF SEDIMENTATION IN A RETREATING TIDEWATER GLACIER REGIME
- B0800** Brown, T. L.; Norton, A. R.; Rogers, J.; Gontz, A. M.; Borrelli, M.: CREATING A HIGH-RESOLUTION, HIGH ACCURACY, SEAMLESS MAP OF THE MARINE-TERRESTRIAL INTERFACE USING SWATH BATHYMETRY, INTERTIDAL STRUCTURES AND TERRESTRIAL LIDAR
- B0801** Logsdon, M. G.; Anderson, C. H.; Keil, R. G.: ASSESSING THE SPATIAL SCALES OF GLACIER RETREAT IN FJORD ENVIRONMENTS
- B0802** Homola, K. L.; Hearn, C. K.: DETERMINING SEAFLOOR COMPOSITION THROUGH MULTIBEAM SONAR
- B0803** Joshi, S. M.; Isakson, M. J.: ACOUSTIC BACKSCATTERING FROM ROUGH SURFACES
- A0214** Maas, A. E.; Wishner, K. F.; Seibel, B. A.: DISTRIBUTION AND PHYSIOLOGY OF THECOSOME PTEROPODS IN THE EASTERN TROPICAL PACIFIC: A NATURAL EXPERIMENT IN CO₂ EXPOSURE
- A0215** Saderne, V.; Wahl, M.: EFFECT OF OCEAN ACIDIFICATION ON GROWTH, CALCIFICATION AND REPRODUCTION OF CALCIFYING AND NON-CALCIFYING EPIBIONTS OF BROWN ALGAE.
- A0216** Wright, J. M.; Ross, P. M.; Parker, L. M.; O'Connor, W. A.: PREDICTING THE PHYSIOLOGICAL RESPONSE OF ECOLOGICALLY AND ECONOMICALLY SIGNIFICANT OYSTERS TO CLIMATE CHANGE
- A0217** Broadaway, B. J.; Hannigan, R. E.: IS THE TAURINE:GLYCINE RATIO AN INDICATOR OF STRESS RESPONSE TO OCEAN ACIDIFICATION?
- A0218** Dupont, S. T.; Moya, A.; Bailly, X.; Thorndyke, M. S.: RESISTANCE TO CO₂-INDUCED ACIDIFICATION IN TIDAL SPECIES
- A0219** Burnett, L. E.; Stover, K. K.; Tommerdahl, A.; Burnett, K. G.: HYPOXIA AND ELEVATED CARBON DIOXIDE LIMIT CRUSTACEAN ADAPTATIONS TO THEIR ENVIRONMENT
- A0220** Reigstad, L. J.; Hoffmann, E.; Baumberger, T.; Eickmann, B.; Sweetman, A. K.; Thorseth, I. H.; Pedersen, R. B.: THE EFFECTS OF CO₂ LEAKAGE ON LIFE IN THE SEAFLOOR SEDIMENT, -A LABORATORY MODEL.
- A0221** Barry, J. P.; Buck, K. R.; Pane, E. F.; Taylor, J. R.; Lovera, C.; Whaling, P. J.; Kim, T.: EFFECTS OF OXYGEN AND PH ON THE PERFORMANCE OF THE URCHIN STRONGYLOCENTROTUS FRAGILIS ACROSS A DEPTH GRADIENT SPANNING THE OXYGEN MINIMUM ZONE
- A0222** McElhany, P.; Busch, D. S.: OCEAN ACIDIFICATION EXPERIMENTS IN AN ECOLOGICAL CONTEXT
- A0223** Haynert, K.; Schönfeld, J.; Thomsen, J.; Polovodova, I.: RESPONSE OF BENTHIC FORAMINIFERA TO A NATURALLY CO₂-RICH COASTAL HABITAT IN FLENSBURG FJORD (SW BALTIC SEA)
- A0224** Meseck, S. L.; Alix, J.; Wikfors, G. H.: THE RESPONSE OF BLUE CRAB, *CALINECTES SAPIDUS*, HEMOCYTES TO OCEAN ACIDIFICATION
- A0225** Kleypas, J. A.; Anthony, K.; Gattuso, J. P.: THE INTERPLAY BETWEEN CORAL REEF COMMUNITIES AND SEAWATER CHEMISTRY: IMPLICATIONS FOR THE IMPACTS OF OCEAN ACIDIFICATION
- A0226** Isensee, K.; Erez, J.; Stoll, H. M.: DETECTION OF A VARIABLE INTERNAL CI-POOL IN EMILIANA HUXLEYI AND THALASSIOSIRA WEISSFLOGII IN RESPONSE TO CHANGES IN THE SEAWATER CARBON SYSTEM
- A0227** Kiko, R.; Esser, D.; Kraemer, L.; Philipp, E.; Rosenstiel, P.; Melzner, E.: TRANSCRIPTIONAL PROFILING OF IN SITU FIXED ZOOPLANKTON – TRANSCRIPTOME OF A COPEPOD DIAPAUSING IN THE OXYGEN MINIMUM ZONE
- A0228** Meléndez, M.; Gledhill, D.; Langdon, C.; Loose, B.; McGillis, W. R.; Corredor, J. E.; Morell, J.: ESTIMATES OF SEDIMENT CALCIUM CARBONATE DISSOLUTION RATES IN A CORAL REEF ENVIRONMENT
- A0229** Egilsdottir, H.; Noel, L.; Noisette, F.; Olafsson, J.; Martin, S.: EFFECTS OF ELEVATED PCO₂ ON PHOTOSYNTHESIS, RESPIRATION, CALCIFICATION AND SKELETAL MINERALOGY IN THE RED ALGA *CORALLINA ELONGATA*
- A0230** North, C. A.; Lovvorn, J. R.; Kolts, J. M.: DIETARY RESPONSE OF BENTHIC DEPOSIT-FEEDERS TO FRESH ALGAE SETTLING FROM AN ICE-EDGE SPRING BLOOM IN THE NORTHERN BERING SEA
- A0231** Ceballos, L.; Carter, H. A.; Miller, N. A.; Stillman, J. H.: DEVELOPMENTAL EFFECTS OF OCEAN ACIDIFICATION ON PORCELAIN CRABS
- A0232** Tatters, A. O.; Fu, F.; Schnetzer, A.; Alle Lie, A.; Caron, D. A.; Hutchins, D. A.: COMPARING SHORT-TERM AND LONG-TERM ADAPTED RESPONSES TO CHANGING PCO₂ IN A COASTAL DINOFLAGELLATE BLOOM
- A0233** Koweek, D.; Teneva, L.; Archambault, A.; Mucciarone, D. A.; Dunbar, R. B.: PALMYRA ATOLL'S ANOXIC LAGOONS: UNDERSTANDING THE HYDROGRAPHY AND ASSESSING RISK FOR THE CORAL REEFS

056 Biology And Chemistry In A High CO₂ World

Chair(s): Frank Melzner, fmelzner@ifm-geomar.de
 Sam DuPont, sam.dupont@marecol.gu.se
 Rainer Kiko, rkiko@ifm-geomar.de
 Brad Seibel, seibel@uri.edu
 Alexandra Rao, a.rao@nioo.knaw.nl
 Christian Wild, christian.wild@zmt-bremen.de
 Matthew Charette, mcharette@whoi.edu

Location: Exhibit/Poster Hall

- A0211** Pansch, C.; Schaub, I.; Havenhand, J. N.; Wahl, M.: CAN BARNACLES ADAPT TO FUTURE OCEAN ACIDIFICATION?
- A0212** Cumani, E.; Bradassi, F.; Bressan, G.; Dupont, S.: APPLICATION OF HIGH RESOLUTION IMAGING TECHNIQUES ON CORALLINE ALGAE UNDER OCEAN ACIDIFICATION: A NEW PERSPECTIVE.
- A0213** Slattery, M.; Lee, S. J.; Easson, C. G.; Williams, C. C.; Hunkin, K. E.; Gochfeld, D. J.: SPONGE DIVERSITY AND ACCLIMATION IN NATURALLY-ACIDIFIED MARINE CAVES

058 Integrated Observational And Modeling Studies Of Marine Ecosystems

Chair(s): Bradley Penta, penta@nrlssc.navy.mil
Francisco Chavez, chfr@mbari.org

Location: Exhibit/Poster Hall

- A0475 Lee, T. S.; Henkel, S. K.: FINDING APPROPRIATE ABIOTIC PARAMETERS TO EVALUATE BENTHIC MACROINVERTEBRATE ASSEMBLAGES IN TEMPERATE CONTINENTAL SHELF WATERS
- A0476 Xiu, P.; Chai, F.: MODELING PHYSICAL, BIOGEOCHEMICAL AND OPTICAL PROPERTIES IN THE PACIFIC OCEAN
- A0477 Shulman, I.; Penta, B.; Moline, M.; Haddock, S.; Oliver, M.; Anderson, S.; Sakalaukus, P.; Weidemann, A.; Gould, R.; Ryan, J.: JOINT STUDY AND MODELING OF BIOLUMINESCENCE AND PHYSICAL/BIO-OPTICAL PROPERTIES
- A0478 Anderson, C. R.; Kudela, R. M.; Shulman, I.; Penta, B.; Chao, Y.; Siegel, D. A.; Benitez-Nelson, C.; Quay, J.: THE ROLE OF COUPLED PHYSICAL-BIOLOGICAL MODELS FOR HAB PREDICTION IN CALIFORNIA
- A0479 Zhang, X.; Gray, D.; Twardowski, M.; Lewis, M.: PARTICLE SUBPOPULATIONS FROM VSF INVERSION
- A0480 Gray, D. J.; Penta, B.; Goode, W.; Miller, W. D.; Snyder, W. A.; Rhea, W. J.: OPTICAL PROPERTIES OF DINOFLAGELLATE BLOOMS IN MONTEREY BAY
- A0481 QUEGUINER, B.; CARLOTTI, F.; BLAIN, S.; DEVENON, J.; ZHOU, M.; DOGLIOLI, A.; PETRENKO, A.; LEBLANC, K.; CHRISTAKI, U.; DIAZ, F.: SPECIMED: A MULTI-YEAR SURVEY OF MEDITERRANEAN PELAGIC COASTAL ECOSYSTEMS IN A CONTEXT OF GLOBAL CHANGE
- A0482 Taylor, M. H.; Losch, M.; Bracher, A.: ON THE DRIVERS OF PHYTOPLANKTON BLOOMS IN THE ANTARCTIC SEASONAL ICE ZONE: A GCM APPROACH
- A0483 Smith, S. R.; Shulman, I. G.; Carrier, M. J.; Penta, B.; Yaremchuk, M.; Ngodock, H. E.; Muscarella, P. A.: PREDICTING OCEAN CURRENTS FROM BIO-OPTICAL DATA USING THE 4DVAR-NCOM OCEAN ASSIMILATION SYSTEM
- A0484 Li, Q. P.; Franks, P. J.: ON RECOVERING MICROZOOPLANKTON GRAZING RATES FROM NONLINEAR DILUTION EXPERIMENTS
- A0485 Jolliff, J. K.; deRada, S.; Smith, T.; Penta, B.; Anderson, S.; Wesson, J.; Barron, C.; Gouff, R. W.; Arnone, R. A.: CENTRAL CALIFORNIA'S COASTAL IRON LIMITATION MOSAIC: THEORY, ECOSYSTEM MODELS, OBSERVATIONS, AND FEEDBACK TO THE PHYSICS
- A0486 Gangopadhyay, A.; Chaudhuri, A.; Chai, F.; Haidvogel, D.; LEVIN, J.; Curchitser, E.; Bisagni, J.: SEASONAL RESPONSE OF NUTRIENTS, PHYTOPLANKTON AND ZOOPLANKTON IN THREE NORTH ATLANTIC GYRES

060 Marine Gas Hydrate Deposits: Research, Monitoring Strategies And Present-Day Knowledge

Chair(s): Ray Highsmith, ray@olemiss.edu
Laura Lapham, laura.lapham@biology.au.dk
Leonardo Macelloni, lmacello@olemiss.edu
Marta Torres, mtorres@coas.oregonstate.edu

Location: Exhibit/Poster Hall

- B0755 Macelloni, L.; Carriere, O.; D'Emidio, M.; Gerstoft, P.; Simonetti, A.; Knapp, C. C.; Knapp, J. H.; Lutken, C. B.; Hardage, B. A.; Sleeper, K.: GEOPHYSICAL EVIDENCE OF SHALLOW HYDRATES FORMATION AND ACCUMULATION AT WOOLSEY MOUND, MISSISSIPPI CANYON BLOCK 118
- B0756 D'Emidio, M.; Ingrassia, M.; Lutken, C. B.; Macelloni, L.; Simonetti, A.; Lapham, L. L.; Wilson, R. M.; Hsing, P.; Fisher, C.: BIOGEOCHEMICAL CLASSIFICATION OF SEAFLOOR SEEPS AT A CARBONATE-HYDRATE MOUND, NORTHERN GULF OF MEXICO
- B0757 Feseker, T.; de Beer, D.; Foucher, J. P.; Harmegnies, F.; Legrand, J.; Blandin, J.; Olu, K.; Wenzhöfer, F.; Boetius, A.: LONG-TERM MONITORING OF ERUPTIONS AND GAS HYDRATE DYNAMICS AT THE HKKON MOSBY MUD VOLCANO, BARENTS SEA SLOPE

- B0758 Denny, A. R.; Kelley, D.; Solomon, E. A.; Proskurowski, G.; Philip, B.; Stapleton, C. M.; Delaney, J.: METHANE BUBBLE PLUMES AT HYDRATE RIDGE: MULTIBEAM IMAGING OF TEMPORAL AND SPATIAL VARIABILITY AS PART OF THE OCEAN OBSERVATORIES INITIATIVE
- B0759 Dunbar, J. A.: EXTRUSION MODEL FOR THE DISTRIBUTION OF HYDRATE AT WOOLSEY MOUND, MISSISSIPPI CANYON, BLOCK 118, GULF OF MEXICO
- B0760 Steele, J. A.; Marlow, J. J.; Pasulka, A. L.; Harrison, B. K.; Mason, O. U.; Orphan, V. J.: DIVERSITY AND ACTIVITY OF ARCHAEA AND BACTERIA ASSOCIATED WITH AUTHIGENIC CARBONATES AT DEEP-SEA METHANE SEEPS
- B0761 Grupe, B. M.; Levin, L. A.; Orphan, V. J.; Rouse, G. W.; Gonzalez, J. P.; Marlow, J. J.; Mendoza, G. F.; Steele, J. A.; Thurber, A. R.: MACROFAUNAL COLONIZATION AND TROPHIC DYNAMICS AT TWO EAST PACIFIC METHANE SEEPS (HYDRATE RIDGE AND COSTA RICA)
- B0762 Kapit, J.; Camilli, R.; Farr, N.; Ware, J.; Pontbriand, C.; Hamner, B.; Backus, S.: IMPROVING THE SUSTAINABILITY OF LONG-TERM UNCABLED HYDRATE OBSERVATORIES: TECHNOLOGIES FOR EFFICIENT DATA RETRIEVAL AND RENEWABLE POWER
- B0763 Camilli, R.; Farr, N.; Pontbriand, C.; Kapit, J.; Ware, J.; Pizarro, O.; Whelan, J.: LONG-TERM BENTHIC BOUNDARY LAYER MONITORING AT THE MISSISSIPPI CANYON BLOCK 118 HYDRATES OBSERVATORY
- B0764 Feng, D.; Roberts, H. H.: CARBONATE PRECIPITATION CORRELATES WITH EUSTATIC SEA-LEVEL FLUCTUATIONS OVER THE LAST 50 KA: EVIDENCE FROM GULF OF MEXICO CONTINENTAL SLOPE
- B0765 Phillips, S. C.; Johnson, J. E.; Giosan, L.; Rose, K.; Clyde, W. C.: TRACKING CHANGES IN THE SMT WITH MAGNETIC SUSCEPTIBILITY IN GAS HYDRATE BEARING STRATIGRAPHY
- B0766 Maue, C. C.; Yvon-Lewis, S. A.; Kessler, J. D.; Pohlman, J. W.; Bergeron, E.; Worley, C.; Ruppel, C. D.; Sparrow, K.: MONITORING METHANE FLUXES WITH AN INTEGRATED SEAWATER EQUILIBRIATOR AND CAVITY RING-DOWN SPECTROMETER (CRDS): SYSTEM VALIDATION AND APPLICATION
- B0767 Furlong, J. C.; Riedel, M.; Paull, C. K.; Spence, G. D.; Brewer, P. G.: A DETAILED LOOK AT COLD-VENTS USING HIGH-RESOLUTION AUV DATA: A MODEL OF GAS VENTING EVOLUTION ON THE NORTH CASCADIA MARGIN
- B0768 Kawka, O. E.; Kelley, D. S.; Delaney, J. R.; Solomon, E.; RSN-OOI Team: THE FUTURE OF REAL-TIME MONITORING OF METHANE HYDRATE DEPOSITS AT ACTIVE CONTINENTAL MARGINS: THE OOI CABLED OBSERVATORY AT HYDRATE RIDGE

061 Coastal Oceanography Through Integrated Data Analysis

Chair(s): Yonggang Liu, yliu@marine.usf.edu
Ryan M. McCabe, rmccabe@ocean.washington.edu

Location: Exhibit/Poster Hall

- B1244 Nezlin, N. P.; Sutula, M. A.; Stumpf, R. P.; Sengupta, A.: FACTORS DRIVING PHYTOPLANKTON BLOOMS ALONG THE CENTRAL AND SOUTHERN CALIFORNIA COAST
- B1245 Li, Y.; He, R.; McGillicuddy, D.: INTERANNUAL VARIABILITY OF COASTAL HYDROGRAPHY IN THE GULF OF MAINE: 2002-2010
- B1246 Schaeffer, A.; Roughan, M.; Morris, B.: PHYSICAL VARIABILITY ON THE SHEF OFF NSW AUSTRALIA: NEW INSIGHTS FROM THE NSW INTEGRATED MARINE OBSERVING SYSTEM.
- B1247 Fedele, E.; Benetazzo, A.; Gallego, G.; Shih, P. C.; Yezzi, A.; Carniel, S.; Sclavo, M.; Barbariol, F.: SPACE-TIME STATISTICS AND SPECTRA FROM STEREO MEASUREMENTS OF GRAVITY WAVES
- B1248 Polton, J. A.; Palmer, M. R.; Howarth, M. J.: NEW INSIGHTS FROM COMBINED THEORY, MODELLING AND OBSERVATIONS INTO MACRO-TIDAL RESIDUAL CIRCULATION
- B1249 Welhena, T.; Pattiaratchi, C. B.; Fong, M.: DENSE SHELF WATER CASCADE (DSWC) ON THE ROTNEST CONTINENTAL SHELF IN SOUTH-WESTERN AUSTRALIA
- B1250 Wang, H.; Wang, D.; Liu, G.: SEASONAL VARIATION OF EDDY KINETIC ENERGY IN THE SOUTH CHINA SEA

- B1251 Mullins-Perry, R. L.; DiMarco, S. F.; Guinasso Jr, N. L.; Zhang, X. Q.; May Jr, L. N.: IS THE TEXAS COAST A MAJOR CONTRIBUTOR TO NORTHERN GULF OF MEXICO HYPOXIA? USING INTEGRATED COASTAL OBSERVING SYSTEMS TO ANALYZE DISSOLVED OXYGEN VARIABILITY
- B1252 Merckelbach, L. M.; Onken, R.; Riethmueller, R.: ANALYSIS OF SEDIMENT RESUSPENSION UNDER A PYCNOCLINE IN THE GERMAN BIGHT FROM COMBINED GLIDER AND SCANFISH OBSERVATIONS
- B1253 Li, B.; DiMarco, S. F.: STRATIFICATION LIMITS ON VERTICAL VENTILATION: ADDITIONAL CONTROLS ON THE FORMATION OF HYPOXIA OF THE TEXAS-LOUISIANA SHELF
- B1254 Zhang, C.; Li, C.; Bentley, S. J.; Walker, N.; Bargu, S.; White, J. R.; Roy, E.; Liu, B.; Rouse, L. J.: IMPACT OF FRESHWATER DIVERSION ON THE FLUSHING OF LAKE PONTCHARTRAIN AND COASTAL OCEAN
- B1255 Ruiz-Angulo, A.; Zavala-Hidalgo, J.: OBSERVED UPWELLING EVENTS IN THE PETACALCO CANYON.
- B1256 Liu, X.; Penta, B.; Chavez, F. P.; Paduan, J. D.; Ryan, J. P.; Pereira, A.; Smith, R. N.; Caron, D. A.; Jones, B. H.: BIO-OPTICAL DISCRIMINATION OF PHYTOPLANKTON FUNCTIONAL GROUPS IN MONTEREY BAY, CA USING MULTIPLE AUTONOMOUS UNDERWATER VEHICLES
- B1257 McCabe, R. M.; Hickey, B. M.; Dever, E. P.; Geier, S. L.: STRUCTURE AND DYNAMICS OF CROSS-SHELF CIRCULATION IN THE NORTHERN CALIFORNIA CURRENT SYSTEM
- B1258 Yu, F.; Diao, X.; Zhao, S.: THE SEASONAL VARIATION OF YELLOW SEA WARM CURRENT
- B1259 Flampouris, S.; Veeramony, J.; Orzech, M.; Seemann, J.: COMPARISON OF ANALYZED NEARSHORE WAVE FIELD TO IN-SITU OBSERVATIONS
- B1260 Freitas, F. H.; Halewood, S.; Stassinis, E.; Siegel, D. A.: GLIDER OBSERVATIONS OF BIO-OPTICAL PROPERTIES IN THE COASTAL WATERS OF THE SANTA BARBARA CHANNEL, CALIFORNIA
- B1261 Dellaripa, N. W.; Washburn, L.; Brzezinski, M. A.: METHODS FOR MAPPING CHLOROPHYLL BIOMASS BELOW THE EUPHOTIC ZONE
- B1262 Amador, A. M.; Canals, .: LAGRANGIAN OBSERVATIONS OF ACCELERATION IN BREAKING WAVES
- B1263 Shu, Y.; Wang, D.; Zhu, J.; Peng, S.: THE 4-D STRUCTURE OF UPWELLING AND PEARL RIVER PLUME IN THE NORTHERN SOUTH CHINA SEA DURING SUMMER 2008 REVEALED BY A DATA ASSIMILATION MODEL
- B1264 Watanabe, T.; Igeta, Y.; Okuno, A.: SEASONAL VARIABILITY OF THE SUBSURFACE COUNTERCURRENT UNDER THE COASTAL BRANCH OF THE TSUSHIMA WARM CURRENT IN THE JAPAN SEA
- B1265 Hausman, J. K.; Leben, R.: COMPARISON OF ALTIMETRIC DATASETS NEAR THE US WEST COAST
- B1266 Zhu, D. Y.; Li, L.; Guo, X. G.: THE ANNUAL AND MULTI-YEAR VARIATIONS OF THE SEA SURFACE CURRENT IN THE SOUTHERN TAIWAN STRAIT OBSERVED BY THE OSMAR HF RADARS
- B1954 Ma, K.; Lowen, J. B.; Deibel, D.; McKenzie, C. H.: SEASONAL VARIABILITY IN SETTLEMENT AND ABUNDANCE OF THE NON-INDIGENOUS ASCIDIAN, *BOTRYLLUS SCHLOSSERI*, IN A SUBARCTIC HARBOUR
- B1955 Deibel, D.; Lowen, J. B.; Ma, K.; McKenzie, C. H.; Rise, M. L.; Applin, G.; Hall, J.; Thompson, R. J.: THE POPULATION ECOLOGY OF NON-INDIGENOUS ASCIDIANS ON THE SOUTH COAST OF NEWFOUNDLAND
- B1956 Applin, G. H.; Hall, J. R.; Lowen, J. B.; Mckenzie, C. H.; Rise, M. L.; Deibel, D.: EARLY DETECTION OF THE INVASIVE ASCIDIANS *BOTRYLLUS SCHLOSSERI* AND *BOTRYLLOIDES VIOLACEUS* UTILIZING TAQMAN ASSAYS
- B1957 Hacking, A. B.; Keil, R. G.: HUMAN INFLUENCES ON THE CHEMICAL COMPOSITION OF ORGANIC MATTER IN STREAMS AND LAKES OF THE HIMALAYAS
- B1958 Anderson, M. R.; Roux, M. J.: YOU ARE WHERE AND WHAT YOU EAT –SYMPATRIC COMPETITORS AND DIET MAY DETERMINE THE EFFECT OF PHYSICAL HABITAT ALTERATION ON MERCURY IN FRESHWATER FISH
- B1959 Luecke, C.; Giblin, A. E.; Evans, M. A.; Kling, G. W.: RESPONSE OF ARCTIC LAKES TO FERTILIZATION VARIES WITH LAKE DEPTH: A COMPARISON OF BENTHIC AND PELAGIC PRODUCTION
- B1960 Anderson, C. H.; Logsdon, M. G.; Theiss, J.; Keil, R. G.: NATURAL AND ANTHROPOGENIC ORGANIC CHEMICALS IN THE ZANZIBAR CHANNEL, TANZANIA
- B1961 Monbureau, E. M.; White, B. L.; Brandt, A. M.; Killius, M. G.: MEASUREMENTS OF TURBULENCE AND SCALAR FLUCTUATIONS ACROSS A SEAGRASS PATCH EDGE USING PIV AND PLIF
- B1962 Snauffer, E. L.; Masson, D.; Allen, S. E.: TRACKING LARVAE IN THE STRAIT OF GEORGIA
- B1963 Kawakami, T. R.; Crimaldi, J. P.: THE ROLE OF OBSTACLE WAKES IN ENHANCING GAMETE COALESCENCE IN BROADCAST SPAWNING
- B1964 Smolenski, R. L.; Townsend-Small, A.; Nash, D. B.: CARBON AND NITROGEN CYCLING IN IMPOUNDED AND UNIMPOUNDED RIVERS IN THE OHIO RIVER WATERSHED
- B1965 Thoma, S. M.; Chapman, J.; Dumbauld, B.: THE ENERGETIC COST OF AN INTRODUCED MARINE PARASITE ON ITS NEW NATIVE SHRIMP HOST
- B1966 Barba, A. P.; Roman, M. R.; Pierson, J. J.: ZOOPLANKTON RESPONSE TO HYPOXIA IN CHESAPEAKE BAY

066 Western Pacific Ocean Circulation And Air-Sea Interactions

Chair(s): Fan Wang, fwang@qdio.ac.cn
 Kentaro Ando, andouk@jamstec.go.jp
 Dongchull Jeon, dcjeon@kordi.re.kr
 Janet Sprintall, jsprintall@ucsd.edu
 Sophie Cravatte, sophie.cravatte@ird.fr

Location: Exhibit/Poster Hall

- B1845 Yuan, D.: AN INTRODUCTION TO THE CHINA CLIMATE CHANGE NATIONAL BASIC RESEARCH PROGRAM PROJECT: ROME
- B1846 Zhao, X.; Li, J.: WINTER-TO-WINTER RECURRENCE (WWR) OF AIR-SEA SYSTEM OVER THE KUROSHIO-OYASHIO EXTENSION REGION
- B1847 Zheng, E.; Zhang, R. H.; Zhu, J.: EFFECTS OF INTERANNUAL SALINITY VARIABILITY ON THE DEVELOPMENT OF ENSO EVENTS DIAGNOSED FROM ARGO
- B1848 Sueyoshi, M.; Yasuda, T.: SEA SURFACE HEIGHT CHANGES EAST OF JAPAN IN TWENTY-FIRST CENTURY CLIMATE PROJECTIONS
- B1849 Castruccio, F. S.; Curchitser, E. N.; Kleypas, J. A.: A HIGH-RESOLUTION REGIONAL MODEL FOR THE CORAL TRIANGLE
- B1851 Zheng Wang, Z.; Dongliang Yuan, .: NONLINEAR DYNAMICS OF TWO WESTERN BOUNDARY CURRENTS COLLIDING AT A GAP
- B1852 Jia, Y.; Chassignet, E. P.: SEASONAL VARIATION OF EDDY SHEDDING FROM THE KUROSHIO INTRUSION IN THE LUZON STRAIT

065 Physical - Ecological Interactions In Inland Waters

Chair(s): Alfred Wuest, alfred.wuest@eawag.ch
 Josef Daniel Ackerman, ackerman@uoguelph.ca
 Miki Hondzo, mhondzo@umn.edu

Location: Exhibit/Poster Hall

- B1950 Zeng, T.; Chin, Y. P.; Arnold, W. A.: PRAIRIE POTHOLE POREWATER CHEMISTRY AND ITS EFFECT ON PESTICIDE FATE
- B1951 Bennington, V.; Notaro, M. N.; Zarrin, A.; Vavrus, S. J.; Lofgren, B.: HOW DO THE LAURENTIAN GREAT LAKES WATER LEVELS RESPOND TO CLIMATE CHANGE? A REGIONAL CLIMATE MODEL STUDY
- B1952 Alfred Wuest, A.; Lee Bryant, .; Andreas Matzinger, .; Martin Schmid, .; Beat Müller, .: DEEP-WATER OXYGEN CONSUMPTION IN LAKES AND RESERVOIRS
- B1953 Gross, J. A.; Stadler, J. H.: ECOLOGICAL RISKS OF ANTHROPOGENIC NOISE ON FRESHWATER FISHERY RESOURCES

- B1854 [Sasaki Wataru, w.](#); Richards J. Kelvin, .: ROLE OF VERTICAL MIXING ORIGINATING FROM SMALL VERTICAL SCALE STRUCTURES WITHIN THE EQUATORIAL THERMOCLINE IN A COUPLED GENERAL CIRCULATION MODEL
- B1855 [Gourdeau, L.](#); Melet, A.; verrou, J.; Cravatte, S.; Djath, N.; Kessler, W.; Molines, J. M.; Barnier, B.: THE LLWBCS OF THE SOUTH PACIFIC OBSERVED AND MODELLED IN THE SOLOMON SEA
- B1856 [Foster, M. R.](#); Veron, F.: AN INVESTIGATION OF WAVE BREAKING OFF THE COAST OF NORTHERN CALIFORNIA
- B1857 [Kim, E.](#); Jeon, D. C.; Park, J. H.; Jang, C. J.: CHARACTERISTIC OF NEAR-INERTIAL WAVES OCCURRED BY A TYPHOON IN THE TROPICAL NORTHWESTERN PACIFIC OCEAN
- B1858 [Jang, C.](#); Park, J.; Park, T.; Yoo, S.: PROJECTED MIXED LAYER DEPTH CHANGE IN THE NORTH PACIFIC OCEAN AND ITS IMPACT ON PRIMARY PRODUCTION
- B1859 [Park/Taewook, T.](#); Jang/Chan Joo, C.; Jungclaus/Johann H., J. H.; Haak/Helmuth, H.; Park/Wonsun, W.; Oh/Im Sang, I.: HOW CAN CHANGJIANG FRESHWATER CONTRIBUTE TO MAINTAIN WARM SEA SURFACE IN THE YELLOW AND EAST CHINA SEAS?
- B1860 [Gao, S.](#); Chen, Y.; Wang, F.: THE FORMATION, PATHWAY AND DESTINATION OF THE NORTH PACIFIC SUBDUCTION WATER IDENTIFIED BY A SIMULATED PASSIVE TRACER
- B1861 [Cadden, D. D.](#): SEASONAL VARIABILITY OF THE KUROSHIO INTRUSION INTO THE LUZON STRAIT
- B1862 [Chiang, T.](#); Qu, T.: SUBTHERMOCLINE EDDIES NEAR THE MINDANAO CURRENT/UNDERCURRENT IN AN EDDY-RESOLVING GCM
- B1863 [Jan, S.](#); Chern, C. S.; Wang, J.; Chiou, M. D.: AN IDEALIZED NUMERICAL STUDY FOR THE MODIFICATION OF THE KUROSHIO TO THE GENERATION AND PROPAGATION OF M2 BAROCLINIC TIDES IN THE LUZON STRAIT
- B1864 [Yamanaka, G.](#); Ishizaki, H.; Nakano, H.; Tsujino, H.; Hirabara, M.: PACIFIC SUBTROPICAL CELL RESPONSE TO EFFECTIVE OCEAN OPTICAL PROPERTIES
- B1865 [Choi, S. H.](#); Kim, D.; Kim, K. H.; Jeong, J. H.: THE SPATIAL AND TEMPORAL VARIABILITY OF SURFACE PCO₂ IN THE WESTERN NORTH PACIFIC AND THE EAST CHINA SEA DURING 2006-2010
- B1867 [Hristova, H. G.](#); Kessler, W. S.; McWilliams, J. C.; Molemaker, M. J.: MESOSCALE EDDIES IN THE SOLOMON SEA
- B1868 [C.W. June/Chang, C. J.](#); Huang-Hsiung /Hsu, .: OCEANIC DYNAMICS ASSOCIATED WITH ENSO IN AFFECTING THE SST VARIATION IN THE WESTERN PACIFIC / PHILIPPINE SEA SECTOR
- B1869 [Wang, Q.](#): THE BIFURCATION LINE OF THE NORTH EQUATORIAL CURRENT IN SODA DATA
- B1870 [Ueki, I.](#); Tozuka, T.: WIND-EVAPORATION-SEA SURFACE TEMPERATURE FEEDBACK IN THE WESTERN TROPICAL PACIFIC
- B1871 [Bunge, L. G.](#); Clarke, A. J.: ON THE RELATIONSHIP BETWEEN WARM WATER VOLUME AND EL NINO SINCE 1955
- B1042 [Seo, J. H.](#); Oh, J. A.; Ju, S. E.; Choi, J. K.: THE VARIATION OF ZOOPLANKTON COMMUNITY UNDER THE CONTROL OF DIKE GATES IN THE DAM CONSTRUCTED ESTUARY
- B1043 [Lee, G.](#); Park, H. B.; Rhew, H.: ESTIMATION OF SUSPENDED SEDIMENT MASS FLUX DURING SUMMER MONSOON USING ADCP IN THE DAMMED NAKDONG ESTUARY, KOREA
- B1044 [Woo, S. B.](#); [Yoon, B. I.](#); Lee, D. W.; Kim, J. W.; Song, J. I.: THE SALT INTRUSION AND ITS RESPONSE TO RIVER DISCHARGE IN FUNNEL-SHAPED HAN RIVER ESTUARY, SOUTH KOREA
- B1045 [Yoon, B. I.](#); Woo, S. B.; Kim, M. H.; Gu, B. H.; Choi, N. K.; Lim, C. W.: ANALYSIS OF TIDAL ASYMMETRY AND FLOOD/EBB DOMINANCE AROUND THE HAN RIVER ESTUARY, SOUTH KOREA
- B1046 [Lee, D. W.](#); Woo, S. B.; Kim, J. W.; Choi, N. Y.; Lim, C. W.: SPRING-NEAP VARIATIONS OF RESIDUAL CURRENT AND SALINITY AT YEOMHA CHANNEL, SOUTH KOREA.
- B1047 [Radabaugh, K. R.](#); Peebles, E. B.: FLUOROMETRY-BASED DETECTION OF FRESHWATER INFLOW EFFECTS ON ESTUARINE PHYTOPLANKTON DEPOSITION
- B1048 [Gipson, B. R.](#); Cutter, G. A.: A NEW PHASE SPECIATION LEACHING PROCEDURE FOR DETERMINATION OF METALS IN BOTH OXIC AND ANOXIC ESTUARINE SEDIMENTS
- B1049 [Buck, C. M.](#); Wilkerson, F.; Largier, J.; Parker, A. E.: THE INFLUENCE OF SEASONAL NUTRIENT SUPPLY ON PHYTOPLANKTON BLOOMS IN A LOW-INFLOW ESTUARY
- B1050 [Kang, S.](#); An, S.: INFLUENCE OF ESTUARINE BARRAGE ON SEDIMENT OXYGEN DEMAND AND DENITRIFICATION IN GO-SEONG ESTUARY, SOUTH SEA, KOREA
- B1051 [Yoon, K. T.](#); Park, H. S.; Chang, M.: DETECTION OF THE EFFECTS ON SUBTIDAL BENTHIC ECOSYSTEM BY TIME-SCALE MONITORING SINCE DEVELOPMENT OF ESTUARIES AROUND NAKDONG RIVER, KOREA
- B1052 [Song, J. I.](#); Woo, S. B.; Yoon, B. I.; Lee, D. W.: RESEARCH OF HYDRODYNAMIC AND TWO LAYER CIRCULATION IN THE NAKDONG RIVER, SOUTH KOREA
- B1053 [Choi, N. Y.](#); Woo, S. B.; Yoon, B. I.; Lee, D. H.: THE SPRING-NEAP TIDE VARIABILITY OF RESIDUAL FLOW AT SEOKMO CHANNEL, SOUTH KOREA.
- B1054 [Chua, V. P.](#); Fringer, O. B.; Fong, D. A.; Monismith, S. G.; Koseff, J. R.: MODELING THE IMPACT OF SEA-LEVEL RISE ON SALINITY INTRUSION IN SAN FRANCISCO BAY
- B1055 [Rice, E. J.](#); Stewart, G. M.: PHYTOPLANKTON COMMUNITY SHIFTS AND INCREASING SURFACE TEMPERATURES IN LONG ISLAND SOUND SINCE 1952
- B1056 [Hall, A. M.](#); Laporte, S.: SPECIES OF CONCERN RIVER HERRING
- B1057 [Lee/Sungjoo, L. S.](#); Kim/Kyehyun, K. K.; Seo/Jungtaek, S. J.: DESIGN OF ENVIRONMENTAL INFORMATION SYSTEM FOR THE ANALYSIS OF ECOLOGICAL CHANGES OF THE ESTUARY
- B1058 [Seo, D.](#); Bae, S.: EFFECT OF PHOSPHORUS FRACTIONS IN MAJOR TRIBUTARY, THE GEUMHO RIVER, TO THE EUTROPHICATION OF THE NAKDONG RIVER ESTUARY
- B1059 [Islam, M. S.](#); [Bonner, J. S.](#); Kirkey, W. D.; Fuller, C.; Ojo, T.: IMPACT OF AN EXTREME FLOODING EVENT IN THE HUDSON RIVER WATERSHED CAPTURED BY THE RIVER AND ESTUARY OBSERVATORY NETWORK
- B1060 [Choi, J. U.](#); Woo, H. J.; An, S.: MID TERM POLLUTION STATUS CHANGES REFLECTED IN THE BENTHIC FORAMINIFERAL ASSEMBLAGE OF MASAN BAY (SOUTH KOREA)
- B1061 [Phan, T. M.](#); Uchiyama, Y.; Bonner, J.; Ojo, T.; [Wells, J. C.](#); Fuller, C.; Islam, M.; Kirkey, W.; Ishii, S.; Nishii, T.: HIGHLY-RESOLVED FLOW COMPUTATIONS IN THE HUDSON RIVER ESTUARY
- B1062 [Najjar, R. G.](#): LONG-TERM SALINITY CHANGE IN THE DELAWARE ESTUARY
- B1063 [Wang, L.](#); Carmichael, R. H.; Mortazavi, B.; Ortmann, A. C.: SULFIDE REDUCTION MAY PREVENT OYSTERS FROM STIMULATING INDIRECT NITROGEN REMOVAL IN MOBILE BAY, AL

067 Altered Estuaries: Processes, Restoration, And Management

Chair(s): Guan-hong Lee, ghlee@inha.ac.kr

Aswani K. Volety, avolety@fgcu.edu

Timothy M. Dellapenna, dellapet@tamug.edu

Location: Exhibit/Poster Hall

- B1038 [Hinson, K. I.](#); Thompson, C.; North, E.; Goodwin, J.: TESTING A NEW TECHNOLOGY FOR BIVALVE LARVAE IDENTIFICATION
- B1039 [Ferer, E. J.](#); Canuel, E. A.; Mainor, T. M.; Duffy, J. E.: TURNING POLLUTION INTO FUEL: PROSPECTS FOR USING WILD ALGAE TO CLEAN COASTAL WATERS AND PRODUCE BIOFUELS
- B1040 [Lopez, E. K.](#); Gedan, K. B.: FILTRATION CAPABILITIES OF FOUR BIVALVE SPECIES IN THE CHESAPEAKE BAY
- B1041 [Henderson, N. D.](#); Christian, A. D.: QUANTITATIVE ASSESSMENT OF MACROINVERTEBRATE COMMUNITIES IN AN URBAN NEW ENGLAND WATERSHED

B1064 Howard, E.; Stanley, R.: A NOVEL METHOD TO QUANTIFY IN SITU GROSS PRIMARY PRODUCTION OF BENTHIC MICROALGAE USING TRIPLE OXYGEN ISOTOPES

A0089 Suzuki, T.; Ishii, M.; Ono, T.; Kawano, T.; Wakita, M.; Miller, L. A.; Murata, A.; Sasaki, K.; Christian, J. R.; Key, R. M.: PACIFICA: PACIFIC OCEAN INTERIOR CARBON DATA SYNTHESIS

074 The Changing Ocean Carbon Cycle: Data Syntheses, Analyses And Modeling

Chair(s): Nicolas Gruber, nicolas.gruber@env.ethz.ch
Dorothee Bakker, D.Bakker@uea.ac.uk
Chris Sabine, Chris.Sabine@noaa.gov
Toste Tanhua, ttanhua@ifm-geomar.de

Location: Exhibit/Poster Hall

- A0072 Azetsu-Scott, K.; Labrador Sea Monitoring Group, .: DECADAL TREND OF LONG-TERM CARBON SINK IN THE LABRADOR SEA
- A0073 Signorini, S. R.; Häkkinen, S.; McClain, C. R.; Olsen, A.; Omar, A.; Skjelvan, I.; Chierici, M.; Olafsson, J.; Metzl, N.; Reverdin, G.: ASSESSMENT AND IMPACT OF CARBON VARIABILITY IN THE NORDIC SEAS
- A0074 Steinfeldt, R.; Rhein, M.; Kieke, D.: VARIABILITY OF THE UPTAKE AND STORAGE OF ANTHROPOGENIC CARBON BY NORTH ATLANTIC DEEP WATER
- A0075 Koeve, W.; Duteil, O.; Dietze, H.; Kriest, I.; Oschlies, A.: APPLYING THE TA* METHOD FOR THE EVALUATION OF THE CACO₃-CYCLE IN OCEAN MODELS
- A0076 Tjiputra, J. E.; Olsen, A.; Assmann, K. M.; Pfeil, B.; Heinze, C.: SEASONAL AND LONG TERM NORTH ATLANTIC SURFACE PCO₂ VARIABILITY - A MODEL STUDY
- A0077 Masahide Wakita, M.; Shuichi Watanabe, S.; Katsunori Kimoto, K.; Makio Honda, M.; Yoshiyuki Nakano, Y.: OCEAN ACIDIFICATION IN THE SUBARCTIC WESTERN NORTH PACIFIC OCEAN
- A0078 González-Dávila, M.; Santana-Casiano, J. M.; Barrera-Galderique, A.: CARBON DIOXIDE FLUXES IN THE EASTERN NORTH ATLANTIC DURING SUMMER AND AUTUMN: A COMPARISON BETWEEN 2006 AND 2011
- A0079 Roy, T. M.; Metzl, N.; Lenton, A.; Bopp, L.; Halloran, P.; Heinze, C.; Joos, F.; Tjiputra, J.: USING OCEANIC PCO₂ PERFORMANCE METRICS TO ASSESS THE DEPENDENCY OF FUTURE OCEANIC CO₂ UPTAKE ON MODEL SKILL
- A0081 Clement, D.; Graven, H.; Gruber, N.: MULTIPLE TRACER CONSTRAINTS ON THE ANTHROPOGENIC CO₂ UPTAKE BY THE OCEAN
- A0082 Sabine, C. L.; Bakker, D. E.; Olsen, A.; Metzl, N.; Pfeil, B.; Kozyr, A.; Hankin, S. C.; Koyuk, H.; Manke, A. B.; Fassbender, A.: THE SURFACE OCEAN CO₂ ATLAS (SOCAT): A NEW TOOL FOR ASSESSING CHANGES IN THE OCEAN CARBON SINK
- A0083 Brown, P. J.; Messias, M. J.; Bakker, D. B.; Watson, A. J.; Hoppema, M.; Meredith, M. M.; Jullion, L.; Naveira Garabato, A. C.: ON THE CHANGING SEQUESTRATION OF NATURAL AND ANTHROPOGENIC CARBON AND EXPORT FROM THE WEDDELL GYRE AT DEPTH
- A0084 Plancherel, Y.; Rodgers, K. B.; Key, R. M.; Jacobson, A. R.; Sarmiento, J. L.: QUANTIFICATION OF THE BASIN-SCALE DECADAL CHANGES IN THE DISTRIBUTION OF OCEANIC INDUSTRIAL CARBON BY EMLR
- A0085 Bostock, H. C.; Mikaloff-Fletcher, S.; Williams, M. J.: ESTIMATING CARBONATE PARAMETERS FROM HYDROGRAPHIC DATA IN THE SOUTHERN OCEAN
- A0086 Ishida, A.; Aita, M. N.; Yamanaka, Y.: INTERANNUAL VARIABILITY OF ANTHROPOGENIC AND NATURAL AIR-SEA CO₂ FLUXES IN THE PACIFIC OCEAN
- A0087 PARK, G. H.; Wanninkhof, R.: A MULTI-YEAR INCREASE OF THE CO₂ SINK IN THE WESTERN TROPICAL NORTH ATLANTIC FROM 2000–2009
- A0088 Barbero, L.; Pierrot, D.; Wanninkhof, R.; Sullivan, K.; Castle, R.; Gledhill, D.: VARIABILITY IN THE AIR-SEA CO₂ FLUX IN THE GULF OF MEXICO

078 The Fate Of Discharged Hydrocarbons From The Macondo Reservoir And The Impacts To Gulf Ecosystems

Chair(s): Joel Kostka, jkostka@fsu.edu
Markus Huettel, mhuettel@fsu.edu
Ian MacDonald, imacdonald@fsu.edu
Samantha Joye, mandyjoye@gmail.com

Location: Exhibit/Poster Hall

- A0289 Abercrombie, M. L.; Coble, P. G.; Wood, A. M.; Ayoub, L. M.: USING FLUORESCENCE SPECTROSCOPY TO INVESTIGATE THE TEMPORAL PERSISTENCE OF HYDROCARBONS IN THE WATER COLUMN FOLLOWING THE DEEPWATER HORIZON OIL SPILL
- A0290 Cohen, J. H.; McCormick, L. R.; Burkhardt, S. M.: LETHAL AND SUBLETHAL EFFECTS OF COREXIT 9500A DISPERSANT, MC-252 OIL, AND DISPERSED OIL MIXTURES ON MARINE ZOOPLANKTON
- A0291 Roffer, M. A.; Muhling, B.; Lamkin, J.; Ingram, W.; Upton, M.; Gawlikowski, G.; Muller-Karger, F.; Habtes, S.: MODELING THE TEMPORAL AND SPATIAL OVERLAP BETWEEN ATLANTIC BLUEFIN TUNA SPAWNING HABITAT AND DEEPWATER HORIZON OIL IN SPRING 2010
- A0292 Joung, D. J.; Shiller, A. M.: BARIUM, IRON, COPPER, NICKEL, MANGANESE, COBALT AND NUTRIENT DISTRIBUTIONS IN THE WATER COLUMN AFFECTED BY THE DEEPWATER HORIZON OIL SPILL
- A0293 Peterson, R. N.; Viso, R. F.; MacDonald, I. R.; Joye, S. B.: CONTINUED FLUID DISCHARGE NEAR THE MACONDO WELLHEAD
- A0294 GarciaPineda, O. G.; MacDonald, I. R.; Morey, S.: REMOTE SENSING OVERVIEW OF BP OIL DISCHARGE FROM SATELLITE SAR DATA.
- A0295 Kinsey, J. C.; Yoerger, D. R.; Jakuba, M. V.; Camilli, R.; Reddy, C. M.: ESTIMATING MID-WATER HYDROCARBON FLUXES WITH AN AUTONOMOUS UNDERWATER VEHICLE AND AN IN-SITU MASS SPECTROMETER
- A0296 Rivers, A. R.; Sharma, S.; Martin, J.; Lindquist, E. A.; Tringe, S. G.; Joye, S. B.; Moran, M. A.: TRANSCRIPTIONAL RESPONSES OF DEEP WATER BACTERIA AND ARCHAEA TO HYDROCARBON CONTAMINATION FROM THE DEEPWATER HORIZON SPILL
- A0297 English, D. C.; Hu, C.; Barnes, B.; Ivey, J.; Peebles, E.; Murasko, S.; Lembke, C.; Kovach, C.: USE OF IN-SITU OPTICAL SCATTERING AND FLUORESCENCE MEASUREMENTS FOR THE REAL-TIME DETECTION OF DISPERSED OIL IN WATERS NEAR THE DEEPWATER HORIZON OIL SPILL
- A0298 Condon, R. H.; Graham, W. M.; Brandes, J.; Ortmann, A. C.; Linn, L. J.; Shelton, N. L.; Hernandez Jr, F. J.: HYDROCARBONS AS SUBSIDY ENERGY FOR MICROBIAL AND FOOD WEB PRODUCTION IN COASTAL GULF OF MEXICO WATERS
- A0299 Brooks, G. R.; Larson, R. A.; Hollander, D.; Flower, B. P.; Hastings, D.; Valente, A.; Hill, K.; Moore, C.; Romero, I.: RAPID INCREASE IN ACCUMULATION RATE AND SHIFT IN SEDIMENTARY REGIME IN THE NE GULF OF MEXICO FOLLOWING THE 2010 BP BLOWOUT EVENT
- A0300 Romero, I. C.; Hollander, D. J.; Patterson, W.; Quintana-Rizzo, E.; Kane, A.; Murawski, S.; Peebles, E. B.; Ellis, G.; Zenzola, N.; Torres, J. J.: ORGANIC GEOCHEMICAL EVIDENCE FOR OIL SPILL IMPACTS ON FISH IN THE GULF OF MEXICO: COMPARATIVE AND QUANTITATIVE ANALYSES OF POLYCYCLIC AROMATIC HYDROCARBONS
- A0301 Shiller, A. M.; Joung, D.; Wade, T. L.; Sericano, J. L.; Sweet, S. T.; Yeager, K. M.; Brunner, C. A.; Louchouart, P.: DEEPWATER HORIZON POLYCYCLIC AROMATIC HYDROCARBON DISTRIBUTION AND MODIFICATION FROM WELLHEAD TO COASTAL MARSHES

- A0302 Socolofsky, S. A.; Adams, E. E.; DiMarco, S. F.; Stoesser, T.; Sherwood, C. R.: NEAR-FIELD DYNAMICS OF THE DEEPWATER HORIZON ACCIDENTAL BLOWOUT: CHEMICAL PARTITIONING, INTRUSION DYNAMICS, AND DISPERSANT EFFECTIVENESS
- A0303 Spier, C. L.; Stringfellow, W. T.; Hazen, T.; Conrad, M.: AN INVESTIGATION INTO THE DISTRIBUTION OF HYDROCARBONS IN SEDIMENTS AND THE SUBSURFACE WATER COLUMN AFTER THE 2010 EXPLOSION OF THE MACONDO 252 OIL RIG
- A0304 Ortmann, A. C.; Metzger, R. C.; Anders, J.; Shelton, N.; Condon, R.; Graham, W. M.: DISPERSANTS AND DISPERSED OIL STIMULATE PROKARYOTES AND VIRUSES IN COASTAL ALABAMA WATERS
- A0305 Daly, K. L.; Remsen, A.; Murasko, S.; Outram, D.: PLANKTON DYNAMICS FOLLOWING THE BP OIL SPILL
- A0306 French-McCay, D. P.: EVALUATING THE FATE AND EFFECTS OF THE DEEPWATER HORIZON OIL SPILL ON WATER COLUMN BIOTA
- A0307 Mendoza, W. G.; Riemer, D. D.; Zika, R. G.: TRACKING OF THE DEEPWATER HORIZON HYDROCARBONS AND THE DISPERSANT IN THE GULF OF MEXICO USING EEM AND PARAFAC MODELING
- A0308 Fink, H. V.; Heyes, A.; Mitchelmore, C. L.: PAH BIOACCUMULATION IN MARINE BIOFOULING INVERTEBRATES IN THE NORTHERN GULF OF MEXICO
- A0309 Rosanbalm, J. L.; Baskerville, T. C.; Chauhan, A.; Cherrier, J.; Jeffrey, W. H.: EFFECTS OF OIL AND DISPERSANT ON PHYTOPLANKTON COMMUNITIES IN NORTHERN GULF OF MEXICO ESTUARIES
- A0310 Sarkodee-Adoo, J.; Cherrier, J.; Chanton, J.: TRACING THE DEEPWATER HORIZON OIL SPILL INTO FISH ALONG COASTAL AND OFFSHORE CONTAMINATION GRADIENTS IN THE GULF OF MEXICO USING NATURAL 14C AND 13C ABUNDANCES
- A0311 Larson, R. A.; Brooks, G. R.; Flower, B. P.; Hollander, D.; Hastings, D.; Romero, I.; Valente, A.; Hill, K.; Moore, C.: ASSESSING THE FATE AND IMPACT OF BP OIL ON DEEP-SEA SEDIMENTARY ENVIRONMENTS AND BENTHIC COMMUNITIES: NE GULF OF MEXICO.
- A0312 Baskerville, T. C.; Cherrier, J.; Chauhan, A.; Rosanbalm, J.; Jeffrey, W.: THE EFFECTS OF DEEPWATER HORIZON CONTAMINATION ON MICROBIAL COMMUNITY STRUCTURE AND BIOGEOCHEMICAL CYCLING IN OIL IMPACTED GULF OF MEXICO
- A0313 Dubinsky, E. A.; Piceno, Y. M.; Reid, F. C.; Tom, L. M.; Hazen, T. C.; Andersen, G. L.: MICROBIAL COMMUNITY COMPOSITION IN A DEEP WATER OIL PLUME AND DISSOLVED OXYGEN ANOMALIES
- A0314 Joye, S. B.; Crespo-Medina, M.; Medeiros, P.; Benitez-Nelson, C.; Moore, W.; Montoya, J. P.; Asper, V.; Diercks, A.; Highsmith, R.: INTENSE SEDIMENTATION TO THE SEAFLOOR FOLLOWING THE 2010 MACONDO BLOWOUT: GEOCHEMICAL COMPOSITION, MECHANISMS, AND MICROBIAL IMPACTS.
- B0883 Ge, Q.; Liu, J. P.; Xue, Z.: DISTRIBUTION OF THE HOLOCENE-AGE PEARL RIVER-DERIVED SEDIMENT ON THE DELTA AND CONTINENTAL SHELF
- B0884 Wang, H.; Saito, Y.; Zhang, Y.; Bi, N.; Sun, X.; Yang, Z.: RECENT CHANGES OF SEDIMENT FLUX TO THE WESTERN PACIFIC OCEAN FROM MAJOR RIVERS IN EAST AND SOUTHEAST ASIA
- B0885 Smith, C. G.; Marot, M. E.; Osterman, L. E.: INFLUENCE OF ANTHROPOGENIC ACTIVITIES AND NATURAL PROCESSES ON HISTORIC DEPOSITIONAL PATTERNS AND ENVIRONMENTAL CHANGE IN THE MOBILE BAY ESTUARINE SYSTEM (USA)
- B0886 Steven, A. D.; Babcock, R.; Carlin, G.; Cherukeru, N.; Ford, P.; Fry, G.; Gusmao, F.; Oubelkheir, K.: BIOGEOCHEMICAL PROPERTIES AND ECOLOGICAL CONSEQUENCES OF THE 2011 FLOODS IN MORETON BAY, QUEENSLAND
- B0887 Rose, L. E.; Kuehl, S. A.: MODERN VS. ANCIENT EVENT LAYERS ON THE WAIPOAO CONTINENTAL SHELF: CHARACTERISTICS, MODES OF INITIATION AND DEVELOPMENT THROUGH THE LATE QUATERNARY
- B0888 Webster, K. L.; Nittrouer, C. A.; Ogston, A. S.: FLUVIAL SEDIMENT DISPERSAL THROUGH AN INSULAR SEA: MODERN SEDIMENTATION ASSOCIATED WITH THE SKAGIT RIVER DELTA, PUGET SOUND, WA
- B0889 Lorenzoni, L.; Benitez-Nelson, C.; Hollander, D.; Thunell, R. C.; Muller-Karger, F. E.; Murray, R. W.; Goddard, E.; Tappa, E. J.; Montes, E.; Varela, R.: LITHOGENIC SEDIMENT DISTRIBUTION AND TRANSPORT IN THE CARIACO BASIN, VENEZUELA.
- B0890 Wu, C. Y.; Milliman, J. D.; Liu, J. P.; Hsieh, M. L.; Liu, C. S.; Wang, Y. S.: THE VARIATION OF SEDIMENT RATE IN THE LAN-YANG PLAIN AND ADJACENT CONTINENTAL SHELF
- B0891 Miller, I. M.; Stevens, A.; Warrick, J. A.; Gelfenbaum, G.: THE MORPHOLOGIC EVOLUTION OF A SMALL, DAMMED RIVER DELTA
- B0892 Moriarty, J. M.; Harris, C. K.: REWORKING OF FLOOD DEPOSITS ON THE WAIPOAO RIVER CONTINENTAL SHELF, NEW ZEALAND
- B0893 Nittrouer, J. A.; Viparelli, E.; Parker, G.; Mohrig, D.: BACKWATER HYDRAULICS AND SEDIMENT TRANSPORT IN COASTAL FLUVIAL SYSTEMS: OBSERVATION AND MODELING FROM THE MISSISSIPPI RIVER
- B0894 Farnsworth, K. L.: COASTAL CONNECTIONS: ADVANCES IN THE UNDERSTANDING OF THE INTERACTION OF FLUVIAL AND MARINE SYSTEMS
- B0895 Hsieh, Y. H.; Liu, C. S.: SEDIMENTARY PROCESSES OF THE CHIMEI SUBMARINE CANYON OFFSHORE EASTERN TAIWAN
- B0896 Xiao, J.; Wang, H.; Xie, X. N.; Zhu, B.; Jiang, S.; Liao, J. H.; Xue, G.: TEMPORAL AND SPATIAL VARIATION OF CONTINENTAL SHELF-SLOPE SYSTEM IN QIONGDONGNAN BASIN, SOUTH CHINA SEA
- B0897 Eldredge, K. H.; Heil, C. A.: UREA IN CENTRAL MAINE COASTAL WATERS: CONCENTRATIONS AND INTERACTIONS WITH *ALEXANDRIUM FUNDYENSE* IN NATURAL MICROBIAL POPULATIONS
- B0898 Birchler, J. J.; Harris, C. K.: A ONE-DIMENSIONAL SEDIMENT-WATER COLUMN MODEL INCORPORATING RADIOISOTOPE 7BE
- B0899 Nowacki, D. J.; Ogston, A. S.; Nittrouer, C. A.; Walfir, P. W.; Silva, M. S.; Silveira, O. E.; Fricke, A. T.: WATER AND SEDIMENT TRANSPORT IN THE AMAZON TIDAL RIVER AND ITS TRIBUTARIES
- B0900 Duval, D.; Sommerfield, C. K.; Chant, R. J.: SEDIMENTARY RESPONSE OF THE DELAWARE ESTUARY TO EXTREME STORM EVENTS IN 2011
- B0901 Bi, N.; Yang, Z.; Wang, H.; Sun, X.: CHANGE OF THE MASS FLUX OF THE HUANGHE (YELLOW RIVER) TO THE SEA DUE TO THE ARTIFICIAL FLOOD BY THE HUANGHE WATER-SEDIMENT REGULATION SCHEME SINCE 2002

080 Coastal Connections: Advances In The Understanding Of The Interaction Of Fluvial And Marine Systems

Chair(s): Katie Farnsworth, kfarns@iup.edu
 Paul Liu, jpliu@ncsu.edu
 Kehui Xu, kxu@coastal.edu
 James Syvitski, james.syvitski@colorado.edu

Location: Exhibit/Poster Hall

- B0880 Wagner, R. W.; Stacey, M. T.: THERMAL VARIABILITY WITHIN A COMPLEX BRANCHING ESTUARINE SYSTEM
- B0881 Williams, J. W.; Dellapenna, T. M.: SEDIMENT DISPERSAL AND DYNAMICS OF A SMALL MOUNTAINOUS RIVER DELTA IN A MIXED CARBONATE SILICICLASTIC BACK-REEF LAGOON, NORTH STANN CREEK DELTA: BELIZE
- B0882 Carlin, J. A.; Dellapenna, T. M.; Eyerdorn, T.: DYNAMICS OF A DEVELOPING SUB-AQUEOUS DELTA: PROGRADATION/ DEGRADATION, NATURAL/ANTHROPOGENIC ALTERATIONS AND CROSS-SHELF TRANSPORT ON THE BRAZOS RIVER DELTA, TX

B0902 Mickey, R. C.; Xu, K. H.; Harris, C. K.; Hetland, R. D.; Kaihatu, J. M.: SENSITIVITY TESTS ON SEABED SEDIMENT ERODIBILITY OF THE TEXAS-LOUISIANA CONTINENTAL SHELF

090 Enhanced Regions Of Mixing In The Coastal And Deep Ocean

Chair(s): Jeffrey W. Book, jeff.book@nrlssc.navy.mil
Harindra J. Fernando, Harindra.J.Fernando.10@nd.edu
Nicole L. Jones, nicole.jones@uwa.edu.au
Hemantha Wijesekera, Hemantha.Wijesekera@nrlssc.navy.mil

Location: Exhibit/Poster Hall

- B1928 Rice, A. E.; Book, J. W.; Carniel, S.; Schroeder, K.; Wood, W. T.: ANALYSIS OF SOUTHERN ADRIATIC WATER MASS DISTRIBUTION, MIXING AND TRANSPORT IN THE SPRING OF 2009
- B1929 Stewart, K. D.; Griffiths, R. W.; Hughes, G. O.: INSIGHTS INTO COUPLED TURBULENT MIXING AND OVERTURNING CIRCULATION
- B1930 Fribance, D. B.; Wijesekera, H. W.; Jarosz, E.; Teague, W. J.: INTERNAL WAVE GENERATION AND VARIABILITY OVER ROUGH TOPOGRAPHY
- B1931 Fernando, H. J.; Lozovatsky, I. D.: MIXING EFFICIENCY IN NATURAL FLOWS
- B1932 Teague, W. J.; Wijesekera, H. W.; Jarosz, E.; Fribance, D. B.: CURRENTS OVER THE EAST FLOWER GARDEN BANK
- B1933 Jarosz, E.; Fribance, D.; Wijesekera, H.; Teague, W. J.: SNAPSHOTS OF MIXING OVER THE EAST FLOWER GARDEN BANK UNDER DIFFERENT FLOW CONDITIONS
- B1934 Pham, H. T.; Sarkar, S.; Winters, K. B.: NEAR-N OSCILLATIONS AND DEEP-CYCLE TURBULENCE IN AN UPPER EQUATORIAL OCEAN MODEL
- B1935 Book, J. W.; Ansong, I.; Rice, A. E.; Roman, R.; Dengler, M.; Thomsen, S.; Wood, W. T.: EARLY RESULTS ON MESOSCALE STIRRING AND DIAPYCNAL MIXING MECHANISMS IN THE AGULHAS RETURN CURRENT FROM THE ARC12 EXPERIMENT
- B1937 Ilicak, M.; Adcroft, A. J.; Griffies, S. M.; Hallberg, R. W.: SPURIOUS DIAPYCNAL MIXING AND THE ROLE OF MOMENTUM CLOSURE
- B1938 Staalström, A.; Arneborg, L.; Liljebladh, B.; Broström, G.: LOCAL ENERGY LOSS NEAR A SILL DUE TO HYDRAULIC JUMPS CONTROLLED BY STRATIFICATION.
- B1939 Osafune, S.; Yasuda, I.: NUMERICAL STUDY ON THE IMPACT OF THE 18.6-YEAR PERIOD TIDAL MIXING IN THE SUBARCTIC NORTH PACIFIC
- B1940 Shoko Abe, S.; Tomohiro Nakamura, T.: TRANSITION PROCESS FROM BREAKING LARGE-AMPLITUDE INTERNAL WAVES TO TURBULENCE
- B1941 Fischer, T.; Dengler, M.; Brandt, P.: UNDERWAY ACOUSTIC SURVEY OF INTERNAL WAVE SHEAR; AND ITS USE TO ESTIMATE DIAPYCNAL MIXING AND TRANSPORTS IN THE INTERIOR OCEAN
- B1942 Scotti, A.; White, B.: IS SURFACE BUOYANCY FORCING REALLY NOT A FACTOR IN SUSTAINING THE MERIDIONAL OVERTURNING CIRCULATION?
- B1943 Beird, N. L.; Fer, I.; Rhines, P. B.; Eriksen, C. C.: DISSIPATION RATE AND VERTICAL MIXING INFERRED FROM SEAGLIDERS: AN APPLICATION TO THE NORDIC SEAS OVERFLOWS
- B1944 Lozovatsky, I. D.; Liu, Z.; Fernando, H. J.: ENHANCED TURBULENCE IN A SHALLOW TIDAL FLOW DUE TO UNEVEN BATHYMETRY
- B1945 Whalen, C. B.; Talley, L. D.; MacKinnon, J. A.: A GLOBAL VIEW OF SMALL-SCALE TURBULENT MIXING
- B1946 Wain, D. J.; Gregg, M. C.; Alford, M. H.; Lien, R. C.; Carter, G. S.; Hall, R. A.: ENERGY FLUXES AND TURBULENCE IN UPPER MONTEREY CANYON
- B1947 Köhler, J.; Mertens, C.; Walter, M.; Kanzow, T.; Rhein, M.: TEMPORAL VARIABILITY OF NEAR-INERTIAL WAVE ENERGY IN THE ATLANTIC DEEP WESTERN BOUNDARY CURRENT AT 16°N

B1948 Hsieh, T. C.; Ahmed, S.; Choi, J.; Troy, C.: VERTICAL MIXING ASSOCIATED WITH NEAR-INERTIAL POINCARÉ WAVES IN LAKE MICHIGAN

B1949 Sun, O. M.; St. Laurent, L. C.; Polzin, K. L.: A ZERO-TH-ORDER, OBSERVATIONALLY BASED PARAMETERIZATION FOR VERTICAL DIFFUSIVITY IN THE THERMOCLINE

096 The Biological Basis And Geochemical Consequences Of Non-Redfield N:P Ratios In The Ocean

Chair(s): Raymond Sambrotto, sambrott@ldeo.columbia.edu
John Reinfeldter, reinfeldter@envsci.rutgers.edu

Location: Exhibit/Poster Hall

- A0360 Burkhardt, B. G.; White, A. E.; Watkins-Brandt, K.; Paytan, A.: THE RATE AND RATIO OF PARTICULATE ORGANIC MATTER REMINERALIZATION BY NATURAL MICROBIAL POPULATIONS
- A0361 Franz, J.; Krahnemann, G.; Lavik, G.; Grasse, P.; Dittmar, T.; Riebesell, U.: DYNAMICS AND STOICHIOMETRY OF NUTRIENTS AND PHYTOPLANKTON IN WATERS INFLUENCED BY THE OXYGEN MINIMUM ZONE IN THE TROPICAL SOUTH EAST PACIFIC
- A0363 Popendorf, K. J.; Tanaka, T.; Pujol-Pay, M.; Lagaria, A.; Courties, C.; Conan, P.; Oriol, L.; Sofen, L. E.; Moutin, T.; Van Mooy, B.: GRADIENTS IN INTACT POLAR MEMBRANE LIPIDS ACROSS THE MEDITERRANEAN SEA ARE RELATED TO PHOSPHATE AVAILABILITY
- A0364 Reinfeldter, J. R.: EFFECTS OF CO₂ ON N AND P QUOTAS IN MARINE PHYTOPLANKTON

099 Temporal And Spatial Scales Of Sea Surface Temperature Variability And Its Impacts On Air-Sea Interactions, Weather, And Climate

Chair(s): Gary A. Wick, gary.a.wick@noaa.gov
Chelle Gentemann, gentemann@remss.com
Andrew T. Jessup, jessup@apl.washington.edu
Carol Anne Clayson, clayson@met.fsu.edu

Location: Exhibit/Poster Hall

- B1461 Combes, V.; Matano, R.; Strub, T.: MEAN AND SEASONAL TRANSPORT VARIABILITY IN THE SOUTHWEST ATLANTIC DERIVED FROM A TWO-WAY NESTING MODEL EXPERIMENT
- B1462 Ghantous, M.; Babanin, A. V.; Chalikov, D.: WAVE-INDUCED MIXED LAYER DEEPENING IN THE OPEN OCEAN.
- B1463 Emery, W. J.; Svejrowsky, J.; Good, W.: AIRBORNE SENSING OF SEA SURFACE TEMPERATURE PATTERNS IN OIL COVERED WATERS
- B1464 Martinez Avellaneda, N.; Serra, N.; Stammer, D.: LARGE-SCALE IMPACT OF SAHARAN DUST ON THE NORTH ATLANTIC OCEAN CIRCULATION
- B1465 Gentemann, C. L.; Minnett, P. J.: SPATIAL VARIABILITY OF DIURNAL WARMING FROM SATELLITE MEASUREMENTS OF SST
- B1466 Dickinson, S.; Kelly, K. A.: AN EXAMINATION OF OCEANIC PROCESSES CONTRIBUTING TO THE SST ANOMALIES IN THE NORTH ATLANTIC OCEAN
- B1467 Halkides, D.; Waliser, D. E.; Lee, T.; Lucas, L.; Murtugudde, R.: MECHANISMS CONTROLLING MIXED-LAYER TEMPERATURE VARIABILITY IN THE EASTERN TROPICAL PACIFIC ON THE INTRASEASONAL TIMESCALE
- B1468 Morioka, Y.; Tozuka, T.; Yamagata, T.: ON A TRIGGERING MECHANISM OF THE INDIAN OCEAN SUBTROPICAL DIPOLE
- B1469 Vinogradova, N. T.; Ponte, R. M.; Piecuch, C. G.: CONTRIBUTION OF DYNAMIC AND THERMODYNAMIC PROCESSES TO SEASONAL AND LONGER VARIATIONS IN SST
- B1470 Liu, H.; Wang, C.; Lee, S.; Enfield, D.: ATLANTIC WARM POOL VARIABILITY AND ITS CLIMATE IMPACTS IN THE IPCC TWENTIETH-CENTURY CLIMATE SIMULATIONS
- B1471 deRada, S.; Jolliff, J.; Arnone, R. A.; Fasullo, J. T.; Wijesekera, H.; Teague, W. J.: DECADEAL-SCALE OCEAN MODEL SIMULATIONS IN THE GULF OF MEXICO REVEAL INCREASING TRENDS IN OCEAN HEAT CONTENT AND SEASONAL TEMPERATURE EXTREMES

- B1472 Judd, K. P.; Savelyev, I. B.; Smith, G. B.; Marmorino, G. O.: SMALL-SCALE SPATIAL AND TEMPORAL SST FLUCTUATIONS ASSOCIATED WITH A NEAR-SURFACE TURBULENT JET: AIRBORNE IMAGERY AND LABORATORY EXPERIMENT
- B1473 Goubanova, K.; Illig, S.; Dewitte, B.; Montecinos, A.; Takahashi, K.; Garçon, V.: SST-WIND COUPLED MODES IN THE BENGUELA CURRENT SYSTEM AT INTRASEASONAL TIME SCALES FROM SATELLITE OBSERVATIONS (2000-2008)
- B1474 Bogdanoff, A. S.; Clayson, C. A.: SPATIOTEMPORAL RELATIONSHIPS OF EXTREME DIURNAL WARMING EVENTS
- B1475 Riffler, M.; Wunderle, S.; Schulze, S.: TOWARD A CLIMATOLOGY OF LAKE SURFACE TEMPERATURE FROM AVHRR 1-KM FOR THE MAJOR PREALPINE WATER BODIES WITHIN SWISS GCOS
- B1476 Corlett, W. B.; Scully, M. E.: IMPACT OF WINTER SST ANOMALIES ON EASTERN SEABOARD SUMMER SURFACE WIND VARIATIONS
- B1477 de Szoek, S. P.; Perlin, N.; Chelton, D. B.: MODELING WIND RESPONSE TO FINE-SCALE SST GRADIENTS
- B1478 Jessup, A. T.; Branch, R. A.; Clark, D.: OPEN OCEAN INFRARED AND NEAR-SURFACE OBSERVATIONS OF SST SPATIAL VARIABILITY
- B1479 Wick, G. A.: INTERCOMPARISON OF THE UNCERTAINTY IN DIURNAL WARMING ESTIMATES FROM PHYSICAL MIXED LAYER MODELS
- B1480 Castro, S. L.; Wick, G. A.; Beggs, H. M.: COMPARISONS OF MODELED AND OBSERVED DIURNAL WARMING IN THE TROPICAL WESTERN PACIFIC
- B1481 Gramscianinov, C. B.; Campos, E. D.: LAST DECADES SEA SURFACE TEMPERATURE CHANGES AND TRENDS IN SOUTHWESTERN OF SOUTH ATLANTIC OCEAN USING AVHRR SATELLITE DATA AND MODEL SIMULATION

105 Vertical Flow In The Ocean

- Chair(s): Andreas Thurnherr, ant@ldeo.columbia.edu
Eleanor Frajka-Williams, eefw1u08@noc.ac.uk
Tamay Ozgokmen, tozgokmen@rsmas.miami.edu
- Location: Exhibit/Poster Hall
- B2185 Krahmann, G.; Brandt, P.; Kanzow, T.: VERTICAL VELOCITIES IN THE TROPICAL ATLANTIC OBSERVED WITH AUTONOMOUS GLIDERS
- B2186 Berntsen, J.; Darelius, E.; Avlesen, H.: THE ROLE OF CROSS-CANYON CIRCULATION IN GRAVITY CURRENTS DOWN CANYONS
- B2187 Bates, M. L.; Griffies, S. M.; England, M. H.: USING AN EMBEDDED LAGRANGIAN MODEL TO REPRESENT DOWNSLOPE FLOWS IN LEVEL COORDINATE OCEAN CLIMATE MODELS
- B2188 Saenz, J. A.; Griffiths, R.; Hogg, A. M.; Hughes, G.: ESTIMATING THE RELATIVE MAGNITUDES OF OCEAN ENERGY INPUT FROM SURFACE BUOYANCY AND WIND FORCING
- B2189 Palter, J. B.; Galbraith, E. D.; Griffies, S.; Gnanadesikan, A.: VARIABILITY IN VERTICAL MASS AND HEAT TRANSPORT TO THE DEEP OCEAN ASSOCIATED WITH CABBELING AND THERMOBARICITY
- B2190 Frajka-Williams, E.; Rhines, P. B.; Eriksen, C. C.; Harcourt, R. R.: HIGH-RESOLUTION OBSERVATIONS OF WINTERTIME DEEP CONVECTION IN THE LABRADOR SEA
- B2191 Hasegawa, D.: HOW SMALL ISLANDS INDUCE UPWELLING IN STRONG GEOSTROPHIC CURRENTS
- B2192 Thurnherr, A. M.; St. Laurent, L. C.; Simmons, H. L.: 3-D VELOCITY FIELD ASSOCIATED WITH HYDRAULIC FLOW, INTERNAL WAVES AND TURBULENCE OVER A TOPOGRAPHIC RIDGE IN LUZON STRAIT
- B2193 Rudnick, D. L.; Johnston, T. S.; Sherman, J. T.: OBSERVATIONS OF HIGH-FREQUENCY INTERNAL WAVES NEAR THE LUZON STRAIT USING UNDERWATER GLIDERS
- B2194 Danioux, E.; Vanneste, J.; Klein, P.: HIGH-FREQUENCY VERTICAL VELOCITIES IN THE DEEP OCEAN

106 Global Mode Waters: Physical And Biogeochemical Processes, Variability And Impacts.

- Chair(s): Young-Oh Kwon, yokwon@whoi.edu
Lynne Talley, ltalley@ucsd.edu
Shang-Ping Xie, xie@hawaii.edu
Toshio Suga, suga@pol.gp.tohoku.ac.jp
- Location: Exhibit/Poster Hall
- B1602 Oka, E.; Qiu, B.: OBSERVED AND HYPOTHESIZED DECADEAL VARIABILITY OF SUBTROPICAL AND CENTRAL MODE WATERS IN ASSOCIATION WITH THE KUROSHIO EXTENSION VARIABILITY
- B1603 Locke-Wynn, L.: MODE WATER IN THE SEA OF JAPAN: A STUDY ON THE REPRODUCIBILITY OF MODE WATER IN THE DATA-ASSIMILATING REGIONAL NAVY COASTAL OCEAN MODEL
- B1604 Kelly, K. A.; Dong, S.: CONTRIBUTIONS TO EIGHTEEN DEGREE WATER INTERANNUAL VOLUME ANOMALIES
- B1605 Kwon, Y.; Park, J.; Lozier, M. S.; Gary, S. F.: SEASONAL CYCLE OF THE EIGHTEEN DEGREE WATER AND ITS LAGRANGIAN PATHWAYS
- B1606 Luo, Y.; Liu, Q.; Rothstein, L.: PROJECTED CHANGES IN THE PACIFIC SUBTROPICAL MODE WATERS UNDER GLOBAL WARMING
- B1607 Park, J. J.; Fratantoni, D.; Kwon, Y. O.; Lozier, S. M.: PATCHINESS LENGTH SCALE OF EIGHTEEN DEGREE WATER
- B1608 Akira Nagano, A.; Kazuyuki Uehara, U.; Yoshimi Kawai, Y.; Hiroshi Ichikawa, H.; Toshio Suga, T.: INTER-ANNUAL SEA-SURFACE SALINITY ANOMALIES IN THE KUROSHIO EXTENSION REGION ADVECTED FROM THE EAST OF THE PHILIPPINES
- B1609 Olsina, O.; Wienders, N.; Dewar, W. K.: THE CLIMATOLOGY AND VARIABILITY OF EIGHTEEN DEGREE WATER POTENTIAL VORTICITY FORCING
- B1610 Fratantoni, D. M.; Kwon, Y. O.; Hodges, B. A.: DIRECT OBSERVATION OF SUBTROPICAL MODE WATER CIRCULATION IN THE WESTERN NORTH ATLANTIC OCEAN
- B1611 Bell, S. J.; Johnson, R. R.; Lomas, M. w.; Bates, N. R.; Knap, A. H.: SUB-TROPICAL MODE WATER SPATIAL AND TEMPORAL NUTRIENT VARIABILITY FROM DATA COLLECTED BY THE BERMUDA ATLANTIC TIME-SERIES STUDY
- B1612 Billheimer, S.; Talley, L. D.: DESTRUCTION OF EIGHTEEN DEGREE WATER AND THE EVOLUTION OF THE SEASONAL PYCNOCLINE
- B1613 Deremble, B.; Wienders, N.; Dewar, W. K.: HIGH RESOLUTION ESTIMATE OF SURFACE POTENTIAL VORTICITY FLUXES IN THE REGION OF THE SEPARATED GULF STREAM
- B1614 Park, Y.: THE PROPERTIES OF THE NORTH PACIFIC INTERMEDIATE WATER FROM A SUITE OF NOAA/GFDL COUPLED CLIMATE MODELS
- B1615 Nishikawa, S.; Tsujino, H.; Sakamoto, K.; Nakano, H.: DIAGNOSIS OF WATER-MASS TRANSFORMATION AND FORMATION RATES IN A HIGH-RESOLUTION GCM OF THE NORTH PACIFIC
- B1616 Toyama, K.; Suga, T.: VERTICAL STRUCTURE OF MODE WATERS AND ITS IMPACT ON T-S STRATIFICATION OF THE SUBTROPICAL PYCNOCLINE IN THE NORTH PACIFIC
- B1617 Girton, J. B.; Inoue, R.: NEAR-INERTIAL INTERNAL WAVES AND MIXING IN THE GULF STREAM

108 Biogeochemical And Sedimentological Factors That Influence Physical, Geotechnical And Mechanical Properties Of Cohesive Sediments In Riverine And Littoral Zones

- Chair(s): Joseph Calantoni, Joe.Calantoni@nrlssc.navy.mil
Allen H. Reed, Allen.Reed@nrlssc.navy.mil
Tian-Jian Hsu, tianjianhsu@gmail.com
- Location: Exhibit/Poster Hall
- B0903 Furukawa, Y.; Watkins, J. L.: FLOCCULATION OF COLLOIDAL MONTMORILLONITE: A MODELING APPROACH
- B0904 Sou, I. M.; Calantoni, J.; Reed, A. H.; Furukawa, Y.: TOMOGRAPHIC PARTICLE IMAGE VELOCIMETRY MEASUREMENTS OF FLOW STRUCTURE OVER A COHESIVE SEDIMENT CORE

- B0905 Calantoni, J.; Sou, I. M.; Reed, A. H.; Furukawa, Y.: LABORATORY STUDY OF COHESIVE SEDIMENT EROSION IN UNIDIRECTIONAL FLOWS
- B0906 Yin, H.; Reed, A.; Tan, X.; Furukawa, Y.; Zhang, G.: STRENGTH OF COHESIVE SEDIMENT-BIOPOLYMER FLOCS UNDER COMPRESSIONAL LOADING
- B0907 Reed, A. H.; Yin, H.; Tan, X.; Furukawa, Y.; Zhang, G.: TRANSFORMATION OF COHESIVE SEDIMENT-BIOPOLYMER PARTICLES IN WATER OF VARIED IONIC STRENGTH AND VELOCITY
- B0908 Law, B. A.; Hill, P. S.; Milligan, T. G.; Newgard, J. P.: THE ROLE OF FLOCCULATION IN PRODUCING LOW STRENGTH COHESIVE MUD DEPOSITS IN TIDAL CHANNELS AND BANKS
- B0909 Ellis, A. M.; Smith, J. P.; Reed, A. H.: FLOCCULATION IN THE PEARL RIVER ESTUARY – SEDIMENT PARTICLE SIZES IN A CIRCUMNEUTRAL PH RIVER WITH HIGH COLLOIDAL IRON
- B0911 Fall, K. A.; Friedrichs, C. T.; Cartwright, G. M.: USE OF ACOUSTIC DOPPLER VELOCIMETERS (ADVS) TO INFER RELATIONSHIPS AMONG FINE SEDIMENT SETTLING, BED ERODIBILITY AND PARTICLE TYPE, YORK RIVER ESTUARY, VA
- B0912 Kraatz, L. M.; Friedrichs, C. T.; Fall, K. A.; Wilkerson, C. N.: RELATIONSHIPS BETWEEN ERODIBILITY AND FINE-GRAINED SEABED PROPERTIES ON TIDAL TO SEASONAL TIME-SCALES, YORK RIVER ESTUARY, VIRGINIA

110 Dynamics Of Fjords And High Latitude Estuaries

Chair(s): Rocky Geyer, rgeyer@whoi.edu
 Parker MacCready, pmacc@uw.edu
 Lars Arneborg, laar@gvc.gu.se
 Fiamma Straneo, fstraneo@whoi.edu

Location: Exhibit/Poster Hall

- B1642 Li, Y.; Li, M.: DYNAMICS OF WIND-INDUCED LATERAL CIRCULATION AND ITS EFFECTS ON ESTUARINE EXCHANGE FLOW AND STRATIFICATION
- B1643 Halverson, M. J.: RECENT CIRCULATION STUDIES IN PRINCE WILLIAM SOUND, A FJORD-LIKE SYSTEM IN THE NORTHERN GULF OF ALASKA.
- B1644 Stedmon, C. A.; Markager, S. S.; Pedersen, T. J.; Sejr, M. K.: THE OPTICAL PROPERTIES OF GREENLANDIC COASTAL WATERS: MODELLING LIGHT PENETRATION IN A CHANGING CLIMATE
- B1645 Myksgvoll, M. S.; Sandvik, A. D.; Asplin, L.: MODELING A NORWEGIAN FJORD WITH HIGH RESOLUTION WIND FORCING
- B1646 Liljebadh, B. S.; Stigebrandt, A. G.: FORCED BUOYANT CONVECTION IN A CLOSED STRATIFIED VOLUME
- B1647 Cyr, F.; Bourgault, D.; Galbraith, P.: INTERIOR VERSUS BOUNDARY MIXING FOR THE EROSION OF A COLD INTERMEDIATE LAYER IN A SUBARCTIC ESTUARY
- B1648 Linders, T.; Arneborg, L.; Fiekas, V.; Knoll, M.; Prandke, H.: ENHANCED DIAPYCNAL MIXING DURING INTERMEDIARY FLUSHING OF A DEEP SILL FJORD
- B1649 Sciascia, R.; Straneo, F.; Cenedese, C.; Heimbach, P.: MODELLING THE IMPACT OF FJORD DYNAMICS ON SUBMARINE MELTING OF A GREENLAND GLACIER
- B1651 Geyer, W. R.; MacCready, P.; Chen, S. N.; Sutherland, D. A.: EXCHANGE FLOW AT A FJORD SILL: PARAMETERIZING THE TRANSITION FROM 2-LAYER HYDRAULICS TO THREE-DIMENSIONAL TIDAL DISPERSION
- B1652 Blanchard, A. L.: SPATIO-TEMPORAL DYNAMICS OF THE BENTHOS IN A SUB-ARCTIC GLACIAL FJORD IN ALASKA
- B1653 Kawase, M.: SEASONAL VARIABILITY OF EXCHANGE CIRCULATION AND HYDROGRAPHY IN A FJORD ESTUARY: A NUMERICAL MODEL STUDY
- B1654 Stigebrandt, A.: FJORD OCEANOGRAPHY – A REVIEW OF IMPORTANT DYNAMIC PROCESSES AND MODES OF CIRCULATION
- B1655 Oltmanns, M.; Straneo, F.: INFLUENCE OF STRONG WIND EVENTS ON THE CIRCULATION AND ICE COVER IN A MAJOR EAST GREENLAND FJORD

- B1656 Xu, Y.; Rignot, E. J.; Menemenlis, D.; Primeau, F.; Tan, R.: THE BEHAVIOR OF SUBGLACIAL FRESHWATER PLUMES: NUMERICAL MODEL AND TANK EXPERIMENTS

112 Ocean Spreading Centers: Connecting The Seafloor With The Open Ocean

Chair(s): Jason Sylvan, jsylvan@usc.edu

Location: Exhibit/Poster Hall

- B0769 German, C. R.: HYDROTHERMAL VENTING AND OCEAN BIOGEOCHEMISTRY: RECENT DEVELOPMENTS AND FUTURE PERSPECTIVES.
- B0770 Gartman, A.; Yücel, M.; Chan, C. S.; Luther, G. W.: PYRITE NANPARTICLES FROM HYDROTHERMAL VENTS ARE A POTENTIAL SOURCE OF IRON TO THE OCEAN
- B0771 Bennett, S. A.; Coleman, M.; Huber, J. A.; Kinsey, J.; McIntyre, C.; Reddington, E.; Seewald, J.; German, C. R.: THE CARBON BIOGEOCHEMISTRY OF A DISPERSING HYDROTHERMAL PLUME FROM AN ULTRAMAFIC INFLUENCED SYSTEM ON THE MID-CAYMAN RISE
- B0772 Rogers, D. R.; Frank, K.; Olins, H.; Vidoudez, C.; Girguis, P. R.: SULFATE REDUCTION RATES FROM COMMUNITIES HOSTED WITHIN AND ON MASSIVE SULFIDE DEPOSITS.
- B0773 Kellogg, J. P.; McDuff, R. E.; Hautala, S. L.; Stahr, F. R.: TEMPORAL VARIABILITY OF VERTICAL HEAT FLUX FROM THE MAIN ENDEAVOUR FIELD, JUAN DE FUCA RIDGE
- B0774 Breier, J. A.; Osicki, O. N.; Wendt, K.; Sorensen, J. V.; Toner, B.; Anantharaman, K.; Dick, G.; Jiang, H.: DISTRIBUTION OF CHEMICAL ENERGY IN A RISING HYDROTHERMAL PLUME OF THE LAU BASIN.
- B0775 Proskurowski, G.; Lilley, M. D.; Baker, E. T.; Walker, S. L.; Huber, J. A.; Lupton, J. E.: POST-ERUPTIVE HYDROTHERMAL CONTRIBUTION TO THE WATER COLUMN ABOVE AXIAL SEAMOUNT
- B0776 MacGregor, B. J.; Biddle, J. G.; Siebert, J. R.; Hegg, E. L.; Matthyse, A. G.; Teske, A.: WHY ARE ORANGE GUAYMAS BASIN *BEGGIATO*A ORANGE?
- B0777 Sylvan, J. B.; Sia, T. Y.; Haddad, A.; Briscoe, L. J.; Girguis, P. R.; Edwards, K. J.: MICROBIOLOGY OF LOW TEMPERATURE SEAFLOOR DEPOSITS ALONG A GEOCHEMICAL GRADIENT IN LAU BASIN
- B0778 Haddad, A. G.; Baquiran, J.; Edwards, K. J.: INFLUENCES OF HYDROTHERMAL PLUME FALLOUT AND MINERALOGY ON MICROBIAL COMMUNITIES: INSIGHTS FROM IN SITU EXPERIMENTS AT THE LO'IHI SEAMOUNT, HAWAII
- B0779 Salmi, M. S.; Johnson, H. P.; Hutnak, M.; Tivey, M. A.; Bjorklund, T. A.: DISCOVERY OF LARGE AREAS OF ACTIVE HYDROTHERMAL DISCHARGE AND RECHARGE IN A MID-OCEAN RIDGE AXIAL VALLEY
- B0780 Singer, E.; Dhillon, A.; Edwards, K. J.: METAGENOMIC INSIGHTS INTO THE DOMINANT FE(II)-OXIDIZING ZETAPROTEOBACTERIA FROM A BIOMAT AT LO'IHI, HAWAII
- B0781 Yamaoka, K.; Ishikawa, T.; Matsubaya, O.; Ishiyama, D.; Nagaishi, K.; Hiroyasu, Y.; Chiba, H.; Kawahata, H.: BORON AND OXYGEN ISOTOPE SYSTEMATICS FOR A COMPLETE SECTION OF OCEANIC CRUSTAL ROCKS IN THE OMAN OPHIOLITE

115 Western Antarctic Ocean Ecosystems: Chemical, Physical, And Biological Connections

Chair(s): Matthew M. Mills, mmmills@stanford.edu
 Ken Mankoff, kdmankof@ucsc.edu
 Ted Maksym, emak@bas.ac.uk

Location: Exhibit/Poster Hall

- B1977 Mankoff, K. D.; Stammerjohn, S. E.: MIXING AND CIRCULATION OF ICE SHELF AND OCEAN WATERS IN PINE ISLAND BAY DERIVED FROM SST AND SEA ICE
- B1978 Randall-Goodwin, E. M.; Stammerjohn, S.; Sherrell, R.: DETECTING MELT-WATER-MODIFIED CDW IN THE AMUNDSEN SEA POLYNYA

- B1979 Vaillancourt, R. D.; Hargreaves, B. R.; Lance, V. P.; Marra, J. F.: TIME SCALES OF PHOTOACCLIMATION IN PHYTOPLANKTON OF THE WESTERN ANTARCTIC ZONE
- B1980 Pedulli, M.; Bisagni, J. J.: TEMPORAL AND SPATIAL VARIABILITY OF PRIMARY PRODUCTION AND CHLOROPHYLL IN THE WATERS OFF OF THE WESTERN ANTARCTIC PENINSULA (WAP) REGION
- B1981 Zhu, Y.; Zhou, M.; Espinasse, B.; Hazen, E. L.; Chu, D.: EFFECT OF KRILL GRAZING ON PLANKTON SIZE SPECTRA DURING LATER AUSTRAL FALL IN THE WESTERN ANTARCTIC PENINSULA REGION
- B1982 Smith, C. M.; Harada, H.; MacIntyre, H. L.; Kieber, D. J.; Kiene, R. P.: THE RELATIONSHIP BETWEEN PHYTOPLANKTON PIGMENT CONCENTRATIONS AND DMSP, DMS, AND DMSO IN A DIATOM-DOMINATED BLOOM IN THE ROSS SEA, ANTARCTICA
- B1983 Mu, L.; Yager, P. L.: ATMOSPHERIC CO₂ UPTAKE BY A SUPER-PRODUCTIVE ANTARCTIC POLYNYA
- B1984 Williams, C. M.; Connelly, T. L.; Sines, K. A.; Yager, P. L.: PELAGIC MICROBIAL HETEROTROPHY IN A HIGHLY PRODUCTIVE ANTARCTIC POLYNYA
- B1985 Brown, Z. W.; Mills, M. M.; Arrigo, K. R.: CHARACTERIZING THE SEA ICE ALGAL COMMUNITY OF THE BELLINGSHAUSEN/AMUNDSEN SEAS
- B1986 Bernard, K. S.; Steinberg, D. K.; Fraser, W. R.: KRILL DISTRIBUTION AND ADLIE PENGUIN DIET AT ANVERS AND AVIAN ISLANDS, WESTERN ANTARCTIC PENINSULA
- B1987 Venables, H. J.; Meredith, M. P.; Clarke, A.; Reeves, S.: COUPLED VARIABILITY IN PHYSICAL AND BIOLOGICAL PROCESSES IN AN ANTARCTIC PENINSULA TIME SERIES
- B1988 Ruck, K. E.; Steinberg, D. K.; Canuel, E. A.: KRILL LIPID DYNAMICS ALONG THE WESTERN ANTARCTIC PENINSULA
- B1989 Frants, M.; Gille, S. T.; Hatta, M.; Kahru, M.; Measures, C. I.; Zhou, M.: HORIZONTAL AND VERTICAL PROCESSES CONTRIBUTING TO NATURAL IRON SUPPLY IN THE MIXED LAYER IN THE ONA BASIN IN SOUTHERN DRAKE PASSAGE, ANTARCTICA
- B1990 DeMaster, D. J.; Smith, C. R.; Thomas, C. J.: TRENDS IN BIOGEOCHEMICAL TRACERS ALONG A CLIMATE-SENSITIVE TRANSECT ON THE WEST ANTARCTIC PENINSULA SHELF: RESULTS FROM FOODBANCs-2
- B1991 McDonnell, A. M.; Buesseler, K. O.: HIGH-RESOLUTION MAPPING OF SINKING PARTICLE FLUXES AND SIZE DISTRIBUTIONS ALONG THE WESTERN ANTARCTIC PENINSULA
- B1992 Brault, E. K.; Dickhut, R. M.; Geisz, H. N.: CONTAMINANTS IN ANTARCTIC FUR SEALS: ASSESSMENT OF DIET AND THE DECLINE IN CONTAMINANT BODY BURDEN OF FEMALES FROM PLACENTAL AND LACTATION TRANSFER
- B1993 Hatta, M.; Measures, C. I.; Selph, K. E.; Zhou, M.; Hiscock, W. T.; Schlitzer, R.: IRON FLUXES FROM THE SHELF REGIONS IN THE SOUTHERN DRAKE PASSAGE DURING THE AUSTRAL-WINTER 2006
- B1994 Pirtle-Levy, R.; Thomas, C.; Belicka, L.; Jaffe, R.; DeMaster, D.: USING LIPID BIOMARKERS TO UNDERSTAND THE TROPHIC ECOLOGY OF ANTARCTIC BENTHIC MEGAFaUNA
- B1995 Ombres, E. H.; Quintana Rizzo, E.; Torres, J. J.: HABITAT PREFERENCE OF PLEURAGRAMMA ANTARCTICUM, ELECTRONA ANTARCTICA AND EUPHAUSIA SUPERBA ALONG THE WESTERN ANTARCTIC PENINSULA USING ISOTOPE SIGNATURES
- B1996 Selph, K. E.; Apprill, A.; Measures, C. I.; Hatta, M.; Brown, M. T.; Hiscock, W. T.: PHYTOPLANKTON AND DISSOLVED IRON DISTRIBUTIONS NEAR THE SHACKLETON TRANSVERSE RIDGE/ELEPHANT ISLAND IN THE LATE AUSTRAL SUMMER OF 2004
- B1997 Sailey, S. E.; Ducklow, H.; Doney, S. C.; Moeller, H.: CARBON FLUXES AND PELAGIC ECOSYSTEM DYNAMICS AROUND TWO WESTERN ANTARCTIC PENINSULA ADELIE PENGUIN COLONY: AN INVERSE MODEL APPROACH
- B1998 Measures, C. I.; Grand, M. M.; Olivera, H.; Landing, W. M.; Kilgore, B.: DISTRIBUTION OF DISSOLVED TRACE ELEMENTS IN THE UPPER 1000 M OF THE SOUTH PACIFIC DURING THE CLIVAR S4P CRUISE.

- B1999 Tortell, P. D.; Long, M. C.; Payne, C. D.; Alderkamp, A. C.; Arrigo, K. R.: SPATIAL DISTRIBUTION OF PCO₂ DO₂ /AR AND DIMETHYLSULFIDE (DMS) IN POLYNYA WATERS AND THE SEA ICE ZONE OF THE AMUNDSEN SEA, ANTARCTICA

116 Recent Advances In Linking The Microbiology And Biogeochemistry Of Oxygen-Deficient Zones

Chair(s): Rachel Horak, rahorak@uw.edu
 Laura Bristow, lbristow@umassd.edu
 Bonnie Chang, bonniec@princeton.edu
 Loreto De Brabandere, loreto@biology.sdu.dk

Location: Exhibit/Poster Hall

- A0365 Hamersley, M. R.; Turk, K. A.; Leinweber, A.; Gruber, N.; Zehr, J. P.; Gunderson, T.; Capone, D. G.: NITROGEN FIXATION WITHIN THE WATER COLUMN OF HYPOXIC BASINS OF THE SOUTHERN CALIFORNIA BIGHT
- A0366 Tolar, B. B.; King, G. M.; HOLLIBAUGH, J. T.: AMMONIA-OXIDIZING THAUMARCHAETA IN THE NORTHERN GULF OF MEXICO OMZ
- A0367 Eggert, A.; Schmidt, M.: THE SPATIO-TEMPORAL DYNAMICS OF THE NITROGEN FLUX ON THE NORTHERN BENGUELA HYPOXIC SHELF: A MODEL VIEW
- A0368 Liu, Z.; Liu, S.; Epp-Schmidt, D. J.; Liu, J.; Gardner, W. S.: COMPARING DECOMPOSITION PATHWAYS OF SMALL PEPTIDES BETWEEN OXIC AND HYPOXIC WATERS IN THE NORTHERN GULF OF MEXICO
- A0369 Chan, E.; Bristow, L.; Deutsch, C.; Letelier, R. M.; Altabet, M. A.; Galan, A.: SHELF HYPOXIA AND FIXED NITROGEN LOSS IN THE NORTHERN CALIFORNIA CURRENT
- A0370 Bonaglia, S.; Deutsch, B.; Bartoli, M.; Brüchert, V.: SEASONAL BENTHIC NUTRIENT CYCLING IN A BALTIC SEA ESTUARY
- A0371 Liu, S.; Liu, Z.: COMPARISON OF PEPTIDE HYDROLYSIS BETWEEN OXIC AND HYPOXIC WATERS IN THE NORTHERN GULF OF MEXICO
- A0372 Madison, M. J.; Rathburn, A. E.; Patel, A.; Ziebis, W.: NITROGEN CYCLING IN PERMEABLE SEDIMENTS UNDERLYING THE OMZ OFF THE COAST OF SOUTHERN CALIFORNIA
- A0373 Mann, E.; Bundy, R.; Alstad, T.; Barbeau, K.: DETAILED FLOW CYTOMETRIC CHARACTERIZATION OF PICOPHYTOPLANKTON ACROSS THE UPPER BOUNDARY OF THE OXYGEN MINIMUM ZONE IN THE EASTERN TROPICAL NORTH PACIFIC

122 Climate Change Impacts On The High-Latitude Ocean

Chair(s): John Crusius, jcrusius@usgs.gov
 Rob Campbell, rcampbell@pwssc.org
 Andrew Schroth, aschroth@usgs.gov

Location: Exhibit/Poster Hall

- B1306 MacDonald, C. R.; Muenchow, A.; Huntley, H. S.: ICE THICKNESS ESTIMATES FROM SATELLITE DATA IN NARES STRAIT
- B1307 Murnane, M.; Maslowski, W.; Kwok, R.; Clement Kinney, J.; Osinski, R.; Roberts, A.: EVALUATION OF ARCTIC SEA ICE KINEMATICS AND THEIR IMPACT ON ICE THICKNESS DISTRIBUTION
- B1308 Onodera, J.; Harada, N.; Tanaka, Y.; Honda, M. C.; Okazaki, Y.; Kimoto, K.; Chiba, S.; Nagashima, K.: TIME-SERIES MONITORING OF SINKING PARTICLE FLUX IN THE NORTHWIND ABYSSAL PLAIN, 2010-2011
- B1309 Torres, J. J.; Fraser, W. R.; Ashford, J. R.; Ferguson, J.; Patarnello, T.; Agostini, C.; Parker, M.: DISAPPEARANCE OF THE ANTARCTIC SILVERFISH FROM THE WESTERN PENINSULA SHELF- A FISH VULNERABLE TO CHANGING CLIMATE
- B1310 Lopes, C.; Mix, A. C.; Kucera, M.: HIGH PRIMARY PRODUCTIVITY IN THE NORTHEAST PACIFIC DURING THE LAST GLACIAL MAXIMUM INDICATED BY DIATOM TRANSFER FUNCTIONS
- B1311 An, S.; Kim, H.: EFFECT OF GREENLAND ICE SHEET MELTING ON NORTH ATLANTIC CLIMATE VARIABILITY
- B1312 Strong, C.: CHANGES IN GREENLAND'S COASTAL MARGINAL ICE ZONE 1979-2011

- B1313 [Kawaguchi, Y.](#); Hutchings, J.; Kikuchi, T.; Morison, J.; Krishfield, R.: BUOY-BASED INVESTIGATION OF UNUSUAL SEA ICE REDUCTION DURING SUMMER 2010 IN EURASIAN BASIN, ARCTIC OCEAN
- B1314 [Dossier, H. V.](#); Rainville, L.: INTERNAL WAVE GENERATION, PROPAGATION, AND DISSIPATION IN THE BEAUFORT GYRE

123 Compound-Specific Amino Acid Analysis: A Rapidly Evolving Tool For Ecology, Paleoceanography And Biogeochemical Cycle Research

Chair(s): [Matthew McCarthy](#), [mccarthy@pmc.ucsc.edu](#)
[Brian Popp](#), [popp@hawaii.edu](#)
[Marilyn Fogel](#), [m.fogel@gl.ciw.edu](#)

Location: Exhibit/Poster Hall

- A0315 [Teece, M. A.](#); Wurzel, W.; Lirman, D.: IMPORTANCE OF HETEROTROPHIC FEEDING IN SUPPLYING AMINO ACIDS TO SCLERACTINIAN REEF BUILDING CORALS
- A0316 [Yamaguchi, Y. T.](#); Takano, Y.; Chikaraishi, Y.; Ogawa, N. O.; Imachi, H.; Yokoyama, Y.; Ohkouchi, N.: NITROGEN ISOTOPIC SIGNATURE OF AMINO ACIDS DURING MICROBIAL PROCESSES
- A0317 [Choy, K.](#); O'Brien, D. M.: COMPOUND SPECIFIC STABLE CARBON ISOTOPE ANALYSIS OF AMINO ACIDS IN BONE COLLAGEN TO RECONSTRUCT HUMAN PALAEODIETS USING LC-IRMS
- A0318 [Ghosh, P.](#); Findlay, R. H.: TEST OF COMPOUND SPECIFIC STABLE ISOTOPE ANALYSIS FOR DETERMINING TROPHIC POSITION IN FRESHWATER ECOSYSTEMS
- A0319 [Choi, B. H.](#); Ha, S. Y.; Min, J. O.; Lee, J. S.; Chikaraishi, Y.; Shin, K. H.: DETERMINATION OF TROPHIC LEVEL OF BENTHIC ORGANISM AND FISHES IN SEOMJIN ESTUARY, KOREA
- A0320 [Loick-Wilde, N.](#); Dutz, J.; Miltner, A.; Gehre, M.; Montoya, J. P.; Voss, M.: INCORPORATION OF NITROGEN FROM N₂-FIXATION INTO AMINO ACIDS OF ZOOPLANKTON
- A0321 [Ellis, G. S.](#); Hollander, D. H.; Peebles, E. B.; Herbert, G. S.: TRACING ONTOGENETIC TROPHIC SHIFTS VIA NITROGEN ISOTOPES OF AMINO ACIDS: A CASE STUDY IN *BAIRDIELLA CHRYSOURA* FROM TAMPA BAY, FL.
- A0322 [Vander Zanden, H. B.](#); Arthur, K. E.; Bolten, A. B.; Popp, B. N.; Lagueux, C. J.; Harrison, E.; Campbell, C. L.; Bjorndal, K. A.: INTERPRETING CARIBBEAN GREEN TURTLE FORAGING ECOLOGY USING BULK CARBON AND NITROGEN STABLE ISOTOPE ANALYSIS AND NITROGEN ISOTOPIC COMPOSITION OF AMINO ACIDS
- A0323 [Steffan, S. A.](#); Chikaraishi, Y.; Bosak, E. J.; Horton, D.; Ohkouchi, N.: TROPHIC SPECTRA REVEAL COMMUNITY STRUCTURE IN A TERRESTRIAL SYSTEM
- A0324 [Batista, F. C.](#); Ravelo, A. C.; McCarthy, M. D.: 15N/14N ANALYSIS OF AMINO ACIDS FROM SANTA BARBARA BASIN SEDIMENTS
- A0325 [Popp, B. N.](#); Arthur, K. A.; Benson, S. R.; Dutton, P. H.; Tapilatu, R. F.; Seminoff, J. A.: SATELLITE TRACKING AND STABLE ISOTOPIC COMPOSITIONS EXPOSE MIGRATORY AND FORAGING STRATEGIES OF ENDANGERED LEATHERBACK TURTLES IN THE PACIFIC OCEAN
- A0326 [Bradley, C. J.](#); Popp, B. N.; Longenecker, K.; Pyle, R. L.: COMPARING THE TROPHIC ECOLOGY OF MESOPHOTIC AND EUPHOTIC FISHES USING COMPOUND SPECIFIC ISOTOPE ANALYSIS OF AMINO ACIDS
- A0327 [Germain, L. R.](#); Koch, P. L.; Harvey, J. T.; [McCarthy, M. D.](#): FEEDING EXPERIMENT IN HARBOR SEALS SUGGESTS DIVERGENT COMPOUND-SPECIFIC AMINO ACID 15N TROPHIC ENRICHMENT FACTORS IN UREA VS. AMMONIA EXCRETING MARINE ANIMALS
- A0328 [Kruse, S.](#); Hunt, B.; Pakhomov, E.: TROPHIC POSITION OF TWO ABUNDANT JELLYFISH SPECIES IN RIVERS INLET, BRITISH COLUMBIA, CANADA
- A0329 [Thorrold, S. R.](#); McMahon, K. W.; Berumen, M. L.: REVISITING THE SOURCE OF CARBON FUELING FISHERIES ON CORAL REEFS
- A0330 [Vokhshoori, N. L.](#); McCarthy, M. D.: STRONG CALIFORNIA COASTAL DEL 15N ISOSCAPE GRADIENT INVESTIGATED USING COMPOUND-SPECIFIC DEL 15N- AMINO ACIDS IN MYTILUS CALIFORNIANUS

- A0331 [Takano, Y.](#); Chikaraishi, Y.; Ohkouchi, N.: ENANTIOMER-SPECIFIC ISOTOPE ANALYSIS (ESIA): INSIGHT FROM NITROGEN ISOTOPIC HETERO- AND HOMOGENEITY BY MICROBIAL AND CHEMICAL PROCESSES
- A0332 [Broek, T. A.](#); Walker, B. D.; Batista, F. C.; Andreasen, D. H.; McCarthy, M. D.: NEW METHOD FOR THE HIGH-PRECISION ¹⁵N/¹⁴N MEASUREMENT OF INDIVIDUAL AMINO ACIDS: HIGH PRESSURE LIQUID CHROMATOGRAPHY COUPLED TO EA-IRMS.
- A0333 [Sabadel, A. J.](#); Van Hale, R.; Boyd, P. W.; Frew, R. D.: FROM ONSHORE TO OFFSHORE: USING AMINO ACIDS TO TRACE THE MARINE-TERRESTRIAL EXCHANGE

125 Ocean Acidification In Coastal And Estuarine Environments

Chair(s): [Simone Alin](#), [simone.r.alin@noaa.gov](#)
[Adrienne Sutton](#), [adrienne.sutton@noaa.gov](#)
[Francis Chan](#), [chanft@science.oregonstate.edu](#)
[George Waldbusser](#), [waldbuss@coas.oregonstate.edu](#)

Location: Exhibit/Poster Hall

- B0961 [Juraneck, L. W.](#); Feely, R. A.; Alin, S. R.; Meinig, C.; Stalin, S. E.: EVALUATING SEASONAL AND EVENT-SCALE EFFECTS OF UPWELLING, BIOLOGICAL PRODUCTION, AND HYPOXIA ON CENTRAL OREGON MARGIN CARBON CHEMISTRY USING A COASTAL GLIDER
- B0962 [Waldbusser, G. G.](#); Green, M. A.: POPULATION DYNAMICS OF MARINE BIVALVES UNDER ACIDIFICATION: EVALUATING THE IMPACTS OF SEDIMENT CORROSIVITY ON POST-LARVAE
- B0963 [Harris, K. E.](#); DeGrandpre, M. D.; Hales, B. R.: THE PRIMARY FACTORS DRIVING ARAGONITE SATURATION STATE IN THE OREGON COASTAL UPWELLING ZONE
- B0964 [Leinweber, A.](#); Gruber, N.; Hauri, C.: HIGH VARIABILITY OF OCEAN ACIDIFICATION PARAMETERS IN SANTA MONICA BAY, CA
- B0965 [Sunda, W. G.](#); Cai, W. J.: EUTROPHICATION INDUCED ACIDIFICATION OF SUBSURFACE COASTAL WATERS
- B0966 [Moore-Maley, B. L.](#); Sklad, J.; Allen, S. E.; Ianson, D.: TOWARD EFFECTIVE CARBON CYCLE MODELING IN AN ESTUARY USING A ONE-DIMENSIONAL VERTICAL BIOPHYSICAL MODEL
- B0967 [Alin, S. R.](#); Feely, R. A.; Juraneck, L. W.; Hales, B.; Ianson, D.; Peterson, W. T.; Peterson, J. O.; Newton, J. A.; Bowlby, E.; Brancato, M. S.: EMPIRICAL RELATIONSHIPS FOR ESTIMATING THE STATE OF THE CARBONATE SYSTEM UNDER HYPOXIC CONDITIONS IN THE NORTHERN CALIFORNIA CURRENT SYSTEM
- B0968 [White, M. M.](#); Mullineaux, L. S.; McCorkle, D. C.; Cohen, A. L.; Mills, S. W.: SHORT TERM HIGH CO₂ EXPOSURE OF LARVAL BAY SCALLOPS (*ARGOPECTEN IRRADIANS*) MAY SHOW LATENT EFFECTS
- B0969 [Rose, J. M.](#); Chan, F.; Gouhier, T. C.; Menge, B. A.: PLAYING THE SHELL GAME: ASSESSING DISTRIBUTIONS OF INTERTIDAL CALCIFYING SPECIES AND THEIR MINERALOGIES ALONG THE CALIFORNIA CURRENT LARGE MARINE ECOSYSTEM
- B0970 [Bignami, S. G.](#); Sponaugle, S.; Cowen, R. K.: RESISTANCE TO OCEAN ACIDIFICATION IN LARVAE OF A SUBTROPICAL FISH
- B0971 [Vance, J. M.](#); Hales, B.; Waldbusser, G.; Brunner, E.; Barton, A.: EVALUATION OF THE EFFECT OF CORROSIVE WATERS UNDER UPWELLING AND NON-UPWELLING CONDITIONS ON THE GROWTH AND SURVIVAL OF *CRASSOSTREA GIGAS*.
- B0972 [Teneva, L. T.](#); Dunbar, R. B.; Mucciarone, D. A.; Koweek, D.; Archambault, A.: ASSESSING CORAL REEF VULNERABILITY TO OCEAN ACIDIFICATION VIA HIGH-RESOLUTION BASELINE MONITORING OF CARBON BUDGETS ON PALMYRA ATOLL
- B0973 [Bockmon, E. E.](#); Lord, J.; Dickson, A. G.: AN EXPERIMENTAL AQUARIUM SYSTEM WITH CAREFULLY CONTROLLED CARBONATE CHEMISTRY, OXYGEN LEVELS, AND TEMPERATURE, FOR INVESTIGATING THE IMPACTS OF CLIMATE CHANGE
- B0974 [Kropuenske Artman, L.](#); Hauri, C.; Gruber, N.: CARBON, NITROGEN, AND OXYGEN DISTRIBUTIONS IN THE HUMBOLDT CURRENT SYSTEM UNDER DIFFERENT OCEAN ACIDIFICATION SCENARIOS

- B0975 Preziosi, B. M.; Jones, R. J.; Runge, J. A.; Christiansen, J.: EFFECTS OF OCEAN ACIDIFICATION ON REPRODUCTIVE PROCESSES OF THE MARINE PLANKTONIC COPEPOD CALANUS FINMARCHICUS
- B0976 Cooper, R. D.; McCallister, S. L.; Johns, A.: INNOVATIVE MESOCOSM DESIGN TO INVESTIGATE THE IMPACTS OF OCEAN ACIDIFICATION ON CARBON CYCLING IN COASTAL WATERS
- B0977 Carter, H. A.; Ceballos, L.; Miller, N.; Stillman, J. H.: IMPACT OF OCEAN ACIDIFICATION ON ENERGETICS AND DEVELOPMENT OF PORCELAIN CRAB EARLY LIFE STAGES

141 Improving The Representation Of Plankton Ecology In Earth System Models

Chair(s): Irina Marinov, imarinov@sas.upenn.edu
Zhi-Ping Mei, zmei@umces.edu
Tihomir Kostadinov, tiho@eri.ucsb.edu
Anand Gnanadesikan, gnanades@jhu.edu

Location: Exhibit/Poster Hall

- B1967 Taniguchi, D. A.; Franks, P.; Poulin, F.; Landry, M. R.: PARAMETERIZING SIZE-STRUCTURED ECOSYSTEM MODELS USING A MODIFICATION OF THE TRADITIONAL DILUTION METHOD
- B1968 Heinle, M. J.; Buitenhuis, E. T.; Malin, G.: REPRESENTING COCCOLITHOPHORES IN A GLOBAL BIOGEOCHEMICAL MODEL
- B1969 Kavanaugh, M. T.; Hales, B.; Saraceno, M.; Spitz, Y. H.; White, A. E.; Church, M. J.; Letelier, R. M.: SATELLITE-DERIVED DYNAMIC SEASCAPES: SPATIOTEMPORAL CONTEXT FOR OCEANOGRAPHIC OBSERVATIONS OF NORTH PACIFIC ECOSYSTEMS
- B1970 Perhar, G.; Arhonditsis, G. B.: HIGHLY UNSATURATED FATTY ACIDS: THE MISSING LINK IN FRESHWATER PLANKTON MODELS – AN INTEGRATIVE APPROACH
- B1971 Kvale, K. E.; Meissner, K. J.; Schmittner, A.: CLIMATIC CONSEQUENCES OF NONUNIFORM CALCIFIER RESPONSE TO OCEAN ACIDIFICATION AND CLIMATE CHANGE: A MODEL STUDY
- B1972 Gnanadesikan, A.: BOTTOM-UP EFFECTS ON INTERANNUAL VARIABILITY
- B1973 Keller, D. P.; Oschlies, A.: INVESTIGATING THE NET IMPACT OF ECOSYSTEM SEASONALITY ON BIOGEOCHEMISTRY IN CLIMATE CHANGE SIMULATIONS
- B1974 Vogt, M.; Peloquin, J. A.; Buitenhuis, E. T.; Bednarek, N.; Dunne, J. P.; Leblanc, K.; Luo, Y.; Moriarty, R.; O'Brien, T. D.; Schiebel, R.: MAREDAT - TOWARDS A WORLD ATLAS OF MARINE PLANKTON FUNCTIONAL TYPES
- B1975 Mei, Z.; Finkel, Z.; Irwin, A.: PHYTOPLANKTON GROWTH ALLOMETRY AND SIZE-DEPENDENT C:N STOICHIOMETRY REVEALED BY A VARIABLE QUOTA MODEL
- B1976 Masuda, Y.; Yamanaka, Y.; Sumata, H.: DEVELOPMENT OF AN EDDY-PERMITTING MARINE ECOSYSTEM MODEL (MEM)

147 Infusing Biogeochemistry With Ecosystem Science

Chair(s): Susanne Neuer, susanne.neuer@asu.edu
Raleigh Hood, rhood@umces.edu

Location: Exhibit/Poster Hall

- A0268 Krause, J. W.; Brzezinski, M. A.; Villareal, T. A.; Wilson, C.: SPECIES EFFECTS ON THE PRODUCTION AND ACCUMULATION OF BIOGENIC SILICA IN SUMMER DIATOM BLOOMS IN THE NORTH PACIFIC SUBTROPICAL GYRE
- A0269 Banas, N. S.: TROPHIC COMPLEXITY, LIMITS ON PREDICTABILITY, AND EMERGENT ECOSYSTEM STRUCTURE AND FUNCTION IN A NEW SIZE-SPECTRAL PLANKTON MODEL
- A0270 Tameler, T.; Reigstad, M.; Olli, K.; Slagstad, D.; Wassmann, P.: NEW PRODUCTION: A DRIVER OF EXPORT STOICHIOMETRY IN THE OCEAN?
- A0271 Tang, T.; Lee, C.; Kisslinger, K.: A NEW SOURCE OF BIOGENIC SILICATE FORMED DURING DEGRADATION OF MARINE CYANOBACTERIUM *SYNECHOCOCCUS*

- A0272 Bachman, B. E.; Goldman, E. A.; Lomas, M. W.; Richardson, T. L.: CONTRIBUTIONS OF PICOPHYTOPLANKTON TO PRIMARY PRODUCTIVITY AND BIOMASS IN MESOSCALE EDDIES IN THE SARGASSO SEA
- A0273 Palevsky, H. I.; Ribalet, F.; Cosca, C. E.; Swalwell, J. E.; Cokelet, E. D.; Quay, P. D.; Feely, R. A.; Armbrust, E. V.: EXPLAINING A NARROW REGION OF HIGH CO₂ UPTAKE IN THE GULF OF ALASKA: THE ROLE OF BIOLOGICAL PRODUCTION AND PHYTOPLANKTON COMMUNITY STRUCTURE
- A0274 Carozza, D. A.; Galbraith, E. D.: MODELING THE MODIFICATION OF ORGANIC MATTER SINKING BY METAZOANS
- A0275 Choi, H. Y.; Stewart, G. M.; Lomas, M. W.; Moran, S. B.; Kelly, R. P.: SEASONAL 210PO AND 210PB DISTRIBUTIONS AND PLANKTON COMMUNITY STRUCTURE IN THE NE PACIFIC
- A0276 Nunn, B. L.; Moore, E. K.; Faux, J.; Goodlett, D. R.; Harvey, H. R.: FROM BLOOM TO BUST TO THE BOTTOM: PROTEINS THAT SURVIVE THE JOURNEY AND WHY
- A0277 Sharma, A. K.; Becker, J. W.; Bryant, J. A.; Ottesen, E. A.; Repeta, D. J.; DeLong, E. F.: EFFECTS OF DISSOLVED ORGANIC MATTER ON MICROBIAL COMMUNITY GROWTH, SUCCESSION, AND GENE EXPRESSION
- A0278 Prairie, J. C.; Arnosti, C.; Camassa, R.; McLaughlin, R. M.; White, B. L.; Ziervogel, K.: DELAYED SETTLING OF MARINE SNOW PARTICLES THROUGH SHARP DENSITY TRANSITIONS AND CONSEQUENCES FOR MARINE CARBON CYCLING
- A0279 Durkin, C. A.; Bender, S. J.; Gaessner, K.; Armbrust, E. V.: UPTAKE LIMITATION OF SILICIC ACID IN COASTAL DIATOMS CONTROLS CELLULAR SILICIFICATION
- A0280 Aita, M. N.; Tadokoro, K.; Ogawa, N. O.; Hyodo, F.; Ishii, R.; Smith, S. L.; Saino, T.; Kishi, M. J.; Saitoh, S.; Wada, E.: LINEAR RELATIONSHIP BETWEEN CARBON AND NITROGEN ISOTOPE RATIOS ALONG SIMPLE FOOD CHAINS IN MARINE ENVIRONMENTS
- A0281 Gloeckler, K. M.; Teece, M.; Lirman, D.: REEF BUILDING CORALS RELY ON SYMBIONTS FOR ENERGY AND NUTRIENTS OVER A LARGE DEPTH RANGE
- A0282 Armstrong, E. J.; Palevsky, H. I.; Ribalet, F.; Quay, P. D.; Armbrust, E. V.: THE INFLUENCE OF PHYTOPLANKTON COMMUNITY STRUCTURE ON NET COMMUNITY PRODUCTION AND AIR-SEA CO₂ FLUX IN THE SUBTROPICAL AND SUBARCTIC NORTH PACIFIC
- A0283 Hansman, R. L.; Sessions, A. L.: IN SITU d¹³C OF DISTINCT MARINE PLANKTON POPULATIONS USING FACS AND SWIM-IRMS
- A0284 Grosse, J.; Boschker, E.: SHIFT IN NUTRIENT LIMITATION AFFECTS BIOCHEMICAL COMPOSITION OF NORTH SEA PHYTOPLANKTON
- A0286 Francesca De Martini, F.; Michael W.Lomas, M. W.; Susanne Neuer, S.: GROWTH AND GRAZING MORTALITY OF NANO- AND PICOPHYTOPLANKTON IN THE SARGASSO SEA
- A0287 Salihoglu, B.; Fach, B.; Cannaby, H.; Oguz, T.; Dorofeev, V.; Kubriyakov, A.: INFLUENCE OF HIGHER TROPHIC LEVELS ON BLACK SEA PRODUCTIVITY.
- A0288 McPherson, M. L.; Zimmerman, R. C.; Hill, V. J.: ENVIRONMENTAL AND PHYSIOLOGICAL INFLUENCES ON C ISOTOPE CONTENT OF ZOSTERA MARINA (EELGRASS)

152 Polar Marine Microbial Ecology

Chair(s): Rebecca J. Gast, rgast@whoi.edu
Robert W. Sanders, sanders1@temple.edu
David A. Caron, dcaron@usc.edu

Location: Exhibit/Poster Hall

- A0374 Gast, R. J.; McKie-Krisberg, Z. M.; Sanders, R. W.: QPCR-BASED ABUNDANCES OF MIXOTROPHIC PROTIST SPECIES IN THE ROSS SEA, ANTARCTICA AND THE BEAUFORT SEA
- A0375 Lovejoy, C.; Monier, A.; Comeau, A. M.; Medrinal, E.; Gratton, Y.: PROTIST COMMUNITIES THROUGH THE DEEP CHLOROPHYLL MAXIMA LAYER OF THE MACKENZIE CANYON, BEAUFORT SEA, ARCTIC OCEAN

- A0376 Thaler, M.; Lovejoy, C.: COMPARISON OF DISTRIBUTION OF HETEROTROPHIC FLAGELLATE TAXA IN THE CANADIAN ARCTIC
- A0377 Frank, E.; Duff, R. J.; Lavrentyev, P. J.; Franze, G.; Moore, F. B.; Sherr, E. B.; Sherr, B. E.: TOWARD ESTIMATING THE PAN-ARCTIC DIVERSITY OF EUKARYOTIC MICROBIAL PLANKTON
- A0378 McCusker, K. A.; Rynearson, T. A.: IDENTIFICATION AND CHARACTERIZATION OF DNA FINGERPRINTING MARKERS FOR THE BLOOM-FORMING DIATOM, THALASSIOSIRA GRAVIDA
- A0379 Kellogg, C.; Deming, J. W.: BACTERIAL COMMUNITY COMPOSITION AND HYDROLYTIC ACTIVITY IN ARCTIC NEPHELOID LAYERS
- A0380 Franze, G.; Lavrentyev, P. J.: MICROZOOPLANKTON GROWTH AND HERBIVORY PATTERNS ACROSS A TEMPERATURE GRADIENT IN THE BARENTS SEA
- A0381 Collins, R. E.: HIMA: A META-DATABASE FOR GENOMES, METAGENOMES, AND PHENOTYPES FROM COLD ENVIRONMENTS

157 Understanding Plankton Biogeography By Putting Functional Traits On The Map

Chair(s): Andrew David Barton, adbarton@MIT.EDU
Elena Litchman, litchman@msu.edu
Andrew J. Pershing, andrew.pershing@maine.edu

Location: Exhibit/Poster Hall

- A0621 Turner, J. T.; Roncalli, V.; Ciminiello, P.; Carotenuto, Y.; Esposito, F.; Ianora, A.: BIOGEOGRAPHIC EFFECTS OF THE GULF OF MEXICO RED TIDE DINOFLAGELLATE KARENIA BREVIS ON THE MEDITERRANEAN COPEPODS CALANUS HELGOLANDICUS AND TEMORA STYLIFERA
- A0622 Lombard, E.; Labeyrie, L.; Michel, E.; Gorsky, G.: USING ZOOPLANKTON ECOPHYSIOLOGY TO REPRODUCE THEIR BIOGEOGRAPHY AND TEMPORAL SUCCESSIONS: A MULTISPECIES CASE STUDY ON APPENDICULARIANS AND FORAMINIFERS
- A0623 Ngugi, D. K.; Jimenez, F.; Stingl, U.: MICRODIVERSITY STUDIES REVEAL A HIGH-TEMPERATURE ADAPTED CLUSTER OF SAR11 IN WATERS OF THE RED SEA
- A0624 Tarran, G. A.; Zubkov, M. V.: RELATING WIND STIRRING AND PICOPHYTOPLANKTON DISTRIBUTION IN THE OCEAN USING THE ATLANTIC MERIDIONAL TRANSECT OBSERVATIONS
- A0625 Herrington, S. J.; Martin, A. P.; Srokosz, M. A.; Zubkov, M. V.: ECOLOGICAL PARTITIONS AND VARIABILITY THEREIN OF MICROBIAL POPULATIONS: AN ATLANTIC FIELD STUDY
- A0626 Cermeno, P.; Finkel, Z.; Vallina, S.: CLIMATIC TRIGGERS FOR THE EVOLUTIONARY SUCCESS OF MARINE DIATOMS
- A0627 Pershing, A. J.; Record, N. R.; Maps, F.; Carpenter, J.: A COMPUTATIONAL APPROACH TO COPEPOD BIOGEOGRAPHY
- A0628 Maps, F.; Pershing, A. J.; Record, N. R.; Plourde, S.: PHYSIOLOGY AND LIFE-CYCLE TRAITS EXPLAIN THE DIFFERENT PHENOLOGIES OF CO-OCCURRING CALANUS CONGENERS IN THE SUB-ARCTIC ST-LAWRENCE ESTUARY
- A0629 Vallina, S. M.; Cermeno, P.; Dutkiewicz, S.; Follows, M. J.: KILL-THE-WINNER PREDATION AND THE SURVIVAL OF RARE PHYTOPLANKTON SPECIES
- A0630 Tobin, E. D.; Grünbaum, D.; Cattolico, R. A.: QUANTIFICATION OF TRANSITIONAL SWIMMING BEHAVIORS IN THE ALGA, *HETEROSIGMA AKASHIWO*, AND THEIR IMPLICATIONS FOR PELAGIC AND BENTHIC DISTRIBUTIONS
- A0631 Kenitz, K. M.; Williams, R.; Sharples, J.; Biktashev, V.; Selsil, O.: WHAT DRIVES CHAOS IN MODELLED PHYTOPLANKTON COMMUNITIES?
- A0632 Barton, A. D.; Finkel, Z. V.; Ward, B. A.; Follows, M. J.: REGIONAL VARIATIONS IN THE SEASONAL SUCCESSION OF DIATOMS AND DINOFLAGELLATES IN THE NORTH ATLANTIC

161 Characterizing The Variability Of The Coastal Ocean And Its Implications

Chair(s): Sung Yong Kim, syongkim@mpl.ucsd.edu
Anthony Kirincich, akirincich@whoi.edu

Location: Exhibit/Poster Hall

- B1723 Lin, X.; Yang, J.: THE ASYMMETRIC UPWIND FLOW-NEW OBSERVATIONS AND THEORY
- B1724 Llebot, C.; Rueda, F. J.; Solé, J.; Artigas, M. L.; Estrada, M.: HYDRODYNAMIC STATES IN A WIND-DRIVEN MICROTIDAL ESTUARY
- B1725 Dale, A. C.; Jackson, K.; Bell, C. W.; Boyd, T. J.: ASYMMETRY OF AN OPEN-WATER TIDAL RACE
- B1726 Liu, Z. Q.; Gan, J. P.: MODELING STUDIES OF COASTAL UPWELLING CIRCULATIONS IN THE EAST CHINA SEA: RESPONSE TO WIND, TIDES AND TOPOGRAPHY FORCING
- B1727 Austin, J. A.; Minor, E. C.; Guildford, S. J.; Hecky, R. E.; James, M. D.: GLIDER OBSERVATIONS OF PHYSICAL AND BIOGEOCHEMICAL PROPERTY DISTRIBUTIONS IN LAKE SUPERIOR
- B1728 Liu, G.; Wang, D.; Wang, H.: ROLE OF EKMAN TRANSPORT VERSUS EKMAN PUMPING IN DRIVING SUMMER UPWELLING IN THE SOUTH CHINA SEA
- B1729 Roarty, H. J.; Kohut, J. T.; Lemus, E. R.; Palamara, L.; Handel, E.; Glenn, S. M.: VARIABILITY OF THE SURFACE CURRENTS IN THE MID ATLANTIC BIGHT ON THE SCALE OF DAYS TO YEARS
- B1730 Masson, D.; Cummins, P. F.: LOW FREQUENCY VARIABILITY OF THE SURFACE WATERS OF COASTAL BRITISH COLUMBIA
- B1731 Pérez-Pérez, N. M.; Sánchez-García, J.; García-Ríos, C. I.: AMINO ACID ANALYSIS OF THE CYTOCHROME C OXIDASE SUBUNIT I (COI) FROM CARIBBEAN *CHITON* SPP. (MOLLUSCA: POLYPLACOPHORA)
- B1732 Gelpi, C. G.: CHLOROPHYLL CONCENTRATION DYNAMICS IN THE SOUTHERN CALIFORNIA BIGHT
- B1733 Kang, B.; Yoon, J. H.: SHORT-TERM VARIABILITIES IN THE TSUSHIMA/KOREA STRAITS
- B1734 Saramul, S.; Ezer, T.: FORCING MECHANISMS FOR THE COASTAL DYNAMICS OF THE UPPER GULF OF THAILAND
- B1735 Seo, H.; Koracin, D.; Dorman, C.; Edwards, C.; Brink, K.: COASTAL UPWELLING AND LAND HEATING OVER THE CALIFORNIA-OREGON COAST: DYNAMICS AND CLIMATE SCALE LAND-OCEAN-ATMOSPHERE INTERACTIONS
- B1736 Woods, N. W.; Fratantoni, D. M.; Baumgartner, M. F.; Ji, R.; He, R.: PHYSICAL CONTROLS ON DENSE COPEPOD AGGREGATIONS IN THE GREAT SOUTH CHANNEL
- B1737 Sahl, L. E.; Tilburg, C. E.: OBSERVATIONS OF THE PENOBSCOT RIVER PLUME
- B1738 Zhang, Z.; Hetland, R.: NUMERICAL STUDIES ON CONVERGENT ALONGSHORE FLOWS ALONG THE TEXAS-LOUISIANA SHELF
- B1739 Kobashi, D.; Tomlinson, R.; Griffin, D. A.: COASTAL CIRCULATION AND ITS LINKS WITH AN WESTERN BOUNDARY CURRENT AND CLIMATE VARIABILITY USING BLUELINK OCEAN REANALYSIS, SOUTH EAST QUEENSLAND, AUSTRALIA
- B1740 Greer, A. T.; Cowen, R. K.; Guigand, C.; McManus, M. A.; Sevdjian, J. C.; Timmerman, A.: SMALL SCALE CHANGES IN GELATINOUS ZOOPLANKTON COMMUNITY DURING UPWELLING AND RELAXATION EVENTS

175 Exploitations Of Synthetic Aperture Radar For Winds, Waves And Data Assimilation

Chair(s): Theresa Paluszkiwicz, terri.paluszkiwicz@navy.mil

Location: Exhibit/Poster Hall

- B1494 Romeiser, R.; Graber, H. C.: AN EMPIRICAL ALGORITHM FOR OCEAN WAVE RETRIEVALS FROM SCANSAR IMAGES UNDER TYPHOON CONDITIONS

- B1495 Sun, J.: THE MEASUREMENT OF SURFACE WAVES BY SPACEBORNE SAR, AIRBORNE SAR AND BUOY ALONG THE COAST OF HAINAN
- B1496 Nadai, A.; Umehara, T.; Uratsuka, S.: DEPENDENCY OF MICROWAVE BACKSCATTERING FROM OCEAN SURFACE ON OCEAN WINDS USING AIRBORNE DUAL-FREQUENCY POLARIMETRIC SYNTHETIC APERTURE RADAR
- B1497 Caruso, M. J.; Graber, H. C.: TRACKING THE EVOLUTION OF SUPER TYPHOON MEGI WITH SAR
- B1498 Horstmann, J.; Maresca, S.: SYNTHETIC APERTURE RADAR WIND FIELD RETRIEVAL WITH RESPECT TO CYCLONES
- B1499 Foster, R. C.; Patoux, J. P.: USING SURFACE PRESSURE DATA TO IMPROVE TROPICAL CYCLONE SAR WIND RETRIEVALS
- B1500 Thompson, D. R.; Monaldo, F. M.; Mouche, A.; Horstmann, J.; Winstead, N. S.; Sterner, R.: EXTRACTION OF HIGH-RESOLUTION WIND FIELDS OVER THE OCEAN SURFACE FROM TERRASAR-X AND COSMO SKYMED SAR IMAGERY

177 Gelatinous Plankton: Ecology, Physiology And Economic Impact In The Changing World Ocean

Chair(s): Anthony G. Moss, mossant@auburn.edu
Jamie Seymour, Assoc. Professor, jamie.seymour@jcu.edu.au

Location: Exhibit/Poster Hall

- A0535 Cawood, A. M.: IMPACTS OF ACUTE SALINITY CHANGES ON THE SURVIVORSHIP OF AURELIA SP1 POLYPS, EPHYRAE, AND JUVENILE MEDUSAE
- A0536 Javidpour, J.; Molinero, J.: DEMOGRAPHIC CONTROL IN *MNEMIOPSIS LEIDYI* POPULATION DYNAMICS REVEALED BY HIGH FREQUENCY OBSERVATIONS
- A0537 Colin, S. P.; Sutherland, K. R.; Costello, J. H.; Dabiri, J. O.: EFFECTS OF FORAGING MODE AND TURBULENCE ON THE ENCOUNTER RATES OF THE LOBATE CTENOPHORE *MNEMIOPSIS LEIDYI*
- A0538 Lang, C.; Ciobanu, A.; Costello, J. H.; Sullivan, B. K.: IN SITU PREY INGESTION AND EGG PRODUCTION BY THE CTENOPHORE *MNEMIOPSIS LEIDYI* IN NARRAGANSETT BAY, RI, USA
- A0539 Katija, K.; Jiang, H.; Costello, J. H.; Colin, S. P.: ONTOGENETIC PROPULSIVE TRANSITIONS FROM VISCOUS TO INERTIAL FLOW REGIMES
- A0540 Hopcroft, R. R.; Jaspers, C.: THE GELATINOUS ZOOPLANKTON COMMUNITIES OF GODTHBBSFJORDEN, WEST GREENLAND
- A0541 Moss, A. G.; Wells, B.; Graham, W. M.: NEMATOSOMES OF THE AUSTRALIAN SPOTTED JELLYFISH, *PHYLLORHIZA PUNCTATA*, A RHIZOSTOME JELLYFISH INVASIVE TO THE NORTHERN GULF OF MEXICO.
- A0542 Lucas, K.; Colin, S. P.; Costello, J. H.; Katija, K.: FLUID INTERACTIONS THAT ENABLE STEALTH PREDATION BY THE UPSTREAM FORAGING HYDROMEDUSAE *CRASPEDACUSTA SOWERBYI*
- A0543 Besson, E.; Claustre, H.; Gorsky, G.; Stemann, L.; Ferraris, M.; Leymarie, E.; Picheral, M.; Lepage, Y.; Fiquet, F.: TOWARDS A MONITORING OF JELLYFISH SWARMS USING AN EMBEDDED VISION SYSTEM IN AUVs, GLIDERS AND PROFILING FLOATS
- A0544 Condon, R. H.; Robinson, K. L.; Bogeberg, M.; Graham, W. M.; Duarte, C. M.; Regetz, J.; Schildhauer, M.; Madin, L. P.; JEDI Development Team,.; JEDI Development Team,.; JELLYFISH DATABASE INITIATIVE (JEDI): DEVELOPING A GLOBAL SYNTHESIS OF JELLYFISH OBSERVATIONS USING ECOINFORMATICS AND COMMUNITY-LEVEL DATA SHARING
- A0545 Robinson, K. L.; Condon, R. H.; Graham, W. M.; Duarte, C. M.; Decker, M. B.; Purcell, J. E.; Pitt, K. A.; Lucas, C. H.; Madin, L. P.; JEDI Development Team: QUANTIFYING GLOBAL-SCALE DEPENDENCIES BETWEEN JELLIES AND CLIMATE FORCES: AN ANALYTICAL APPROACH USING THE JELLYFISH DATABASE INITIATIVE

186 General Session: Biological Oceanography, Aquatic Biology

Chair(s): Jeff Shimeta, jeff.shimeta@rmit.edu.au

Location: Exhibit/Poster Hall

- A0633 Liu, H.; Gong, G.; Ho, T.: THE DISTRIBUTION AND SOURCES OF DISSOLVED CD, CU, AND PB IN THE WATER COLUMN OF THE EAST CHINA SEA IN SUMMER 2010
- A0634 Buskey, E. J.; Gemmill, B.; Bittler, K.; Hyatt, C. J.; Goes, J. I.; Gomes, H. R.; Matondkar, S. G.: *GREENNOCTILUCA* BLOOMS IN THE ARABIAN SEA: SHIPBOARD AND LABORATORY STUDIES OF GROWTH AND GRAZING
- A0635 Dickerson, T. L.; Williams, H. N.: BACTERIAL COMMUNITY METABOLIC AND PHYLOGENETIC PROFILES FROM THREE NORTH FLORIDA FRESHWATER LAKES
- A0636 Foster, R. A.; Franzke, D.; Padilla, C.; Tiahlo, M.; Turk-Kubo, K.; Capone, D. G.; Zehr, J. P.: NANOSIMS IMAGING OF N, C, AND P ASSIMILATION IN FIELD POPULATIONS OF DIATOM-RICH *HELICELLA* SYMBIOSES AND *TRICHODESMIUM* SPP. FROM THE WTNA
- A0637 Rivera Irazarry, E.; Ginter, C. C.; Marshall, C. D.: CHARACTERIZATION OF THE GASTROINTESTINAL TRACT AND INKING IN PYGMY SPERM WHALES (*KOGIA BREVICEPS*)
- A0638 Goldstein, M. C.; Rosenberg, M. R.; Cheng, L.: INCREASED ABUNDANCE AND ECOLOGICAL IMPLICATIONS OF PLASTIC MICRODEBRIS IN THE NORTH PACIFIC SUBTROPICAL GYRE
- A0639 Hitchcock, G. L.; Heil, C. A.: PRIMARY PRODUCTION AND DARK RESPIRATION RATES IN *KARENIA BREVIS* BLOOMS ON THE WEST FLORIDA SHELF
- A0640 Park, H. J.; Choi, K. S.; Choy, E. J.; Hwang, J.; Park, H. S.; Shim, W. J.; Kang, C. K.: SHORT-TERM EFFECT OF THE HEBEI SPIRIT OIL SPILL ON CONDITION, REPRODUCTION AND ENERGY STORAGE CYCLE OF *RUDITAPES PHILIPPINARUM* ON THE WEST COAST OF KOREA
- A0641 Heil, C. A.; Hitchcock, G.; Vargo, G. A.; Tomas, C.: HISTORICAL PRIMARY PRODUCTION IN THE EASTERN GULF OF MEXICO
- A0642 Arbuckle, N. S.; Wormuth, J. H.: HUMBOLDT SQUID STATOLITH MICROCHEMISTRY STUDY USING LASER ABLATION INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY (LA-ICP-MS)
- A0643 Chu, J. W.; Leys, S. P.: HIGH RESOLUTION MAPPING OF COMMUNITY STRUCTURE IN THREE GLASS SPONGE REEFS (PORIFERA, HEXACTINELLIDA)
- A0644 Choi, C. J.; Berges, J. A.: INTERACTIONS BETWEEN OSMOTIC STRESS AND DARK-INDUCED CELL DEATH IN THE HALOTOLERANT UNICELLULAR CHLOROPHYTE, *DUNALIELLA TERTIOLECTA*
- A0645 Milligan, A. J.; Halsey, K. H.; Behrenfeld, M. J.: PHYTOPLANKTON ASSIMILATION NUMBERS ARE NOT GROWTH RATE DEPENDENT.
- A0646 Breland, M.; Chigbu, P.; Oghenekaro, E.; Mayor, E.: FEEDING ECOLOGY OF BAY ANCHOVY (*ANCHOA MITCHILLI*) IN THE MARYLAND COASTAL BAYS
- A0647 Ramos, Z.; Williams, E.; Bunkley-Williams, L.: ASSESSMENT OF PARASITISM IN *PTEROIS VOLITANS/MILES* (SCORPAENIDAE) FROM COASTAL WATERS OF PUERTO RICO
- A0648 Gárate, M. H.; Henderson, N. D.; Christian, A. D.: SPATIAL VARIATION IN MICROBIAL COMMUNITY FUNCTIONAL GROUP COMPOSITION IN SURFACE WATER AND SEDIMENTS IN DORCHESTER BAY OF BOSTON HARBOR
- A0649 Díaz-Negrón, E. M.; Stoecker, D.: THE EFFECTS OF VIOLACEIN-PRODUCING BACTERIA ON MICROZOOPLANKTON GRAZING AND PHYTOPLANKTON GROWTH
- A0650 Carlotti, E.; Qiu, Z.; Doglioli, A.; Marsaleix, P.: THE INFLUENCE OF HYDRODYNAMIC PROCESSES ON ZOOPLANKTON TRANSPORT AND DISTRIBUTIONS IN THE NORTH WESTERN MEDITERRANEAN SEA ESTIMATED FROM A LAGRANGIAN MODEL.

- A0651 Carrera, A.; Vélez, S.; Ortiz, E.; Sastre, M.: PLANKTONIC DIVERSITY IN LAGUNA GRANDE, PUERTO RICO
- A0652 Harvey, T. E.; Bona, S. R.; Strickler, J. R.: DIGITAL HOLOGRAPHY OF FEEDING MECHANISMS IN DAPHNIA ON COLONIAL DIATOMS
- A0653 Walechka, J. M.: ECOLOGICAL NICHE MODELING OF LAKE BEMIDJI
- A0654 Rueda, D.; Muller, F.; Mendoza, J.: SPATIAL AND TEMPORAL VARIABILITY OF SARDINE (*SARDINELLA AURITA*) BIOMASS IN SOUTHEASTERN CARIBBEAN RELATED TO THE UPWELLING CYCLE
- A0655 Satoh, Y.; Hama, T.: COMPREHENSIVE ANALYSIS OF CHLOROPHYLL DERIVATIVES BY CHROMIC OXIDATION METHOD
- A0656 Ng, J. L.; Sonoda, K.; Yamamoto, S.; Kurosawa, N.: COMPARISON OF HYDROCARBON BIODEGRADABILITY IN *ALCANIVORAX* STRAINS ISOLATED FROM TEMPERATE AND TROPICAL SEAWATER
- A0657 Byun, G. H.; Choi, K. S.; Choy, E. J.; Lee, D. S.; Park, H. S.; Shim, W. J.; Kang, C. K.: CONDITION, REPRODUCTION, AND GROSS BIOCHEMICAL COMPOSITION OF THE PACIFIC OYSTER *CRASSOSTREA GIGAS* AFTER THE HEBEI SPIRIT OIL SPILL ON THE WEST COAST OF KOREA
- A0658 Morales-Nuñez, A. G.; Alfaro, M.; Heard, R. W.; Arocho, N. E.: TAXONOMIC STRUCTURE OF TANAIIDACEA (CRUSTACEA: PERACARIDA) AT LA PARGUERA, PUERTO RICO
- A0659 Ruiz-de la Torre, M. C.; Maske, H.; Almeda-Jauregui, C. O.; Ochoa-de la Torre, J.; Moreno-Willerer, M.: NEAR - SURFACE TEMPERATURE STRATIFICATION IN DENSE SURFACE ALGAL BLOOMS AND WIND TRANSPORT.
- A0660 McManus, G.; Santoferrara, L.; Alder, V.: TWO-LOCUS MOLECULAR CHARACTERIZATION OF MORPHOSPECIES WITHIN THE ORDER TINTINNIDA (CILIOPHORA, SPIROTRICHEA): IMPLICATIONS FOR TAXONOMY AND DIVERSITY

Friday, February 24 - Orals

011 Biology, Biogeochemistry, And Bio-Optics Of The Pacific Sector Of The Arctic Ocean

Chair(s): Donald Perovich, donald.k.perovich@usace.army.mil
Kevin R. Arrigo, arrigo@stanford.edu
Marcel Babin, Marcel.Babin@takuvik.ulaval.ca

Location: Ballroom B

- 14:00 Arrigo, K. R.; The ICESCAPE Team, : MASSIVE PHYTOPLANKTON BLOOMS BELOW ARCTIC SEA ICE
- 14:15 Chen, B.; Cai, W.; Chen, L.: INCREASED BIOLOGICAL CO₂ UPTAKE FOLLOWING SEA-ICE RETREAT IN THE PACIFIC SECTOR OF THE ARCTIC OCEAN
- 14:30 Mills, M. M.; Brown, Z. W.; Ortega-Retuerta, E.; Laney, S. R.; Van Dijken, G. L.; Lowry, K. E.; Martin, S. A.; Brownlee, E.; Arrigo, K. R.: NITRATE UTILIZATION BY PHYTOPLANKTON AND BACTERIAL COMMUNITIES IN THE CHUKCHI SEA
- 14:45 Granger, J.; Sigman, D. M.: DISTINCTION OF ATLANTIC VS. PACIFIC NITRATE IN THE BEAUFORT SEA FROM THE COUPLED N AND O ISOTOPE RATIOS OF NITRATE
- 15:00 Frey, K. E.; Cooper, L. W.; Grebmeier, J. M.; Light, B.; Mayer, D. P.; Perovich, D. K.; Polashenski, C. M.; Trusel, L. D.; Wood, C. L.: LIGHT TRANSMISSION THROUGH OCEAN WATERS BENEATH MELT-SEASON SEA ICE IN THE CHUKCHI AND BEAUFORT SEAS
- 15:15 Babin, M.; Belanger, S.: LIGHT-DRIVEN CARBON FLUXES IN THE ARCTIC OCEAN: SYNTHESIS OF THE RESULTS FROM THE MALINA PROJECT
- 15:30 Reynolds, R. A.; Stramski, D.; Ehn, J. K.; Zheng, G.; Tatarkiewicz, J. J.: PARTICLE BACKSCATTERING, SIZE DISTRIBUTION, AND COMPOSITION IN ARCTIC WATERS
- 15:45 Mitchell, B. G.; Seegers, B.; Schieber, B.; Kahru, M.; Arrigo, K. R.; Mills, M. M.: REGULATION OF OCEAN COLOR RELATIONSHIPS BY ABSORPTION COMPONENTS IN THE CHUKCHI AND BEAUFORT SEAS

012 The Chukchi Sea Region: Rapid Changes In The Pacific Gateway To The Arctic

Chair(s): Jacqueline E. Grebmeier, jgrebmei@umces.edu
Russell R. Hopcroft, hopcroft@ims.uaf.edu
Sue E. Moore, sue.moore@noaa.gov
Robert S. Pickart, rpickart@whoi.edu
Bill Williams, bill.williams@dfo-mpo.gc.ca

Location: Ballroom F

- 08:00 Hutchings, J. K.; Rigor, I. G.; Orlich, A. R.: THE ROLE OF SEA ICE DYNAMICS IN INCREASING LATITUDINAL EXPANSE OF THE SEASONAL ICE ZONE IN THE CHUKCHI AND BEAUFORT SEAS.
- 08:15 Luchin, V.; Panteleev, G.: THERMAL REGIMES IN THE CHUKCHI SEA SINCE 1941-PRESENT.
- 08:30 Gong, D.; Pickart, R. S.: OBSERVATIONS OF CIRCULATION AND WATER MASS TRANSFORMATION IN THE EASTERN CHUKCHI SEA
- 08:45 Motono Itoh, M.; Shigeto Nishino, S.; Yusuke Kawaguchi, Y.; Takashi Kikuchi, T.: BARROW CANYON FLUXES OF VOLUME, HEAT AND FRESH WATER BY YEAR-ROUND MOORINGS
- 09:00 Winsor, P.; Weingartner, T. J.; Statscewich, H.; Potter, R. A.; Merck, M. M.: AUV GLIDER AND HF RADAR OBSERVATIONS OF CIRCULATION AND STRATIFICATION FEATURES IN THE CHUKCHI SEA
- 09:15 Christensen, J. P.; Melling, H.: MESOSCALE DISTRIBUTION OF SPRINGTIME WATERS AND NUTRIENTS NEAR THE SHELF BREAK, BEAUFORT SEA, ALASKA
- 09:30 Watanabe Eiji, E.; Kishi J. Micho, ; Ishida Akio, ; Aita Noguchi Maki, : MODELING STUDY ON THE WESTERN ARCTIC PRIMARY PRODUCTIVITY REGULATED BY SHELFBREAK WARM EDDIES
- 09:45 Spitz, Y. H.; Ashjian, C. J.; Backlund, C. M.; Campbell, R. G.; Perlin, N.; Steele, M.; Zhang, J.: INTENSIFICATION OF THE BEAUFORT GYRE AND ITS IMPACTS ON THE ECOSYSTEM IN THE CANADA BASIN AND SHALLOWER SEAS IN THE PACIFIC SECTOR OF THE ARCTIC OCEAN

- 10:30 Mathis, J. T.; Cross, J. N.; Bates, N. R.: OCEAN ACIDIFICATION AND THE SUPPRESSION AND UNDERSATURATION OF CARBONATE MINERAL SATURATION STATES IN THE PACIFIC-ARCTIC REGION
- 10:45 Bronk, D. A.; Sipler, R. E.; Sanderson, M. P.; Killberg-Thoreson, L.; Roberts, Q. N.; Mulholland, M. R.: NITROGEN FIXATION - A NEW SOURCE OF NITROGEN IN THE CHANGING WESTERN ARCTIC?
- 11:00 Trefry, J. H.; Trocine, R. P.; Fox, A. L.; Cooper, L. W.: PRESENT-DAY DISTRIBUTION PATTERNS AND SOURCES OF METALS IN SEDIMENTS AND SEAWATER FROM THE EASTERN CHUKCHI SEA
- 11:15 Fujiwara, A.; Hirawake, T.; Suzuki, K.; Saitoh, S. I.: HORIZONTAL DISTRIBUTION OF PHYTOPLANKTON COMMUNITIES DURING LATE SUMMER IN THE WESTERN ARCTIC
- 11:30 Ershova, E.; Hopcroft, R. R.; Kosobokova, K.: A LONG-TERM CENSUS OF THE ZOOPLANKTON COMMUNITIES OF THE PACIFIC ARCTIC
- 11:45 Ashjian, C. J.; Campbell, R. G.; Kuletz, K. J.; Laney, S. R.; Longnecker, K. L.; Mordy, C. W.; Okkonen, S. R.; Stockwell, D. A.: A WINTER EXPEDITION TO EXPLORE THE BIOLOGICAL AND PHYSICAL CONDITIONS OF THE BERING, CHUKCHI, AND SOUTHERN BEAUFORT SEAS
- 12:00 Questel, J. M.; Hariharan, P.; Hopcroft, R. R.; Clarke, C.: INTER-ANNUAL VARIABILITY OF THE PLANKTONIC COMMUNITIES IN THE NORTHEASTERN CHUKCHI SEA: 2008-2010
- 12:15 Dunton, K. H.; Schonberg, S. V.: THE DISTRIBUTION, ABUNDANCE, AND DIVERSITY OF BENTHIC INFAUNA OF THE NORTHEASTERN CHUKCHI SEA
- 14:00 Kedra, M.; Grebmeier, J. M.; Cooper, L. W.: BENTHIC POPULATION DYNAMICS AND DIVERSITY IN THE WARMING CHUKCHI SEA
- 14:15 Knowlton, A. L.; Blanchard, A. L.: BENTHIC FAUNA OF THE NORTHEASTERN CHUKCHI SEA, 2008-2010
- 14:30 Bluhm, B. A.; Iken, K.; Sirenko, B. I.; Hardy, S. M.; Holladay, B. A.; Dunton, K.: FOOD WEB STRUCTURE AND EPIBENTHIC MEGAFUNA IN THE CHUKCHI SEA: A COMPARISON BETWEEN 2004 AND 2009
- 14:45 Ravelo, A. M.; Konar, B.; Trefry, J. H.; Grebmeier, J. M.: EPIBENTHIC COMMUNITY VARIABILITY ON THE NORTHEASTERN CHUKCHI SEA CONTINENTAL SHELF
- 15:00 Edenfield, L. E.; Norcross, B. L.; Carroll, S. S.; Holladay, B. A.: TROPHIC RELATIONSHIPS OF FIVE SPECIES OF DEMERSAL FISHES IN THE NORTHEASTERN CHUKCHI SEA, 2009-2010
- 15:15 Moore, S. E.; Grebmeier, J. M.; Overland, J. E.: MARINE MAMMALS AND SEA ICE LOSS IN THE PACIFIC ARCTIC: TRACKING ECOSYSTEM RESPONSES TO THE -NEW NORMAL- DURING A PERIOD OF RAPID CHANGE
- 15:30 Jay, C. V.; Grebmeier, J. M.; Fischbach, A. S.: EFFECTS OF REDUCED SUMMER SEA ICE ON WALRUS DISTRIBUTION AND BENTHIC FORAGING PATTERNS
- 15:45 Gall, A. E.; Day, R. H.; Weingartner, T. J.: INFLUENCE OF WATER MASSES ON THE DISTRIBUTION AND ABUNDANCE OF SEABIRDS IN THE NORTHEASTERN CHUKCHI SEA

015 Nearshore Processes

Chair(s): Jennifer L. Irish, jirish@vt.edu
Alex Apotsos, aapotsos@gmail.com

Location: Ballroom I

- 08:00 Brodie, K. L.; McNinch, J. E.; Slocum, R. K.: HOURLY MEASUREMENTS OF BEACH TOPOGRAPHY, WAVE RUNUP, AND SURF-ZONE WAVE HEIGHTS DURING HURRICANE IRENE FROM A TERRESTRIAL LASER SCANNER AT DUCK, NC
- 08:15 Hapke, C. J.; Lentz, E. E.; List, J.; Warner, J. C.: IMPACTS OF HURRICANE IRENE AT FIRE ISLAND, NEW YORK: A BEACH BUILDING EVENT
- 08:30 Wadman, H. M.; Hathaway, K. K.; McNinch, J. E.; Mulligan, R. P.: WIND-DRIVEN STORM SURGE AND SEICHING IN THE CURRITUCK AND ALBEMARLE SOUNDS DURING HURRICANE IRENE
- 08:45 Luettich, R.; Beardsley, R.; Chen, C.; Hansen, J.; Perrie, W.; Rhome, J.; Slinn, D.; Wang, H.; Weisberg, R.; Westerink, J.: A TESTBED FOR THE EVALUATION OF COUPLED WAVE, STORM SURGE AND INUNDATION MODELS

- 09:00 Serafin, K. A.; Ruggiero, P.: EXTREME WAVE AND WATER LEVEL EVENTS IN THE NE PACIFIC
- 09:15 Gelfenbaum, G.; Richmond, B. M.; Morton, R. A.; Buckley, M. L.: COMPLEX INUNDATION, EROSION, AND DEPOSITION ALONG THE CHILE COAST DURING THE 27 FEBRUARY 2010 CHILE TSUNAMI
- 09:30 Kaihatu, J. M.; Goertz, J. T.: THE INTERACTION BETWEEN SHORT OCEAN SWELL AND TSUNAMIS - AN EXPERIMENTAL STUDY
- 09:45 Tehrani-rad, B.; Kirby, J. T.; Shi, F.: COASTAL PLANE ESTUARIES AS LOW PASS FILTERS FOR TSUNAMI ACTIVITY
- 10:30 Lippmann, T. C.; Irish, J. D.; McKenna, L.; Foster, D. L.: OBSERVATIONS OF CURRENTS IN A TIDALLY MODULATED INLET
- 10:45 Torres-Garcia, L. M.; Yankovsky, A.; Torres, R.: ALONG-CHANNEL MOMENTUM BALANCE AND TIDAL DISSIPATION IN THE TRANSITION ZONE OF THE SANTEE RIVER, SC, USA
- 11:00 Hall, G. E.; Hill, D. F.; Horton, B. P.; Engelhart, S. E.; Griffiths, S. D.; Peltier, W. R.: A HIGH-RESOLUTION STUDY OF TIDAL RANGE CHANGES IN THE DELAWARE BAY: PAST CONDITIONS AND FUTURE SCENARIOS
- 11:15 Jia, Y. G.; Zheng, J. W.; Shan, H. X.; Liu, X. L.: EROSIONAL FEATURE EVOLUTION OF FINE SEDIMENTS—CASE STUDY IN MODERN YELLOW RIVER DELTA, CHINA
- 11:30 Magar, V.; Probert, G.; Reeve, D. E.; Cai, Y.: STATISTICAL PREDICTION OF COASTAL AND ESTUARINE EVOLUTION
- 11:45 Hanes, D. M.; Erikson, L. H.: THE SIGNIFICANCE OF ULTRA-REFRACTED SWELL WAVES TO COASTAL PROCESSES IN SHELTERED AREAS, WITH APPLICATION TO CRISSY FIELD MARSH, SAN FRANCISCO
- 12:00 Voulgaris, G.; Kumar, N.; List, J. H.; Warner, J. C.: MEASUREMENT OF INNER-SHELF WAVES AND CURRENTS USING VERY HIGH FREQUENCY (VHF) WELLEN RADAR
- 12:15 Olabarrieta, M.; Geyer, R.; Warner, J. C.; Kumar, N.: WAVE-CURRENT INTERACTION IN AN IDEALIZED PLANE JET
- 14:00 Buscombe, D.; Conley, D. C.; Rubin, D. M.: CO-VARIATION OF INTERTIDAL MORPHOLOGY, BEDFORMS AND GRAIN SIZE ON A MACROTIDAL SAND BEACH: PRAA SANDS, UK
- 14:15 Gallagher, E. L.; Reniers, A. J.; MacMahan, J. H.; Brown, J. A.; Thornton, E. B.: GRAIN SIZE AND MORPHOLOGICAL VARIABILITY
- 14:30 Miselis, J. L.; McNinch, J. E.; List, J. H.: INTERANNUAL AND STORM-RELATED EVOLUTION OF NEARSHORE MORPHOLOGY AND ITS RELATIONSHIP TO SHORELINE BEHAVIOR
- 14:45 Rodriguez-Abudo, S.; Foster, D. L.: BEDFORM-INDUCED DYNAMICS IN THE WAVE-BOTTOM BOUNDARY LAYER
- 15:00 Nelson, T. R.; Voulgaris, G.: THE INFLUENCE OF RIPPLE GEOMETRY ON SEABED ROUGHNESS AND VERTICAL SUSPENDED SEDIMENT CONCENTRATION PROFILES
- 15:15 Hsu, W. Y.; Hwung, H. H.; Yang, R. Y.; Hsu, T. J.; Torres-Freyermuth, A.: AN EXPERIMENTAL AND NUMERICAL INVESTIGATION ON WAVE-MUD INTERACTIONS
- 15:30 Sahin, C.; Sheremet, A.; Hsu, T. J.; Safak, I.: INVESTIGATION OF WAVE-SEA FLOOR INTERACTION, ATCHAFALAYA SHELF, LOUISIANA
- 15:45 Ozdemir, C. E.; Hsu, T.; Traykovski, P. A.; Balachandar, S.: 3D NUMERICAL SIMULATION OF FINE SEDIMENT TRANSPORT IN OSCILLATORY CHANNEL - THE EFFECT OF WAVE INTENSITY

020 Theory, Modelling, And Observations Of Remote-Sensed Propagating Waves And Eddies

Chair(s): Dr. Subrahmanyam Bulusu, sbulusu@geol.sc.edu
Dr. Remi Tailleux, R.G.J.Tailleux@reading.ac.uk

Location: Ballroom H

- 08:00 Farrar, J. T.; Durland, T. S.: A SURVEY OF WAVES ON SUBSEASONAL TIME SCALES IN THE TROPICAL PACIFIC OCEAN
- 08:15 Dewitte, B.; Marcel Ramos, M.; Oscar Pizarro, O.: REMOTELY FORCED SUB-THERMOCLINE VARIABILITY AT LOW FREQUENCY IN THE SOUTH-EASTERN PACIFIC
- 08:30 Polito, P. S.; Urbano, D. F.; Yamashita, M. K.: INTRASEASONAL WAVES IN THE EQUATORIAL ATLANTIC

- 08:45 Szuts, Z. B.: ENERGIES AND ENERGY FLUXES OF LOW-FREQUENCY BAROCLINIC WAVES ACROSS THE ATLANTIC AT 26N
- 09:00 Clement, L.; Frajka-Williams, E.; Szuts, Z. B.; Cunningham, S. A.; Bryden, H. L.: ON THE VERTICAL STRUCTURE OF WESTWARD PROPAGATING ANOMALIES IN THE NORTH ATLANTIC AND THEIR IMPACT ON THE MOC AT 26.5NN FROM OBSERVATIONS.
- 09:15 Early, J. J.; Samelson, R. M.; Chelton, D. B.; Gaube, P.; Schlax, M. G.: ROSSBY WAVES OR EDDIES: COMPARING QUASIGEOSTROPHIC THEORY WITH SATELLITE ALTIMETRY OBSERVATIONS
- 09:30 Gaube, P.; Chelton, D. B.: THE INFLUENCE OF NONLINEAR MESOSCALE EDDIES ON OCEANIC CHLOROPHYLL
- 09:45 Holte, J.; Straneo, F.; Moffat, C.; Weller, R.; Farrar, J. T.: STRUCTURE, PROPERTIES, AND HEAT CONTENT OF EDDIES IN THE SOUTHEAST PACIFIC OCEAN

044 Advancing Satellite Ocean Color Science For Global And Coastal Research

Chair(s): Bryan A. Franz, bryan.a.franz@nasa.gov
Vincent Vantrepotte, Vincent.Vantrepotte@univ-littoral.fr
Frédéric Mélin, frederic.melin@jrc.ec.europa.eu
Stéphane Maritorena, stephane@eri.ucsb.edu

Location: Ballroom B

- 08:00 Maritorena, S.; Franz, B.: FROM CHLOROPHYLL TO ADVANCED OCEAN COLOR PRODUCTS: A REVIEW
- 08:15 Hu, C.; Lee, Z.; Franz, B.: A NEW CHLOROPHYLL-A ALGORITHM FOR BLUE WATERS: IMPLICATIONS FOR UNCERTAINTY ESTIMATES AND CLIMATE RESEARCH
- 08:30 Sauer, M. J.; Roesler, C. S.: UNDER THE HOOD OF SATELLITE EMPIRICAL CHL A ALGORITHMS: REVEALING THE DEPENDENCIES OF MAXIMUM BAND RATIO ALGORITHMS ON INHERENT OPTICAL PROPERTIES
- 08:45 Schollaert Uz, S.; Busalacchi, A.; Brown, C. W.; Smith, T.; Carton, J. A.: STATISTICAL RECONSTRUCTION AND ANALYSIS OF CHLOROPHYLL CONCENTRATIONS USING PHYSICAL PROXY DATA
- 09:00 Ben Mustapha, Z.; Alvain, S.; Jamet, C.; Loisel, H.: USING SELF-ORGANIZING MAPS TO IDENTIFY PHYTOPLANKTON GROUPS FROM REMOTELY SENSED DATA IN CASE 1 WATERS
- 09:15 Zheng, G.; Stramski, D.: A MODEL BASED ON STACKED CONSTRAINTS APPROACH FOR PARTITIONING THE LIGHT ABSORPTION COEFFICIENT OF SEAWATER INTO PHYTOPLANKTON AND NON-PHYTOPLANKTON COMPONENTS
- 09:30 Westberry, T. K.; Behrenfeld, M. J.; Milligan, A. J.; Doney, S. C.: RETROSPECTIVE SATELLITE OCEAN COLOR ANALYSIS OF OCEAN IRON FERTILIZATION (OIF)
- 09:45 Siegel, D. A.; Behrenfeld, M. J.; McClain, C. R.; Antoine, D.; Bailey, S. W.; Bontempi, P. S.; Boss, E. S.; Dierssen, H. M.; Doney, S. C.; Eplee, Jr., R. E.: REGIONAL TO GLOBAL SCALE PHYTOPLANKTON DYNAMICS: THE SEAWIFS LEGACY
- 10:30 Stammes, K.; Fan, Y.; Li, W.; Hamre, B.; Frette, O.; Folkestad, A.; Sorensen, K.; Stammes, J. J.: RETRIEVAL OF AEROSOL AND MARINE PARAMETERS IN COASTAL WATERS: THE OC-SMART ALGORITHM
- 10:45 Gilerson, A.; Hlaing, S.; Harmel, T.; Tonizzo, A.; Weidemann, A.; Arnone, R.; Ahmed, S.: BIDIRECTIONAL REFLECTANCE DISTRIBUTION CORRECTION OF ABOVE-WATER AND SATELLITE WATER-LEAVING RADIANCE IN COASTAL WATERS
- 11:00 Jamet, C.; Loisel, H.; Dessailly, D.: MONITORING THE DIFFUSE ATTENUATION COEFFICIENT KD IN OPEN AND TURBID WATERS FROM OCEAN COLOR IMAGES USING A NEURAL NETWORK INVERSION
- 11:15 Anatoly Gitelson, A.; Wesley Moses, .; Daniela Gurlin, .: TOWARD UNIFIED APPROACH TO REMOTE ESTIMATION OF CHLOROPHYLL CONCENTRATION IN COMPLEX COASTAL, ESTUARINE AND INLAND WATERS
- 11:30 Peng, F.; Effler, S. W.: ESTIMATIONS OF (BACK)SCATTERING COEFFICIENTS OF MINERAL PARTICLES IN LAKE ONTARIO IN SUPPORT OF OPTICAL CLOSURE AND PARTITIONING OF PARTICULATE SCATTERING

- 11:45 Gerbi, G.; Boss, E.; Antoine, D.; Barnard, A.; Brown, K.; DeDonato, M.; Woodward, B.: MEASUREMENTS OF SOLAR RADIATION FROM AN AUTONOMOUS PROFILING FLOAT--OPPORTUNITIES AND RESULTS FOR VALIDATION AND CALIBRATION ACTIVITIES.
- 12:00 Brando, V. E.; Clementson, L.; Schroeder, T.; Keen, R.; Daniel, P. J.; Dekker, A. G.: SPATIAL AND TEMPORAL BIO-OPTICAL VARIABILITY AT LUCINDA JETTY COASTAL OBSERVATORY: IMPLICATIONS FOR CALIBRATION AND VALIDATION OF OCEAN COLOUR SENSORS
- 12:15 Kahru, M.; Kudela, R. M.; Di Lorenzo, E.; Manzano-Sarabia, M.; Mitchell, B. G.: TRENDS IN THE SURFACE CHLOROPHYLL OF THE CALIFORNIA CURRENT: MERGING DATA FROM MULTIPLE OCEAN COLOR SATELLITES

046 Understanding The Biological Consequences Of Ocean Acidification In A Holistic Global Change Context

Chair(s): David Hutchins, dahutch@usc.edu
Philip Boyd, Pboyd@chemistry.otago.ac.nz
Shannon Meseck, smeseck@clam.mi.nmfs.gov
Adina Paytan, apaytan@ucsc.edu

Location: Ballroom G

- 08:00 Boyd, P. W.; Meseck, S.; Paytan, A.; Hutchins, D. A.: BUILDING ON THE SUCCESS OF OCEAN ACIDIFICATION RESEARCH IN THE BROADER CONTEXT OF GLOBAL ENVIRONMENTAL CHANGE
- 08:15 Tagliabue, A.; Martinez-Rey, J.; Bopp, L.; Chang, N.; Gehlen, M.; Monteiro, P.; Voelker, C.: THE RESPONSE OF BIOGEOCHEMICAL CYCLES TO OCEAN ACIDIFICATION
- 08:30 Sugie Koji, K.; Yoshimura Takeshi, .: INTERACTIVE EFFECTS OF PCO_2 AND IRON ON ELEMENTAL COMPOSITION OF DIATOM *PSEUDO-NITZSCHIA PSEUDODELICATISSIMA*
- 08:45 Rouco-Molina, M.; Branson, O.; Lebrato, M.; IGLESIAS-RODRIGUEZ, M. D.: INVESTIGATING THE COMBINED EFFECTS OF OCEAN ACIDIFICATION AND NUTRIENT LIMITATION ON THE PHYSIOLOGY OF THE COCCOLITHOPHORE *EMILIANIA HUXLEYI*
- 09:00 Lefebvre, S. C.; Benner, I.; Stillman, J. H.; Parker, A. E.; Drake, M. K.; Rossignol, P. E.; Okimura, K. M.; Komada, T.; Carpenter, E. J.: NITROGEN SOURCE AND PCO_2 SYNERGISTICALLY AFFECT CARBON ALLOCATION, GROWTH AND MORPHOLOGY OF THE COCCOLITHOPHORE *EMILIANIA HUXLEYI*
- 09:15 Hutchins, D. A.; Fu, F.; Webb, E. A.; Tagliabue, A.: CAN CHANGING PCO_2 CONTROL THE GLOBAL DOMINANCE AND DIVERSITY OF N_2 -FIXING CYANOBACTERIA?
- 09:30 Dufault, A. M.; Cumbo, V. R.; Fan, T. Y.; Edmunds, P. J.: LIGHT INTERACTIONS WITH OCEAN ACIDIFICATION TO ALTER CALCIFICATION AND SURVIVAL OF CORAL RECRUITS.
- 09:45 Cumbo, V. R.; Fan, T. Y.; Edmunds, P. J.: VARIATION IN ONTOGENETIC SENSITIVITY TO THE INTERACTIVE EFFECTS OF PCO_2 AND HETEROTROPHY IN CORAL RECRUITS

053 Nitrogen And Carbon Cycling In The Eastern Tropical Pacific Ocean: Linking The OMZ To The Open Ocean

Chair(s): Angela Knapp, aknapp@rsmas.miami.edu
Alyson Santoro, asantoro@umces.edu
Rachel Foster, rfoster@mpi-bremen.de
Sophie Bonnet, Sophie.BONNET@univmed.fr

Location: Ballroom A

- 14:00 Casciotti, K. L.; Buchwald, C.; Santoro, A.: USE OF NITRATE AND NITRITE ISOTOPES TO STUDY NITROGEN CYCLING IN OCEANIC OXYGEN DEFICIENT ZONES
- 14:15 Dekaezemacker, J.; Bonnet, S.; Turk-Kubo, K. A.; Moutin, T.; Grosso, O.; Knapp, A. N.; Capone, D. G.: ORGANIC/INORGANIC NUTRIENT CONTROL OF N_2 FIXATION IN THE EASTERN TROPICAL SOUTH PACIFIC
- 14:30 Berelson, W.; Rollins, N.; Haskell, W.; Tems, C.; Wolfe, C.; Prokopenko, M.; Knapp, A. N.; Casciotti, K. L.; Hammond, D. E.; Capone, D. G.: SEDIMENTATION AND BIOGENIC MATTER REMINERALIZATION IN THE EASTERN TROPICAL SOUTH PACIFIC (ETSP); SEDIMENT TRAP AND SEDIMENT PORE WATER FLUXES

- 14:45 Knapp, A. N.; Casciotti, K. L.; Buchwald, C.; Bonnet, S.; Dekaezemacker, J.; Gunderson, T.; Prokopenko, M.; Berelson, W. M.; Capone, D. G.: QUANTIFYING THE IMPORTANCE OF NITRATE AND N_2 FIXATION AS SOURCES OF NEW N FOR EXPORT PRODUCTION IN THE EASTERN TROPICAL SOUTH PACIFIC USING N ISOTOPE BUDGETS
- 15:00 Rafter, P. A.; Sigman, D. M.; DiFiore, P. J.; Haug, G. H.: SUBANTARCTIC MODE WATER NUTRIENT MODIFICATION EN ROUTE TO THE EQUATORIAL PACIFIC THROUGH SHADOW ZONE MIXING AND ORGANIC MATTER REMINERALIZATION
- 15:15 Capone, D. G.; Tiahlo, M.; Knapp, A.; Moutin, T.; Berelson, W.: CARBON FIXATION AND PHOSPHORUS TURNOVER IN SURFACE WATERS OF THE EASTERN TROPICAL SOUTH PACIFIC (ETSP)
- 15:30 Fernandez, C.: BIOGEOCHEMICAL CONTROLS OF NITROGEN FIXATION IN THE OXYGEN MINIMUM ZONE OF THE EASTERN SOUTH PACIFIC REGION
- 15:45 Buchwald, C.; Santoro, A. E.; Casciotti, K. L.: NITRITE RESIDENCE TIMES IN THE PRIMARY AND SECONDARY NITRITE MAXIMA IN THE EASTERN TROPICAL PACIFIC: INSIGHTS FROM THE OXYGEN ISOTOPIC COMPOSITION

056 Biology And Chemistry In A High CO_2 World

Chair(s): Frank Melzner, fmelzner@ifm-geomar.de
Sam DuPont, sam.dupont@marecol.gu.se
Rainer Kiko, rkiko@ifm-geomar.de
Brad Seibel, seibel@uri.edu
Alexandra Rao, a.rao@nioo.knaw.nl
Christian Wild, christian.wild@zmt-bremen.de
Matthew Charette, mcharette@whoi.edu

Location: Ballroom G

- 10:30 Barry, J. P.: THE EFFECTS OF OCEAN ACIDIFICATION ON MARINE BENTHIC ORGANISMS AND PROCESSES
- 10:45 Munday, P. L.; McCormick, M. I.; Meekan, M.; Dixon, D. L.; Watson, S.; Ferrari, M. C.; Chivers, D.: SELECTION FOR CO_2 TOLERANCE IN MARINE FISHES
- 11:00 Frieder, C. A.; Levin, L. A.: FAUNAL DIVERSITY IN THE WORLD'S OXYGEN MINIMUM AND CARBON MAXIMUM ZONES
- 11:15 Chan, K.; Grünbaum, D.; O'Donnell, M. J.; Thorndyke, M.; Dupont, S.: EFFECTS OF OCEAN ACIDIFICATION ON PHYSIOLOGICAL AND SWIMMING PERFORMANCE OF LARVAL ECHINODS
- 11:30 Comeau, S.; Carpenter, R. C.; Edmunds, P. J.: IS CALCIFICATION IN THE SCLERACTINIAN CORAL PORITES RUS AND THE CRUSTOSE CORALLINE ALGA HYDROLITHON ONKODES CONTROLLED BY BICARBONATE OR CARBONATE IONS?
- 11:45 Seibel, B. A.; Maas, A. E.; Dierrsen, H. M.: ENERGETIC PLASTICITY UNDERLIES A VARIABLE RESPONSE TO OCEAN ACIDIFICATION IN THE PTEROPOD, LIMACINA HELICINA ANTARCTICA
- 12:00 Thomsen, J.; Casties, I.; Pansch, C.; Körtzinger, A.; Melzner, F.: EFFECTS OF ELEVATED PCO_2 AND NUTRITION ON *MYTILUS EDULIS* GROWTH: COMPARISON OF FIELD AND LABORATORY STUDIES
- 12:15 Timmins-Schiffman, E.; O'Donnell, M.; Roberts, S.: OCEAN ACIDIFICATION ALTERS LARVAL PACIFIC OYSTER GROWTH AND PHYSIOLOGY
- 14:00 Martens, C. S.; Lindquist, N.; Mendlovitz, H. P.; Hoer, D.; Byrne, R.; Liu, X.; Kintzing, M. D.; Hallock-Muller, P.: LOCAL CONTROLS ON ARAGONITE SATURATION IN THE BENTHIC BOUNDARY LAYER OF A CORAL REEF ECOSYSTEM, CONCH REEF, FLORIDA KEYS
- 14:15 Rao, A. E.; Polerecky, L.; Ionescu, D.; Meysman, F.; De Beer, D.: $CACO_3$ DYNAMICS IN PERMEABLE REEF SEDIMENTS: THE ROLE OF HYDRODYNAMICS AND BENTHIC METABOLISM
- 14:30 Liu, Q.; Charette, M. A.; Dai, M. H.; Henderson, P.; Breier, C.; Wang, G. Z.; Chen, W. F.: CARBONATE SYSTEM BIOGEOCHEMISTRY IN SUBTERRANEAN ESTUARIES AND ITS IMPACT ON THE COASTAL OCEAN INORGANIC CARBON CYCLE
- 14:45 Raulf, F. E.; Boetius, A.; Ramette, A.: CHANGES IN BACTERIAL COMMUNITY STRUCTURE AND FUNCTION UNDER PREDICTED OCEAN ACIDIFICATION SCENARIOS

- 15:00 Fu, E.; Garcia, N. S.; Tatters, A. O.; Yu, E. K.; Breene, C.; Walworth, N.; Webb, E. A.; Hutchins, D. A.: ADAPTATION OF THE MARINE CYANOBACTERIUM TRICHODESMIUM TO ELEVATED CO₂
- 15:15 Benner, L.; Tirindelli, J.; Posseme, C.; Komada, T.; Stillman, J. H.; Carpenter, E. J.: LONG-TERM EFFECT OF HIGH CO₂ LEVELS ON CALCIFICATION AND PHOTOSYNTHESIS IN *EMILIANA HUXLEYI*
- 15:30 Muehllehner, N.; Langdon, C.; Fabricius, K.: THE CHANGING SEAGRASS COMMUNITY AFTER DECADES OF EXPOSURE TO OCEAN ACIDIFICATION FROM VOLCANIC VENTS IN PAPUA NEW GUINEA
- 15:45 Baumann, H.; Talmage, S. C.; Gobler, C. J.: REDUCED EARLY LIFE GROWTH AND SURVIVAL IN A FISH IN RESPONSE TO ELEVATED CO₂ LEVELS

058 Integrated Observational And Modeling Studies Of Marine Ecosystems

Chair(s): Bradley Penta, penta@nrlssc.navy.mil
Francisco Chavez, chfr@mbari.org

Location: Ballroom J

- 08:00 Chavez, E.; Penta, B.: MARINE PHOTOSYNTHETIC PLANKTON DYNAMICS: WHERE ARE WE AFTER 50 YEARS?
- 08:30 Dalgleish, F. R.; Ouyang, B.; Vuorenkoski, A. K.; Metzger, B.; Krupski, A.; Notarnicola, N.: OBSERVATIONS FROM SPRAY GLIDERS IN SUPPORT OF PLANKTON POPULATION CHARACTERIZATION AT MESOPHOTIC REEF ECOSYSTEMS NEAR THE WEST FLORIDA SHELF.
- 08:45 Ya-Wei Luo, Y.; Scott Doney, S. C.: ESTIMATE OF GLOBAL NITROGEN FIXATION RATES AND DIAZOTROPHIC BIOMASS: COMPARING CCSM MODEL AND OBSERVATIONAL DATABASE
- 09:00 Das, J.; Harvey, J.; Py, F.; Maughan, T.; Sukhatme, G. S.; Rajan, K.: LEARNING PROBABILISTIC ORGANISM ABUNDANCE MODELS THROUGH INTELLIGENT WATER-SAMPLE ACQUISITION BY AUVS
- 09:15 Harvey, J. B.; Ryan, J. P.; Zhang, Y.; Marin III, R.; Rajan, K.; Bellingham, J. G.; Doucette, G. J.; McManus, M. A.; Chavez, F. P.; Scholin, C. A.: AN INTERDISCIPLINARY, MULTI-SCALE APPROACH TO MONITORING THE DEVELOPMENT AND SUCCESSION OF HARMFUL ALGAL BLOOM COMMUNITIES IN THE MONTEREY BAY
- 09:30 Miller, W. D.; Gray, D. J.; Bowles, J. H.; Snyder, W. A.: MEASURING THE EVOLUTION OF A DINOFLAGELLATE BLOOM USING AIRCRAFT BASED HYPERSPECTRAL IMAGERY
- 09:45 Penta, B.; Gray, D. J.; Jones, B.; Goode, W.; Anderson, S. C.; Snyder, W. A.; Shulman, I. G.; Gould, R. W.; Jolliff, J. K.; Chavez, F. P.: MERGING OPTICAL DATA FROM MULTIPLE PLATFORMS AND SENSORS TO STUDY THE DISTRIBUTION PATTERNS AND DYNAMICS OF TWO CO-OCCURRING PHYTOPLANKTON BLOOMS

065 Physical - Ecological Interactions In Inland Waters

Chair(s): Alfred Wuest, alfred.wuest@eawag.ch
Josef Daniel Ackerman, ackerman@uoguelph.ca
Miki Hondzo, mhondzo@umn.edu

Location: Ballroom E

- 08:00 King, A. T.; Rueda, F. J.; Cowen, E. A.: 3D MODELING OF RESIDENCE TIMES OF POINT RELEASES ON A SHALLOW SHELF IN A LARGE MONOMICTIC LAKE
- 08:15 Pernica, P.; Wells, M. G.; Sprules, W. G.: THE RELATIONSHIP BETWEEN INTERNAL WAVES AND THE DISTRIBUTION OF ZOOPLANKTON IN THE EPIMLNION OF LAKE OPEONGO, CANADA
- 08:30 Lemkert, C.; Gibbes, B.; Burfird, M.: VERTICAL MIGRATION OF ZOOPLANKTON AND ITS IMPACT ON WATER QUALITY WITHIN RESERVOIRS
- 08:45 Soltys, M. A.; Crimaldi, J. P.: INTERACTIONS BETWEEN TURBULENT MIXING AND CORAL REPRODUCTION
- 09:00 Zeller, R. B.; Weitzman, J. S.; Abbett, M. E.; Fringer, O. B.; Koseff, J. R.: SEAGRASS BLADE DYNAMICS IN UNIDIRECTIONAL, OSCILLATORY, AND COMBINED FLOWS

- 09:15 Espinosa, A.; Ghisalberti, M.; Ivey, G. N.; Jones, N. L.: PARTICLE CAPTURE BY BIOLOGICAL COLLECTORS IN AQUATIC SYSTEMS
- 09:30 Hall, E. H.; McCallister, S. L.; Sobczak, W.: FACTORS CONTROLLING DISSOLVED ORGANIC CARBON LABILITY AND ECOLOGICAL FATE IN THE EAST BRANCH SWIFT RIVER, MASSACHUSETTES
- 09:45 Lippiatt, S. M.; Arthur, C. D.; Wallace, N. E.: ASSESSING THE ABUNDANCE AND TYPES OF MARINE DEBRIS ON SHORELINES AND SURFACE WATERS IN CHESAPEAKE BAY TRIBUTARIES STRATIFIED BY LAND USE
- 10:30 Chappell, J. C.; Whitmire, S.; Martinez, G. A.; Sotomayor-Ramirez, S.: THE IMPACT OF AN INVASIVE BIVALE ON TWO SYSTEMS WITH DIFFERENT NUTRIENT CONCENTRATIONS
- 10:45 Quinn, N. P.; Ackerman, J. D.: NEAR-BED TURBULENCE AND FERTILIZATION SUCCESS IN BROADCAST SPAWNING BIVALVES
- 11:00 Wheeler, J. D.; Anderson, E. J.; Helfrich, K. R.; McGann, B. J.; Mills, S. W.; Mullineaux, L. S.: TURBULENCE-MEDIATED SETTLEMENT RESPONSES IN LARVAL OYSTER *CRASSOSTREA VIRGINICA*
- 11:15 Lowen, B.; Deibel, D.; Ma, K.; McKenzie, C. H.; Thompson, R.: LIFE-HISTORY CONSTRAINTS AFFECTING INVASION SUCCESS IN THE ASCIDIAN *BOTRYLLUS SCHLOSSERI*
- 11:30 Fuchs, H. L.; Reidenbach, M. A.: TURBULENCE-INDUCED SINKING AND SUBSTRATE TYPE IMPACT SETTLEMENT PATTERNS OF OYSTER LARVAE
- 11:45 Rippy, M. A.; Franks, P. J.; Feddersen, F.; Guza, R.: SPATIO-TEMPORAL VARIABILITY OF NEARSHORE FECAL INDICATOR BACTERIA: THE RELATIVE IMPORTANCE OF FLUID DYNAMICS AND EXTRA-ENTERIC BACTERIAL MORTALITY
- 12:00 Yñiguez, A. T.; Camoying, M.; Bollozos, I.; Palermo, J. D.; Villanoy, C. L.: PHYTOPLANKTON ASSEMBLAGES IN NORTHEAST LUZON AS INFLUENCED BY THE PACIFIC WESTERN BOUNDARY CURRENT SYSTEM
- 12:15 Mouw, C. B.; Chen, H.; McKinley, G. A.: TRENDS IN SATELLITE-DERIVED CHLOROPHYLL CONCENTRATION AND OPTICAL PROPERTIES IN RELATION TO CHANGING ICE ON LAKE SUPERIOR
- 14:00 Bollozos, I. E.; Yñiguez, A. T.; Palermo, J. H.; Camoying, M. G.; Villanoy, C.: ZOOPLANKTON COMPOSITION AND ABUNDANCE IN LAMON BAY, NORTHEAST LUZON, PHILIPPINES
- 14:15 Maier, M. A.; Peterson, T. D.; Needoba, J. A.; Bartowitz, K.; Baptista, A.: PHYTOPLANKTON SEASONAL DYNAMICS AND ECOLOGICAL INTERACTIONS IN THE LOWER COLUMBIA RIVER
- 14:30 Zeeman, S. L.; Tilburg, C. E.; Bozeman, M.; Spillane, T.: PRECIPITATION, LAND-COVER, AND RIVER CONTAMINANT LOAD.
- 14:45 Larsen, L. G.; Harvey, J. W.; Maglio, M.; Langston, T.; Choi, J.: HOW DO DYNAMIC LIMITING FACTORS INFLUENCE SUCCESS OF STREAM ECOSYSTEM RESTORATION?
- 15:00 Beyer-Robson, J.; Wu, R.; Vink, S.: CONSEQUENCES OF SALINE MINE DISCHARGE ON MICROBIAL COMMUNITY STRUCTURE AND BIOGEOCHEMICAL CYCLING IN EPHEMERAL STREAMS
- 15:15 Brown, A. L.; Carpenter, R. C.: FLOW-REGULATED, ALGAL TURF CONTROL OF OXYGEN DYNAMICS WITHIN INTERACTIONS OF MASSIVE *PORITES* SPP. AND ALGAL TURF
- 15:30 Camren Brown, C. L.; Chandra Franklin, C.: SEASONAL CHANGES IN THE ANATOMY OF SPARTINA ALTERNIFLORA RHIZOMES.
- 15:45 Kerrigan, L.; Finkel, Z. V.: TRAJECTORIES IN DIATOM SIZE STRUCTURE IN RESPONSE TO RECENT WARMING

080 Coastal Connections: Advances In The Understanding Of The Interaction Of Fluvial And Marine Systems

Chair(s): Katie Farnsworth, kfarns@iup.edu
Paul Liu, jpliu@ncsu.edu
Kehui Xu, kxu@coastal.edu
James Syvitski, james.syvitski@colorado.edu

Location: Ballroom D

- 10:30 Syvitski, J.; Kettner, A.; Cohen, S.: SEDIMENT FLUXES TO THE EARTH'S COASTAL OCEAN

- 10:45 Bentley, S. J.; Fabre, J.; Li, C.; Smith, E.; Walker, N.; White, J. R.; Rouse, L.; Bargu, S.: FLUVIAL SEDIMENT FLUX DURING HIGH DISCHARGE EVENTS: HARNESSING MISSISSIPPI RIVER SEDIMENT TO BUILD NEW LAND ON AN ENDANGERED COAST
- 11:00 Kineke, G. C.; Bentley, S. J.: SEDIMENT DELIVERY AND REWORKING ON THE SHALLOW LOUISIANA SHELF
- 11:15 Rogers, K. G.; Goodbred, S. L.: SEASONAL SCALE SPATIAL AND TEMPORAL SEDIMENTATION PATTERNS ON THE TIDE-DOMINATED LOWER GANGES-BRAHMAPUTRA DELTA PLAIN
- 11:30 Liu, J.: FLUXES AND FATES OF RIVER-DERIVED SEDIMENTS INTO THE SOUTH CHINA SEA
- 11:45 Xu, K. H.; Milliman, J. D.; Liu, J. P.; Yang, S. L.; Li, A. C.; Yang, Z. S.: YANGTZE SEDIMENT DISPERSAL SYSTEM: FROM THE SOURCE TO THE SINK
- 12:00 Yang, Z.; Saito, Y.; Wang, H.; Milliman, J. D.; Bi, N.; Sun, X.; Xu, K.: DECLINE OF THE HUANGHE (YELLOW RIVER) DELTA TO DESTRUCTION PHASE
- 12:15 Kuehl, S. A.; Rose, L. E.: FROM THE AMAZON TO THE WAIPAOA: SHIFTING THE FOCUS TO SMALL MOUNTAINOUS RIVERS
- 14:00 Meade, R. H.: NEXT TASK: TRENDS?
- 14:15 Milliman, J. D.; Xu, K. H.; Driscoll, N.; Slingerland, R.; Harris, P. T.: POST-LGM FLUX AND FATE OF FLUVIAL SEDIMENTS IN THE GULF OF PAPUA
- 14:45 Nittrouer, C. A.: MILLIMANIA: S2S DISCOVERIES AROUND THE WORLD BY AND WITH JOHN MILLIMAN
- 15:00 Kniskern, T. A.; Harris, C. K.; Mitra, S.; Orpin, A. R.: FLOOD DEPOSITION ON THE WAIPAOA SHELF, NEW ZEALAND
- 15:15 Kao, S.; Liu, J.; Carnuel, E.; Milliman, J.: ESCAPE OF TERRESTRIAL ORGANIC PARTICLES DRIVEN BY HYPERPYCNAL FLOW
- 15:30 Wheatcroft, R. A.; Goni, M. A.; Borgeld, J. C.; Hastings, R. H.; Richardson, K.: A LOW-SEDIMENT-YIELD RIVER DISCHARGING INTO A HIGH-ENERGY OCEAN: THE UMPQUA RIVER DISPERSAL SYSTEM, OREGON
- 15:45 Warrick, J. A.: SUPPLY AND DISPERSAL OF RIVER SEDIMENT ALONG THE SOUTHERN CALIFORNIA COAST

090 Enhanced Regions Of Mixing In The Coastal And Deep Ocean

- Chair(s): Jeffrey W. Book, jeff.book@nrlssc.navy.mil
Harindra J. Fernando, Harindra.J.Fernando.10@nd.edu
Nicole L. Jones, nicole.jones@uwa.edu.au
Hemantha Wijesekera, Hemantha.Wijesekera@nrlssc.navy.mil
- Location: Ballroom C
- 10:30 Nash, J. D.: DYNAMICS CONTROLLING THE DISTRIBUTION OF ENHANCED MIXING IN THE OCEAN.
- 11:00 Gregg, M. C.; Hall, R. A.; Carter, G. S.; Alford, M. H.; Lien, R. C.; Winkel, D. P.; Wain, D. J.: MIXING AND FLOW IN ASCENSION, A STEEP, NARROW CANYON
- 11:15 Yang, Q.; Tian, J.; Zhao, W.; Liang, X.; Tian, C.: TURBULENCE OBSERVATION ON THE NORTHERN SOUTH CHINA SEA SHELF AND SLOPE
- 11:30 Bouruet-Aubertot, P.; Cuypers, Y.; Ferron, B.; Dausse, D.; Menage, O.; Atmadipoera, A.; Jaya, I.: TURBULENT MIXING AND INTERNAL TIDES IN THE INDONESIAN THROUGHFLOW DURING THE INDOMIX CRUISE
- 11:45 Wijesekera, H. W.; Teague, W. J.; Jarosz, E.; Fribance, D. B.; Moline, M.; Moum, J. N.: MIXING AND CIRCULATION OVER A ROUGH TOPOGRAPHIC BANK
- 12:00 Martini, K. I.; Stoudt, C. A.; Simmons, H. A.; Hutchings, J. K.: NEAR-INERTIAL INTERNAL WAVES AND MIXING ON THE BEAUFORT CONTINENTAL SLOPE
- 12:15 Soares, S. M.; Richards, K. J.: RESONANT FORCING BY EASTERLY WAVES IN THE NORTHEASTERN TROPICAL PACIFIC
- 14:00 Menesguen, C.; McWilliams, J. C.; Molemaker, M. J.: AN EXAMPLE OF AGEOSTROPHIC INSTABILITY IN A ROTATING STRATIFIED FLOW
- 14:15 MacKinnon, J. A.: MODELING THE CONTINUUM: UNDERSTANDING DOWNSCALE ENERGY TRANSFER AND MIXING FROM BREAKING INTERNAL WAVES

- 14:30 Hughes, G. O.; Griffiths, R. W.; Hogg, A. M.; Prastowo, T.; Qin, X.: MIXING EFFICIENCIES OF OCEAN PROCESSES: INSIGHTS FOR THE ENERGY BUDGET OF THE GLOBAL CIRCULATION
- 14:45 Alford, M. H.; Lukas, R.; Howe, B. M.; Pickering, A.; Santiago-Mandujano, E.: MOORED OBSERVATIONS OF EPISODIC ABYSSAL FLOW AND MIXING AT STATION ALOHA
- 15:00 Li, M.; Mertens, C.; Walter, M.; Rhein, M.: DIAPYCNAL MIXING IN THE SUBPOLAR NORTH ATLANTIC INFERRED FROM CTD/LACDP SURVEYS
- 15:15 Waterhouse, A. E.; MacKinnon, J. A.; Pinkel, R.; Alford, M. H.; Moum, J. N.; Nash, J. D.; Polzin, K.; Sun, O.: GLOBAL PATTERNS OF MIXING FROM DIRECT AND INDIRECT MEASUREMENTS OF DISSIPATION
- 15:30 Melet, A. Y.; Hallberg, R. W.; Legg, S.; Polzin, K.: SENSITIVITY OF THE PACIFIC OCEAN STATE TO THE FORMULATION OF THE VERTICAL PROFILE OF INTERNAL-TIDE DRIVEN MIXING
- 15:45 Tanaka, Y.; Yasuda, I.; Hasumi, H.; Tatebe, H.; Osafune, S.: EFFECTS OF THE 18.6-YEAR MODULATION OF TIDAL MIXING ON BIDECADEAL CLIMATE VARIABILITY IN THE NORTH PACIFIC

096 The Biological Basis And Geochemical Consequences Of Non-Redfield N:P Ratios In The Ocean

- Chair(s): Raymond Sambrotto, sambrott@ldeo.columbia.edu
John Reinfelder, reinfelder@envsci.rutgers.edu
- Location: Ballroom A
- 10:30 Deutsch, C.; Weber, T.: NUTRIENT RATIOS AS A TRACER AND DRIVER OF OCEAN BIOGEOCHEMISTRY
- 11:00 Somes, C. J.; Oschlies, A.; Schmittner, A.: CONSTRAINING THE RATES OF N₂ FIXATION AND DENITRIFICATION IN A GLOBAL OCEAN MODEL USING OCEANIC N:P RATIOS
- 11:15 Weber, T. S.; Deutsch, C.: REGULATION OF THE OCEAN NITROGEN RESERVOIR BY STOICHIOMETRICALLY DIVERSE PLANKTON
- 11:30 Sambrotto, R. N.; Burdloff, D.; McKee, K.: TAXONOMICALLY-LINKED VARIATIONS IN THE N/P RATIO OF MARINE PHYTOPLANKTON
- 11:45 Daines, S. J.; Clark, J. R.; Lenton, T. M.: ENVIRONMENTAL SELECTION FOR PHYTOPLANKTON TRAITS AND STOICHIOMETRY IN AN ECOSYSTEM MODEL WITH SUB-CELLULAR RESOURCE ALLOCATION
- 12:00 Grzymalski, J. J.; Cullen, J. T.: COST-MINIMIZATION STRATEGIES OF MARINE MICROBES AND THEIR POTENTIAL IMPACTS ON N:P CYCLING IN THE UPPER OCEAN
- 12:15 Ward, B. A.; Dutkiewicz, S.; Follows, M. J.: GLOBAL DISTRIBUTION OF ESSENTIAL NUTRIENTS CONTROLLED BY COMMUNITY ECOLOGY AND IRON:NITROGEN SUPPLY RATIOS

105 Vertical Flow In The Ocean

- Chair(s): Andreas Thurnherr, ant@ldeo.columbia.edu
Eleanor Frajka-Williams, eefw1u08@noc.ac.uk
Tamay Ozgokmen, tozgokmen@rsmas.miami.edu
- Location: Ballroom C
- 08:00 Talley, L. D.; Reid, J. L.: GLOBAL OVERTURNING CIRCULATION: DOWN-GRADIENT FLOW AND FRESHWATER TRANSPORTS
- 08:15 Wang, J.; Mahadevan, A.: VERTICAL TRANSPORT AT AN OCEAN FRONT
- 08:30 Phillips, H. E.; Bindoff, N. L.; SOFINE Collaborators, .: THE NON-EQUIVALENT BAROTROPIC STRUCTURE OF THE ANTARCTIC CIRCUMPOLAR CURRENT
- 08:45 Rouillet, G.; McWilliams, J. C.; Molemaker, M. J.: THE ENERGETICS OF LARGE ISOPYCNAL DISPLACEMENTS
- 09:00 Wingate, B. A.; Embid, P. E.: A NEW THEORY FOR SLOW DYNAMICS IN THE PRESENCE OF STRONG ROTATION AND WEAK STRATIFICATION
- 09:15 Wang, P.; Ménesguen, C.; McWilliams, J. C.: THE AGEOSTROPHIC INSTABILITY OF A VERTICAL SHEAR IN A BOUSSINESQ MODEL
- 09:30 Pratt, L. J.; Ozgokmen, T.; Rypina, I.; Bebieva, Y.: THREE-DIMENSIONAL DS ANALYSIS OF STIRRING IN AN OVERTURNING EDDY CIRCULATION

09:45 Di Iorio, D.; Lavelle, J. W.; Xu, G.: VERTICAL VELOCITY OF THE DEEP SEA HYDROTHERMAL PLUME OF DANTE AND ITS INTERACTION WITH TIDAL FLOWS

106 Global Mode Waters: Physical And Biogeochemical Processes, Variability And Impacts.

Chair(s): Young-Oh Kwon, yokwon@whoi.edu
Lynne Talley, ltalley@ucsd.edu
Shang-Ping Xie, xie@hawaii.edu
Toshio Suga, suga@pol.gp.tohoku.ac.jp

Location: Ballroom J

10:30 Joyce, T. M.: SOME NEW PERSPECTIVES ON EIGHTEEN DEGREE WATER FORMATION

11:00 Marshall, J. C.; Maze, G.: DIAGNOSING THE OBSERVED SEASONAL CYCLE OF ATLANTIC SUBTROPICAL MODE WATER USING POTENTIAL VORTICITY AND ITS ATTENDANT THEOREMS

11:15 Davis, X. J.; Weller, R. A.; Bigorre, S.; Plueddemann, A. J.: LOCAL OCEANIC THERMAL RESPONSE TO ATMOSPHERIC FORCING: THE GULF STREAM REGION

11:30 Dong, S.; Kelly, K. A.: HOW WELL DO CLIMATE MODELS REPRODUCE NORTH ATLANTIC SUBTROPICAL MODE WATER?

11:45 de Boissésou, E.; Thierry, V.; Mercier, H.; Caniaux, G.: ORIGIN, FORMATION AND VARIABILITY OF THE SUBPOLAR MODE WATER OBSERVED OVER THE REYKJANES RIDGE

12:00 Cronin, M. E.; Bond, N. A.; Farrar, J. T.; Ichikawa, H.; Jayne, S. R.; Kawai, Y.; Konda, M.; Qiu, B.; Rainville, L.; Tomita, H.: FORMATION AND EROSION OF THE SEASONAL THERMOCLINE IN THE KUROSHIO EXTENSION RECIRCULATION GYRE

12:15 Ishii, M.; Sasano, D.; Kosugi, N.; Midorikawa, T.; Rodgers, K. B.: MODE WATERS: THE UPTAKE WINDOW OF NATURAL AND ANTHROPOGENIC CO₂ INTO THE OCEAN INTERIOR

14:00 Douglass, E. M.; Kwon, Y. O.; Jayne, S. R.: A COMPARISON OF NORTH PACIFIC AND NORTH ATLANTIC SUBTROPICAL MODE WATERS IN A CLIMATOLOGICALLY-FORCED MODEL

14:15 Xu, L. X.; Xie, S. P.; Liu, Q. Y.; Kobashi, F.: RESPONSE OF THE NORTH PACIFIC SUBTROPICAL COUNTERCURRENT AND ITS VARIABILITY TO GLOBAL WARMING

14:30 Sallée, J.; Rintoul, S.; Speer, K.; Matear, R.; Lenton, A.: THE SOUTHERN OCEAN THERMOCLINE VENTILATION: IMPACT ON ANTHROPOGENIC CARBON AND RESPONSE TO ATMOSPHERIC VARIABILITY

14:45 Downes, S. M.; Sarmiento, J. L.; Menemenlis, D.; Zhang, H.; Kwon, E. Y.: THE ROLE OF LARGE-SCALE PHENOMENA IN VARYING THE SUBDUCTION OF MODE WATERS IN THE PACIFIC

15:00 Cerovecki, I.; Talley, L. D.; Mazloff, M. R.: SUBANTARCTIC MODE WATER (SAMW) FORMATION AND TRANSFORMATION IN AN EDDY-PERMITTING SOUTHERN OCEAN STATE ESTIMATE

15:15 Carter, B. R.; Dickson, A. G.; Talley, L. D.: AN OMP-BASED APPROACH FOR DECONVOLVING SIMULTANEOUS TRENDS IN PROCESSES CONTROLLING SUBANTARCTIC MODE WATER PROPERTY DISTRIBUTIONS FROM HYDROGRAPHIC SECTIONS.

15:30 Mill, G. N.; Paiva, A. M.: SOUTH ATLANTIC SUBTROPICAL MODE WATERS REVISITED

15:45 Sato, O. T.; Polito, P. S.: INTRA-DECADAL CHANGES IN THE SALINITY AND ITS CONNECTION WITH SUBTROPICAL MODE WATER IN THE SOUTH ATLANTIC

116 Recent Advances In Linking The Microbiology And Biogeochemistry Of Oxygen-Deficient Zones

Chair(s): Rachel Horak, rahorak@uw.edu
Laura Bristow, lbristow@umassd.edu
Bonnie Chang, bonniec@princeton.edu
Loreto De Brabandere, loretoadb@biology.sdu.dk

Location: Ballroom D

08:00 Altabet, M. A.; Ryabenko, E.; Stramma, L.; Wallace, D.; Frank, M.; Grasse, P.; Lavik, G.: EDDY HOTSPOTS FOR FIXED NITROGEN-LOSS FROM THE PERU OXYGEN MINIMUM ZONE

08:15 Bristow, L. A.; Stewart, F. J.; Altabet, M. A.; Ulloa, O.; DeLong, E. F.: NITROGEN ISOTOPES AND COMMUNITY DNA AND RNA DATASETS SUPPORT A ROLE FOR NITRITE OXIDATION THROUGHOUT THE OXYGEN MINIMUM ZONE OFF NORTHERN CHILE

08:30 Stewart, F. J.; Dalsgaard, T.; Young, C. R.; Thamdrup, B.; Revsbech, N.; Ulloa, O.; Canfield, D. E.; DeLong, E. F.: OXYGEN ADDITION AND EXPERIMENTAL PERTURBATION ELICIT PROFOUND CHANGES IN COMMUNITY TRANSCRIPTION IN OMZ BACTERIOPLANKTON

08:45 Fuchsman, C. A.; Murray, J. W.; Staley, J. T.: AUTOTROPHIC DENITRIFICATION FOUND IN THE BOSPORUS PLUME OF THE BLACK SEA

09:00 Kirkpatrick, J. B.; Fuchsman, C. A.; Yakushev, E.; Staley, J. T.; Murray, J. W.: THE ACTIVITY OF ANAMMOX AND DENITRIFYING BACTERIA IN THE SUBOXIC ZONE OF THE BLACK SEA

09:15 Algar, C. K.; Joseph Vallino, J. J.: A MAXIMUM ENTROPY PRODUCTION (MEP) BASED MODEL OF NITROGEN CYCLING PROCESSES IN LOW OXYGEN AND ANOXIC ENVIRONMENTS

09:30 Devol, A.; Keil, R.; Hartnett, H.: DENITRIFICATION RATES AND CARBON FLUXES IN OXYGEN DEFICIENT ZONES

09:45 Madison, A. S.; Tebo, B. M.; Mucci, A.; Sundby, B.; Luther, G. W.: OCCURRENCE OF SOLUBLE MANGANESE(III) IN THE MARINE ENVIRONMENT

128 Sensitivity Analysis, Data Assimilation And Uncertainty Quantification In Ocean Modeling

Chair(s): Ibrahim Hoteit, ibrahim.hoteit@kaust.edu.sa
Bruce Cornuelle, bdc@ucsd.edu
Mohamed Iskandarani, miskandarani@rsmas.miami.edu

Location: Ballroom H

10:30 Anderson, J.; Karspeck, A.; Hoar, T.; Collins, N.; Raeder, K.; Yeager, S.: ENSEMBLE DATA ASSIMILATION AND UNCERTAINTY QUANTIFICATION

11:00 Bub, E.; Dykes, J.; Lunde, B.; Toner, M.; Cobb, M.: SENSITIVITY ANALYSIS, DATA ASSIMILATION AND UNCERTAINTY QUANTIFICATION IN OCEAN MODELING

11:15 Carton, J. A.; Seidel, H. F.; Giese, B. S.: UNCERTAINTY IN DETECTION OF HISTORICAL OCEAN CLIMATE VARIABILITY

11:30 Good, S. A.; Martin, M. J.; Rayner, N. A.: ESTIMATING UNCERTAINTIES IN AN OCEAN ANALYSIS USING AN APPROACH THAT IS ROBUST TO MISSPECIFICATION OF BACKGROUND AND OBSERVATION ERROR COVARIANCES

11:45 Alexanderian, A.; Winokur, J.; Sraj, I.; Srinivasan, A.; Iskandarani, M.; Thacker, W. C.; Knio, O. M.: UNCERTAINTY ANALYSIS AND QUANTIFICATION OF THE HYCOM SST RESPONSE TO HURRICANE IVAN USING POLYNOMIAL CHAOS EXPANSIONS

12:00 Simons, R. D.; Siegel, D. A.; Brown, K.: MODEL ROBUSTNESS IN ESTIMATING LARVAL TRANSPORT AND CONNECTIVITY IN THE COASTAL OCEAN

12:15 REMY Elisabeth, E. D.; GREINER Eric, .: ADJOINT SENSITIVITY ANALYSIS APPLIED TO THE GLORYS 1/4 GLOBAL OCEAN REANALYSIS

14:00 Brasseur, P.; Brankart, J. M.; Testut, C. E.; Béal, D.; Doron, M.; Fontana, C.; Meinvielle, M.; Verron, J.: TOWARD AN IMPROVED DESCRIPTION OF UNCERTAINTIES IN OCEAN SIMULATIONS: EFFECT OF LOCAL ANAMORPHIC TRANSFORMATIONS ON SPATIAL CORRELATIONS

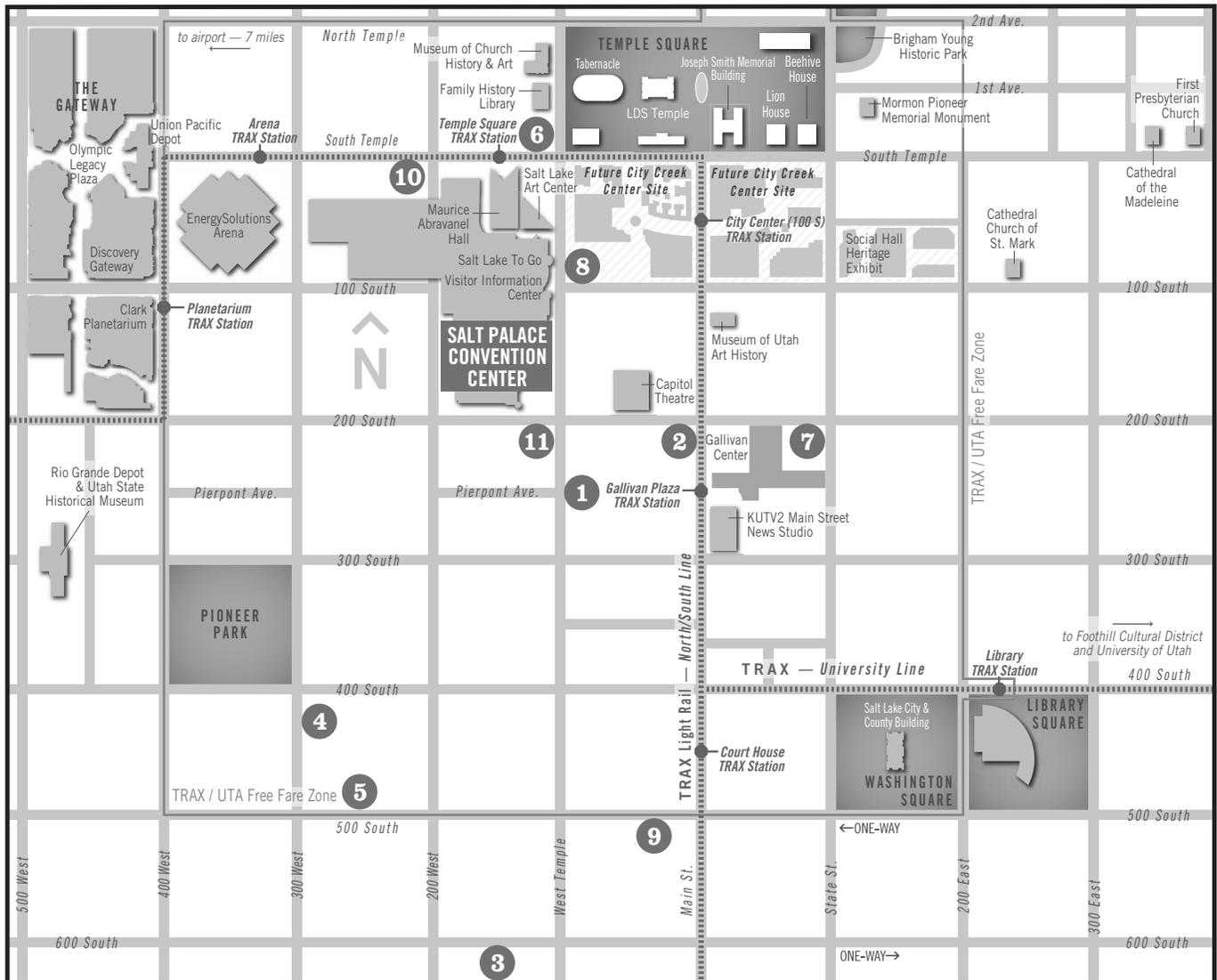
14:15 Butler, T. D.; Altaf, M. U.; Dawson, C.; Hoteit, I.; Luo, X.; Mayo, T.: DATA ASSIMILATION WITHIN THE ADVANCED CIRCULATION MODELING FRAMEWORK FOR HURRICANE STORM SURGE FORECASTING

14:30 Miller, R. N.; Weir, B.; Spitz, Y. H.; Atkins, E.; Chorin, A. J.; Morzfeld, M.: APPLICATION OF THE IMPLICIT PARTICLE FILTER TO A MODEL OF NEARSHORE CIRCULATION

14:45 Chaudhuri, A. H.; Ponte, R. M.; Forget, G.; Heimbach, P.: UNCERTAINTIES IN AIR-SEA BOUNDARY FORCING AND IMPLICATIONS FOR OCEAN MODELING AND STATE ESTIMATION

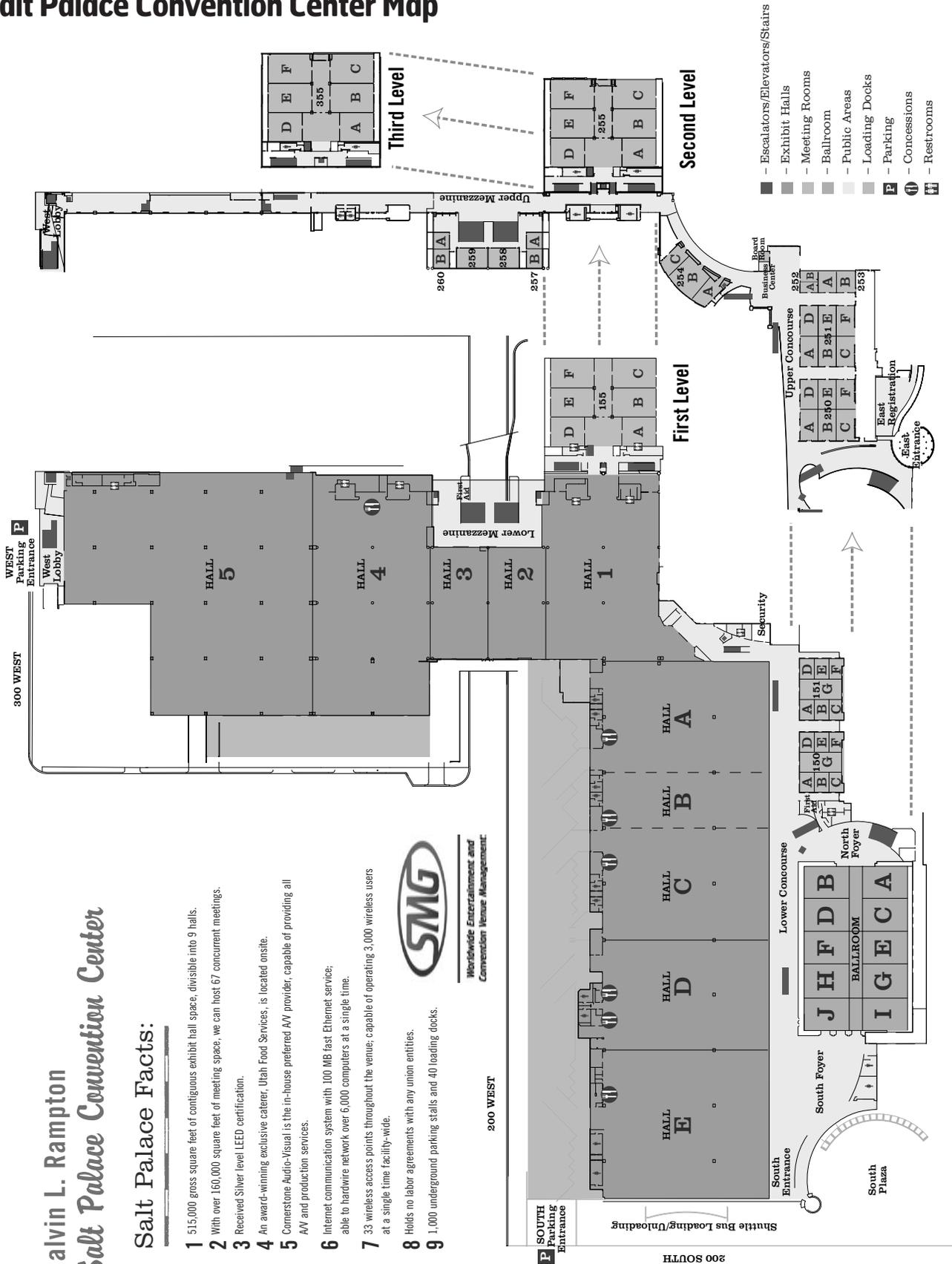
- 15:00 Smith, P. J.; Moore, A. M.: EXPLORING DUAL FORMULATION WEAK CONSTRAINT 4D-VAR DATA ASSIMILATION FOR THE CALIFORNIA CURRENT SYSTEM
- 15:15 Bruedgam, M.; Baehr, J.; Eden, C.: TOWARDS THE ABILITY OF THE ADJOINT TECHNIQUE TO RECOVER DECADEAL VARIABILITY IN THE NORTH ATLANTIC
- 15:30 Forget, G.: ESTIMATES OF PARAMETERIZED PHYSICS AND THE REDUCTION OF SPURIOUS MODEL DRIFTS.
- 15:45 Slawig, T.; Prieß, M.; Kratzenstein, C.; Piwonski, J.; Koziel, S.: ACCELERATED PARAMETER IDENTIFICATION IN 3D MARINE ECOSYSTEM MODELS
- 147 Infusing Biogeochemistry With Ecosystem Science**
- Chair(s): Susanne Neuer, susanne.neuer@asu.edu
Raleigh Hood, rhod@umces.edu
- Location: Ballroom A
- 08:00 Richardson, T. L.: PUTTING THE "BIO" INTO BIOGEOCHEMICAL MODELS: CURRENT ATTEMPTS AND FUTURE CHALLENGES
- 08:30 Neuer, S.; Amacher, J. A.; Hansen, A. M.; Lomas, M. W.: THE SMOKING GUN: LINKING PLANKTON COMMUNITY COMPOSITION WITH PARTICLE EXPORT
- 08:45 Stukel, M. R.; Landry, M. R.; Selp, K. E.; Decima, M. R.; Taniguchi, D. A.: THE ROLE OF SYNECHOCOCCUS IN CARBON EXPORT IN THE COSTA RICA DOME: VERTICAL TRANSPORT WITHIN MESOZOOPLANKTON FECAL PELLETS
- 09:00 Cetinic, I.; Perry, M. J.; Briggs, N.; Kallin, E.; Alkire, M.; D'Asaro, E.; Lee, C.; Poulton, N.; Rehm, E.; Sieracki, M.: RELATIONSHIPS BETWEEN THE PARTICULATE ORGANIC CARBON, PLANKTON COMPOSITION AND OPTICAL PROPERTIES DURING NORTH ATLANTIC BLOOM 2008
- 09:15 Rynearson, T. A.; Richardson, K.; Lampitt, R. S.; Sieracki, M. E.; Poulton, A.; Perry, M. J.: WHAT YOU SEE IS NOT WHAT YOU GET: RELATING DIATOM SPECIES COMPOSITION IN SURFACE WATERS TO CARBON FLUX DURING A SPRING BLOOM IN THE NORTH ATLANTIC
- 09:30 Stock, C. A.; Dunne, J. P.; John, J. G.: CONNECTING GLOBAL-SCALE PLANKTONIC FOOD WEB DYNAMICS AND BIOGEOCHEMICAL FLUXES
- 09:45 Dutkiewicz, S.; Ward, B. A.; Scott, J. R.; Follows, M. J.: MODELING THE INTERCONNECTION BETWEEN ECOSYSTEMS AND BIOGEOCHEMISTRY IN A CHANGING OCEAN

Downtown Salt Lake City Area Map



- | | |
|---|--|
| 1. Hilton Salt Lake City Center | 7. Marriott Salt Lake City Center |
| 2. Hotel Monaco | 8. Marriott Salt Lake City Downtown |
| 3. Red Lion Hotel Salt Lake Downtown | 9. Little America Hotel |
| 4. Hampton Inn – Downtown | 10. Radisson Hotel Salt Lake City Downtown |
| 5. Crystal Inn Downtown | 11. Shilo Inn Hotel |
| 6. The Salt Lake Plaza Hotel at Temple Square | |

Salt Palace Convention Center Map



Galvin L. Rampton Salt Palace Convention Center

Salt Palace Facts:

- 1 515,000 gross square feet of contiguous exhibit hall space, divisible into 9 halls.
- 2 With over 160,000 square feet of meeting space, we can host 67 concurrent meetings.
- 3 Received Silver level LEED certification.
- 4 An award-winning exclusive caterer, Utah Food Services, is located onsite.
- 5 Cornerstone Audio-Visual is the in-house preferred AV provider, capable of providing all AV and production services.
- 6 Internet communication system with 100 MB fast Ethernet service; able to hardwire network over 6,000 computers at a single time.
- 7 33 wireless access points throughout the venue; capable of operating 3,000 wireless users at a single time facility-wide.
- 8 Holds no labor agreements with any union entities.
- 9 1,000 underground parking stalls and 40 loading docks.



Join

APPLY ONLINE AT
WWW.TOS.ORG/JOIN_TOS.HTML



The Oceanography Society

MEMBERSHIP BENEFITS

All members will receive a subscription to *Oceanography*, the Society's quarterly magazine. Members are also entitled to exercise the rights and responsibilities of active participation in the Society, including:

- the right to vote;
- the right to express opinions on all matters of interest to the Society;
- the right to register at discounted rates for meetings sponsored or cosponsored by the Society.

MEMBERSHIP LEVELS

- **REGULAR MEMBERSHIP** | Regular membership is available to oceanographers, scientists, or engineers active in ocean-related fields, or to persons who have advanced oceanography by management or other public service.
- **STUDENT MEMBERSHIP** | With proper certification, student membership is available for students enrolled at least half-time in an oceanography or ocean-related program at the baccalaureate or higher level.
- **SPONSORING MEMBERSHIP** | Sponsoring membership is available to individuals who wish to provide enhanced support annually. In the U.S., \$50 of the annual dues in this category is tax-deductible as a charitable contribution, as are any additional contributions, over and above the annual Regular Member dues.
- **CORPORATE/INSTITUTIONAL SPONSORS** | Organizations and companies may subscribe annually as Corporate/Institutional Sponsors. Visit the TOS Web site for more information.
- **ANNUAL LIBRARY SUBSCRIPTIONS** | Annual library subscriptions are also available. Please send a check for \$150 as well as the library's complete mailing address to the address below.

THE APPLICATION PROCESS

Apply online at www.tos.org/join_tos.html. All applications for membership are subject to approval by the TOS Membership Committee.

MEMBERSHIP DUES

Regular Membership.....	\$60
Student Membership.....	\$30
Sponsoring Membership	\$110
Corporate/Institutional Sponsors.....	\$500

Apply online at www.tos.org/join_tos.html. Send all inquiries to Jennifer Ramarui at The Oceanography Society, P.O. Box 1931, Rockville, MD 20849-1931, USA, e-mail: info@tos.org.

AGU FALL MEETING 2012

San Francisco, California, USA
6 – 10 December
Thursday - Monday

The **AGU FALL MEETING** is the largest worldwide conference in the geophysical sciences, attracts over 20,000 Earth and space scientists, educators, students, and policy makers.

AGU galvanizes a community of Earth and space scientists that collaboratively advances and communicates sciences and its power to ensure a sustainable future

<http://fallmeeting.agu.org>

SESSION PROPOSALS OPEN

Deadline to submit session proposals:
20 April 2012

ABSTRACTS

Abstract submissions open:
12 June 2012

Deadline to submit abstracts:
8 August 2012



Nominate your colleague for the recognition of a lifetime!

The 2012 AGU Union Medals, Awards, & Prize

The following Medals will be presented

*William Bowie Medal | James B. Macelwane Medal | John Adam Fleming Medal | Walter H. Bucher Medal
Maurice Ewing Medal | Robert E. Horton Medal | Waldo E. Smith Medal | Charles A. Whitten Medal
Harry H. Hess Medal | Roger Revelle Medal*

The following Awards will be presented

*Edward A. Flinn III Award | Charles S. Falkenberg Award | Athelstan Spilhaus Award
International Award | Excellence in Geophysical Education Award*

The following Journalism Awards will be presented

*Walter Sullivan Award for Excellence in Science Journalism—Features
David Perlman Award for Excellence in Science Journalism—News*

The following Prize will be presented

AGU Climate Communication Prize

Nominations web site NOW OPEN! www.agu.org/2012honors

All nominations must be complete and received at AGU headquarters by 16 March 2012.



Author Index

2

- 2011 C-MORE Summer Course Cruise
Collective 46
2011 C-MORE Summer Course Genome
Collective 49

A

- Aagaard, K. 73
Abbett, M. E. 122
Abdulla, H. A. 61
Abe-Ouchi, A. 61
Abercrombie, D. 78
Abercrombie, M. I. 108
Abernathy, R. 38, 52
Abernathy, R. P. 52
Abernathy, E. A. 48
Abouali, M. 80
Abrahamsen, E. P. 38
Abramczyk, M. 76
Abram, L. C. 69
Abramowitz, G. 76
Abrego, D. 59
Achatz, U. 67
Achterberg, E. P. 32, 60, 77
Acker, J. G. 82, 101
Ackerman, J. D. 65, 122
Ackerman, S. D. 103
Ackleson, S. G. 55, 65
Adams, D. K. 43
Adams, E. E. 109
Adams, K. 59, 85
Adams, K. A. 59
Adams, L. G. 34
Adani, M. 29
Adcroft, A. 56, 61, 110
Adcroft, A. J. 61, 110
Adey, W. H. 87
Adhikari, D. 96
Adi, T. R. 40, 90
Adkins, J. F. 32, 61
Ådlandsvik, B. 80
Adornato, L. 59, 84
Adornato, L. A. 84
Aerts, L. A. 99
AGEL, L. 66
Agostini, C. 113
Agrawal, Y. C. 47, 53
Aguilar, C. 44, 101
Aguilar, H. 48
Aguilar-Islas, A. M. 77
Aguilera, E. 86
Agusti, S. 37
Aguzzi, J. 66
Ahmed, S. 41, 101, 102, 110, 120
Ahmed, S. A. 41
Ahn, Y. 35
Aiken, G. R. 89, 103
Aiki, H. 50, 52
Aikman, F. 29
Airey, D. 104
Aita, M. N. 108, 115
Aita Noguchi Maki, . 119
Akan, C. 58, 68, 93
Akira Nagano, A. 111
Akkaynak, D. 78
Aksenov, Y. 54, 88, 98
Aksnes, D. L. 95
Alabia, I. 90
Alali, B. 99
Alan, S. 72
Alatalo, P. 73
Albert, D. 88
Alberts, J. C. 50
Albrecht, M. 67
Albright, B. 64
ALBURQUEQUE, E. 83
Alderkamp, A. C. 93, 113
Alder, V. 118
Alexander, C. R. 92
Alexander, H. 56
Alexanderian, A. 124
Alexander, J. 43
Alexander, M. 80, 90
Alexander, M. A. 90
Alfaro, M. 118
Alford, M. 30, 31, 57, 61, 67, 110, 123
Alford, M. H. 30, 31, 57, 67, 110, 123
Alfred Wuest, A. 106
Algeo, T. 42
al-Ghadban, A. N. 77
Ali, A. 62
Alin, S. 53, 94, 114
Alin, S. A. 94
Alin, S. R. 114
Alix, J. 104
Al-Kharusi, L. H. 85
Alkire, M. 34, 44, 125
Alkire, M. B. 34
Allard, R. 33, 39, 80, 88
Allard, R. A. 33, 39, 80
Alle Lie, A. 104
Allen, A. E. 36
Allen, J. R. 45
Allen, J. S. 39
Allen, K. 45
Allen, L. E. 86
Allen, S. E. 79, 106, 114
Aller, R. C. 84
Allers, E. 48
Allison, M. A. 62, 98, 104
Allison, M. D. 78
Allison, P. A. 75, 79
Almeida-Jauregui, C. O. 82, 118
Almeida, J. L. 74
Alm, E. W. 92
Alnajjar, M. W. 69
Alsén, H. 63
Al Shehhi, M. R. 48
Alstad, T. 113
Altabet, M. 30, 60, 62, 70, 96, 113, 124
Altabet, M. A. 60, 62, 70, 96, 113, 124
Altaf, M. U. 124
Alvain, S. 120
Alves, O. 68
Amabile Ferreira, A. 102
Amacher, J. A. 125
Amador, A. M. 106
Amann, R. I. 48
Aman, Z. M. 52
Ambe, D. 65
Ambrose Jr, W. G. 98
Ambrose, W. G. 86
Amin, R. 47, 70
Amin, R. M. 70
Amin, S. A. 87
Amjadali, A. 68
Ammerman, J. W. 81
Amon, R. M. 101
Amrhein, D. E. 52
Anandakrishnan, S. 64
Anantharaman, K. 112
Anatoly Gitelson, A. 120
Andersen, G. L. 109
Andersen, N. 93
Anders, J. 109
Anderson, A. 31, 85, 103
Anderson, A. M. 103
Anderson, C. H. 104, 106
Anderson, C. R. 105
Anderson, E. 41, 59, 85, 122
Anderson, E. J. 41, 59, 122
Anderson, E. M. 85
Anderson, I. C. 35
Anderson, J. 34, 41, 81, 124
Anderson, J. D. 41
Anderson, J. E. 34
Anderson, M. R. 106
Anderson, P. D. 30
Anderson, R. F. 32, 72
Anderson, S. 66, 105, 122
Anderson, S. C. 122
Andersson, A. 70
Ando, K. 90
Andrea McCurdy, L. 30
Andreasen, D. H. 114
Andreas Matzinger, . 106
Andres, A. S. 91
Andresen, C. 50, 54
Andres, M. 79
Andrew, A. A. 103
Andrew Seitz, . 46
Andrews, O. D. 41
Androulidakis, Y. 39
Andrus, C. F. 87, 98
Angel-Benavides, I. M. 79
Anguelova, M. D. 37
Annick Bricaud, . 102
An, S. 91, 107
Anselmi, C. 40
Ansong, J. K. 30
Anson, I. 110
Antell, L. 45
Anthony, K. 104
Antje Boetius, . 30
Antoine, D. 102, 120, 121
ANTOINE, D. 89
Aono, T. 57, 67
Aoyama, M. 57, 67, 99
Aponte, L. 40
Apple, J. K. 50, 102
Apple, J. L. 44
Applin, G. 106
Applin, G. H. 106
Apprill, A. 113
Aragundi, W. M. 59
Aramaki, T. 42, 57
Arbic, B. K. 30, 40, 60, 75, 77
Arbuckle, N. S. 117
Archambault, A. 104, 114
Archer, M. R. 75, 92
Archer, S. D. 51
Ardhuin, F. 34, 37, 50
Ardisson, P. L. 101
Ardron, J. 33
Arellano, A. R. 50, 84, 103
Arellano, S. M. 59
Arenson, R. 78
Aretxabaleta, A. L. 45
Argentino, J. F. 44
Arhonditsis, G. B. 115
Aristizabal, M. F. 71
Arko, R. A. 78
Armbrust, E. V. 37, 87, 115
Armstrong, A. 78
Armstrong, E. J. 115
Armstrong, E. M. 66, 83
Armstrong, R. A. 94
Arneborg, L. 63, 64, 92, 110, 112
Arnoldi, N. S. 58
Arnold, W. A. 106
Arnone, B. 47
Arnone, R. 35, 47, 101, 102, 105, 110, 120
Arnone, R. A. 101, 102, 105, 110
Arnosti, C. 46, 115
Arnott, K. D. 47
Arnott, S. 51, 70
Arobone, E. 75
Arocho, N. E. 118
Arrigo, K. R. 63, 93, 98, 99, 113, 119
Arruda, W. 82
Arthur, C. D. 122
Arthur, K. A. 114
Arthur, K. E. 93, 114
Artigas, M. L. 116
Arzayus, K. 54, 79
Arzel, O. 63
Arzeno, I. B. 64, 70
Asch, R. G. 33
Asher, E. C. 93
Asher, W. E. 34, 45
Ashford, J. R. 113
Ashjian, C. A. 73
Ashjian, C. J. 119
Aslam, S. 95
Asper, V. 91
Asper, V. 109
Asplin, L. 112
Assmann, K. M. 108
Aßmann, S. 74
Astor, Y. 87, 89, 101
Atkins, E. 124
Atkinson, L. 55
Atlas, R. 29
Atlas, R. M. 29
Atmadipoera, A. 123
Atsuhiko, I. 33, 42
Auclair, F. 75, 77
Auel, H. 41
Augustin, C. 70
Aulov, O. 29
Ault, J. S. 78
Aumont, O. 51
Aurea Ciotti, . 102
Aurin, D. A. 47
Austin, J. A. 36, 116
Austin, T. 64
Avery, G. B. 62
Avery, J. K. 66
Avlesen, H. 111
Awaji, T. 81
Ayers, J. M. 52
Ayoub, L. M. 108
Ayoub, N. K. 30

- Azam, F. 72
 Azetsu-Scott, K. 54, 108
 Azumaya, T. 64
- B**
- Babanin, A. V. 110
 Babb, I. 31, 43
 Babb, I. G. 31
 Babbini, A. 46, 54
 Babbini, A. R. 46
 Babcock, R. 35, 109
 Babcock, R. C. 35
 Babin, M. 98, 99, 119
 Bachman, B. E. 115
 Bachman, S. 80, 88
 Backlund, C. M. 119
 Backus, S. 105
 Bacon, S. 54, 63, 86, 88
 Baden, D. 43
 Bader, J. 56
 Badger, J. H. 36
 Baehr, J. 125
 Baer, S. E. 99
 Bae, S. 107
 Bahk, J. 70
 Bahr, F. 57, 69
 Bahr, F. L. 57
 Bailey, B. 37
 Bailey, D. 93
 Bailey, H. 68
 Bailey, S. W. 120
 Bailly, X. 104
 Baird, B. E. 58
 Baird, M. 65, 80
 Baird, M. E. 80
 Bai, X. 41
 Bajona, B. 46
 Baker, A. R. 32
 Baker, D. M. 93
 Baker, E. T. 43, 112
 Baker, M. 34, 68
 Baker, M. C. 34
 Bakhoday Paskyabi, M. 68
 Bakker, D. B. 108
 Bakker, D. C. 60, 62
 Bakker, D. E. 108
 Balachandar, S. 62, 120
 Balcom, P. H. 77
 Ballabrera, J. 34
 Ballance, L. 68
 Ballard, R. D. 57, 66, 78
 Ballerini, T. 34, 44
 Baltar, F. 84
 Balwada, D. 38
 Båmstedt, U. 70
 Banahan, S. 65
 Banas, N. 36, 42, 92, 115
 Banas, N. S. 36, 92, 115
 Bange, H. 41, 96
 Bange, H. W. 41, 96
 Banks, C. 34
 Banyte, D. 51
 Banzon, V. F. 66
 Baptista, A. 36, 39, 48, 53, 66, 83, 122
 Baptista, A. M. 36, 39, 48, 53, 66, 83
 Baquiran, J. 112
 Barabara Block, . 46
 Barada, L. P. 50
 Baranova, O. 79
 Barba, A. 40, 106
 Barba, A. P. 106
 Barbariol, F. 105
 Barbeau, K. 36, 71, 87, 113
 Barbeau, K. A. 36, 71, 72, 87
 Barbeau, K. B. 71
 Barber, D. G. 101
 Barbero, L. 108
 Bardin, A. M. 60
 Bargu, S. 106, 123
 Barker, A. D. 92
 Barker, R. 50
 Barlow, J. 69
 Barminski, J. 37
 Barnard, A. 44, 48, 53, 55, 59, 121
 Barnard, A. H. 44, 53, 55, 59
 Barnard, P. L. 88
 Barnes, B. 108
 Barnes, C. R. 55
 Barnier, B. 51, 65, 107
 Barofsky, A. 70
 Barott, K. L. 36
 Barrera, C. 44
 Barrera-Galderique, A. 108
 Barreto-Orta, M. 51
 Barrett, J. 82, 88
 Barrett, J. I. 82
 Barr, N. S. 64
 Barron, C. 47, 64, 72, 75, 85, 105
 Barron, C. N. 47, 64, 75, 85
 Barroso, C. P. 88
 Barry, J. 33, 59, 104, 121
 Barry, J. P. 59, 104, 121
 Bartels, B. 72
 Barth, J. 31, 40, 59, 65, 69, 85, 90
 Barth, J. A. 31, 40, 65, 69, 85, 90
 Barth, N. 53
 Bartlett, K. B. 85
 Bartlett, K. P. 49
 Bartoli, M. 113
 Barton, A. 114, 116
 Barton, A. D. 116
 Barton, D. 44, 74
 Barton, D. J. 74
 Barton, E. D. 66
 Barton, G. 85
 Bartowitz, K. 122
 Bascheck, B. 58
 Bascheck, B. 52, 76
 Basdurak, N. B. 48
 Baseman, J. 44
 Basilio, A. J. 47
 Baskaran, M. M. 78
 Baskerville, T. C. 92, 109
 Basovich, A. 50
 Bassett, C. S. 104
 Bass, P. 37
 Basu, S. 34
 Batchelder, H. 49
 Batchelder, H. P. 49
 Bateman, S. P. 75
 Bates, J. J. 66
 Bates, M. L. 111
 Bates, N. R. 53, 80, 93, 101, 111, 119
 Bates, S. C. 61
 Batista, F. C. 93, 114
 Batten, S. D. 39
 Battles, J. J. 91
 Bauer, J. E. 46
 Baumann, H. 57, 122
 Baumann, M. S. 73
 Baumann, Z. 57
 Baumann, Z. A. 57
 Baumberger, T. 104
 Baumert, H. Z. 75
 Baumgartner, M. F. 116
 Baumgart, P. 30
 Baum, S. K. 78
 Bayen, A. M. 71
 Bayer, S. R. 33
 Bayler, E. 64
 Baylor, V. D. 99
 Beard, N. L. 110
 Béal, D. 124
 Beal, L. M. 38
 Beardall, J. 95
 Beardsley, R. 64, 66, 70, 88, 119
 Beardsley, R. C. 57
 Beardsley, R. C. 64, 66
 Beat Müller, . 106
 Beatty, C. M. 74
 Beaulieu, S. E. 33, 43, 69
 Beaupre, S. R. 53, 61
 Beazley, M. 92
 Bebieva, Y. 123
 Beck, A. J. 62
 Becker, J. M. 72, 74, 75
 Becker, J. W. 36, 115
 Beckler, J. S. 59, 84, 87
 Beck, M. 61
 Bedard, J. M. 46
 Bednarsek, N. 115
 Beegle-Krause, C. J. 86
 Beggs, H. M. 111
 Beggs, S. E. 95
 Beguery, L. 91
 Behar, A. 64
 Behl, M. 68
 Behra, P. 59
 Behrenfeld, M. J. 120
 Behrenfeld, M. J. 102, 117, 120
 Behrens, E. 54, 63
 Behringer, D. 64
 Beirne, E. C. 98
 Beisser, K. 64
 Bélanger, S. 119
 Belcher, A. C. 71
 Belcher, S. E. 32, 42
 Beletsky, D. 41
 Belicka, L. 113
 Belkin, I. 83
 Bell, A. F. 59
 Bell, C. 39, 48, 116
 Bell, C. W. 39, 116
 Bellingham, J. 49, 54, 56, 69, 74, 83, 85, 122
 Bellingham, J. G. 54, 56, 69, 74, 83, 85, 122
 Bell, K. C. 66
 Bell, K. L. 57, 78
 Bell, R. J. 49
 Bell, S. J. 111
 Belmadani, A. 94
 Belonenko, T. V. 100
 Belyaev, K. P. 33
 Beman, J. M. 103
 Bender, M. I. 38
 Bender, M. L. 51, 60
 Bender, S. J. 37, 115
 Benetazzo, A. 105
 Beneze, E. L. 48
 Benfield, M. C. 95
 Benitez-Nelson, C. 109
 Benitez-Nelson, C. 32, 105, 109
 Benitez-Nelson, C. R. 32
 Benjamin, W. 71
 Ben Mustapha, Z. 120
 Benner, I. 49, 97, 121, 122
 Benner, R. 53, 61, 63, 98
 Bennert, E. 35
 Bennett, R. H. 35
 Bennett, S. A. 112
 Bennington, V. 53, 106
 Bennis, A. C. 37, 50
 Benoit-Bird, K. J. 73
 Benoit-Cattin, A. 89
 Benson, S. R. 114
 Bent, J. 51, 60
 Bent, J. D. 60
 Bentley, S. J. 106, 123
 Benway, H. M. 34
 Berelson, W. 37, 60, 87, 103, 121
 Berelson, W. M. 37
 Berelson, W. M. 37, 60, 87, 103, 121
 Bergamaschi, B. A. 89
 Bergauer, K. 70, 84
 Bergen, W. 65
 Bergeron, E. 90, 105
 Berger, S. A. 40
 Berges, J. A. 48, 117
 Bergkvist, J. 70
 Bergondo, D. L. 48
 Berg, P. 55, 65
 Bergquist, D. 48
 Berkelmans, R. 92
 Berlianty, D. 40
 Berloff, P. 94
 Bermejo, M. 32
 Bernardello, R. 45, 97
 Bernard Gentili, . 102
 Bernardino, A. F. 43
 Bernard, K. S. 113
 Bernard, S. 102
 Bernasconi, S. M. 97
 Bernhardt, P. W. 53, 102
 Bernsten, J. 111
 Beron-Vera, F. J. 75
 Berry, D. L. 81
 Bertino, L. 102
 Bertrand, E. 56, 81
 Bertrand, E. M. 56
 Berube, P. M. 36
 Berumen, M. L. 93, 114
 Berys, C. 66
 Besson, F. 44, 117
 Best, C. H. 89
 Bester, M. N. 58
 Beszczynska-Moeller, A. 88, 98
 Beszteri, B. 49
 Beszteri, S. 48
 Bever, A. J. 46
 Beyer-Robson, J. 122
 bianchi, d. 49
 Bianchi, D. 94
 Bianchi, T. 35, 36, 48, 98
 Bianchi, T. S. 35, 98
 Bian, N. 98
 Bianucci, L. 76
 Biastoch, A. 29, 38, 54, 56, 63

- Bickel, S. L. 59
 Biddanda, B. A. 78
 Biddle, J. 70, 90, 112
 Biddle, J. F. 90
 Biddle, J. G. 112
 Bidle, K. D. 59
 Bidlot, J. 32
 Bierce, P. J. 103
 Bigg, G. R. 63
 Biggs, D. 69
 Bignami, S. G. 114
 Bigorre, S. 42, 124
 Bi, H. 95
 Bik, H. M. 86
 Biktashev, V. 116
 Biladeau, C. 71
 Biller, D. 32, 77
 Biller, D. V. 77
 Billheimer, S. 111
 Billiot, A. 89
 Bilo, T. C. 76
 Biló, T. C. 39
 Bi, N. 109, 123
 Binder, B. J. 96
 Bindoff, N. 41, 42, 123
 Bindoff, N. L. 42, 123
 Bindschadler, R. 64
 Bingham, B. L. 69, 70
 Bingham, F. M. 45
 Birch, D. A. 52
 Birch, J. M. 78
 Birchler, J. J. 109
 Birkholz, N. F. 62
 Birner, T. 38
 Birsa, L. M. 40
 Bisagni, J. J. 86, 113
 Bishop, J. K. 34, 44
 Bishop, S. P. 100
 Bishop, T. 41
 Bissett, P. 35
 Bittler, K. 117
 Bizimis, M. 87
 Bjork, G. 63, 64
 Bjorklund, T. A. 112
 Bjorndal, K. A. 35, 114
 Blacic, T. M. 82
 Black, B. A. 87
 Blackford, J. C. 94
 Black, H. D. 98
 Blackhurst, T. D. 75
 Black, P. G. 88
 Black, T. 78
 BLAIN, S. 105
 Blake, A. 91
 Blakely, M. D. 81
 Blake, R. E. 62
 Blanchard, A. L. 99, 112, 119
 Blanchard, J. L. 34
 Blanchette, C. 94
 Blanco-Bercial, L. 73
 Blandin, J. 105
 Blanke, B. 50
 Blaser, S. 91
 Blayo, E. 81
 Blazek, M. 50
 Bleck, R. 79
 Bleich, M. 102
 Blidberg, R. 85
 Block, B. 35, 58, 68, 69
 Block, B. A. 35, 58, 68, 69
 Blomquist, B. W. 51
 Bloomer, P. 35
 Bloomfield, C. 32
 Blough, N. V. 103
 Bluhm, B. A. 85, 119
 Blumberg, A. F. 66
 Blunt, N. 33
 Blythe, B. J. 96
 Blythe, J. N. 43, 78
 Boaventura Geraldo, G. R. 69
 Bochdansky, A. B. 84
 Bochenek, R. J. 78
 Bock, C. 87
 Bockmon, E. E. 114
 Boebel, O. 38
 Boegman, L. 41
 Boening, C. 51
 Boetius, A. 89, 105, 121
 Bogdanoff, A. S. 111
 Bogeberg, M. 117
 Bograd, S. 31, 44, 58, 68
 Bograd, S. J. 44, 58, 68
 Bohlke, J. K. 91
 Boicourt, W. 40, 55, 66
 Boiteau, R. M. 97
 Bolam, S. 33
 Boldt, K. 92
 Boldt, K. V. 92
 Boleman, C. L. 82
 Bolint, H. 58
 Bollozos, I. 122
 Bollozos, I. F. 122
 Bolten, A. B. 35, 114
 Bolton, C. T. 53
 Bomeisl, L. P. 70
 Bonaglia, S. 113
 Bona, S. R. 70, 118
 Bond, N. A. 33, 85, 124
 Böning, C. 29, 31, 54, 63
 Böning, C. W. 31, 54, 63
 Bonin, J. A. 63
 Bonner, J. 44, 107
 Bonner, J. S. 44, 107
 Bonnet, S. 103, 121
 Bontempi, P. S. 120
 Book, J. 80, 110
 Book, J. W. 110
 Booth, J. F. 33
 Booth, N. 30
 Bootsma, H. A. 31, 55
 Bopp, L. 31, 33, 51, 108, 121
 Borberg, J. M. 82
 Borg, A. 84
 Borgeld, J. 53, 123
 Borgeld, J. C. 123
 Borghini, M. 75
 Bornemann, H. 58
 Borrazzo, K. 97
 Borrelli, M. 82, 104
 Borrero, L. A. 97
 Borunda, A. 72
 Bosak, E. J. 114
 Boschker, E. 115
 Boss, E. 44, 50, 59, 78, 91, 102, 120
 , 121
 Boss, E. S. 50, 91, 102, 120
 Bostick, B. C. 72, 97
 Bostock, H. C. 108
 Botella, J. 67
 Böttger, L. 50
 Böttjer, D. 102
 Bouanchaud, J. 75
 Boudreau, D. 33
 Bouffard, D. 41
 Bouffard, J. 75
 Bouillon, S. 97
 Bourassa, M. A. 31, 42, 78, 84
 Bourexix, P. 31, 50
 Bourexix, P. S. 31
 Bourgault, D. 112
 Bourg, L. 84
 Bourles, B. 58
 Bourrin, F. 91
 Bouruet Aubertot, P. 67
 Bouruet-Aubertot, P. 45, 75, 123
 Bouttier, P. A. 81
 Bowen, A. 38
 Bowen, J. L. 37
 Bowen, W. D. 35
 bower, a. 43
 Bower, A. S. 52
 Bowers, D. G. 78
 Bowers, J. 102
 Bowers, J. B. 102
 Bowie, A. R. 32, 77
 Bowlby, E. 114
 Bowles, J. 35
 Bowles, J. H. 35, 47, 122
 Bowman, H. 80
 Bowman, J. S. 95
 Bowman, K. L. 32, 77
 Bowman, M. H. 72
 Bowman, M. J. 80
 Boyce, D. G. 79
 Boyd, B. M. 62
 Boyd, P. 32, 58, 102, 114, 121
 Boyd, P. W. 58, 102, 114, 121
 Boyd, R. 104
 Boyd, T. 48, 116
 Boyd, T. J. 116
 Boyer, T. 47, 54, 79
 Boyer, T. P. 47
 Boyle, E. A. 32, 77, 97
 Bozec, A. 40, 56
 Bozeman, M. 122
 Bracco, A. 37, 49, 63, 72, 91, 100
 Bracegirdle, T. J. 29
 Bracher, A. 105
 Brachet, S. 32
 Brachfeld, S. 87, 99
 Bracken-Grissom, H. 73, 92
 Bracken-Grissom, H. D. 92
 Bradassi, F. 82, 104
 Bradley, C. J. 93, 114
 Bradley, N. M. 48
 Bradstreet, T. 48
 Brailsford, G. 51
 Braithwaite, K. M. 78
 Brancato, M. S. 114
 Branch, R. 34, 111
 Branch, R. A. 111
 Brand, A. J. 53
 Brandes, J. 76, 108
 Brandes, J. A. 76
 Brando, V. 74, 121
 Brando, V. E. 121
 Brandt, A. 74, 106
 Brandt, A. M. 106
 Brandt, P. 31, 41, 58, 67, 110, 111
 Brandt, S. B. 82
 Brankart, J. 72, 81, 124
 Brankart, J. M. 72, 124
 Brannigan, L. 29
 BRANSON, O. 121
 Branton, R. M. 46
 Bresseur, P. 72, 81, 124
 Brassington, G. B. 92
 Bratton, J. A. 91
 Brault, E. K. 113
 Bravo, H. 30, 41
 Bravo, H. R. 41
 Breene, C. 102, 122
 Breene, C. L. 102
 Breier, C. 67, 121
 Breier, C. F. 67
 Breier, J. A. 112
 Breitbarth, E. 102
 Breitbarth, M. 70
 Breland, M. 117
 Brennan, M. L. 78
 Brenner, S. 29
 Brennon, R. E. 67
 Bresnahan, P. J. 74
 Bressan, G. 82, 104
 Brewer, J. 104
 Brewer, P. G. 105
 Brewin J.W. Robert, R. J. 84
 Brewster, J. 78
 Brey, J. A. 81
 Brey, T. 87
 Brian Zachry, . 76
 Bricaud, A. 98
 Bricaud, C. 65
 Brickley, P. J. 89
 Bridoux, M. C. 48, 93
 Briegleb, B. 61
 Briggs, B. R. 70
 Briggs, J. 76
 Briggs, K. 78
 Briggs, N. 34, 44, 59, 78, 125
 Briggs, N. T. 59
 Brigham-Grette, J. 104
 Brill, R. 40, 51
 Brill, R. W. 51
 Bringas, F. 92
 Brink, K. 116
 Brink, K. H. 59, 69
 Briscoe, L. J. 112
 Briseño-Avena, C. 72
 Bristowe, L. 30
 Bristow, L. 60, 70, 113, 124
 Bristow, L. A. 60, 70, 124
 Britton, W. B. 86
 Brix, H. 31, 89
 Broadaway, B. J. 104
 Broad, M. 50
 Brock, L. M. 48
 Brodeur, R. D. 78
 Brodie, E. 70
 Brodie, K. L. 119
 Brody, S. R. 43
 Broek, T. 57, 114
 Broek, T. A. 114
 Bronk, D. A. 99, 101, 119
 Bronner, E. 64
 Brooks, A. 35, 71, 78
 Brooks, E. J. 35, 78
 Brooks, G. 92, 108, 109
 Brooks, G. R. 108, 109
 Brooks, I. M. 45

- Brooks, M. T. 37, 49, 50
 Brooks, S. D. 61
 Broquet, G. 95
 Brosnan, I. G. 46
 Broström, G. 58, 68, 92, 110
 Brostromm, G. 68
 Brothers, L. L. 90
 Brovchenko, I. 83
 Brower, P. M. 50
 Brown, A. L. 122
 Brown, C. 34, 46, 49, 120
 Brown, C. J. 34
 Brown, C. W. 46, 120
 Brown, E. D. 83
 Brown, J. 72, 75, 120
 Brown, J. A. 74, 75, 120
 Brown, K. 43, 44, 121, 124
 Brown, K. L. 43
 Brown, K. M. 44
 Brownlee, E. 119
 Brown, M. 43, 77, 113
 Brown, M. G. 77
 Brown, M. T. 113
 Brown, P. J. 108
 Brown, S. M. 64
 Brown, T. A. 57
 Brown, T. L. 82, 104
 Brown, W. 55, 66
 BROWN, W. 66
 Brown, Z. W. 99, 113, 119
 Brubaker, J. M. 95
 Bruce, J. S. 70
 Brüchert, V. 113
 Bruedgam, M. 125
 Brüggemann, N. 42
 Bruland, K. 32, 77
 Bruland, K. W. 77
 Brum, J. R. 49, 95
 Brumsack, H. J. 87
 Brunner, C. A. 108
 Brunner, E. 94, 114
 Brunner, E. L. 94
 Brunner-Suzuki, A. E. 75
 Brust, J. 101
 Bryan, F. 29, 33, 60, 61
 Bryan, F. O. 29, 33, 60
 BRYAN, F. O. 42
 Bryant, J. A. 115
 Bryden, H. L. 60, 120
 Brzezinski, M. A. 61, 90, 106, 115
 Bub, F. 46, 81, 100, 124
 Bub, F. L. 46, 100
 Bucciarelli, E. 77, 81
 Buchwald, C. 103, 121
 Buck, C. M. 107
 Buck, C. S. 77
 Buckingham, C. E. 82
 Buck, K. 77, 87, 97, 104
 Buck, K. N. 77, 87, 97
 Buck, K. R. 104
 Buckley, L. 34
 Buckley, M. 48, 50, 63, 64, 82, 120
 Buckley, M. E. 48, 82
 Buckley, M. L. 120
 Buckley, M. W. 63
 Bucklin, A. 73, 84
 Bucklin, A. C. 84
 Buck, N. 77
 Budgell, W. P. 80
 Budillon, G. 64
 Buesseler, K. 32, 57, 67, 77, 89, 113
 Buesseler, K. O. 32, 57, 67, 77, 89, 113
 Buffett, G. G. 82
 Bugden, G. 62
 Bühler, O. 79
 Buhr, S. M. 33
 Buijsman, M. C. 57
 Buitenhuis, E. 41, 94, 115
 Buitenhuis, E. T. 41, 94, 115
 Bullister, J. L. 30, 31, 60
 Bulseco, A. N. 102
 Bulusu, S. 45
 Bundy, R. 71, 87, 113
 Bundy, R. M. 71, 87
 Bunge, L. G. 107
 Bunkley-Williams, L. 117
 Burbank, R. 89
 Burchell, M. 87
 Burcicki, D. M. 69
 Burdett, H. L. 87
 Burdige, D. J. 53, 61
 Burdloff, D. 123
 Burfird, M. 122
 Burgaud, G. 70
 Burgess, A. K. 60
 Burgess, T. 55
 Burgin, A. J. 53
 Burke, P. 74
 Burke, P. B. 74
 Burkhardt, B. G. 110
 Burkhardt, S. M. 108
 Burkholder, J. M. 81
 Burnett, K. G. 104
 Burnett, L. E. 104
 Burnett, P. F. 63
 Burrows, M. T. 34
 Burton, R. S. 73
 Busalacchi, A. 120
 Busch, D. S. 104
 Buscombe, D. 78, 120
 Busecke, J. 34, 54
 Bush, A. B. 86
 Bushinsky, S. M. 74
 Buskey, E. J. 96, 117
 Butler, E. C. 32
 Butler, T. D. 124
 Butman, B. 72
 Butz, A. 84
 Byrne, D. 56, 66, 79
 Byrne, D. A. 56, 66
 Byrne, R. 59, 84, 121
 Byrne, R. H. 59, 84
 Byun, D. S. 64
 Byun, G. H. 118
- ## C
- Caballero Alfonso, A. M. 30
 Cabanes, C. 65
 Cable, J. E. 46
 Cabrera, O. 90
 Cadden, D. D. 107
 Caffrey, J. M. 71
 Cahill, B. 53
 Cai, P. 80
 Cai, W. 53, 63, 89, 94, 114, 119
 cai, W. J. 53
 Cai, W. J. 53, 63, 114
 Cai, Y. 120
 Calado, L. 39, 83
 Calantoni, J. 74, 75, 111, 112
 Calbet, A. 70
 Caldeira, R. 80
 Caldeira, R. M. 80
 Calderon, T. 66
 Callaghan, A. H. 37, 58
 Callaghan, M. E. 49
 Calleja, M. L. 93
 Calliari, D. 49
 Calvert, D. 32
 Camara-Mor, P. 76, 77
 Camassa, R. 46, 67, 115
 Cambon, G. 41
 Camilli, R. 43, 105, 108
 Cammer, S. S. 46, 89
 Camoying, M. 122
 Camoying, M. G. 122
 Campagna, S. R. 70
 Campbell, B. J. 36
 Campbell, C. L. 114
 Campbell, D. A. 103
 Campbell, E. 76
 Campbell, J. R. 96
 Campbell, L. E. 45
 Campbell, R. G. 73, 119
 Campbell, R. W. 36, 93
 Campbell, T. 38, 80, 88
 Campbell, T. J. 38
 Campin, J. 81
 Campin, J. M. 38, 63
 Campos, E. D. 38, 111
 Campos, E. J. 38
 Camren Brown, C. L. 122
 Canals, M. 40, 47, 75, 106
 Canals, M. F. 40, 75
 Candela, J. 79, 80
 Canfield, D. E. 124
 Caniaux, G. 124
 Canion, A. 92
 Cannaby, H. 115
 Canuel, E. A. 35, 46, 62, 89, 107, 113
 Cao, F. 95, 102
 Cao, F. J. 95
 Cao, W. Q. 71
 Cao, Z. 65, 83
 Cape, M. 54, 87
 Cape, M. R. 54
 Capers, J. 44
 Capone, D. 37, 50, 103, 113, 117, 121
 Capone, D. G. 50, 103, 113, 117, 121
 Capotondi, A. 90
 Carassou, L. 37
 Card, E. 86
 Cardenas Ramos, F. 97
 Cardigos, F. 33
 Cardona, L. 44
 Cardona, Y. 37, 72
 Caress, D. W. 103
 Carrillo, L. 47
 Carini, P. 48
 Carini, R. J. 88
 Carleton, C. D. 79
 Carlin, G. 65, 109
 Carlin, G. D. 35
 Carlin, J. A. 109
 Carlisle, A. 35, 69
 Carlisle, A. B. 69
 Carlos Garcia, . 102
 Carlotti, F. 117
 CARLOTTI, F. 105
 Carlson, C. 36, 41, 52, 61, 69, 89
 Carlson, C. A. 36, 41, 52, 61, 89
 Carlson, J. O. 36
 Carlson, N. 35
 Carmack, E. C. 98
 Carmichael, R. H. 107
 Carnes, M. R. 47
 Carniel, S. 105, 110
 Carnuel, E. 123
 Carolan, M. T. 103
 Caron, D. A. 90, 95, 104, 106
 Carotenuto, Y. 70
 Carotenuto, Y. 70, 116
 Carozza, D. 94, 115
 Carozza, D. A. 115
 Carpenter, E. 37, 49, 50, 97, 121, 122
 Carpenter, E. J. 37, 49, 50, 97, 121, 122
 Carpenter, J. 116
 Carpenter, R. C. 121, 122
 Carporaso, J. G. 36
 Carrano, C. C. 59
 Carrano, C. J. 50
 Carrasco, G. 77, 87
 Carré, M. 97
 Carrera, A. 118
 Carriere, O. 105
 Carrier, M. J. 64, 81, 105
 Carroll, M. L. 86, 98
 Carroll, S. S. 119
 Carson, H. S. 83
 Carstensen, J. 30
 Carter, B. 49, 124
 Carter, B. R. 124
 Carter, G. S. 31, 86, 110, 123
 Carter, H. A. 104, 115
 Carton, J. 54, 56, 68, 120, 124
 Carton, J. A. 54, 68, 120, 124
 Carton, X. 52
 Cartwright, G. M. 78, 112
 Caruso, M. J. 117
 Casacuberta, N. 57, 67
 Casciotti, K. L. 103, 121
 Casey, B. 47
 Casey, K. S. 66
 Cash, C. 45
 Cassano, J. J. 64
 Cassar, N. 38, 43, 51
 Cass, C. J. 37
 Castelain, R. 63, 83
 Castelain, R. M. 83
 Castel, D. 50
 Casteletti, A. 97
 Casties, I. 94, 121
 Castle, R. 108
 Castleton, M. R. 68
 Castro, B. M. 39
 Castro-Ortiz, M. C. 60
 Castro, S. L. 111
 Castruccio, F. 45, 85, 106
 Castruccio, F. S. 85, 106
 Cattolico, R. A. 116
 Causey, D. 36
 Cawley, K. 35
 Cawood, A. M. 117
 Cayula, S. 64
 Cía, B. 61
 Ceballos, L. 104, 115
 Ceccopieri, W. 76
 Cefarelli, A. O. 99

- Cenedese, C. 95, 112
 Centurioni, L. 55, 90
 Centurioni, L. R. 90
 Cermenio, P. 116
 Cerovecki, I. 33, 40, 124
 Cervantes, B. K. 52
 Cervantes, B. T. 75
 Cessi, P. 29, 38
 Cetinic, I. 44
 Cetinic, I. 34, 44, 55, 125
 Cetrulo, B. 31, 44
 Chaffin, M. D. 84
 Chai, A. 94
 Chai, F. 80, 93, 105
 Chakrabarti, A. 88
 Chakraborty, S. 62
 Chalamalla, V. 67
 Chalikov, D. 31, 110
 Challenor, P. G. 81
 Chambers, D. P. 63
 Chance, R. 32
 Chan, C. S. 112
 Chandler, C. L. 78
 Chandra Franklin, C. 122
 Chan, F. 31, 40, 94, 113, 114
 Chang, B. X. 85
 Chang, D. 85
 Chang, F. 65
 Chang, F. H. 65
 Chang, k. i. 42
 Chang, K. I. 64
 Chang, M. 79, 107
 Chang, N. 121
 Chang, P. 56, 64
 Chang, P. S. 64
 Changsheng Chen, . 30
 Chang, W. 70, 96
 Chang, W. J. 96
 Chang, Y. 81, 83, 88, 89, 90
 Chang, Y. L. 89, 90
 Chang, Y. S. 81
 Chan, I. 66
 Chan, K. 82, 121
 Chan, P. 87
 Chan, S. 45
 Chanton, J. 90, 109
 Chanton, J. P. 90
 Chant, R. 35, 36, 45, 47, 69, 71, 109
 Chant, R. J. 35, 36, 71, 109
 Chanut, J. 65
 CHAO, S. 88
 Chao, Y. 29, 34, 45, 49, 64, 65, 71, 89, 100, 101, 105
 Chapman, C. C. 79
 Chapman, D. 66, 78
 Chapman, J. 106
 Chapman, M. R. 95
 Chapman, P. 74
 Chappell, J. C. 122
 Chappell, P. D. 56, 69
 Chapron, B. 34
 Charette, M. 32, 67, 77, 93, 121
 Charette, M. A. 32, 67, 77, 121
 Chariv, J. E. 74
 Charles Alexander, . 46
 Charles, C. D. 77
 Charles, D. 97
 Charneco, M. 94
 Charnotsky, M. I. 77
 Charoenpong, C. N. 60, 70
 Charrière, B. 61
 Charters, J. W. 77
 Chase, A. P. 46, 84
 Chase, Z. 62
 Chassignet, E. 40, 56, 80, 82, 100, 106
 Chassignet, E. P. 40, 56, 100, 106
 Chatagnier, J. 75
 Chaudhuri, A. 105, 124
 Chaudhuri, A. H. 124
 Chauhan, A. 92, 109
 Chavanne, C. 64
 Chaves, J. E. 99
 Chavez, F. 54, 68, 83, 94, 106, 122
 Chavez, F. P. 68, 83, 106, 122
 Checkley, D. M. 39, 44
 Checkley, Jr., D. M. 37
 Cheel, R. 88
 Chekalyuk, A. 36, 37, 48, 82
 Chelton, D. B. 92
 Chelton, D. B. 80, 111, 120
 Chénard, C. 48
 Chen, B. 119
 Chen, C. 57, 65, 66, 88, 90, 119
 Chen, D. 80, 92
 Chen, G. 92
 Cheng, H. 32, 72
 Cheng, L. 46, 49, 117
 Cheng Ma, C. 30
 Cheng, P. 71
 Cheng, W. 54, 63, 85
 Cheng, X. 38
 Cheng, Y. 64, 74
 Cheng, Z. 62, 74
 Chen, H. 38, 61, 70, 122
 Chen, H. C. 38
 Chen, J. 53, 62, 97
 Chen, K. 80
 Chen, L. 91, 97, 119
 Chen, M. 38, 71
 Chen, M. R. 71
 Chen, Q. J. 75
 Chen, R. 30, 46, 53, 58, 62, 71, 82
 Chen, R. F. 30, 46, 53, 58, 62, 71
 Chen, S. 36, 50, 56, 79, 88, 90, 112
 Chen, S. N. 36, 112
 Chen, S. S. 50, 88
 Chen, W. F. 121
 Chen, W. Y. 65
 Chen, Y. 65, 107
 Chen, Y. K. 65
 Chepurin, G. A. 54
 Chereskin, T. K. 29, 38
 Cheriton, O. M. 69
 Chern, C. S. 107
 Cherrier, J. 92, 109
 Cherukeru, N. 109
 Cheung, I. 44
 Chiang, T. 82, 107
 Chiba, H. 112
 Chiba, S. 43, 113
 Chicakdel, C. C. 88
 Chichlowski, E. 70
 Chickadel, C. C. 36, 72
 Chidichimo, M. P. 29
 Chien, M. H. 75
 Chierici, M. 108
 Chigbu, P. 117
 Chiggato, J. 75, 80
 Chikamoto, M. O. 61
 Chikaraishi, Y. 93, 114
 Childs, A. R. 35
 Chilton, L. 41
 Chini, G. P. 32, 42, 52
 Chin, T. M. 83
 Chin, Y. P. 71, 106
 Chiou, M. D. 107
 Chipman, L. 55
 Chisholm, S. W. 36
 Chiste, M. J. 50
 Chistoserdov, A. Y. 92
 Chivers, D. 121
 Chmeleff Jerome, J. 69
 Cho, C. W. 91
 Cho, H. 90
 Choi, B. 39, 64, 81, 114
 Choi, B. H. 114
 Choi, B. J. 38
 Choi, B. J. 39, 64
 Choi, C. J. 48, 117
 Choi, D. 48, 79
 Choi, D. H. 48
 Choi, H. J. 91
 Choi, H. S. 91
 Choi, H. Y. 32, 115
 Choi, J. 38, 41, 50, 107, 110, 122
 Choi, J. K. 107
 Choi, J. U. 107
 Choi, K. S. 117, 118
 Choi, N. K. 107
 Choi, N. Y. 107
 Choi, S. H. 107
 Choi, T. J. 91
 Choi, Y. 66
 Chong, L. 37, 60
 Chong, L. S. 37
 Chorin, A. J. 124
 Chotikarn, P. 65
 Chough, S. K. 97
 Chou, P. H. 74
 Chou, W. 55
 Chow, C. T. 89
 Chowdary, J. 79
 Cho, Y. 39, 48, 81, 83
 Choy, C. A. 93
 Choy, E. J. 117, 118
 Choy, K. 114
 Cho, Y. K. 38, 48, 83
 CHRISTAKI, U. 105
 Christ, D. 87
 Christensen, A. H. 44
 Christensen, J. P. 119
 Christensen, K. 58, 68
 Christensen, K. H. 58, 68
 Christensen, T. R. 55, 64
 Christenson, E. A. 97
 Christian, A. D. 107, 117
 Christian, J. R. 108
 Christiansen, J. 115
 Christie, D. 43
 Chuang, C. 97
 Chuang, V. J. 61
 Chua, V. P. 107
 Chuda, T. 100
 Chu, J. W. 117
 Chung, J. 41, 77
 Chung, J. L. 77
 Chu, P. C. 46, 81
 chu, P. Y. 30
 Churchill Grimes, . 46
 Church, J. A. 39
 Church, M. J. 89, 101, 102, 115
 Church, T. M. 32, 77
 Churnside, J. 83
 Churnside, J. H. 83
 Chu, T. 32
 Chu, X. 92
 Ciannelli, L. 40, 70
 Ciavatta, S. 89
 Ciminiello, P. 116
 Cimino, M. A. 46, 59
 Cinquini, L. 34
 Ciobanu, A. 117
 Cisternas, C. 103
 Clague, D. A. 103
 Clark, C. 85
 Clark, D. 34, 88, 111
 Clark, D. B. 88
 Clarke, A. 107, 113
 Clarke, A. J. 107
 Clarke, C. 119
 Clarke, J. 43
 Clarke, J. W. 43
 Clarke, S. 104
 Clark, H. 41, 55, 64, 67
 Clark, H. R. 41, 67
 CLARK, J. 66
 Clark, J. R. 95, 123
 Clark, N. 76
 Clark, P. D. 78
 Clark, S. J. 75
 claustre, h. 64
 Claustre, H. 44, 49, 54, 71, 79, 117
 Clavierie, T. 97
 Clayton, C. A. 58, 111
 Clayton, S. A. 94
 Clement, D. 91, 108
 Clement Kinney, J. 113
 Clement, L. 120
 Clementson, L. 43, 97, 121
 Cline, D. 54
 Clyde, W. C. 105
 Cobb, M. 124
 Cobb, R. M. 98
 Coble, P. 53, 103, 108
 Coble, P. G. 103, 108
 Cochran, E. M. 46
 Codiga, D. L. 71
 Codron, F. 32
 Coelho, E. 57, 64, 66, 68, 81, 85
 Coelho, E. F. 57, 66, 68, 81, 85
 Cohen, A. L. 94, 114
 Cohen, J. H. 108
 Cohen, S. 122
 Coholan, P. D. 89
 Cokelet, E. D. 85, 87, 115
 Colaco, A. 33
 Colbert, S. 60
 Colbourne, E. 54
 Cole, H. S. 33
 Cole, K. L. 83
 Coleman, D. F. 33, 66, 78
 Coleman, K. 93
 Coleman, M. 112
 Cole, S. 31, 52
 Cole, S. T. 31
 Coles, V. 37, 49, 50, 58
 Coles, V. J. 37, 49, 50, 58
 Coletti, L. J. 44
 Colin de Verdière, A. 63, 79
 Colin, S. 85, 95, 96, 117

JOIN
NOW!

ASLO fosters a diverse, international scientific community that creates, integrates & communicates knowledge across the full spectrum of aquatic sciences, advances public awareness and education about aquatic resources and research, and promotes scientific stewardship of aquatic resources for the public interest. Its products and activities are directed toward these ends.

*Publications
and Journals:*

- Limnology and Oceanography
- Limnology and Oceanography: Methods
- Limnology and Oceanography: Bulletin
- Limnology and Oceanography: Fluids and Environments
- Limnology and Oceanography: e-Lectures
- Limnology and Oceanography: e-Books

*Meetings
and Programs:*

- Image Library of Exciting Photos
- Education and Outreach Activities
- Meetings as a Society and Joint Meetings with Other Scientific Societies

*Member
Benefits Include:*

- Contribute to and receive scholarly publications
- Attend and contribute to innovative scientific meetings
- Get connected! Meet leaders and peers in the aquatic sciences
- Get involved! Join the ASLO board or committees & be a leader
- Make a difference through education and outreach programs that work
- Develop professionally

www.aslo.org

ASLO

Association for the Sciences of Limnology and Oceanography



ASLO 2012 Membership

Join online at www.aslo.org

Your Information:

FIRST NAME _____ MIDDLE INITIAL _____ LAST NAME _____

ADDRESS LINE 1 _____

ADDRESS LINE 2 _____

ADDRESS LINE 3 _____

ADDRESS LINE 4 _____

CITY _____ STATE _____ ZIP/POST CODE _____

COUNTRY _____

Demographic Information:

Please complete and/or indicate any changes to the following in the space provided below.

Institution/Organization: _____

Dept/School: _____

Telephone: _____

Fax: _____

E-Mail: _____

Gender (M/F): _____ Birth Year: _____

Highest Degree: _____ Year Completed: _____

Discipline: _____

Enter in order of priority: B-Biological O-Optical C-Chemical P-Physical G-Geological

Disciplinary Specialty (Use no more than 30 characters.): _____

Field: _____

LIM (Limnology) or OCE (Oceanography). Enter primary first if listing both.

Environmental Specialty: _____

- Enter no more than four in order of priority.*
- | | | |
|--------------------------|-----------------|---------------|
| 1-Lakes/Reservoirs/Ponds | 4-Wetlands | 7-Open Ocean |
| 2-Rivers/Streams | 5-Estuaries | 8-Most or all |
| 3-Great Lakes | 6-Coastal Ocean | |

Please list recent awards and/or honors received:

- I **DO NOT** wish to be included in third-part mailings. Please add me to the mailing list of the ASLO Policy Action Network.

Payment Information:

- Check enclosed. Make your check payable in US dollars to: **ASLO**. Checks must be drawn on a US or Canadian bank.
- Credit card payment:
- VISA MasterCard American Express Discover

CARDHOLDER NAME _____

CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

Membership Dues

Membership is based on a calendar year (Jan-Dec) and includes *L&O Bulletin*, *L&O Fluids & Environment* (ASLO's new on-line journal) and discounts on meeting registration fees. Members with print or electronic subscriptions receive *L&O* and *L&O: Methods*. Subscription to printed version includes access to electronic version. Use your ASLO Member ID Number (P#) to access the electronic version via the ASLO web site.

- Regular Member with Subscription** to *Limnology and Oceanography* and *L&O: Methods*.
- Printed Version \$215.00
 - Electronic Version Only \$85.00
- Regular Member without Journal Subscription \$60.00
- Early Career Professional Member with Subscription** to *Limnology and Oceanography* and *L&O: Methods*. (Non-student members who have received their highest degree within the last 10 years)
- Printed Version \$170.00
 - Electronic Version Only \$40.00
- Early Career Professional Member without Journal Subscription \$15.00
- Student Member with Subscription** to *Limnology and Oceanography* and *L&O: Methods*. (5-year limit for graduate students)
- Printed Version \$170.00
 - Electronic Version Only \$40.00
- Student Member without Journal Subscription \$15.00
- Emeritus Member with Subscription** to *Limnology and Oceanography* and *L&O: Methods*.
- Printed Version \$170.00
 - Electronic Version Only \$40.00
- Emeritus Member without Journal Subscription No Charge
- New! Sustaining Membership** (with recognition in the *Bulletin*) Add \$100.00
- I wish to remain anonymous.
- New! Lifetime Membership** (with recognition in the *Bulletin*) \$2,000.00
- I wish to remain anonymous.

New! Developing Countries Membership

ASLO supports scientists and students needing financial support for membership from countries listed on the OCED, <http://www.icmi9.org/public/documents/pdf/es/OECD.pdf>.

- Developing Countries Regular Membership
- With print Journal \$150.00
 - With electronic Journal \$ 20.00
- Developing Countries Student Membership
- With Print Journal \$130.00
 - With electronic Journal \$ 0.00

NAME OF INSTITUTION (REQUIRED) _____

NAME AND EMAIL OF ADVISOR (REQUIRED) _____

Society Fund Contributions

- Donation to Student Travel Fund \$ _____
- Donation to Endowment Fund \$ _____
- Supports awards, special projects, and programs.*
- Donation to Education & Outreach Fund \$ _____
- Contributors to be recognized in the L&O Bulletin.*
- New! \$5.00 for Student/Early Career activities at meetings \$5.00

Limnology and Oceanography CD-ROM Offer

- L&O Archival CD-ROM set (1956-1998, Volumes 1-43) \$150.00
- Shipping Charges—North America \$10.00
 - Shipping Charges—Outside North America \$15.00

Limnology and Oceanography Bulletin

All members receive an electronic subscription.

- Limnology and Oceanography Bulletin* Printed Version No Charge

ASLO Biography Series

- Alfred C. Redfield \$20.00
- Ramon Margalef \$20.00

Membership Directory

The membership directory is available to members online. To purchase a printed biennial directory, please contact business@aslo.org

Total Amount Enclosed \$ _____

Remit to: **ASLO** · 5400 Bosque Blvd. · Suite 680
Waco, Texas 76710-4446

Contact: 800-929-ASLO or 254-399-9635 Voice, · 254-776-3767 Fax · business@aslo.org

- Colin, S. P. 85, 95, 117
 Collie, J. S. 34, 48, 49
 Collier, K. 37
 Collignon, A. G. 53, 71
 Collins, A. 70
 Collins, C. A. 76, 94
 Collins, C. O. 100
 Collins, D. 78
 Collins, J. A. 66
 Collins, N. 81, 124
 Collins, R. E. 116
 Colman, A. 62, 98
 Colman, A. S. 62
 Colón-Rivera, R. J. 97
 Colon, Y. 45
 Colton, M. 30
 Colwell, F. S. 70
 Combes, V. 110
 Comeau, A. M. 115
 Comeau, D. S. 97
 Comeau, S. 121
 Companion, C. 31, 54, 55, 64
 Conan, P. 110
 Conathan, M. 58
 Concannon, B. M. 52
 Condal, A. R. 101
 Condon, R. 37, 108, 109, 117
 Condon, R. H. 37, 108, 117
 Conkright, M. 79
 Conley, D. 30, 78, 120
 Conley, D. C. 78, 120
 Conley, D. J. 30
 Conmy, R. N. 103
 Connelly, T. L. 99, 101, 113
 Connolly, T. 42, 69
 Connolly, T. P. 69
 Conrad, M. 109
 Conroy, B. J. 37
 Consi, T. R. 70
 Conte, M. 66, 77, 89, 101
 Conte, M. H. 66, 77, 89
 Conway, T. M. 32
 Cook, S. 44, 95
 Coombs, S. 89
 Cooper, B. 88
 Cooper, J. K. 72, 82
 Cooper, L. W. 73, 85, 99, 119
 Cooper, P. R. 103, 104
 Cooper, R. D. 115
 Cooper, S. K. 67
 Cooper, W. 89
 Copley, J. T. 33
 Copley, N. J. 73, 85
 Coppini, G. 74
 Coppola, A. I. 61
 Corbett, D. R. 53
 Corlett, W. B. 111
 Cornell, S. R. 74, 75
 Cornillon, P. C. 66, 82
 Cornils, A. 73
 Cornuelle, B. 40, 72, 81, 89, 100, 101
 Cornuelle, B. D. 40, 72, 81
 Cornwall, C. E. 102
 Corredor, J. 40, 101
 Corredor, J. E. 104
 Correia, L. 49
 Corselli, C. 98
 Corson, M. 35
 Corson, M. R. 35, 47
 Cortinas, J. V. 66
 Cosca, C. E. 115
 Cosgrove, R. 46
 Cosme, E. 81
 Cossu, R. 41
 Costa, D. 54, 58, 64, 68
 Costa, D. P. 54, 58, 64, 68
 Costa, E. S. 44
 Costa-Pierce, B. A. 82
 Costello, J. 85, 95, 96, 117
 Costello, J. H. 85, 95, 117
 Cottier, F. R. 92
 Cotton, C. F. 92
 Coughlin, A. 87
 Courcoux, Y. 101
 Courties, C. 110
 Courtois, P. 51
 Cousins, S. 93
 Couvelard, X. 80
 Coward, A. C. 88
 Cowen, E. A. 122
 Cowen, R. K. 69, 73, 83, 95, 114, 116
 Cowles, T. J. 65
 Cowley, P. D. 35
 Cox, C. S. 45
 Cox, D. 62, 88
 Cox, D. T. 88
 Cox, N. 74
 Cox, T. 44
 Coyle, K. O. 85
 Coyne, K. J. 81
 Craig, J. 41, 78
 Craig, J. D. 41
 Cramer, C. B. 58
 Cram, J. A. 89
 Crandall, J. B. 70
 Crandall, K. A. 73, 92
 Cravatte, S. 82, 107
 Crawford, D. W. 99
 Crawford, K. 68
 Crawford, W. R. 31
 Crespo-Medina, M. 91, 109
 Cressie, N. 76
 Crimaldi, J. P. 59, 106, 122
 Crise, A. 45
 Crispo, S. M. 53
 Crocker, D. E. 58
 Cronin, M. F. 33, 56, 124
 Cronin, T. M. 66, 85
 Croot, P. L. 32
 Cross, J. 62, 93, 119
 Cross, J. N. 93, 119
 Cross, S. L. 39, 79
 Crout, R. L. 80
 Crowley, M. 30, 54
 Crowley, M. F. 54
 Crudeli, D. 98
 Crump, B. 50, 83
 Crump, B. C. 83
 Crusius, J. 93
 Cruz López, R. 70
 Cucci, T. L. 33
 Cuhel, R. L. 44, 101
 Cuker, B. E. 40
 Cullen, D. 60
 Cullen, J. T. 32, 71, 77, 123
 Cumani, F. 82, 104
 Cumbo, V. R. 121
 Cummins, P. F. 41, 116
 Cunningham, C. 43
 Cunningham, S. A. 120
 Cuning, R. 94
 Curchitser, E. 105
 Curchitser, E. 73, 80, 85, 106
 Curchitser, E. N. 80, 85, 106
 Curcic, M. 50
 Currie, K. 89, 102
 Currie, K. I. 89
 Currin, C. A. 96
 Curry, B. 54, 63
 Curtis, D. A. 70
 Cusack, M. 87
 Cutajar, J. 96
 Cutter, G. 40, 72, 77, 107
 Cutter, G. A. 107
 Cutter, G. C. 40
 Cutter, L. C. 77
 Cuypers, Y. 45, 67, 75, 123
 C.W. June/Chang, C. J. 107
 Cynn, M. J. 75
 Cyr, F. 112
 Czaja, A. 33, 79
 Czerny, J. 102
 Czeschel, L. 100
 Czeschel, R. 42
 Czirkowsky, M. J. 74
- ## D
- Dababneh, J. 74
 Dabiri, J. 95, 96, 117
 Dabiri, J. O. 95, 117
 Dacey, J. W. 93
 Dadic, R. 98, 99
 Dadou, I. 41, 84
 Dagg, M. J. 36
 Dail, H. 81
 Dai, M. 55, 65, 71, 80, 121
 Dai, M. H. 65, 71, 121
 Daines, S. 38, 95, 123
 Daines, S. J. 95, 123
 Dale, A. 39, 48, 116
 Dale, A. C. 39, 116
 Daley, K. 85
 Dalgleish, F. R. 78, 86, 122
 Dalsgaard, T. 124
 Dalyander, P. S. 72
 Daly, K. 34, 40, 54, 109
 Daly, K. L. 34, 37, 54, 109
 D'Ambrosio, L. 91
 Danabasoglu, G. 54, 61, 63, 81
 Dang, T. C. 71
 Daniault, N. 54
 Daniela Gurlin, . 120
 Daniel, P. 74, 121
 Daniel, P. J. 121
 Daniels, E. 36
 Danielsen, M. 89
 Danielson, S. 73, 85, 94
 Daniels, R. 46, 64
 Daniels, R. M. 64
 Danilov, S. 63
 Danioux, E. 94, 111
 Dansereau, D. 82
 Darby, D. 99
 Darecki, M. 42
 Darelus, E. 111
 Darer, A. 69
 D'Asaro, E. 44
 D'Asaro, E. 34, 44, 55, 59, 88, 125
 Dasher, D. 66, 99
 Dasher, D. H. 66
 Dash, M. K. 51
 da Silva, J. 57
 Das, J. 54, 122
 Dastugue, J. M. 64
 Dausman, A. M. 86
 Dausse, D. 123
 Dauxois, T. 57, 67
 Dave, A. 46, 84
 Davidson, E. R. 57
 Davidson, K. 57
 Davies, A. G. 74
 Davies, E. J. 91
 Davis, A. M. 82
 Davis, C. 35, 43, 47, 95, 102
 Davis, C. O. 35, 47, 102
 Davis, C. S. 43, 95
 Davis, K. A. 36, 42
 Davis, M. B. 104
 Davison, P. C. 93
 Davis, R. 43, 95
 Davis, R. E. 95
 Davis, X. J. 124
 Dawson, C. 72, 124
 Day, A. 74
 Day, R. H. 99, 119
 Dean, C. 40, 66
 Deane, G. B. 37, 50
 Deans, N. L. 85
 Death, R. M. 51
 de Baar, H. 32, 77, 91
 De Baar, H. 32, 68
 De Baar, H. J. 32
 de Beer, D. 55, 89, 105
 De Beer, D. 121
 de Boer, A. M. 56, 95
 De Boer, A. M. 54
 de Boissésou, E. 124
 Deb, P. 51
 Debreu, L. 81
 DeBruyckere, L. 37
 De Carlo, E. H. 30, 39
 DeCarlo, E. H. 39
 deCharon, A. 34, 55
 deCharon, A. 31, 54, 64, 71
 Décima, M. 93
 Decima, M. R. 125
 Decker, M. B. 117
 Declodt, T. M. 79
 De Corte, D. 84
 de Cuevas, B. 54
 DeDonato, M. 44, 76, 121
 DeDonato, M. P. 44
 DeFares, B. A. 45
 DeGrandpre, M. D. 74, 114
 DeGrazia, A. 95
 DeHaan, C. 98
 Deheyn, D. D. 51
 Deibel, D. 106, 122
 de Jong, J. 32
 Dekaezemacker, J. 103, 121
 Dekker, A. G. 121
 Dekker, T. J. 30
 de Kluijver, A. 102
 Delaney, J. 56, 58, 65, 85, 105
 Delaney, J. R. 56, 58, 65, 105
 De Lange, G. J. 97, 98
 de La Rosa, L. 70
 Del Castillo, C. 76

- De Leo, F. C. 43
 Delgado, A. L. 102
 Dellapenna, T. 74, 91, 109
 Dellapenna, T. M. 91, 109
 Della Ripa, L. A. 93
 Dellaripa, N. W. 90, 106
 Dell, R. W. 79
 Dellwig, O. 84
 DeLong, E. F. 115, 124
 DeLong, K. L. 87
 DeLuca, C. 34
 Del Vecchio, R. 103
 Delworth, T. 29, 54, 58, 81
 Delworth, T. L. 29, 58, 81
 De Manzano, A. 44
 DeMaster, D. 113
 DeMaster, D. J. 113
 Demer, D. A. 83
 De Mey, P. 29, 30
 De Mey, P. J. 29
 D'Emidio, M. 74, 105
 Deming, J. W. 95, 116
 Demirov, E. 54, 63
 Demirov Entcho, E. 54
 Deng, C. 61
 Dengler, M. 31, 45, 110
 Denman, K. 49, 55
 Denman, K. L. 55
 Dennison, B. 50
 Denny, A. R. 105
 de Nooijer, L. 87
 Denton, E. B. 84
 DePinto, J. V. 30
 de Putron, S. 70
 deRada, S. 105, 110
 Deremble, B. 111
 Derr, A. 44, 48
 de Ruijter, W. P. 38
 Derval, C. 83
 Desai, S. D. 40
 Descoteaux, R. 97
 Deser, C. 90
 Deshayes, J. 33
 Dessailly, D. 120
 de Steur, L. 54, 98
 de Zoeke, S. P. 111
 Detrick, L. 45
 Deunnebie, F. 55
 Deutsch, B. 113
 Deutsch, C. 31, 41, 113, 123
 Deutscher, R. R. 41
 DeVaul, S. B. 36
 DEVENON, J. 105
 Dever, E. P. 65, 106
 Devlin, A. 31
 Devol, A. 30, 62, 85, 124
 Devol, A. H. 30, 62, 85
 de Vos, A. 68
 DeVries, T. 52, 60
 DeVries, T. J. 52
 Dewar, H. 68
 Dewar, W. K. 111
 Dewayne Fox, . 46
 Dewey, R. 39, 49, 55, 82, 85
 Dewey, R. K. 39, 49, 85
 Dewey, R. W. 55
 Dewitte, B. 83, 84, 111, 120
 Dexter, E. D. 70
 Dhillon, A. 112
 Dia, M. 71
 Diamessis, P. J. 57
 Diao, X. 106
 DIAZ, F. 105
 Díaz-Negrón, E. M. 117
 Dibarboure, G. 64
 Dickerson, T. L. 117
 Dick, G. 112
 Dickhut, R. M. 113
 Dickinson, S. 110
 Dickson, A. G. 114, 124
 Dickson, R. R. 54
 Didelle, H. 57, 67
 Didwischus, S. H. 31, 67
 Diederick, L. K. 44
 Diercks, A. 91, 109
 Dierrsen, H. M. 121
 Dierssen, H. M. 120
 Dietrich, D. E. 80
 Dietze, H. 103, 108
 DiFiore, P. J. 121
 Diggs, S. C. 66
 DiGiacomo, P. 30
 Di Iorio, D. 124
 Dijkstra, H. 63
 Dijkstra, H. A. 63
 Dikovskaya, N. 94
 Dillon, A. 30
 Dillon, J. 88
 Di Lorenzo, E. 63, 68, 94, 121
 Di Lorenzo, E. 82
 Dimarco, S. 36
 DiMarco, S. 39, 46, 48, 52, 68, 74, 83, 85, 106, 109
 DiMarco, S. F. 39, 46, 52, 68, 74, 83, 85, 106, 109
 Dimond, J. 69, 70
 Dimond, J. L. 70
 Ding, H. 58
 Ding, P. 39
 Ding, X. 84
 Ding, Y. 61
 Dinnel, P. A. 62
 Dinniman, M. 54, 63, 64, 70
 Dinniman, M. S. 54, 63, 64
 Dinsdale, E. A. 36
 Ditchfield, A. K. 76
 Dittmar, T. 50, 53, 61, 87, 89, 103, 110
 DiTullio, G. R. 59
 Divakaran, P. 92
 Dix, J. K. 39
 Dixon, K. W. 29
 Dixson, D. L. 121
 Djath, N. 107
 Dmitrenko, I. 88, 98
 Dmitrenko, I. A. 88
 Dobarro, J. 69
 Dobbs, F. C. 76
 Dublin, M. 43, 55, 95, 97
 Dublin, M. A. 43
 Dobricic, S. 29
 Dodds, W. 89
 Doering, C. R. 77
 Doglioli, A. 117
 Doglioli, A. 75
 DOGLIOLI, A. 105
 Dogliotti, A. I. 79
 Dohan, K. 54, 64, 94
 Doherty, M. 50
 Doi, T. 58
 Doll, C. 81
 Domack, E. 54, 87
 Domingues, R. M. 83
 Donaghay, J. 83
 Donaghay, P. 83
 Donaghay, P. L. 83
 Donat, J. R. 87
 Donelan, M. A. 42, 50
 Donelan, R. P. 59
 Doney, S. C. 38, 58, 60, 72, 91, 94, 13, 120
 Doney, S. L. 30
 Dong, C. 80, 92
 Dongliang Yuan, . 106
 Dong, Q. 102
 Dong, S. 111, 124
 Dongun Kim, J. 36
 Dong, Z. 50
 Donis, D. 55
 Donlon, C. J. 92
 Donner, S. D. 34, 68
 Donohue, K. A. 29, 38, 80, 100
 Donohue, P. 87
 Dore, J. E. 101
 Dorfman, D. S. 78
 Dorfman, R. E. 97
 Dorman, C. 116
 Dorman, C. E. 33
 Dorman, J. G. 44
 Dorofeev, V. 115
 Doron, M. 124
 Dorph, R. 31, 41
 D'Ortenzio, F. 34, 44
 D'Ortenzio, F. 44, 79
 Dosser, H. V. 114
 DouAbul, A. A. 62
 Doubell, M. J. 83
 Doubleday, A. J. 95
 Doucette, G. J. 122
 Dougans, J. 77
 Douglass, E. M. 57, 124
 Dove, A. 70
 Dover-Good, L. H. 34, 41
 Dove, S. 94
 d'Ovidio, F. 75
 D'Ovidio, F. 64
 Dowd, M. 76
 Dowell, M. D. 102
 Dower, J. 82
 Downer, M. 86
 Downes, S. M. 29, 124
 Downie, R. 85
 Downing-Kunz, M. A. 62
 Doxaran, D. 99
 Doyle, J. D. 80
 Doyle, T. D. 95
 Doyle, T. K. 68
 Drake, M. K. 121
 Draut, A. E. 62
 Drazen, J. C. 93
 Drennan, W. 31, 45, 100
 Drennan, W. M. 45, 100
 Drevillon, M. 65, 83
 Drillet, Y. 65, 83
 Drinkwater, K. 86
 Drinkwater, K. F. 86
 Driscoll, N. 123
 Drivdal, M. 58, 68
 Driver, L. E. 61
 Drucker, R. 31
 Drudi, M. 29
 Druffel, E. M. 61
 Druffel, E. R. 53
 Drupp, P. 30, 39
 Drupp, P. S. 30, 39
 Drymon, M. 70
 D'Sa, E. J. 89, 98, 101
 Duarte, C. 37, 117
 Duarte, C. M. 117
 Dubinsky, E. A. 109
 Dubranna, J. 42, 79
 Dubranna, J. L. 42
 Du, C. 65
 Ducklow, H. 37, 51, 93, 95, 113
 Ducklow, H. W. 37, 93, 95
 Duda, A. 37
 Dudgeon, M. B. 48
 Duennebie, F. 31
 Dufault, A. M. 121
 Dufault, S. 46
 Duffaut Espinosa, L. A. 87
 Duff, R. J. 116
 Duffy, J. E. 107
 Dufour, C. O. 51
 Dugan, B. 61
 Dugan, D. 30, 85
 Dugan, D. G. 30
 Dugdale, R. 36, 91
 Duguay, L. 33, 41
 Dukhovskoy, D. 80
 Dukhovskoy, D. S. 80
 DU, L. 99
 Dulaiova, H. 57, 66
 Duliaova, H. 67
 Dulvy, N. K. 44
 Dumas, F. 50
 Dumbauld, B. 106
 Du, N. 99
 Dunagan, S. E. 47
 Dunbar, J. A. 105
 Dunbar, R. 38, 94, 104, 114
 Dunbar, R. B. 62, 104, 114
 Duncan, D. D. 104
 Duncley, J. 69, 72
 Duncley, J. F. 72
 Dungan, J. L. 47
 Dunlap, D. S. 70
 Dunne, J. 34, 41, 43, 60, 61, 84, 115, 125
 Dunne, J. P. 34, 41, 43, 61, 84, 115, 125
 Dunn, S. 78
 Dunphy, M. W. 75
 Dunton, K. 99, 119
 Dunton, K. H. 99, 119
 Dupont, C. L. 36
 Dupont, S. 82, 104, 121
 Durack, P. J. 47
 Durand, E. 83
 Durbin, E. G. 51
 Durette, C. 39
 Durgadoo, J. V. 56
 Durkin, C. A. 37, 115
 Durland, T. S. 120
 Durreiu de Madron, X. 91
 Durreiu de Madron, X. 46
 Dussin, R. 65
 Duteil, O. 41, 108
 Dutkiewicz, S. 61, 116, 123, 125
 Dutra, E. 94
 Dutrieux, P. 63
 Dutt, K. 45

Dutton, P. H. 114
 Dutz, J. 114
 Duval, D. 35, 109
 Duval, D. I. 35
 du Vall, K. 39
 Du, Y. 79
 Dwivedi, R. M. 34
 Dwivedi, S. 76
 Dwyer, A. 86
 Dyda, R. Y. 89, 103
 Dyhrman, S. T. 56, 81
 Dykes, J. 124
 Dziallas, C. 70
 Dzieciuch, M. A. 72
 Dzwonkowski, B. 69

E

Eaglesham, J. 59
 Eakin, C. M. 34, 38, 55, 64
 Eakin, D. 72, 82
 Early, J. J. 94, 120
 Easley, R. A. 84
 Easson, C. G. 104
 Easson, G. L. 74
 Ebuchi, N. 90
 Echevoyen-Sanz, Y. 77
 Eckert, G. L. 49
 Eck, T. F. 101
 Edebeli, J. 69
 Eden, C. 42, 82, 100, 125
 Edenfield, L. E. 119
 Ederington-Hagy, M. 92
 Ederington-Hagy, M. C. 92
 Edgcomb, V. 70
 Edgington, D. 54
 Edmunds, P. J. 121
 Edson, J. B. 33
 Edullantes, B. 48
 Edwards, B. R. 70
 Edwards, C. 116
 Edwards, C. A. 36, 76, 95
 Edwards, C. R. 85
 Edwards, K. J. 112
 Edwards, K. L. 39
 Edwards, M. 39, 47
 Edwards, M. R. 47
 Edwards, R. J. 87
 Edwards, R. L. 32, 72
 Eert, J. 86
 Effendy AWM, . 49
 Effler, S. W. 120
 Egbert, G. D. 39, 40, 59
 Eggert, A. 41, 113
 Eggins, S. M. 87
 Egilsdottir, H. 104
 Eglinton, A. J. 62
 Eglinton, T. I. 98
 Ehlert, C. 41, 65
 Ehn, J. K. 99, 119
 Eichinger, M. 61
 Eicken, H. 51
 Eickmann, B. 104
 Einolf, A. E. 70
 Eisner, L. 85
 Elderfield, H. 87
 Eldevik, T. 54, 88
 Eldoy, S. 99
 Eldredge, K. H. 109

Elgar, S. 74, 88
 Elipot, S. 94
 Elizabeth, R. 49
 Elliott, D. 96
 Elliott, D. 40
 Elliott, K. P. 66
 Elliott Rodriguez, W. 97
 Elliott, S. 67
 Ellis, A. M. 112
 Ellis, G. 108, 114
 Ellis, G. S. 114
 Ellwood, M. J. 32, 77
 El Shaffey, H. 76
 Embid, P. E. 123
 Embury, O. 56
 Emerson, S. 31, 60, 74
 Emerson, S. R. 60
 Emery, W. J. 84, 110
 Emond, M. 45
 Endo, H. 102
 Endoh, T. 32
 Endres, S. 103
 Enfield, D. 100, 110
 Enfield, D. B. 100
 Engel, A. 103
 Engelhart, S. E. 120
 Engels, M. 49
 Engel, V. C. 35
 England, M. H. 41, 52, 63, 111
 English, C. A. 58
 English, D. 85, 108
 English, D. C. 108
 Enochs, I. C. 94
 Enrich-Prast, A. 101
 Enriquez, C. 88
 Entwistle, C. 69
 Eplee, Jr., R. E. 120
 Epp-Schmidt, D. J. 113
 Erba, e. 98
 Erez, J. 104
 Eric Galbraith, e. 38
 Erickson, J. 74
 Erickson, M. 93
 Eriksen, C. C. 66, 92, 110, 111
 Eriksen, M. 55
 Erikson, L. H. 120
 Ermakov, S. A. 77
 Ermold, W. 92
 Erofeev, A. 85
 Erofeeva, S. 29, 40
 Erofeeva, S. Y. 40
 Ershova, E. 119
 Escudier, R. 80
 Espinosa, A. 122
 Esposito, F. 116
 Esser, D. 104
 Estapa, M. L. 102
 Estess, E. E. 58
 Estrada, M. 116
 et al., . 70
 Evans, D. 80, 87, 100
 Evans, D. G. 80, 100
 Evans, G. R. 60
 Evans, K. J. 68
 Evans, M. A. 106
 Evans, R. H. 66, 102
 Evans, W. 53, 94
 Everett, J. 55
 Ewing, N. R. 57
 Eyerdorn, T. 109

Ezer, T. 75, 116

F

Fabre, J. 72, 123
 Fabricius, K. 122
 Fach, B. 115
 Fadeev, V. V. 36
 Fahl, K. 61
 Fain, I. V. 38
 Fairall, C. W. 42
 Fairfield, C. 103
 Falco, P. 52
 Falina, A. 54
 Falkowski, P. G. 36
 Falk-Petersen, S. 101
 Fallick, A. E. 77, 97
 Fall, K. A. 112
 Fan, C. 46, 81
 Fan, C. W. 46
 Fan, D. 98
 Fandel, C. L. 71
 Fang, C. 67
 Fang, G. 90
 Fan, L. 56
 Fanning, K. A. 89, 101
 Fanning, L. 37
 Fan, T. Y. 121
 Fan, X. 63
 Fan, Y. 32, 120
 Fan, Z. 52
 Fargher, H. E. 76
 Fargion, G. 47, 102
 Fargion, G. S. 47
 Farias, L. 40
 Farington, S. 78
 Farmer, D. 57, 66
 Farmer, D. M. 57
 Farneti, R. 61
 Farnsworth, K. L. 109
 Farquharson, G. 47, 100
 Farrara, J. 29, 49, 100
 Farrara, J. D. 29, 100
 Farrar, J. T. 45, 120, 124
 Farris, K. J. 86
 Farr, N. 105
 Farst, C. 87
 Fassbender, A. 74, 108
 Fassbender, A. J. 74
 Fasullo, J. T. 110
 Fatland, D. R. 49
 Fauchereau, N. 51
 Faugère, Y. 64
 Fauver, A. 45
 Fauville, G. 82
 Faux, J. 71, 115
 Faux, J. F. 71
 Fay, A. R. 91
 Fayman, P. A. 39
 Fay, S. A. 36
 Feagin, R. 97
 Feddersen, F. 74, 75, 88, 122
 Fedele, F. 105
 Fedenczuk, T. 50
 Fedorov, A. V. 38, 54
 Feely, R. A. 30, 39, 60, 84, 94, 114, 115
 Feichter, J. 61
 Feili Li, F. 63
 Felber, J. 48
 Felcmanová, K. 36
 Felder, D. L. 92
 Feldman, A. G. 58
 Feliks, Y. 32
 Feng, D. 105
 Feng, H. 34, 102
 Feng, M. 105
 Feng, Y. 52
 Feng, Z. 72
 Fennel, K. 35, 52, 53, 62, 76, 89
 Fennell, S. 63
 Fennel, W. 39
 Fenty, I. 98
 Ferer, E. J. 107
 Ferguson, B. K. 74
 Ferguson, J. 113
 Fer, I. 58, 68, 98, 110
 Ferjani, D. 79
 Ferlino, A. F. 65
 Fermanich, K. 30
 Fernandes, F. P. 42
 Fernandez, C. 91, 121
 Fernández González, N. 37
 Fernandez, V. L. 59
 Fernando, H. J. 110
 Ferrari, M. C. 121
 Ferrari, R. 29, 33, 52, 72, 88
 Ferraris, M. 117
 Ferraro, C. A. 33
 Ferreira, D. 31, 38, 63
 Ferrer, R. P. 59
 Ferrier, G. A. 59
 Ferron, B. 54, 75, 123
 Ferrón, S. 35
 Ferry, N. 65
 Feseker, T. 89, 105
 Feyen, J. 29, 46
 Feyen, J. C. 46
 Fichot, C. G. 53, 63, 98
 Fiechter, J. 76
 Fiedler, B. 41, 74
 Fiedler, P. 68
 Fiekas, V. 112
 Field, D. 66
 Field, M. E. 62
 Fields, D. 45, 49, 96
 Fields, D. M. 45, 49
 Fields, J. C. 66
 Fierstein, D. 64
 Fietzek, P. 74
 Fiksen, Ø. 95
 Filina, J. 94
 Fincke, J. R. 72, 85
 Findlay, R. H. 114
 Fine, R. 30
 Finkel, Z. 95, 103, 115, 116, 122
 Finkel, Z. V. 95, 103, 116, 122
 Fink, H. V. 109
 Finney, B. 97
 Finzi Hart, J. A. 58
 Fiquet, F. 117
 Firing, E. 31
 Firing, Y. L. 29, 38
 Fischbach, A. S. 119
 Fischer, A. S. 30
 Fischer, J. 54
 Fischer, N. 102
 Fischer, P. F. 52
 Fischer, T. 110
 Fishbach, A. S. 73

- Fisher, C. 105
 Fisher, N. 57
 Fisher, N. S. 57
 Fitzgerald, W. F. 77
 Fitzpatrick, P. J. 100
 Fitzsimmons, J. N. 32, 97
 Fitzsimons, M. F. 62
 Flagg, C. 63, 66
 Flagg, C. N. 63
 Flament, P. 80, 90
 Flampouris, S. 106
 Flatau, M. 79
 Fleisher, M. Q. 32, 72
 Fleming, A. H. 69
 Fleming, N. 95
 Flemming, N. 82
 Flick, R. E. 88
 Flierl, G. R. 77, 80, 82
 Flohr, A. 41
 Flood, R. D. 78
 Florio, K. 41, 55, 64, 67
 Florio, K. B. 41, 67
 Flower, B. 92, 108, 109
 Flower, B. P. 108, 109
 Flynn, A. 93
 Fogarty, M. J. 36, 49, 64
 Fogel, M. L. 93
 Fogleman, J. 50
 Foley, D. 58, 68
 Foley, D. G. 58
 Folkestad, A. 120
 Follett, C. L. 61
 Follows, M. 31, 36, 94, 116, 123, 125
 Follows, M. J. 36, 94, 116, 123, 125
 Folmer, M. 64
 Foltz, G. R. 67
 Fong, D. A. 59, 69, 107
 Fong, P. 31, 41
 Fontana, C. 124
 Font, J. 34, 45
 Foong, L. P. 48
 Foote, A. D. 58
 Ford, M. R. 72, 74
 Ford, P. 35, 109
 Ford, P. W. 35
 Foreman, C. M. 71
 Forest, A. 98
 Forest, C. E. 61
 Foretich, M. A. 70
 Forget, F. 81
 Forget, G. 124, 125
 Forney, D. C. 61
 Fornwall, M. D. 79
 Forrest, B. 71
 Forryan, A. 32
 Fortier, L. 98
 Fortin, W. 72, 82
 Fortin, W. F. 82
 Fortunato, C. 50
 Fortus, M. I. 66
 Foster, D. 46, 74, 120
 Foster, D. L. 74, 120
 Foster, M. R. 107
 Foster, R. 49, 50, 103, 117
 Foster, R. A. 50, 117
 Foster, R. C. 117
 Foucher, J. 89, 105
 Foucher, J. P. 105
 Foux, V. R. 100
 Fowler, C. 54
 Fowler, M. 58
 Fowler, R. A. 45, 67
 Fox, A. L. 99, 119
 Fox, C. G. 78
 Fox, C. J. 35
 Fox, D. A. 46
 Fox-Kemper, B. 29, 31, 32, 37, 61, 72, 80, 87, 88
 Fox, P. A. 49
 Foy, M. S. 85
 Frade, P. R. 70
 Frago Vázquez, J. L. 96
 Fraile-Nuez, E. 37
 Frajka-Williams, E. 111, 120
 Fram, J. P. 39, 55, 65
 Francesca De Martini, F. 115
 Francis, C. F. 103
 Francis, O. P. 29
 Franck, V. M. 70, 82
 Frank, C. 74
 Frank, D. P. 74
 Frank, E. 116
 Frank, K. 84, 112
 Frank, K. L. 84
 Franklin, D. J. 48
 Frank, M. 41, 65, 77, 124
 Franks, P. 75, 105, 115, 122
 Franks, P. J. 75, 105, 122
 Frank, T. M. 78
 Frants, M. 93, 113
 Franz, B. 36, 120
 Franz, B. A. 36
 Franze, G. 86, 116
 Franz, J. 110
 Franzke, D. 117
 Fraser, M. J. 51
 Fraser, W. 46, 113
 Fraser, W. R. 113
 Fratantoni, D. 111, 116
 Fratantoni, D. M. 111, 116
 Fratianni, C. 29
 Fredericq, S. 92
 Fredricks, H. F. 59
 Freeman, A. 66
 Freeman, E. 66
 Freeman, H. M. 92
 Freeman, S. A. 99
 Freitas, F. H. 84, 102, 106
 French-McCay, D. P. 109
 Frenger, I. 51
 Frenzel, H. 31
 Frette, O. 120
 Frew, R. D. 102, 114
 Freychet, N. 81
 Frey, K. 98, 99, 119
 Frey, K. E. 99, 119
 Frias-Torres, S. 47
 Fribance, D. 110, 123
 Fribance, D. B. 110, 123
 Fricke, A. T. 62, 109
 Fricker, H. A. 64
 Frid, L. J. 69
 Frieder, C. A. 121
 Friedrich, G. 94
 Friedrich, J. 76
 Friedrich, R. 54
 Friedrichs, A. 59
 Friedrichs, C. 46, 70, 78, 112
 Friedrichs, C. T. 46, 78, 112
 Friedrichs, M. 44, 46, 52, 53, 76
 Friedrichs, M. A. 44, 46, 52
 Fries, D. P. 85
 Fringer, O. B. 29, 41, 67, 71, 107, 122
 Frischer, M. 40, 76, 99
 Frischer, M. E. 40, 76, 99
 Froelicher, T. L. 29
 Frolov, S. 85
 Fruman, M. D. 67
 Fründt, B. 101
 Fry, B. 86
 Fry, G. 109
 Fuchs, H. L. 122
 Fuchsman, C. A. 62, 124
 Fuckar, N. S. 61
 Fuentes, M. 45
 Fu, F. 32, 102, 104, 121, 122
 Fu, F. X. 102
 Fuhrman, J. A. 89
 Fujii, M. 71, 102
 Fujii, Y. 81
 Fujiki, T. 48, 101
 Fujikura, K. 93
 Fujimoto, H. 39
 Fujimura, A. 67, 69
 Fujimura, A. G. 69
 Fujisaki, A. 43
 Fujita, K. 103
 Fujiwara, A. 119
 Fujiwara, Y. 93
 Fukamachi, Y. 90
 Fukasawa, M. 60
 Fu, K. H. 57
 Fu, L. 56
 Fuller, C. 107
 Fullerton, A. M. 74
 Fulton-Bennett, K. 64
 Fundis, A. 58, 64
 Fundis, A. T. 58
 Funk, A. 31, 34, 58, 67
 Furlong, J. C. 105
 Furse, C. 51
 Furukawa, Y. 111, 112
 Fu, T. C. 74
 Futrelle, J. 49
- ## G
- Gabarró, C. 34, 45
 GACS Board of Governance, . 39
 Gaessner, K. 115
 Gaichas, S. 34
 Gaillard, F. 54
 Galan, A. 113
 Galbraith, E. 31, 94, 111, 115
 galbraith, e. d. 49
 Galbraith, E. D. 94, 111, 115
 Galbraith, P. 112
 Galfond, B. 72
 Galibert, G. 55
 Galindo, H. M. 34
 Gallacher, P. C. 67
 Gall, A. E. 99, 119
 Gallagher, S. 83
 Gallagher, E. 74
 Gallagher, E. L. 74, 120
 Gallego, G. 105
 Gallego-Torres, D. 98
 Galperin, B. 94
 Galvanovskis, E. 86
 Galvarino, C. R. 78
 Gamelsrød, T. 63
 Gamot, T. 77
 Gan, B. 42
 Ganeshram, R. S. 77
 Gangopadhyay, A. 66, 80, 83, 105
 Gan, J. 52
 Gan, J. P. 116
 Gao, B. 35, 47
 Gao, B. C. 35, 47
 Gao, G. 88
 Gao, H. 71
 Gao, H. W. 48
 Gao, J. 80
 Gao, S. 107
 Gao, Z. 91
 Garaba, S. P. 65
 Garaffo, Z. 57
 Gárate, M. H. 117
 Garay, L. V. 34
 Garbe, C. S. 58, 84
 Garcia, C. A. 79
 Garcia-Carrillo, P. 79
 Garcia-Comas, C. 65
 Garcia, H. 79
 Garcia, N. 99, 102
 Garcia-Nava, H. 50
 Garcia, N. S. 102
 Garcia-Orellana, J. 57, 76, 77
 García-Orellana, J. 98
 GarciaPineda, O. G. 108
 García-Ríos, C. I. 116
 García-Tenorio, R. 57
 Garcia Tigreros, F. 35
 Garçon, V. 59, 84, 111
 Gärdes, A. 59
 Gardner, B. 46
 Gardner, G. B. 53
 Gardner, K. 41, 54, 55, 64, 67
 Gardner, W. D. 46, 71
 Gardner, W. S. 99, 113
 Garfield, N. 49
 Gargett, A. E. 53, 95
 Garcia, N. S. 122
 Garraffo, Z. 66, 75
 Garraffo, Z. D. 66, 75
 Garric, G. 65
 Gartman, A. 112
 Garwood, J. C. 53
 Gary, S. F. 111
 Garzio, M. J. 93
 Garzoli, S. 30
 Gasol, J. 37
 Gastrich, K. 92
 Gast, R. J. 36, 95, 115
 Gattuso, J. P. 102, 104
 Gaube, P. 120
 Gaultier, L. 72
 Gawarkiewicz, G. 59, 69
 Gawarkiewicz, G. G. 59, 69
 Gawlikowski, G. 47, 108
 Gawlikowski, G. J. 47
 Gayanilo, F. C. 78
 Gayen, B. 42, 57, 67
 Gaylord, B. P. 87
 Gaynus, C. J. 48
 Gay, P. 38, 50
 Gebbie, G. 51
 Gebler, M. 38
 Gedan, K. B. 107

- Geer, I. W. 81
 Gegg, S. R. 78
 Gehlen, M. 31, 33, 121
 Gehre, M. 114
 Gehrke, C. L. 44
 Geibert, W. 61, 77, 87
 Geider, R. J. 94
 Geier, S. L. 95, 106
 Geiger, E. F. 55, 59
 Geiman, J. D. 88
 Geisz, H. N. 113
 Gelderloos, R. 56
 Gelfenbaum, G. 109, 120
 Gelfman, C. 73
 Gelpi, C. G. 116
 Gelsleichter, J. A. 92
 Gemery, L. 85
 Gemmell, B. 96, 117
 Gemmell, B. J. 96
 Gemmrich, J. 50, 58
 Gemmrich, J. R. 50
 Genest, G. 64
 Genet, H. 91
 Genin, A. 43, 69, 72
 Gentemann, C. L. 110
 Gentio Harsono, . 90
 Gent, P. R. 29, 60
 George, J. 43, 52, 57
 George, J. A. 43, 52
 Ge, Q. 109
 Gerbi, G. 44, 121
 Gerbi, G. P. 44
 Gerdts, G. 53
 Gerin, R. 52, 75
 Germain, L. R. 114
 German, C. 34, 38, 43, 89, 112
 German, C. R. 34, 43, 112
 Gerringa, L. 32, 77
 Gersonde, R. 72
 Gerstoft, P. 105
 Gertman, I. 29, 101
 Gevaio, B. 77
 Geyer, R. 120
 Geyer, W. R. 36, 53, 72, 92, 112
 Ghantous, M. 110
 Ghedira, H. 48
 Gherboudj, I. 48
 Ghiglione, J. F. 98
 Ghil, M. 32
 Ghisalberti, M. 122
 Ghosh, P. 114
 Gibbes, B. 122
 Gibbs, S. 53
 Giblin, A. E. 106
 Gibson, B. 90
 Gibson, E. S. 51
 Gibson, G. A. 73, 85
 Gibson, J. 93
 Giddings, S. 36, 42
 Giddings, S. N. 36
 Gierach, M. M. 84, 100
 Gierlach, M. 56
 Giese, B. S. 124
 Gilbert, D. 30, 41
 Gilbert, M. T. 58, 84
 Gilerson, A. 101, 102, 120
 Giles, D. M. 101
 Gilg, I. 33
 Gill, B. C. 53
 Gille, S. 29, 51, 60, 70, 90, 93, 113
 Gille, S. T. 29, 51, 60, 70, 90, 113
 Gillikin, D. P. 97
 Gillis, D. 35
 Gilly, W. F. 58
 Gilroy, A. R. 70
 Gil, Y. 78
 Gimre, K. 97
 Ginis, I. 66, 70
 Ginter, C. C. 117
 Giosan, L. 105
 Giovannoni, S. 40, 48, 49
 Giovannoni, S. J. 48, 49
 Gipson, B. 77, 107
 Gipson, B. R. 107
 Girguis, P. 59, 78, 84, 112
 Girguis, P. R. 59, 84, 112
 Girton, J. 30, 38, 111
 Girton, J. B. 38, 111
 Giulivi, C. F. 34
 Gladding, S. 53
 Glance, W. J. 66
 Glaser, S. M. 36
 Glatts, R. 75
 Glazer, B. T. 39, 55, 59
 Glazewski, M. 46
 Glebushko, K. 74
 Gle, C. 87
 Gleckler, P. 61
 Gledhill, D. 94, 101, 104, 108
 Gledhill, D. K. 94, 101
 Gleiber, M. R. 37
 Gleichauf, K. T. 71
 Glenn, S. 31, 54, 55, 64, 66, 95, 116
 Glenn, S. M. 31, 54, 55, 95, 116
 Glessmer, M. S. 54
 Glibert, P. M. 43, 81
 Glinski, D. A. 62
 Gloeckler, K. M. 115
 Glover, D. M. 78, 94
 Glud, R. N. 55
 Gnanadesikan, A. 60, 111, 115
 Gobat, J. 63
 Gobler, C. J. 43, 81, 122
 Gochfeld, D. J. 104
 Goddard, E. 109
 Godin, M. 74, 83
 Godin, M. A. 83
 Godin, O. A. 66, 100
 Godoi, V. A. 83
 Godwin, W. J. 40
 Goebel, N. L. 36, 95
 Goericke, R. 82
 Goertz, J. T. 120
 Goes, J. 34, 37, 50, 58, 101, 117
 Goes, J. (. 37
 Goes, J. I. 34, 50, 101, 117
 Goés, J. I. 98
 Goetsch, C. 58
 Goetze, E. 49, 73
 Goff, J. A. 104
 Goggins, L. 40
 Goldberg, S. J. 89
 Golden, K. M. 51, 99
 Goldin, M. A. 82
 Goldman, E. A. 48, 115
 Goldman, K. J. 69
 Goldstein, M. C. 117
 goldstein, P. 79
 Goldstein, P. 78
 Goldstein, S. L. 77
 Gomes, A. 37
 Gomes, H. D. R. 98
 Gomes, H. R. 34, 37, 101, 117
 Gomes, K. 54
 Gomez, M. 44, 80
 Gommenginger, C. 34, 58
 Gommenginger, C. P. 58
 Goncalves, R. C. 38
 Gon, C. J. 74
 Gong, D. 90, 119
 Gong, G. 55, 65, 117
 Gong, G. C. 55, 65
 Gong, K. C. 65
 Gong, Y. 69
 Goni, G. 92
 Goni, M. 53, 123
 Goni, M. A. 123
 Gonnermann, H. M. 61
 Gontz, A. M. 75, 104
 González, A. G. 71
 González-Dávila, M. 71, 108
 González-Haro, C. 92
 Gonzalez, J. 40, 89, 105
 Gonzalez, J. P. 105
 González-Posada, A. 34
 González, V. 45
 Goodbred, S. L. 123
 Goode, W. 42, 78, 83, 105, 122
 Goodkin, N. F. 87, 91
 Goodlett, D. L. 71
 Goodlett, D. R. 115
 Goodman, J. A. 47
 Goodman, L. 36, 75
 Goodman, P. J. 45
 Good, S. A. 56, 124
 Good, W. 110
 Goodwin, J. 107
 Goodwin, M. H. 82
 Goosen, R. D. 39
 Gopalakrishnan, G. 66, 100
 Gorbunov, M. Y. 36
 Gordon, A. 34, 38, 54, 64, 90, 100
 Gordon, A. L. 34, 38, 54, 100
 Gorman, A. R. 72, 82
 Gorsky, G. 116
 Gorsky, G. 117
 Goryl, P. 84
 Goschen, W. S. 35
 Gosselin, M. 99
 Gostiaux, L. 57, 67, 75, 77, 82
 Gottfried, S. T. 78
 Goubanova, K. 111
 Goudeau, M. S. 97
 Gouhier, T. C. 114
 Gouillon, F. 40
 Gould, R. 47, 64, 105, 122
 Gould, R. W. 102
 Gould, R. W. 47, 64, 122
 Goulf, R. W. 105
 Goff, J. A. 104
 Gourdeau, L. 107
 Gourrion, J. 34, 45
 Gouws, G. 35
 Goyens, C. 46, 102
 Graber, H. C. 45, 89, 100, 116, 117
 Graco, M. 59
 Gradinger, R. 73, 85
 Gradoville, M. R. 102
 Graff, J. R. 102
 Graham, D. 94
 Graham, G. W. 78, 91
 Graham, J. A. 64
 Graham, R. M. 95
 Graham, W. M. 108, 109, 117
 Gramscianinov, C. B. 111
 Grandi, A. 29
 Grand, M. M. 76, 113
 Granger, J. 85, 99, 119
 Graniero, L. 97
 Granskog, M. A. 101, 103
 Grant, A. L. 32
 Grant, L. 42
 Grare, L. 50
 Grasse, P. 41, 65, 110, 124
 Grasso, F. 88
 Gratton, Y. 99, 115
 Grauel, A. L. 97
 Graven, H. 51, 108
 Graven, H. D. 51
 Graves, J. E. 37
 Gravinese, P. M. 82
 Graw, M. 70
 Gray, A. 29, 34, 53
 Gray, A. R. 29
 Gray, D. 105, 122
 Gray, D. J. 105, 122
 Gray, G. B. 39
 Gray, M. 102
 Gray, S. C. 74
 Greatbatch, R. J. 31, 50, 67
 Greaves, D. M. 71
 Greaves, M. J. 87
 Grebmeier, J. M. 73, 85, 99, 119
 Greeley, D. 84
 Greenan, B. J. 79
 Green, C. L. 63
 Green, D. 61, 76, 85
 Green, D. H. 61, 76
 Greene, C. 86
 Greenfield, D. I. 48, 81
 Green, J. L. 50
 Green, J. M. 40, 63
 Green, M. 114
 Green, M. A. 114
 Green, N. W. 61
 Green, R. 78, 80, 89
 Green, R. E. 80, 89
 Green, S. 92
 Greenwood, N. 35
 Greer, A. 69, 83, 95, 116
 Greer, A. T. 69, 95, 116
 Gregg, M. 96, 110, 123
 Gregg, M. C. 110, 123
 Gregg, W. 78
 Gregg, W. W. 78
 Gregorcyk, K. L. 40
 Grégori, G. 61
 Gregory Lough, R. G. 43
 Gregory, B. 85
 Greiner, E. 65, 83
 GREINER Eric, . 124
 Greittl, L. R. 62
 Gremes-Cordero, S. 31
 Griesemer, C. 72
 Griffa, A. 52, 75
 Griffies, S. 32, 41, 61, 110, 111
 Griffies, S. M. 41, 61, 110, 111
 Griffin, D. A. 116
 Griffin, H. L. 87
 Griffin, S. 53, 87, 98

- Griffin, S. M. 87, 98
 Griffith, D. A. 83
 Griffiths, R. 110, 111, 123
 Griffiths, R. W. 110, 123
 Griffiths, S. D. 30, 120
 Grifman, P. M. 58
 Griggs, G. L. 41, 42
 Grigor, J. J. 43
 Grigorov, I. 38
 Grilli, S. 66
 Grim, S. L. 36
 Grisouard, N. 75, 77, 79
 Griswold, A. 58
 Grodin, M. 62
 Grodsky, S. 56, 68
 Grodsky, S. A. 68
 Groeger, M. 63
 Groeskamp, S. 60
 Groleau, Y. 49
 Groman, R. C. 78
 Grosch, C. E. 58, 68
 Grossart, H. P. 59, 70
 Gross, B. 102
 Grosse, J. 115
 Gross, J. A. 106
 Grosso, O. 121
 Grothues, T. 69
 Grubbs, D. 78
 Grubbs, R. D. 92
 Gruber, N. 31, 51, 53, 91, 94, 95, 102, 108, 113, 114
 Grubisic, V. 80
 Grünbaum, D. 116, 121
 Grupe, B. 89, 105
 Grupe, B. M. 105
 Grzymalski, J. J. 123
 Guan, L. 66
 Guan, Y. 80, 88
 Guan, Y. P. 88
 Guarnieri, A. 29, 74
 Gu, B. H. 107
 Gudmundsson, K. 44
 Guéguen, C. 101
 Guenther, B. M. 47
 Guerra, G. E. 71
 Guida, V. 90
 Guigand, C. 69, 83, 95, 116
 Guigand, C. M. 69
 Guikema, S. D. 55
 Guilderson, T. 38, 53, 57, 62, 93
 Guilderson, T. P. 53, 57, 93
 Guildford, S. J. 116
 Guild, L. 47, 64
 Guild, L. S. 47, 64
 Guillocheau, N. 102
 Guimaraes, G. P. 101
 Guimbard, S. 45
 Guinan, K. G. 50
 Guinasso Jr., N. L. 106
 Guinasso, N. L. 83
 Gulev, S. K. 33, 56
 Gulick, S. P. 104
 Gully, A. 51
 Gunderson, K. 40, 48, 63
 Gunderson, T. 50, 113, 121
 Gunderson, T. E. 50
 Gunn, J. 29, 30
 Guo, J. 61, 71
 Guo, J. D. 71
 Guo, L. 67, 71, 103
 Guo, L. D. 67, 71
 Guo, P. 80
 Guo, X. 42, 43, 48, 62, 65, 69
 Guo, X. Y. 48, 65
 Guozhen Zha, Z. 100
 Gusmao, F. 109
 Gustafsson, B. 30, 40
 Gustafsson, B. G. 40
 Guthrie, J. D. 98
 Gutierrez, J. A. 91
 Gutiérrez Rodríguez, A. 36
 Gutknecht, E. 41
 Gutowska, M. A. 94
 Gutowska, M. A. 102
 Guza, R. 74, 75, 88, 122
 Guza, R. T. 74, 75, 88
 Gwang-Ho Seo, . 76
- ## H
- Haak/Helmuth, H. 107
 Haas, A. 36, 69
 Haas, A. F. 36
 Haas, K. A. 88
 Habtes, S. 47, 92, 108
 Habtes, S. Y. 47
 Hackett, E. E. 74
 Hacking, A. B. 104, 106
 Hack, J. J. 68
 Haddad, A. 58, 67, 112
 Haddad, A. G. 58, 112
 Haddad, P. R. 32
 Haddock, S. 105
 Hadfield, M. G. 44
 Haertel, P. T. 38
 Hafez, M. 37, 48, 82
 Hafner, J. 55, 83
 Hagan, C. 92
 Hagenson, N. L. 44
 Haghshenas, S. A. 53
 Ha, H. 54, 63, 64
 Ha, H. K. 64
 Hahm, M. S. 48
 Haidvogel, D. 45, 105
 Haidvogel, D. B. 45
 Haines, K. 63
 Haine, T. 76, 81, 88
 Haine, T. W. 88
 Hairston, N. G. 59
 Hajduk, M. M. 99
 Hajime Obata, . 77
 Häkkinen, S. 108
 Häkkinen, S. M. 54
 Halanych, K. M. 86
 Halem, M. 29, 66
 Hale, R. 53
 Hale, R. P. 53
 Hales, B. 53, 94, 114, 115
 Hales, B. R. 114
 Halewood, S. 106
 Haley, B. A. 94
 Halfar, J. 87
 Halkides, D. 42, 110
 Halkides, D. J. 42
 Hall, A. M. 107
 Hallberg, R. 56, 61, 110, 123
 Hallberg, R. W. 61, 110, 123
 Hall, C. 68
 Hall, E. H. 122
 Hallenbeck, T. R. 37
 Haller, G. 75, 89
 Haller, M. C. 48, 70
 Hallet, B. 92
 Hall, G. F. 120
 Halliday, I. 93
 Halliwell, G. R. 29
 Hall, J. 106
 Hall, J. R. 106
 Hallmann, N. 87
 Hallock-Muller, P. 121
 Halloran, P. 108
 Hall, R. A. 31, 110, 123
 Hally-Rosendahl, K. 75
 Halpern, B. S. 49
 Halsband-Lenk, C. 89
 Halsey, K. H. 117
 Halversen, C. 82
 Halverson, M. J. 112
 Hamajima, Y. 57
 Hama, T. 118
 Hamataka, K. 57
 Hameed, S. 89
 Hamersley, M. R. 113
 Hamidi, S. A. 41
 Hamilton, P. 80
 Hamilton, T. 66
 Hamlington, B. D. 56
 Hamlington, P. E. 31, 32, 72
 Hamme, R. C. 51
 Hammerschmidt, C. R. 32, 77
 Hammerschmidt, C. R. 77
 Hammond, D. E. 103, 121
 Hamner, B. 105
 Hamre, B. 120
 Hams, J. E. 67
 Hamukuaya, H. 37
 Han, A. 55
 Hanawa, K. 39, 43
 Handel, E. 116
 Hanes, D. M. 120
 Haney, S. R. 31, 88
 Hanisak, M. D. 78
 Han, J. S. 91
 Hankin, S. C. 108
 Hanley, K. 39
 Hanlon, R. T. 96
 Hannigan, R. E. 102, 104
 Hansell, D. A. 52, 89, 103
 Hansen, A. M. 125
 Hansen, B. W. 49
 Hansen, E. 54, 98
 Hansen, J. 88, 119
 Hansen, J. E. 88
 Hansman, R. L. 115
 Hanson, K. M. 96
 Han, W. 79
 Hapke, C. J. 119
 Harada, H. 113
 Harada, N. 98, 113
 Haramaty, L. 59
 Hara, T. 70, 88
 Harbitz, C. R. 100
 Harcourt, P. 33, 41
 Harcourt, R. 31, 68, 111
 Harcourt, R. R. 31, 111
 Hardage, B. A. 105
 Harder, T. 59
 Harding, J. M. 39, 100
 Hardison, A. K. 35
 Hardman-Mountford, N. J. 94
 Hardy, S. M. 97, 119
 Hare, J. A. 64
 Hargreaves, B. R. 51, 113
 Hariharan, P. 119
 Harke, M. J. 81
 Harlick, A. 54
 Harmegnies, F. 105
 Harmel, T. 120
 Harmon, T. C. 78
 Harper, S. 68
 Harris, C. K. 35, 53, 109, 110, 123
 Harris, K. 74, 114
 Harris, K. E. 114
 Harris, M. S. 103
 Harrison, B. K. 105
 Harrison, C. S. 59
 Harrison, E. 114
 Harrison, M. J. 41
 Harrison, P. J. 102
 Harris, P. T. 123
 Harrod, C. 68, 95
 Harter, S. 78
 Hartin, C. A. 29
 Hartman, A. E. 77
 Hart, M. C. 61, 76
 Hartnet, A. 50
 Hartnett, H. 124
 Hartog, J. R. 68
 Harvey, C. 78
 Harvey, E. L. 96
 Harvey, H. R. 71, 85, 99, 115
 Harvey, J. 83, 114, 122
 Harvey, J. B. 83, 122
 Harvey, J. T. 114
 Harvey, J. W. 122
 Harvey, T. E. 118
 Hasegawa, D. 111
 Hasegawa, T. 55, 90
 Haskell II, W. Z. 103
 Haskell, W. 121
 Hassan Moustahfid, H. 46
 Hassler, C. 43, 97
 Hassrick, J. 58
 Hastings, D. 108, 109
 Hastings, R. 53, 123
 Hastings, R. H. 123
 Hasumi, H. 123
 Ha, S. Y. 114
 Hatcher, B. G. 46
 Hatcher, P. G. 61
 Hathaway, K. K. 119
 Hatta, K. 93
 Hatta, M. 32, 72, 113
 Hatten, J. 53
 Hatton, A. D. 61, 76, 87
 Häubner, N. 45
 Hauff, M. J. 73
 Haugen, E. M. 33
 Haug, G. H. 121
 Haulsee, D. E. 46
 Haupt, A. J. 37, 73
 Hauri, C. 94, 102, 114
 Haus, B. K. 42, 72, 75
 Hauser, T. P. 63
 Hausier, T. 54
 Hausman, J. K. 66, 106
 Hautala, S. L. 112
 Havenhand, J. N. 104
 Hawke, E. 86



REGISTRATION OPEN!

NEW AGU SCIENCE POLICY CONFERENCE

Monday, 30 April - Thursday, 3 May 2012

Ronald Reagan Building and International Trade Center Washington, D.C.

AGU's new conference will bring together scientists, policy makers, and stakeholders to discuss natural hazards, natural resources, oceans, and Arctic science as it relates to challenges facing our society. Communicating the important role of science in these subjects is vital to ensuring the continued investment in the research that supports our economy, public safety, and national security.

Poster Abstract Submission Deadline – 22 February

Early Registration Deadline – 30 March

Housing Registration Deadline – 30 March

For more information please visit

www.agu.org/spconference

Visit the AGU Booth

**Become a part of the largest global organization
for geophysical scientists.**

Join or renew your AGU membership
Free gifts to the first 100 members!

Learn about upcoming meetings and new AGU books.

**Find out about how to sign up for AGU e-alerts,
Eos, Science Policy,
Journal Tables of Contents, and more!**

www.agu.org





The Nils Gunnar Jerlov Award

Awarded in recognition of contributions made to the advancement of our knowledge of the nature and consequences of light in the ocean.

www.tos.org/awards_honors/jerlov_award.html

Call for Nominations

Nils Gunnar Jerlov was an early leader in the area of ocean optics research. His name is recognized widely within the entire international oceanographic research community. Jerlov's theoretical and experimental work on ocean optical and related processes helped form the foundation of modern ocean optical research. He proposed the concept of an optical ocean water mass classification and the Jerlov water types are familiar to many outside of the ocean optics community. His book, *Marine Optics*, published in 1976, remains widely referenced and is considered required reading for all students of ocean optics and ocean color remote sensing.

The Oceanography Society (TOS) commemorates Dr. Jerlov and his many contributions to the study of light in the ocean with an international award, established in his name, to recognize outstanding achievements in ocean optics and ocean color remote sensing research.

TOS is responsible for setting award policy, garnering nominations from the international research community, and selecting a recipient from those nominated. To be eligible for nomination, the recipient's work must deal directly with the processes governing the interaction of light with the ocean and/or the consequences of such interactions. The award may be issued in recognition of research (theoretical or applied, field-based or laboratory-based, a landmark paper or lifetime achievement), a pattern of excellence in education, a history of service to the international ocean optics research community, or contributions to all of the above. In the end, the nominated individual must have significantly advanced our knowledge of how light interacts with the ocean.

The award consists of a bronze medallion designed by Judith Munk, a lapel pin, travel support to attend the Ocean Optics Conference, and a cash award. This award is supported by the U.S. National Aeronautics and Space Administration and the U.S. Office of Naval Research.

PREVIOUS RECIPIENTS

- 2010: Charles S. Yentsch, Plankton Research & Instruments and Bigelow Laboratory for Ocean Sciences
- 2008: Talbot Waterman, Yale University
- 2006: J. Ronald V. Zaneveld, Oregon State University
- 2004: Howard R. Gordon, University of Miami
- 2002: Raymond C. Smith, University of California, Santa Barbara
- 2000: André Morel, Université Pierre et Marie Curie

NOMINATION PROCEDURE

Nomination packages shall consist of:

- a single master nominating statement (no more than 5 pages),
- a suggested one-paragraph citation of no more than 100 words,
- an abbreviated CV of the nominee, and
- up to 5 additional letters of endorsement (2 page maximum) solicited by the master nominator (only one of which may be from the candidate's institution—international endorsements are encouraged).

The master nominator serves as the point of contact. Submission of materials in electronic format is required. Submit all nomination materials and direct all questions to: info@tos.org.

NOMINATION DEADLINE

The deadline for nominations is **June 1, 2012**.



THE OCEANOGRAPHY SOCIETY

The Oceanography Society, P.O. Box 1931, Rockville, MD 20849-1931, USA
Tele: 301/251-7708, Fax: 301/251-7709; info@tos.org; www.tos.org

- Hawley, N. 41, 53, 78
 Hawley, N. H. 78
 Hay, A. E. 78, 86, 88
 Hayakawa, K. 57
 Hay, C. C. 56
 Hayes, A. G. 50
 Hayes, C. T. 32, 72
 Hayes, D. 39
 Haygood, M. G. 71
 Haynert, K. 104
 Haynes, S. E. 33
 Hays, G. C. 68, 95
 Haza, A. 52, 75
 Haza, A. C. 75
 Hazelkorn, R. 44
 Hazen, E. L. 58, 68
 Hazen, T. 91, 109
 Hazen, T. C. 91, 109
 Heaney, K. D. 85
 Heard, R. W. 118
 Hearn, C. K. 104
 Heartsill-Scalley, T. 51
 Hebert, D. 43
 Hecht, M. W. 29, 63
 Hecky, R. E. 116
 He, D. 35
 Hedstrom, K. 73, 80
 Heene, T. 67
 Hee -Won Yang, H. W. 76
 Hegaret, H. 81
 Hegg, E. L. 112
 He, H. 103
 Heil, C. A. 109, 117
 Heilman, L. A. 65
 Heilmayer, O. 87
 Heim, B. 101
 Heimbach, P. 30, 64, 81, 98, 112, 124
 Hein, J. 51
 Heinle, M. J. 115
 Heinze, C. 108
 Heithaus, M. R. 92
 Heitsenrether, R. M. 39, 45
 Helber, R. 47, 64, 72, 75
 Helber, R. W. 47, 64, 75
 Helfrich, K. 57, 59, 67, 83, 95, 122
 Helfrich, K. R. 67, 83, 95, 122
 Helgers, J. 52
 Heller, M. I. 32
 Hellmer, H. H. 54
 Hello, Y. 44
 Helms, J. R. 61
 Hemond, H. F. 84
 Hench, J. L. 59, 70
 Hendee, J. 92, 94, 101
 Hendee, J. C. 92, 94
 Hendershott, M. C. 33, 40
 Henderson, C. M. 41
 Henderson, J. 82
 Henderson, N. D. 107, 117
 Henderson, P. 32, 67, 121
 Henderson, P. B. 67
 Henderson, S. H. 74
 Henderson, S. M. 37, 88
 Hendrick, G. 85
 Hendry, R. M. 52
 Henkel, S. K. 105
 Hennekam, R. 97
 Hennige, S. J. 87
 Hennon, T. D. 67
 Henriksen, P. 48
 Henry, C. L. 67, 77
 Henry, L. V. 86
 Hensley, W. 45
 Henson, S. A. 33, 43
 Hepburn, C. D. 102
 Heppell, S. A. 73
 He, R. 29, 33, 39, 53, 69, 80, 83, 89,
 100, 101, 105, 116
 Heraud, P. 95
 Herbers, T. 74
 Herbers, T. H. 74, 75
 Herbert, G. 30, 114
 Herbert, G. S. 114
 Herfort, L. 36, 43, 83
 Hermann, A. J. 73, 85
 Hermes, A. L. 35
 Hernandez, D. 39
 Hernandez, H. 70
 Hernandez Jr., F. J. 108
 Hernández-León, S. 37
 Herndl, G. J. 84
 Herndl, G. J. 70, 84
 Hernes, P. 89, 103
 Hernes, P. J. 89
 Heron, S. 55, 64
 Heron, S. F. 55, 64
 Herren, C. 55
 Herrera, A. 100
 Herrera, S. 73
 Herrington, S. J. 116
 Hersey, J. 104
 Herut, B. 101
 Hervieux, G. 85
 Hestrom, K. 85
 Hetland, R. 35, 39, 52, 62, 83, 110, 116
 Hetland, R. D. 35, 39, 83, 110
 Hetzel, Y. L. 47
 Hetzinger, S. 87
 Hewson, I. 59, 70
 Heyes, A. 109
 Heyman, W. D. 75
 Heywood, K. 39, 44, 64, 95
 Heywood, K. J. 44, 64, 95
 Hibiya, T. 40
 Hibler, L. 75
 Hickey, S. 67
 Hickey, B. 36, 42, 69, 95, 106
 Hickey, B. M. 36, 69, 95, 106
 Hidaka, K. 83
 Hiester, H. R. 75
 Highsmith, R. 43, 91, 109
 Higley, K. 57
 Hikami, M. 103
 Hilburn, K. A. 56
 Hildebrand, J. A. 68
 Hildebrand, M. 77
 Hill, C. 38, 60, 81
 Hill, C. N. 60
 Hill, D. F. 120
 Hiller, W. 81
 Hillgruber, N. 83
 Hill, K. 108, 109
 Hill, P. S. 53, 62, 78, 112
 Hill, R. 95
 Hill, T. M. 30, 87, 94
 Hill, V. J. 35, 101, 115
 Hilton, M. R. 87
 Himmerkus, N. 102
 Hine, A. 78
 Hines, A. 32
 Hino, R. 39
 Hinson, K. I. 107
 Hirabara, M. 107
 Hirata, T. H. 77
 Hirawake, T. 45, 99, 102, 119
 Hiroe, Y. 64, 100
 Hirose, K. 57, 67
 Hirose, N. 40
 Hiroshi Ichikawa, H. 111
 Hiroshi Yoshioka, H. 45
 Hiroyasu, Y. 112
 Hirschi, J. 100
 Hiscock, W. T. 113
 Hitchcock, G. 117
 Hitchcock, G. L. 117
 Hiyoshi, Y. 81
 Hlaing, S. 101, 102, 120
 Hoareau, N. 34
 Hoar, T. 81, 124
 Hobæk, A. 33
 Hobday, A. J. 47, 68
 Hobson, B. W. 74
 Hobson, V. J. 95
 Hochstaedter, A. 64
 Hodder, J. 44
 Hodge, L. W. 58
 Hodges, B. A. 111
 Ho, D. T. 35, 51
 Hoecker-Martinez, M. S. 75
 Hoegh-Guldberg, O. 94
 Hoeke, R. K. 62
 Hoen, D. K. 93
 Hoer, D. 121
 Hoering, K. A. 46, 71
 Hoey, T. B. 97
 Höfle, H. 35
 Hoffman, J. C. 93
 Hoffman, M. J. 55, 81
 Hoffmann, F. 104
 Hoffman, N. G. 89
 Hoffmann, L. 102
 Hoffman, P. F. 53
 Hofmann, A. F. 78
 Hofmann, E. 45, 53, 54, 64
 Hofmann, E. E. 45, 54, 64
 Hofmann, G. E. 94
 Hofmeister, R. 47
 Hogan, P. 29, 52, 54, 66, 68, 86
 Hogan, P. J. 52, 54, 86
 Hogg, A. M. 29, 79, 111, 123
 Hogg, N. G. 100
 Hogle, S. 36, 71
 Hogle, S. L. 36
 Hohenegger, C. 99
 Holben, B. N. 101
 Holbrook, N. J. 46
 Holbrook, W. S. 72, 82
 Hole, L. R. 58, 68
 Hölemann, J. 88, 101
 Holladay, B. A. 119
 Holland, D. 64
 Hollander, D. 92, 108, 109, 114
 Hollander, D. H. 114
 Hollander, D. J. 92, 108
 Holland, M. 93
 Holleman, R. C. 47
 HOLLIBAUGH, J. T. 113
 Holliday, N. P. 54, 63
 Hollowed, A. B. 44
 Holloway, G. 98
 Holman, R. A. 39, 74, 75
 Holman, R. H. 88
 Holmes, C. W. 77
 Holmes, R. M. 103
 Holtapps, M. 55
 Holt, B. 52, 66
 Holte, J. 54, 120
 Holtermann, P. L. 60
 Holzer, M. 52, 60
 Holzman, B. J. 70
 Homoky, W. B. 32
 Homola, K. L. 104
 Honda, M. 57, 66, 67, 101, 113
 Honda, M. C. 57, 66, 67, 101, 113
 Honegger, D. A. 48
 Honey, D. 32
 Hong, B. 46
 Hong, C. 54, 63
 Hong, G. H. 57
 Hong, H. S. 100
 Hong, J. 49, 83
 Hood, R. 37, 49, 50
 Hood, R. R. 37, 49, 50
 Hooker, S. B. 47, 98
 Hooshmand, A. 53
 Hoover, T. 74
 Hopcroft, R. 86, 95, 99, 117, 119
 Hopcroft, R. R. 86, 95, 99, 117, 119
 Hopkins, J. 50, 59
 Hopkins, J. A. 50
 Hopkinson, B. M. 36, 71, 102
 Hopkinson, C. S. 53
 Hoppe, K. 37
 Hoppema, M. 91, 108
 Horak, R. E. 85
 Horel, A. 92
 Horii, T. 39
 Hormann, V. 31
 Horne, J. K. 83
 Horner-Devine, A. R. 36, 48, 53, 62
 Horodysky, A. Z. 51
 Horsburgh, K. J. 30
 Horstmann, J. 117
 Horton, A. 101
 Horton, B. P. 120
 Horton, D. 114
 Horwitz, R. M. 59
 Hosegood, P. J. 62
 Hosfelt, J. 87
 Hosoda, S. 42, 44
 Ho, T. 32, 117
 Hotaling, L. 33, 44, 64, 85
 Hotaling, L. A. 44, 85
 Hoteit, I. 79, 81, 84, 100, 124
 Ho, T. Y. 32
 Houde, E. 95
 Houghton, J. 68, 95
 Houghton, J. D. 68
 Hou, J. 64
 Houpert, L. 46, 91
 Hourigan, T. F. 78
 Houser, C. 75
 Hou, W. 42, 47, 78
 Hou, W. W. 78
 Howard, E. 31, 108
 Howard, M.
 55, 74, 78, 89, 90, 100, 101
 Howard, M. D. 90
 Howard, M. K. 55, 74, 78, 100, 101
 Howarth, M. J. 105

- Howden, S. 40, 53
 Howden, S. D. 53
 Howe, B. 31, 55, 86, 123
 Howe, B. M. 55, 86, 123
 Howe, N. 63
 Howey-Jordan, L. 78
 Ho, Y. 97
 Hoyer, I. R. 93
 Hoy, S. K. 104
 Hristova, H. G. 107
 Hsiao, S. Y. 65
 Hsieh, C. 44, 55, 65
 Hsieh, C. H. 44, 55, 65
 Hsieh, J. 56
 Hsieh, M. L. 109
 Hsieh, T. C. 41, 110
 Hsieh, Y. H. 109
 Hsieh, Y. T. 32
 Hsing, P. 105
 Hsin, Y. 82
 Hsu, H. 74, 90
 Hsu, H. H. 90
 Hsu, T. 53, 62, 65, 74, 75, 120
 Hsu, T. C. 65
 Hsu, T. J. 53, 74, 75, 120
 Hsu, W. Y. 120
 Hua, L. 52
 Huang, D. 65, 90
 Huang, D. J. 65
 Huang-Hsiung /Hsu, . 107
 Huang, K. 51, 72
 Huang, K. F. 72
 Huang, W. 63, 94
 Huang, W. J. 63
 Huang, X. 67
 Huang, Y. H. 97
 Huang, Z. C. 50
 Hubble, T. 104
 Huber, B. 38, 54, 64
 Huber, B. A. 38, 54
 Huber, J. A. 37, 112
 Hu, C. 64, 108, 120
 Huck, T. 63, 79
 Hu, D. 84, 90
 Hudson, B. 92
 Hudson, D. A. 68
 Hudson, J. M. 37
 Huettel, M. 55, 65, 92
 Huettmann, F. 99
 Huff, D. D. 35
 Hughes, E. A. 99
 Hughes, G. 110, 111, 123
 Hughes, G. O. 110, 123
 Hughes, P. 31, 42
 Hughes, P. J. 31
 Hu, H. 41, 85, 99
 Huhn, O. 60
 Hu, J. 62, 76, 83
 Hulbert, M. 83
 Hult, E. L. 67
 Humberston, J. L. 62
 Hummon, J. M. 78
 Humphreys, R. L. 93
 Hundermark, B. 64
 Hung, C. 65, 97
 Hung, C. C. 65
 Hunkin, K. E. 104
 Hunt, B. 114
 Hunt, C. W. 62
 Hunt, D. E. 48
 Hunter, E. 64, 71
 Hunter, E. J. 71
 Hunter, K. 91
 Hunter, K. A. 102
 Hunt, F. 100
 Hunt, G. L. 68
 Hunt, Jr., G. L. 83
 Huntley, H. S. 113
 Huot, Y. 36
 Hurd, C. L. 102
 Hurlburt, H. E. 47, 54, 56, 90
 Hurrell, J. 63
 Hurst, T. 102
 Hurther, D. 91
 Huse, S. M. 92
 Hussey, N. E. 93
 Hutchings, J. 114
 Hutchings, J. 67, 98, 119, 123
 Hutchings, J. K. 67, 119, 123
 Hutchins, D. A. 32, 102, 104, 121, 122
 Hutchins, H. 32
 Hutchinson-Delgado, Y. M. 96
 Hutchins, P. R. 40
 Huthnance, J. M. 59
 Hutnak, M. 112
 Hu, X. 94
 Hu, X. 86
 Hwang, B. 98
 Hwang, J. 98, 117
 Hwang, P. A. 37, 50
 Hwung, H. H. 120
 Hyatt, C. J. 117
 Hyde, K. 53, 64
 Hyde, K. J. 64
 Hylander, S. 96
 Hynes, A. M. 96
 Hyodo, F. 115
 Hyun, J. H. 70
 HYUN, S. 97
- I**
- Ianora, A. 70, 116
 Ianson, D. 114
 Ichikawa, H. 124
 Ide, K. 29, 81
 Ide, T. 61
 Ide, Y. 42
 Igarashi, H. 81
 Igarashi, S. 57
 Igeta, Y. 97, 106
 Iglesias, G. 74
 Iglesias-Rodriguez, D. 93
 Iglesias-Rodriguez, M. D. 87
 IGLESIAS-RODRIGUEZ, M. D. 121
 Ikeda, M. 57
 Iken, K. 78, 85, 97, 119
 Ikeya, T. 83
 Ilicak, M. 110
 Illig, S. 111
 Imachi, H. 114
 Imai, I. 99
 Inagake, D. 64
 Inall, M. 48, 57, 92
 Inall, M. E. 57, 92
 Inanelli, J. 68
 Inatsu, M. 42
 Inazu, D. 39
 Incze, M. L. 39
- Ingalls, A. E. 48, 93
 Ingham, M. 51
 Ingle, J. D. 59
 Ingle, S. 39, 85
 Ingram, W. 108
 Ingrassia, M. 105
 Inoue, M. 57
 Inoue, R. 67, 111
 Ioannou, I. 102
 IODP Expedition 336 Science Party 58, 67
 Ionescu, D. 121
 Iredell, D. 80
 Irie, T. 103
 Irish, J. 39, 45, 71, 74, 120
 Irish, J. D. 71, 120
 Irish, J. L. 74
 Irvine, G. V. 87
 Irvine, L. 68
 Irwin, A. 46, 82, 95, 115
 Irwin, A. J. 95
 Isada, T. 102
 Isakson, M. J. 104
 Isensee, K. 104
 Isern-Fontanet, J. 92
 Ishida, A. 102, 108
 Ishida Akio, . 119
 Ishii, M. 91, 108, 124
 Ishii, R. 115
 Ishii, S. 107
 Ishikawa, T. 112
 Ishikawa, Y. 81
 Ishimaru, T. 57, 67
 Ishiyama, D. 112
 Ishizaka, J. 55
 Ishizaki, H. 107
 Iskandarani, M. 81, 124
 Islam, M. 107
 Islam, M. S. 107
 Isobe, M. 48
 Itoh, M. 86, 99
 Itoh, S. 64, 83, 100
 Ito, S. 65
 Ito, T. 31, 38, 41
 Ito, Y. 57
 Iudicone, D. 51
 Ivan Lima, I. 72
 Ivanova, D. 61
 Ivanov, B. V. 101
 Ivanov, L. M. 94
 Ivanov, V. 88, 98
 Ivanov, V. V. 88
 Ivanov, V. V. 88
 Iverson, S. J. 35, 46, 58
 Ivey, G. N. 122
 Ivey, J. 108
 Iwakasa, N. 43
 Iwano, K. I. 31
 Iwasaka, N. 42, 43
 Iwata, M. 57
- J**
- Jachec, S. M. 67
 Jackson, D. 78
 Jackson, G. A. 37, 39, 44
 Jackson, J. 59, 84
 Jackson, J. M. 59
 Jackson, K. 71, 116
 Jackson, K. J. 71
 Jackson, R. H. 92
 Jackson, S. E. 91
 Jacob, J. 59
 Jacobsen, D. W. 79
 Jacobs, G. 57, 66, 68, 72
 Jacobs, G. A. 57
 Jacobs, G. B. 57
 Jacobson, A. J. 73
 Jacobson, A. R. 108
 Jacobs, S. 54, 63
 Jacobs, S. S. 63
 Jacquot, J. E. 32, 97
 Jadhav, R. 75
 Jaffe, J. S. 72, 75
 Jaffe, R. 61, 89, 113
 Jaffé, R. 35
 Jaffre, F. 85
 Jago, C. F. 53, 91
 Jagoe, C. H. 86
 Jähne, B. 45
 Jahn, G. 40
 Jakobsen, H. H. 48
 Jakobsson, M. 78
 Jakuba, M. V. 82, 108
 James, A. K. 61
 James, M. D. 116
 Jamet, C. 102, 120
 Jamieson, A. J. 78
 Jang, C. 107
 Jang/Chan Joo, C. 107
 Jang, C. J. 107
 Jang, S. 39
 Jannasch, H. W. 44
 Janout, M. 85, 88, 101
 Janout, M. A. 88
 Jan, S. 56, 90, 107
 Jan Saynisch, J. 81
 Janssen, T. T. 75, 88
 Jaramillo, S. 30, 39, 74, 75
 Jarosz, E. 42, 78, 110, 123
 Jaspers, C. 117
 Javidpour, J. 117
 Jaya, I. 123
 Jay, C. V. 73, 119
 Jay, D. A. 31, 40
 Jayne, S. 57, 61, 67, 124
 Jayne, S. R. 57, 61, 67, 124
 Jeandel, C. 59
 JEANDEL, C. 76
 Jeandel Catherine, J. 69
 Jearld, Jr., A. 45
 JEDI Development Team 117
 Jeffery, N. 29, 38
 Jeffrey, W. 92, 98, 109
 Jeffrey, W. H. 92, 98, 109
 Jelenak, Z. 64
 Jenkins, A. 63, 68
 Jenkins, A. D. 68
 Jenkins, B. D. 56, 69
 Jensen, S. 78
 Jensen, T. G. 79
 Jeon, C. 31
 JEON, D. 90
 Jeon, D. C. 107
 Jeong, H. D. 55
 Jeong, H. J. 55
 Jeong, J. H. 107
 Jeong, S. 87
 Jessen, P. F. 75
 Jessup, A. T. 34, 45, 88, 111

- Jewett, S. 66, 99
 Jewett, S. C. 99
 Jiang, G. 61
 Jiang, H. 69, 112, 117
 Jiang, J. 33
 Jiang, L. 69, 84
 Jiang, M. 30, 46, 72, 93
 Jiang, S. 36, 109
 Jiang, Y. 36, 48, 97
 Jiang, Y. L. 48
 Jianzhong Ge, G. 30
 Jiao, . 61
 Jiao, N. 61, 84
 Jiao, N. Z. 61
 Jiao, Y. 64, 98
 Jiao, Y. T. 98
 Jia, Y. 29, 79, 90, 106, 120
 Jia, Y. G. 120
 Jia, Y. L. 90
 Ji, J. 61
 Jilbert, T. 97
 Ji, M. 46, 64
 Jimenez-Espejo, F. 62
 Jimenez, F. 116
 Jin, M. 33, 98
 Ji, R. 43, 57, 66, 95, 116
 J. Keith Moore, J. K. 102
 Joannes Westerink, . 76
 Jochen, A. 39
 Jochens, A. E. 30, 55, 78
 Jochum, M. 60, 61
 Jochumsen, K. 54
 Johengen, T. 78
 John, J. G. 61, 125
 John Kocik, . 46
 John Payne, . 46
 Johns, A. 115
 Johns, D. 43
 John, S. G. 32
 Johns, L. 94
 Johnson, A. 45, 51, 60
 Johnson, A. K. 51, 60
 Johnson, B. J. 86
 Johnson, C. G. 36
 Johnson, D. M. 86
 Johnson, D. S. 58
 Johnson, G. C. 30, 31, 42, 46, 52
 Johnson, H. L. 38, 56
 Johnson, H. P. 112
 Johnson, J. E. 105
 Johnson, K. 34, 44, 54, 74
 Johnson, K. S. 34, 44, 54
 Johnson, K. W. 74
 Johnson, L. 53
 Johnson, N. D. 85
 Johnson, R. J. 42, 80, 89, 100, 101
 Johnson-Roberson, M. 82
 Johnson, R. R. 111
 Johnson, S. 40, 46, 58
 Johnson, S. P. 46, 58
 Johnson, Z. 36, 48
 Johnson, Z. I. 48
 Johnston, D. T. 53
 Johnston, M. L. 69
 Johnston, S. 91
 Johnston, T. S. 111
 Johns, W. E. 58
 Jolivet, A. 97
 Jolliff, J. 47, 105, 110, 122
 Jolliff, J. K. 105, 122
- Jones, B. 30, 46, 49, 87, 90, 93, 106, 122
 Jones, B. H. 30, 90, 106
 Jones, B. M. 87, 93
 Jones, C. 85
 Jones, D. A. 68
 Jones, D. C. 38
 Jones, E. M. 76
 Jones, I. S. 88
 Jones, J. 61, 89
 Jones, J. B. 89
 Jones, J. L. 61
 Jones, M. 59, 87
 Jones, M. E. 87
 Jones, N. L. 30, 122
 Jones, P. W. 79
 Jones, R. J. 115
 Jonkers, L. 87
 Jonsen, I. D. 35
 Jonsson, B. F. 60
 Jónsson, S. 88
 Joos, F. 33, 108
 Jordan, L. 78
 Jørgensen, C. 47
 Jørgensen, S. 35, 58, 68
 Jørgensen, S. J. 58, 68
 Joseph Vallino, J. J. 124
 Josey, S. 58
 Joshi, S. M. 104
 Joubert, W. R. 38
 Joung, D. 108
 Joung, D. J. 108
 Jourdain, N. 65
 Joux, F. 98
 Jo, Y. 63, 80, 84
 Joyce, P. 67, 86
 Joyce, T. M. 33, 124
 Joye, S. B. 91, 108, 109
 Jo, Y. H. 84
 Judd, K. P. 111
 Julien, K. 42, 52
 Jullion, L. 38, 51, 108
 Jumars, P. A. 96
 Jungbluth, M. J. 49
 Jungclaus/Johann H., J. H. 107
 Jung, H. S. 64
 Jung, K. 39, 83
 Jung, K. T. 83
 Jung, T. 63
 Jung, u. j. 42
 Juniper, S. K. 40, 66
 Junker, T. 39
 Juranek, L. W. 53, 94, 114
 Jurisa, J. T. 36
 Ju, S. E. 107
- K**
- Kaba, J. 92
 Kachel, N. B. 95
 Kadko, D. 72, 103
 Kadko, D. C. 72
 Kahl, L. A. 93
 Kahn, P. 36
 Kahru, M. 113, 119, 121
 Kaihatu, J. M. 50, 110, 120
 Kaiser, C. 43
 Kaiser, J. 34, 44
 Kaiser-Weiss, A. K. 92
- Takehi, S. 64
 Kakoulaki, G. 48
 Kalen, O. 64
 Kalén, O. 54
 Kallin, E. 125
 Kalmbach, A. J. 49
 Kalnejais, L. H. 46
 Kaltenbacher, E. A. 84
 Kaltenbacker, E. A. 59
 Kamachi, M. 81
 Kameda, T. 43
 Kamenik, J. 66
 Kamenkovich, I. 29, 79, 94
 Kamenkovich, I. V. 29
 Kamenos, N. 87, 97
 Kamenos, N. A. 87, 97
 Kamenos, N. K. 87
 Kamenov, G. 35
 Kana, R. 36
 Kana, T. M. 43, 81
 Kanda, J. 57, 67
 Kane, A. 108
 Kane, J. 57
 Kaneko, H. 83
 Kane, T. L. 31, 91
 Kang, B. 116
 Kang, C. K. 117, 118
 Kang, D. 80
 Kang, H. 52
 Kang, S. K. 100
 Kang, T. 39
 Kanna, N. 77
 Kanzow, T. 34, 41, 54, 110, 111
 Kao, H. Y. 34
 Kao, S. 65, 123
 Kao, S. J. 65
 Kapit, J. 105
 Kaplan, M. 34, 69, 72
 Kappa, J. 66
 Kappel, E. S. 45
 Karino, Y. 43
 Karl, D. M. 101
 Karspeck, A. 54, 81, 124
 Karspeck, A. R. 81
 Karsten, R. H. 40
 Karstensen, J. 34, 39, 41, 51, 63
 Käse, R. H. 54
 Kaser, J. S. 50
 Kashino, Y. 90
 Kasper, J. L. 88
 Kassem, S. 30
 Katija, K. 117
 Katsman, C. A. 56
 Katsumata, K. 29, 60
 Katsunori Kimoto, K. 108
 Katsura, S. 46
 Kattner, G. 87
 Katz, J. 49, 79, 83
 Kauffman, B. 80
 Kaufman, D. E. 44
 Kavanaugh, M. T. 89, 115
 Kawaguchi, Y. 98, 99, 114
 Kawahata, H. 103, 112
 Kawai, Y. 33, 42, 124
 Kawakami, H. 57, 66, 67, 101
 Kawakami, T. R. 106
 kawale, J. 49
 Kawamiya, M. 102
 Kawano, T. 108
 Kawase, M. 112
- Kawka, O. E. 105
 Kayfetz, K. R. 49
 Kayser, R. 77
 Kazuyuki Uehara, U. 111
 Kearney, M. 91
 Kearns, E. J. 66
 Keating, S. R. 72
 Kedra, M. 119
 Keeling, R. F. 51, 60
 Keen, A. S. 74
 Keene, J. 104
 Keenlyside, N. 56, 58, 90
 Keenlyside, N. S. 56
 Keen, R. 74, 121
 Keen, T. R. 38
 Keijzer, E. 32
 Keiko Takahashi, K. 41
 Keil, R. 48, 71, 93, 104, 106, 124
 Keil, R. G. 71, 104, 106
 Keiser, J. 86
 Keiser, K. 66
 Keith, G. 85
 Kelez, S. 93
 Keller, A. A. 40
 Keller, D. P. 115
 Kelley, D. 56, 58, 65, 105
 Kelley, D. S. 56, 58, 65, 105
 Kelley, N. 39
 Kellogg, C. 116
 Kellogg, J. P. 112
 Kelly, H. 98
 Kelly, K. A. 33, 79, 110, 111, 124
 Kelly, R. P. 73, 115
 Kelly, S. M. 30
 Kemena, T. P. 67
 Kemm, M. 33
 Kemp, A. 38, 87
 Kemp, A. E. 87
 Kendall, S. T. 78
 Kenitz, K. M. 116
 Kenji Shimizu, K. 100
 Kenna, T. C. 67, 77
 Kennedy, A. B. 76
 Kennedy, J. 30, 41, 56
 Kennedy, J. J. 56
 Kennelly, M. A. 38
 Kennison, R. L. 41
 Kent, C. 84
 Keppler, C. 48
 Kerfoot, J. 55
 Kerns, B. 88
 Kerosky, S. M. 68
 Kerrigan, L. 122
 Kersale, M. 75
 Keshtpoor, M. 75
 Kessler, J. 90, 105
 Kessler, J. D. 90, 105
 Kessler, W. 82, 90, 107
 Kessler, W. S. 82, 90, 107
 Kettner, A. 122
 Key, R. 51, 91, 108
 Key, R. M. 38, 91, 108
 Khatiwala, S. 51
 Khim, J. S. 91
 Kida, S. 66, 79
 Kieber, D. J. 113
 Kieber, R. J. 62
 Kiefhaber, D. 45
 Kieft, B. 74
 Kieke, D. 31, 54, 60, 63, 108

- Kienast, M. 31
 Kiene, R. P. 113
 Kiessling, W. 34
 Kiker, J. 53
 Kiker, J. M. 53
 Kiko, R. 104
 Kikuchi, T. 65, 86, 98, 99, 114
 Kilb, D. 64
 Kilbourne, B. F. 38
 Kilbourne, K. H. 68
 Kilcher, L. 36, 39
 Kilcher, L. F. 36
 Kilgore, B. 72, 113
 Killberg-Thoreson, L. 119
 Killett, B. 40
 Killius, M. G. 106
 Kilpatrick, T. 32, 42
 Kilpatrick, T. J. 42
 Kilpert, F. 49
 Kim, B. G. 48
 Kim, C. 36, 39
 Kim, D. 107
 Kim, E. 107
 KIM, E. 90
 Kim, G. 61
 Kim, H. 42, 65, 66, 80, 113
 Kim, H. C. 57, 66
 Kim, H. J. 42
 Kim Holland, . 46
 Kim, H. S. 80
 Kim, J. 61, 91, 107
 Kim, J. K. 39
 KIM, J. K. 97
 Kim, J. W. 91, 107
 Kim, K. H. 107
 Kim, K. O. 83
 Kim, K. Y. 56
 Kim/Kyehyun, K. K. 107
 Kim, M. 98
 Kimmance, S. 59
 Kimmel, D. 40, 43
 Kimmel, D. G. 40
 Kimmerer, W. J. 49
 Kim, M. H. 107
 Kimoto, K. 113
 Kim, S. 30, 37, 48, 49, 57, 70, 75, 80, 93
 Kim, S. B. 45
 Kim, S. H. 57
 Kim, S. I. 48
 Kim, S. L. 93
 Kim, S. Y. 37, 49, 75
 Kim, T. 39, 55, 61, 63, 91, 104
 Kim, T. H. 91
 Kim, T. I. 91
 Kim, T. W. 55
 Kim, Y. 29, 31, 42, 57, 64, 83, 90
 Kim, Y. H. 31, 83
 Kim, Y. I. 57
 Kim, Y. Y. 42, 90
 Kincaid, C. R. 48
 Kindelberger, S. A. 40
 Kinder, T. 60
 Kineke, G. C. 123
 King, A. 32, 122
 King, A. L. 32
 King, A. T. 122
 King, B. A. 30, 51, 60
 King, B. D. 50
 King, C. 86
 King, E. H. 71
 King, G. M. 113
 Kinne, S. 101
 Kinsey, J. 38, 43, 108, 112
 Kinsey, J. C. 43, 108
 Kintzing, M. D. 121
 Kiørboe, T. 96
 Kirby, J. T. 50, 62, 88, 120
 Kirchman, D. L. 36
 Kirillov, S. 88, 98
 Kirillov, S. A. 88
 Kirincich, A. R. 69
 Kirkey, W. 44, 107
 Kirkey, W. D. 107
 Kirkpatrick, B. A. 55
 Kirkpatrick, G. J. 55
 Kirkpatrick, J. B. 124
 Kishi J. Micho, . 119
 Kishi, M. J. 115
 Kisslinger, K. 115
 Kist, J. K. 103
 Kitamura, M. 57, 93, 101
 Klaeschen, D. 82
 Klages, M. 54
 Klar, J. 32
 Klein, B. 60
 Klein, P. 111
 Kleiss, J. M. 33, 37
 Kleyvas, J. A. 104, 106
 Klimant, I. 55
 Klinck, J. 45, 54, 63, 64
 Klinck, J. M. 45, 54, 63, 64
 Kline, D. I. 94
 Kline, T. C. 47, 69
 Klinger, B. A. 63
 Kling, G. W. 106
 Kliphuis, M. 63
 Klocker, A. 29
 Klonowski, W. 74
 Kloser, R. J. 85
 Kloster, S. 61
 Klump, J. V. 30, 41
 Klump, V. 78
 Klymak, J. M. 46, 57
 Knap, A. H. 80, 101, 111
 Knapke, E. M. 37
 Knapp, A. 103, 121
 Knapp, A. N. 103, 121
 Knapp, C. C. 105
 Knapp, J. H. 105
 Knecht, H. 59
 Knight, A. 51
 Knight, R. 36
 Knio, O. M. 81, 124
 Kniskern, T. A. 123
 Knoll, M. 112
 Knowles, B. 99
 Knowlton, A. L. 119
 Knowlton, C. 33
 Knowlton, C. W. 33
 Knutti, R. 51
 Kobara, S. 78
 Kobashi, D. 116
 Kobashi, F. 43, 44, 124
 Kobayashi, T. 38, 44
 Koch, A. O. 75
 Koch, B. 61, 87, 101
 Koch, B. P. 61, 87
 Koch, C. R. 59
 Koch, E. W. 53, 62
 Koch, M. 94
 Koch, P. L. 114
 Kock, A. 41, 96
 Ko, D. 79, 89, 100, 101
 Ko, D. S. 79, 89, 100
 KO, D. S. 88
 Koegler, J. 44
 Koehl, M. A. 59
 Koepfler, E. T. 40
 Koertzing, A. 41, 94
 Koester, M. 76
 Koeve, W. 41, 103, 108
 Kohler, D. 35
 Köhler, J. 110
 Kohn, M. S. 67
 Kohut, J. 31, 46, 54, 55, 64, 66, 67, 82, 95, 116
 Kohut, J. T. 55, 64, 67, 116
 Koibuchi, Y. 48
 Koizumi, Y. 69
 Kok, S. P. 49
 Koldunov, . 29
 Koldunov, N. V. 88
 Kolesnikov, I. 43
 Kolker, A. S. 53
 Koltermann, K. P. 56
 Kolts, J. M. 85, 104
 Komada, T. 53, 61, 97, 121, 122
 Komatsu, K. 83
 Komchatov, V. F. 66
 Komori, N. 33, 42
 Komori, S. 31
 Komori, S. K. 31
 Konar, B. 78, 99, 119
 Konda, M. 42, 43, 124
 Kondo, F. 43
 Kondolf, G. M. 62
 Kondo, Y. 32, 97
 Konikow, L. 91
 Konotchick, T. 36
 Koopmans, D. 55, 65
 Kopp, R. E. 56
 Koracin, D. 116
 Koracin, D. R. 33
 Kordell, T. R. 70
 Korniyuk, N. N. 39, 49
 Korotenko, K. A. 80
 Körtzinger, A. 74, 121
 Koschinsky, A. 87, 97
 Koseff, J. R. 67, 69, 72, 107, 122
 Kosobokova, K. 119
 Kosro, M. 49
 Kosro, P. M. 29, 59, 95
 Kostadinov, T. S. 102
 Kostel, K. 57
 Köster, M. 76
 Kostka, J. E. 92
 Kosugi, N. 124
 Kotabová, E. 36
 Kourafalou, V. 29, 39, 52, 80
 Kourafalou, V. H. 29, 52, 80
 Kovach, C. 108
 Kovacs, C. 44
 Kovacs, K. 33
 Kowalczyk, P. 103
 Kowek, D. 66, 104, 114
 Koyuk, H. 108
 Kozdon, R. 98
 Koziel, S. 125
 Kozik, C. R. 48
 Kozyr, A. 108
 Kpemie, E. 81
 Kraatz, L. M. 70, 112
 Kraatz, S. G. 75
 Krabbenhof, D. P. 89
 Kraemer, L. 104
 Krahmann, G. 34, 41, 51, 110, 111
 Krahmann, G. W. 41
 Kramer, J. G. 45
 Kramer, L. 37, 70
 Kramp, H. E. 51
 Krasting, J. P. 61
 Kratzenstein, C. 125
 Kratz, L. 53
 Krause, J. W. 115
 Krelling, A. M. 80
 Kress, N. 101
 Kretschmer, S. 32
 Kreutz, K. J. 87, 98
 Kriest, I. 108
 Krishfield, J. R. 114
 Krishfield, R. 31, 54, 56
 Krishfield, R. A. 31
 Krishnamurthy, N. 71, 72
 Kroeger, K. D. 91, 93
 Kromkamp, J. C. 36
 Kropuenske Artman, L. 31, 114
 Krumhansl, R. 82
 Krumpen, T. 88
 Krupke, A. 49
 Krupski, A. 122
 Krusche, A. V. 50
 Kruse, F. A. 47
 Kruse, S. 114
 Kruts, A. A. 33
 Kubokawa, A. 43
 Kubota, M. 43
 Kubriyakov, A. 115
 Kucera, M. 113
 Kudela, R. 47, 59, 81, 105, 121
 Kudela, R. M. 47, 81, 105, 121
 Kuehl, S. A. 109, 123
 Kukulka, T. 31
 Kukulya, A. 64, 69
 Kukulya, A. L. 64
 Kuleshov, Y. 68
 Kuletz, K. 73, 119
 Kuletz, K. J. 119
 Kumamoto, Y. 42
 Kumar, A. 38, 69, 74
 Kumar, N. 88, 120
 Kunze, E. 52, 82
 Kuo, A. 46
 Kuo, T. C. 44
 Kuperman, W. A. 72
 Küpper, F. C. 50
 Kupper, S. 88
 Kuramoto, T. K. 31
 Kurapov, A. 29, 39, 46, 55, 59, 74
 Kurapov, A. L. 29, 30, 39, 59, 74
 Kurata, N. 48
 Kuroda, H. 64, 65
 Kurokawa, Z. 85
 Kurosawa, N. 49, 118
 Kurose, R. K. 31
 Kuroyanagi, A. 103
 Kurtze, D. 97
 Kuska, G. F. 30, 39
 Kuss, J. 101
 Kustka, A. B. 32, 77

- Kutsumi, M. 48
 Kutsuwada, K. 43
 Kuwano-Yoshida, A. 33, 42
 Kuwata, M. 48
 Kuypers, M. 49
 Kuzminov, F. I. 36
 Kvale, K. F. 115
 Kvassnes, A. J. 33
 Kwak, M. 81
 Kwok, R. 63, 98, 113
 Kwon, E. Y. 60, 124
 Kwon, K. K. 39
 Kwon, M. 98
 Kwon, P. 31, 33, 41
 Kwon, P. S. 31
 Kwon, S. R. 53, 70
 Kwon, Y. 33, 63, 111, 124
 Kwon, Y. O. 33, 63, 111, 124
- L**
- Laan, M. 32
 Laan, P. 32
 LABATUT, M. 32, 76
 LaBella, A. L. 43
 Labeyrie, L. 116
 Labrador Sea Monitoring Group 108
 Labreuche, P. 79
 Labroue, S. 64
 LACAN, F. 76
 LACAN, F. 32
 LaCasce, J. H. 29
 Lachkar, Z. 53, 94
 Lacy, J. R. 53, 62
 Ladd, C. 99
 Ladner, S. 47, 64, 102
 Ladner, S. D. 47, 64
 Laffoley, D. A. 89
 Lagaria, A. 110
 Lagerloef, G. 34, 71
 Lagerloef, G. S. 34
 Lagueux, C. J. 114
 Laguionie, P. 91
 Lai, Z. 57, 66, 88
 Lalejini, D. M. 39
 Lamarque, J. F. 68
 Lambin, J. 64
 Lamb, K. G. 67, 75
 Lamborg, C. 32, 89
 Lamborg, C. H. 32, 89
 Lamela, G. 35, 47
 Lamela, G. M. 35
 Lamkin, J. 35, 47, 92, 100, 108
 Lamkin, J. T. 35, 47, 100
 Lamouroux, J. 30
 Lampitt, R. S. 43, 125
 Lamson, M. R. 83
 Lance, V. P. 51, 102, 113
 Landerer, F. W. 100
 Lander, S. 47
 Landing, W. M. 71, 72, 77, 87, 113
 Landolfi, A. 103
 Landon, K. C. 75
 Landrum, J. 50
 Landrum, L. 29
 Landry, M. 36, 82, 89, 93, 115, 125
 Landry, M. R. 36, 89, 93, 115, 125
 Lanerolle, L. W. 66
 Laney, S. 36, 56, 98, 119
 Laney, S. R. 36, 119
 Lang, C. 117
 Langdon, C. 94, 102, 104, 122
 Lange, C. 40
 Langehaug, H. R. 54
 Langston, T. 122
 Lankhorst, M. 42, 65
 Lan, K. W. 83
 Lannig, G. 87
 Lannuzel, D. 32, 77
 Lapham, L. 90, 105
 Lapham, L. L. 90, 105
 Laporte, S. 107
 Larese-Casanova, M. 60
 Large, B. 32
 Large, W. 61, 80
 Large, W. G. 61
 Largier, J. 48, 49, 67, 107
 Largier, J. L. 49, 67
 Larkum, J. A. 60, 62, 70
 Larose, C. 95
 Larsen, A. 59
 Larsen, L. G. 35, 122
 Larsen, T. 93
 Larson, A. 67
 Larson, L. A. 62
 Larson, N. 74
 Larson, R. 92, 108, 109
 Larson, R. A. 108, 109
 Lasorsa, B. K. 99
 Laszlo, I. 64
 Latif, M. 29, 56, 58
 Lauderdale, J. M. 38
 Lauffenburger, N. E. 52
 Lau, J. A. 68
 Laurel, B. J. 47
 Laurent, A. 62
 Laurindo, L. C. 100
 Lauritano, C. 70
 Lavelle, J. W. 124
 Lavender Law, K. 67
 Lavender, S. 84
 Lavenère-Wanderley, A. A. 62
 Lavery, A. C. 72, 82, 85
 Lavezza, R. 61
 Lavigne, H. 44, 79
 LaVigne, M. 87
 Lavik, G. 41, 110, 124
 Lavoie, D. 86
 Lavrentyev, P. J. 86, 116
 Law, B. A. 53, 112
 Law Chune, S. 83
 Law, C. S. 58, 102
 Lawrence, C. M. 95
 Lawrence, S. J. 49
 Lawrence-Slavas, N. 74
 Lawson, A. 47, 102
 Lawson, G. L. 71, 72, 82, 85
 Lazure, P. 67
 Leary, P. R. 69
 Lebednik, P. A. 87
 Le Bel, D. A. 64
 Leben, R. 56, 64, 80, 89, 106
 Leben, R. R. 56, 64, 80, 89
 Leblanc, K. 115
 LEBLANC, K. 105
 Lebon, G. T. 74
 LEBBRATO, M. 121
 Le Bris, N. 33
 Lechtenfeld, O. J. 61, 87
 Leclair, M. 75
 Le Dimet, F. X. 81
 Ledwell, J. R. 52, 75
 Lee Bryant, . 106
 Lee, C. 34, 44, 48, 53, 54, 55, 59, 63, 64, 65, 70, 77, 88, 90, 92, 97, 103, 115, 125
 Lee, C. M. 44, 48, 63, 88, 92
 Lee, C. S. 65, 77, 97
 Lee, C. Y. 88
 Lee, D. H. 107
 Lee, D. K. 90
 Lee, D. S. 118
 Lee, D. W. 91, 107
 Lee, E. M. 70
 Lee, G. 62, 90, 91, 107
 Lee, G. A. 62
 Lee, H. 43, 54, 57, 65, 91, 98
 Lee, H. J. 65, 91
 Lee, H. M. 57
 Lee, J. 31, 39, 54, 63, 91, 114
 Lee, J. H. 31, 45
 Lee, J. S. 114
 Lee, K. 47, 55, 64, 98
 Lee, K. E. 98
 Lee, K. H. 64
 Lee, K. R. 47
 Lee, M. A. 65, 83
 Leeming, R. 93
 Lee, O. 78
 Lee, R. F. 76
 Lee, S. 35, 54, 63, 98, 100, 104, 110
 Lees, C. 82
 Lee, S. H. 39
 Lee, S. J. 104
 Lee, S. K. 35, 100
 Lee/Sungjoo, L. S. 107
 Lee, T. 42, 51, 56, 84, 105, 110
 Lee, T. S. 105
 Leeuw, T. 60
 Lee, W. J. 72, 86
 Lee, Z. 35, 47, 101, 102, 120
 Lee, Z. P. 35
 Lefebvre, S. C. 97, 121
 Lefèvre, D. 61
 Le Galloudec, O. 65
 Legg, S. 56, 57, 123
 Legrand, J. 105
 Leguizamón Vélez, M. E. 46
 Le Henaff, M. 29, 80, 81
 Le Hénaff, M. 52
 Lehman, J. 93
 Leichter, J. J. 36, 69, 96
 Leider, A. 97
 Lei, J. 98
 Leinen, M. S. 56
 Leinweber, A. 94, 113, 114
 Leising, A. 43, 47
 Leising, A. W. 47
 Leitner, A. L. 78
 Lekunberri, I. 84
 Lellouche, J. M. 65
 Lelong, A. 81
 Lelong, M. P. 52, 75, 94
 Lemanski, J. R. 70
 Lembke, C. 55, 85, 108
 Lemckert, C. 122
 Lemieux, J. F. 29
 Lemus, E. R. 116
 Lenain, L. 37, 45, 50, 58
 Lenn, Y. D. 29
 Lenton, A. 108, 124
 Lenton, T. M. 95, 123
 Lentz, E. E. 119
 Lentz, S. J. 59
 Lenz, E. 87
 Lenz, P. H. 49
 Lepage, Y. 44, 117
 Lepp, J. G. 74
 Leptoukh, G. G. 101
 Le Quéré, C. 41, 94
 Lerczak, J. A. 48, 67, 70
 LeRoy, S. L. 38
 Le Sommer, J. 51, 79
 Lessard, E. J. 85
 Letelier, R. 40, 89, 102, 113, 115
 Letelier, R. M. 89, 102, 113, 115
 Le Traon, P. Y. 47
 Le Treut, H. 32
 Letscher, R. T. 103
 Leuliette, E. W. 56, 66
 Levenson, S. 54
 Leventer, A. 87
 Levier, B. 65
 Levine, D. 34
 LeVine, D. M. 34
 Levine, M. D. 52, 75
 Levine, N. M. 91
 LEVIN, J. 105
 Levin, L. 33, 43, 45, 89, 96, 105, 121
 Levin, L. A. 33, 43, 89, 96, 105, 121
 Levin, P. 37
 Levin, P. S. 37
 Levitan, D. 46
 Levitus, S. 54, 79
 Lewis, B. 40
 Lewis, D. 47
 Lewis, M. 44, 47, 79, 105
 Lewis, M. D. 47
 Lewis, M. R. 44, 79
 Leymarie, E. 44, 117
 Leys, S. P. 117
 Lherminier, P. 54
 Li, A. C. 123
 Liang, J. H. 58
 Liang, X. 79, 81, 123
 Liang, X. S. 81
 Liang, Y. 29
 Liao, J. H. 109
 Liao, Q. 31, 55
 Liao, Y. P. 50
 Li, B. 43, 48, 74, 83, 106
 Libes, S. 34, 40
 Libes, S. M. 34, 40
 Li, C. 79, 90, 106, 123
 Lichtenwalner, C. S. 33, 41, 54, 55, 64, 67
 Lichtenwalner, S. 55
 Lidén, K. 78
 Lidgard, D. C. 35
 Lien, R. 52, 67, 88, 110, 123
 Lien, R. C. 88, 110, 123
 Li, F. 63, 80
 Li-Feng Lu, L. 41
 Light, B. 98, 99, 119
 Lightsom, F. 78
 Li, J. 55, 64, 106
 Li, L. 102
 Liljebldh, B. 92, 110, 112
 Liljebldh, B. S. 112

- Lilley, M. D. 112
 Lilley, M. K. 95
 Lillibridge, J. 56, 66
 Lillibridge, J. L. 56
 Lilly, J. 52, 58, 94
 Lilly, J. M. 52, 94
 Li, M. 47, 56, 71, 100, 112, 123
 Lima, I. 60, 94
 Lima, I. D. 60
 Lim, B. 57
 Lim, C. W. 107
 Limeburner, R. 64, 70
 Lin, D. 41
 Lindemann, Y. 43, 72
 Linder, C. 69
 Linders, T. 112
 Lindholm, J. 51
 Lindley, S. T. 35
 Lindo-Atichati, D. 92
 Lindo, D. 47
 Lindquist, E. A. 108
 Lindquist, N. 121
 Lindsay, D. 93
 Lindsay, K. 38, 60, 72, 93, 94
 Lindstrom, E. 30, 34, 56
 Lindstrom, E. J. 30, 34, 56
 Lin, H. 57, 66, 88, 90, 101
 Lin, I. I. 88
 Lin, J. 51, 57, 65, 66
 Lin, J. T. 51
 Lin, K. 65, 87
 Lin, K. Y. 65
 Linn, L. J. 108
 Lin, P. 44, 77
 Lin, P. S. 77
 Lin, T. 101
 Lin, X. 39, 80, 116
 Lin, Y. 36, 48, 94
 Lin, Y. C. 94
 Li, P. 45, 49, 64, 100
 Li, P. P. 49
 Lippiatt, S. M. 68, 122
 Lippmann, T. C. 71, 74, 120
 Li, Q. 57, 61, 69, 105
 Li, Q. P. 105
 Lique, C. 33
 Li, R. 47
 Lirman, D. 114, 115
 Li, R. R. 35, 47
 Lisa Levin, A. 30
 Lisé-Pronovost, A. 99
 Liss, A. 103
 Liss, A. M. 103
 List, J. 88, 119, 120
 List, J. H. 88, 120
 Li, T. 98
 Littreal, P. R. 46
 Litvin, S. 69
 Liu, B. 90, 106
 Liu, C. S. 109
 Liu, D. C. 65
 Liu, G. 38, 55, 64, 105, 116
 Liu, H. 36, 110, 117
 Liu, J. 33, 65, 109, 113, 123
 Liu, J. P. 109, 123
 Liu, J. W. 33, 65
 Liu, K. K. 65
 Liu, M. 71, 98
 Liu, Q. 39, 56, 89, 90, 111, 121, 124
 Liu, Q. Y. 56, 90, 124
 Liu, S. 113
 Liu, W. 71, 84
 Liu, W. T. 84
 Liu, X. 59, 84, 106, 120, 121
 Liu, X. L. 120
 Liu, Y. 35, 80, 85, 90, 92, 100
 Liu, Z. 48, 56, 57, 61, 79, 98, 110, 113, 116
 Liu, Z. Q. 116
 Li, W. 59, 120
 Li, X. 66, 81
 Li, X. C. 81
 Li, Y. 29, 39, 86, 90, 105, 112
 Li Yao, . 90
 Li, Y. N. 39
 Li, Z. 29, 45, 49, 61, 64, 65, 100
 Llebot, C. 116
 Llinas, O. 44
 Llinás, O. 44
 Llopiz, J. K. 47
 Lloyd, K. G. 90
 Lluésma Gomez, M. 84
 Locker, S. 78
 Locke, W. L. 86
 Locke-Wynn, L. 111
 Lockwood, D. E. 60
 Loder, J. W. 54
 LoDolce, G. C. 64
 Loe, V. 68
 Lofgren, B. 106
 Loftin, J. 50
 Logan, C. A. 34
 Logares, R. 36
 Loginova, A. 101
 Logsdon, M. 103, 104, 106
 Logsdon, M. G. 104, 106
 Lohan, M. 32, 77, 87
 Lohan, M. C. 87
 Lohmann, K. 54
 Lohmann, R. 60, 61
 Lohrenz, S. 40, 53, 62, 63, 89
 Lohrenz, S. E. 53, 62, 63
 Loick-Wilde, N. 114
 Loisel, H. 102
 Loisel, H. 102, 120
 Lomas, M. 37, 73, 80, 85, 89, 101, 102, 111, 115, 125
 Lomas, M. w. 111
 Lomas, M. W. 37, 73, 80, 89, 101, 102, 115, 125
 Lombard, F. 116
 Lo, N. 65
 Long, D. G. 55, 66
 Longenecker, K. 114
 Long, M. 29, 38, 55, 65, 99, 113
 Long, M. C. 29, 38, 99, 113
 Long, M. H. 55
 Longmire, E. 96
 Longnecker, K. L. 119
 Long, W. 36, 46
 Lonsdale, D. J. 43
 Loose, B. 104
 Lopes, C. 113
 López, A. 71
 Lopez, A. L. 86
 Lopez-Castillo, E. 57
 Lopez-Castro, M. C. 35
 Lopez, E. K. 107
 López-Figueroa, N. B. 97
 Lopez, J. E. 39, 48, 66
 Lopez, L. M. 60
 Lord, J. 114
 Lorenz, D. 30
 Lorenzo, A. 44
 Lorenzoni, L. 89, 101, 109
 Lorenz, R. D. 50, 64, 78
 Lorrain, A. 97
 Losch, M. 64, 105
 Losh, J. L. 102
 Lott, D. E. 60
 Lott, K. 60
 Louchouart, P. 62, 108
 Louis, M. E. 58
 Lourenço, A. 67, 75
 Lourenço, A. 45
 Lourenço, T. S. 75
 Lovejoy, C. 115, 116
 Lovenduski, N. 38
 Lovenduski, N. S. 29, 38
 Lovera, C. 104
 Lovewell, M. A. 37
 Lovko, V. 70
 Lovvorn, J. R. 73, 85, 104
 Lowen, B. 122
 Lowen, J. B. 106
 Lower, E. E. 87, 98
 Lowe, R. J. 47
 Lowes, S. 44
 Lowry, K. E. 93, 99, 119
 Lozano, C. 80
 Lozier, M. S. 43, 52, 111
 Lozier, S. M. 111
 Lozovatsky, I. D. 110
 Lubbers, D. 51
 Lucas, A. J. 59
 Lucas, C. H. 117
 Lucas, E. Y. 55, 64
 Lucas, K. 85, 117
 Lucas, L. 110
 Lucas, M. 47, 102
 Lucas, M. Q. 47
 Luchin, V. 65, 119
 Lucke, R. 35, 47
 Lucke, R. L. 47
 Ludwichowski, K. U. 87
 Ludwig, K. 34
 Luebbecke, J. F. 67
 Luecke, C. 106
 Lueck, R. G. 45, 65
 Luettich, R. 119
 Lugo-Fernández, A. 80, 89
 Lu, H. 100
 Luhanová, D. 36
 Lu, J. Y. 90
 Lu, K. 102
 Lukas, R. 31, 55, 90, 101, 123
 Lukas, R. B. 31, 101
 Lukijanto, . 90
 Lumpkin, R. 56, 67, 83, 94
 Lund, B. 100
 Lunde, B. 81, 124
 Lundrigan, S. 54, 63
 Lunde, B. 81, 124
 Lundrigan, S. E. 63
 Lunsford, E. T. 59
 Lunsford, T. L. 45
 Lunven, M. 67
 Lunyu Wu, . 30
 Luo, H. 63, 68, 94
 Luo, J. 78, 83, 90, 95
 Luo, J. Y. 83, 95
 Luo, L. 41
 Luo, T. 84
 Luo, X. 81, 124
 Luo, X. F. 51
 Luo, Y. 39, 111, 115
 Lupton, J. E. 112
 Luther, D. 31, 65, 79
 Luther, D. S. 65, 79
 Luther, G. W. 59, 112, 124
 Luthringer, J. E. 53
 Luthy, R. G. 41
 Lutjeharms, J. R. 59
 Lutken, C. B. 74, 105
 Luttazi, C. F. 71
 Lu, Y. 98
 Lu/Youyu, Y. Y. 51
 Lyard, F. 30
 Lyman, J. M. 42, 46
 Lynds, S. 33, 64
 Lynett, P. J. 76
 Lyons, G. 46
 Lyons, M. M. 76
 Lyubartsev, V. 29, 74
- ## M
- Maas, A. E. 104, 121
 MacCready, P. 36, 42, 56, 71, 92, 112
 Macdonald, A. M. 31, 67
 MacDonald, C. R. 113
 Macdonald, D. 48
 MacDonald, D. 36, 59
 MacDonald, D. G. 36
 Macdonald, F. A. 53
 Macdonald, H. S. 80
 MacDonald, I. R. 91, 108
 Macduff, S. D. 62
 Mace, A. 58
 Macelloni, L. 74, 105
 MacGregor, B. J. 112
 Machu, E. 41
 MacIntyre, H. L. 113
 Mackenzie, F. T. 39
 Mackey, J. 55
 Mackinnon, J. A. 57
 MacKinnon, J. A. 110, 123
 Mack, S. 63
 MacMahan, J. 69, 71, 72, 74, 75, 120
 MacMahan, J. H. 69, 71, 74, 75, 120
 Macoun, P. 85
 Macrander, A. 38, 99
 Macrander, A. M. 99
 MacVean, L. J. 62
 Maddison, J. R. 82
 Maderich, V. 83
 Madigan, D. J. 69
 Madin, L. P. 117
 Madison, A. S. 124
 Madison, M. J. 113
 Maenner-Jones, S. 39
 Maffei, A. 49
 Ma, G. 88
 Magaldi, M. G. 88
 Magar, V. 71, 120
 Magerman, J. 66
 Maglio, M. 122
 Magnusson, J. 58, 67
 Mahadevan, A. 42, 52, 55, 76, 79, 89, 98, 123

- mahaffey, c. 82
 Mahaffey, C. 61, 69
 Mahajan, S. 68
 Mahiouz, K. 91
 Mahoney, A. 99
 Mahon, I. 82
 Mahon, R. 37
 Maie, N. 89
 Maier, M. A. 36, 48, 53, 122
 Maier-Reimer, E. 63
 Maik Thomas, M. 81
 Mainor, T. M. 107
 Maio, C. V. 75
 Maiti, K. 77
 Majda, A. J. 72
 Majkut, J. 38, 60, 91
 Majkut, J. D. 91
 Majumder, S. 79
 Ma, K. 106, 122
 Makio Honda, M. 108
 Maldonado, M. T. 32, 77
 Malecha, Z. 52
 Malin, G. 115
 Mallick, S. 82
 Malone, T. C. 30
 Maltrud, M. E. 29, 63, 79
 Manda, A. 43
 Manderson, J. 82, 95
 Manfrino, C. 92
 Manganini, S. J. 98
 Mangin, A. 49
 Manizza, M. 60
 Manke, A. B. 108
 Mankoff, K. D. 112
 Manley, J. 85
 Mann, E. 71, 113
 Mann, E. L. 71
 Manning, A. C. 51
 Manning, A. J. 62
 Manning, C. C. 60
 Mannino, A. 47, 53, 62, 64, 89, 102
 Mannix, H. 34
 Mann, M. E. 66
 Mann, P. J. 103
 Mann, R. 45
 Manrique-Hernández, H. 51
 Mansfield, K. L. 35
 Manzano-Sarabia, M. 121
 Manzello, D. P. 94
 Manzini, E. 56
 Mao, C. 63
 Mao, J. 61
 Maps, F. 43, 95, 116
 Ma, R. 35
 Maranger, R. 30
 Marcantonio, F. 98
 Marcel Ramos, M. 120
 Marchesiello, P. 41
 Marchi, A. 91
 Maresca, S. 117
 Margolin, A. R. 38
 Margolina, T. 76, 94
 Margvelashvili, N. 76
 Mariano, A. F. 72
 Marin, F. 80, 82
 Marin, F. O. 80
 Marin III, R. 122
 Mariño, I. 88
 Marinov, I. 45, 97
 Maritorea, S. 102, 120
 Markager, S. 48, 112
 Markager, S. S. 112
 Marker, M. 94
 Mark Hope, . 76
 Marlow, J. J. 105
 Marmorino, G. 52, 57, 111
 Marmorino, G. O. 52, 111
 Marot, M. E. 109
 Marquette, C. 69
 Marquis, E. 65
 Marquis, E. C. 65
 Marra, J. F. 113
 Marsaleix, P. 117
 Marsaleix, P. 30, 83
 Marsay, C. M. 77
 Marshall, C. D. 117
 Marshall, D. P. 38, 56, 82
 Marshall, J. 31, 38, 52, 60, 63, 124
 Marshall, J. C. 124
 Marsh, L. 33
 Marsh, R. 46
 Marston, A. 82
 Marta-Almeida, M. 39
 Martens, C. 90, 121
 Martens, C. S. 121
 Martens-Habbena, W. 87
 Martin, A. P. 33, 116
 Martin, B. 70
 Martin, C. 90
 Martin, D. L. 30
 Martinez Avellaneda, N. 110
 Martinez, C. 66
 Martinez, E. 44
 MARTINEZ, E. 89
 Martinez, G. A. 122
 Martinez-Garcia, M. 84
 Martinez, J. 34, 45
 Martinez-Pedraja, J. 75, 92
 Martinez-Rey, J. 31, 121
 Martínez-Ruiz, F. 98
 Martini, A. 53
 Martini, K. I. 57, 67, 99, 123
 Martin, J. 108
 Martin, M. J. 124
 Martinolich, P. 35, 47, 102
 Martin, P. 80, 98
 Martin, S. 104, 119
 Martin, S. A. 119
 Martin Schmid, . 106
 Martin, T. 29
 Martin, W. R. 71
 Martynov, F. 101
 Martz, T. 44, 74, 94
 Martz, T. R. 74, 94
 Masahide Wakita, M. 108
 Maschner, H. D. 97
 Masiello, C. A. 61
 Mask, A. 83
 Maske, H. 70, 82, 118
 Maskell, J. 30
 Masland, D. P. 84
 Maslanik, J. 64
 Maslowski, W. 63, 113
 Mason, O. U. 105
 Masque, P. 32, 57, 76, 77
 Masqué, P. 32, 57, 67, 98
 Massana, R. 36
 Masson, D. 38, 41, 106, 116
 Masuda, S. 29, 81
 Masuda, Y. 115
 Masujima, M. 43
 Masumoto, Y. 42, 57, 66
 Matabos, M. 40, 66
 Matano, R. 36, 83, 110
 Matano, R. P. 36, 83
 Matear, R. 47, 94, 124
 Matear, R. J. 47
 Mate, B. R. 68
 Mathews, H. D. 38
 Mathis, J. 53, 93, 94, 97, 119
 Mathis, J. T. 53, 93, 94, 97, 119
 Matis, K. 31, 33
 Matis, K. E. 33
 Matondkar, S. G. 117
 Matondkar, S. P. 34
 Matrai, P. 44, 87, 96, 98
 Matrai, P. A. 44, 87
 Matrouk, K. 77
 Matsou, P. G. 94
 Matsubaya, O. 112
 Matsumoto, G. 54, 85
 Matsumoto, K. 48, 101
 Matsuno, K. 99
 Matsuno, T. 32
 Matsuoka, A. 98
 Matsuo, N. 44
 Mattern, J. P. 76
 Matthew, M. H. 57
 Matthew Ware, M. W. 102
 Matthyse, A. G. 112
 Mattos, R. 39
 Matt, S. 48, 67
 Maturi, E. 64
 Matzanke, B. F. 50
 Maue, C. 90, 105
 Maue, C. C. 105
 Maughan, T. 54, 122
 Maughan, T. G. 54
 Mauri, E. 39, 52
 Mauritzen, C. 98
 Maury, O. 47
 Maxeiner, E. 31, 57
 Maximenko, N. 55, 83, 94
 Maximenko, N. A. 94
 May, A. L. 70
 Mayer, D. 98, 119
 Mayer, D. P. 119
 Mayer, L. 38
 May Jr., L. N. 106
 Mayor, E. 117
 Mayo, T. 124
 May, P. W. 80
 Maze, G. 41, 124
 Mazel, C. 84
 Mazloff, M. 29, 38, 60, 70, 124
 Mazloff, M. R. 29, 38, 70, 124
 Mazzini, P. 65, 69, 85
 Mazzini, P. L. 65, 69
 McAlister, J. A. 77
 McCabe, R. M. 106
 McCaffrey, K. L. 80, 88
 McCallister, S. L. 101, 115, 122
 McCammon, M. E. 30
 McCann, J. 82
 McCann, M. 54, 78
 McCann, M. P. 78
 McCarthy, M. 53, 93, 114
 McCarthy, M. D. 53, 93, 114
 McCarthy, S. 64, 102
 McCarthy, S. C. 102
 McClain-Counts, J. P. 93
 McClain, C. R. 99, 108, 120
 McClatchie, S. 83, 95
 McClean, J. 33, 100
 McClean, J. L. 100
 McConney, P. 37
 McCorkle, D. C. 71, 94, 114
 McCormick, L. R. 108
 McCormick, M. I. 121
 McCoy, C. A. 40
 McCreary, Jr., J. P. 76
 McCullough, G. 101
 McCurdy, A. 54, 64
 McCusker, K. A. 116
 McDonagh, E. 29, 60
 McDonagh, E. L. 60
 McDonnell, J. 54
 McDonnell, A. M. 94, 113
 McDonnell, J. 33, 54, 55, 64, 67, 82
 McDonnell, J. D. 33, 64, 67
 McDougall, T. J. 60
 McDuff, R. 50, 112
 McDuff, R. E. 112
 McEachen, H. J. 86
 McElhany, P. 104
 McEwen, R. 74
 McFadden, L. F. 36
 McFall, G. 104
 McFarland, M. 83
 McFarland, M. N. 83
 McGann, B. J. 59, 122
 McGeachy, C. T. 60
 McGeehan, T. P. 63
 McGilliard, E. 75
 McGillicuddy, D. 69, 80, 105
 McGillicuddy, D. J. 69, 80
 McGillis, W. R. 46, 104
 McGillivray, P. A. 85
 McGlathery, K. J. 55
 McGranaghan, M. 43
 McGrath, D. 92
 McGraw, C. M. 102
 McGregor, H. V. 87
 McInnes, A. 43, 48
 McInnes, A. S. 43
 McInness, A. 36
 McIntosh, H. 46
 McIntosh, H. A. 46
 McIntosh, N. E. 73
 McIntyre, C. 112
 McKay, M. C. 67
 McKee, D. 47
 McKee, K. 97, 123
 McKenna, L. 74, 120
 McKenna, L. A. 74
 Mckenzie, C. H. 106
 McKenzie, C. H. 106, 122
 Mckenzie, D. 74
 McKeon, M. A. 62
 McKie-Krisberg, Z. M. 115
 Mckinley, G. 53
 McKinley, G. A. 53, 91, 94, 122
 McKinnon, A. D. 39
 McKnight, D. M. 71
 McLain, P. 74
 McLaughlin, R. 46, 115
 McLaughlin, R. M. 115
 McLean, S. 78
 McLean, S. J. 78
 McLellan, S. L. 92

- McLeod, K. L. 34
 McMahan, J. 74
 McMahan, K. W. 93, 114
 McManus, G. 49, 118
 McManus, G. B. 49
 McManus, J. 37, 87
 McManus, M. A. 30, 39, 59, 69, 94, 116, 122
 McManus, P. 79
 McMillan, W. 33
 McMullen, K. Y. 103
 McNeil, B. I. 76, 93, 94
 McNinch, J. E. 75, 119, 120
 McPhaden, M. J. 67
 McPhaden, M. J. 54
 McPhaden, M. J. 42, 67
 McPhee, M. 64
 McPhee-Shaw, E. 69, 95
 McPhee-Shaw, E. E. 69
 McPherson, M. L. 115
 McQuaid, C. 59
 McTainsh, G. 97
 McTigue, N. D. 99
 McVicar, A. 79
 McWilliams, J. 29, 31, 52, 58, 80, 92, 107, 123
 McWilliams, J. C. 29, 31, 52, 58, 107, 123
 Meade, R. H. 123
 Mead, K. A. 103
 Mead, R. N. 62
 Means, Z. 92
 Measures, C. 32, 76, 93, 113
 Measures, C. I. 32, 72, 76, 113
 Mecking, S. 31, 51, 60
 Medeiros, P. 50, 109
 Medeiros, P. M. 50
 Medrinal, E. 115
 Meekan, M. 121
 Mehra, A. 57, 64, 66, 89, 100, 101
 Meijer, H. 91
 Meijers, A. J. 60
 Meinig, C. 56, 74, 114
 Meinville, M. 124
 Meisels, G. G. 58
 Meissner, K. J. 115
 Meissner, R. J. 70
 Meissner, T. 34
 Mei, Z. 115
 Mejia, J. F. 33
 Meléndez Díaz, J. 82
 Meléndez, J. O. 82
 Meléndez, M. 101, 104
 Meléndez, M. O. 101
 Melet, A. 107, 123
 Melet, A. V. 123
 Melling, G. J. 39
 Melling, H. 119
 Melling, H. 98
 Melnichenko, O. 94
 Melo, N. 94
 Melrose, D. C. 64
 Melville, K. W. 50
 Melville, W. K. 31, 37, 45, 50, 58
 Melzner, F. 94, 104, 121
 Menage, O. 123
 Mendelssohn, R. 43
 Menden-Deuer, S. 95, 96
 Mendlovitz, H. 90, 121
 Mendlovitz, H. P. 121
 Mendoza, G. F. 105
 Mendoza, G. M. 89
 Mendoza, J. 118
 Mendoza, W. G. 109
 Menemenlis, D. 33, 61, 81, 92, 98, 112, 124
 Menesguen, C. 52, 123
 Ménesguen, C. 123
 Meneveau, C. 50
 Menge, B. 94, 114
 Menge, B. A. 114
 Mengelt, C. 102
 Mensa, J. 75
 Mensa, J. A. 75
 Mercado, A. 40
 Merchant, C. J. 56
 Mercier, H. 41, 54, 124
 Mercier, M. 57, 67
 Mercier, M. J. 67
 Merckelbach, L. M. 106
 Merck, M. M. 119
 Meredith, M. M. 108
 Meredith, M. P. 29, 38, 51, 113
 Mériaux, X. 102
 Merico, A. 94
 Merrifield, M. 59, 72, 74, 75
 Merrifield, M. A. 72, 74, 75
 Merrifield, S. 33
 Merrill, C. F. 74
 Mertens, C. 63, 110, 123
 Meseck, S. 104, 121
 Meseck, S. L. 104
 Mesick, S. M. 78
 Mesner, N. O. 60
 Messerman, N. A. 70
 Messias, M. J. 108
 Messie, M. 83
 Messie, M. 58, 68
 Meth, C. 34
 Mette, M. J. 98
 Metzger, B. 78
 Metzger, B. 122
 Metzger, E. J. 29, 30, 75, 90
 Metzger, R. C. 109
 Metzl, N. 108
 Meyer, A. K. 98
 Meyer, D. 84
 Meyer, J. J. 58
 Meyer, R. 76
 Meyers, G. 46
 Meyers, P. 78
 Meyer, V. 55
 Meysman, F. 121
 Miard, T. 94
 Michael, H. A. 91
 Michael W.Lomas, M. W. 115
 Michel, C. 95
 Michel, E. 116
 Micheli, F. 73
 Michelou, V. K. 36
 Mickett, J. B. 30
 Mickey, R. C. 110
 Middag, R. 32
 Middelburg, J. J. 102
 Middleton, J. 44, 59
 Middleton, J. F. 44
 Midorikawa, T. 124
 Mied, R. P. 76
 Mienert, J. 89
 Mignot, A. 44
 Mignot, J. 54
 Mihaly, S. F. 39
 Mihoff, M. 46
 Mikaloff-Fletcher, S. 51, 60, 108
 Mikaloff-Fletcher, S. E. 60, 89
 Mikaloff-Fletcher, S. E. 60
 Mikkelsen, O. A. 53
 Mikolajewicz, U. 63
 Mikulak, S. 46, 55
 Mildner, T. C. 100
 Mileham, M. A. 34, 44
 Miles, T. N. 93
 Millar, J. J. 29
 Miller, A. J. 32, 98
 Miller, A. L. 34, 50
 Miller, D. 46
 Miller, E. 50, 59
 Miller, E. P. 50
 Miller, G. 67, 78
 Miller, G. H. 67
 Miller, I. M. 109
 Miller, J. 30
 Miller, L. 64, 108
 Miller, L. A. 108
 Miller, M. 44, 61
 Miller, M. D. 61
 Miller, N. 104, 115
 Miller, N. A. 104
 Miller, R. N. 76, 124
 Miller, S. 58
 Miller, T. W. 93
 Miller, W. D. 52, 105, 122
 Miller, W. L. 50, 63
 Mill, G. N. 124
 Milligan, A. J. 49, 102, 117, 120
 Milligan, T. G. 112
 Milliman, J. 109, 123
 Milliman, J. D. 109, 123
 Mills, D. 74
 Mills, E. W. 81
 Mills Flemming, J. 35
 Mills, M. 93, 98, 99, 113, 119
 Mills, M. M. 93, 99, 113, 119
 Mills, R. A. 32
 Mills, S. W. 33, 43, 114, 122
 Milne, A. 32, 77
 Miltner, A. 114
 Milutinovic, S. 102
 Min, D. 40, 41
 Miner, B. 49
 Min, H. S. 31, 100
 Minicucci, T. J. 69
 Min, J. O. 114
 Minnett, P. J. 92, 110
 Minobe, S. 42, 56
 Minor, E. C. 116
 Miralto, A. 70
 Miranda, J. A. 80
 Misarti, N. 97
 Mischra, S. 102
 Miselis, J. L. 120
 Mishra, D. R. 47
 Mishra, S. 47
 Misra, S. 62
 Misumi, K. 72
 Mitarai, S. 59
 Mitchell, B. G. 93, 94, 99, 119, 121
 Mitchell, J. G. 44
 Mitchelmore, C. L. 109
 Mitchum, G. T. 56, 66, 95
 Mitra, S. 123
 Mitrovica, J. X. 56
 Mitsudera, H. 33, 43, 75
 Mix, A. 40, 113
 Mix, A. C. 113
 Miyama, T. 33, 66, 90
 Miyamoto, H. 57
 Miyamoto, Y. 100
 Miyasaka, T. 42, 56
 Miyazaki, C. 60
 Miyazawa, Y. 43, 57, 66
 Mize, J. L. 78
 Mizuno, K. 38, 90
 Moate, B. D. 91
 Mobley, C. 102
 Mode, J. 103
 Moeller, F. U. 53
 Moeller, H. 113
 Moffat, C. 45, 120
 Moffat, C. F. 45
 Moffet, J. W. 36
 Moffett, J. W. 32, 71, 77, 87, 97
 Moffitt, R. A. 49
 Moffitt, S. E. 30
 Mohan, J. A. 86
 Mohrholz, V. 41, 67, 82
 Mohrig, D. 109
 Molcard, A. 75
 Molemaker, M. J. 52, 76, 107, 123
 Molinari, J. F. 40
 Moline, M. 46, 49, 105, 123
 Moline, M. A. 46, 49
 Molinero, J. 117
 Molines, J. J. 65
 Molines, J. M. 51, 107
 Monacci, N. 53, 94
 Monacci, N. M. 94
 Monahan, E. C. 68
 Monaldo, F. M. 117
 Monbureau, E. M. 106
 Monfort, C. 38
 Monger, B. C. 100
 Monier, A. 49, 115
 Monismith, S. G. 41, 59, 69, 71, 72, 83, 88, 95, 107
 Moniz, R. J. 59, 69
 Monsen, N. E. 71
 Montagnes, D. 69
 Montanari, G. 74
 Montecinos, A. 111
 Monteiro, F. M. 41, 51
 Monteiro, P. 38, 51, 121
 Monteiro, P. M. 38, 51
 Montes, E. 101, 109
 Montes, M. J. 47
 Montluçon, D. B. 98
 Montoya, J. 37, 49, 50, 91, 109, 114
 Montoya, J. P. 91
 Montoya, J. P. 37, 49, 50, 91, 109, 114
 Mooers, C. 66, 89, 100, 101
 Mooers, C. N. 66, 89, 100
 Mooney, T. A. 34, 69, 96
 Moon, J. 40
 Moore, A. M. 76, 95, 125
 Moore, C. 44, 48, 59, 67, 108, 109
 Moore, C. C. 59
 Moore, C. D. 67
 Moore, D. 46, 58
 Moore, D. A. 58
 Moore, E. K. 71, 115

- Moore, F. B. 116
 Moore, G. 80, 88
 Moore, G. W. 88
 Moore, J. K. 41, 93, 94
 Moore, K. 60, 72
 Moore-Maley, B. L. 114
 Moore, P. 34
 Moore, R. M. 51
 Moore, S. 85, 119
 Moore, S. E. 119
 Moore, T. S. 102
 Moore, W. 32, 109
 Moore, W. S. 32
 Mopper, K. 61
 Morace, J. L. 53
 Morales, L. V. 85
 Morales Maqueda, M. A. 54
 Morales-Núñez, A. G. 118
 Morales, R. L. 37
 Morando Jr, M. B. 50
 Moran, J. M. 81
 Moran, K. 55
 Moran, M. A. 50, 108
 Moran, R. 44
 Moran, S. B. 32, 72, 73, 115
 Moraru, C. L. 48
 Mordy, C. 85, 99, 119
 Mordy, C. A. 85
 Mordy, C. W. 85, 99, 119
 Morel, F. M. 102
 Morell, J. 104
 Morell, J. 40
 Morello, F. 97
 Morel, Y. 80
 Moreno-Willerer, M. 118
 Morey, S. 42, 80, 100, 108
 Morey, S. L. 42, 80, 100
 Morgan, L. E. 49
 Morgan, S. 69, 72, 74
 Morgan, S. G. 69, 72
 Morgan, T. C. 99
 Morgan, T. L. 62
 Moriarty, J. 53, 109
 Moriarty, J. M. 53, 109
 Moriarty, R. 94, 115
 Morii, Y. 55
 Morimoto, A. 31
 Morishige, C. 68
 Morison, J. 114
 Morison, J. H. 63, 98
 Moritsch, M. 59
 Moroni, D. F. 66
 Morris, B. 90, 105
 Morris, B. D. 90
 Morrison, A. K. 29
 Morrison, H. G. 92
 Morrison, J. R. 39
 Morris, P. J. 32
 Morrow, E. 56
 Morrow, J. 47
 Morrow, R. 64
 Mortazavi, B. 91, 92, 107
 Morten, A. M. 77
 Mortenson, E. A. 64
 Mortier, L. 52
 Mortlock, R. 54
 Morton, P. L. 77, 87
 Morton, R. A. 120
 Morzel, J. 88
 Morzfeld, M. 124
 Moser, F. C. 45
 Moser, S. C. 58
 Moses, W. 35
 Moses, W. J. 47
 Moshary, F. 102
 Mosley, C. M. 51
 Moss, A. G. 95, 117
 Moteki, Q. 43
 Motoyoshi, M. 119
 Motschman, J. D. 70
 Motti, C. 59
 Motz, E. 54
 Mouche, A. 117
 Moulin, A. 56
 Moulton, M. R. 74
 Moun, J. N. 36, 56, 57, 67, 79, 123
 Moutin, T. 110, 121
 Mouw, C. B. 98, 101, 122
 Moya, A. 104
 Moy, C. 62
 Moyer, C. L. 102
 Moyer, J. K. 59
 Mrvaljevic, R. K. 88
 Mucci, A. 30, 124
 Mucciarone, D. 62
 Mucciarone, D. A. 38, 104, 114
 Muehlechner, N. 122
 Mueller, M. 40
 Muenchow, A. 63, 113
 Muench, R. 54, 63, 64
 Muench, R. D. 54, 63
 Mueter, F. 44
 Mueter, F. J. 44
 Muhling, B. 35, 47, 92, 100, 108
 Muhling, B. A. 35, 47, 92, 100
 Mukai, H. 60
 Mukherjee, S. 76
 Mulholland, M. R. 53, 62, 64, 81, 102, 119
 Mulisch, M. 102
 Mullarney, J. C. 37, 74, 88
 Muller, A. A. 82
 Muller, F. 118
 Muller-Karger, . 89
 Muller-Karger, F. 47, 58, 64, 89, 92, 101, 108, 109
 Muller-Karger, F. E. 47, 92, 101, 109
 Müller, T. J. 101
 Müller, W. 87
 Mulligan, R. P. 62, 119
 Mullineaux, L. S. 33, 43, 59, 114, 122
 Mullins-Perry, R. L. 68, 74, 106
 Munday, D. R. 38
 Munday, P. L. 121
 Mundy, C. J. 99
 Munk, P. 35
 Munk, W. H. 66, 72
 Munnich, M. 94
 Münnich, M. 51
 Munoz, E. 68
 Munoz, Y. P. 103
 Munro, D. R. 62
 Munroe, D. M. 45
 Murasko, S. 108, 109
 Murata, A. 60, 108
 Murawski, S. 108
 Murayama, A. 77
 Murnane, M. 113
 Murphy, B. 84
 Murphy, D. 74
 Murphy, S. J. 34
 Murray, J. 32, 51, 72, 124
 MURRAY, J. 32
 Murray, J. R. 51
 Murray, J. W. 72, 124
 Murray, L. 76
 Murray, R. W. 109
 Murray, T. 92
 Murtugudde, R. 79, 110
 Musat, N. 49
 Muscarella, P. 81, 105
 Muscarella, P. A. 81, 105
 Muse, E. 82
 Musielewicz, S. 39, 101
 Muus, D. 66
 Myers, J. S. 47
 Myers, P. G. 86
 Myers-Pigg, A. N. 71
 Myksovoll, M. S. 112
 Myoshi, T. 89
 Myriam Sibuet, . 30
 Myrick, M. L. 48
 Mysak, L. A. 38
- ## N
- Nadai, A. 117
 Nadiga, B. T. 75, 94
 Nadiga, S. 64
 Naesje, T. F. 35
 Nagai, H. 77
 Nagaishi, K. 112
 Nagai, T. 52, 83, 94
 Nagao, S. 57
 Nagashima, K. 113
 Nagy Catz, K. 41
 Na, H. 43
 Nahorniak, J. 35
 Naidu, S. 92, 99
 Naidu, S. A. 92
 Naik, P. 98, 101
 Najjar, R. 53, 55, 66, 71, 97, 101, 107
 Najjar, R. G. 55, 101, 107
 Nakajima, H. 44
 Nakajima, R. 49
 Nakamura, H. 33, 42, 56, 79
 Nakamura, H. R. 79
 Nakamura, T. 33, 75
 Nakano, H. 43, 107, 111
 Nakatomi, N. 49
 Nakayama, J. 48
 Nam, S. H. 42
 Naohisa Takagaki, N. 45
 Naoya Suzuki, N. 45
 Narvaez, D. 45
 Nash, D. B. 106
 Nash, J. D. 30, 36, 56, 57, 79, 123
 Nasrolahi, A. 59
 Natarov, A. 90
 Natter, C. 87
 Naveira Garabato, A. C. 29, 38, 51, 108
 Naveira-Garabato, A. C. 38, 86, 88
 Nayak, A. 79, 83
 Nayak, A. R. 79
 Neale, P. J. 46, 68, 93
 Nechaev, . 29
 Nechaev, D. 65
 Needoba, J. A. 36, 43, 48, 53, 83, 122
 Neeley, A. 50, 98, 99
 Neeley, A. R. 99
 Neely, M. B. 65
 Negrón Ruiz, G. 82
 Negrón Ruiz, G. 82
 Neibauer, J. 48, 71
 Neill, S. P. 74
 Nejtgaard, J. C. 70
 Nelles, A. M. 95
 Nelson, C. 36, 69
 Nelson, C. E. 36
 Nelson, G. 66
 Nelson, J. S. 33
 Nelson, N. B. 41
 Nelson, T. R. 120
 Nencioli, F. 75
 Nerger, L. 81
 Nero, W. 47
 Nesterenko, P. N. 32
 Neuer, S. 37, 125
 Neufeld, D. 78
 Neukermans, G. 35
 Neveu, E. 81
 Nevitt, G. A. 59
 New, A. M. 32, 77
 Newell, R. I. 53
 Newgard, J. P. 112
 Newman, L. 29
 Newton, B. 54
 Newton, J. 30, 95, 114
 Newton, J. A. 30, 114
 Newton, R. 45, 54, 92
 Newton, R. J. 92
 Neuzil, N. P. 105
 Ng, C. 84
 Ng, G. 59
 Ng, J. L. 118
 Ngodock, H. 81, 88, 105
 Ngodock, H. E. 81
 Ngodock, H. E. 81, 105
 Ngugi, D. K. 116
 Nguyen, A. T. 98
 Nguyen, P. 66
 Nguyen, S. 68
 Nichols, C. 97
 Nicholson, D. P. 60
 Nidzieko, N. 48
 Nidzieko, N. J. 46
 Nielsen, T. G. 70
 Niemi, A. 95
 Nienow, P. 97
 Niergarth, J. 104
 Nieto, K. M. 83
 Nieto-Moreno, V. 98
 Nigam, S. 68
 Niggemann, J. 50, 53, 61
 Nigro, L. M. 91
 Nihongi Ziarek, A. 96
 Niiler, P. P. 88, 90
 Niino, H. 100
 Nikurashin, M. 56
 Nikurashin, Max, M. 38
 Nilsen, J. E. 54
 Nimmo-Smith, A. 78
 Nimmo-Smith, A. 62
 Nimmo-Smith, W. A. 62
 Nimmo-Smith, W. A. 78, 91
 Nishida, T. 83
 Nishii, K. 42
 Nishii, T. 107
 Nishikawa, H. 83

- Nishikawa, J. 57
 Nishikawa, S. 111
 Nishina, A. 79
 Nishino, S. 99
 Nishioka, J. 72, 75, 77
 Nisumaa, A. M. 102
 Nittrouer, C. 62, 92, 109, 123
 Nittrouer, C. A. 62, 92, 109, 123
 Nittrouer, J. A. 109
 Niwa, Y. 40
 Ni, X. 90
 Noble, A. E. 97
 Noble, M. A. 69
 Noda, G. 41
 Nodder, S. 32
 Noel, L. 104
 Nof, D. 82
 Nof, D. 68, 99
 Noh, J. H. 48
 Noisette, F. 104
 Nojiri, Y. 60, 103
 Nolan, G. D. 63
 Nold, S. C. 78
 Nolet, G. 44
 Nonaka, M. 33, 42, 56
 Nonomura, T. 83
 Noor Azhar, M. S. 49
 Noormets, R. 104
 Nootz, G. 78
 Norcross, B. 99, 119
 Norcross, B. L. 119
 Nordström, M. C. 96
 Norisuye, K. 77
 Norman, L. 97
 Norrbin, M. F. 43
 Norris, R. D. 53
 Norris, S. J. 45
 North, C. A. 85, 104
 North, E. 36, 107
 North, E. W. 36
 Norton, A. R. 104
 Norton, E. L. 73
 Nosal, E. 50, 86
 Nosal, E. M. 86
 Nosse, C. 31, 101
 Nosse, C. T. 31, 101
 Notarnicola, N. 122
 Notaro, M. N. 106
 Not, F. 44
 Novak, M. G. 62
 Novikhin, A. 101
 Novoa, A. 45
 Nowacki, D. J. 109
 Nugnes, K. A. 81
 Nunnally, C. 43
 Nunn, B. L. 48, 71, 115
 Nurhati, I. 77
 Nurser, A. G. 88
 Nuzzio, D. B. 59, 84
 Nyadjro, E. S. 45
 Nycander, J. 40, 52
 Nye, J. 44
 Nye, V. E. 33
 Nystuen, J. A. 85
- O**
 Oakley, A. 74, 75
 Oakley, A. J. 74
- Obata, H. 67, 72, 77
 Oberbauer, S. 50
 O'Brien, C. J. 95
 O'Brien, D. M. 114
 O'Brien, T. D. 115
 Ocampo-Torres, F. J. 50
 Oceanographic Autonomous
 Observations 64, 71
 Ochoa-de la Torre, J. 82, 118
 Ochoa, J. 80
 O'Connell, D. J. 44
 O'Connor, C. D. 87
 O'Connor, W. A. 104
 Oddo, P. 29
 O'Donnell, J. 55, 77, 96
 O'Donnell, M. 121
 O'Donnell, M. J. 121
 O'Dor, R. 46
 Oelkers, E. 59
 Oey, L. 29, 89, 90, 100, 101
 Oey, L. Y. 29, 89, 90, 100
 Ogata, T. 79
 Ogawa, F. 42
 Ogawa, N. O. 93, 114, 115
 Ogé, A. 44
 Oghenekaro, E. 117
 Ogston, A. 53, 62, 109
 Ogston, A. S. 53, 62, 109
 Oguz, T. 115
 Ohashi, K. 35
 Ohde, T. 34
 O'Hern, J. E. 69
 Ohfuchi, W. 33
 Oh/Im Sang, I. 107
 Oh, J. A. 107
 Ohkouchi, N. 93, 114
 Ohlmann, C. 52
 Ohlmann, J. C. 52
 Ohman, M. D. 83, 95
 Ohokouchi, N. 114
 Ohshima, K. I. 90
 Ojo, T. 44, 107
 Oka, A. 61
 Okada, N. 100
 Oka, E. 43, 46, 100, 111
 OKane, T. J. 92
 Okazaki, M. 64
 Okazaki, R. R. 94
 Okazaki, Y. 113
 Oke, P. R. 30
 Okimura, K. M. 97, 121
 Okkonen, S. 86, 98, 119
 Okkonen, S. R. 86, 119
 Okulate, M. 48
 Okumura, Y. M. 68
 Okunishi, T. 65
 Okuno, A. 106
 Olabarrieta, M. 120
 Olafsdottir, S. R. 89
 Olafsson, J. 89, 104, 108
 Olascoaga, M. J. 89
 Old, C. 91
 Oleksiak, M. F. 73
 Olhede, S. C. 94
 Olins, H. 84, 112
 Olins, H. C. 84
 Oliveira, E. N. 83
 Oliveira, F. S. 38
 Oliveira, H. M. 76
 Olivera, H. 113
- Oliver, J. A. 44
 Oliver, K. 38
 Oliver, K. I. 38
 Oliver, M. 46, 55, 59, 82, 84, 95, 105
 Oliver, M. J. 46, 59, 82, 84
 Olley, J. T. 96
 Olli, K. 115
 Olsen, A. 108
 Olsen, R. C. 47
 Olsina, O. 111
 Olson, M. B. 69
 Oltmanns, M. 112
 Olu, K. 89, 105
 Omand, M. 46, 55, 84, 89
 Omand, M. M. 84, 89
 Omar, A. 108
 Ombres, E. H. 113
 Omrani, N. 56
 On behalf of the SOOS community, . 29
 O'Neill, L. W. 33
 O'Neill, N. T. 101
 Onishi, H. 100
 Onken, R. 106
 Onodera, J. 113
 Ono, J. 43, 62
 Ono, T. 31, 33, 43, 75, 108
 Opdal, A. F. 47
 Orcutt, B. 67
 Orcutt, J. A. 66
 Orcutt, K. M. 63
 Ordóñez, C. 85
 O'Reilly, T. 54
 O'Reilly, W. C. 88
 Orem, W. H. 89
 Orescanin, M. M. 74
 Orians, K. 32, 77
 Orians, K. J. 32, 77
 Oriol, L. 110
 Orlich, A. R. 119
 Orlikowska, . 60
 Orphan, V. 78, 89, 91, 105
 Orphan, V. J. 91, 105
 Orpin, A. 53, 123
 Orpin, A. R. 53, 123
 Orrico, C. 44, 48
 Orrico, C. M. 44
 Orr, J. 33
 Orsi, A. 29, 38, 51, 63, 64
 Orsi, A. H. 29, 38, 51, 63, 64
 Ortega-Retuerta, E. 98, 119
 Ortiz, E. 118
 Ortiz, J. 82, 99
 Ortiz, J. D. 99
 Ortiz-Santiago, V. M. 60
 Ortiz-Zayas, J. R. 51
 Ortmann, A. C. 107, 108, 109
 Orzech, M. 88, 106
 Osafune, S. 83, 110, 123
 Osborne, J. J. 59
 Osborn, K. J. 84
 Osburn, C. L. 89, 93
 Oscar Pizarro, O. 120
 Oschlies, A. 41, 94, 103, 108, 115, 123
 Osicki, O. N. 112
 Osinski, R. 113
 Østerhus, S. 54
 Østerhus, S. 63, 88
 Osterman, L. E. 109
 Ostermann, D. R. 87
 Ostrovsky, L. A. 77
- O'Sullivan, J. 32
 Otero, M. 49
 Othman BHR, . 49
 Ottavianelli, G. 84
 Otterå, O. H. 56
 Ottesen, E. A. 115
 Oubelkheir, K. 35, 109
 Outram, D. 40, 109
 Ouyang, B. 86, 122
 Overeem, I. 92
 Overholt, W. 92
 Overland, J. E. 119
 Owens, B. 38, 64, 70
 Owens, S. 32, 89
 Owens, S. A. 32, 89
 Owens, W. 59, 100
 Owens, W. B. 59
 Ozdemir, C. E. 120
 Ozdemir, E. 62
 Ozeren, Y. 88
 Ozgokmen, T. 52, 123
 Özgökmen, T. 75
 Ozgokmen, T. M. 75
 Ozgokmen, T. M. 52
 Özgökmen, T. M. 75
 Ozkan-Haller, H. T. 30, 55, 75
 Özkan-Haller, H. T. 74
- P**
 Packard, G. J. 85
 Padalino, S. J. 70
 Padhi, A. 82
 Padilla, C. 117
 Padilla, D. J. 62
 Padman, L. 63, 64, 70
 Paduan, J. B. 103
 Paduan, J. D. 49, 106
 Paelike, H. 53
 Paeng, J. 61
 Paffenhoefer, G. A. 76
 Paffenhöfer, G. 76
 Paffenhofer, G. A. 76
 Page, B. P. 58
 Paget, A. C. 50
 Pahlow, M. 94
 Pahnke, K. 77
 Paiva, A. M. 124
 Pakhomov, E. 114
 Palacios, D. M. 68
 Palacios, S. L. 47
 Palacios-Theil, E. 92
 Paladino, F. V. 34, 68
 Palamara, L. 116
 Paldor, N. 82
 Palenik, B. 36
 Palermo, J. D. 122
 Palermo, J. H. 122
 Palevsky, H. I. 115
 Paley, D. A. 85
 Palinkas, C. M. 53, 62
 Pallàs-Sanz, E. 80
 Palma, E. D. 36, 83
 Palmer, M. A. 99
 Palmer, M. D. 30
 Palmer, M. R. 57, 82, 105
 Palmer, R. 74
 Palocz, A. 76
 Palóczy, A. 39

ASLO

Association for the Sciences of Limnology and Oceanography

Officers/Executive Committee

Deborah Bronk, President
College of William and Mary/VIMS

Carlos Duarte, Past-President
The University of Western Australia

John Downing, President-Elect
Iowa State University

Lisa Campbell, Secretary
Texas A&M University

Patricia Matrai, Treasurer
Bigelow Laboratory

Members-at-Large

Lihini Aluwihare, Member-at-Large
Scripps Institution of Oceanography

Thomas Bianchi, Member-at-Large
Texas A&M University

Deidre Gibson, Member-at-Large
Hampton University

Lars Tranvik, Member-at-Large
Uppsala University

Roxane Maranger, Member-at-Large
Université de Montréal

Uta Passow, Member-at-Large
University of California Santa Barbara

Anya Waite, Member-at-Large
University of Western Australia

Paul del Giorgio, Member-at-Large
Université du Québec à Montréal

Student Board Members

Luana Pinho, Student Board Member
Federal University of Rio de Janeiro

Allison Fong, Student Board Member
University of Hawaii

www.aslo.org

ASLO Staff Members

Everett Fee, Editor-in-Chief
Limnology and Oceanography

Lucille Doucette, Journals Manager
Limnology and Oceanography

Adrienne Sponberg, Co-Editor
Limnology and Oceanography: Bulletin

John Dolan, Co-Editor
Limnology and Oceanography: Bulletin
Laboratoire d'Océanographie de Villefranche

Paul F. Kemp, Editor-in-Chief
Limnology and Oceanography: Methods

Susana Feng, Managing Editor
Limnology and Oceanography: Methods

Joe Ackerman, Editor
Limnology and Oceanography: Fluids and Environments
University of Guelph

M. Robin Anderson, Editor
Web-Based Books
Fisheries & Oceans Canada

Jennifer Cherrier, Editor
Limnology and Oceanography e-Lectures
Florida A & M University

Paul F. Kemp, ASLO Web Editor
University of Hawaii

Adrienne Sponberg, Director of Public Affairs

Helen Schneider Lemay, Business Manager
sg Meeting & Marketing Services

Upcoming Meetings

2012 Aquatic Sciences Meeting
8-13 July 2012
Lake Biwa, Otsu, Japan

2013 Aquatic Sciences Meeting
17-22 February 2013
New Orleans, Louisiana, USA

2014 Ocean Sciences Meeting (with AGU, TOS)
23-28 February 2014
Honolulu, Hawaii, USA

2014 Summer Meeting (with PSA, SWS, SFS, and ASLO)
18-23 May 2014
Portland, Oregon, USA



- Palter, J. B. 111
 Palumbi, S. R. 36, 73
 Palya, A. 35
 Pandey, P. C. 51
 Pane, E. F. 104
 Pan, S. 71
 Pansch, C. 94, 104, 121
 Panteleev, G. 29, 65, 119
 Panton, A. 69
 Paquay, F. 87
 Parab, S. G. 34
 Paradis, D. 83
 Parent, L. 65
 Pargett, D. 78
 Paris, C. B. 29, 52, 69
 Parker, A. 36, 91, 107, 121
 Parker, A. E. 36, 107, 121
 Parker, B. B. 68
 Parker, G. 109
 Parker, K. R. 75
 Parker, L. M. 104
 Parker, M. 113
 Parker-Stetter, S. 83
 Park, G. H. 30
 PARK, G. H. 108
 Park, H. 91, 107, 117, 118
 Park, H. B. 107
 Park, H. J. 117
 Park, H. S. 107, 117, 118
 Park, J. 31, 43, 57, 79, 107, 111
 Park, J. H. 31, 57, 79, 107
 Park, J. J. 111
 Park, K. 36, 69
 Park, M. 76
 Parks, A. B. 75, 92
 Parks, S. E. 69
 Park, T. 107
 Park/Taewook, T. 107
 Park, W. 29, 58
 Park/Wonsun, W. 107
 Park, Y. 29, 98, 111
 Park, Y. H. 29
 Parra, S. M. 88
 Parslow, J. 76
 Parsons, A. 39, 79
 Parsons, A. R. 39, 79
 Parsons, C. 31, 41, 55, 64, 67
 Parsons, C. M. 55
 Pascual, A. 80
 Pasqualini, A. 54
 Pasquet, S. 67
 Passow, U. 103
 Pasternack, G. 53
 Pasulka, A. 89, 105
 Pasulka, A. L. 105
 Pasulka, A. P. 89
 Patara, L. 29
 Patarnello, T. 113
 Patchen, R. 52, 66, 89, 100, 101
 Patchen, R. C. 66
 Patel, A. 113
 Paternostro, C. L. 74
 Paterson, J. 44
 Pather, S. 62, 70
 Patino, L. 45
 Pation, E. 89
 Patoux, J. P. 117
 Patra, P. K. 51, 60
 Patsavas, M. C. 84
 Patterson, D. 46
 Patterson, K. W. 35, 47
 Patterson, T. A. 35
 Patterson, W. 86, 108
 Pattiaratchi, C. 47, 68, 105
 Pattiaratchi, C. B. 47, 105
 Paul, J. 85
 Paull, C. K. 59, 105
 Paulmier, A. 41, 59, 84
 Paulo Calil, P. 72
 Paul, V. J. 44, 59
 Paver, C. R. 78
 Pavlov, A. K. 44, 101
 Pawlak, E. 30
 Pawlak, G. 39, 59, 74, 75
 Pawlowicz, R. 76
 Payne, C. D. 113
 Payne, D. L. 31
 Payne, J. R. 86
 Payne, R. 85
 Paytan, A. 110, 121
 Peach, C. 41
 Peach, K. 94
 Peacock, S. 60
 Peacock, T. 57, 67
 Pearce, R. 87
 Pearman, D. W. 75
 Pearson, J. 48
 Peart, L. 57, 67
 Peart, L. W. 57
 Pedersen, O. P. 39
 Pedersen, R. B. 104
 Pedersen, T. J. 112
 Pedulli, M. 113
 Peebles, E. 107, 108, 114
 Peebles, E. B. 107, 108, 114
 Peeters, F. 38
 Peggion, G. 57, 66, 85
 Pelland, N. 46, 58, 92
 Pelland, N. A. 92
 Pellechia, P. 87
 Pelling, H. E. 40
 Peloquin, J. 95, 115
 Peloquin, J. A. 115
 Peltier, W. R. 120
 Peña, M. A. 31
 Penduff, T. 51
 Peng, F. 120
 Pengfei Xue, . 30
 Peng, M. 29
 Peng, S. 29, 39, 106
 Peng, S. Q. 39
 Penko, A. M. 75
 Pennington, J. T. 83
 Penta, B. 102, 105, 106, 122
 Penven, P. 83
 Peralta-Ferriz, C. 63
 Percuoco, V. P. 46
 Perdue, E. M. 61
 Pereira, A. 106
 Pérez-Brunius, P. 79
 Perez, F. F. 41, 91
 Pérez-Pérez, N. M. 116
 Perez, R. C. 94
 Perhar, G. 115
 Periera, H. 57
 Peri, F. 30, 53
 Perillo, G. M. 102
 Perlin, N. 111, 119
 Pernica, P. 122
 Pernice, M. 37, 43
 PERON, C. 74
 Perovich, D. 98, 99, 119
 Perovich, D. K. 99, 119
 Perrie, W. 48, 119
 Perrtree, R. 44
 Perry, J. E. 51
 Perry, M. 34, 44, 54, 55, 59, 125
 Perry, M. J. 34, 44, 54, 55, 59, 125
 Perry, R. W. 91
 Per Sahlin, J. 98
 Pershing, A. J. 43, 95, 116
 Petersen, M. R. 79
 Peters, H. 75
 Peterson, J. O. 114
 Peterson, L. 40
 Peterson, R. N. 40, 108
 Peterson, S. H. 58
 Peterson, T. D. 36, 43, 47, 48, 53, 83, 122
 Peterson, W. T. 114
 Petrenko, A. 75
 PETRENKO, A. 105
 Petrie, B. 63
 Petrik, C. M. 37, 39, 44
 Petrou, K. 43, 95
 Pettigrew, N. P. 55
 Pfeiffer-Herbert, A. S. 48
 Pfeil, B. 108
 Pfister, C. 62, 98
 Pham, D. T. 81
 Pham, H. T. 110
 Phan, T. M. 107
 Philip, B. 105
 Philipp, E. 104
 Phillips, A. 63
 Phillips, H. 42, 123
 Phillips, H. E. 42, 123
 Phillips, J. C. 94
 Phillips, M. 72
 Phillips, S. C. 105
 Phipps, S. 87
 Piatkowski, U. 93
 Pica, J. 78
 Piccolo, M. C. 102
 Piceno, Y. M. 109
 Pichel, W. 64
 Picheral, M. 98, 117
 Pichon, A. 40, 75
 Pickart, R. 80, 88, 98, 99, 119
 Pickart, R. S. 88, 98, 99, 119
 Pickering, A. 57, 123
 Pickering, A. I. 57
 Pidduck, E. L. 62
 Piecuch, C. G. 100, 110
 Piedra, R. 68
 Pierce, S. 31, 40, 52, 75
 Pierce, S. D. 31, 40, 52, 75
 Piercy, S. 66
 Pierpont, C. G. 38
 Pierrot, D. 35, 108
 Pierson, J. 40, 43, 96, 106
 Pierson, J. J. 40, 43, 106
 Piggott, M. 75, 79
 Piggott, M. D. 75
 Pike, S. 57, 67
 Pike, S. M. 67
 Pillans, R. D. 35
 Pilley, C. T. 89
 Pimenta, A. 30
 Pinardi, N. 29, 74
 Pinchuk, A. I. 85
 Pineda, J. 57
 Pingxing Ding, . 30
 Pinhassi, J. 84
 Pinkel, R. 123
 Pirtle, R. 72, 82
 Pinones, A. 54
 Pinto, E. 69
 Pi, Q. 83
 Pirtle, J. L. 104
 Pirtle-Levy, R. 113
 Pitcher, G. C. 59
 Piterbarg, L. 75
 Pitt, K. A. 117
 Piwinski, S. 49
 Piwonski, J. 125
 Pizarro, O. 40, 43, 82, 105
 Place, A. 49
 Plancherel, Y. 108
 Plant, J. N. 44
 Plant, W. J. 47, 100
 Plattner, G. K. 94
 Platt, T. 33
 Plessen, B. 85
 Pleuthner, R. L. 85
 Plötz, J. 58
 Plourde, S. 116
 Plouviez, S. 43
 Plude, D. 31
 Plueddemann, A. J. 31, 65, 101, 124
 Podorski, D. 89
 Pohl, K. 61
 Pohl, K. A. 61
 Pohlman, J. W. 90, 105
 Pohnert, G. 70
 POITRASSON, F. 32
 Poje, A. C. 52
 Polagye, B. 104
 Polashenski, C. 98, 99, 119
 Polashenski, C. M. 99, 119
 Polerecky, L. 121
 Polido, G. 59
 Polito, P. S. 100, 120, 124
 Pollard, P. 61
 Pollery, R. G. 101
 Poloczanska, E. S. 34
 Polovina, J. J. 34
 Polovodova, I. 104
 polton, j. 82
 Polton, J. A. 105
 Polyak, L. 99
 Polyakov, I. V. 88
 Polzin, K. 29, 110, 123
 Polzin, K. L. 29, 110
 Pomponi, S. 43
 Pondell, C. R. 46, 62
 Pontbriand, C. 105
 Ponte, A. L. 40
 Ponte, R. 39, 98, 100, 110, 124
 Ponte, R. M. 39, 100, 110, 124
 Popendorff, K. J. 70
 Popendorff, K. J. 49, 110
 Popp, B. N. 93, 114
 Poppe, L. J. 103
 Portabella, M. 34
 Pörtner, H. O. 87
 Posacka, A. 32, 77
 Posacka, A. M. 77
 Posseme, C. 122
 Poteau, A. 44, 79

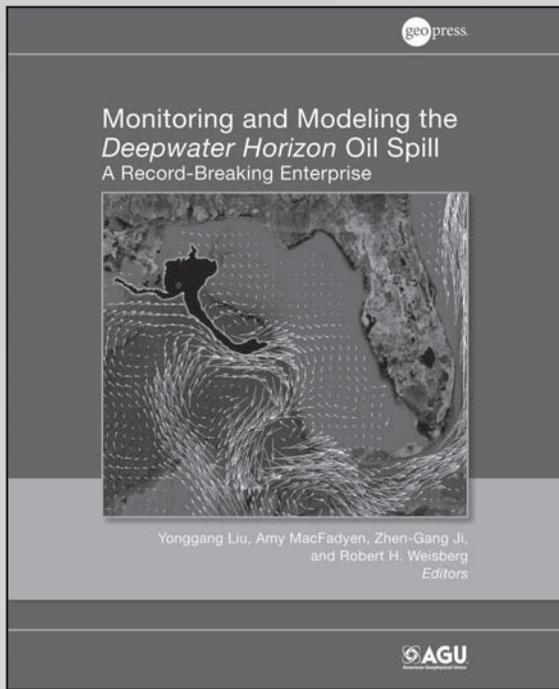
- Poteau, A. P. 44, 49
 Potemra, J. T. 39
 Potter, H. 100
 Potter, R. A. 99, 119
 Pottsmith, H. C. 47
 Potts, T. 43
 Poulain, P. M. 52, 75
 Poulin, F. 115
 Poulin, M. 95
 Poulton, A. 125
 Poulton, N. 33, 36, 55, 59, 84, 125
 Poulton, N. J. 33, 36, 84
 Powell, B. S. 55
 Powell, E. 45
 Powell, E. N. 45
 Powell, J. 92, 95
 Powell, J. R. 95
 Powell, R. D. 104
 Powell, T. M. 44
 Powers, L. 50, 63
 Powers, L. C. 63
 Powers, S. 70
 Pradal, M. S. 64
 PRADOUX, C. 76
 Prael, F. G. 70, 94, 97
 Prášil, O. 36
 Prairie, J. 46, 115
 Prairie, J. C. 115
 Prakash, O. 92
 Prandke, H. 112
 Prastowo, T. 123
 Pratt, Jr., H. L. 35
 Pratt, L. J. 77, 94, 123
 Pratt, L. W. 79
 Pratt, T. 35
 Prescott, M. 104
 Prescott, M. M. 104
 Preston, C. 78
 Preziosi, B. M. 115
 Price, D. 78
 Price, H. 30
 Price, L. M. 95
 Priede, I. G. 78
 Prien, R. D. 84
 Prief, M. 125
 Primeau, F. 52, 60, 112
 Primeau, F. W. 52, 60
 Primer, S. B. 70
 Principato, m. s. 98
 Pringle, J. M. 36, 59
 Pritchard, A. T. 79
 Privalsky, V. 66
 Privette, J. L. 66
 Probert, G. 120
 Probyn, T. A. 59
 Procise, L. A. 81
 Prokopenko, M. 37, 60, 85, 87, 99, 103, 121
 Prokopenko, M. G. 37, 60, 85, 99, 103
 Proshutinsky, A. 54, 56, 88
 Proskurowski, G. 58
 Proskurowski, G. 65, 67, 105, 112
 Protospadakis, L. A. 58
 Provencher, J. 44
 Prugue, R. 46
 Puigcorb , P. 77
 Puigcorbe, V. 32
 Puigcorb , V. 32
 Pujiana, K. 100
 Pujol, M. I. 64
 Pujol-Pay, M. 110
 Puleo, J. A. 75
 Pullen, J. D. 45, 80
 Purca, S. 83
 Purcell, J. E. 117
 Purdie, D. A. 89
 Purkey, S. G. 52
 Putrasahan, D. A. 32
 Pyenson, N. D. 58
 Py, F. 122
 Pyle, A. 49
 Pyle, R. L. 114
- ## Q
- Qazi, W. A. 84
 Qiang Li, Q. 30
 Qian, H. 83, 100
 Qingyou He, H. 100
 Qin, X. 123
 Qi, S. 40
 Qiu, b. 32
 Qiu, B. 42, 56, 90, 111, 124
 Qiu, Z. 117
 Qi, Y. 38, 81
 Qi, Y. Q. 81
 Quadfasel, D. 54
 Quaid, A. 83
 Quaresma, L. S. 40
 Quay, J. 105
 Quay, P. 31, 60, 62, 91, 115
 Quay, P. D. 60, 62, 115
 QUEGUINER, B. 105
 Queroue, F. 77
 Queste, B. 44
 Queste, B. Y. 44
 Questel, J. M. 119
 Quigg, A. 36, 43, 48, 97
 Quiles-Perez, G. A. 64
 Quinn, N. P. 122
 Quinn, T. M. 87
 Quintana Rizzo, E. 113
 Quintana-Rizzo, E. 108
 Quintrell, J. 30
 Quistad, S. 69
 Qu, T. 107
- ## R
- Rabalais, N. 53, 90
 Rabalais, N. N. 53
 Rabolli, M. 34, 71
 Raby, A. C. 71
 Racault, M. F. 33
 Radabaugh, K. R. 107
 Rader, L. 31
 Radermacher, P. 98
 RADIC, A. 32
 Radko, T. 29, 77
 Raeder, K. 81, 124
 Rafter, P. A. 121
 Raghukumar, K. 95
 Raghunathan, V. V. 89
 Ragland, J. 48
 Rago, T. A. 76
 Rahter, B. A. 75
 Raimbault, P. 99
 Raimondi, P. 94
 Rainville, L. 30, 59, 88, 98, 114, 124
 RAITSOS, D. 89
 Raitso, D. E. 84
 Rajan, K. 54, 122
 Ralph, P. 65, 95
 Ralph, P. J. 65
 Ralston, D. K. 36
 Ram, A. 67
 Ramachandran, S. 42, 76
 Ramarui, J. 45
 Ramette, A. 121
 Ramirez-Llodra, E. Z. 34
 Ramirez, R. E. 32
 Ramos, B. 78
 Ramos-Chavez, J. C. 44
 Ramos Musalem, A. K. 83
 Ramos, R. J. 45, 100
 Ramos, R. R. 100
 Ramos, Z. 117
 Rampal, P. 98
 Ramp, S. R. 57, 95
 Ramsey, J. 62
 Randall-Goodwin, E. M. 112
 Rao, A. F. 121
 Rao, S. A. 36
 Rapaka, N. 57
 Rapp , M. S. 36
 Rathburn, A. E. 113
 Raubenheimer, B. 74, 88
 Rauen Zahn, J. L. 55, 64
 Raulet, E. 71
 Raulf, F. F. 121
 Rauschenberg, C. 96
 Ravelo, A. C. 114
 Ravelo, A. M. 119
 Rayner, N. 56, 124
 Rayner, N. A. 56, 124
 Ray, R. D. 30
 Rea, C. L. 99
 Read, A. J. 58
 Read, J. 30
 Reagan, J. 54
 Reay, W. G. 89
 Quintana-Rizzo, E. 108
 Reche, I. 37
 Reche, P. D. 74
 Reckinger, S. M. 29
 Record, N. R. 39, 95, 116
 Redalje, D. 40
 Reddington, E. 112
 Reddy, C. M. 91, 108
 Redfern, J. 68
 Redmond, M. C. 91
 Reeb, C. 35
 Reed, A. 60, 111, 112
 Reed, A. C. 60
 Reed, A. H. 111, 112
 Reed, D. C. 40
 Reeder, D. B. 57
 Reed, J. 78
 Reedy, B. 95
 Reeve, D. E. 120
 Reeves, S. 113
 Reffray, G. 65, 83
 Regetz, J. 117
 Regnier, C. 65
 Rego, B. C. 101
 Rehder, G. 60
 Rehmann, C. R. 67
 Rehm, E. 34, 44, 125
 Reichart, G. 87
 Reichl, B. 70
 Reichsman, F. 50
 Reidenbach, M. A. 59, 122
 Reid, F. C. 109
 Reid, J. L. 123
 Reid, K. 35
 Reid, M. C. 35
 Reigstad, L. J. 104
 Reigstad, M. 115
 Reimers, C. E. 55, 62
 Reineman, B. 45, 50
 Reineman, B. D. 45
 Reinfeldt, J. R. 110
 Reinsch, C. 62
 Reintaler, T. 84
 Reisdorph, S. C. 94
 Reisinger, A. 84
 Reiter, J. M. 74
 Reitz, a. 98
 Rembert, J. R. 104
 Remenyi, T. A. 32
 Remmler, S. 67
 Remsen, A. 109
 REMY Elisabeth, E. D. 124
 Renaudie, C. 64
 Renault, L. 80
 Reneirs, A. 72
 Renema, W. 87
 Reniers, A. 69, 71, 72, 74, 75, 120
 Reniers, A. J. 69, 71, 74, 120
 Rennie, S. E. 74, 101
 Repa, J. T. 31
 Repeta, D. J. 36, 61, 97, 115
 Resing, J. 72, 77
 Resing, J. A. 77
 Restrepo, J. M. 72, 97
 Retelle, M. J. 98
 Reuben, J. 74
 Reuer, M. K. 77
 Reul, N. 34
 Reverdin, G. 108
 Revill, A. T. 93
 Revsbeck, N. 124
 Reynolds, R. A. 99, 119
 Reynolds, R. W. 66, 92
 Reynolds, S. E. 61
 Rhea, W. J. 52, 105
 Rhein, M. 31, 54, 60, 63, 108, 110, 123
 Rheuban, J. 55, 65
 Rheuban, J. E. 55
 Rhew, H. 107
 RHEW, H. 90
 Rhines, P. B. 54, 56, 110, 111
 Rhodes, W. T. 78
 Rhone, J. 119
 Rhyne, A. 102
 Ribalet, F. 115
 Ribera d'Alcal , M. 61
 Riccamboni, R. 82
 Ricciardulli, L. 56
 Rice, A. E. 110
 Rice, E. J. 107
 Rice, G. 78
 Richards J. Kelvin, . 107
 Richards, K. J. 29, 90, 123
 Richardson, A. J. 34
 Richardson, J. E. 53
 Richardson, K. 123, 125
 Richardson, M. J. 46, 71

- Richardson, T. L. 37, 48, 115, 125
 Richman, J. G. 30, 47, 75, 81
 Richman, J. R. 30
 Richmond, B. M. 120
 Richmond, R. H. 62
 Richter, D. H. 42
 Richter, D. J. 77
 Rico, M. 71
 Ridder, N. N. 41
 Ridgwell, A. 41, 51
 Riebesell, U. 102, 110
 Riedel, M. 90, 105
 Riedel, T. 61
 Riemer, D. D. 109
 Rieper, F. 67
 Riethmueller, R. 106
 Riffler, M. 111
 Rigaud, S. B. 32
 Rignot, E. J. 112
 Rigor, I. 92, 99, 119
 Rigor, I. G. 99, 119
 Rijkbergen, M. 32, 77
 Riley, S. A. 44
 Rinaldi, A. 74
 Rinehimer, J. P. 72
 Rines, J. 83
 Ringler, T. D. 79
 Rintoul, S. 29, 42, 60, 124
 Rintoul, S. R. 29, 42, 60
 Rio, M. H. 64
 Rippeth, T. 29, 69
 Rippeth, T. P. 29
 Rippy, M. A. 122
 Riseman, S. 36, 66
 Riseman, S. F. 36
 Rise, M. L. 106
 Riser, S. 29, 30, 31, 34, 41, 44,
 54, 67, 85, 100
 Riser, S. C. 29, 30, 31, 34, 41, 44,
 67, 85, 100
 Risien, C. 46, 55, 64, 65
 Risien, C. M. 65
 Ristuben, K. R. 58
 Riter, A. 91
 Rivera, B. 40
 Rivera Irizarry, F. 117
 Rivera-Vázquez, Y. 69
 Rivero-Calle, S. 46, 102
 Rivers, A. R. 108
 Rivin, I. 57
 Rixen, T. 41
 Roach, C. J. 42
 Roarty, H. 55, 116
 Roarty, H. J. 116
 Robbins, J. 93
 Roberston, G. L. 90
 Robert, K. 66
 Robert, P. 68
 Roberts, A. 113
 Roberts, B. J. 36, 53, 70
 Roberts, E. 70
 Roberts, H. H. 105
 Roberts, J. M. 87
 Roberts, K. A. 71
 Roberts, M. 59, 87
 Roberts, M. J. 59
 Robertson, R. 40
 Roberts, P. L. 72, 75
 Roberts, Q. N. 99, 119
 Roberts, S. 121
 Robison, C. 44
 Robinson, G. L. 69
 Robinson, K. L. 117
 Robinson, L. F. 32, 72
 Robinson, P. W. 58
 Robison, B. H. 84
 Roca-Martí, M. 76
 Rocap, G. 82
 Rocha, C. B. 39, 76, 83
 Rocholz, R. 45
 Rodgers, K. 29, 41, 51, 60, 91, 108, 124
 Rodgers, K. B. 29, 41, 51, 60, 108, 124
 Rodriguez-Abudo, S. 120
 Rodriguez, G. E. 69
 Rodriguez-Mueller, B. 36
 Rodriguez-Pinto, I. 75
 Roegner, C. G. 43
 Roehl, U. 53
 Roe, H. S. 89
 Roe, K. L. 71
 Roemmich, D. H. 90
 Roesler, C. S. 55, 102, 103, 120
 Roessler, A. 63
 Roffer, M. 35, 47, 92, 108
 Roffer, M. A. 35, 47, 92, 108
 Rogachev, K. A. 55
 Rogers, D. R. 84, 112
 Rogers, E. 88
 Rogers, J. 88, 104
 Rogers, J. S. 88
 Rogers, K. G. 123
 Rogers, W. E. 80
 Röhrs, J. 58, 68
 Rohwer, F. 36, 69
 Rolf, S. 60
 Rollins, N. 37, 103, 121
 Rollins, N. E. 37
 Rolph, J. 78
 Roman, B. 78
 Roman, C. 66, 78
 Roman, C. N. 78
 Roman, M. 40, 96, 106
 Roman, M. R. 40, 106
 Romano, G. 70
 Roman, R. 110
 Romeiser, R. 116
 Rom, E. L. 45
 Romero-Centeno, R. 86
 Romero-Centeno, R. R. 84
 Romero, I. 92, 108, 109
 Romero, I. C. 108
 Romero, L. 31, 37
 Romine, J. G. 91
 Rona, P. 90
 Roncalli, V. 70, 116
 Rooper, C. N. 104
 Rosanbalm, J. 92, 109
 Rosanbalm, J. L. 92, 109
 Rosati, A. 29, 58, 81
 Rosati, A. J. 58
 Rosburg, K. 80
 Rose, A. L. 71
 Rose, G. 63
 Rose, J. M. 114
 Rose, K. 105
 Rose, L. E. 109, 123
 Rosenberg, A. D. 32
 Rosenberger, K. J. 69
 Rosenberg, M. R. 117
 Rosenfeld, L. 30
 Rosenheim, B. E. 53
 Rosen, N. 62
 Rosenstiel, P. 104
 Rossby, H. T. 43
 Rossby, T. 56, 63
 Ross, C. 73
 Rossignol, P. E. 121
 Ross, P. M. 104
 Ross, S. W. 93
 Ross, T. 86, 95
 Rostamina, M. 39
 Roth, C. 63
 Roth, G. E. 104
 Rothman, D. H. 53, 61
 Roth, M. S. 51
 Rothstein, L. 39, 111
 Rothstein, L. M. 39
 Röttgers, R. 103
 Rouault, M. 38, 83
 Rouault, M. J. 83
 ROUCO-MOLINA, M. 121
 Roughan, M. 55, 80, 90, 105
 Rouillet, G. 123
 Roumillat, B. 70
 Roumillat, W. 51
 Rouse, G. 89, 105
 Rouse, G. W. 105
 Rouse, L. 106, 123
 Rouse, L. J. 106
 Rousseau Tristan, T. 69
 Rousseaux, C. S. 78
 Roussenov, V. 52
 Roux, M. J. 106
 Rowden, A. A. 43
 Rowe, G. T. 43
 Rowe, S. M. 41, 44
 Rowley, C. 47, 57, 66, 68, 81, 86
 Rowley, C. D. 57, 81, 86
 Rowley, J. 97
 Royal, J. 103
 Roy, C. 66
 Roy, E. 106
 Roy, T. 33, 108
 Roy, T. M. 108
 RSN-OOI Team 105
 RSN-OOI TEAM, . 65
 Rubao Ji, . 43
 Rubao Ji, R. 33
 Ruberg, S. 30, 78
 Ruberg, S. A. 78
 Rubin, D. M. 120
 Rückert, M. 58
 Ruck, K. E. 113
 Ruddick, K. 35
 Rude, A. 54
 Rudels, B. 88
 Rudnick, D. 79
 Rudnick, D. 30, 83, 100, 111
 Rudnick, D. L. 30, 83, 111
 Rudzin, J. E. 42
 Rueda, D. 101, 118
 Rueda, F. J. 116, 122
 Rueda, M. 44
 Rueda, M. J. 44
 Ruessink, B. G. 88
 Ruggiero, P. 120
 Ruiz-Angulo, A. 106
 Ruiz-Chancho, M. J. 87
 Ruiz-Cooley, R. I. 93
 Ruiz de la Torre, M. C. 70
 Ruiz-de la Torre, M. C. 118
 Ruiz, S. 80
 Rumbold, D. G. 89
 Runge, J. A. 43, 115
 Ruppel, C. D. 90, 105
 Rushdi, A. I. 62
 Russell, A. D. 87, 94
 Russell, J. 29, 34, 45
 Russell, J. L. 29
 Russell, P. B. 47
 Russoniello, C. 91
 Rutgersson, A. 32
 Rutgers van der Loeff, M. 32, 76
 Rutzen, I. 99
 Ruzicka, J. 34, 76
 Rothstein, L. 39, 111
 Ruzicka, R. 64
 Ryabenko, E. 41, 96, 124
 Ryan, D. E. 102
 Ryan, E. 52
 Ryan, J. 58, 64, 83, 95, 105, 106, 122
 Ryan, J. P. 64, 83, 95, 106, 122
 Ryan, S. K. 86
 Ryan, T. 85
 Rykaczewski, R. 68
 Rykaczewski, R. R. 68
 Rynearson, T. A. 56, 116, 125
 Rypina, I. 57, 67, 77, 94, 123
 Rypina, I. I. 57, 67, 77, 94
- ## S
- Sabadel, A. J. 114
 Saba, G. 93, 95
 Saba, G. K. 93
 Saba, V. S. 34
 Sabetta, M. 74, 75
 Sabetta, M. J. 74
 Sabia, R. 45
 Sabine, C. 39, 51, 53, 74, 101, 108
 Sabine, C. L. 51, 53, 74, 108
 Saccomanno, V. 46
 Sachdeva, R. 89
 Sachs, J. P. 97
 Sachspurger, J. 80
 Sackett, O. E. 95
 Saderne, V. 104
 Sadler, D. W. 101
 Sadler, J. W. 42
 Sadr, R. 50
 Saenz, B. T. 93
 Saenz, J. A. 111
 Saetra, O. 68
 Sætra, Ø. 58
 Sáez, L. 82
 Sáez, L. R. 82
 Safak, I. 53, 62, 120
 Sahin, C. 120
 Sahl, L. E. 116
 Sahu Teli, J. L. 51
 Saidi, S. J. 57, 67
 Sailley, S. F. 113
 Saino, T. 43, 44, 48, 57, 66, 115
 Saitoh, S. 45, 102, 115, 119
 Saitoh, S. I. 119
 Saito, M. 56, 81, 97
 Saito, M. A. 56, 97
 Saito, Y. 109, 123
 Sakai, K. 103

- Sakai, T. 57
 Sakalaukus, P. 64, 105
 Sakamoto, C. M. 44
 Sakamoto, K. 43, 111
 Sakellariou, D. 82
 Sakerin, S. M. 101
 Salihoglu, B. 115
 Salisbury, J. 62
 Salisbury, S. K. 35
 Sallée, J. 79, 124
 Sallee, J. B. 29
 Sallée, J. B. 79
 Salmi, M. S. 112
 Salo, S. A. 85
 Salt, L. 32
 Salyer, S. 50
 Samanta, D. 51
 Sambrotto, R. N. 72, 97, 123
 Samelson, R. M. 52, 120
 Sampei, M. 98
 Sampson, B. 38
 Sampson, C. 51
 Samuelson, L. 58
 Sánchez-García, J. 116
 Sanchez, J. A. 73
 Sanchez, S. 45
 Sanchez, X. 68
 SanClements, M. D. 71
 Sander, S. G. 97
 Sanderson, A. 85
 Sanderson, M. P. 119
 Sanders, R. W. 36, 95, 115
 Sandery, P. A. 92
 Sandgren, C. D. 48
 Sandoval, E. 79
 Sandvik, A. D. 80, 112
 Sanford, E. 87, 94
 Sanford, E. D. 94
 Sanford, L. P. 53, 70
 Sanford, T. B. 52, 88
 Sanger, D. 40
 Sangermano, J. J. 74
 Sangra, P. 80
 Sangrà, P. 92
 Sanjuan, V. 47
 San Roman, M. 97
 Sansone, F. J. 39, 55
 Santana-Casiano, J. M. 71, 108
 Santana, R. 44
 Santiago-Mandujano, F. 31, 101, 123
 Santidrián Tomillo, P. 34
 Santinelli, C. 61, 71
 Santoferrara, L. 118
 Santoro, A. 103, 121
 Santoro, A. E. 103, 121
 Santos, I. R. 103
 Santschi, P. H. 71, 97
 Sanudo-Wilhelmy, S. A. 50, 103
 Sañudo-Wilhelmy, S. A. 77, 103
 Saraceno, M. 115
 Sarafanov, A. 54
 Sarafraz, A. 42
 Saramul, S. 116
 Saravanan, R. 56, 58
 Sarkar, S. 42, 57, 67, 75, 110
 Sarkodee-Adoo, J. 109
 Sarmiento, H. 37
 sarmiento, j. l. 49
 Sarmiento, J. L. 29, 34, 38, 41, 43, 60, 84, 91, 97, 102, 108, 124
 Sarthou, G. 77
 Sasai, Y. 65
 Sasaki, H. 42, 56, 65, 90, 94
 Sasaki, J. 57, 66
 Sasaki, K. 60, 108
 Sasaki Wataru, w. 107
 Sasaki, Y. 81
 Sasaki, Y. N. 56
 Sasano, D. 124
 Sasaoka, K. 43
 Sasaki, J. 66
 Sasse, T. P. 76
 Sastre, M. 118
 Sathyendranath, S. 102
 Sathyendranath, S. 33
 Satinsky, B. M. 50
 Sato, H. 77
 Satoh, Y. 118
 Sato, K. 44
 Sato, M. 82
 Sato, O. T. 124
 Satoru Komori, S. 45
 Sauer, M. J. 120
 Saulo Soares, . 90
 Saustrop, S. 104
 Sautter, L. R. 58, 103, 104
 Savelyev, I. B. 31, 57, 111
 Savenije, H. H. 76
 Savidge, D. 53, 69
 Savidge, D. K. 53
 Sawicka, E. 42
 Sayer, A. M. 101
 Sayre-McCord, R. T. 69
 Scambos, T. 54
 Scanlon, J. A. 67
 Scanlon, K. M. 104
 Schaaf, J. M. 87
 Schaeffer, A. 90, 105
 Schaeffer, B. A. 102
 Schaer, J. D. 103
 Schaferkotter, M. R. 67
 Schalkhauser, B. 87
 Schallenberg, C. 71
 Schalles, J. F. 96
 Schander, C. 43
 Schaper, J. 45
 Scharrer, K. 92
 Scharroo, R. 56, 66
 Schatz, M. J. 85
 Schaub, I. 104
 Schauer, A. 97
 Scheibling, R. E. 87
 Scheinert, M. 63
 Schenck, R. O. 49
 Scher, H. D. 77
 Scheu, K. R. 41
 Scheurle, c. 64
 Scheurle, C. 49, 54, 71
 Schiebel, R. 115
 Schieber, B. 99, 119
 Schijf, J. 97
 Schildhauer, M. 117
 Schillinger, D. J. 86
 Schlag, Z. 36
 Schlax, M. G. 80, 120
 Schleier, S. L. 49
 Schlitzer, R. 113
 Schlosser, P. 54
 Schlosser, C. 32
 Schlueter, R. 76
 Schmale, J. 44
 Schmale, O. 60
 SCHMIDT, A. 66
 Schmidt, S. 41, 42
 Schmidt, M. 41, 82, 113
 Schmidt-rohr, K. 61
 Schmidt-Rohr, K. 61
 Schmidt, W. E. 92
 Schmitt, J. G. 50
 Schmittner, A. 31, 115, 123
 Schmitt, R. 46, 72, 82
 Schmitt, R. W. 46, 82
 Schmitz, W. J. 54
 Schneeweis, M. 62
 Schneider, A. 51
 Schneider, K. 94
 Schneider, L. 60
 Schneider, N. 32, 42, 56, 94
 Schnetzer, A. 104
 Schnieders, J. 58
 Schoch, G. C. 30
 Schodlok, M. P. 61
 Schoellhamer, D. H. 62
 Schoeman, D. S. 34
 Schoemann, V. 32, 97
 Schoene, B. R. 87
 Schoener, D. M. 49
 Schoepfer, S. D. 41, 42
 Schofield, O. 31, 45, 46, 54, 55, 65, 66, 77, 93, 95
 SCHOFIELD, O. 66
 Schofield, O. M. 31, 45, 93, 95
 Scholin, C. 78, 90, 122
 Scholin, C. A. 90, 122
 Schollaert Uz, S. 120
 Schonberg, S. V. 119
 Schöne, B. R. 98
 Schönfeld, J. 104
 Schopp, R. 52
 Schrag, D. P. 53
 Schreiber, M. 46
 Schroeder, I. D. 45
 Schroeder, K. 52, 75, 110
 Schroeder, T. 121
 Schroeter, J. 81
 Schröter, J. 38, 63
 Schroth, A. 93
 Schroth, A. W. 93
 Schrum, H. 67, 86
 Schrum, H. N. 86
 Schruuth, D. M. 37
 Schueler, C. F. 102
 Schulte, J. 97
 Schultz, L. 89
 Schultz, T. F. 73
 Schulz-Bull, D. E. 60, 84, 101
 Schulze, L. M. 88
 Schulze, S. 111
 Schulz, J. 65
 Schulz, K. G. 102
 Schulz, W. J. 76
 Schwab, D. 30, 41
 Schwab, D. J. 41
 Schwarzkopf, F. U. 31
 Schwehr, K. A. 97
 Schwendeman, M. 50
 Schwendeman, M. S. 50
 Sciandra, A. 71
 Sciascia, R. 112
 Sclavo, M. 105
 Scott, C. A. 58
 Scott Doney, S. C. 72, 122
 Scotti, A. 67, 110
 Scott, J. D. 90
 Scott, J. P. 84
 Scott, J. R. 61, 125
 Scott, K. 47, 75
 Scott, K. R. 47
 Scott, R. 77, 83
 Scott, R. B. 77
 Scott, S. 77
 Scowcroft, G. 33
 Scowcroft, G. A. 33
 Scranton, M. 89, 90, 101
 Scranton, M. I. 89, 90
 Scully, M. E. 35, 46, 72, 111
 Seagroves, E. E. 51
 Searle, D. R. 71
 Searle, R. 57
 Seaton, C. 48, 66, 83
 Secrist, G. 33
 Sedwick, P. N. 77, 97
 Seegers, B. 46, 90, 99, 102, 103, 119
 Seegers, B. J. 99, 103
 Seegers, B. N. 90
 Seemann, J. 106
 Seewald, J. 112
 Segsneider, J. 33
 Seguret, M. 77
 Seibel, B. 40, 104, 121
 Seibel, B. A. 104, 121
 Seidel, H. F. 124
 Seidel, M. 61
 Seidov, D. 54, 79
 Seim, H. 30, 55
 Seim, H. E. 30
 Sein, D. V. 63
 Seitz, A. C. 85
 Sejr, M. K. 112
 Sekma, H. 29
 Selph, K. E. 72, 93, 113, 125
 Selsil, O. 116
 Semeniuk, D. M. 32
 Seminoff, J. A. 114
 Semmler, C. M. 36, 53
 Send, U. 39, 42, 63, 65
 Senft-Grupp, S. 84
 Sengupta, A. 105
 Seo, D. 107
 Seo, G. 39, 81
 Seo, G. H. 38
 Seo, H. 32, 116
 Seo, J. H. 107
 Seo/Jungtaek, S. J. 107
 Serafin, K. A. 120
 Sergent, E. 75
 Sericano, J. L. 108
 Serra, N. 88, 110
 Serrão Santos, R. 33
 Serra, S. 74
 Serrato, G. M. 83
 Sessions, A. L. 115
 Setou, T. 64, 65
 Seubert, E. L. 90
 Seuront, L. 44
 Sevadjian, J. 69, 116
 Sevadjian, J. C. 116
 Sevellec, F. 54
 Sevensen, C. 86
 Severtson, A. M. 50

- Sexson, M. 73
 Sexton, P. F. 53
 Seymour, J. 43, 44
 Seymour, J. R. 44
 Shafer, D. J. 53
 Shaffer, S. 68
 Shah, S. R. 49
 Sha, J. 84
 Shakespeare, C. J. 29
 Shamberger, K. 39
 Shan, H. X. 120
 Shank, G. C. 89
 Shanks, A. 74
 Shanks, A. L. 69, 72
 Shank, T. M. 73, 84
 Shao, A. E. 51
 Shapiro, A. D. 33, 58
 Sharma, A. K. 115
 Sharma, J. 86
 Sharma, N. 89
 Sharman, L. 94
 Sharma, S. 50, 108
 Sharp, J. H. 30, 46, 48
 Sharples, J. 57, 59, 69, 116
 Shatley, M. C. 84
 SHATOVA, O. 66
 Shaw, C. T. 85
 Shaw, E. C. 94
 Shaw, T. J. 48
 Shaw, W. J. 64, 69
 Shay, L. K. 75, 78, 92
 Shchepetkin, A. F. 29
 Shearman, R. K. 39, 67, 85
 Sheehan, A. 66
 Sheets, B. A. 62
 Sheinbaum, J. 79, 80
 Shellenbarger, G. G. 62
 Shelley, R. U. 77
 Shellito, S. 39, 45, 62
 Shellito, S. M. 39
 Shelton, N. 37, 108, 109
 Shelton, N. L. 37, 108
 Shema, S. 49, 96
 Shema, S. D. 49
 Shemer, L. 77
 Shen, A. Y. 66
 Shen, C. C. 87
 Sheng, J. 35, 96
 Shen, H. 36
 Shen, J. 46
 Shen, L. 42, 50
 Shen, M. 56, 66
 Shen, M. L. 56
 Shen, M. Y. 66
 Shenoy, D. 61
 Shen, S. 101
 Shen, Y. 63
 Shepard, A. 43, 78
 Sheremet, A. 88, 120
 Sherlock, R. E. 84
 Sherman, C. 96
 Sherman, J. T. 111
 Sherman, K. 37
 Sherr, B. F. 73, 116
 Sherr, E. B. 73, 116
 Sherrell, R. 77, 93, 112
 Sherrell, R. M. 77, 93
 Sherwood, C. R. 91, 109
 Sherwood, O. A. 93
 Shiah, F. K. 65
 Shibano, R. 100
 Shibboard Party SS12/2008 104
 Shi, D. 102
 Shields, M. 35
 Shi, F. 62, 75, 88, 120
 Shigeto Nishino, S. 119
 Shih, P. C. 105
 Shi, J. 64
 Shiller, A. M. 108
 Shillinger, G. 35, 68
 Shillinger, G. L. 68
 Shi, M. 80
 Shimada, S. S. 31
 Shimeta, J. 96
 Shimizu, K. 48
 Shimizu, M. 64
 Shim, W. j. 57
 Shim, W. J. 83, 117, 118
 Shin'ichiro, K. 33, 42
 Shin, K. H. 114
 Shinn, E. 78
 Shinoda, T. 79, 90
 Shin, S. I. 56
 Shinsuke, I. 42
 Shipboard Party SS12/2008 104
 Shi, R. 42
 Shivji, M. 48
 Shi, W. 101
 Shoko Abe, S. 110
 Shriver, J. F. 30, 75
 Shrumm, K. N. 98
 Shuckburgh, E. F. 29
 Shuichi Watanabe, S. 108
 Shull, D. 73, 85
 Shull, D. H. 73
 Shulman, I. 64, 102, 105, 122
 Shulman, I. G. 105, 122
 Shutta, J. 71
 Shu, Y. 106
 Shyka, T. 39
 Sia, T. Y. 112
 Siboni, N. 59
 Siebers, A. L. 46
 Siebert, J. R. 112
 Siedlecki, S. A. 42
 Siegel, D. A. 41, 59, 89, 102, 105, 106, 120, 124
 Siegfried, D. 45
 Siegle, E. 62, 75
 Siegle, E. S. 88
 Sienkiewicz, J. M. 46, 64
 Sieracki, M. 33, 36, 59, 84, 125
 Sieracki, M. E. 33, 36, 84, 125
 Sigler, M. F. 83, 85
 Sigman, D. M. 85, 119, 121
 Sigman, M. 85
 Signell, R. P. 39
 Signori, C. N. 101
 Signorini, S. R. 108
 Sijp, W. P. 52
 Sikes, E. L. 35
 Silsbe, G. 36
 Silva, M. S. 109
 Silveira, I. A. 39, 80
 Silveira, I. C. 76, 83
 Silveira, O. F. 109
 Simmonds, D. J. 71
 Simmons, C. T. 38
 Simmons, G. M. 62
 Simmons, H. 30, 57, 67, 72, 82, 99, 111, 123
 Simmons, H. A. 67, 123
 Simmons, H. L. 30, 99, 111
 Simmons, H. S. 57
 Simmons, S. E. 58
 Simms, E. 31, 82
 Simoneit, B. R. 62
 Simonet, F. 72
 Simonetti, A. 105
 Simon, H. 48, 83
 Simon, H. M. 48
 Simonello, C. 55, 78
 Simonnet, E. 32
 Simons, R. D. 124
 Simon, V. H. 40
 Simon Yang, S. 38
 Sims, D. 89
 Sims, J. 80
 Sinclair, A. M. 88
 Sines, K. A. 99, 113
 Singer, E. 112
 Singha, A. 50
 Sinha, N. 68
 Sinninghe Damsté, J. S. 98
 Sintes, E. 84
 Sin, Y. 48
 Sipler, R. E. 99, 101, 119
 Sirenko, B. I. 119
 Širovic, A. 68
 Sison-Mangus, M. P. 36
 Siswanto, E. S. 101
 Siu, N. 33, 102
 Six, J. 103
 Skelley, S. 30
 Skiba, A. W. 40, 60
 Skipp, P. J. 87
 Skirving, W. J. 55
 Skjelvan, I. 108
 Sklad, J. 114
 Skliris, N. 46
 Skrabal, S. A. 62
 Skyllingstad, E. D. 52
 Slack, G. W. 36
 Slade, W. 47, 59, 78
 Slade, W. H. 59, 78
 Slagstad, D. 115
 Slattery, M. 104
 Slawig, T. 125
 Sleeper, K. 74, 90, 105
 Sleeper, K. G. 74
 Slemmons, L. 72
 Slingerland, R. 123
 Slinn, D. 119
 Slivkoff, M. 74
 Slocum, R. K. 75, 119
 Slomp, c. 98
 Slomp, C. P. 40
 Sloyan, B. 29, 30, 38, 60
 Sloyan, B. M. 29, 38, 60
 Slutsker, I. 101
 Smail, E. A. 77, 103
 Smallegan, S. M. 88
 Small, R. J. 33, 42, 80
 SMALL, R. J. 42
 Smart, J. H. 101
 Smedsrud, L. H. 80
 Smedstad, L. F. 85
 Smedstad, O. M. 52, 64
 Smethie, W. M. 54
 Smillie, M. W. 72
 Smirnov, A. 101
 Smirnov, D. 42
 Smith, C. 33, 43, 50, 82, 95, 102, 109, 113
 Smith, C. A. 82
 Smith, C. B. 50
 Smith, C. G. 109
 Smith, C. M. 113
 Smith, C. R. 33, 43, 113
 Smith, D. 52, 56, 66, 77
 Smith, D. K. 56, 66
 Smith, D. P. 77
 Smith, E. 40, 123
 Smith, E. M. 40
 Smith, G. 43, 52, 57, 111
 Smith, G. B. 52, 57, 111
 Smith, H. 71, 88
 Smith, H. D. 88
 Smith, J. 36, 68, 69, 82, 88, 103, 112
 Smith, J. A. 68, 72, 82
 Smith, J. E. 36
 Smith, J. M. 88, 103
 Smith, J. P. 112
 Smith, Jr., W. O. 64
 Smith, K. A. 43, 84
 Smith, K. S. 52, 72
 Smith, L. B. 97
 Smith, L. K. 33
 Smith, M. W. 48
 Smith, N. 59
 Smith, P. C. 62
 Smith, P. J. 125
 Smith, R. N. 106
 Smith, S. 37, 42, 53, 66, 78, 81, 94, 105, 115
 Smith, S. L. 94, 115
 Smith, S. R. 37, 42, 66, 78, 105
 Smith, T. 80, 88, 105, 120
 Smith, T. A. 88
 Smith, W. O. 44
 Smit, M. 83
 Smolenski, R. L. 106
 Smolyar, I. 54
 Smythe, M. G. 103
 Smyth, R. 68, 93
 Smyth, R. L. 93
 Smyth, T. 89
 Smyth, W. D. 57, 75
 Snaith, H. 34
 Snauffer, E. L. 106
 Snedeker, A. 70
 Snoeijs, P. 45
 Snow, C. M. 76
 Snyder, W. A. 47, 105, 122
 Soares, S. M. 123
 Sobczak, W. 122
 Sobecky, P. 92
 Socolofsky, S. A. 109
 Soetaert, K. 102
 Soeyanto, E. 43
 Sofen, L. E. 70, 110
 Sofianos, S. 43
 SOFINE Collaborators, . 123
 Sogin, M. L. 92
 Sohm, J. A. 102
 Sohrin, Y. 77
 Sohrin, Y. S. 77
 Sohst, B. M. 97
 Soiland, H. 63

- Sokolov, A. P. 61
 Sole, A. 92
 Solé, J. 116
 Solera, L. 90
 Solo-Gabriele, H. M. 72
 Solomon, E. 89, 105
 Solomon, E. A. 89, 105
 Solonenko, N. 48
 Soloviev, A. 48, 67, 76
 Solovyev, K. 86
 Soltys, M. A. 122
 Somes, C. 31, 123
 Somes, C. J. 123
 Sommerfield, C. K. 35, 62, 109
 Sommeria, J. 57, 67
 Song, H. 76, 81, 95
 Song, J. I. 107
 Song, Y. S. 91
 Song, Y. T. 60
 Sonke, J. 59
 Sonke Jeroen, J. E. 69
 Sonnerup, R. 51, 60, 91
 Sonnerup, R. E. 51, 60
 Sonoda, K. 49, 118
 Sophie Cravatte, S. 90
 Sophie Plouviez, S. C. 73
 Sorensen, J. V. 112
 Sorensen, K. 120
 Sorrentino, D. A. 44
 Sosik, H. M. 47, 48, 49
 Sotka, E. 69
 Sotomayor-Ramírez, S. 122
 Sottolichio, A. 91
 Soudant, P. 81
 Souhaut Marc, M. 69
 Sou, I. M. 74, 111, 112
 Soulage, M. 47
 Sourriceau, M. 67
 Soutelino, R. G. 39, 80
 Southall, B. L. 85
 Souza, A. 53, 62, 99
 Souza, A. C. 99
 Souza, A. J. 62
 Spall, M. A. 56, 88
 Sparrow, K. 90, 105
 Sparrow, M. 29
 Speer, K. 38, 60, 64, 82, 124
 Speer, K. G. 60, 82
 Spence, G. D. 105
 Spence, L. 45
 Spence, P. 72
 Spencer, R. 49, 103
 Spencer, R. G. 103
 Sperber, K. 61
 Spero, H. J. 87
 Spier, C. L. 109
 Spillane, T. 122
 Spillman, C. M. 68
 Spindler, T. 57, 66
 Spitz, Y. 39, 48, 76, 115, 119, 124
 Spitz, Y. H. 76, 115, 119, 124
 Sponaugle, S. 73, 114
 Spotila, J. R. 34, 68
 Springer, A. M. 46, 58
 Springer, S. 63, 70
 Springer, S. R. 63
 Sprintall, J. 29, 51, 60, 90
 Sproson, D. A. 45
 Spruce, J. 89
 Sprules, W. G. 122
 Spydell, M. S. 74
 Squibb, M. E. 72
 Sraj, I. 124
 Srinivasan, A. 29, 52, 80, 81, 124
 Sriver, R. L. 46
 Srokosz, M. 34, 58, 116
 Srokosz, M. A. 58, 116
 Staalstrom, A. 92
 Staalstrøm, A. 110
 Stabeno, P. 73, 85
 Stabeno, P. J. 85
 Stacey, M. T. 47, 53, 59, 69, 71, 109
 Stadler, J. H. 106
 Stadnyk, A. D. 38
 Stafford, K. 85, 98
 Stahl, D. A. 87
 Stahl, H. 87
 Stahr, F. 31, 112
 Stahr, F. R. 112
 Staley, J. T. 124
 Stalin, S. E. 114
 Stamey, B. A. 65
 Stammer, D. 30, 110
 Stammerjohn, S. E. 93
 Stammerjohn, S. 93, 112
 Stammerjohn, S. E. 93, 112
 Stammes, J. J. 120
 Stammes, K. 120
 Stanhope, J. W. 35
 Stanley, J. 75
 Stanley, R. 60, 103, 108
 Stanley, R. H. 60
 Stanton, T. K. 72
 Stanton, T. P. 39, 64, 69
 Stapleton, C. M. 105
 Staquet, C. 75, 77, 79
 Starczak, V. S. 57
 Stark, A. K. 87
 Staryk, C. J. 53
 Stassinis, E. 106
 Stastna, K. 66
 Statom, N. 50, 58
 Statscewich, H. 85, 94, 99, 119
 Stavn, R. H. 78
 Stedmon, C. A. 101, 112
 Steele, J. A. 105
 Steele, J. H. 34
 Steele, M. 44, 54, 92, 98, 119
 Steffan, S. A. 114
 Steffen, K. R. 99
 Stegert, C. 95
 Steinacher, M. 102
 Steinberg, D. 37, 89, 95, 113
 Steinberg, D. K. 37, 89, 95, 113
 Steindler, L. 48
 Steinfeldt, R. 54, 60, 108
 Steingass, S. 53
 Stein, J. 37
 Stein, J. E. 37
 Selma, S. A. 69
 Stemmann, L. 98, 117
 Stemmer, K. 87
 Stenichikov, G. 84
 Stendardo, I. 31
 Steneck, R. S. 87
 Stenson, A. 87
 Stepanauskas, R. 36, 84
 Stephens, B. B. 51, 60
 Stephenson, G. R. 29
 Sterling, J. T. 46, 58
 Sterner, R. 117
 Stern, W. F. 81
 Steven, A. 35, 65, 109
 Steven, A. D. 109
 Stevens, A. 109
 Stevens, B. G. 60
 Stevens, D. P. 56, 95
 Stevenson, S. 61, 87, 88
 Stevenson, S. L. 87
 Steward, J. 46
 Stewart, B. 58
 Stewart, C. 64, 70
 Stewart, F. J. 124
 Stewart, G. M. 107, 115
 Stewart, J. J. 81
 Stewart, J. S. 58
 Stewart, K. D. 110
 Steyn, J. 58
 Stichel, T. 77
 Stigebrandt, A. 112
 Stigebrandt, A. G. 112
 Stillman, J. 97, 104, 115, 121, 122
 Stillman, J. H. 97, 104, 115, 121, 122
 Stimac, I. 32
 Stinchcombe, M. C. 60
 Stingl, U. 116
 Stinson, C. M. 102
 St. Laurent, L. 82
 St. Laurent, L. 57, 72, 110, 111
 St. Laurent, L. C. 57, 110, 111
 St-Laurent, P. 63
 stock, c. 49
 Stock, C. 34, 44, 84, 85, 125
 Stock, C. A. 34, 84, 85, 125
 Stockwell, D. A. 119
 Stoeber, U. 79
 Stoecker, D. 117
 Stoermer, M. 58, 85
 Stoesser, T. 109
 Stofan, E. 64
 Stoike, S. 37
 Stokes, M. D. 37, 50
 Stolkin, R. A. 44
 Stoll, H. M. 104
 Stone, R. E. 81
 St-Onge, G. 99
 Storlazzi, C. D. 62, 88
 Stoudt, C. A. 67, 99, 123
 Stouffer, R. J. 61
 Stover, K. K. 104
 Stowell, M. A. 62
 Stowell, M. A. 70
 Stramma, L. 41, 42, 51, 124
 Stramski, D. 42, 99, 119, 120
 Strand, K. O. 63
 Straneo, F. 45, 54, 56, 92, 112, 120
 Strang, C. 82
 Stratil, S. 59
 Straub, D. N. 75, 94
 Strauss, A. 37
 Streets, A. 96
 Stretch, D. D. 67
 Strickler, J. R. 70, 96, 118
 Striegl, R. G. 103
 Stringfellow, W. T. 109
 Stromberg, K. H. 95
 Strong, A. E. 55, 64
 Strong, A. L. 63
 Strong, C. 113
 Strubhar, W. 44, 48
 Strub, P. T. 46, 55
 Strub, T. 110
 Strutton, P. G. 38, 51
 Strzepek, R. F. 102
 Stuart, K. M. 55
 Stuart, R. K. 36
 Stubbins, A. 49, 61, 89, 103
 Stukel, M. R. 37, 49, 50, 125
 Stump, C. L. 60
 Stumpf, R. P. 105
 Suanda, S. H. 90
 Subich, C. 67
 Subramaniam, A. 49, 52, 70, 91, 103
 Subramanian, A. C. 81
 Subramanian, V. 39
 Su, C. 74
 Suci, D. 48
 Sudre, J. 84
 Sue, Y. 43
 Sueyoshi, M. 106
 Suffrian, K. 102
 Suga, T. 38, 44, 100, 111
 Sugie, K. 102
 Sugie Koji, K. 121
 Sukhohara, G. 36
 Sugimoto, S. 43
 Sugjura, N. 81
 Sukhatme, G. S. 122
 Sukhovich, A. 44
 Sukoriansky, S. 94
 Sulisty, B. 40
 Sulkin, S. D. 60
 Sullivan, B. K. 117
 Sullivan, D. E. 45, 64
 Sullivan, J. 61, 83
 Sullivan, J. M. 83
 Sullivan, K. 108
 Sullivan, M. B. 48, 49, 95
 Sullivan, M. E. 85
 Sullivan, P. 31, 32, 42, 58, 72, 88
 Sullivan, P. P. 31, 32, 42, 58, 72, 88
 Sumata, H. 115
 Sun, D. 90
 Sunda, W. G. 114
 Sundby, B. 30, 124
 Sundby, S. 58, 68
 Sundermeyer, M. A. 52
 Sundermeyer, M. A. 52, 75
 Sundström, M. 45
 Sun, H. 91
 Sun, J. 72, 84, 97, 117
 Sun, L. C. 46
 Sun, O. 57, 82, 110, 123
 Sun, O. M. 110
 Sun, S. 79
 Sun, X. 109, 123
 Sun, Y. 90
 Surge, D. 88, 97
 Surge, D. M. 97
 Suryaputra, I. 61, 103
 Suryaputra, I. A. 103
 Susanne Neuer, . 115
 Susanto, R. D. 40, 90
 Sutherland, D. 54, 92, 112
 Sutherland, D. A. 92, 112
 Sutherland, G. 58, 68
 Sutherland, K. R. 95, 117
 Sutherland, P. 58
 Sutter, L. 51
 Suttle, C. A. 48



Monitoring and Modeling the *Deepwater Horizon* Oil Spill: A Record-Breaking Enterprise

*Yonggang Liu, Amy MacFadyen,
Zhen-Gang Ji, and Robert H. Weisberg, Editors*

Learn about the significant work that was conducted in immediate response to the oil spill in the Gulf of Mexico in 2010. This volume includes studies of in situ and remotely sensed observations and laboratory and numerical model studies on the four-dimensional oceanographic conditions in the gulf and their influence on the distribution and fate of the discharged oil.

Now available at the AGU bookstore!

geopress.agu.org



Geophysical Monograph Series, Volume 195, 2011
271 pp., hardcover, ISBN 978-0-87590-485-6
List Price \$80.00 • AGU Member Price \$56.00

012-022

Publish in the Preeminent Journal in Paleontology!

Paleoceanography publishes original contributions focused on reconstructions of past conditions and processes of change as recorded in sediments deposited in water. The journal's central interest involves marine sediments and may extend to sediments from freshwater environments. Approaches to reconstruction can include sedimentology, geochemistry, paleontology, oceanography, geophysics, and modeling.



**According to 2010 Journal Citation Reports®,
Paleoceanography is ranked**

- #1 journal in Paleontology
- #1 in Impact Factor and Article Influence Score
- #3 journal in Oceanography
- In the top 5% of all journals in the category of Multidisciplinary Geosciences

Visit the AGU Booth to learn more about publishing with AGU,
or go to www.agu.org/pubs/authors

012-025



- Suttles, S. E. 53
 Sutton, A. J. 58
 Sutton, T. T. 37, 93
 Sutula, M. A. 105
 Sutyryn, G. 43
 Suzuki, A. 103
 Suzuki, K. 65, 102, 119
 Suzuki, N. 88
 Suzuki, S. 100
 Suzuki, T. 48, 108
 Svejkský, J. 110
 Swallow, J. E. 115
 Swan, B. K. 84
 Swan, C. M. 41
 Swanstrom, J. A. 48
 Swart, N. C. 79
 Swart, S. 51
 Sweeney, C. 38, 51, 93
 Sweeney, K. 68
 Sweetman, A. K. 33, 43, 104
 Sweet, S. T. 83, 108
 Swift, D. 44, 85
 Swift, J. 38, 51, 66, 67
 Swift, J. H. 38, 51, 66
 Swithenbank, A. M. 68
 Syamsuddin, M. L. 45
 Sydeman, W. J. 34, 44
 Sydney, N. J. 85
 Sykulski, A. 94
 Sylvander, P. 45
 Sylvan, J. B. 112
 Sylvester, C. 78
 Syvitski, J. 92, 122
 Syvitski, J. P. 92
 Szczechowski, C. 55
 Szekielda, K. H. 35
 Szmant, A. M. 44, 84
 Szuts, Z. B. 120
 Szwaykowska, K. 85
- T**
- Taberski, K. 91
 Tadokoro, K. 101, 115
 Tagliabue, A. 31, 32, 51, 93, 121
 Taguchi, B. 33, 42, 56, 90
 Taillandier, V. 44
 Taillefert, M. 84, 87
 Tailleux, R. 100
 Tait, A. 77
 Tait, Z. S. 99
 Takabayashi, M. 96
 Takagaki, N. T. 31
 Takahashi, K. 66, 79, 111
 Takahashi, T. 30, 38, 53
 Takano, S. 77
 Takano, S. T. 77
 Takano, Y. 41, 93, 114
 Takashi Kikuchi, T. 119
 Takatama, K. 42
 Takaya, K. 33
 Takayama, K. 97
 Takeda, S. 97
 Takemi, T. 100
 Takeoka, H. 42, 69
 Takeshita, Y. 44
 Takigawa, M. 57, 66
 Talapatra, S. 49, 83
 Talke, S. A. 31, 40
 Talley, L. 34, 110, 111, 123, 124
 Talley, L. D. 110, 111, 123, 124
 Talley, T. S. 96
 Tallifert, M. 59
 Talmage, S. C. 122
 Talmy, D. 94
 Tamelander, T. 115
 Tamura, T. 64
 Tanaka, K. 57
 Tanaka, S. 42
 Tanaka, T. 110
 Tanaka, Y. 113, 123
 Tande, K. S. 39
 Tandon, A. 42, 52, 76, 79, 83
 Taneda, T. 64
 Tang, B. 45, 49, 64, 65
 Tang, H. 75
 Tang, K. W. 59, 70
 Tang, T. 79, 103, 115
 TANG, T. Y. 88
 Tanhua, T. 30, 51, 60, 91
 Taniguchi, D. A. 89, 115, 125
 Tanimizu, M. T. 77
 Tanimoto, Y. 43
 Tankersley, R. A. 48, 50
 Tanner, C. 45
 Tan, R. 112
 Tan, X. 112
 Tan Yu, Y. 100
 Tao, J. 62
 Tapilatu, R. F. 114
 Tapiolas, D. 59
 Tappa, E. J. 109
 Tarnecki, J. 86
 Tarpley, D. 40
 Tarran, G. A. 116
 Tartar, A. 48
 Tatarikiewicz, J. J. 99, 119
 Tatebe, H. 123
 Tatters, A. O. 104, 122
 Tavormina, P. L. 91
 Taylor, A. 29, 34, 82, 89
 Taylor, A. G. 89
 Taylor, F. W. 87
 Taylor, G. T. 89, 101
 Taylor, J. 33, 52, 72, 104
 Taylor, J. R. 72, 104
 Taylor, K. A. 99
 Taylor, L. A. 78
 Taylor, M. H. 105
 Tazoe, H. 77
 Teague, C. C. 48
 Teague, W. J. 110, 123
 Tebben, J. 59
 Tebo, B. M. 124
 Teece, M. 70, 114, 115
 Teece, M. A. 70, 114
 Tehranirad, B. 120
 Teira, E. 37
 Tejada-Martinez, A. E. 68
 Tejada-Martinez, A. E. 58, 68, 93
 Tempera, F. 33
 Tempest, K. E. 60
 Templeton, C. K. 75
 Tems, C. 87, 121
 Tems, C. E. 87
 Teneva, L. 94, 104, 114
 Teneva, L. T. 114
 Teng, C. K. 98
 Teng, H. 54
 Teng, W. 65
 Teng, Y. C. 52, 65
 Terada, K. 48
 Terray, E. A. 52
 Terrill, E. 30, 37, 49, 75, 100
 Terrill, E. J. 30, 49, 100
 Teske, A. 90, 91, 112
 Teske, A. P. 90, 91
 Tessarolo, C. 97
 Tester, P. A. 49
 Testor, P. 39, 44, 46, 75
 Testut, C. E. 124
 Teutschel, N. 58
 Thacker, W. C. 81, 124
 Thaler, A. D. 73, 84
 Thaler, M. 116
 Thamdrup, B. 124
 The ICESCAPE Team, . 119
 Theiss, J. 106
 The U.S. ECoS Team, . 53
 Thibodeaux, C. 48
 Thibodeaux, L. J. 60
 Thier, E. 33
 Thierry, V. 41, 54, 124
 Thoma, B. P. 92
 Thomalla, S. 38, 51, 102
 Thomalla, S. J. 38, 51
 Thomas, A. C. 43
 Thomas, C. 45, 99, 113
 Thomas, C. J. 45, 113
 Thomas, C. S. 99
 Thomas, H. 46
 Thomas, J. O. 30
 Thoma, S. M. 106
 Thomas, M. D. 56
 Thomas, P. 86
 Thomas, S. 45
 Thomas, W. K. 86
 Thompson, A. 49, 79
 Thompson, A. F. 79
 Thompson, B. P. 33
 Thompson, C. 77, 107
 Thompson, C. M. 77
 Thompson, D. R. 117
 Thompson, J. 32
 Thompson, K. 55
 Thompson, L. 31, 33, 51, 60, 79
 Thompson, M. 57, 76
 Thompson, M. E. 76
 Thompson, P. D. 59
 Thompson, P. R. 95
 Thompson, R. 106, 122
 Thompson, R. J. 106
 Thompson, V. D. 87
 Thomsen, J. 94, 104, 121
 Thomsen, S. 110
 Thomson, J. 98
 Thomson, J. 50, 58, 72, 104
 Thoppil, P. 34, 86
 Thoppil, P. G. 34
 Thorndyke, M. 104, 121
 Thorndyke, M. S. 104
 Thorne, L. H. 58
 Thorne, P. D. 91
 Thornton, D. C. 61
 Thornton, E. B. 71, 74, 120
 Thoroughgood, C. A. 39
 Thorpe, S. A. 57
 Thorrold, S. R. 93, 114
 Thorseth, I. H. 33, 104
 Thouron, D. 59
 Thrash, J. C. 49
 Thunell, R. 87, 89, 101
 Thunell, R. C. 109
 Thunell, R. C. 87, 89
 Thurber, A. R. 43, 105
 Thurnherr, A. 57, 79, 111
 Thurnherr, A. M. 79, 111
 Thurow, B. 95
 Thurow, J. W. 87
 Thwaites, F. T. 31
 Tiahlo, M. 50, 103, 117, 121
 Tian, C. 67, 123
 Tian, H. 53
 Tian, J. 67, 84, 123
 Tian, M. 88
 Tilbrook, B. 94
 Tilburg, C. E. 116, 122
 Tilstone, G. H. 103
 Timko, P. G. 30
 Timmerman, A. 69, 116
 Timmermann, R. 54
 Timmerman, R. 30, 39
 Timmerman, R. E. 39
 Timmermans, M. L. 31, 52, 54, 56
 Timmins-Schiffman, E. 121
 TING, F. C. 88
 Tintore, J. 80
 Tintoré, J. 80
 Tirindelli, J. 122
 Tiron, R. 67
 Tiselius, P. 49
 Tivey, M. A. 112
 Tjiputra, J. 108
 Tjiputra, J. F. 108
 Toberman, M. 48
 Tobias, C. R. 35
 Tobin, E. D. 116
 Toda, T. 48, 49
 Todd, A. C. 100
 Todd, D. J. 53
 Todd, R. E. 59
 Toggweiler, J. R. 60
 Tohjima, Y. 60
 Tokinaga, H. 58, 79
 Tokmakian, R. T. 81
 Tolar, B. B. 113
 Tolman, H. 57, 66
 Tolman, H. L. 57, 66
 Tomas, C. 117
 Tomaso, D. J. 101
 Tomas, R. 33, 60
 TOMAS, R. 42
 Tomas, R. A. 33
 Tome, R. 80
 Tomita, H. 33, 42, 124
 Tomita, T. 42
 Tomlinson, M. S. 30, 39
 Tomlinson, R. 116
 Tom, L. M. 109
 Tommerdahl, A. 104
 Tomohiro Nakamura, T. 110
 Tonani, M. 29
 Toner, B. 112
 Toner, M. 83, 124
 Tonizzo, A. 101, 102, 120
 Toohey, L. 82
 Toole, J. 31, 52, 54, 56
 Toole, J. M. 31, 52, 54
 Toratani, M. 100

- Torres, D. J. 88
 Torres-Freyermuth, A. 74, 120
 Torres-Garcia, L. M. 120
 Torres, J. 86, 97, 108, 113
 Torres, J. J. 86, 108, 113
 Torres, R. 62, 120
 Torres-Valdes, S. 86
 Torrusio, S. 34
 Torrusio, S. 71
 Tortell, P. D. 93, 113
 Tosh, C. A. 58
 Toshio Suga, T. 111
 Toshitaka Gamo, . 77
 Towle, E. K. 94
 Townsend, A. T. 77
 Townsend-Small, A. 60, 106
 Townsend, T. L. 64
 Toyama, K. 44, 111
 Toyota, T. 77
 Tozuka, T. 107
 Tracey, K. L. 29, 38, 100
 Trahanovsky, K. A. 101
 Tranchant, B. 65
 Tranter, M. 51
 Trapp, J. M. 34, 40
 Travers, C. S. 99
 Traykovski, P. 78, 120
 Traykovski, P. A. 120
 Trees, C. 47
 Trees, C. C. 47
 Trefry, J. H. 99, 119
 Treguier, A. M. 33
 Tremblay, J. E. 99
 Trembl, M. 39
 Trenary, L. L. 79
 Treusch, A. H. 49
 Treydte, S. 87
 Tribbia, J. 54, 63, 81
 Tribbia, J. J. 63
 Trigo Cabrita Gil, G. 67
 Tringe, S. G. 48, 108
 Troccoli Ghinaglia, L. 89
 Trocine, R. P. 99, 119
 Trockel, D. F. 67
 Trond Kristiansen, . 43
 Troolin, D. 96
 Trossman, D. S. 60
 Trottier, T. 62
 Trowbridge, J. 31, 78
 Trowbridge, J. H. 31
 Troy, C. 41, 110
 Troy, C. D. 41
 Trudnowska, E. 39
 Truesdale, J. E. 68
 Truffer, M. 54, 64
 Trusel, L. 98, 119
 Trusel, L. D. 119
 Tsai, A. Y. 65
 Tseng, C. W. 65
 Tseng, J. 74
 Tseng, W. L. 90
 Tseng, Y. 29, 38, 56, 65, 75
 Tseng, Y. F. 65
 Tseng, Y. H. 38, 56, 75
 Tsuang, B. J. 90
 Tsubono, T. 57, 67
 Tsubouchi, T. 86
 Tsuchiya, K. 49
 Tsuchiya, M. 93
 Tsuda, A. 57, 65
 Tsujino, H. 43, 107, 111
 Tsukamoto, O. 43
 Tsukernik, M. 44
 Tsumune, D. 57, 67, 72
 Tsutsumi, E. 32
 Tucker, A. N. 101
 Tu, C. Y. 90
 Tuddenham, P. 41
 Tuerena, R. E. 77
 Tuffillaro, N. 35, 47
 Tuffillaro, N. B. 35
 Tu, K. L. 99
 Tulloch, R. 63
 Tumej, S. J. 57
 Tunncliffe, V. 39, 40, 49, 55, 66
 Tupper, B. 33
 Turiel, A. 34
 Turi, G. 53
 Turk, D. 46
 Turk, K. A. 113
 Turk-Kubo, K. 103, 117, 121
 Turk-Kubo, K. A. 103, 121
 Turner, J. T. 116
 Turner, M. K. 58
 Turner, R. E. 91
 Turnock, S. R. 39
 Turtle, E. P. 64
 Tuthill, L. K. 59
 Twardowski, M. 83, 105
 Tweddle, J. F. 57
 Twing, K. I. 90
 Tyler, P. A. 33, 34
 Tzortzi, E. 58
 Tzortziou, M. 46
- U**
- Uchiyama, Y. 107
 Uehara, H. 33
 Uehara, K. 40, 43
 Ueki, I. 39, 107
 Uematsu, M. 57
 Ueno, G. 81
 Ueno, H. 100
 Uiterwyk, K. 58
 Ullman, D. S. 43, 48, 71
 Ulloa, O. 40, 124
 Umbert, M. 34
 Umehara, T. 117
 Umezawa, Y. 55
 Umlauf, L. 60
 Unal, E. 84
 Underhill, V. R. 99
 Underwood, G. J. 95
 Underwood, S. 90
 Upton, M. 47, 108
 Upton, M. A. 47
 Uratsuka, S. 117
 Urban, E. 29
 Urban, N. R. 53
 Urbano, D. F. 120
 Urban-Rich, J. 76
 Uriah Gravois, . 76
 Urquhart, E. A. 55
 Ushie, H. 103
 Ussher, S. J. 77
 Ussler, W. 78
 Usui, N. 43
- V**
- Våge, K. 88
 Vagle, S. 46, 52, 58
 Vaillancourt, R. B. 70
 Vaillancourt, R. D. 113
 Valaitis, S. 45
 Valas, R. E. 36
 Valdes, J. 89
 Valdimarsson, H. 54, 88
 Valenta, T. 30, 41
 Valente, A. 108, 109
 Valentín Del Río, C. R. 82
 Valentín Del Río, C. R. 82
 Valentine, D. L. 91
 Valeriano Borja, . 90
 Valette-Silver, N. J. 43
 Valle-Levinson, A. 47, 71, 88
 Valley, J. W. 98
 Vallina, S. 116
 Vallina, S. M. 116
 Vallino, J. J. 37
 Vallis, G. 38, 52, 56
 Vallis, G. K. 38, 52
 van Aken, H. 32
 Van Aken, H. M. 32
 Van Alstyne, K. 49, 59
 Van Alstyne, K. L. 59
 Van-Beek Pieter, P. 69
 VANCE, D. 76
 Vance, J. M. 114
 van Damme, C. J. 35
 Vandehey, A. K. 46
 Vandemark, D. 34, 39, 45, 62
 van den Berg, C. M. 97
 van den Hoff, J. 58
 van der Elst, K. 71
 Vanderhoff, J. C. 75
 Vandermark, A. R. 77
 Van der Merwe, P. 77
 Vandermeulen, R. 102
 Vandermeulen, R. 46, 48
 Vandermeulen, R. A. 48
 Vander Zanden, H. B. 114
 van Dijken, G. L. 99
 Van Dijken, G. L. 93, 99, 119
 van Dongen-Vogels, V. 44
 Van Dongeren, A. R. 75
 Van Dover, C. L. 33, 73
 Van Dyk, P. 31
 Van Gorder, S. 68
 Van Hale, R. 114
 van Haren, H. 82
 van Heuven, S. 91
 van Heuven, S. 32, 91
 Van Heuven, S. 68
 Van Keuren, D. 73
 Van Meerssche, E. S. 101
 Van Mooy, B. 49, 59, 70, 71, 110
 Van Mooy, B. A. 49, 59
 Vanneste, J. 111
 Van Noord, J. 68
 Van Ormondt, M. 75
 Van Pelt, T. I. 85
 van Proosdij, D. 62
 Van Roekel, L. 32, 72, 88
 Van Roekel, L. P. 31, 88
 van Sebille, E. 29
 Vantrepotte, V. 102
 Van Uffelen, L. J. 86
- Van Wambeke, F. 61
 van Weerelt, M. 101
 Vardaro, M. F. 65
 Vardi, A. 59
 Varela, D. E. 99
 Varela, R. 89, 101, 109
 Vargas, M. 46
 Vargo, G. A. 117
 Variano, E. A. 62
 Varlamov, S. M. 31, 66
 Varner, J. 78
 Varpé, Ø. 33, 43
 Vasilyev, O. V. 29
 Vavrus, S. J. 106
 Vaz, A. C. 29
 Vazquez, J. 66, 83
 Vázquez-Rodríguez, M. 35
 Vecchi, G. A. 58
 Vedamati, J. 36, 71
 Veeramony, J. 88, 106
 Vega-Moreno, D. 44
 Vega-Rodríguez, M. 64
 Vega-Rodríguez, M. 64
 Vélez-Belchí, P. 90
 Vélez, F. J. 47
 Vélez, F. J. 75
 Vélez, S. 118
 Vella, K. 48
 Vellore, R. K. 33
 Velo-Suarez, L. 67
 Venables, H. J. 38, 113
 Venayagamoorthy, S. K. 67
 Venegas, R. 40, 55
 Venegas, R. M. 40
 Veneziani, M. 75, 92, 95
 Venkataramani, S. 72
 Vennell, R. 72
 Ventura, M. 93
 Vergin, K. L. 49
 Vermont, A. I. 96
 Vernet, M. 54, 87
 Verney, R. 62
 Veron, F. 50, 107
 veron, J. 107
 Verron, J. 72, 81, 124
 Versteegh, E. A. 97
 Versteegh, G. J. 97
 Vervatis, V. 43
 Vetter, E. W. 43
 Vetter, L. 87
 Viboud, S. 57, 67
 Vidaurre, G. 61
 Vidoudez, C. 112
 Vidra, R. 33
 Vierra, A. 37
 Vigilant, F. 81
 Villanoy, C. 90, 122
 Villanoy, C. L. 90, 122
 Villareal, T. 37, 49, 70, 91, 115
 Villareal, T. A. 49, 91, 115
 Vimont, D. 30, 42
 Vimont, D. J. 42
 Vincent, S. 45
 Vink, S. 122
 Vinogradova, N. T. 110
 Viotti, C. 67
 Viparelli, E. 109
 Visbeck, M. 41, 51, 54
 Viso, R. F. 40, 108
 Vitousek, S. 29

- Vittori, G. 62
 Vivier, F. 29, 51
 Vizcaino, A. 38, 62
 Vizoso, G. 80
 Vlahos, P. 68, 94
 Vlamis, T. 96
 Voelker, C. 121
 Vogel, M. J. 80
 Vogel, T. 95
 Vogt, M. 94, 95, 102, 115
 Vokhshoori, N. L. 114
 Volkov, D. L. 100
 Volkov, Y. N. 33
 Vollenweider, J. J. 83
 von Appen, W. J. 98
 von Lanken, A. 72
 VonLanken, A. 82
 von Schuckmann, K. S. 47
 Voss, M. 114
 Vossmeier, A. 91
 Voulgaris, G. 53, 62, 88, 120
 Voynova, Y. 30, 46, 48
 Voynova, Y. G. 46
 Vuorenkoski, A. K. 78, 86, 122
 Vu, Q. 49, 64
- W**
- Wackowski, S. 85
 Wada, E. 115
 Wade, T. L. 83, 108
 Wadham, J. L. 51
 Wadman, H. M. 119
 Waduawawara, S. 95
 Wage, K. E. 72
 Wagener, T. 32
 Waggett, R. J. 49
 Wagner, E. J. 47
 Wagner, R. W. 109
 Wahl, D. 62
 Wahle, R. A. 70
 Wahlin, A. 64
 Wahlin, A. K. 64
 Wählin, A. K. 54, 63
 Wahl, M. 59, 94, 104
 Wahl, S. 58
 Wahr, J. 40
 Wain, D. J. 67, 110, 123
 Wainer, I. 29
 Waite, J. N. 44
 Waite, T. D. 71
 Wakatsuchi, M. 90
 Wake, B. 32
 Wakefield, W. W. 40, 78
 Wakeham, S. G. 37
 Wakita, M. 48, 101, 108
 Waldbusser, G. 94, 114
 Waldbusser, G. G. 94, 114
 Waldron, H. 102
 Walechka, J. M. 118
 Walfir, P. W. 109
 Waliser, D. E. 42, 110
 Walker, B. D. 53, 114
 Walker-Brown, C. 44
 Walker, N. 89, 106, 123
 Walker, N. D. 89
 Walker, S. 55, 86, 101, 112
 Walker, S. A. 101
 Walker, S. E. 86
- Walker, S. L. 112
 Wallace, B. 76
 Wallace, D. 41, 51, 55, 91, 96, 124
 Wallace, D. W. 51, 96
 Wallace, J. M. 63
 Wallace, N. E. 122
 Wallcraft, A. J. 30, 75
 Wallsgrove, N. J. 93
 Walsh, B. 86
 Walsh, E. J. 44
 Walsh, I. D. 55
 Walsh, J. P. 53
 Walsh, K. 92
 Walter, L. M. 59
 Walter, M. 110, 123
 Walter, R. K. 69, 83
 Walters, T. L. 76
 Walther, B. D. 86, 97, 98
 Walther, S. M. 47
 Walworth, N. 122
 Walz, K. R. 84
 Wambaugh, Z. 62
 Wanamaker Jr., A. D. 87, 98
 Waner, J. C. 88
 Wang, B. 31, 40, 55
 Wang, C. 65, 76, 110
 Wang, C. K. 65
 Wang, D. 33, 52, 60, 62, 74, 80, 83, 88, 92, 100, 105, 106, 116
 Wang, D. P. 52
 Wang, D. W. 33
 Wang, F. 90, 100, 107
 Wang, G. Z. 121
 Wang, H. 52
 Wang, H. 36, 56, 86, 100, 105, 109, 116, 119, 123
 Wang, J. 41, 43, 48, 75, 85, 99, 107, 123
 Wang, L. 98, 107
 Wang, M. 64, 85, 98, 101
 Wang, P. 84, 123
 Wang, Q. 63, 74, 86, 107
 WANG, Q. 38
 Wang, S. 93
 Wang, X. 46, 49, 53, 62, 65, 71, 100
 Wang, X. C. 46, 53, 71
 Wang, Y. 48, 63, 93, 109
 Wang, Y. C. 48
 Wang, Y. S. 109
 WANG, Y. X. 38
 Wang, Z. 29, 46, 69, 71, 85
 Wang, Z. A. 46, 69, 71
 Waniek, J. J. 60, 101
 Wankel, S. D. 59
 Wanninkhof, R. 30, 35, 51, 91, 94, 108
 Waples, J. T. 30
 Waples, J. W. 41
 Warburton, J. 67, 85
 Ward, B. 46, 58, 68, 116, 123, 125
 Ward, B. A. 116, 123, 125
 Ward, B. B. 46
 Ward, E. M. 70
 Ward, M. L. 29
 Ward, N. 50
 Ward, P. D. 41
 Ware, J. 105
 Warner, J. C. 80, 88, 119, 120
 Warner, M. J. 60
 Warner, S. J. 56, 82
 Warner, T. R. 53, 70
- Warren, J. D. 69
 Warrick, J. A. 109, 123
 Washburn, L. 30, 49, 90, 106
 Waska, H. 61, 87
 Wassick, A. C. 48
 Wassmann, P. 115
 Wasson, A. 32
 Watanabe, A. 89
 Watanabe Eiji, E. 119
 Watanabe, S. 60, 66, 102
 Watanabe, T. 97, 106
 Watanabe, W. B. 83
 Watanabe, Y. W. 57
 Waterbury, J. B. 36
 Waterhouse, A. F. 123
 Waterman, S. 29
 Watkins-Brandt, K. 110
 Watkins, J. A. 51
 Watkins, J. L. 111
 Watkins, M. 40
 Watson, A. J. 108
 Watson, D. 74
 Watson, E. 53
 Watson, M. G. 96
 Watson, R. 32, 97
 Watson, S. 121
 Watts, D. R. 29, 38, 43, 79, 80, 100
 Waugh, D. W. 52
 Wear, E. K. 61
 Weatherbee, R. 43
 Webb, A. 37, 88
 Webb, E. A. 77, 102, 121, 122
 Weber, E. D. 83
 Weber, J. C. 66, 89
 Weber, S. C. 50
 Weber, T. 104, 123
 Weber, T. C. 104
 Weber, T. S. 123
 Webster, J. 104
 Webster, K. L. 109
 Webster, M. 98, 99
 Webster, S. E. 65
 Wegley Kelly, L. 36
 Wegley, L. 69
 Wei Chuanjie, . 90
 Weidemann, A. 39, 42, 47, 78, 83, 101, 105, 120
 Weidemann, A. D. 39, 47
 Weidman, C. 94
 Weidner, E. F. 104
 Wei, E. 70
 Wei, H. 75
 Wei-Haas, M. L. 71
 Weijer, W. 29, 38, 63
 Weiler, C. S. 45
 Weingartner, T. 73, 88, 99, 119
 Weingartner, T. J. 88, 99, 119
 Weinstein Knowlton, S. E. 50
 Weir, B. 76, 124
 Weisberg, R. 30, 55, 85, 90, 119
 Weisberg, R. H. 30, 55, 90
 Weisman, D. 37
 Weissburg, M. J. 70
 Weiss, E. 99
 Weiss, G. 44
 Weitzman, J. S. 122
 Wei, Z. 90
 Wejnert, K. E. 87
 Wekerle, C. 63
 Welch, C. 95
- Welch, D. W. 35
 Welch, T. P. 85
 Welhena, T. 105
 Welker, J. 36
 Welle, P. 48
 Weller, R. 31, 39, 42, 45, 101, 120, 124
 Weller, R. A. 31, 42, 45, 101, 124
 Wellner, J. S. 103
 Wells, B. 35, 37, 45, 92, 117
 Wells, B. K. 35, 37, 45
 Wells, J. C. 107
 Wells, J. R. 39, 59
 Wells, M. G. 41, 122
 Welter, E. 50
 Weltmer, M. A. 71
 Wendell Brown, W. S. 42
 Wendt, K. 112
 Wenegrat, J. O. 42
 Wengrove, M. 46
 Wen, L. 65, 77, 97
 Wen, L. S. 65, 77, 97
 Wen, N. 56
 Wen, T. 85
 Wentz, F. 34
 Wentz, F. 34, 56
 Wentz, F. J. 56
 Wenzhoefer, F. 55, 89
 Wenzhöfer, F. 105
 Werdell, J. P. 99
 Wernand, M. R. 65
 Werner, F. 37
 Werner, F. E. 37
 Wesley Moses, . 120
 Wesson, J. 105
 Westberry, T. K. 120
 Westerhold, T. 53
 Westerink, J. 119
 Wetherbee, B. 46
 Wetterauer, A. M. 62
 Wetzel, A. N. 40
 Whalen, C. B. 110
 Whaling, P. J. 104
 Whang Cho-Rrong, . 39
 Wheatcroft, R. 53, 123
 Wheatcroft, R. A. 123
 Wheeler, J. D. 59, 122
 Whelan, J. 105
 Whitcraft, C. R. 96
 White, A. E. 89, 102, 110, 115
 White, B. 46, 83, 95, 106, 110, 115
 White, B. L. 83, 95, 106, 115
 Whitefield, J. D. 99
 Whitehead, R. F. 44, 84
 Whitehouse, R. J. 39
 White, J. R. 106, 123
 White, M. M. 114
 Whitledge, T. 50, 74, 94, 101
 Whitledge, T. E. 74, 94, 101
 Whitley, L. 41
 Whitley, L. N. 41
 Whitmire, A. L. 89
 Whitmire, S. 122
 Whitney, F. 31
 Whitney, H. 85
 Whitney, L. P. 56
 Whitney, M. M. 71, 79
 Whoriskey, F. G. 35
 Wiberg, P. L. 53, 62
 Wick, G. A. 111
 Wickland, K. P. 103

- Wicks, C. 50
 Wicks, L. C. 87
 Widdicombe, C. 89
 Widner, B. 62
 wiebe, P. H. 82
 Wiebe, P. H. 72, 78, 85
 Wieclawek, J. 54
 Wiederwohl, C. L. 51, 63, 64
 Wienders, N. 111
 Wiese, F. K. 85
 Wiggert, J. 84, 100
 Wiggert, J. D. 100
 Wiggins, C. E. 78
 Wiggins, S. 68
 Wiggins, S. M. 68
 Wilhelm, S. 32
 Wijesekera, H. 110, 123
 Wijesekera, H. W. 110, 123
 Wijffels, S. 46, 47, 79
 Wijffels, S. E. 47
 Wikfors, G. H. 104
 Wiktor, J. 95
 Wilcox Freeburg, E. D. 102
 Wiley, D. 57
 Wilkerson, C. N. 95, 112
 Wilkerson, F. 91, 107
 Wilkin, J. 53, 69, 76, 80
 Wilkin, J. L. 69
 Wilkin, M. 66
 Willcock, W. 85
 Wille, M. 77
 Willey, D. 29
 Williams, A. 51, 70
 Williams, B. 87
 Williams, C. A. 69
 Williams, C. C. 104
 Williams, C. M. 113
 Williams, E. 117
 Williams, H. N. 48, 51, 70, 117
 Williams, J. A. 30
 Williams, J. W. 109
 Williams, L. N. 68
 Williams, M. 64, 70, 108
 Williams, M. J. 108
 Williams, N. J. 45, 100
 Williams, R. 38, 52, 61, 116
 Williams, R. G. 38, 52, 61
 Williams, S. 78
 Williams, W. 46, 86, 98
 Williams, W. J. 86, 98
 Willis-Norton, E. M. 68
 Willis, S. K. 59, 69
 Willmot, V. 98
 Wilson, C. 30, 31, 56, 102, 104, 115
 Wilson, C. D. 104
 Wilson, G. W. 74, 75
 Wilson, P. A. 53
 Wilson, R. 35, 90, 105
 Wilson, R. M. 90, 105
 Wilson, S. 35, 37, 42, 76
 Wilson, S. E. 37
 Wilson, S. J. 42
 Wilson, S. T. 76
 Wilt, L. M. 99
 Wiltshire, J. 43
 Wimbush, M. 79
 Winckler, G. 54, 72
 Windecker, L. A. 61
 Windom, H. L. 92
 Wingate, B. A. 123
 Winkel, D. P. 123
 Winkelmann, I. 84
 Winkelstern, I. Z. 97
 Winokur, J. 124
 Winsor, P. 85, 94, 99, 119
 Winstead, N. S. 117
 Winter, R. 94
 Winters, K. B. 110
 Wirtz, K. W. 94
 Wisdom, S. S. 99
 Wisegarver, D. P. 60
 Wishner, K. F. 40, 104
 Witten, A. B. 57
 Witt, M. 61, 87
 Woehlke, S. A. 70
 Wolanski, E. 62
 Wolfe, C. 29, 38, 121
 Wolfe, C. L. 29, 38
 Wolfer, H. M. 60
 Wolff, G. A. 69
 Wolff, J. O. 38
 Wolfram, P. J. 71
 Wolhowe, M. D. 97
 Wolk, F. 45, 65
 Woll, C. I. 49
 Wong, P. L. 62
 Wong, S. 39
 Wood, A. M. 108
 Woodard, K. C. 100
 Wood, C. 98, 99, 119
 Wood, C. L. 99, 119
 Wood C.L., C. L. 44
 Woodgate, R. 98, 99
 Woodgate, R. A. 99
 Wood, K. R. 99
 Wood, L. 64
 Woodlief, V. A. 75
 Woodring, D. 55
 Woodruff, J. D. 53
 Woodruff, S. D. 66
 Woods, N. W. 116
 Woodson, C. B. 59, 69, 72, 83, 95
 Woods, S. 42, 78
 Wood, T. J. 34, 44
 Woodward, B. 121
 Woodward, E. M. 32, 77
 Woodward, L. 74
 Woodworth, P. A. 34
 Wood, W. T. 110
 Woo, H. J. 107
 Woo, J. S. 91
 Woolaway, C. 55
 Woo, S. B. 91, 107
 Worcester, P. F. 66, 72
 Worden, A. Z. 49, 94
 Worley, C. 90, 105
 Worley, S. 66
 Worm, B. 79
 Wormuth, J. H. 117
 Worsfold, P. J. 62, 77
 Wortham, C. J. 100
 Worthen, D. L. 54
 Wozencraft, J. 78
 Wren, D. G. 88
 Wren, P. A. 74
 Wright, J. M. 104
 Wright, S. 62
 Wright, S. A. 62
 Wrohan, I. A. 99
 W. Timothy Liu, . 63
 Wu, C. 31, 41, 82, 109
 Wu, C. H. 31, 41
 Wu, C. Y. 109
 Wu, H. 36
 Wu, L. 33, 42, 67, 90
 Wunderle, S. 111
 Wunsch, C. 81, 82, 100
 Wunsch, C. I. 82, 100
 Wu, Q. S. 65
 Wu, R. 122
 Wurch, L. L. 81
 Wurl, O. 72, 77
 Wurst, M. 103
 Wurtzell, K. 82
 Wurzel, W. 114
 Wuttig, K. 32
 Wu, Y. 62, 103
 Wu, Z. 65
 Wyatt, A. J. 69
 Wyatt, S. N. 99
 Wyneken, J. 35
 X
 Xiao-Hai Yan, X. 63
 Xiao, J. 31, 55, 109
 Xiao, Y. 76
 Xie, J. 81
 Xie, L. 29
 Xie, S. 33, 38, 58, 61, 79, 124
 Xie, S. P. 33, 79, 124
 Xie, X. 75, 84, 109
 Xie, X. H. 75
 Xie, X. N. 109
 Xing, x. 44
 Xing, X. 44
 Xiong, J. 30
 Xiu, P. 80, 105
 Xu, C. 97
 Xu, D. Z. 81
 Xue, G. 109
 Xue, H. 80, 93
 Xue, J. 41, 53, 100
 Xue, Z. 53, 89, 109
 Xu, F. H. 29
 Xu, G. 124
 Xu, J. 52, 59
 Xu, J. P. 59
 Xu, K. 40, 110, 123
 Xu, K. H. 110, 123
 Xu, L. 61, 90, 124
 Xu, L. X. 90, 124
 Xu, X. 54
 Xu, Y. 55, 66, 102, 112
 XU, Y. 45
 Y
 Yack, T. M. 69
 Yager, P. 34, 37, 50, 58, 93, 99, 113
 Yager, P. L. 37, 50, 93, 99, 113
 Yager, T. 50
 Yagi, M. 83
 Yahia, H. 84
 Yahnker, C. 66
 Yakushev, E. 124
 Yamada, M. 77
 Yamagishi, H. 60
 Yamaguchi, A. 55, 99
 Yamaguchi, Y. T. 114
 Yamamoto, A. 102
 Yamamoto, H. 93
 Yamamoto, J. 77
 Yamamoto-Kawai, M. 99
 Yamamoto, M. 57
 Yamamoto, S. 49, 118
 Yamanaka, G. 107
 Yamanaka, Y. 100, 102, 108, 115
 Yamanaka, Y. Y. 102
 Yamano, H. 102
 Yamaoka, K. 112
 Yamashita, M. K. 120
 Yamashita, Y. 89
 Yamawaki, N. 55
 Yamazaki, H. 83
 Yamazaki, K. 97
 Yambélé, A. 97
 Yanagi, T. 40
 Yan, C. 81
 Yang, B. 84
 Yang, C. S. 83
 Yang, D. 50
 Yang, H. 29
 Yang, J. 116
 Yang-Ki Cho, . 76
 Yang, M. 51
 Yang, Q. 67, 84, 123
 Yang, R. Y. 120
 Yang, S. C. 75
 Yang, S. L. 123
 Yang, T. 91
 Yang, W. 39, 67, 83
 Yang, W. F. 67
 Yang, Y. 57, 67
 Yang, Y. J. 57
 Yang, Z. 66, 98, 109, 123
 Yang, Z. S. 123
 Yankovsky, A. 120
 Yankovsky, A. 76
 Yankovsky, A. E. 76
 Yan, W. 84
 Yan, X. 63, 80, 84
 Yan, X. H. 84
 Yao, F. 79
 Yara, Y. 102
 Yaremchuk, M. 29, 65, 81, 105
 Yarimizu, K. 59
 Yarincik, K. 34
 Yashayaev, I. 54, 63
 Yasuda, I. 49, 83, 100, 110, 123
 Yasuda, M. 37
 Yasuda, T. 106
 Yasuki, N. 65
 Yates, K. K. 59
 Yawei Luo, Y. 72
 Ya-Wei Luo, Y. 122
 Yayoi Hongo, Y. 77
 Yeager, D. E. 45
 Yeager, K. M. 108
 Yeager, S. 54, 61, 63, 81, 124
 Yeager, S. G. 54, 61, 63
 Yeakel, K. L. 70
 Ye, H. 36
 Yeh, T. Z. 65
 Yeh, Y. C. 55
 Yellen, B. 53
 Yerubandi, R. R. 41

- Yeung, L. Y. 37, 103
 Yezi, A. 105
 Yijun He, H. 100
 Yin, H. 112
 Yin, Y. 39
 Yniguez, A. T. 122
 Yñiguez, A. T. 122
 Yoder, J. 33, 64, 102
 Yoder, J. A. 33, 102
 Yoerger, D. 38, 43, 108
 Yoerger, D. R. 43, 108
 Yokokawa, T. 84
 Yokoyama, Y. 114
 Yonekura, E. 29
 Yool, A. 33
 Yoon, B. I. 91, 107
 Yoon, H. D. 88
 Yoon, H. S. 36
 Yoon, J. H. 31, 116
 Yoon, K. T. 107
 YOO, H. S. 97
 Yoo, S. 107
 Yoshiaki Toba, Y. 45
 Yoshida, S. 57, 67
 Yoshida, T. 49, 93
 Yoshie, N. 65
 Yoshikawa, Y. 32, 42
 Yoshimi Kawai, Y. 111
 Yoshimura, H. 55
 Yoshimura, T. 102
 Yoshimura Takeshi, . 121
 Yoshiyuki Nakano, Y. 108
 Young, C. 29, 56, 124
 Young, C. C. 56
 Young, C. R. 124
 Young, D. 53
 Young, E. D. 37, 103
 Young-Heon Jo, Y. 63
 Young, J. R. 87
 Young, M. 87
 Young, O. 49
 young, S. 70
 Young, S. J. 51
 You, S. H. 83
 Yuan, C. Y. 51
 Yuan, D. 40, 84, 106
 Yuan, X. 29
 Yuan, Y. 48
 Yücel, M. 112
- Yueh, S. 34
 Yueh, S. H. 45
 Yu, E. K. 102, 122
 Yu, F. 106
 Yu, H. 95
 Yuji Kashino, Y. 90
 Yu, L. L. 46
 Yu, P. 29, 55, 94, 104
 Yu, P. C. 94
 Yu, S. 46
 Yusuke Kawaguchi, Y. 119
 Yu, X. 62
 Yvon-Lewis, S. A. 35, 90, 105
- ## Z
- Zablocka, M. 103
 Zabolotin, N. A. 66
 Zabriskie, K. G. 48
 Zador, S. 68
 Zahn, R. 38, 87
 Zaika, Y. 44
 Zaitchik, B. F. 55
 Zaleha, K. 49
 Zalles, D. 82
 Zambianchi, E. 52
 Zamora, L. M. 41
 Zamorski, S. E. 100
 Zamudio, L. 29
 Zanasca, P. 75
 Zanna, L. 67
 Zanolowski, H. 29
 Zantopp, R. 41, 54
 Zappa, C. J. 45, 64
 Zaron, E. 31, 40, 64, 89, 100, 101
 Zaron, E. D. 40, 64, 89, 100
 Zaron, E. D. 40
 Zarrin, A. 106
 Zarubin, M. 43, 72
 Zavadsky, A. 77
 Zavala-Hidalgo, J. 84, 86, 106
 Zavala-Hidalgo, J. Z. 84
 Zavala Lopez, A. 97
 Zedel, L. 78, 88
 Zeebe, R. E. 87
 Zeeman, S. I. 122
 Zehr, J. 36, 49, 103, 113, 117
 Zehr, J. P. 36, 103, 113, 117
- Zeller, D. 68
 Zeller, R. B. 122
 Zelnio, K. A. 84
 Zeng, D. 90
 Zeng, L. 40, 60
 Zeng, T. 106
 Zenzola, N. 108
 Zettler, E. 49
 zhai, p. 43
 Zhang, A. 74
 Zhang, C. 106
 Zhang, D. 54, 63
 Zhang, F. 83, 85
 Zhang, G. 75, 112
 Zhang, H. 49, 64, 81, 88, 100, 124
 Zhang, J. 42, 63, 67, 73, 79, 98, 119
 Zhang, J. L. 98
 Zhang, K. 66
 Zhang, L. 33
 Zhang, R. 84, 106
 Zhang, R. H. 106
 Zhang, S. 31, 33, 81, 97, 98
 ZHANG, S. 99
 Zhang, S. G. 98
 Zhang, S. P. 33
 zhang, W. 80
 Zhang, W. G. 69
 Zhang, W. Z. 100
 Zhang, X. 39, 45, 74, 98, 105, 106
 Zhang, X. Q. 106
 Zhang, Y. 52, 74, 79, 83, 109, 122
 Zhang, Z. 32, 42, 98, 116
 Zhang, Z. H. 51
 Zhao, D. 80
 ZHAO, J. 99
 Zhao, J. P. 98
 Zhao, L. 75
 Zhao, S. 106
 Zhao, W. 67, 123
 Zhao, X. 106
 Zhao, Y. 36, 48
 Zhao, Z. 30
 Zharkov, V. 82
 Zheng, F. 106
 Zheng, G. 119, 120
 Zheng, H. 32
 Zheng, J. 67, 77, 120
 Zheng, J. W. 120
 Zheng, L. 30
- Zheng, Q. 61
 Zheng, S. 64
 Zheng Wang, Z. 106
 Zheng, X. T. 79
 Zheng, Y. 42
 Zhong, Y. 72, 100
 Zhou, H. 90
 Zhou, J. 32, 45, 71
 Zhou, K. 32, 77, 80
 Zhou, M. 30, 72, 93, 113
 ZHOU, M. 105
 ZHOU, W. 74
 Zhou, Z. 74, 103
 Zhuang, W. 79
 Zhu, B. 109
 Zhu, J. 36, 46, 81, 86, 106
 Zhu, Q. 84
 Zhu, X. 65, 92
 Zhu, X. H. 65
 Zhu, Y. 93
 Zibordi, G. 47
 Ziccarelli, L. 72
 Ziebis, W. 113
 Zielinski, B. L. 50
 Zielinski, O. 65
 Zieman, J. C. 55
 Ziervogel, K. 46, 115
 Zika, J. D. 51, 52
 Zika, R. G. 109
 Zilberman, N. V. 90
 Zimmer, C. A. 43, 59
 Zimmer, L. 72, 77
 Zimmer, L. A. 77
 Zimmermann, L. A. 34
 Zimmerman, R. C. 35, 115
 Zimmer, R. K. 43, 59
 Zinzola, N. 92
 Zirbel, M. J. 102
 Zisner, E. R. 48
 Zlotnicki, V. 66
 Zong, H. 39
 Zonneveld, K. A. 97
 Zuber, P. 36, 43, 83
 Zubkov, M. V. 116
 ZUO, J. 99
 Zweng, M. 54
 Zygourakis, K. 61

2012 TOS Fellow

The Oceanography Society would like to congratulate

Dr. James A. Yoder

Woods Hole Oceanographic Institution

on being named a Fellow of The Oceanography Society.

The TOS Fellows Program recognizes individuals who have attained eminence in oceanography through their outstanding contributions to the field of oceanography or its applications during a substantial period of years. To learn more about the Fellows Program and nominating procedures, please visit

http://www.tos.org/awards_honors/fellows_program.html

The Walter Munk Award

The Oceanography Society would like to congratulate

Dr. William A. Kuperman

Scripps Institution of Oceanography

on his selection as the most recent recipient of The Walter Munk Award in recognition of distinguished research in oceanography related to sound and the sea.

Dr. Kuperman will present the Munk Award Lecture titled "The Ocean as a Complex Acoustic Medium" on Wednesday, February 22nd at 14:00 in Room 250 of the Salt Palace Convention Center.

For more information on The Walter Munk Award, visit

http://www.tos.org/awards_honors/munk_award.html



THE OCEANOGRAPHY SOCIETY

Mike Roman, President
Mark Abbott, President-Elect
Carolyn Thoroughgood, Past-President
Susan Cook, Secretary
Susan Banahan, Treasurer
Ellen Kappel, Editor, *Oceanography*

COUNCILLORS

Scott Doney
Scott Glenn
Blanche Meeson
Charles Nittrouer
Mary Scranton
Janet Sprintall
Deborah Steinberg

Oceanography VOLUME 25

NUMBER 1 | MARCH 2012

Special Issue | Oceanic Spreading Center Processes:
Ridge 2000 Program Research

Supplement | New Frontiers in Ocean Exploration:
The E/V *Nautilus* and NOAA Ship *Okeanos Explorer*
2010 and 2011 Field Seasons

NUMBER 2 | JUNE 2012

Special Issue | Internal Waves

NUMBER 3 | SEPTEMBER 2012

Special Issue | Antarctic Oceanography in a Changing World

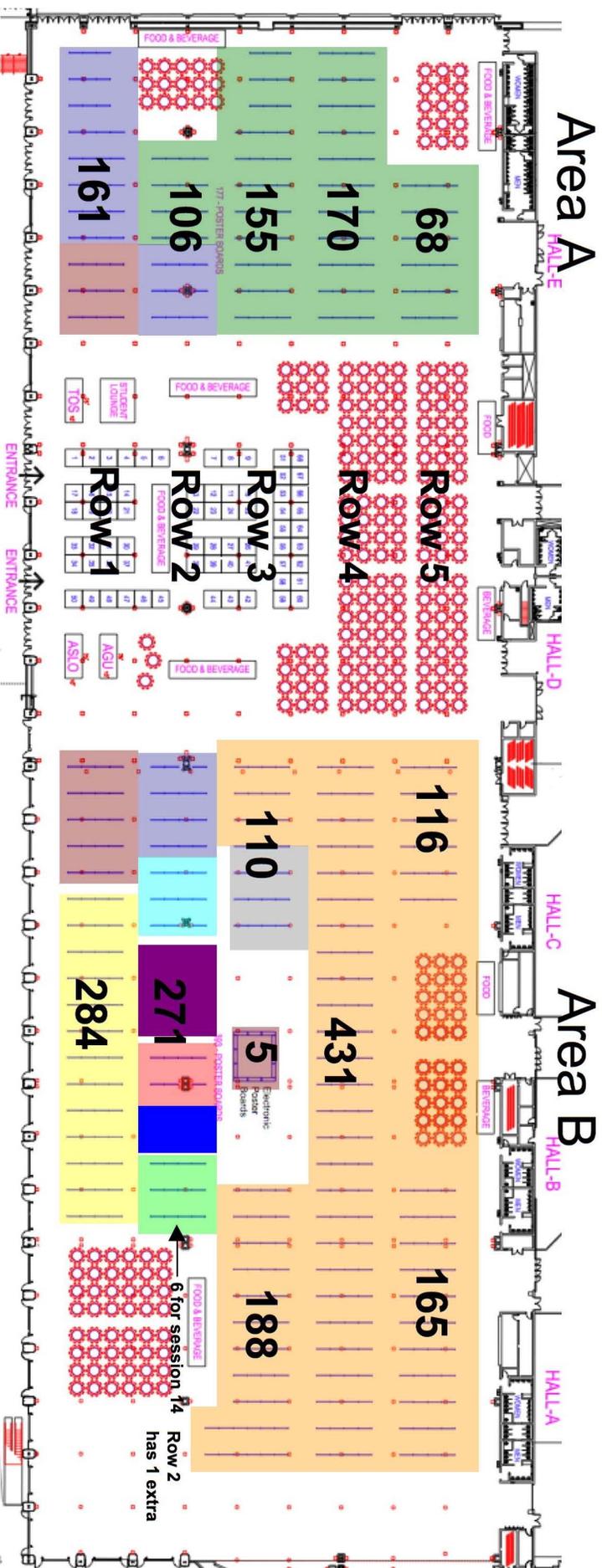
NUMBER 4 | DECEMBER 2012

Special Issue | Upper Ocean Processes:
Peter Niller's Contributions and Inspirations

<http://www.tos.org/oceanography>

TOS would like to thank The Deerbrook Charitable Trust
for supporting student involvement in the Ocean Sciences Meeting.

Ecosystems: processes, assessment, and management
Ocean policy, resource management (9, 11)



- Physical Oceanography, limnology (2)
- Biological Oceanography, aquatic bio (3)
- Chemical Oceanography, aquatic chem (4)
- Education, scientific outreach, scientific workforce (10)
- Geology and geophysics (1)
- Nearshore and coastal regions (6)
- Watersheds, lakes, rivers, estuaries (5)
- Observatories, operat. oceanogr., new tech (13)
- Climate change, environ change, ocean acid. (8)
- Optics, acoustics, remote sensing (12)

Mark Your Calendar:



2014 Ocean Sciences Meeting

February 23-28, 2014

Hawaii Convention Center

Honolulu, Hawaii

For more information on the 2012 Ocean Sciences Meeting:

2012 Ocean Sciences Meeting
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446
Phone: 254-776-3550
Fax: 254-776-3767

<http://www.sgmeet.com/osm2012> Web
osm2012@sgmeet.com Email