

Data Management Update

Vicki Ferrini

Lamont-Doherty Earth Observatory

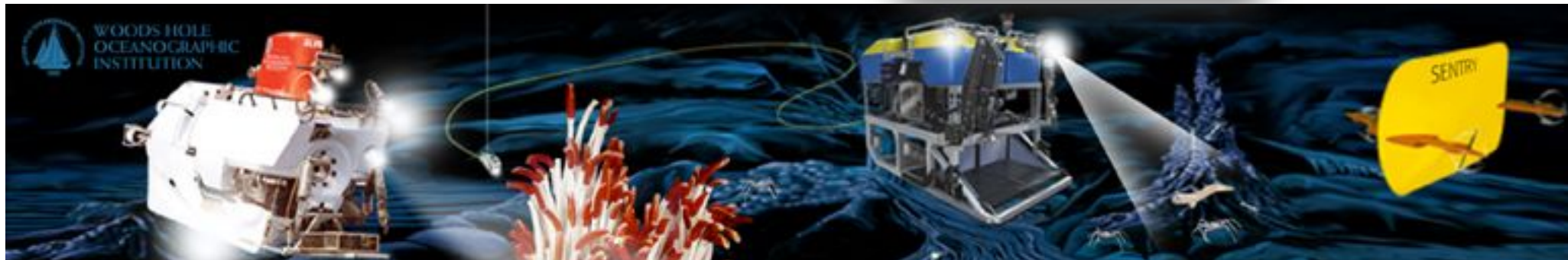
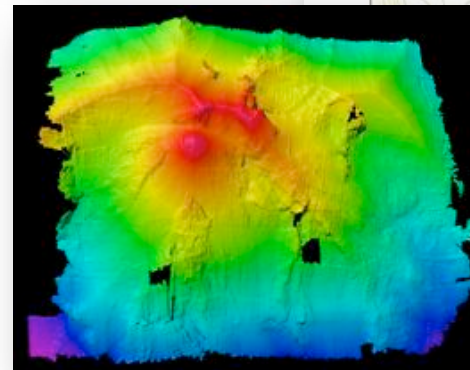
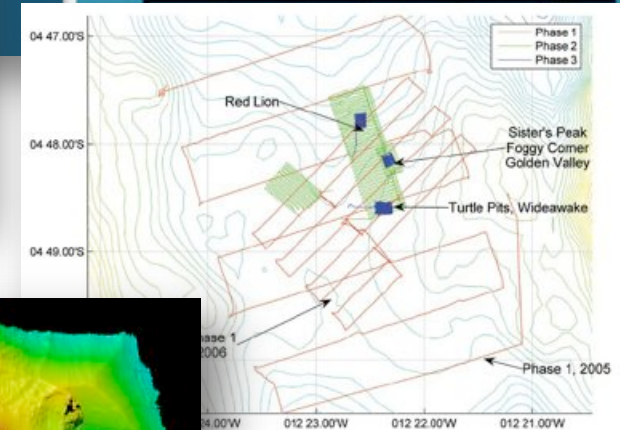
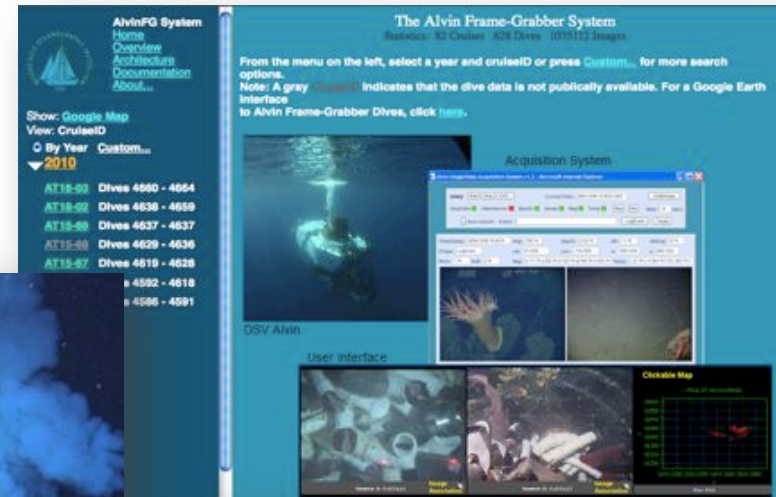
Importance of Data Management

- Support science and discovery
- Scientific reproducibility
- Costs of acquisition
- Optimizing operations
- Increasing volumes of data
- Data Policies with increasing focus on data sharing



NDSF Data Types

- Images & Video
- Raw data streams
 - Navigation
 - Sonar, CTD, subbottom
- First-order products
 - Grids & Images
 - Processed Navigation
- Science Party Instrumentation



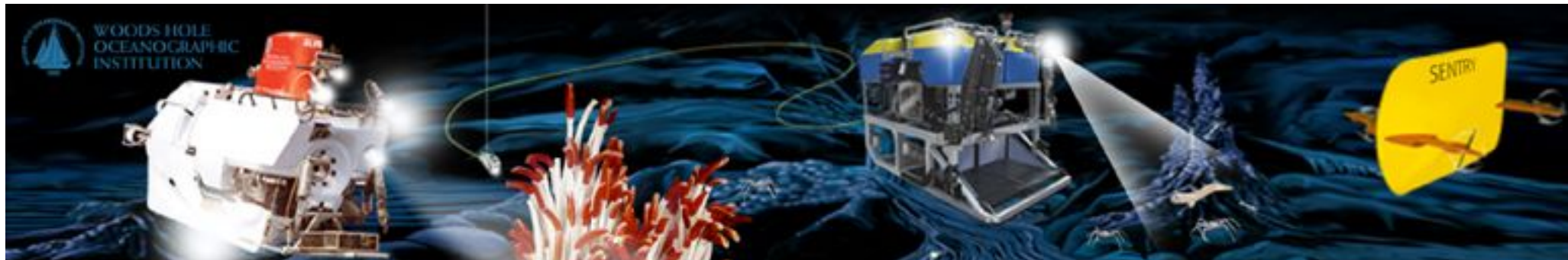
MGDS – marine-geo.org

- Primarily marine geophysical data
 - Bathymetry, sidescan, subbottom, seismic, magnetics
- NSF OCE data policy-recommended
- Includes complementary data + metadata
 - Bottom photos, interpretations, navigation
- Existing Data Collections include NDSF Data
 - Ridge 2000 & MARGINS Data Portals
 - Links to FrameGrabber & Virtual Van Images
- Data curation – preservation, online search & access



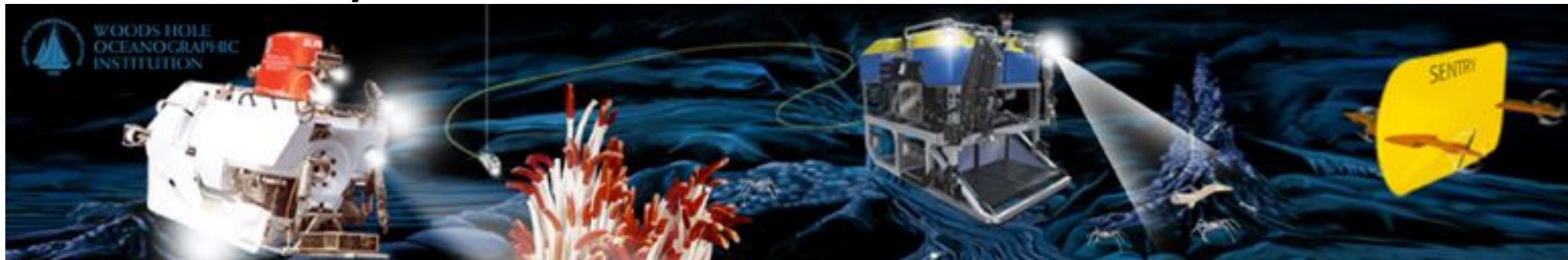
Spring 2013 DeSSC

- Pursue migration of subset of NDSF data to Marine Geo Data System (marine-geo.org) for increased accessibility
- Target raw data & first order products (*at-sea, operator-generated*)
 - Basic dive metadata
 - Sonar data (multibeam, sidescan)
 - Subbottom data
 - Navigational data



Workplan & Progress

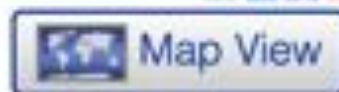
- Identify suite of data suitable for migration ✓
- Identify initial data sets (3 cruises) to target ✓
- Contact PIs for permission ✓
- Transfer Data + Metadata to MGDS ✓
- Ingest and make available via MGDS ✓
 - Issue data DOIs in coordination with PIs
 - Include in GeoMapApp
- Identify additional PIs to contact





AT18-03

Field: Marine



Fisher, Charles Penn State
Chief Scientist

Platform Atlantis
WHOI

Start Date 2010-12-06
Gulfport, Mississippi

Stop Date 2010-12-15
Gulfport, Mississippi

Data Sets	Sensor Data		
Event Logs	Bathymetry Device Info Sonar:Multibeam AUV:Sentry	Repository MGDS	Fisher, Charles Penn State
Personnel	Bathymetry:Swath Device Info Sonar:Multibeam AUV:Sentry	Repository MGDS	Fisher, Charles Penn State
Instruments	Navigation Device Info Navigation AUV:Sentry	Repository MGDS	Fisher, Charles Penn State
Related Information	Navigation:Primary Device Info Navigation Atlantis	Repository R2R	Fisher, Charles Penn State



Data Sets

[Expeditions / AT18-03](#)
[Compilations](#) Atlanta

Processed Data

Processed Data Products

[AT18-03 Bathymetry](#)

Fisher, Charles Penn State

Locale [GulfOfMexico](#)
[Gulf](#)
Platform [AUV:Sentry](#)
Info [WHOI:NDSF](#)
Device [Sonar:Multibeam](#)
Info [Reson:SeaBat 7125](#)
Events

File [ASCII:ESRI](#)
Format
Quality 1
 A level of processing has been undertaken, ensuring quality control (e.g. ping edited sonar data, edited navigation data).

[AT18-03 Bathymetry](#)

Fisher, Charles Penn State

Locale [GulfOfMexico](#)
[Gulf](#)
Platform [AUV:Sentry](#)
Info [WHOI:NDSF](#)
Device [Sonar:Multibeam](#)
Info [Reson:SeaBat 7125](#)
Events

File [NetCDF:GMT](#)
Format
Quality 1
 A level of processing has been undertaken, ensuring quality control (e.g. ping edited sonar data, edited navigation data).

[AT18-03 Bathymetry](#)

Fisher, Charles Penn State

Locale [GulfOfMexico](#)
[Gulf](#)
Platform [AUV:Sentry](#)
Info [WHOI:NDSF](#)
Device [Sonar:Multibeam](#)
Info [Reson:SeaBat 7125](#)
Events

File [PDF](#)
Format
Quality 1
 A level of processing has been undertaken, ensuring quality control (e.g. ping edited sonar data, edited navigation data).



AT18-03 Launch Information

Fisher, Charles Penn State
 Investigator

Download List: [Text](#) | [XML](#)

Launch Information

Launch Information

Total Launch Count: 6

Devices

Events

Related Data Sets

sentry079

Start 2010-12-07T23:23:00

Stop 2010-12-08T00:46:00

Locale GulfOfMexico
 Gulf

Nav Type NotProvided

Details No data acquired.

sentry080

Start 88.4722° W 28.6777° N
 2010-12-08T04:26:08

Stop 88.4658° W 28.6781° N
 2010-12-08T10:53:52

Locale GulfOfMexico
 Gulf

Nav Type DVL/USBL

[Related Files](#)

sentry081

Start 88.3257° W 28.7176° N
 2010-12-09T02:36:45

Stop 88.3228° W 28.7164° N
 2010-12-09T12:06:13

Locale GulfOfMexico
 Gulf

Nav Type DVL/USBL

[Related Files](#)

sentry082

Start 88.1705° W 28.619° N
 2010-12-10T04:38:53

Stop 88.1667° W 28.6358° N
 2010-12-10T10:08:18

Locale GulfOfMexico
 Gulf

Nav Type DVL/USBL

[Related Files](#)

sentry083

Start 88.4354° W 28.7024° N

Stop 88.4287° W 28.7044° N

[Related Files](#)


[Login](#)

AT18-03 Bathymetry

Fisher, Charles Penn State
 Investigator

Device Info Sonar:Multibeam
 Reson SeaBat 7125

Platform Sentry (AUV)
 WHOI:NDSF

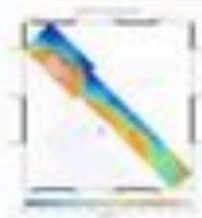
Quality 1
 A level of processing has been undertaken, ensuring quality control (e.g. ping edited sonar data, edited navigation data).

 Select All

Data Files

17 Total Files Select files to download and choose Download Selected File(s) above.

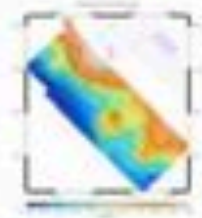
Data Files



✓ [sentry084_p5xp5_part2.grd](#)
Locale GulfOfMexico
 Gulf

▶ More

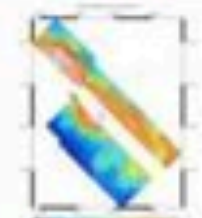
Size 80.1MB
Format NetCDF-GMT
[Related Data](#)



✓ [sentry084_p5xp5_part1.grd](#)
Locale GulfOfMexico
 Gulf

▶ More

Size 43.3MB
Format NetCDF-GMT
[Related Data](#)



[sentry084_p5xp5.grd](#)
Locale GulfOfMexico
 Gulf

▶ More

Size 101.0MB
Format NetCDF-GMT
[Related Data](#)

[sentry084_p5xp5_equal.grd](#)
Locale GulfOfMexico

Size 89.1MB
Format NetCDF-GMT



[Login](#)

AT18-03 Bathymetry

Fisher, Charles Penn Sta
Investigator

Data Files

File Download

You may browse freely, but you may not circulate or publish materials you obtained from this site if you do not accept the terms of providing adequate citation to the contributing scientists and MGDS (www.marine-geo.org). Users are strongly encouraged to contact the original investigators responsible for data made available on this site. Where appropriate, researchers are also encouraged to consider collaboration and/or co-authorship with original investigators. Select the **Accept & Download** button below to agree to our **terms of use** and start the data download.

What is the intended use for this data?

- Educational
- Research
- Personal Interest
- Other

Accept & Download

(Total uncompressed size is 123.5MB)

This information is not intended for navigation purposes.

Cancel

ity 1

A level of processing has been undertaken, ensuring quality control (e.g. ping edited sonar data, edited navigation data).

[Request Selected File\(s\)](#)

Size 80.1MB
Format [NetCDF:GMT](#)
[Related Data](#)

Size 43.3MB
Format [NetCDF:GMT](#)
[Related Data](#)

Size 101.0MB
Format [NetCDF:GMT](#)
[Related Data](#)

[sentry084_p5xp5_equal.grd](#)

Locale GulfOfMexico

Size 89.1MB
Format [NetCDF:GMT](#)



MGDS Search (v2.2)

[Basic](#) | [Seismic](#) | [Ridge 2000](#) | [MARGINS](#) | [GeoPRISMS](#) | [Antarctic](#) | [Documents](#)

Search by:

Data Type : [Bathymetry](#) x | File Format : [NetCDF:GMT](#) x | Platform Type : [AUV](#) x

AND

Device Type : ?

or [Select From List](#)

List results by: Data set Expedition/Compilation

[Run Search](#) | [Help](#)

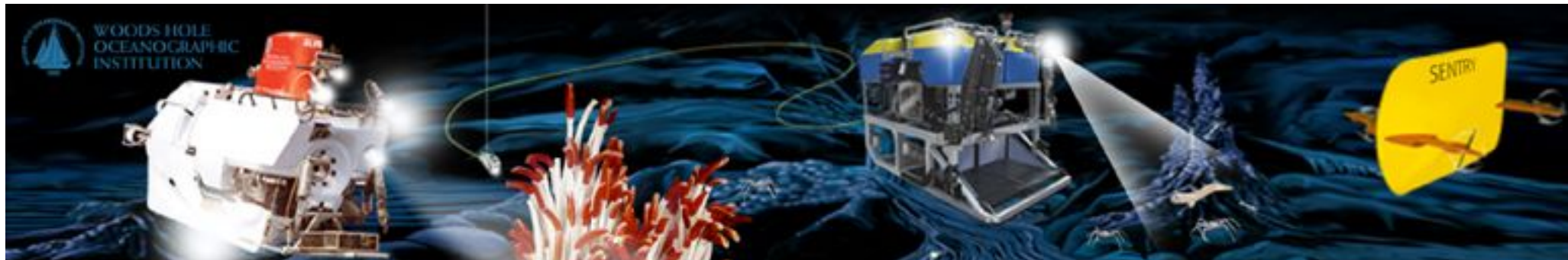
7 Data Set(s)

[Map View](#) | Download Results: [Text](#) | [XML](#)

Data Type	Date	Instrument Info	Lead Investigator(s)	Expedition/Compilation	References
Bathymetry (Grid)	1999-01-28 1999-03-05	AUV: ABE Sonar: Scanning	Cormier	AT03-31	▶ Data Set Reference(s) ▶ Program Reference(s)
Bathymetry (Grid)	2001-11-04 2001-12-07	AUV: ABE Sonar: Scanning Dive Log	Fornari	AT07-04	▶ Data Set Reference(s) ▶ Program Reference(s)
Bathymetry (Grid)	2010-03-15 2010-04-14	AUV: Sentry Sonar: Multibeam	Sinton, White	AT15-63	▶ Data Set Reference(s) ▶ Program Reference(s)
Bathymetry (Grid)	2010-12-06 2010-12-15	AUV: Sentry Sonar: Multibeam Dive Log	Fisher	AT18-03	
Bathymetry Swath	2004-09-10	AUV: ABE			▶ Data Set Reference(s)

Next Steps...

- Continue with integration of initial data sets
- Contact next round of PIs
- Refine workflow to routinize migration process
- Deploy custom service for search & access
- Continue to solicit final derived products from scientists that support scientific publications



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OCEANOGRAPHIC
INSTITUTION