

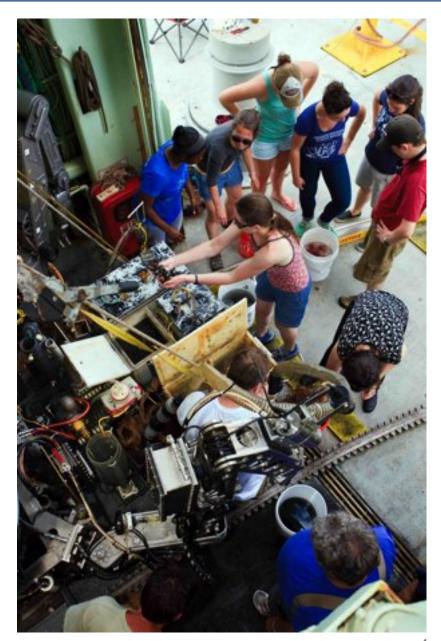
NDSF 2014 Vehicle Operations Summary **Alvin Operations**





- 86 funded days
- 4 cruises completed

 Gulf of Mexico
- 59 dives, 389 hrs submerged
- Longest: 9.5 hrs
- Average: 6.5 hrs
- Average bottom time: 4.92 hrs
- Dives lost: 7 weather, 5 mechanical





NDSF 2014 Vehicle Operations Summary **Alvin** Highlights



- Ops Group and ship's crew re-train/qualify on the dayto-day science operations of the vehicle
- Evaluation of sub ergonomics, new window windows and science work area

Opportunity to operate and evaluate the sub in a range of weather environments







NDSF 2014 Vehicle Operations Summary Alvin Highlights (cont.)



- Opportunity to evaluate overall battery capacity over a multi-cruise period
- Use of new digital propulsion control system in varied environments
- Use of new SubC still/HD video camera
- Command and Control software

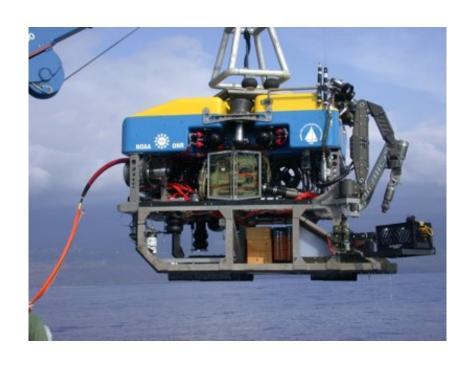


NDSF 2014 Vehicle Operations Summary

Jason Operations



- 64 funded days
- 2 cruises completed
 East Pacific Rise, North Pond
- 15 dives, 505 total hrs
- Longest: 104 hrs
- Average: 40 hrs
- Data total: ~ 3.5 TB
- Vessels used: Atlantis, Maria S. Merian





NDSF 2014 Vehicle Operations Summary Jason Highlights





Seivert

- 13 days of bottom time in 5 dives
- Fast turnaround
- Multidisciplinary ops, flexibility

Edwards

- "All our proposed objectives were fully achieved"
- Successful ops on Merian
- Use of *Merian* crane
- Jason USBL on Merian
- Cork recovery work
- Multidisciplinary ops, flexibility



NDSF 2014 Vehicle Operations Summary

Sentry Operations



- 80 funded days
- 3 cruises completed

Hawaii, Gulf of Mexico

- 42 dives, 468 hrs
- Longest: 20 hrs
- Average: 12 hrs
- 871 km of survey
- Data total: ~ 7.9 TB
- Vessels used: KoK, Atlantis





NDSF 2014 Vehicle Operations Summary Sentry Highlights





- 74 dives in the last 12 months
- Two perfect cruises no major problems of any kind
- New camera
- 120 cm flight
- New multibeam
- New thrusters
- New web site
- Substantially improved data structure and post-processing
- Microbial / larval sampling: AUV first, not just Sentry first
- Mapped part of Florida Escarpment 1500 m tall, average slope > 70 deg
- 191 days scheduled in 2014, including two private cruises