

NDSF Improvements and Activities in 2009/10

Alvin

- Spares inventory improvement (Sonar in particular)
- Reson Multibeam integration ongoing
- New Pilot qualification (Walter), with two more expected in '10

Jason

- Two maintenance periods in 2010 planned at WHOI
- Integration of new Schilling Titan 4 Manipulator
 - Identical to Alvin: Increased lift, jaw closer, improved rock sampling capability
 - Comparable dexterity to Kraft arms
- LARS development in progress, integration 2011/12
- Reson Sonar to be acquired in 2010



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General

- USBL integration in progress. 3 Complete systems with spares now available
- HDTV integration in progress and will be completed 2nd qtr '10. Examining best practices for archive and recording
- Purchase of Edgetech SBP/SS
- Full integration of USBL into pre-existing navigation system, including improved tools
- Development of cross-platform tools for Reson sonar processing
- Data repository improvements (speed, twin locations)
- Migration to WHOI of MGDS-developed metadata search portal progressing
- Virtual van now allows search/extraction of data by lowering
- Revision to Event Loggers



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Data Repository

- contains digital data from all NDSF cruises since Spring '08, plus others.
- RAID 6 plus tape backups
- Hardware for WHOI Quisset campus Storage Area Network (SAN via iSCSI), which provides near-line backup and failover, has been configured (on WHOI's village campus) and will be moved to WHOI's Computer Room before end of year.

Metadata Search Portal

- Core scripts received in autumn from MGDS, porting to new systems is underway and being performed by WHOI Computing and Information Services group.
- The MGDS portal can be found at <http://www.marine-geo.org/portals/ndsf/search/>

Re-navigation Software Upgrade

- adds support for Sonardyne USBL
- produces file format suitable for use with MBsystem (multibeam sonar processing software).
- cohesive procedures and uniformity across vehicles
- self-documenting



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Reson Processing

- alpha version of script to produce MBsystem-compatible navigation file, MBsystem command files completed.

Jason Virtual Van

- first reported at June 09 DeSSC.
- places all vehicles on a by-lowering organization
- independent HTML product allows clients to view Van at own convenience, similar to Alvin's FrameGrabber.
- easier-to-navigate interface
- event histories can now be extracted in KML (Google Earth) format.

