



AUV Fest 2008 Data Management Plan

Project Description:

The Naval Undersea Warfare Center (NUWC) and NOAA's Office of Ocean Exploration and Research (OER) are working collaboratively for AUV Fest 2008. NUWC will test new AUV technology over known and prepared sites off the Northeast Atlantic coast. Four of these sites are historical shipwreck sites in which OER's Maritime Archaeology Program has an interest. NUWC has agreed that the unclassified data sets from the AUVs over these four sites can be made available to OER. OER intends to make these data available to the marine archaeology community using established data management tools and procedures developed for OER.

Project Objectives:

OER intends to archive the unclassified raw data, imagery, and products generated from the AUV data in the NOAA National Data Centers, and provide discovery and access to these data with standard Federal Geospatial Data Committee (FGDC) compliant metadata and geospatial tools.

Project Principals for Data Management:

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Implementation Plan:

For each site targeted during the AUV exercises during AUV Fest 2008, raw data files will be collected and data products will be generated from all of the different systems and sensors employed. The types of data recorded include: vehicle navigation data, sidescan sonar images, multibeam data and products, video and still images, and environmental sensor data. These data will be offloaded as each vehicle returns to the dock and managed first at the NUWC. Using a proprietary system at NUWC, post-mission analysts will use software analysis tools to QA/QC the data and de-classify the data intended for OER's use. For the four historical shipwreck sites that OER is interested in, these analysts will provide exported data sets of the declassified raw data, multimedia, and products on a OER-procured two terabyte hard drive.

OER will use the Cruise Information Management System (CIMS) software to manage the raw data sets, multimedia files, and products recorded, collected, or produced from the AUV Fest 2008. NUWC has agreed to provide the raw data, multimedia, and products in a file system format on the hard-drive that will emulate the relational structure of CIMS. (Fig. 1) OER will populate a CIMS instance customized for the AUV Fest, providing an automated method for generating and publishing FGDC-compliant metadata through the Metadata Enterprise Resource Management Aid (MERMAid) system hosted at NCDDC. (Fig. 2)

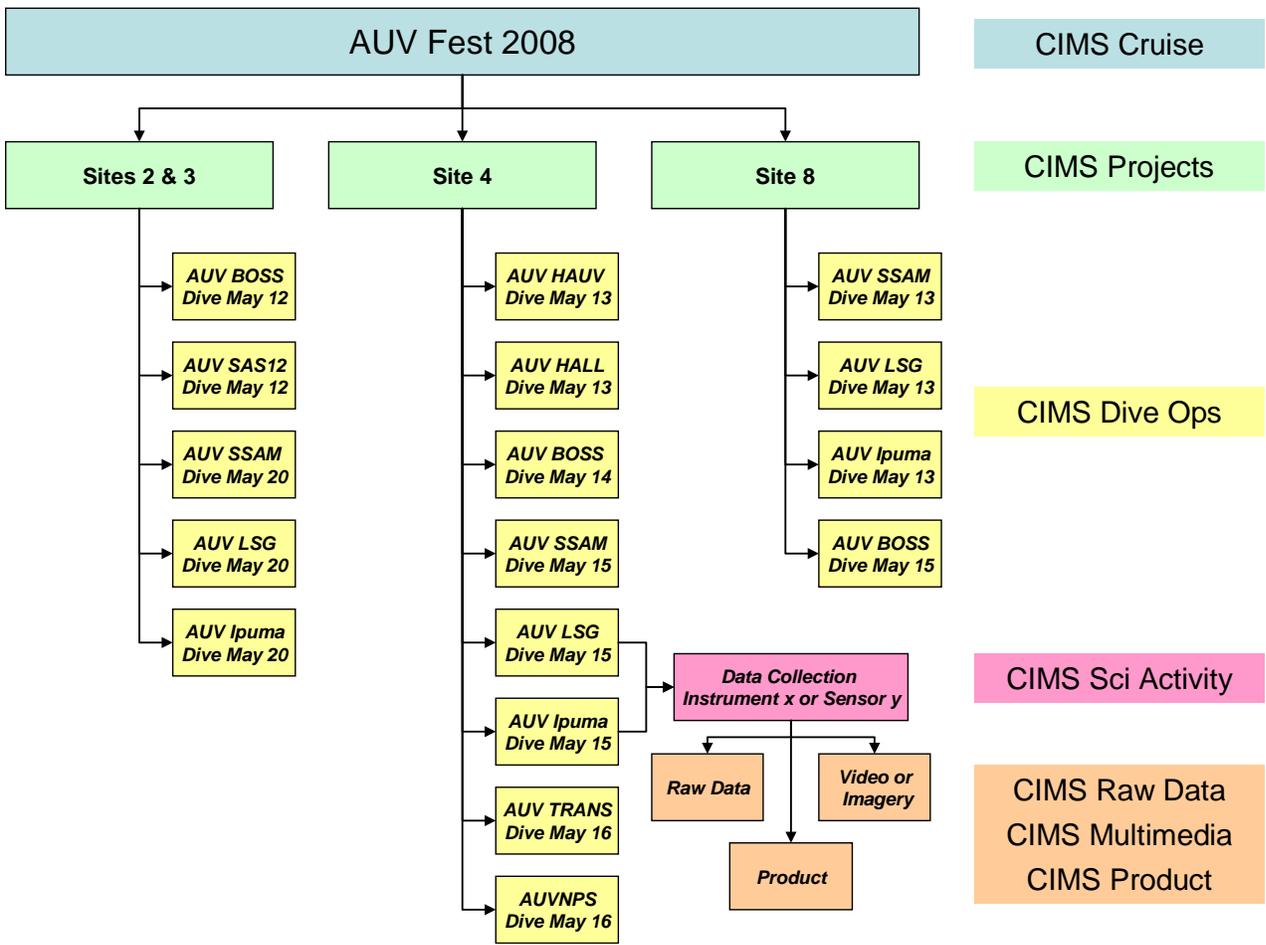


Fig. 1: Data Hierarchy within CIMS compared to AUV Fest

Metadata Generation and Archive

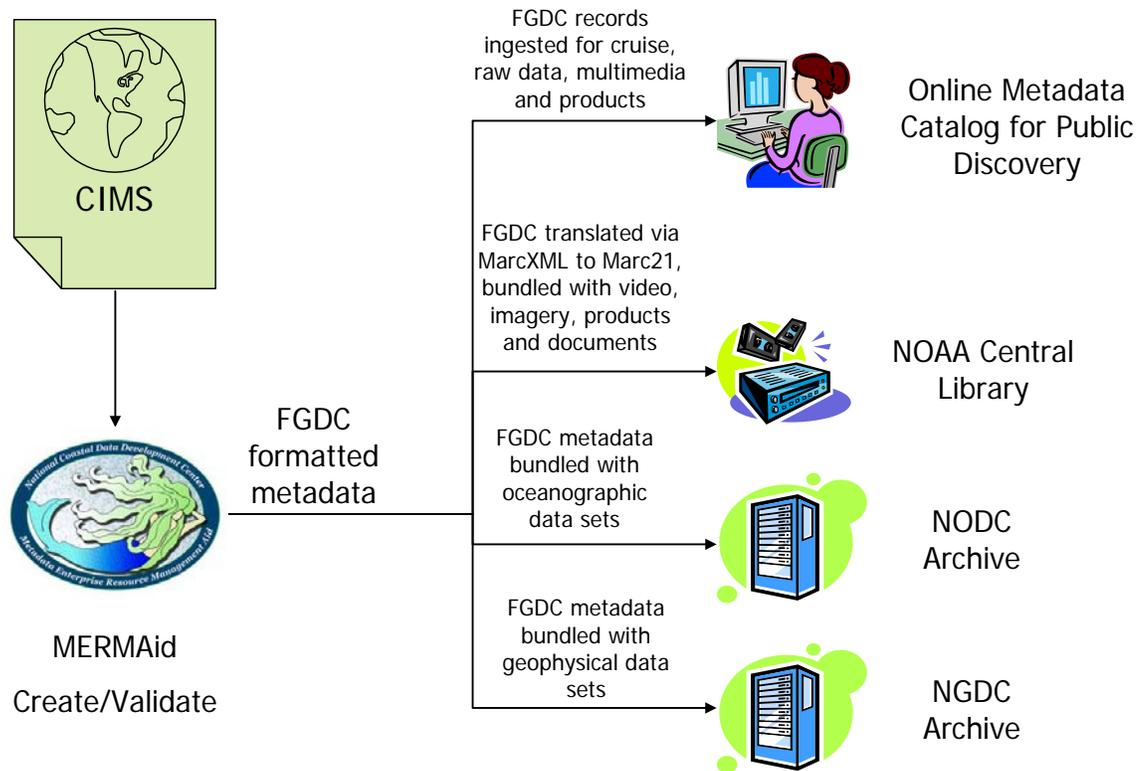


Fig. 2: Data Flow of CIMS for Archive, Discovery and Access