

OER Data Management Team Mission Report EX1704 (Apr 4 – Apr 21, 2017)

The EX1704 Project Instructions described the following objectives, which were mostly met.

- Conduct follow-on mapping to the previous ROV cruise EX-17-02. An overarching concept of OER's approach to exploration is that OER-collected data will lead to new scientific hypothesis. The collection of data complimentary to EX-17-02 will allow for increased hypothesis generation from scientists and managers based on initial results from EX-17-02;
- Conduct preliminary seafloor mapping operations to contribute to geological understanding of remote areas of the Pacific Ocean;
- Acquire data to support priority Monument and Sanctuaries science and management needs, including habitat surveys in recently expanded boundary areas;
- Identify and characterize vulnerable marine habitats particularly potential locations for high density deep sea coral and sponge communities;
- Characterize seamounts adjacent to the Prime Crust Zone (PCZ). The PCZ is the area of the Pacific with the highest expected concentration of deep sea minerals, including rare metals and rare earth elements;
- Collect information on the geologic history of Central Pacific Seamounts, including those that are or may be relevant to our understanding of plate tectonics and subduction zone biology and geology;
- Provide a foundation of publicly accessible data and information products to spur further exploration, research, and management activities.

Onboard data team created daily multibeam products to send to shore and to maintain onboard team awareness of data quality and coverage of survey areas.

Qimera project is having dynamic surface creation issues, causing data to be incorrectly invalidated by the system. Team is having to do manual editing.

Data quality is good overall. Engineering work throughout the day is causing hull reverberation in all sensors.

Daily message is: Minimal processing for daily multibeam products. Daily products are being created. Raw data EM302 files are being copied to the ForFTP folder and pushed to shore. Subbottom profiler data is being processed for EX1701 and EX1704.

End of cruise message: All *.ALL and SEGY files have been processed for EX1704. The last daily product was created. A FMGT project of the Samoan Clipper site was created. Data is backed up

to the cruise data folder and transferred to a portable drive, which will be shipped when reaching the mainland.

The mission ISO metadata record has been updated to reflect the cruise has taken place.



Data Throughput

Project Instructions Received	Data Management Plan Delivered	ISO Collection Level Metadata Published	Cruise End	Data Received	Final Data Archive Complete	Cruise End to Archive
3/28/2017	3/30/2017	6/19/2017	4/21/2017	6/1/2017	6/20/17	60 days

Data and Information Access

Oceanographic Archive	Geophysical Archive	Library Catalog	Total Archived Volume
3795 files (6.24 GB)	<u>6064 files (161 GB)</u>	3 files (.00136 GB)	167.241 GB

