

KOK12-09

September 17 – October 14, 2012

- Goal: AUV based multibeam mapping and photographic surveys of Manganese nodule fields in the Eastern Pacific
- Non-UNOLS funding through JOGMEC (Japanese Federal Agency)
- US Project Lead/Point of Contact: Carl Kaiser

Challenges

- Extreme depth: few AUV groups can do ops here
- Tracking has to be of sufficient quality for 1m gridded multibeam navigation as well as tracking vehicle
- Extreme ops tempo – brought along extra ops people to push turnarounds down around 10 hours (using partial battery charge)

Outcomes

- 1m gridded bathymetric map of 13sq nautical miles of seafloor between 5100 and 5400m depth
- 16km long overlapping coverage photo transect of the same region
- 11 total dives to 5000+m with the 7 main survey dives back to back within 9 days: > 50% survey ratio including all turn around ascent and descent.
- 12 dives
11520 photos
just under 13 square nautical miles of MB survey (very rough number).
133 hours of survey time
182 hours in the water
337km of trackline