

SENTRY/ ABE debrief summary - 12/08

Delaney-Kelley	July - August 2008	Thompson (Sentry)	Axial-Hydrate Ridge
Lin	August-Sept 2008	Da Yan Yi Hao (ABE)	Galapagos - EPR 0-3°S

Sentry debrief issues - 12/08

First Science Cruise for Sentry:

- RESON high resolution data extremely promising, as is INS and DVL couple
- Six dives, total distance covered - 205 km, average dive 16.8 hrs (depths ~3000 m to 700 m)
- Excellent first shake down cruise

Sentry debrief issues - 12/08

Navigation - INS-DVL system

- Multiple INS failures resulted in system being locked up, gaps in coverage
- DVL parsing error, rejected fixes
- Dead reckoning degraded over rough topography - vehicle “stalled out”
- Multiple failures of shear pins on the thrusters

Data flow - MBSystem

- Data processing on-going; change over to MBSystem

ABE debrief issues - 12/08

- ABE worked well on four dives, conducted Phase 2 and Phase 3 work at two sites
- Work on training program for next generation team members for operations

Develop stable 24 hr operational plan for Sentry