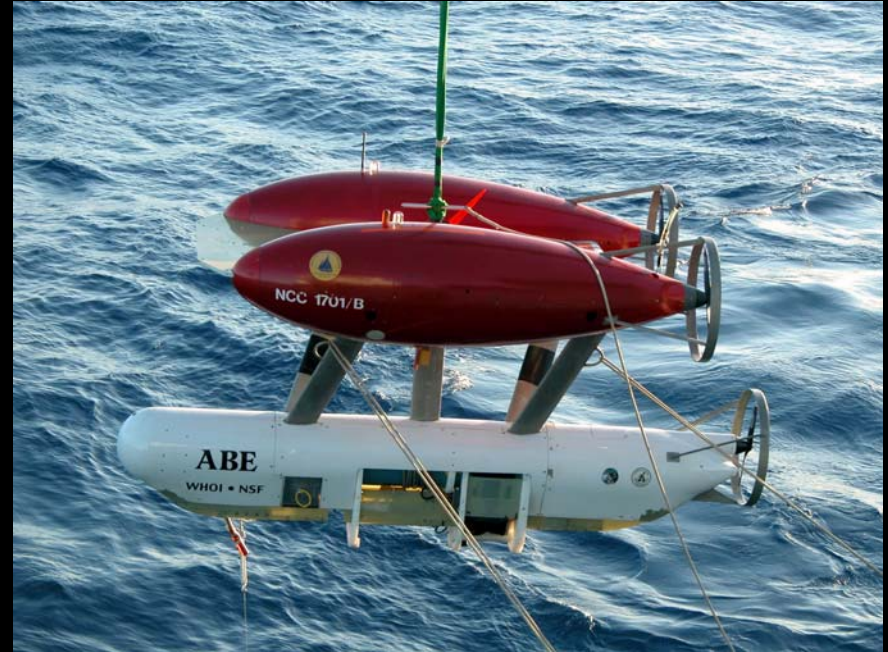


DESSC Meeting December 2008

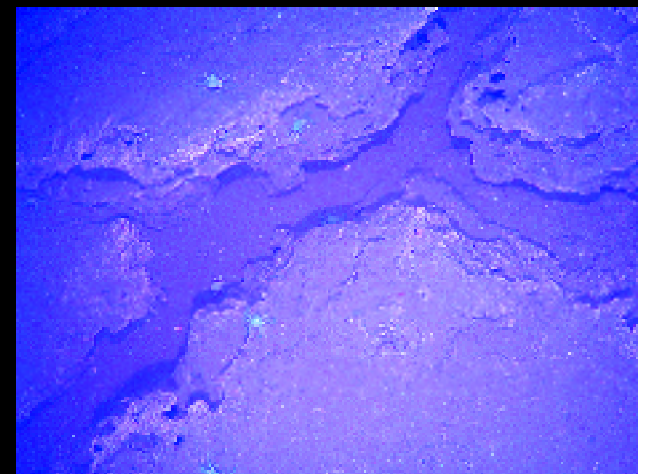
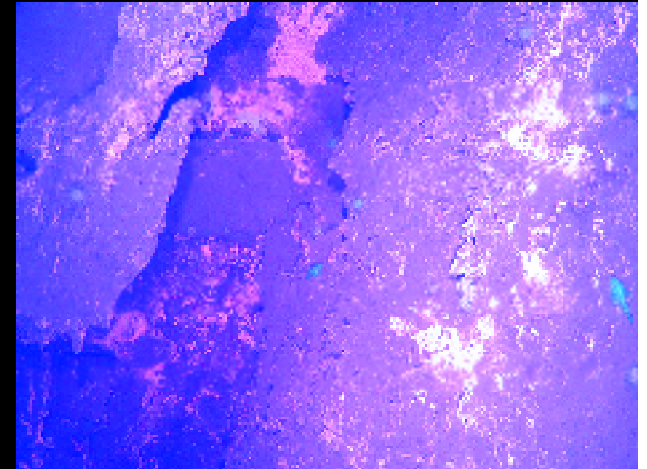
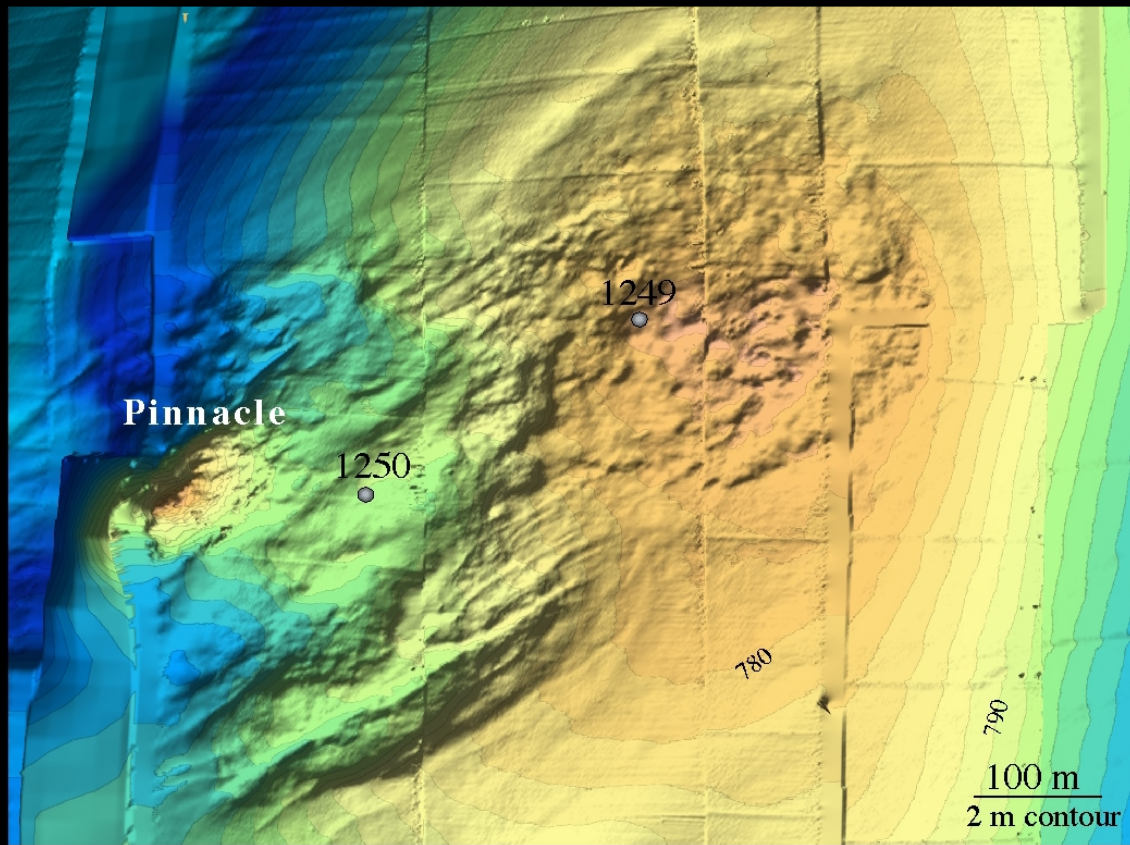


Sentry/ABE Science User Reports

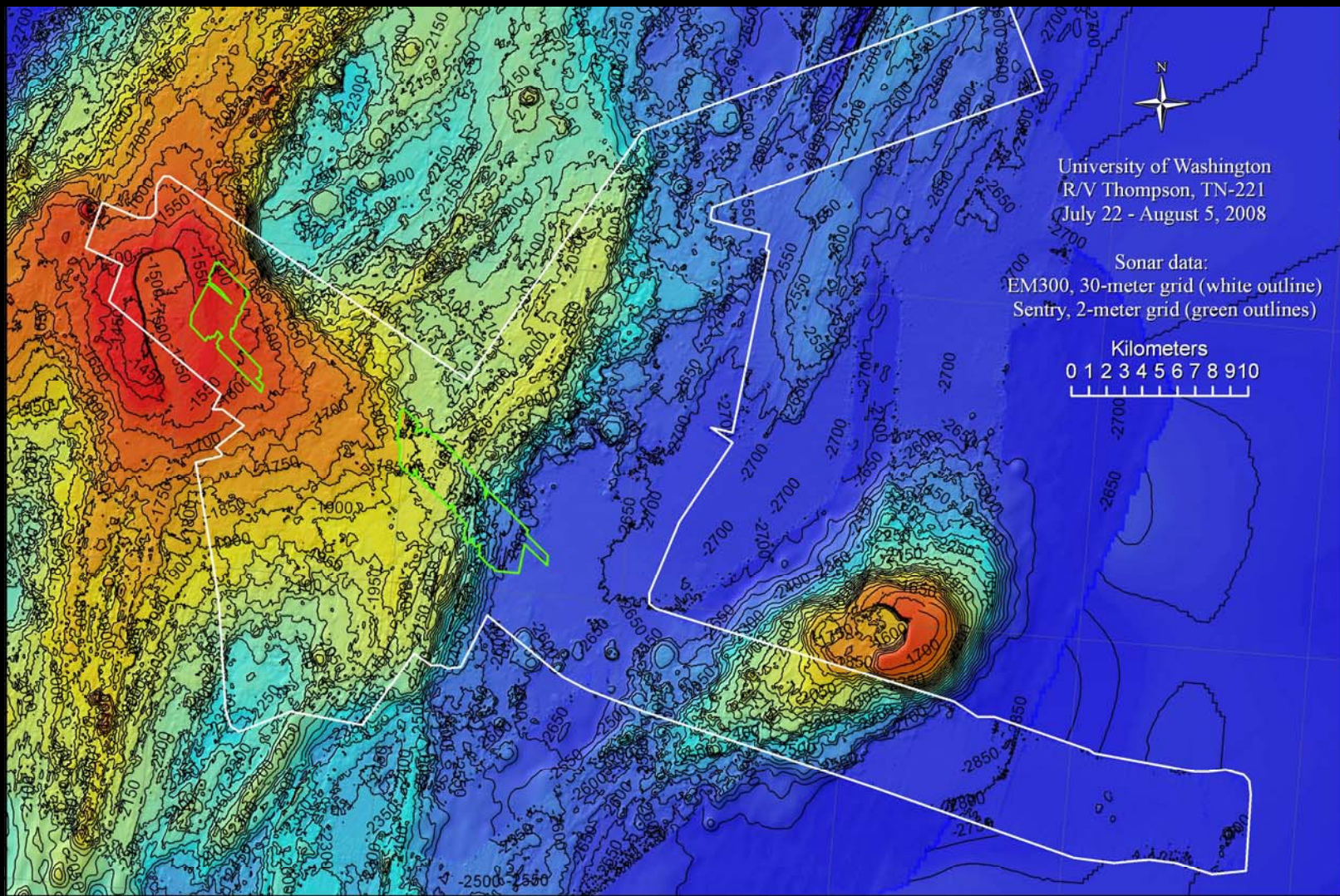
***Insite08
Delaney and Kelley
RSN Node Mapping Cruise***



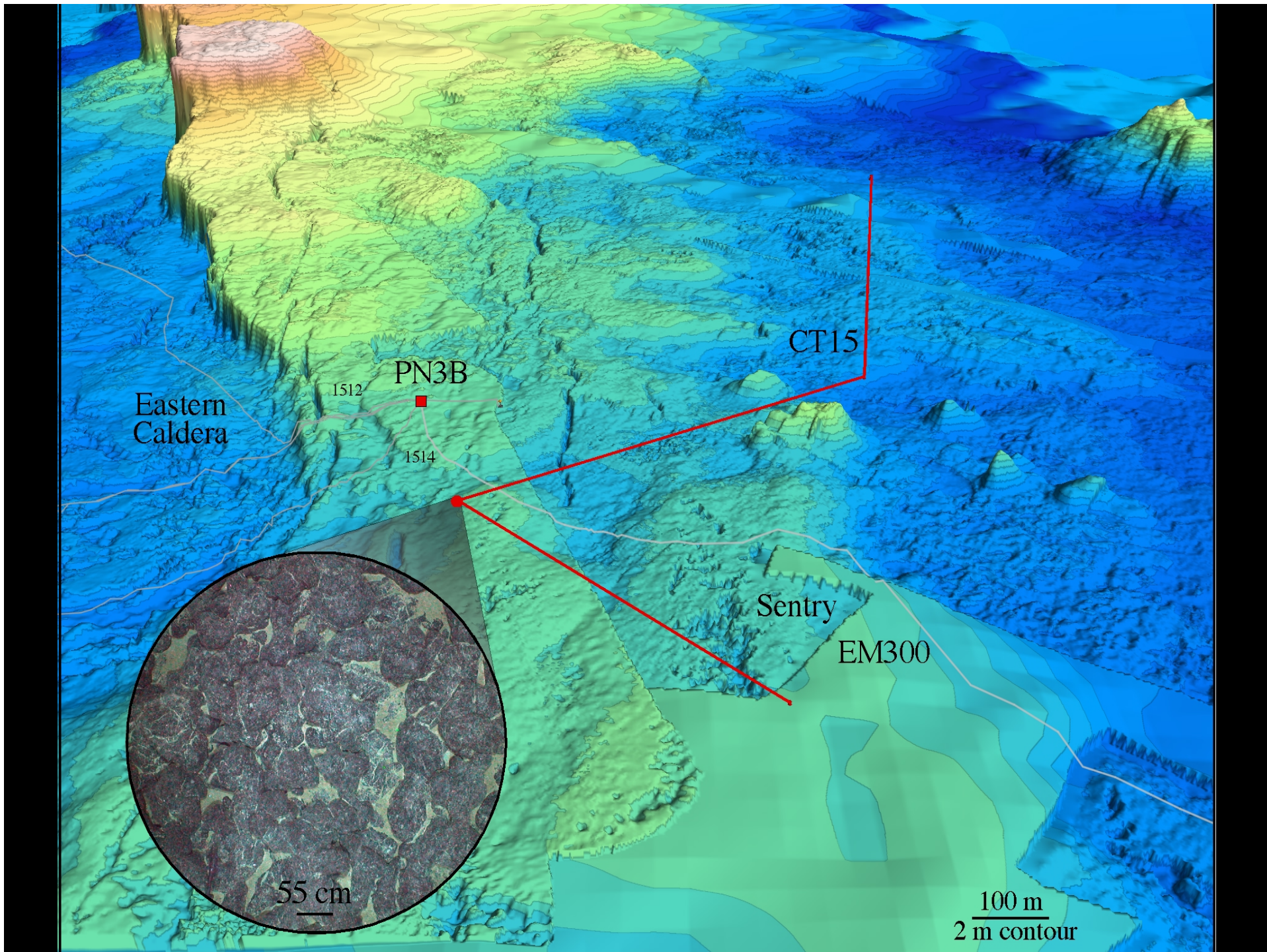
***July 22, August 5 2008
Hydrate Ridge & Axial Seamount***



Six dives, total distance covered - 205 km, average dive 16.8 hrs (depths ~3000 m to 700 m)



Six dives, total distance covered - 205 km, average dive 16.8 hrs (depths ~3000 m to 700 m)



ABE cruise on R/V DayangYihao

August-September 2008 (25 days)

Chief Scientist: Chuanhui Tao (2nd Inst. Oceanogr.)

Assist. Chief Scientists: Jian Lin (WHOI), Guanghai Wu (2nd Inst.)

WHOI ABE Team: Chris German, Dana Yoerger, Al Duester,
Rod Catanach

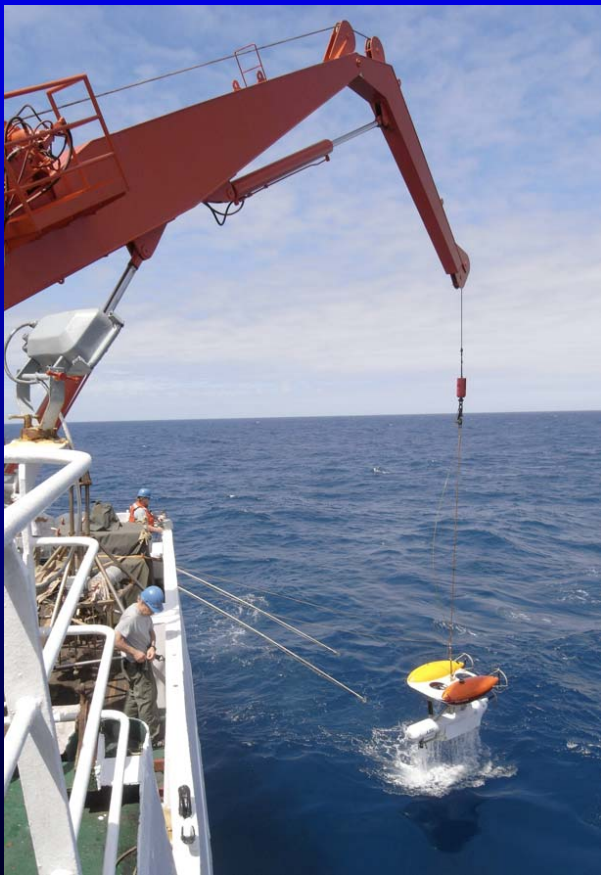
Science Party of DY115-20 Leg III



See AGU poster, Thursday, Dec. 18, 8 AM, V41B-2081 (Tao et al.)

Cruise Objective

To locate and investigate active hydrothermal vent fields on the equatorial Southern East Pacific Rise (SEPR) in a region where water column turbidity anomalies were measured during a 2005 R/V DayangYihao expedition.



Aug. 2008

Main Results

- 1) Hydrothermal vent activities were observed at four locations along a 22-km-long ridge segment of the SEPR at 2°-2.2°S. A significant portion of the activity appears to be concentrated along the edges of a seafloor fissure system. Vent activity was also found on top of an off-axis seamount.
- 2) Two of the vent fields, near 2°S and 2.2°S, respectively, were investigated in detail using ABE. A total of four ABE dives (all phases II and III) were conducted, yielding thousands of photographs of the seafloor and several types of water column anomaly data.
- 3) Relict hydrothermal chimneys were recovered using TV-grab, showing evidence for high-temperature hydrothermal venting.

