



Oases 2012 - RV Atlantis (AT18-16) & ROV Jason

Mid Cayman Rise (Von Damm & Piccard Hydrothermal Fields)

January 6-28, 2012; Port Everglades-Port Everglades

Chief Scientist: Chris German (WHOI)



Operational Stuff

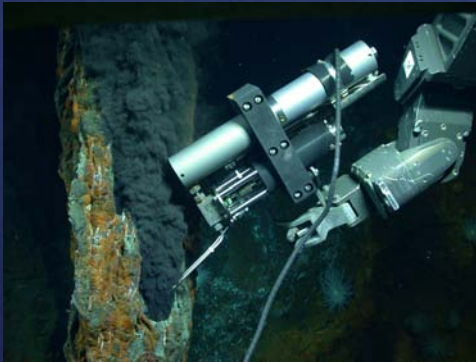


- 10 dives (5 @ Piccard, 5 @ Von Damm)
 - 2 x mapping/SUPR sampling
 - 6 x multi-disciplinary vent-sampling
 - 2 x geological reconnaissance
- USBL vs LBL navigation?
 - LBL results superior at 5000m
 - No improvement over USBL at 2500m
- Detailed dive plans used throughout
 - prepared in advance of each dive
 - shared with Exp Ldr on descent

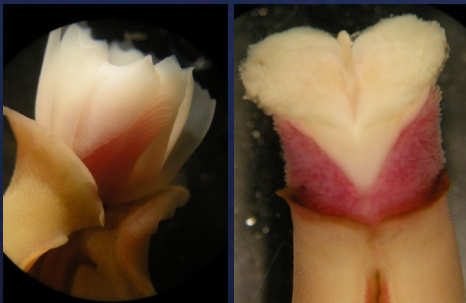
Science Stuff



- Von Damm (2300m) site
 - 212°C clear fluids at mound summit
 - Ultramafic influenced fluid chemistry
 - 3 shrimp species; 2 tubeworm species



- Piccard (4950-5000m) site:
 - Black smoker fluids over 400°C
 - Interesting chemistry for MORB-hosted site
 - Less diverse biology than Von Damm
 - Large deposit = sustained venting?



- Learn more all week at AGU
 - Mon = OS11A (Cheadle) & OS13B (Searle, Kinsey)
 - Tue = OS22B (Dick, Seewald, McDermott, Bennett)
 - Thu = B42F (Huber)
 - Fri = OS53 (German)