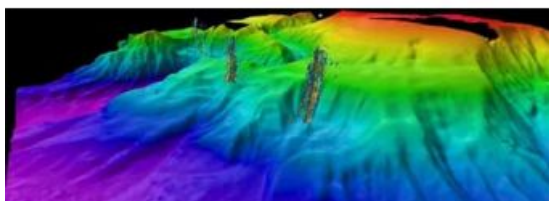


1400 Metre Plume Discovered



Fledermaus' mid-water visualisation technology has helped scientists to discover a 1400m plume off the northern California (USA) margin. While on a cruise to test the new Kongsberg EM302 multibeam sonar in May 2009, the NOAA ship Okeanos Explorer, discovered a 1400m high plume rising from the seafloor. The feature was noticed in the online display of the water-column data of the sonar, and further analysed in the new Fledermaus mid-water visualisation tool.

The ship returned to the area in July, verified that the plume was still active, and detected a number of other plumes ranging in height from 700 to 1400m in a 15km area around the original discovery.

James V. Gardner and Mashkoor Malik (of The Center for Coastal & Ocean Mapping (CCOM) UNH and NOAA, respectively) participated on the cruise, and provided details of the discovery in the 11th August 2009 issue of EOS. Scientists cannot yet be certain of the composition, but they do feel reasonably certain that the plume is not a hydrothermal vent associated with the eastern section of the Mendocino Fracture Zone. The region is known for both subsurface and water-column gas; however, the reported gas plumes are confined to water depths of less than 200m. The discovery of this plume is significant because none has been reported in this area from such depths.