2005 OBSIP Field Programs

East Pacific Rise at 9°N, Eastern Pacific (Tolstoy et al.). LEG 3 served as a recovery cruise for 12 instruments deployed in LEG 2, and also included the deployment of a replacement fleet of 12 units. This represents the third set of one-year deployments of the SIO LC2000 in the active configuration. All deployment/recoveries were done between Alvin dives as night operations aboard the R/V Atlantis. LEG 2 included units recording solely on the vertical seismometer at a sample rate of 125 Hz. Unmodified LC2000 units recorded for the entire yearlong deployment, a testament to the low power logger design. For this turn-around leg three additional LC2000 units were temporarily deployed for a 1-month duration (thus 15 new units in total), which were to be recovered and returned to SIO post cruise. Two OBS units were not recovered (1 year-long and 1 month-long unit), and one OBS unit stopped recording early with unusable data. Though communication was established in one of the lost units it would not lift off the bottom, which is thought to be indicative of flooded glass ball floatation. There was no communication at all with the other unit. The original intention of this microseismicity project (as pointed out by proposal reviewers) was to record tri-axial data at these high sample rates (~125 Hz). Consequently, through OBSIP funds an upgraded, tested tri-axial LC2000 package was deployed on the second one-year deployment leg.