

Acquisition System

3D Seismic acquisition system

The P-Cable is a new type of low-fold, high-resolution 3D seismic acquisition system developed by Volcanic Basin Petroleum Research (VBPR) in collaboration with National Oceanography Centre, Southampton (NOCS), University of Tromsø (UiTø), and Fugro Survey AS, Oslo. For this cruise we have used the proto-type system of the National Oceanography Centre, Southampton.

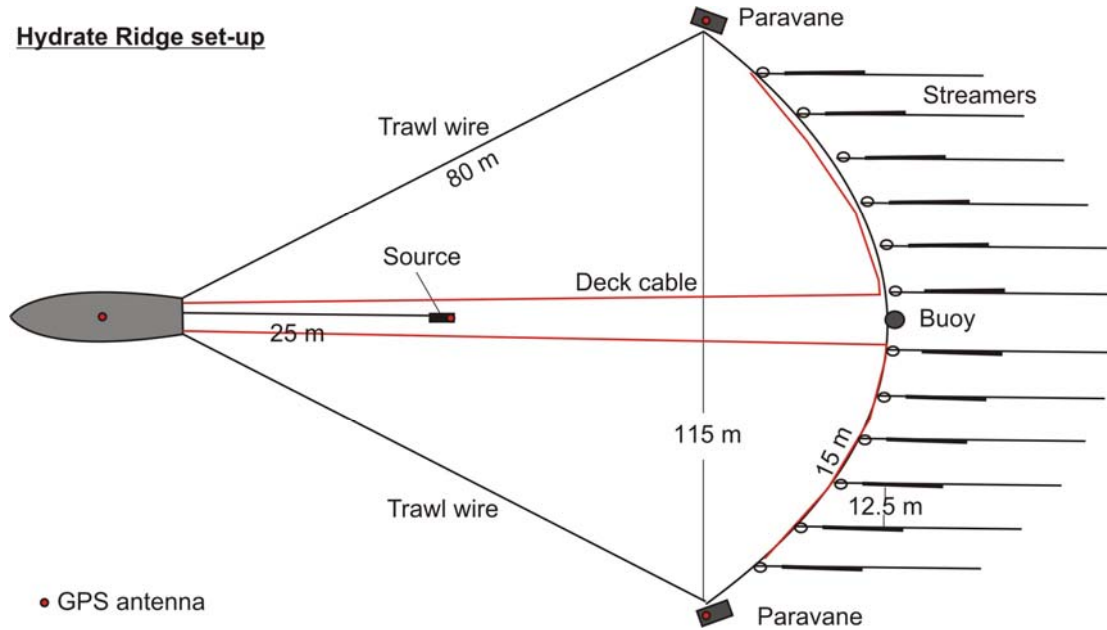


Figure 3. Initial P-Cable configuration for the Hydrate Ridge cruise until the 7/11/08.

The NOCS P-Cable system consists of a wire that is towed perpendicular to the ships steaming direction using two specially designed paravanes. Several single-channel Teledyne Geophysical Instruments analogue streamers are connected to this wire. The paravanes and a tail boat are supposed to keep the cross wire at approximately 1 m depth. The paravanes are towed behind the ship using reinforced power cables that power the GPS receivers on each door. Two data cables transmit data from the streamers back to the ship. A Geometrics Geode 24 seismic recording system digitizes the seismic data on-board.