

Example of OBS data acquisition offshore Morocco

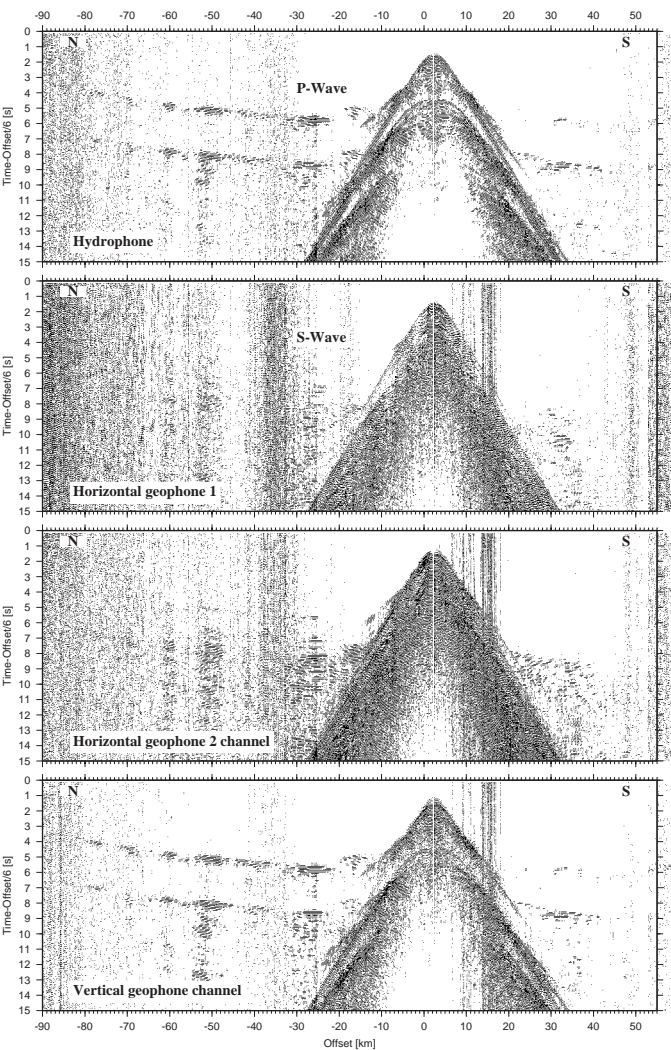


Figure 8 : OBS data from the continental margin off Morocco. The data are filtered (3-5-24-36 Hz) and reduced to 6 km/s. Offset dependent gain has been applied.

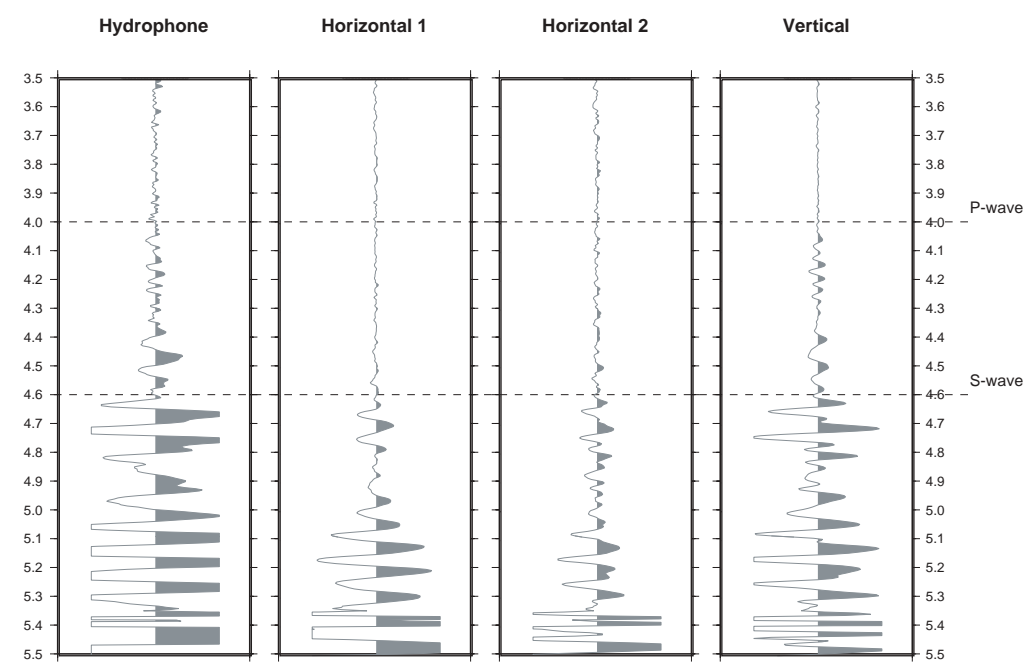


Figure 9 : Details of the 4-components record. Arrivals of P and S-Wave are annotated.

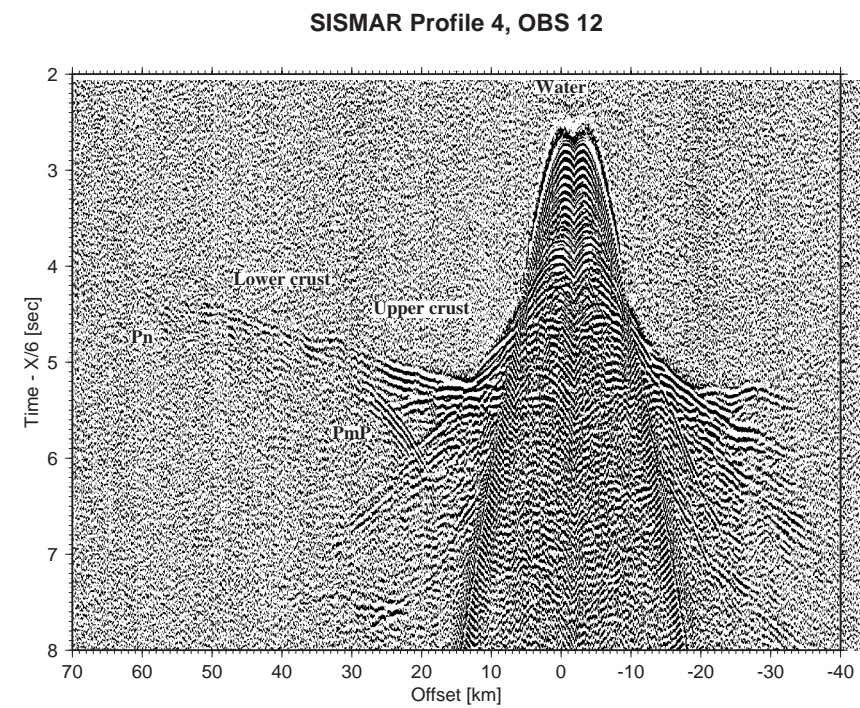


Figure 10 : Arrivals from the crust and the upper mantle (Pn, PmP) are recorded to offsets up to 80 km.

Geophysical characterization of gas hydrates in the sediments : combined seismic reflection and wide-angle studies

Tomographie OBS

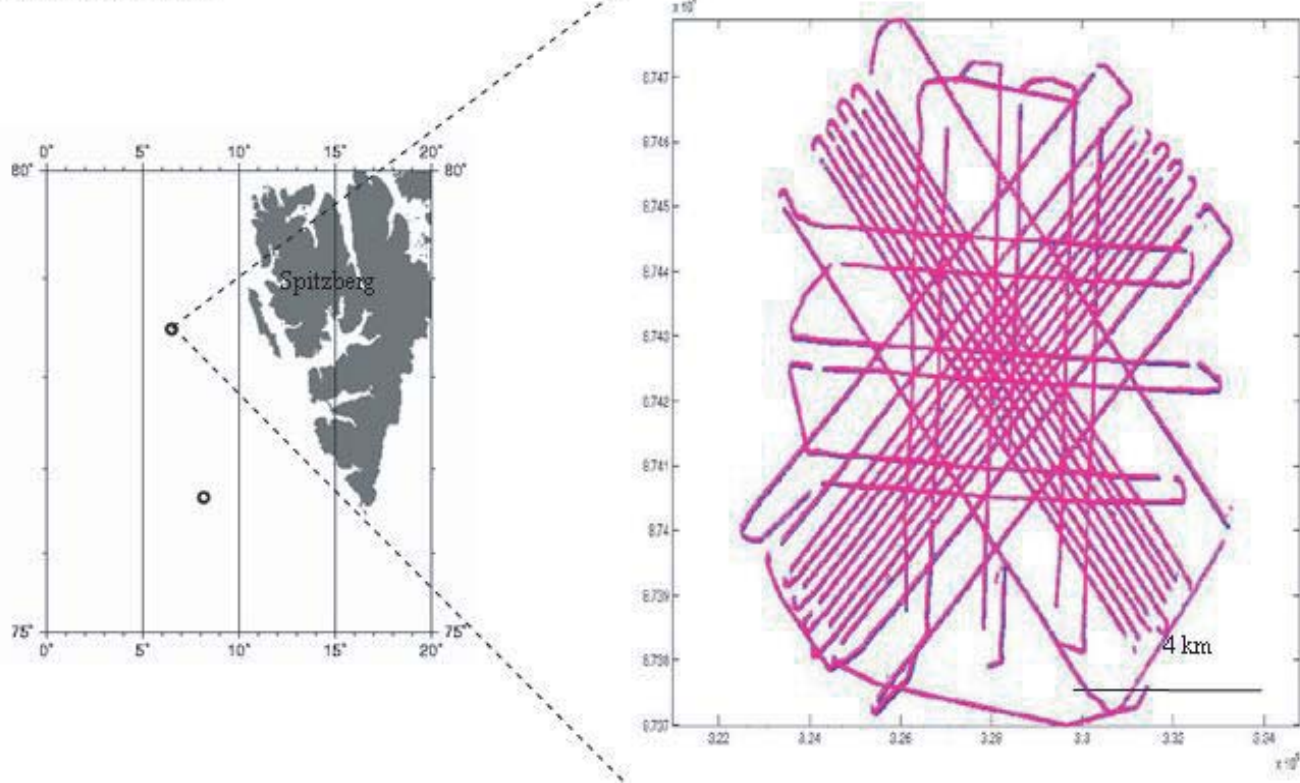


Figure 11 : OBS deployment offshore Svalbard : OBS are deployed at the nodes of the studied area.

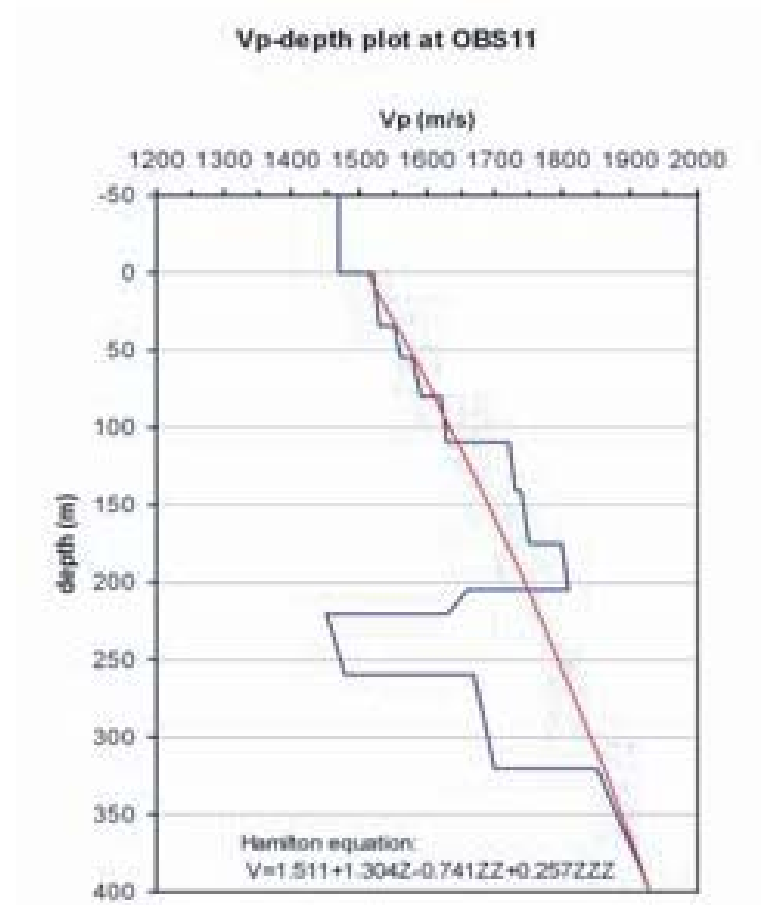


Figure 12 : Comparison between typical P-wave velocity increase in the sediments with velocities obtained with wide angle seismic tomography. Note the increase above the BSR in relation with the presence of gas hydrates in the sediments, and the strong velocity drop below the BSR due to the presence of free gas in the sediments.

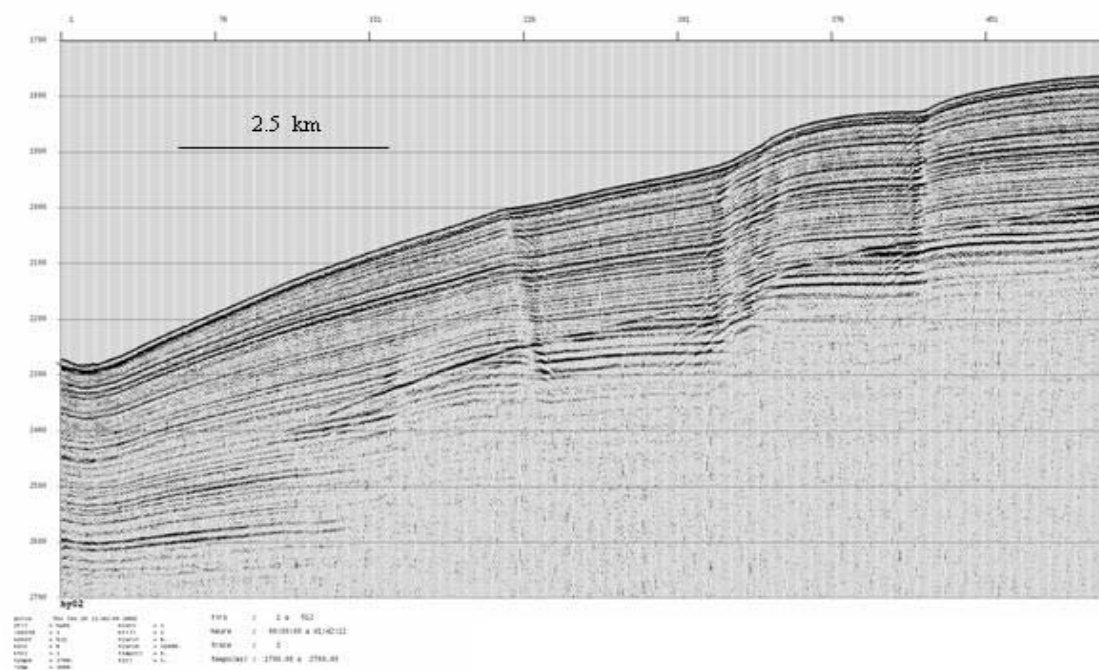


Figure 13 : High resolution seismic profile offshore Svalbard. The BSR runs parallel to the seafloor and cuts across the sedimentary layers. Note the seismic and frequency attenuations below the BSR.