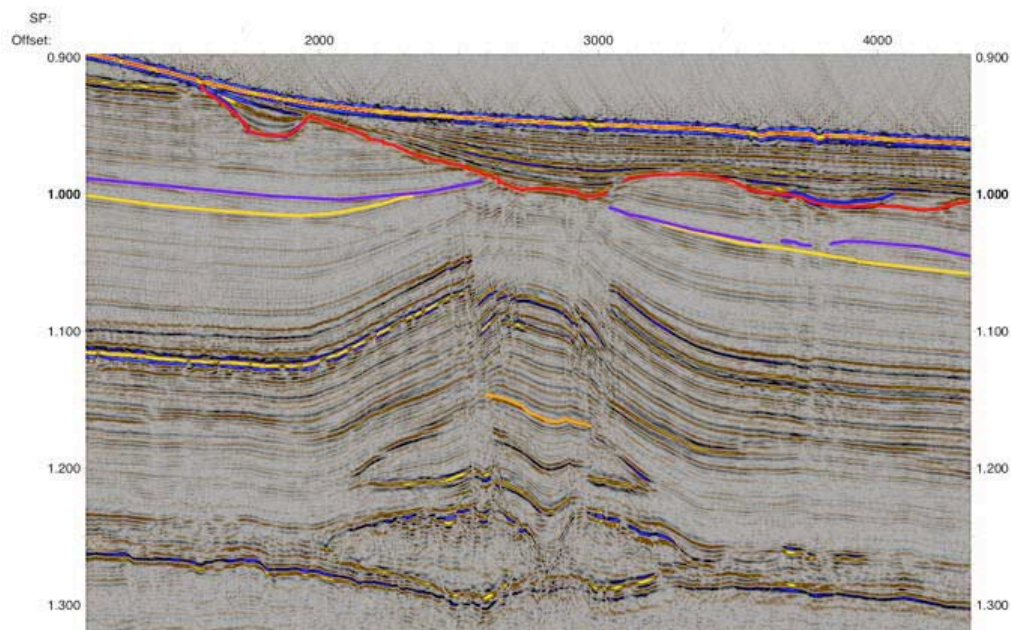


3. Weekly Report S0226 CHRIMP

During the third week at sea we continued the data acquisition in the 3D area. After interruptions due to the weather conditions we finally achieved full coverage. A first compilation of the data volume has already allowed a visual walk through of the data cube created. Numerous gas migration pathways can be identified, not only related to the observed active vent sites. The imaging of a complete lens shaped body underneath the upper sedimentary layers is of importance as similar features appear widely throughout the region. Inverted amplitudes at the upper interface of this body argue for increased gas content.

Similar structures were observed along the 2D seismic lines. Lens-shaped bodies do occur under the pockmark structures and under undisturbed seafloor. These lens features occur more commonly in the east of our working area. Below the lens shaped bodies strong but irregular amplitudes outline the top of the next sediment layer. Migration pathways from this lower sediment body into the lens shaped structures are indicated by interruptions and scattered amplitudes. From the top of the lenses migration pathways for gas ascending toward the seafloor are interpreted. Sediments above these structures are of continuous thickness but seem to be uplifted during emplacement of the lenses.




A preliminary interpretation of the stratigraphy has been started already. The deepest interpreted horizon is imaged at about 400 ms to 500 ms below the seafloor. Below this horizon crests of anticlinal strata are imaged by sporadic reflections. The deepest interpreted interface is continuous throughout the entire working area. The overlying sediments have been grouped into 4 packages. Interfaces between the packages are difficult to identify in parts due to reflection amplitude varying a lot along the interfaces or the interface having been eroded. The lower-most seismic package is marked by irregular and strong reflections and inverted amplitudes within the package are interpreted to indicate gas accumulations. Numerous gas migration pathways are visible leading from this interface upwards.

An extended slump mass has been identified in the east of the working area underneath undisturbed seafloor. This package is also characterised by strong irregular reflections. The limits are well defined. Faults provide sharp boundaries to stacks of undisturbed sediment layers within the structure.

After acquiring some additional 2D seismic lines we left the working area on Sunday. Currently we are sailing along reconnaissance lines above the mid size pockmarks in our second working area.

All are doing well on board. With regards on behalf of all participants



Jörg Riden