

# Mendocino Ridge Insets Mapping Shakedown Cruise May 5-26, 2009

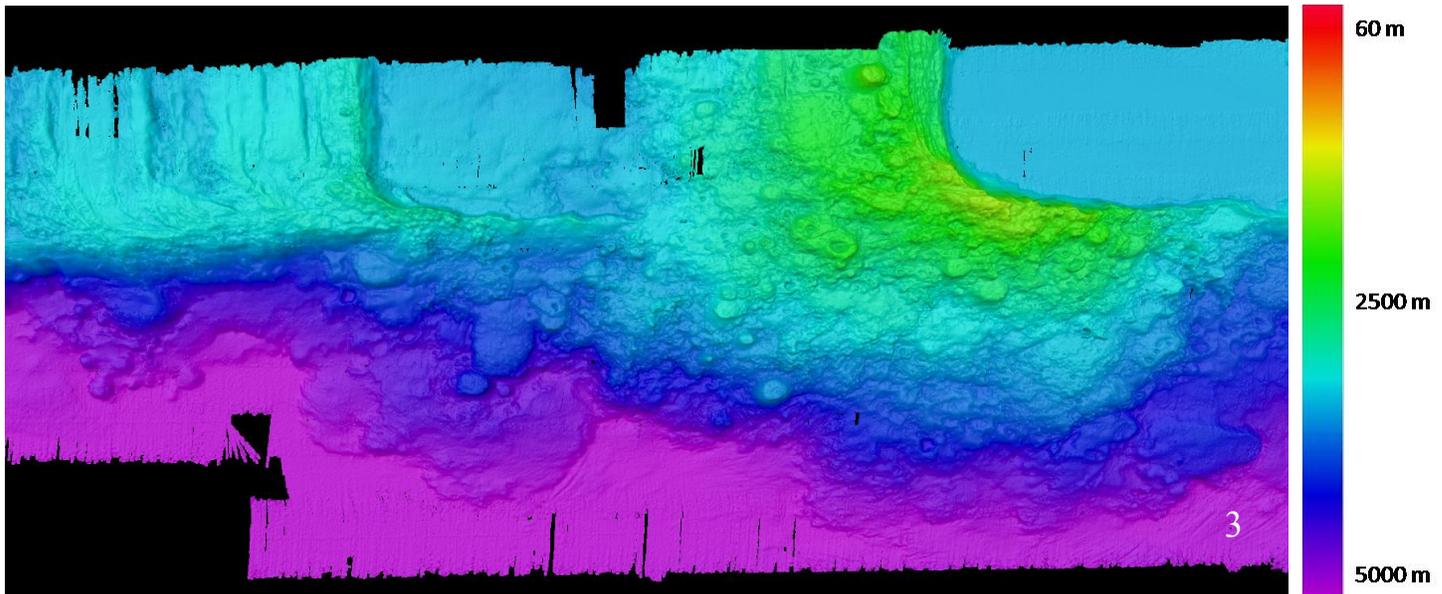
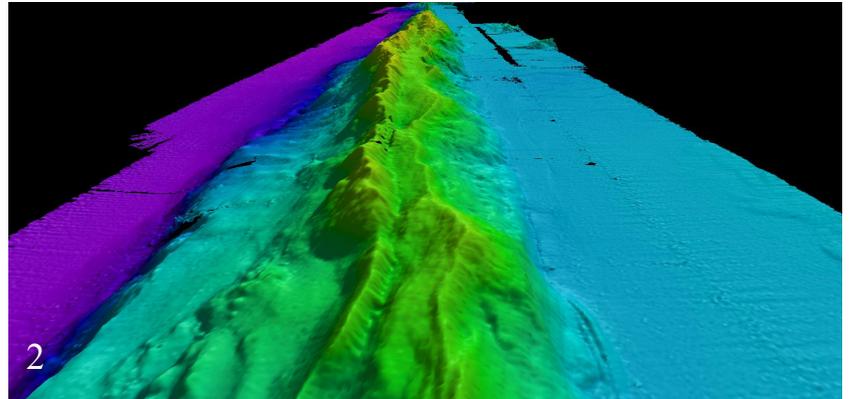


A perspective view looking southeast.

Earlier core samples from a meandering channel at the base of the Gorda Escarpment shows that this channel was formed by turbidity currents from the margin that traversed onto the basin floor. This meandering channel resembles in all aspects a meandering channel on land except that this channel has never been above sea level.

A perspective view looking westward along the north side of Mendicino Ridge.

The ridge is a fracture zone that separates 3 million-year-old crust on the north from 3-million-year-old Pacific Plate crust on the south.



Above: Plan view.

As the northern portion of the Pacific Plate is moving at a faster rate than the Pacific Plate, it is creating drag folds of the Pacific Plate. There is also high volcanic activity along to a leaky portion of the Mendocino Fracture Zone.

A perspective view looking northwest.

As the ship passed over a slump area, some activity in the water column was observed. As debris fell down the slope (like a landslide) it exposed a weaker crust. Potentially methane gas, less dense than sediment, was able to break free of the crust and rise into the water column.

