Argentina recommendations (ECS ID-2500)

Recommendations cover two specific regions of the Argentine margin. 1. the northern region of the Argentine Atlantic margin sector, referred to as the Río de la Plata Craton passive volcanic continental margin region; and 2. the westernmost sector of the combined continental margin to the south, covering the Tierra del Fuego margin region.

Two areas were not considered for recommendations – the Malvinas archipelago area, which is disputed by the United Kingdom and the area of Antarctica.

Río de la Plata Craton region

The Río de la Plata Craton region is part of the passive volcanic continental margin region extends from the boundary with Uruguay to the Colorado Transfer Fracture Zone. The continental margin in this region varies in width from about 550 km by the Río de la Plata in the north, increasing toward the south to about 1,000 km off the San Jorge Gulf. The margin is characterized by extensional faults, aborted rift systems, a major volcanic wedge seen in convex seaward dipping reflectors (SDRs) and high velocity lower crust due to intrusions of magmatic material. The present shelf is composed of numerous submarine canyons crossing the slope and the rise. In this region the southernmost area is dominated by along-slope contourite depositional processes while the northern area is dominated by across-slope processes characterized by a well-defined continental rise and turbidite deposits.

The sub-commission agreed that the Río de la Plata Craton passive volcanic continental margin was a 'type E' passive volcanic continental margin (as defined in the guidelines) with a characteristic seaward-dipping reflector sequence. It also agreed that the morphological complexity of the margin, due to the interaction of along-slope (contour currents) and downslope (gravity currents), have resulted in either local points of maximum change in the gradient or constant curvature of slopes. These features have rendered the location of FOS points by means of the maximum change in the gradient to be unreliable in some cases, necessitating the use of evidence to the contrary.

In the application of evidence to the contrary, the sub-commission considered:

- the base and foot of the continental slope should not be located seaward of the region where the SDR sequence terminates;
- the base and foot of the continental slope should not be located seaward of the region where the thickness of the crust reduces to typical oceanic crustal values further seaward; and
- the specific seaward dipping reflector chosen as the 'last unequivocally identifiable seaward dipping reflector' at the end of the SDR sequence should be of sufficient coherency and impedance.



The northern region of the Argentine Atlantic margin sector, referred to as the Río de la Plata Craton passive volcanic continental margin region, left, (highlighted in red) (highlighted in red) (From the Argentine recommendations).

Tierra Del Fuego Margin Region

The Tierra Del Fuego Margin Region extends from the Tierra del Fuego Spur into the Scotia Sea at the southern tip of Argentina.



The westernmost sector of the combined continental margin to the south, covering the Tierra del Fuego margin region, right, (highlighted in red) (From the Argentine recommendations).

Issues

The sub-commission did not agree with all FOS points established using evidence to the contrary (see dot points regarding SDR and BOS).