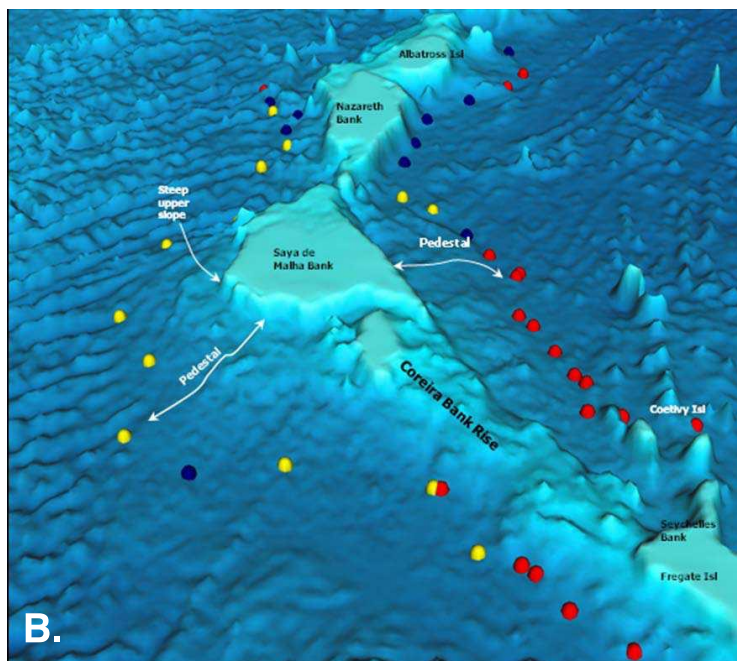


Mauritius- Seychelles recommendations (ECS ID-1400)

Mascarene Plateau region

The Mascarene Plateau is located in the southwest Indian Ocean. This plateau is a large arc shaped composite seafloor high that constitutes the natural prolongation of Mauritius and the Seychelles. The Seychelle Islands are located on the Seychelles bank, the northernmost bank of the plateau. Mauritius is located south of Carajos Bank. Between the two island groups there are a series of flat topped pedestals that rise ~2500m above the abyssal depths of ~4000m. The pedestals have steep upper slopes and gentler lower slopes.

The geological evolution of the Mascarene Plateau involved several episodes of rifting and break-up of the Gondwana super- continent, the emplacement of flood basalt to form a Large Igneous Province (LIP), additional magmatism associated with the southward movement of a hotspot, and, finally, the development of carbonate platform. All these events and processes contributed to the formation of the large, elongated, mid-ocean seafloor high with its rectilinear margins, and deep, broad, low-gradient pedestal surmounted by narrower, steep-sided, flat-topped carbonate platforms.



3D bathymetric view of the Mascarene Plateau from the north showing f flat-topped banks with steep upper slopes that surmount a broad lower-slope pedestal with lower gradients.

Issues

The sub-commission felt that in the north and northeast region of Saya de Malha Bank the BOS was difficult to determine due to a terraced and eroded low-gradient lower slope,

different aged fracture zones, and the poor orientation of bathymetric profiles with respect to slope. The suggested moving FOS points. In the western region the states were required to supply additional multibeam data to confirm the position of FOS points.