

Figure 11. A 3D perspective of Anton Dohrn Seamount, showing the very steep walls and domed summit. The parasitic cones to the northwest are very clear is the rougher topography of the north-western summit area and “steps” on the southern part of the summit.

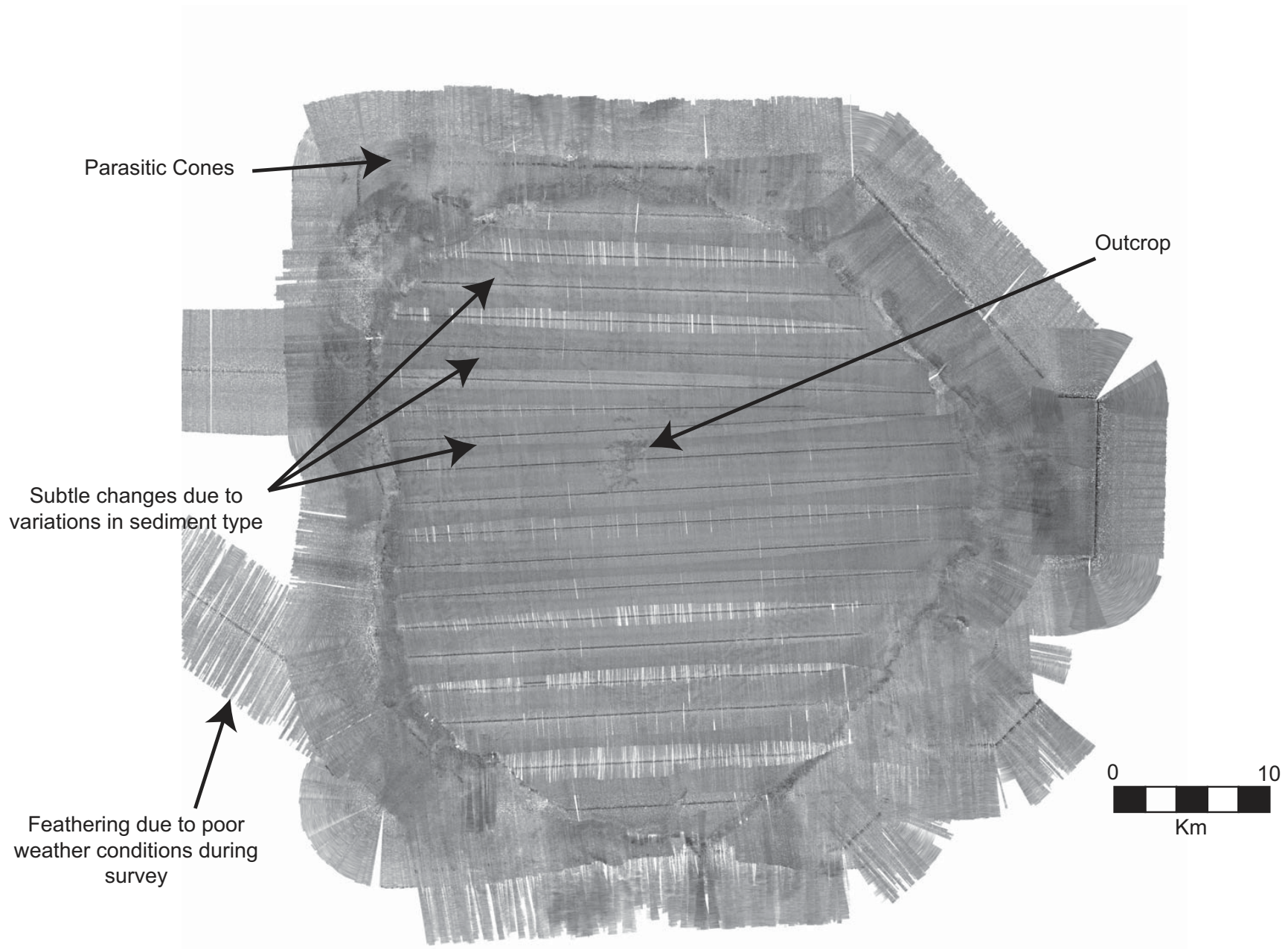


Figure 12 Acoustic backscatter over Anton Dohrn Seamount. The subtle changes over the north and west indicate changes in sediment type (see Figure 13). The “feathering” effect is due to bad weather during survey operations.

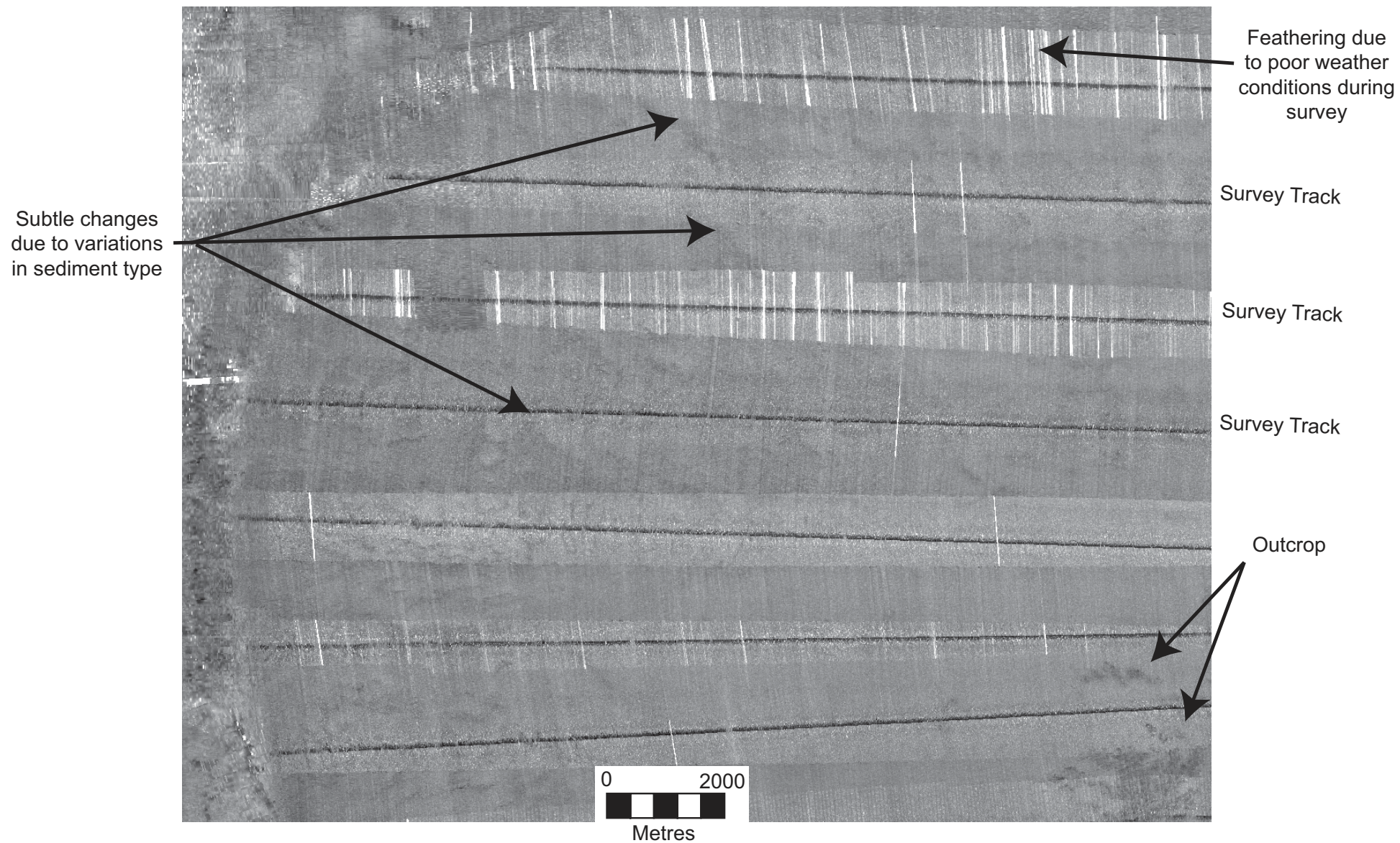


Figure 13 Close-up of acoustic backscatter variation on the summit of Anton Dohrn Seamount. The high reflectivity in the lower right is basement outcrop; the other more subtle variations are due to changes in sediment character.

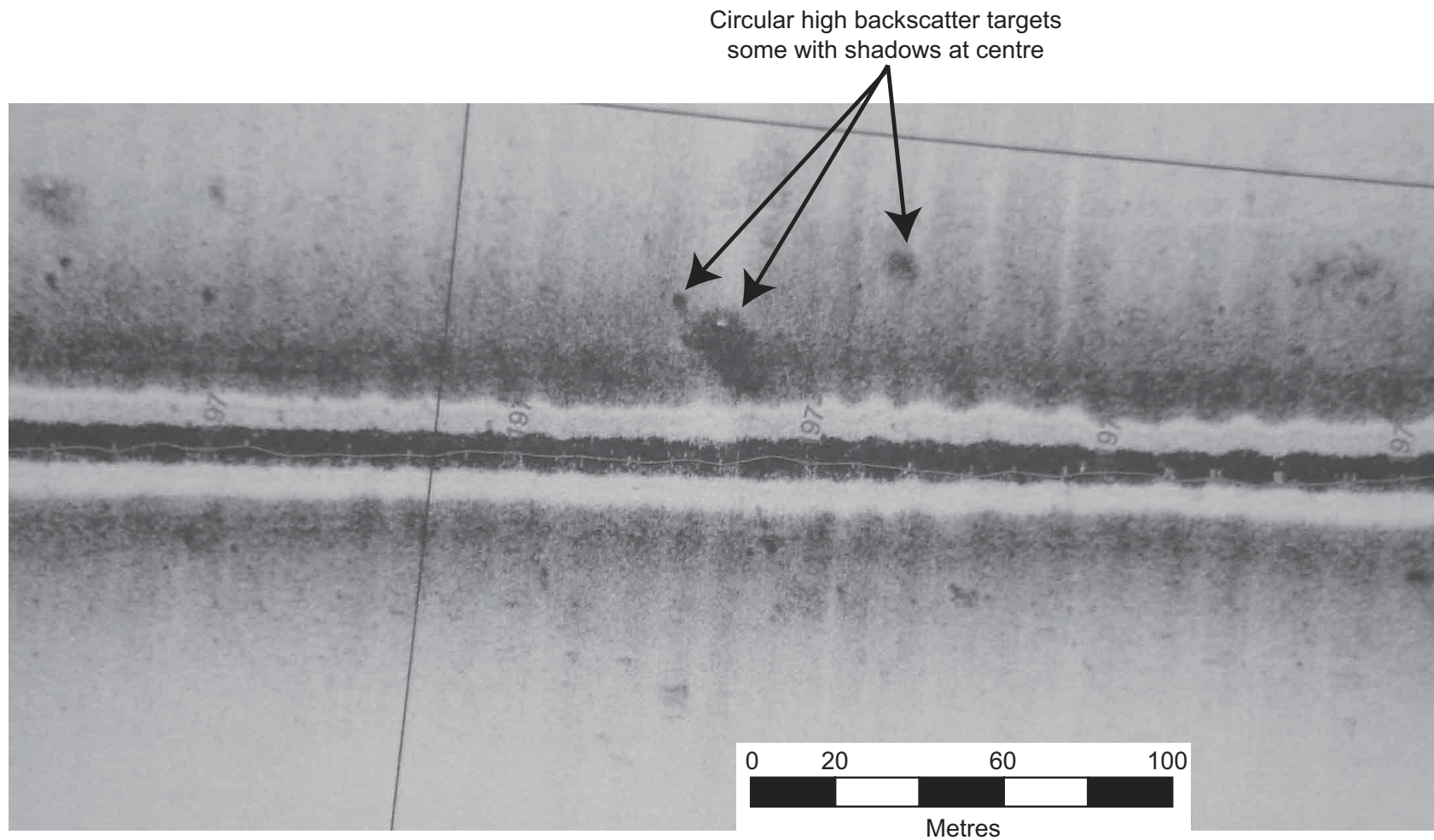


Figure 14. Circular high backscatter features just east of the summit outcrop of Anton Dohrn Seamount, they are between 2-10 m in diameter and of uncertain origin.

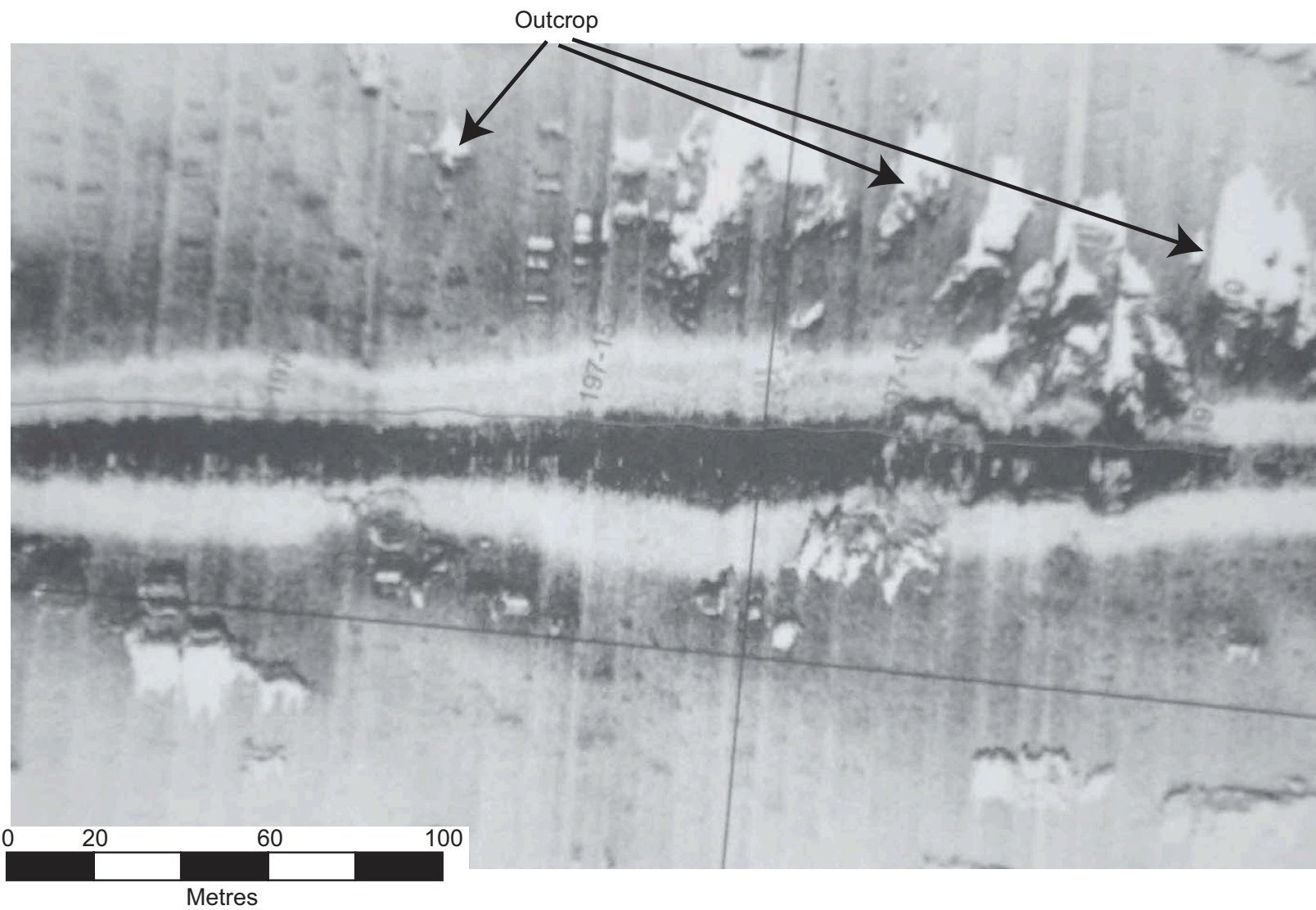
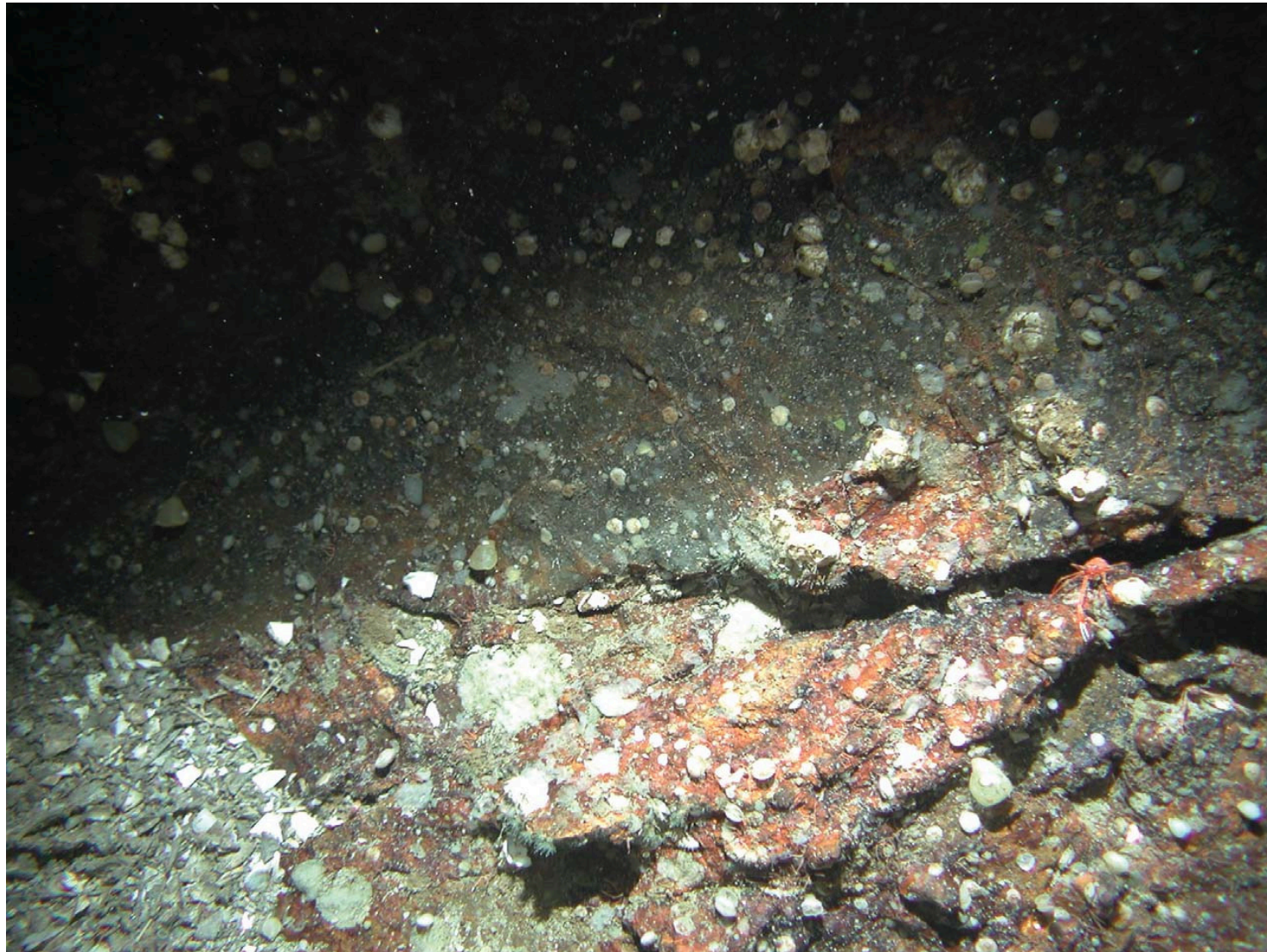


Figure 15. Rock outcrop over the central summit area of Anton Dohrn Seamount.



Biogenic
gravel

Iron-stained
and jointed
probable
basalt outcrop

Figure 16. Seabed photograph showing iron-stained and jointed (probably basalt) outcrop at a depth of ~525 metres, with biogenic gravel and coarse sand lag deposits.

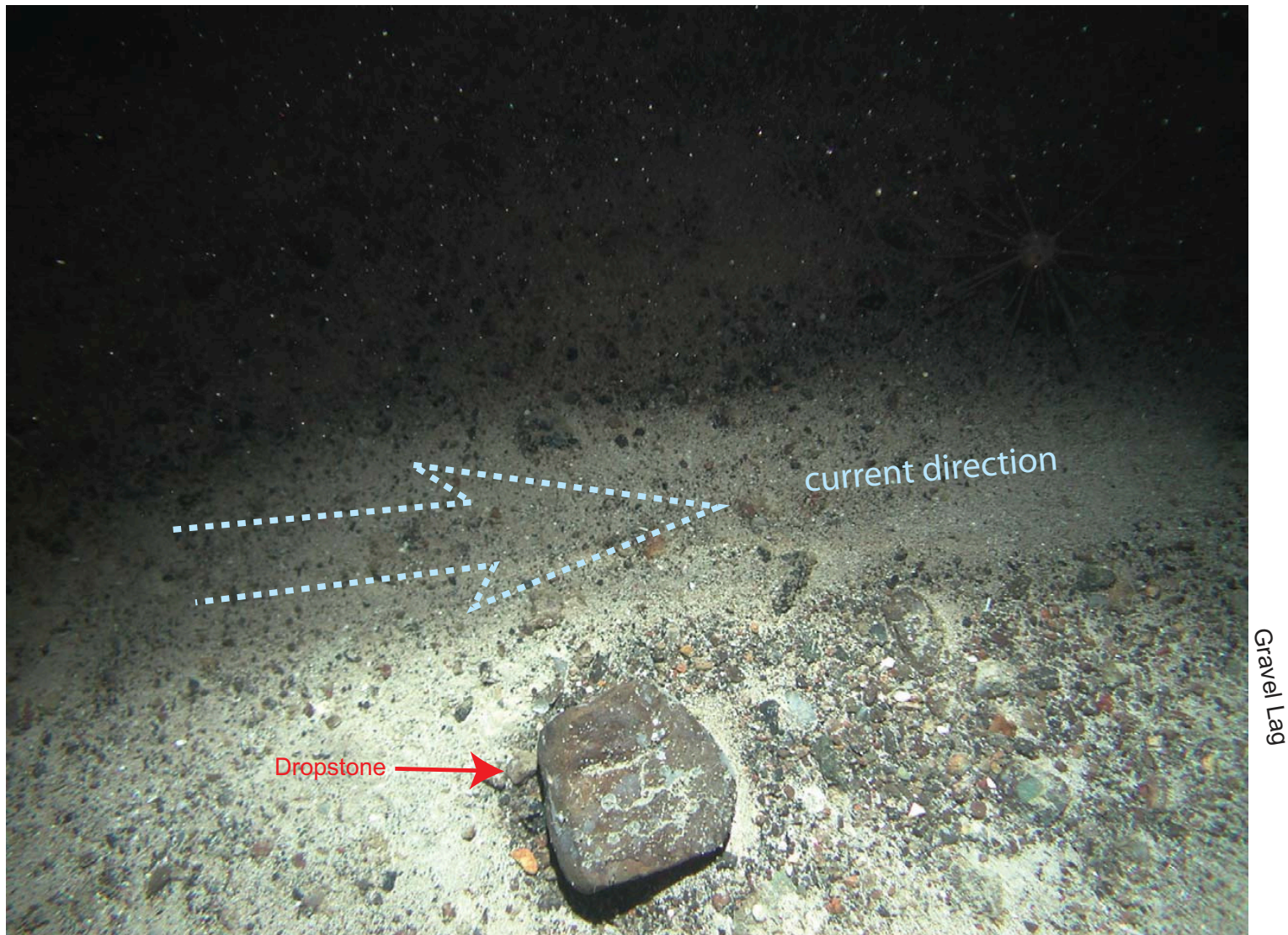


Figure 17. Seabed photograph at 724 metres depth on the northwest summit area of Anton Dohrn Seamount imaging a gravely sand with dropstones that show well-developed downstream gravel lag.

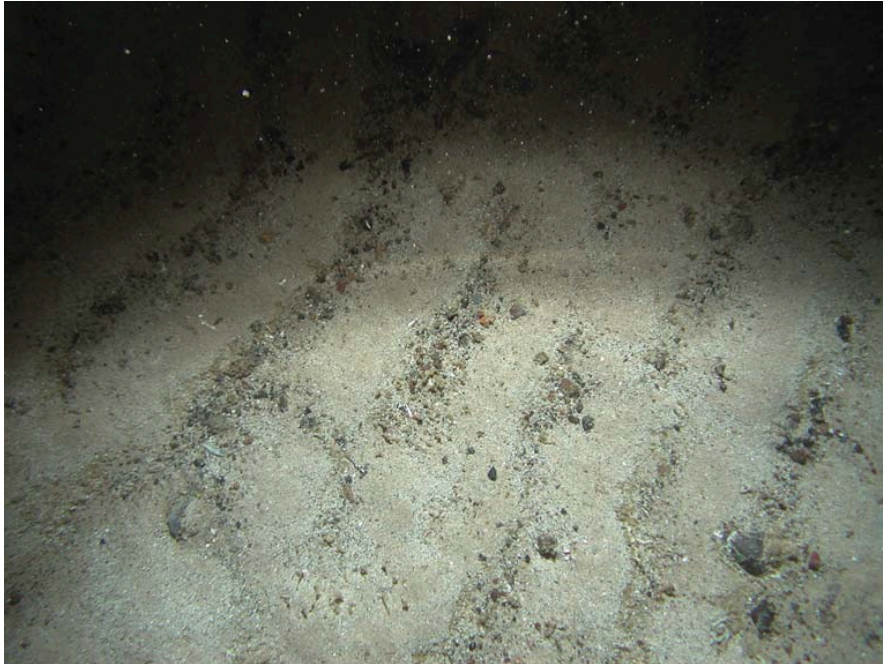


Photo a



Photo b

Figure 18. Seabed photographs from the northwest summit area of Anton Dohrn Seamount at 725 metres, trying to image the reason for the acoustic backscatter change on the EM120 data. Two types of seafloor were imaged along the transect; (a) a rippled seabed with coarser material in the ripple troughs, and (b) a gravely sand.

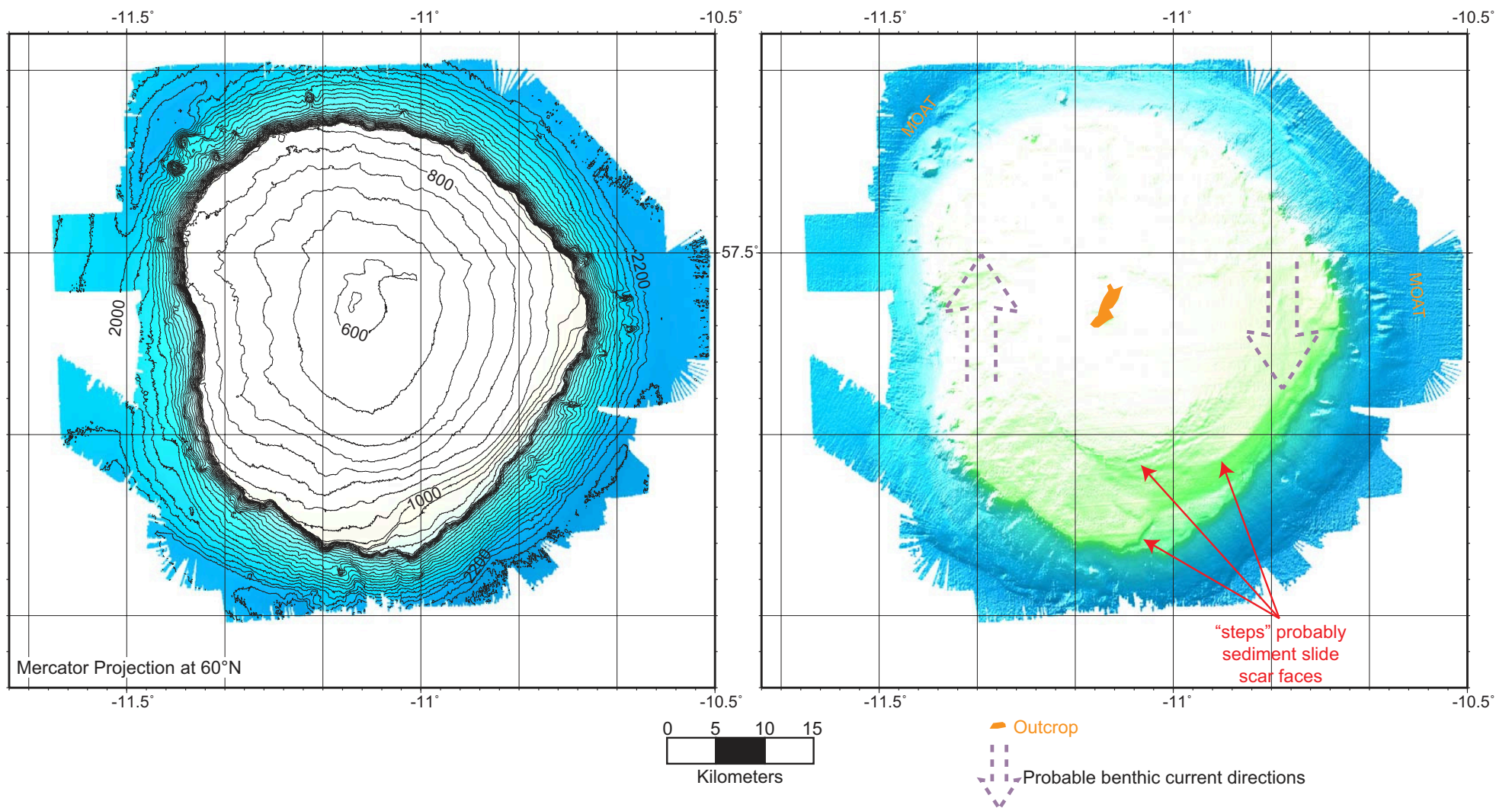


Figure 19. Schematic interpretation of the geomorphology, surficial seabed geology and benthic current activity on and around Anton Dohrn seamount as derived from the 2005 SV Kommandor Jack surveys.

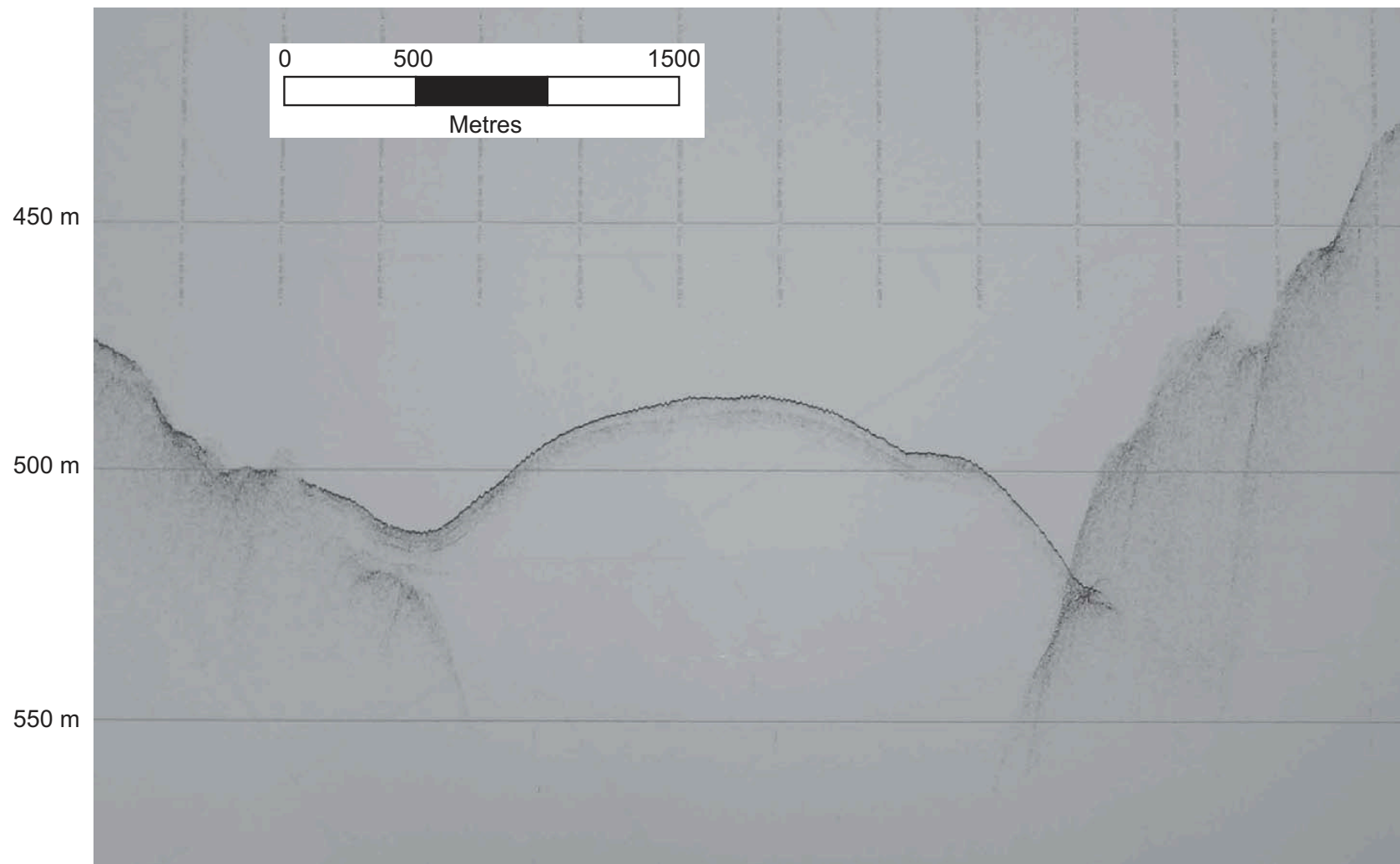


Figure 20. CHIRP profile showing the 100 m high incised embayment walls along the southern East Rockall margin, that here contains an infill where the adjacent sediment drift has followed the topography and begun to infill the embayment.