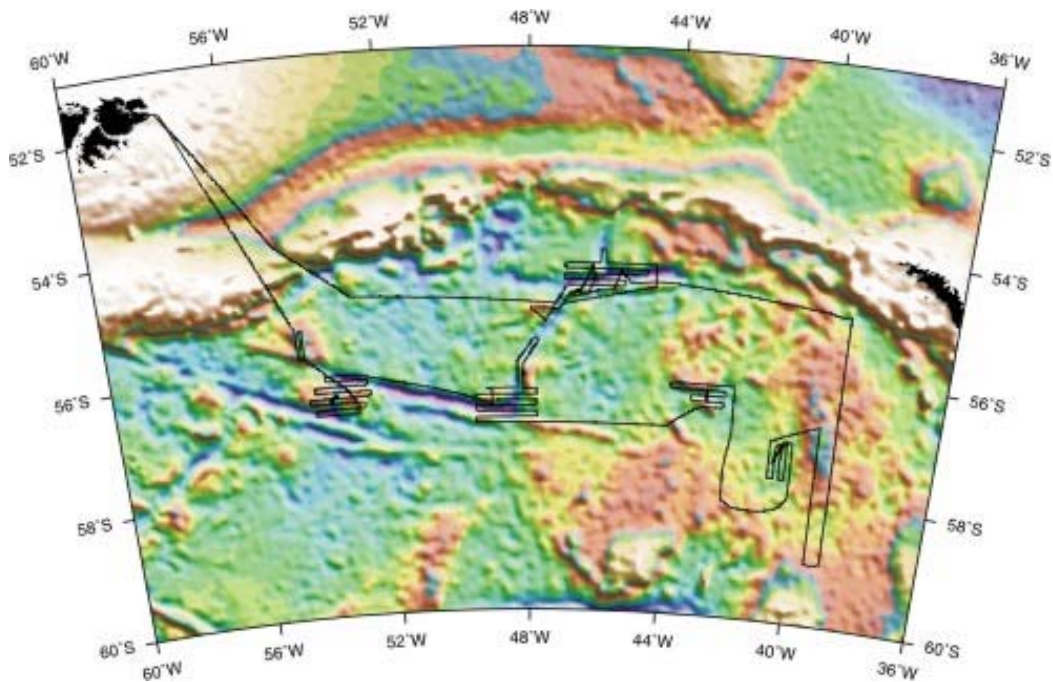


## JR77/78 Cruise Report

### *Introduction*

Combined cruises JR77 and JR78 were postponed from season 2002/2003, following an incident in which the ship was damaged by collision with another vessel while tied up at FIPASS. The ship sailed from FIPASS at 11:00 on 15<sup>th</sup> February 2004, for a total of twenty days' bathymetric and magnetic survey, combined with rock dredging at fourteen sites. Thirteen dredges were successful in recovering oceanic rocks of mixed sizes up to very large boulders.



**Fig. 1 Track plot for JR77/78 (see inside back cover for A3 version)**

The southbound transit from the Falkland Islands was used to follow a flow line of West Scotia Ridge spreading, and so acquire useful magnetic anomaly data. Strong winds were experienced on several days during the leg, but operations were never curtailed, so that all objectives were met comfortably. The new bathymetric maps add considerably to knowledge of the West Scotia Ridge, and were vital in the choice of sampling sites. The rock haul should help address several questions associated with the flow of upper mantle and ocean currents through Drake Passage.