

Abstracts of Additional SOPAC Cruise Session Papers

Subduction of Woodlark Spreading System at Solomon Island Arc

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The initial results of a marine program sponsored by Australia, New Zealand, the United States, and CCOP/SOPAC to investigate the subduction of the Woodlark spreading system beneath the Solomon island arc can be reported. This unusual tectonic situation provides: a) a controlled experiment in which the roles of subducted oceanic crust and sediments in island arc petrogenesis can be assessed; and b) an opportunity for determining the relation between the thermal structure of the subducted oceanic lithosphere and the thermal regime of the island arc/back arc. Station work during the 24-day cruise included dredging, coring, and digital heat flow measurements.
