

Metadata Details

Title

Iceberg Studies in Antarctic Waters.

Science Keywords

Category	Cryosphere
Topic	Glaciers/Ice Sheets
Expedition Year	1982-1983
ISO Topic	Meteorology

Summary

Abstract

Icebergs are one of the most important physical forms of ice around the Antarctic continent. During the present expedition the appearance of solid icebergs was noticed at 59°S latitude. Onwards from this spot continuous occurrence of icebergs was logged and several distinctive physical forms of bergs were identified. For detailed examination of the iceberg the authors landed on an iceberg on 10/1/1983 which was adrift at a location fixed as 59°05'12" S latitude and 110°46'18" E longitude. A shallow borehole was drilled by a portable power driven machine and a complete core was obtained up to a depth of 4.62 m. Physical appearance, location and nature of stratification indicate that this iceberg has been generated by calving of the main shelf of the Princess Astrid Coast.

Purpose

Icebergs are one of the most important physical forms of ice around the Antarctic continent. Before encountering the bergs, small floes of ice drifting in waters around 55° to 58°S latitude are noticed. These floes are remnants of the icebergs that have disintegrated and diminished in size while floating northwards. First appearance of a solid iceberg was noticed at 59°S latitude. South of this spot, continuous occurrence of icebergs is witnessed. Before entrance to polynya, near the shores of Antarctica, scattered icebergs are present, while within the polynya there are clusters of icebergs. Nearing the coastline of Antarctica icebergs stranded within the pack ice were noticed. When aligned, the latter give from a distance a deceptive appearance of coastline.

Data Center