

Metadata Details

Title

Meteorological Studies at Antarctica During The Period March, 1986 to February, 1987.

Science Keywords

Category	Atmosphere
Topic	Atmospheric Temperature
Expedition Year	1985-1986
ISO Topic	Meteorology

Summary

Abstract

A permanently manned meteorological observatory was established at the Indian Research Station, Dakshin Gangotri, during the Third Indian Scientific expedition to Antarctica, for continuous recording of meteorological parameters. The observatory is equipped with instruments to monitor the weather systems approaching and affecting the Station. Valuable data has been collected so far and such studies were continued during the period of March, 86 to Feb., 87 also, the results of which are presented in this paper. An automatic weather station (DCP) was also installed during the Fifth Indian Expedition, through which hourly data is being recorded and transmitted on real time basis to New Delhi through Indian National satellite INSAT-1B." The meteorological data collected during the period of the report has also been compared with mean climatological values of some nearby stations.

Purpose

The observatory at Dakshin Gangotri is equipped with autographic instruments for continuous recording of meteorological parameters e.g. surface wind direction and speed, pressure and temperature. It also has the facility for measurement of surface and global radiations, surface ozone and atmospheric electrical potential gradient. Periodic balloon ascents are also taken to obtain vertical profile of upper air temperature, humidity and radiation fluxes. It also has the equipment for the reception of weather charts broadcasts from forecasting offices in the region and the Automatic Picture Transmission (APT) equipment 260 T. V. P. Bhaskara Rao for reception of cloud imageries from the polar orbiting weather satellites.

Data Center