

# Metadata Details

**Title**

A Wide Band Magnetotelluric Investigations to Delineate the Deep Crustal Geoelectric Structure in East Antarctica.

---

**Science Keywords**

Category	Paleoclimate
Topic	Geomagnetism
Expedition Year	2005-2006
<b>ISO Topic</b>	Geodesy

**Summary**

---

**Abstract**

In the 25th Indian Scientific Expedition to Antarctica, wide-band magneto telluric investigations were carried out during December 2005 to March 2006 in and around Schirmacher oasis. The aim of the study was to map the deep crustal geoelectric structure of east Antarctica around the Indian Research Station, Maitri. Limited long period MT studies were taken up earlier in Antarctica by other countries.

**Purpose**

In the present study, the logistics of field data acquisition procedures of the wideband magneto tell uric study are presented. A deep crustal geoelectric section obtained from 2-D modelling results showed a thin (10 km) high resistive upper cmst followed by less resistive mid-lower crust. A feeble resistivity contrast is also observed as a boundary between lower cmst and upper mantle, perhaps represents an electrical Moho. Results are compared with earlier (24th Indian Antarctic Expedition) MT results and discussed.

---

**Data Center**