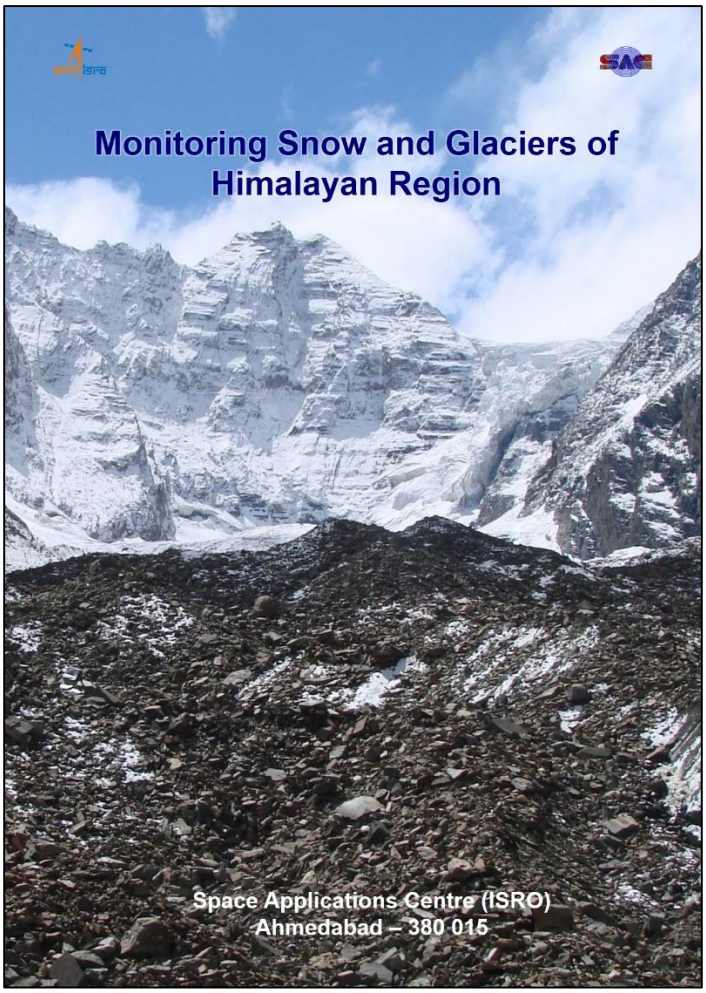
New SAC Publication "Monitoring Snow and Glaciers of Himalayan Region"

Space Applications Centre (SAC), Indian Space Research Organisation (ISRO), Ahmedabad has published a Book entitled "Monitoring Snow and Glaciers of Himalayan Region". This document provides details of the salient findings of a national project entitled, "Monitoring Snow and Glaciers of Himalayan region (Phase-II)", taken up under National Natural Resources Management (NNRMS) Program and jointly sponsored by the Ministry of Environment, Forest and Climate Change (MoEF&CC) and Department of Space (DOS). The project has been successfully completed by Space Applications Centre, Indian Space Research Organisation (ISRO), Ahmedabad as a nodal agency along with eighteen partner institutes.

It provides details of the current status of Himalayan snow and glaciers based on the analysis of time series multi-sensor satellite data supported by field based observations. It covers details about the types of satellite data used, methodology developed and salient findings related to snow cover, glaciers and Himalayan Glacier Information System. Studies have been carried out using Ground Penetrating Radar (GPR), hyperspectral data, SAR Interferometry and Photogrammetry for glacier ice thickness, snow pack characterization, glacier flow determination and glacier mass balance estimation. Development of advance technique using INSAT-3D, RISAT-1, Gravity Recovery and Climate Experiment (GRACE), ICESat/GLAS laser altimetry data for snow cover, detection of glacial lakes buried under snow, estimation of regional water mass variations and monitoring ice thickness changes have been well documented.

Copy of the Book can be downloaded from SAC Web Portal "Visualization of Earth Data and Archival System" (VEDAS)".

SAC (2016) Monitoring Snow and Glaciers of Himalayan Region, Space Applications Centre, ISRO, Ahmedabad, India, 413 pages, ISBN: 978 – 93 – 82760 -24 -5