

Earth Ecosystem Research and Training Division (ERTD)
VEDAS Research Group (VRG), EPSA/SAC

“Cryospheric Applications using Space Based Observations”

Date: 04 -12 October, 2017

Training and Research in Earth Eco-system (TREES)

A Nine-days training programme was conducted on **“Cryospheric Applications using Space Based Observations”**. The training programme was attended by 21 participants from 14 institutes / organisations from all over country.



Overall 20 lectures covering various aspects of Satellite based cryosphere and modeling were delivered. The lectures on remote sensing covered Basic principles of Remote Sensing and its broader Applications. Image processing, Lecture on VEDAS, and Android App. Utility Demonstration were delivered. Specific Applications of remote sensing for Cryosphere, Himalayan snow cover product generation, Glacier inventory, Monitoring and mass balance, Snow melt runoff estimation, Glacial lakes monitoring, Microwave interactions with snow and Glaciers, Glacier Faces mapping.

Besides Himalayan cryosphere lectures on Remote sensing of Polar cryosphere, Sea Ice, Its Classification and Analysis, Glacier Ice velocity in polar Region, Monitoring of Ice Shelves and Sea Ice Thickness.

Seven Tutorial / Hands on exercise of Twenty-eight hours on Image processing, GIS, NDSI based Snow cover extraction, Glacier mapping, Glacier Faces identification, SARAL Altika data processing for ICE Sheets, Glacier Ice Velocity, Sea Ice Classification and Thickness was also devoted so that participants can appreciate the theoretical aspects covered. In addition, VSSE Visit and Two sessions on demonstration of Ground Penetration Radar (GPR), GPS and field data collection utilities were covered.

The participants highly appreciated the course content and its presentation. The feedback received was encouraging, many of participants showed interest to work with SAC/ISRO collaborative projects and students wanted to be part of TREES Research Programme.