IGU Burdwan, 6-8 March 2020

Two-days training on Snow Cover Dynamics and Glacier Fluctuations in the Himalaya, 7-8 March 2020, supported by IGU Commission on Biogeography and Biodiversity

Prof. R.B. Singh, Mentor

Dr. Suraj Mal and Dr. Pankaj, tutors

Number of students: Max 20 and Min 10

Eligibility: Early stage of MPhil/Ph.D. or Final semester of MA Geography, with a related research topic.

Fee: Rs. 1000.

Selection method: Candidates, with a basic practical understanding of GIS software, must send a motivation letter (200 words) to
pankajdsedu@gmail.com / suraj.mal@sbs.du.ac.in explaining their current research topic and expectation from the training forwarded by their supervisors. The candidates will be selected by organizers based on the motivation letter.

Important dates:

Motivation letter by 20th January.

Acceptance by organizers by 31st January.

Registration and fee payment by 15th February.

Concept:

The Himalayas are known as the “Water Tower of the earth” or “the third pole,” owing to an extensive snow cover extent (SCE) and the highest concentration of glaciers outside the polar regions. The SCE and glaciers are the sources of 10 major river systems, covering ~9 million km2 area. These river systems support ~1.8 billion population,extensive irrigated agricultural land use, etc.In the Himalayan region, due to climate change, the decline of SCE and recession and fragmentation of the glaciers have been observed. It has modified the river flows and water supplies and eventually threatened human society not only in the mountains but also in the adjacent plains. Besides, the highly seasonal river flows put pressure on hydropower projects. It is, therefore, essential to understanding past and on-going changes in the SCE and glaciers in the region. This training offers early-stage research students in the related field to gain hand-on basic experience using the freely available remotely sensed data from Indian Remote Sensing satellites and the United States Geological Survey.

Tentative Program

7th March 2020

9.30-10.00 AM: Introduction to the training. Prof. R.B. Singh

10.00-10.30: Lecture on the snow cover mapping and change estimation based on the remote sensing data. Dr. Pankaj Kumar

10.30-11.00: Lecture on the glaciers types and dynamics in the Himalaya. Dr. Suraj Mal

11.00-11.30: Tea break

11.30-1.00: Training session on snow cover mapping. Dr. Pankaj Kumar.

1.00-2.00: Lunch break

2.00-5.00: Training session on snow cover mapping and dynamics. Dr. Pankaj Kumar

8th March 2020

9.00-9.30: Glacier mapping techniques

9.30-11.00: Training on clean ice glacier mapping

11.00-11.30: Tea break

11.30-1.00: Training on the debris-covered glacier mapping

1.00-2.00: Lunch break

2.00-3.00: Interactions with tutors. (questions and discussions).

3.00-3.30: Closing ceremony. Concluding remarks by Prof. R.B. Singh