

Indus Basin Report: India

Renoj Thayyen

National Institute of Hydrology, Roorkee

International Workshop on Climate and Environment

Change Impact on the Indus Basin Waters

ICIMOD, Kathmandu

17-18 February 2016

Cryosphere research in Ladakh

Ganglass Catchment, Leh, Ladakh

5600 m a.s.l.

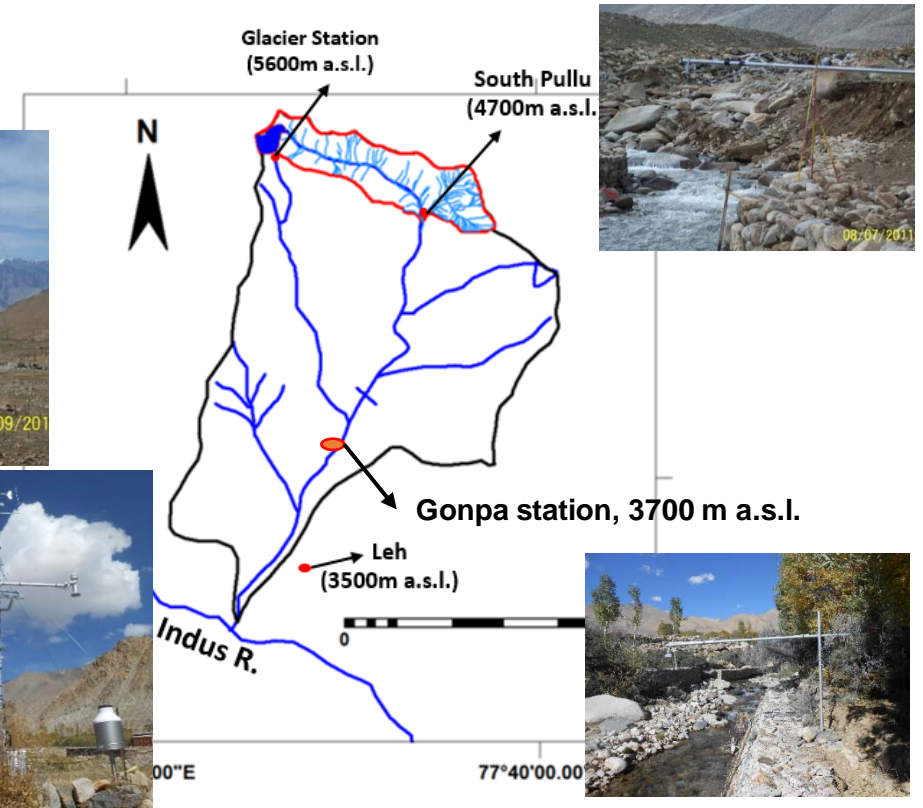


Catchment Area: 15.7 Km²
Glacier cover : 4%

4700 m a.s.l.



3700 m a.s.l.



- Winter & Summer Glacier Mass Balance
- Meteorological Studies
- Runoff Modeling
- Isotopic studies

New Initiatives : Runoff studies at Upper Shyok Basin, Karakorum



New initiatives: SEB studies on Phuche and Khardung glaciers



Recurrence of extreme events in the region

➤ 10 Cloudbursts events from 12 July to 09 August

- ❑ 12-24 July 2015: 4 cloudburst in the Kashmir region
- ❑ August 3-4 2015: Leh Floods
- ❑ Jhelum Floods: September 2014 & May 2015
- ❑ Zaskar Flood Landslide dam break (Phutkal lake) flood

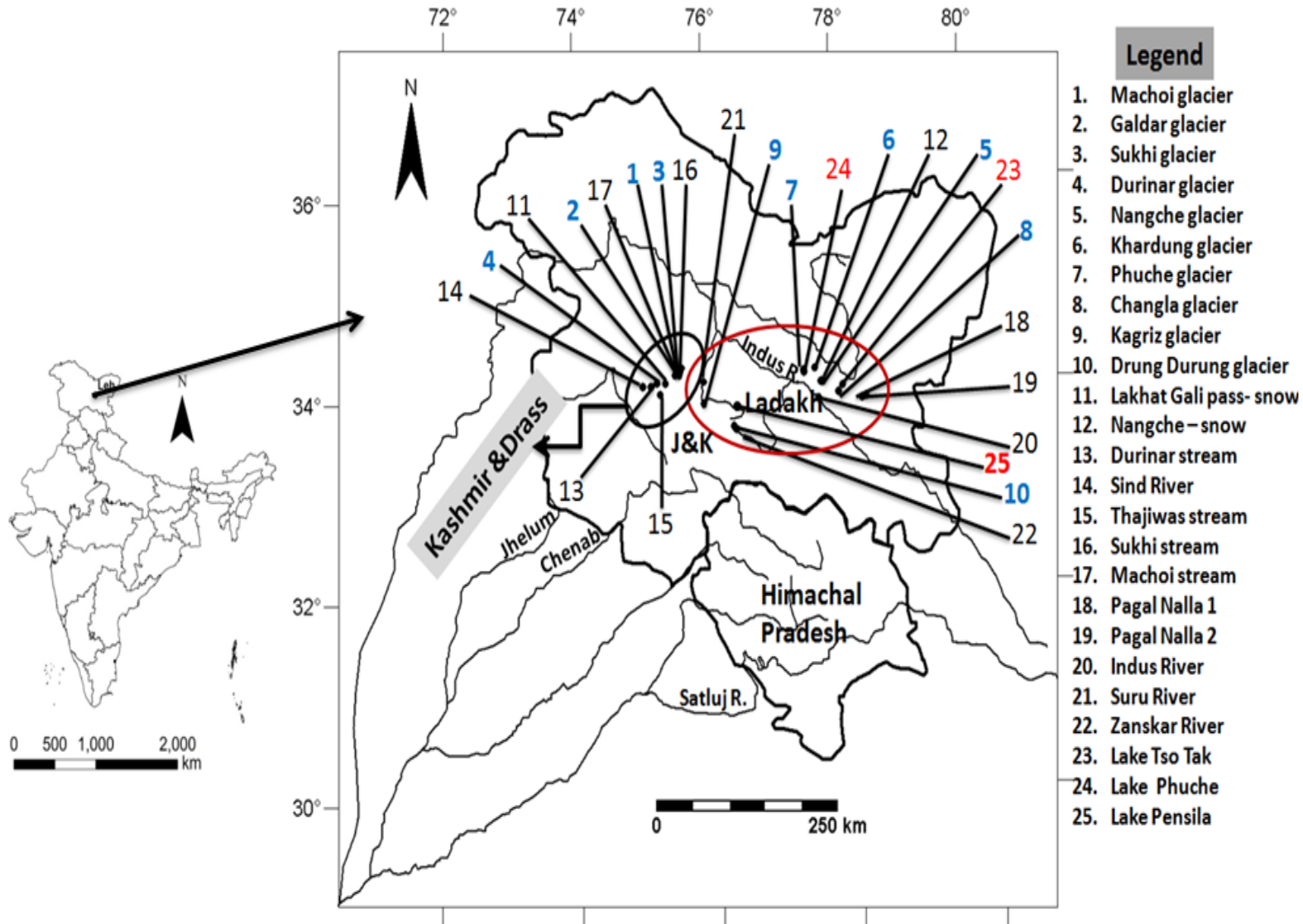
**International workshop on Himalayan Permafrost under the Changing Climate
August 2016 , New Delhi**

Co-organised by

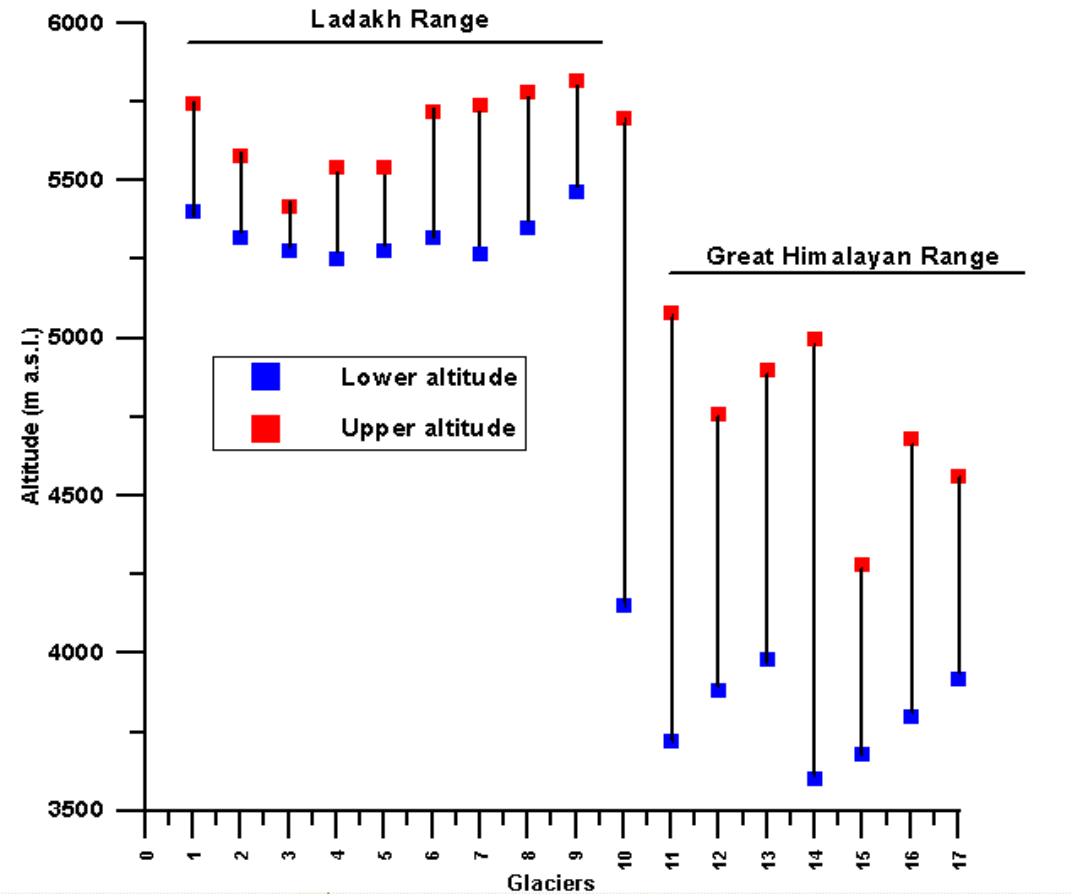
**International Centre for Integrated Mountain Development (ICIMOD)
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(By invitation only)

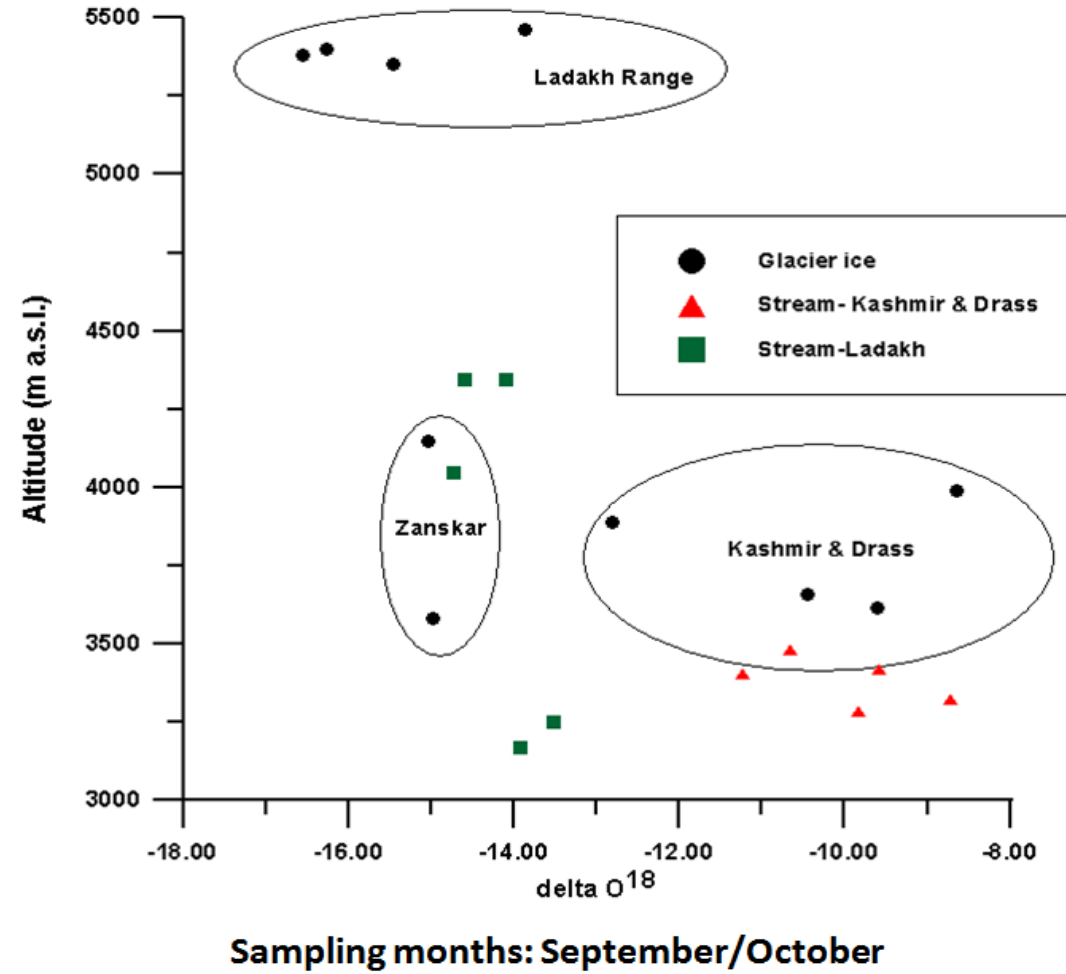
Isotopic characterization of Kashmir and Ladakh Glaciers



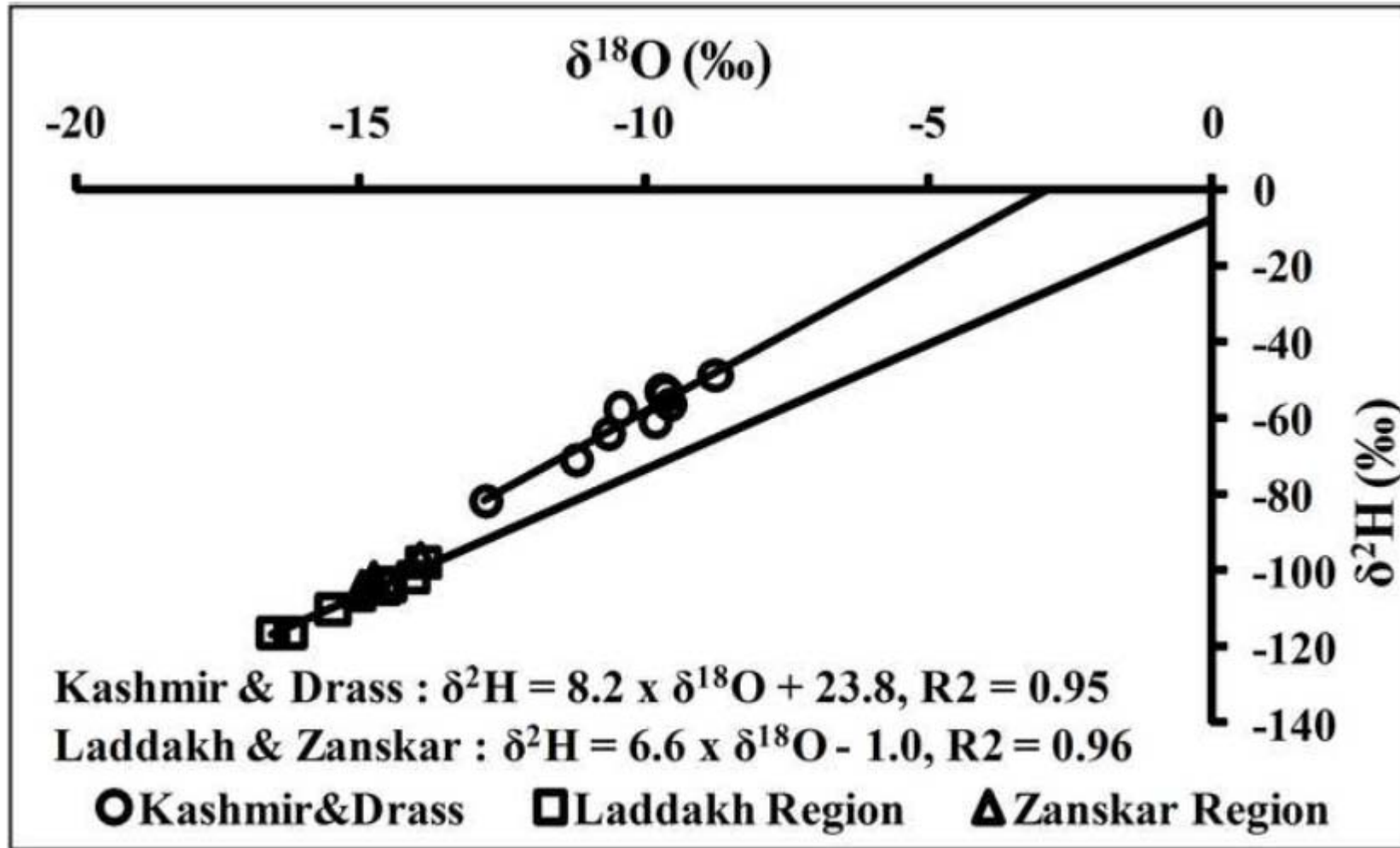
Altitude distribution of select glaciers in Ladakh & Kashmir



Distinct characteristics of Kashmir & Ladakh Waters



Distinct characteristics of Kashmir & Ladakh Waters



Lower d-excess of Ladakh glacier ice samples suggesting the role of sublimation

