



2025
International
Year of Glaciers'
Preservation



<https://www.un-glaciers.org/>

A Journey of Cryosphere activity in ICIMOD

Sharad Joshi, Cryosphere Analyst

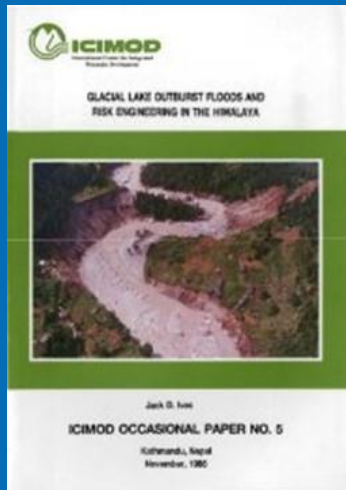
21 January 2025



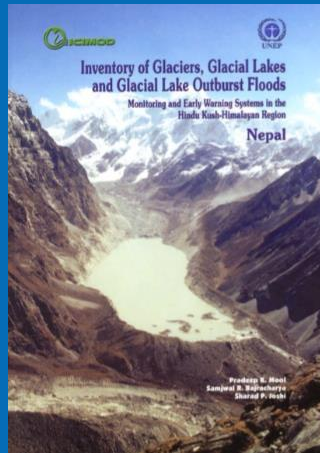
Among the world's most important global resources, the HKH—Hindu Kush Himalaya—sits at the peak.



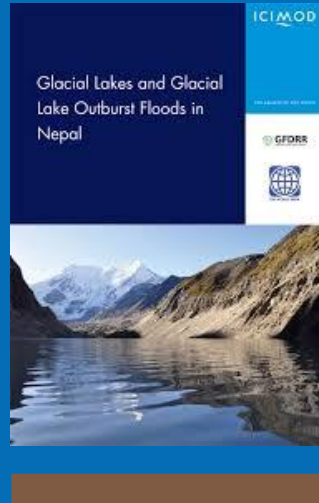
Building awareness & collecting baseline data



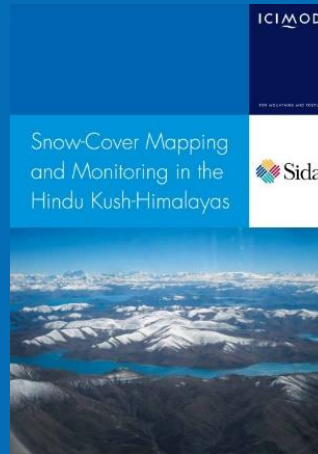
1986
GLOF risk
in
Himalaya



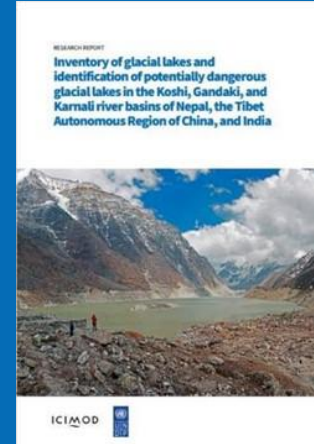
2001-5 1st
Glacier/Lake
Inventory
Nepal,
Bhutan, India,
China,
Pakistan



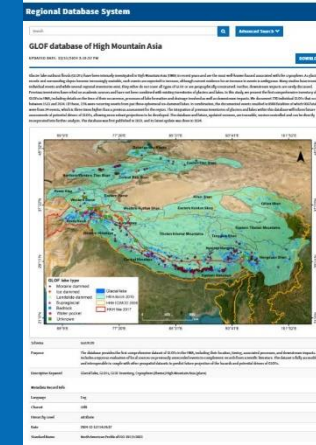
2011
2nd
Glacial
Lake
Inventory



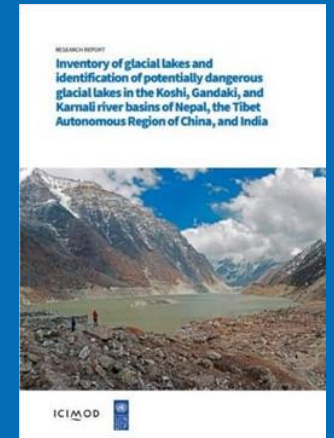
2011 HKH
Snow
cover
Mapping
**Status of
Glacier in
HKH**



2020 3rd
Lake
Inventory



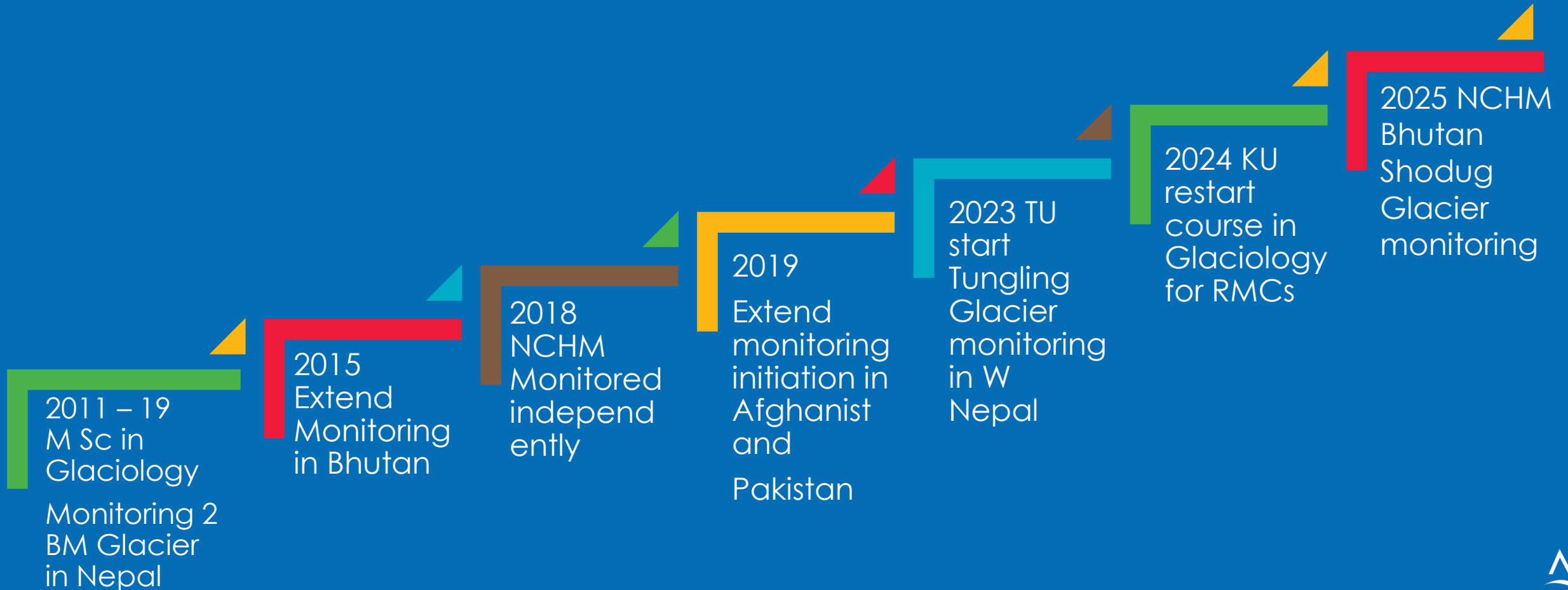
2024 HMA
GLOF
Data



2025 HKH
Decadal
Glacier
Mapping



Capacity building & fostering regional collaboration



Capacity-building on cryosphere monitoring



Monitoring Capacity-building

- Set up and maintain mass balance stake network,
- Snow density
- Submit data to WGMS



Bulletin No. 5 (2020–2021)

Global Glacier Change Bulletin

A contribution to
the Global Terrestrial Network for Glaciers (GTN-G) as part of the Global Climate Observing System (GCOS) and its Terrestrial Observation Panel for Climate (TOPC),
the Science Division and the Global Environment Outlook as part of the United Nations Environment Programme (Science Division and GEO, UNEP),
and the International Hydrological Programme of the United Nations Educational, Scientific and Cultural Organization (IHP, UNESCO)



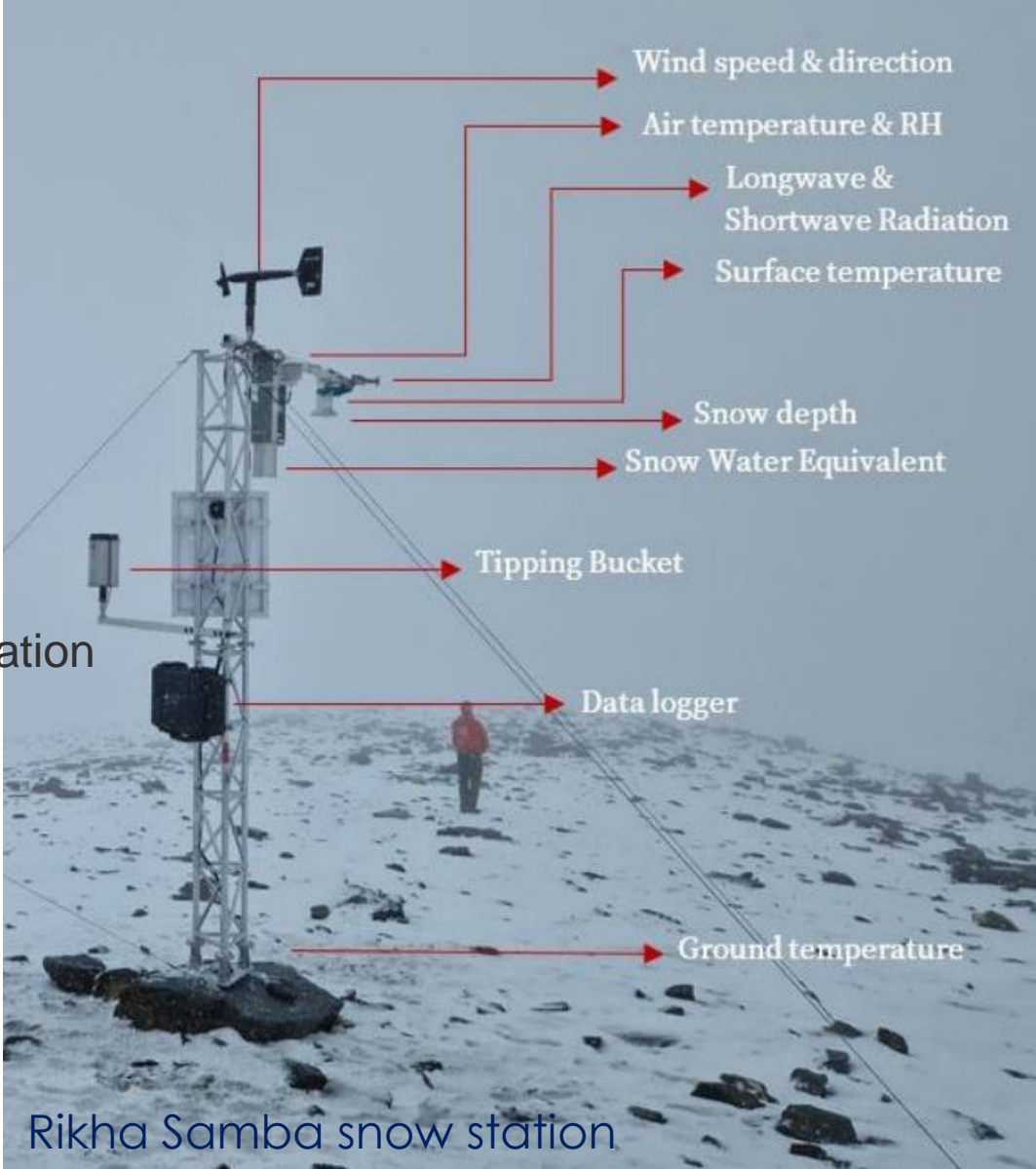
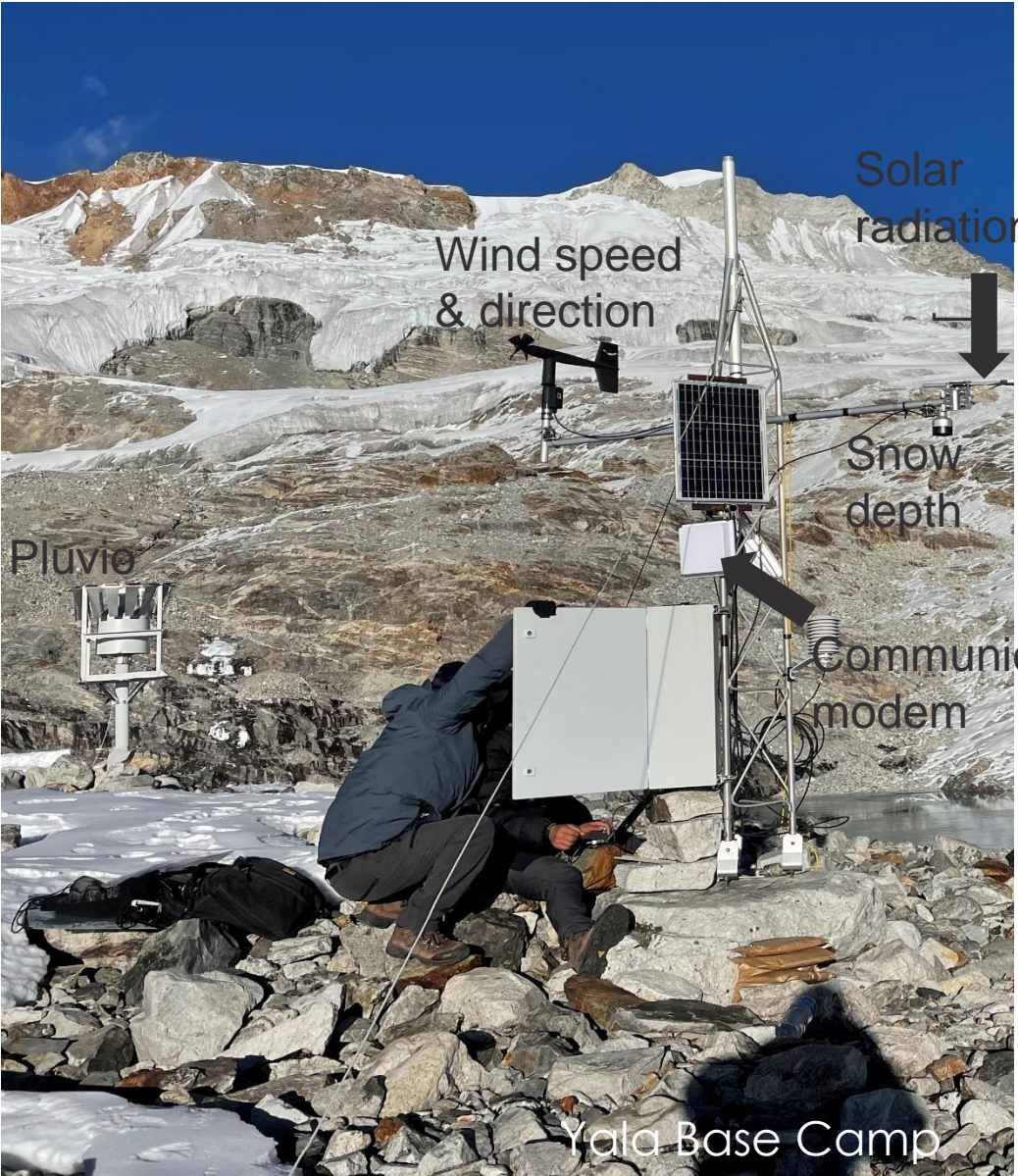
Compiled by
the World Glacier Monitoring Service (WGMS)

wgms

ISC (WDS) – IUGG (IACS) – UNEP – UNESCO – WMO | 2023



Automatic Weather Station (AWS)

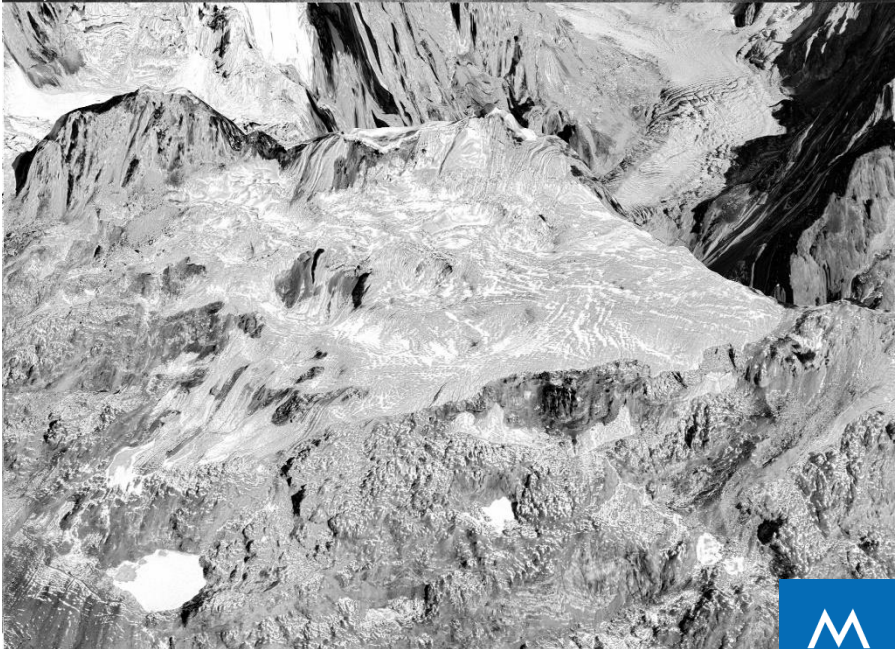
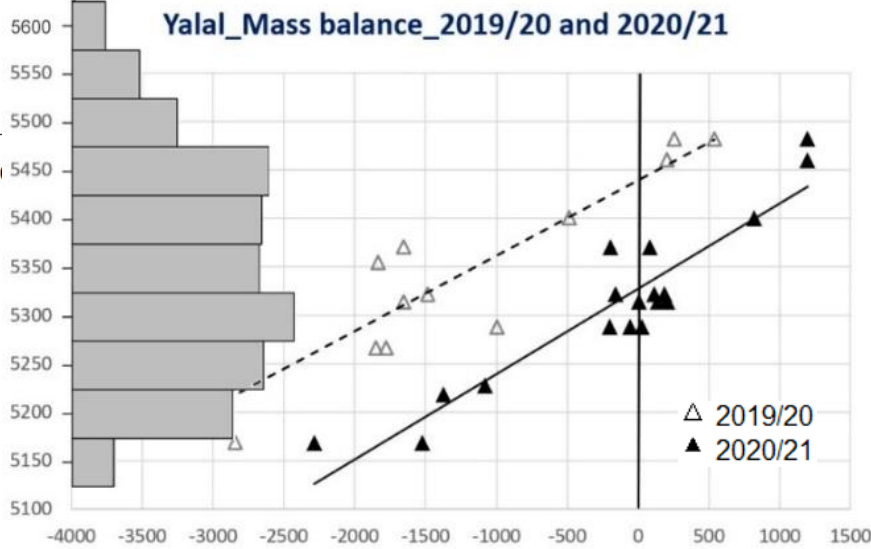
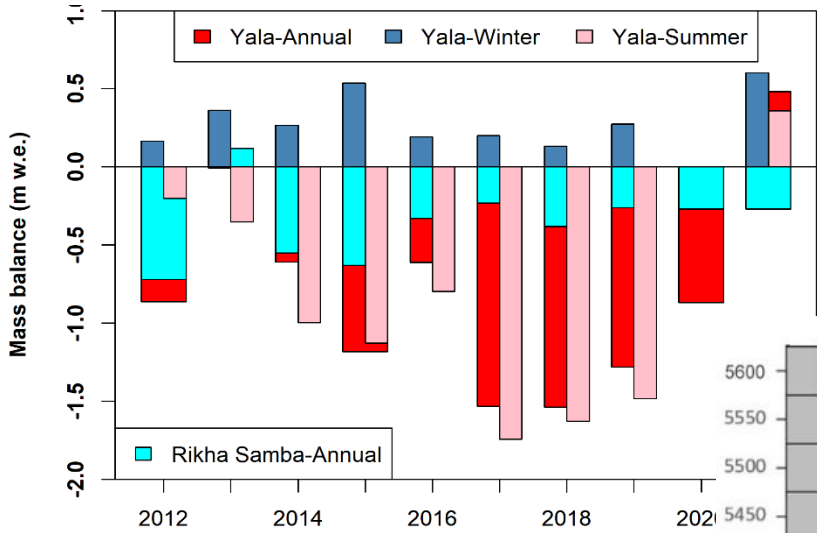


Monitoring:

MB data to WGMS

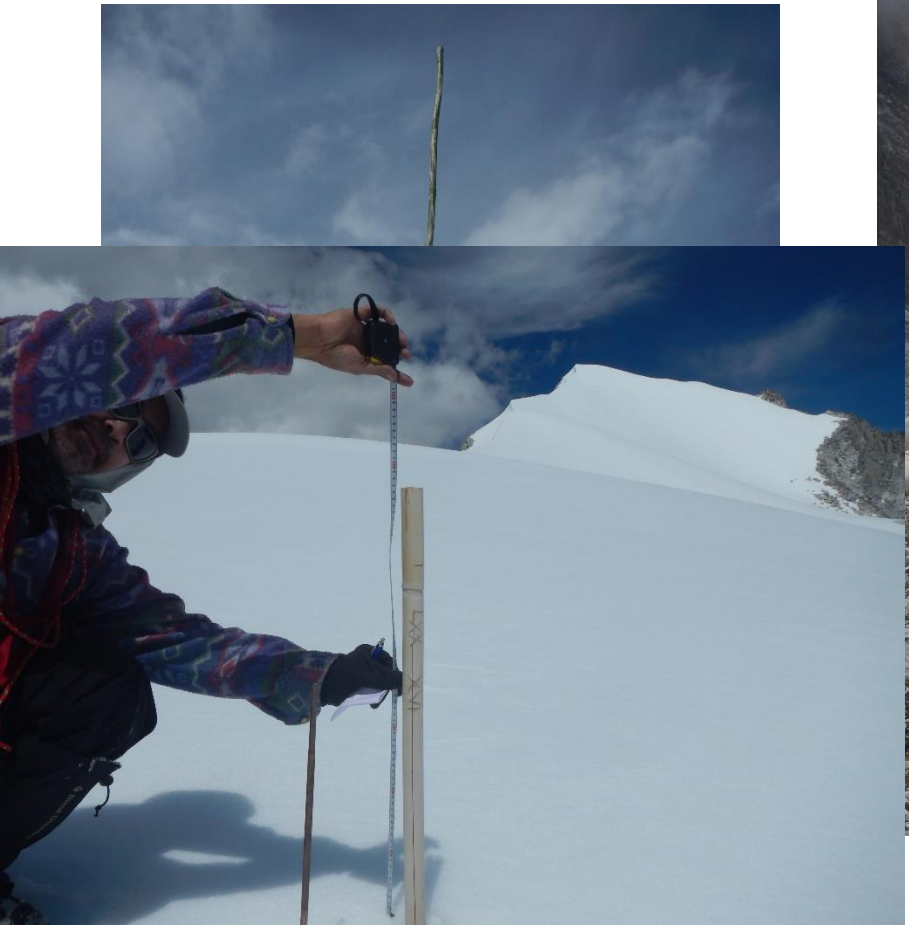
Annual Rikha Samba

Yala Glacier repeat photo



<https://rds.icimod.org/>
<https://wgms.ch/data-exploration/>

Monitoring:

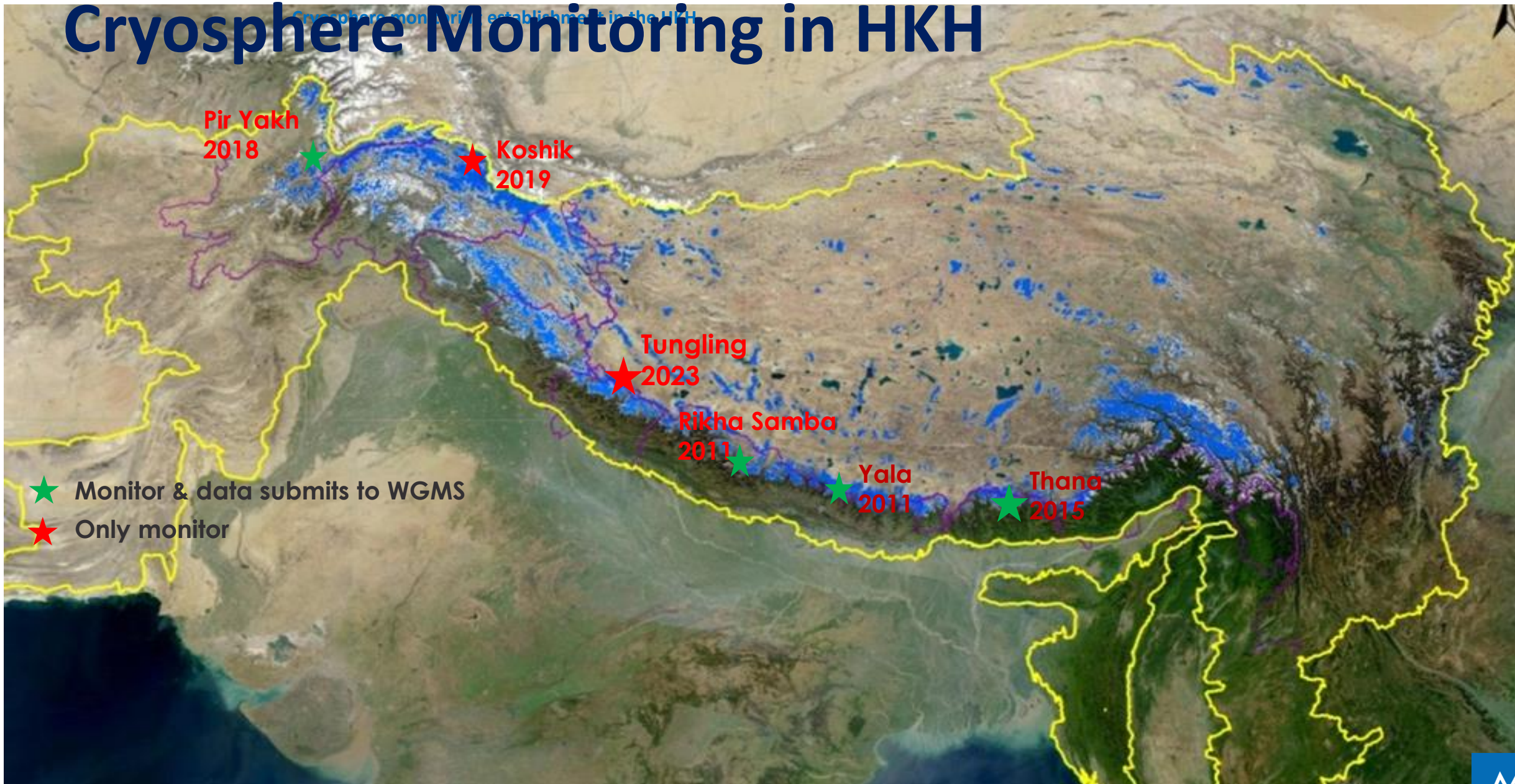


Monitoring:

Annual mass balance Pir Yakh, 2020



Cryosphere Monitoring in HKH





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THANKS