

Observational Facility in Nepal and Operation of AMY-2008

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NEPAL

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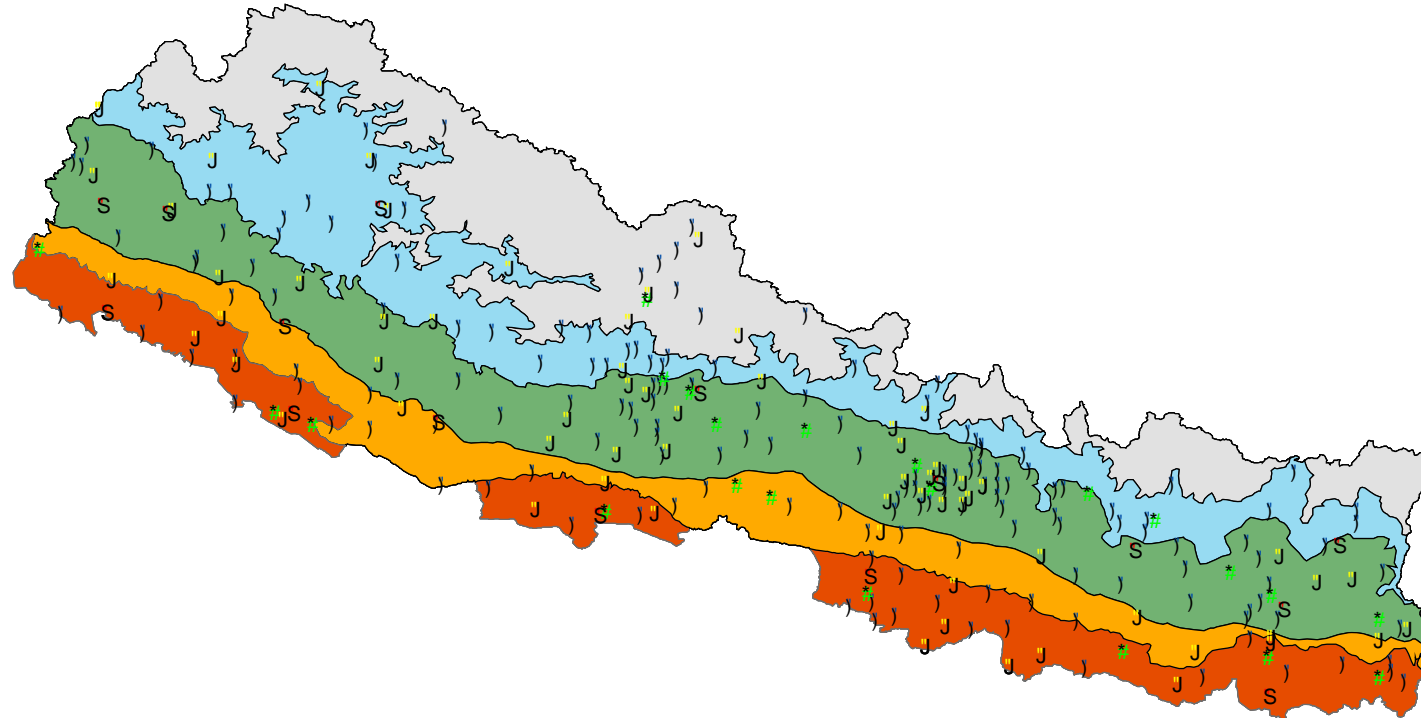
Meteorological Station in Nepal

- Rainfall Station 337
- Climate Station 67
- Agrometeorological Station 22
- Synoptic Station 9
- Aerosynoptic Station 6

Total 442

Automatic Weather Station 18

HMG
Ministry of Environment, Science & Technology
Department of Hydrology & Meteorology
Meteorological Station Network, 2006



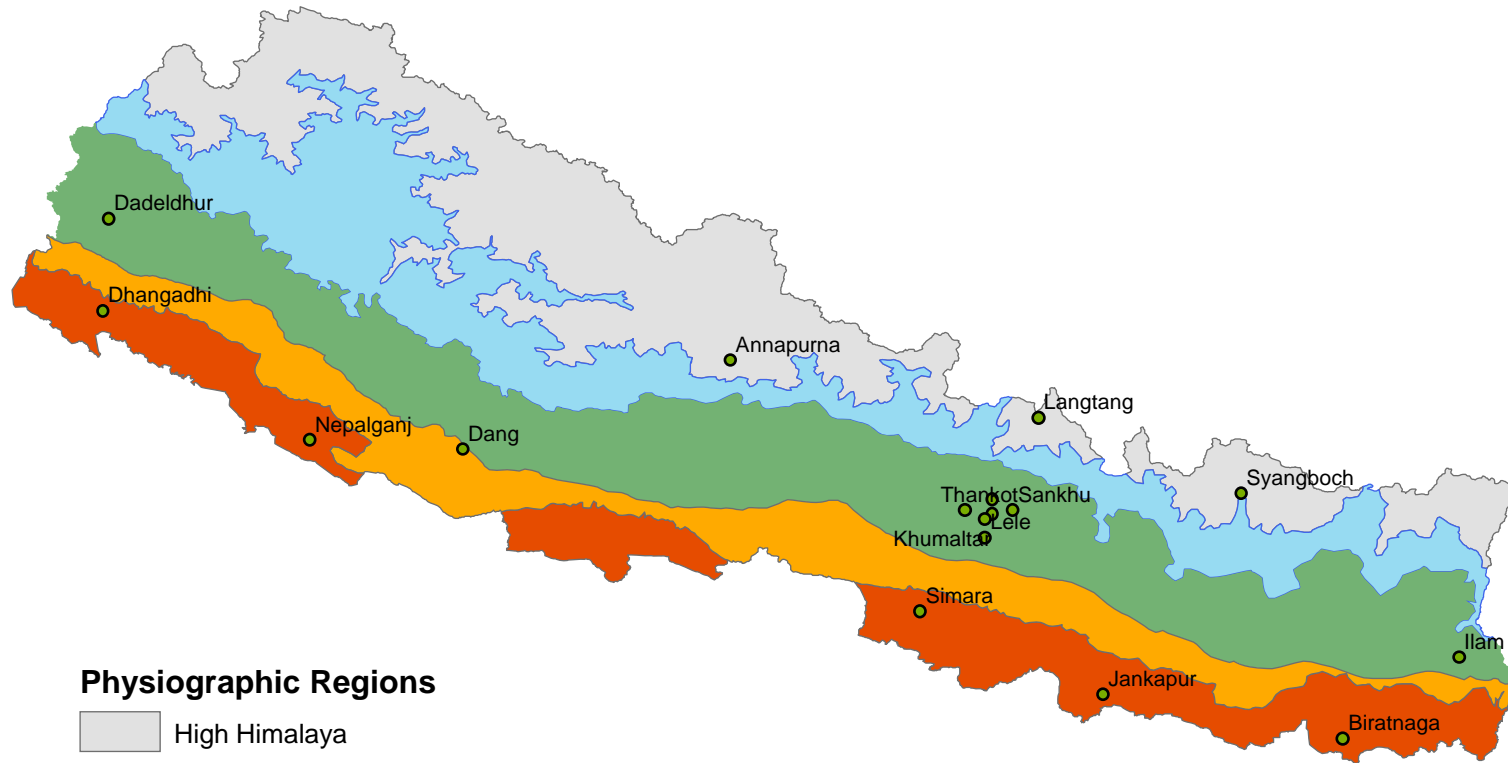
Legend

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Physiographic Regions

- High Himalaya
- High Mountain
- Middle Mountain
- Siwalik
- Terai

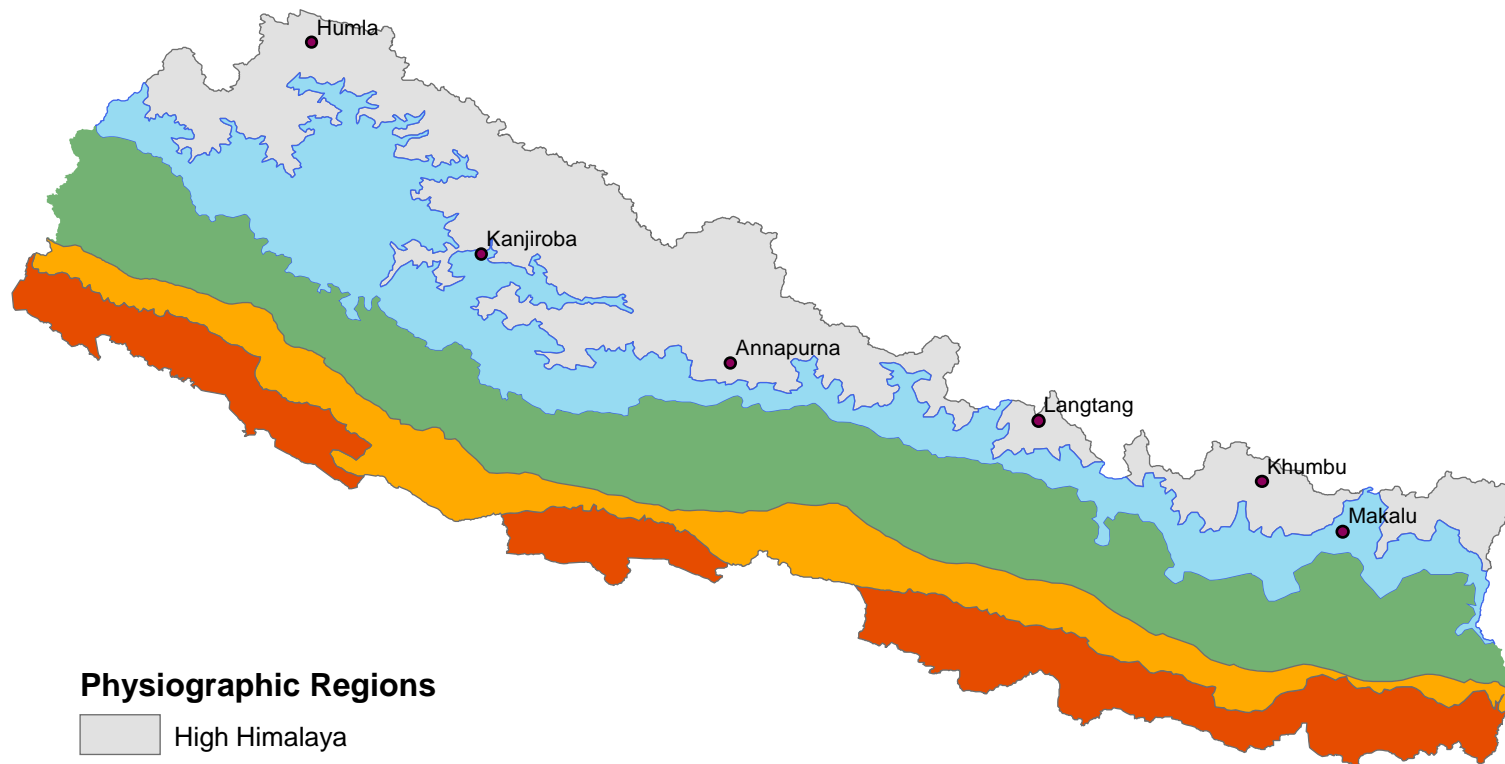
AWS station network



Physiographic Regions

- High Himalaya
- High Mountain
- Middle Mountain
- Siwaliks
- Terai
- AWS Stations

Snow & Glacier station network



Physiographic Regions

High Himalaya

High Mountain

Middle Mountain

Siwaliks

Terai

• Snow and Glacier stations

Tsho Rolpa Glacier Lake, Nepal



L=3.3 km

B=500 m

D=142 m

Department of Hydrology and Meteorology

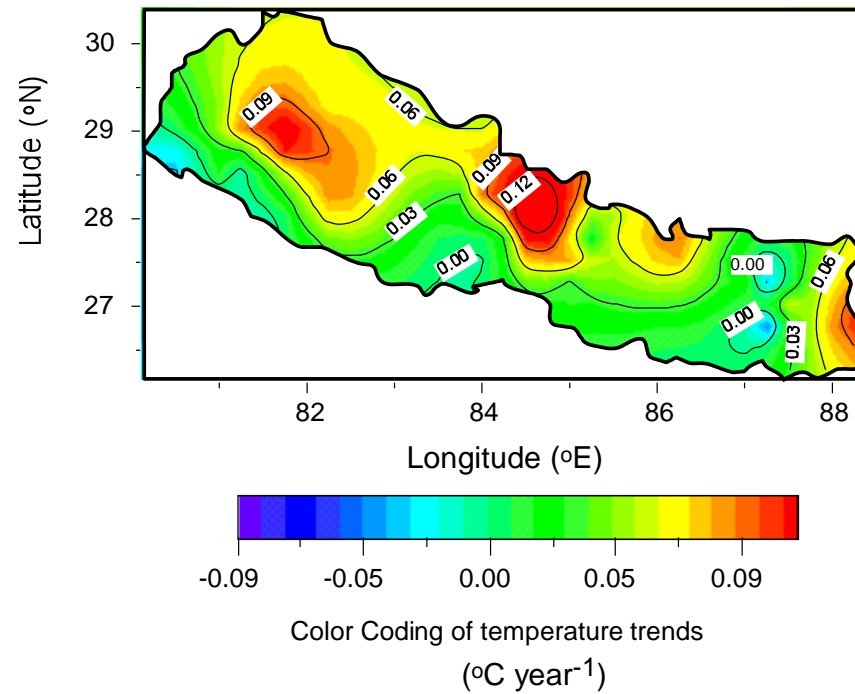
Upper Air Observation

- Upper air observations are not only important but essential toward the understanding of the atmospheric behavior and their prediction.
- At present none in Nepal
- Is there any possibility of even having a temporary station for monitoring the upper atmosphere?

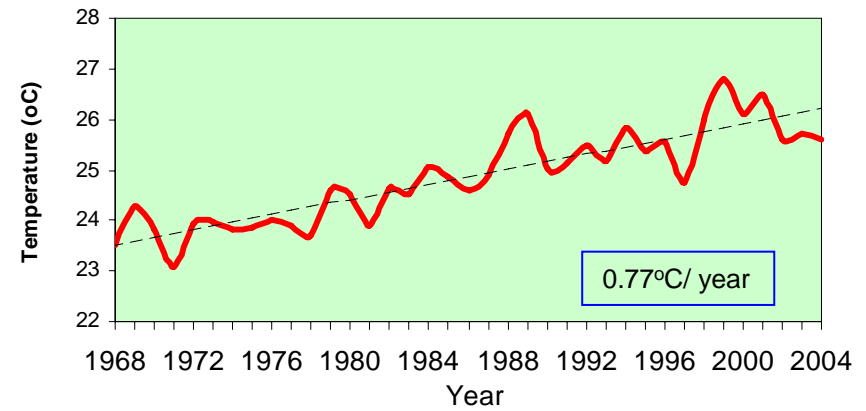


Near Sundari Ghat, Bagmati, 2002 July

Spatial Distribution of maximum temperature trends in Nepal for the period 1977 to 1994.



Kathmandu Maximum Temperature (°C)



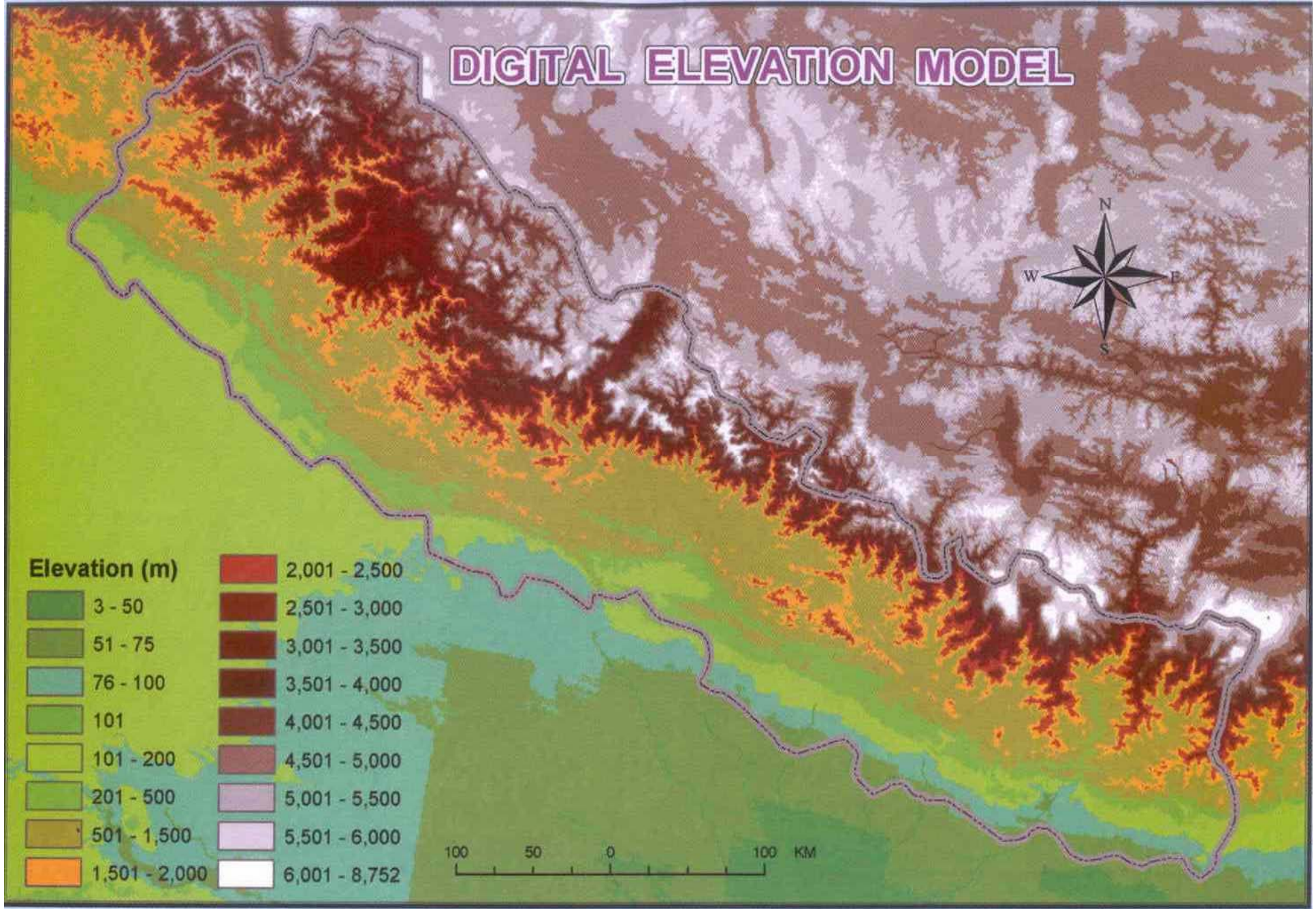
Web site of Department of Hydrology and Meteorology

- www.dhm.gov.np
- www.mfd.gov.np

DIGITAL ELEVATION MODEL

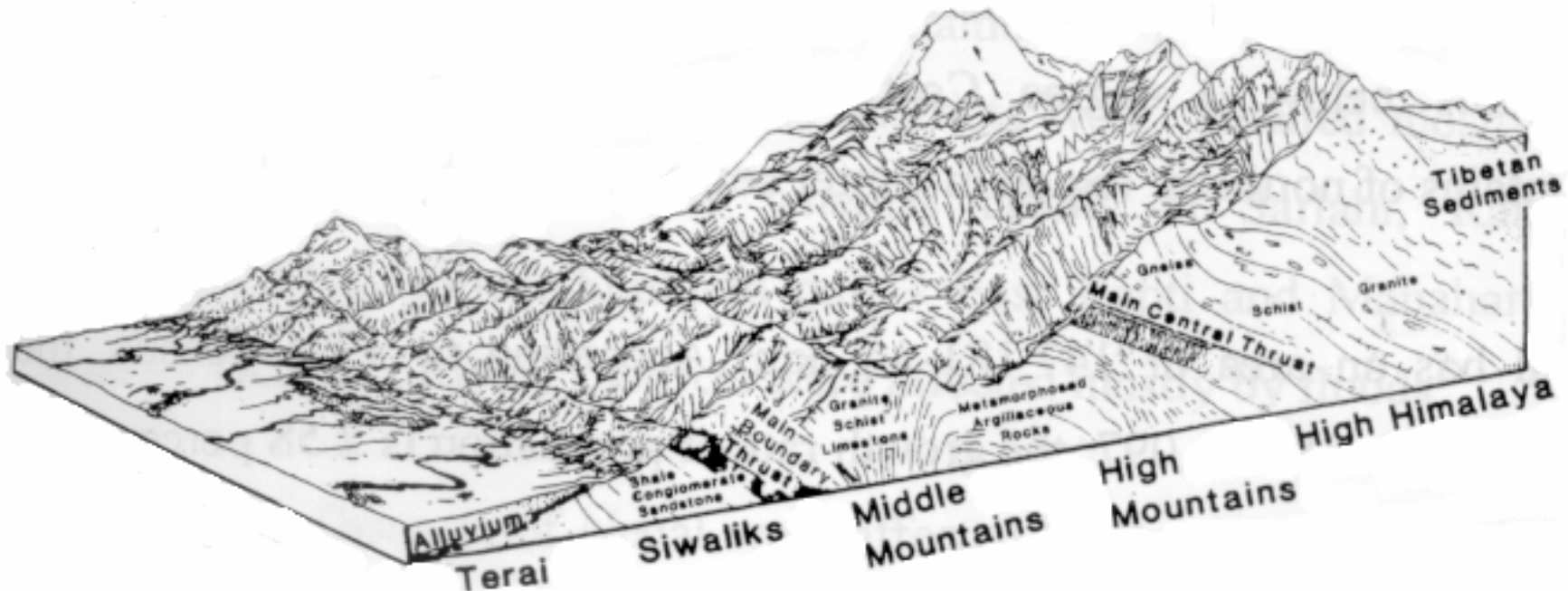


Elevation (m)	
3 - 50	2,001 - 2,500
51 - 75	2,501 - 3,000
76 - 100	3,001 - 3,500
101	3,501 - 4,000
101 - 200	4,001 - 4,500
201 - 500	4,501 - 5,000
501 - 1,500	5,001 - 5,500
1,501 - 2,000	5,501 - 6,000
	6,001 - 8,752



Physiography

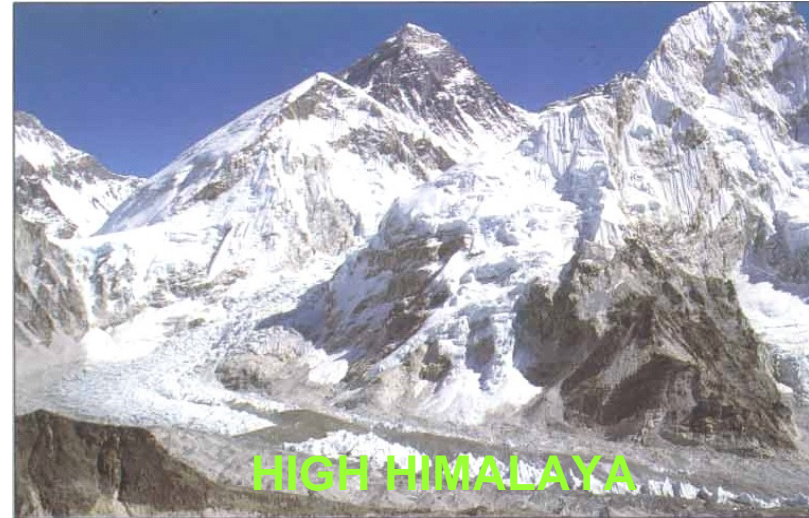
THE PHYSIOGRAPHIC REGIONS OF NEPAL



(Source: modified from Nelson, et al 1980, and Ramsay, 1986)



The Diversity



Himalayan region and modeling

- In this part of the South Asia especially in the Himalayan region the success story of the monsoon modeling has yet to be made.
- The Himalayan topography is still a scientific challenge to the modeling communities.

Proposal: To make the effort to develop model in the Himalayan region so that it can be applied effectively for the benefit to the people in that region.

Thank you