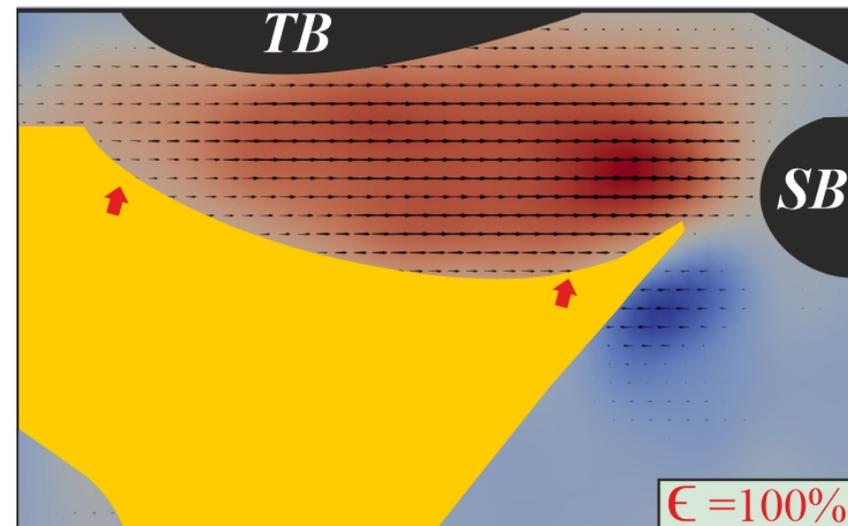
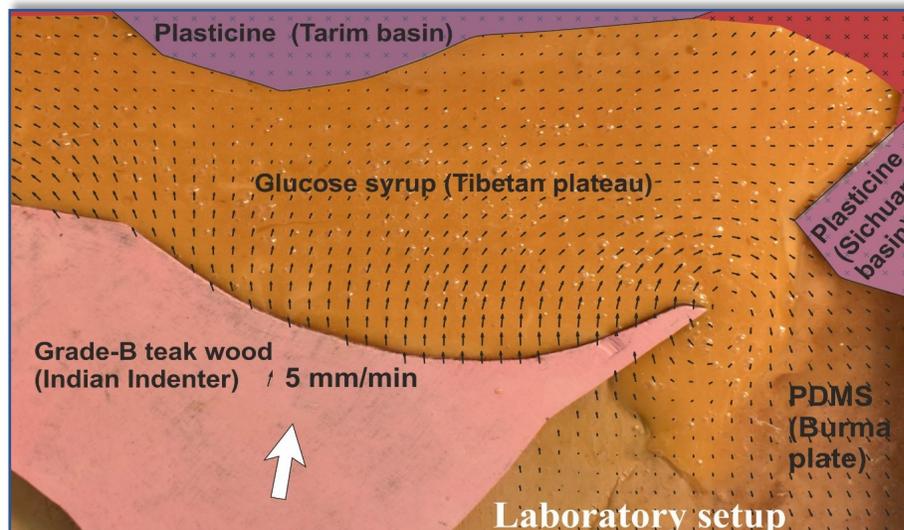


Tectonic transitions in the Tibetan Plateau during India-Asia collision: Findings from scaled laboratory models

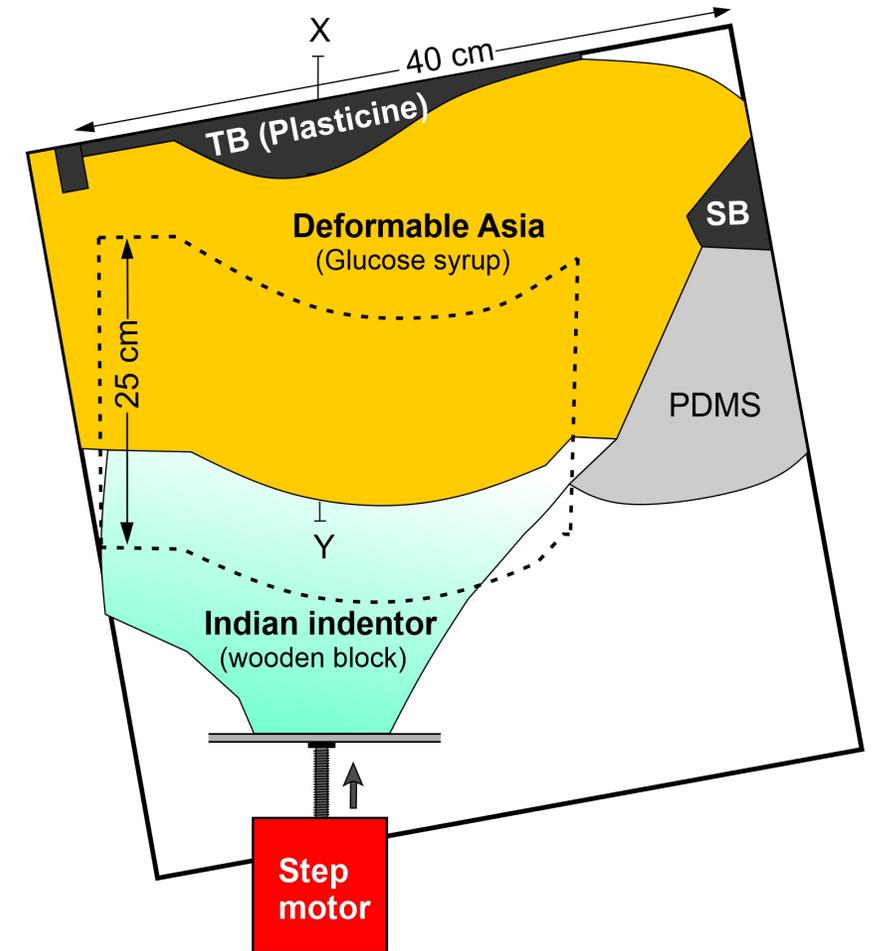
**Arnab Roy, Giridas Maiti, Joyjeet Sen, Nibir Mandal
Dept. of Geological Sciences, Jadavpur University, India.*

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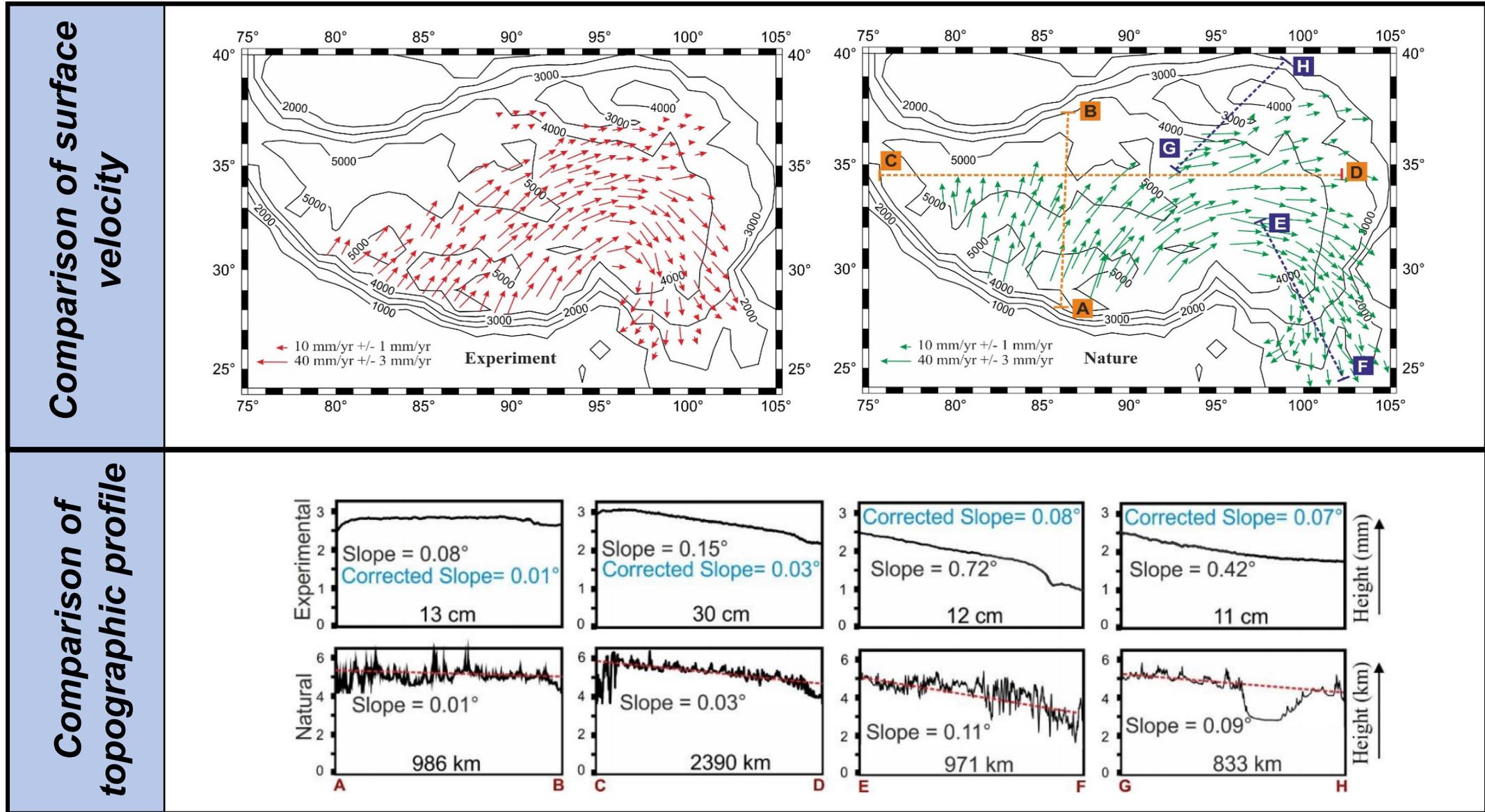
The aim of our study

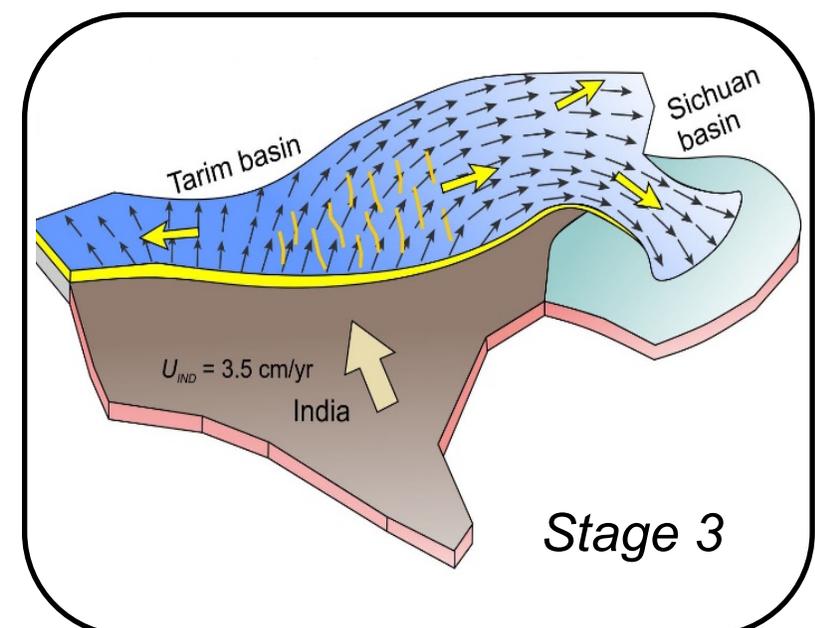
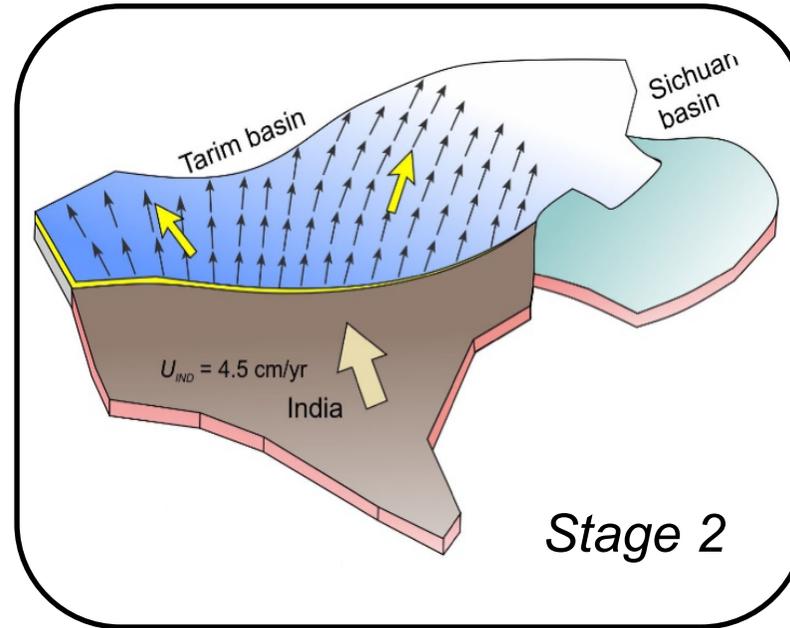
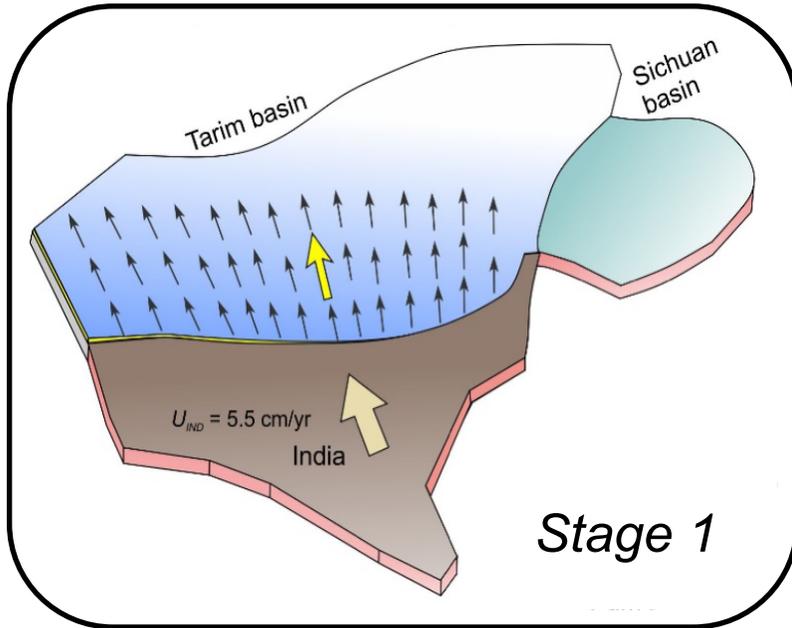
- To explore the **influence of the Indo- Asian collisional dynamics** in creating the present day **extensional regime** within the Tibetan Plateau.
- To understand the fundamental issues related to how the **E-W topographic gradient** in the Tibetan Plateau **came into existence** and what triggered the **gravitational collapse** of the plateau in the India- Asia collisional history.
- To review the **influence of the lateral crustal heterogeneities** (Tarim, Sichuan etc) around the Tibetan Plateau, in the **evolution of the Tibetan crustal flow**.



A schematic presentation (plan view) of the laboratory setup.

Comparison of model results with natural data shows very good consistency.





A cartoon representation of the three-stage evolution of crustal-flow pattern in the Tibetan plateau with decreasing Indian indentation velocity (U_{IND}).

This study explains the **onset of E-W extension in Tibet** as a consequence of **decreasing Indian indentation velocity** in India-Asia collision history.

ARNAB ROY
 CSIR- SRF FELLOW, HPT LAB,
 JADAVPUR UNIVERSITY
 Profile : https://www.researchgate.net/profile/Arnab_Roy6
 Mail: royarnabroy18@gmail.com