

# Acknowledgments

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the Himalayan frontal thrusts with the probably synchronous Kishtwar and Larji-Kullu-Rampur domes in the middle of the High Himalaya. The models of Beaumont et al. (1994, 1996) and Escher & Beaumont (1997) suggest that the initiation of up-warping at the backstop may be controlled by reduction in the convergent material that can be accommodated by the subduction channel. During the late orogenic and active Himalayan phase of dextral transpression between India and Asia, the dome structures continue to be uplifted and are often limited by younger normal faults and flexures such as the N-striking Tso Moriri fault and the Tso Kar and Yurdi flexures. The latter is together with the WNW-striking Sanku flexure responsible for the active uplift of the Suru syntaxis (Suru dome).

### Conclusion

In conclusion, the Himalayan range was built up during the convergence of the Indian and Asian plates by a typical succession of orogenic phases (Masclé 1985, Le Fort 1996, Hodges 2000), where the preceding phase influences the next younger one. The main phases of the NW Himalaya are enumerated in the following list:

- 1) The Late Cretaceous and Paleocene **Transhimalayan batholith phase** (prothimalayan phase, Hodges 2000), characterised by the 103-50 Ma Andean type Ladakh magmatism, the accretion of the Dras-Nindam arc, the accretion and later obduction of the Spongtang immature island arc forming the southern active border of Asia and forearc sediment deposition. The Transhimalayan batholith, together with the Asian mantle wedge, form the Asian backstop for the Himalayan range.
- 2) The **Shikar Beh phase**: the intra continental NE-verging Shikar Beh range of an unknown, probably late Paleocene age,
- 3) The Eocene **North Himalayan phase** (eohimalayan phase, Hodges 2000) creating the SW-directed North Himalayan accretionary wedge.
- 4) The late Eocene-Miocene **High Himalayan phase** (neohimalayan phase, Hodges 2000): The zone of dry intra-crustal melting below the North Himalayan range and the Shikar Beh nappe stack determined the future position of the Main Central thrust at the base of the High Himalayan or "Crystalline" nappe.
- 5) The late Miocene to present **Lesser Himalayan phase**, with the formation of the deep-seated intracrustal Main boundary thrust.
- 6) The active **Subhimalayan phase** with the Subhimalayan thrust in front and the Active Himalayan thrust at the base of the present Himalayan accretionary wedge.

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