Determining when India collided with Asia to form the Himalayan mountains

3 April 2017

The collision between the Indian subcontinent and the Asian landmass resulted in the formation of the Himalayan Mountains and the rise of the Tibetan Plateau, with consequent major climatic and environmental changes around our planet. Placing precise constraints on the timing of the India-Asia continental collision is essential to understanding the subsequent geological and topographic evolution of the orogenic belt as well as the tectonic uplift of the Tibetan Plateau and their effects on climate, environment and life. A recent study has precisely constrained the timing of the initial India-Asia continental collision via the accurate analysis of the sedimentary record preserved along the collision zone.

This study represents a major contribution to understanding plate tectonics and continental dynamics, and is of great significance, not only as far as the India-Asia collision, Himalayan orogeny, Tibetan-Plateau uplift and consequent Cenozoic climatic change are concerned, but also because it
provides a reference standard useful to investigate the process of continental collision and to reconstruct its progress in time resulting in the full growth of huge mountain belts.


---

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*