

# Giant lava flows, giant dyke swarms: The Deccan Traps, India

\*Hetu C. Sheth<sup>1</sup>

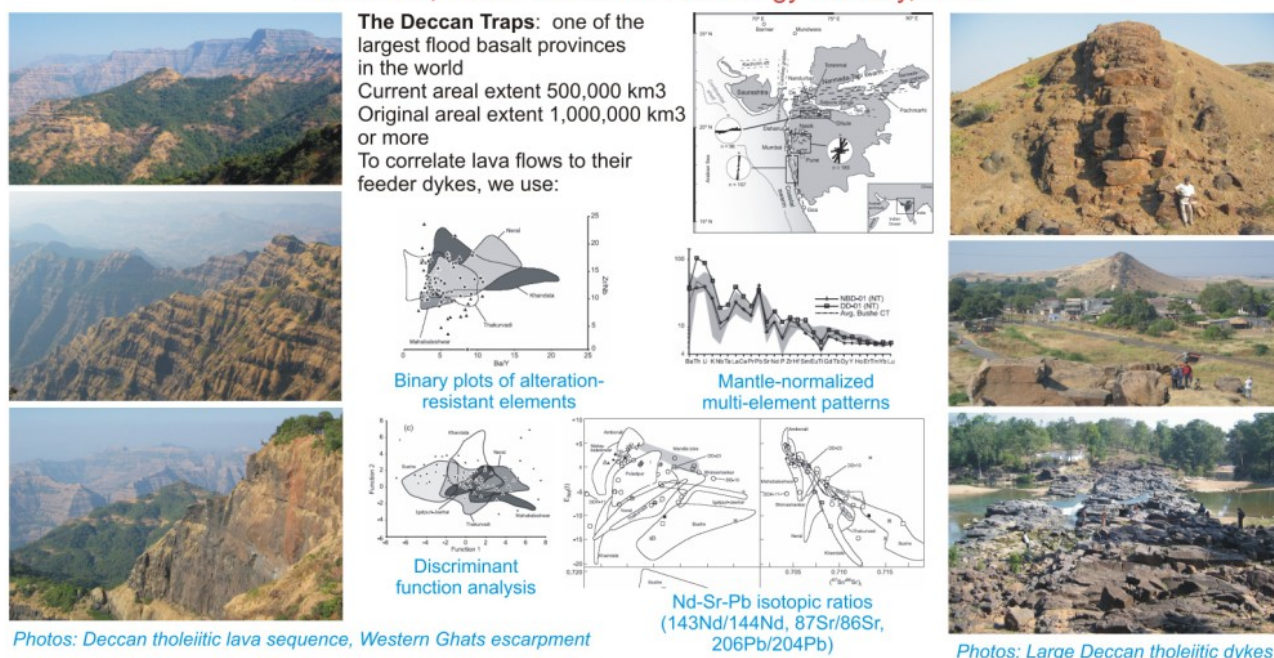
1. Indian Institute of Technology Bombay

This poster presents the main results of the work done by the author and his colleagues on the mafic dyke swarms of the Deccan Traps flood basalt province and their geochemical correlations to the volcanic units, with the aim to identify the feeder dykes of the huge lava flows and lava flow sequences.

Keywords: Flood basalt volcanism, Deccan Traps, Giant dyke swarms

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Hetu Sheth, Indian Institute of Technology Bombay, India



**Important conclusions:** There are three major mafic dyke swarms in the Deccan Traps flood basalt province. Field, petrographic, and geochemical-isotopic work shows many Deccan dykes that are highly probable feeders. Large (30-50 km long) dykes could have supplied large (~1000 km<sup>3</sup>) lava flows over only ~10 years. Distances of surface lava transport were likely several hundred kilometers.

**References:** Bondre et al. 2006 (J. Geol.), Ray et al. 2007 (Bull. Volcanol.), Sheth et al. 2009 (Contrib. Mineral. Petrol.), Vanderkluyzen et al. 2011 (J. Petrol.), Sheth et al. 2013 (Bull. Volcanol.), Sheth et al. 2014 (J. Asian Earth Sci.), Cucciniello et al. 2015 (Bull. Volcanol.), Sheth & Canon-Tapia 2015 (Int. J. Earth Sci.), Sheth et al. 2018 (Geol. J.)