

## TREKKING MAP “KAILASH/GURLA MANDHATA 1:100,000”

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The Institute of Cartography of TU Dresden has published several trekking maps of high mountain areas worldwide within the last two decades. The initial idea for the latest mapping project covering Mount Kailash and Gurla Mandhata arose from the demand for an up-to-date map which illustrates this benchmark area of the joint Sino-German research projects “TiP” (Tibetan Plateau: Formation – Climate – Ecosystems; Subproject: Dynamic Response of Glaciers on the Tibetan Plateau to Climate Change) and “WET” (Variability and Trends in Water Balance Components of Benchmark Drainage Basins on the Tibetan Plateau).

This region in southwestern Tibet and northwestern Nepal has an outstanding cultural and religious importance and attracts both pilgrims and (trekking/mountaineering) tourists alike. The most famous examples are the traditional circuits of Mount Kailash and Lake Manasarovar as well as Gurla Mandhata as an attractive destination for expedition mountaineers.

The production of a high quality trekking map of the area faced several challenges. Ground data was collected during three strenuous field trips both from the Tibetan and Nepalese side. However, the majority of the information had to be extracted from high resolution satellite imagery, open source data and local knowledge collected through Tibetan and Nepalese tour guides, tibetologists and (guide)books. Significant differences between western and standard Tibetan language, various kinds of transcriptions and general problems to get toponym data especially in China made the labeling very difficult.

The digitization of the satellite images was performed as a social cartography project called “Coffee Break Mapping”. The investigation area was therefore divided into 16 quadrants and researchers of the “TiP” and “WET” projects worked on one quadrant each following corporate mapping guidelines and keys. The trekking map “Kailash/Gurla Mandhata” is currently being finalized.

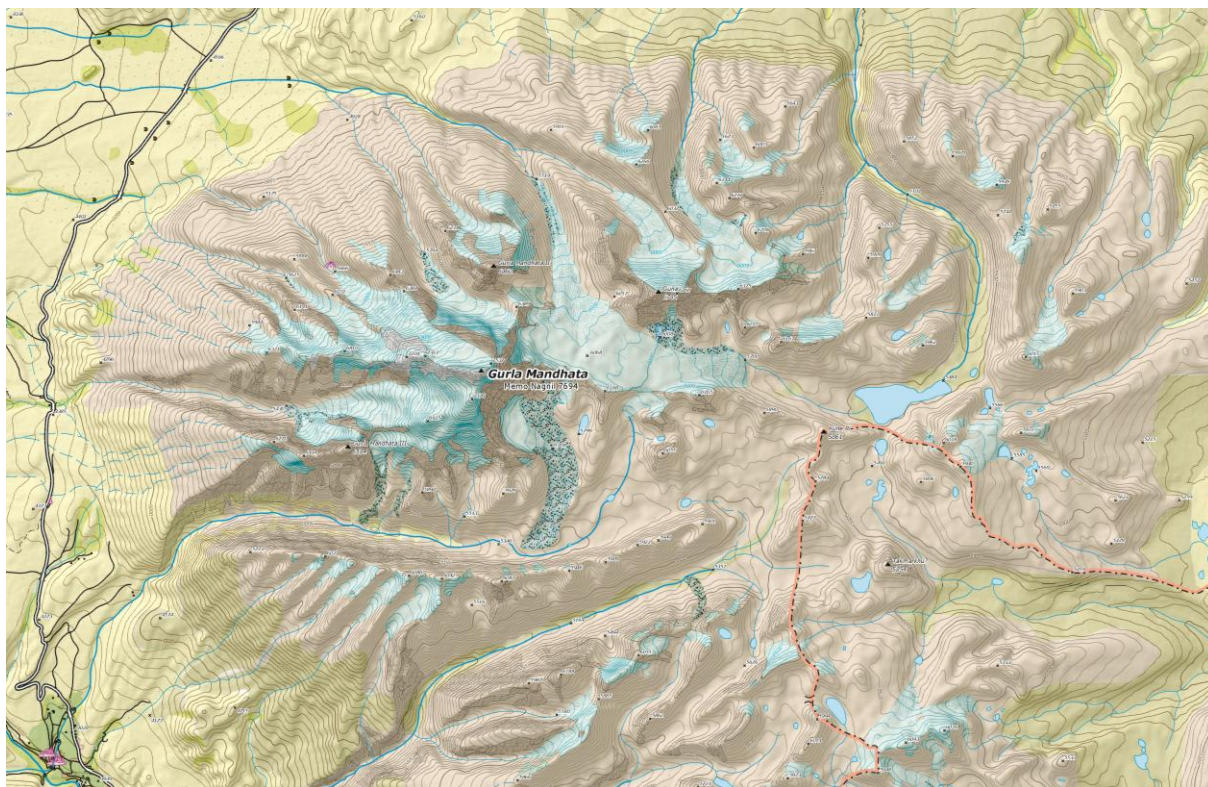


Figure 1: Preliminary map excerpt showing Gurla Mandhata

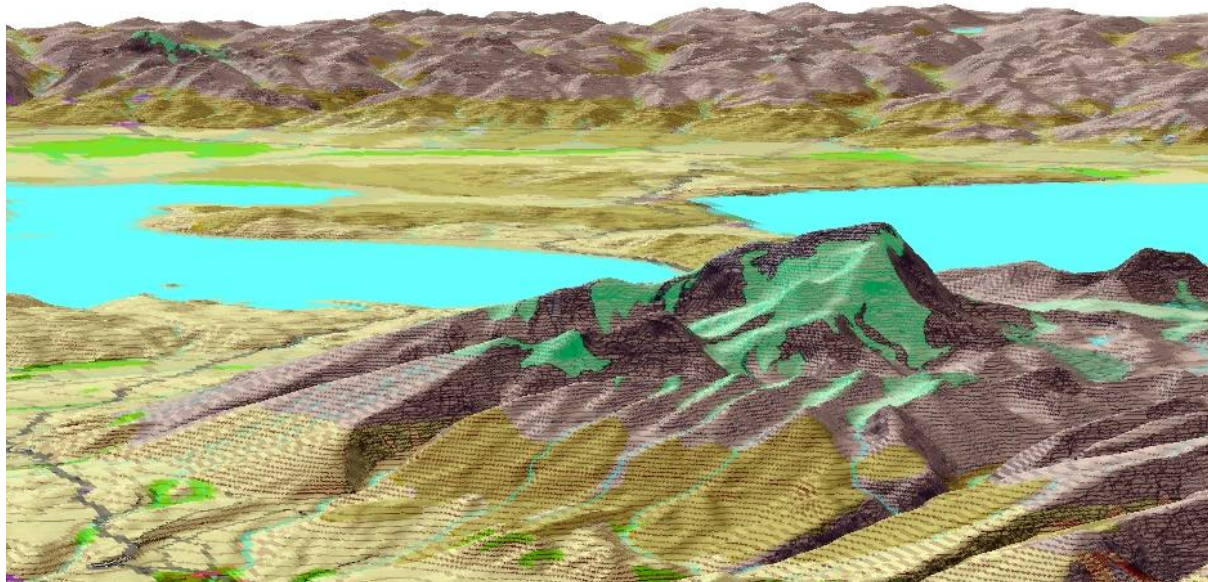


Figure 2: Oblique view of the preliminary map excerpt showing Gurla Mandhata (foreground), Lakes Rakshastal and Manasarovar (middle) and Mount Kailash (background left)