

## Traversing the Himalayan Orogen 2019 – Report of the 8<sup>th</sup> Student Himalayan Exercise Tour

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The Himalaya has been formed by the collision of the Indian and Eurasian plates since ca 50 Ma. Geologic constitution of the Himalaya being composed of six geotectonic zones running parallel to the mountain range clearly reflects the collision tectonics. Large uplifting rate of maximum 5 mm per year of the mountains even at present results in deep valleys and steep mountain slopes where land slide, debris flow, and river flood are often met with. The Himalaya is the living museum for students to study geology and natural hazards.

The NE-SW traverse of the Himalaya along the route connecting the Kaligandaki and Tinau valleys in west-central Nepal (Figs. 1, 2) is the best geo-excursion course that discloses a full view of the Himalayan Orogen. We have been conducting the Japan-Nepal Student Himalayan Exercise Program (Yoshida et al., 2019; SHET-HP, 2019) every year since 2012, and so far eight field tours under the program were successfully conducted along the above course (e.g., Yoshida, Ed., 2019; Yoshida and Ulak, 2017), and preparation for the ninth tour in March 2020 is under the progress.

The Program includes the following two major objectives.

- 1) To let participants to become familiar to the Himalayan geology as well as field geology.
- 2) To let participants to obtain the internationality including familiarity and understanding to other countries and the passion and skill to use English.

The 8<sup>th</sup> Student Himalayan Exercise Tour (8<sup>th</sup> SHET) was conducted in 2019 from March 4<sup>th</sup> to 18<sup>th</sup>. The tour team was composed of 15 students, two citizens and two leaders/teachers from Japan, 2 students and one teacher from Nepal, and one student from China, thus the total being 23, including 14 males and 9 females. Throughout the tour course, a chartered bus was used along the course Kathmandu-Pokhara-Tansen-Lumbini-Narayangath-Mugling-Kathmandu, and 5 jeeps were used along the course Pokhara-Jomsom-Muktinath-Pokhara.

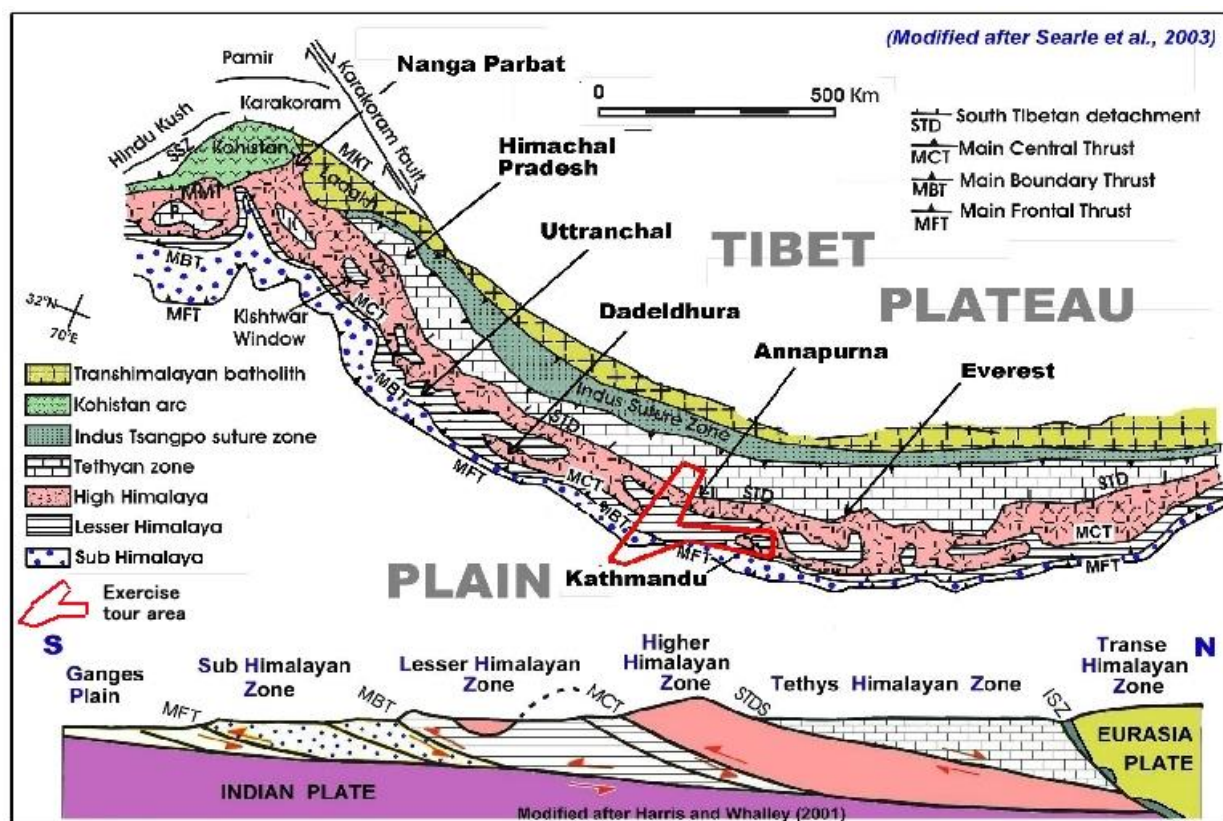


Fig. 1. Geologic outline of the Himalayan Orogen and the tour area.

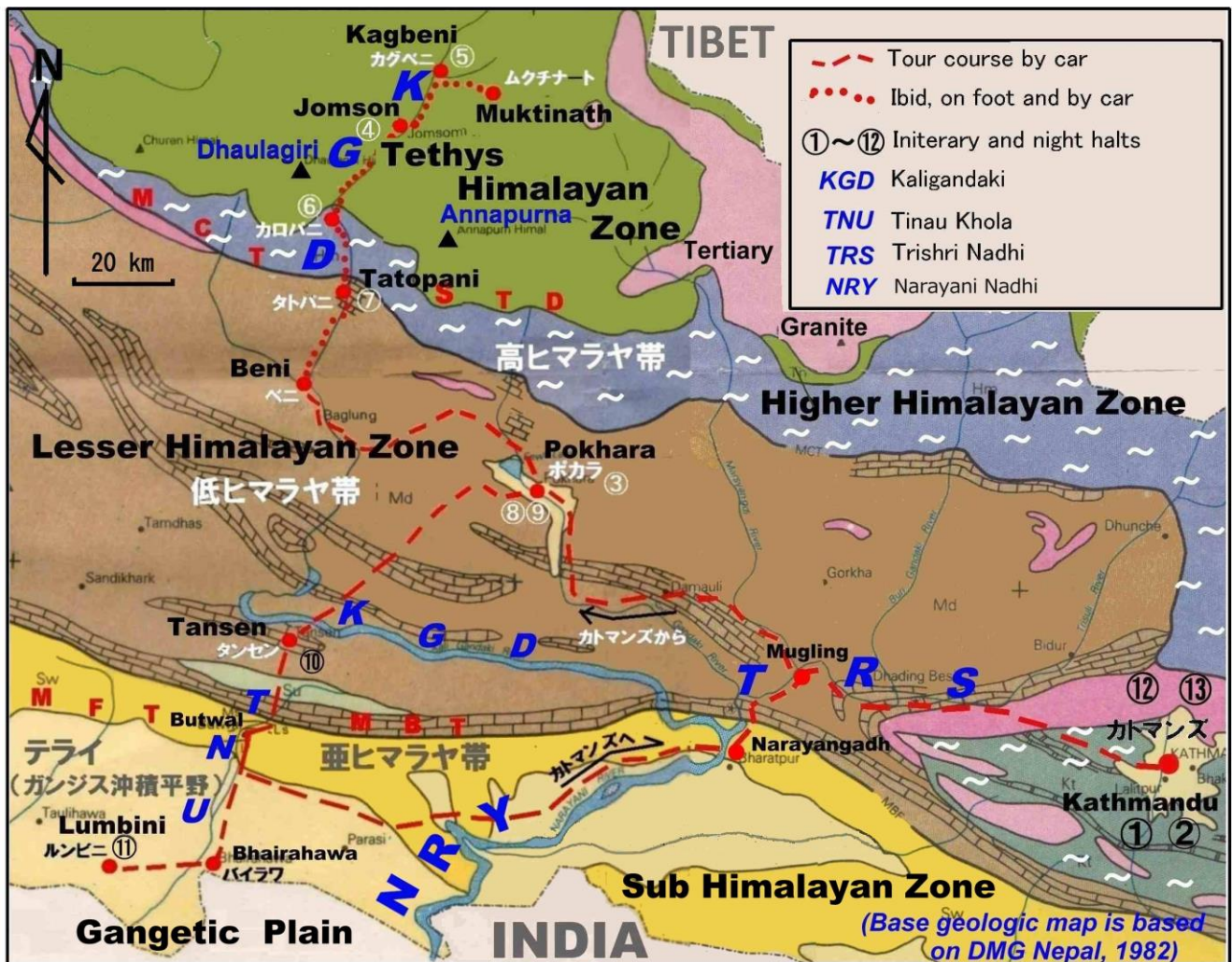


Fig. 2. Geological outline of the study area of the 8<sup>th</sup> SHET. Broken line: Tour course mostly by driving. Dotted line: Tour course by trekking and driving. ①~⑬: Night halts. STD: South Tibetan Detachment, MCT: Main Central Thrust, MBT: Main Boundary Thrust, MFT: Main Frontal Thrust. Base geologic map is derived from DMG Nepal (1982).

Pre- and post- field tour seminars were held at the Department of Geology, Tri-Chandra Campus, and city tours escorted by students of Tri-Chandra Campus were held before and after the field tour. Through the tour and pre- and post-tour programs above, objectives of the program mentioned above were successfully achieved.

In the presentation, highlights of the field tour will be displayed and calling for participants to the 9<sup>th</sup> SHET in next March will be advertised.

## References

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