

## The paleoseismological activity of the Himalaya-Bengal Fault by trenching survey at Kakarbhita, Eastern Nepal

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We present the paleoseismological activity of the Himalaya-Bengal fault by trenching study at Kakarbhita, southeastern Nepal. This fault, slips right-laterally, runs from where it intercepts and becomes coincident with the Main Boundary Thrust in southeastern Nepal for at least 100 km to the southeast in Saidpur, Bangladesh, and may connect to the western end of the Dauki fault of active thrust along the southern margin of the Shillong plateau. It is possible that the Himalaya-Bengal fault is characterized as transform fault between the Himalaya Front Thrust and the Dauki fault related to the current Himalayan collision.

We trenched across this fault at Tokura Tea Estate about 2 km NW from Kakarbhita, where this fault produces the spindle-shaped pull-a-part basin along the fault.

In the log of the wall of the exposed trench, two main vertical-dipping fault zones deformed the fluvial - back marsh deposits with creating the depression between fault zones. We recognized two faulting events at least in this log by evidence of abrupt truncation of faults. Pending <sup>14</sup>C dates will hopefully bracket the actual timing of these events and the faulting recurrence interval.