



*Supplement of*

## **Integrated hydrogeological and hydrogeochemical dataset of an alpine catchment in the northern Qinghai–Tibet Plateau**

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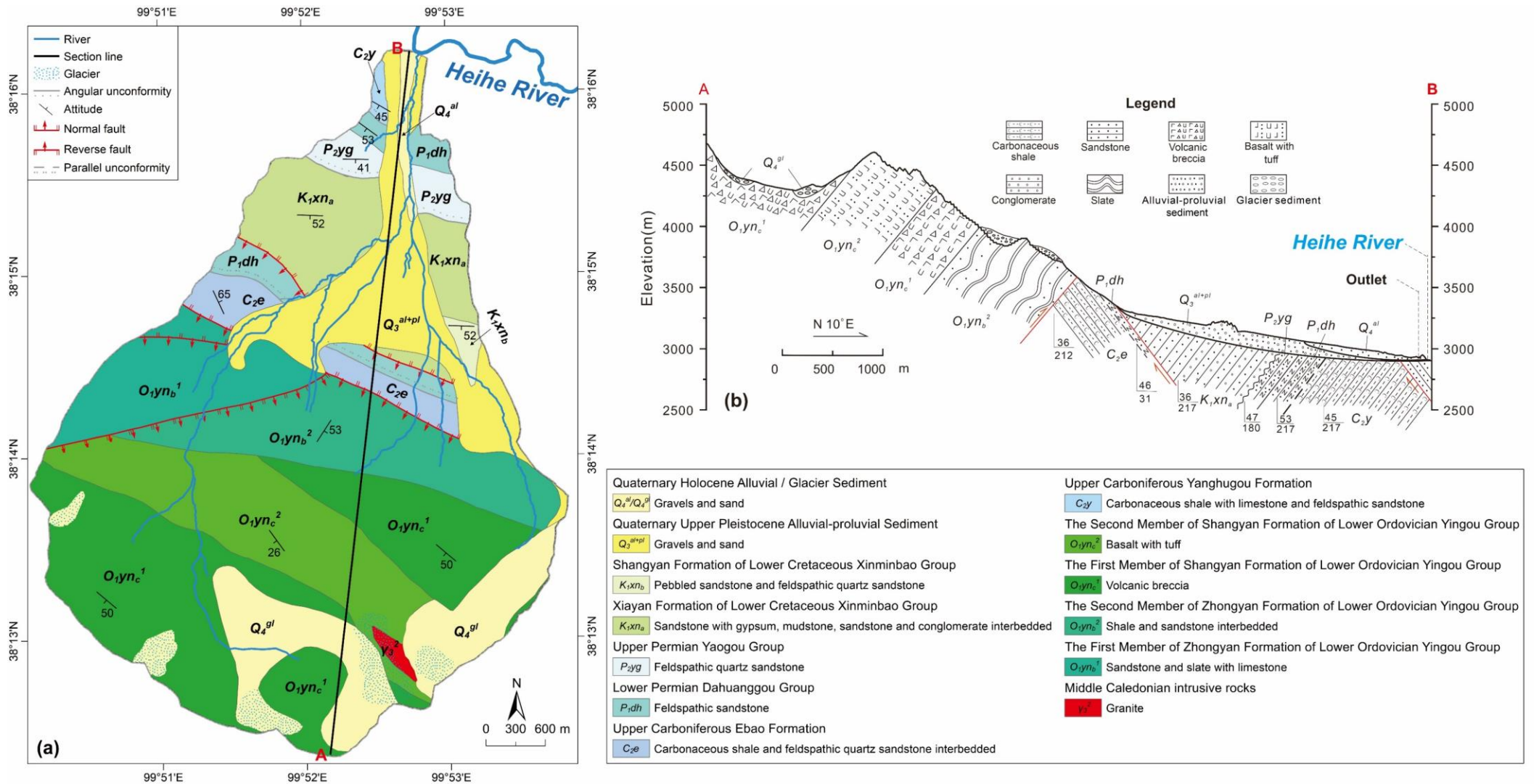


Figure S1. (a) Geologic map of the study area; (b) a geological cross section (Modified from Liu, 2013; Ma et al., 2017; Chang, 2019).

#### References

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- Ma, R., Sun, Z., Hu, Y., Chang, Q., Wang, S., Xing, W., and Ge, M.: Hydrological connectivity from glaciers to rivers in the Qinghai–Tibet Plateau: roles of suprapermafrost and subpermafrost groundwater, *Hydrol. Earth Syst. Sci.*, 21, 4803-4823, <https://doi.org/10.5194/hess-21-4803-2017>, 2017.

## **Text S1. The description of sensor calibration**

All temperature sensors were calibrated in the laboratory before use. We placed each temperature sensor in water under eight different temperatures (-40 °C, -30 °C, -20 °C, 0 °C, 10 °C, 20 °C, 30 °C, and 40 °C) and the temperatures were measured using the sensors. The slopes and the correlation coefficients between measured vs. actual values for all sensors were in the range of 0.998–1.003.

Similarly, all pressure sensors were placed under the condition of the nine different pressures (10 kpa, 50 kpa, 100 kpa, 150 kpa, 200 kpa, 250 kpa, 300 kpa, 350 kpa, and 399 kpa), and the pressures were measured by these sensors. The slopes and the correlation coefficients between measured vs. actual values for all sensors were in the range of 0.999–1.001.