

Activity Report 2025 – Task Forces / Coordination Committees

Project Title: Global Geo Transects (GGT)

Project No.: 2021-CC4

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1. Highlights of recent ILP Task Force work/results

An ~1000 km long reflection/refraction seismic profile has been acquired in western Tibet and the Tarim Basin by Sinoprobe-2 as part of a geophysical-geological transect across Mongolia, linking existing geosections in the Qinghai-Tibet Plateau and Siberia.

152 broadband seismic stations have been deployed on the Mongolian Plateau in 2025.

Collaboration between China and Brazil on broad-band seismic data acquisition is continued.

2. Presence at international meetings/workshops (this year)

GGT organised one symposium at EGU 2025:

Lithosphere structure and evolution worldwide with focus on the Tethyan Belt.

Convenors: Alexey Shulgin, Hans Thybo, Irina Artemieva, Xiaoqing Zhang, Nala Lom, Yang Chu, Vahid Teknik.

GGT co-organised two symposia at AGU 2025:

1. T005 Deep Earth Exploration Structure, Composition, and Processes in Lithosphere. Convenors: Shuwen Dong, Hans Thybo, Larry Brown and Lijun Liu.

2. Town Hall Meeting : New Initiative: EarthProbe Consortium. Convenors: Hans Thybo, Irina Artemieva, Ramon Carbonell, and Marcelo Rocha.

GGT members have given several invited and contributed talks at various meetings during the year.

3. Important publications of ILP Task Force members (max. five)

- Ren, Z., Dong, S., Xiao, W., Sang, M., Zhang, Y., Chen, X., et al. 2025. Cretaceous evolution of the northeastern Asian continent: Insights from the Pikou strike-slip fault zone of the Liaodong Peninsula, NE China. **Tectonics**, 44,e2024TC008639. <https://doi.org/10.1029/2024TC008639>
- Xia, B., Artemieva, I.M., Thybo, H. *, 2025. Phanerozoic emergence of global continental collision and onset of massive crustal eclogitization. **Geology**, doi: 10.1130/G52647.1.
- Makushkina, A., Tauzin, B., Miller, M.S., Tkalčić, H., Thybo, H. *, 2025. Opening of the North Atlantic Ocean and the rise of Scandinavian mountains. **Geology**, doi: 10.1130/G52735.1.
- Kahraman, M., Thybo, H. *, Artemieva, I., Shulgin, A., Hedin, P., Mjelde, R., 2025. Northern Scandinavian mountains supported by a low-grade eclogitic crustal keel. **Nature Comm.**, 16, doi: 10.1038/s41467-025-55865-3

4. New contacts (this year)