

Fig. 7. Simplified geologic map of the Tanggula Mountain thrust system. 1. Cenozoic sediments; 2. Cenozoic volcanics; 3. Jurassic strata; 4. Permian strata; 5. Carboniferous strata; 6. granite; 7. thrust fault; 8. strike-slip fault; 9. normal fault; 10. syncline axes; 11. anticline axes; 12. cross-section line; 13. U-Pb sampling locality; 14. ice cover; 15. lakes; 16. mountain peaks.

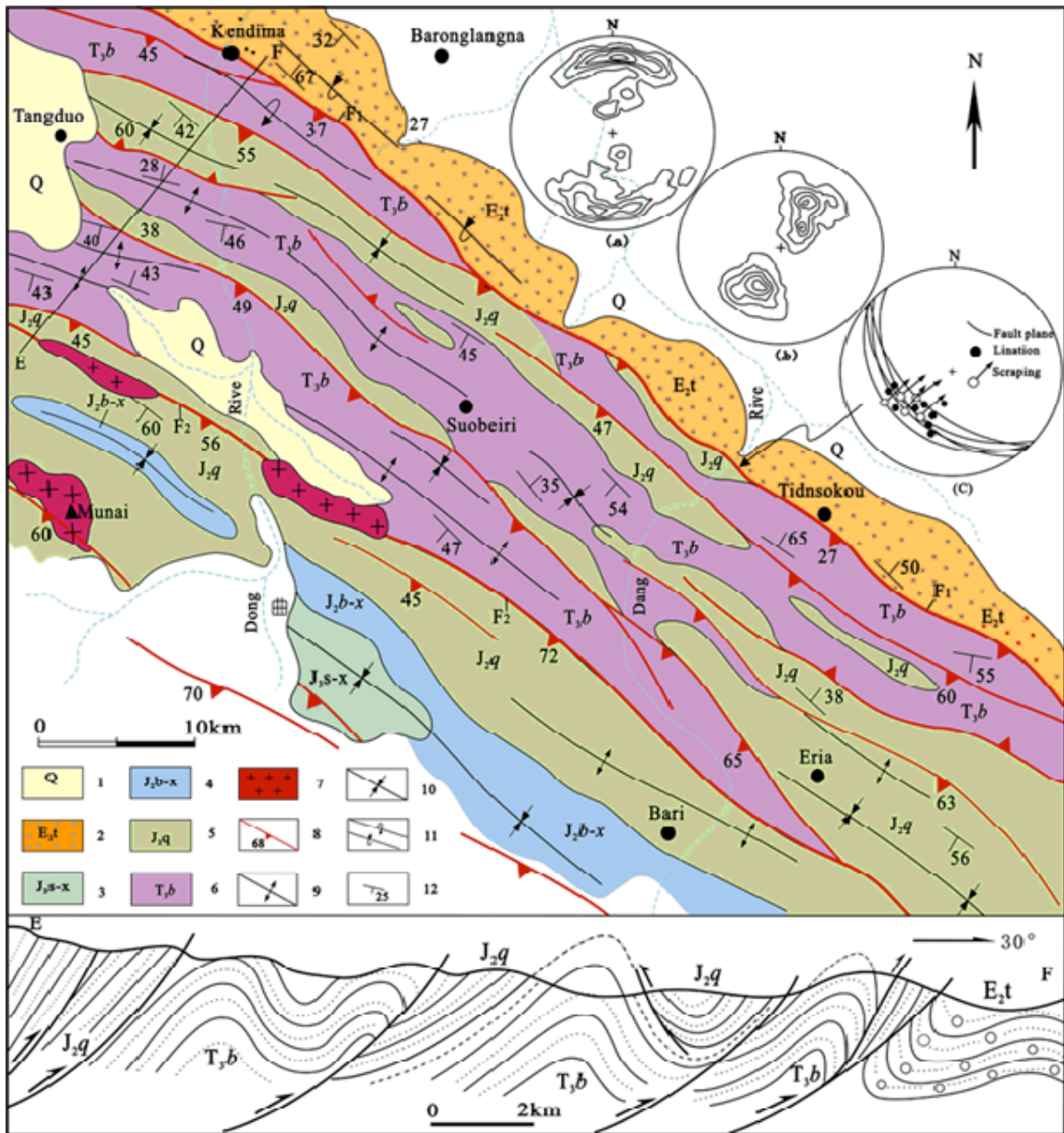


Fig. 8. Profile of the Tanggula thrust system frontal zone in the Kendima area.

1. Quaternary; 2. Paleogene Tuotuohe formation; 3. Jurassic Suowa and Xueshan formations; 4. Jurassic Buqu and Xiali formations; 5. Jurassic Quemocuo formation; 6. Triassic Bagong formation; 7. granite; 8. thrust fault; 9. anticline axes; 10. syncline axes; 11. overturned anticlines and synclines; 12. bedding attitude. **a)** Cenozoic folding ($n=57$ limb attitudes). Contour intervals are: 1.1—3.3—5.5—7.7—9.0—11.0%. **b)** Folding within the frontal zone ($n=61$ limb attitudes). Contour intervals are: 1.5—4.5—7.5—10.5—12.0%. **c)** Stereonath showing bedding attitudes, fault planes, and slip lineations measured on those fault planes. Projection is onto the lower hemisphere.

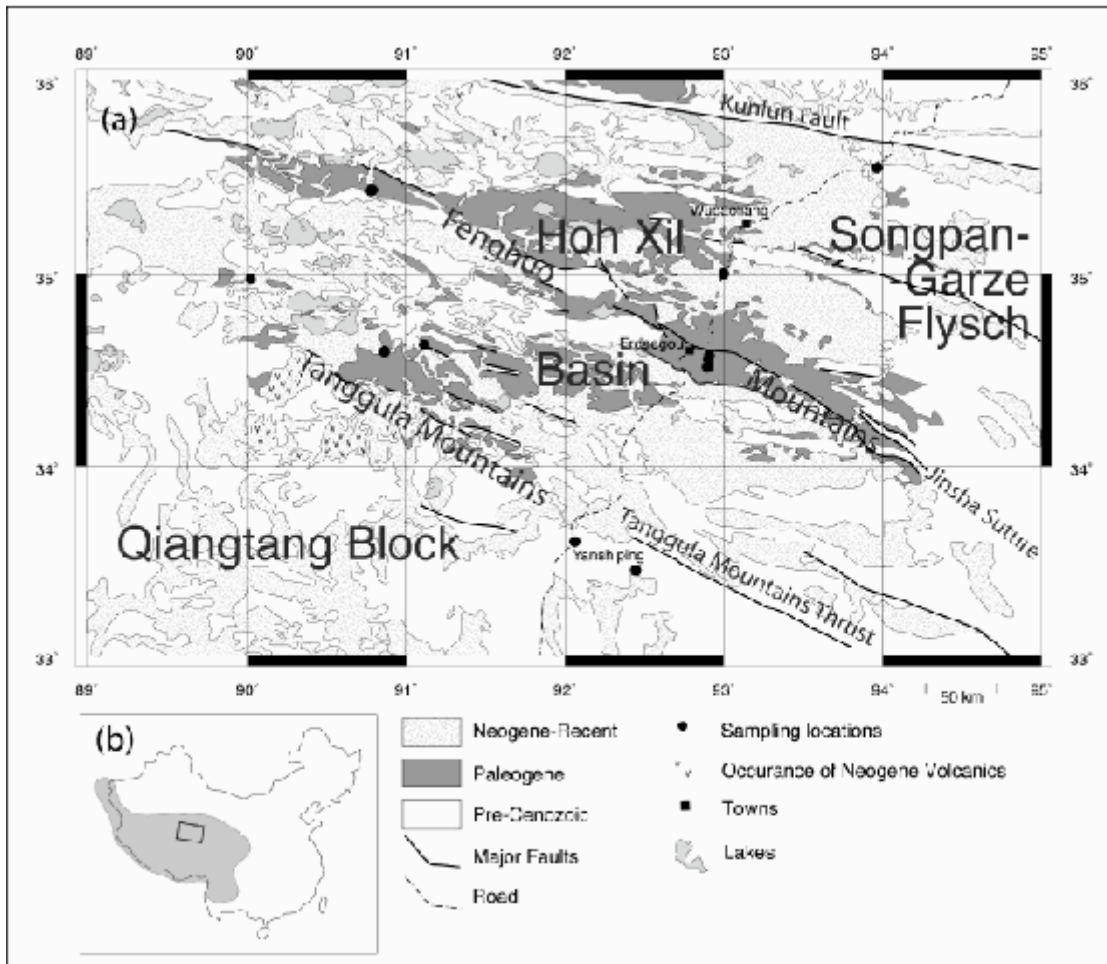


Fig. 9. Simplified geologic map of the Hoh Xil and adjacent regions (north-central Tibet) showing locations of apatite fission-track samples and major geographic features.

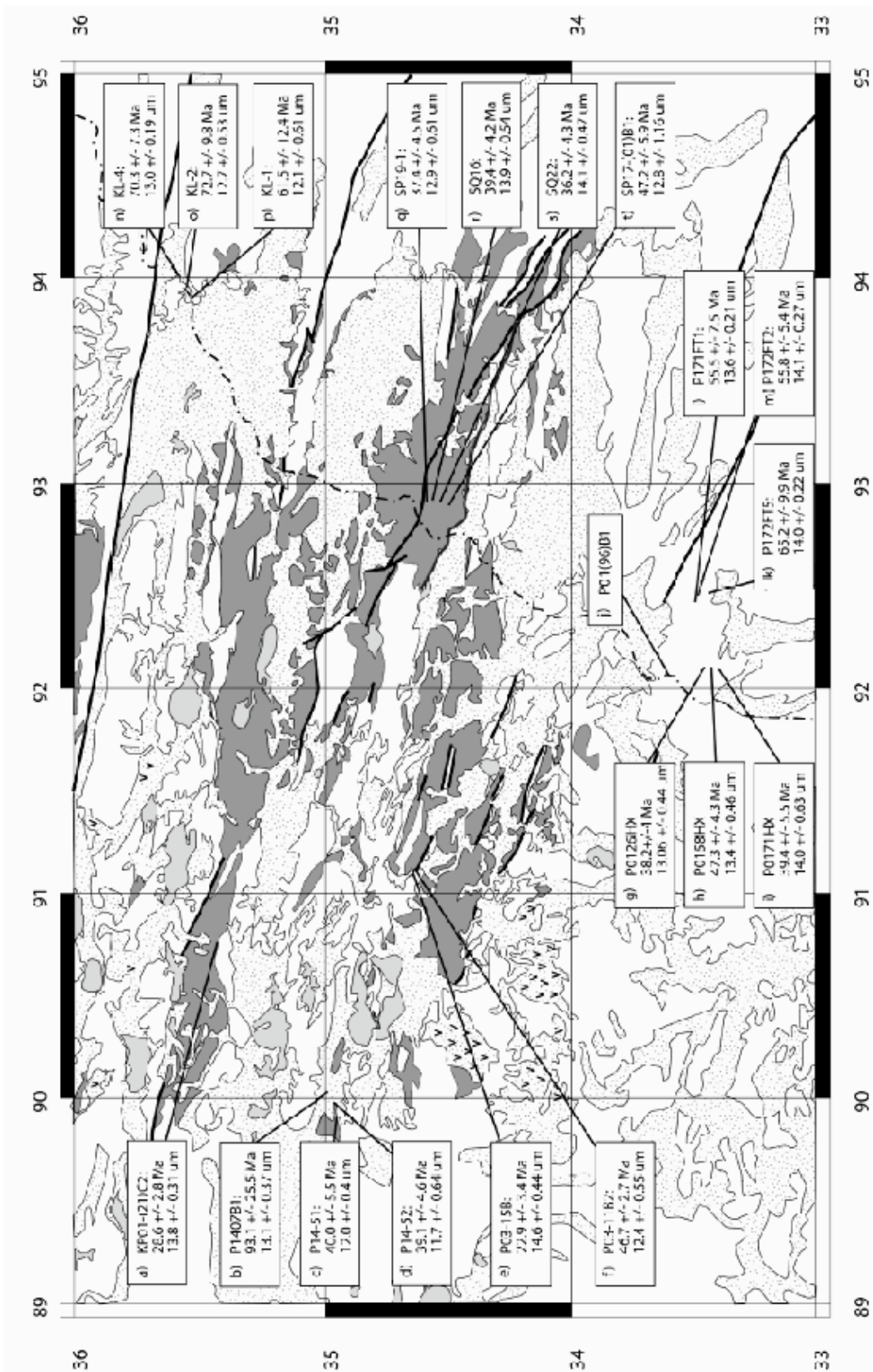


Fig. 10. Apatite-fission track samples, interpreted ages, and mean track lengths overlain on map shown in Figure 9.

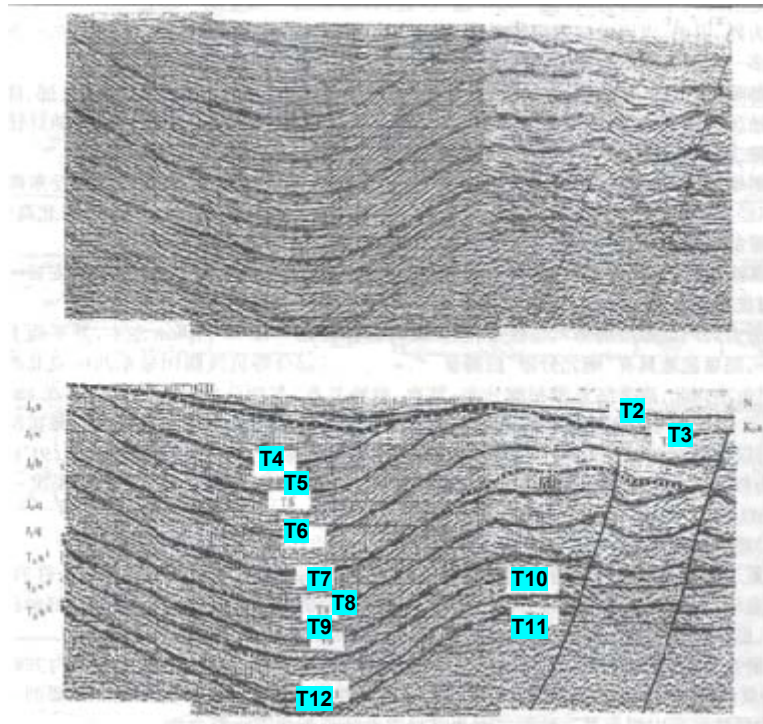


Fig. 11. An original and interpreted seismic profile from the northern Qiangtang area. **Upper:** Original seismic profile (with horizontal distance of ~30 km) in the northern Qiangtang region (unpublished data from the China National Petroleum Corporation). **Lower:** Interpretation of the profile showing an unconformity boundary (T3). Mesozoic Marine strata are immediately beneath the unconformity and are folded and faulted. Continental deposits of the Abushan formation (between T3 and T2) are Upper Cretaceous in age, are significantly less disrupted.

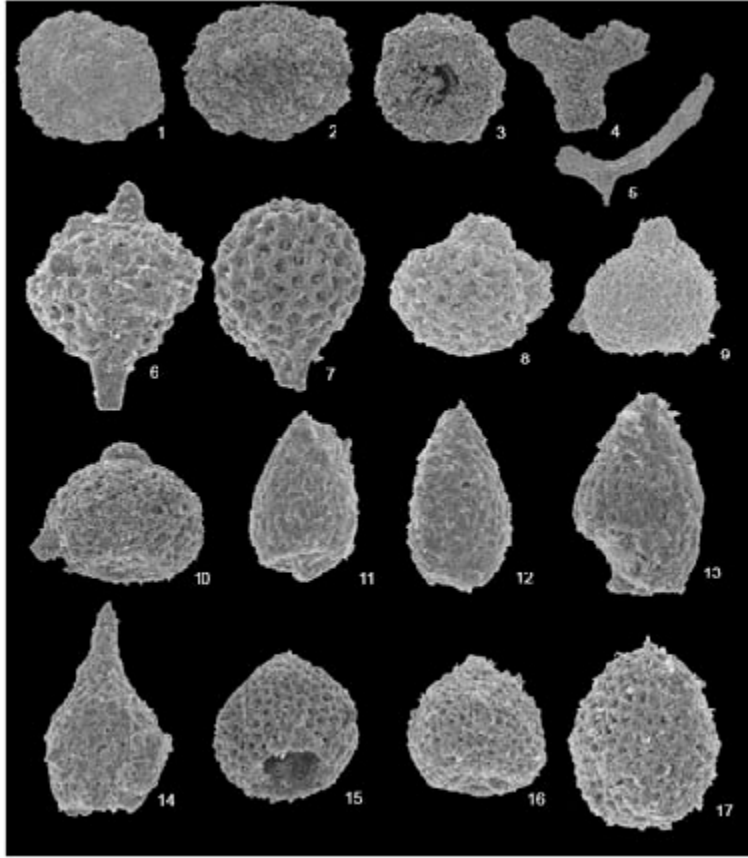


Fig. 12. SEM micrographs of Early Eocene radiolarians from Saga County (9°15'58"N, 85°15'17"E, Z in Fig. 1), located in the northern Tethyan Himalaya. Fossils identified by Marta Bak, Institute of Geological Sciences, Jagiellonian University, Krakow, Poland.

1-2. *Patellula planoconvexa* (SDL11-1, 200x magnification); 3. *Orbiculiforma sacramentoensis* (SDL11-1, 300x magnification); 4. *Pseudoaulophacus riedeli*, SDL11-1, 200x magnification; 5. *Spongosaturminus* sp. cf. *S. ellipticus* (SDL11-1, 200x magnification); 6-7. *Amphisphaera coronata* (SDO16-2, 250x magnification); 8. *Calocycloma ampulla* (SDL16-2, 300x magnification); 9-10. *Bekoma* sp. (SDL16-2, 250x magnification); 11. *Buryella hanna*e (SDL16-2, 300x magnification); 12. *Buryella clinata* (SDL16-2, 300x magnification); 13. *Buryella tetradica* (SDL16-2, 500x magnification); 14. *Lamptonium fabaeforme constrictum* (SDL16-2, 300x magnification); 15. *Lamptonium pennatum* (SDL16-2, 250x magnification); 16. *Lamptonium* (?) *colymbus* (SDL16-2, 250x magnification); 17. *Lithomespilus coronatus* (SDL16-2, 250x magnification).