
Table DR1: Zircon U-Pb data.

Table DR2: Electron Microprobe Analyses of Mineral Compositions

DR Figure 1: Photomicrographs of quartz dynamic recrystallization fabrics. Locations are given in Figure 3. a-b) Grain Boundary Migration (GBM) within quartz-rich microlithons of schists (AR-9-13-03-1 and AR-9-10-03-5) from samples collected in the hanging wall of the Torbashi Fault. c) Subgrain Rotation (SGR) of sheared granite from the footwall of the Torbashi thrust near the town of Gedeben (DI-7-16-10-1). d-e) Bulging dynamic recrystallization (BLG) overprinting GBM within quartz grains from footwall of Torbashi thrust (AR-9-10-3-4).

DR Figure 2: Thin sections of samples used for Garnet-Biotite Fe-Mg exchange thermometry. (a) Sample AR-9-10-03-1. (b) Sample AR940-09. Gt – garnet; Bio – Biotite; Tr1 – Transect 1; Tr2 – Transect 2; TR3 – Transect 3.

DR Figure 3: Zircon U/Pb Concordia plots for samples in Figure 10.

DR Figure 4: Thin sections showing representative thin sections from the hanging wall and footwall of the Baoziya Thrust.

DR Figure 5: Zircon U/Pb cumulative probability diagrams showing comparison of ages between samples in this study (black lines) and composite populations from other regions of the Pamir or Tibet (color filled).

DR Figure 6: Unmarked field photographs of Figure 4 in manuscript.

DR Figure 7: Satellite image emphasizing the location of the southern exposure of the Torbashi Thrust. Arrows indicate the location of the contact.

DR Figure 8: Geologic Map of the Southeast Pamir. Same as Figure 3.
Imrecke et al

DR Figure 2
Imrecke et al.

DR - Figure 3
Petrographic Relationships North of the Muztaghata Gneiss Dome

Baoziya Thrust

Imrecke et al.

DR-Figure 4
Imrecke et al.

DR- Figure 5