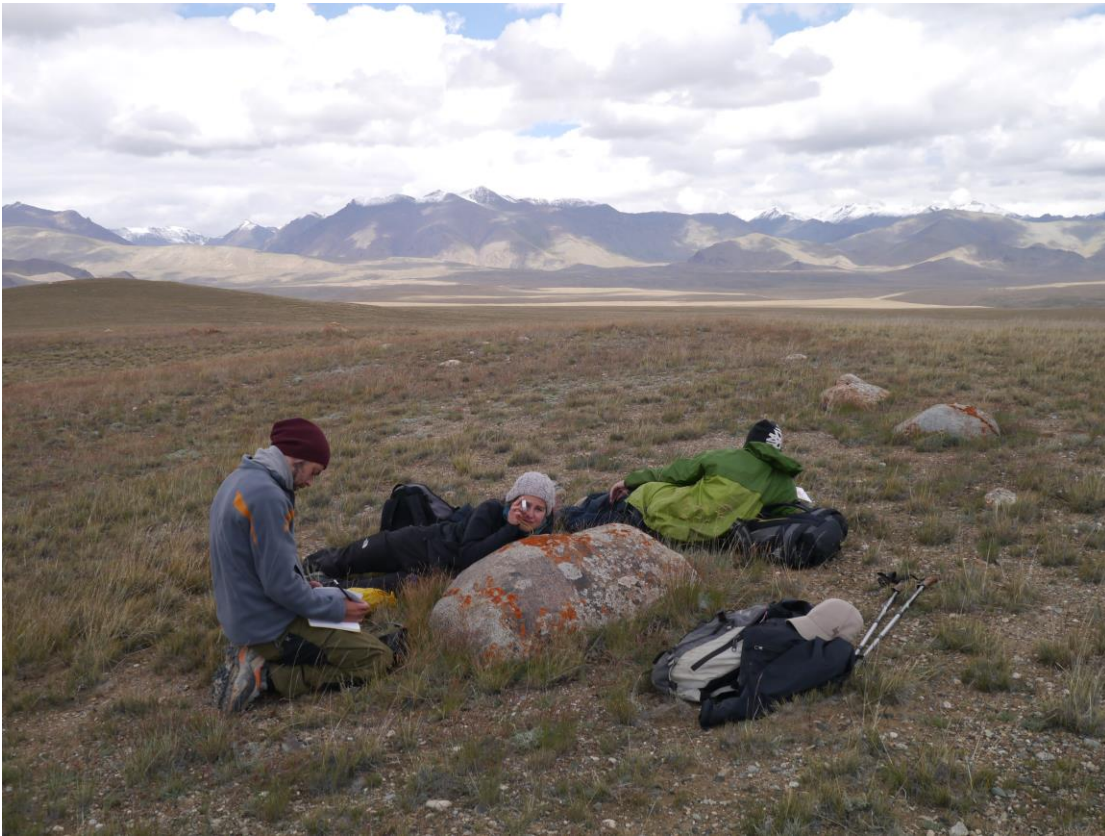


Supplementary data

Sample information

TS-C-12-007 (TAR 2)

Medium to coarse-grained granitic boulder on right-lateral Taragay moraine in the Ak-Shyrak area. Moraine surface is highly degraded with very subtle topography. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.2 m x 0.8 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



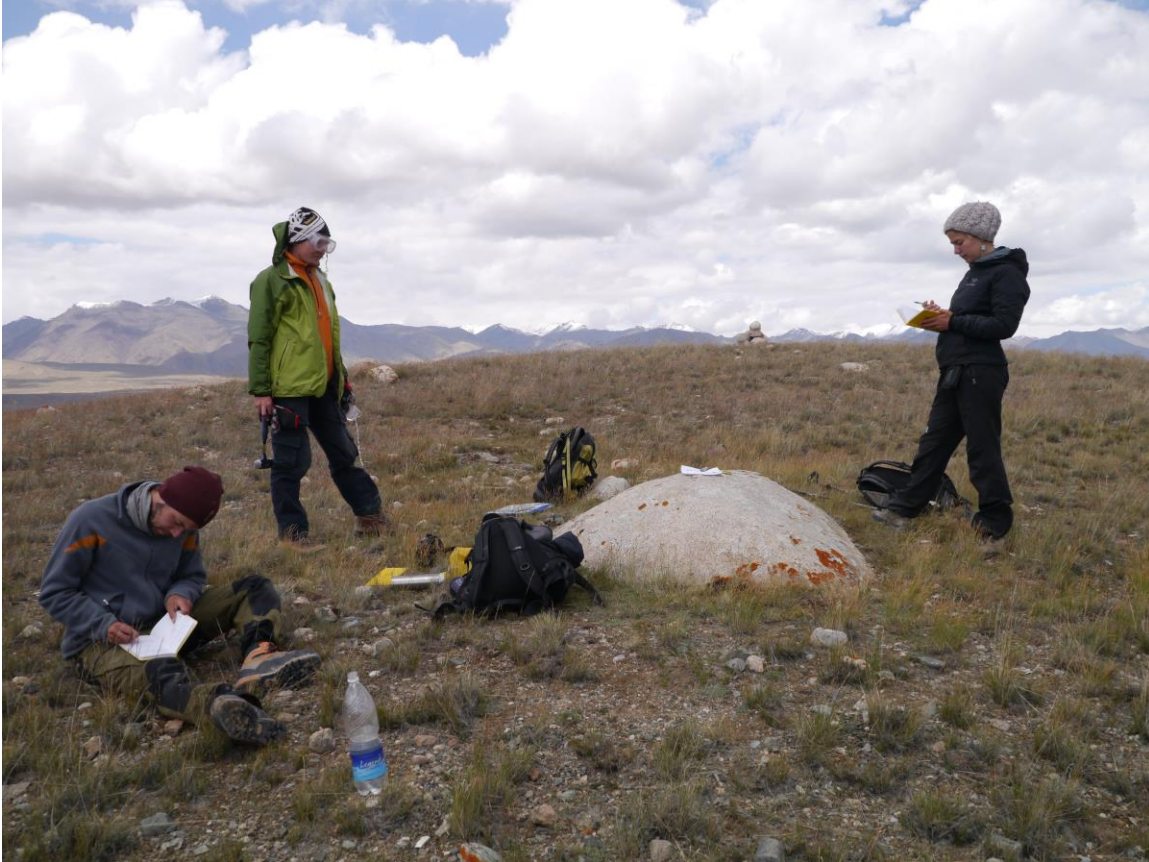
TS-C-12-008 (TAR 2)

Medium to coarse-grained granitic boulder on Right-lateral Taragay moraine in the Ak-Shyrak area. Moraine surface is highly degraded with very subtle topography. Same surface as TS-C-12-007 (TAR 2). Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.1 m x 0.7 m x 0.5 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-009 (TAR 2)

Medium to coarse-grained granitic boulder on Right-lateral Taragay moraine in the Ak-Syrak area. Moraine surface is highly degraded with very subtle topography. Same surface as TS-C-12-007/008 (TAR 2). Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.6 m x 0.4 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



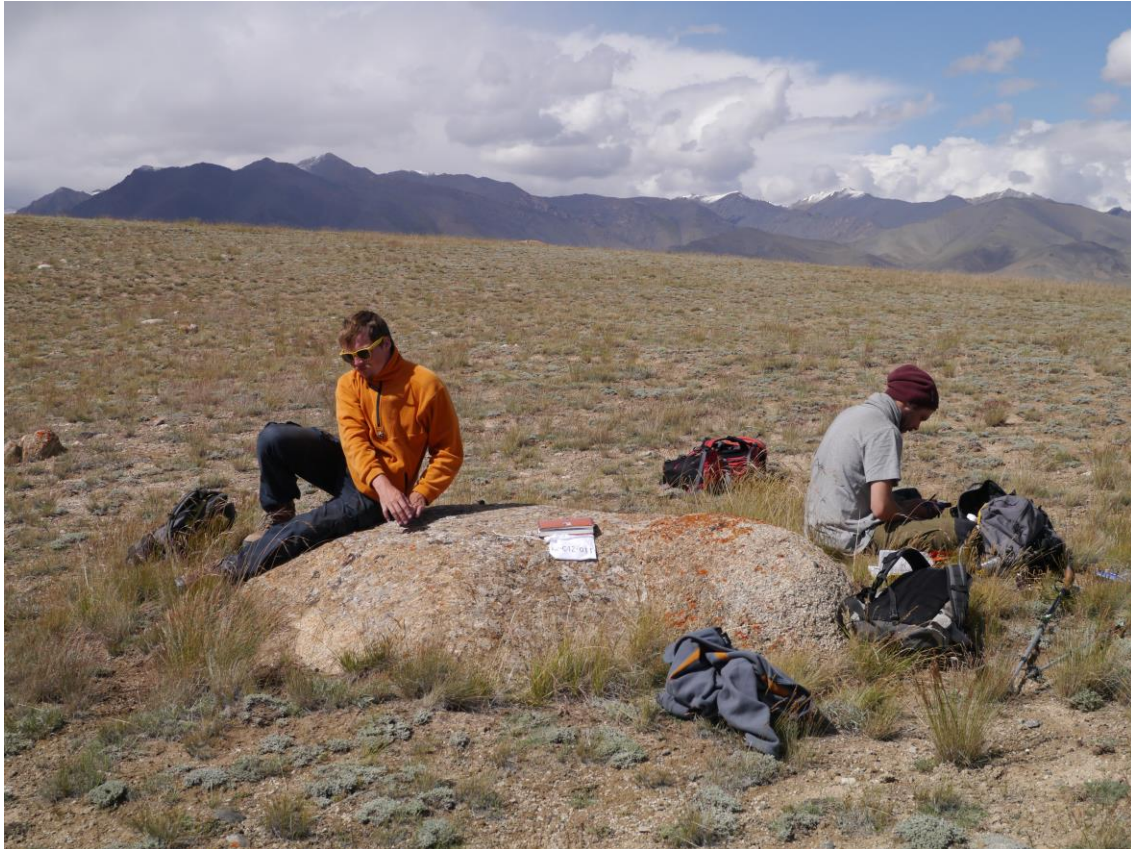
TS-C-12-010 (TAR 2)

Medium to coarse-grained granitic boulder on Right-lateral Taragay moraine in the Ak-Syrak area. Moraine surface is highly degraded with very subtle topography. Same surface as TS-C-12-007/008/009 (TAR 2). Boulder surface is lightly varnished with moderate lichen cover. Dimensions: 1.0 m x 0.9 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-011 (TAR 2)

Medium to coarse-grained granitic boulder on Right-lateral Taragay moraine in the Ak-Syrak area. Moraine surface is highly degraded with very subtle topography. Same surface as TS-C-12-007/008/009/010 (TAR 2). Boulder surface is lightly varnished with moderate lichen cover. Dimensions: 3.5 m x 2.5 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-035

Medium to coarse-grained granitic boulder on top of L lateral Taragay moraine in the Ak-Shyrak area. Moraine surface is highly degraded with very subtle topography. Younger surface than TS-C-12-007/008/009/010/011 (TAR 2). Boulder surface is varnished with moderate lichen cover. Dimensions: 1.1 m x 0.8 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-036

Medium to coarse-grained granitic boulder on top of L lateral Taragay moraine in the Ak-Shyrak area. Moraine surface is highly degraded with very subtle topography. Younger surface than TS-C-12-007/008/009/010/011 (TAR 2). Same surface as TS-C-12-035 (TAR 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 1.7 m x 1.0 m x 0.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



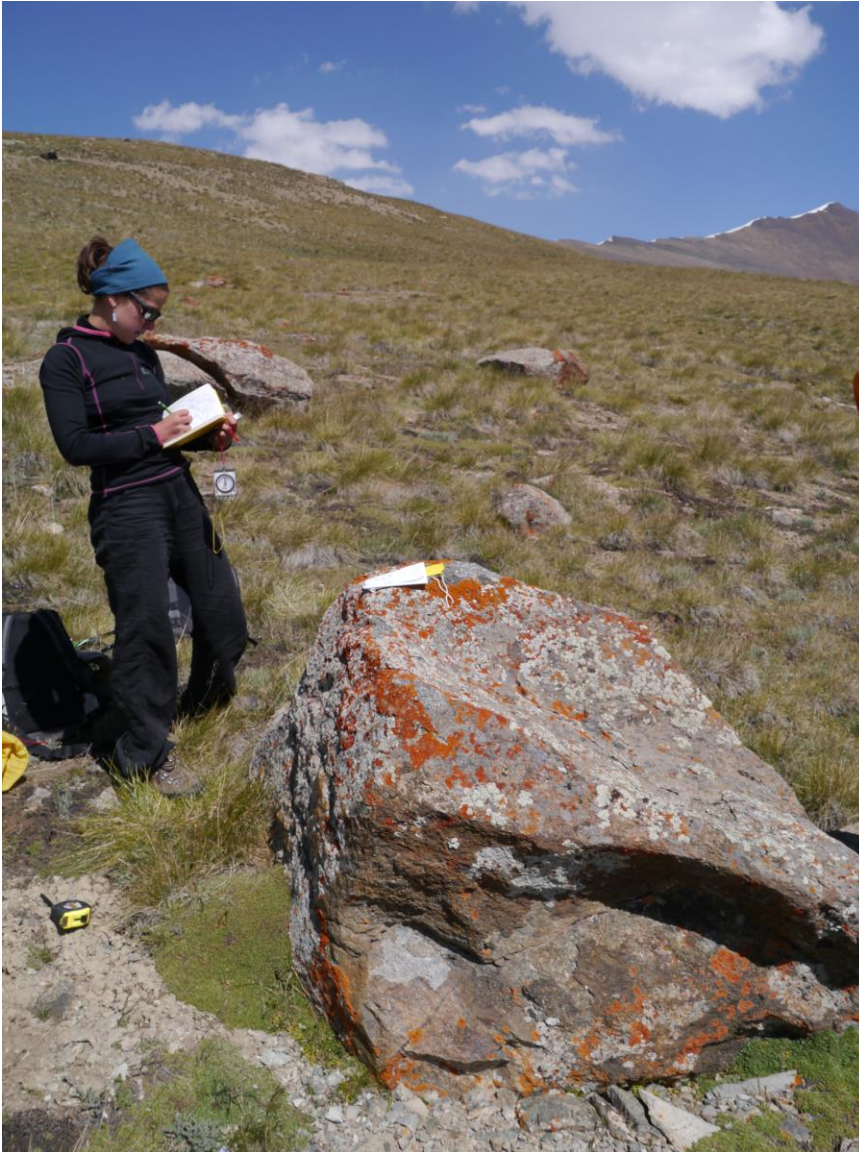
TS-C-12-037 (TAR 1)

Medium to coarse-grained granitic boulder on top of L lateral Taragay moraine in the Ak-Shyrak area. Moraine surface is highly degraded with very subtle topography. Younger surface than TS-C-12-007/008/009/010/011 (TAR 2). Same surface as TS-C-12-035/036 (TAR 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 2.0 m x 1.0 m x 0.5 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-019 (BOR 3)

Medium to coarse-grained granitic boulder on top R lateral moraine in Bordo valley. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.8 m x 1.7 m x 1.0 m high. Dip/dip direction: no measurement taken. Sample taken on top of boulder.



TS-C-12-020 (BOR 3)

Medium to coarse-grained granitic boulder on top R lateral moraine in Bordo valley. Same surface as TS-C-12-019 (BOR 3). Boulder on slope. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.9 m x 1.4 m x 0.7 m high. Dip/dip direction: no measurement taken. Sample taken from on top of boulder.



TS-C-12-021 (BOR 3)

Medium to coarse-grained granitic boulder on top R lateral moraine in Bordo valley. Same surface as TS-C-12-019/020 (BOR 3). Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.7 m x 1.4 m x 0.8 m high. Dip/dip direction: no measurement taken. Sample taken from on top of boulder.



TS-C-12-022 (BOR 3)

Medium to coarse-grained granitic boulder on top R lateral moraine in Bordo valley. Same surface as TS-C-12-019/020/021 (BOR 3). Boulder on slope. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.6 m x 1.3 m x 0.9 m high. Dip/dip direction: no measurement taken. Sample taken from on top of boulder.



TS-C-12-023 (BOR 2)

Medium to coarse-grained granitic boulder on top of R lateral moraine in Bordo valley. Younger surface inside that of TS-C-12-019/020/021/022 (BOR 3). Boulder on slope. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 2.0 m x 1.2 m x 0.7 m high. Dip/dip direction: no measurement taken. Sample taken from on top of boulder.



TS-C-12-025 (BOR 2)

Medium to coarse-grained granitic boulder on top of R lateral moraine in Bordo valley. Younger surface inside that of TS-C-12-019/020/021/022 (BOR 3). Same surface as TS-C-12-023 (BOR 2). Boulder on slope. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.6 m x 1.5 m x 0.5 m high. Dip/dip direction: 297°/0°. Sample taken on top of boulder.



TS-C-12-026 (BOR 2)

Medium to coarse-grained granitic boulder on top of R lateral moraine in Bordo valley. Younger surface inside that of TS-C-12-019/020/021/022 (BOR 3). Same surface as TS-C-12-023/025 (BOR 2). Boulder on slope. Boulder surface is lightly varnished with moderate to high lichen cover. Dimensions: 1.5 m x 0.9 m x 0.6 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-027 (BOR 1)

Medium to coarse-grained granitic boulder on top of terminal moraine in Bordo valley. Younger surface than TS-C-12-023/025/026 (BOR 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 2.4 m x 2.3 m x 1.4 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-028 (BOR 1)

Medium to coarse-grained granitic boulder on top of terminal moraine in Bordo valley. Younger surface than TS-C-12-023/025/026 (BOR 2). Same surface as TS-C-12-027 (BOR 1). Boulder on slope. Boulder surface is varnished with moderate lichen cover. Dimensions: 2.7 m x 2.2 m x 1.0 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-029 (BOR 1)

Medium to coarse-grained granitic boulder on top of terminal moraine in Bordo valley. Younger surface than TS-C-12-023/025/026 (BOR 2). Same surface as TS-C-12-027/028. Boulder on slope (BOR 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 1.2 m x 1.1 m x 0.8 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-030 (BOR 1)

Medium to coarse-grained granitic boulder on top of terminal moraine in Bordo valley. Younger surface than TS-C-12-023/025/026 (BOR 2). Same surface as TS-C-12-027/028/029 (BOR 1). Boulder surface is varnished with almost no lichen cover. Dimensions: 1.2 m x 1.1 m x 0.8 m high. Dip/dip direction: $324^{\circ}/9^{\circ}$. Sample taken from on top of boulder.



TS-C-12-031 (BOR 1)

Medium to coarse-grained granitic boulder on top of terminal moraine in Bordo valley. Younger surface than TS-C-12-023/025/026 (BOR 2). Same surface as TS-C-12-027/028/029/030 (BOR 1). Boulder surface is varnished with almost no lichen cover. Dimensions: 1.5 m x 1.3 m x 1.0 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-046 (KOY 1)

Medium to coarse-grained granitic boulder on terminal moraine in the Koyundi main trunk valley on the east side of the Ak-Shyrak massif. The terminal moraine is hummocky in character and boulder concentration is high. Boulder is on slope. Boulder surface is varnished with moderate lichen cover. Dimensions: 5.1 m x 3.0 m x 1.7 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-047 (KOY 1)

Medium to coarse-grained granitic boulder on terminal moraine in the Koyundi main trunk valley on the east side of the Ak-Shyrak massif. The terminal moraine is hummocky in character and boulder concentration is high. Same surface as TS-C-12-046 (KOY 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 3.0 m x 1.3 m x 1.0 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-048 (KOY 1)

Medium to coarse-grained granitic boulder on terminal moraine in the Koyundi main trunk valley on the east side of the Ak-Shyrak massif. The terminal moraine is hummocky in character and boulder concentration is high. Same surface as TS-C-12-046/047 (KOY 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 3.6 m x 3.1 m x 1.5 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-049 (KOY 1)

Medium to coarse-grained granitic boulder on terminal moraine in the Koyundi main trunk valley on the east side of the Ak-Shyrak massif. The terminal moraine is hummocky in character and boulder concentration is high. Same surface as TS-C-12-046/047048 (KOY 1). Boulder on slope and partly buried. Boulder surface is varnished with moderate lichen cover. Dimensions: 6.5 m x 2.8 m x 11.0 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.



TS-C-12-050 (KOY 1)

Medium to coarse-grained granitic boulder on R-lateral part of terminal moraine in the Koyundi main trunk valley on the east side of the Ak-Shyrak massif. The terminal moraine is hummocky in character and boulder concentration is high. Same surface as TS-C-12-046/047/048/049 (KOY 1). Boulder surface is varnished with moderate lichen cover. Dimensions: 2.4 m x 1.8 m x 0.8 m high. Dip/dip direction: measurement not taken. Sample taken from on top of boulder.

