

Weak influences of climate and mineral supply rates on  
chemical erosion rates: Measurements along two  
altitudinal transects in the Idaho Batholith –  
Supplementary File

Ken L. Ferrier

*Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology*

James W. Kirchner

*Department of Earth and Planetary Science, University of California, Berkeley*

*Swiss Federal Institute for Forest, Snow, and Landscape Research (WSL), Birmensdorf, Switzerland*

*Department of Environmental Sciences, Swiss Federal Institute of Technology (ETH), Zürich, Switzerland*

Robert C. Finkel

*Center for Accelerator Mass Spectrometry, Lawrence Livermore National Laboratory, California*

*Department of Earth and Planetary Science, University of California, Berkeley*

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## S1. Introduction to supplementary file

This work described in the main text is an experimental study of chemical erosion rates at seventeen climatically diverse field sites in the Idaho Batholith. To quantify variations in chemical erosion rates with climate, we measured regolith temperature and a proxy for regolith moisture at four-hour intervals over nearly three years at each field site, and we also measured the chemical composition of 916 rock and regolith samples. (Here and in the main text we define the term "regolith" as the layer of physically mobile material at the top of the weathering column, distinct from the physically static material underlying it which may also be chemically weathered. This

usage is equivalent to the definition of soil in some studies (e.g., Heimsath et al., 1997) and the definition of the partially disturbed zone in Yoo and Mudd (2008). In this we follow the usage in Ferrier et al. (2011) and diverge from the standard geochemical definition of regolith as the full thickness of chemically weathered material, including the physically mobile layer and physically static material underlying it (e.g., Brantley et al., 2011). Because the geochemical datasets we generated are too large to include in the main text in full, we include them here in the supplementary text, where we also describe the laboratory methods used to generate these datasets.

## S2. Chemical composition of rock and regolith samples from field sites on Pilot Peak and Tailholt Mountain

As described in the main text, we established a series of field sites along two altitudinal transects on Pilot Peak and Tailholt Mountain. At each field site we collected two sets of regolith samples and one set of rock samples. In Tables S1 and S2 we present the chemical composition of each rock and regolith sample as measured with X-ray fluorescence (section 4.3). These are the data that were used to calculate the mean chemical compositions of regolith and its parent material at each site (Tables S3-S6), which themselves were used to calculate chemical erosion rates and chemical depletion fractions for the bulk regolith and for individual elements at each site (Tables ??-??).

Each sample in Tables S1 and S2 has a sample name that describes the field site the sample was collected from and the group of samples it belongs to. Sample names begin with a prefix identifying the mountain and the altitude of the field site where the sample was collected. For example, samples from the field site at 1850 m on Pilot Peak have names beginning with the prefix "P1850N", and samples from the field site at 2364 m on Tailholt Mountain have names beginning with the prefix "T2364". Following the prefix, each sample name has a suffix that indicates which set of samples it belongs to. The first set of regolith samples at each site consisted of 16 regolith samples collected from a small rectangular plot, typically ~10 m x 10 m in size, in which each sample was collected 10-15 cm below the surface. In Tables S1 and S2, these regolith samples are given the suffix "-B" followed by the sample number (e.g., P1850N-B2, P1850N-B3). Within the regolith sampling plot at each field site, one pit was dug down to or close to the parent material. From each pit we collected a second set of regolith samples from a range of depths to quantify vertical variations in composition. In Tables S1 and S2, these

regolith profile samples are given the suffix "-B1-PF" followed by the sample number (e.g., P1850N-B1-PF1, P1850N-B1-PF2). In addition to the regolith samples, 40 rock outcrop samples were collected at each site to characterize the regolith's parent material. In Tables S1 and S2, these samples are given the suffix "-X" followed by the sample number (e.g., P1850N-X1, P1850N-X2).

Table S1: Sample compositions (Al to Na). Type X=rock, B=regolith, S=underlying parent rock.

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P2280-X1	X	outcrop	15.4	2.5	1.8	2.9	0.52	0.030	1.0	4.0
P2280-X2	X	outcrop	15.0	2.2	1.5	3.6	0.42	0.030	1.1	3.7
P2280-X3	X	outcrop	14.8	2.0	2.0	3.7	0.57	0.041	1.0	3.5
P2280-X4	X	outcrop	14.8	2.4	1.8	2.8	0.51	0.030	1.0	3.8
P2280-X5	X	outcrop	12.3	1.5	1.1	3.5	0.28	0.020	1.3	2.8
P2280-X6	X	outcrop	17.1	3.0	1.6	2.7	0.44	0.030	1.6	4.5
P2280-X7	X	outcrop	16.3	2.5	1.8	3.6	0.47	0.030	1.3	4.1
P2280-X8	X	outcrop	15.1	2.4	1.8	2.5	0.47	0.030	1.1	4.0
P2280-X9	X	outcrop	17.0	3.1	1.7	2.6	0.46	0.030	1.3	4.5
P2280-X10	X	outcrop	15.0	2.2	1.7	3.3	0.45	0.020	1.2	3.7
P2280-X11	X	outcrop	14.9	2.3	1.8	2.7	0.53	0.030	1.1	3.9
P2280-X12	X	outcrop	14.8	2.2	1.7	3.1	0.49	0.040	1.2	3.7
P2280-X13	X	outcrop	15.8	2.1	1.8	3.8	0.55	0.060	1.2	3.6
P2280-X14	X	outcrop	14.8	2.0	1.2	3.1	0.23	0.020	1.2	3.7
P2280-X15	X	outcrop	15.6	2.4	1.7	2.9	0.46	0.030	1.3	4.1
P2280-X16	X	outcrop	14.5	2.3	1.6	2.8	0.46	0.030	0.9	3.8
P2280-X17	X	outcrop	13.7	2.0	1.4	3.0	0.38	0.020	1.3	3.5
P2280-X18	X	outcrop	14.4	2.4	1.6	2.5	0.48	0.030	0.9	3.8
P2280-X19	X	outcrop	15.9	2.2	1.7	4.5	0.50	0.030	1.2	3.7
P2280-X20	X	outcrop	14.9	2.3	1.8	2.9	0.48	0.040	1.4	3.8
P2280-X21	X	outcrop	14.8	2.1	1.4	3.2	0.31	0.040	1.8	3.5
P2280-X22	X	outcrop	15.0	2.4	1.8	2.8	0.54	0.030	1.2	3.9
P2280-X23	X	outcrop	14.5	1.2	1.5	3.3	0.36	0.041	4.0	3.0
P2280-X24	X	outcrop	15.2	2.5	1.8	3.0	0.52	0.030	1.1	4.0
P2280-X25	X	outcrop	14.8	2.3	1.7	2.6	0.47	0.030	1.2	3.8
P2280-X26	X	outcrop	14.5	0.6	0.4	5.4	0.08	0.030	1.3	2.8
P2280-X27	X	outcrop	15.8	2.3	1.7	3.6	0.50	0.030	1.1	3.9
P2280-X28	X	outcrop	15.5	2.4	1.7	3.3	0.52	0.041	1.2	3.9
P2280-X29	X	outcrop	15.5	0.8	2.1	8.4	0.64	0.031	1.4	2.0
P2280-X30	X	outcrop	13.5	1.0	2.0	3.3	0.34	0.050	2.7	2.8
P2280-X31	X	outcrop	15.0	2.3	1.3	3.3	0.38	0.020	1.5	3.9
P2280-X32	X	outcrop	16.2	2.0	1.6	4.8	0.45	0.030	1.0	3.6
P2280-X33	X	outcrop	14.4	2.0	1.5	3.0	0.39	0.040	1.4	3.7
P2280-X34	X	outcrop	14.5	2.3	1.9	2.4	0.51	0.041	1.4	3.9
P2280-X35	X	outcrop	15.5	2.4	1.8	3.3	0.50	0.030	1.2	4.0
P2280-X36	X	outcrop	14.9	2.1	1.5	3.2	0.37	0.051	1.4	3.8
P2280-X37	X	outcrop	14.6	2.3	1.9	2.9	0.52	0.031	1.1	3.7
P2280-X38	X	outcrop	15.4	1.9	1.5	4.4	0.43	0.031	1.5	3.6
P2280-X39	X	outcrop	15.5	2.4	1.8	3.0	0.53	0.051	1.5	4.0
P2280-X40	X	outcrop	16.0	2.1	1.6	4.3	0.45	0.030	1.5	3.8

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P2283S-B2	B	10-15	16.2	1.9	2.1	3.1	0.46	0.071	1.4	3.6
P2283S-B3	B	10-15	15.7	1.7	1.9	3.8	0.39	0.061	1.5	3.2
P2283S-B4	B	10-15	15.4	1.9	2.2	2.9	0.45	0.061	1.9	3.4
P2283S-B5	B	10-15	15.8	2.0	2.0	2.9	0.41	0.060	1.5	3.6
P2283S-B6	B	10-15	15.6	1.9	2.0	2.9	0.42	0.061	1.5	3.5
P2283S-B7	B	10-15	16.0	2.0	2.1	3.2	0.43	0.061	1.4	3.5
P2283S-B8	B	10-15	16.5	2.1	2.1	3.3	0.45	0.071	1.6	3.6
P2283S-B9	B	10-15	16.2	2.1	2.1	3.1	0.45	0.081	1.7	3.5
P2283S-B10	B	10-15	16.3	2.0	2.3	3.0	0.50	0.061	1.6	3.5
P2283S-B11	B	10-15	15.1	1.8	2.0	3.2	0.38	0.061	1.5	3.2
P2283S-B12	B	10-15	15.9	1.9	2.0	3.2	0.40	0.061	1.3	3.5
P2283S-B13	B	10-15	15.6	1.9	1.9	3.3	0.41	0.061	1.6	3.3
P2283S-B14	B	10-15	16.5	2.0	2.2	3.1	0.48	0.071	1.6	3.6
P2283S-B15	B	10-15	15.4	1.9	1.9	2.9	0.39	0.041	1.4	3.4
P2283S-B16	B	10-15	14.8	1.9	1.9	2.6	0.39	0.050	1.4	3.3
P2283S-B17	B	10-15	16.0	2.0	2.2	3.0	0.47	0.071	1.7	3.5
P2283S-B1-PF1	B	3	15.2	1.9	1.9	3.0	0.40	0.051	1.4	3.4
P2283S-B1-PF2	B	9	17.2	2.1	2.3	3.3	0.50	0.061	1.5	3.7
P2283S-B1-PF3	B	17	16.3	1.9	2.0	3.3	0.42	0.051	1.4	3.5
P2283S-B1-PF4	B	23	15.3	1.8	1.9	2.9	0.41	0.040	1.4	3.4
P2283S-B1-PF5	B	35	15.2	1.7	1.9	3.0	0.42	0.040	1.6	3.3
P2283S-B1-PF6	B	45	14.6	1.7	1.9	2.7	0.39	0.040	1.5	3.2
P2283S-B1-PF7	B	60	16.2	1.9	2.3	3.1	0.49	0.051	1.4	3.5
P2281N-B2	B	10-15	16.8	2.1	2.6	2.7	0.65	0.071	1.7	3.4
P2281N-B3	B	10-15	15.8	1.8	2.2	3.0	0.60	0.061	1.5	3.1
P2281N-B4	B	10-15	15.4	1.8	2.1	2.9	0.59	0.061	1.6	3.0
P2281N-B5	B	10-15	16.9	1.9	2.5	3.5	0.64	0.061	1.8	3.3
P2281N-B6	B	10-15	16.6	1.9	2.4	3.4	0.68	0.081	1.0	3.1
P2281N-B7	B	10-15	15.7	2.0	2.1	3.1	0.59	0.071	1.5	3.1
P2281N-B8	B	10-15	16.2	1.8	2.4	3.1	0.66	0.071	1.5	3.0
P2281N-B9	B	10-15	16.4	1.8	2.4	3.1	0.67	0.082	1.4	3.1
P2281N-B10	B	10-15	15.6	1.8	2.2	2.8	0.61	0.071	1.4	3.0
P2281N-B11	B	10-15	16.2	1.8	2.5	3.0	0.67	0.092	1.6	3.1
P2281N-B12	B	10-15	14.9	1.6	2.1	2.9	0.56	0.071	1.7	2.8
P2281N-B13	B	10-15	16.2	1.8	2.3	3.1	0.64	0.072	1.7	3.1
P2281N-B14	B	10-15	15.0	1.8	1.9	3.0	0.44	0.051	1.4	3.2
P2281N-B15	B	10-15	16.7	2.0	2.4	3.0	0.56	0.061	1.6	3.5
P2281N-B16	B	10-15	16.3	2.0	2.5	3.0	0.56	0.071	1.7	3.4
P2281N-B17	B	10-15	16.6	2.0	2.4	2.8	0.58	0.071	1.6	3.5
P2281N-B1-PF1	B	7	16.5	1.9	2.3	3.3	0.65	0.071	1.7	3.1
P2281N-B1-PF2	B	15	15.7	1.8	2.2	2.9	0.61	0.071	1.7	3.1
P2281N-B1-PF3	B	23	16.8	1.9	2.5	2.9	0.70	0.082	1.8	3.2

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P2281N-B1-PF4	B	36	16.2	1.7	2.3	3.1	0.62	0.061	1.6	3.1
P2281N-B1-PF5	B	46	16.3	1.7	2.4	2.8	0.66	0.051	2.2	3.0
P2281N-B1-PF6	B	80	15.0	1.3	1.7	3.2	0.35	0.020	2.6	2.9
P2281N-B1-PF7	B	91	15.4	1.4	1.9	3.1	0.30	0.020	3.3	3.0
P2090S-X1	X	outcrop	14.3	2.5	1.8	2.2	0.53	0.030	0.7	3.7
P2090S-X2	X	outcrop	14.3	2.5	1.7	2.3	0.55	0.030	1.0	3.7
P2090S-X3	X	outcrop	16.8	1.6	1.0	7.0	0.34	0.020	1.3	3.0
P2090S-X4	X	outcrop	15.4	2.3	1.6	3.3	0.46	0.030	0.8	3.9
P2090S-X5	X	outcrop	14.8	2.5	1.7	2.2	0.55	0.030	0.7	3.8
P2090S-X6	X	outcrop	15.1	2.3	1.6	2.8	0.43	0.040	1.3	3.9
P2090S-X7	X	outcrop	14.4	2.3	1.7	2.7	0.50	0.030	0.7	3.6
P2090S-X8	X	outcrop	14.7	2.4	1.8	2.7	0.56	0.081	0.8	3.7
P2090S-X9	X	outcrop	15.0	2.3	1.8	3.5	0.53	0.030	0.2	3.6
P2090S-X10	X	outcrop	14.1	1.9	1.5	3.7	0.40	0.030	1.0	3.2
P2090S-X11	X	outcrop	16.3	2.8	1.9	2.9	0.50	0.030	0.6	4.1
P2090S-X12	X	outcrop	15.9	2.3	1.7	3.6	0.48	0.040	0.6	3.8
P2090S-X13	X	outcrop	13.5	2.3	1.5	2.1	0.48	0.030	1.1	3.5
P2090S-X14	X	outcrop	15.7	2.0	1.5	4.3	0.42	0.020	1.1	3.6
P2090S-X15	X	outcrop	15.1	2.2	1.6	3.8	0.47	0.030	0.3	3.6
P2090S-X16	X	outcrop	16.1	2.0	1.6	3.6	0.38	0.031	0.6	4.0
P2090S-X17	X	outcrop	15.7	2.5	1.9	2.9	0.54	0.031	0.9	4.1
P2090S-X18	X	outcrop	14.9	2.5	1.8	2.5	0.56	0.030	0.9	3.8
P2090S-X19	X	outcrop	14.9	2.4	1.6	2.9	0.50	0.020	0.9	3.7
P2090S-X20	X	outcrop	15.2	2.3	1.7	3.2	0.53	0.030	1.2	3.7
P2090S-X21	X	outcrop	15.4	2.3	1.9	2.9	0.50	0.031	1.2	4.0
P2090S-X22	X	outcrop	15.6	2.4	1.7	2.6	0.48	0.030	0.6	4.1
P2090S-X23	X	outcrop	19.9	1.3	0.3	5.4	0.06	0.010	1.7	6.1
P2090S-X24	X	outcrop	14.8	1.6	2.2	4.5	0.63	0.040	0.9	3.2
P2090S-X25	X	outcrop	15.8	2.6	1.9	2.3	0.54	0.040	1.1	4.3
P2090S-X26	X	outcrop	14.7	1.2	1.0	4.9	0.21	0.020	1.9	3.4
P2090S-X27	X	outcrop	15.7	2.3	1.7	3.3	0.49	0.030	1.4	3.9
P2090S-X28	X	outcrop	15.3	2.3	1.9	2.6	0.49	0.040	1.5	4.0
P2090S-X29	X	outcrop	14.8	2.0	2.1	2.8	0.48	0.040	0.6	3.8
P2090S-X30	X	outcrop	15.7	2.3	1.7	3.1	0.47	0.030	0.8	4.0
P2090S-X31	X	outcrop	15.3	2.2	1.2	2.6	0.36	0.030	1.2	3.9
P2090S-X32	X	outcrop	14.9	2.4	1.8	2.7	0.53	0.040	1.4	3.8
P2090S-X33	X	outcrop	16.2	0.5	0.2	8.5	0.04	0.000	1.7	2.9
P2090S-X34	X	outcrop	15.5	2.4	1.6	3.4	0.50	0.030	1.5	3.7
P2090S-X35	X	outcrop	15.0	2.3	1.6	3.1	0.48	0.040	1.2	3.7
P2090S-X36	X	outcrop	15.1	2.4	1.6	3.2	0.51	0.030	0.5	3.8
P2090S-X37	X	outcrop	15.8	2.7	1.8	2.9	0.57	0.030	0.9	4.0
P2090S-X38	X	outcrop	14.8	2.5	1.3	2.8	0.42	0.030	1.4	3.7

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P2090S-X39	X	outcrop	14.6	2.5	1.8	2.3	0.60	0.040	1.4	3.8
P2090S-X40	X	outcrop	15.4	2.2	1.4	4.2	0.42	0.030	1.1	3.6
P2090S-B2	B	10-15	16.5	2.0	2.3	3.4	0.67	0.071	1.3	3.2
P2090S-B3	B	10-15	13.8	1.7	2.0	2.7	0.54	0.062	1.6	2.7
P2090S-B4	B	10-15	16.0	2.1	2.3	3.1	0.66	0.072	1.1	3.2
P2090S-B5	B	10-15	15.6	1.9	2.4	3.0	0.72	0.061	1.2	2.9
P2090S-B6	B	10-15	14.9	1.8	2.1	3.1	0.60	0.061	1.5	2.9
P2090S-B7	B	10-15	15.5	1.9	2.2	3.2	0.59	0.071	1.2	3.1
P2090S-B8	B	10-15	15.0	1.7	2.2	3.1	0.59	0.071	0.8	2.9
P2090S-B9	B	10-15	15.4	2.0	2.2	3.0	0.63	0.071	1.5	3.0
P2090S-B10	B	10-15	15.2	1.8	2.1	3.3	0.59	0.061	1.2	2.9
P2090S-B11	B	10-15	15.9	1.9	2.3	3.2	0.65	0.072	1.1	3.1
P2090S-B12	B	10-15	14.6	1.8	2.1	2.8	0.58	0.061	0.8	3.0
P2090S-B13	B	10-15	15.1	1.7	2.0	3.4	0.54	0.061	1.3	2.9
P2090S-B14	B	10-15	14.9	1.8	2.1	3.2	0.60	0.071	1.6	2.9
P2090S-B15	B	10-15	14.5	1.8	2.0	3.0	0.58	0.061	1.5	2.8
P2090S-B16	B	10-15	14.9	1.8	2.2	2.9	0.62	0.071	1.6	2.9
P2090S-B17	B	10-15	14.8	1.7	1.9	3.5	0.51	0.061	1.1	2.8
P2090S-B1PF1	B	8	14.5	1.7	1.9	3.2	0.54	0.061	1.7	2.8
P2090S-B1PF2	B	16	14.9	1.8	2.1	3.1	0.60	0.061	1.2	2.9
P2090S-B1PF3	B	24	16.0	1.9	2.4	3.0	0.67	0.071	1.1	3.2
P2090S-B1PF4	B	33	14.9	1.7	1.8	3.3	0.51	0.051	1.1	2.9
P2090S-B1PF5	B	45	16.4	2.0	2.2	3.2	0.61	0.061	1.6	3.3
P2090S-B1PF6	B	59	16.0	1.8	2.0	3.6	0.55	0.051	1.5	3.2
P2090S-B1PF7	S	50	15.1	2.1	1.9	3.7	0.55	0.051	1.1	3.4
P2090S-B1PF8	S	50	16.4	1.8	1.3	6.0	0.38	0.020	1.2	3.2
P1850N-X1	X	outcrop	15.0	1.8	1.3	3.9	0.30	0.030	1.1	3.4
P1850N-X2	X	outcrop	14.7	2.3	1.7	2.8	0.46	0.030	0.8	3.7
P1850N-X3	X	outcrop	15.5	2.4	1.5	2.8	0.36	0.030	1.1	3.9
P1850N-X4	X	outcrop	14.8	2.2	1.3	3.4	0.35	0.030	1.1	3.6
P1850N-X5	X	outcrop	15.8	2.5	1.5	3.3	0.42	0.030	0.7	3.9
P1850N-X6	X	outcrop	15.3	2.5	1.7	2.5	0.42	0.030	1.1	4.0
P1850N-X7	X	outcrop	14.6	2.3	1.7	2.8	0.46	0.040	1.2	3.6
P1850N-X8	X	outcrop	15.2	2.4	1.6	2.9	0.43	0.030	1.0	3.8
P1850N-X9	X	outcrop	15.5	1.7	2.1	3.3	0.39	0.040	0.9	3.8
P1850N-X10	X	outcrop	15.2	2.6	1.5	2.2	0.39	0.020	0.9	4.1
P1850N-X11	X	outcrop	16.8	1.9	2.5	4.9	0.61	0.040	0.9	3.6
P1850N-X12	X	outcrop	13.6	2.2	1.6	2.1	0.39	0.030	1.1	3.6
P1850N-X13	X	outcrop	13.8	2.1	2.0	2.3	0.44	0.050	-1.5	3.2
P1850N-X14	X	outcrop	13.1	2.0	1.2	2.4	0.25	0.020	1.5	3.3
P1850N-X15	X	outcrop	14.1	2.1	1.5	2.8	0.37	0.030	0.8	3.6

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1850N-X16	X	outcrop	13.6	1.3	1.4	4.6	0.32	0.030	1.3	2.7
P1850N-X17	X	outcrop	14.9	1.5	1.8	4.6	0.38	0.030	1.7	3.2
P1850N-X18	X	outcrop	14.3	2.3	1.6	2.6	0.43	0.030	0.9	3.7
P1850N-X19	X	outcrop	13.6	1.1	1.0	4.9	0.18	0.020	1.7	2.8
P1850N-X20	X	outcrop	15.1	2.5	1.7	2.7	0.45	0.030	1.3	3.9
P1850N-X21	X	outcrop	13.9	2.0	1.5	3.2	0.38	0.020	1.1	3.2
P1850N-X22	X	outcrop	14.0	2.1	1.9	2.9	0.45	0.030	1.7	3.4
P1850N-X23	X	outcrop	14.3	1.9	1.5	3.5	0.39	0.030	0.8	3.3
P1850N-X24	X	outcrop	15.9	2.5	1.8	2.9	0.46	0.030	1.5	4.1
P1850N-X25	X	outcrop	12.9	2.0	1.4	2.4	0.36	0.030	0.6	3.3
P1850N-X26	X	outcrop	14.9	2.2	1.7	2.6	0.44	0.030	0.8	3.7
P1850N-X27	X	outcrop	15.7	2.1	1.7	3.7	0.44	0.030	0.8	3.6
P1850N-X28	X	outcrop	13.4	1.5	1.0	3.8	0.19	0.020	1.3	2.9
P1850N-X29	X	outcrop	14.0	0.9	2.1	6.2	0.49	0.030	1.1	2.0
P1850N-X30	X	outcrop	14.1	2.2	1.6	2.8	0.38	0.030	0.9	3.6
P1850N-X31	X	outcrop	14.9	1.9	1.3	3.7	0.27	0.020	0.7	3.8
P1850N-X32	X	outcrop	13.5	2.0	1.7	2.9	0.42	0.030	0.5	3.2
P1850N-X33	X	outcrop	16.0	2.5	1.9	2.9	0.49	0.030	0.7	4.0
P1850N-X34	X	outcrop	14.6	2.2	1.7	2.8	0.43	0.030	1.2	3.7
P1850N-X35	X	outcrop	15.9	2.2	1.6	3.7	0.42	0.030	0.7	3.7
P1850N-X36	X	outcrop	15.6	2.3	1.6	3.0	0.37	0.030	0.7	3.9
P1850N-X37	X	outcrop	15.2	2.1	1.6	3.7	0.40	0.030	1.0	3.5
P1850N-X38	X	outcrop	14.6	2.4	1.8	2.2	0.47	0.030	1.2	3.8
P1850N-X39	X	outcrop	16.6	2.5	1.6	3.0	0.40	0.020	0.7	4.2
P1850N-X40	X	outcrop	16.2	2.0	1.9	3.6	0.39	0.030	0.5	4.0
P1850N-B2	B	10-15	15.5	2.0	1.7	3.5	0.37	0.072	1.6	3.6
P1850N-B3	B	10-15	15.1	1.8	1.7	3.4	0.35	0.071	1.5	3.5
P1850N-B4	B	10-15	15.5	1.9	1.8	3.4	0.39	0.051	1.1	3.6
P1850N-B5	B	10-15	15.4	2.0	1.8	3.0	0.42	0.061	1.1	3.5
P1850N-B6	B	10-15	16.3	2.1	2.2	3.1	0.50	0.081	1.8	3.7
P1850N-B7	B	10-15	15.6	1.9	1.8	3.4	0.38	0.061	1.6	3.7
P1850N-B8	B	10-15	15.4	1.9	1.8	3.6	0.38	0.062	1.5	3.6
P1850N-B9	B	10-15	15.6	2.1	1.9	3.3	0.42	0.040	1.2	3.6
P1850N-B10	B	10-15	15.6	2.1	2.0	3.0	0.44	0.071	1.6	3.5
P1850N-B11	B	10-15	15.4	1.9	1.9	3.0	0.39	0.050	1.3	3.6
P1850N-B12	B	10-15	15.7	1.9	1.7	3.5	0.37	0.061	1.2	3.6
P1850N-B13	B	10-15	15.4	2.1	1.9	2.7	0.45	0.051	1.6	3.7
P1850N-B14	B	10-15	16.1	2.1	2.2	3.0	0.50	0.060	1.1	3.6
P1850N-B15	B	10-15	15.4	2.0	1.8	3.1	0.42	0.061	1.5	3.5
P1850N-B16	B	10-15	14.8	2.0	1.7	2.9	0.39	0.040	1.1	3.5
P1850N-B17	B	10-15	14.8	1.9	1.6	3.2	0.35	0.050	1.5	3.4
P1850N-B1PF1	B	6	15.4	2.0	1.8	3.2	0.41	0.071	1.6	3.6

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1850N-B1PF2	B	9	15.4	2.1	1.9	2.9	0.45	0.061	1.6	3.6
P1850N-B1PF3	B	16	15.4	2.0	1.7	3.3	0.39	0.040	1.3	3.5
P1850N-B1PF4	B	22	15.1	1.9	1.6	3.3	0.37	0.030	1.1	3.5
P1850N-B1PF5	S	29	16.0	2.2	1.8	3.1	0.45	0.030	1.3	3.7
P1850N-B1PF6	S	40	16.2	2.3	2.1	2.5	0.55	0.030	1.2	3.8
P1850N-B1PF7	S	48	16.6	2.4	2.0	2.9	0.57	0.030	0.8	3.8
P1706N-X1	X	outcrop	13.8	1.7	0.6	4.5	0.15	0.010	1.3	3.0
P1706N-X2	X	outcrop	15.1	2.5	1.8	2.8	0.49	0.030	1.2	3.8
P1706N-X3	X	outcrop	13.5	2.4	1.6	1.9	0.39	0.030	1.2	3.6
P1706N-X4	X	outcrop	14.5	2.3	1.6	2.3	0.42	0.030	1.2	3.8
P1706N-X5	X	outcrop	14.7	2.5	1.7	2.5	0.42	0.030	1.2	3.8
P1706N-X6	X	outcrop	14.1	2.5	1.5	2.2	0.39	0.020	1.6	3.8
P1706N-X7	X	outcrop	16.0	2.6	1.6	3.3	0.42	0.030	1.3	4.0
P1706N-X8	X	outcrop	15.0	2.5	1.8	2.4	0.44	0.030	1.2	4.0
P1706N-X9	X	outcrop	11.1	1.3	1.3	3.2	0.31	0.020	2.0	2.4
P1706N-X11	X	outcrop	13.1	2.3	1.6	1.8	0.38	0.030	1.7	3.5
P1706N-X12	X	outcrop	13.5	2.3	1.8	2.4	0.47	0.040	0.7	3.4
P1706N-X13	X	outcrop	14.7	1.4	0.6	6.3	0.13	0.010	1.1	2.6
P1706N-X14	X	outcrop	15.0	2.2	1.3	3.7	0.32	0.020	0.6	3.6
P1706N-X15	X	outcrop	15.8	2.4	1.6	3.6	0.44	0.030	1.3	3.8
P1706N-X16	X	outcrop	14.3	2.3	1.7	2.6	0.41	0.030	1.3	3.6
P1706N-X17	X	outcrop	14.7	1.2	0.5	4.8	0.12	0.010	1.8	3.1
P1706N-X18	X	outcrop	14.6	2.0	1.2	3.6	0.30	0.020	0.9	3.4
P1706N-X19	X	outcrop	12.4	1.6	1.3	3.6	0.32	0.020	1.7	2.6
P1706N-X20	X	outcrop	14.4	2.4	1.7	2.6	0.45	0.030	0.7	3.7
P1706N-X21	X	outcrop	14.9	2.3	1.7	3.4	0.42	0.030	0.9	3.7
P1706N-X22	X	outcrop	15.2	2.4	1.7	3.1	0.45	0.030	0.6	3.8
P1706N-X23	X	outcrop	14.2	2.5	1.6	2.3	0.40	0.030	0.7	3.8
P1706N-X24	X	outcrop	15.0	2.3	1.4	3.6	0.36	0.020	1.1	3.6
P1706N-X25	X	outcrop	14.8	2.4	1.6	2.8	0.43	0.030	0.7	3.8
P1706N-X26	X	outcrop	14.7	1.5	0.9	4.6	0.22	0.020	1.1	3.2
P1706N-X28	X	outcrop	15.1	1.4	0.9	4.2	0.19	0.010	0.7	3.3
P1706N-X29	X	outcrop	14.9	2.4	1.5	3.1	0.38	0.030	1.1	3.8
P1706N-X30	X	outcrop	14.7	1.9	1.0	4.3	0.23	0.020	0.6	3.4
P1706N-X31	X	outcrop	15.7	2.7	1.8	2.7	0.47	0.040	1.1	4.2
P1706N-X32	X	outcrop	15.6	2.8	2.1	2.2	0.54	0.040	0.6	4.2
P1706N-X33	X	outcrop	15.0	2.4	1.6	2.9	0.39	0.030	0.9	3.8
P1706N-X34	X	outcrop	14.5	2.4	1.7	2.4	0.42	0.030	0.9	3.9
P1706N-X27	X	outcrop	15.0	2.5	1.9	2.6	0.47	0.030	1.3	3.9
P1706N-X35	X	outcrop	14.3	2.5	1.7	2.0	0.42	0.030	0.2	3.9
P1706N-X36	X	outcrop	14.8	2.4	1.5	2.8	0.39	0.030	0.5	3.8
P1706N-X37	X	outcrop	14.1	1.5	0.6	5.0	0.13	0.010	1.4	3.0

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1706N-X38	X	outcrop	15.4	2.4	1.6	3.4	0.42	0.030	1.1	3.9
P1706N-X39	X	outcrop	15.5	2.4	1.6	3.6	0.42	0.030	0.7	3.8
P1706N-X40	X	outcrop	15.7	2.8	2.0	2.4	0.49	0.030	1.3	4.3
P1706N-B2	B	10-15	15.4	2.5	1.9	2.5	0.46	0.050	1.5	3.9
P1706N-B3	B	10-15	15.3	2.5	1.8	2.4	0.44	0.040	1.5	4.0
P1706N-B4	B	10-15	16.1	2.5	2.1	2.7	0.53	0.040	1.8	3.9
P1706N-B5	B	10-15	15.3	2.4	1.9	2.7	0.45	0.030	1.4	3.7
P1706N-B6	B	10-15	14.8	2.1	1.7	3.2	0.41	0.040	1.4	3.4
P1706N-B7	B	10-15	16.2	2.4	2.0	3.2	0.53	0.041	1.5	3.8
P1706N-B8	B	10-15	15.9	2.6	2.0	2.5	0.51	0.041	1.4	4.0
P1706N-B9	B	10-15	15.6	2.4	1.9	2.7	0.47	0.041	1.8	3.8
P1706N-B10	B	10-15	15.2	2.3	1.8	2.8	0.44	0.040	1.3	3.6
P1706N-B11	B	10-15	15.8	2.3	1.9	3.1	0.45	0.040	1.4	3.7
P1706N-B12	B	10-15	15.6	2.5	2.0	2.5	0.48	0.040	1.4	3.9
P1706N-B13	B	10-15	15.6	2.4	1.8	2.6	0.43	0.030	1.4	3.9
P1706N-B14	B	10-15	15.7	2.5	2.0	2.5	0.50	0.040	1.4	3.9
P1706N-B15	B	10-15	15.8	2.5	2.0	2.8	0.48	0.041	1.3	3.8
P1706N-B16	B	10-15	15.9	2.3	1.9	3.3	0.47	0.041	1.3	3.7
P1706N-B17	B	10-15	15.0	2.1	1.8	3.1	0.42	0.040	1.8	3.4
P1706N-B1PF1	B	7	15.4	2.4	1.9	2.8	0.47	0.051	1.4	3.6
P1706N-B1PF2	B	14	14.9	2.2	1.7	3.0	0.42	0.040	1.3	3.4
P1706N-B1PF3	B	17	16.2	2.5	2.3	2.6	0.55	0.051	1.0	3.9
P1706N-B1PF4	B	23	16.3	2.5	2.2	2.9	0.53	0.040	1.3	3.9
P1706N-B1PF5	B	28	16.1	2.5	2.1	2.5	0.52	0.030	0.9	4.1
P1706N-B1PF6	S	32	15.1	2.3	1.4	3.3	0.35	0.020	0.8	3.7
P1706N-B1PF7	S	30	14.5	2.1	1.5	2.8	0.39	0.030	0.9	3.6
P1480-X1	X	outcrop	16.4	2.4	1.5	3.9	0.41	0.030	0.7	4.0
P1480-X2	X	outcrop	16.2	2.6	1.5	3.0	0.42	0.030	0.7	4.3
P1480-X3	X	outcrop	16.0	1.8	1.3	4.1	0.33	0.040	0.8	3.8
P1480-X4	X	outcrop	15.5	2.2	1.6	3.5	0.45	0.030	0.8	3.8
P1480-X5	X	outcrop	14.3	2.5	1.6	1.9	0.42	0.030	1.0	4.0
P1480-X6	X	outcrop	15.3	1.3	1.2	4.2	0.21	0.030	1.0	3.7
P1480-X7	X	outcrop	15.1	2.3	1.6	2.8	0.41	0.030	1.2	3.9
P1480-X8	X	outcrop	14.7	2.5	1.6	2.2	0.43	0.030	0.8	4.0
P1480-X9	X	outcrop	14.5	2.3	1.3	2.7	0.33	0.030	1.2	3.8
P1480-X10	X	outcrop	14.9	2.5	1.8	2.2	0.47	0.030	0.7	4.1
P1480-X11	X	outcrop	13.9	2.4	1.8	2.1	0.53	0.030	0.9	3.6
P1480-X12	X	outcrop	14.7	2.4	1.6	3.0	0.46	0.030	0.6	3.7
P1480-X13	X	outcrop	14.9	2.5	1.7	2.4	0.50	0.030	1.3	3.8
P1480-X14	X	outcrop	16.8	2.7	1.7	3.2	0.52	0.030	0.6	4.2
P1480-X15	X	outcrop	15.2	2.5	1.7	2.7	0.48	0.030	1.3	3.8

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1480-X16	X	outcrop	15.6	2.6	2.2	2.7	0.63	0.050	0.6	3.9
P1480-X17	X	outcrop	14.2	2.5	1.9	2.0	0.51	0.040	0.9	3.8
P1480-X18	X	outcrop	14.4	2.4	1.8	2.6	0.51	0.030	0.7	3.6
P1480-X19	X	outcrop	15.7	2.6	1.8	2.8	0.51	0.030	0.4	3.9
P1480-X20	X	outcrop	15.5	2.7	1.8	2.5	0.51	0.030	1.1	4.1
P1480-X21	X	outcrop	14.7	2.4	1.6	2.6	0.48	0.030	0.9	3.6
P1480-X22	X	outcrop	12.5	1.9	1.6	2.5	0.41	0.030	1.3	3.0
P1480-X23	X	outcrop	13.1	0.1	2.1	3.8	0.49	0.062	0.9	1.3
P1480-X24	X	outcrop	15.2	2.5	1.8	2.6	0.48	0.030	0.7	4.1
P1480-X25	X	outcrop	16.2	0.6	1.5	3.9	0.39	0.020	0.6	3.5
P1480-X26	X	outcrop	15.8	2.6	1.6	3.2	0.45	0.020	1.5	4.0
P1480-X27	X	outcrop	15.7	2.8	1.7	2.4	0.47	0.030	0.9	4.2
P1480-X28	X	outcrop	16.0	2.4	1.8	3.5	0.49	0.030	0.9	3.9
P1480-X29	X	outcrop	14.8	2.3	1.8	2.8	0.51	0.050	0.7	3.8
P1480-X30	X	outcrop	14.6	2.4	1.8	2.5	0.48	0.030	0.7	3.8
P1480-X31	X	outcrop	15.1	2.1	1.4	3.8	0.37	0.030	1.4	3.6
P1480-X32	X	outcrop	13.8	0.4	0.5	5.5	0.09	0.010	1.1	2.5
P1480-X33	X	outcrop	15.3	2.0	1.2	4.2	0.28	0.030	1.1	3.6
P1480-X34	X	outcrop	14.1	2.3	1.7	2.3	0.41	0.030	0.7	3.8
P1480-X35	X	outcrop	15.9	2.3	1.6	3.4	0.37	0.030	0.9	4.0
P1480-X36	X	outcrop	14.3	2.1	1.7	2.8	0.40	0.030	0.7	3.7
P1480-X37	X	outcrop	15.6	2.3	1.5	2.8	0.36	0.020	0.5	4.1
P1480-X38	X	outcrop	15.9	1.9	1.4	5.0	0.38	0.030	1.1	3.4
P1480-X39	X	outcrop	14.1	1.6	1.2	3.6	0.29	0.020	1.1	3.4
P1480-X40	X	outcrop	14.8	2.5	1.7	2.3	0.48	0.030	1.3	3.9
P1485N-B2	B	10-15	16.1	1.9	2.3	2.7	0.47	0.040	1.1	3.4
P1485N-B3	B	10-15	16.9	1.9	2.4	2.8	0.51	0.040	1.5	3.7
P1485N-B4	B	10-15	15.6	1.8	2.1	2.8	0.42	0.041	1.0	3.4
P1485N-B5	B	10-15	16.7	1.8	2.4	3.1	0.48	0.041	1.2	3.5
P1485N-B6	B	10-15	15.7	1.8	2.3	2.8	0.46	0.041	0.7	3.4
P1485N-B7	B	10-15	16.4	2.0	2.3	2.8	0.47	0.040	1.4	3.6
P1485N-B8	B	10-15	16.3	1.9	2.3	2.9	0.45	0.050	1.1	3.5
P1485N-B9	B	10-15	16.4	1.9	2.3	2.9	0.47	0.041	1.2	3.5
P1485N-B10	B	10-15	16.1	2.1	2.0	2.9	0.42	0.030	0.9	3.7
P1485N-B11	B	10-15	15.9	1.8	2.1	3.0	0.41	0.040	1.1	3.4
P1485N-B12	B	10-15	16.4	2.0	2.2	2.7	0.46	0.040	1.5	3.6
P1485N-B13	B	10-15	16.5	2.0	2.4	2.7	0.49	0.041	1.1	3.6
P1485N-B14	B	10-15	15.6	1.9	1.9	2.8	0.41	0.040	1.0	3.5
P1485N-B15	B	10-15	17.1	2.0	2.3	3.2	0.47	0.040	1.4	3.6
P1485N-B16	B	10-15	16.5	1.9	2.2	2.9	0.44	0.040	1.2	3.6
P1485N-B17	B	10-15	15.6	1.8	2.0	2.7	0.39	0.040	1.0	3.4
P1485N-B1PF1	B	4	15.6	1.9	2.0	2.7	0.41	0.040	0.8	3.4

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1485N-B1PF2	B	9	16.3	1.9	2.1	2.9	0.43	0.040	1.0	3.5
P1485N-B1PF3	B	17	16.1	1.8	2.2	2.9	0.46	0.040	1.1	3.4
P1485N-B1PF4	S	24	15.9	1.9	1.6	3.1	0.34	0.020	0.9	3.6
P1485N-B1PF5	S	33	15.0	1.3	1.4	3.5	0.25	0.010	1.2	3.0
P1485N-B1PF6	S	41	15.8	1.8	1.4	3.3	0.28	0.020	1.1	3.6
P1471S-B2	B	10-15	14.9	1.9	1.7	2.8	0.35	0.030	1.3	3.4
P1471S-B3	B	10-15	16.0	2.1	1.9	3.0	0.41	0.030	1.5	3.6
P1471S-B4	B	10-15	15.6	2.0	1.9	2.9	0.40	0.030	1.1	3.6
P1471S-B5	B	10-15	15.8	1.9	2.1	2.9	0.42	0.040	1.2	3.5
P1471S-B6	B	10-15	15.1	1.9	2.0	2.6	0.38	0.030	1.1	3.5
P1471S-B7	B	10-15	15.3	2.0	2.0	2.8	0.42	0.030	1.0	3.5
P1471S-B8	B	10-15	15.0	1.9	1.7	3.0	0.37	0.030	1.6	3.3
P1471S-B9	B	10-15	15.5	2.0	2.0	2.7	0.41	0.040	1.2	3.5
P1471S-B10	B	10-15	15.7	2.0	1.9	3.0	0.39	0.030	1.7	3.6
P1471S-B11	B	10-15	15.6	1.8	1.9	2.8	0.34	0.030	1.2	3.5
P1471S-B12	B	10-15	15.5	2.1	2.0	2.7	0.43	0.040	0.8	3.5
P1471S-B13	B	10-15	15.9	2.1	2.0	2.6	0.44	0.040	1.5	3.7
P1471S-B14	B	10-15	15.5	2.1	2.0	2.7	0.42	0.030	1.3	3.6
P1471S-B15	B	10-15	15.3	1.9	1.7	3.1	0.35	0.030	1.2	3.4
P1471S-B16	B	10-15	15.2	1.9	2.0	2.8	0.38	0.040	1.6	3.4
P1471S-B17	B	10-15	15.1	1.8	2.0	2.6	0.36	0.030	1.2	3.4
P1471S-B1-PF1	B	5	15.1	1.9	1.8	2.6	0.37	0.040	1.6	3.5
P1471S-B1-PF2	B	9	15.8	2.0	1.9	2.9	0.39	0.030	1.5	3.6
P1471S-B1-PF3	B	13	15.5	1.9	1.8	3.1	0.36	0.030	1.2	3.5
P1471S-B1-PF4	B	20	19.1	1.7	2.6	3.4	0.58	0.041	0.5	4.6
P1471S-B1-PF5	B	29	17.5	1.2	2.7	3.5	0.49	0.030	1.2	3.9
P1471S-B1-PF6	B	43	17.0	0.4	1.8	3.5	0.46	0.020	1.8	3.8
P1471S-B1-PF7	S	55	15.2	1.6	1.8	2.8	0.35	0.030	1.6	3.5
P1270-X1	X	outcrop	14.6	2.3	1.6	2.6	0.42	0.030	1.4	3.9
P1270-X2	X	outcrop	15.5	2.0	1.2	4.9	0.33	0.020	1.1	3.4
P1270-X3	X	outcrop	14.2	2.4	1.6	2.4	0.43	0.030	1.2	3.8
P1270-X4	X	outcrop	14.1	2.3	1.6	2.5	0.42	0.030	0.8	3.7
P1270-X5	X	outcrop	15.2	2.3	1.4	3.4	0.40	0.030	1.7	3.8
P1270-X6	X	outcrop	15.5	2.4	1.7	3.3	0.45	0.030	0.9	3.9
P1270-X7	X	outcrop	15.2	2.2	1.5	3.4	0.42	0.030	1.1	3.7
P1270-X8	X	outcrop	14.6	1.5	1.1	3.6	0.24	0.081	0.9	3.2
P1270-X9	X	outcrop	14.3	0.7	0.5	3.8	0.04	0.030	1.1	4.2
P1270-X10	X	outcrop	15.6	1.9	1.1	5.0	0.31	0.020	1.3	3.4
P1270-X11	X	outcrop	15.8	2.3	1.5	3.8	0.38	0.030	1.2	3.9
P1270-X12	X	outcrop	16.0	2.0	1.3	4.8	0.34	0.030	1.7	3.6
P1270-X13	X	outcrop	14.8	2.4	1.7	2.5	0.44	0.030	1.4	3.9

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1270-X14	X	outcrop	14.7	2.2	1.7	3.2	0.45	0.040	1.2	3.7
P1270-X15	X	outcrop	14.3	2.3	1.7	2.4	0.46	0.030	1.1	3.7
P1270-X16	X	outcrop	16.0	2.5	1.7	3.4	0.44	0.040	1.3	4.1
P1270-X17	X	outcrop	14.5	2.3	1.5	2.8	0.41	0.030	1.3	3.8
P1270-X18	X	outcrop	14.4	0.6	0.5	4.5	0.04	0.030	1.5	3.8
P1270-X19	X	outcrop	15.1	2.2	1.4	3.4	0.39	0.030	1.4	3.7
P1270-X20	X	outcrop	14.3	2.4	1.5	2.2	0.39	0.030	1.2	3.8
P1270-X21	X	outcrop	15.7	2.4	1.6	3.2	0.45	0.030	1.3	4.0
P1270-X22	X	outcrop	14.6	2.1	1.5	3.7	0.40	0.030	0.8	3.4
P1270-X23	X	outcrop	14.7	2.2	1.5	2.9	0.37	0.030	1.2	3.8
P1270-X24	X	outcrop	14.2	2.3	1.6	2.4	0.41	0.030	1.2	3.8
P1270-X25	X	outcrop	15.3	2.3	1.6	3.4	0.43	0.030	1.1	3.8
P1270-X26	X	outcrop	15.5	2.4	1.5	3.2	0.40	0.030	1.1	4.0
P1270-X27	X	outcrop	15.0	2.3	1.5	3.3	0.37	0.020	1.3	3.8
P1270-X28	X	outcrop	14.9	2.2	1.7	3.3	0.43	0.030	1.4	3.7
P1270-X29	X	outcrop	14.7	2.4	1.7	2.4	0.44	0.030	1.2	3.9
P1270-X30	X	outcrop	15.9	2.2	1.6	4.2	0.42	0.030	0.7	3.7
P1270-X31	X	outcrop	16.1	2.5	1.4	3.6	0.37	0.020	1.3	4.1
P1270-X32	X	outcrop	15.8	2.2	1.6	3.8	0.40	0.030	1.1	3.8
P1270-X33	X	outcrop	14.5	2.5	1.8	2.1	0.45	0.030	1.1	3.9
P1270-X34	X	outcrop	13.7	2.2	1.7	2.6	0.45	0.030	1.1	3.5
P1270-X35	X	outcrop	14.7	0.6	0.5	6.4	0.03	0.010	1.2	2.8
P1270-X36	X	outcrop	14.1	2.2	1.5	2.6	0.38	0.020	1.1	3.6
P1270-X37	X	outcrop	15.9	2.2	2.3	3.8	0.62	0.040	1.2	3.7
P1270-X38	X	outcrop	13.5	2.1	1.3	2.7	0.35	0.020	1.2	3.5
P1270-X39	X	outcrop	15.6	2.5	1.5	3.1	0.38	0.030	1.5	4.1
P1270-X40	X	outcrop	15.3	2.5	1.7	2.9	0.44	0.030	1.1	4.0
P1277S-B2	B	10-15	14.5	2.2	1.1	2.9	0.28	0.030	1.4	3.7
P1277S-B3	B	10-15	15.3	2.3	1.3	3.0	0.34	0.030	1.8	3.8
P1277S-B4	B	10-15	14.6	2.1	1.4	2.9	0.34	0.030	1.9	3.6
P1277S-B5	B	10-15	15.0	2.2	1.2	3.0	0.32	0.030	1.4	3.7
P1277S-B6	B	10-15	14.1	2.1	1.1	3.0	0.28	0.030	1.5	3.6
P1277S-B7	B	10-15	14.4	2.2	1.1	2.8	0.28	0.030	1.3	3.6
P1277S-B8	B	10-15	14.5	2.1	1.3	2.7	0.33	0.030	1.3	3.6
P1277S-B9	B	10-15	14.6	2.1	1.2	3.0	0.30	0.030	1.3	3.6
P1277S-B10	B	10-15	14.7	2.2	1.2	2.9	0.31	0.040	1.4	3.7
P1277S-B11	B	10-15	14.6	2.2	1.2	2.9	0.31	0.030	1.1	3.7
P1277S-B12	B	10-15	13.9	2.0	1.2	2.9	0.29	0.030	1.1	3.4
P1277S-B13	B	10-15	15.1	2.2	1.4	2.7	0.38	0.020	1.3	3.8
P1277S-B14	B	10-15	14.2	2.0	1.2	3.2	0.30	0.030	1.3	3.4
P1277S-B15	B	10-15	14.6	2.2	1.2	2.8	0.32	0.030	1.6	3.7
P1277S-B16	B	10-15	14.6	2.1	1.2	3.2	0.30	0.030	1.4	3.5

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1277S-B17	B	10-15	14.6	2.0	1.3	2.8	0.33	0.030	1.1	3.6
P1277S-B1-PF1	B	2.5	14.8	2.2	1.2	3.2	0.28	0.030	1.1	3.7
P1277S-B1-PF2	B	11	14.8	2.2	1.3	2.9	0.32	0.030	1.2	3.7
P1277S-B1-PF3	B	16	14.1	2.1	1.3	2.5	0.33	0.030	1.5	3.6
P1277S-B1-PF4	B	24	14.9	2.2	1.5	2.8	0.37	0.030	1.3	3.7
P1277S-B1-PF5	B	34	15.6	2.4	1.6	2.7	0.42	0.030	1.1	4.0
P1277S-B1-PF6	B	40	15.2	2.2	1.6	2.8	0.38	0.020	1.2	3.8
P1277S-B1-PF7	B	47	15.5	2.1	1.5	3.8	0.37	0.020	1.1	3.6
P1277S-B1-PF8	S	57	15.0	2.3	1.7	2.5	0.42	0.030	1.1	3.8
P1264N-B2	B	10-15	14.9	2.3	1.7	2.6	0.43	0.041	1.1	3.7
P1264N-B3	B	10-15	15.2	2.2	1.8	2.9	0.42	0.040	1.2	3.7
P1264N-B4	B	10-15	15.3	2.2	1.6	3.1	0.38	0.040	1.6	3.7
P1264N-B5	B	10-15	15.3	2.2	1.5	3.1	0.36	0.040	1.3	3.8
P1264N-B6	B	10-15	14.2	2.1	1.4	2.9	0.33	0.040	1.2	3.5
P1264N-B7	B	10-15	15.4	2.2	1.7	3.1	0.41	0.040	1.2	3.7
P1264N-B8	B	10-15	15.0	2.3	1.8	2.5	0.44	0.040	1.3	3.8
P1264N-B9	B	10-15	15.9	2.4	1.9	2.8	0.46	0.040	1.1	4.0
P1264N-B10	B	10-15	15.1	2.2	1.7	2.9	0.43	0.041	1.2	3.7
P1264N-B11	B	10-15	16.1	2.4	2.1	2.8	0.52	0.040	1.2	4.0
P1264N-B12	B	10-15	15.3	2.2	1.6	3.3	0.39	0.041	1.2	3.7
P1264N-B13	B	10-15	14.8	2.2	1.7	2.7	0.39	0.040	1.3	3.7
P1264N-B14	B	10-15	15.5	2.2	1.7	3.4	0.42	0.040	1.1	3.7
P1264N-B15	B	10-15	15.5	2.4	2.0	2.6	0.49	0.051	1.1	3.9
P1264N-B16	B	10-15	15.4	2.3	1.7	2.8	0.41	0.041	1.2	3.8
P1264N-B17	B	10-15	15.4	2.4	1.9	2.8	0.46	0.051	1.1	3.8
P1264N-B1PF1	B	5	15.6	2.4	1.8	2.9	0.44	0.051	1.2	3.9
P1264N-B1PF2	B	13	15.6	2.4	1.9	2.6	0.47	0.041	1.2	3.9
P1264N-B1PF3	B	21	15.2	2.3	1.9	2.7	0.45	0.041	1.5	3.8
P1264N-B1PF4	B	27	15.6	2.3	1.8	2.9	0.45	0.030	1.1	3.9
P1264N-B1PF5	B	33	15.3	2.1	1.7	3.1	0.41	0.030	1.2	3.7
P1264N-B1PF6	B	43	16.2	2.3	2.2	3.1	0.53	0.041	0.7	3.9
P1264N-B1PF7	B	53	16.1	1.9	2.2	3.4	0.51	0.031	1.2	3.9
P1264N-B1PF8	S	60	13.5	0.8	1.2	4.0	0.32	0.031	1.8	3.0
P1264N-B1PF9	S	70	15.5	1.6	1.8	4.0	0.43	0.031	1.1	3.7
P1264N-B1PF10	S	67	15.2	1.1	1.5	3.7	0.35	0.020	1.5	3.8
P1264N-B1PF11	S	46	13.6	1.6	1.2	3.7	0.31	0.020	1.6	3.0
P1062-X1	X	outcrop	15.4	2.2	1.4	3.9	0.39	0.030	1.4	3.7
P1062-X2	X	outcrop	14.7	2.3	1.7	2.9	0.45	0.030	1.1	3.7
P1062-X3	X	outcrop	14.5	2.0	1.2	4.0	0.32	0.020	0.9	3.3
P1062-X4	X	outcrop	15.3	2.5	1.5	2.6	0.41	0.030	1.2	4.1
P1062-X5	X	outcrop	14.6	2.3	1.7	3.1	0.43	0.030	1.2	3.6

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1062-X6	X	outcrop	15.5	2.5	1.7	3.0	0.43	0.030	1.2	4.0
P1062-X7	X	outcrop	14.7	2.4	1.8	2.5	0.47	0.030	1.5	3.9
P1062-X8	X	outcrop	14.1	2.4	1.7	2.2	0.46	0.030	1.2	3.7
P1062-X9	X	outcrop	15.0	2.4	1.6	3.0	0.44	0.030	1.1	3.8
P1062-X10	X	outcrop	14.8	2.2	1.6	3.1	0.41	0.030	1.4	3.7
P1062-X11	X	outcrop	15.5	2.4	1.5	3.3	0.39	0.030	0.7	3.9
P1062-X12	X	outcrop	13.7	2.0	1.5	3.1	0.43	0.030	1.0	3.3
P1062-X13	X	outcrop	15.5	2.3	1.6	3.2	0.39	0.030	0.9	3.9
P1062-X14	X	outcrop	15.8	2.3	1.5	3.6	0.38	0.030	0.3	3.7
P1062-X15	X	outcrop	14.5	1.1	1.1	2.9	0.19	0.010	1.2	3.6
P1062-X16	X	outcrop	15.3	2.5	1.7	2.7	0.46	0.030	0.7	3.9
P1062-X17	X	outcrop	14.7	2.2	1.8	2.9	0.45	0.030	0.9	3.6
P1062-X18	X	outcrop	15.2	2.1	1.5	3.7	0.35	0.030	0.2	3.7
P1062-X19	X	outcrop	15.5	2.2	1.7	3.1	0.43	0.030	1.0	3.7
P1062-X20	X	outcrop	15.7	2.6	1.8	2.7	0.47	0.040	0.9	4.1
P1062-X21	X	outcrop	15.1	1.8	1.0	4.3	0.25	0.020	0.9	3.5
P1062-X22	X	outcrop	15.2	2.4	1.6	3.2	0.45	0.030	1.0	3.8
P1062-X23	X	outcrop	14.6	2.3	1.8	2.5	0.45	0.030	0.5	3.8
P1062-X24	X	outcrop	14.7	2.4	1.7	2.7	0.46	0.030	1.2	3.8
P1062-X25	X	outcrop	15.9	2.4	1.5	3.6	0.42	0.030	1.2	3.9
P1062-X26	X	outcrop	15.0	2.1	1.4	3.5	0.35	0.020	0.7	3.6
P1062-X27	X	outcrop	14.7	2.3	1.8	2.6	0.47	0.030	0.5	3.7
P1062-X28	X	outcrop	15.3	2.5	1.5	3.0	0.41	0.030	0.7	4.0
P1062-X29	X	outcrop	15.8	2.2	1.7	3.8	0.41	0.030	0.3	3.8
P1062-X30	X	outcrop	14.8	2.3	1.9	3.1	0.48	0.030	0.5	3.7
P1062-X31	X	outcrop	13.5	2.0	1.7	2.7	0.40	0.030	1.2	3.4
P1062-X32	X	outcrop	16.2	1.5	1.5	3.1	0.27	0.020	0.9	4.0
P1062-X33	X	outcrop	15.2	2.2	1.2	3.4	0.30	0.020	1.0	3.8
P1062-X34	X	outcrop	14.7	2.3	1.4	3.0	0.37	0.030	0.2	3.7
P1062-X35	X	outcrop	15.1	2.4	1.6	3.1	0.41	0.030	0.5	3.8
P1062-X36	X	outcrop	14.9	2.2	1.4	3.4	0.37	0.030	0.9	3.6
P1062-X37	X	outcrop	15.5	2.7	1.6	2.6	0.43	0.040	1.0	4.2
P1062-X38	X	outcrop	14.6	2.4	1.6	2.6	0.43	0.030	0.3	3.9
P1062-X39	X	outcrop	14.6	1.9	1.6	3.2	0.34	0.020	0.5	3.6
P1062-X40	X	outcrop	14.7	2.3	1.6	3.2	0.41	0.030	0.7	3.6
P1062S-B2	B	10-15	16.5	2.3	2.4	2.9	0.60	0.051	0.8	3.8
P1062S-B3	B	10-15	16.4	2.1	2.3	3.0	0.54	0.041	1.3	3.8
P1062S-B4	B	10-15	15.3	2.0	1.9	3.1	0.45	0.030	1.3	3.5
P1062S-B5	B	10-15	15.9	2.3	2.1	2.8	0.51	0.041	1.3	3.8
P1062S-B6	B	10-15	15.6	1.2	2.3	3.3	0.39	0.020	1.1	3.1
P1062S-B7	B	10-15	16.3	2.0	1.8	3.7	0.43	0.031	1.2	3.7
P1062S-B8	B	10-15	16.1	2.1	2.2	3.1	0.55	0.041	1.0	3.7

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
P1062S-B9	B	10-15	15.6	2.2	1.8	2.8	0.43	0.040	1.3	3.7
P1062S-B10	B	10-15	16.4	2.2	2.3	2.8	0.57	0.041	1.0	3.8
P1062S-B11	B	10-15	16.5	2.2	2.5	2.8	0.62	0.040	0.8	3.8
P1062S-B12	B	10-15	15.5	1.8	1.8	3.1	0.41	0.020	1.2	3.5
P1062S-B13	B	10-15	16.5	2.2	2.3	2.9	0.56	0.040	1.1	3.8
P1062S-B14	B	10-15	15.6	2.2	2.0	2.9	0.46	0.030	1.1	3.7
P1062S-B15	B	10-15	15.2	2.1	1.8	2.8	0.42	0.030	1.3	3.6
P1062S-B16	B	10-15	15.8	2.1	2.0	3.0	0.47	0.031	1.3	3.7
P1062S-B17	B	10-15	15.3	2.2	1.7	3.3	0.42	0.030	1.1	3.6
P1062S-B1-PF1	B	5	16.0	2.3	2.2	2.8	0.53	0.051	1.0	3.8
P1062S-B1-PF2	B	12	16.6	2.2	2.3	3.0	0.56	0.040	1.1	3.8
P1062S-B1-PF3	B	20	16.8	2.3	2.6	2.8	0.65	0.051	1.0	3.9
P1062S-B1-PF4	B	27	18.3	2.3	3.6	3.1	0.84	0.051	0.8	3.7
P1062S-B1-PF5	B	35	18.0	2.2	3.5	2.9	0.82	0.061	1.1	3.7
P1062S-B1-PF6	B	42	18.8	2.3	4.1	2.8	0.96	0.062	1.3	3.7
P1062S-B1-PF7	B	50	19.2	2.3	4.4	2.7	1.03	0.061	1.4	3.7
P1062S-B1-PF8	B	60	19.2	2.3	4.4	2.7	1.08	0.102	1.1	3.7
P1062N-B2	B	10-15	16.9	2.3	2.5	2.9	0.60	0.040	1.2	3.7
P1062N-B3	B	10-15	17.1	2.4	2.7	2.8	0.64	0.051	1.2	3.8
P1062N-B4	B	10-15	17.2	2.4	2.7	2.9	0.65	0.041	1.1	3.8
P1062N-B5	B	10-15	16.1	2.0	2.1	3.2	0.46	0.040	1.0	3.6
P1062N-B6	B	10-15	16.4	2.1	2.4	2.8	0.55	0.041	0.9	3.7
P1062N-B7	B	10-15	16.9	2.4	2.5	2.9	0.61	0.051	1.6	3.8
P1062N-B8	B	10-15	17.0	2.4	2.6	2.8	0.62	0.051	1.2	3.8
P1062N-B9	B	10-15	16.4	1.9	2.3	3.0	0.50	0.040	1.4	3.6
P1062N-B10	B	10-15	17.0	2.5	2.7	3.0	0.64	0.061	0.9	3.7
P1062N-B11	B	10-15	16.5	2.2	2.3	2.9	0.52	0.040	1.4	3.7
P1062N-B12	B	10-15	16.5	2.2	2.6	2.7	0.60	0.051	0.9	3.6
P1062N-B13	B	10-15	16.2	2.1	2.3	2.7	0.56	0.040	0.8	3.6
P1062N-B14	B	10-15	16.8	2.1	2.6	2.9	0.60	0.061	1.0	3.6
P1062N-B15	B	10-15	16.6	2.3	2.5	2.8	0.60	0.050	1.5	3.7
P1062N-B16	B	10-15	17.0	2.4	2.6	2.9	0.59	0.051	1.1	3.8
P1062N-B17	B	10-15	16.3	2.4	2.4	2.9	0.59	0.061	1.5	3.7
P1062N-B1-PF1	B	8	15.6	2.2	2.2	2.6	0.53	0.040	1.1	3.6
P1062N-B1-PF2	B	15	17.1	2.3	2.7	2.8	0.64	0.051	1.0	3.8
P1062N-B1-PF3	B	23	17.5	2.3	2.6	3.2	0.63	0.051	1.0	3.8
P1062N-B1-PF4	B	30	16.6	2.2	2.6	2.7	0.62	0.051	1.1	3.6
P1062N-B1-PF5	B	41	16.7	2.3	2.5	2.8	0.60	0.051	1.6	3.7
P1062N-B1-PF6	B	48	17.1	2.3	2.6	2.9	0.60	0.051	1.5	3.7
P1062N-B1-PF7	B	58	15.6	2.2	2.2	2.5	0.61	0.030	1.1	3.5
P1062N-B1-S1	S	58	16.5	2.2	1.9	3.7	0.45	0.031	1.0	3.7

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T2364-X1	X	outcrop	14.9	1.6	0.8	3.0	0.20	0.040	1.5	4.0
T2364-X2	X	outcrop	14.9	1.4	0.9	4.0	0.21	0.040	1.3	3.6
T2364-X3	X	outcrop	13.5	1.3	0.5	3.8	0.16	0.020	1.4	3.2
T2364-X4	X	outcrop	14.9	1.4	1.0	3.3	0.27	0.040	1.6	3.7
T2364-X5	X	outcrop	15.0	1.3	1.0	4.3	0.21	0.060	1.4	3.5
T2364-X6	X	outcrop	14.6	0.8	0.6	1.3	0.04	0.180	1.1	5.7
T2364-X7	X	outcrop	14.8	1.2	0.7	4.3	0.19	0.030	1.6	3.5
T2364-X8	X	outcrop	14.4	1.4	1.0	3.4	0.26	0.050	1.4	3.7
T2364-X9	X	outcrop	15.0	0.3	0.3	7.6	0.03	0.020	1.7	2.6
T2364-X10	X	outcrop	14.8	1.6	0.9	3.0	0.23	0.050	1.5	3.9
T2364-X11	X	outcrop	14.3	0.1	0.3	9.3	0.04	0.010	1.7	1.2
T2364-X12	X	outcrop	14.7	0.3	0.7	5.3	0.04	0.121	1.7	3.1
T2364-X13	X	outcrop	14.9	0.5	0.7	4.6	0.05	0.181	1.6	3.6
T2364-X14	X	outcrop	14.3	0.5	0.6	4.3	0.05	0.071	1.4	3.6
T2364-X15	X	outcrop	14.4	0.1	0.2	10.1	0.01	0.010	1.6	1.2
T2364-X16	X	outcrop	14.5	0.7	0.4	3.9	0.05	0.010	1.4	3.7
T2364-X17	X	outcrop	14.8	0.7	0.4	4.9	0.05	0.010	1.4	3.7
T2364-X18	X	outcrop	14.4	0.2	0.3	8.4	0.02	0.030	1.8	2.3
T2364-X19	X	outcrop	14.1	1.2	0.9	3.6	0.24	0.040	1.4	3.4
T2364-X20	X	outcrop	13.9	0.5	0.7	4.3	0.03	0.171	1.3	3.7
T2364-X21	X	outcrop	14.1	0.7	0.6	2.0	0.06	0.059	1.3	4.5
T2364-X22	X	outcrop	14.3	0.1	0.2	10.3	0.00	0.010	1.4	1.2
T2364-X23	X	outcrop	14.6	0.7	0.7	2.2	0.06	0.040	1.5	4.4
T2364-X24	X	outcrop	14.1	0.5	0.7	3.7	0.07	0.161	1.6	3.5
T2364-X25	X	outcrop	13.8	1.3	0.8	3.3	0.22	0.040	1.5	3.4
T2364-X26	X	outcrop	15.0	1.4	0.9	3.4	0.24	0.041	1.9	3.8
T2364-X27	X	outcrop	15.5	0.7	0.7	3.1	0.07	0.080	1.3	4.5
T2364-X28	X	outcrop	14.9	0.8	0.5	4.3	0.08	0.040	1.4	3.6
T2364-X29	X	outcrop	15.2	0.8	0.4	4.5	0.08	0.020	1.6	3.5
T2364-X30	X	outcrop	14.2	0.6	0.6	3.7	0.07	0.040	14.8	3.6
T2364-X31	X	outcrop	15.2	0.1	0.5	8.4	0.07	0.010	1.3	1.4
T2364-X32	X	outcrop	14.6	0.2	0.3	8.3	0.01	0.020	1.5	2.4
T2364-X33	X	outcrop	15.0	0.9	0.6	1.8	0.05	0.060	1.1	5.0
T2364-X34	X	outcrop	14.4	0.6	0.5	4.8	0.03	0.040	1.8	4.0
T2364-X35	X	outcrop	14.6	1.3	0.9	3.7	0.22	0.040	1.4	3.4
T2364-X36	X	outcrop	14.9	0.2	0.5	3.2	0.14	0.050	1.6	3.7
T2364-X37	X	outcrop	15.8	1.5	1.1	3.8	0.25	0.052	1.5	3.8
T2364-X38	X	outcrop	14.4	1.4	0.9	3.3	0.18	0.041	1.8	3.6
T2364-X39	X	outcrop	16.7	0.5	0.8	3.6	0.11	0.111	1.6	4.8
T2364-X40	X	outcrop	14.7	0.5	0.8	4.0	0.03	0.121	1.6	3.8
T2364-B2	B	10-15	16.6	1.3	1.5	3.3	0.50	0.071	2.0	3.4
T2364-B3	B	10-15	16.2	1.3	1.6	3.1	0.42	0.081	1.7	3.4

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T2364-B4	B	10-15	15.7	1.2	1.6	3.4	0.39	0.091	1.8	3.0
T2364-B5	B	10-15	15.6	1.1	1.5	3.2	0.41	0.081	1.8	3.0
T2364-B6	B	10-15	16.5	1.5	1.5	3.2	0.39	0.071	1.7	3.8
T2364-B7	B	10-15	15.6	1.2	1.3	3.8	0.33	0.061	1.5	3.2
T2364-B8	B	10-15	15.9	1.4	1.4	3.0	0.37	0.071	1.7	3.6
T2364-B9	B	10-15	15.9	1.2	1.6	3.3	0.43	0.061	2.3	3.1
T2364-B10	B	10-15	15.2	1.2	1.4	3.4	0.39	0.061	2.1	3.1
T2364-B11	B	10-15	15.8	1.0	1.3	3.7	0.51	0.051	1.8	2.7
T2364-B12	B	10-15	15.6	1.4	1.0	3.5	0.27	0.040	2.0	3.7
T2364-B13	B	10-15	16.2	1.3	1.5	3.9	0.36	0.051	1.8	3.3
T2364-B14	B	10-15	16.0	1.2	1.5	3.4	0.41	0.061	2.0	3.2
T2364-B15	B	10-15	16.3	1.3	1.5	3.6	0.42	0.081	1.2	3.4
T2364-B16	B	10-15	14.9	1.1	1.3	4.0	0.30	0.061	1.7	3.0
T2364-B17	B	10-15	15.7	1.3	1.4	3.4	0.38	0.081	1.3	3.3
T2364-B1-PF1	B	1.5	16.1	1.2	1.5	3.9	0.38	0.071	2.5	3.2
T2364-B1-PF2	B	10	17.0	1.3	1.8	3.4	0.47	0.092	1.5	3.4
T2364-B1-PF3	B	16	16.8	1.3	1.6	3.4	0.43	0.061	2.1	3.4
T2364-B1-PF4	S	24	15.1	1.2	1.0	3.5	0.26	0.040	1.7	3.0
T2364-B1-PF5	S	30	15.8	1.3	1.0	3.9	0.28	0.041	1.5	3.3
T2364-B1-PF6	S	38	15.6	1.4	1.0	3.4	0.28	0.040	2.1	3.6
T2073-X1	X	outcrop	14.8	1.8	1.3	3.5	0.29	0.040	1.4	3.9
T2073-X2	X	outcrop	14.8	1.7	1.2	3.8	0.26	0.030	1.7	3.7
T2073-X3	X	outcrop	15.2	1.8	1.3	3.6	0.29	0.040	1.4	4.0
T2073-X4	X	outcrop	14.8	1.9	1.2	3.4	0.24	0.030	1.1	3.8
T2073-X5	X	outcrop	15.0	1.8	1.3	3.6	0.26	0.030	1.4	3.9
T2073-X6	X	outcrop	14.7	1.7	1.2	3.7	0.22	0.030	1.1	3.6
T2073-X7	X	outcrop	15.3	1.9	1.1	3.7	0.25	0.030	1.3	4.0
T2073-X8	X	outcrop	15.2	1.9	1.3	3.3	0.25	0.030	1.1	3.9
T2073-X9	X	outcrop	14.6	1.7	1.2	3.7	0.29	0.030	1.0	3.7
T2073-X10	X	outcrop	14.5	1.9	1.1	3.1	0.26	0.030	1.4	3.9
T2073-X11	X	outcrop	14.2	0.7	1.0	3.0	0.19	0.030	1.0	3.9
T2073-X12	X	outcrop	14.1	1.7	1.2	3.1	0.23	0.040	1.4	3.8
T2073-X13	X	outcrop	14.0	1.9	1.3	2.7	0.28	0.030	1.3	3.8
T2073-X14	X	outcrop	14.3	1.8	1.2	3.1	0.24	0.030	1.6	3.7
T2073-X15	X	outcrop	15.4	2.0	1.6	2.9	0.33	0.040	1.2	4.1
T2073-X16	X	outcrop	14.6	1.9	1.2	2.9	0.28	0.040	1.5	4.0
T2073-X17	X	outcrop	15.0	1.8	1.1	3.5	0.27	0.040	1.4	3.9
T2073-X18	X	outcrop	14.6	1.9	1.1	2.9	0.24	0.020	1.3	4.1
T2073-X20	X	outcrop	14.1	1.7	1.2	3.3	0.26	0.030	1.6	3.8
T2073-X21	X	outcrop	14.1	1.6	1.3	3.4	0.31	0.030	1.3	3.6
T2073-X22	X	outcrop	14.3	1.6	1.3	4.0	0.26	0.030	1.3	3.5
T2073-X23	X	outcrop	14.9	1.9	1.3	3.5	0.28	0.040	1.6	3.8

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T2073-X24	X	outcrop	14.6	1.8	1.4	2.9	0.29	0.041	1.2	4.0
T2073-X25	X	outcrop	14.0	1.7	1.2	3.3	0.30	0.040	1.2	3.6
T2073-X26	X	outcrop	14.0	1.7	1.2	3.3	0.24	0.030	1.4	3.7
T2073-X27	X	outcrop	14.6	1.7	1.1	3.9	0.24	0.030	1.5	3.7
T2073-X28	X	outcrop	14.8	1.7	1.2	4.0	0.24	0.030	1.4	3.7
T2073-X29	X	outcrop	14.3	1.7	1.0	3.7	0.21	0.030	1.6	3.7
T2073-X30	X	outcrop	15.1	1.6	1.3	3.9	0.27	0.030	1.3	3.7
T2073-X31	X	outcrop	14.5	1.7	1.3	3.2	0.25	0.030	1.3	3.7
T2073-X32	X	outcrop	14.7	1.7	1.3	3.5	0.26	0.030	1.3	3.8
T2073-X33	X	outcrop	15.5	1.6	1.6	3.5	0.32	0.041	1.3	4.0
T2073-X34	X	outcrop	15.1	1.7	1.2	3.6	0.24	0.030	1.6	3.9
T2073-X35	X	outcrop	14.4	1.7	1.2	3.0	0.23	0.030	1.4	3.9
T2073-X36	X	outcrop	14.7	1.9	1.2	3.3	0.27	0.030	1.3	3.9
T2073-X37	X	outcrop	14.7	1.8	1.2	3.4	0.28	0.030	0.9	3.9
T2073-X38	X	outcrop	14.3	1.8	1.2	3.1	0.28	0.040	1.5	3.9
T2073-X39	X	outcrop	13.9	1.4	1.3	3.1	0.19	0.020	1.3	3.6
T2073-X40	X	outcrop	14.9	1.6	1.3	4.1	0.26	0.030	1.4	3.7
T2073-B2	B	10-15	15.6	1.7	1.4	3.4	0.29	0.040	0.6	3.8
T2073-B3	B	10-15	15.5	1.9	1.5	3.3	0.33	0.051	1.5	3.8
T2073-B4	B	10-15	15.2	1.8	1.4	3.4	0.28	0.040	1.7	3.7
T2073-B5	B	10-15	14.8	1.8	1.4	3.5	0.29	0.050	1.5	3.6
T2073-B6	B	10-15	15.9	1.6	1.4	3.8	0.26	0.040	1.7	3.8
T2073-B7	B	10-15	14.9	1.7	1.4	3.3	0.29	0.040	0.9	3.5
T2073-B8	B	10-15	14.7	1.8	1.5	2.9	0.31	0.051	1.5	3.6
T2073-B9	B	10-15	15.0	1.8	1.4	3.4	0.29	0.050	1.1	3.6
T2073-B10	B	10-15	14.5	1.4	1.3	3.7	0.25	0.041	1.7	3.3
T2073-B11	B	10-15	15.5	1.7	1.4	3.3	0.28	0.040	1.1	3.7
T2073-B12	B	10-15	15.2	1.8	1.6	3.0	0.34	0.051	1.7	3.8
T2073-B13	B	10-15	16.0	2.0	1.7	3.2	0.36	0.051	0.7	3.9
T2073-B14	B	10-15	15.1	1.7	1.5	3.2	0.31	0.050	1.3	3.6
T2073-B15	B	10-15	15.7	1.6	1.7	3.3	0.35	0.051	1.7	3.7
T2073-B16	B	10-15	14.9	1.6	1.5	3.4	0.30	0.050	1.1	3.5
T2073-B17	B	10-15	15.6	1.6	1.6	3.4	0.33	0.051	1.7	3.7
T2073-B1-PF1	B	3	14.9	1.7	1.4	3.3	0.32	0.051	1.8	3.6
T2073-B1-PF2	B	10	15.7	1.8	1.5	3.5	0.34	0.050	0.7	3.7
T2073-B1-PF3	B	20	15.2	1.7	1.5	3.1	0.33	0.051	1.1	3.7
T2073-B1-PF4	B	30	14.5	1.0	1.0	3.3	0.15	0.030	1.8	3.5
T2073-B1-PF5	S	37	15.0	1.0	1.0	3.6	0.15	0.020	1.7	3.6
T2073-B1-PF6	S	48	14.6	1.1	1.2	3.1	0.19	0.020	1.1	3.6
T1755-X1	X	outcrop	14.2	0.9	0.3	3.7	0.06	0.010	1.5	3.7
T1755-X2	X	outcrop	15.3	0.3	0.7	5.2	0.12	0.061	1.4	2.1

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1755-X3	X	outcrop	14.3	1.3	1.1	3.5	0.19	0.030	1.4	3.8
T1755-X4	X	outcrop	14.3	1.0	1.0	3.3	0.10	0.030	1.4	3.9
T1755-X5	X	outcrop	14.9	1.5	1.3	3.4	0.21	0.040	1.4	4.1
T1755-X6	X	outcrop	14.4	1.4	0.9	3.7	0.16	0.030	0.8	3.8
T1755-X7	X	outcrop	14.7	1.4	1.1	3.6	0.19	0.030	1.4	3.9
T1755-X8	X	outcrop	14.7	1.4	1.2	3.5	0.20	0.030	0.8	3.9
T1755-X9	X	outcrop	13.9	0.3	0.3	6.0	0.04	0.010	1.7	2.8
T1755-X10	X	outcrop	13.6	0.7	0.4	3.9	0.11	0.010	1.5	2.5
T1755-X11	X	outcrop	8.5	0.1	0.5	1.6	0.01	0.010	1.5	0.2
T1755-X12	X	outcrop	5.0	0.0	0.3	0.8	0.03	0.010	1.8	0.1
T1755-X13	X	outcrop	8.5	0.1	0.4	2.1	0.01	0.010	1.7	0.3
T1755-X14	X	outcrop	9.6	0.0	0.2	2.2	0.00	0.000	1.5	0.1
T1755-X15	X	outcrop	5.0	0.1	0.4	1.0	0.02	0.030	1.7	0.2
T1755-X16	X	outcrop	12.6	0.1	0.5	3.1	0.05	0.010	1.6	0.2
T1755-X17	X	outcrop	8.7	0.1	0.4	2.2	0.02	0.010	1.9	0.5
T1755-X18	X	outcrop	7.7	0.2	0.5	1.4	0.00	0.020	1.6	0.1
T1755-X19	X	outcrop	13.5	0.1	0.4	3.2	0.07	0.010	1.1	0.2
T1755-X20	X	outcrop	12.4	0.1	0.4	3.0	0.03	0.010	1.6	0.2
T1755-X21	X	outcrop	12.2	0.1	0.2	2.7	0.03	0.000	1.4	0.1
T1755-X22	X	outcrop	15.2	0.0	0.9	3.9	0.09	0.020	1.3	0.2
T1755-X23	X	outcrop	14.5	0.1	0.3	3.3	0.06	0.000	1.0	0.2
T1755-X24	X	outcrop	15.3	0.1	1.2	3.6	0.04	0.041	1.1	0.2
T1755-X25	X	outcrop	14.3	0.1	0.7	3.3	0.03	0.030	1.0	0.2
T1755-X26	X	outcrop	15.2	0.1	1.6	3.2	0.05	0.010	1.4	0.1
T1755-X27	X	outcrop	11.6	0.1	0.8	2.8	0.03	0.021	1.4	0.4
T1755-X28	X	outcrop	13.6	0.1	0.7	3.0	0.07	0.010	1.8	0.1
T1755-X29	X	outcrop	7.9	0.0	0.2	1.8	-0.01	0.010	1.6	0.2
T1755-X30	X	outcrop	7.5	0.1	0.5	1.2	0.01	0.020	2.0	0.2
T1755-X31	X	outcrop	14.7	0.1	1.2	3.1	0.03	0.020	1.3	0.1
T1755-X32	X	outcrop	14.3	0.1	0.6	3.3	0.07	0.040	1.4	0.3
T1755-X33	X	outcrop	9.1	0.1	0.4	2.0	0.00	0.000	1.5	0.1
T1755-X34	X	outcrop	12.4	0.1	0.7	2.7	0.03	0.050	1.5	0.2
T1755-X35	X	outcrop	11.0	0.1	0.4	2.4	0.02	0.010	1.5	0.2
T1755-X36	X	outcrop	14.6	1.2	1.1	3.6	0.18	0.030	1.1	3.8
T1755-X37	X	outcrop	14.1	0.5	0.4	6.5	0.05	0.071	1.1	2.3
T1755-X38	X	outcrop	15.0	0.9	1.0	4.8	0.12	0.160	1.2	3.6
T1755-X39	X	outcrop	14.2	1.2	1.3	3.5	0.20	0.040	1.1	3.7
T1755-X40	X	outcrop	8.5	0.0	0.3	1.6	0.00	0.010	1.4	0.1
T1755-B2	B	10-15	15.2	1.1	1.5	3.3	0.19	0.050	1.0	3.7
T1755-B3	B	10-15	14.4	1.0	1.1	3.5	0.14	0.040	1.5	3.4
T1755-B4	B	10-15	15.5	1.1	1.3	3.5	0.20	0.071	1.0	3.2
T1755-B5	B	10-15	16.2	1.3	1.4	3.6	0.24	0.071	1.6	3.7

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1755-B6	B	10-15	15.1	0.9	1.1	3.6	0.14	0.041	1.3	3.3
T1755-B7	B	10-15	15.8	1.1	1.3	3.6	0.22	0.081	0.8	3.0
T1755-B8	B	10-15	15.9	1.2	1.4	3.5	0.23	0.071	0.8	3.6
T1755-B9	B	10-15	14.9	1.2	1.3	3.4	0.20	0.061	1.3	3.7
T1755-B10	B	10-15	15.0	1.2	1.2	3.4	0.18	0.051	1.0	3.5
T1755-B11	B	10-15	16.5	1.2	1.4	3.5	0.24	0.040	1.5	3.5
T1755-B12	B	10-15	16.0	1.3	1.5	3.5	0.25	0.081	1.5	3.6
T1755-B13	B	10-15	15.2	1.2	1.3	3.5	0.22	0.070	1.5	3.5
T1755-B14	B	10-15	15.8	1.3	1.4	3.4	0.24	0.061	1.5	3.6
T1755-B15	B	10-15	14.6	1.1	1.2	3.4	0.20	0.040	1.8	3.7
T1755-B16	B	10-15	16.7	1.3	1.6	3.5	0.27	0.081	1.1	3.6
T1755-B17	B	10-15	16.1	1.3	1.5	3.6	0.26	0.091	2.1	3.8
T1755-B1-PF1	B	4	15.2	1.0	1.2	3.5	0.17	0.060	1.5	3.3
T1755-B1-PF2	B	14	16.1	0.9	1.3	3.5	0.21	0.041	1.3	2.8
T1755-B1-PF3	S	19	17.9	0.2	1.8	3.9	0.20	0.020	1.3	0.5
T1755-B1-PF4	S	27	16.4	0.2	2.0	3.5	0.16	0.010	1.5	0.5
T1755-B1-PF5	S	37	16.9	0.2	2.0	3.4	0.16	0.010	1.3	0.5
T1755-B1-PF6	S	48	15.1	0.2	1.4	3.4	0.13	0.010	1.3	0.5
T1508-X1	X	outcrop	14.9	1.5	1.0	3.5	0.22	0.030	1.3	3.9
T1508-X2	X	outcrop	14.7	1.6	1.0	3.5	0.22	0.030	1.4	3.8
T1508-X3	X	outcrop	15.2	1.6	0.9	3.8	0.21	0.030	1.5	4.0
T1508-X4	X	outcrop	15.1	1.6	1.1	3.7	0.21	0.030	1.6	4.0
T1508-X5	X	outcrop	15.4	1.4	1.0	4.0	0.21	0.030	1.5	4.0
T1508-X6	X	outcrop	14.0	0.3	0.5	4.1	0.11	0.020	1.3	3.6
T1508-X7	X	outcrop	12.6	0.1	0.5	4.2	0.09	0.020	1.3	3.0
T1508-X8	X	outcrop	14.0	1.5	1.0	3.4	0.21	0.030	1.3	3.6
T1508-X9	X	outcrop	15.2	1.7	1.0	3.4	0.22	0.030	1.3	4.2
T1508-X10	X	outcrop	15.0	1.7	1.2	3.4	0.26	0.030	1.0	4.1
T1508-X11	X	outcrop	14.2	1.5	1.1	3.4	0.23	0.030	1.4	3.8
T1508-X12	X	outcrop	14.6	1.4	1.2	3.6	0.24	0.040	1.4	3.9
T1508-X13	X	outcrop	14.8	1.4	1.2	3.7	0.25	0.030	1.1	3.9
T1508-X14	X	outcrop	14.9	1.5	1.1	3.4	0.23	0.040	1.3	4.0
T1508-X15	X	outcrop	15.0	1.6	1.3	3.9	0.28	0.040	1.0	3.8
T1508-X16	X	outcrop	14.6	1.6	1.2	3.2	0.25	0.040	1.4	3.9
T1508-X17	X	outcrop	14.5	1.3	1.3	3.2	0.25	0.040	1.1	4.0
T1508-X18	X	outcrop	14.2	1.5	1.0	3.4	0.21	0.030	1.3	3.8
T1508-X19	X	outcrop	14.7	1.4	1.0	3.5	0.21	0.030	1.5	3.9
T1508-X20	X	outcrop	15.0	1.2	1.1	3.3	0.22	0.030	1.1	4.2
T1508-X21	X	outcrop	14.3	1.4	1.2	3.1	0.25	0.040	1.5	3.9
T1508-X22	X	outcrop	14.5	1.4	1.2	3.3	0.23	0.050	1.4	4.0
T1508-X23	X	outcrop	14.6	1.6	1.1	3.2	0.24	0.040	1.2	4.0
T1508-X24	X	outcrop	15.0	1.5	1.0	3.3	0.22	0.040	1.4	4.0

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1508-X25	X	outcrop	2.1	0.2	0.2	0.6	0.00	0.010	1.6	0.0
T1508-X26	X	outcrop	14.4	0.1	0.8	3.8	0.19	0.111	1.4	3.5
T1508-X27	X	outcrop	14.1	0.1	1.0	2.7	0.19	0.100	1.5	3.9
T1508-X28	X	outcrop	15.0	0.9	0.9	4.1	0.21	0.020	0.9	2.8
T1508-X29	X	outcrop	16.1	1.0	1.1	4.5	0.25	0.030	1.5	3.4
T1508-X30	X	outcrop	14.5	0.3	1.0	3.3	0.16	0.040	1.3	4.0
T1508-X31	X	outcrop	14.7	0.2	0.9	3.3	0.17	0.030	1.5	4.2
T1508-X32	X	outcrop	14.7	0.2	0.9	3.3	0.17	0.030	1.3	4.2
T1508-X33	X	outcrop	14.7	0.3	0.9	3.1	0.19	0.040	1.3	4.2
T1508-X34	X	outcrop	14.5	1.5	1.1	3.7	0.21	0.030	1.6	3.7
T1508-X35	X	outcrop	14.8	1.6	1.1	3.5	0.23	0.040	0.3	3.9
T1508-X36	X	outcrop	15.0	1.6	1.2	3.1	0.24	0.040	1.1	4.2
T1508-X37	X	outcrop	14.8	1.6	1.2	3.5	0.22	0.030	0.9	3.9
T1508-X38	X	outcrop	14.6	1.6	1.2	3.4	0.25	0.050	1.4	3.9
T1508-X39	X	outcrop	14.5	1.7	1.2	3.1	0.25	0.040	1.0	4.0
T1508-X40	X	outcrop	14.6	1.5	1.2	3.6	0.25	0.040	1.1	3.8
T1508-B2	B	10-15	15.7	1.4	1.4	3.4	0.31	0.041	0.9	4.0
T1508-B3	B	10-15	15.7	1.3	1.5	3.5	0.33	0.061	1.1	3.9
T1508-B4	B	10-15	14.8	1.2	1.2	3.5	0.28	0.051	1.7	3.8
T1508-B5	B	10-15	15.4	1.1	1.3	3.4	0.26	0.030	1.1	4.0
T1508-B6	B	10-15	15.5	1.4	1.4	3.6	0.31	0.071	2.1	3.8
T1508-B7	B	10-15	14.8	1.4	1.2	3.6	0.24	0.030	1.1	3.8
T1508-B8	B	10-15	15.4	1.1	1.4	3.4	0.33	0.050	2.1	3.7
T1508-B9	B	10-15	15.1	1.4	1.2	3.4	0.28	0.041	1.3	4.0
T1508-B10	B	10-15	14.7	1.4	1.3	3.3	0.28	0.061	1.7	3.8
T1508-B11	B	10-15	15.2	1.3	1.3	3.7	0.27	0.050	1.1	3.8
T1508-B12	B	10-15	15.2	1.2	1.2	3.8	0.25	0.051	0.9	3.7
T1508-B13	B	10-15	15.5	1.3	1.4	3.5	0.30	0.051	1.5	3.9
T1508-B14	B	10-15	15.4	1.4	1.3	3.3	0.28	0.061	1.3	3.8
T1508-B15	B	10-15	16.4	1.4	1.6	3.6	0.34	0.052	1.1	4.0
T1508-B16	B	10-15	15.4	1.3	1.4	3.5	0.31	0.061	2.1	3.8
T1508-B17	B	10-15	15.4	1.3	1.5	3.5	0.31	0.082	1.7	3.9
T1508-B1-PF1	B	4	15.2	1.3	1.4	3.4	0.36	0.091	1.3	3.7
T1508-B1-PF2	B	11	15.0	1.3	1.3	3.5	0.29	0.061	1.7	3.7
T1508-B1-PF3	B	21	15.1	1.0	1.2	3.6	0.29	0.020	1.3	3.5
T1508-B1-PF4	B	32	15.1	1.1	1.3	3.4	0.35	0.020	1.5	3.5
T1508-B1-PF5	B	45	15.3	1.1	1.3	3.4	0.38	0.020	1.3	3.4
T1508-B1-PF6	B	65	14.6	1.0	1.1	3.5	0.29	0.030	1.9	3.4
T1508-B1-PF7	B	80	15.6	1.2	1.3	3.6	0.33	0.030	1.7	3.7
T1508-B1-PF8	B	93	15.2	1.1	1.2	3.5	0.28	0.020	1.9	3.7
T1294-X1	X	outcrop	14.4	1.5	0.8	3.3	0.11	0.030	1.6	4.0

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1294-X2	X	outcrop	15.5	1.6	0.5	4.4	0.08	0.020	1.4	4.2
T1294-X3	X	outcrop	14.9	1.2	0.6	4.5	0.11	0.020	1.3	2.9
T1294-X4	X	outcrop	14.3	1.3	0.7	3.6	0.13	0.020	1.2	3.4
T1294-X5	X	outcrop	14.7	0.3	0.9	3.8	0.15	0.030	1.3	3.9
T1294-X6	X	outcrop	14.1	0.9	1.0	3.6	0.16	0.030	1.5	3.7
T1294-X7	X	outcrop	14.8	1.7	0.8	3.5	0.12	0.030	1.4	4.1
T1294-X8	X	outcrop	14.9	1.4	0.7	3.8	0.13	0.030	1.6	3.9
T1294-X9	X	outcrop	15.4	1.5	0.7	4.0	0.11	0.020	1.6	4.1
T1294-X10	X	outcrop	15.4	1.4	0.6	5.2	0.10	0.020	1.6	3.7
T1294-X11	X	outcrop	14.8	0.8	1.1	3.7	0.17	0.041	1.5	3.9
T1294-X12	X	outcrop	14.6	0.4	1.0	3.0	0.17	0.030	1.5	4.4
T1294-X13	X	outcrop	14.8	1.0	1.0	3.7	0.14	0.030	1.6	3.9
T1294-X14	X	outcrop	14.8	0.7	1.0	3.8	0.15	0.040	1.8	4.0
T1294-X15	X	outcrop	14.6	1.3	0.9	3.9	0.14	0.030	1.4	3.6
T1294-X16	X	outcrop	14.5	1.5	1.2	3.4	0.18	0.041	1.3	3.8
T1294-X17	X	outcrop	13.8	0.5	0.4	4.5	0.04	0.110	1.5	3.4
T1294-X18	X	outcrop	15.1	0.3	1.0	3.3	0.19	0.041	1.4	4.0
T1294-X19	X	outcrop	14.9	0.6	1.0	3.6	0.15	0.050	1.4	4.1
T1294-X20	X	outcrop	15.2	0.7	1.0	3.7	0.18	0.040	1.2	4.0
T1294-X21	X	outcrop	14.3	0.8	1.0	3.8	0.16	0.030	1.2	3.5
T1294-X22	X	outcrop	14.0	0.3	1.1	3.5	0.18	0.040	1.2	3.7
T1294-X23	X	outcrop	14.5	1.1	0.9	4.0	0.17	0.030	1.5	3.2
T1294-X24	X	outcrop	15.9	0.7	0.9	4.7	0.18	0.030	1.2	3.5
T1294-X25	X	outcrop	14.5	1.3	0.7	3.8	0.11	0.020	1.5	3.6
T1294-X26	X	outcrop	15.1	1.2	0.7	3.6	0.15	0.021	1.5	3.0
T1294-X27	X	outcrop	14.7	1.1	1.0	4.3	0.17	0.040	1.4	3.2
T1294-X28	X	outcrop	14.5	1.5	1.0	3.6	0.15	0.020	1.8	3.7
T1294-X29	X	outcrop	14.7	1.5	1.6	3.6	0.21	0.030	1.3	3.7
T1294-X30	X	outcrop	14.5	1.1	0.7	3.9	0.12	0.020	1.2	3.7
T1294-X31	X	outcrop	14.5	1.3	0.8	3.5	0.13	0.020	1.3	3.9
T1294-X32	X	outcrop	14.5	0.6	1.0	3.7	0.16	0.030	1.6	3.9
T1294-X33	X	outcrop	14.7	0.3	0.9	3.7	0.15	0.020	1.4	4.0
T1294-X34	X	outcrop	14.9	0.6	1.1	4.4	0.21	0.040	0.8	2.9
T1294-X35	X	outcrop	14.6	0.2	1.1	3.1	0.21	0.020	1.5	4.0
T1294-X36	X	outcrop	14.5	1.4	1.2	3.5	0.18	0.040	0.9	3.8
T1294-X37	X	outcrop	14.4	1.5	1.0	3.5	0.16	0.030	1.1	3.8
T1294-X38	X	outcrop	14.9	1.6	1.3	3.3	0.22	0.040	1.1	3.8
T1294-X39	X	outcrop	15.0	1.6	0.8	4.1	0.13	0.030	1.8	3.9
T1294-X40	X	outcrop	14.4	1.5	1.1	3.6	0.19	0.040	1.3	3.8
T1294-B2	B	10-15	15.4	1.5	1.5	3.4	0.24	0.050	1.2	4.0
T1294-B3	B	10-15	14.7	1.5	1.1	3.5	0.16	0.040	1.5	3.9
T1294-B4	B	10-15	14.5	1.5	1.2	3.4	0.21	0.061	1.4	3.8
T1294-B5	B	10-15	15.1	1.6	1.4	3.5	0.22	0.050	1.4	4.0

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1294-B6	B	10-15	15.2	1.6	1.2	3.4	0.20	0.050	1.4	4.1
T1294-B7	B	10-15	14.7	1.5	1.1	3.4	0.17	0.040	1.4	4.0
T1294-B8	B	10-15	14.8	1.4	1.2	3.5	0.21	0.050	1.2	3.9
T1294-B9	B	10-15	14.9	1.5	1.5	3.4	0.24	0.070	1.4	3.9
T1294-B10	B	10-15	14.5	1.4	1.1	3.5	0.18	0.040	0.7	3.8
T1294-B11	B	10-15	15.0	1.5	1.4	3.5	0.22	0.050	1.2	3.9
T1294-B12	B	10-15	14.8	1.6	1.2	3.2	0.18	0.040	0.8	4.0
T1294-B13	B	10-15	14.6	1.5	1.2	3.5	0.20	0.040	1.4	3.8
T1294-B14	B	10-15	14.1	1.4	1.0	3.4	0.16	0.040	1.2	3.8
T1294-B15	B	10-15	14.9	1.5	1.3	3.5	0.21	0.051	1.5	3.9
T1294-B16	B	10-15	14.5	1.4	1.3	3.4	0.21	0.050	1.0	3.8
T1294-B17	B	10-15	14.9	1.5	1.3	3.6	0.20	0.051	1.0	3.9
T1294-B1-PF1	B	2	14.2	1.4	1.1	3.2	0.17	0.040	1.0	3.8
T1294-B1-PF2	B	9	14.2	1.4	1.2	3.4	0.19	0.050	0.8	3.7
T1294-B1-PF3	B	19	14.7	1.4	1.4	3.4	0.22	0.050	1.4	3.9
T1294-B1-PF4	B	28	14.6	1.4	1.2	3.5	0.18	0.040	1.2	3.9
T1294-B1-PF5	B	36	15.3	1.5	1.4	3.4	0.23	0.040	1.2	4.0
T1294-B1-PF6	B	46	14.9	1.6	1.5	3.3	0.23	0.040	1.0	4.0
T1294-B1-PF7	B	56	14.0	1.6	1.1	3.1	0.16	0.030	1.5	3.9
T1294-B1-PF8	B	70	14.5	1.7	1.3	3.1	0.20	0.040	1.0	4.1
T1084-X1	X	outcrop	14.7	1.5	0.9	3.7	0.15	0.030	1.4	3.9
T1084-X2	X	outcrop	13.8	1.4	0.8	3.4	0.13	0.030	1.5	3.8
T1084-X3	X	outcrop	15.0	1.5	1.0	3.9	0.16	0.030	1.4	3.9
T1084-X4	X	outcrop	14.4	1.4	0.8	3.6	0.14	0.030	1.3	3.8
T1084-X5	X	outcrop	14.5	1.4	1.1	3.5	0.20	0.040	1.6	3.8
T1084-X6	X	outcrop	14.5	1.3	0.8	3.9	0.14	0.030	1.3	3.9
T1084-X7	X	outcrop	15.3	1.6	0.7	4.0	0.13	0.030	1.5	4.0
T1084-X8	X	outcrop	14.2	1.6	0.9	3.2	0.14	0.030	1.1	4.0
T1084-X9	X	outcrop	14.0	1.6	1.0	3.0	0.16	0.040	1.5	3.9
T1084-X10	X	outcrop	14.0	1.4	0.9	3.4	0.17	0.030	1.2	3.8
T1084-X11	X	outcrop	14.5	1.6	1.1	3.6	0.18	0.041	2.0	3.9
T1084-X12	X	outcrop	14.8	1.7	1.2	3.2	0.21	0.040	0.9	4.1
T1084-X13	X	outcrop	14.3	0.2	0.6	3.1	0.18	0.030	1.3	3.8
T1084-X14	X	outcrop	14.5	1.4	1.0	3.7	0.17	0.030	1.5	3.8
T1084-X15	X	outcrop	14.5	1.4	1.1	3.6	0.17	0.030	1.3	3.9
T1084-X16	X	outcrop	14.6	1.5	1.2	3.6	0.21	0.041	1.6	3.9
T1084-X17	X	outcrop	13.9	1.3	1.0	4.0	0.15	0.030	0.9	3.5
T1084-X18	X	outcrop	14.2	1.4	1.1	3.5	0.18	0.040	1.0	3.7
T1084-X19	X	outcrop	14.5	1.2	1.4	3.6	0.21	0.050	1.0	3.8
T1084-X20	X	outcrop	14.1	1.1	1.2	3.0	0.18	0.040	1.3	3.8
T1084-X21	X	outcrop	14.2	1.2	1.0	3.5	0.17	0.030	0.9	3.8
T1084-X22	X	outcrop	14.5	1.3	1.0	3.3	0.18	0.040	1.0	4.0

Sample Name	Type	Depth (cm)	Al <sub>2</sub> O <sub>3</sub> %	CaO %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	MgO %	MnO %	Mo ppm	Na <sub>2</sub> O %
T1084-X23	X	outcrop	14.8	1.4	0.9	4.0	0.14	0.030	1.5	4.0
T1084-X24	X	outcrop	14.0	0.8	0.9	3.7	0.15	0.030	1.2	3.6
T1084-X25	X	outcrop	14.7	0.7	0.7	4.0	0.13	0.030	1.3	3.8
T1084-X26	X	outcrop	14.5	1.1	1.2	3.9	0.20	0.040	1.1	3.8
T1084-X27	X	outcrop	14.3	1.3	1.0	3.7	0.17	0.030	1.3	3.7
T1084-X28	X	outcrop	14.8	0.6	1.0	3.5	0.20	0.030	1.1	3.9
T1084-X29	X	outcrop	13.9	0.7	1.0	3.4	0.16	0.040	1.3	3.6
T1084-X30	X	outcrop	13.4	1.2	1.0	3.8	0.15	0.030	1.1	3.4
T1084-X31	X	outcrop	14.5	1.2	0.8	3.5	0.10	0.101	1.3	4.1
T1084-X32	X	outcrop	14.9	1.4	1.1	3.4	0.18	0.040	0.9	4.1
T1084-X33	X	outcrop	14.7	1.0	0.9	3.8	0.15	0.030	1.2	4.0
T1084-X34	X	outcrop	14.3	1.0	1.0	3.7	0.17	0.030	1.3	3.8
T1084-X35	X	outcrop	15.0	0.8	1.2	3.8	0.20	0.040	1.2	4.0
T1084-X36	X	outcrop	15.3	0.8	1.0	4.4	0.15	0.030	1.4	3.7
T1084-X37	X	outcrop	14.9	1.3	1.0	3.8	0.18	0.030	1.1	4.0
T1084-X38	X	outcrop	14.9	0.9	1.0	3.7	0.18	0.030	1.0	3.9
T1084-X39	X	outcrop	14.4	1.3	1.1	3.4	0.18	0.030	1.6	4.1
T1084-X40	X	outcrop	14.1	0.9	1.0	4.1	0.17	0.040	1.1	3.6
T1084-B2	B	10-15	14.5	1.2	1.0	3.6	0.16	0.030	1.4	3.9
T1084-B3	B	10-15	14.9	1.3	1.0	3.7	0.17	0.030	1.4	3.9
T1084-B4	B	10-15	15.2	1.2	1.4	3.7	0.23	0.051	1.3	3.8
T1084-B5	B	10-15	14.9	1.3	1.2	3.6	0.21	0.051	1.3	3.9
T1084-B6	B	10-15	15.0	1.3	1.3	3.5	0.22	0.041	1.0	3.9
T1084-B7	B	10-15	15.2	1.4	1.3	3.7	0.22	0.051	1.6	3.9
T1084-B8	B	10-15	14.9	1.4	1.4	3.5	0.24	0.071	1.1	3.8
T1084-B9	B	10-15	15.0	1.4	1.4	3.6	0.24	0.061	1.0	3.8
T1084-B10	B	10-15	14.9	1.3	1.3	3.7	0.22	0.061	1.1	3.8
T1084-B11	B	10-15	14.9	1.3	1.3	3.6	0.22	0.060	1.3	3.8
T1084-B12	B	10-15	14.6	1.3	1.1	3.8	0.20	0.061	1.4	3.8
T1084-B13	B	10-15	14.8	1.2	1.3	3.6	0.22	0.060	1.1	3.8
T1084-B14	B	10-15	14.8	1.3	1.3	3.4	0.24	0.060	1.1	3.7
T1084-B15	B	10-15	14.8	1.3	1.3	3.7	0.24	0.071	1.6	3.7
T1084-B16	B	10-15	14.9	1.3	1.4	3.4	0.24	0.061	1.6	3.8
T1084-B17	B	10-15	15.2	1.3	1.3	3.6	0.22	0.060	1.4	3.9
T1084-B1-PF1	B	3	14.8	1.2	1.2	3.5	0.20	0.051	1.1	3.8
T1084-B1-PF2	B	11	15.3	1.2	1.4	3.9	0.24	0.061	1.4	3.7
T1084-B1-PF3	B	19	15.2	1.3	1.5	3.6	0.25	0.061	1.1	3.8
T1084-B1-PF4	B	26	14.8	1.3	1.3	3.5	0.23	0.061	1.4	3.8
T1084-B1-PF5	B	39	14.7	1.1	1.2	3.7	0.21	0.051	1.7	3.6
T1084-B1-PF6	B	53	15.3	1.2	1.3	3.8	0.22	0.051	1.7	3.8
T1084-B1-PF7	B	60	15.0	1.2	1.2	3.9	0.20	0.051	1.0	3.8
T1084-B1-PF8	B	71	14.7	1.3	1.5	3.4	0.26	0.061	1.4	3.7

Table S2: Sample compositions (Nb to Zr). Type X=rock, B=regolith, S=underlying parent rock.

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P2280-X1	X	outcrop	15.7	0.087	73	72.5	697	6.4	0.26	9.8	129
P2280-X2	X	outcrop	13.6	0.071	75	73.2	684	9.1	0.21	9.6	117
P2280-X3	X	outcrop	17.9	0.106	89	73.0	637	13.3	0.28	11.2	132
P2280-X4	X	outcrop	15.6	0.079	69	73.6	660	6.5	0.25	8.6	136
P2280-X5	X	outcrop	10.0	0.052	72	78.2	546	7.1	0.16	7.4	112
P2280-X6	X	outcrop	13.0	0.055	62	70.3	859	9.2	0.23	8.4	94
P2280-X7	X	outcrop	15.0	0.076	80	70.9	709	4.5	0.24	8.1	116
P2280-X8	X	outcrop	15.6	0.084	66	73.4	632	7.0	0.24	8.4	119
P2280-X9	X	outcrop	13.3	0.057	59	70.4	857	8.6	0.24	8.3	103
P2280-X10	X	outcrop	15.6	0.076	75	73.3	641	5.6	0.23	7.7	122
P2280-X11	X	outcrop	15.4	0.085	68	73.4	642	7.5	0.25	10.1	130
P2280-X12	X	outcrop	15.0	0.087	71	73.6	641	5.8	0.24	8.9	130
P2280-X13	X	outcrop	14.6	0.092	84	72.0	677	6.8	0.23	8.8	123
P2280-X14	X	outcrop	15.9	0.081	69	74.7	563	6.4	0.22	8.7	123
P2280-X15	X	outcrop	13.9	0.103	68	72.7	668	4.9	0.23	7.7	125
P2280-X16	X	outcrop	13.8	0.083	68	74.3	638	5.8	0.23	8.5	135
P2280-X17	X	outcrop	11.6	0.090	65	75.7	612	9.2	0.19	7.9	106
P2280-X18	X	outcrop	14.4	0.078	66	74.4	631	6.5	0.24	8.9	134
P2280-X19	X	outcrop	13.8	0.083	92	71.2	722	5.0	0.24	10.4	127
P2280-X20	X	outcrop	14.3	0.085	70	73.6	633	7.5	0.24	8.0	123
P2280-X21	X	outcrop	11.6	0.064	72	74.3	724	8.2	0.17	7.7	75
P2280-X22	X	outcrop	15.8	0.132	68	73.1	650	5.7	0.25	9.6	131
P2280-X23	X	outcrop	13.6	0.089	103	75.7	477	3.6	0.24	8.1	123
P2280-X24	X	outcrop	15.8	0.085	72	72.7	683	7.4	0.26	10.5	128
P2280-X25	X	outcrop	14.2	0.078	66	74.0	625	7.5	0.23	8.7	122
P2280-X26	X	outcrop	24.9	0.054	196	76.1	168	1.2	0.05	10.3	36
P2280-X27	X	outcrop	15.2	0.073	81	71.9	697	5.7	0.24	9.0	119
P2280-X28	X	outcrop	15.2	0.082	76	72.3	672	6.5	0.24	10.0	119
P2280-X29	X	outcrop	17.7	0.120	164	70.2	681	9.1	0.31	11.1	72
P2280-X30	X	outcrop	15.0	0.097	101	76.6	444	5.3	0.23	9.6	123
P2280-X31	X	outcrop	11.4	0.098	67	73.6	697	8.2	0.19	7.3	111
P2280-X32	X	outcrop	14.6	0.080	95	71.0	703	4.9	0.22	9.0	116
P2280-X33	X	outcrop	14.0	0.073	71	74.7	587	7.6	0.21	7.7	113
P2280-X34	X	outcrop	16.5	0.078	68	74.1	586	5.9	0.25	8.6	131
P2280-X35	X	outcrop	15.7	0.079	76	72.2	683	5.9	0.24	8.0	114
P2280-X36	X	outcrop	14.4	0.073	76	73.8	628	8.7	0.23	7.2	124
P2280-X37	X	outcrop	16.3	0.093	74	73.7	603	8.2	0.24	7.9	120
P2280-X38	X	outcrop	14.0	0.094	90	72.5	653	6.3	0.22	9.5	120
P2280-X39	X	outcrop	15.1	0.091	74	72.3	688	6.4	0.26	8.6	130
P2280-X40	X	outcrop	14.3	0.079	90	71.4	721	7.5	0.23	8.5	112

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P2283S-B2	B	10-15	16.1	0.082	87	72.2	557	6.7	0.32	9.1	147
P2283S-B3	B	10-15	14.5	0.095	95	72.9	562	5.4	0.28	9.4	138
P2283S-B4	B	10-15	15.4	0.107	84	73.3	532	6.5	0.31	9.4	138
P2283S-B5	B	10-15	15.5	0.089	82	72.8	567	6.1	0.29	9.3	144
P2283S-B6	B	10-15	15.6	0.104	82	73.2	558	5.9	0.29	9.6	141
P2283S-B7	B	10-15	14.8	0.104	85	72.5	577	6.5	0.29	9.5	138
P2283S-B8	B	10-15	15.9	0.119	88	71.5	597	5.9	0.30	9.7	133
P2283S-B9	B	10-15	15.9	0.120	84	72.0	590	6.5	0.30	9.8	135
P2283S-B10	B	10-15	17.6	0.101	88	71.9	552	6.6	0.34	9.9	143
P2283S-B11	B	10-15	14.2	0.087	83	74.0	541	7.9	0.27	9.6	136
P2283S-B12	B	10-15	15.6	0.092	87	72.7	571	6.5	0.28	8.8	141
P2283S-B13	B	10-15	14.2	0.118	84	73.1	567	6.1	0.27	8.7	129
P2283S-B14	B	10-15	16.4	0.096	89	71.5	571	8.0	0.32	10.0	142
P2283S-B15	B	10-15	15.7	0.094	78	73.6	554	4.9	0.28	8.5	142
P2283S-B16	B	10-15	14.8	0.093	75	74.6	532	6.1	0.28	8.8	142
P2283S-B17	B	10-15	16.4	0.114	84	72.4	571	6.4	0.32	9.6	141
P2283S-B1-PF1	B	3	14.3	0.098	80	73.8	550	5.9	0.27	8.6	138
P2283S-B1-PF2	B	9	17.8	0.103	91	70.4	603	5.9	0.34	9.7	143
P2283S-B1-PF3	B	17	15.8	0.088	87	72.2	579	5.6	0.29	9.5	138
P2283S-B1-PF4	B	23	15.3	0.091	80	73.9	542	7.3	0.28	9.1	136
P2283S-B1-PF5	B	35	14.8	0.086	84	74.1	527	4.5	0.28	10.2	142
P2283S-B1-PF6	B	45	14.3	0.083	75	75.1	505	6.5	0.28	9.1	141
P2283S-B1-PF7	B	60	16.7	0.089	87	72.2	555	7.0	0.33	9.6	146
P2281N-B2	B	10-15	18.3	0.139	85	71.2	556	7.6	0.36	11.0	141
P2281N-B3	B	10-15	16.0	0.124	83	72.9	540	7.7	0.32	9.7	145
P2281N-B4	B	10-15	15.8	0.128	81	73.6	530	7.5	0.30	9.6	129
P2281N-B5	B	10-15	17.0	0.156	93	70.7	573	8.4	0.35	10.5	142
P2281N-B6	B	10-15	16.9	0.156	91	71.4	562	7.6	0.34	9.9	145
P2281N-B7	B	10-15	14.1	0.148	83	72.9	555	6.2	0.30	9.2	138
P2281N-B8	B	10-15	16.4	0.135	86	72.4	528	5.3	0.34	10.0	139
P2281N-B9	B	10-15	17.0	0.140	88	71.9	535	8.9	0.34	10.3	140
P2281N-B10	B	10-15	15.8	0.132	81	73.4	518	4.3	0.31	9.7	147
P2281N-B11	B	10-15	17.0	0.156	88	72.1	527	8.7	0.36	10.1	140
P2281N-B12	B	10-15	14.7	0.138	81	74.6	497	6.6	0.30	9.4	129
P2281N-B13	B	10-15	16.0	0.144	85	72.4	527	7.7	0.33	9.6	138
P2281N-B14	B	10-15	14.0	0.102	78	74.3	533	6.1	0.27	9.0	138
P2281N-B15	B	10-15	18.0	0.119	87	71.3	559	6.7	0.35	9.7	138
P2281N-B16	B	10-15	16.3	0.132	86	71.8	553	10.3	0.32	10.0	143
P2281N-B17	B	10-15	17.3	0.121	86	71.5	555	9.0	0.35	10.3	144
P2281N-B1-PF1	B	7	16.5	0.153	89	71.6	568	8.4	0.33	9.8	138
P2281N-B1-PF2	B	15	15.6	0.133	83	73.1	528	6.4	0.31	9.5	130
P2281N-B1-PF3	B	23	17.2	0.145	87	71.4	553	7.8	0.35	10.0	141

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P2281N-B1-PF4	B	36	15.8	0.135	85	72.5	536	7.8	0.32	10.2	145
P2281N-B1-PF5	B	46	17.4	0.151	84	72.5	505	7.4	0.34	10.0	140
P2281N-B1-PF6	B	80	15.2	0.108	80	75.1	473	4.9	0.24	8.6	121
P2281N-B1-PF7	B	91	16.6	0.100	75	74.5	498	6.1	0.25	9.0	121
P2090S-X1	X	outcrop	13.7	0.080	60	74.6	640	6.9	0.24	8.4	135
P2090S-X2	X	outcrop	14.5	0.072	61	74.7	640	5.9	0.24	9.4	122
P2090S-X3	X	outcrop	8.5	0.074	114	70.1	804	2.8	0.15	8.7	104
P2090S-X4	X	outcrop	14.4	0.081	76	72.7	674	5.0	0.24	9.2	125
P2090S-X5	X	outcrop	14.6	0.080	57	74.1	654	7.2	0.24	9.3	129
P2090S-X6	X	outcrop	15.3	0.084	68	73.5	637	7.0	0.23	8.9	121
P2090S-X7	X	outcrop	13.8	0.077	70	74.4	628	6.4	0.24	10.0	124
P2090S-X8	X	outcrop	14.6	0.099	69	73.7	651	5.0	0.24	9.1	127
P2090S-X9	X	outcrop	14.5	0.079	81	72.9	677	6.1	0.25	10.1	134
P2090S-X10	X	outcrop	12.1	0.072	78	74.9	639	8.9	0.20	8.6	119
P2090S-X11	X	outcrop	13.9	0.072	68	71.2	815	10.2	0.25	7.9	102
P2090S-X12	X	outcrop	12.6	0.100	76	71.8	736	5.8	0.23	7.3	122
P2090S-X13	X	outcrop	11.1	0.097	57	76.3	623	5.7	0.22	8.4	139
P2090S-X14	X	outcrop	11.3	0.088	84	72.2	722	4.5	0.20	9.3	114
P2090S-X15	X	outcrop	12.0	0.080	81	73.0	689	5.0	0.22	9.4	122
P2090S-X16	X	outcrop	15.3	0.088	82	72.0	622	3.8	0.23	8.7	125
P2090S-X17	X	outcrop	15.4	0.110	72	72.1	681	5.2	0.27	8.8	127
P2090S-X18	X	outcrop	14.4	0.081	64	73.5	650	5.0	0.25	7.9	131
P2090S-X19	X	outcrop	12.7	0.085	67	73.6	666	6.0	0.23	8.0	119
P2090S-X20	X	outcrop	13.7	0.075	71	72.9	678	4.3	0.23	7.8	122
P2090S-X21	X	outcrop	15.5	0.080	69	72.7	636	5.4	0.25	8.0	115
P2090S-X22	X	outcrop	13.6	0.094	67	72.8	686	5.4	0.25	9.3	129
P2090S-X23	X	outcrop	5.5	0.067	112	66.7	178	-1.4	0.04	7.2	14
P2090S-X24	X	outcrop	18.2	0.104	117	72.5	576	15.6	0.29	13.2	126
P2090S-X25	X	outcrop	15.9	0.078	68	72.2	713	6.9	0.25	9.1	132
P2090S-X26	X	outcrop	15.7	0.075	106	74.4	435	3.9	0.13	11.3	52
P2090S-X27	X	outcrop	12.6	0.089	74	72.2	701	3.8	0.23	8.5	115
P2090S-X28	X	outcrop	15.7	0.108	66	73.0	661	5.0	0.25	8.2	125
P2090S-X29	X	outcrop	26.7	0.068	81	73.7	502	9.8	0.25	16.2	124
P2090S-X30	X	outcrop	13.1	0.082	72	72.3	713	4.4	0.23	8.5	118
P2090S-X31	X	outcrop	13.1	0.083	62	74.0	633	5.8	0.23	7.4	123
P2090S-X32	X	outcrop	14.6	0.085	69	73.6	634	6.2	0.24	8.2	120
P2090S-X33	X	outcrop	5.7	0.057	179	71.6	151	0.3	0.03	11.1	8
P2090S-X34	X	outcrop	12.8	0.073	76	72.6	695	6.1	0.23	8.3	117
P2090S-X35	X	outcrop	14.0	0.077	72	73.4	663	6.4	0.23	8.3	118
P2090S-X36	X	outcrop	12.0	0.084	70	73.0	706	4.6	0.23	8.9	130
P2090S-X37	X	outcrop	13.9	0.077	70	71.8	721	5.1	0.27	9.4	126
P2090S-X38	X	outcrop	11.9	0.072	65	74.3	770	4.4	0.19	8.8	94

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P2090S-X39	X	outcrop	13.7	0.084	60	74.0	652	5.5	0.26	7.5	131
P2090S-X40	X	outcrop	11.7	0.077	79	72.6	716	4.3	0.19	9.0	118
P2090S-B2	B	10-15	15.1	0.150	86	71.3	582	6.3	0.35	10.3	141
P2090S-B3	B	10-15	12.8	0.123	70	76.1	479	6.1	0.31	9.6	140
P2090S-B4	B	10-15	15.0	0.143	79	72.2	565	5.4	0.35	10.8	142
P2090S-B5	B	10-15	15.0	0.140	77	72.9	515	6.0	0.38	10.1	137
P2090S-B6	B	10-15	13.3	0.132	76	74.2	518	5.5	0.32	9.6	141
P2090S-B7	B	10-15	13.9	0.153	78	73.0	561	6.6	0.34	10.5	137
P2090S-B8	B	10-15	13.7	0.137	76	74.0	520	6.8	0.33	10.0	138
P2090S-B9	B	10-15	14.5	0.140	76	73.2	544	5.9	0.33	9.8	139
P2090S-B10	B	10-15	13.6	0.126	80	73.8	531	5.7	0.31	9.7	135
P2090S-B11	B	10-15	14.2	0.134	80	72.5	547	5.5	0.36	10.0	143
P2090S-B12	B	10-15	13.6	0.122	72	74.7	514	4.9	0.32	9.0	141
P2090S-B13	B	10-15	12.8	0.138	79	73.8	545	7.0	0.32	9.4	127
P2090S-B14	B	10-15	12.9	0.127	78	74.1	534	5.4	0.31	9.8	132
P2090S-B15	B	10-15	13.2	0.132	75	74.7	510	5.3	0.31	9.3	138
P2090S-B16	B	10-15	14.4	0.134	77	74.1	510	5.7	0.34	9.5	135
P2090S-B17	B	10-15	12.3	0.121	79	74.3	542	3.4	0.29	9.1	133
P2090S-B1PF1	B	8	13.0	0.130	76	74.8	515	5.6	0.29	9.6	129
P2090S-B1PF2	B	16	14.3	0.129	76	74.2	524	7.3	0.34	9.9	138
P2090S-B1PF3	B	24	15.5	0.128	79	72.3	551	6.2	0.37	9.9	145
P2090S-B1PF4	B	33	12.8	0.101	77	74.3	557	6.3	0.28	9.1	133
P2090S-B1PF5	B	45	14.9	0.100	81	71.8	588	6.4	0.34	10.1	135
P2090S-B1PF6	B	59	14.1	0.087	85	72.4	588	5.9	0.30	9.6	137
P2090S-B1PF7	S	50	15.4	0.074	84	72.8	659	6.4	0.26	8.5	121
P2090S-B1PF8	S	50	10.8	0.071	106	70.6	776	1.1	0.18	8.0	108
P1850N-X1	X	outcrop	12.8	0.061	92	74.0	656	13.9	0.17	8.9	104
P1850N-X2	X	outcrop	12.6	0.072	69	73.9	658	7.5	0.24	8.9	140
P1850N-X3	X	outcrop	10.2	0.069	63	73.1	710	6.7	0.21	8.4	137
P1850N-X4	X	outcrop	10.4	0.074	75	73.9	693	8.1	0.19	9.4	130
P1850N-X5	X	outcrop	10.9	0.081	70	72.2	747	5.2	0.22	8.8	130
P1850N-X6	X	outcrop	12.9	0.080	65	73.3	652	8.2	0.22	8.5	132
P1850N-X7	X	outcrop	12.0	0.066	74	74.0	672	7.4	0.24	9.1	130
P1850N-X8	X	outcrop	11.3	0.068	69	73.2	714	6.0	0.23	9.0	133
P1850N-X9	X	outcrop	22.7	0.059	114	72.9	370	10.3	0.21	14.0	91
P1850N-X10	X	outcrop	11.4	0.073	54	73.6	684	7.5	0.21	9.2	131
P1850N-X11	X	outcrop	25.2	0.090	117	69.1	674	17.0	0.33	13.1	83
P1850N-X12	X	outcrop	12.3	0.069	57	76.3	583	7.5	0.22	7.6	132
P1850N-X13	X	outcrop	15.8	0.188	70	75.6	512	17.0	0.30	19.7	311
P1850N-X14	X	outcrop	9.6	0.077	53	77.6	568	6.1	0.17	7.4	133
P1850N-X15	X	outcrop	11.6	0.082	64	75.2	628	7.3	0.22	7.6	129

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1850N-X16	X	outcrop	13.7	0.059	106	75.8	549	9.9	0.17	12.2	93
P1850N-X17	X	outcrop	18.0	0.063	114	73.1	556	17.2	0.22	10.9	79
P1850N-X18	X	outcrop	12.7	0.076	67	74.7	644	8.2	0.23	9.0	132
P1850N-X19	X	outcrop	8.9	0.052	103	76.2	554	9.9	0.12	8.0	83
P1850N-X20	X	outcrop	12.7	0.064	66	73.2	676	8.7	0.24	10.9	129
P1850N-X21	X	outcrop	10.6	0.071	69	75.5	620	5.7	0.21	7.7	124
P1850N-X22	X	outcrop	13.7	0.074	77	74.9	613	9.3	0.24	9.1	142
P1850N-X23	X	outcrop	11.9	0.072	77	74.7	622	6.2	0.22	8.1	127
P1850N-X24	X	outcrop	13.0	0.093	68	72.0	701	6.2	0.25	7.9	124
P1850N-X25	X	outcrop	11.4	0.073	59	77.4	558	7.5	0.20	8.3	136
P1850N-X26	X	outcrop	14.0	0.072	65	74.0	642	7.8	0.23	9.0	140
P1850N-X27	X	outcrop	12.9	0.122	79	72.4	697	6.2	0.23	10.4	131
P1850N-X28	X	outcrop	9.7	0.059	80	77.0	567	10.5	0.14	7.7	80
P1850N-X29	X	outcrop	22.3	0.078	138	74.0	553	28.6	0.26	14.7	113
P1850N-X30	X	outcrop	13.4	0.086	67	75.0	627	4.2	0.21	8.4	126
P1850N-X31	X	outcrop	13.9	0.058	84	73.9	433	6.3	0.16	13.3	98
P1850N-X32	X	outcrop	11.7	0.079	71	76.0	596	6.6	0.22	8.5	135
P1850N-X33	X	outcrop	13.4	0.125	72	71.8	701	6.6	0.26	10.4	142
P1850N-X34	X	outcrop	14.2	0.078	72	74.2	626	6.5	0.24	8.4	129
P1850N-X35	X	outcrop	12.5	0.066	81	72.1	722	7.5	0.23	8.8	142
P1850N-X36	X	outcrop	11.9	0.107	74	72.9	660	6.8	0.22	9.0	132
P1850N-X37	X	outcrop	12.0	0.065	78	73.2	665	6.1	0.22	8.0	125
P1850N-X38	X	outcrop	14.1	0.069	61	74.3	627	6.2	0.25	8.7	127
P1850N-X39	X	outcrop	13.8	0.084	74	71.3	724	6.1	0.24	8.7	126
P1850N-X40	X	outcrop	16.5	0.065	94	71.6	518	10.0	0.22	12.1	158
P1850N-B2	B	10-15	15.5	0.082	99	73.0	497	6.6	0.22	12.2	105
P1850N-B3	B	10-15	16.8	0.073	101	73.8	441	6.9	0.20	14.3	102
P1850N-B4	B	10-15	16.2	0.071	95	73.0	510	6.7	0.23	11.5	115
P1850N-B5	B	10-15	13.9	0.063	83	73.5	563	6.7	0.24	10.5	121
P1850N-B6	B	10-15	15.9	0.075	94	71.7	603	7.3	0.30	10.5	132
P1850N-B7	B	10-15	16.7	0.088	101	72.9	467	5.6	0.22	12.6	109
P1850N-B8	B	10-15	16.5	0.080	102	73.1	455	6.1	0.22	12.7	106
P1850N-B9	B	10-15	12.4	0.061	87	72.7	638	6.6	0.23	8.8	126
P1850N-B10	B	10-15	14.4	0.066	84	73.0	608	8.4	0.27	9.5	130
P1850N-B11	B	10-15	16.1	0.090	91	73.4	509	6.1	0.24	11.6	122
P1850N-B12	B	10-15	15.6	0.088	99	72.8	500	6.9	0.22	12.4	108
P1850N-B13	B	10-15	15.2	0.072	84	73.4	554	7.3	0.26	10.7	133
P1850N-B14	B	10-15	15.9	0.073	90	72.0	612	7.0	0.30	10.6	143
P1850N-B15	B	10-15	14.0	0.061	85	73.3	583	6.4	0.25	9.4	121
P1850N-B16	B	10-15	14.1	0.067	85	74.3	530	6.8	0.23	10.9	126
P1850N-B17	B	10-15	13.9	0.081	87	74.4	523	6.9	0.21	10.8	119
P1850N-B1PF1	B	6	15.2	0.075	89	73.2	533	5.6	0.23	10.3	116

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1850N-B1PF2	B	9	15.8	0.068	86	73.2	546	7.4	0.25	10.4	123
P1850N-B1PF3	B	16	14.2	0.060	89	73.3	550	6.8	0.22	9.9	118
P1850N-B1PF4	B	22	13.1	0.060	88	73.8	544	7.5	0.21	9.4	116
P1850N-B1PF5	S	29	14.7	0.059	86	72.4	623	5.5	0.25	9.2	123
P1850N-B1PF6	S	40	16.3	0.058	78	72.2	616	7.4	0.28	10.0	134
P1850N-B1PF7	S	48	15.1	0.056	74	71.4	679	8.2	0.27	9.0	141
P1706N-X1	X	outcrop	6.3	0.055	77	76.0	687	4.0	0.10	6.3	101
P1706N-X2	X	outcrop	16.5	0.079	69	73.3	678	7.2	0.24	9.7	128
P1706N-X3	X	outcrop	14.1	0.126	55	76.2	609	9.1	0.21	7.9	141
P1706N-X4	X	outcrop	14.3	0.100	62	74.7	650	10.5	0.22	9.2	139
P1706N-X5	X	outcrop	13.3	0.078	61	74.1	678	7.5	0.22	8.1	138
P1706N-X6	X	outcrop	12.3	0.067	56	75.2	651	8.3	0.20	6.9	128
P1706N-X7	X	outcrop	16.0	0.088	85	71.8	728	6.7	0.21	9.1	124
P1706N-X8	X	outcrop	16.8	0.063	71	73.5	658	8.1	0.24	9.3	131
P1706N-X9	X	outcrop	11.8	0.057	69	80.2	510	11.3	0.18	6.8	106
P1706N-X11	X	outcrop	12.6	0.123	52	76.9	593	7.3	0.21	7.4	140
P1706N-X12	X	outcrop	14.8	0.094	63	75.8	600	7.6	0.24	9.0	143
P1706N-X13	X	outcrop	5.4	0.065	101	74.1	726	3.6	0.09	6.9	91
P1706N-X14	X	outcrop	11.6	0.058	83	73.5	695	6.8	0.19	7.6	122
P1706N-X15	X	outcrop	14.0	0.089	82	71.9	724	6.7	0.22	8.5	129
P1706N-X16	X	outcrop	13.9	0.155	69	74.7	633	5.8	0.22	7.7	131
P1706N-X17	X	outcrop	10.0	0.046	111	75.6	293	2.1	0.08	16.1	47
P1706N-X18	X	outcrop	10.4	0.108	74	74.6	679	9.6	0.17	7.7	114
P1706N-X19	X	outcrop	11.1	0.074	76	78.0	566	11.6	0.18	8.4	102
P1706N-X20	X	outcrop	13.9	0.083	64	74.3	647	6.7	0.24	8.7	136
P1706N-X21	X	outcrop	13.9	0.073	76	73.4	686	7.3	0.23	8.4	131
P1706N-X22	X	outcrop	13.9	0.071	70	73.0	682	7.3	0.23	8.4	132
P1706N-X23	X	outcrop	13.1	0.065	61	75.0	635	6.5	0.21	8.1	128
P1706N-X24	X	outcrop	12.9	0.079	78	73.5	687	7.4	0.20	8.9	120
P1706N-X25	X	outcrop	13.5	0.079	68	73.8	664	7.8	0.23	7.9	130
P1706N-X26	X	outcrop	13.4	0.088	119	74.6	403	1.1	0.13	12.7	80
P1706N-X28	X	outcrop	12.8	0.054	67	74.9	662	7.3	0.12	7.8	131
P1706N-X29	X	outcrop	10.0	0.071	81	73.6	628	6.9	0.21	12.8	97
P1706N-X30	X	outcrop	15.9	0.060	70	74.2	707	6.8	0.14	10.5	128
P1706N-X31	X	outcrop	15.5	0.071	64	72.0	700	7.6	0.24	8.8	142
P1706N-X32	X	outcrop	12.5	0.077	66	72.1	669	6.5	0.27	7.6	127
P1706N-X33	X	outcrop	14.2	0.074	67	73.6	636	6.8	0.21	8.1	129
P1706N-X34	X	outcrop	15.3	0.068	69	74.5	664	8.1	0.22	7.9	136
P1706N-X27	X	outcrop	21.5	0.074	113	73.4	329	5.2	0.24	17.8	79
P1706N-X35	X	outcrop	14.6	0.093	55	74.9	631	9.8	0.22	8.1	146
P1706N-X36	X	outcrop	13.4	0.085	66	73.9	668	6.3	0.21	9.1	140
P1706N-X37	X	outcrop	6.8	0.057	89	75.5	593	18.9	0.09	9.8	141

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1706N-X38	X	outcrop	14.3	0.079	81	72.5	699	5.8	0.23	9.1	126
P1706N-X39	X	outcrop	13.4	0.075	77	72.3	707	7.9	0.22	8.5	122
P1706N-X40	X	outcrop	16.4	0.079	66	72.1	695	9.0	0.25	8.2	131
P1706N-B2	B	10-15	15.1	0.085	72	72.9	670	6.7	0.26	9.7	138
P1706N-B3	B	10-15	14.7	0.071	66	73.2	676	8.3	0.24	9.1	131
P1706N-B4	B	10-15	16.9	0.073	80	71.8	672	10.1	0.30	11.7	141
P1706N-B5	B	10-15	14.7	0.077	75	73.3	650	8.4	0.25	10.3	137
P1706N-B6	B	10-15	13.6	0.072	80	74.0	640	9.0	0.23	10.1	130
P1706N-B7	B	10-15	15.7	0.069	83	71.5	692	8.4	0.28	9.9	133
P1706N-B8	B	10-15	16.1	0.079	75	72.0	676	12.2	0.29	10.6	138
P1706N-B9	B	10-15	15.9	0.073	77	72.7	656	10.7	0.28	10.7	137
P1706N-B10	B	10-15	14.5	0.075	76	73.5	642	9.4	0.25	10.5	132
P1706N-B11	B	10-15	14.4	0.078	81	72.4	675	7.4	0.25	10.3	135
P1706N-B12	B	10-15	15.8	0.075	72	72.8	661	10.0	0.27	10.0	137
P1706N-B13	B	10-15	14.1	0.070	71	73.0	661	8.7	0.25	9.8	130
P1706N-B14	B	10-15	16.3	0.079	77	72.5	662	10.1	0.28	10.8	137
P1706N-B15	B	10-15	14.4	0.081	79	72.3	666	8.8	0.27	10.5	133
P1706N-B16	B	10-15	14.7	0.069	85	72.0	665	11.1	0.27	10.0	129
P1706N-B17	B	10-15	13.9	0.068	80	73.8	635	9.4	0.24	10.1	133
P1706N-B1PF1	B	7	15.1	0.090	77	73.1	646	10.3	0.26	11.1	140
P1706N-B1PF2	B	14	14.1	0.077	79	74.0	634	8.9	0.24	11.0	131
P1706N-B1PF3	B	17	17.4	0.091	79	71.6	658	11.4	0.30	12.1	147
P1706N-B1PF4	B	23	16.9	0.089	85	71.3	678	12.7	0.30	11.7	147
P1706N-B1PF5	B	28	17.3	0.073	78	71.8	677	11.9	0.29	10.5	152
P1706N-B1PF6	S	32	12.6	0.069	72	73.5	689	7.4	0.19	8.9	135
P1706N-B1PF7	S	30	13.6	0.067	76	74.7	641	9.5	0.21	9.0	125
P1480-X1	X	outcrop	14.8	0.061	84	71.1	758	5.7	0.21	9.4	121
P1480-X2	X	outcrop	14.2	0.069	73	71.7	747	8.1	0.23	9.1	134
P1480-X3	X	outcrop	14.7	0.070	95	72.3	665	5.0	0.21	11.8	117
P1480-X4	X	outcrop	13.9	0.070	83	72.6	711	7.9	0.22	9.2	131
P1480-X5	X	outcrop	12.8	0.063	55	75.0	626	7.5	0.21	8.3	135
P1480-X6	X	outcrop	15.4	0.072	101	73.9	449	5.1	0.15	26.2	75
P1480-X7	X	outcrop	12.6	0.065	67	73.5	689	6.1	0.22	9.3	125
P1480-X8	X	outcrop	13.3	0.063	59	74.3	685	6.4	0.22	7.9	127
P1480-X9	X	outcrop	11.0	0.048	67	74.8	668	6.4	0.18	8.6	112
P1480-X10	X	outcrop	15.6	0.065	65	73.7	654	9.7	0.25	9.6	150
P1480-X11	X	outcrop	14.8	0.098	55	75.2	642	8.1	0.25	8.1	141
P1480-X12	X	outcrop	13.4	0.066	71	73.7	715	7.8	0.23	8.9	127
P1480-X13	X	outcrop	12.9	0.073	57	73.8	706	7.3	0.24	7.9	136
P1480-X14	X	outcrop	13.0	0.130	69	70.4	821	9.6	0.24	8.2	140
P1480-X15	X	outcrop	13.4	0.084	64	73.2	734	5.8	0.24	7.9	136

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1480-X16	X	outcrop	16.2	0.073	69	71.9	746	8.9	0.30	8.8	142
P1480-X17	X	outcrop	14.8	0.080	52	74.7	669	7.1	0.26	8.1	147
P1480-X18	X	outcrop	14.4	0.078	60	74.4	682	10.6	0.26	8.1	151
P1480-X19	X	outcrop	13.3	0.078	62	72.3	759	8.7	0.25	8.3	144
P1480-X20	X	outcrop	13.4	0.075	59	72.5	767	7.8	0.25	8.4	141
P1480-X21	X	outcrop	12.9	0.072	59	74.3	689	8.5	0.23	7.9	141
P1480-X22	X	outcrop	13.2	0.092	65	77.7	546	5.7	0.21	7.8	112
P1480-X23	X	outcrop	16.1	0.063	189	78.7	60	6.9	0.27	8.5	151
P1480-X24	X	outcrop	16.9	0.081	73	73.0	668	8.3	0.25	10.4	133
P1480-X25	X	outcrop	16.0	0.070	138	73.7	525	8.6	0.23	9.0	138
P1480-X26	X	outcrop	12.6	0.070	65	72.0	782	6.9	0.22	7.4	133
P1480-X27	X	outcrop	13.7	0.076	56	72.3	763	7.8	0.24	8.3	137
P1480-X28	X	outcrop	14.8	0.079	77	71.6	728	8.2	0.25	8.7	133
P1480-X29	X	outcrop	17.1	0.082	78	73.6	639	5.9	0.25	9.5	125
P1480-X30	X	outcrop	13.8	0.073	65	74.1	654	7.7	0.24	9.1	133
P1480-X31	X	outcrop	11.6	0.065	81	73.3	699	6.9	0.20	8.4	116
P1480-X32	X	outcrop	5.6	0.058	118	77.1	438	5.1	0.08	10.9	68
P1480-X33	X	outcrop	9.4	0.066	84	73.2	715	8.4	0.16	9.6	103
P1480-X34	X	outcrop	12.4	0.073	62	75.2	619	7.1	0.22	7.7	138
P1480-X35	X	outcrop	13.9	0.064	84	72.1	691	6.4	0.22	8.4	120
P1480-X36	X	outcrop	14.1	0.062	86	74.7	599	7.2	0.22	11.0	123
P1480-X37	X	outcrop	13.1	0.067	71	73.0	682	5.5	0.22	8.4	132
P1480-X38	X	outcrop	11.4	0.064	103	71.7	736	6.8	0.20	8.4	104
P1480-X39	X	outcrop	13.6	0.064	88	75.5	398	2.2	0.14	10.8	68
P1480-X40	X	outcrop	14.0	0.077	60	73.9	691	7.4	0.24	8.4	138
P1485N-B2	B	10-15	16.5	0.077	85	72.7	535	8.1	0.34	11.2	155
P1485N-B3	B	10-15	17.3	0.073	91	71.3	561	7.6	0.35	11.6	149
P1485N-B4	B	10-15	14.6	0.069	84	73.6	521	6.9	0.30	10.9	146
P1485N-B5	B	10-15	16.9	0.074	96	71.6	546	7.1	0.34	12.6	158
P1485N-B6	B	10-15	15.6	0.072	85	73.1	532	9.6	0.32	11.3	152
P1485N-B7	B	10-15	17.3	0.072	86	72.0	588	8.0	0.32	11.3	148
P1485N-B8	B	10-15	16.3	0.064	87	72.2	566	6.9	0.33	11.4	147
P1485N-B9	B	10-15	16.5	0.066	88	72.0	565	7.2	0.32	10.8	150
P1485N-B10	B	10-15	16.1	0.063	83	72.4	613	6.4	0.29	9.7	135
P1485N-B11	B	10-15	15.0	0.069	87	73.0	554	8.1	0.30	11.1	145
P1485N-B12	B	10-15	15.7	0.065	85	72.2	574	7.6	0.32	11.0	148
P1485N-B13	B	10-15	17.0	0.071	87	71.9	559	10.2	0.34	11.2	156
P1485N-B14	B	10-15	14.2	0.064	81	73.6	550	8.1	0.29	10.7	148
P1485N-B15	B	10-15	16.8	0.071	93	70.8	607	7.8	0.34	11.4	145
P1485N-B16	B	10-15	15.5	0.075	90	72.0	563	8.5	0.32	11.4	149
P1485N-B17	B	10-15	14.6	0.075	82	73.7	539	7.6	0.29	10.8	149
P1485N-B1PF1	B	4	15.2	0.071	81	73.5	547	7.9	0.30	10.4	143

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1485N-B1PF2	B	9	15.4	0.069	87	72.4	565	6.7	0.31	10.8	148
P1485N-B1PF3	B	17	15.5	0.069	86	72.7	545	7.9	0.32	11.2	153
P1485N-B1PF4	S	24	14.7	0.041	85	73.3	605	7.2	0.24	8.6	135
P1485N-B1PF5	S	33	13.8	0.041	92	75.2	513	6.6	0.22	8.1	135
P1485N-B1PF6	S	41	13.4	0.041	84	73.6	610	5.8	0.22	7.9	123
P1471S-B2	B	10-15	13.4	0.075	77	74.6	565	6.4	0.24	10.4	133
P1471S-B3	B	10-15	15.1	0.092	83	72.5	631	8.7	0.26	10.8	125
P1471S-B4	B	10-15	14.4	0.082	80	73.2	596	6.8	0.26	10.8	138
P1471S-B5	B	10-15	14.8	0.091	85	73.0	572	6.5	0.29	11.5	144
P1471S-B6	B	10-15	15.5	0.091	76	74.3	563	8.9	0.27	11.1	151
P1471S-B7	B	10-15	14.9	0.077	79	73.6	580	7.9	0.28	10.9	144
P1471S-B8	B	10-15	13.5	0.076	79	74.3	579	10.0	0.25	10.6	138
P1471S-B9	B	10-15	14.2	0.090	79	73.5	573	7.4	0.28	11.2	138
P1471S-B10	B	10-15	14.1	0.088	81	73.1	592	7.8	0.26	11.0	135
P1471S-B11	B	10-15	13.8	0.088	80	73.7	543	7.3	0.26	11.0	143
P1471S-B12	B	10-15	14.9	0.079	79	73.4	591	8.9	0.27	12.3	144
P1471S-B13	B	10-15	14.5	0.085	76	72.8	596	8.8	0.29	11.2	143
P1471S-B14	B	10-15	14.7	0.068	76	73.4	591	7.8	0.27	10.6	138
P1471S-B15	B	10-15	12.5	0.074	79	73.9	587	8.0	0.24	11.1	140
P1471S-B16	B	10-15	14.0	0.093	80	73.9	558	8.3	0.27	11.1	136
P1471S-B17	B	10-15	14.6	0.094	78	74.3	529	9.8	0.27	11.3	140
P1471S-B1-PF1	B	5	13.1	0.086	76	74.3	561	8.8	0.26	10.9	143
P1471S-B1-PF2	B	9	14.0	0.088	81	73.2	583	7.4	0.26	11.4	151
P1471S-B1-PF3	B	13	12.8	0.084	83	73.5	577	7.6	0.26	10.5	144
P1471S-B1-PF4	B	20	17.8	0.096	137	67.7	486	6.9	0.34	13.3	165
P1471S-B1-PF5	B	29	15.9	0.076	129	70.3	469	9.2	0.29	12.0	158
P1471S-B1-PF6	B	43	13.9	0.057	146	72.7	370	7.6	0.23	9.6	145
P1471S-B1-PF7	S	55	14.8	0.049	84	74.4	540	10.0	0.25	9.4	127
P1270-X1	X	outcrop	17.0	0.071	69	74.3	596	8.2	0.21	10.1	127
P1270-X2	X	outcrop	12.8	0.072	94	72.4	665	7.0	0.18	9.7	117
P1270-X3	X	outcrop	16.1	0.071	65	74.9	595	7.6	0.23	9.6	138
P1270-X4	X	outcrop	16.5	0.064	65	75.0	608	7.5	0.22	8.9	135
P1270-X5	X	outcrop	14.0	0.067	77	73.3	681	7.3	0.20	10.1	118
P1270-X6	X	outcrop	17.5	0.061	80	72.5	674	6.4	0.24	8.9	124
P1270-X7	X	outcrop	15.6	0.071	88	73.3	656	7.1	0.22	9.4	119
P1270-X8	X	outcrop	21.7	0.067	164	75.6	374	4.5	0.13	16.7	81
P1270-X9	X	outcrop	18.5	0.047	152	76.4	36	4.4	0.04	34.4	49
P1270-X10	X	outcrop	12.1	0.057	102	72.4	699	4.9	0.17	8.4	105
P1270-X11	X	outcrop	14.2	0.072	86	72.0	695	6.5	0.20	9.5	121
P1270-X12	X	outcrop	12.5	0.070	95	71.7	714	7.2	0.19	9.3	116
P1270-X13	X	outcrop	17.0	0.066	67	73.9	627	7.1	0.23	9.4	126

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1270-X14	X	outcrop	17.5	0.066	77	73.8	638	5.6	0.23	9.4	128
P1270-X15	X	outcrop	16.5	0.073	64	74.8	606	8.2	0.24	8.9	138
P1270-X16	X	outcrop	15.2	0.075	79	71.6	719	6.3	0.23	9.5	123
P1270-X17	X	outcrop	15.2	0.065	67	74.3	627	6.9	0.22	8.5	127
P1270-X18	X	outcrop	19.8	0.048	177	76.0	22	2.7	0.04	22.8	34
P1270-X19	X	outcrop	13.9	0.069	73	73.4	657	8.0	0.21	8.6	127
P1270-X20	X	outcrop	14.0	0.063	55	75.0	629	6.6	0.20	7.9	127
P1270-X21	X	outcrop	15.5	0.074	73	72.2	685	5.4	0.23	9.1	134
P1270-X22	X	outcrop	15.1	0.068	78	73.9	623	6.5	0.21	9.2	131
P1270-X23	X	outcrop	13.8	0.075	65	74.1	636	5.9	0.21	8.7	129
P1270-X24	X	outcrop	14.1	0.054	60	75.0	598	7.4	0.22	8.1	138
P1270-X25	X	outcrop	15.6	0.078	76	72.8	656	9.0	0.23	8.7	132
P1270-X26	X	outcrop	15.0	0.063	73	72.7	660	7.6	0.21	8.6	129
P1270-X27	X	outcrop	14.6	0.076	73	73.5	648	6.6	0.20	8.3	118
P1270-X28	X	outcrop	16.1	0.149	77	73.3	627	7.1	0.23	9.1	126
P1270-X29	X	outcrop	16.0	0.086	64	74.0	612	8.6	0.24	9.3	136
P1270-X30	X	outcrop	16.6	0.075	94	71.5	672	8.4	0.21	9.2	123
P1270-X31	X	outcrop	14.4	0.067	81	71.7	692	5.7	0.19	9.8	123
P1270-X32	X	outcrop	16.4	0.074	86	72.1	662	7.0	0.22	9.8	125
P1270-X33	X	outcrop	16.1	0.069	64	74.4	616	9.1	0.23	9.0	134
P1270-X34	X	outcrop	17.9	0.070	69	75.4	583	7.1	0.24	9.5	129
P1270-X35	X	outcrop	12.4	0.041	193	74.9	45	1.7	0.04	25.9	30
P1270-X36	X	outcrop	13.6	0.066	61	75.3	609	9.1	0.21	7.7	149
P1270-X37	X	outcrop	20.5	0.055	93	71.0	683	18.7	0.32	8.5	96
P1270-X38	X	outcrop	13.0	0.055	60	76.2	580	6.8	0.19	7.6	132
P1270-X39	X	outcrop	15.4	0.066	72	72.5	664	8.1	0.22	8.9	117
P1270-X40	X	outcrop	17.3	0.072	72	72.9	644	7.1	0.23	9.8	132
P1277S-B2	B	10-15	10.9	0.057	68	75.1	614	6.8	0.18	8.4	121
P1277S-B3	B	10-15	14.2	0.059	74	73.6	631	7.3	0.22	9.5	130
P1277S-B4	B	10-15	13.8	0.060	71	74.8	605	9.0	0.22	9.4	143
P1277S-B5	B	10-15	12.6	0.062	70	74.3	616	7.4	0.21	9.0	132
P1277S-B6	B	10-15	10.6	0.068	66	75.6	595	5.3	0.16	8.2	121
P1277S-B7	B	10-15	11.5	0.063	65	75.2	613	6.7	0.17	8.2	118
P1277S-B8	B	10-15	12.8	0.060	68	75.1	595	6.2	0.21	9.6	141
P1277S-B9	B	10-15	12.0	0.061	70	74.9	600	8.4	0.19	9.0	126
P1277S-B10	B	10-15	11.8	0.072	69	74.7	605	6.9	0.19	8.8	127
P1277S-B11	B	10-15	12.7	0.066	68	74.8	604	7.3	0.20	9.6	130
P1277S-B12	B	10-15	11.9	0.056	69	76.1	571	7.5	0.20	9.6	130
P1277S-B13	B	10-15	15.7	0.055	71	74.2	598	8.9	0.24	9.4	138
P1277S-B14	B	10-15	11.9	0.060	72	75.3	593	8.3	0.19	9.6	134
P1277S-B15	B	10-15	12.2	0.060	66	74.9	608	7.4	0.19	9.1	125
P1277S-B16	B	10-15	11.7	0.059	87	74.9	585	5.8	0.20	9.3	128

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1277S-B17	B	10-15	15.0	0.055	70	74.9	585	9.2	0.23	9.8	145
P1277S-B1-PF1	B	2.5	11.5	0.062	71	74.5	632	6.0	0.18	8.7	122
P1277S-B1-PF2	B	11	12.6	0.059	71	74.4	614	7.5	0.21	10.0	133
P1277S-B1-PF3	B	16	13.1	0.058	63	75.7	574	7.7	0.21	9.4	135
P1277S-B1-PF4	B	24	15.2	0.054	72	74.2	603	8.0	0.23	9.3	134
P1277S-B1-PF5	B	34	17.0	0.059	72	73.0	635	7.2	0.25	9.7	144
P1277S-B1-PF6	B	40	16.4	0.053	71	73.7	618	7.4	0.23	9.5	130
P1277S-B1-PF7	B	47	15.0	0.058	82	72.9	654	5.8	0.21	9.3	123
P1277S-B1-PF8	S	57	16.6	0.049	68	74.0	613	8.0	0.23	9.5	128
P1264N-B2	B	10-15	14.7	0.082	72	74.0	591	7.5	0.24	10.0	121
P1264N-B3	B	10-15	15.2	0.074	81	73.4	597	7.9	0.24	10.3	135
P1264N-B4	B	10-15	13.9	0.070	77	73.4	618	5.6	0.22	9.2	121
P1264N-B5	B	10-15	13.5	0.074	78	73.4	606	6.6	0.21	9.6	122
P1264N-B6	B	10-15	12.1	0.071	71	75.3	576	6.7	0.20	8.7	121
P1264N-B7	B	10-15	14.0	0.079	80	73.1	612	9.1	0.24	10.7	124
P1264N-B8	B	10-15	15.7	0.084	73	73.8	577	8.5	0.25	9.8	129
P1264N-B9	B	10-15	16.5	0.084	76	72.2	619	7.2	0.26	10.2	134
P1264N-B10	B	10-15	17.7	0.078	78	73.6	622	10.4	0.24	10.6	135
P1264N-B11	B	10-15	14.9	0.089	78	71.6	594	7.9	0.29	9.6	128
P1264N-B12	B	10-15	13.1	0.080	80	73.1	595	7.9	0.23	10.2	122
P1264N-B13	B	10-15	14.7	0.083	74	74.2	589	9.3	0.23	10.7	130
P1264N-B14	B	10-15	14.5	0.081	82	72.7	619	8.3	0.24	9.6	124
P1264N-B15	B	10-15	16.7	0.092	74	72.6	602	10.3	0.27	10.8	130
P1264N-B16	B	10-15	14.6	0.081	74	73.2	606	7.8	0.24	10.5	128
P1264N-B17	B	10-15	15.1	0.087	75	72.8	601	10.4	0.25	9.9	125
P1264N-B1PF1	B	5	15.2	0.093	74	72.6	626	9.1	0.25	10.2	125
P1264N-B1PF2	B	13	16.4	0.088	73	72.6	615	9.9	0.26	10.5	134
P1264N-B1PF3	B	21	15.4	0.080	72	73.3	597	9.6	0.25	10.0	129
P1264N-B1PF4	B	27	15.6	0.074	74	72.6	625	10.0	0.25	9.9	131
P1264N-B1PF5	B	33	14.9	0.065	77	73.4	612	11.1	0.24	9.4	123
P1264N-B1PF6	B	43	19.0	0.073	83	71.5	636	14.2	0.29	10.0	132
P1264N-B1PF7	B	53	19.2	0.069	83	71.6	625	15.0	0.30	9.3	124
P1264N-B1PF8	S	60	10.6	0.042	85	77.0	504	9.7	0.16	6.6	87
P1264N-B1PF9	S	70	16.1	0.051	87	72.7	623	18.5	0.24	8.0	105
P1264N-B1PF10	S	67	13.7	0.045	86	74.1	575	15.0	0.21	7.5	111
P1264N-B1PF11	S	46	11.5	0.048	76	76.3	587	13.2	0.17	6.9	85
P1062-X1	X	outcrop	13.3	0.066	81	72.6	703	9.2	0.20	8.2	121
P1062-X2	X	outcrop	15.6	0.067	70	73.9	663	12.0	0.23	9.4	126
P1062-X3	X	outcrop	11.8	0.060	80	74.5	662	7.7	0.17	9.3	114
P1062-X4	X	outcrop	14.6	0.060	65	73.2	695	7.7	0.21	9.1	126
P1062-X5	X	outcrop	15.7	0.071	73	74.0	660	11.6	0.23	9.4	133

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1062-X6	X	outcrop	15.3	0.064	73	72.6	703	8.5	0.23	9.1	127
P1062-X7	X	outcrop	17.0	0.068	67	73.9	647	9.2	0.25	8.6	134
P1062-X8	X	outcrop	15.8	0.084	60	75.1	612	11.1	0.24	9.2	145
P1062-X9	X	outcrop	15.6	0.079	71	73.5	667	11.2	0.23	10.1	149
P1062-X10	X	outcrop	15.2	0.071	73	73.7	669	10.7	0.23	9.7	135
P1062-X11	X	outcrop	13.3	0.074	73	72.7	712	7.3	0.21	9.1	121
P1062-X12	X	outcrop	14.1	0.069	69	75.7	605	7.2	0.22	8.8	137
P1062-X13	X	outcrop	13.4	0.068	72	72.8	686	6.7	0.22	7.7	119
P1062-X14	X	outcrop	13.9	0.079	74	72.3	703	8.4	0.20	8.5	127
P1062-X15	X	outcrop	15.0	0.077	69	76.3	531	7.4	0.22	9.2	147
P1062-X16	X	outcrop	15.6	0.082	69	73.0	680	7.3	0.23	9.9	142
P1062-X17	X	outcrop	15.8	0.081	71	74.0	636	9.7	0.24	9.6	135
P1062-X18	X	outcrop	13.6	0.066	77	73.2	680	5.8	0.20	9.1	127
P1062-X19	X	outcrop	15.0	0.067	75	72.9	675	6.6	0.23	8.5	129
P1062-X20	X	outcrop	15.8	0.077	67	72.3	691	7.2	0.24	9.1	135
P1062-X21	X	outcrop	12.4	0.056	92	73.7	594	4.4	0.15	11.3	101
P1062-X22	X	outcrop	14.0	0.062	72	73.1	670	7.4	0.23	8.2	122
P1062-X23	X	outcrop	15.7	0.068	65	74.2	637	8.8	0.24	7.9	139
P1062-X24	X	outcrop	15.8	0.076	65	74.1	651	7.1	0.23	8.8	134
P1062-X25	X	outcrop	13.6	0.065	76	71.9	734	7.9	0.21	7.7	122
P1062-X26	X	outcrop	12.2	0.063	72	73.8	674	7.2	0.19	7.9	133
P1062-X27	X	outcrop	16.3	0.074	67	74.1	632	7.8	0.24	9.2	142
P1062-X28	X	outcrop	14.3	0.071	68	72.9	695	6.6	0.21	8.9	124
P1062-X29	X	outcrop	14.0	0.071	80	72.0	718	7.3	0.22	8.9	128
P1062-X30	X	outcrop	16.0	0.068	73	73.4	651	7.1	0.25	9.8	139
P1062-X31	X	outcrop	14.8	0.076	65	76.0	585	8.6	0.23	9.4	142
P1062-X32	X	outcrop	15.2	0.085	78	73.1	568	6.4	0.23	8.3	130
P1062-X33	X	outcrop	12.2	0.068	69	73.6	683	6.8	0.18	8.4	120
P1062-X34	X	outcrop	12.5	0.065	65	74.2	658	7.0	0.20	7.7	124
P1062-X35	X	outcrop	14.2	0.065	70	73.4	674	5.7	0.22	8.2	123
P1062-X36	X	outcrop	12.8	0.062	73	73.8	669	6.4	0.20	7.8	118
P1062-X37	X	outcrop	14.7	0.064	62	72.7	707	7.6	0.22	8.1	121
P1062-X38	X	outcrop	14.9	0.070	65	74.2	650	7.7	0.23	8.9	139
P1062-X39	X	outcrop	13.7	0.065	74	74.5	599	7.3	0.22	8.0	120
P1062-X40	X	outcrop	13.3	0.067	72	73.9	655	6.3	0.22	8.0	131
P1062S-B2	B	10-15	23.3	0.062	96	71.0	588	8.9	0.41	13.9	171
P1062S-B3	B	10-15	20.6	0.061	91	71.4	582	11.2	0.38	13.1	167
P1062S-B4	B	10-15	18.1	0.060	85	73.4	562	8.3	0.32	11.5	163
P1062S-B5	B	10-15	18.8	0.065	82	72.3	599	8.7	0.33	11.1	153
P1062S-B6	B	10-15	17.6	0.072	86	73.8	432	7.5	0.27	9.3	142
P1062S-B7	B	10-15	17.6	0.059	89	71.7	632	7.2	0.29	11.9	145
P1062S-B8	B	10-15	20.8	0.059	93	71.8	588	10.2	0.35	12.6	164

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
P1062S-B9	B	10-15	16.9	0.055	79	73.1	605	6.0	0.29	10.7	151
P1062S-B10	B	10-15	21.4	0.056	88	71.5	589	11.1	0.37	13.5	162
P1062S-B11	B	10-15	23.4	0.062	94	71.1	584	10.7	0.39	13.6	173
P1062S-B12	B	10-15	18.4	0.053	87	73.5	550	10.3	0.31	11.3	154
P1062S-B13	B	10-15	21.7	0.063	90	71.2	604	9.4	0.37	13.0	169
P1062S-B14	B	10-15	17.6	0.071	78	72.8	631	8.7	0.28	10.9	147
P1062S-B15	B	10-15	16.3	0.063	76	73.6	598	7.9	0.27	10.6	144
P1062S-B16	B	10-15	18.9	0.060	83	72.5	604	8.6	0.32	12.0	157
P1062S-B17	B	10-15	15.4	0.065	78	73.3	643	7.1	0.22	10.0	134
P1062S-B1-PF1	B	5	20.1	0.060	88	71.9	592	10.5	0.37	13.4	169
P1062S-B1-PF2	B	12	21.8	0.061	95	71.0	606	10.7	0.38	14.0	167
P1062S-B1-PF3	B	20	24.2	0.060	100	70.5	586	11.3	0.43	14.0	173
P1062S-B1-PF4	B	27	28.2	0.066	113	67.6	578	10.9	0.49	17.2	169
P1062S-B1-PF5	B	35	27.4	0.066	108	68.3	564	12.2	0.47	16.2	170
P1062S-B1-PF6	B	42	30.7	0.069	111	66.7	555	10.5	0.53	17.8	173
P1062S-B1-PF7	B	50	30.8	0.071	107	66.0	548	14.0	0.53	17.2	172
P1062S-B1-PF8	B	60	31.4	0.068	108	65.9	538	14.2	0.56	17.9	176
P1062N-B2	B	10-15	21.3	0.058	93	70.5	607	7.3	0.40	12.7	162
P1062N-B3	B	10-15	21.7	0.062	94	70.1	599	9.1	0.43	14.0	166
P1062N-B4	B	10-15	22.3	0.062	95	69.8	606	10.4	0.44	13.6	164
P1062N-B5	B	10-15	17.8	0.057	90	72.2	586	8.5	0.33	12.2	155
P1062N-B6	B	10-15	20.2	0.060	89	71.5	573	8.7	0.39	11.8	165
P1062N-B7	B	10-15	21.8	0.069	93	70.3	612	8.0	0.40	13.1	158
P1062N-B8	B	10-15	21.3	0.067	92	70.2	599	8.7	0.42	12.9	158
P1062N-B9	B	10-15	19.9	0.056	91	71.8	570	8.0	0.37	13.2	156
P1062N-B10	B	10-15	20.6	0.079	95	69.9	602	8.7	0.43	13.4	167
P1062N-B11	B	10-15	18.1	0.058	87	71.4	594	5.9	0.36	11.9	154
P1062N-B12	B	10-15	21.3	0.063	92	71.3	550	8.1	0.43	14.3	169
P1062N-B13	B	10-15	19.8	0.057	85	72.1	565	8.6	0.36	10.5	161
P1062N-B14	B	10-15	21.6	0.061	95	70.8	562	8.1	0.43	13.7	164
P1062N-B15	B	10-15	20.5	0.065	92	71.0	585	6.5	0.40	12.4	159
P1062N-B16	B	10-15	21.0	0.075	92	70.2	607	8.2	0.41	13.4	164
P1062N-B17	B	10-15	19.3	0.094	87	71.2	588	5.7	0.38	12.2	151
P1062N-B1-PF1	B	8	18.0	0.058	83	72.8	565	9.0	0.36	13.2	162
P1062N-B1-PF2	B	15	21.5	0.058	95	70.1	599	8.3	0.43	13.6	167
P1062N-B1-PF3	B	23	20.9	0.060	98	69.3	618	8.5	0.43	13.9	166
P1062N-B1-PF4	B	30	21.4	0.060	93	71.1	565	9.9	0.43	13.2	168
P1062N-B1-PF5	B	41	20.1	0.060	91	70.8	588	9.0	0.41	13.9	162
P1062N-B1-PF6	B	48	20.6	0.059	91	70.3	607	8.2	0.40	12.7	161
P1062N-B1-PF7	B	58	17.8	0.056	74	73.0	579	6.1	0.30	10.3	153
P1062N-B1-S1	S	58	15.1	0.067	87	71.3	696	6.4	0.23	8.9	125

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T2364-X1	X	outcrop	10.8	0.054	91	75.3	368	4.5	0.08	8.1	50
T2364-X2	X	outcrop	11.4	0.061	114	74.8	362	2.0	0.09	9.8	52
T2364-X3	X	outcrop	8.7	0.059	107	77.4	354	3.0	0.07	8.9	52
T2364-X4	X	outcrop	12.6	0.066	106	75.3	347	2.5	0.10	12.2	48
T2364-X5	X	outcrop	12.1	0.074	126	74.4	366	1.1	0.09	9.8	48
T2364-X6	X	outcrop	15.1	0.062	72	76.7	32	5.8	0.04	23.8	45
T2364-X7	X	outcrop	9.9	0.057	118	75.1	359	1.8	0.07	8.6	38
T2364-X8	X	outcrop	11.8	0.067	107	75.7	364	3.5	0.10	9.5	49
T2364-X9	X	outcrop	11.3	0.066	256	74.0	28	-0.1	0.03	11.6	12
T2364-X10	X	outcrop	12.5	0.093	96	75.3	366	3.5	0.09	10.4	51
T2364-X11	X	outcrop	9.8	0.068	272	74.7	83	-0.5	0.03	10.8	13
T2364-X12	X	outcrop	17.8	0.078	217	75.6	34	-1.1	0.03	9.5	20
T2364-X13	X	outcrop	15.9	0.075	193	75.5	33	-0.1	0.04	15.0	32
T2364-X14	X	outcrop	13.9	0.077	148	76.4	17	1.9	0.04	18.6	25
T2364-X15	X	outcrop	4.9	0.070	279	73.9	82	-0.9	0.03	9.5	11
T2364-X16	X	outcrop	10.9	0.079	114	76.5	113	0.3	0.05	10.5	9
T2364-X17	X	outcrop	8.4	0.078	132	75.4	130	-1.1	0.05	12.1	9
T2364-X18	X	outcrop	5.6	0.077	243	74.3	75	-1.2	0.04	9.3	10
T2364-X19	X	outcrop	10.6	0.060	107	76.4	367	4.1	0.09	8.5	53
T2364-X20	X	outcrop	9.9	0.073	136	76.6	25	0.9	0.03	14.3	25
T2364-X21	X	outcrop	17.0	0.069	90	77.8	18	4.2	0.04	22.4	29
T2364-X22	X	outcrop	4.8	0.079	289	73.8	49	-1.4	0.03	9.6	14
T2364-X23	X	outcrop	18.8	0.083	93	77.1	24	4.3	0.04	21.9	21
T2364-X24	X	outcrop	13.4	0.061	129	77.1	64	1.4	0.04	13.5	29
T2364-X25	X	outcrop	11.9	0.060	103	77.0	320	2.6	0.09	11.3	45
T2364-X26	X	outcrop	11.6	0.059	107	75.1	365	2.7	0.09	7.7	45
T2364-X27	X	outcrop	14.7	0.057	120	75.3	67	1.6	0.04	10.4	31
T2364-X28	X	outcrop	14.9	0.131	144	75.5	102	-1.1	0.05	12.3	22
T2364-X29	X	outcrop	14.8	0.148	143	75.4	114	0.1	0.04	10.8	17
T2364-X30	X	outcrop	16.1	0.105	140	77.0	39	4.4	0.05	6.5	13
T2364-X31	X	outcrop	15.6	0.060	269	74.2	74	-1.0	0.04	8.9	12
T2364-X32	X	outcrop	7.7	0.083	250	74.0	24	-0.7	0.03	11.8	13
T2364-X33	X	outcrop	22.9	0.081	74	76.4	30	5.4	0.05	23.9	28
T2364-X34	X	outcrop	12.8	0.075	148	75.5	26	0.4	0.04	11.2	14
T2364-X35	X	outcrop	12.1	0.058	109	75.6	345	3.7	0.09	8.8	50
T2364-X36	X	outcrop	10.6	0.039	115	77.2	235	3.0	0.09	7.2	48
T2364-X37	X	outcrop	13.8	0.068	115	73.5	366	3.2	0.11	10.0	47
T2364-X38	X	outcrop	10.3	0.062	97	76.1	342	1.4	0.08	9.4	51
T2364-X39	X	outcrop	14.9	0.061	144	73.1	71	-0.7	0.05	13.5	27
T2364-X40	X	outcrop	13.7	0.068	135	75.9	25	1.5	0.03	14.1	27
T2364-B2	B	10-15	14.0	0.107	106	73.0	332	2.8	0.17	8.3	64
T2364-B3	B	10-15	14.1	0.086	102	73.6	297	3.1	0.19	10.0	72

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T2364-B4	B	10-15	12.4	0.079	107	74.3	293	3.5	0.19	11.9	73
T2364-B5	B	10-15	12.6	0.075	103	74.7	285	2.7	0.18	10.1	70
T2364-B6	B	10-15	14.7	0.094	106	72.7	375	3.8	0.15	9.7	63
T2364-B7	B	10-15	12.4	0.085	113	74.3	337	2.5	0.14	7.3	62
T2364-B8	B	10-15	13.3	0.098	100	73.9	344	5.0	0.15	8.6	68
T2364-B9	B	10-15	12.9	0.073	105	74.2	290	3.5	0.18	9.1	64
T2364-B10	B	10-15	13.3	0.071	106	75.0	296	2.5	0.16	9.1	66
T2364-B11	B	10-15	13.6	0.063	114	74.7	264	3.0	0.13	8.4	55
T2364-B12	B	10-15	10.7	0.066	100	74.4	352	3.4	0.11	8.4	50
T2364-B13	B	10-15	14.0	0.076	119	73.3	331	2.0	0.15	9.2	57
T2364-B14	B	10-15	13.5	0.074	108	74.0	299	3.0	0.18	11.7	64
T2364-B15	B	10-15	13.6	0.083	113	73.1	325	2.0	0.17	10.3	68
T2364-B16	B	10-15	12.2	0.073	116	75.1	313	2.2	0.14	10.5	60
T2364-B17	B	10-15	13.9	0.077	111	74.0	319	3.3	0.16	8.7	65
T2364-B1-PF1	B	1.5	13.0	0.078	117	73.5	331	2.8	0.17	8.2	63
T2364-B1-PF2	B	10	15.1	0.077	113	72.3	320	3.5	0.20	8.5	73
T2364-B1-PF3	B	16	13.6	0.070	110	72.7	330	1.4	0.18	8.6	62
T2364-B1-PF4	S	24	14.9	0.063	105	75.8	294	2.6	0.11	9.3	47
T2364-B1-PF5	S	30	14.2	0.060	116	74.2	337	3.0	0.11	7.2	48
T2364-B1-PF6	S	38	12.3	0.062	103	74.5	358	3.1	0.10	8.4	49
T2073-X1	X	outcrop	14.3	0.043	95	74.2	421	10.2	0.14	9.1	75
T2073-X2	X	outcrop	13.6	0.047	101	74.3	424	7.4	0.13	11.7	76
T2073-X3	X	outcrop	14.9	0.051	100	73.6	437	6.4	0.14	12.4	75
T2073-X4	X	outcrop	13.1	0.042	91	74.5	455	8.0	0.14	9.3	85
T2073-X5	X	outcrop	14.2	0.048	96	73.9	430	6.6	0.15	10.8	80
T2073-X6	X	outcrop	12.8	0.041	100	74.6	441	10.1	0.14	11.8	84
T2073-X7	X	outcrop	12.5	0.049	95	73.6	435	8.2	0.13	10.8	73
T2073-X8	X	outcrop	14.4	0.069	109	74.0	447	9.6	0.15	10.2	88
T2073-X9	X	outcrop	14.4	0.048	101	74.7	407	8.4	0.14	13.8	82
T2073-X10	X	outcrop	13.4	0.043	86	75.0	422	7.4	0.13	10.4	91
T2073-X11	X	outcrop	15.1	0.047	100	76.8	328	7.5	0.14	9.7	91
T2073-X12	X	outcrop	14.2	0.053	89	75.8	390	8.5	0.13	11.7	79
T2073-X13	X	outcrop	15.9	0.056	83	75.8	395	8.9	0.15	9.4	89
T2073-X14	X	outcrop	13.1	0.065	86	75.5	404	6.9	0.13	9.4	84
T2073-X15	X	outcrop	15.8	0.067	91	73.3	430	7.9	0.17	11.6	87
T2073-X16	X	outcrop	13.6	0.048	86	74.9	414	7.1	0.14	13.3	74
T2073-X17	X	outcrop	13.2	0.049	97	74.1	428	6.3	0.14	9.4	81
T2073-X18	X	outcrop	12.4	0.055	83	75.0	416	5.4	0.13	9.8	83
T2073-X20	X	outcrop	13.3	0.050	94	75.4	398	6.1	0.14	10.4	79
T2073-X21	X	outcrop	15.0	0.076	99	75.4	382	7.1	0.15	10.1	83
T2073-X22	X	outcrop	13.4	0.048	110	74.8	413	4.9	0.15	10.2	80
T2073-X23	X	outcrop	13.9	0.072	100	74.1	430	6.3	0.15	11.4	80

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T2073-X24	X	outcrop	15.7	0.049	90	74.9	398	7.4	0.16	9.6	90
T2073-X25	X	outcrop	13.5	0.050	92	75.6	401	7.0	0.14	12.9	91
T2073-X26	X	outcrop	14.2	0.051	95	75.7	389	6.6	0.14	10.0	85
T2073-X27	X	outcrop	13.1	0.043	102	74.5	423	5.9	0.13	9.2	74
T2073-X28	X	outcrop	13.1	0.050	104	74.2	426	6.6	0.13	10.4	79
T2073-X29	X	outcrop	11.4	0.054	101	75.2	405	6.0	0.13	10.0	78
T2073-X30	X	outcrop	13.2	0.043	104	73.9	422	5.0	0.14	10.8	81
T2073-X31	X	outcrop	13.9	0.049	92	75.2	397	7.7	0.15	8.6	84
T2073-X32	X	outcrop	13.3	0.045	98	74.6	411	6.6	0.15	9.4	84
T2073-X33	X	outcrop	16.3	0.074	105	73.2	407	6.3	0.17	10.7	76
T2073-X34	X	outcrop	13.0	0.045	98	74.1	423	6.9	0.13	9.3	77
T2073-X35	X	outcrop	13.1	0.049	87	75.3	403	9.0	0.14	10.0	89
T2073-X36	X	outcrop	13.1	0.049	91	74.6	421	9.6	0.14	18.5	81
T2073-X37	X	outcrop	14.2	0.047	95	74.5	418	7.7	0.14	22.6	83
T2073-X38	X	outcrop	14.2	0.044	87	75.1	407	9.6	0.14	11.0	90
T2073-X39	X	outcrop	14.8	0.111	87	76.1	346	8.5	0.15	10.1	94
T2073-X40	X	outcrop	14.5	0.075	107	74.0	418	7.8	0.14	10.4	83
T2073-B2	B	10-15	14.8	0.080	96	73.4	404	6.5	0.16	9.7	84
T2073-B3	B	10-15	15.7	0.090	98	73.4	406	4.6	0.18	12.3	90
T2073-B4	B	10-15	14.7	0.066	94	74.0	402	5.3	0.17	11.3	85
T2073-B5	B	10-15	14.4	0.073	96	74.4	405	5.9	0.17	11.1	89
T2073-B6	B	10-15	15.1	0.073	106	73.1	397	8.2	0.16	11.9	82
T2073-B7	B	10-15	14.7	0.069	96	74.6	381	6.8	0.16	13.7	93
T2073-B8	B	10-15	15.4	0.072	89	74.8	381	6.9	0.17	12.0	90
T2073-B9	B	10-15	15.5	0.080	101	74.1	403	7.3	0.17	11.3	87
T2073-B10	B	10-15	13.7	0.062	101	75.3	365	5.9	0.15	10.4	85
T2073-B11	B	10-15	15.3	0.065	99	73.8	388	5.4	0.17	11.5	86
T2073-B12	B	10-15	16.4	0.074	90	74.0	385	5.6	0.19	11.2	87
T2073-B13	B	10-15	16.7	0.092	98	72.5	416	7.8	0.19	12.9	93
T2073-B14	B	10-15	15.7	0.072	99	74.2	387	7.0	0.18	10.9	87
T2073-B15	B	10-15	16.7	0.074	102	73.3	375	6.2	0.20	14.1	93
T2073-B16	B	10-15	13.8	0.070	97	74.6	377	7.9	0.17	11.1	93
T2073-B17	B	10-15	15.4	0.083	100	73.4	378	6.9	0.19	11.2	87
T2073-B1-PF1	B	3	14.4	0.090	96	74.4	380	7.4	0.17	10.6	92
T2073-B1-PF2	B	10	15.7	0.079	101	73.2	399	5.0	0.18	11.3	95
T2073-B1-PF3	B	20	15.8	0.075	95	74.2	372	8.8	0.18	11.3	87
T2073-B1-PF4	B	30	13.8	0.065	108	76.3	305	5.4	0.12	11.3	81
T2073-B1-PF5	S	37	15.0	0.064	104	75.4	341	5.2	0.14	9.3	82
T2073-B1-PF6	S	48	15.2	0.063	98	76.0	329	7.7	0.15	11.1	86
T1755-X1	X	outcrop	10.0	0.056	117	76.9	257	1.4	0.06	9.7	38
T1755-X2	X	outcrop	34.9	0.042	217	76.1	102	2.1	0.10	14.3	39

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1755-X3	X	outcrop	14.6	0.049	116	75.5	347	4.6	0.12	12.1	73
T1755-X4	X	outcrop	15.7	0.055	114	76.3	280	6.2	0.11	12.3	74
T1755-X5	X	outcrop	16.9	0.061	117	74.3	355	5.5	0.12	17.8	76
T1755-X6	X	outcrop	13.7	0.063	114	75.5	336	4.5	0.10	13.8	76
T1755-X7	X	outcrop	14.3	0.059	113	74.9	365	6.1	0.12	13.6	82
T1755-X8	X	outcrop	16.4	0.061	115	74.8	353	5.3	0.13	12.2	80
T1755-X9	X	outcrop	16.4	0.056	232	76.5	49	-0.1	0.04	10.3	7
T1755-X10	X	outcrop	21.7	0.036	137	78.6	198	1.0	0.10	10.7	42
T1755-X11	X	outcrop	8.3	0.034	56	89.1	107	3.3	0.07	8.2	45
T1755-X12	X	outcrop	4.5	0.027	41	93.7	43	1.3	0.04	3.7	18
T1755-X13	X	outcrop	10.1	0.030	91	88.6	101	0.2	0.06	8.2	33
T1755-X14	X	outcrop	11.8	0.034	76	87.7	131	2.5	0.09	10.1	53
T1755-X15	X	outcrop	6.9	0.034	42	93.2	72	1.9	0.06	6.3	35
T1755-X16	X	outcrop	15.2	0.039	96	83.3	165	4.3	0.11	9.7	69
T1755-X17	X	outcrop	10.4	0.031	84	87.9	124	2.2	0.07	7.6	40
T1755-X18	X	outcrop	8.5	0.033	51	90.0	95	2.4	0.07	9.1	37
T1755-X19	X	outcrop	13.8	0.039	109	82.4	146	5.9	0.10	11.3	62
T1755-X20	X	outcrop	12.6	0.035	99	83.9	125	3.8	0.10	10.3	55
T1755-X21	X	outcrop	13.5	0.044	84	84.5	128	4.9	0.11	13.5	61
T1755-X22	X	outcrop	23.1	0.040	160	79.5	107	4.0	0.11	14.7	49
T1755-X23	X	outcrop	18.1	0.036	107	81.5	147	6.9	0.13	16.1	82
T1755-X24	X	outcrop	16.2	0.044	129	79.4	119	3.4	0.10	17.7	60
T1755-X25	X	outcrop	16.9	0.043	112	81.3	159	4.2	0.11	13.1	65
T1755-X26	X	outcrop	17.7	0.063	106	79.5	170	4.5	0.13	12.7	78
T1755-X27	X	outcrop	15.5	0.044	104	84.3	116	2.7	0.09	12.1	50
T1755-X28	X	outcrop	16.6	0.043	126	82.3	126	3.9	0.10	12.2	69
T1755-X29	X	outcrop	8.3	0.031	78	89.8	78	1.1	0.05	5.7	25
T1755-X30	X	outcrop	8.0	0.031	55	90.4	110	2.7	0.06	7.3	33
T1755-X31	X	outcrop	19.1	0.050	109	80.5	121	4.7	0.11	17.3	65
T1755-X32	X	outcrop	16.8	0.034	105	81.1	111	0.9	0.11	13.8	52
T1755-X33	X	outcrop	8.7	0.033	68	88.3	113	2.2	0.07	7.3	47
T1755-X34	X	outcrop	15.3	0.041	87	83.7	127	4.8	0.11	9.3	63
T1755-X35	X	outcrop	12.8	0.040	78	85.8	133	3.5	0.09	10.5	59
T1755-X36	X	outcrop	17.1	0.046	122	75.3	318	4.9	0.12	13.0	68
T1755-X37	X	outcrop	18.7	0.068	241	76.1	138	1.6	0.05	13.4	26
T1755-X38	X	outcrop	25.0	0.081	247	74.2	228	3.2	0.10	17.8	53
T1755-X39	X	outcrop	17.3	0.055	121	75.6	330	4.8	0.13	11.6	75
T1755-X40	X	outcrop	9.5	0.035	60	89.4	126	2.2	0.07	7.2	41
T1755-B2	B	10-15	17.7	0.052	121	74.7	296	4.4	0.14	14.4	80
T1755-B3	B	10-15	14.9	0.049	123	76.2	285	4.4	0.12	13.7	72
T1755-B4	B	10-15	17.9	0.059	125	74.9	278	4.4	0.15	14.5	75
T1755-B5	B	10-15	18.6	0.054	131	73.3	315	5.8	0.16	12.2	79

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1755-B6	B	10-15	17.1	0.051	119	75.6	270	4.4	0.13	14.4	73
T1755-B7	B	10-15	18.2	0.050	123	74.8	273	5.4	0.15	12.1	81
T1755-B8	B	10-15	18.8	0.057	127	73.8	301	3.6	0.16	16.1	86
T1755-B9	B	10-15	15.9	0.051	119	75.1	299	4.5	0.14	13.9	73
T1755-B10	B	10-15	16.2	0.051	124	75.4	296	5.6	0.13	11.6	77
T1755-B11	B	10-15	19.7	0.048	130	73.4	311	4.4	0.16	12.8	82
T1755-B12	B	10-15	19.5	0.053	127	73.6	304	4.2	0.16	13.8	82
T1755-B13	B	10-15	17.8	0.050	125	74.9	302	3.6	0.15	13.9	75
T1755-B14	B	10-15	18.5	0.051	124	74.2	297	4.3	0.15	12.4	81
T1755-B15	B	10-15	19.6	0.051	129	75.6	295	5.8	0.12	13.0	66
T1755-B16	B	10-15	20.7	0.054	129	72.8	306	6.1	0.18	13.6	82
T1755-B17	B	10-15	19.3	0.060	132	73.2	311	5.0	0.17	15.1	76
T1755-B1-PF1	B	4	17.8	0.058	120	75.3	272	4.4	0.14	12.4	80
T1755-B1-PF2	B	14	18.8	0.048	121	74.9	255	4.9	0.15	12.1	85
T1755-B1-PF3	S	19	20.7	0.047	118	75.2	148	6.6	0.16	11.3	93
T1755-B1-PF4	S	27	18.4	0.048	107	77.0	141	5.5	0.14	10.4	86
T1755-B1-PF5	S	37	19.2	0.049	105	76.6	145	4.5	0.15	11.2	89
T1755-B1-PF6	S	48	17.6	0.042	105	79.1	111	3.4	0.11	12.4	59
T1508-X1	X	outcrop	14.7	0.058	122	74.7	382	5.5	0.12	13.4	69
T1508-X2	X	outcrop	13.6	0.067	116	74.9	389	5.2	0.12	14.4	72
T1508-X3	X	outcrop	13.8	0.051	122	74.1	394	5.2	0.11	15.7	63
T1508-X4	X	outcrop	14.7	0.051	133	74.2	390	4.8	0.12	13.0	72
T1508-X5	X	outcrop	14.6	0.066	136	73.7	401	4.4	0.12	12.9	71
T1508-X6	X	outcrop	11.2	0.044	146	77.4	123	2.1	0.06	10.7	42
T1508-X7	X	outcrop	10.4	0.047	139	79.4	89	3.0	0.06	18.1	50
T1508-X8	X	outcrop	14.1	0.054	108	76.1	338	4.3	0.12	19.2	75
T1508-X9	X	outcrop	14.5	0.049	119	74.0	398	4.4	0.12	15.8	67
T1508-X10	X	outcrop	15.6	0.057	118	74.2	394	4.4	0.13	15.3	76
T1508-X11	X	outcrop	14.1	0.045	120	75.7	369	3.0	0.12	11.7	75
T1508-X12	X	outcrop	15.3	0.059	125	74.9	374	4.5	0.13	13.1	72
T1508-X13	X	outcrop	15.9	0.054	126	74.6	377	4.2	0.13	14.9	76
T1508-X14	X	outcrop	15.5	0.061	121	74.7	388	4.2	0.12	17.5	77
T1508-X15	X	outcrop	17.0	0.085	136	73.9	400	5.9	0.14	14.7	83
T1508-X16	X	outcrop	15.6	0.076	114	75.0	376	4.0	0.13	14.2	69
T1508-X17	X	outcrop	16.3	0.062	117	75.1	360	6.9	0.14	12.3	78
T1508-X18	X	outcrop	14.3	0.061	116	75.8	356	4.4	0.12	12.5	68
T1508-X19	X	outcrop	15.5	0.095	126	75.0	372	4.5	0.12	13.3	68
T1508-X20	X	outcrop	16.4	0.074	120	74.7	343	5.4	0.13	20.4	77
T1508-X21	X	outcrop	16.1	0.063	116	75.7	358	6.2	0.13	12.1	83
T1508-X22	X	outcrop	15.2	0.086	121	75.2	354	6.5	0.13	11.5	72
T1508-X23	X	outcrop	15.2	0.054	113	75.1	364	5.6	0.12	15.1	72
T1508-X24	X	outcrop	15.1	0.046	108	74.7	372	4.8	0.12	15.9	71

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1508-X25	X	outcrop	8.8	0.108	45	96.8	7	0.2	0.04	4.9	8
T1508-X26	X	outcrop	13.6	0.036	161	77.0	109	5.8	0.10	8.9	82
T1508-X27	X	outcrop	17.7	0.045	122	77.7	170	4.9	0.12	10.9	71
T1508-X28	X	outcrop	22.0	0.044	141	75.9	221	4.6	0.12	18.8	44
T1508-X29	X	outcrop	21.6	0.042	148	73.4	275	6.2	0.14	17.2	46
T1508-X30	X	outcrop	16.4	0.042	121	76.6	208	6.4	0.12	13.9	72
T1508-X31	X	outcrop	16.8	0.040	149	76.5	179	5.8	0.11	13.0	67
T1508-X32	X	outcrop	17.5	0.040	113	76.4	167	7.8	0.11	11.8	71
T1508-X33	X	outcrop	13.6	0.047	130	76.6	371	5.3	0.13	11.1	67
T1508-X34	X	outcrop	15.6	0.047	119	75.2	381	3.2	0.12	11.7	74
T1508-X35	X	outcrop	14.7	0.072	126	74.8	380	6.7	0.12	44.9	70
T1508-X36	X	outcrop	16.7	0.087	120	74.4	380	5.3	0.13	11.8	73
T1508-X37	X	outcrop	16.1	0.065	123	74.5	377	7.0	0.13	15.6	82
T1508-X38	X	outcrop	15.2	0.061	118	74.9	379	6.4	0.13	13.9	72
T1508-X39	X	outcrop	15.6	0.050	112	75.0	373	6.1	0.13	17.4	74
T1508-X40	X	outcrop	15.9	0.066	126	74.9	368	7.1	0.14	16.1	80
T1508-B2	B	10-15	17.6	0.061	120	73.5	326	5.5	0.16	14.9	72
T1508-B3	B	10-15	18.7	0.065	127	73.6	309	4.5	0.16	14.4	74
T1508-B4	B	10-15	15.5	0.057	121	75.0	295	5.4	0.14	14.1	71
T1508-B5	B	10-15	20.0	0.054	120	74.4	297	6.1	0.15	18.3	80
T1508-B6	B	10-15	18.3	0.060	125	73.6	330	4.3	0.16	15.3	75
T1508-B7	B	10-15	16.0	0.057	120	74.7	338	4.9	0.12	11.3	70
T1508-B8	B	10-15	18.6	0.058	127	74.3	287	3.4	0.17	11.5	78
T1508-B9	B	10-15	16.3	0.056	123	74.4	310	4.7	0.14	13.0	80
T1508-B10	B	10-15	17.0	0.058	116	74.9	320	4.8	0.15	12.5	73
T1508-B11	B	10-15	16.9	0.065	127	74.2	322	5.9	0.16	14.4	75
T1508-B12	B	10-15	15.7	0.056	130	74.4	307	4.6	0.14	14.2	75
T1508-B13	B	10-15	19.7	0.062	133	73.9	270	3.4	0.15	16.9	67
T1508-B14	B	10-15	15.8	0.063	116	74.2	322	4.2	0.15	14.4	75
T1508-B15	B	10-15	18.8	0.070	124	72.4	317	5.1	0.19	16.4	77
T1508-B16	B	10-15	16.7	0.069	127	74.1	300	5.5	0.17	12.6	76
T1508-B17	B	10-15	19.1	0.064	132	73.8	278	3.9	0.17	16.3	82
T1508-B1-PF1	B	4	17.0	0.075	125	74.2	301	5.7	0.17	13.0	78
T1508-B1-PF2	B	11	16.5	0.063	125	74.7	300	5.6	0.16	17.6	75
T1508-B1-PF3	B	21	16.8	0.051	128	75.1	288	4.5	0.14	11.7	77
T1508-B1-PF4	B	32	17.7	0.051	125	75.0	284	3.2	0.15	13.0	79
T1508-B1-PF5	B	45	17.1	0.054	126	74.9	279	2.5	0.15	17.1	73
T1508-B1-PF6	B	65	15.2	0.051	120	75.8	283	4.1	0.13	10.7	67
T1508-B1-PF7	B	80	17.6	0.048	124	74.1	294	6.0	0.14	15.9	68
T1508-B1-PF8	B	93	15.6	0.046	117	74.8	291	5.4	0.12	9.6	70
T1294-X1	X	outcrop	12.6	0.061	107	75.7	349	4.7	0.09	13.3	64

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1294-X2	X	outcrop	8.6	0.048	126	73.6	398	2.8	0.07	12.2	56
T1294-X3	X	outcrop	16.8	0.047	131	75.7	299	3.2	0.10	18.0	52
T1294-X4	X	outcrop	14.9	0.048	114	76.4	312	3.3	0.10	11.1	58
T1294-X5	X	outcrop	14.5	0.037	141	76.1	260	4.5	0.10	11.8	64
T1294-X6	X	outcrop	13.8	0.044	119	76.4	331	5.6	0.11	8.9	75
T1294-X7	X	outcrop	11.8	0.106	110	74.8	378	3.6	0.09	15.5	62
T1294-X8	X	outcrop	12.5	0.056	117	75.0	353	5.4	0.09	13.1	70
T1294-X9	X	outcrop	10.8	0.063	119	74.1	397	3.3	0.09	8.4	64
T1294-X10	X	outcrop	9.2	0.051	139	73.5	405	1.3	0.08	14.8	50
T1294-X11	X	outcrop	16.3	0.054	143	75.3	320	5.2	0.11	14.6	65
T1294-X12	X	outcrop	18.9	0.046	145	76.2	235	4.9	0.11	13.3	65
T1294-X13	X	outcrop	15.0	0.059	121	75.2	306	1.8	0.10	11.2	51
T1294-X14	X	outcrop	15.4	0.058	129	75.3	317	4.8	0.11	14.0	69
T1294-X15	X	outcrop	16.0	0.045	124	75.4	327	5.5	0.11	14.5	52
T1294-X16	X	outcrop	17.0	0.095	116	75.2	348	4.0	0.12	16.2	63
T1294-X17	X	outcrop	19.4	0.059	194	77.2	103	0.4	0.04	10.2	17
T1294-X18	X	outcrop	14.0	0.042	126	75.8	210	3.8	0.10	11.3	62
T1294-X19	X	outcrop	15.1	0.059	125	75.4	318	3.9	0.11	11.3	76
T1294-X20	X	outcrop	15.6	0.048	124	75.2	293	4.1	0.11	9.8	64
T1294-X21	X	outcrop	17.0	0.042	125	76.3	287	4.6	0.12	17.2	58
T1294-X22	X	outcrop	13.9	0.044	134	77.1	227	5.6	0.11	8.4	63
T1294-X23	X	outcrop	18.2	0.046	126	75.9	317	4.4	0.12	18.0	57
T1294-X24	X	outcrop	17.3	0.060	153	73.9	306	5.4	0.11	23.4	46
T1294-X25	X	outcrop	13.1	0.146	122	75.9	263	2.6	0.09	14.8	39
T1294-X26	X	outcrop	22.0	0.043	123	76.1	242	3.0	0.13	15.0	42
T1294-X27	X	outcrop	18.7	0.074	156	75.3	268	2.6	0.12	13.3	52
T1294-X28	X	outcrop	15.6	0.084	115	75.3	340	2.9	0.11	13.9	60
T1294-X29	X	outcrop	21.9	0.157	126	74.3	347	5.8	0.16	16.7	65
T1294-X30	X	outcrop	15.2	0.064	129	75.8	248	3.8	0.09	22.8	36
T1294-X31	X	outcrop	13.7	0.063	112	75.7	289	2.8	0.09	19.1	51
T1294-X32	X	outcrop	15.1	0.047	124	76.0	293	3.7	0.12	13.5	61
T1294-X33	X	outcrop	15.4	0.044	132	76.1	237	4.2	0.10	10.9	62
T1294-X34	X	outcrop	20.3	0.049	163	75.8	251	4.1	0.14	28.3	57
T1294-X35	X	outcrop	13.4	0.051	156	76.7	182	4.9	0.10	9.7	66
T1294-X36	X	outcrop	16.2	0.066	121	75.1	350	4.9	0.13	8.9	61
T1294-X37	X	outcrop	14.3	0.065	116	75.4	358	4.4	0.11	9.2	72
T1294-X38	X	outcrop	21.1	0.066	119	74.6	331	4.8	0.15	12.8	67
T1294-X39	X	outcrop	12.1	0.056	122	74.4	381	4.0	0.09	13.1	51
T1294-X40	X	outcrop	16.0	0.060	117	75.2	355	5.4	0.12	11.6	69
T1294-B2	B	10-15	19.0	0.068	120	73.8	351	4.9	0.16	15.7	68
T1294-B3	B	10-15	15.1	0.056	114	75.0	359	4.7	0.12	12.9	70
T1294-B4	B	10-15	17.1	0.068	118	75.1	346	2.6	0.14	12.7	72
T1294-B5	B	10-15	19.6	0.063	119	74.0	361	5.2	0.15	16.6	68

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1294-B6	B	10-15	16.9	0.063	117	74.0	367	3.4	0.14	10.3	67
T1294-B7	B	10-15	14.8	0.059	115	75.0	357	3.1	0.12	12.6	64
T1294-B8	B	10-15	16.7	0.068	118	74.7	348	2.3	0.14	19.6	66
T1294-B9	B	10-15	19.8	0.069	121	74.2	352	3.5	0.16	15.9	70
T1294-B10	B	10-15	14.5	0.061	116	75.2	348	3.1	0.12	12.4	73
T1294-B11	B	10-15	18.1	0.072	121	74.1	355	4.6	0.16	15.9	73
T1294-B12	B	10-15	16.0	0.063	110	74.7	366	4.7	0.13	17.3	73
T1294-B13	B	10-15	16.0	0.066	118	74.9	349	3.3	0.13	13.9	70
T1294-B14	B	10-15	13.2	0.062	110	76.0	344	4.5	0.11	12.8	66
T1294-B15	B	10-15	17.1	0.063	118	74.4	349	3.4	0.14	14.2	65
T1294-B16	B	10-15	17.3	0.065	116	75.0	342	4.0	0.15	14.3	69
T1294-B17	B	10-15	18.0	0.063	119	74.3	358	5.6	0.14	14.2	72
T1294-B1-PF1	B	2	14.5	0.058	109	75.9	332	2.8	0.13	11.1	75
T1294-B1-PF2	B	9	16.5	0.057	114	75.8	338	4.6	0.13	14.3	69
T1294-B1-PF3	B	19	16.8	0.062	117	74.8	342	5.4	0.15	15.4	72
T1294-B1-PF4	B	28	15.5	0.065	115	75.0	349	3.7	0.13	14.2	70
T1294-B1-PF5	B	36	18.1	0.062	121	73.8	358	4.1	0.16	11.8	73
T1294-B1-PF6	B	46	18.9	0.056	116	74.3	359	4.6	0.15	15.4	76
T1294-B1-PF7	B	56	14.8	0.048	103	75.8	362	5.2	0.11	14.8	75
T1294-B1-PF8	B	70	17.3	0.049	104	74.9	371	4.2	0.13	15.7	80
T1084-X1	X	outcrop	14.1	0.067	113	74.9	365	3.8	0.10	9.7	64
T1084-X2	X	outcrop	13.6	0.062	109	76.4	330	3.5	0.09	13.7	57
T1084-X3	X	outcrop	15.5	0.061	122	74.3	363	5.9	0.11	15.9	69
T1084-X4	X	outcrop	13.7	0.050	111	75.6	346	4.1	0.09	20.4	58
T1084-X5	X	outcrop	17.6	0.071	114	75.2	338	4.0	0.12	10.4	61
T1084-X6	X	outcrop	14.3	0.058	120	75.2	337	4.6	0.10	16.5	57
T1084-X7	X	outcrop	12.4	0.048	116	74.0	409	4.0	0.08	12.6	61
T1084-X8	X	outcrop	14.1	0.054	102	75.6	354	3.6	0.10	22.9	68
T1084-X9	X	outcrop	16.5	0.048	104	76.2	341	5.6	0.11	11.7	62
T1084-X10	X	outcrop	15.7	0.055	112	76.1	323	2.9	0.10	18.6	57
T1084-X11	X	outcrop	16.8	0.058	115	74.9	360	5.2	0.11	11.4	61
T1084-X12	X	outcrop	19.2	0.057	110	74.6	349	3.5	0.13	27.3	62
T1084-X13	X	outcrop	20.4	0.085	142	77.7	146	7.0	0.10	11.0	50
T1084-X14	X	outcrop	15.3	0.052	120	75.2	350	5.0	0.11	11.0	61
T1084-X15	X	outcrop	15.5	0.055	116	75.1	354	3.7	0.11	15.4	66
T1084-X16	X	outcrop	18.1	0.077	117	74.7	352	5.1	0.13	15.9	64
T1084-X17	X	outcrop	15.2	0.073	125	76.0	336	6.8	0.10	13.4	68
T1084-X18	X	outcrop	16.5	0.050	111	75.7	355	4.6	0.11	21.5	65
T1084-X19	X	outcrop	20.5	0.066	122	75.0	328	6.2	0.14	18.3	59
T1084-X20	X	outcrop	20.0	0.059	105	76.5	305	6.0	0.12	10.7	57
T1084-X21	X	outcrop	16.1	0.068	117	75.9	323	3.5	0.11	19.0	60
T1084-X22	X	outcrop	16.5	0.052	113	75.4	338	4.3	0.11	14.7	63

Sample Name	Type	Depth (cm)	Nb ppm	P <sub>2</sub> O <sub>5</sub> %	Rb ppm	SiO <sub>2</sub> %	Sr ppm	Th ppm	TiO <sub>2</sub> %	Y ppm	Zr ppm
T1084-X23	X	outcrop	13.4	0.054	129	74.6	371	2.2	0.10	9.7	58
T1084-X24	X	outcrop	17.2	0.120	130	76.6	252	5.4	0.10	18.5	71
T1084-X25	X	outcrop	16.0	0.060	131	75.8	261	4.6	0.10	18.0	59
T1084-X26	X	outcrop	17.6	0.054	130	75.0	329	3.6	0.12	19.5	66
T1084-X27	X	outcrop	17.1	0.059	121	75.6	338	5.0	0.11	13.3	66
T1084-X28	X	outcrop	16.6	0.055	131	75.7	231	2.7	0.11	19.1	72
T1084-X29	X	outcrop	16.0	0.054	124	77.1	272	14.1	0.10	13.2	67
T1084-X30	X	outcrop	15.3	0.063	121	76.9	314	4.9	0.10	20.0	62
T1084-X31	X	outcrop	27.1	0.115	256	75.5	259	3.9	0.08	14.7	52
T1084-X32	X	outcrop	17.6	0.054	117	74.6	357	4.3	0.12	18.0	64
T1084-X33	X	outcrop	15.3	0.068	134	75.2	329	4.2	0.10	20.8	56
T1084-X34	X	outcrop	15.6	0.062	123	75.9	314	4.0	0.11	13.5	57
T1084-X35	X	outcrop	18.5	0.054	127	74.8	315	4.3	0.12	14.9	58
T1084-X36	X	outcrop	17.5	0.058	135	74.5	305	4.7	0.11	17.1	57
T1084-X37	X	outcrop	17.3	0.044	126	74.6	351	3.9	0.11	14.4	58
T1084-X38	X	outcrop	18.8	0.064	123	75.2	303	4.6	0.11	17.1	68
T1084-X39	X	outcrop	16.0	0.047	113	75.4	339	4.0	0.11	16.6	59
T1084-X40	X	outcrop	15.6	0.059	140	76.0	305	3.5	0.11	16.7	52
T1084-B2	B	10-15	14.6	0.054	118	75.4	296	2.2	0.12	14.3	63
T1084-B3	B	10-15	14.3	0.062	120	74.9	315	3.2	0.12	11.6	66
T1084-B4	B	10-15	17.7	0.061	129	74.1	308	4.1	0.15	16.6	74
T1084-B5	B	10-15	16.1	0.071	122	74.6	309	3.9	0.15	19.1	73
T1084-B6	B	10-15	17.5	0.064	122	74.4	306	4.3	0.16	18.5	75
T1084-B7	B	10-15	16.0	0.068	126	74.1	313	4.4	0.15	14.2	70
T1084-B8	B	10-15	17.2	0.070	123	74.5	301	3.8	0.17	16.2	74
T1084-B9	B	10-15	16.6	0.068	125	74.4	305	5.4	0.17	15.8	78
T1084-B10	B	10-15	15.8	0.076	124	74.6	302	4.7	0.15	20.9	77
T1084-B11	B	10-15	16.0	0.073	124	74.6	301	3.5	0.15	13.0	68
T1084-B12	B	10-15	13.8	0.082	121	74.9	306	4.6	0.14	14.8	71
T1084-B13	B	10-15	16.6	0.082	126	74.8	291	2.8	0.15	15.7	69
T1084-B14	B	10-15	16.7	0.061	122	74.9	292	4.8	0.16	16.0	73
T1084-B15	B	10-15	16.5	0.074	124	74.6	308	4.0	0.16	14.0	77
T1084-B16	B	10-15	17.2	0.067	119	74.6	296	3.4	0.17	18.7	74
T1084-B17	B	10-15	16.6	0.068	125	74.2	306	4.9	0.15	14.3	71
T1084-B1-PF1	B	3	15.9	0.062	122	75.0	297	3.2	0.14	13.8	71
T1084-B1-PF2	B	11	17.7	0.066	130	73.9	307	4.3	0.17	15.0	73
T1084-B1-PF3	B	19	18.5	0.066	128	74.1	300	3.2	0.17	16.6	79
T1084-B1-PF4	B	26	17.1	0.071	121	74.7	296	3.5	0.16	17.4	75
T1084-B1-PF5	B	39	16.4	0.057	126	75.2	290	3.8	0.15	12.0	71
T1084-B1-PF6	B	53	17.3	0.066	129	74.1	298	3.6	0.16	12.9	67
T1084-B1-PF7	B	60	15.7	0.061	127	74.5	301	2.3	0.14	17.2	71
T1084-B1-PF8	B	71	18.0	0.065	123	74.9	285	3.5	0.17	13.4	75

Table S3: Pilot Peak elemental concentrations in granite outcrops (mean  $\pm$  s.e.)

Site	Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Mo (ppm)	Na <sub>2</sub> O (%)	Nb (ppm)
P2283S	15.1 $\pm$ 0.1	2.1 $\pm$ 0.08	1.6 $\pm$ 0.05	3.4 $\pm$ 0.16	0.45 $\pm$ 0.02	0.033 $\pm$ 0.001	1.4 $\pm$ 0.08	3.7 $\pm$ 0.07	15 $\pm$ 0.4
P2281N	15.1 $\pm$ 0.1	2.1 $\pm$ 0.08	1.6 $\pm$ 0.05	3.4 $\pm$ 0.16	0.45 $\pm$ 0.02	0.033 $\pm$ 0.001	1.4 $\pm$ 0.08	3.7 $\pm$ 0.07	15 $\pm$ 0.4
P2090S	15.3 $\pm$ 0.2	2.2 $\pm$ 0.07	1.6 $\pm$ 0.06	3.4 $\pm$ 0.20	0.46 $\pm$ 0.02	0.031 $\pm$ 0.002	1.0 $\pm$ 0.06	3.8 $\pm$ 0.08	14 $\pm$ 0.5
P1850N	14.8 $\pm$ 0.2	2.1 $\pm$ 0.06	1.6 $\pm$ 0.04	3.3 $\pm$ 0.14	0.40 $\pm$ 0.01	0.029 $\pm$ 0.001	1.0 $\pm$ 0.05	3.6 $\pm$ 0.07	13 $\pm$ 0.6
P1706N	14.6 $\pm$ 0.2	2.2 $\pm$ 0.07	1.5 $\pm$ 0.06	3.2 $\pm$ 0.16	0.37 $\pm$ 0.02	0.026 $\pm$ 0.001	1.1 $\pm$ 0.06	3.6 $\pm$ 0.07	13 $\pm$ 0.5
P1485N	15.0 $\pm$ 0.1	2.2 $\pm$ 0.10	1.6 $\pm$ 0.04	3.0 $\pm$ 0.13	0.43 $\pm$ 0.02	0.031 $\pm$ 0.001	0.9 $\pm$ 0.04	3.7 $\pm$ 0.08	14 $\pm$ 0.3
P1471S	15.0 $\pm$ 0.1	2.2 $\pm$ 0.10	1.6 $\pm$ 0.04	3.0 $\pm$ 0.13	0.43 $\pm$ 0.02	0.031 $\pm$ 0.001	0.9 $\pm$ 0.04	3.7 $\pm$ 0.08	14 $\pm$ 0.3
P1277S	15.0 $\pm$ 0.1	2.1 $\pm$ 0.08	1.5 $\pm$ 0.06	3.3 $\pm$ 0.14	0.38 $\pm$ 0.02	0.030 $\pm$ 0.002	1.2 $\pm$ 0.03	3.7 $\pm$ 0.04	16 $\pm$ 0.3
P1264N	15.0 $\pm$ 0.1	2.1 $\pm$ 0.08	1.5 $\pm$ 0.06	3.3 $\pm$ 0.14	0.38 $\pm$ 0.02	0.030 $\pm$ 0.002	1.2 $\pm$ 0.03	3.7 $\pm$ 0.04	16 $\pm$ 0.3
P1062S	15.0 $\pm$ 0.1	2.2 $\pm$ 0.04	1.6 $\pm$ 0.03	3.1 $\pm$ 0.07	0.40 $\pm$ 0.01	0.029 $\pm$ 0.001	0.9 $\pm$ 0.05	3.8 $\pm$ 0.03	14 $\pm$ 0.2
P1062N	15.0 $\pm$ 0.1	2.2 $\pm$ 0.04	1.6 $\pm$ 0.03	3.1 $\pm$ 0.07	0.40 $\pm$ 0.01	0.029 $\pm$ 0.001	0.9 $\pm$ 0.05	3.8 $\pm$ 0.03	14 $\pm$ 0.2

Site	P <sub>2</sub> O <sub>5</sub> (%)	Rb (ppm)	SiO <sub>2</sub> (%)	Sr (ppm)	Th (ppm)	TiO <sub>2</sub> (%)	Y (ppm)	Zr (ppm)
P2283S	0.083 $\pm$ 0.003	81 $\pm$ 4	73.3 $\pm$ 0.3	643 $\pm$ 17	6.8 $\pm$ 0.3	0.23 $\pm$ 0.006	8.8 $\pm$ 0.2	117 $\pm$ 3
P2281N	0.083 $\pm$ 0.003	81 $\pm$ 4	73.3 $\pm$ 0.3	643 $\pm$ 17	6.8 $\pm$ 0.3	0.23 $\pm$ 0.006	8.8 $\pm$ 0.2	117 $\pm$ 3
P2090S	0.082 $\pm$ 0.002	77 $\pm$ 3	72.9 $\pm$ 0.2	642 $\pm$ 21	5.6 $\pm$ 0.4	0.22 $\pm$ 0.008	9.0 $\pm$ 0.3	115 $\pm$ 4
P1850N	0.075 $\pm$ 0.003	78 $\pm$ 3	73.9 $\pm$ 0.3	627 $\pm$ 13	8.5 $\pm$ 0.7	0.22 $\pm$ 0.006	9.4 $\pm$ 0.3	123 $\pm$ 3
P1706N	0.079 $\pm$ 0.003	74 $\pm$ 2	74.3 $\pm$ 0.3	635 $\pm$ 16	7.5 $\pm$ 0.5	0.20 $\pm$ 0.008	9.0 $\pm$ 0.4	123 $\pm$ 3
P1485N	0.073 $\pm$ 0.002	77 $\pm$ 4	73.6 $\pm$ 0.3	655 $\pm$ 21	7.2 $\pm$ 0.2	0.22 $\pm$ 0.006	9.3 $\pm$ 0.5	127 $\pm$ 3
P1471S	0.073 $\pm$ 0.002	77 $\pm$ 4	73.6 $\pm$ 0.3	655 $\pm$ 21	7.2 $\pm$ 0.2	0.22 $\pm$ 0.006	9.3 $\pm$ 0.5	127 $\pm$ 3
P1277S	0.069 $\pm$ 0.002	84 $\pm$ 5	73.7 $\pm$ 0.2	593 $\pm$ 27	7.1 $\pm$ 0.4	0.20 $\pm$ 0.009	10.6 $\pm$ 0.8	119 $\pm$ 4
P1264N	0.069 $\pm$ 0.002	84 $\pm$ 5	73.7 $\pm$ 0.2	593 $\pm$ 27	7.1 $\pm$ 0.4	0.20 $\pm$ 0.009	10.6 $\pm$ 0.8	119 $\pm$ 4
P1062S	0.070 $\pm$ 0.001	71 $\pm$ 1	73.6 $\pm$ 0.2	660 $\pm$ 7	7.8 $\pm$ 0.3	0.22 $\pm$ 0.003	8.8 $\pm$ 0.1	130 $\pm$ 2
P1062N	0.070 $\pm$ 0.001	71 $\pm$ 1	73.6 $\pm$ 0.2	660 $\pm$ 7	7.8 $\pm$ 0.3	0.22 $\pm$ 0.003	8.8 $\pm$ 0.1	130 $\pm$ 2

<sup>a</sup> These are mean concentrations of the 39 or 40 rock samples collected at each site, and include all samples except the outlier P1850N-X13.

Table S4: Pilot Peak elemental concentrations in regoliths (mean  $\pm$  s.e.)

Site	$\text{Al}_2\text{O}_3$ (%)	$\text{CaO}$ (%)	$\text{Fe}_2\text{O}_3$ (%)	$\text{K}_2\text{O}$ (%)	$\text{MgO}$ (%)	$\text{MnO}$ (%)	$\text{Mo}$ (ppm)	$\text{Na}_2\text{O}$ (%)	$\text{Nb}$ (ppm)
P2283S	15.8 $\pm$ 0.1	1.9 $\pm$ 0.03	2.1 $\pm$ 0.03	3.1 $\pm$ 0.07	0.43 $\pm$ 0.01	0.063 $\pm$ 0.002	1.6 $\pm$ 0.04	3.4 $\pm$ 0.03	16 $\pm$ 0.2
P2281N	16.1 $\pm$ 0.2	1.9 $\pm$ 0.03	2.3 $\pm$ 0.05	3.0 $\pm$ 0.05	0.61 $\pm$ 0.02	0.070 $\pm$ 0.002	1.5 $\pm$ 0.05	3.2 $\pm$ 0.05	16 $\pm$ 0.3
P2090S	15.2 $\pm$ 0.2	1.8 $\pm$ 0.03	2.2 $\pm$ 0.04	3.1 $\pm$ 0.05	0.60 $\pm$ 0.01	0.066 $\pm$ 0.001	1.3 $\pm$ 0.06	2.9 $\pm$ 0.03	14 $\pm$ 0.2
P1850N	15.5 $\pm$ 0.1	2.0 $\pm$ 0.03	1.8 $\pm$ 0.04	3.2 $\pm$ 0.06	0.41 $\pm$ 0.01	0.059 $\pm$ 0.003	1.4 $\pm$ 0.06	3.6 $\pm$ 0.02	15 $\pm$ 0.3
P1850Nsub	15.7 $\pm$ 0.2	2.1 $\pm$ 0.02	2.0 $\pm$ 0.06	3.0 $\pm$ 0.08	0.45 $\pm$ 0.01	0.061 $\pm$ 0.006	1.4 $\pm$ 0.12	3.6 $\pm$ 0.03	15 $\pm$ 0.6
P1706N	15.6 $\pm$ 0.1	2.4 $\pm$ 0.03	1.9 $\pm$ 0.03	2.8 $\pm$ 0.08	0.47 $\pm$ 0.01	0.040 $\pm$ 0.001	1.5 $\pm$ 0.04	3.8 $\pm$ 0.05	15 $\pm$ 0.2
P1485N	16.2 $\pm$ 0.1	1.9 $\pm$ 0.02	2.2 $\pm$ 0.04	2.9 $\pm$ 0.04	0.45 $\pm$ 0.01	0.040 $\pm$ 0.001	1.1 $\pm$ 0.06	3.5 $\pm$ 0.03	16 $\pm$ 0.3
P1471S	15.4 $\pm$ 0.1	2.0 $\pm$ 0.03	1.9 $\pm$ 0.03	2.8 $\pm$ 0.04	0.39 $\pm$ 0.01	0.033 $\pm$ 0.001	1.3 $\pm$ 0.06	3.5 $\pm$ 0.02	14 $\pm$ 0.2
P1277S	14.6 $\pm$ 0.1	2.1 $\pm$ 0.02	1.2 $\pm$ 0.03	2.9 $\pm$ 0.04	0.32 $\pm$ 0.01	0.030 $\pm$ 0.001	1.4 $\pm$ 0.06	3.6 $\pm$ 0.03	13 $\pm$ 0.4
P1264N	15.3 $\pm$ 0.1	2.3 $\pm$ 0.03	1.7 $\pm$ 0.05	2.9 $\pm$ 0.06	0.42 $\pm$ 0.01	0.042 $\pm$ 0.001	1.2 $\pm$ 0.03	3.8 $\pm$ 0.03	15 $\pm$ 0.3
P1062S	15.9 $\pm$ 0.1	2.1 $\pm$ 0.07	2.1 $\pm$ 0.07	3.0 $\pm$ 0.06	0.49 $\pm$ 0.02	0.035 $\pm$ 0.002	1.1 $\pm$ 0.05	3.7 $\pm$ 0.04	19 $\pm$ 0.6
P1062N	16.7 $\pm$ 0.1	2.2 $\pm$ 0.04	2.5 $\pm$ 0.05	2.9 $\pm$ 0.03	0.58 $\pm$ 0.01	0.048 $\pm$ 0.002	1.2 $\pm$ 0.05	3.7 $\pm$ 0.02	21 $\pm$ 0.3

Site	$\text{P}_2\text{O}_5$ (%)	$\text{Rb}$ (ppm)	$\text{SiO}_2$ (%)	$\text{Sr}$ (ppm)	$\text{Th}$ (ppm)	$\text{TiO}_2$ (%)	$\text{Y}$ (ppm)	$\text{Zr}$ (ppm)
P2283S	0.101 $\pm$ 0.003	85 $\pm$ 1	72.8 $\pm$ 0.2	563 $\pm$ 5	6.4 $\pm$ 0.2	0.30 $\pm$ 0.005	9.4 $\pm$ 0.1	139 $\pm$ 1
P2281N	0.136 $\pm$ 0.004	85 $\pm$ 1	72.4 $\pm$ 0.3	541 $\pm$ 5	7.4 $\pm$ 0.4	0.33 $\pm$ 0.006	9.9 $\pm$ 0.1	140 $\pm$ 1
P2090S	0.134 $\pm$ 0.002	77 $\pm$ 1	73.7 $\pm$ 0.3	532 $\pm$ 6	5.7 $\pm$ 0.2	0.33 $\pm$ 0.005	9.8 $\pm$ 0.1	137 $\pm$ 1
P1850N	0.074 $\pm$ 0.002	92 $\pm$ 2	73.2 $\pm$ 0.2	537 $\pm$ 15	6.8 $\pm$ 0.2	0.24 $\pm$ 0.008	11.2 $\pm$ 0.4	120 $\pm$ 3
P1850Nsub	0.068 $\pm$ 0.002	87 $\pm$ 2	72.7 $\pm$ 0.3	596 $\pm$ 13	7.2 $\pm$ 0.3	0.27 $\pm$ 0.012	10.1 $\pm$ 0.3	131 $\pm$ 3
P1706N	0.075 $\pm$ 0.001	77 $\pm$ 1	72.7 $\pm$ 0.2	662 $\pm$ 4	9.3 $\pm$ 0.3	0.26 $\pm$ 0.005	10.3 $\pm$ 0.1	134 $\pm$ 1
P1485N	0.070 $\pm$ 0.001	87 $\pm$ 1	72.4 $\pm$ 0.2	561 $\pm$ 6	7.9 $\pm$ 0.2	0.32 $\pm$ 0.005	11.1 $\pm$ 0.1	149 $\pm$ 1
P1471S	0.084 $\pm$ 0.002	79 $\pm$ 1	73.6 $\pm$ 0.1	578 $\pm$ 6	8.1 $\pm$ 0.3	0.27 $\pm$ 0.004	11.0 $\pm$ 0.1	139 $\pm$ 1
P1277S	0.061 $\pm$ 0.001	70 $\pm$ 1	74.9 $\pm$ 0.1	601 $\pm$ 4	7.4 $\pm$ 0.3	0.20 $\pm$ 0.005	9.2 $\pm$ 0.1	131 $\pm$ 2
P1264N	0.080 $\pm$ 0.002	76 $\pm$ 1	73.3 $\pm$ 0.2	601 $\pm$ 4	8.2 $\pm$ 0.4	0.24 $\pm$ 0.006	10.0 $\pm$ 0.1	127 $\pm$ 1
P1062S	0.061 $\pm$ 0.001	86 $\pm$ 2	72.4 $\pm$ 0.2	587 $\pm$ 12	8.9 $\pm$ 0.4	0.32 $\pm$ 0.013	11.8 $\pm$ 0.3	156 $\pm$ 3
P1062N	0.065 $\pm$ 0.003	91 $\pm$ 1	70.9 $\pm$ 0.2	588 $\pm$ 5	8.0 $\pm$ 0.3	0.40 $\pm$ 0.007	12.8 $\pm$ 0.2	161 $\pm$ 1

<sup>a</sup> These are mean concentrations of the 16 regolith samples collected at 10–15 cm depths at each site, and do not include samples from the regolith profile at each site. P1850Nsub refers to the subset of regolith samples in the eastern half of the regolith plot (P1850N-B5, B6, B9, B10, B13, B14), which excludes the anomalously rocky regolith samples in the western half of the regolith sampling plot (see section 6.3).

Table S5: Tailholt Mountain elemental concentrations in granite outcrops (mean  $\pm$  s.e.)

Site	Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Mo (ppm)	Na <sub>2</sub> O (%)	Nb (ppm)
T2364	14.6 $\pm$ 0.2	1.4 $\pm$ 0.04	0.9 $\pm$ 0.04	3.6 $\pm$ 0.11	0.22 $\pm$ 0.008	0.042 $\pm$ 0.003	0.22 $\pm$ 0.008	3.6 $\pm$ 0.06	11 $\pm$ 0.3
T2073	14.6 $\pm$ 0.1	1.7 $\pm$ 0.03	1.2 $\pm$ 0.02	3.4 $\pm$ 0.06	0.26 $\pm$ 0.005	0.033 $\pm$ 0.001	0.26 $\pm$ 0.005	3.8 $\pm$ 0.02	14 $\pm$ 0.2
T1755	14.5 $\pm$ 0.1	1.3 $\pm$ 0.06	1.1 $\pm$ 0.05	3.5 $\pm$ 0.05	0.18 $\pm$ 0.013	0.033 $\pm$ 0.002	0.18 $\pm$ 0.013	3.9 $\pm$ 0.04	16 $\pm$ 0.5
T1508	14.7 $\pm$ 0.1	1.2 $\pm$ 0.09	1.0 $\pm$ 0.03	3.5 $\pm$ 0.06	0.22 $\pm$ 0.006	0.038 $\pm$ 0.003	0.22 $\pm$ 0.006	3.9 $\pm$ 0.05	15 $\pm$ 0.3
T1294	14.7 $\pm$ 0.1	1.0 $\pm$ 0.07	0.9 $\pm$ 0.04	3.8 $\pm$ 0.07	0.15 $\pm$ 0.006	0.033 $\pm$ 0.002	0.15 $\pm$ 0.006	3.7 $\pm$ 0.05	15 $\pm$ 0.5
T1084	14.5 $\pm$ 0.1	1.2 $\pm$ 0.05	1.0 $\pm$ 0.03	3.6 $\pm$ 0.05	0.17 $\pm$ 0.004	0.036 $\pm$ 0.002	0.17 $\pm$ 0.004	3.8 $\pm$ 0.03	17 $\pm$ 0.4

Site	P <sub>2</sub> O <sub>5</sub> (%)	Rb (ppm)	SiO <sub>2</sub> (%)	Sr (ppm)	Th (ppm)	TiO <sub>2</sub> (%)	Y (ppm)	Zr (ppm)
T2364	0.064 $\pm$ 0.003	107 $\pm$ 2	75.5 $\pm$ 0.3	356 $\pm$ 4	2.8 $\pm$ 0.3	0.09 $\pm$ 0.003	9.5 $\pm$ 0.3	48 $\pm$ 1
T2073	0.054 $\pm$ 0.002	96 $\pm$ 1	74.7 $\pm$ 0.1	412 $\pm$ 4	7.4 $\pm$ 0.2	0.14 $\pm$ 0.002	11.0 $\pm$ 0.4	83 $\pm$ 1
T1755	0.056 $\pm$ 0.002	116 $\pm$ 1	75.3 $\pm$ 0.2	336 $\pm$ 10	5.2 $\pm$ 0.2	0.12 $\pm$ 0.004	13.3 $\pm$ 0.7	75 $\pm$ 2
T1508	0.058 $\pm$ 0.002	125 $\pm$ 2	75.3 $\pm$ 0.2	328 $\pm$ 15	5.2 $\pm$ 0.2	0.12 $\pm$ 0.003	15.0 $\pm$ 0.9	70 $\pm$ 2
T1294	0.061 $\pm$ 0.004	129 $\pm$ 3	75.5 $\pm$ 0.1	303 $\pm$ 10	4.0 $\pm$ 0.2	0.11 $\pm$ 0.003	13.9 $\pm$ 0.7	58 $\pm$ 2
T1084	0.062 $\pm$ 0.002	124 $\pm$ 4	75.5 $\pm$ 0.1	324 $\pm$ 7	4.7 $\pm$ 0.3	0.11 $\pm$ 0.002	15.9 $\pm$ 0.6	61 $\pm$ 1

<sup>a</sup> At sites T2073, T1084, T1294, and T1508, these are mean concentrations of the 40 rock samples collected at each site, and include all samples except the outlier T1508-X25. At sites T2364 and T1755, these are mean concentrations of subsets of the rock samples, as described in the text.

Table S6: Elemental concentrations in Tailholt Mountain regoliths and Eureka Flat sediments (mean  $\pm$  s.e.)

Site	Al <sub>2</sub> O <sub>3</sub> (%)	CaO (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	K <sub>2</sub> O (%)	MgO (%)	MnO (%)	Mo (ppm)	Na <sub>2</sub> O (%)	Nb (ppm)
T2364	15.9 $\pm$ 0.1	1.3 $\pm$ 0.03	1.4 $\pm$ 0.04	3.4 $\pm$ 0.07	0.39 $\pm$ 0.02	0.067 $\pm$ 0.003	1.8 $\pm$ 0.07	3.3 $\pm$ 0.07	13 $\pm$ 0.2
T2073	15.3 $\pm$ 0.1	1.7 $\pm$ 0.03	1.5 $\pm$ 0.03	3.3 $\pm$ 0.05	0.31 $\pm$ 0.01	0.047 $\pm$ 0.001	1.3 $\pm$ 0.09	3.7 $\pm$ 0.04	15 $\pm$ 0.2
T1755	15.6 $\pm$ 0.2	1.2 $\pm$ 0.03	1.3 $\pm$ 0.04	3.5 $\pm$ 0.02	0.22 $\pm$ 0.01	0.063 $\pm$ 0.004	1.3 $\pm$ 0.09	3.5 $\pm$ 0.05	18 $\pm$ 0.4
T1508	15.3 $\pm$ 0.1	1.3 $\pm$ 0.03	1.4 $\pm$ 0.03	3.5 $\pm$ 0.03	0.29 $\pm$ 0.01	0.053 $\pm$ 0.003	1.4 $\pm$ 0.10	3.9 $\pm$ 0.03	18 $\pm$ 0.4
T1294	14.8 $\pm$ 0.1	1.5 $\pm$ 0.02	1.3 $\pm$ 0.04	3.4 $\pm$ 0.02	0.20 $\pm$ 0.01	0.048 $\pm$ 0.002	1.2 $\pm$ 0.06	3.9 $\pm$ 0.02	17 $\pm$ 0.5
T1084	14.9 $\pm$ 0.1	1.3 $\pm$ 0.01	1.3 $\pm$ 0.03	3.6 $\pm$ 0.03	0.22 $\pm$ 0.01	0.055 $\pm$ 0.003	1.3 $\pm$ 0.05	3.8 $\pm$ 0.02	16 $\pm$ 0.3
EF <sup>b</sup>	13.5 $\pm$ 0.4	3.6 $\pm$ 0.4	6.8 $\pm$ 0.8	2.5 $\pm$ 0.2	2.3 $\pm$ 0.3	0.12 $\pm$ 0.02	no data	2.4 $\pm$ 0.1	13.9 $\pm$ 0.5

Site	P <sub>2</sub> O <sub>5</sub> (%)	Rb (ppm)	SiO <sub>2</sub> (%)	Sr (ppm)	Th (ppm)	TiO <sub>2</sub> (%)	Y (ppm)	Zr (ppm)
T2364	0.080 $\pm$ 0.003	108 $\pm$ 1	74.0 $\pm$ 0.2	316 $\pm$ 7	3.0 $\pm$ 0.2	0.16 $\pm$ 0.006	9.5 $\pm$ 0.3	64 $\pm$ 2
T2073	0.074 $\pm$ 0.002	98 $\pm$ 1	73.9 $\pm$ 0.2	391 $\pm$ 4	6.5 $\pm$ 0.3	0.18 $\pm$ 0.003	11.6 $\pm$ 0.3	88 $\pm$ 1
T1755	0.052 $\pm$ 0.001	126 $\pm$ 1	74.5 $\pm$ 0.3	296 $\pm$ 3	4.7 $\pm$ 0.2	0.15 $\pm$ 0.004	13.6 $\pm$ 0.3	77 $\pm$ 1
T1508	0.061 $\pm$ 0.001	124 $\pm$ 1	74.1 $\pm$ 0.2	308 $\pm$ 5	4.8 $\pm$ 0.2	0.16 $\pm$ 0.004	14.4 $\pm$ 0.5	75 $\pm$ 1
T1294	0.064 $\pm$ 0.001	117 $\pm$ 1	74.6 $\pm$ 0.1	353 $\pm$ 2	3.9 $\pm$ 0.2	0.14 $\pm$ 0.004	14.5 $\pm$ 0.6	69 $\pm$ 1
T1084	0.069 $\pm$ 0.002	123 $\pm$ 1	74.6 $\pm$ 0.1	304 $\pm$ 2	4.0 $\pm$ 0.2	0.15 $\pm$ 0.004	15.9 $\pm$ 0.6	72 $\pm$ 1
EF <sup>b</sup>	0.19 $\pm$ 0.03	87 $\pm$ 10	68.2 $\pm$ 1.7	328 $\pm$ 12	6.2 $\pm$ 1.4	1.04 $\pm$ 0.14	24.4 $\pm$ 2.7	166 $\pm$ 14

<sup>a</sup> Tailholt Mountain elemental concentrations are means of the 16 regolith samples collected at 10-15 cm depths at each site, and do not include samples from the regolith profile at each site.

<sup>b</sup> Eureka Flat (EF) sediment concentrations from Sweeney et al. (2007).

### **S3. Regolith composition in depth profiles at field sites on Pilot Peak and Tailholt Mountain**

As described in the main text, at each field site on Pilot Peak and Tailholt Mountain we dug one regolith excavation down to or close to the parent material, and collected regolith samples at various depths within the profile. Where possible, we also collected samples of partially weathered parent rock within the profile.

In this section we plot the chemical compositions of the samples in these profiles. Solid circles indicate regolith samples, open diamonds represent underlying parent rock samples, and open squares show the mean composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at each site. For reference, the average rock outcrop composition at each site (e.g., for site P1706N, this is the mean composition of rock samples P1706N-X1 through P1706N-X40) is plotted as a gray box centered on the mean rock composition, with a width of one standard error on either side of the mean.

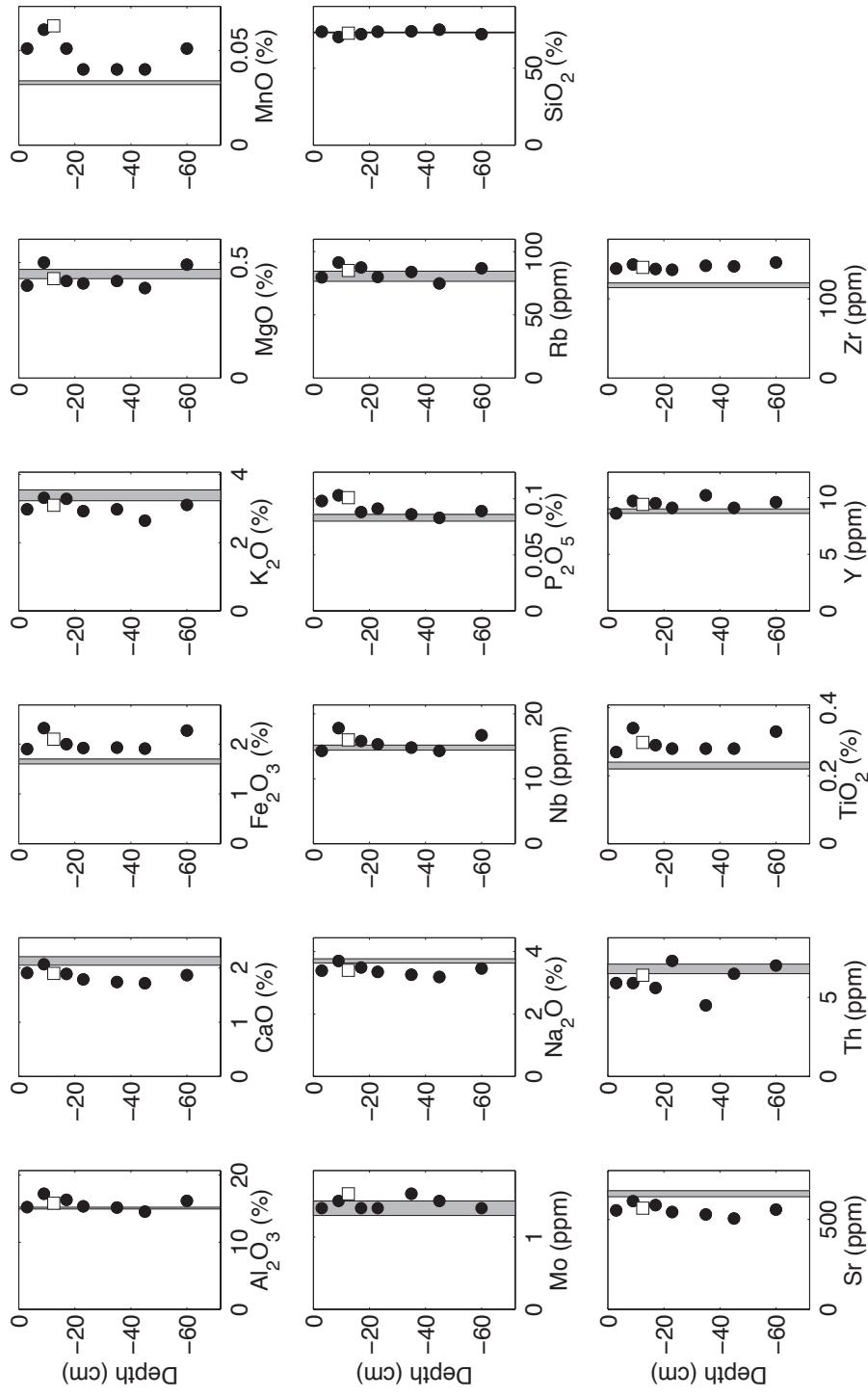


Figure S1: Elemental concentrations in the regolith profile at site P'2283S. Solid circles represent regolith samples; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

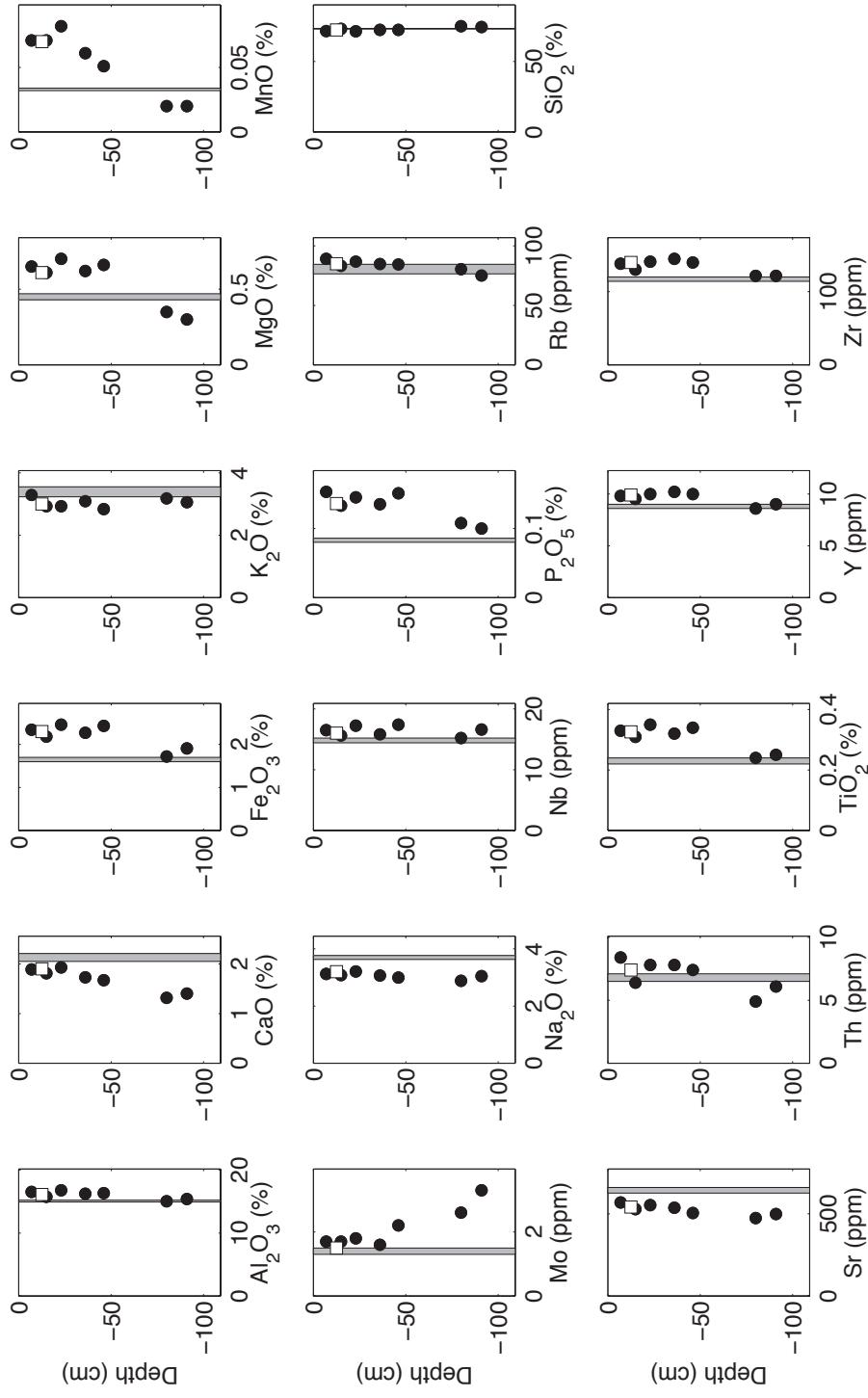


Figure S2: Elemental concentrations in the regolith profile at site P2281N. Solid circles represent regolith samples; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

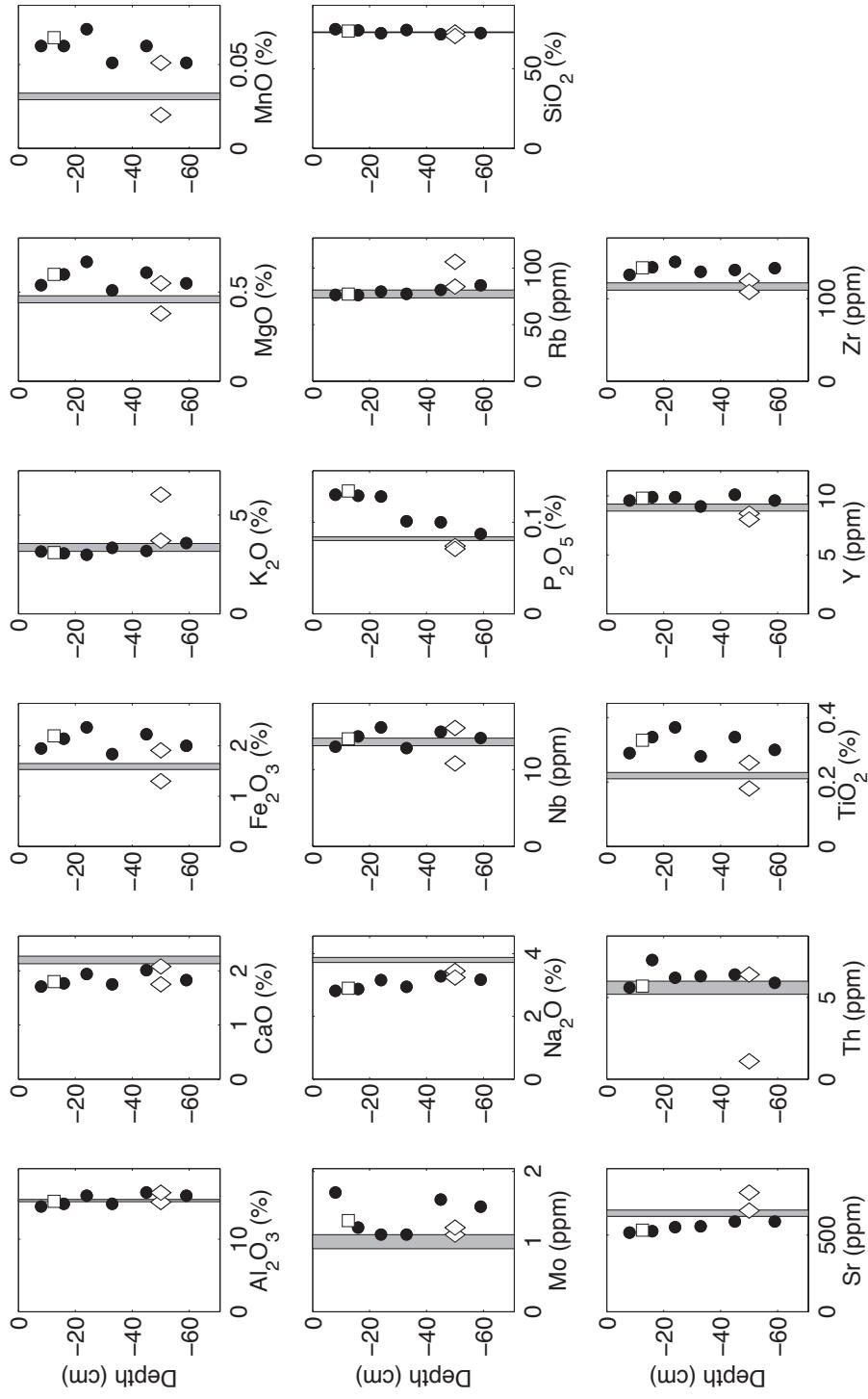


Figure S3: Elemental concentrations in the regolith profile at site P2090S. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

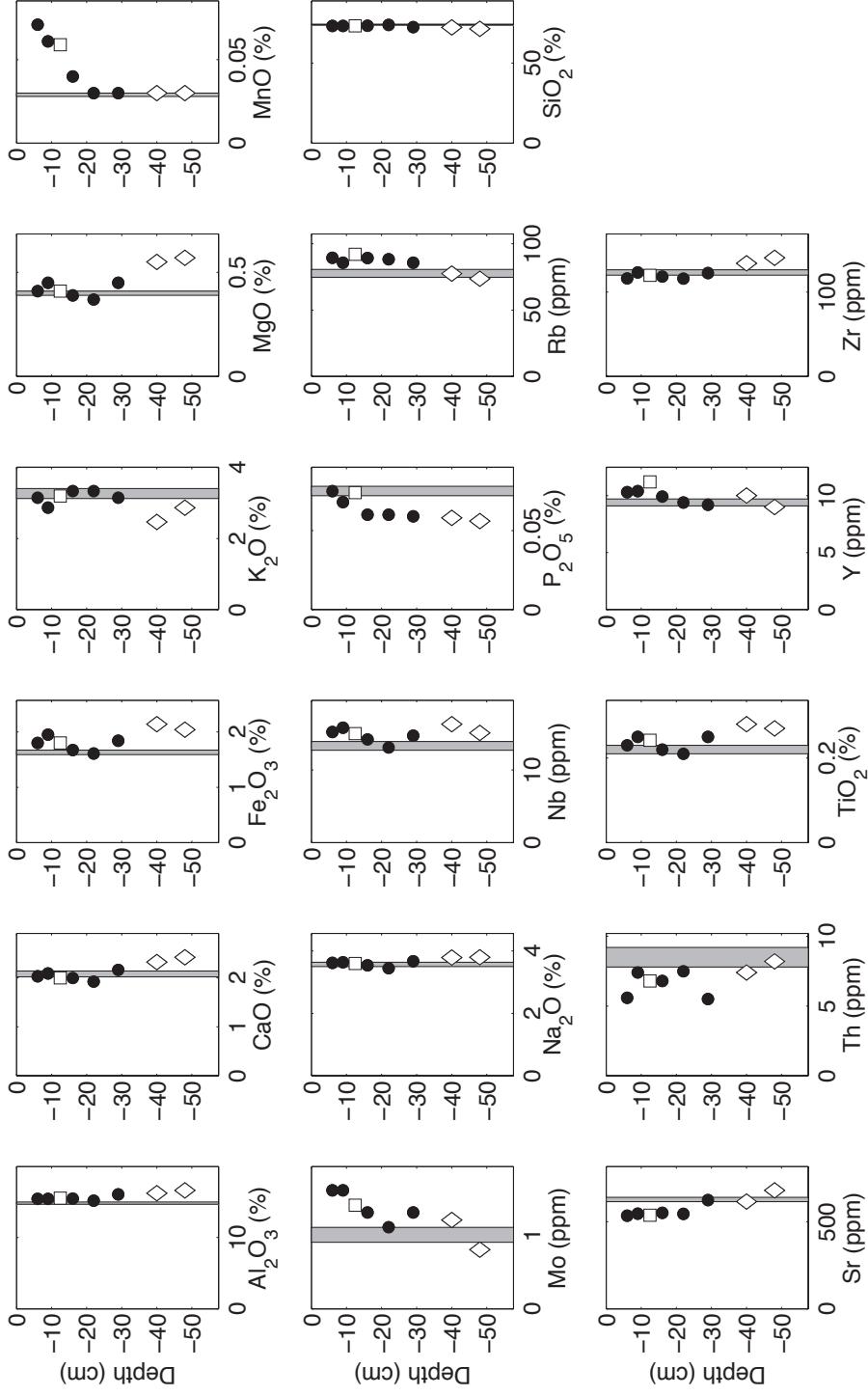


Figure S4: Elemental concentrations in the regolith profile at site P1850N. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

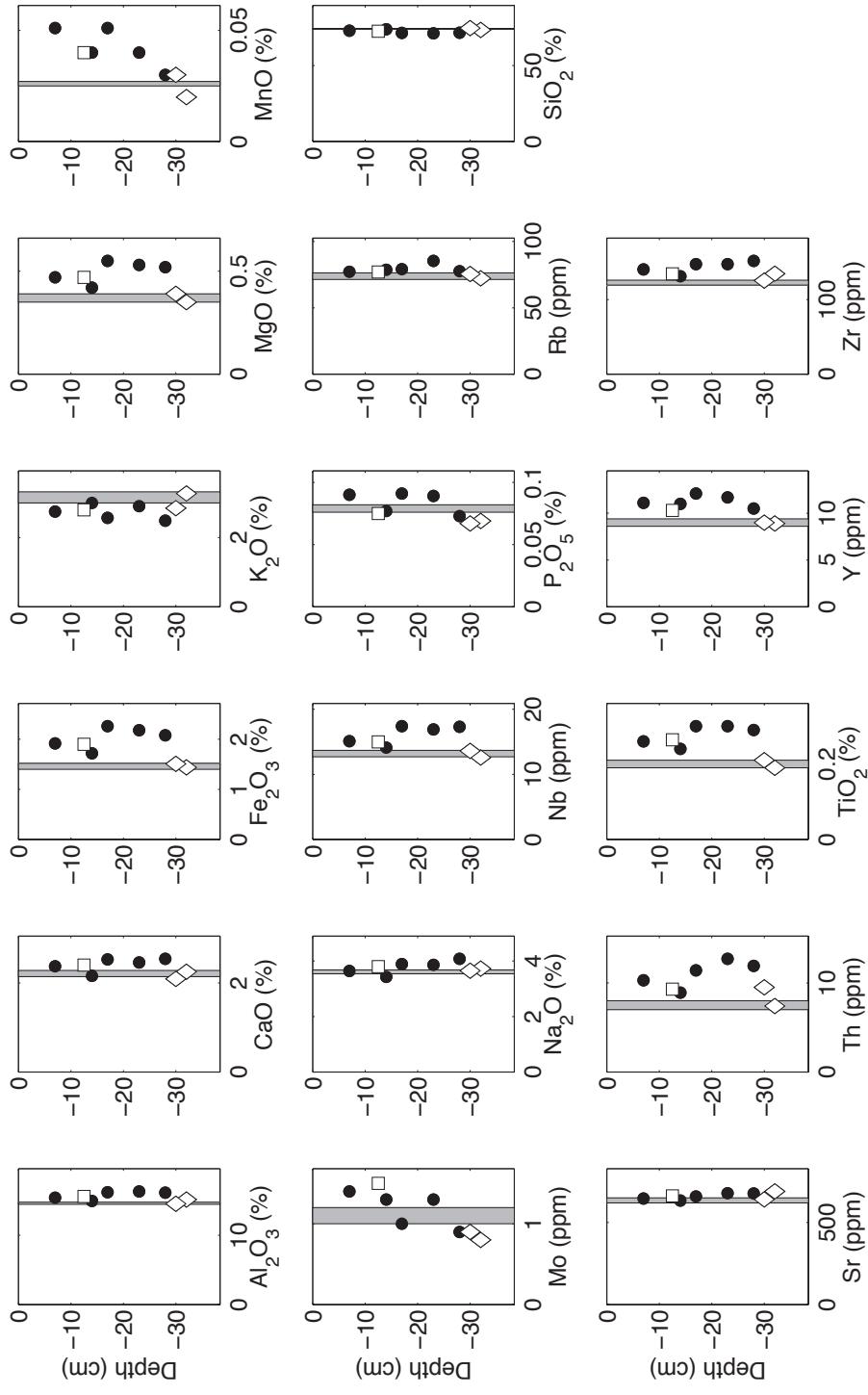


Figure S5: Elemental concentrations in the regolith profile at site P1706N. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

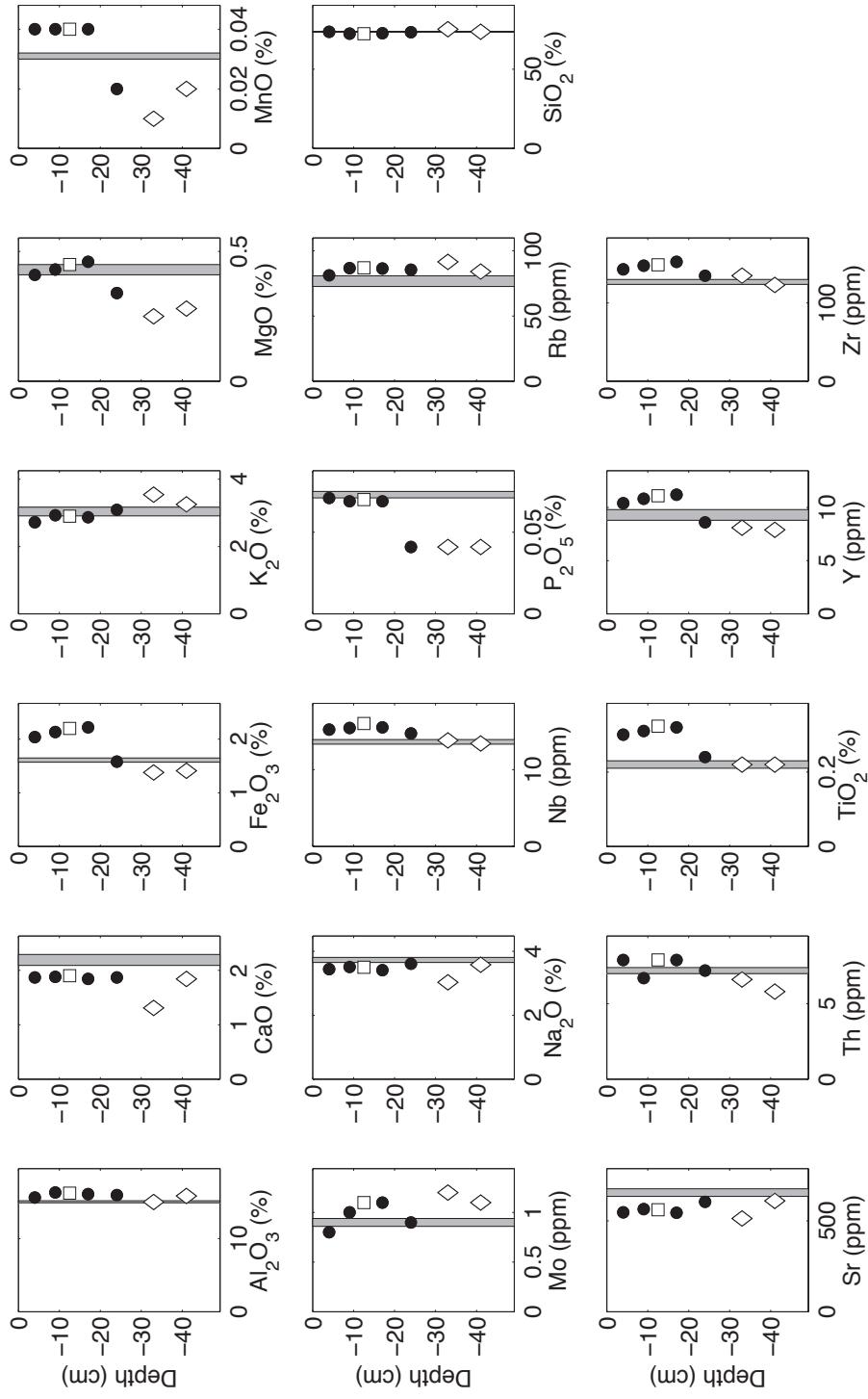


Figure S6: Elemental concentrations in the regolith profile at site P1485N. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

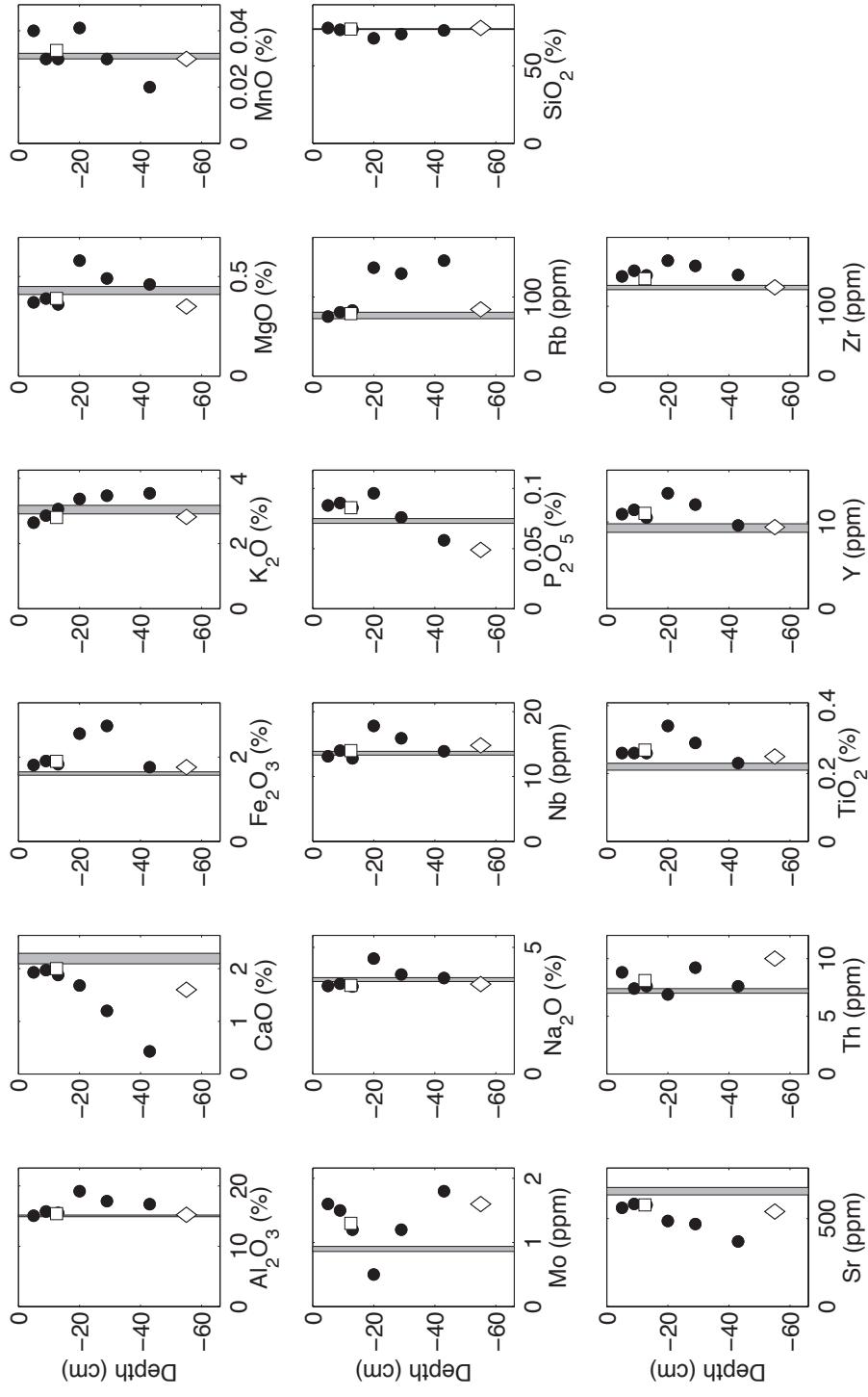


Figure S7: Elemental concentrations in the regolith profile at site P1471S. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

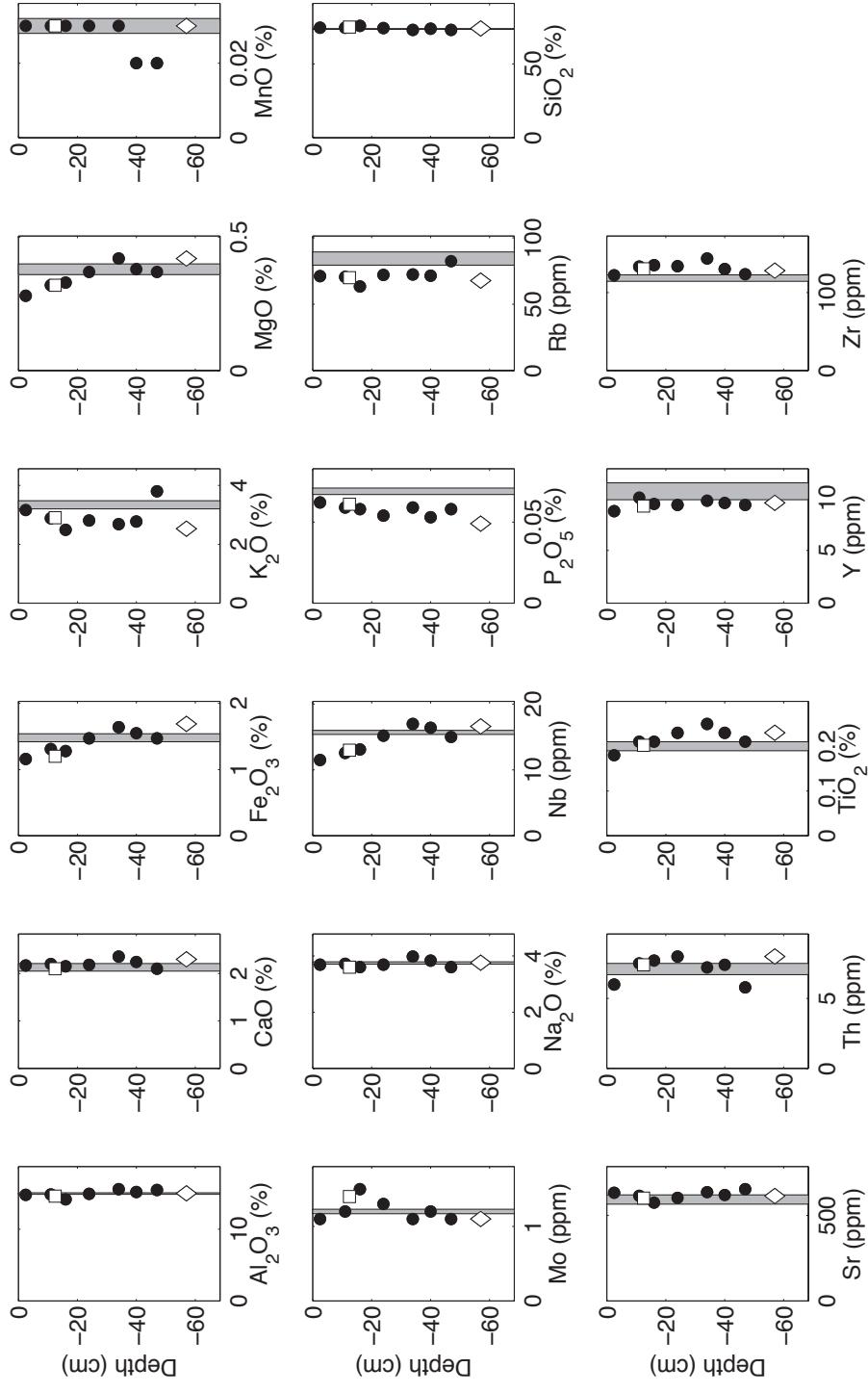


Figure S8: Elemental concentrations in the regolith profile at site P1277S. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

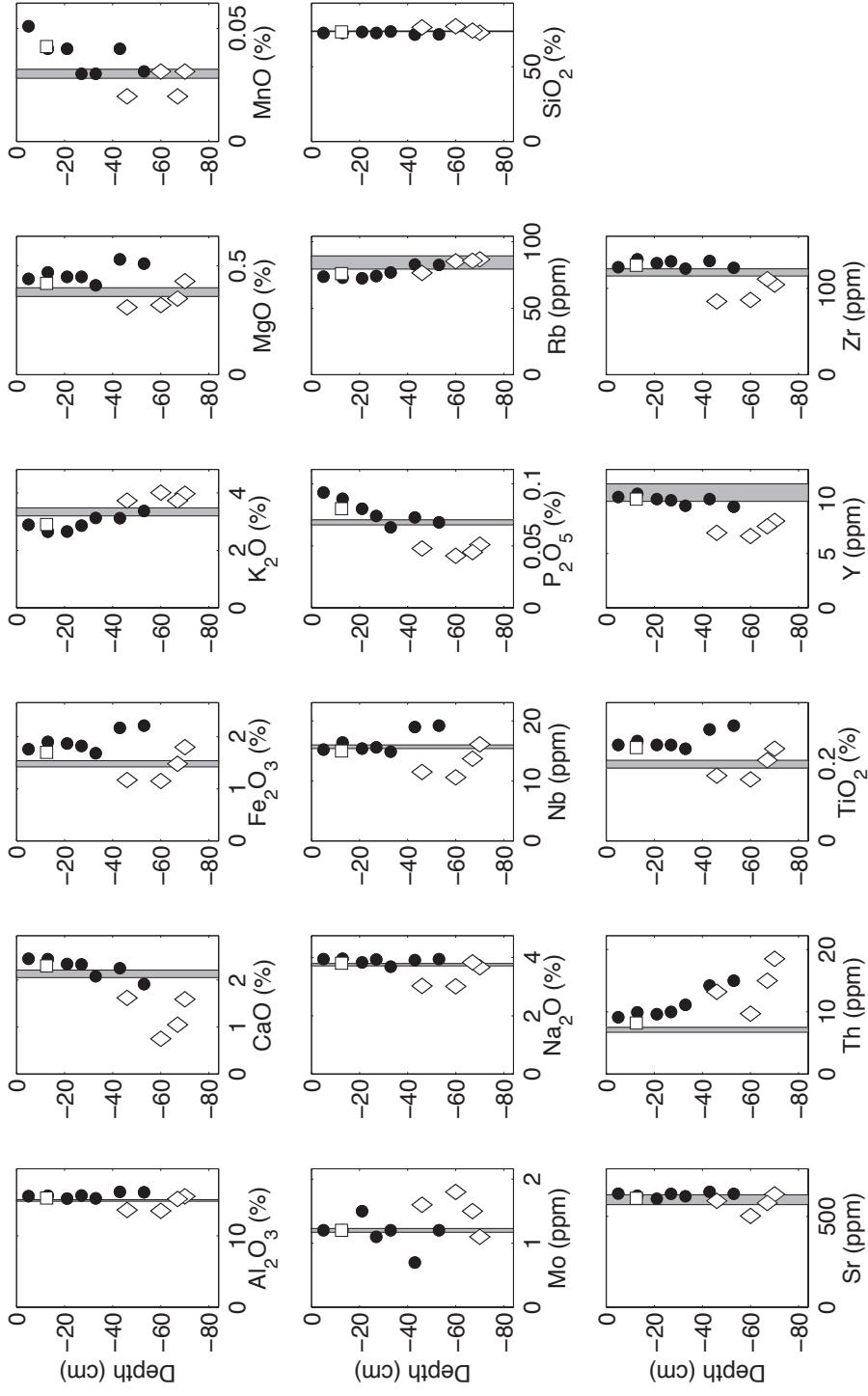


Figure S9: Elemental concentrations in the regolith profile at site P1264N. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

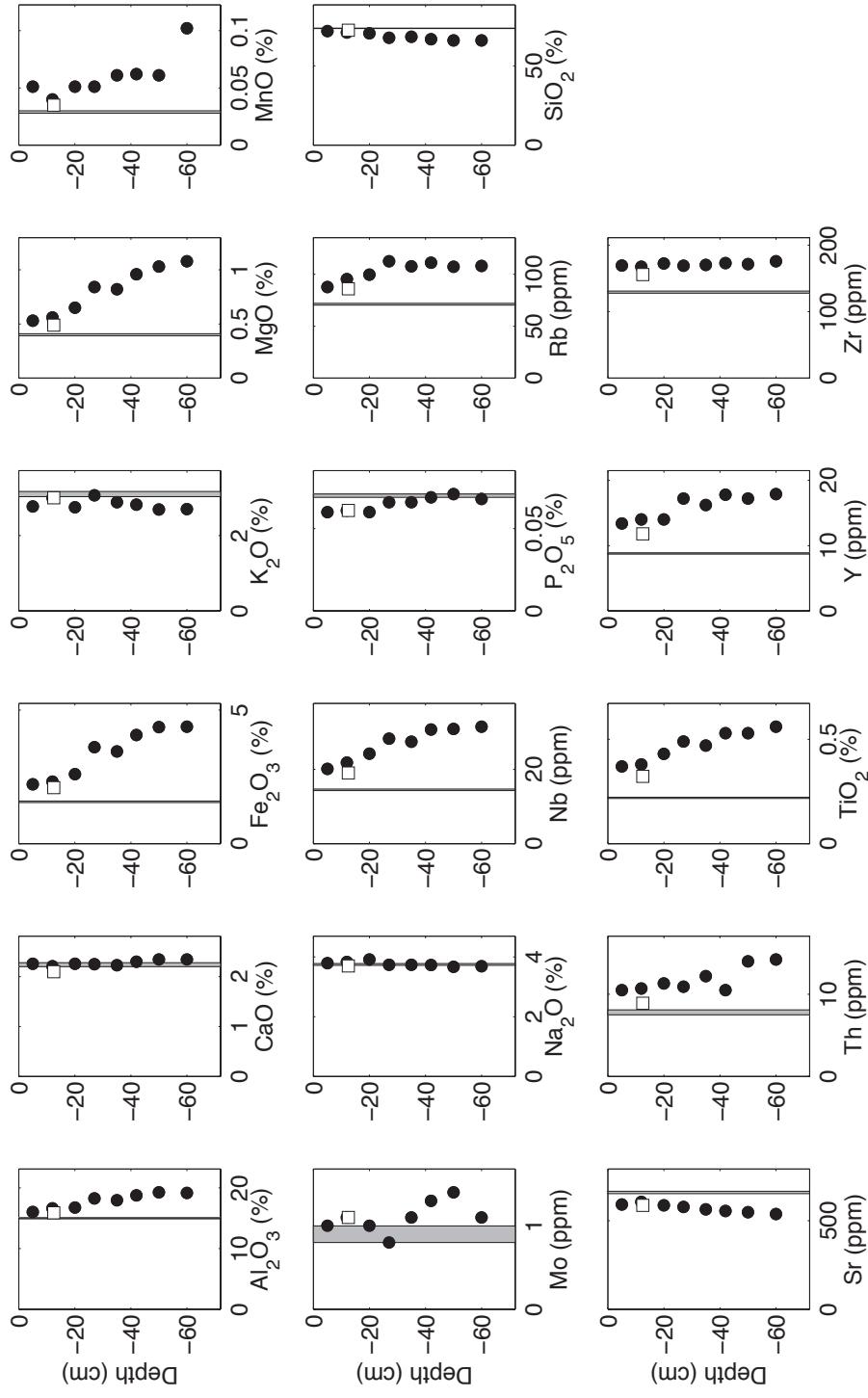


Figure S10: Elemental concentrations in the regolith profile at site P1062S. Solid circles represent regolith samples; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

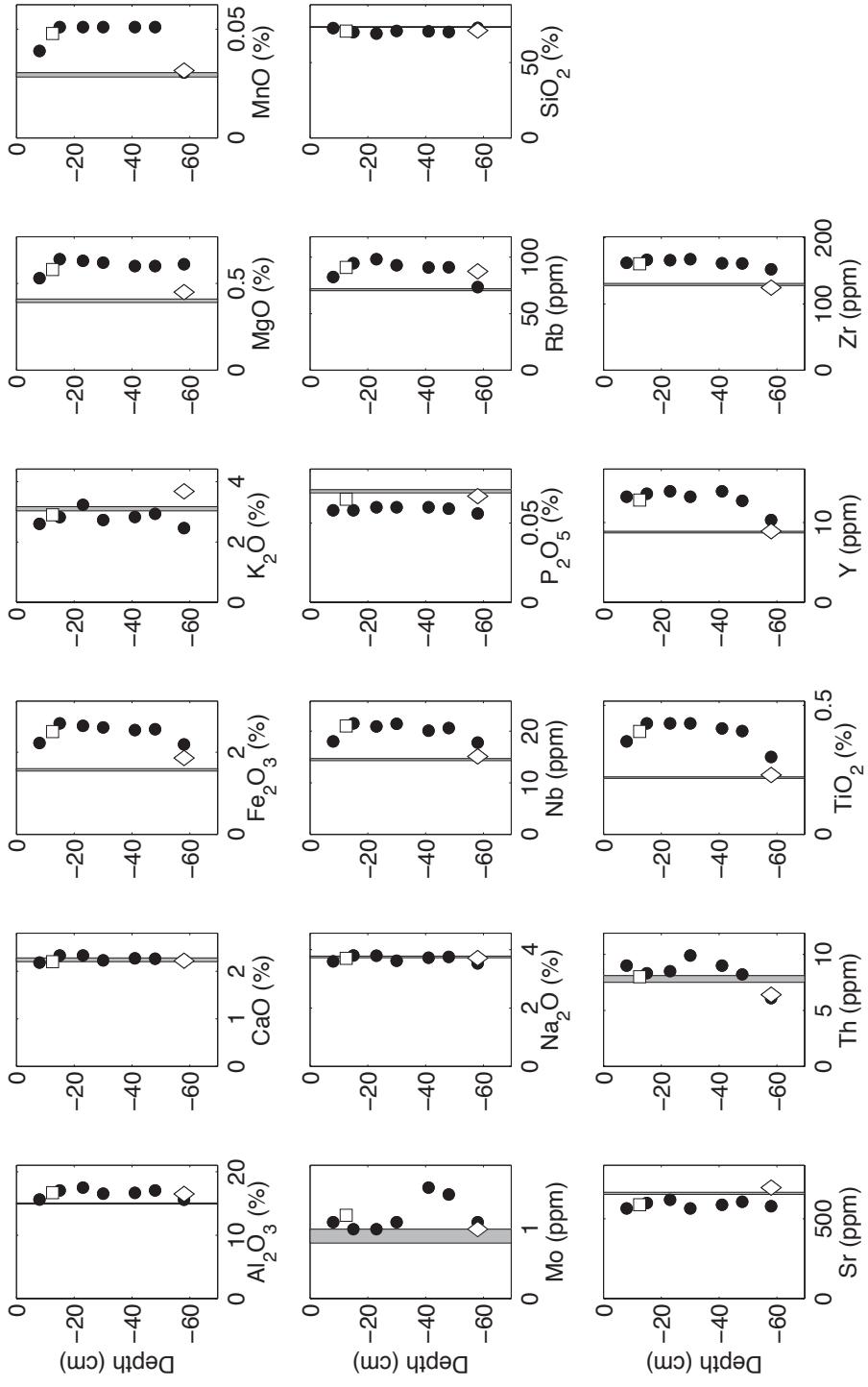


Figure S11: Elemental concentrations in the regolith profile at site P1062N. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

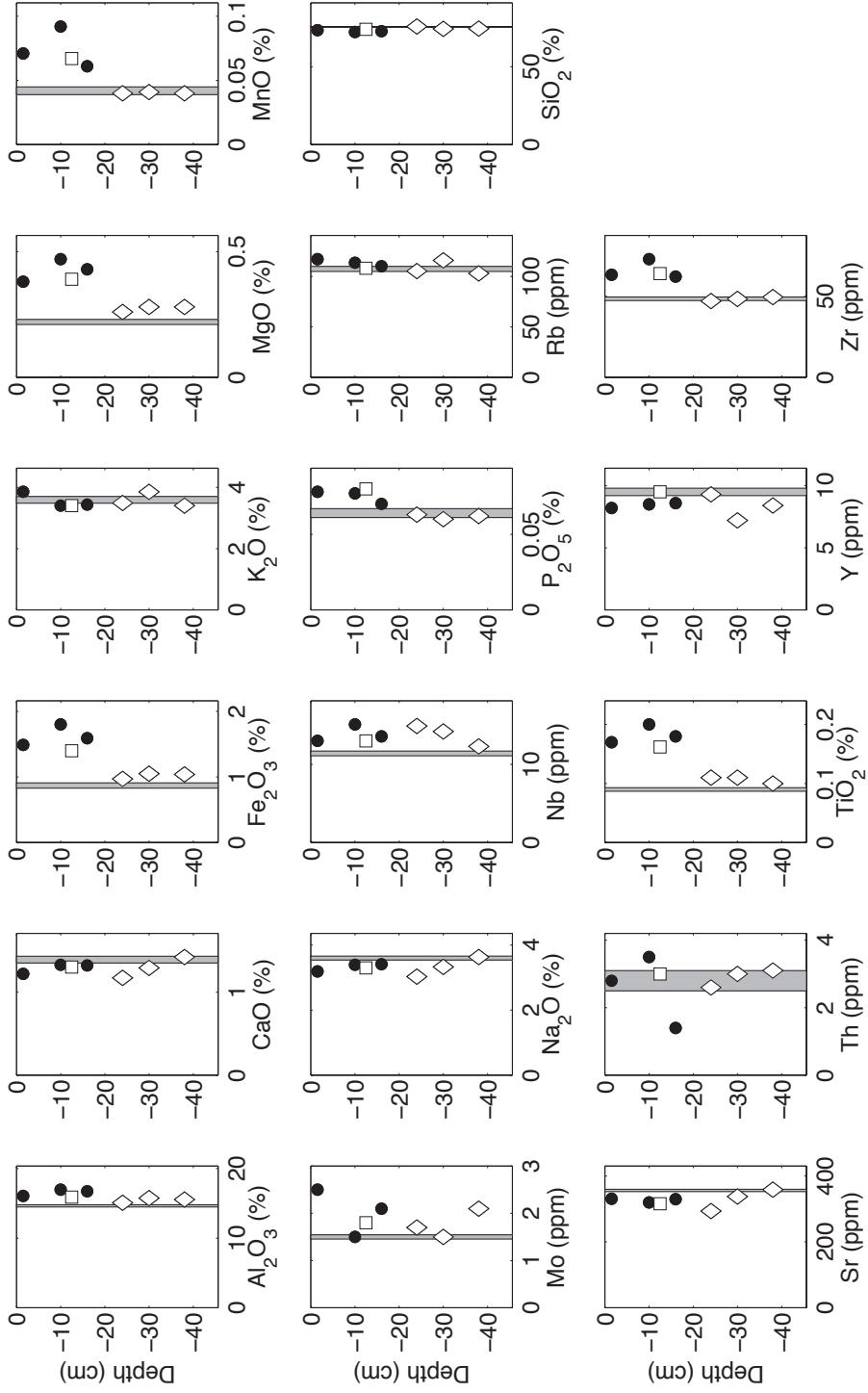


Figure S12: Elemental concentrations in the regolith profile at site T2364. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

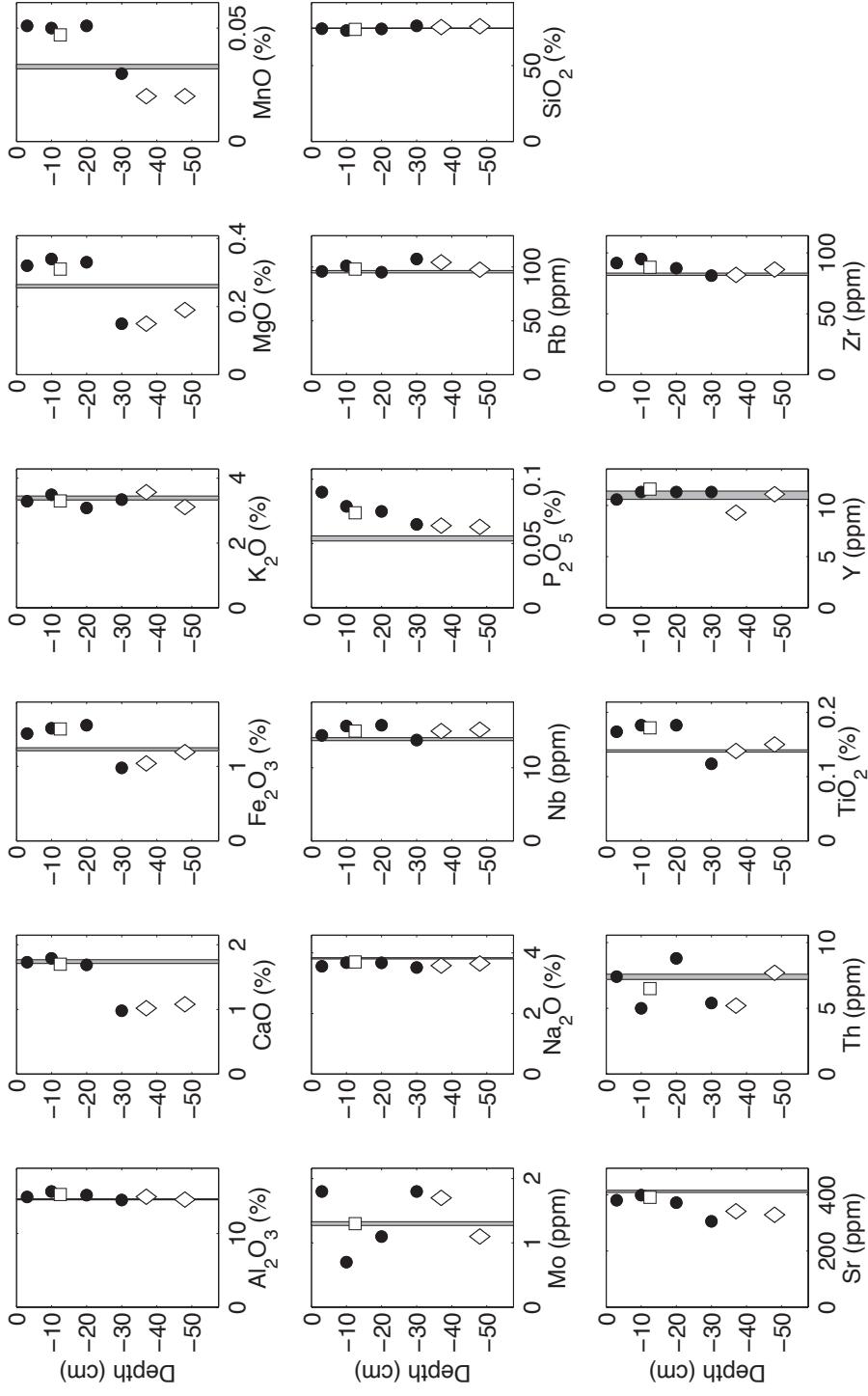


Figure S13: Elemental concentrations in the regolith profile at site T2073. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

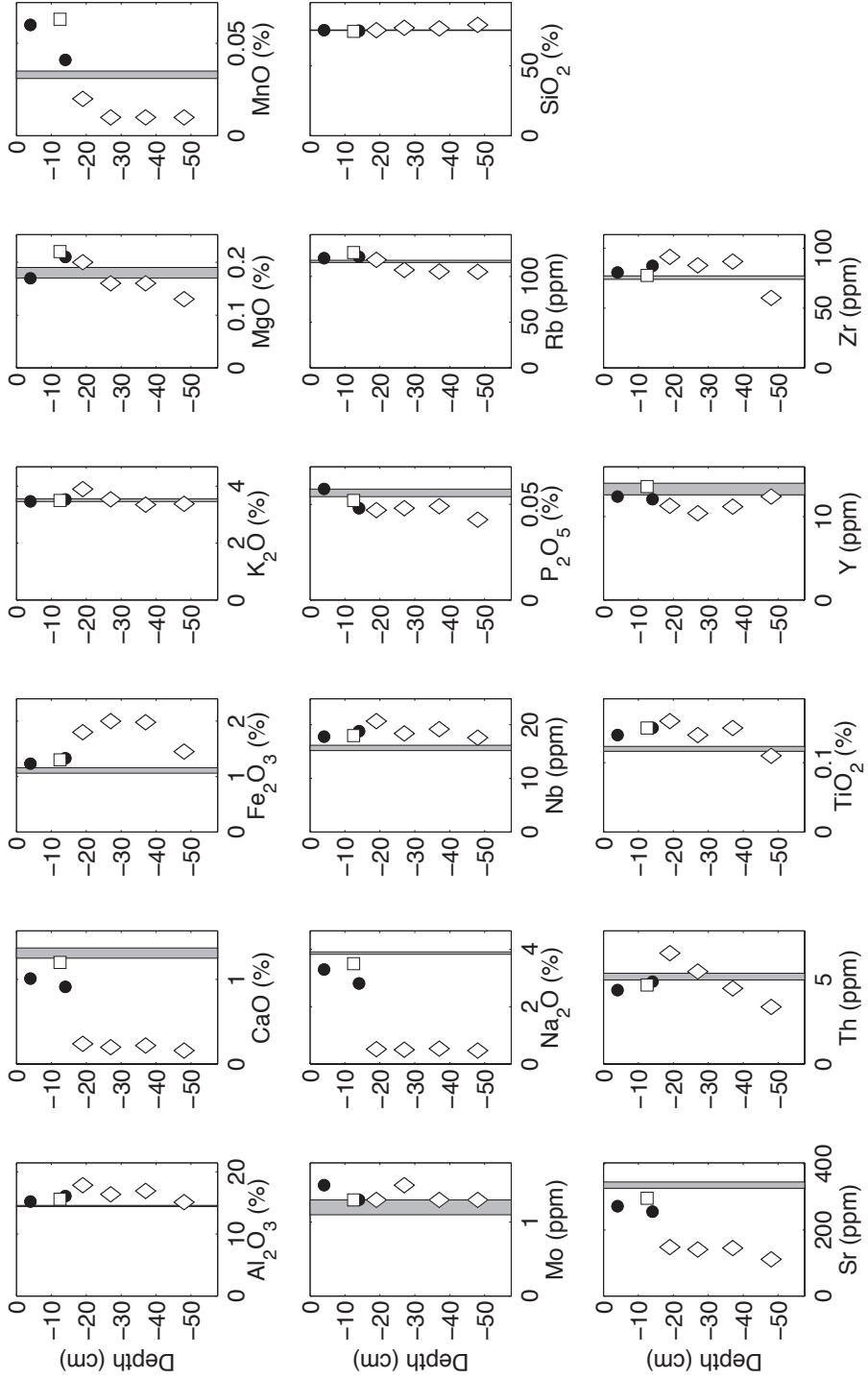


Figure S14: Elemental concentrations in the regolith profile at site T1755. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

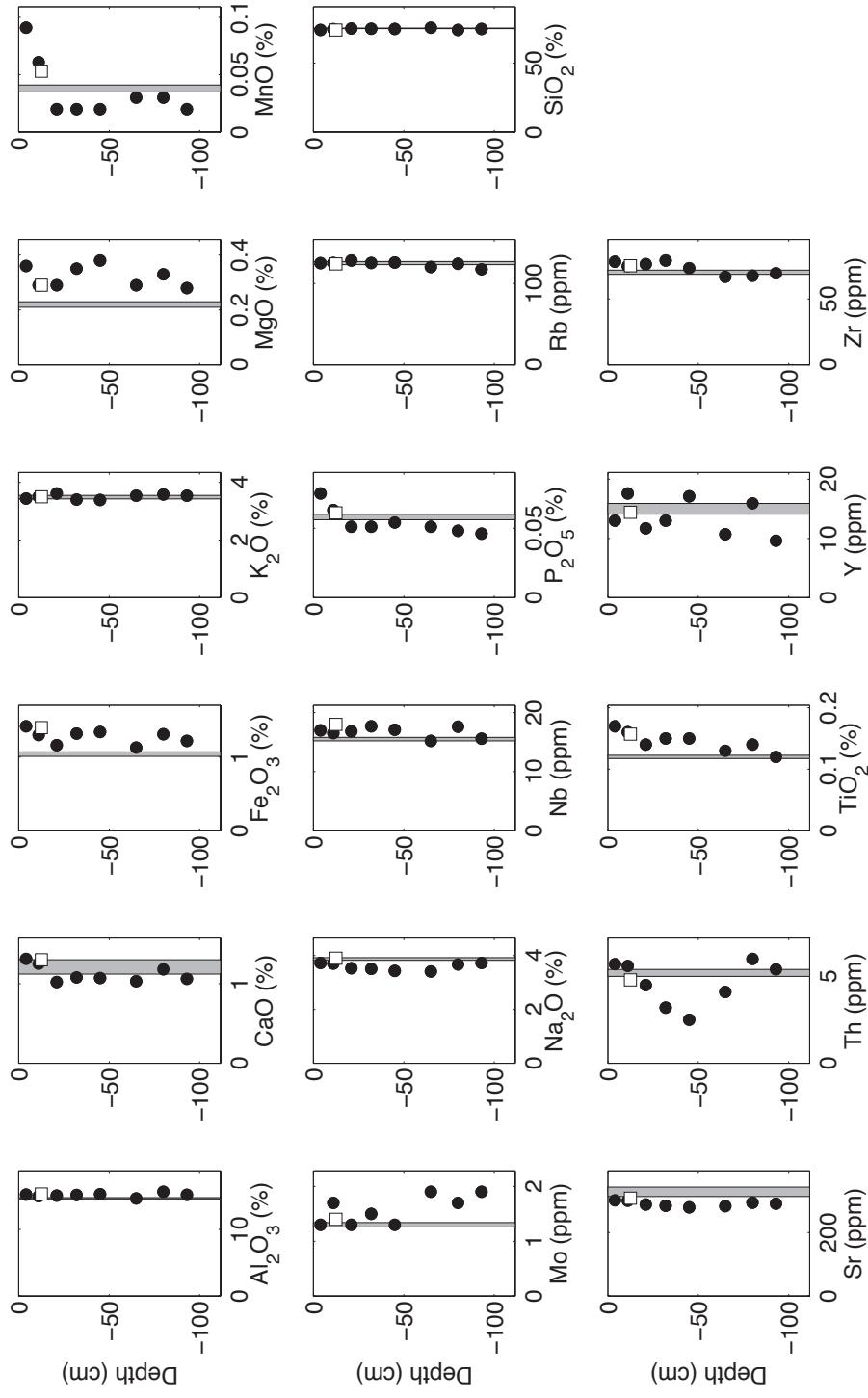


Figure S15: Elemental concentrations in the regolith profile at site T1508. Solid circles represent regolith samples; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

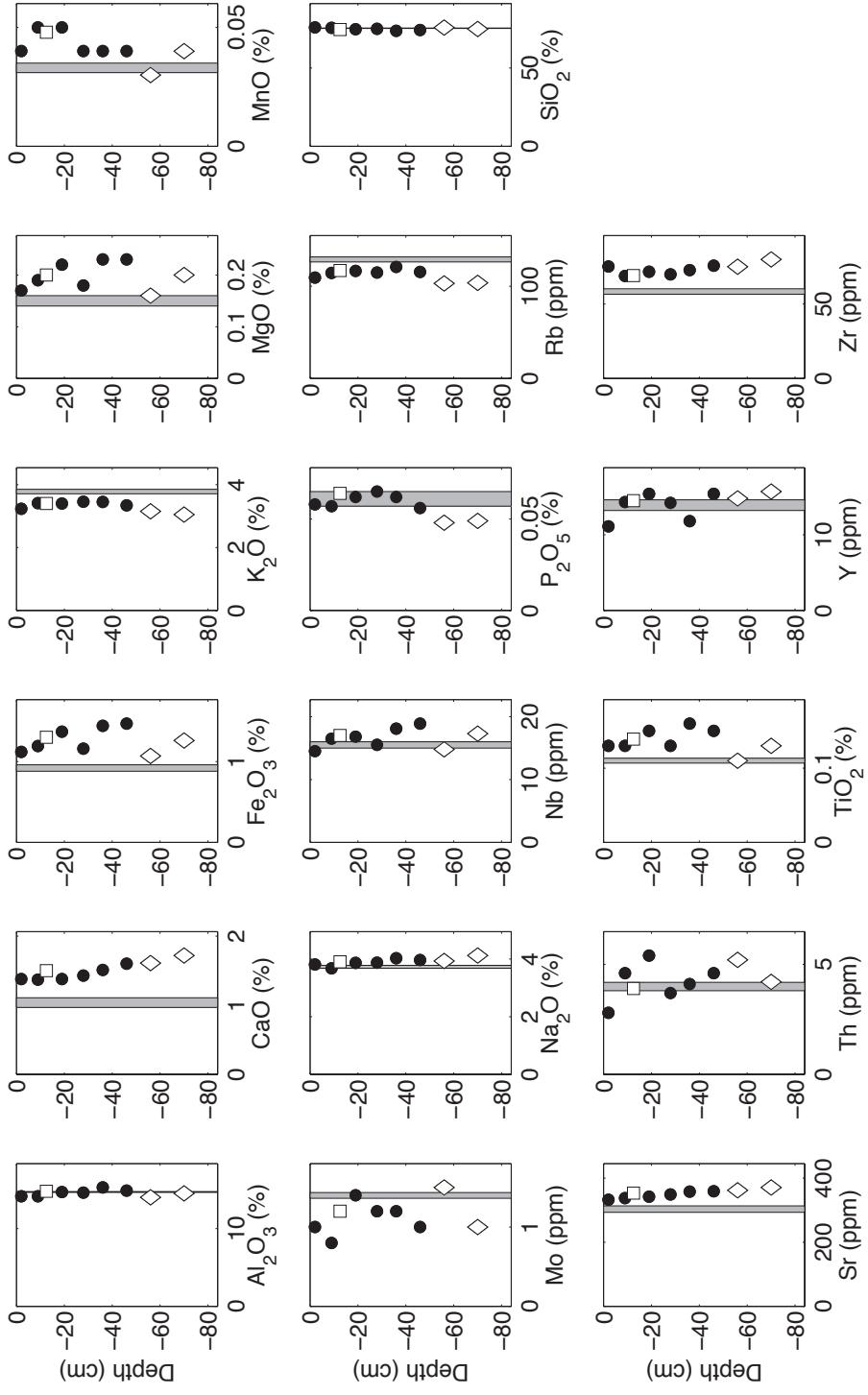


Figure S16: Elemental concentrations in the regolith profile at site T1294. Solid circles represent regolith samples; open diamonds represent samples of the underlying parent rock; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

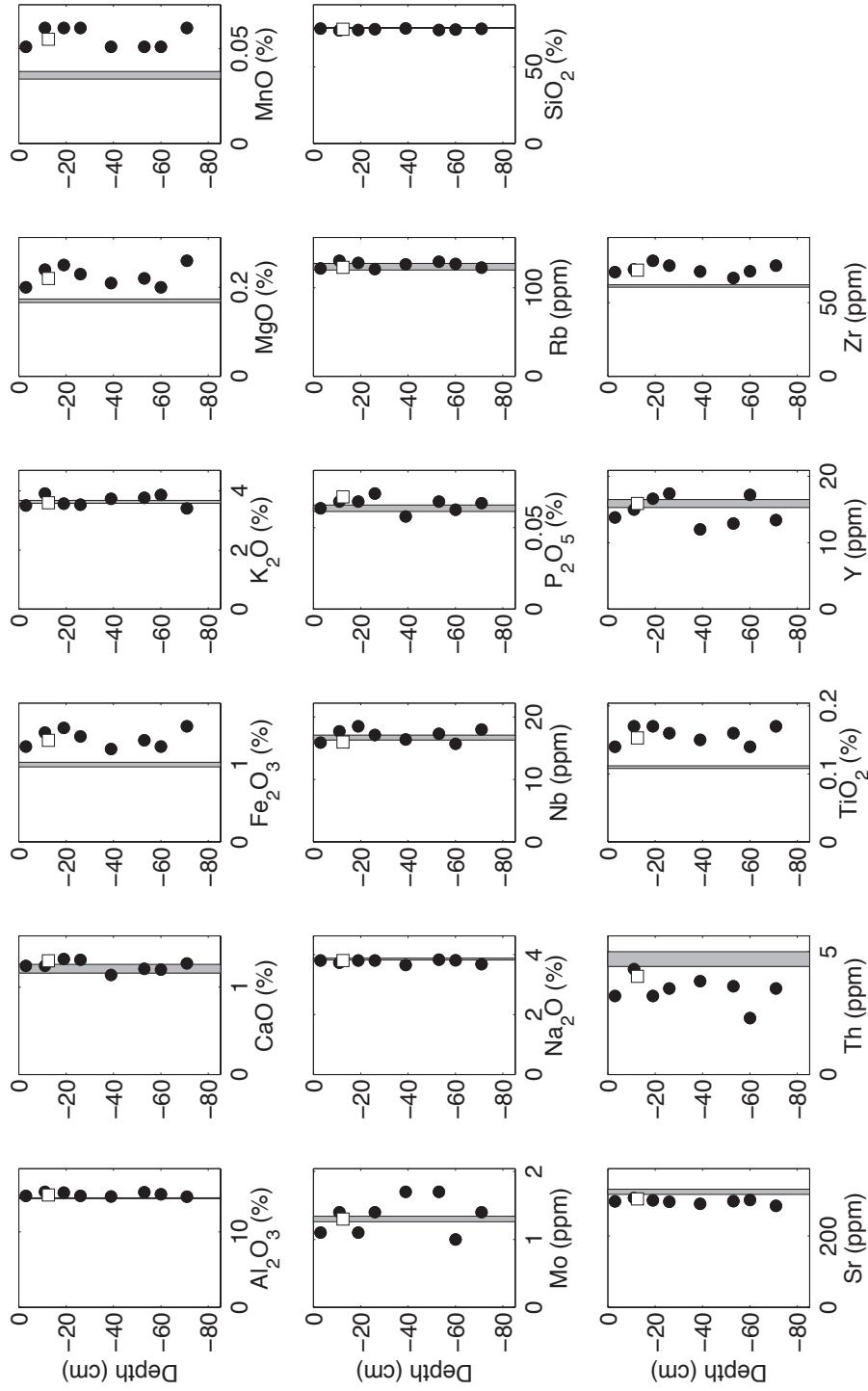


Figure S17: Elemental concentrations in the regolith profile at site T1084. Solid circles represent regolith samples; the gray box represents the average rock outcrop composition (mean and s.e.); and the open square represents the average composition of the 16 regolith samples collected at 10-15 cm depth elsewhere at this site.

#### **S4. Justification for excluding some rock samples as outliers at sites T2364 and T1755**

At most of the field sites on Pilot Peak and Tailholt Mountain, the sets of rock and regolith samples are well approximated by multivariate normal compositional distributions, and we assume that the mean compositions of these sample sets are accurate representations of the regolith and the regolith's parent granite. One of these typical distributions is shown in Figure S18. However, at sites T2364 and T1755, rock samples are much more variable in composition than rocks collected at other field sites, and fall into two compositional groups. One of these groups has a composition similar to rocks at the other sites on Tailholt Mountain (black crosses in Figure S19), while the second group has a strikingly different composition with much lower concentrations of certain elements, especially Ca, Sr and Na (red X's in Figure S19). Unlike the bimodally distributed rock samples at T2364 and T1755, the regolith samples at these sites (blue dots in Figure S19) fall into single unimodal distributions and have compositions similar to those in regoliths at the other Tailholt Mountain sites, suggesting they are derived from parent rocks similar to the parent rocks elsewhere on Tailholt Mountain. If we were to consider the average composition of all sampled rocks at sites T2364 and T1755 to be representative of the parent material of the sampled regoliths, we would be forced into the geochemically unreasonable conclusion that highly soluble Ca and Na are much less chemically mobile than immobile Zr. Instead, we assume that the sampled regoliths at T2364 and T1755 are a product only of the first set of "typical" rock samples, and do not reflect contributions from the second group of "atypical" rock samples. We therefore exclude the second group of rock samples from all calculations of average rock composition at T2364 and T1755 and thus of chemical and physical erosion rates at these sites. The subsets of the sampled rocks at T2364 and T1755 that we consider representative of the parent rock are, at site T2364: X1-X5, X7, X8, X10, X19, X25, X26, X35, X37, X38; and at site T1755: X3-X8, X36, and X39. The mean rock compositions for T2364 and T1755 listed in Table S5 are the mean compositions of these sample subsets.

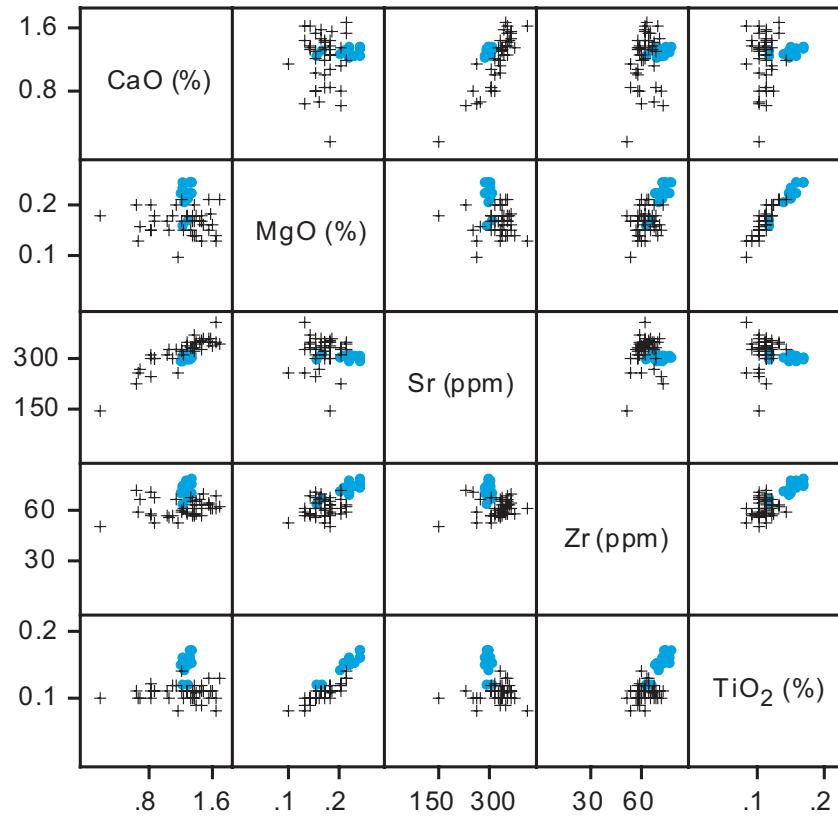


Figure S18: At site T1084, as at most field sites on Pilot Peak and Tailholt Mountain, regolith and rock compositions are well approximated by multivariate normal distributions. Here blue dots are regolith samples, and black crosses (+) are rock outcrop samples.

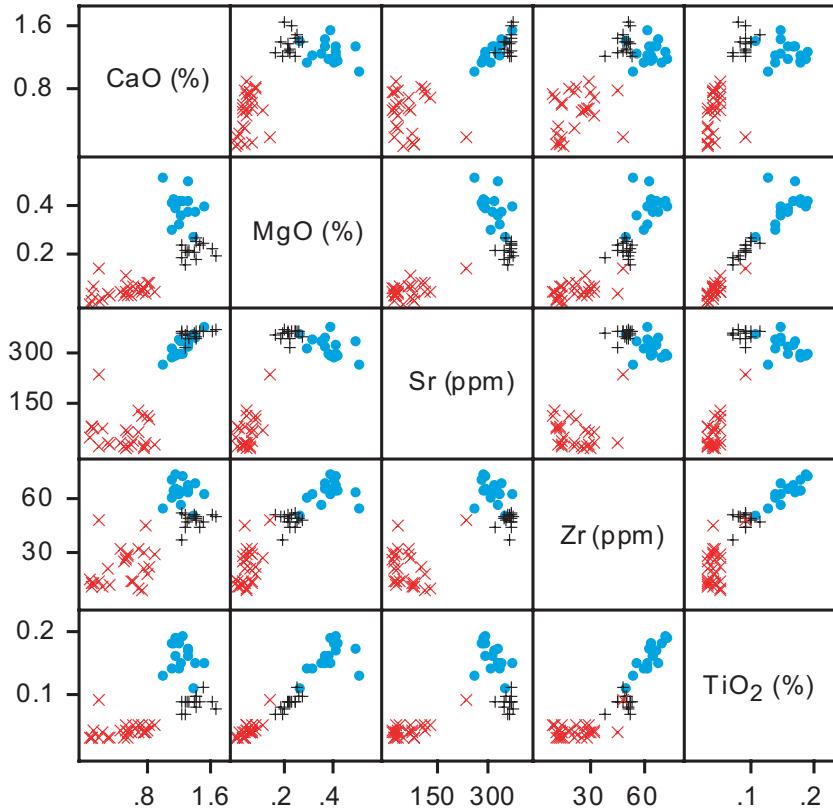


Figure S19: Justification for excluding some rock samples as outliers at site T2364. At this site the rock samples fall into a bimodal distribution, in which a subset of rock samples has a composition similar to that of other rocks on Tailholt Mountain (black + symbols), while the remainder has a much different composition, with far less Ca, Mg, and Sr, among other elements (red  $\times$  symbols). Blue circles represent regolith samples. If the subset of atypical rock samples were included in an estimate of the mean granite composition at T2364, Equation 7 would predict that mobile elements Ca and Sr were less mobile than immobile elements Zr and Ti, which is geochemically unreasonable. We therefore consider it unlikely that this subset of rock samples contributed material to the sampled regolith, and exclude them as outliers from the estimated mean rock composition. Site T1755 has a similarly bimodal set of rock samples, and we excluded a subset of its rock samples in the same manner (see text).

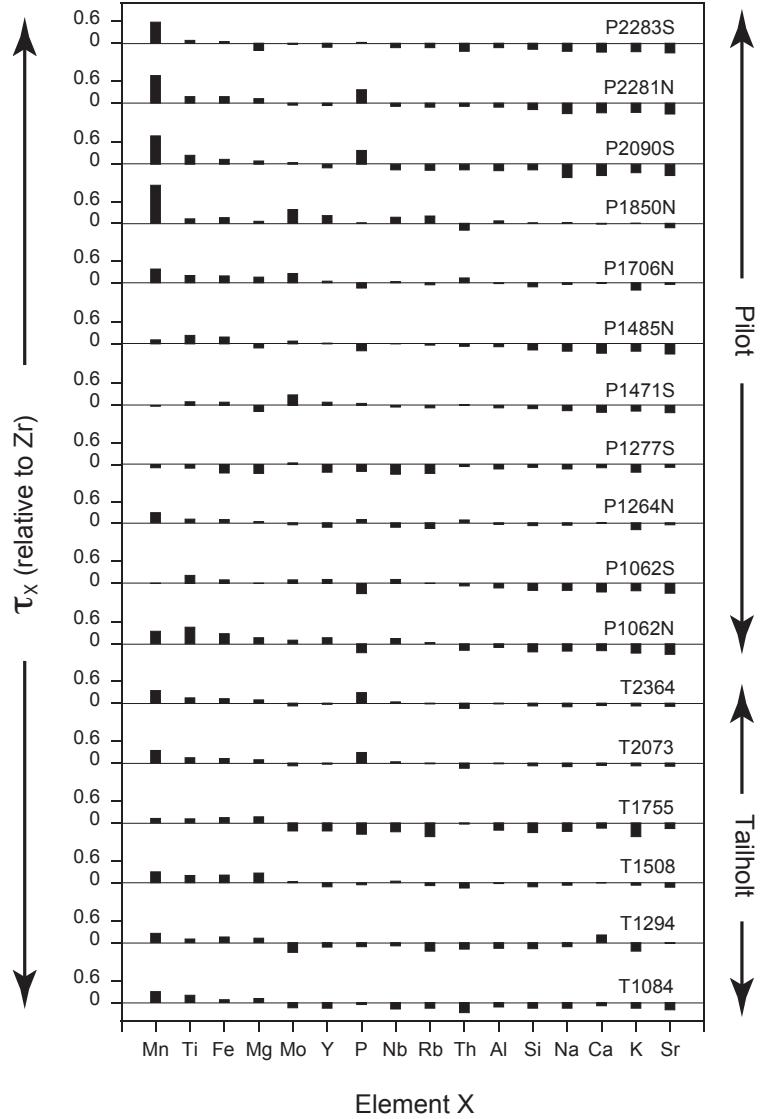


Figure S20: For an element X, the mass transfer coefficient ( $\tau_X = X_s Zr_r / X_r Zr_s - 1$ ) expresses the gain or loss of X relative to an immobile element (here Zr) in the regolith compared to its parent rock (Brimhall and Dietrich, 1987; Chadwick et al., 1990). At many of the field sites on Pilot Peak and Tailholt Mountain,  $\tau_{Ti}$ ,  $\tau_{Mn}$ ,  $\tau_{Fe}$ , and  $\tau_{Mg}$  are  $> 0$ , implying that the regoliths have been enriched in these elements relative to Zr. Because Zr should be chemically immobile in this environment, this suggests that these elements have been added to the regolith by a second source rich in these elements. We suggest the most likely source is dust incorporation into the regolith (Ferrier et al., 2011).

## S5. Regolith climate time series measurements

As described in the main text, at each field site on Pilot Peak and Tailholt Mountain we buried instruments to measure regolith moisture and regolith temperature. Here we present the regolith climate time series measured by these instruments. These are the data from which mean annual regolith temperatures (MART) and moisture indices were calculated. Calculating MART at several of the sites required filling data gaps in the temperature records where the instruments succumbed to electrical failure, heat, or rodents. We filled these data gaps with temperature estimates based on correlations with regolith temperatures at the nearest sites, as described below.

At Pilot Peak there are two sets of temperature data gaps over the two-year time interval for which we calculated MART (8/1/2006-7/31/2008). The first set of gaps are in the first twelve or thirteen days of August 2006 at sites P2283S, P1471S, and P1062S. To fill these gaps, we used linear correlations between temperatures at these sites and their nearest neighbors (P2281N, P1485N, and P1062N, respectively) based on temperature measurements at these six sites during the remainder of August 2006. These gaps are short (<2 weeks) relative to the two-year time interval over which we calculated MART for Pilot Peak, and thus the manner in which we filled these data gaps had a negligible effect on calculated MART values.

The second set of data gaps at sites P1471S and P1485N is in July–October 2006, during which regolith temperatures declined at a near-linear rate at the sites nearest P1471S and P1485N. To fill these gaps, we calculated regolith temperatures at P1471S and P1485N as a multivariate linear function of the regolith temperatures at their nearest neighbors (P1706N, P1277S, and P1264N). These functions are based on the July–October regolith temperatures at P1471S, P1485N, P1706N, P1277S, and P1264N in 2005, 2006, and 2008.

At Tailholt Mountain, more than half of the sensors had major data gaps during the second year of monitoring. Rather than attempt to fill each of these long gaps with temperature estimates, we instead report MART at Tailholt only for the first year of monitoring (10/1/2005-9/30/2006). Because site T1294 did not record any good data during the first year of monitoring, we assume its MART during this year is 1.45 °C lower than the MART of the nearest site (T1084), as was the case during the second year of monitoring when both T1294 and T1084 recorded good temperature data.

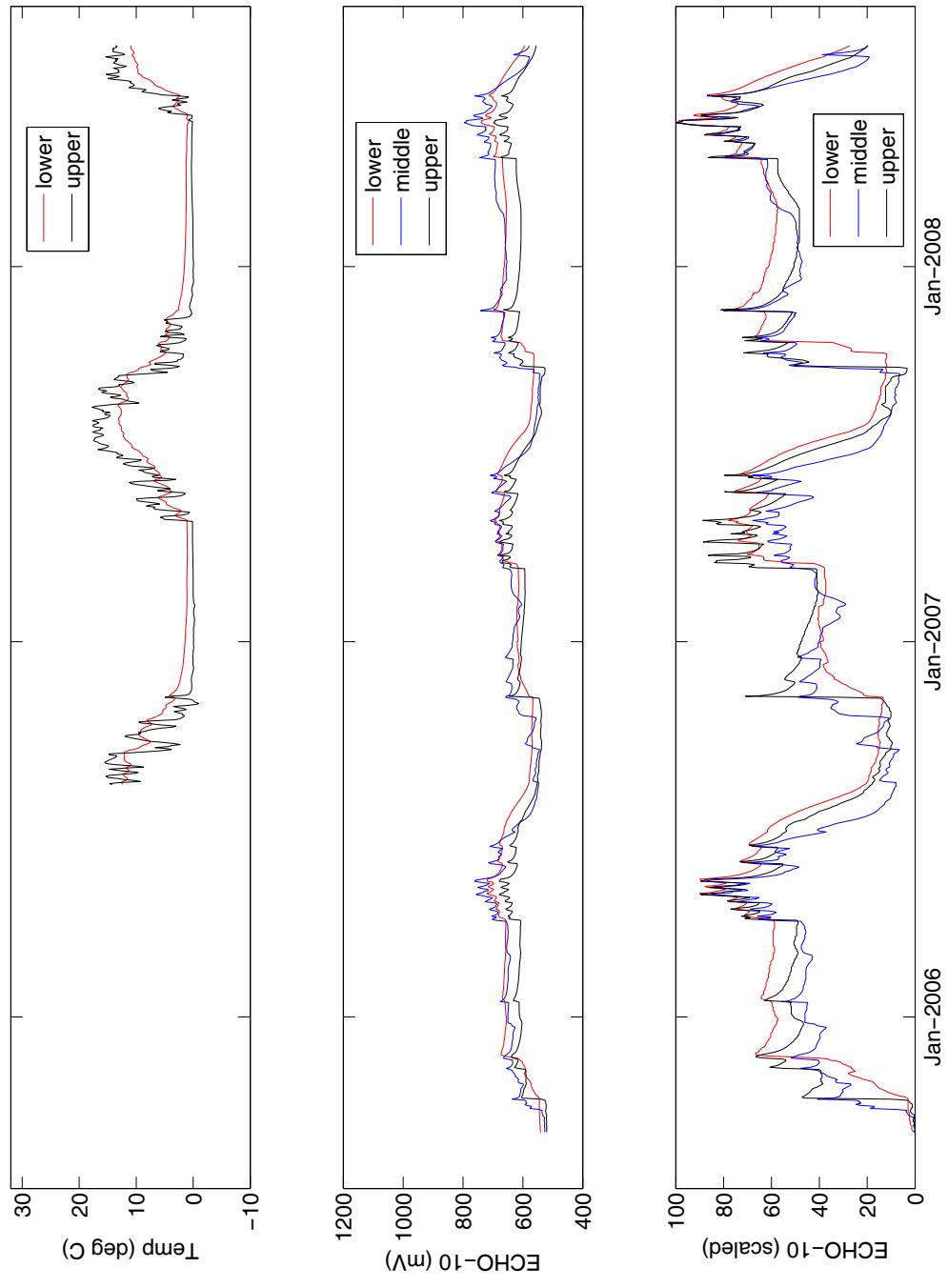


Figure S21: P2283S regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

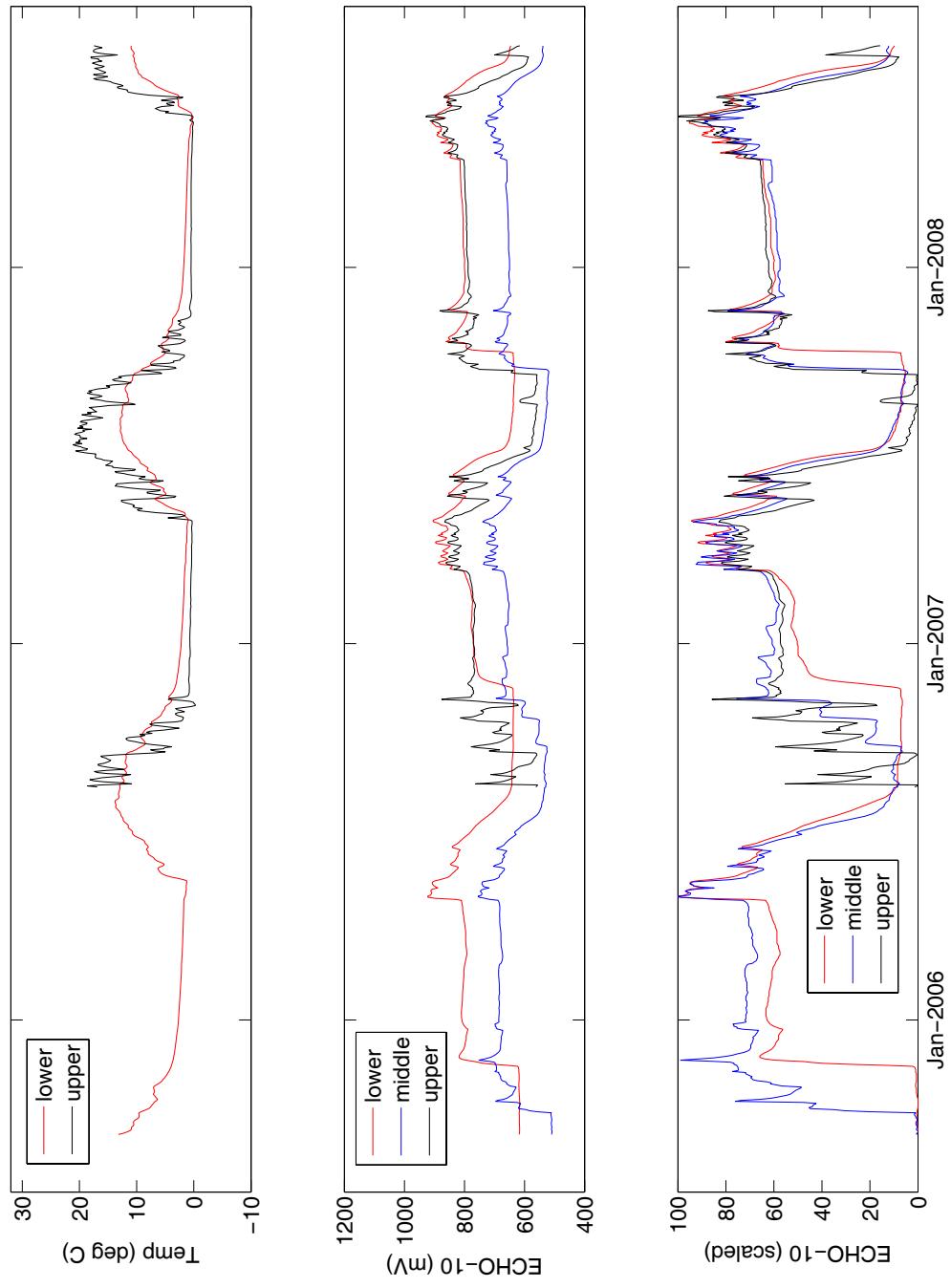


Figure S22: P2281N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

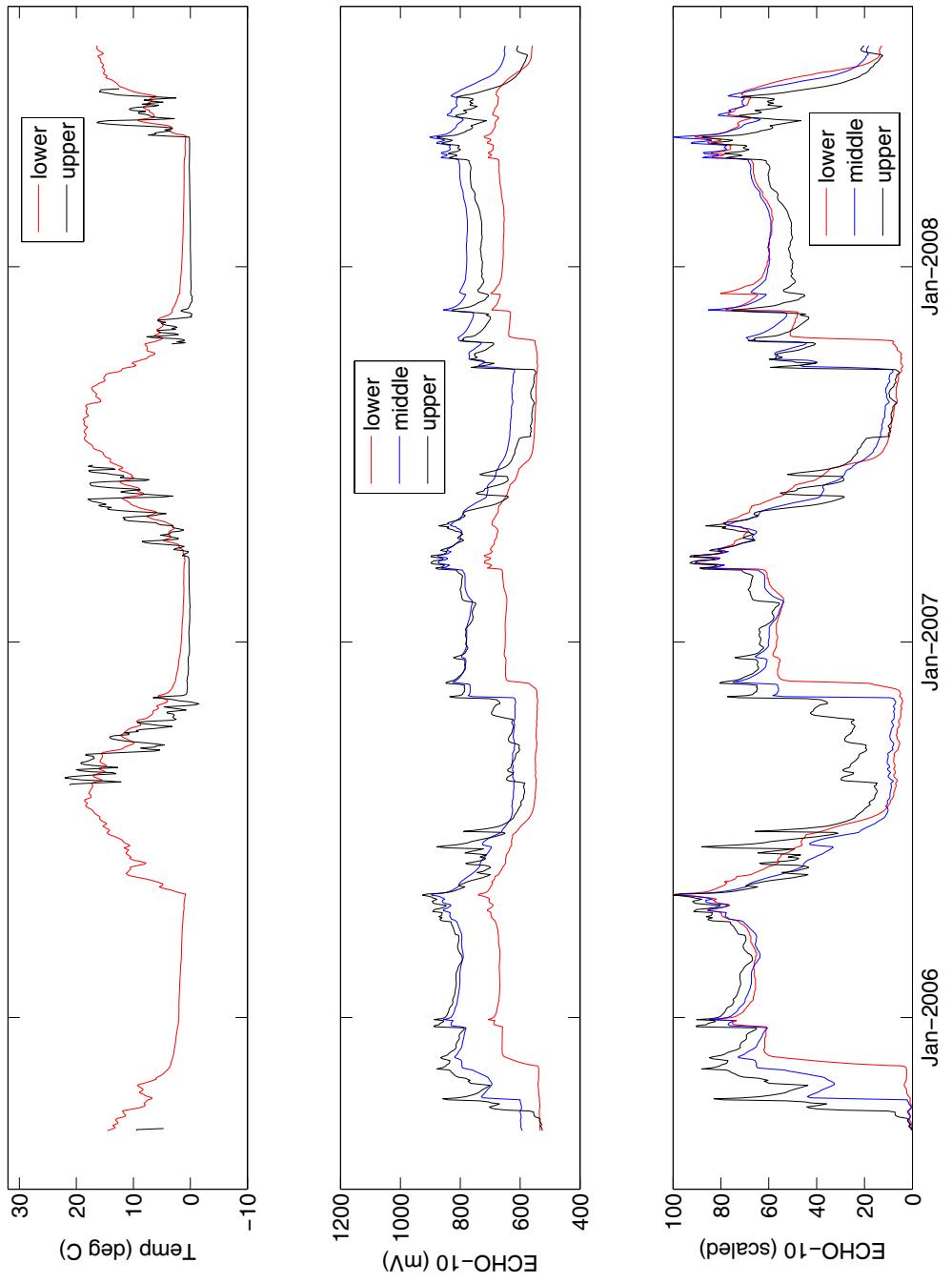


Figure S23: P2090S regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

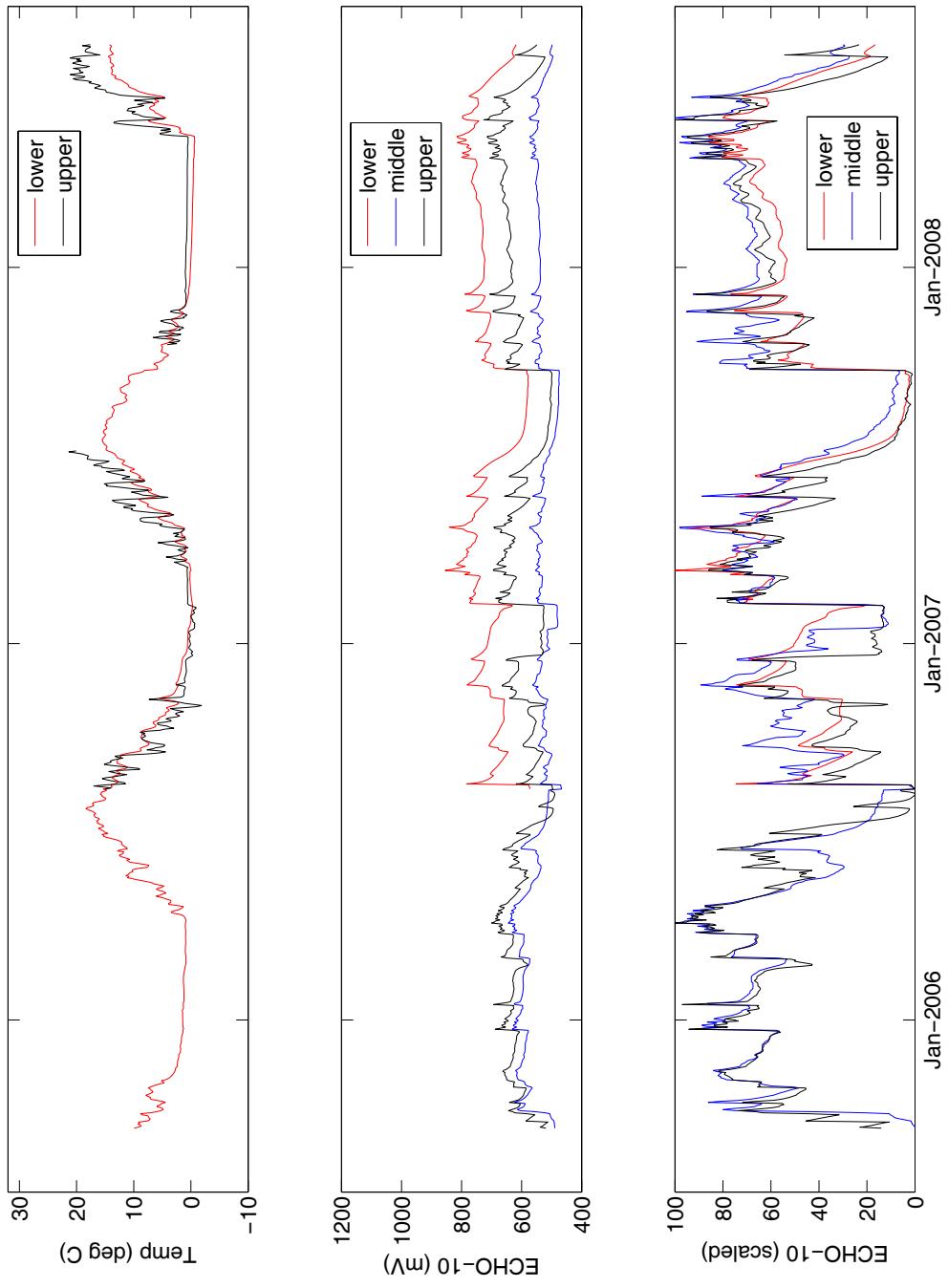


Figure S24: P1850N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

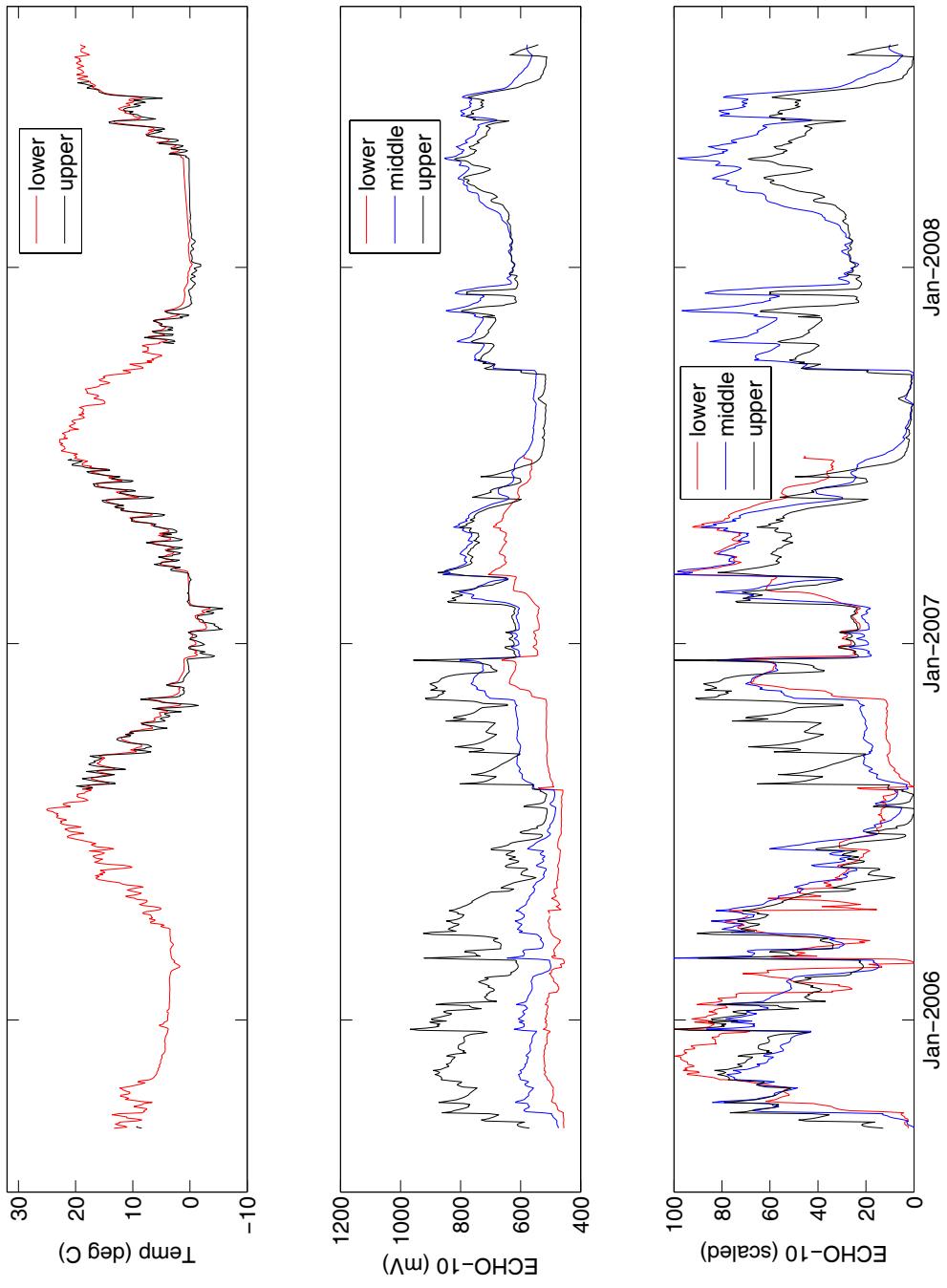


Figure S25: P1706N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

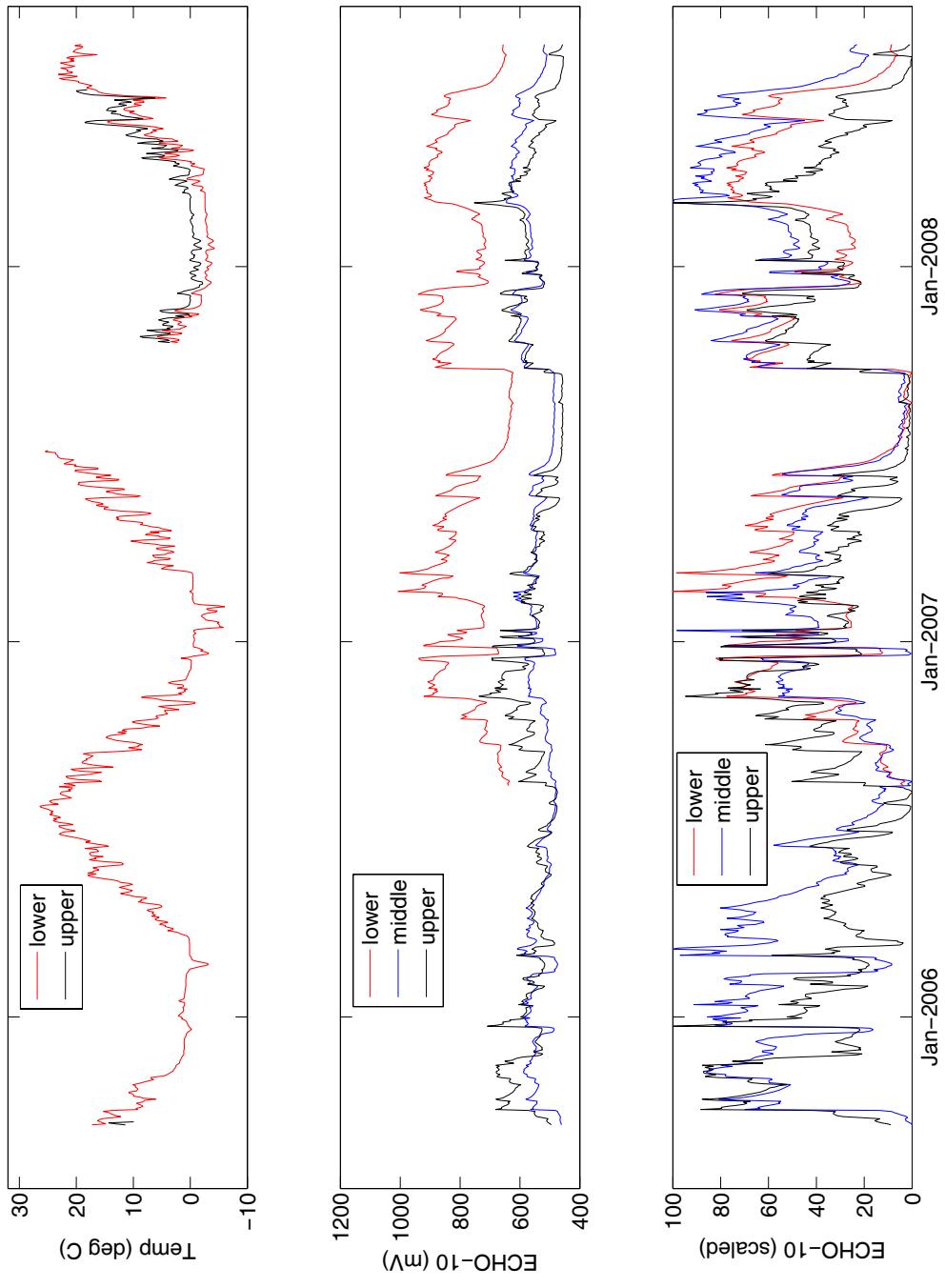


Figure S26: P1485N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

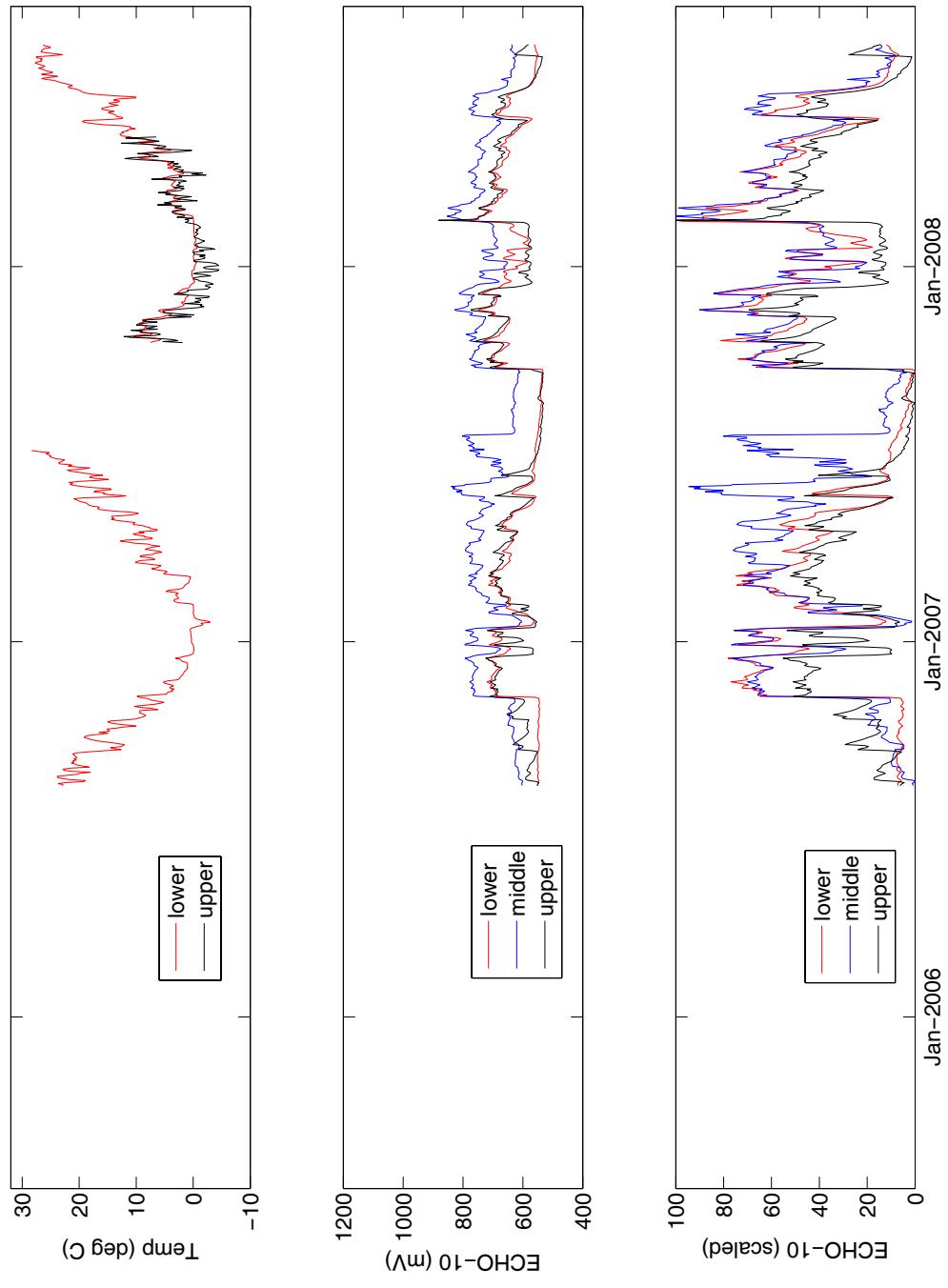


Figure S27: P1471S regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

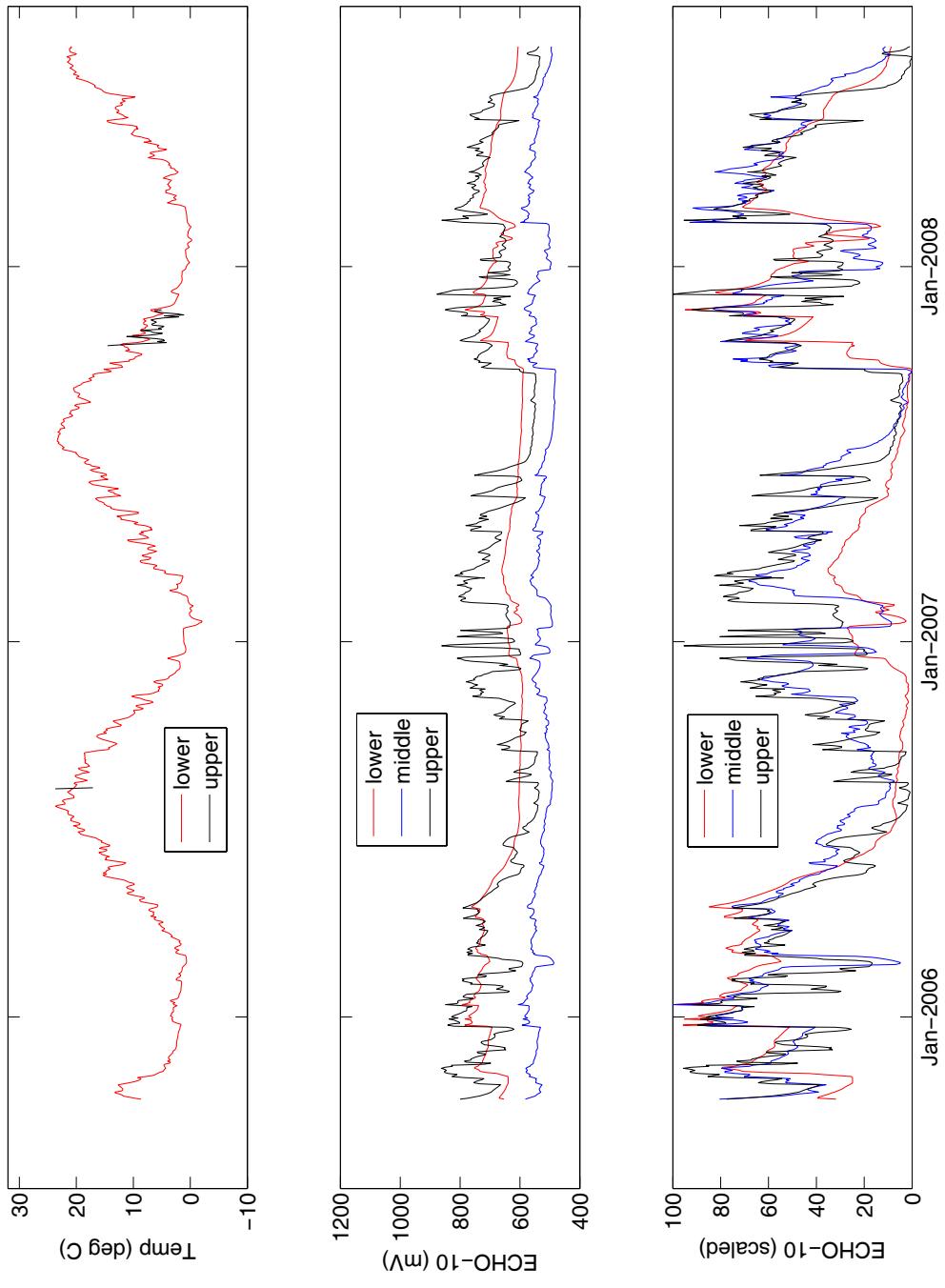


Figure S28: P1277S regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

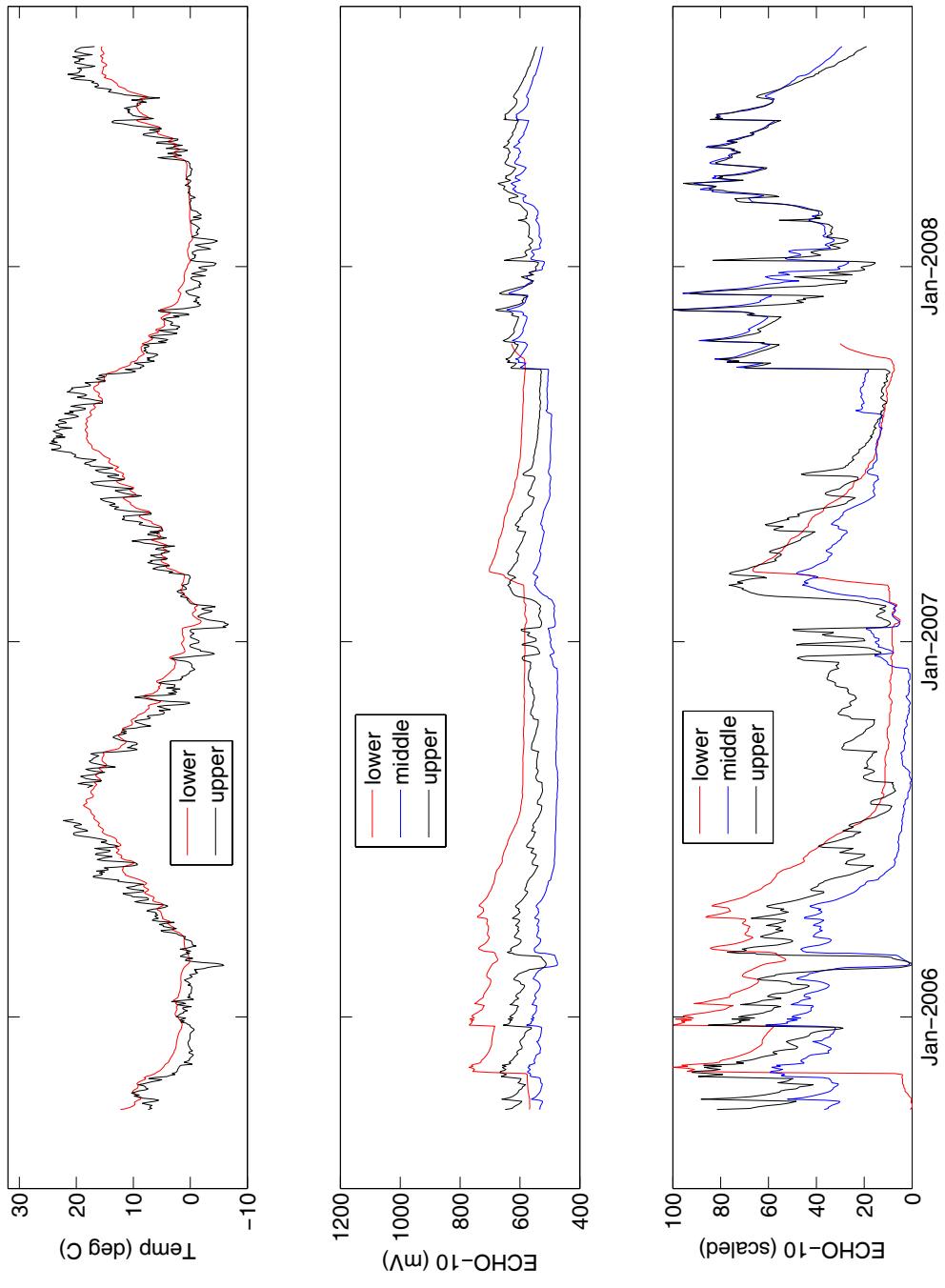


Figure S29: P1264N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

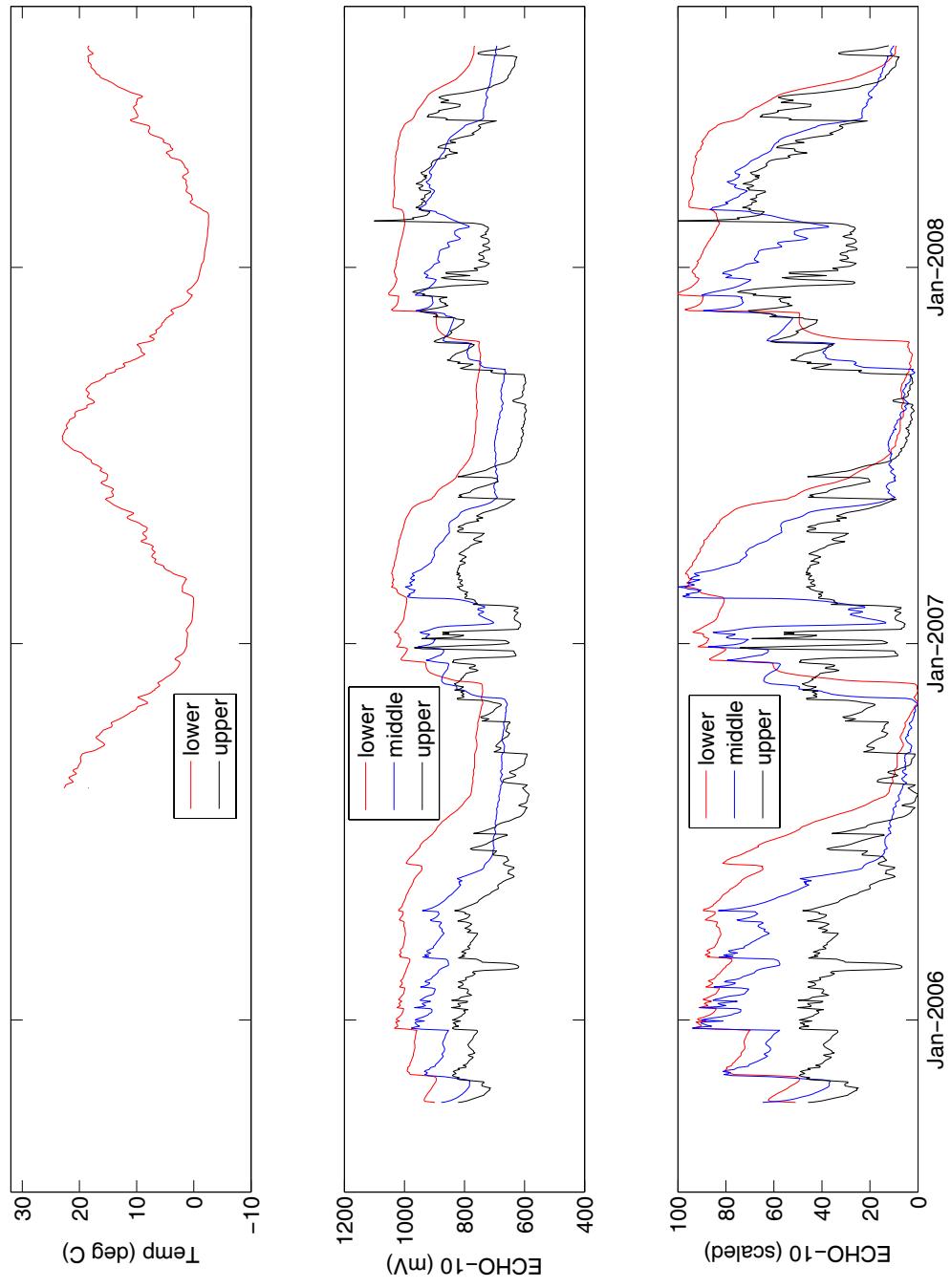


Figure S30: P1062S regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

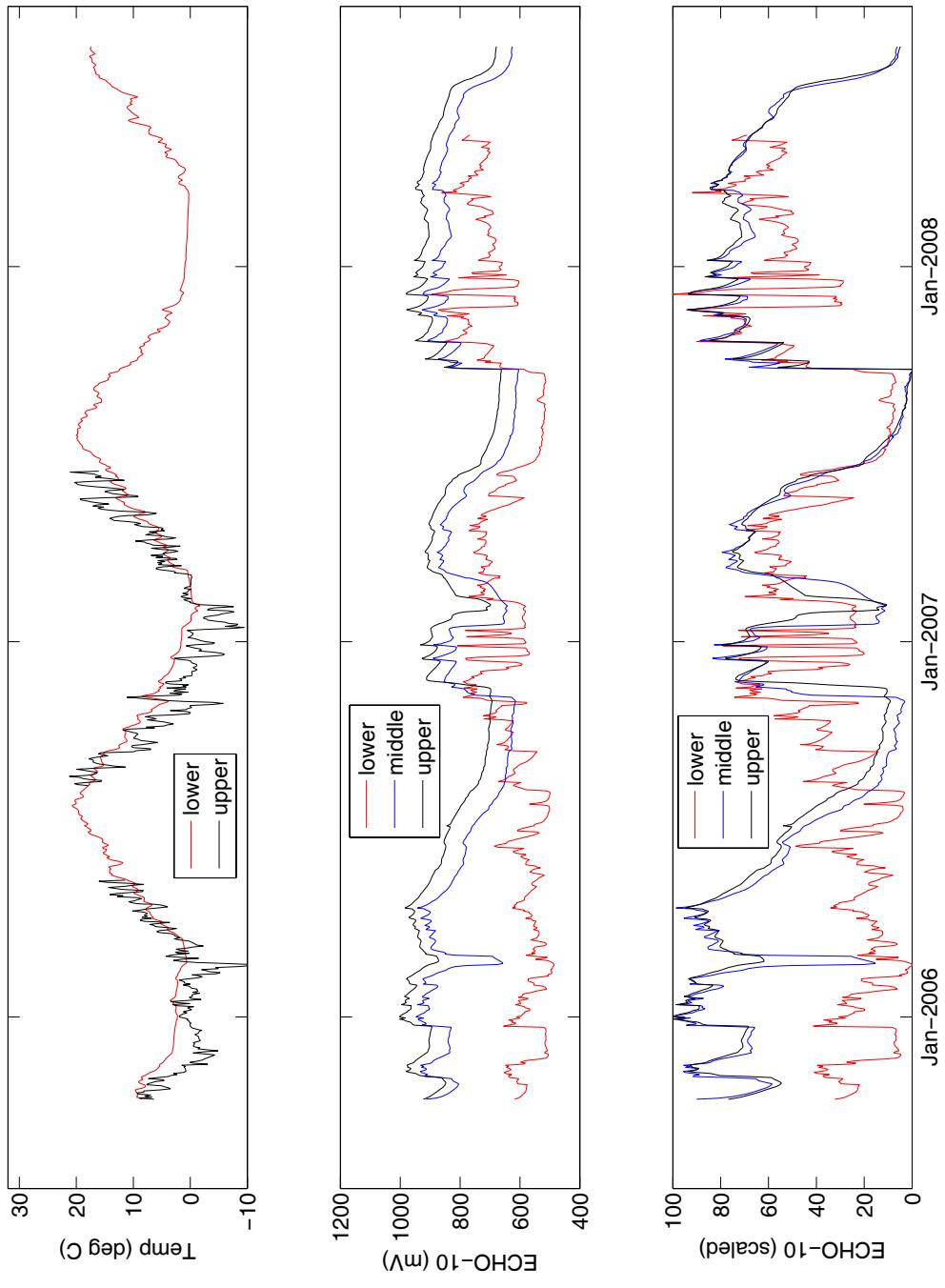


Figure S31: P1062N regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

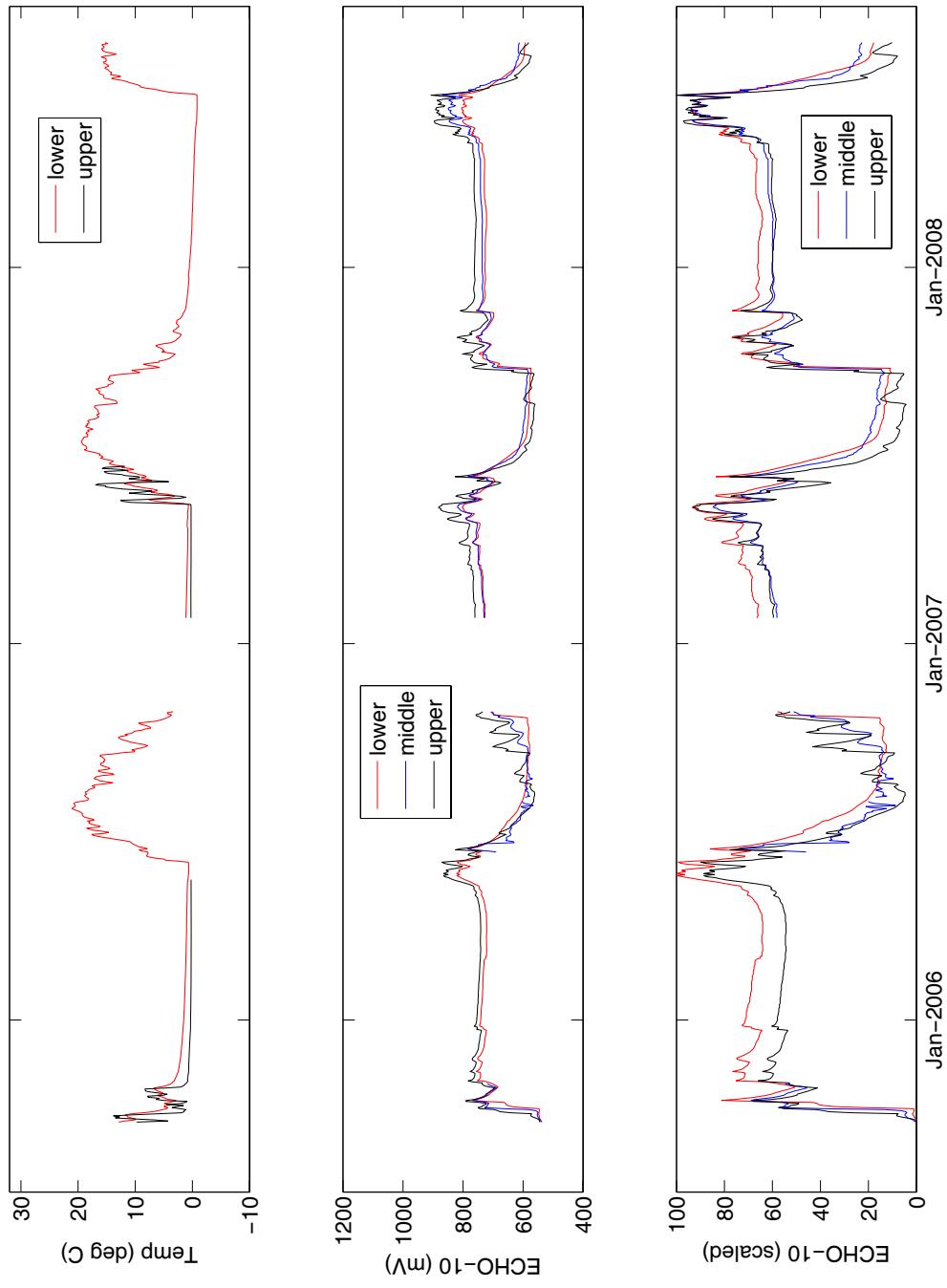


Figure S32: T2364 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100.

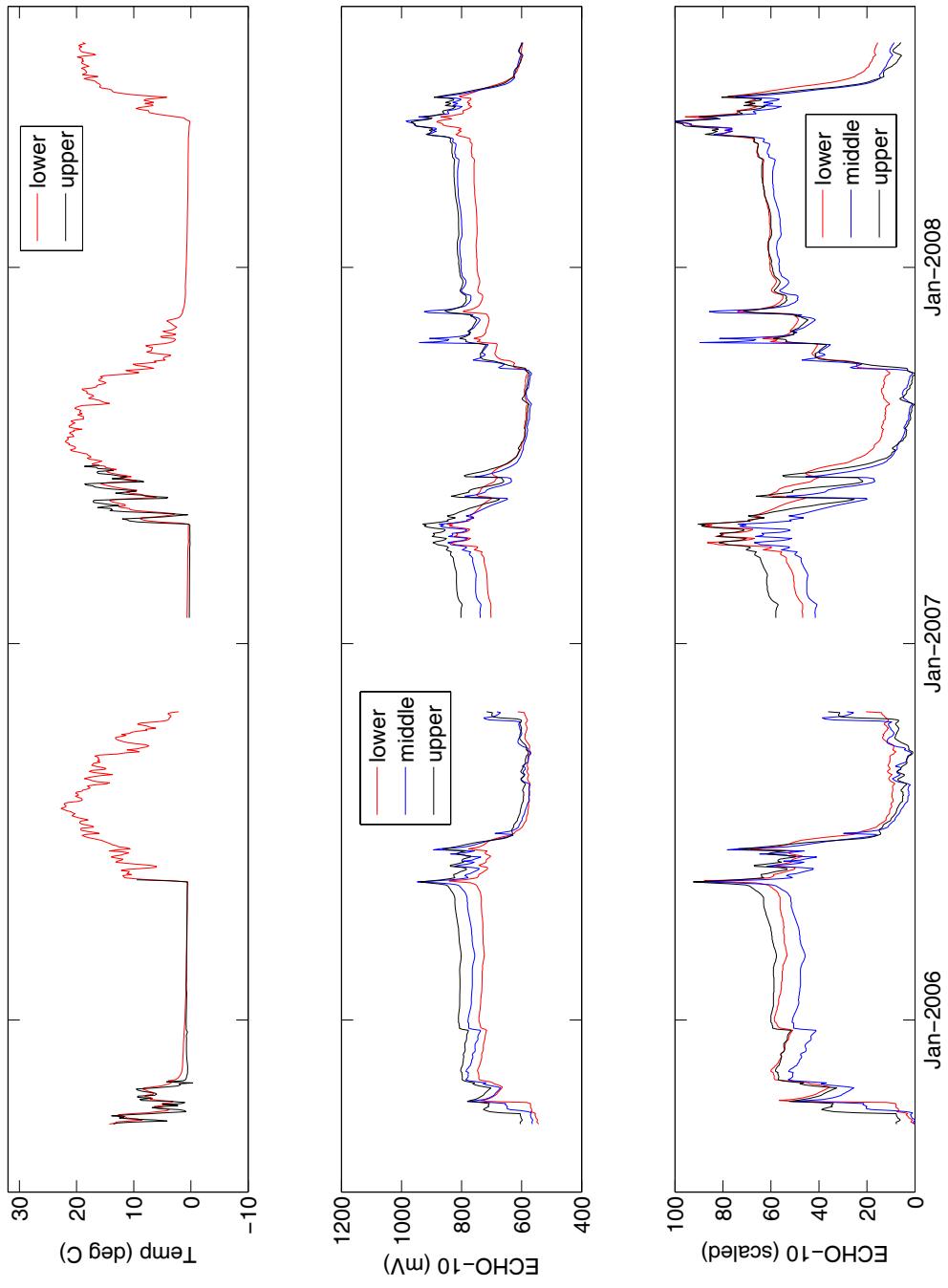


Figure S33: T2073 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

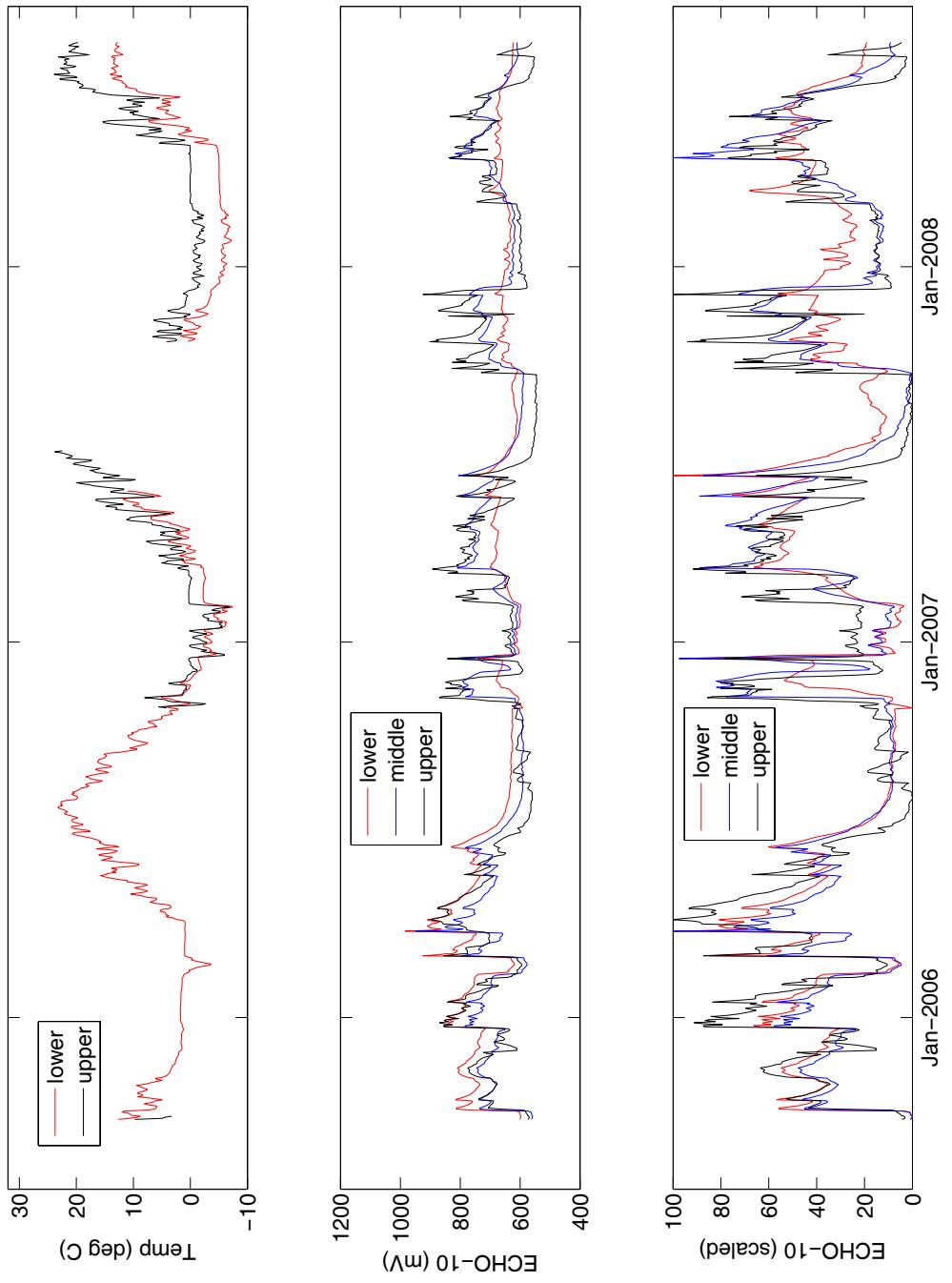


Figure S34: T1755 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

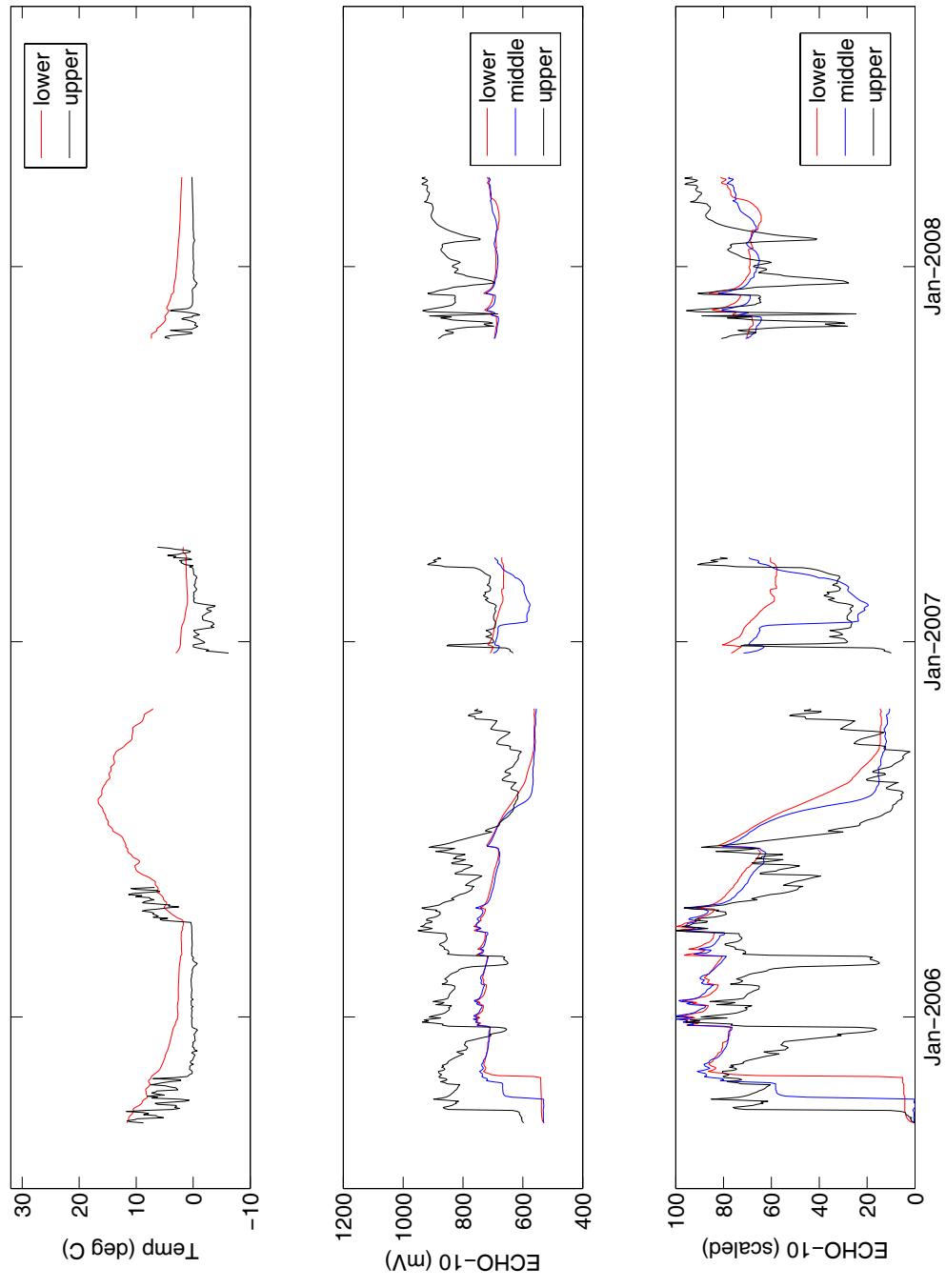


Figure S35: T1508 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

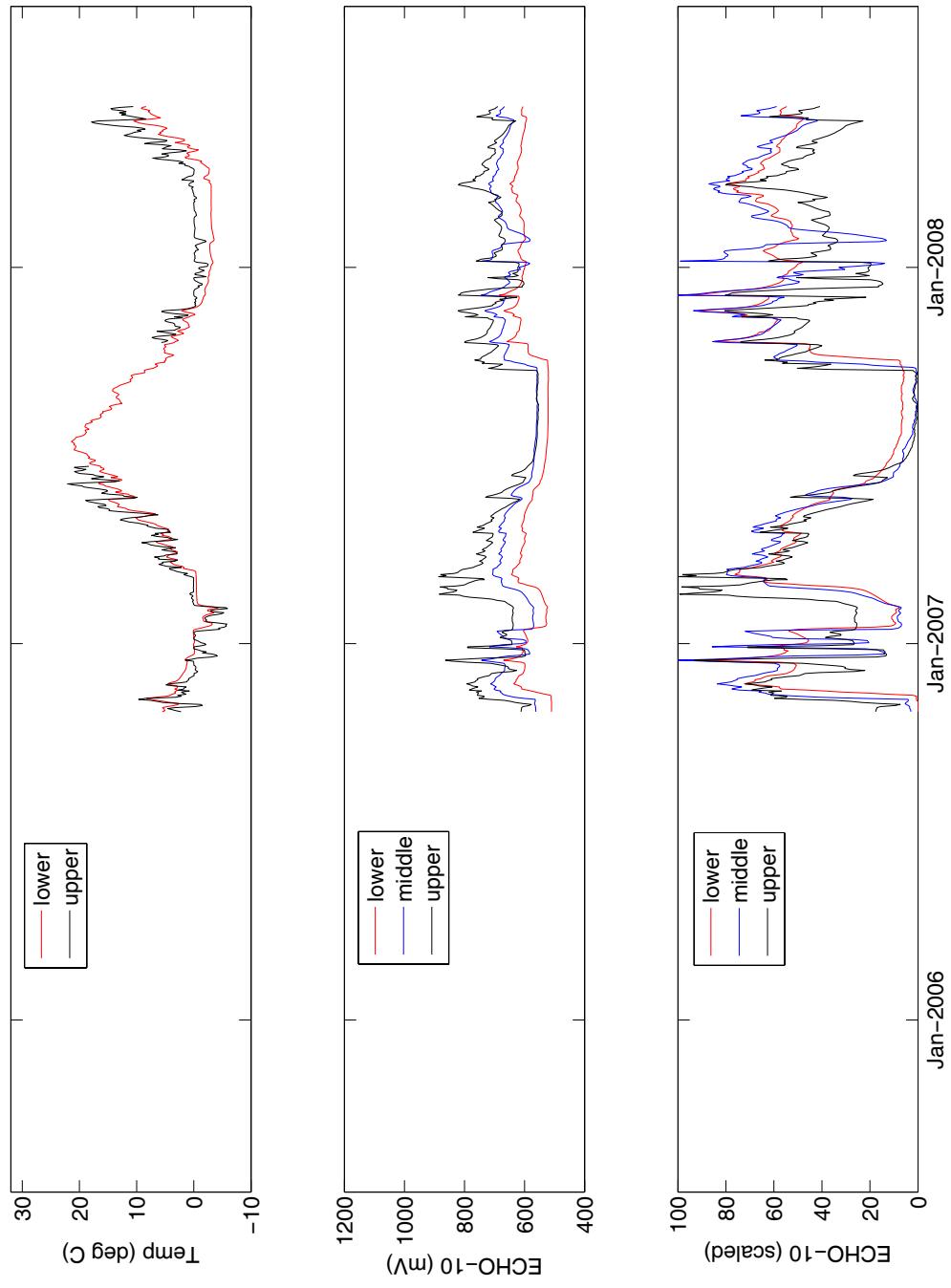


Figure S36: T1294 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

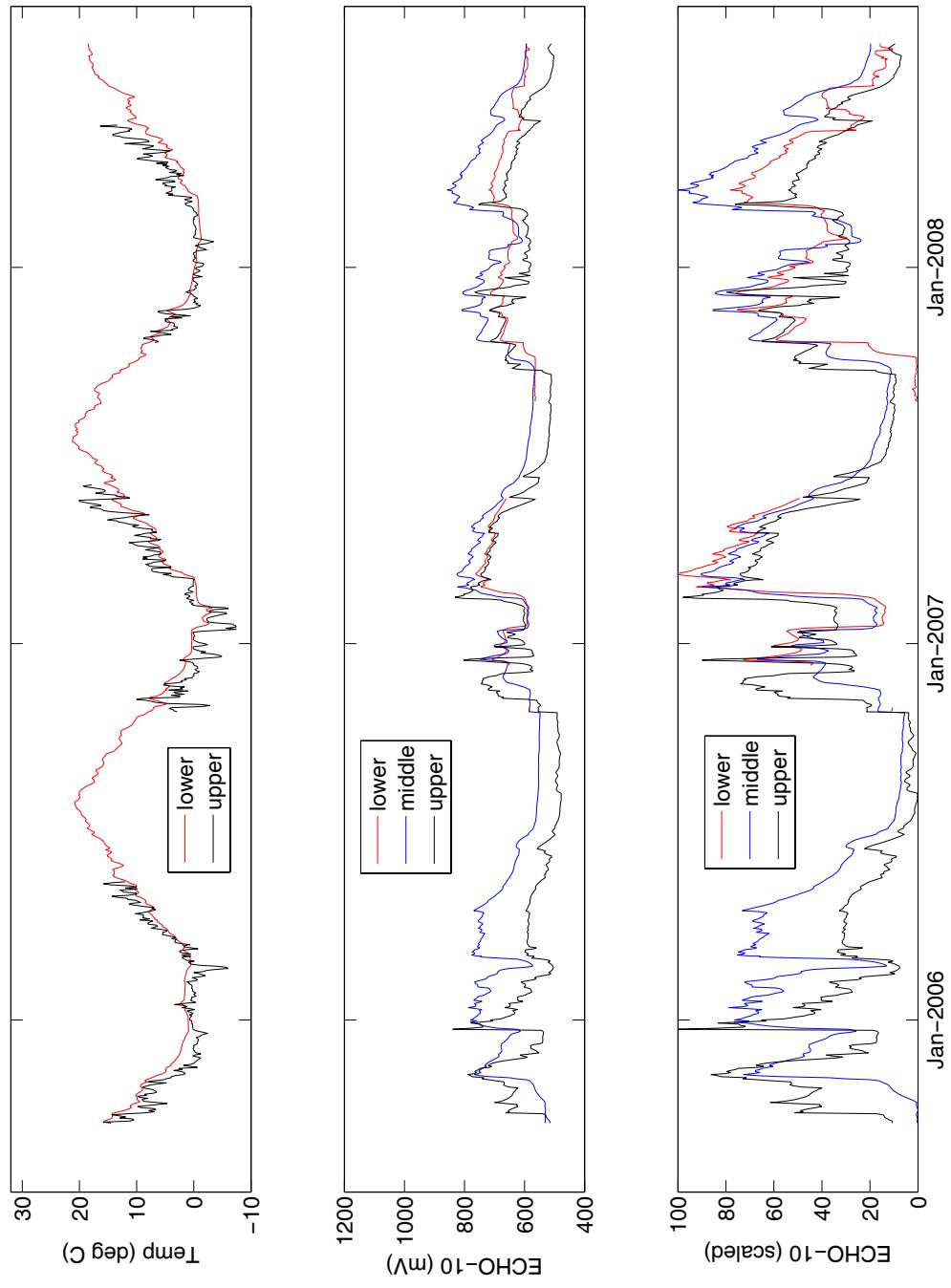


Figure S37: T1084 regolith climates. The middle graph shows the ECHO-10 measurements in mV, a proxy for regolith moisture, and the lower graph shows the same ECHO-10 readings rescaled such that the minimum value of each is 0 and maximum value 100. All values are daily averages.

## S6. Correlation parameters

In each panel of Figures 6-8 we reported the correlation coefficient  $r$  for the combined Pilot Peak and Tailholt Mountain data (including values for P1850N<sub>sub</sub>, and not P1850N; section 6.3) using the method of York et al. (2004), which accounts for uncertainties in both x- and y-values. Here in Table S7 we summarize these correlation coefficients  $r$ , the two-tailed p-values for these correlations, and the Spearman rank correlation coefficient  $r_s$ .

Table S7: Correlation coefficient  $r$ , two-tailed p value for  $r$ , and Spearman rank correlation coefficient  $r_s$  for the data presented in Figures 6-8

y vs. x	$r$	$p$	$r_s$
CDF vs. MART	-0.12	0.64	-0.12
CDF vs. moisture index	0.36	0.17	0.44
CDF vs. $P$	-0.61	0.01	-0.62
CDF vs. log(residence time)	0.54	0.03	0.57
$W$ vs. MART	-0.27	0.29	-0.27
$W$ vs. moisture index	0.42	0.11	0.34
$W$ vs. $P$	0.01	0.97	-0.01
$W$ vs. log(residence time)	-0.04	0.88	0.09
$W_{SiO_2}$ vs. MART	-0.31	0.23	-0.28
$W_{CaO}$ vs. MART	-0.35	0.17	-0.25
$W_{Na_2O}$ vs. MART	-0.31	0.22	-0.24
$W_{K_2O}$ vs. MART	-0.26	0.32	-0.30
$W_{SiO_2}$ vs. moisture index	0.43	0.10	0.35
$W_{CaO}$ vs. moisture index	0.51	0.04	0.48
$W_{Na_2O}$ vs. moisture index	0.42	0.11	0.36
$W_{K_2O}$ vs. moisture index	0.35	0.18	0.26
$W_{SiO_2}$ vs. $P_{SiO_2}$	0.09	0.74	0.07
$W_{CaO}$ vs. $P_{CaO}$	0.17	0.53	0.08
$W_{Na_2O}$ vs. $P_{Na_2O}$	0.12	0.65	0.09
$W_{K_2O}$ vs. $P_{K_2O}$	0.11	0.66	0.10
$W_{SiO_2}$ vs. log(residence time)	-0.09	0.73	0.03
$W_{CaO}$ vs. log(residence time)	0.04	0.88	0.17
$W_{Na_2O}$ vs. log(residence time)	-0.15	0.57	-0.01
$W_{K_2O}$ vs. log(residence time)	-0.14	0.59	0.04
CDF <sub>Si</sub> vs. MART	-0.17	0.52	-0.12
CDF <sub>Ca</sub> vs. MART	-0.16	0.54	-0.23
CDF <sub>Na</sub> vs. MART	-0.20	0.44	-0.21
CDF <sub>K</sub> vs. MART	-0.12	0.65	-0.18
CDF <sub>Si</sub> vs. moisture index	0.37	0.16	0.43
CDF <sub>Ca</sub> vs. moisture index	0.45	0.08	0.55
CDF <sub>Na</sub> vs. moisture index	0.45	0.08	0.51
CDF <sub>K</sub> vs. moisture index	0.28	0.30	0.27
CDF <sub>Si</sub> vs. $P_{SiO_2}$	-0.61	0.01	-0.59
CDF <sub>Ca</sub> vs. $P_{CaO}$	-0.26	0.32	-0.17
CDF <sub>Na</sub> vs. $P_{Na_2O}$	-0.37	0.14	-0.47
CDF <sub>K</sub> vs. $P_{K_2O}$	-0.55	0.02	-0.32
CDF <sub>Si</sub> vs. log(residence time)	0.54	0.03	0.52
CDF <sub>Ca</sub> vs. log(residence time)	0.35	0.17	0.34
CDF <sub>Na</sub> vs. log(residence time)	0.25	0.33	0.37
CDF <sub>K</sub> vs. log(residence time)	0.36	0.16	0.36

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