

**Table S1** Descriptive Statistics for Training Data Parameters

Variable	Nov-17				Jan-18			
	Min	Max	Mean	St. Dev.	Min	Max	Mean	St. Dev.
Bare Soil Fractions	0	0.996	0.143	0.271	0	0.999	0.206	0.355
Green Vegetation Fractions	0	0.998	0.305	0.369	0	0.98	0.243	0.362
Senesced Fractions	0	0.993	0.132	0.293	0	0.998	0.148	0.318
Subtidal/Water Fractions	0	1	0.191	0.332	0	0.998	0.199	0.33
Shade Fractions	0	0.759	0.189	0.153	0	0.539	0.195	0.147
NDVI	-0.302	0.596	0.308	0.176	-0.114	0.525	0.254	0.127
mARI	0	0.003	0.001	0.0003	0.095	1.835	0.768	0.364
DTM					1.16	3.515	1.654	0.414

**Table S1** (cont.)

Variable	Nov-18				Nov-20			
	Min	Max	Mean	St. Dev.	Min	Max	Mean	St. Dev.
Bare Soil Fractions	0	0.995	0.125	0.258	0	0.997	0.125	0.259
Green Vegetation Fractions	0	0.999	0.352	0.388	0	0.999	0.274	0.379
Senesced Fractions	0	0.999	0.2	0.294	0	0.999	0.167	0.304
Subtidal/Water Fractions	0	0.981	0.102	0.244	0	0.998	0.1	0.256
Shade Fractions	0	0.729	0.201	0.191	0	0.795	0.181	0.195
NDVI	-0.394	0.669	0.345	0.173	-0.43	0.632	0.332	0.204
mARI	0.0004	0.002	0.001	0.0003	-0.142	2.51	1.031	0.643
DTM								