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ODDZIAŁ W KRAKOWIE

Lack of Signals of Selection at Candidate Loci at a Small Geographical Scale along a Steep Altitudinal Gradient in Norway Spruce (*Picea abies* [L.] Karst.)

Matúš Hrivnák, Diana Krajmerová and Dušan Gömöry*

Technical University in Zvolen, Faculty of Forestry,
TG Masaryka 24, 96001 Zvolen, Slovakia

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Local adaptation is a key concept in biology: shift of genetic structures of populations due to differential survival of genotypes is expected to lead to phenotypes providing an advantage in the local environment. Variation of sequences of twelve candidate genes was investigated in 13 Norway spruce (*Picea abies* (L.) Karst.) provenances originating from sites distributed along an altitudinal gradient from 550 to 1300 m a.s.l. Signals of selection were assessed in 103 single nucleotide polymorphisms (SNP). The Bayesian F_{ST}-outlier identification methods as implemented in the programs BayeScan and Arlequin did not identify any SNP with a clear evidence of selection. The approaches relying on SNP-climate associations (spatial analysis method based on logistic regression of allele frequencies with environmental variables, Bayesian method applied in BayEnv2) identified several relationships but none of them remained significant after correction for multiple testing. Gene flow, epigenetic inheritance and former management of the studied populations are discussed as potential reasons for this weak evidence of selection signals.

Keywords: local adaptation, single nucleotide polymorphisms, F_{ST}-outliers, spatial analysis method

INTRODUCTION

The concept of local adaptation is of fundamental importance not only for evolutionary biology but it also has practical implications in nature conservation and forestry. Conservationists frequently focus on populations on marginal or extreme sites, expecting that such populations have developed specific gene pools by adaptation to local environments (Araújo and Williams, 2001; Lesica and Allendorf, 1995; Parsons, 1989). In forestry, local adaptation is actually the basis for the legislation on procuring and transfer of forest reproductive material. The current EU regulations are based on so-called regions of provenance, serving as a guiding framework for the choice of appropriate reforestation material. A region of provenance is defined as 'the area or group of areas subject to sufficiently uniform ecological conditions in which stands or seed sources showing similar phenotypic or genetic characters are found' (European Communities, 1999). This geography-based approach relies on the idea that climate, photoperiod and other factors associated with the geographical location are the main drivers of natural selection, which shapes genetic variation of tree populations. Non-local seed sources are considered risky because of the concerns about potential losses in yield and other forest functions (Hemery, 2008). Even though the ongoing climate change makes such rules of seed transfer questionable, the proposed solutions again rely on the idea of climate-driven local adaptation: assisted migration, i.e., transfer of genetic material from populations, which in the past experienced climatic conditions expected on target sites in the future (Williams and Dumroese, 2013), is also based on the assumption that gene pools of such populations are adapted to local climates.

The patterns of adaptive genetic variation have traditionally been studied by the common-garden approach; this is especially true for forest trees (Mátyás, 1996). On the other hand, in spite of recent rapid developments in forest tree genomics (González-Martínez et al., 2006; Neale and Ingvarsson, 2008), the knowledge of adaptation

* Corresponding author, email: gomory@tuzvo.sk

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processes and the resulting variation patterns at the molecular level is by far not sufficient, especially in conifers having large and complex genomes (Prunier et al., 2016). The candidate gene approach still predominates in conifer genomics studies, because of rapid decay of linkage disequilibrium in tree populations, which poses problems for association studies (Neale and Kremer, 2011). Moreover, adaptive variation patterns are also influenced by neutral processes such as gene flow, migration or genetic drift (Savolainen et al., 2007). Experimental designs of local adaptation studies need to reflect this fact.

This study focused on variation patterns at polymorphisms in candidate genes potentially involved in adaptation to temperature and precipitation variations or cold tolerance. We primarily focused on genes showing significant differences between a pair of climatically contrasting spruce provenances in an earlier study (Romšáková et al., 2012). We attempted to verify whether these polymorphisms would show a clinal pattern along an altitudinal (and climatic) gradient within a small territory, where the patterns arising from adaptation are not confused with differences caused by different population history.

MATERIALS AND METHODS

The study relies on a local nursery provenance experiment comprising 13 provenances originating within the natural range of Norway spruce in Slovakia, distributed along an altitudinal gradient from 550 to 1500 m a.s.l. (Table 1). Seeds were received from the gene bank of forest trees of Slovakia (OZ Semenoles Liptovský Hrádok), sown in a forest nursery in 2014 and replanted in 2016.

In 2018, branches of ~5 cm length were taken in the nursery from 10 seedlings per provenance. Total genomic DNA was isolated from 10 mg of silica-dried needles per seedling using a modified CTAB protocol following Doyle and Doyle (1987). DNA concentration was measured spectrophotometrically. Twelve loci reported in two different studies as adaptive were sequenced. The loci M002, M007B2, M007C2 and M007D1 (Lamothe et al., 2006) were identical with those studied by Romšáková et al. (2012). They were complemented by the loci 09870a, 16364e, 03870a, 04312b, 06340a, 05811e, 09644m and 08398a (Prunier et al., 2011). Primer sequences and the thermal cycling profile for PCR followed Lamothe et al. (2006) and Prunier et al. (2011). The PCR mixtures for all markers were done in volume 20 μL consisting of 1 × PCR buffer, 3 mM $MgCl_2$, 0.2 μM of primer, 0.3 μM dNTP, 0.5 U Taq DNA polymerase (Solis), 0.8 μg/μL of BSA, and 25 ng of template DNA. The PCR products were checked on 1.5% agarose gel and afterwards they were sent to IGA Technology Services (Udine, Italy) for sequencing. For all primer pairs, both DNA strands were sequenced. The obtained raw data were evaluated using SeqScape v.2.5. Sequences were reduced to sites exhibiting single nucleotide polymorphisms (SNPs).

Climatic data of the sites of origin of the studied populations were taken from the WorldClim high-resolution interpolated climate database (Fick and Hijmans (2017); variables are derived from meteorological data within the period 1960–1990 at a 1 km resolution), and were complemented by variables generated with the ClimateEU v4.63 software (http://tinyurl.com/ClimateEU, 1 km resolution) based on the methodology described by Hamann et al. (2013).

To obtain basic information on genetic structure of the studied populations, the following indices of genetic diversity were calculated for each population: mean number of alleles per SNP (A; as sample size was constant, no rarefaction was done), expected heterozygosity (H_e) and within-population fixation index (F_{is}). The significance of F_{is} was tested using 100,000 permutations. Analysis of molecular variance (AMOVA; Excoffier et al., 1992) was carried out; the significances of variance components attributed to populations and individuals were tested using 100,000 random permutations. Calculations were done using the PopGene 1.3 (Yeh et al., 1999) and Arlequin 3.5.1.3 (Schneider et al., 2000) computer programs. To account for potential population genetic substructure, we used the Bayesian clustering approach implemented in the program STRUCTURE v.2.3 (Pritchard et al., 2000) to infer individual membership to one or more genetic clusters. The procedure was run ten times for each K = 1–10, with a burn-in period of 200,000 and subsequent 1,000,000 iterations without prior information on the population of origin to determine the number of clusters. The optimum number of clusters was determined using the procedure of Evanno et al. (2005).

We used a combination of several methods to detect single-nucleotide polymorphisms (SNPs) that exhibit signs of selection, as recommended by Di Pierro et al. (2016). The first method relying on the F_{ST}-outlier approach is implemented in BayeScan (Foll and Gaggiotti, 2008), and uses population differentiation of the loci to search for those affected by selection. Version 2.1 of BayeScan was used with 20 pilot runs and burn-in with 5,000 iterations and final 50,000 iterations to estimate the posterior distributions. Prior odds for the neutral model were set to 10 (default). The evidence of selection was based on Bayes factors, measuring odds for the

TABLE 1. Localization of the studied populations and the planting site (forest nursery).

Code	Alt (m a.s.l.)	Long	Lat	Forest unit	Locality	Gene bank no.
pab225CA-004	550	49°24'	18°42'	Čadca	Zákopčie	2003/009
pab225CA-003	550	49°24'	18°42'	Čadca	Husáre	2003/011
pab214BB-188	650	48°46'	19°24'	Slovenská Ľupča	Pohronský Bukovec	2003/008
pab235BR-062	750	48°50'	19°45'	Beňuš	Hrobcovo	2003/018
pab215RK-867	870	49°09'	19°25'	Liptovská Teplá	Prosečné	2010/026
pab235BR-250	910	48°42'	19°30'	Hronec	Hrončecký grúň	2010/029
pab216TS-840	920	49°15'	19°39'	Habovka	Žriedla	2010/034
pab216TS-106	1050	49°16'	19°43'	Habovka	Zadná Kremenná	2010/041
pab216LM-039	1060	48°59'	19°48'	Malužiná	Tajch	2010/035
pab216LM-028	1100	49°09'	19°41'	Liptovský Mikuláš	Žiar	2010/037
pab217BR-169	1280	48°50'	19°25'	Slovenská Ľupča	Jasenie	2010/046
pab217TS-110	1335	49°14'	19°13'	Habovka	Zverovka	2010/033
nn	1500	48°57'	19°27'	Partizánska Ľupča	sedlo Ďurkovej	nn
Nursery	860	48°40'	19°01'	VšLP TU Zvolen	Mláčik	

Code – registration code of the approved seed stand, **Alt** – altitude, **Long** – longitude, **Lat** – latitude, nn – not an approved stand

selection model versus the neutral model derived from posterior probabilities of each of the models (Foll and Gaggiotti, 2008). The second method based on the F_{ST}-outlier approach is that of Excoffier et al. (2009), which relies on obtaining the distribution of F_{ST} across loci as a function of heterozygosity between populations by performing coalescent simulations. We used Arlequin 3.5.1.3 to perform 10,000 simulations under the finite island model.

Two other methods were based on the search for SNP-environmental variable relationships. The spatial analysis method (SAM) as implemented in Samβada (Stucki et al., 2017) is based on logistic regression of allele frequencies with environmental variables. SAM needs presence/absence data; therefore, SNP genotypes were coded as suggested by Joost et al. (2007), considering the effect of the SNP allele dominant. Markers with minor allele frequency of less than 10% were removed. Both Wald test and *G*-test implemented in Samβada were taken into account when examining the significance of the results, while Benjamini-Hochberg procedure was used to correct both for multiple testing. Since multiple redundant tests would reduce the power of this approach, some markers were removed so that no pair of markers had Spearman correlation index higher than 0.9. A similar criterion was used to prune environmental variables: the order of priority that guided removal of correlated environmental variables was the following: geographic coordinates > WorldClim bioclimatic variables > other WordClim variables > ClimateEU. At the end, 15 variables were retained out of the original 189: latitude, longitude, elevation, WorldClim bioclimatic variables BIO2 (mean diurnal range), BIO3 (isothermality), BIO6 (minimim temperature of the coldest month), BIO13 (precipitation of the wettest month), BIO14 (precipitation of the driest month) and BIO15 (precipitation seasonality), solar radiation average in January and October, vapor pressure in December, degree-days > 18 °C (DD18), and Hargreaves climatic moisture deficit (CMD). In addition, Bayesian factors for the support for the models in which SNP frequencies covary linearly with environmental variables over models in which SNPs vary according to neutral expectation were assessed using the program BayEnv2 (Günther and Coop, 2013). For each SNP-environmental variable combination, the procedure was run with 100,000 iterations.

RESULTS AND DISCUSSION

In total 393 SNPs were identified, out of which 290 were discarded from further evaluations because of too many missing data or overall minor allele frequency below 10%.

The levels of within-population genetic variation were quite similar in all populations (Table 2). In spite of a relatively small sample size, the proportion of monomorphic SNPs was small, as documented by high mean numbers of alleles per SNP, which exceeded 1.8 in all populations. Except the population Hrobcovo with a slight excess of homozygotes, the populations were at Hardy-Weinberg equilibrium. AMOVA showed that the interpopulation differentiation is negligible (0.56% of the total variation; Table S1 in Supplementary material).

The Bayesian clustering analysis done by the procedure STRUCTURE revealed a certain divergence of the high-elevation population 13 (sedlo Ďurkovej), which corresponds to $K = 2$ as the optimum number of clusters indicated by the ΔK measure of Evanno et al. (2005) (Fig. S1). The outcomes of the analyses for $K = 3$ and $K = 4$ confirmed the distinctness of the population 13, and did not reveal any potential hidden substructure (Fig. 1). The reason for the divergence of the population 13 is unclear: it is a population growing in extreme climatic conditions at the upper tree limit (isolated trees alternating with patches of *Pinus mugo* krummholz). Both climate-driven selection and marginality may be responsible for its specific structure.

Neither of the two approaches aimed at the detection of adaptive variation found any reliable evidence of selection. F_{ST} values ranged between 0.032 and 0.037, which is slightly higher than reported for strictly neutral markers such as nuclear microsatellites in studies covering similarly small areas (Máchová et al., 2018; Scotti et al., 2006) but indicates negligible differentiation among populations anyway. The highest value of the logarithm of posterior odds for the selection model against the neutral model as calculated by BayeScan was -0.875, which actually means that the neutral model was more probable than the selection one (Fig. 2, Table S2 in Supplementary material). Simulations under the finite island model in Arlequin yielded the same result: for none of the SNPs the outlier F_{ST} value remained significant after correction for multiple testing (Table S3 in Supplementary material).

In the case of Samβada, no reliable evidence for a marker–climatic variable relationship was found either. Without correction for multiple testing, one SNP on the 9644 gene (G/T polymorphism at site 24, Table 3, Table S4 in Supplementary material) showed significant association with several climatic variables, related to both

TABLE 2. Basic characteristics of the population genetic structure of the studied populations.

	Population	*A*	H_e	F_{is}	*P*
1	Zákopčie	1.9223±0.3032	0.2816±0.1553	0.0480	0.283
2	Husáre	1.8252±0.3816	0.2496±0.1783	-0.0288	0.270
3	Pohronský Bukovec	1.9223±0.3032	0.2771±0.1639	-0.1386	0.089
4	Hrobcovo	1.8447±0.3900	0.2522±0.1600	0.1404	0.042
5	Prosečné	1.8932±0.3405	0.2507±0.1550	0.0306	0.357
6	Hrončecký grúň	1.9223±0.2690	0.2703±0.1511	-0.1000	0.219
7	Žriedla	1.8350±0.3730	0.2537±0.1648	0.0237	0.390
8	Zadná Kremenná	1.8932±0.3104	0.2814±0.1618	-0.0433	0.331
9	Tajch	1.8641±0.3718	0.2683±0.1752	0.0438	0.286
10	Žiar	1.8835±0.3224	0.2618±0.1709	0.0017	0.497
11	Jasenie	1.8932±0.3104	0.2721±0.1673	-0.0988	0.138
12	Zverovka	1.8835±0.3224	0.2872±0.1618	-0.0224	0.393
13	sedlo Ďurkovej	1.8544±0.3811	0.2630±0.1686	-0.0040	0.474

A – mean number of alleles, $\boldsymbol{H_e}$ – expected heterozygosity, $\boldsymbol{F_{is}}$ – fixation index, ***P*** – significance of H_0: $F_{is} = 0$

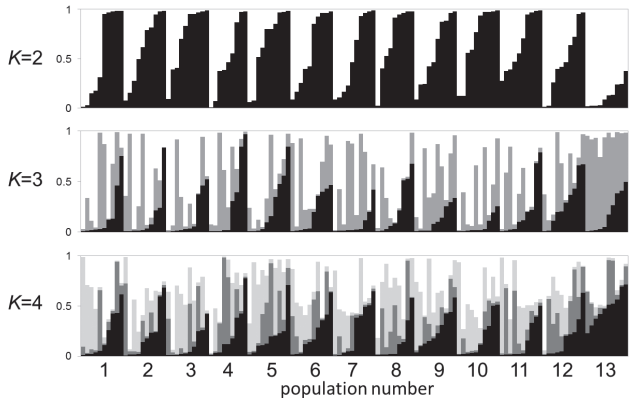

Fig. 1. Bar plots of the Bayesian clustering analysis by STRUCTURE for the numbers of groups K = 2–4.

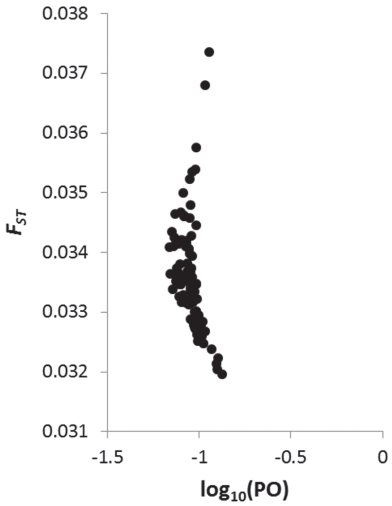

Fig. 2. Results of BayeScan: F_{ST}-values plotted against the decadic logarithm of posterior odds for the selection model (PO).

precipitation (BIO13) and temperature (BIO2, BIO6, DD18). Nevertheless, after Benjamini-Hochberg correction for multiple testing, none of these relationships remained significant: even the association with precipitation of the wettest month (WorldClim bioclimatic variable 13), which showed a relatively low P-value of 0.0000770 in the G-test, would need a P-value below 0.0000758 to be statistically significant even at the 10% significance level. On the other hand, most of these relationships were confirmed by the BayEnv2 analysis: the Bayes factor for the association 9644_2.024.G/BIO13 was 16.96, which means strong support for the selection model. In the case of the associations of the polymorphism at this site with the other above-mentioned climatic variables, Bayes factors also exceeded 3, meaning substantial support, and the same applies to several other SNP-climate associations (Table 4, Table S5 in

TABLE 3. SNP-climatic variable relationships significant at $P < 0.01$ without correction for multiple testing.

SNP	Enviro	G	P_G	Wald	P_{Wald}	McFadden R^2	β_0	β_1
9644_2.024.G	BIO13	15.631	0.000077	9.971	0.001590	0.1251	6.1824	-0.0633
9644_2.024.G	radiation	12.997	0.000312	10.944	0.000939	0.0967	-83.4101	0.0076
9644_2.024.G	BIO2	9.154	0.002482	7.869	0.005028	0.0554	-16.9328	1.7393
9644_2.024.G	BIO6	8.692	0.003197	8.287	0.003992	0.0505	22.4807	2.5028
9644_2.024.G	CMD	8.503	0.003545	8.783	0.003040	0.0484	-2.1451	0.0552
9644_2.024.G	DD18	7.016	0.008078	6.995	0.008175	0.0324	-2.2298	0.0246
9644_2.047.G	BIO6	8.376	0.003801	7.919	0.004892	0.0261	16.9089	1.7869
M007B2.376.A	CMD	7.851	0.005079	8.683	0.003213	0.0460	-2.6919	0.0575
M007B2.361.A	BIO15	8.815	0.002988	7.227	0.007182	0.0437	-7.5250	0.1691
16364.200.C	BIO6	7.831	0.005136	7.357	0.006681	0.0219	16.3363	1.7017

SNP – designation of marker, site and the dominant base at a particular SNP, **Enviro** – climatic variable, G – G-test score, P_G – significance of the G-test, **Wald** – Wald test score, P_{Wald} – significance of the Wald-test, **McFadden** R^2 – adjusted McFadden goodness-of-fit measure, β_0, β_1 – intercept and slope of the linear logistic regression model, respectively.
BIO2 – mean diurnal range of temperatures, BIO6 – minimum temperature of the coldest month, BIO13 – precipitation of the wettest month, BIO15 – precipitation seasonality , CMD – climatic moisture deficit, DD18 – degree-days > 18°C, radiation – yearly average of solar radiation.

TABLE 4. Bayes factors (BF ≥ 3.0) for the support of selection model over the neutral model in the SNP-climatic variable relationships.

Locus	longitude	BIO2	BIO3	BIO6	BIO13	BIO14	radiation	vapour	DD18	CMD
9644_2.024.G		4.52		6.81	16.96	4.09	11.39	3.14	3.50	6.23
M007B2.376.A										3.03
M007B2.275.A		9.42			3.50	6.52				3.36
16364.232.A										3.00
5811.397.G								3.28	4.07	
5811.397.A								3.80	5.33	
8398_2.126.G	3.44		3.36						3.19	
8398_2.266.A	6.94		3.62						4.66	
8398_2.410.C	3.99								3.70	

Supplementary material). However, Bayes factors cannot be corrected for multiple assessments as easily as probabilities; therefore, these results need to be regarded with caution.

Admittedly, the dataset used in this study was relatively modest in terms of the sample size and geographic coverage. Nevertheless, Prunier et al. (2011), one of the sources of candidate genes used in this work, used 156 individuals in 26 populations to search for signs of selection within a larger pool of candidate genes. Our study (using identical genes) relied on a comparable sample: 128 seedlings from 13 populations. It is thus improbable that our failure in finding convincing evidence for selection was caused by the insufficiently small sample size. There was an obvious difference in the geographic extent of the sampled populations (for instance, the longitudinal span of populations studied by Prunier et al. (2011) was 16° compared to 1°22' in our study). We attempted to keep the sampled territory as small as possible to avoid detecting false positives associated with neutral processes such as colonization and recolonization of the current range during the Quaternary (Kupryjanowicz et al., 2018; Tollefsrud et al., 2008). On the other hand, we tried to make the climatic gradients as steep as possible: the range of average temperatures of the populations was 4.26°C and yearly precipitation 492 mm, compared to the ranges of 4.28°C and 553 mm, respectively, in the study of Prunier et al. (2011). There is obviously enough environmental variation to allow adaptation. Very probably, gene flow among relatively closely located populations in this study counteracted selection and prevented differentiation. This is supported by the findings of Scalfi et al. (2014), who studied adaptive genetic variation in Norway spruce on both macrogeographic and microgeographic scale and indeed found only very few SNPs associated with environmental variables on the microgeographic scale: they detected 2 possibly adaptive loci within altitudinal transects, compared to 38 loci on the range-wide scale. Of course, the levels of gene flow are not exclusively a matter of geographical proximity; as the studied populations are located at different elevations, their flowering times differ. Nevertheless, the temperature gradient underlying this phenological shift is continuous, and there is a considerable overlap in the timing of flowering among neighboring altitudinal zones, which may allow a spread of genes across the whole gradient in a few generations. On the other hand, the studies of Di Pierro et al. (2016, 2017) found signals of climatic selection in Norway spruce populations distributed over areas of a similar size. Apparently, the effects of gene flow counteracting selection depend on a particular geographical situation.

The research on differentiation in growth traits, cold tolerance and phenology in Norway spruce populations distributed along altitudinal gradients at small geographic scales revealed phenotypic climate-related clines (Chmura, 2006; Oleksyn et al., 1998). The question is, whether the basis of these heritable differences is necessarily genetic. Epigenetic effects induced by temperature and photoperiod during seed development have been demonstrated in Norway spruce, affecting budset, flushing and cold acclimation (Johnsen et al., 2005). Yakovlev et al. (2010) found micro-RNAs, which are one of the known epigenetic mechanisms, to have different transcription levels in individuals

from the cold and warm environments. Gömöry et al. (2015) revealed that the early-growth environment also induces changes in budburst phenology of conifers. Such epigenetic effects may hamper adaptive responses by selection, as they decrease the selection pressure.

Finally, Norway spruce is among the most intensively managed tree species in Slovakia and Central Europe. Of course, collections for gene banks (from where we received the materials) focus on indigenous approved seed stands. However, in the case of a species, which has been extensively planted and transferred across the whole region, historical records need not always be completely reliable and autochthony can never be guaranteed (Jansen et al., 2017). Even if we had made sampling in nature reserves, expected to represent virgin forests, human interventions including planting could not be excluded (Sabatini et al., 2018). Theoretical population models predict that several generations are needed to substantially change the frequency of an allele under selection unless selective pressure is very strong (Wright, 1931). Therefore, if our materials included non-indigenous populations, the generated random noise may have obscured the signal. The more populations are included in a study, the higher this risk is; this may be the reason why the same set of SNPs yielded significant results in the study of Romšáková et al. (2012) comparing only two climatically contrasting populations, while our study failed to verify them.

This study demonstrates that the adaptive value of particular polymorphisms depends on the context of the species and environment, and the experimental design may also play a role. Any generalizations require that signals of selection are verified by several independent studies.

AUTHORS' CONTRIBUTIONS

DG designed the experiment and wrote the first draft, DK performed molecular analyses, MH made the mathematical treatment of the data, all authors prepared the final version of the manuscript.

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SUPPLEMENTARY MATERIAL

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Lack of signals of selection at candidate loci at a small geographical scale along a steep altitudinal gradient in Norway spruce (*Picea abies* [L.] Karst.)

TABLE S1. Analysis of molecular variance.

TABLE S2. Complete numerical results of the BayeScan analysis.

TABLE S3. F_{ST}-outlier detection by coalescent simulations under the finite island model.

TABLE S4. Complete results of Samβada.

TABLE S5. Bayesian factors for SNP-environment associations calculated by BayEnv2

S1

Analysis of molecular variance

Source of variation	DF	Sum of squares	Variance components	Percentage of variation
Among populations	12	178.675	0.07601 ns	0.56
Within populations	241	3230.522	13.40466	99.44
Total	253	3409.197	13.48067	

ns – non-significant ($P > 0.05$)

S2

Complete numerical results of the BayeScan analysis

marker.site	*P*	$\log_{10}$(PO)	*q*	α	F_{ST}
M002.020	0.078416	-1.0701	0.91254	-0.02386	0.03353
M002.033	0.074215	-1.0960	0.91386	-0.03388	0.03317
M002.040	0.085417	-1.0297	0.90653	-0.05008	0.03283
M002.063	0.081016	-1.0547	0.91115	-0.02078	0.03370
M002.080	0.072214	-1.1088	0.91473	-0.02836	0.03326
M002.097	0.081416	-1.0524	0.91102	-0.03704	0.03312
M002.105	0.080416	-1.0582	0.91153	-0.03739	0.03314
M002.114	0.089018	-1.0100	0.90274	-0.03944	0.03322
M002.131	0.084617	-1.0341	0.90741	-0.03455	0.03337
M002.135	0.086217	-1.0252	0.90579	-0.04651	0.03300
M002.141	0.073815	-1.0986	0.91415	-0.02180	0.03346
M002.193	0.067213	-1.1423	0.91629	-0.02278	0.03338
M002.278	0.090618	-1.0015	0.90050	-0.04775	0.03292
M002.282	0.070614	-1.1193	0.91532	-0.01822	0.03373
M002.353	0.064613	-1.1607	0.91682	-0.00149	0.03409
M002.354	0.066613	-1.1465	0.91645	0.00616	0.03435
M002.380	0.084417	-1.0353	0.90799	-0.03806	0.03316
M002.410	0.087417	-1.0187	0.90501	-0.05624	0.03271
M002.411	0.092819	-0.9901	0.89862	-0.05302	0.03275
M002.413	0.092819	-0.9901	0.89862	-0.05982	0.03268
M002.459	0.089418	-1.0079	0.90193	-0.04916	0.03296
M002.486	0.082817	-1.0443	0.90980	-0.04902	0.03288
M007B2.082	0.088018	-1.0154	0.90416	-0.04482	0.03302
M007B2.163	0.079216	-1.0653	0.91204	-0.03425	0.03315
M007B2.164	0.097219	-0.9678	0.89300	-0.06142	0.03267
M007B2.198	0.090418	-1.0026	0.90100	-0.05501	0.03279
M007B2.245	0.105420	-0.9287	0.88818	-0.07236	0.03237
M007B2.266	0.082617	-1.0455	0.90994	-0.03279	0.03335
M007B2.275	0.088018	-1.0154	0.90416	-0.03232	0.03346
M007B2.305	0.086817	-1.0220	0.90554	-0.03799	0.03334
M007B2.316	0.112020	-0.8991	0.88571	-0.09265	0.03203
M007B2.340	0.088218	-1.0143	0.90314	-0.02984	0.03348
M007B2.361	0.076815	-1.0798	0.91304	0.00141	0.03462
M007B2.376	0.087618	-1.0176	0.90474	0.01980	0.03539
M007B2.384	0.083217	-1.0421	0.90920	-0.03527	0.03333
M007B2.405	0.090618	-1.0015	0.90050	-0.04865	0.03295
M007CC2.083	0.089218	-1.0090	0.90235	-0.05652	0.03262
M007CC2.086	0.090018	-1.0047	0.90148	-0.05869	0.03251
M007CC2.107	0.085417	-1.0297	0.90653	-0.03862	0.03320
M007CC2.186	0.069614	-1.1260	0.91563	-0.01909	0.03352
M007CC2.207	0.068814	-1.1314	0.91579	0.01402	0.03464
M007CC2.230	0.076015	-1.0848	0.91344	-0.02892	0.03328
M007CC2.251	0.081616	-1.0512	0.91077	-0.02369	0.03362
M007CC2.256	0.076415	-1.0823	0.91318	0.01204	0.03461
M007CC2.258	0.073815	-1.0986	0.91415	0.01154	0.03466

M007CC2.269	0.067814	-1.1382	0.91612	0.00045	0.03409
M007CC2.333	0.068414	-1.1341	0.91595	0.00121	0.03425
M007CC2.350	0.072014	-1.1101	0.91487	-0.00105	0.03413
M007CC2.373	0.078616	-1.0689	0.91242	-0.02264	0.03364
M007D2.108	0.079416	-1.0642	0.91191	-0.02200	0.03368
M007D2.194	0.076015	-1.0848	0.91344	0.01672	0.03499
M007D2.201	0.065013	-1.1578	0.91664	-0.01939	0.03363
M007D2.233	0.081616	-1.0512	0.91077	-0.03469	0.03330
M007D2.235	0.073015	-1.1037	0.91444	-0.02609	0.03346
M007D2.242	0.077816	-1.0738	0.91279	-0.00941	0.03410
M007D2.271	0.078816	-1.0677	0.91229	-0.00661	0.03419
M007D2.283	0.083217	-1.0421	0.90920	-0.03545	0.03327
M007D2.371	0.087818	-1.0165	0.90445	0.02436	0.03575
M007D2.412	0.079816	-1.0618	0.91166	-0.01677	0.03381
X16364.098	0.078216	-1.0713	0.91266	-0.00149	0.03417
X16364.137	0.075815	-1.0860	0.91358	-0.02593	0.03353
X16364.200	0.071614	-1.1127	0.91502	-0.01892	0.03359
X16364.232	0.093219	-0.9880	0.89720	-0.06282	0.03251
X16364.320	0.085017	-1.0319	0.90698	-0.04875	0.03287
X16364.321	0.069814	-1.1246	0.91548	0.00144	0.03421
X16364.392	0.071014	-1.1167	0.91517	-0.01507	0.03367
X3870.024	0.084417	-1.0353	0.90799	-0.01859	0.03393
X3870.069	0.084817	-1.0330	0.90720	-0.03934	0.03317
X3870.096	0.097620	-0.9659	0.89161	0.05469	0.03680
X3870.179	0.084017	-1.0375	0.90835	-0.02653	0.03358
X3870.181	0.083217	-1.0421	0.90920	-0.00485	0.03427
X3870.182	0.072815	-1.1049	0.91458	-0.01389	0.03380
X3870.216	0.081616	-1.0512	0.91077	-0.01327	0.03398
X3870.250	0.079016	-1.0665	0.91217	-0.01382	0.03413
X3870.349	0.095619	-0.9758	0.89427	-0.07277	0.03246
X3870.380	0.081416	-1.0524	0.91102	-0.01141	0.03406
X3870.411	0.086017	-1.0264	0.90604	-0.05080	0.03278
X3870.450	0.082016	-1.0489	0.91022	-0.03682	0.03325
X3870.533	0.080616	-1.0571	0.91128	-0.03942	0.03315
X4312.059	0.082216	-1.0478	0.91008	0.01908	0.03523
X4312.099	0.110820	-0.9044	0.88658	-0.08402	0.03214
X4312.122	0.073015	-1.1037	0.91444	-0.02134	0.03353
X4312.207	0.084217	-1.0364	0.90817	-0.02909	0.03345
X4312.211	0.117620	-0.8752	0.88238	-0.09360	0.03196
X4312.236	0.086817	-1.0220	0.90554	-0.05041	0.03274
X4312.245	0.080416	-1.0582	0.91153	-0.03470	0.03322
X4312.255	0.094019	-0.9839	0.89632	-0.06351	0.03259
X4312.269	0.074815	-1.0922	0.91372	-0.00233	0.03421
X4312.293	0.091018	-0.9994	0.89931	-0.06228	0.03265
X4312.303	0.082817	-1.0443	0.90980	0.00525	0.03478
X4312.400	0.082817	-1.0443	0.90980	-0.02558	0.03367
X5811.332	0.113220	-0.8939	0.88458	-0.08201	0.03222
X5811.397	0.088018	-1.0154	0.90416	-0.00595	0.03445
X8398_2.126	0.084417	-1.0353	0.90799	0.01546	0.03535
X8398_2.201	0.079616	-1.0630	0.91179	-0.02545	0.03351
X8398_2.266	0.083417	-1.0409	0.90871	-0.02055	0.03373

X8398_2.410	0.077616	-1.0750	0.91291	-0.02746	0.03360
X9644_2.023	0.081616	-1.0512	0.91077	-0.00150	0.03457
X9644_2.024	0.102020	-0.9446	0.88981	0.04690	0.03735
X9644_2.028	0.085217	-1.0308	0.90676	-0.03683	0.03326
X9644_2.047	0.083417	-1.0409	0.90871	-0.03327	0.03331
X9644_2.122	0.094819	-0.9798	0.89536	-0.05218	0.03283
X9644_2.219	0.083017	-1.0432	0.90936	-0.02914	0.03341

P	probability of the model including selection
$\log_{10}$(PO)	logarithm of posterior odds for the selection model compared to the neutral model
q	the *q*-value of the selection model (the minimum false discovery rate, at which a locus may become significant)
α	the estimated α coefficient indicating the strength and direction of selection
F_{ST}	coefficient of differentiation

S3

F_{ST}-outlier detection by coalescent simulations under the finite island model

Marker.site	*He*	F_{ST}	$P(F_{ST})$
M007D2.108	0.10465	0.00388	0.06347
M007D2.194	0.36587	0.02573	0.19109
M007D2.201	0.40406	0.02262	0.23201
M007D2.233	0.16427	-0.00869	0.32344
M007D2.235	0.39525	0.01315	0.20310
M007D2.242	0.11311	-0.00103	0.43699
M007D2.271	0.11311	-0.00103	0.43699
M007D2.283	0.32169	-0.00425	0.39831
M007D2.371	0.14170	0.02857	0.16655
M007D2.412	0.11415	-0.00147	0.43001
M007CC2.083	0.50017	0.00384	0.05902
M007CC2.086	0.49985	0.00901	0.13444
M007CC2.107	0.15875	-0.00581	0.36913
M007CC2.186	0.44927	0.00696	0.10518
M007CC2.207	0.50113	0.01755	0.24561
M007CC2.230	0.42791	0.02059	0.27067
M007CC2.251	0.27186	0.01174	0.18107
M007CC2.256	0.50160	-0.00300	0.42006
M007CC2.258	0.50160	-0.00300	0.42006
M007CC2.269	0.50026	0.00673	0.10176
M007CC2.333	0.37867	0.00665	0.10810
M007CC2.350	0.49595	0.02578	0.19782
M007CC2.373	0.27717	0.01124	0.17254
M007B2.082	0.31704	0.01769	0.24566
M007B2.163	0.49281	0.01920	0.26363
M007B2.164	0.27955	-0.00594	0.36522
M007B2.198	0.26904	-0.00210	0.42661
M007B2.245	0.46226	-0.00869	0.33895
M007B2.266	0.15246	-0.02441	0.11156
M007B2.275	0.14012	-0.01373	0.24207
M007B2.305	0.11293	-0.00819	0.31961
M007B2.316	0.43868	-0.01620	0.20416
M007B2.340	0.19308	0.00273	0.04550
M007B2.361	0.14850	0.02789	0.17000
M007B2.376	0.09926	0.02827	0.17143
M007B2.384	0.19308	0.00273	0.04550
M007B2.405	0.21318	-0.01186	0.29568

M002.020	0.22359	-0.00490	0.40582
M002.033	0.49462	0.01453	0.20878
M002.040	0.43087	-0.01243	0.25126
M002.063	0.24528	0.01094	0.17180
M002.080	0.37181	0.01458	0.22195
M002.097	0.38537	0.01474	0.22538
M002.105	0.38256	0.01339	0.20727
M002.114	0.26640	0.00493	0.07902
M002.131	0.11852	-0.01152	0.26962
M002.135	0.11852	-0.01152	0.26962
M002.141	0.39774	0.02088	0.24623
M002.193	0.46632	0.01286	0.18764
M002.278	0.11143	-0.02186	0.13206
M002.282	0.23292	0.00969	0.15206
M002.353	0.49641	0.04269	0.08475
M002.354	0.49842	0.04988	0.05723
M002.380	0.16507	-0.02124	0.14681
M002.410	0.40715	-0.02373	0.11369
M002.411	0.39400	0.01351	0.20806
M002.413	0.42347	-0.02347	0.11573
M002.459	0.13210	-0.02050	0.15143
M002.486	0.40057	-0.01048	0.28430
X16364.098	0.42544	0.00553	0.08552
X16364.137	0.16828	0.02318	0.20386
X16364.200	0.39806	-0.01232	0.25880
X16364.232	0.43535	-0.00188	0.41672
X16364.320	0.49943	-0.01806	0.20033
X16364.321	0.44125	-0.00010	0.45024
X16364.392	0.46986	-0.00669	0.37091
X3870.024	0.08584	-0.00595	0.35312
X3870.069	0.14527	-0.01992	0.16060
X3870.096	0.47303	0.02381	0.21034
X3870.179	0.14727	0.01088	0.17111
X3870.181	0.25353	0.02479	0.19160
X3870.182	0.25353	0.02479	0.19160
X3870.216	0.23072	0.02812	0.16300
X3870.250	0.10004	0.00826	0.13253
X3870.349	0.18036	0.00357	0.05963
X3870.380	0.10004	0.00826	0.13253
X3870.411	0.20511	0.00712	0.11344
X3870.450	0.12764	-0.01107	0.27814
X3870.533	0.14245	-0.00109	0.44558
X4312.059	0.12563	0.01910	0.26630
X4312.099	0.18645	-0.01393	0.26043
X4312.122	0.48946	-0.02435	0.13010
X4312.207	0.12533	-0.01360	0.24035
X4312.211	0.37396	-0.02091	0.15425
X4312.236	0.36261	0.01161	0.17921
X4312.245	0.15879	-0.00895	0.31769
X4312.255	0.13192	-0.03524	0.03447
X4312.269	0.34142	0.03415	0.13417
X4312.293	0.27121	-0.02821	0.08591
X4312.303	0.11859	0.01534	0.23112
X4312.400	0.15885	-0.00519	0.37965
X5811.332	0.17836	0.00046	0.00781
X5811.397	0.21016	0.11148	0.00074
X9644_2.023	0.49609	-0.03408	0.05296
X9644_2.024	0.14186	0.02990	0.15586
X9644_2.028	0.13560	-0.02876	0.07323
X9644_2.047	0.34298	0.01184	0.17771

X9644_2.122	0.16590	-0.01704	0.19956
X9644_2.219	0.30084	-0.00734	0.35205
X8398_2.126	0.14596	0.02599	0.18679
X8398_2.201	0.11869	0.01618	0.24191
X8398_2.266	0.17863	0.02109	0.21486
X8398_2.410	0.17863	0.02109	0.21486

He heterozygosity
F_{ST} observed F_{ST}
$P(F_{ST})$ probability of F_{ST} being an outlier

S4

Complete results of Samβada

marker.site.SNP	environmental variable	log likelihood	*G*	P_G	Wald	P_{Wald}	Mc Fadden Adj R^2	AIC	β_0	β_1
X9644_2.024.G	BIO13	-38.68019	15.63076	0.0000770	9.97131	0.0015900	0.12507	81.36	6.18241	-0.06328
X9644_2.024.G	radiation	-39.99723	12.99669	0.0003120	10.94435	0.0009389	0.09675	83.99	-83.41011	0.00760
X8398_2.266.A	longitude	-57.11335	9.31316	0.0022751	6.33104	0.0118643	0.04301	118.23	-51.49837	2.56201
X9644_2.024.G	BIO2	-41.91877	9.15359	0.0024823	7.86948	0.0050276	0.05542	87.84	-16.93281	1.73928
M007B2.361.A	BIO15	-50.72501	8.81464	0.0029882	7.22681	0.0071823	0.04366	105.45	-7.52500	0.16913
X8398_2.126.G	DD18	-51.08330	8.78351	0.0030397	4.30247	0.0380571	0.04311	106.17	-1.32335	-0.04395
X9644_2.024.G	BIO6	-42.14981	8.69152	0.0031969	8.28723	0.0039925	0.05045	88.30	22.48072	2.50278
X9644_2.024.G	CMD	-42.24386	8.50341	0.0035448	8.78341	0.0030398	0.04843	88.49	-2.14509	0.05521
X9644_2.047.G	BIO6	-79.51604	8.37650	0.0038010	7.91911	0.0048915	0.02614	163.03	16.90887	1.78688
M007B2.376.A	CMD	-37.90685	7.85101	0.0050792	8.68260	0.0032126	0.04603	79.81	-2.69193	0.05755
X16364.200.C	BIO6	-83.44766	7.83102	0.0051357	7.35685	0.0066808	0.02193	170.90	16.33635	1.70171
X8398_2.126.G	BIO3	-51.59770	7.75471	0.0053573	5.58634	0.0181011	0.03384	107.20	-24.45189	0.70976
X8398_2.266.A	DD18	-57.95288	7.63409	0.0057275	4.84254	0.0277660	0.02942	119.91	-1.13651	-0.03295
X9644_2.024.G	vapDec	-42.87104	7.24906	0.0070938	6.41651	0.0113064	0.03494	89.74	-9.88587	19.44620
X9644_2.024.G	elevation	-42.93180	7.12753	0.0075909	6.17286	0.0129725	0.03363	89.86	0.85654	-0.00290
X9644_2.024.G	DD18	-42.98754	7.01607	0.0080782	6.99482	0.0081746	0.03243	89.98	-2.22980	0.02465
X9644_2.024.G	BIO15	-43.03410	6.92294	0.0085097	6.41854	0.0112935	0.03143	90.07	2.83142	-0.13865
M007B2.163.G	radOct	-76.75129	6.89900	0.0086244	5.85962	0.0154922	0.01807	157.50	24.40630	-0.00314
M007CC2.207.T	CMD	-62.51043	6.86936	0.0087686	3.66624	0.0555253	0.02176	129.02	0.99780	0.08637
X5811.397.G	CMD	-42.60665	6.77254	0.0092571	2.88985	0.0891392	0.03014	89.21	1.59638	0.15700
X16364.200.C	CMD	-83.99685	6.73264	0.0094664	5.67713	0.0171875	0.01564	171.99	-0.46981	0.04503
M007B2.361.A	longitude	-51.81265	6.63937	0.0099749	4.70696	0.0300408	0.02394	107.63	-46.66207	2.30424
X8398_2.126.G	longitude	-52.22537	6.49937	0.0107913	4.64266	0.0311866	0.02253	108.45	-45.33981	2.23587
M007B2.163.G	radJan	-76.99956	6.40245	0.0113963	5.53992	0.0185874	0.01498	158.00	13.49546	-0.00371
X8398_2.266.A	BIO3	-58.58244	6.37498	0.0115740	5.02536	0.0249787	0.01922	121.16	-19.34724	0.55876
M007CC2.186.T	longitude	-40.71711	6.23491	0.0125256	4.04757	0.0442349	0.02549	85.43	55.85719	-2.75256
M002.020.C	BIO13	-62.75428	6.09257	0.0135751	5.78954	0.0161218	0.01590	129.51	-4.47446	0.02462
M007B2.163.G	latitude	-77.22522	5.95114	0.0147078	5.66691	0.0172878	0.01216	158.45	-102.78333	2.10916
M002.193.T	latitude	-47.19205	5.89069	0.0152211	5.24231	0.0220440	0.01886	98.38	148.62949	-2.98690
M002.282.T	BIO6	-69.08150	5.79480	0.0160736	5.07044	0.0243372	0.01247	142.16	-18.68900	-1.80132
X16364.232.A	CMD	-41.17382	5.79263	0.0160935	2.56563	0.1092091	0.02034	86.35	1.70024	0.14207
X5811.397.G	longitude	-43.30329	5.37925	0.0203776	3.71492	0.0539282	0.01499	90.61	48.95801	-2.40350
X16364.200.C	BIO13	-84.68576	5.35481	0.0206651	5.16592	0.0230343	0.00775	173.37	2.34688	-0.01918
X9644_2.024.G	longitude	-43.85571	5.27973	0.0215751	5.31522	0.0211399	0.01376	91.71	28.09208	-1.53630
X9644_2.024.G	BIO14	-43.87442	5.24230	0.0220441	5.15434	0.0231884	0.01336	91.75	2.14150	-0.07443

X16364.200.C	BIO2	-84.74651	5.23333	0.0221581	4.91629	0.0266046	0.00706	173.49	-6.48886	0.73102
X5811.397.G	vapDec	-43.45110	5.08363	0.0241528	4.53636	0.0331821	0.01178	90.90	-4.74745	16.83647
M002.080.C	BIO2	-83.20175	5.08152	0.0241821	4.76521	0.0290406	0.00631	170.40	-6.58565	0.72817
X3870.450.T	elevation	-47.51275	4.96308	0.0258941	4.69354	0.0302762	0.00963	99.03	-3.96859	0.00206
M007CC2.350.A	radOct	-57.80836	4.93862	0.0262629	4.04620	0.0442708	0.00779	119.62	26.96050	-0.00337
M002.353.G	BIO6	-77.03591	4.92630	0.0264509	4.49289	0.0340361	0.00583	158.07	15.45399	1.50392
X3870.024.T	BIO2	-33.10331	4.88609	0.0270739	4.65900	0.0308912	0.01246	70.21	7.83106	-1.19285
M007B2.163.G	elevation	-77.78538	4.83080	0.0279556	4.65089	0.0310375	0.00518	159.57	2.14915	-0.00147
X9644_2.023.G	DD18	-47.25134	4.79257	0.0285827	3.53538	0.0600727	0.00798	98.50	1.19023	0.02576
M007D2.108.T	radiation	-41.85877	4.65535	0.0309570	4.38679	0.0362183	0.00742	87.72	-50.91968	0.00454
X9644_2.047.G	CMD	-81.39693	4.61472	0.0316986	4.29509	0.0382227	0.00367	166.79	-0.66275	0.03573
M007B2.376.A	BIO2	-39.52548	4.61374	0.0317167	4.10058	0.0428684	0.00734	83.05	-12.63214	1.20167
X4312.236.G	radOct	-84.85662	4.59461	0.0320727	4.41879	0.0355452	0.00341	173.71	16.07156	-0.00218
M002.353.G	vapDec	-77.20484	4.58844	0.0321883	4.36646	0.0366532	0.00370	158.41	-3.55475	10.65494
M002.020.C	BIO2	-63.52011	4.56093	0.0327094	4.42327	0.0354520	0.00426	131.04	5.56687	-0.78544
M002.020.C	BIO14	-63.52608	4.54898	0.0329384	4.10002	0.0428827	0.00417	131.05	-4.24001	0.05754
X9644_2.023.G	longitude	-47.37508	4.54510	0.0330132	3.58715	0.0582282	0.00549	98.75	35.09554	-1.72235
M002.353.G	BIO2	-77.26110	4.47591	0.0343759	4.32551	0.0375452	0.00299	158.52	-5.24903	0.70721
M002.020.C	radiation	-63.58041	4.44032	0.0350997	4.15394	0.0415378	0.00335	131.16	35.65193	-0.00344
X9644_2.023.G	BIO13	-47.46593	4.36340	0.0367189	4.15916	0.0414099	0.00366	98.93	4.90194	-0.02497
M002.020.C	elevation	-63.63913	4.32288	0.0376033	4.18111	0.0408768	0.00245	131.28	-2.64777	0.00154
M007B2.376.A	radiation	-39.70867	4.24736	0.0393113	4.01767	0.0450260	0.00296	83.42	-50.06939	0.00446
M007CC2.186.T	BIO3	-41.74574	4.17765	0.0409604	3.19412	0.0739036	0.00203	87.49	20.68123	-0.58084
X4312.236.G	DD18	-85.07154	4.16476	0.0412734	4.08404	0.0432901	0.00095	174.14	-0.54817	0.01422
X8398_2.266.A	BIO15	-59.72367	4.09251	0.0430737	3.76233	0.0524194	0.00075	123.45	-4.87905	0.10009
M007CC2.186.T	BIO15	-41.80170	4.06572	0.0437619	3.55754	0.0592757	0.00075	87.60	6.50044	-0.12889
X3870.450.T	BIO2	-47.96782	4.05296	0.0440941	3.98117	0.0460116	0.00053	99.94	5.79693	-0.90414
M007B2.164.A	DD18	-72.44519	4.00186	0.0454501	3.44173	0.0635689	0.00001	148.89	-0.73098	-0.01746
X5811.397.G	elevation	-43.99861	3.98861	0.0458090	3.79594	0.0513772	-0.00012	92.00	3.99191	-0.00194
M007CC2.350.A	latitude	-58.29736	3.96062	0.0465765	3.75746	0.0525724	-0.00033	120.59	-100.90928	2.08843
X16364.232.T	BIO14	-85.95203	3.95842	0.0466375	3.79392	0.0514390	-0.00024	175.90	-2.18555	0.04262
M002.080.C	vapDec	-83.77719	3.93064	0.0474140	3.81426	0.0508180	-0.00040	171.55	-4.09084	9.15271
M002.353.G	elevation	-77.53799	3.92214	0.0476543	3.81142	0.0509043	-0.00049	159.08	2.09591	-0.00133
X16364.200.C	vapDec	-85.41543	3.89548	0.0484162	3.78047	0.0518542	-0.00060	174.83	-3.92597	9.04206
M002.063.C	BIO6	-71.52412	3.89319	0.0484822	3.56225	0.0591075	-0.00073	147.05	-14.62619	-1.39751
X4312.236.G	radJan	-85.21037	3.88710	0.0486584	3.78937	0.0515789	-0.00065	174.42	8.16076	-0.00247
X3870.024.T	BIO14	-33.60867	3.87538	0.0489991	3.31236	0.0687608	-0.00175	71.22	-6.84936	0.08409
X16364.137.T	BIO6	-53.22765	3.80937	0.0509667	3.82314	0.0505495	-0.00173	110.46	13.03706	1.51970
M007CC2.350.A	BIO3	-58.38198	3.79139	0.0515169	3.21860	0.0728057	-0.00173	120.76	14.82215	-0.41641
M007B2.376.A	elevation	-39.94138	3.78195	0.0518083	3.40248	0.0650986	-0.00261	83.88	-0.24161	-0.00213
X8398_2.201.A	latitude	-46.33887	3.77542	0.0520108	3.51611	0.0607750	-0.00233	96.68	115.14915	-2.38802
X4312.236.G	elevation	-85.29735	3.71313	0.0539860	3.58661	0.0582471	-0.00165	174.59	0.85544	-0.00122
M002.080.C	elevation	-83.89215	3.70072	0.0543889	3.57078	0.0588048	-0.00175	171.78	0.85158	-0.00123
M007B2.163.G	vapDec	-78.36172	3.67814	0.0551304	3.53419	0.0601155	-0.00201	160.72	-3.14094	9.40369
M007B2.376.A	BIO15	-40.00364	3.65743	0.0558198	3.51481	0.0608226	-0.00409	84.01	1.54363	-0.11482
X4312.293.T	BIO15	-75.16355	3.60829	0.0574921	3.43270	0.0639176	-0.00254	154.33	-3.56713	0.07897
M007D2.108.T	CMD	-42.38526	3.60237	0.0576973	4.08663	0.0432236	-0.00450	88.77	-2.42228	0.04002
X8398_2.201.A	radiation	-46.44558	3.56199	0.0591167	3.42374	0.0642654	-0.00454	96.89	-41.89823	0.00372
M002.353.G	radJan	-77.71987	3.55838	0.0592455	3.24272	0.0717416	-0.00278	159.44	10.03307	-0.00268
M002.063.C	vapDec	-71.69168	3.55807	0.0592565	3.40996	0.0648040	-0.00301	147.38	2.98401	-9.76865
M007CC2.350.A	radJan	-58.50705	3.54124	0.0598606	3.00341	0.0830893	-0.00381	121.01	13.38724	-0.00343

X16364.200.C	elevation	-85.62277	3.48081	0.0620845	3.37182	0.0663203	-0.00297	175.25	0.92344	-0.00118
X3870.024.T	elevation	-33.81240	3.46792	0.0625698	3.24950	0.0714451	-0.00748	71.62	-4.30017	0.00204
X3870.450.T	BIO14	-48.26463	3.45932	0.0628961	3.07906	0.0793061	-0.00541	100.53	-5.31095	0.06300
M002.033.T	latitude	-52.16168	3.44502	0.0634427	3.24230	0.0717597	-0.00515	108.32	103.04884	-2.06545
X3870.096.G	elevation	-80.84042	3.44109	0.0635937	3.31290	0.0687381	-0.00338	165.68	-0.56337	0.00123
X9644_2.024.G	latitude	-44.77643	3.43828	0.0637020	3.24163	0.0717891	-0.00604	93.55	107.83126	-2.23192
M002.193.T	radOct	-48.43143	3.41194	0.0647264	3.54418	0.0597548	-0.00586	100.86	-16.99457	0.00252
X9644_2.023.G	BIO3	-47.94547	3.40431	0.0650263	2.81970	0.0931138	-0.00600	99.89	15.29915	-0.43121
X4312.236.G	latitude	-85.45785	3.39213	0.0655082	3.30800	0.0689432	-0.00349	174.92	-73.18784	1.48463
M002.020.C	vapDec	-64.11917	3.36280	0.0666846	3.21824	0.0728217	-0.00484	132.24	3.04157	-10.21403
M007B2.376.A	BIO6	-40.15648	3.35174	0.0671339	3.38225	0.0659019	-0.00775	84.31	14.23101	1.69651
X8398_2.126.G	CMD	-53.80689	3.33632	0.0677658	2.07999	0.1492410	-0.00598	111.61	-1.44213	-0.05971
M007B2.275.A	CMD	-53.46983	3.32501	0.0682336	2.06854	0.1503659	-0.00612	110.94	-1.42791	-0.05917
X3870.349.C	radOct	-56.88712	3.31175	0.0687864	2.84306	0.0917690	-0.00588	117.77	-21.97976	0.00270
X16364.200.C	radiation	-85.73862	3.24909	0.0714630	3.15470	0.0757085	-0.00430	175.48	-25.57436	0.00237
X3870.069.A	BIO14	-51.97520	3.24409	0.0716814	3.25685	0.0711257	-0.00705	107.95	0.92868	-0.05144
M007CC2.186.A	CMD	-84.36013	3.21208	0.0730965	2.82881	0.0925867	-0.00458	172.72	0.02743	0.03149
M002.282.T	vapDec	-70.37581	3.20617	0.0733611	3.07721	0.0793967	-0.00551	144.75	2.76768	-9.49816
M007CC2.251.A	BIO14	-76.25240	3.19265	0.0739700	2.99411	0.0835677	-0.00519	156.50	-3.16625	0.04280
X16364.200.C	BIO15	-85.77155	3.18325	0.0743967	3.11221	0.0777077	-0.00467	175.54	1.99821	-0.06610
M007CC2.186.T	radJan	-42.24950	3.17012	0.0749967	2.53282	0.1115005	-0.00947	88.50	16.52605	-0.00417
M007B2.376.A	BIO13	-40.25132	3.16206	0.0753678	2.85161	0.0912824	-0.01002	84.50	1.11166	-0.02531
M002.353.G	radOct	-77.92151	3.15510	0.0756901	2.89020	0.0891200	-0.00531	159.84	16.08745	-0.00203
M007B2.275.A	vapDec	-53.55502	3.15463	0.0757120	2.96906	0.0848711	-0.00767	111.11	2.93716	-11.39089
X8398_2.126.G	radJan	-53.90113	3.14784	0.0760274	2.65504	0.1032225	-0.00768	111.80	-13.59839	0.00345
M002.193.T	radiation	-48.56874	3.13731	0.0765201	2.95292	0.0857224	-0.00860	101.14	-35.41429	0.00349
M007D2.233.T	latitude	-56.62616	3.06607	0.0799426	2.94716	0.0860284	-0.00803	117.25	90.23988	-1.87123
M007B2.163.G	DD18	-78.67303	3.05551	0.0804636	2.78997	0.0948562	-0.00589	161.35	0.50132	0.01388
M007CC2.207.T	DD18	-64.41754	3.05513	0.0804826	2.59527	0.1071834	-0.00716	132.84	1.10428	0.01671
X8398_2.266.A	CMD	-60.25666	3.02653	0.0819132	2.08523	0.1487298	-0.00788	124.51	-1.25082	-0.04845
M007B2.164.A	radJan	-72.95045	2.99134	0.0837109	2.71762	0.0992456	-0.00677	149.90	-9.92803	0.00260
X8398_2.266.A	radJan	-60.27642	2.98701	0.0839350	2.59864	0.1069557	-0.00820	124.55	-11.98054	0.00304
X3870.024.T	BIO13	-34.05384	2.98503	0.0840378	2.74201	0.0977417	-0.01428	72.11	-5.82133	0.02621
M002.040.C	BIO13	-82.27811	2.96159	0.0852640	2.91135	0.0879582	-0.00620	168.56	2.15389	-0.01443
M002.063.C	BIO2	-72.00593	2.92958	0.0869704	2.88172	0.0895901	-0.00728	148.01	4.06750	-0.59292
X4312.122.G	radiation	-58.61473	2.92802	0.0870539	2.79159	0.0947600	-0.00892	121.23	-29.98574	0.00294
M007D2.108.T	latitude	-42.75224	2.86842	0.0903338	2.69945	0.1003831	-0.01280	89.50	105.50572	-2.19436
M002.353.A	vapDec	-60.34140	2.85706	0.0909739	2.77693	0.0956315	-0.00925	124.68	5.55007	-9.83044
X8398_2.201.A	radOct	-46.80476	2.84364	0.0917362	2.39596	0.1216491	-0.01199	97.61	-24.07229	0.00293
X16364.137.T	vapDec	-53.71906	2.82653	0.0927184	2.73131	0.0983986	-0.01064	111.44	-6.03221	10.48049
M002.410.A	elevation	-87.30872	2.79699	0.0944416	2.73239	0.0983318	-0.00678	178.62	-0.97258	0.00104
M007CC2.207.T	longitude	-64.55434	2.78153	0.0953571	2.44948	0.1175642	-0.00924	133.11	23.10343	-1.11829
M007B2.163.G	BIO3	-78.81183	2.77792	0.0955725	2.59676	0.1070821	-0.00762	161.62	9.43213	-0.27447
M002.063.C	elevation	-72.09414	2.75315	0.0970629	2.70370	0.1001156	-0.00849	148.19	-2.13651	0.00116
M002.141.G	BIO6	-87.10006	2.74524	0.0975445	2.68682	0.1011818	-0.00709	178.20	9.47085	0.98687
M007D2.201.A	radiation	-86.62288	2.74276	0.0976959	2.67145	0.1021631	-0.00714	177.25	23.11225	-0.00216
M007CC2.350.G	CMD	-76.48025	2.73696	0.0980511	2.21456	0.1367138	-0.00811	156.96	0.68691	0.03426
X4312.122.A	BIO6	-79.23701	2.73453	0.0982001	2.72055	0.0990636	-0.00785	162.47	-9.26391	-1.02660
M007CC2.186.T	vapDec	-42.46987	2.72939	0.0985171	2.56376	0.1093385	-0.01449	88.94	-2.87639	12.24466
M007D2.371.C	vapDec	-53.78037	2.70393	0.1001014	2.62781	0.1050063	-0.01175	111.56	-5.96774	10.35677
X16364.137.T	DD18	-53.78619	2.69228	0.1008355	2.80831	0.0937772	-0.01186	111.57	-1.95138	0.01448

M007CC2.083.T	BIO3	-69.24296	2.67555	0.1019004	2.71193	0.0996002	-0.00938	142.49	-7.34777	0.26784
M007B2.376.A	vapDec	-40.51392	2.63687	0.1044088	2.52734	0.1118890	-0.01629	85.03	-7.27612	12.24425
M007D2.108.T	BIO13	-42.87304	2.62681	0.1050726	2.41697	0.1200269	-0.01554	89.75	0.76327	-0.02207
X5811.397.G	BIO2	-44.68880	2.60823	0.1063105	2.59195	0.1074080	-0.01513	93.38	-4.40613	0.75541
M007CC2.333.G	CMD	-86.66037	2.59063	0.1074979	2.45997	0.1167808	-0.00801	177.32	-0.37902	0.02649
X4312.303.G	longitude	-44.95506	2.57848	0.1083258	2.69328	0.1007721	-0.01537	93.91	20.19863	-1.14638
X16364.232.A	DD18	-42.78097	2.57833	0.1083362	1.93567	0.1641399	-0.01613	89.56	1.84293	0.02190
M007D2.242.A	elevation	-44.71161	2.56262	0.1094173	2.39766	0.1215168	-0.01563	93.42	-0.51781	-0.00161
M002.080.C	CMD	-84.46372	2.55758	0.1097665	2.45796	0.1169306	-0.00841	172.93	-0.48287	0.02627
M002.040.C	radiation	-82.50573	2.50635	0.1133885	2.44021	0.1182603	-0.00892	169.01	-22.63532	0.00213
M007CC2.083.T	longitude	-69.32975	2.50197	0.1137042	2.55221	0.1101400	-0.01061	142.66	-15.92806	0.87877
X9644_2.023.G	radJan	-48.40011	2.49504	0.1142052	2.17941	0.1398683	-0.01516	100.80	12.08605	-0.00307
M007CC2.083.T	DD18	-69.33984	2.48178	0.1151721	2.54987	0.1103033	-0.01076	142.68	1.34925	-0.01211
X3870.349.C	DD18	-57.30237	2.48123	0.1152122	2.09016	0.1482505	-0.01297	118.60	-1.35399	-0.01640
X3870.450.T	BIO13	-48.75735	2.47388	0.1157516	2.39003	0.1221114	-0.01526	101.51	-4.47190	0.01906
X8398_2.126.G	BIO15	-54.23899	2.47212	0.1158813	2.31359	0.1282474	-0.01377	112.48	-4.50207	0.08274
M002.033.T	radOct	-52.65347	2.46143	0.1166723	2.52958	0.1117296	-0.01428	109.31	-13.37586	0.00200
M007B2.316.A	DD18	-84.81785	2.45715	0.1169912	2.43341	0.1187739	-0.00897	173.64	0.46246	-0.01105
X8398_2.201.A	BIO6	-47.00391	2.44534	0.1178741	2.48636	0.1148370	-0.01612	98.01	10.98861	1.33637
X16364.137.T	elevation	-53.91444	2.43579	0.1185941	2.30555	0.1289130	-0.01419	111.83	-0.40166	-0.00137
X4312.236.G	vapDec	-85.93895	2.42993	0.1190381	2.38623	0.1224085	-0.00901	175.88	-3.25613	7.14643
M007B2.164.A	vapDec	-73.24045	2.41134	0.1204595	2.33867	0.1261975	-0.01067	150.48	2.29534	-7.97921
X16364.137.T	BIO13	-53.93027	2.40412	0.1210161	2.27617	0.1313762	-0.01447	111.86	0.66448	-0.01787
M007B2.164.A	radOct	-73.24747	2.39732	0.1215437	2.20802	0.1372947	-0.01076	150.49	-15.00173	0.00186
X5811.397.G	radOct	-44.80159	2.38265	0.1226895	2.02811	0.1544127	-0.01758	93.60	22.86812	-0.00276
M007CC2.350.A	CMD	-59.08674	2.38186	0.1227510	2.57394	0.1086371	-0.01342	122.17	1.72332	-0.02878
X5811.397.G	radJan	-44.80760	2.37062	0.1236376	1.98659	0.1586982	-0.01771	93.62	13.88598	-0.00343
M002.193.T	radJan	-48.95222	2.37034	0.1236600	2.46173	0.1166500	-0.01625	101.90	-7.08356	0.00262
M002.410.A	BIO2	-87.52460	2.36522	0.1240665	2.30457	0.1289942	-0.00921	179.05	4.13699	-0.47848
M002.020.C	DD18	-64.62097	2.35919	0.1245465	2.10584	0.1467376	-0.01247	133.24	-0.92731	-0.01379
M007B2.082.T	CMD	-79.27704	2.35919	0.1245470	2.00066	0.1572305	-0.01020	162.55	-0.49034	-0.03062
M002.033.C	radiation	-70.01754	2.35308	0.1250360	2.27532	0.1314482	-0.01157	144.04	-24.11824	0.00234
M002.033.T	radJan	-52.70934	2.34969	0.1253075	2.41464	0.1202054	-0.01531	109.42	-6.70179	0.00243
M007D2.201.A	BIO13	-86.82651	2.33548	0.1264558	2.30293	0.1291302	-0.00946	177.65	-1.71613	0.01247
M002.410.A	BIO6	-87.54857	2.31728	0.1279433	2.27000	0.1318996	-0.00948	179.10	-8.78017	-0.90601
M002.040.C	BIO6	-82.60058	2.31666	0.1279948	2.25142	0.1334922	-0.01005	169.20	9.24332	0.92685
M007CC2.083.G	CMD	-60.40366	2.31545	0.1280944	1.71614	0.1901913	-0.01368	124.81	1.26789	0.04001
M007D2.371.C	radiation	-53.97667	2.31133	0.1284343	2.26339	0.1324638	-0.01531	111.95	-30.86523	0.00272
M002.033.T	BIO6	-52.73119	2.30599	0.1288765	2.09920	0.1473760	-0.01572	109.46	14.78264	1.35017
M007D2.194.T	BIO2	-85.73915	2.29864	0.1294874	2.25040	0.1335802	-0.00979	175.48	3.79378	-0.47429
M007CC2.186.T	radOct	-42.68601	2.29710	0.1296158	1.95797	0.1617309	-0.01942	89.37	22.80762	-0.00274
M007B2.082.T	DD18	-79.30967	2.29393	0.1298804	2.13691	0.1437917	-0.01060	162.62	-0.48086	-0.01186
M002.141.G	BIO2	-87.32690	2.29156	0.1300794	2.23153	0.1352195	-0.00966	178.65	-4.17935	0.47228
X16364.200.C	BIO14	-86.21768	2.29099	0.1301269	2.24320	0.1342031	-0.00978	176.44	1.50171	-0.03218
M007CC2.186.T	DD18	-42.69531	2.27850	0.1311787	1.77327	0.1829782	-0.01964	89.39	1.83462	0.02003
X3870.024.T	radiation	-34.41206	2.26861	0.1320187	2.13058	0.1443865	-0.02435	72.82	37.64404	-0.00373
M007D2.242.A	vapDec	-44.87268	2.24047	0.1344401	2.17485	0.1402834	-0.01913	93.75	-6.42544	10.63481
X16364.392.C	BIO15	-83.09062	2.23422	0.1349844	2.17731	0.1400589	-0.01048	170.18	2.41933	-0.05722
M007CC2.350.A	longitude	-59.16121	2.23293	0.1350975	1.96786	0.1606755	-0.01466	122.32	22.29736	-1.06660
M002.353.G	BIO13	-78.38440	2.22931	0.1354139	2.20076	0.1379431	-0.01114	160.77	2.55187	-0.01308
X9644_2.047.G	BIO15	-82.61806	2.17247	0.1405008	2.14489	0.1430454	-0.01092	169.24	1.40938	-0.05560

M002.080.C	BIO6	-84.66429	2.15643	0.1419738	2.13214	0.1442393	-0.01075	173.33	8.21219	0.87795
M007D2.201.A	BIO14	-86.91747	2.15357	0.1422388	2.09950	0.1473475	-0.01049	177.83	-1.70463	0.03112
M007B2.245.T	BIO3	-44.92030	2.14523	0.1430133	1.83412	0.1756414	-0.02016	93.84	14.13183	-0.37954
X16364.232.T	latitude	-86.86077	2.14093	0.1434146	2.10894	0.1464406	-0.01057	177.72	-56.98129	1.16261
M007CC2.207.C	BIO6	-73.02475	2.13831	0.1436604	2.01987	0.1552528	-0.01256	150.05	10.94950	1.01906
X4312.236.G	longitude	-86.08519	2.13747	0.1437391	2.11746	0.1456278	-0.01069	176.17	13.89957	-0.73142
X4312.122.A	DD18	-79.53556	2.13744	0.1437416	2.16273	0.1413937	-0.01155	163.07	0.88118	-0.01061
M007D2.233.T	radiation	-57.09110	2.13620	0.1438582	2.09960	0.1473379	-0.01602	118.18	-28.53079	0.00252
M007B2.245.T	latitude	-44.92639	2.13304	0.1441544	2.04872	0.1523338	-0.02030	93.85	-87.66745	1.82836
X3870.024.T	vapDec	-34.48636	2.12001	0.1453857	1.97355	0.1600717	-0.02644	72.97	2.69896	-12.08539
X8398_2.266.A	radOct	-60.71316	2.11354	0.1460008	1.90319	0.1677212	-0.01527	125.43	-16.68081	0.00202
M002.278.G	latitude	-45.18850	2.11160	0.1461868	2.02682	0.1545434	-0.02042	94.38	86.73028	-1.80959
X5811.397.G	BIO6	-44.93823	2.10938	0.1463991	1.87298	0.1711338	-0.02055	93.88	16.19065	1.45201
X3870.096.G	BIO2	-81.51809	2.08576	0.1486786	2.01947	0.1552930	-0.01159	167.04	4.70676	-0.47706
X5811.397.G	BIO13	-44.95351	2.07880	0.1493572	2.01082	0.1561811	-0.02089	93.91	4.51047	-0.01834
M007B2.164.A	longitude	-73.41634	2.05958	0.1512523	1.90774	0.1672140	-0.01303	150.83	-17.67008	0.85861
M007B2.376.A	DD18	-40.81365	2.03742	0.1534698	2.15605	0.1420089	-0.02346	85.63	-2.45704	0.01501
X3870.450.T	vapDec	-48.97732	2.03395	0.1538200	1.94599	0.1630194	-0.01966	101.95	2.10174	-9.77824
M007B2.316.A	vapDec	-85.02980	2.03324	0.1538924	2.00261	0.1570285	-0.01143	174.06	2.98317	-6.56061
X4312.293.T	CMD	-75.95233	2.03073	0.1541461	1.70936	0.1910684	-0.01279	155.90	-0.74818	-0.02898
X4312.303.G	elevation	-45.23464	2.01932	0.1553090	1.90785	0.1672019	-0.02142	94.47	-0.71822	-0.00141
X9644_2.047.G	BIO13	-82.69508	2.01842	0.1554003	1.98464	0.1589020	-0.01184	169.39	1.15712	-0.01203
X3870.069.A	BIO15	-52.59071	2.01307	0.1559499	1.90043	0.1680307	-0.01854	109.18	-4.31079	0.07577
M007D2.371.C	BIO13	-54.12633	2.01200	0.1560599	1.92777	0.1650022	-0.01803	112.25	0.46873	-0.01626
M002.278.G	CMD	-45.24446	1.99967	0.1573332	2.24711	0.1338640	-0.02163	94.49	-2.24672	0.03019
X3870.349.C	longitude	-57.54467	1.99664	0.1576479	1.77094	0.1832653	-0.01711	119.09	-21.45597	1.02129
X16364.232.T	BIO6	-86.93437	1.99374	0.1579503	1.96142	0.1613620	-0.01141	177.87	-8.07801	-0.83884
M007B2.245.T	radiation	-45.00069	1.98446	0.1589219	1.94614	0.1630033	-0.02191	94.00	32.28565	-0.00282
X4312.303.G	DD18	-45.25349	1.98161	0.1592207	2.08604	0.1486508	-0.02182	94.51	-2.29341	0.01393
M007CC2.186.T	elevation	-42.84623	1.97667	0.1597422	1.93820	0.1638639	-0.02308	89.69	3.45486	-0.00137
X3870.349.C	radJan	-57.55484	1.97630	0.1597806	1.77074	0.1832907	-0.01728	119.11	-10.21355	0.00251
M007D2.233.T	radOct	-57.17152	1.97536	0.1598804	1.77522	0.1827377	-0.01741	118.34	-16.94136	0.00204
M007B2.275.A	BIO6	-54.14672	1.97122	0.1603180	1.80129	0.1795561	-0.01840	112.29	-13.61413	-1.22370
X16364.200.C	DD18	-86.37847	1.96940	0.1605111	1.95035	0.1625492	-0.01162	176.76	-0.36389	0.00974
X9644_2.023.G	radOct	-48.66484	1.96558	0.1609177	1.75117	0.1857295	-0.02049	101.33	17.89949	-0.00217
X16364.392.T	BIO14	-49.01476	1.95907	0.1616133	1.98746	0.1586062	-0.02041	102.03	-0.30738	0.04180
X3870.096.G	BIO14	-81.58999	1.94196	0.1634557	1.92402	0.1654142	-0.01246	167.18	-1.01267	0.03053
M007D2.201.A	BIO2	-87.02686	1.93479	0.1642352	1.89594	0.1685336	-0.01173	178.05	3.65557	-0.43180
X8398_2.201.A	radJan	-47.25937	1.93442	0.1642762	1.67570	0.1954967	-0.02142	98.52	-12.02058	0.00292
M007B2.305.C	vapDec	-46.99023	1.93407	0.1643140	1.84714	0.1741159	-0.02154	97.98	2.00315	-9.71493
M002.353.A	elevation	-60.80682	1.92622	0.1651726	1.85586	0.1731029	-0.01679	125.61	0.41617	0.00112
X9644_2.023.G	BIO15	-48.68507	1.92512	0.1652930	1.80381	0.1792525	-0.02090	101.37	3.99745	-0.07308
M002.193.T	BIO14	-49.17645	1.92189	0.1656490	1.77595	0.1826474	-0.02072	102.35	4.35411	-0.04560
X9644_2.028.G	longitude	-43.85555	1.92045	0.1658065	1.97935	0.1594584	-0.02320	91.71	16.84038	-0.95742
M002.353.A	radJan	-60.81042	1.91902	0.1659643	1.97374	0.1600517	-0.01684	125.62	-5.69431	0.00209
M002.278.G	radOct	-45.28762	1.91336	0.1665902	1.66731	0.1966188	-0.02256	94.58	-20.17867	0.00240
M007D2.371.C	DD18	-54.17610	1.91246	0.1666900	2.00513	0.1567680	-0.01893	112.35	-1.89310	0.01246
M007B2.275.A	BIO2	-54.18354	1.89759	0.1683483	1.89352	0.1688052	-0.01907	112.37	3.26613	-0.58023
X3870.069.A	BIO2	-52.64865	1.89719	0.1683934	1.80181	0.1794934	-0.01962	109.30	-7.11992	0.62189
X4312.099.C	radJan	-57.60112	1.88375	0.1699089	1.94511	0.1631144	-0.01807	119.20	5.82788	-0.00216
X4312.236.G	BIO3	-86.21536	1.87711	0.1706630	1.86156	0.1724449	-0.01218	176.43	6.04597	-0.20040

X4312.122.G	BIO13	-59.14067	1.87614	0.1707730	1.84196	0.1747216	-0.01768	122.28	3.47793	-0.01448
X3870.096.C	latitude	-43.13590	1.86847	0.1716510	1.78939	0.1810003	-0.02418	90.27	88.37594	-1.75695
M002.282.T	BIO2	-71.05024	1.85731	0.1729355	1.84392	0.1744920	-0.01488	146.10	3.01208	-0.48139
X16364.392.C	CMD	-83.28238	1.85069	0.1737027	1.66070	0.1975088	-0.01276	170.56	0.36094	0.02449
M002.380.A	CMD	-59.35839	1.83857	0.1751190	1.98522	0.1588414	-0.01793	122.72	-1.69716	0.02553
M002.353.A	radOct	-60.85112	1.83762	0.1752299	1.89055	0.1691396	-0.01750	125.70	-10.94404	0.00165
M002.411.T	vapDec	-87.24530	1.82842	0.1763147	1.80328	0.1793165	-0.01232	178.49	-2.71173	6.13840
X16364.320.G	BIO15	-66.08138	1.82358	0.1768874	1.75400	0.1853747	-0.01624	136.16	3.33108	-0.06118
M007CC2.186.T	BIO13	-42.92461	1.81990	0.1773248	1.76894	0.1835137	-0.02487	89.85	4.46802	-0.01755
X4312.122.A	BIO13	-79.69779	1.81297	0.1781521	1.78162	0.1819507	-0.01357	163.40	-0.85036	0.01171
M002.141.G	elevation	-87.56978	1.80580	0.1790131	1.77746	0.1824620	-0.01240	179.14	0.67899	-0.00084
X4312.122.G	BIO2	-59.17780	1.80189	0.1794845	1.79576	0.1802254	-0.01829	122.36	-3.01443	0.53086
M007B2.164.A	BIO3	-73.54549	1.80127	0.1795595	1.69381	0.1930988	-0.01477	151.09	-8.35664	0.23241
X16364.392.C	latitude	-83.31237	1.79073	0.1808371	1.76474	0.1840350	-0.01312	170.62	54.29419	-1.09593
M002.040.C	BIO15	-82.86488	1.78805	0.1811644	1.75689	0.1850123	-0.01320	169.73	1.91904	-0.05065
M007CC2.083.T	radOct	-69.69146	1.77855	0.1823276	1.80948	0.1785706	-0.01574	143.38	-10.12671	0.00150
X8398_2.126.G	radOct	-54.58646	1.77719	0.1824954	1.59666	0.2063769	-0.02003	113.17	-16.74967	0.00200
X16364.137.T	radJan	-54.24457	1.77552	0.1827001	1.83378	0.1756812	-0.02017	112.49	5.66084	-0.00214
X4312.245.A	radOct	-52.88115	1.75492	0.1852590	1.82087	0.1772103	-0.02088	109.76	11.42679	-0.00175
X16364.137.T	BIO2	-54.25569	1.75328	0.1854644	1.67049	0.1961930	-0.02038	112.51	-6.66986	0.57843
M007D2.371.C	BIO14	-54.25758	1.74950	0.1859394	1.77318	0.1829884	-0.02041	112.52	0.26155	-0.03687
M007B2.164.A	elevation	-73.57641	1.73944	0.1872103	1.71973	0.1897276	-0.01518	151.15	-1.86088	0.00092
M007B2.361.A	BIO6	-54.26496	1.73474	0.1878065	1.59786	0.2062065	-0.02054	112.53	-12.80778	-1.14138
X4312.122.G	BIO15	-59.21232	1.73284	0.1880481	1.65684	0.1980299	-0.01887	122.42	3.69223	-0.06445
X4312.293.T	longitude	-76.10188	1.73162	0.1882035	1.62729	0.2020788	-0.01474	156.20	-15.59311	0.75502
X16364.098.A	radJan	-86.40829	1.72950	0.1884742	1.70111	0.1921425	-0.01301	176.82	-5.55476	0.00164
X9644_2.023.G	BIO6	-48.78319	1.72888	0.1885540	1.57970	0.2088034	-0.02287	101.57	13.12019	1.19097
M002.020.C	CMD	-64.93617	1.72879	0.1885650	1.41337	0.2344976	-0.01726	133.87	-0.96297	-0.03180
M007CC2.083.T	latitude	-69.72098	1.71950	0.1897574	1.68531	0.1942203	-0.01616	143.44	60.84371	-1.21626
X4312.122.G	CMD	-59.22005	1.71738	0.1900310	1.33818	0.2473546	-0.01900	122.44	1.34611	0.03373
M007D2.371.C	elevation	-54.27923	1.70619	0.1914800	1.64365	0.1998257	-0.02080	112.56	-0.59458	-0.00114
M007B2.340.A	DD18	-60.50350	1.69500	0.1929437	1.50201	0.2203624	-0.01879	125.01	-1.28059	-0.01279
M007B2.316.A	longitude	-85.20374	1.68536	0.1942132	1.67270	0.1958979	-0.01345	174.41	-12.55430	0.66066
M007B2.082.T	elevation	-79.62015	1.67297	0.1958617	1.65348	0.1984865	-0.01446	163.24	-1.48533	0.00085
X16364.137.T	longitude	-54.29592	1.67283	0.1958798	1.73348	0.1879677	-0.02111	112.59	14.50896	-0.83385
X16364.232.T	BIO3	-87.09733	1.66782	0.1965509	1.63496	0.2010182	-0.01326	178.19	6.10190	-0.18963
M007B2.361.A	BIO13	-54.29927	1.66613	0.1967775	1.63389	0.2011652	-0.02117	112.60	-3.64507	0.01450
M007B2.305.C	BIO2	-47.12904	1.65645	0.1980833	1.65907	0.1977285	-0.02443	98.26	3.10959	-0.59298
X16364.392.T	BIO3	-49.17413	1.64032	0.2002815	1.46408	0.2262813	-0.02360	102.35	11.42803	-0.29964
M007B2.275.A	elevation	-54.31338	1.63791	0.2006123	1.61731	0.2034672	-0.02142	112.63	-2.75751	0.00109
M007B2.305.C	CMD	-47.14175	1.63103	0.2015606	1.16995	0.2794106	-0.02470	98.28	-1.74582	-0.04091
M007D2.108.T	BIO15	-43.37115	1.63060	0.2016198	1.62059	0.2030097	-0.02681	90.74	0.31210	-0.07369
M007B2.245.T	BIO14	-45.17811	1.62961	0.2017567	1.66015	0.1975834	-0.02577	94.36	-0.12565	0.04070
M007B2.316.A	BIO3	-85.23264	1.62757	0.2020397	1.61498	0.2037932	-0.01379	174.47	-5.75380	0.19027
X16364.321.T	vapDec	-41.12995	1.62170	0.2028552	1.55323	0.2126592	-0.02835	86.26	-1.74739	9.67841
X9644_2.028.G	DD18	-44.00795	1.61566	0.2036987	1.67340	0.1958039	-0.02660	92.02	-1.97222	0.01230
M007B2.245.T	BIO13	-45.18699	1.61185	0.2042319	1.53804	0.2149096	-0.02596	94.37	-0.15518	0.01646
X16364.232.T	radiation	-87.12883	1.60483	0.2052203	1.58125	0.2085804	-0.01362	178.26	17.70419	-0.00165
X4312.255.T	DD18	-47.42511	1.60294	0.2054870	1.35252	0.2448377	-0.02485	98.85	-1.75654	-0.01510
M002.282.T	elevation	-71.18246	1.59287	0.2069168	1.57841	0.2089903	-0.01672	146.36	-1.98080	0.00090
M002.353.A	longitude	-60.98010	1.57965	0.2088112	1.62927	0.2018035	-0.01959	125.96	-13.33838	0.76277

X16364.320.A	BIO14	-73.98634	1.56738	0.2105877	1.56807	0.2104874	-0.01627	151.97	-0.56627	0.02909
M007B2.163.G	BIO2	-79.41714	1.56729	0.2106014	1.55276	0.2127289	-0.01517	162.83	-2.84041	0.41347
X3870.349.C	latitude	-57.76154	1.56291	0.2112401	1.52976	0.2161479	-0.02081	119.52	62.87404	-1.31354
M007B2.305.C	elevation	-47.17840	1.55773	0.2119980	1.53624	0.2151783	-0.02546	98.36	-3.09998	0.00117
M002.020.C	longitude	-65.02240	1.55634	0.2122023	1.44689	0.2290281	-0.01857	134.04	-16.31049	0.78069
X3870.179.A	BIO3	-52.81948	1.55553	0.2123207	1.60414	0.2053177	-0.02280	109.64	5.90543	-0.24165
M002.033.T	elevation	-53.10671	1.55495	0.2124056	1.49466	0.2214954	-0.02269	110.21	0.59073	0.00109
X16364.232.T	BIO13	-87.16097	1.54055	0.2145357	1.52550	0.2167884	-0.01399	178.32	-1.26954	0.01010
X16364.392.T	radOct	-49.22516	1.53826	0.2148767	1.38025	0.2400586	-0.02462	102.45	16.86133	-0.00199
M002.033.C	BIO15	-70.42555	1.53706	0.2150558	1.49939	0.2207647	-0.01730	144.85	2.73393	-0.05400
X9644_2.047.G	radiation	-82.94224	1.52411	0.2169993	1.50414	0.2200357	-0.01479	169.88	-18.10783	0.00165
M002.033.C	BIO13	-70.43323	1.52170	0.2173619	1.51001	0.2191375	-0.01741	144.87	2.46451	-0.01152
X16364.232.T	radOct	-87.17467	1.51314	0.2186606	1.48058	0.2236841	-0.01414	178.35	9.40385	-0.00124
M007B2.376.A	longitude	-41.08277	1.49917	0.2207984	1.57451	0.2095537	-0.02989	86.17	16.18661	-0.94616
M002.020.C	radJan	-65.05167	1.49780	0.2210095	1.40568	0.2357742	-0.01901	134.10	-7.55230	0.00187
X16364.392.T	BIO15	-49.24968	1.48923	0.2223359	1.41267	0.2346143	-0.02511	102.50	4.17939	-0.06805
X3870.096.G	BIO15	-81.81780	1.48633	0.2227863	1.45804	0.2272416	-0.01522	167.64	2.18135	-0.04719
M007D2.242.A	radJan	-45.25056	1.48471	0.2230392	1.54983	0.2131608	-0.02734	94.50	5.58534	-0.00222
X4312.099.C	elevation	-57.80332	1.47933	0.2238794	1.43324	0.2312358	-0.02153	119.61	-0.60404	-0.00102
X4312.122.G	vapDec	-59.33958	1.47832	0.2240370	1.44020	0.2301069	-0.02099	122.68	-1.44630	7.26608
M007CC2.186.T	BIO6	-43.09710	1.47493	0.2245702	1.34267	0.2465635	-0.02880	90.19	14.15163	1.23789
X16364.392.T	radJan	-49.25929	1.47000	0.2253461	1.31530	0.2514372	-0.02530	102.52	10.19035	-0.00241
M007B2.340.A	BIO6	-60.61771	1.46658	0.2258862	1.48906	0.2223626	-0.02065	125.24	7.19264	0.89056
X16364.232.A	longitude	-43.33822	1.46383	0.2263221	1.26778	0.2601829	-0.02877	90.68	23.08135	-1.07716
X16364.320.G	vapDec	-66.26298	1.46038	0.2268701	1.42962	0.2318263	-0.01895	136.53	-1.44065	6.62783
X3870.096.C	BIO15	-43.34087	1.45852	0.2271650	1.37536	0.2408923	-0.02883	90.68	4.58957	-0.07356
M002.141.G	vapDec	-87.74444	1.45648	0.2274909	1.44034	0.2300837	-0.01437	179.49	-2.36831	5.45840
X9644_2.028.G	CMD	-44.08890	1.45376	0.2279249	1.58627	0.2078602	-0.02841	92.18	-1.90959	0.02477
X4312.122.A	vapDec	-79.87805	1.45246	0.2281329	1.43757	0.2305325	-0.01580	163.76	3.10367	-5.82586
X8398_2.201.A	BIO15	-47.50073	1.45171	0.2282537	1.44715	0.2289864	-0.02642	99.00	0.20728	-0.06565
X5811.397.G	BIO15	-45.26738	1.45106	0.2283574	1.37175	0.2415120	-0.02771	94.53	4.41621	-0.07107
M002.080.C	BIO13	-85.02014	1.44475	0.2293726	1.42868	0.2319803	-0.01490	174.04	1.00690	-0.00998
X4312.255.T	elevation	-47.50622	1.44073	0.2300215	1.42531	0.2325309	-0.02653	99.01	-3.05955	0.00111
M007D2.194.T	BIO6	-86.17129	1.43436	0.2310542	1.40618	0.2356918	-0.01476	176.34	-7.29747	-0.72241
M007B2.245.G	DD18	-83.91791	1.43344	0.2312031	1.43689	0.2306441	-0.01516	171.84	0.55400	-0.00848
M007CC2.350.A	BIO14	-59.56207	1.43119	0.2315701	1.44757	0.2289188	-0.02131	123.12	-0.15387	0.03187
X4312.122.A	radJan	-79.88917	1.43022	0.2317280	1.43999	0.2301410	-0.01594	163.78	-4.66460	0.00156
X16364.098.A	radOct	-86.55877	1.42855	0.2320011	1.40620	0.2356882	-0.01473	177.12	-8.94545	0.00120
X9644_2.028.G	BIO15	-44.10304	1.42547	0.2325047	1.42734	0.2321983	-0.02872	92.21	0.36124	-0.06316
M002.380.A	DD18	-59.56644	1.42245	0.2330005	1.47772	0.2241320	-0.02138	123.13	-1.70283	0.01017
X4312.245.A	DD18	-53.05442	1.40840	0.2353228	1.47185	0.2250547	-0.02410	110.11	-1.94777	0.01083
X3870.179.A	longitude	-52.89357	1.40735	0.2354963	1.46047	0.2268548	-0.02419	109.79	13.47494	-0.78410
X16364.392.C	radJan	-83.50869	1.39808	0.2370451	1.39873	0.2369360	-0.01545	171.02	-4.62274	0.00149
X16364.392.T	longitude	-49.29692	1.39475	0.2376042	1.23973	0.2655223	-0.02606	102.59	20.31861	-0.94712
M007D2.201.A	latitude	-87.29753	1.39345	0.2378238	1.37968	0.2401560	-0.01481	178.60	-46.24052	0.94125
X3870.179.A	BIO15	-52.90582	1.38284	0.2396173	1.37881	0.2403041	-0.02442	109.81	0.22408	-0.05972
X4312.122.G	latitude	-59.39033	1.37683	0.2406422	1.34962	0.2453446	-0.02183	122.78	61.44082	-1.22072
M007B2.361.A	DD18	-54.44560	1.37345	0.2412196	1.21195	0.2709465	-0.02382	112.89	-1.50763	-0.01243
M007D2.233.T	CMD	-57.47288	1.37264	0.2413582	1.48374	0.2231910	-0.02259	118.95	-1.69656	0.02325
M007D2.108.T	DD18	-43.50145	1.37000	0.2418120	1.44279	0.2296884	-0.02976	91.00	-2.32803	0.01201
X16364.232.A	radiation	-43.38535	1.36957	0.2418859	1.32329	0.2500031	-0.02984	90.77	-24.25266	0.00246

X9644_2.023.G	BIO14	-48.96359	1.36808	0.2421427	1.28125	0.2576665	-0.02651	101.93	3.62593	-0.03980
M002.353.G	BIO14	-78.81847	1.36117	0.2433348	1.31885	0.2507982	-0.01660	161.64	2.23182	-0.02695
X4312.099.C	vapDec	-57.86291	1.36015	0.2435110	1.34330	0.2464536	-0.02255	119.73	-4.46113	7.00501
M002.282.T	radJan	-71.29952	1.35876	0.2437525	1.28111	0.2576920	-0.01835	146.60	-7.09150	0.00174
X16364.137.T	radOct	-54.45340	1.35785	0.2439099	1.40353	0.2361332	-0.02396	112.91	9.70739	-0.00151
X16364.321.T	BIO15	-41.26499	1.35161	0.2449966	1.27037	0.2596982	-0.03157	86.53	4.66887	-0.07331
X9644_2.047.G	BIO2	-83.02946	1.34967	0.2453363	1.32305	0.2500458	-0.01583	170.06	-3.67887	0.37663
X4312.245.A	latitude	-53.08450	1.34823	0.2455879	1.31617	0.2512801	-0.02466	110.17	-65.59671	1.30036
X4312.099.C	radOct	-57.86998	1.34601	0.2459766	1.38952	0.2384863	-0.02267	119.74	9.55981	-0.00148
M007CC2.107.C	BIO2	-53.08619	1.34485	0.2461804	1.34792	0.2456426	-0.02470	110.17	2.46979	-0.49488
X16364.392.C	radOct	-83.53558	1.34431	0.2462754	1.34285	0.2465320	-0.01577	171.07	-8.37736	0.00118
M007B2.361.A	radiation	-54.46094	1.34278	0.2465447	1.30686	0.2529633	-0.02410	112.92	20.65725	-0.00209
X4312.207.C	radiation	-47.55588	1.34140	0.2467872	1.32601	0.2495156	-0.02756	99.11	-26.16183	0.00226
M007CC2.333.G	BIO3	-87.28540	1.34056	0.2469358	1.31309	0.2518351	-0.01512	178.57	-5.64792	0.17082
X3870.450.T	radJan	-49.32546	1.33766	0.2474467	1.20534	0.2722578	-0.02663	102.65	-9.76225	0.00229
X4312.122.A	BIO2	-79.93704	1.33448	0.2480101	1.30483	0.2533337	-0.01653	163.87	3.99621	-0.38275
X16364.392.C	BIO14	-83.54245	1.33055	0.2487067	1.32236	0.2501682	-0.01585	171.08	-0.82070	0.02492
X16364.392.T	latitude	-49.32999	1.32861	0.2490518	1.30094	0.2540407	-0.02672	102.66	-64.14976	1.34577
M007CC2.350.A	radiation	-59.61499	1.32535	0.2496338	1.31237	0.2519654	-0.02219	123.23	22.25320	-0.00193
X16364.392.T	vapDec	-49.33175	1.32508	0.2496827	1.28730	0.2565467	-0.02675	102.66	-1.27201	7.72420
M002.410.A	vapDec	-88.04582	1.32279	0.2500915	1.30913	0.2525526	-0.01509	180.09	2.16350	-5.19106
M002.411.T	radOct	-87.50008	1.31886	0.2507975	1.30513	0.2532787	-0.01521	179.00	8.45531	-0.00115
X16364.320.A	radJan	-74.11304	1.31398	0.2516760	1.33258	0.2483466	-0.01796	152.23	-4.33970	0.00155
M007CC2.083.T	BIO6	-69.92465	1.31216	0.2520034	1.25622	0.2623681	-0.01904	143.85	9.06033	0.81388
X4312.122.A	elevation	-79.94820	1.31215	0.2520049	1.29065	0.2559286	-0.01667	163.90	-0.02588	0.00076
M007D2.371.C	BIO2	-54.48003	1.30460	0.2533748	1.25834	0.2619657	-0.02444	112.96	-5.95883	0.49752
M002.033.T	longitude	-53.23368	1.30100	0.2540300	1.34488	0.2461754	-0.02504	110.47	-12.68089	0.73607
X4312.099.C	BIO2	-57.89484	1.29629	0.2548918	1.25224	0.2631242	-0.02309	119.79	-5.65530	0.47432
X8398_2.266.A	vapDec	-61.12227	1.29533	0.2550689	1.26733	0.2602691	-0.02189	126.24	1.23653	-6.63260
X4312.059.A	elevation	-49.35013	1.28833	0.2563557	1.27703	0.2584517	-0.02712	102.70	-2.89827	0.00103
M007B2.361.A	BIO3	-54.48952	1.28562	0.2568574	1.18022	0.2773122	-0.02462	112.98	-9.52067	0.24628
M007B2.275.A	DD18	-54.49433	1.27601	0.2586428	1.13342	0.2870466	-0.02470	112.99	-1.51295	-0.01193
M007B2.376.A	latitude	-41.19689	1.27092	0.2595935	1.23742	0.2659695	-0.03262	86.39	71.05473	-1.49275
X4312.207.C	latitude	-47.59276	1.26763	0.2602112	1.23957	0.2655544	-0.02833	99.19	64.35057	-1.35152
X4312.293.T	BIO3	-76.33404	1.26732	0.2602708	1.21269	0.2707993	-0.01775	156.67	-6.82315	0.18614
X16364.232.A	BIO6	-43.43655	1.26717	0.2602990	1.16178	0.2810975	-0.03101	90.87	13.19299	1.13746
M002.193.T	BIO13	-49.50554	1.26371	0.2609499	1.24451	0.2646044	-0.02729	103.01	3.70363	-0.01344
X4312.255.T	radJan	-47.59689	1.25938	0.2617685	1.13232	0.2872812	-0.02841	99.19	-9.83834	0.00229
X4312.303.G	BIO3	-45.61667	1.25526	0.2625509	1.30171	0.2539010	-0.02968	95.23	5.54873	-0.23935
M007B2.340.A	radJan	-60.72609	1.24982	0.2635861	1.15915	0.2816412	-0.02241	125.45	-7.99811	0.00190
M002.063.C	radJan	-72.84889	1.24364	0.2647703	1.18283	0.2767812	-0.01876	149.70	-6.55644	0.00162
M002.353.A	latitude	-61.14887	1.24212	0.2650632	1.22017	0.2693266	-0.02232	126.30	57.09904	-1.13313
X16364.232.T	BIO2	-87.31133	1.23983	0.2655041	1.22227	0.2689159	-0.01570	178.62	3.04094	-0.34509
M007CC2.083.T	radJan	-69.96307	1.23531	0.2663766	1.25827	0.2619790	-0.01959	143.93	-4.19570	0.00155
X4312.122.G	BIO6	-59.46261	1.23226	0.2669676	1.16459	0.2805162	-0.02303	122.93	10.18306	0.88961
X9644_2.023.G	vapDec	-49.03644	1.22237	0.2688958	1.19695	0.2739315	-0.02797	102.07	-1.47071	7.25762
M007D2.242.A	radOct	-45.38289	1.22005	0.2693502	1.27389	0.2590390	-0.03022	94.77	10.23377	-0.00163
X8398_2.266.A	elevation	-61.16475	1.21036	0.2712608	1.20299	0.2727248	-0.02258	126.33	-2.32088	0.00087
X4312.255.T	BIO13	-47.62152	1.21013	0.2713069	1.19134	0.2750602	-0.02892	99.24	-3.78176	0.01349
M007D2.233.T	radJan	-57.55675	1.20489	0.2723469	1.11218	0.2916094	-0.02403	119.11	-8.21119	0.00193
X9644_2.219.A	BIO15	-81.34524	1.19680	0.2739617	1.17707	0.2779537	-0.01710	166.69	-2.06101	0.04259

M007B2.163.C	BIO15	-59.28051	1.19512	0.2742986	1.15625	0.2822446	-0.02342	122.56	3.29379	-0.05317
X4312.245.A	radJan	-53.16190	1.19343	0.2746391	1.23476	0.2664830	-0.02610	110.32	4.43854	-0.00181
X9644_2.047.G	latitude	-83.10766	1.19325	0.2746749	1.18263	0.2768217	-0.01677	170.22	43.47337	-0.89488
M002.353.A	BIO15	-61.17469	1.19047	0.2752354	1.18980	0.2753699	-0.02274	126.35	-0.20184	0.05054
X4312.236.G	BIO14	-86.55914	1.18956	0.2754191	1.18020	0.2773155	-0.01612	177.12	0.91196	-0.02312
M002.040.C	latitude	-83.16615	1.18550	0.2762386	1.17479	0.2784198	-0.01680	170.33	43.30139	-0.87754
X4312.099.C	DD18	-57.95064	1.18470	0.2764004	1.23245	0.2669314	-0.02404	119.90	-1.73121	0.00955
X4312.400.T	vapDec	-54.88309	1.18394	0.2765555	1.16984	0.2794347	-0.02538	113.77	-4.48315	6.75073
M002.278.G	radJan	-45.65253	1.18353	0.2766393	1.06305	0.3025195	-0.03045	95.31	-9.89619	0.00228
X16364.320.A	BIO2	-74.17906	1.18195	0.2769599	1.15360	0.2827960	-0.01884	152.36	4.24225	-0.38049
M007B2.316.A	CMD	-85.45771	1.17743	0.2778800	1.16223	0.2810031	-0.01640	174.92	0.39449	-0.01763
M007D2.108.T	vapDec	-43.60267	1.16755	0.2799044	1.14852	0.2838582	-0.03205	91.21	-5.34143	7.80969
X16364.232.T	radJan	-87.34780	1.16688	0.2800438	1.14935	0.2836846	-0.01611	178.70	4.70261	-0.00135
M002.380.A	longitude	-59.69610	1.16315	0.2808139	1.19981	0.2733592	-0.02353	123.39	11.43615	-0.66734
X16364.321.T	BIO14	-41.35963	1.16233	0.2809837	1.18798	0.2757379	-0.03383	86.72	0.29170	0.03609
M007D2.194.T	BIO3	-86.30898	1.15900	0.2816735	1.15355	0.2828067	-0.01635	176.62	4.79333	-0.15937
X3870.349.C	vapDec	-57.96688	1.15222	0.2830842	1.12770	0.2882655	-0.02432	119.93	1.10385	-6.53569
X9644_2.028.G	elevation	-44.24467	1.14223	0.2851819	1.10915	0.2922675	-0.03188	92.49	-0.71240	-0.00111
M007D2.108.T	BIO2	-43.62217	1.12857	0.2880815	1.08289	0.2980522	-0.03249	91.24	-6.76787	0.54018
X16364.137.T	CMD	-54.56849	1.12768	0.2882716	1.22245	0.2688806	-0.02605	113.14	-1.81642	0.02120
X16364.098.A	latitude	-86.70983	1.12642	0.2885397	1.11733	0.2904938	-0.01646	177.42	41.42380	-0.84272
M007B2.245.G	BIO3	-84.07472	1.11984	0.2899527	1.11930	0.2900692	-0.01702	172.15	-4.62586	0.15890
M007B2.340.A	BIO3	-60.79139	1.11923	0.2900851	1.04786	0.3060013	-0.02348	125.58	-8.15064	0.21040
M007CC2.251.A	BIO13	-77.29177	1.11391	0.2912336	1.10768	0.2925858	-0.01854	158.58	-2.12044	0.00935
M007D2.242.A	longitude	-45.43621	1.11341	0.2913415	1.16528	0.2803733	-0.03138	94.87	13.02744	-0.77430
M007B2.163.G	longitude	-79.64435	1.11287	0.2914599	1.07160	0.3005851	-0.01800	163.29	12.01539	-0.58196
M007B2.316.A	BIO15	-85.49110	1.11064	0.2919422	1.10349	0.2935006	-0.01679	174.98	-1.01386	0.03909
X16364.320.A	radOct	-74.21490	1.11025	0.2920279	1.12504	0.2888349	-0.01932	152.43	-7.66530	0.00115
M007D2.242.A	BIO15	-45.43829	1.10926	0.2922437	1.10972	0.2921423	-0.03143	94.88	-0.03708	-0.05962
X16364.137.T	BIO14	-54.57936	1.10593	0.2929675	1.12097	0.2897092	-0.02625	113.16	-0.11984	-0.02955
X8398_2.201.A	BIO13	-47.67707	1.09902	0.2944802	1.06356	0.3024044	-0.03008	99.35	-0.22678	-0.01309
M007B2.316.A	radiation	-85.49751	1.09782	0.2947450	1.08758	0.2970082	-0.01686	175.00	15.01177	-0.00137
M007B2.340.A	radOct	-60.80259	1.09683	0.2949631	1.02544	0.3112319	-0.02366	125.61	-12.22220	0.00143
M002.033.C	BIO2	-70.64594	1.09628	0.2950843	1.09334	0.2957316	-0.02039	145.29	-2.20361	0.36467
X4312.293.T	DD18	-76.42212	1.09116	0.2962145	1.03791	0.3083084	-0.01890	156.84	-0.77766	-0.00828
M002.063.C	radOct	-72.92610	1.08923	0.2966422	1.03953	0.3079313	-0.01981	149.85	-10.14639	0.00121
X4312.303.G	vapDec	-45.69997	1.08865	0.2967700	1.07342	0.3001738	-0.03148	95.40	-5.05369	7.31114
M002.063.C	CMD	-72.92761	1.08621	0.2973126	0.96626	0.3256135	-0.01983	149.86	-0.88030	-0.02091
X16364.232.A	BIO13	-43.52727	1.08573	0.2974183	1.06856	0.3012717	-0.03306	91.05	3.92560	-0.01350
X8398_2.126.G	BIO13	-54.93355	1.08302	0.2980228	1.07214	0.3004626	-0.02629	113.87	-3.25958	0.01161
M007D2.242.A	BIO2	-45.45275	1.08033	0.2986241	1.04091	0.3076108	-0.03174	94.91	-6.42053	0.51188
X5811.397.G	radiation	-45.45323	1.07938	0.2988374	1.05283	0.3048566	-0.03175	94.91	-20.60879	0.00211
M002.193.G	vapDec	-85.92114	1.07665	0.2994474	1.06597	0.3018575	-0.01691	175.84	-1.57570	4.76872
X9644_2.219.A	radiation	-81.40552	1.07625	0.2995376	1.06226	0.3026998	-0.01784	166.81	14.61036	-0.00142
M007B2.316.A	radJan	-85.50977	1.07330	0.3002002	1.06930	0.3011042	-0.01701	175.02	-4.20657	0.00131
X3870.096.C	radiation	-43.53449	1.07128	0.3006568	1.04186	0.3073903	-0.03323	91.07	-21.41507	0.00220
M002.080.C	radiation	-85.20824	1.06854	0.3012746	1.05881	0.3034867	-0.01709	174.42	-14.92775	0.00136
X3870.069.A	elevation	-53.06324	1.06802	0.3013942	1.03774	0.3083471	-0.02735	110.13	-0.88037	-0.00092
M002.193.T	BIO3	-49.60474	1.06531	0.3020076	1.10089	0.2940718	-0.02927	103.21	-4.78296	0.21045
X3870.096.C	BIO3	-43.53840	1.06346	0.3024267	1.10294	0.2936229	-0.03332	91.08	-5.07655	0.22658
M002.411.T	radJan	-87.62985	1.05933	0.3033691	1.05280	0.3048635	-0.01668	179.26	4.18724	-0.00127

X16364.392.C	radiation	-83.67992	1.05563	0.3042150	1.04264	0.3072091	-0.01748	171.36	-14.22513	0.00137
M002.193.G	BIO6	-85.93374	1.05145	0.3051736	1.03292	0.3094741	-0.01705	175.87	6.44148	0.62297
M007B2.376.A	BIO14	-41.30676	1.05119	0.3052343	1.07495	0.2998304	-0.03525	86.61	-0.33811	-0.03483
M002.040.C	BIO3	-83.23531	1.04718	0.3061567	1.02972	0.3102244	-0.01763	170.47	5.07834	-0.15276
M007B2.163.G	radiation	-79.67781	1.04595	0.3064408	1.03793	0.3083040	-0.01842	163.36	15.75974	-0.00141
M007B2.163.C	BIO14	-59.35551	1.04512	0.3066329	1.05754	0.3037774	-0.02467	122.71	0.03735	0.02771
M007B2.164.A	CMD	-73.92360	1.04505	0.3066495	0.93528	0.3334953	-0.01985	151.85	-0.84626	-0.02018
X3870.179.A	CMD	-53.07522	1.04406	0.3068789	1.13554	0.2865960	-0.02758	110.15	-1.88298	0.02082
M007CC2.186.A	DD18	-85.44642	1.03951	0.3079360	1.02118	0.3122405	-0.01722	174.89	0.09362	0.00718
X4312.122.A	BIO14	-80.08722	1.03412	0.3091930	1.03383	0.3092601	-0.01840	164.17	-0.48494	0.02247
M007B2.361.A	CMD	-54.61571	1.03324	0.3093993	0.84927	0.3567589	-0.02691	113.23	-1.53559	-0.02655
X3870.450.T	radiation	-49.47772	1.03314	0.3094218	1.00871	0.3152130	-0.02967	102.96	19.30848	-0.00198
M007D2.371.C	longitude	-54.61630	1.03206	0.3096761	1.07029	0.3008809	-0.02692	113.23	11.33184	-0.66943
M007B2.082.T	longitude	-79.94130	1.03066	0.3100042	0.99538	0.3184303	-0.01845	163.88	-11.47290	0.55648
X9644_2.023.G	elevation	-49.13455	1.02615	0.3110651	1.01617	0.3134297	-0.02995	102.27	2.42935	-0.00097
M002.033.T	radiation	-53.37155	1.02528	0.3112707	1.00304	0.3165756	-0.02760	110.74	-18.25972	0.00186
M007D2.108.T	BIO14	-43.67448	1.02394	0.3115865	1.04616	0.3063941	-0.03368	91.35	-0.38008	-0.03286
M007CC2.083.G	DD18	-61.04961	1.02355	0.3116778	0.94445	0.3311351	-0.02417	126.10	1.32148	0.00954
M002.353.G	DD18	-78.98870	1.02072	0.3123494	0.97844	0.3225840	-0.01874	161.98	0.67212	0.00778
M007CC2.083.T	BIO14	-70.07118	1.01910	0.3127333	0.98678	0.3205309	-0.02112	144.14	2.48647	-0.02530
X9644_2.219.A	longitude	-81.43575	1.01579	0.3135194	0.98382	0.3212574	-0.01821	166.87	-11.11975	0.53911
M002.278.G	radiation	-45.73856	1.01147	0.3145513	1.00345	0.3164764	-0.03231	95.48	-23.60736	0.00201
M002.282.T	radOct	-71.47331	1.01118	0.3146192	0.96352	0.3263008	-0.02076	146.95	-10.14935	0.00120
X4312.059.A	latitude	-49.49136	1.00586	0.3158972	0.98889	0.3200139	-0.02994	102.98	55.86260	-1.17685
M002.033.T	BIO3	-53.38241	1.00355	0.3164527	1.02769	0.3107022	-0.02780	110.76	-4.41357	0.19018
M002.282.T	BIO15	-71.47743	1.00294	0.3166003	0.98189	0.3217324	-0.02082	146.95	-2.53878	0.04282
X9644_2.023.G	radiation	-49.15164	0.99197	0.3192617	0.96935	0.3248428	-0.03029	102.30	-18.71112	0.00189
X4312.255.T	BIO3	-47.73820	0.97676	0.3230012	0.89749	0.3434545	-0.03134	99.48	-9.35354	0.23232
M007CC2.207.T	BIO15	-65.45683	0.97655	0.3230524	0.95279	0.3290101	-0.02292	134.91	2.83426	-0.04498
X4312.255.T	longitude	-47.73847	0.97622	0.3231326	0.88571	0.3466424	-0.03135	99.48	-17.59700	0.80361
M002.141.G	CMD	-87.98502	0.97531	0.3233596	0.95618	0.3281520	-0.01709	179.97	-0.22169	0.01606
M002.193.G	BIO2	-85.97194	0.97506	0.3234214	0.96819	0.3251309	-0.01749	175.94	-2.26991	0.30917
M007B2.305.C	BIO6	-47.47004	0.97444	0.3235755	0.91199	0.3395868	-0.03154	98.94	-10.99060	-0.92890
M007CC2.107.C	CMD	-53.27140	0.97442	0.3235798	0.79986	0.3711354	-0.02814	110.54	-1.61412	-0.02655
X8398_2.266.A	BIO13	-61.28619	0.96748	0.3253093	0.96085	0.3269725	-0.02455	126.57	-2.84444	0.01020
X8398_2.126.G	elevation	-54.99336	0.96339	0.3263345	0.95937	0.3273469	-0.02737	113.99	-2.50599	0.00083
M002.033.C	CMD	-70.71262	0.96293	0.3264495	0.86206	0.3531628	-0.02133	145.43	0.80511	0.02102
M007D2.194.T	elevation	-86.40703	0.96289	0.3264596	0.95643	0.3280873	-0.01748	176.81	-0.86770	0.00062
M007D2.242.A	latitude	-45.51217	0.96149	0.3268128	0.94032	0.3321959	-0.03303	95.02	-61.97545	1.22144
X3870.179.A	DD18	-53.11668	0.96114	0.3269003	1.00055	0.3171779	-0.02835	110.23	-1.90197	0.00901
X4312.122.A	radOct	-80.12377	0.96101	0.3269327	0.96762	0.3252747	-0.01885	164.25	-7.09723	0.00104
X3870.450.T	radOct	-49.51380	0.96099	0.3269383	0.88733	0.3462022	-0.03039	103.03	-13.44252	0.00153
M002.193.T	vapDec	-49.65786	0.95907	0.3274204	0.94887	0.3300064	-0.03033	103.32	4.56810	-6.49573
M007CC2.083.T	BIO2	-70.10400	0.95347	0.3288383	0.95326	0.3288902	-0.02158	144.21	-1.84082	0.34745
X16364.200.C	longitude	-86.88767	0.95101	0.3294633	0.94696	0.3304942	-0.01745	177.78	9.22222	-0.48503
M007D2.108.T	BIO6	-43.71393	0.94504	0.3309840	0.96788	0.3252107	-0.03457	91.43	6.49313	0.88623
X9644_2.028.G	radJan	-44.34484	0.94188	0.3317952	0.96967	0.3247618	-0.03412	92.69	4.24455	-0.00175
M002.410.A	BIO14	-88.23692	0.94059	0.3321270	0.93116	0.3345606	-0.01724	180.47	-1.05286	0.02038
M002.353.A	BIO6	-61.30028	0.93929	0.3324602	0.95397	0.3287114	-0.02478	126.60	-5.47590	-0.71534
X9644_2.024.G	radJan	-46.02766	0.93581	0.3333569	0.96198	0.3266876	-0.03295	96.06	4.16591	-0.00170
M002.410.A	BIO13	-88.23992	0.93460	0.3336716	0.92919	0.3350722	-0.01728	180.48	-1.01667	0.00784

M002.080.C	BIO14	-85.27556	0.93389	0.3338531	0.92850	0.3352534	-0.01788	174.55	0.76958	-0.02056
M007CC2.350.A	BIO6	-59.81123	0.93288	0.3341165	0.94816	0.3301877	-0.02544	123.62	-5.50795	-0.72407
X4312.255.T	BIO14	-47.76195	0.92927	0.3350533	0.88316	0.3473386	-0.03184	99.52	-3.66612	0.03184
X8398_2.201.A	CMD	-47.76933	0.91450	0.3389242	1.00502	0.3160999	-0.03199	99.54	-2.09162	0.02078
M002.193.T	BIO6	-49.68122	0.91236	0.3394897	0.85946	0.3538894	-0.03079	103.36	10.38069	0.87198
M007CC2.107.C	BIO6	-53.30531	0.90660	0.3410181	0.85876	0.3540845	-0.02877	110.61	-9.79963	-0.82588
M002.193.G	elevation	-86.00639	0.90616	0.3411355	0.90101	0.3425112	-0.01789	176.01	0.95863	-0.00060
M007B2.245.T	BIO2	-45.54027	0.90530	0.3413656	0.87476	0.3496411	-0.03364	95.08	6.05632	-0.47010
X4312.303.G	radOct	-45.79228	0.90404	0.3417017	0.94088	0.3320529	-0.03347	95.58	8.46733	-0.00140
M007D2.283.A	BIO6	-83.27877	0.90362	0.3418129	0.88733	0.3462032	-0.01849	170.56	-6.28437	-0.59566
M007CC2.350.G	DD18	-77.39835	0.90075	0.3425804	0.86360	0.3527325	-0.01991	158.80	0.75146	0.00741
M007D2.194.T	longitude	-86.44021	0.89654	0.3437123	0.89451	0.3442578	-0.01786	176.88	9.04590	-0.47913
M007B2.163.G	BIO15	-79.75291	0.89575	0.3439230	0.89374	0.3444651	-0.01935	163.51	-0.52632	0.03671
M002.278.G	BIO3	-45.79933	0.88994	0.3454928	0.81841	0.3656447	-0.03363	95.60	-9.28697	0.22793
M002.411.T	latitude	-87.71525	0.88853	0.3458754	0.88282	0.3474296	-0.01765	179.43	-36.83423	0.74665
M007CC2.251.A	radiation	-77.40837	0.88071	0.3480066	0.87005	0.3509404	-0.02003	158.82	13.40337	-0.00133
M007B2.163.G	BIO6	-79.76045	0.88068	0.3480165	0.88399	0.3471116	-0.01945	163.52	-4.99297	-0.58513
X3870.181.T	CMD	-73.34400	0.87949	0.3483404	0.91204	0.3395732	-0.02115	150.69	-1.11176	0.01627
X3870.069.A	BIO3	-53.15886	0.87678	0.3490851	0.81945	0.3653399	-0.02914	110.32	-8.14969	0.20124
X9644_2.219.A	CMD	-81.50573	0.87584	0.3493434	0.81632	0.3662595	-0.01906	167.01	-0.53873	-0.01680
M002.033.T	DD18	-53.44850	0.87137	0.3505764	0.90343	0.3418648	-0.02903	110.90	1.75313	-0.00843
M007CC2.207.C	radiation	-73.65825	0.87131	0.3505933	0.86006	0.3537205	-0.02111	151.32	-13.66984	0.00137
M007CC2.107.C	BIO3	-53.32359	0.87006	0.3509397	0.89576	0.3439202	-0.02911	110.65	4.03969	-0.18276
X5811.397.G	BIO14	-45.55839	0.86904	0.3512202	0.82613	0.3633935	-0.03404	95.12	3.70191	-0.03147
M007D2.283.A	BIO2	-83.29632	0.86853	0.3513630	0.86369	0.3527074	-0.01870	170.59	2.05952	-0.29737
X4312.236.G	BIO2	-86.72135	0.86513	0.3523071	0.85474	0.3552144	-0.01798	177.44	-2.81576	0.29124
X3870.096.C	BIO13	-43.64205	0.85617	0.3548126	0.84676	0.3574711	-0.03567	91.28	3.72578	-0.01208
X4312.122.A	CMD	-80.18026	0.84805	0.3571058	0.86388	0.3526550	-0.01955	164.36	0.80105	-0.01531
X4312.255.T	BIO2	-47.80738	0.83840	0.3598549	0.84379	0.3583165	-0.03278	99.61	1.63163	-0.41961
M002.020.C	BIO15	-65.38185	0.83743	0.3601321	0.82264	0.3644106	-0.02403	134.76	-2.53061	0.04197
M007CC2.251.A	BIO2	-77.43033	0.83680	0.3603145	0.83515	0.3607862	-0.02032	158.86	1.76076	-0.30649
M007B2.316.A	BIO13	-85.62837	0.83610	0.3605159	0.83092	0.3620057	-0.01838	175.26	-0.72433	0.00757
X16364.200.C	radJan	-86.94554	0.83525	0.3607583	0.83195	0.3617083	-0.01811	177.89	3.68573	-0.00113
M002.193.T	longitude	-49.72225	0.83029	0.3621887	0.86168	0.3532683	-0.03161	103.44	-10.43618	0.63437
M002.353.G	latitude	-79.08825	0.82161	0.3647089	0.81634	0.3662515	-0.01999	162.18	-37.03516	0.77079
M002.282.T	BIO13	-71.56897	0.81985	0.3652231	0.81655	0.3661918	-0.02209	147.14	-2.23731	0.00846
X4312.122.A	longitude	-80.19438	0.81979	0.3652417	0.82770	0.3629390	-0.01973	164.39	-8.56800	0.47711
M002.193.T	CMD	-49.72842	0.81795	0.3657816	0.67489	0.4113507	-0.03173	103.46	1.74897	0.02542
X4312.293.T	BIO6	-76.56062	0.81415	0.3668957	0.79351	0.3730398	-0.02070	157.12	-6.73075	-0.59886
M002.411.T	BIO2	-87.75458	0.80986	0.3681613	0.80158	0.3706220	-0.01809	179.51	-2.58396	0.27914
X4312.255.T	radOct	-47.82310	0.80696	0.3690215	0.74830	0.3870140	-0.03310	99.65	-12.82560	0.00144
X4312.303.G	radJan	-45.84089	0.80682	0.3690620	0.83750	0.3601123	-0.03453	95.68	3.59463	-0.00164
X4312.255.T	vapDec	-47.82578	0.80161	0.3706132	0.78601	0.3753088	-0.03316	99.65	0.55931	-6.15299
M007CC2.251.A	longitude	-77.44853	0.80039	0.3709760	0.81099	0.3678284	-0.02055	158.90	8.38716	-0.47609
X16364.200.C	latitude	-86.96319	0.79997	0.3711029	0.79558	0.3724184	-0.01831	177.93	34.66129	-0.71043
X16364.137.T	BIO15	-54.73256	0.79955	0.3712280	0.80168	0.3705904	-0.02903	113.47	-0.19992	-0.04448
M007CC2.333.G	radOct	-87.55622	0.79892	0.3714178	0.78658	0.3751377	-0.01820	179.11	-7.01576	0.00090
X16364.232.A	BIO14	-43.67142	0.79742	0.3718660	0.75894	0.3836620	-0.03634	91.34	3.77401	-0.03123
M002.040.C	CMD	-83.36276	0.79229	0.3734076	0.76322	0.3823238	-0.01915	170.73	0.13857	0.01494
X9644_2.047.G	elevation	-83.31097	0.78663	0.3751203	0.77952	0.3772889	-0.01919	170.62	0.11197	-0.00058
M007CC2.207.C	BIO13	-73.70186	0.78409	0.3758930	0.78125	0.3767600	-0.02170	151.40	2.10787	-0.00811

X3870.024.T	DD18	-35.15578	0.78116	0.3767881	0.68778	0.4069212	-0.04528	74.31	-2.01297	-0.01193
M007B2.275.A	BIO13	-54.74852	0.76762	0.3809551	0.76203	0.3826934	-0.02931	113.50	-2.99587	0.00980
M007D2.194.T	BIO14	-86.50585	0.76525	0.3816892	0.75570	0.3846775	-0.01861	177.01	-1.26178	0.01862
X4312.293.T	radiation	-76.58609	0.76321	0.3823255	0.75492	0.3849245	-0.02103	157.17	12.47541	-0.00125
X4312.293.T	vapDec	-76.58612	0.76316	0.3823415	0.75591	0.3846130	-0.02103	157.17	0.88084	-4.35102
X16364.232.A	elevation	-43.68917	0.76192	0.3827287	0.76034	0.3832233	-0.03674	91.38	2.93668	-0.00086
M007B2.245.T	radOct	-45.61224	0.76135	0.3829067	0.70523	0.4010319	-0.03521	95.22	13.00916	-0.00146
X9644_2.219.A	elevation	-81.56315	0.76098	0.3830208	0.75820	0.3838931	-0.01976	167.13	-1.18283	0.00056
X3870.450.T	DD18	-49.61788	0.75282	0.3855853	0.68718	0.4071254	-0.03248	103.24	-1.73523	-0.00950
M007B2.164.A	latitude	-74.06991	0.75242	0.3857102	0.74775	0.3871904	-0.02181	152.14	36.97424	-0.77298
M007B2.245.T	radJan	-45.61689	0.75205	0.3858283	0.69403	0.4047970	-0.03531	95.23	8.20778	-0.00180
X4312.400.T	DD18	-55.09922	0.75167	0.3859473	0.77996	0.3771534	-0.02928	114.20	-1.82619	0.00786
M007CC2.333.G	BIO13	-87.58066	0.75003	0.3864652	0.74711	0.3873932	-0.01848	179.16	-1.16418	0.00706
X3870.179.A	radJan	-53.22253	0.74944	0.3866533	0.77245	0.3794592	-0.03032	110.45	3.20025	-0.00144
M002.380.A	BIO3	-59.90392	0.74750	0.3872674	0.76542	0.3816364	-0.02698	123.81	3.49016	-0.15808
X9644_2.028.G	radOct	-44.44246	0.74665	0.3875405	0.77000	0.3802172	-0.03630	92.88	7.71589	-0.00126
M002.080.C	radJan	-85.37070	0.74362	0.3885047	0.74313	0.3886591	-0.01899	174.74	3.36842	-0.00107
M007CC2.333.G	radJan	-87.58572	0.73993	0.3896836	0.73004	0.3928699	-0.01853	179.17	-3.91736	0.00108
M007B2.082.T	BIO2	-80.08780	0.73766	0.3904110	0.73534	0.3911564	-0.02027	164.18	1.77603	-0.28330
M007D2.283.A	vapDec	-83.36274	0.73569	0.3910438	0.72993	0.3929055	-0.01949	170.73	1.16944	-4.04534
M007CC2.350.A	vapDec	-59.90990	0.73553	0.3910963	0.72558	0.3943194	-0.02708	123.82	-0.54617	5.05788
M007D2.201.A	vapDec	-87.62672	0.73507	0.3912450	0.73063	0.3926779	-0.01855	179.25	1.54707	-3.88635
M002.033.C	latitude	-70.82726	0.73364	0.3917061	0.72735	0.3937443	-0.02294	145.65	38.56638	-0.76695
X9644_2.047.G	BIO14	-83.33875	0.73108	0.3925321	0.72945	0.3930618	-0.01953	170.68	0.53990	-0.01849
M002.040.C	BIO14	-83.39389	0.73003	0.3928736	0.72153	0.3956433	-0.01952	170.79	1.21216	-0.01848
M002.353.G	longitude	-79.13456	0.72899	0.3932116	0.70724	0.4003614	-0.02057	162.27	9.88708	-0.46777
M007B2.275.A	BIO14	-54.77019	0.72429	0.3947406	0.69819	0.4033925	-0.02971	113.54	-3.05274	0.02567
X16364.320.A	elevation	-74.40843	0.72320	0.3950971	0.71420	0.3980535	-0.02191	152.82	0.40167	0.00059
M007CC2.107.C	vapDec	-53.40128	0.71467	0.3978985	0.70369	0.4015476	-0.03056	110.80	0.45125	-5.39051
M002.411.T	elevation	-87.80320	0.71262	0.3985760	0.70782	0.4001689	-0.01864	179.61	0.31619	-0.00052
M007CC2.083.T	radiation	-70.22842	0.70462	0.4012346	0.69636	0.4040093	-0.02334	144.46	-12.45289	0.00127
M007B2.164.A	BIO2	-74.09653	0.69918	0.4030588	0.69891	0.4031492	-0.02217	152.19	1.51827	-0.28943
X16364.392.C	BIO2	-83.85856	0.69833	0.4033442	0.69019	0.4061010	-0.01960	171.72	2.79187	-0.26695
X3870.096.C	radOct	-43.72137	0.69753	0.4036147	0.72487	0.3945526	-0.03747	91.44	-7.41223	0.00126
X5811.332.A	latitude	-53.41160	0.69402	0.4048004	0.68715	0.4071338	-0.03075	110.82	43.62707	-0.92482
M007CC2.207.C	latitude	-73.74756	0.69270	0.4052485	0.68756	0.4069955	-0.02232	151.50	37.52036	-0.74364
X8398_2.126.G	vapDec	-55.12900	0.69212	0.4054458	0.68219	0.4088349	-0.02981	114.26	0.43128	-5.19100
M002.193.G	latitude	-86.11358	0.69176	0.4055652	0.68843	0.4066973	-0.01913	176.23	-32.35730	0.66707
X4312.400.T	longitude	-55.13432	0.68146	0.4090839	0.70300	0.4017769	-0.02991	114.27	8.83433	-0.54187
X4312.059.A	radJan	-49.65718	0.67423	0.4115815	0.62971	0.4274606	-0.03326	103.31	-7.38621	0.00160
M002.353.A	DD18	-61.43371	0.67244	0.4122024	0.69335	0.4050283	-0.02694	126.87	1.58780	-0.00698
M002.033.C	elevation	-70.86030	0.66757	0.4139007	0.66645	0.4142928	-0.02340	145.72	1.47011	-0.00057
X16364.320.A	vapDec	-74.43671	0.66664	0.4142263	0.66362	0.4152856	-0.02229	152.87	2.66019	-4.10884
M002.380.A	BIO15	-59.94517	0.66501	0.4147973	0.66699	0.4141026	-0.02766	123.89	-0.24773	-0.03840
M007CC2.107.C	BIO14	-53.42690	0.66342	0.4153540	0.63971	0.4238169	-0.03103	110.85	-3.07707	0.02472
X16364.232.A	BIO15	-43.73941	0.66145	0.4160481	0.63928	0.4239720	-0.03788	91.48	3.73635	-0.04869
X4312.245.A	radiation	-53.42789	0.66144	0.4160515	0.65157	0.4195524	-0.03105	110.86	14.17796	-0.00149
X4312.059.A	BIO3	-49.66377	0.66105	0.4161893	0.62040	0.4308972	-0.03339	103.33	-7.77493	0.18534
M002.193.G	CMD	-86.12911	0.66072	0.4163073	0.63398	0.4259004	-0.01931	176.26	0.29930	0.01377
M007D2.371.C	BIO3	-54.80263	0.65940	0.4167733	0.67709	0.4105892	-0.03030	113.61	3.34016	-0.15799
M007B2.275.A	radiation	-54.80273	0.65920	0.4168417	0.64936	0.4203404	-0.03030	113.61	13.86582	-0.00145

X4312.207.C	BIO15	-47.89789	0.65739	0.4174846	0.66014	0.4165114	-0.03466	99.80	-0.48782	-0.04420
M002.141.G	BIO3	-88.14612	0.65311	0.4190017	0.64704	0.4211723	-0.01891	180.29	-3.86877	0.11784
X4312.099.C	BIO13	-58.21719	0.65161	0.4195390	0.64215	0.4229344	-0.02860	120.43	-0.40802	-0.00872
M007CC2.251.A	latitude	-77.52334	0.65079	0.4198319	0.64665	0.4213136	-0.02151	159.05	-35.04396	0.69637
M002.080.C	BIO15	-85.41716	0.65070	0.4198622	0.64872	0.4205707	-0.01953	174.83	0.67844	-0.02998
X16364.392.C	elevation	-83.88620	0.64307	0.4226014	0.63789	0.4244759	-0.01993	171.77	0.00629	0.00051
X16364.320.G	radJan	-66.67223	0.64188	0.4230323	0.61639	0.4323907	-0.02506	137.34	5.51426	-0.00124
M007B2.082.T	vapDec	-80.13646	0.64035	0.4235845	0.63535	0.4254014	-0.02088	164.27	0.93359	-3.86326
M002.353.A	BIO3	-61.44995	0.63995	0.4237300	0.65406	0.4186655	-0.02720	126.90	-3.10680	0.14429
M002.141.G	latitude	-88.15565	0.63406	0.4258705	0.63118	0.4269221	-0.01902	180.31	-30.97517	0.62857
X3870.450.T	longitude	-49.67786	0.63287	0.4263058	0.59093	0.4420608	-0.03368	103.36	-13.85209	0.61571
X9644_2.047.G	radOct	-83.38804	0.63249	0.4264433	0.62084	0.4307365	-0.02012	170.78	-6.73131	0.00084
M007CC2.251.A	BIO15	-77.53317	0.63112	0.4269456	0.63127	0.4268892	-0.02164	159.07	0.18703	-0.03158
M007CC2.107.C	elevation	-53.44625	0.62474	0.4292923	0.62403	0.4295523	-0.03139	110.89	-2.41792	0.00068
X16364.232.T	longitude	-87.61937	0.62374	0.4296605	0.61844	0.4316278	-0.01920	179.24	7.72679	-0.39339
M007B2.305.C	radJan	-47.64551	0.62351	0.4297462	0.58276	0.4452334	-0.03520	99.29	-7.36425	0.00158
X4312.303.G	BIO6	-45.93294	0.62271	0.4300410	0.63645	0.4250004	-0.03652	95.87	4.79428	0.70241
M007D2.371.C	BIO6	-54.82163	0.62140	0.4305275	0.63222	0.4265420	-0.03064	113.64	4.47917	0.63309
X4312.059.A	radOct	-49.68402	0.62055	0.4308435	0.58300	0.4451406	-0.03380	103.37	-11.17351	0.00123
M002.040.C	vapDec	-83.44893	0.61995	0.4310676	0.61662	0.4323068	-0.02018	170.90	-1.26789	3.63939
X9644_2.028.G	vapDec	-44.50598	0.61960	0.4311967	0.61296	0.4336751	-0.03771	93.01	-4.01215	5.50498
M002.063.C	BIO13	-73.16294	0.61556	0.4327037	0.61429	0.4331788	-0.02303	150.33	-1.96037	0.00719
X16364.098.A	BIO14	-86.96563	0.61482	0.4329793	0.61104	0.4343967	-0.01939	177.93	-0.81344	0.01652
X16364.098.A	radiation	-86.96632	0.61345	0.4334928	0.60974	0.4348845	-0.01940	177.93	-10.85752	0.00102
M002.282.T	CMD	-71.67393	0.60994	0.4348103	0.55955	0.4544425	-0.02355	147.35	-1.01181	-0.01567
M007B2.275.A	radJan	-54.82781	0.60903	0.4351519	0.57627	0.4477792	-0.03075	113.66	-6.50773	0.00140
M002.063.C	DD18	-73.16734	0.60675	0.4360155	0.58479	0.4444421	-0.02309	150.33	-0.89997	-0.00626
M002.193.T	elevation	-49.83594	0.60291	0.4374690	0.59130	0.4419178	-0.03388	103.67	1.20256	0.00071
M002.033.C	vapDec	-70.89320	0.60177	0.4379049	0.59717	0.4396595	-0.02387	145.79	-0.73247	4.02289
M002.063.C	BIO14	-73.17088	0.59967	0.4387042	0.58774	0.4432930	-0.02314	150.34	-1.99001	0.01862
X3870.349.C	BIO3	-58.24370	0.59859	0.4391181	0.57151	0.4496596	-0.02905	120.49	-6.46558	0.15401
M007B2.082.T	radJan	-80.15846	0.59634	0.4399778	0.58320	0.4450603	-0.02115	164.32	-4.21626	0.00104
M002.353.A	BIO2	-61.47624	0.58737	0.4434383	0.57647	0.4477000	-0.02762	126.95	4.10077	-0.30598
X9644_2.028.G	BIO3	-44.52213	0.58730	0.4434670	0.60486	0.4367295	-0.03807	93.04	3.35901	-0.16016
M002.040.C	longitude	-83.46704	0.58372	0.4448577	0.57706	0.4474668	-0.02039	170.93	7.77806	-0.38838
M007D2.194.T	vapDec	-86.59692	0.58311	0.4450940	0.57996	0.4463290	-0.01966	177.19	1.16206	-3.49164
X3870.096.G	latitude	-82.27058	0.58079	0.4460034	0.57800	0.4470981	-0.02071	168.54	31.45884	-0.62871
M007B2.361.A	BIO14	-54.84288	0.57890	0.4467447	0.58705	0.4435625	-0.03103	113.69	-0.51442	-0.02182
X3870.181.T	BIO2	-73.49472	0.57806	0.4470720	0.57861	0.4468567	-0.02319	150.99	1.26047	-0.26465
X16364.098.A	CMD	-86.98409	0.57790	0.4471348	0.56646	0.4516709	-0.01961	177.97	-0.01176	0.01244
M007B2.316.A	radOct	-85.75763	0.57759	0.4472601	0.57681	0.4475665	-0.01989	175.52	-5.54501	0.00077
M007CC2.083.G	longitude	-61.27298	0.57681	0.4475659	0.54997	0.4583304	-0.02780	126.55	11.20245	-0.50083
X16364.320.A	BIO13	-74.48174	0.57657	0.4476603	0.57180	0.4495439	-0.02289	152.96	0.04802	0.00691
X4312.122.G	elevation	-59.79142	0.57463	0.4484246	0.57404	0.4486590	-0.02851	123.58	2.10810	-0.00061
M007CC2.107.C	radiation	-53.47138	0.57447	0.4484888	0.56681	0.4515284	-0.03186	110.94	13.08005	-0.00139
X3870.024.T	radJan	-35.26045	0.57181	0.4495387	0.52574	0.4684030	-0.04822	74.52	-8.34412	0.00179
X9644_2.028.G	latitude	-44.53059	0.57039	0.4501056	0.56252	0.4532474	-0.03826	93.06	-46.65651	0.91521
X16364.320.A	BIO15	-74.48485	0.57035	0.4501202	0.56297	0.4530679	-0.02293	152.97	2.01274	-0.03117
M007B2.340.A	longitude	-61.06740	0.56719	0.4513762	0.54060	0.4621845	-0.02798	126.13	-11.27121	0.50480
X16364.321.T	longitude	-41.65829	0.56500	0.4522511	0.52170	0.4701159	-0.04095	87.32	14.98990	-0.65833
X9644_2.028.G	BIO6	-44.53404	0.56347	0.4528638	0.57563	0.4480290	-0.03834	93.07	4.67611	0.65937

X3870.096.C	radJan	-43.78859	0.56309	0.4530172	0.58306	0.4451159	-0.03899	91.58	-2.76293	0.00142
M002.353.A	CMD	-61.48852	0.56281	0.4531302	0.59555	0.4402797	-0.02782	126.98	1.56147	-0.01450
X16364.098.A	vapDec	-86.99181	0.56247	0.4532679	0.56003	0.4542501	-0.01969	177.98	1.45173	-3.37804
M007D2.371.C	radJan	-54.85115	0.56237	0.4533080	0.57840	0.4469393	-0.03118	113.70	2.59610	-0.00124
X4312.245.A	longitude	-53.47929	0.55865	0.4548059	0.57602	0.4478773	-0.03201	110.96	7.99590	-0.50177
M007B2.163.C	DD18	-59.60149	0.55315	0.4570334	0.57052	0.4500536	-0.02878	123.20	1.60865	-0.00650
X3870.181.T	radiation	-73.50722	0.55305	0.4570741	0.54808	0.4591052	-0.02336	151.01	10.79683	-0.00110
X16364.098.A	BIO2	-86.99953	0.54703	0.4595347	0.54354	0.4609713	-0.01978	178.00	2.02476	-0.22846
X4312.303.G	BIO13	-45.97194	0.54471	0.4604875	0.53437	0.4647744	-0.03736	95.94	-0.77907	-0.00940
M002.410.A	radJan	-88.43503	0.54436	0.4606319	0.54150	0.4618120	-0.01948	180.87	-3.09843	0.00091
X4312.207.C	CMD	-47.95526	0.54263	0.4613438	0.58818	0.4431219	-0.03585	99.91	-2.05704	0.01636
X4312.099.C	latitude	-58.27199	0.54200	0.4616059	0.53744	0.4634937	-0.02953	120.54	-39.59384	0.77474
M002.141.G	radJan	-88.20259	0.54018	0.4623588	0.53839	0.4631026	-0.01955	180.41	2.99183	-0.00091
M007B2.245.G	CMD	-84.36582	0.53764	0.4634129	0.54037	0.4622789	-0.02045	172.73	0.49156	-0.01194
X16364.137.T	BIO3	-54.86432	0.53602	0.4640850	0.54886	0.4587843	-0.03142	113.73	2.81166	-0.14142
X9644_2.219.A	vapDec	-81.67665	0.53400	0.4649308	0.53089	0.4662344	-0.02115	167.35	0.78396	-3.46040
X3870.069.A	longitude	-53.33161	0.53128	0.4660706	0.50248	0.4784124	-0.03236	110.66	-12.10603	0.53278
M007D2.371.C	CMD	-54.86738	0.52990	0.4666488	0.56715	0.4513920	-0.03147	113.73	-1.76581	0.01544
M002.033.T	vapDec	-53.62022	0.52793	0.4674790	0.52502	0.4687065	-0.03222	111.24	3.47643	-4.53939
X16364.320.G	BIO14	-66.73204	0.52227	0.4698768	0.52673	0.4679845	-0.02596	137.46	0.30933	0.01807
M002.040.C	DD18	-83.49831	0.52120	0.4703320	0.51565	0.4727017	-0.02077	171.00	0.14634	0.00510
X16364.320.A	latitude	-74.50943	0.52119	0.4703335	0.51814	0.4716369	-0.02326	153.02	32.32474	-0.63882
M002.353.G	BIO15	-79.23872	0.52067	0.4705576	0.51541	0.4728051	-0.02188	162.48	1.74630	-0.02859
M007CC2.186.T	CMD	-43.57531	0.51850	0.4714809	0.44091	0.5066832	-0.03971	91.15	1.95839	0.02136
X16364.098.A	BIO15	-87.01469	0.51670	0.4722512	0.51434	0.4732676	-0.01996	178.03	0.94621	-0.02645
M002.020.C	radOct	-65.54527	0.51061	0.4748762	0.49540	0.4815283	-0.02651	135.09	-7.55019	0.00085
X4312.245.A	elevation	-53.50423	0.50877	0.4756720	0.50088	0.4791141	-0.03247	111.01	-1.15555	-0.00062
X16364.232.A	latitude	-43.81763	0.50501	0.4773072	0.49829	0.4802521	-0.03965	91.64	46.33179	-0.90113
M002.020.C	BIO3	-65.54870	0.50375	0.4778585	0.48991	0.4839685	-0.02657	135.10	-5.07293	0.12444
X16364.392.C	longitude	-83.95706	0.50135	0.4789095	0.49317	0.4825156	-0.02077	171.91	7.62383	-0.36644
M002.193.G	radOct	-86.21000	0.49894	0.4799663	0.49207	0.4830040	-0.02025	176.42	5.81557	-0.00072
X4312.122.A	BIO3	-80.35522	0.49813	0.4803237	0.50188	0.4786764	-0.02172	164.71	-2.75663	0.10902
M007B2.361.A	vapDec	-54.88546	0.49374	0.4822622	0.48793	0.4848514	-0.03180	113.77	0.11993	-4.38311
X4312.099.C	longitude	-58.29798	0.49001	0.4839219	0.50323	0.4780848	-0.02998	120.60	7.19754	-0.45095
X16364.232.T	BIO15	-87.68706	0.48836	0.4846577	0.48620	0.4856263	-0.01997	179.37	0.93408	-0.02559
M007D2.233.T	BIO3	-57.91592	0.48655	0.4854682	0.46693	0.4944024	-0.03021	119.83	-6.01154	0.14036
X8398_2.126.G	latitude	-55.23216	0.48579	0.4858097	0.48268	0.4872100	-0.03167	114.46	35.42759	-0.75641
X4312.099.C	CMD	-58.30120	0.48357	0.4868083	0.51273	0.4739577	-0.03003	120.60	-1.65380	0.01385
X5811.332.A	DD18	-53.52060	0.47603	0.4902262	0.44762	0.5034652	-0.03278	111.04	-1.64541	-0.00706
M007CC2.083.T	BIO13	-70.34679	0.46789	0.4939596	0.46718	0.4942864	-0.02502	144.69	1.99528	-0.00644
X3870.181.T	vapDec	-73.55023	0.46704	0.4943512	0.46388	0.4958151	-0.02394	151.10	0.43908	-3.52506
X4312.211.G	BIO3	-87.48834	0.46375	0.4958745	0.46358	0.4959572	-0.02016	178.98	2.89529	-0.09910
X4312.211.G	radJan	-87.48844	0.46356	0.4959652	0.46340	0.4960409	-0.02016	178.98	2.64540	-0.00084
M007D2.242.A	BIO3	-45.76261	0.46062	0.4973365	0.47454	0.4909048	-0.03848	95.53	2.70809	-0.14860
X4312.059.A	BIO6	-49.76425	0.46009	0.4975806	0.44288	0.5057344	-0.03540	103.53	-7.78089	-0.60684
X16364.098.A	elevation	-87.04396	0.45816	0.4984861	0.45628	0.4993656	-0.02029	178.09	-0.33993	0.00042
M007CC2.186.T	radiation	-43.60699	0.45515	0.4999015	0.44938	0.5026277	-0.04043	91.21	-12.87334	0.00140
M007B2.316.A	elevation	-85.81971	0.45342	0.5007141	0.45125	0.5017429	-0.02061	175.64	-0.12278	0.00042
M007D2.201.A	elevation	-87.76852	0.45147	0.5016377	0.44986	0.5024028	-0.02016	179.54	-0.45181	0.00042
X9644_2.023.G	BIO2	-49.42367	0.44792	0.5033252	0.44801	0.5032824	-0.03577	102.85	-1.35517	0.33218
M002.141.G	radOct	-88.24908	0.44720	0.5036671	0.44575	0.5043605	-0.02008	180.50	4.88702	-0.00067

M002.353.G	CMD	-79.27558	0.44695	0.5037878	0.42424	0.5148311	-0.02235	162.55	0.71882	0.01217
X4312.211.G	BIO15	-87.49777	0.44490	0.5047650	0.44398	0.5052069	-0.02026	179.00	0.56582	-0.02451
X8398_2.266.A	latitude	-61.54772	0.44441	0.5050013	0.44223	0.5060481	-0.02878	127.10	31.53643	-0.67259
X4312.059.A	BIO14	-49.77288	0.44283	0.5057602	0.42937	0.5122968	-0.03558	103.55	-2.99653	0.02101
X16364.098.A	BIO3	-87.05249	0.44110	0.5065941	0.43958	0.5073244	-0.02039	178.10	-3.00493	0.09666
X4312.303.G	CMD	-46.02395	0.44070	0.5067870	0.47681	0.4898721	-0.03848	96.05	-2.12212	0.01522
M002.193.G	radJan	-86.24053	0.43787	0.5081533	0.43266	0.5106856	-0.02060	176.48	3.25863	-0.00084
M002.410.A	radOct	-88.48936	0.43570	0.5092052	0.43359	0.5102304	-0.02009	180.98	-4.91549	0.00066
M007CC2.083.G	BIO2	-61.34442	0.43392	0.5100734	0.42721	0.5133615	-0.02896	126.69	3.71120	-0.26192
X4312.099.C	BIO6	-58.32605	0.43389	0.5100880	0.44032	0.5069667	-0.03046	120.65	3.32692	0.50358
M007B2.340.A	vapDec	-61.13513	0.43175	0.5111331	0.42782	0.5130588	-0.02908	126.27	0.10774	-3.80732
X3870.024.T	BIO6	-35.33116	0.43039	0.5117970	0.40679	0.5236028	-0.05021	74.66	-9.33195	-0.73301
X4312.303.G	latitude	-46.02932	0.42995	0.5120133	0.42561	0.5141489	-0.03860	96.06	-41.57956	0.80580
X9644_2.219.A	BIO13	-81.73050	0.42629	0.5138146	0.42573	0.5140895	-0.02181	167.46	-1.38203	0.00559
X4312.236.G	radiation	-86.94086	0.42612	0.5138982	0.42408	0.5149067	-0.02050	177.88	8.82428	-0.00085
X4312.245.A	BIO3	-53.54573	0.42576	0.5140752	0.43611	0.5090060	-0.03324	111.09	2.34299	-0.12905
M007B2.340.A	latitude	-61.13939	0.42323	0.5153285	0.42137	0.5162550	-0.02915	126.28	30.96751	-0.66061
X4312.293.T	BIO13	-76.75655	0.42229	0.5157963	0.42175	0.5160636	-0.02324	157.51	-1.67767	0.00579
X9644_2.047.G	vapDec	-83.49541	0.41777	0.5180533	0.41656	0.5186582	-0.02140	170.99	-1.67888	3.01592
X3870.179.A	elevation	-53.38907	0.41635	0.5187661	0.41053	0.5216988	-0.03343	110.78	-1.20202	-0.00057
M002.080.C	DD18	-85.53526	0.41450	0.5196940	0.41562	0.5191282	-0.02091	175.07	-0.39386	0.00449
M007D2.194.T	DD18	-86.68134	0.41427	0.5198102	0.41499	0.5194487	-0.02063	177.36	-0.34056	0.00453
M002.020.C	BIO6	-65.59392	0.41329	0.5203029	0.40535	0.5243414	-0.02725	135.19	-5.69610	-0.46992
M007B2.376.A	BIO3	-41.62601	0.41269	0.5206052	0.38947	0.5325768	-0.04288	87.25	-7.39666	0.16429
X4312.303.G	BIO14	-46.03908	0.41044	0.5217470	0.41759	0.5181401	-0.03881	96.08	-0.94605	-0.02039
X3870.069.A	BIO13	-53.39203	0.41043	0.5217517	0.40537	0.5243308	-0.03349	110.78	-0.75972	-0.00740
X3870.096.G	BIO3	-82.35647	0.40901	0.5224737	0.40305	0.5255167	-0.02175	168.71	3.71230	-0.09793
X5811.332.A	elevation	-53.55416	0.40891	0.5225212	0.40915	0.5223990	-0.03340	111.11	-2.28768	0.00055
X3870.349.C	elevation	-58.34199	0.40199	0.5260609	0.40238	0.5258603	-0.03073	120.68	-2.06735	0.00052
M007CC2.186.T	BIO2	-43.63358	0.40197	0.5260748	0.40519	0.5244235	-0.04104	91.27	-0.53877	0.30555
X4312.059.A	longitude	-49.79337	0.40184	0.5261396	0.38102	0.5370573	-0.03599	103.59	-11.42977	0.49122
X4312.255.T	BIO6	-48.02608	0.40099	0.5265766	0.38653	0.5341268	-0.03731	100.05	-7.62389	-0.58270
X16364.232.A	BIO2	-43.86977	0.40073	0.5267129	0.40416	0.5249501	-0.04084	91.74	-0.53353	0.30699
M007B2.245.G	longitude	-84.43473	0.39981	0.5271893	0.40119	0.5264762	-0.02127	172.87	-5.88369	0.32422
X4312.122.A	BIO15	-80.40441	0.39975	0.5272204	0.39999	0.5270920	-0.02233	164.81	-0.10922	0.02445
X16364.321.T	BIO3	-41.74268	0.39623	0.5290444	0.37506	0.5402590	-0.04296	87.49	7.20871	-0.15820
M007B2.082.T	radOct	-80.26054	0.39219	0.5311486	0.38558	0.5346317	-0.02242	164.52	-5.74026	0.00068
X16364.320.A	BIO6	-74.57398	0.39209	0.5312038	0.39501	0.5296786	-0.02413	153.15	-3.00776	-0.40903
M007B2.245.T	BIO6	-45.79698	0.39186	0.5313234	0.39972	0.5272336	-0.03922	95.59	-3.42655	-0.55921
M007D2.283.A	BIO3	-83.53522	0.39073	0.5319152	0.39218	0.5311556	-0.02155	171.07	2.50060	-0.09401
M007B2.340.A	elevation	-61.15660	0.38880	0.5329294	0.38872	0.5329747	-0.02943	126.31	-1.93086	0.00049
X4312.255.T	CMD	-48.03232	0.38852	0.5330771	0.34328	0.5579441	-0.03744	100.06	-1.85571	-0.01701
X3870.349.C	radiation	-58.35089	0.38419	0.5353676	0.38384	0.5355547	-0.03088	120.70	-12.99787	0.00107
M007B2.305.C	radOct	-47.76648	0.38156	0.5367671	0.36371	0.5464542	-0.03773	99.53	-9.31903	0.00098
M002.080.C	BIO3	-85.55336	0.37829	0.5385197	0.37490	0.5403431	-0.02112	175.11	-3.21471	0.09114
M007D2.371.C	radOct	-54.94337	0.37793	0.5387154	0.38730	0.5337239	-0.03285	113.89	4.55295	-0.00083
M002.410.A	CMD	-88.51865	0.37712	0.5391487	0.37353	0.5410837	-0.02042	181.04	0.09095	-0.00995
M007B2.266.A	vapDec	-53.24711	0.37477	0.5404152	0.37410	0.5407768	-0.03392	110.49	-3.32135	3.86403
X3870.179.A	vapDec	-53.40998	0.37454	0.5405386	0.37363	0.5410339	-0.03382	110.82	-3.34972	3.90001
M007CC2.207.T	BIO2	-65.75829	0.37363	0.5410319	0.36897	0.5435661	-0.02750	135.52	3.31769	-0.23236
M002.278.G	BIO6	-46.05786	0.37288	0.5414373	0.38015	0.5375212	-0.03922	96.12	3.28390	0.54639

M007CC2.350.G	BIO6	-77.66276	0.37194	0.5419474	0.37429	0.5406755	-0.02330	159.33	-2.92806	-0.39003
X16364.137.T	radiation	-54.94751	0.36964	0.5432012	0.36922	0.5434287	-0.03292	113.90	-13.21703	0.00108
X3870.024.T	radOct	-35.36224	0.36824	0.5439638	0.34593	0.5564261	-0.05108	74.72	-10.77416	0.00114
X4312.122.G	BIO14	-59.89515	0.36718	0.5445433	0.35926	0.5489158	-0.03023	123.79	2.40799	-0.01678
M007CC2.186.T	latitude	-43.65151	0.36611	0.5451307	0.36350	0.5465674	-0.04145	91.30	-35.20672	0.75978
X16364.321.T	radOct	-41.75891	0.36377	0.5464196	0.34493	0.5569956	-0.04335	87.52	9.99909	-0.00104
M002.080.C	radOct	-85.56100	0.36301	0.5468373	0.36328	0.5466901	-0.02121	175.12	4.23139	-0.00060
X4312.207.C	vapDec	-48.04536	0.36245	0.5471512	0.36137	0.5477490	-0.03771	100.09	-3.63360	4.08565
X16364.321.T	radJan	-41.76000	0.36160	0.5476191	0.34224	0.5585374	-0.04338	87.52	6.60227	-0.00129
M007B2.266.A	latitude	-53.25451	0.35997	0.5485214	0.35741	0.5499488	-0.03406	110.51	-34.63169	0.67027
X16364.320.G	radOct	-66.81400	0.35834	0.5494287	0.34844	0.5549980	-0.02718	137.63	6.80673	-0.00074
X5811.332.A	radOct	-53.58054	0.35616	0.5506480	0.34218	0.5585732	-0.03389	111.16	-8.26373	0.00086
M007D2.283.A	DD18	-83.55293	0.35531	0.5511229	0.35760	0.5498426	-0.02176	171.11	-0.55242	0.00429
X3870.024.T	CMD	-35.37149	0.34975	0.5542565	0.30033	0.5836746	-0.05134	74.74	-2.07692	-0.01929
M007CC2.083.G	BIO14	-61.38658	0.34960	0.5543410	0.35311	0.5523604	-0.02965	126.77	0.63071	0.01565
M007D2.283.A	elevation	-83.55662	0.34792	0.5552934	0.34735	0.5556193	-0.02181	171.11	-0.85449	0.00038
M002.380.A	BIO6	-60.10379	0.34776	0.5553856	0.35243	0.5527428	-0.03030	124.21	2.80683	0.44535
X16364.392.C	BIO3	-84.03500	0.34547	0.5566910	0.34677	0.5559460	-0.02170	172.07	-2.27691	0.08744
M007B2.163.G	BIO14	-80.03042	0.34072	0.5594125	0.33706	0.5615295	-0.02281	164.06	1.40703	-0.01334
X4312.400.T	radOct	-55.30502	0.34008	0.5597826	0.34813	0.5551717	-0.03299	114.61	4.15406	-0.00078
X5811.332.A	radJan	-53.59006	0.33712	0.5614980	0.32404	0.5691890	-0.03407	111.18	-5.33581	0.00104
X4312.293.T	BIO14	-76.79969	0.33601	0.5621418	0.33757	0.5612326	-0.02380	157.60	-0.19614	-0.01328
M007B2.361.A	radJan	-54.96602	0.33262	0.5641223	0.32021	0.5714793	-0.03326	113.93	-5.19134	0.00102
X8398_2.126.G	BIO6	-55.30999	0.33013	0.5655848	0.32131	0.5708202	-0.03308	114.62	-6.33801	-0.47760
M002.033.T	BIO14	-53.72052	0.32733	0.5672368	0.32040	0.5713695	-0.03408	111.44	2.49097	-0.01668
M007CC2.350.G	longitude	-77.68583	0.32580	0.5681433	0.31952	0.5718975	-0.02360	159.37	6.98207	-0.31468
X16364.320.G	longitude	-66.83063	0.32507	0.5685778	0.31595	0.5740494	-0.02743	137.66	8.05811	-0.34933
X3870.096.C	elevation	-43.91142	0.31744	0.5731530	0.31280	0.5759687	-0.04178	91.82	1.55619	0.00056
M007B2.164.A	BIO13	-74.28749	0.31726	0.5732561	0.31692	0.5734631	-0.02473	152.57	-1.64577	0.00513
M002.193.G	radiation	-86.30122	0.31650	0.5737189	0.31579	0.5741518	-0.02130	176.60	8.28581	-0.00074
M002.282.T	longitude	-71.82114	0.31552	0.5743124	0.30800	0.5789122	-0.02559	147.64	-7.48215	0.32820
M007D2.108.T	longitude	-44.02877	0.31536	0.5744104	0.32545	0.5683532	-0.04169	92.06	6.24664	-0.42970
X4312.059.A	BIO2	-49.83684	0.31491	0.5746855	0.31687	0.5734977	-0.03686	103.67	0.27720	-0.25093
M007CC2.083.G	BIO13	-61.40393	0.31490	0.5746871	0.31245	0.5761815	-0.02993	126.81	0.68272	0.00583
M002.193.G	BIO3	-86.30318	0.31258	0.5760996	0.31326	0.5756841	-0.02132	176.61	-2.22492	0.08203
X8398_2.201.A	BIO3	-48.07070	0.31176	0.5766022	0.29928	0.5843316	-0.03824	100.14	-5.97924	0.12671
M007CC2.350.A	elevation	-60.12186	0.31163	0.5766821	0.31192	0.5765056	-0.03059	124.24	1.95408	-0.00045
M007B2.164.A	BIO15	-74.29045	0.31134	0.5768576	0.30879	0.5784238	-0.02477	152.58	-1.72480	0.02298
M007CC2.107.C	DD18	-53.60307	0.31108	0.5770163	0.29678	0.5859106	-0.03431	111.21	-1.66406	-0.00564
M007CC2.207.C	BIO14	-73.93934	0.30912	0.5782180	0.30499	0.5807683	-0.02491	151.88	1.72819	-0.01331
M007D2.194.T	CMD	-86.73449	0.30797	0.5789271	0.30211	0.5825636	-0.02125	177.47	-0.21504	-0.00917
M007D2.242.A	BIO13	-45.83966	0.30652	0.5798238	0.30314	0.5819185	-0.04015	95.68	-1.06782	-0.00704
M007B2.163.C	BIO2	-59.72626	0.30361	0.5816256	0.29987	0.5839623	-0.03087	123.45	3.42613	-0.22429
M007D2.201.A	BIO3	-87.84291	0.30270	0.5821955	0.30194	0.5826695	-0.02101	179.69	2.52452	-0.08093
M002.410.A	longitude	-88.55632	0.30178	0.5827660	0.30097	0.5832760	-0.02085	181.11	-5.26299	0.27234
X4312.099.C	BIO3	-58.39214	0.30171	0.5828139	0.30759	0.5791651	-0.03159	120.78	1.74500	-0.10425
X5811.332.A	longitude	-53.60790	0.30143	0.5829847	0.28969	0.5904190	-0.03440	111.22	-9.45910	0.39637
M007B2.305.C	DD18	-47.80734	0.29984	0.5839855	0.28375	0.5942558	-0.03858	99.61	-1.84276	-0.00605
X3870.179.A	radOct	-53.44748	0.29952	0.5841806	0.30648	0.5798457	-0.03452	110.89	3.84999	-0.00074
X4312.059.A	BIO13	-49.84777	0.29304	0.5882760	0.29256	0.5885869	-0.03707	103.70	-2.73479	0.00643
X5811.332.A	radiation	-53.61211	0.29300	0.5883043	0.29289	0.5883716	-0.03448	111.22	-12.23482	0.00098

X4312.099.C	BIO14	-58.39719	0.29161	0.5891918	0.29482	0.5871492	-0.03167	120.79	-0.78430	-0.01473
X4312.099.C	BIO15	-58.39832	0.28934	0.5906434	0.29066	0.5897953	-0.03169	120.80	-0.70805	-0.02575
M002.033.C	longitude	-71.05011	0.28795	0.5915360	0.28237	0.5951548	-0.02607	146.10	6.85373	-0.30539
X3870.179.A	latitude	-53.45367	0.28716	0.5920466	0.28568	0.5930046	-0.03464	110.91	-30.84802	0.59302
M007CC2.107.C	BIO13	-53.61525	0.28672	0.5923281	0.28647	0.5924933	-0.03454	111.23	-2.56584	0.00608
M007B2.361.A	latitude	-54.98906	0.28654	0.5924474	0.28495	0.5934719	-0.03368	113.98	-30.38818	0.58508
M007B2.163.C	elevation	-59.73507	0.28600	0.5927960	0.28368	0.5943008	-0.03101	123.47	1.08399	0.00043
M007D2.194.T	BIO13	-86.74594	0.28508	0.5933930	0.28471	0.5936321	-0.02138	177.49	-0.85408	0.00437
X9644_2.047.G	BIO3	-83.56197	0.28463	0.5936809	0.28192	0.5954443	-0.02219	171.12	-3.01864	0.08114
X3870.096.C	BIO6	-43.92828	0.28371	0.5942802	0.27463	0.6002418	-0.04216	91.86	7.11527	0.51599
M002.131.G	CMD	-46.10306	0.28248	0.5950803	0.25386	0.6143701	-0.04019	96.21	-1.94020	-0.01470
X16364.232.T	vapDec	-87.79041	0.28166	0.5956151	0.28100	0.5960440	-0.02114	179.58	-0.90208	2.38821
M007B2.266.A	radOct	-53.29541	0.27817	0.5979061	0.28461	0.5936929	-0.03483	110.59	3.73585	-0.00073
X16364.392.T	BIO6	-49.85540	0.27778	0.5981569	0.28222	0.5952503	-0.03723	103.71	-2.48015	-0.44775
M007B2.275.A	radOct	-54.99392	0.27681	0.5987980	0.26775	0.6048418	-0.03377	113.99	-7.32609	0.00075
M007D2.233.T	elevation	-58.02112	0.27616	0.5992279	0.27623	0.5991862	-0.03201	120.04	-1.96705	0.00043
X4312.211.G	DD18	-87.58234	0.27577	0.5994896	0.27623	0.5991798	-0.02123	179.16	-0.30984	0.00364
X3870.096.C	vapDec	-43.93235	0.27557	0.5996226	0.27503	0.5999764	-0.04226	91.86	3.66317	-3.80835
X4312.293.T	latitude	-76.83055	0.27429	0.6004706	0.27349	0.6009974	-0.02420	157.66	-23.22271	0.45479
M002.033.C	BIO14	-71.05720	0.27377	0.6008172	0.27063	0.6029106	-0.02617	146.11	1.58247	-0.01251
X16364.320.A	CMD	-74.63499	0.27008	0.6032802	0.25814	0.6114035	-0.02494	153.27	0.90980	0.00978
M002.020.C	latitude	-65.66568	0.26977	0.6034831	0.26860	0.6042713	-0.02834	135.33	-25.07251	0.48790
M002.063.C	latitude	-73.33671	0.26801	0.6046701	0.26743	0.6050580	-0.02540	150.67	21.64239	-0.46131
X8398_2.201.A	DD18	-48.09336	0.26643	0.6057334	0.25352	0.6146105	-0.03871	100.19	-1.86369	-0.00562
X3870.096.C	DD18	-43.93751	0.26525	0.6065337	0.27417	0.6005482	-0.04237	91.88	2.18419	-0.00547
X4312.236.G	BIO13	-87.02171	0.26442	0.6070994	0.26381	0.6075137	-0.02143	178.04	0.24782	-0.00422
X8398_2.266.A	radiation	-61.63772	0.26442	0.6070996	0.26278	0.6082150	-0.03024	127.28	7.65617	-0.00085
X16364.232.A	vapDec	-43.93986	0.26054	0.6097464	0.25841	0.6112156	-0.04243	91.88	0.58471	3.68033
M007CC2.350.A	BIO15	-60.14834	0.25865	0.6110486	0.25572	0.6130735	-0.03103	124.30	2.33637	-0.02437
M007B2.275.A	BIO15	-55.00312	0.25842	0.6112048	0.25514	0.6134799	-0.03393	114.01	-2.53252	0.02577
M007CC2.186.A	vapDec	-85.83753	0.25729	0.6119896	0.25671	0.6123918	-0.02177	175.68	-0.73905	2.30559
M007D2.283.A	longitude	-83.60367	0.25383	0.6143888	0.25502	0.6135650	-0.02237	171.21	4.57414	-0.26021
M007B2.305.C	latitude	-47.83131	0.25189	0.6157459	0.25099	0.6163757	-0.03908	99.66	27.54959	-0.60076
M007B2.266.A	radJan	-53.30872	0.25155	0.6159824	0.25714	0.6120912	-0.03508	110.62	1.21030	-0.00086
X3870.181.T	BIO3	-73.65884	0.24982	0.6172034	0.25234	0.6154307	-0.02541	151.32	1.55500	-0.08072
M007CC2.350.G	elevation	-77.72439	0.24867	0.6180111	0.24868	0.6180070	-0.02409	159.45	1.18772	-0.00034
M007B2.245.G	radJan	-84.51054	0.24819	0.6183540	0.24894	0.6178217	-0.02216	173.02	-1.76282	0.00063
M007D2.108.T	elevation	-44.06268	0.24753	0.6188176	0.24464	0.6208768	-0.04246	92.13	-1.62733	-0.00050
M007D2.108.T	radOct	-44.06397	0.24495	0.6206561	0.23524	0.6276670	-0.04249	92.13	-8.26028	0.00082
M007CC2.207.C	BIO15	-73.97170	0.24441	0.6210397	0.24263	0.6223159	-0.02534	151.94	1.70420	-0.02052
X4312.122.G	radOct	-59.95759	0.24230	0.6225484	0.24683	0.6193190	-0.03127	123.92	-3.24144	0.00063
X3870.069.A	radiation	-53.47618	0.24213	0.6226737	0.24219	0.6226282	-0.03506	110.95	-11.36491	0.00090
M007CC2.207.T	BIO14	-65.82436	0.24148	0.6231372	0.24343	0.6217414	-0.02850	135.65	0.65901	0.01247
X3870.024.T	longitude	-35.42571	0.24129	0.6232765	0.22967	0.6317675	-0.05287	74.85	-10.87078	0.44690
M002.033.C	BIO6	-71.07353	0.24109	0.6234176	0.23833	0.6254183	-0.02640	146.15	4.21878	0.33933
M007CC2.107.C	latitude	-53.63925	0.23872	0.6251303	0.23760	0.6259436	-0.03498	111.28	-28.33261	0.54159
X4312.400.T	BIO15	-55.35670	0.23670	0.6265968	0.23782	0.6257876	-0.03392	114.71	-0.88156	-0.02426
M007CC2.350.G	BIO13	-77.73100	0.23546	0.6275022	0.23461	0.6281260	-0.02418	159.46	0.28849	0.00431
M007D2.242.A	BIO6	-45.87527	0.23529	0.6276283	0.23921	0.6247775	-0.04093	95.75	2.28338	0.44112
M007CC2.350.G	radJan	-77.73144	0.23457	0.6281549	0.23664	0.6266438	-0.02418	159.46	-1.35601	0.00065
X4312.236.G	BIO15	-87.03683	0.23418	0.6284440	0.23340	0.6290107	-0.02160	178.07	-0.91304	0.01790

X4312.245.A	vapDec	-53.64167	0.23389	0.6286526	0.23362	0.6288550	-0.03503	111.28	-3.00537	3.05180
M007B2.245.G	BIO6	-84.51943	0.23042	0.6312147	0.22898	0.6322844	-0.02227	173.04	3.26248	0.29230
X4312.400.T	radJan	-55.35989	0.23033	0.6312792	0.23500	0.6278429	-0.03398	114.72	1.04382	-0.00080
M002.411.T	radiation	-88.04473	0.22956	0.6318526	0.22899	0.6322758	-0.02138	180.09	6.45830	-0.00062
M007B2.275.A	longitude	-55.01771	0.22924	0.6320885	0.22187	0.6376199	-0.03420	114.04	-8.29579	0.34066
M002.278.G	elevation	-46.13118	0.22623	0.6343350	0.22667	0.6340034	-0.04080	96.26	-2.46305	0.00045
X4312.293.T	radJan	-76.85476	0.22587	0.6346016	0.22245	0.6371783	-0.02452	157.71	-3.15061	0.00065
X16364.392.C	vapDec	-84.09571	0.22405	0.6359720	0.22375	0.6361936	-0.02242	172.19	1.39998	-2.19292
X4312.211.G	BIO13	-87.60830	0.22383	0.6361381	0.22341	0.6364513	-0.02152	179.22	0.26427	-0.00386
M002.141.G	radiation	-88.36086	0.22362	0.6362933	0.22311	0.6366833	-0.02134	180.72	6.41782	-0.00061
M007B2.164.A	BIO6	-74.33460	0.22304	0.6367350	0.22451	0.6356277	-0.02537	152.67	2.05832	0.31006
M007B2.340.A	BIO14	-61.23969	0.22262	0.6370513	0.21925	0.6396096	-0.03078	126.48	-2.14466	0.01301
M002.080.C	longitude	-85.63137	0.22229	0.6373016	0.22273	0.6369651	-0.02203	175.26	4.27056	-0.23621
X16364.232.T	CMD	-87.82021	0.22207	0.6374674	0.22121	0.6381180	-0.02148	179.64	0.12503	-0.00762
X4312.211.G	radOct	-87.60985	0.22074	0.6384743	0.22085	0.6383923	-0.02154	179.22	3.28255	-0.00047
M007CC2.350.G	radOct	-77.73855	0.22036	0.6387676	0.22221	0.6373644	-0.02428	159.48	-2.93979	0.00051
M007B2.361.A	radOct	-55.02227	0.22013	0.6389430	0.21382	0.6437932	-0.03428	114.04	-6.69477	0.00067
M007CC2.207.T	BIO3	-65.83520	0.21982	0.6391766	0.21532	0.6426319	-0.02866	135.67	4.01298	-0.08472
M002.411.T	DD18	-88.04963	0.21976	0.6392227	0.21993	0.6390898	-0.02144	180.10	-0.24003	0.00324
X4312.400.T	CMD	-55.36524	0.21964	0.6393133	0.23052	0.6311374	-0.03407	114.73	-1.74990	0.00987
M002.410.A	DD18	-88.59750	0.21943	0.6394756	0.21906	0.6397549	-0.02131	181.19	0.08283	-0.00323
M007CC2.207.C	radOct	-73.98646	0.21489	0.6429601	0.21712	0.6412438	-0.02554	151.97	-2.85896	0.00052
M007B2.163.C	BIO6	-59.77123	0.21367	0.6439058	0.20976	0.6469584	-0.03162	123.54	5.01082	0.36066
X3870.179.A	BIO6	-53.49047	0.21355	0.6439987	0.21640	0.6417946	-0.03532	110.98	1.91462	0.37605
X9644_2.219.A	BIO2	-81.83782	0.21166	0.6454689	0.21176	0.6453886	-0.02312	167.68	0.63690	-0.14832
M002.278.G	BIO15	-46.13861	0.21137	0.6456929	0.21259	0.6447441	-0.04096	96.28	-1.16286	-0.02584
X4312.245.A	BIO14	-53.65333	0.21057	0.6463202	0.21298	0.6444406	-0.03524	111.31	-1.04285	-0.01332
X16364.320.G	elevation	-66.88826	0.20982	0.6469071	0.21009	0.6467006	-0.02829	137.78	1.59351	-0.00034
M002.282.T	DD18	-71.87409	0.20961	0.6470707	0.20517	0.6505822	-0.02633	147.75	-1.04158	-0.00372
X16364.320.A	DD18	-74.66530	0.20946	0.6471926	0.21208	0.6451441	-0.02535	153.33	1.02431	-0.00349
M007CC2.350.A	DD18	-60.17305	0.20925	0.6473584	0.20286	0.6524198	-0.03144	124.35	1.45475	0.00422
M007CC2.083.G	BIO15	-61.45787	0.20703	0.6491088	0.20502	0.6507016	-0.03081	126.92	2.17460	-0.02139
M007B2.082.T	latitude	-80.35422	0.20483	0.6508533	0.20458	0.6510531	-0.02359	164.71	18.06238	-0.38120
M002.131.G	BIO3	-46.14306	0.20247	0.6527309	0.20698	0.6491423	-0.04106	96.29	1.11099	-0.09874
X16364.320.G	BIO3	-66.89215	0.20204	0.6530793	0.19831	0.6560908	-0.02835	137.78	3.80601	-0.08001
X4312.236.G	BIO6	-87.05403	0.19979	0.6548942	0.19995	0.6547609	-0.02180	178.11	2.27311	0.26619
X16364.392.T	radiation	-49.89470	0.19919	0.6553750	0.19932	0.6552743	-0.03801	103.79	10.89819	-0.00084
M007CC2.207.T	radiation	-65.84620	0.19782	0.6564864	0.19692	0.6572190	-0.02883	135.69	-6.22162	0.00070
X9644_2.023.G	CMD	-49.54882	0.19762	0.6566490	0.18568	0.6665372	-0.03829	103.10	1.44749	0.01016
M002.040.C	BIO2	-83.66241	0.19300	0.6604314	0.19279	0.6606031	-0.02273	171.32	-0.94983	0.13743
X9644_2.028.G	BIO14	-44.71930	0.19297	0.6604599	0.18882	0.6638992	-0.04247	93.44	-2.53194	0.01547
M007CC2.350.G	radiation	-77.75242	0.19261	0.6607504	0.19196	0.6612863	-0.02445	159.50	-5.77641	0.00062
X9644_2.219.A	DD18	-81.84753	0.19224	0.6610581	0.18998	0.6629334	-0.02323	167.70	-0.58402	-0.00321
M007CC2.186.A	longitude	-85.87046	0.19142	0.6617374	0.19052	0.6624862	-0.02215	175.74	4.49337	-0.22047
M007CC2.333.G	longitude	-87.86010	0.19116	0.6619525	0.19022	0.6627304	-0.02165	179.72	-4.47029	0.21864
X4312.255.T	radiation	-48.13117	0.19083	0.6622282	0.18960	0.6632496	-0.03949	100.26	7.20328	-0.00085
M007D2.201.A	BIO6	-87.89996	0.18859	0.6640910	0.18819	0.6644270	-0.02166	179.80	-2.54277	-0.25664
X16364.320.G	CMD	-66.89944	0.18746	0.6650400	0.17878	0.6724233	-0.02845	137.80	1.21211	0.00881
X4312.303.G	BIO15	-46.15067	0.18726	0.6652044	0.18832	0.6643161	-0.04122	96.30	-1.21258	-0.02433
M007D2.233.T	BIO13	-58.06584	0.18672	0.6656599	0.18581	0.6664282	-0.03278	120.13	-0.91810	-0.00469
M002.033.T	BIO2	-53.79102	0.18632	0.6659957	0.18428	0.6677196	-0.03539	111.58	3.18328	-0.18414

X4312.122.G	BIO3	-59.98565	0.18617	0.6661210	0.18907	0.6636943	-0.03174	123.97	-1.05835	0.08088
X9644_2.024.G	BIO3	-46.40279	0.18556	0.6666400	0.18915	0.6636282	-0.04102	96.81	1.18549	-0.08918
M007D2.233.T	BIO15	-58.06774	0.18291	0.6688855	0.18362	0.6682778	-0.03282	120.14	-0.85086	-0.02082
M007CC2.207.C	vapDec	-74.00281	0.18220	0.6694921	0.18165	0.6699576	-0.02576	152.01	0.12578	2.17401
X4312.207.C	BIO3	-48.13558	0.18201	0.6696525	0.17669	0.6742301	-0.03958	100.27	-4.99677	0.09590
M002.278.G	longitude	-46.15348	0.18164	0.6699716	0.17527	0.6754707	-0.04128	96.31	-8.61575	0.33905
M007CC2.207.C	BIO2	-74.00382	0.18017	0.6712254	0.18054	0.6709081	-0.02578	152.01	-0.24298	0.14707
X3870.181.T	DD18	-73.69387	0.17975	0.6715869	0.18197	0.6696857	-0.02589	151.39	-1.06031	0.00326
M007B2.266.A	elevation	-53.34538	0.17824	0.6728922	0.17703	0.6739395	-0.03576	110.69	-1.37454	-0.00037
M007CC2.333.G	latitude	-87.86685	0.17766	0.6733902	0.17745	0.6735726	-0.02173	179.73	16.14733	-0.33349
X4312.122.A	radiation	-80.51564	0.17728	0.6737204	0.17715	0.6738366	-0.02371	165.03	6.87851	-0.00058
M007D2.371.C	latitude	-55.04409	0.17648	0.6744190	0.17615	0.6747044	-0.03468	114.09	20.81869	-0.45825
X4312.207.C	radOct	-48.13841	0.17635	0.6745304	0.17108	0.6791544	-0.03964	100.28	-6.83470	0.00065
M002.063.C	longitude	-73.38269	0.17604	0.6747986	0.17337	0.6771368	-0.02602	150.77	-5.62013	0.23784
X4312.303.G	BIO2	-46.15639	0.17582	0.6749929	0.17375	0.6767972	-0.04135	96.31	-3.75922	0.20222
M007D2.283.A	BIO13	-83.64305	0.17508	0.6756394	0.17498	0.6757218	-0.02284	171.29	-0.95763	0.00352
X3870.349.C	BIO6	-58.45666	0.17267	0.6777516	0.17454	0.6761075	-0.03269	120.91	1.54260	0.31967
X3870.181.T	elevation	-73.69788	0.17174	0.6785683	0.17188	0.6784443	-0.02594	151.40	-1.28621	0.00029
M007CC2.083.T	BIO15	-70.49507	0.17132	0.6789397	0.17180	0.6785138	-0.02712	144.99	0.54692	0.01752
M007D2.233.T	longitude	-58.07355	0.17129	0.6789703	0.16693	0.6828545	-0.03292	120.15	-7.02818	0.28188
X4312.211.G	longitude	-87.63555	0.16934	0.6807013	0.16954	0.6805169	-0.02183	179.27	3.73216	-0.20493
M007CC2.207.C	DD18	-74.00943	0.16896	0.6810356	0.17104	0.6791912	-0.02585	152.02	1.06898	-0.00316
M002.410.A	latitude	-88.62427	0.16589	0.6837877	0.16570	0.6839630	-0.02161	181.25	15.75480	-0.32037
M007CC2.333.G	vapDec	-87.87285	0.16565	0.6840064	0.16539	0.6842386	-0.02180	179.75	0.53577	-1.83999
M007B2.082.T	BIO6	-80.37402	0.16523	0.6843895	0.16582	0.6838573	-0.02383	164.75	1.85441	0.25699
M007CC2.251.A	radOct	-77.76635	0.16475	0.6848215	0.16600	0.6836905	-0.02463	159.53	2.42922	-0.00044
M002.282.T	latitude	-71.89684	0.16412	0.6853896	0.16391	0.6855787	-0.02665	147.79	16.95340	-0.36785
M007B2.316.A	BIO2	-85.96442	0.16401	0.6854902	0.16354	0.6859196	-0.02229	175.93	1.38128	-0.12759
X4312.255.T	BIO15	-48.14495	0.16326	0.6861752	0.16138	0.6878857	-0.03978	100.29	-2.70086	0.02248
X16364.232.T	elevation	-87.85022	0.16205	0.6872741	0.16180	0.6875023	-0.02182	179.70	-0.16104	0.00025
X16364.098.A	BIO13	-87.19240	0.16128	0.6879841	0.16110	0.6881481	-0.02199	178.38	-0.37312	0.00327
X4312.400.T	radiation	-55.39479	0.16054	0.6886584	0.16062	0.6885898	-0.03461	114.79	-9.28777	0.00071
M002.131.G	BIO2	-46.16412	0.16036	0.6888239	0.16137	0.6878980	-0.04151	96.33	-0.39678	-0.18968
X4312.059.A	radiation	-49.91448	0.15963	0.6894985	0.15970	0.6894311	-0.03841	103.83	-9.95156	0.00075
X4312.245.A	BIO15	-53.67965	0.15793	0.6910714	0.15639	0.6925051	-0.03573	111.36	-2.43602	0.02054
M002.193.T	DD18	-50.05903	0.15673	0.6921852	0.16054	0.6886599	-0.03833	104.12	1.94259	-0.00391
M007CC2.083.T	vapDec	-70.50270	0.15607	0.6928054	0.15598	0.6928866	-0.02723	145.01	1.98018	-2.06462
X5811.332.A	BIO3	-53.68084	0.15555	0.6932890	0.15193	0.6966944	-0.03576	111.36	-4.35515	0.08201
X16364.392.T	BIO13	-49.91692	0.15475	0.6940395	0.15376	0.6949695	-0.03846	103.83	1.24375	0.00470
M007D2.283.A	BIO14	-83.65341	0.15435	0.6944116	0.15358	0.6951411	-0.02296	171.31	-0.93896	0.00850
X9644_2.219.A	BIO3	-81.86692	0.15346	0.6952500	0.15221	0.6964332	-0.02347	167.73	-2.54297	0.06007
M002.380.A	elevation	-60.20099	0.15337	0.6953395	0.15250	0.6961541	-0.03191	124.40	-1.21687	-0.00032
M007B2.082.T	BIO3	-80.38022	0.15282	0.6958513	0.15152	0.6970905	-0.02391	164.76	-2.59276	0.06127
X4312.245.A	BIO6	-53.68221	0.15281	0.6958604	0.15465	0.6941292	-0.03578	111.36	1.35848	0.31965
X4312.303.G	radiation	-46.16848	0.15163	0.6969858	0.15175	0.6968727	-0.04161	96.34	-10.35560	0.00078
X9644_2.219.A	BIO6	-81.86810	0.15110	0.6974872	0.15014	0.6983978	-0.02349	167.74	-2.98960	-0.24208
X16364.320.G	BIO2	-66.91820	0.14993	0.6986007	0.15040	0.6981495	-0.02873	137.84	0.03816	0.14295
M007CC2.350.A	BIO2	-60.20294	0.14946	0.6990490	0.14829	0.7001707	-0.03194	124.41	2.85616	-0.15564
X16364.320.A	radiation	-74.69553	0.14900	0.6994913	0.14854	0.6999300	-0.02575	153.39	-5.00753	0.00056
M002.380.A	radiation	-60.20348	0.14838	0.7000904	0.14843	0.7000375	-0.03195	124.41	-8.43091	0.00065
M007CC2.207.T	BIO6	-65.87243	0.14535	0.7030221	0.14355	0.7047816	-0.02923	135.74	4.02966	0.27849

X16364.392.T	BIO2	-49.92284	0.14290	0.7054128	0.14150	0.7067917	-0.03858	103.85	3.34782	-0.17212
X4312.207.C	radJan	-48.15527	0.14262	0.7056896	0.13876	0.7095123	-0.03999	100.31	-4.42851	0.00072
X3870.181.T	BIO13	-73.71247	0.14256	0.7057484	0.14260	0.7057050	-0.02614	151.42	-1.47161	0.00348
M007CC2.333.G	BIO14	-87.88491	0.14154	0.7067537	0.14113	0.7071646	-0.02193	179.77	-0.64180	0.00793
X3870.450.T	BIO3	-49.92421	0.14017	0.7081077	0.13684	0.7114384	-0.03860	103.85	-4.45434	0.08135
X3870.450.T	latitude	-49.92426	0.14006	0.7082203	0.13976	0.7085198	-0.03860	103.85	19.37966	-0.43300
X3870.179.A	BIO14	-53.52752	0.13945	0.7088286	0.13752	0.7107553	-0.03601	111.06	-2.33236	0.01114
M002.033.C	BIO3	-71.12507	0.13803	0.7102491	0.13896	0.7093152	-0.02712	146.25	-0.98166	0.05988
X16364.320.A	BIO3	-74.70137	0.13731	0.7109724	0.13836	0.7099146	-0.02583	153.40	-0.92640	0.05965
X16364.320.G	BIO6	-66.92507	0.13620	0.7120920	0.13465	0.7136540	-0.02884	137.85	3.84264	0.26510
M002.410.A	radiation	-88.63960	0.13524	0.7130635	0.13507	0.7132319	-0.02178	181.28	5.10695	-0.00047
X4312.211.G	vapDec	-87.65365	0.13313	0.7152101	0.13302	0.7153236	-0.02204	179.31	-0.92990	1.65160
M002.353.A	BIO13	-61.70397	0.13191	0.7164548	0.13139	0.7169981	-0.03131	127.41	0.96397	0.00378
X4312.207.C	elevation	-48.16137	0.13043	0.7179884	0.13071	0.7176959	-0.04012	100.32	-2.27249	0.00034
X16364.392.T	elevation	-49.93130	0.12599	0.7226272	0.12630	0.7223005	-0.03874	103.86	2.17944	-0.00032
M007CC2.207.T	radJan	-65.88220	0.12581	0.7228145	0.12729	0.7212563	-0.02937	135.76	-0.49532	0.00053
M002.040.C	radJan	-83.69682	0.12416	0.7245626	0.12373	0.7250241	-0.02314	171.39	1.74884	-0.00044
X3870.181.T	BIO6	-73.72195	0.12359	0.7251691	0.12428	0.7244371	-0.02627	151.44	1.25384	0.23253
X9644_2.024.G	radOct	-46.43381	0.12353	0.7252393	0.12550	0.7231459	-0.04169	96.87	2.18636	-0.00051
X3870.181.T	BIO15	-73.72225	0.12300	0.7257987	0.12324	0.7255422	-0.02627	151.44	-0.52597	-0.01444
X3870.181.T	BIO14	-73.72246	0.12258	0.7262508	0.12168	0.7272232	-0.02628	151.44	-1.45145	0.00836
M007CC2.186.A	BIO15	-85.90492	0.12251	0.7263246	0.12232	0.7265350	-0.02255	175.81	0.64154	-0.01301
M007B2.305.C	BIO3	-47.89639	0.12173	0.7271625	0.12388	0.7248587	-0.04043	99.79	0.48199	-0.07596
X4312.255.T	latitude	-48.16587	0.12142	0.7274970	0.12122	0.7277133	-0.04021	100.33	18.38368	-0.41429
X9644_2.219.A	latitude	-81.88357	0.12014	0.7288790	0.12002	0.7290166	-0.02367	167.77	-14.73525	0.28730
X16364.321.T	latitude	-41.88234	0.11690	0.7324180	0.11672	0.7326207	-0.04629	87.76	-19.64261	0.44453
X4312.400.T	elevation	-55.41760	0.11492	0.7346136	0.11432	0.7352807	-0.03502	114.84	-1.41037	-0.00029
M007B2.340.A	BIO2	-61.29474	0.11252	0.7372877	0.11292	0.7368483	-0.03168	126.59	-0.31456	-0.13237
M007CC2.186.A	radiation	-85.91024	0.11188	0.7380171	0.11173	0.7381785	-0.02261	175.82	-4.45613	0.00044
M007D2.233.T	BIO14	-58.10483	0.10874	0.7415798	0.10958	0.7406194	-0.03345	120.21	-1.05551	-0.00918
M007B2.163.C	vapDec	-59.82374	0.10865	0.7416885	0.10869	0.7416446	-0.03249	123.65	2.29157	-1.92732
M007CC2.251.A	vapDec	-77.79494	0.10758	0.7429159	0.10739	0.7431335	-0.02500	159.59	-0.20034	-1.61358
M007B2.305.C	BIO14	-47.90352	0.10747	0.7430387	0.10601	0.7447384	-0.04058	99.81	-2.49913	0.01065
M007D2.201.A	radOct	-87.94138	0.10574	0.7450456	0.10564	0.7451603	-0.02213	179.88	2.42992	-0.00033
X4312.293.T	BIO2	-76.91491	0.10557	0.7452400	0.10516	0.7457290	-0.02530	157.83	-1.84778	0.11039
X5811.397.G	BIO3	-45.94019	0.10545	0.7453835	0.10306	0.7481881	-0.04234	95.88	4.39834	-0.07534
X3870.024.T	BIO3	-35.49384	0.10503	0.7458728	0.10692	0.7436783	-0.05479	74.99	0.41270	-0.08182
X9644_2.028.G	BIO2	-44.76391	0.10375	0.7473766	0.10319	0.7480370	-0.04347	93.53	-3.21282	0.17268
X4312.059.A	CMD	-49.94266	0.10326	0.7479539	0.10750	0.7430061	-0.03897	103.89	-1.91350	0.00729
X4312.400.T	BIO14	-55.42350	0.10311	0.7481247	0.10194	0.7495154	-0.03512	114.85	-2.18569	0.00935
X16364.098.A	DD18	-87.22149	0.10311	0.7481275	0.10308	0.7481677	-0.02233	178.44	0.09956	-0.00222
M002.033.T	BIO13	-53.83282	0.10273	0.7485834	0.10287	0.7484163	-0.03616	111.67	2.08181	-0.00361
M007CC2.251.A	elevation	-77.79742	0.10262	0.7487068	0.10268	0.7486377	-0.02503	159.59	-1.07093	0.00022
X4312.245.A	BIO2	-53.70786	0.10152	0.7500181	0.10079	0.7508843	-0.03626	111.42	-2.93686	0.13846
X4312.207.C	BIO13	-48.17585	0.10146	0.7500846	0.10096	0.7506749	-0.04042	100.35	-1.42610	-0.00391
X3870.179.A	BIO13	-53.54666	0.10118	0.7504228	0.10074	0.7509455	-0.03637	111.09	-1.25247	-0.00366
M007D2.233.T	vapDec	-58.10871	0.10098	0.7506551	0.10064	0.7510619	-0.03352	120.22	-0.76320	-1.90952
M002.040.C	elevation	-83.70852	0.10077	0.7509074	0.10074	0.7509478	-0.02328	171.42	0.42193	-0.00020
M007B2.164.A	BIO14	-74.39617	0.09990	0.7519464	0.09927	0.7527071	-0.02619	152.79	-1.36081	0.00758
X16364.200.C	radOct	-87.31380	0.09874	0.7533530	0.09879	0.7532900	-0.02233	178.63	2.15509	-0.00031
M007B2.245.T	longitude	-45.94358	0.09867	0.7534362	0.09618	0.7564578	-0.04241	95.89	6.87813	-0.25067

X3870.024.T	latitude	-35.49704	0.09864	0.7534651	0.09838	0.7537799	-0.05488	74.99	-24.21806	0.44898
X4312.236.G	CMD	-87.10524	0.09735	0.7550328	0.09772	0.7545833	-0.02239	178.21	-0.34579	0.00507
M007B2.082.T	BIO14	-80.40824	0.09679	0.7557151	0.09635	0.7562547	-0.02426	164.82	-1.02139	0.00703
M007B2.082.T	BIO15	-80.40828	0.09670	0.7558202	0.09644	0.7561416	-0.02426	164.82	-1.05486	0.01223
M007CC2.350.A	BIO13	-60.22967	0.09600	0.7566834	0.09568	0.7570759	-0.03238	124.46	1.08277	0.00327
X5811.332.A	BIO6	-53.71086	0.09551	0.7572919	0.09646	0.7561234	-0.03632	111.42	0.71488	0.25335
M002.411.T	CMD	-88.11179	0.09545	0.7573629	0.09556	0.7572267	-0.02214	180.22	-0.21820	0.00499
M007CC2.207.T	radOct	-65.89799	0.09423	0.7588683	0.09521	0.7576601	-0.02961	135.80	-1.46152	0.00037
M007CC2.186.A	elevation	-85.92020	0.09195	0.7617098	0.09192	0.7617548	-0.02273	175.84	0.38991	-0.00019
M007B2.245.G	radOct	-84.58875	0.09178	0.7619314	0.09199	0.7616593	-0.02309	173.18	-1.93186	0.00031
M007D2.242.A	BIO14	-45.94706	0.09170	0.7620237	0.09046	0.7635936	-0.04249	95.89	-2.53213	0.00992
M007CC2.186.A	BIO13	-85.92171	0.08893	0.7655405	0.08885	0.7656381	-0.02275	175.84	-0.11723	0.00245
X3870.349.C	BIO14	-58.49867	0.08863	0.7659279	0.08924	0.7651415	-0.03341	121.00	-1.12897	-0.00820
X4312.211.G	BIO6	-87.67618	0.08808	0.7666306	0.08814	0.7665616	-0.02230	179.35	1.46094	0.17608
M007B2.245.T	vapDec	-45.94901	0.08781	0.7669791	0.08746	0.7674279	-0.04253	95.90	1.15275	2.07548
M007B2.316.A	BIO14	-86.00269	0.08747	0.7674219	0.08750	0.7673796	-0.02274	176.01	-0.05235	0.00638
X3870.069.A	vapDec	-53.55418	0.08614	0.7691462	0.08616	0.7691188	-0.03651	111.11	-2.50835	1.86935
M007CC2.207.T	latitude	-65.90385	0.08251	0.7739223	0.08240	0.7740669	-0.02970	135.81	14.91233	-0.27694
X8398_2.201.A	BIO14	-48.18539	0.08238	0.7740949	0.08314	0.7730883	-0.04062	100.37	-1.47013	-0.00899
X5811.332.A	CMD	-53.71813	0.08097	0.7759830	0.07760	0.7805807	-0.03645	111.44	-1.70833	-0.00672
X4312.207.C	DD18	-48.18639	0.08038	0.7767792	0.08192	0.7747095	-0.04064	100.37	-1.99422	0.00289
M002.033.C	radOct	-71.15389	0.08038	0.7767807	0.08085	0.7761441	-0.02753	146.31	-1.42681	0.00031
M002.278.G	vapDec	-46.20417	0.08026	0.7769461	0.08000	0.7772942	-0.04238	96.41	-1.20761	-1.98210
X16364.098.A	longitude	-87.23308	0.07992	0.7773993	0.07982	0.7775482	-0.02246	178.47	2.79438	-0.14049
M002.033.T	BIO15	-53.84424	0.07990	0.7774344	0.08012	0.7771387	-0.03638	111.69	1.11436	0.01457
M007B2.376.A	radJan	-41.79253	0.07965	0.7777771	0.08111	0.7757993	-0.04686	87.59	-0.20615	-0.00057
X16364.321.T	radiation	-41.90183	0.07794	0.7801113	0.07761	0.7805586	-0.04676	87.80	-4.20385	0.00060
X16364.321.T	DD18	-41.90196	0.07767	0.7804744	0.07934	0.7781919	-0.04676	87.80	2.22373	-0.00310
M002.380.A	BIO13	-60.23898	0.07737	0.7808929	0.07715	0.7811989	-0.03254	124.48	-1.12731	-0.00294
M007B2.245.T	DD18	-45.95437	0.07709	0.7812830	0.07510	0.7840509	-0.04265	95.91	1.95613	0.00308
M002.353.A	BIO14	-61.73148	0.07689	0.7815582	0.07625	0.7824405	-0.03176	127.46	1.86579	-0.00749
X16364.320.A	longitude	-74.73188	0.07630	0.7823709	0.07560	0.7833505	-0.02624	153.46	3.96857	-0.15440
M007B2.163.C	CMD	-59.84020	0.07573	0.7831683	0.07780	0.7803043	-0.03277	123.68	1.53389	-0.00559
M007CC2.333.G	elevation	-87.91836	0.07465	0.7846876	0.07463	0.7847179	-0.02231	179.84	-0.38295	0.00017
M002.063.C	BIO15	-73.43340	0.07463	0.7847158	0.07437	0.7850735	-0.02671	150.87	-1.37387	0.01132
M002.141.G	BIO15	-88.43543	0.07449	0.7849039	0.07447	0.7849333	-0.02218	180.87	0.20740	-0.00997
X9644_2.028.G	BIO13	-44.77856	0.07445	0.7849657	0.07404	0.7855376	-0.04380	93.56	-1.25909	-0.00347
M007CC2.083.G	BIO3	-61.52458	0.07361	0.7861584	0.07271	0.7874356	-0.03189	127.05	3.07280	-0.05086
M007B2.361.A	BIO2	-55.09595	0.07276	0.7873606	0.07235	0.7879500	-0.03562	114.19	-2.65843	0.11546
X16364.320.G	latitude	-66.95681	0.07272	0.7874161	0.07269	0.7874530	-0.02931	137.91	-11.31500	0.25629
X16364.320.G	BIO13	-66.95730	0.07174	0.7888218	0.07178	0.7887583	-0.02932	137.91	1.61262	-0.00261
M002.411.T	BIO6	-88.12407	0.07088	0.7900547	0.07090	0.7900238	-0.02228	180.25	1.34332	0.15748
M007B2.340.A	BIO13	-61.31571	0.07058	0.7904898	0.07061	0.7904511	-0.03202	126.63	-1.81772	0.00276
M007B2.163.C	radOct	-59.84319	0.06976	0.7916887	0.07052	0.7905860	-0.03282	123.69	-1.07353	0.00034
M007B2.082.T	radiation	-80.42195	0.06936	0.7922653	0.06927	0.7924099	-0.02443	164.84	3.23691	-0.00036
M007B2.266.A	radiation	-53.40023	0.06852	0.7935028	0.06832	0.7937996	-0.03679	110.80	3.34790	-0.00047
X4312.211.G	CMD	-87.68597	0.06849	0.7935428	0.06866	0.7932963	-0.02241	179.37	-0.27694	0.00424
X4312.400.T	BIO3	-55.44147	0.06717	0.7955088	0.06792	0.7943897	-0.03545	114.88	-0.06725	-0.05102
X16364.137.T	latitude	-55.09883	0.06700	0.7957610	0.06690	0.7959057	-0.03567	114.20	-15.42015	0.28018
M007CC2.186.A	BIO6	-85.93296	0.06643	0.7966102	0.06645	0.7965729	-0.02288	175.87	-1.29064	-0.15429
M007D2.201.A	longitude	-87.96112	0.06628	0.7968394	0.06625	0.7968756	-0.02235	179.92	2.47062	-0.12949

M007B2.163.C	radJan	-59.84503	0.06608	0.7971387	0.06678	0.7960823	-0.03285	123.69	0.08381	0.00041
M002.278.G	BIO14	-46.21139	0.06581	0.7975373	0.06639	0.7966705	-0.04254	96.42	-1.58174	-0.00826
X3870.096.G	BIO13	-82.52825	0.06545	0.7980878	0.06537	0.7981979	-0.02383	169.06	0.30880	0.00219
X3870.181.T	latitude	-73.75120	0.06509	0.7986243	0.06504	0.7986989	-0.02667	151.50	-12.14249	0.22690
M007B2.082.T	BIO13	-80.42428	0.06470	0.7992173	0.06470	0.7992169	-0.02446	164.85	-0.94155	0.00220
X16364.232.T	DD18	-87.89898	0.06452	0.7994896	0.06444	0.7996178	-0.02238	179.80	0.05057	0.00176
M007B2.266.A	BIO2	-53.40310	0.06279	0.8021426	0.06245	0.8026678	-0.03684	110.81	-2.66798	0.10950
M002.131.G	BIO6	-46.21292	0.06276	0.8021788	0.06339	0.8012104	-0.04257	96.43	0.18692	0.22705
X4312.207.C	BIO14	-48.19529	0.06258	0.8024684	0.06194	0.8034612	-0.04082	100.39	-2.37243	0.00799
X3870.450.T	BIO6	-49.96354	0.06151	0.8041260	0.06081	0.8052224	-0.03939	103.93	-3.97891	-0.21699
M007B2.245.G	BIO14	-84.60452	0.06024	0.8061179	0.06030	0.8060249	-0.02328	173.21	0.13344	0.00535
M007B2.245.G	elevation	-84.60508	0.05911	0.8079148	0.05905	0.8080105	-0.02328	173.21	0.26894	0.00015
X9644_2.047.G	radJan	-83.67487	0.05883	0.8083533	0.05861	0.8087008	-0.02354	171.35	-1.51268	0.00031
M007B2.245.G	vapDec	-84.60569	0.05789	0.8098660	0.05788	0.8098800	-0.02329	173.21	0.87495	-1.11186
M007CC2.207.C	radJan	-74.06508	0.05764	0.8102603	0.05800	0.8096847	-0.02660	152.13	-0.12513	0.00033
X16364.320.G	radiation	-66.96442	0.05750	0.8104844	0.05740	0.8106610	-0.02942	137.93	-2.73431	0.00037
M002.193.G	BIO15	-86.43072	0.05749	0.8105097	0.05741	0.8106317	-0.02280	176.86	0.67690	-0.00890
X3870.181.T	radOct	-73.75593	0.05564	0.8135213	0.05522	0.8142108	-0.02673	151.51	-3.01422	0.00027
M002.063.C	radiation	-73.44321	0.05501	0.8145581	0.05493	0.8146892	-0.02685	150.89	2.67904	-0.00034
M007B2.163.G	CMD	-80.17370	0.05418	0.8159484	0.05469	0.8151006	-0.02460	164.35	0.71706	-0.00394
M007CC2.350.G	BIO3	-77.82179	0.05388	0.8164407	0.05413	0.8160246	-0.02534	159.64	-0.29882	0.03657
X16364.392.T	CMD	-49.96744	0.05371	0.8167346	0.05535	0.8140016	-0.03947	103.93	1.90084	-0.00533
M002.278.G	BIO13	-46.21754	0.05352	0.8170402	0.05335	0.8173371	-0.04267	96.44	-1.63109	-0.00292
M007D2.283.A	radJan	-83.70385	0.05347	0.8171367	0.05326	0.8174854	-0.02357	171.41	-1.51517	0.00030
M002.410.A	BIO15	-88.68068	0.05307	0.8178027	0.05305	0.8178345	-0.02225	181.36	-0.24903	0.00840
X9644_2.047.G	longitude	-83.67815	0.05228	0.8191508	0.05240	0.8189347	-0.02358	171.36	1.85012	-0.11774
X8398_2.266.A	BIO6	-61.74410	0.05166	0.8202067	0.05125	0.8208947	-0.03196	127.49	-3.14801	-0.17284
M007CC2.207.T	BIO13	-65.91935	0.05150	0.8204670	0.05141	0.8206294	-0.02994	135.84	1.01888	0.00225
M007CC2.207.T	elevation	-65.91957	0.05107	0.8212076	0.05113	0.8211069	-0.02994	135.84	1.48418	-0.00017
M007B2.163.C	longitude	-59.85259	0.05096	0.8213935	0.05034	0.8224691	-0.03298	123.71	4.40088	-0.14920
M007D2.201.A	CMD	-87.96879	0.05093	0.8214481	0.05082	0.8216390	-0.02244	179.94	-0.02534	-0.00365
M007CC2.207.T	vapDec	-65.91965	0.05090	0.8214981	0.05091	0.8214800	-0.02994	135.84	1.82959	-1.24083
M002.141.G	BIO14	-88.44747	0.05042	0.8223347	0.05041	0.8223442	-0.02232	180.89	0.12500	-0.00470
M007D2.371.C	BIO15	-55.10712	0.05041	0.8223483	0.05057	0.8220736	-0.03582	114.21	-1.28849	-0.01136
X9644_2.028.G	radiation	-44.79104	0.04947	0.8239844	0.04934	0.8242226	-0.04408	93.58	3.06296	-0.00045
X16364.392.C	BIO13	-84.18356	0.04834	0.8259751	0.04830	0.8260408	-0.02346	172.37	0.25325	0.00184
X4312.059.A	DD18	-49.97087	0.04684	0.8286475	0.04602	0.8301475	-0.03954	103.94	-1.83324	-0.00226
M007CC2.083.G	radJan	-61.53811	0.04655	0.8291821	0.04694	0.8284689	-0.03211	127.08	0.29970	0.00034
X5811.397.G	latitude	-45.96974	0.04634	0.8295584	0.04630	0.8296314	-0.04298	95.94	-10.97462	0.26444
X16364.321.T	CMD	-41.91789	0.04582	0.8305077	0.04741	0.8276354	-0.04714	87.84	2.20611	-0.00550
M002.380.A	radJan	-60.25477	0.04580	0.8305402	0.04621	0.8297944	-0.03280	124.51	-0.35083	-0.00034
M007B2.376.A	radOct	-41.80967	0.04536	0.8313374	0.04461	0.8327258	-0.04727	87.62	-4.87371	0.00036
X4312.207.C	longitude	-48.20390	0.04536	0.8313512	0.04594	0.8302759	-0.04100	100.41	1.11055	-0.15729
X8398_2.201.A	vapDec	-48.20405	0.04506	0.8318920	0.04497	0.8320586	-0.04100	100.41	-1.35439	-1.44321
M007CC2.207.C	CMD	-74.07138	0.04506	0.8318996	0.04431	0.8332850	-0.02669	152.14	0.99368	0.00394
M002.282.T	BIO14	-71.95649	0.04482	0.8323315	0.04462	0.8327065	-0.02747	147.91	-1.37217	0.00513
M002.193.G	BIO13	-86.43741	0.04412	0.8336339	0.04409	0.8336825	-0.02288	176.87	0.14838	0.00173
M007B2.361.A	elevation	-55.11042	0.04382	0.8341884	0.04388	0.8340845	-0.03588	114.22	-1.84108	0.00018
X16364.098.A	BIO6	-87.25144	0.04320	0.8353541	0.04319	0.8353662	-0.02267	178.50	-1.12848	-0.12259
X8398_2.201.A	longitude	-48.20498	0.04319	0.8353606	0.04374	0.8343330	-0.04102	100.41	1.03777	-0.15354
X8398_2.266.A	BIO14	-61.74883	0.04219	0.8372633	0.04239	0.8368824	-0.03204	127.50	-1.17580	-0.00547

X8398_2.126.G	BIO14	-55.45406	0.04200	0.8376252	0.04171	0.8381807	-0.03567	114.91	-2.00326	0.00594
X4312.122.G	DD18	-60.05794	0.04160	0.8383798	0.04205	0.8375163	-0.03294	124.12	1.53812	-0.00183
X16364.321.T	elevation	-41.92016	0.04128	0.8390065	0.04137	0.8388212	-0.04719	87.84	2.37151	-0.00021
M002.353.G	BIO3	-79.47848	0.04114	0.8392607	0.04095	0.8396334	-0.02490	162.96	1.79858	-0.03180
M002.193.T	BIO2	-50.11683	0.04112	0.8392970	0.04127	0.8390250	-0.03948	104.23	1.09342	0.09138
M007B2.266.A	BIO3	-53.41400	0.04098	0.8395786	0.04137	0.8388237	-0.03705	110.83	-0.41479	-0.04138
M007B2.340.A	CMD	-61.33103	0.03995	0.8415730	0.03904	0.8433750	-0.03227	126.66	-1.42244	-0.00420
M002.380.A	vapDec	-60.25812	0.03910	0.8432549	0.03911	0.8432309	-0.03286	124.52	-1.99370	1.15550
M007D2.194.T	radJan	-86.86906	0.03883	0.8437812	0.03876	0.8439314	-0.02279	177.74	-1.12702	0.00025
M007B2.164.A	radiation	-74.42695	0.03834	0.8447529	0.03830	0.8448418	-0.02661	152.85	2.07439	-0.00028
M002.411.T	BIO3	-88.14083	0.03736	0.8467388	0.03731	0.8468384	-0.02247	180.28	-1.08111	0.02812
M007D2.283.A	radiation	-83.71196	0.03724	0.8469672	0.03722	0.8470207	-0.02366	171.42	2.28489	-0.00026
M007CC2.083.G	elevation	-61.54303	0.03670	0.8480814	0.03661	0.8482547	-0.03219	127.09	1.31138	0.00015
M007CC2.350.G	latitude	-77.83143	0.03460	0.8524365	0.03458	0.8524692	-0.02547	159.66	8.71769	-0.16005
M007B2.266.A	longitude	-53.41769	0.03361	0.8545451	0.03394	0.8538254	-0.03711	110.84	0.75799	-0.12792
M007CC2.083.G	radOct	-61.54468	0.03341	0.8549586	0.03366	0.8544361	-0.03222	127.09	-0.27637	0.00023
M002.282.T	radiation	-71.96223	0.03334	0.8551179	0.03330	0.8551971	-0.02755	147.92	1.81168	-0.00027
X3870.349.C	CMD	-58.52643	0.03311	0.8556133	0.03376	0.8542208	-0.03388	121.05	-1.58657	0.00381
M007CC2.186.A	BIO14	-85.94977	0.03281	0.8562706	0.03281	0.8562533	-0.02307	175.90	0.00449	0.00384
M002.131.G	longitude	-46.22792	0.03276	0.8563706	0.03314	0.8555393	-0.04289	96.46	0.65534	-0.13764
X5811.332.A	BIO13	-53.74228	0.03267	0.8565727	0.03260	0.8567098	-0.03690	111.48	-1.47242	-0.00206
M002.131.G	elevation	-46.22811	0.03237	0.8572193	0.03243	0.8570965	-0.04290	96.46	-2.18599	0.00017
X3870.349.C	BIO15	-58.52707	0.03184	0.8583872	0.03174	0.8586093	-0.03389	121.05	-1.85163	0.00864
M007D2.194.T	BIO15	-86.87260	0.03175	0.8585812	0.03175	0.8585672	-0.02284	177.75	-0.05040	-0.00656
M007D2.242.A	DD18	-45.97708	0.03167	0.8587478	0.03212	0.8577753	-0.04314	95.95	-2.03158	0.00191
X4312.207.C	BIO6	-48.21083	0.03151	0.8591094	0.03173	0.8586188	-0.04114	100.42	-0.42014	0.15698
M002.380.A	BIO2	-60.26192	0.03151	0.8591165	0.03158	0.8589554	-0.03292	124.52	-0.91175	-0.07079
M007B2.305.C	BIO13	-47.94174	0.03105	0.8601301	0.03107	0.8600886	-0.04138	99.88	-2.21787	0.00216
M007B2.245.G	BIO2	-84.61937	0.03052	0.8613082	0.03053	0.8612842	-0.02345	173.24	-0.05703	0.05554
X3870.450.T	BIO15	-49.97915	0.03028	0.8618641	0.03036	0.8616762	-0.03970	103.96	-1.55757	-0.00931
M007B2.163.C	latitude	-59.86295	0.03023	0.8619769	0.03020	0.8620265	-0.03315	123.73	10.29755	-0.17926
M002.193.G	BIO14	-86.44441	0.03012	0.8622215	0.03014	0.8621714	-0.02296	176.89	0.18323	0.00369
M007B2.316.A	latitude	-86.03154	0.02976	0.8630443	0.02975	0.8630554	-0.02307	176.06	-6.52284	0.13877
M007CC2.333.G	DD18	-87.94094	0.02947	0.8636900	0.02950	0.8636241	-0.02257	179.88	-0.23866	0.00119
X4312.293.T	radOct	-76.95300	0.02938	0.8638938	0.02924	0.8642159	-0.02579	157.91	-2.32038	0.00019
X8398_2.126.G	radiation	-55.46073	0.02865	0.8655887	0.02861	0.8656897	-0.03579	114.92	1.53207	-0.00030
M002.282.T	BIO3	-71.96462	0.02856	0.8657888	0.02841	0.8661477	-0.02759	147.93	-2.00028	0.02838
M007CC2.083.T	CMD	-70.56645	0.02856	0.8658025	0.02891	0.8649768	-0.02813	145.13	1.14968	-0.00314
X4312.245.A	CMD	-53.74459	0.02804	0.8670126	0.02738	0.8685746	-0.03694	111.49	-1.72415	-0.00389
M002.131.G	BIO15	-46.23029	0.02802	0.8670727	0.02790	0.8673507	-0.04295	96.46	-2.33790	0.00952
M007CC2.207.C	longitude	-74.07990	0.02801	0.8670827	0.02815	0.8667653	-0.02680	152.16	-0.79745	0.09335
M007CC2.350.G	BIO15	-77.83484	0.02777	0.8676510	0.02780	0.8675795	-0.02551	159.67	0.64087	0.00664
X4312.400.T	BIO6	-55.46181	0.02650	0.8706895	0.02633	0.8710991	-0.03581	114.92	-2.97945	-0.13291
M007CC2.251.A	BIO6	-77.83570	0.02607	0.8717402	0.02599	0.8719338	-0.02552	159.67	-1.87786	-0.10442
X4312.059.A	vapDec	-49.98152	0.02555	0.8729962	0.02552	0.8730846	-0.03975	103.96	-1.43113	-1.06469
X4312.245.A	BIO13	-53.74614	0.02495	0.8744952	0.02491	0.8745964	-0.03697	111.49	-1.50700	-0.00180
X4312.122.A	latitude	-80.59187	0.02483	0.8747995	0.02482	0.8748165	-0.02466	165.18	7.22192	-0.13279
X3870.096.G	radOct	-82.54867	0.02461	0.8753447	0.02467	0.8752045	-0.02408	169.10	-0.62389	0.00016
M002.411.T	longitude	-88.14728	0.02446	0.8757194	0.02448	0.8756822	-0.02255	180.29	1.32288	-0.07773
M002.353.A	radiation	-61.75783	0.02419	0.8763998	0.02416	0.8764719	-0.03218	127.52	-1.28412	0.00026
X3870.096.G	CMD	-82.54907	0.02381	0.8773816	0.02394	0.8770434	-0.02408	169.10	0.61587	-0.00259

M007B2.245.G	radiation	-84.62295	0.02336	0.8785126	0.02337	0.8785114	-0.02349	173.25	2.58198	-0.00020
M007B2.266.A	BIO14	-53.42302	0.02294	0.8796145	0.02282	0.8799226	-0.03721	110.85	-1.97127	0.00454
M007CC2.186.A	BIO2	-85.95492	0.02251	0.8807299	0.02251	0.8807268	-0.02313	175.91	-0.18907	0.04637
M002.141.G	BIO13	-88.46143	0.02249	0.8808012	0.02248	0.8808135	-0.02248	180.92	0.03724	-0.00122
X16364.392.T	DD18	-49.98322	0.02215	0.8816926	0.02190	0.8823631	-0.03978	103.97	1.84328	0.00152
X5811.332.A	vapDec	-53.74773	0.02177	0.8826944	0.02175	0.8827566	-0.03700	111.50	-1.36440	-0.93251
X16364.232.A	radOct	-44.05930	0.02168	0.8829488	0.02188	0.8824037	-0.04514	92.12	0.34718	0.00023
X3870.450.T	CMD	-49.98370	0.02118	0.8842810	0.02072	0.8855556	-0.03979	103.97	-1.84642	-0.00353
X3870.096.G	radJan	-82.55058	0.02078	0.8853721	0.02083	0.8852503	-0.02410	169.10	-0.03717	0.00019
M002.131.G	radOct	-46.23391	0.02078	0.8853833	0.02096	0.8848783	-0.04302	96.47	-0.35959	-0.00022
X5811.332.A	BIO2	-53.74843	0.02037	0.8865088	0.02042	0.8863787	-0.03701	111.50	-1.22005	-0.06147
M007B2.275.A	latitude	-55.12222	0.02021	0.8869430	0.02020	0.8869771	-0.03609	114.24	-9.27279	0.15495
M007B2.266.A	BIO13	-53.42441	0.02016	0.8870929	0.02017	0.8870634	-0.03724	110.85	-1.94565	0.00162
X3870.096.G	longitude	-82.55094	0.02006	0.8873604	0.02001	0.8875146	-0.02410	169.10	2.03257	-0.07369
M002.353.G	radiation	-79.48905	0.02001	0.8875130	0.02000	0.8875468	-0.02503	162.98	-1.31699	0.00020
X3870.069.A	latitude	-53.58732	0.01985	0.8879518	0.01985	0.8879624	-0.03713	111.17	5.89267	-0.15548
M007CC2.186.A	latitude	-85.95626	0.01983	0.8880207	0.01982	0.8880297	-0.02315	175.91	5.69521	-0.11179
M007B2.245.G	BIO13	-84.62480	0.01967	0.8884548	0.01967	0.8884724	-0.02351	173.25	0.26196	0.00117
M007CC2.083.G	BIO6	-61.55164	0.01949	0.8889781	0.01956	0.8887619	-0.03233	127.10	0.43925	-0.10466
X4312.211.G	elevation	-87.71052	0.01939	0.8892619	0.01938	0.8892813	-0.02269	179.42	-0.16801	-0.00009
M007B2.340.A	BIO15	-61.34148	0.01905	0.8902370	0.01908	0.8901419	-0.03244	126.68	-1.23282	-0.00643
X4312.211.G	latitude	-87.71089	0.01867	0.8913272	0.01866	0.8913360	-0.02269	179.42	-5.56407	0.10825
M002.131.G	vapDec	-46.23509	0.01842	0.8920403	0.01843	0.8920154	-0.04305	96.47	-2.40866	0.94665
X3870.096.G	radiation	-82.55183	0.01829	0.8924303	0.01828	0.8924568	-0.02411	169.10	-1.37644	0.00018
X3870.069.A	BIO6	-53.58814	0.01822	0.8926229	0.01831	0.8923718	-0.03715	111.18	-0.65880	0.11099
X9644_2.219.A	radJan	-81.93454	0.01822	0.8926410	0.01817	0.8927795	-0.02430	167.87	-1.23642	0.00018
X16364.321.T	BIO2	-41.93169	0.01821	0.8926423	0.01815	0.8928385	-0.04747	87.86	2.76107	-0.06866
X16364.392.C	DD18	-84.19901	0.01744	0.8949448	0.01740	0.8950711	-0.02365	172.40	0.48316	0.00094
M007D2.283.A	BIO15	-83.72187	0.01744	0.8949479	0.01742	0.8949875	-0.02378	171.44	-0.65456	0.00505
X9644_2.047.G	DD18	-83.69573	0.01711	0.8959174	0.01714	0.8958241	-0.02379	171.39	-0.45382	0.00094
M007B2.245.G	latitude	-84.62621	0.01685	0.8967205	0.01685	0.8967302	-0.02353	173.25	5.60306	-0.10563
X3870.069.A	radJan	-53.58889	0.01671	0.8971485	0.01659	0.8975204	-0.03716	111.18	-2.51160	0.00023
M002.141.G	longitude	-88.46433	0.01669	0.8971928	0.01668	0.8972262	-0.02251	180.93	-1.37202	0.06414
X5811.332.A	BIO15	-53.75048	0.01628	0.8984835	0.01631	0.8983801	-0.03705	111.50	-1.52950	-0.00652
X4312.211.G	BIO2	-87.71215	0.01613	0.8989287	0.01613	0.8989522	-0.02271	179.42	-0.58862	0.03932
X8398_2.201.A	BIO2	-48.21866	0.01584	0.8998327	0.01580	0.8999747	-0.04131	100.44	-2.44887	0.05858
M007CC2.333.G	BIO15	-87.94776	0.01584	0.8998333	0.01584	0.8998523	-0.02265	179.90	-0.37374	0.00462
M007D2.233.T	BIO2	-58.15131	0.01577	0.9000583	0.01574	0.9001664	-0.03425	120.30	-1.98776	0.05183
X3870.096.G	BIO6	-82.55325	0.01545	0.9010867	0.01542	0.9011653	-0.02413	169.11	1.34594	0.07669
X3870.069.A	radOct	-53.58954	0.01542	0.9011714	0.01531	0.9015121	-0.03717	111.18	-3.04944	0.00017
M007CC2.333.G	BIO2	-87.94800	0.01536	0.9013711	0.01536	0.9013669	-0.02265	179.90	0.10863	-0.03827
X8398_2.126.G	BIO2	-55.46749	0.01513	0.9021086	0.01509	0.9022226	-0.03592	114.93	-2.13376	0.05211
X3870.096.C	BIO2	-44.06265	0.01498	0.9025981	0.01502	0.9024662	-0.04521	92.13	1.57100	0.06031
M007CC2.083.G	vapDec	-61.55406	0.01464	0.9036784	0.01465	0.9036660	-0.03237	127.11	1.74195	-0.69388
M002.040.C	radOct	-83.75171	0.01438	0.9045337	0.01439	0.9045074	-0.02379	171.50	-0.67608	0.00012
M002.411.T	BIO13	-88.15233	0.01436	0.9046089	0.01436	0.9046090	-0.02260	180.30	-0.31818	0.00097
M007D2.201.A	BIO15	-87.98720	0.01410	0.9054627	0.01410	0.9054705	-0.02265	179.97	-0.19202	0.00433
X3870.069.A	CMD	-53.59021	0.01407	0.9055862	0.01384	0.9063542	-0.03718	111.18	-1.72146	-0.00273
X4312.099.C	radiation	-58.53602	0.01393	0.9060343	0.01392	0.9060747	-0.03404	121.07	0.59003	-0.00020
M007D2.283.A	CMD	-83.72363	0.01390	0.9061439	0.01384	0.9063541	-0.02380	171.45	-0.47381	-0.00205
M007CC2.107.C	BIO15	-53.75171	0.01382	0.9064293	0.01384	0.9063406	-0.03707	111.50	-1.54654	-0.00601

M007CC2.207.C	elevation	-74.08741	0.01299	0.9092555	0.01300	0.9092315	-0.02691	152.17	1.09362	-0.00008
X4312.400.T	BIO2	-55.46874	0.01264	0.9105012	0.01261	0.9105958	-0.03594	114.94	-2.09513	0.04762
M007CC2.251.A	BIO3	-77.84241	0.01263	0.9105114	0.01266	0.9104044	-0.02561	159.68	-0.29857	-0.01775
X3870.096.G	vapDec	-82.55483	0.01228	0.9117793	0.01228	0.9117759	-0.02415	169.11	0.81671	-0.52665
M002.380.A	latitude	-60.27192	0.01150	0.9146114	0.01150	0.9146115	-0.03308	124.54	3.86783	-0.10975
M007CC2.333.G	BIO6	-87.95030	0.01077	0.9173531	0.01076	0.9173753	-0.02268	179.90	-0.81818	-0.06155
X4312.059.A	BIO15	-49.98908	0.01043	0.9186626	0.01045	0.9185856	-0.03990	103.98	-1.68521	-0.00546
X3870.181.T	longitude	-73.77855	0.01040	0.9187806	0.01043	0.9186603	-0.02704	151.56	0.10131	-0.05699
M007CC2.333.G	radiation	-87.95058	0.01019	0.9195767	0.01019	0.9195836	-0.02268	179.90	1.18150	-0.00013
M007D2.242.A	radiation	-45.98790	0.01002	0.9202585	0.01003	0.9202313	-0.04338	95.98	-4.15407	0.00020
M007D2.242.A	CMD	-45.98812	0.00959	0.9219935	0.00974	0.9213910	-0.04338	95.98	-2.01610	0.00250
M007D2.283.A	radOct	-83.72579	0.00959	0.9220002	0.00957	0.9220573	-0.02383	171.45	-1.25430	0.00010
M002.410.A	BIO3	-88.70255	0.00932	0.9230990	0.00932	0.9231056	-0.02249	181.41	0.47489	-0.01397
M007B2.305.C	BIO15	-47.95268	0.00917	0.9237188	0.00915	0.9238005	-0.04161	99.91	-2.10427	0.00528
X3870.349.C	BIO13	-58.53848	0.00902	0.9243440	0.00901	0.9243745	-0.03409	121.08	-1.42630	-0.00103
M002.033.T	CMD	-53.87974	0.00890	0.9248397	0.00879	0.9253122	-0.03703	111.76	1.58648	0.00226
M007D2.194.T	radiation	-86.88415	0.00864	0.9259296	0.00864	0.9259357	-0.02297	177.77	1.02505	-0.00012
X4312.400.T	latitude	-55.47084	0.00843	0.9268556	0.00843	0.9268658	-0.03598	114.94	-6.56434	0.09939
M002.131.G	DD18	-46.24021	0.00817	0.9279809	0.00823	0.9277311	-0.04316	96.48	-2.03492	0.00096
M007D2.233.T	BIO6	-58.15514	0.00812	0.9281838	0.00810	0.9282983	-0.03432	120.31	-2.24080	-0.07162
M007D2.194.T	radOct	-86.88447	0.00800	0.9287228	0.00801	0.9287024	-0.02297	177.77	0.41748	-0.00009
X3870.179.A	BIO2	-53.59325	0.00799	0.9287671	0.00800	0.9287105	-0.03724	111.19	-1.40536	-0.03873
X16364.321.T	BIO13	-41.93682	0.00795	0.9289603	0.00794	0.9290004	-0.04759	87.87	2.01241	0.00119
X4312.207.C	BIO2	-48.22279	0.00759	0.9305877	0.00757	0.9306543	-0.04139	100.45	-2.29357	0.04050
M007CC2.207.C	BIO3	-74.09020	0.00742	0.9313472	0.00744	0.9312704	-0.02694	152.18	0.56991	0.01408
M007CC2.186.A	radOct	-85.96249	0.00736	0.9316142	0.00737	0.9316008	-0.02322	175.92	-0.43798	0.00009
X16364.200.C	BIO3	-87.35958	0.00718	0.9324742	0.00718	0.9324916	-0.02285	178.72	-0.59805	0.01236
M007B2.305.C	radiation	-47.95376	0.00700	0.9333030	0.00701	0.9332827	-0.04163	99.91	-3.66745	0.00016
X9644_2.219.A	radOct	-81.94036	0.00658	0.9353478	0.00659	0.9353043	-0.02437	167.88	0.00181	-0.00008
M002.063.C	BIO3	-73.46744	0.00655	0.9355098	0.00656	0.9354448	-0.02718	150.93	-0.57595	-0.01322
M007B2.266.A	BIO6	-53.43124	0.00652	0.9356565	0.00654	0.9355612	-0.03737	110.86	-1.08016	0.06666
M007B2.245.T	CMD	-45.98970	0.00643	0.9360824	0.00651	0.9356899	-0.04342	95.98	2.01347	-0.00197
M002.193.G	DD18	-86.45628	0.00637	0.9363696	0.00637	0.9364043	-0.02310	176.91	0.37056	0.00056
M007CC2.083.T	elevation	-70.57781	0.00583	0.9391323	0.00583	0.9391508	-0.02830	145.16	1.07750	0.00006
X3870.069.A	DD18	-53.59439	0.00571	0.9397394	0.00569	0.9398937	-0.03726	111.19	-1.72599	-0.00074
M007B2.266.A	BIO15	-53.43168	0.00563	0.9401949	0.00564	0.9401575	-0.03738	110.86	-1.60054	-0.00384
X16364.232.A	BIO3	-44.06738	0.00551	0.9408245	0.00554	0.9406906	-0.04532	92.13	1.54504	0.01712
M007B2.245.T	elevation	-45.99020	0.00543	0.9412668	0.00542	0.9412948	-0.04343	95.98	1.93296	0.00007
M007CC2.107.C	radJan	-53.75590	0.00542	0.9413075	0.00544	0.9411941	-0.03715	111.51	-1.31060	-0.00013
M007B2.245.T	BIO15	-45.99021	0.00542	0.9413166	0.00543	0.9412732	-0.04343	95.98	1.86292	0.00416
M007B2.275.A	BIO3	-55.12968	0.00530	0.9419372	0.00532	0.9418363	-0.03623	114.26	-1.20169	-0.01467
M007CC2.186.T	BIO14	-43.83202	0.00509	0.9431452	0.00510	0.9430658	-0.04557	91.66	1.94407	0.00238
X3870.349.C	BIO2	-58.54059	0.00480	0.9447847	0.00480	0.9447545	-0.03412	121.08	-1.32009	-0.02830
X8398_2.201.A	elevation	-48.22423	0.00471	0.9452979	0.00471	0.9452769	-0.04142	100.45	-2.00758	0.00006
M007B2.163.C	BIO13	-59.87574	0.00465	0.9456322	0.00465	0.9456436	-0.03336	123.75	1.40274	0.00072
M002.033.C	DD18	-71.19190	0.00435	0.9473943	0.00434	0.9474524	-0.02806	146.38	0.90788	0.00052
M007CC2.083.G	latitude	-61.55925	0.00426	0.9479873	0.00425	0.9479923	-0.03245	127.12	4.67972	-0.06567
M007CC2.251.A	CMD	-77.84671	0.00404	0.9493106	0.00403	0.9494099	-0.02566	159.69	-0.85548	-0.00113
M007CC2.186.A	radJan	-85.96432	0.00370	0.9514899	0.00370	0.9514992	-0.02324	175.93	0.46846	-0.00008
M007B2.163.G	BIO13	-80.19895	0.00367	0.9516654	0.00367	0.9516693	-0.02491	164.40	0.62284	0.00052
M002.411.T	BIO15	-88.15783	0.00336	0.9537604	0.00336	0.9537633	-0.02267	180.32	-0.25891	0.00212

M007B2.245.G	BIO15	-84.63303	0.00321	0.9548010	0.00321	0.9547967	-0.02361	173.27	0.34793	0.00212
M007D2.108.T	BIO3	-44.18493	0.00303	0.9560943	0.00304	0.9560188	-0.04523	92.37	-1.69340	-0.01272
M007CC2.350.G	BIO2	-77.84723	0.00300	0.9563117	0.00300	0.9563222	-0.02567	159.69	1.02021	-0.01841
M007D2.201.A	DD18	-87.99283	0.00286	0.9573734	0.00286	0.9573759	-0.02271	179.99	-0.04143	-0.00037
X4312.122.G	radJan	-60.07737	0.00275	0.9581978	0.00274	0.9582502	-0.03327	124.15	1.80207	-0.00009
M002.380.A	radOct	-60.27631	0.00272	0.9584121	0.00273	0.9583637	-0.03316	124.55	-1.01191	-0.00007
M007B2.316.A	BIO6	-86.04510	0.00264	0.9590521	0.00264	0.9590586	-0.02323	176.09	0.58686	0.03076
X9644_2.219.A	BIO14	-81.94239	0.00250	0.9601010	0.00250	0.9600913	-0.02439	167.88	-0.57621	-0.00110
X3870.179.A	radiation	-53.59612	0.00225	0.9621914	0.00225	0.9621986	-0.03729	111.19	-0.80863	-0.00009
M007B2.340.A	radiation	-61.34995	0.00211	0.9633498	0.00211	0.9633554	-0.03258	126.70	-0.63641	-0.00008
M007B2.163.C	radiation	-59.87712	0.00189	0.9652803	0.00190	0.9652760	-0.03339	123.75	2.27935	-0.00007
X4312.211.G	BIO14	-87.71927	0.00189	0.9653246	0.00189	0.9653281	-0.02279	179.44	-0.30007	0.00092
M002.131.G	BIO13	-46.24340	0.00180	0.9661409	0.00180	0.9661481	-0.04323	96.49	-1.94803	-0.00053
M002.141.G	DD18	-88.47178	0.00179	0.9662680	0.00179	0.9662713	-0.02260	180.94	-0.12050	-0.00029
X3870.024.T	BIO15	-35.54550	0.00172	0.9669472	0.00172	0.9669289	-0.05624	75.09	-2.08692	-0.00270
M002.380.A	BIO14	-60.27683	0.00169	0.9672286	0.00169	0.9672473	-0.03317	124.55	-1.57808	0.00112
X4312.293.T	elevation	-76.96687	0.00165	0.9676266	0.00165	0.9676303	-0.02597	157.93	-0.87337	-0.00003
M002.080.C	latitude	-85.74174	0.00154	0.9687180	0.00154	0.9687180	-0.02332	175.48	1.22060	-0.03139
X16364.320.G	DD18	-66.99251	0.00131	0.9711139	0.00131	0.9710906	-0.02984	137.99	1.26777	-0.00030
M007CC2.350.G	BIO14	-77.84808	0.00130	0.9711841	0.00130	0.9711918	-0.02568	159.70	0.90623	-0.00083
M002.131.G	radiation	-46.24367	0.00126	0.9717274	0.00126	0.9717236	-0.04323	96.49	-2.77904	0.00007
M002.131.G	radJan	-46.24370	0.00120	0.9723161	0.00121	0.9722852	-0.04324	96.49	-1.79161	-0.00007
M007B2.163.C	BIO3	-59.87748	0.00118	0.9726379	0.00117	0.9726586	-0.03339	123.75	1.70795	-0.00657
M007CC2.186.A	BIO3	-85.96562	0.00111	0.9733841	0.00111	0.9733866	-0.02326	175.93	0.36378	-0.00488
M007CC2.350.G	vapDec	-77.84818	0.00109	0.9736640	0.00109	0.9736651	-0.02568	159.70	0.79561	0.16222
X8398_2.266.A	BIO2	-61.76947	0.00092	0.9758099	0.00092	0.9758155	-0.03237	127.54	-1.56869	0.01193
M002.131.G	BIO14	-46.24384	0.00091	0.9759055	0.00091	0.9758916	-0.04324	96.49	-1.96720	-0.00098
M002.193.G	longitude	-86.45901	0.00091	0.9759265	0.00091	0.9759307	-0.02313	176.92	0.67530	-0.01522
M002.193.T	BIO15	-50.13695	0.00089	0.9762539	0.00089	0.9762611	-0.03988	104.27	1.92971	-0.00160
M007CC2.107.C	longitude	-53.75818	0.00087	0.9764177	0.00087	0.9764382	-0.03720	111.52	-2.14777	0.02062
M007B2.266.A	CMD	-53.43407	0.00086	0.9766257	0.00086	0.9765812	-0.03742	110.87	-1.73235	0.00066
X3870.096.C	longitude	-44.06972	0.00083	0.9770094	0.00083	0.9770338	-0.04537	92.14	2.53321	-0.02289
M002.411.T	BIO14	-88.15912	0.00078	0.9777471	0.00078	0.9777463	-0.02268	180.32	-0.15689	-0.00059
X4312.400.T	BIO13	-55.47467	0.00078	0.9777806	0.00078	0.9777830	-0.03605	114.95	-1.64495	-0.00031
X3870.096.C	BIO14	-44.06981	0.00066	0.9795809	0.00066	0.9795706	-0.04537	92.14	2.04281	0.00086
M007CC2.107.C	radOct	-53.75830	0.00064	0.9798620	0.00064	0.9798484	-0.03720	111.52	-1.48185	-0.00004
X3870.096.C	CMD	-44.06987	0.00052	0.9818217	0.00052	0.9818566	-0.04538	92.14	2.08477	0.00059
M007B2.305.C	longitude	-47.95701	0.00049	0.9823133	0.00049	0.9823267	-0.04170	99.91	-2.25501	0.01682
M007D2.108.T	radJan	-44.18623	0.00043	0.9834286	0.00043	0.9834169	-0.04526	92.37	-1.95655	-0.00004
X4312.122.G	longitude	-60.07855	0.00039	0.9843148	0.00039	0.9843226	-0.03329	124.16	1.75886	-0.01285
M002.278.G	BIO2	-46.24411	0.00038	0.9844298	0.00038	0.9844331	-0.04324	96.49	-2.09928	0.00932
X16364.392.C	BIO6	-84.20758	0.00030	0.9862550	0.00030	0.9862562	-0.02375	172.42	0.60009	0.01047
X16364.321.T	BIO6	-41.94065	0.00028	0.9865680	0.00028	0.9865624	-0.04768	87.88	2.01223	-0.01635
X3870.181.T	radJan	-73.78361	0.00027	0.9868323	0.00027	0.9868292	-0.02710	151.57	-0.92728	-0.00002
M007CC2.251.A	DD18	-77.84859	0.00027	0.9868428	0.00027	0.9868396	-0.02569	159.70	-0.86421	0.00012
M007B2.266.A	DD18	-53.43436	0.00026	0.9871242	0.00026	0.9871171	-0.03743	110.87	-1.73084	0.00016
M002.278.G	DD18	-46.24417	0.00025	0.9874563	0.00025	0.9874484	-0.04325	96.49	-2.02203	0.00017
X16364.232.A	radJan	-44.07003	0.00021	0.9884416	0.00021	0.9884360	-0.04538	92.14	1.99040	0.00003
M007CC2.251.A	radJan	-77.84864	0.00019	0.9890763	0.00019	0.9890745	-0.02569	159.70	-0.79884	-0.00002
X3870.096.G	DD18	-82.56089	0.00016	0.9899404	0.00016	0.9899391	-0.02422	169.12	0.60152	-0.00009
X4312.211.G	radiation	-87.72016	0.00013	0.9910232	0.00013	0.9910233	-0.02280	179.44	-0.09491	-0.00001

M007D2.201.A	radJan	-87.99420	0.00012	0.9913722	0.00012	0.9913721	-0.02273	179.99	-0.00068	-0.00001
X9644_2.023.G	latitude	-49.64758	0.00010	0.9920478	0.00010	0.9920476	-0.04028	103.30	0.96103	0.01118
X5811.332.A	BIO14	-53.75858	0.00007	0.9932167	0.00007	0.9932176	-0.03720	111.52	-1.76021	0.00025
M002.131.G	latitude	-46.24427	0.00005	0.9941652	0.00005	0.9941652	-0.04325	96.49	-2.45789	0.00894
M007D2.283.A	latitude	-83.73056	0.00005	0.9942100	0.00005	0.9942100	-0.02389	171.46	-0.77771	0.00595
M007D2.233.T	DD18	-58.15917	0.00005	0.9944430	0.00005	0.9944442	-0.03439	120.32	-1.54271	-0.00006
M007CC2.083.G	radiation	-61.56137	0.00002	0.9967257	0.00002	0.9967258	-0.03249	127.12	1.38434	0.00001
M007D2.194.T	latitude	-86.88847	0.00001	0.9975640	0.00001	0.9975640	-0.02302	177.78	-0.38926	0.00244
M002.033.C	radJan	-71.19408	0.00000	0.9984287	0.00000	0.9984288	-0.02809	146.39	0.92561	0.00000

G	score of the G-test
P_G	significance of the G-test without correction for multiple testing
Wald	score of the Wald test
P_{Wald}	significance of the Wald test without correction for multiple testing
McFadden Adj R^2	adjusted McFadden goodness-of-fit measure
AIC	Akaike Information Criterion
β_0	intercept of the logistic regression model
β_1	slope of the logistic regression model

BIO2	mean diurnal range of temperatures deficit
BIO3	isothermality
BIO6	minimum temperature of the coldest month
BIO13	precipitation of the wettest month
BIO14	precipitation of the driest month
BIO15	precipitation seasonality
CMD	Hargreaves climate moisture deficit
DD18	degree-days > 18 °C
radiation	yearly average of solar radiation
radJan	January average of solar radiation
radOct	October average of solar radiation
vapDec	vapour pressure in December

S5

Bayesian factors for SNP-environment associations calculated by BayEnv2

	Latitude	Longitude	Elevation	BIO2	BIO3	BIO6	BIO13	BIO14	BIO15	radiation	radJan	radOct	vapDec	DD18	CMD
M007D2.108.T	**1.29**	0.54	0.50	0.61	0.52	0.58	0.91	0.70	0.66	**1.91**	0.50	0.55	0.55	0.68	**1.15**
M007D2.194.T	0.67	0.77	0.67	0.84	0.83	0.82	0.67	0.67	0.69	0.68	0.62	0.64	0.66	0.66	0.73
M007D2.201.A	**1.01**	0.67	0.68	0.90	0.76	0.72	0.92	0.93	0.67	**1.10**	0.68	0.72	0.75	0.62	0.67
M007D2.233.T	**1.12**	0.65	0.80	0.66	0.65	0.61	0.63	0.64	0.60	0.89	0.93	**1.04**	0.80	0.63	0.86
M007D2.235.G	0.84	0.70	0.70	0.79	0.74	0.68	0.79	0.83	0.69	0.95	0.71	0.75	0.70	0.68	0.68
M007D2.242.A	0.68	0.93	0.88	0.63	0.71	0.55	0.53	0.62	0.75	0.52	0.84	0.81	0.92	0.55	0.55
M007D2.271.C	0.54	0.69	0.98	0.77	0.53	0.56	0.59	0.58	0.73	0.54	0.72	0.63	0.97	0.61	0.57
M007D2.283.A	0.68	0.72	0.69	0.74	0.77	0.73	0.68	0.67	0.67	0.67	0.67	0.69	0.72	0.71	0.70
M007D2.371.C	0.58	**1.02**	0.87	0.78	0.80	0.67	0.95	0.84	0.65	**1.10**	0.72	0.66	**1.48**	**1.26**	0.91
M007D2.412.A	0.68	0.88	**1.14**	0.78	0.67	0.58	0.64	0.63	0.78	0.57	0.89	0.83	**1.18**	0.60	0.61
M007CC2.083.G	0.55	0.71	0.60	0.59	0.58	0.59	0.59	0.55	0.80	0.58	0.58	0.56	0.64	0.70	0.98
M007CC2.083.T	0.78	1.00	0.59	0.67	0.98	0.75	0.62	0.60	0.65	0.62	0.74	0.82	0.61	1.00	0.59
M007CC2.086.A	0.73	0.98	0.66	0.62	0.91	0.68	0.64	0.61	0.67	0.67	0.79	0.82	0.68	**1.10**	0.67
M007CC2.086.G	0.59	0.60	0.60	0.63	0.55	0.64	0.59	0.57	0.74	0.59	0.57	0.56	0.59	0.62	**1.01**
M007CC2.107.C	0.59	0.54	0.70	0.85	0.63	0.65	0.66	0.72	0.59	0.64	0.57	0.56	0.69	0.59	0.60

M007CC2.186.T	0.84	**2.24**	0.96	0.57	**1.90**	0.65	0.72	0.58	**1.04**	0.55	**1.50**	**1.49**	0.95	**1.04**	0.54
M007CC2.186.A	0.63	0.64	0.68	0.73	0.61	0.76	0.79	0.74	0.67	0.69	0.62	0.61	0.69	0.71	0.92
M007CC2.207.T	0.63	0.84	0.62	0.63	0.61	0.76	0.59	0.61	0.83	0.68	0.62	0.61	0.62	0.82	**1.63**
M007CC2.207.C	0.71	0.60	0.61	0.65	0.63	0.86	0.66	0.63	0.61	0.69	0.61	0.63	0.62	0.60	0.62
M007CC2.230.T	0.64	0.63	0.65	0.64	0.63	0.69	0.65	0.63	0.66	0.63	0.61	0.62	0.62	0.66	**1.10**
M007CC2.251.A	0.75	0.69	0.68	0.96	0.61	0.80	0.99	**1.53**	0.71	0.91	0.59	0.60	0.68	0.61	0.69
M007CC2.256.T	0.74	0.56	0.62	0.65	0.55	0.82	0.60	0.63	0.79	0.71	0.74	0.76	0.66	0.56	**1.42**
M007CC2.256.C	0.98	0.67	0.62	0.68	0.67	**1.30**	0.98	0.69	0.81	**1.20**	0.73	0.81	0.67	0.62	0.74
M007CC2.258.A	0.78	0.62	0.63	0.67	0.64	0.81	0.59	0.68	0.84	0.68	0.86	0.87	0.73	0.59	**1.42**
M007CC2.258.T	0.80	0.57	0.64	0.64	0.58	**1.05**	0.76	0.62	0.74	0.87	0.64	0.69	0.66	0.58	0.67
M007CC2.269.A	0.63	0.83	0.58	0.57	0.60	0.79	0.57	0.60	0.88	0.63	0.64	0.66	0.60	0.75	**1.47**
M007CC2.269.T	0.72	0.62	0.64	0.71	0.63	0.89	0.71	0.66	0.67	0.72	0.63	0.66	0.62	0.66	0.72
M007CC2.333.G	0.62	0.66	0.69	0.69	0.71	0.65	0.70	0.70	0.66	0.62	0.68	0.68	0.69	0.65	0.99
M007CC2.350.A	**1.57**	**1.04**	0.68	0.62	**1.40**	0.67	0.66	0.91	0.64	0.91	**1.49**	**1.78**	0.78	0.67	0.96
M007CC2.350.G	0.61	0.67	0.74	0.72	0.61	0.78	0.76	0.68	0.66	0.68	0.60	0.59	0.69	0.67	0.79
M007CC2.373.C	0.79	0.80	0.66	0.84	0.71	0.67	0.80	**1.21**	0.74	0.77	0.67	0.72	0.66	0.62	0.65
M007B2.082.T	0.68	0.77	0.89	0.78	0.73	0.75	0.65	0.66	0.66	0.65	0.70	0.67	0.71	0.81	0.90
M007B2.163.G	**1.87**	0.71	**1.13**	0.75	**1.18**	**1.04**	0.73	0.67	**1.07**	0.94	**1.34**	**1.46**	0.96	0.84	0.79
M007B2.163.C	0.60	0.60	0.68	0.64	0.59	0.65	0.61	0.73	0.80	0.61	0.60	0.59	0.61	0.76	0.66
M007B2.164.A	0.83	0.86	0.72	0.60	0.93	0.67	0.57	0.60	0.69	0.60	**1.09**	**1.05**	0.82	0.96	0.63
M007B2.198.G	0.68	0.83	0.87	0.72	0.81	0.66	0.64	0.66	0.66	0.60	0.93	0.85	0.81	**1.08**	0.66
M007B2.245.T	0.71	0.49	0.62	0.94	0.61	0.77	0.91	**1.05**	0.54	0.73	0.52	0.52	0.54	0.50	0.60
M007B2.245.G	0.70	0.73	0.73	0.67	0.79	0.68	0.66	0.67	0.67	0.69	0.73	0.71	0.70	0.89	0.81
M007B2.266.A	0.67	0.56	0.61	0.66	0.61	0.62	0.59	0.71	0.60	0.60	0.59	0.60	0.57	0.54	0.61
M007B2.275.A	0.64	0.61	**1.40**	9.42	0.77	**1.62**	3.50	6.52	0.64	**1.37**	0.66	0.65	**1.83**	0.81	3.36
M007B2.305.C	0.54	0.54	0.75	**1.04**	0.66	0.74	0.55	0.58	0.59	0.53	0.55	0.53	0.73	0.53	0.93
M007B2.316.A	0.63	0.85	0.70	0.71	0.79	0.71	0.76	0.67	0.78	0.76	0.76	0.70	0.88	0.87	0.75
M007B2.340.A	0.80	0.73	0.66	0.57	0.90	0.91	0.55	0.57	0.59	0.57	0.90	0.97	0.63	0.84	0.57
M007B2.361.A	0.61	**1.30**	0.61	0.61	0.68	0.71	0.73	0.65	**1.56**	0.75	0.60	0.60	0.62	0.68	0.60
M007B2.376.A	0.74	0.64	0.94	**1.37**	0.63	0.91	0.92	0.83	0.96	**1.40**	0.51	0.51	0.87	0.70	3.03
M007B2.384.C	0.72	0.70	0.57	0.55	0.89	**1.06**	0.54	0.54	0.61	0.56	0.75	0.78	0.59	0.70	0.59
M007B2.405.A	0.83	0.70	0.66	0.64	0.91	0.98	0.65	0.67	0.61	0.66	0.78	0.80	0.65	0.71	0.61
M002.020.C	0.66	0.76	**1.10**	**1.27**	0.62	0.65	**1.82**	**1.57**	0.71	**1.41**	0.71	0.61	0.93	0.95	0.78
M002.033.C	0.71	0.64	0.70	0.78	0.63	0.65	0.84	0.66	0.83	0.98	0.63	0.64	0.72	0.63	0.81
M002.033.T	0.98	0.73	0.65	0.61	0.77	0.85	0.63	0.76	0.72	0.75	1.00	0.97	0.60	0.64	0.65
M002.040.C	0.86	0.78	0.69	0.75	0.79	0.92	**1.32**	0.78	0.90	**1.16**	0.68	0.65	0.78	0.76	0.76
M002.063.C	0.65	0.60	0.77	0.74	0.61	0.76	0.57	0.58	0.65	0.59	0.68	0.70	0.87	0.60	0.60
M002.080.C	0.64	0.65	**1.02**	**1.39**	0.73	0.84	0.76	0.84	0.70	0.70	0.71	0.70	**1.06**	0.63	0.83
M002.097.A	0.70	0.66	0.94	**1.12**	0.76	0.83	0.72	0.73	0.67	0.67	0.75	0.73	0.90	0.67	0.81
M002.105.T	0.65	0.66	0.93	**1.16**	0.72	0.95	0.69	0.72	0.70	0.64	0.73	0.71	0.90	0.65	0.87
M002.114.A	0.61	0.63	0.68	0.78	0.75	0.95	0.64	0.72	0.70	0.63	0.59	0.58	0.71	0.59	0.68
M002.131.G	0.54	0.58	0.58	0.63	0.63	0.55	0.63	0.59	0.60	0.55	0.62	0.62	0.62	0.58	0.71
M002.135.T	0.58	0.53	0.57	0.70	0.66	0.62	0.58	0.59	0.57	0.57	0.53	0.55	0.57	0.52	0.73
M002.141.G	0.72	0.64	0.78	0.93	0.75	0.97	0.68	0.68	0.70	0.76	0.63	0.63	0.71	0.61	0.77
M002.193.G	0.70	0.63	0.74	0.74	0.66	0.71	0.71	0.71	0.67	0.70	0.65	0.65	0.70	0.65	0.70
M002.193.T	**2.03**	0.72	0.67	0.62	0.82	0.67	0.77	**1.12**	0.58	**1.27**	**1.37**	**1.68**	0.79	0.77	0.63
M002.278.G	**1.01**	0.63	0.57	0.56	0.85	0.60	0.55	0.59	0.57	0.70	0.83	0.93	0.57	0.51	0.89
M002.282.T	0.62	0.62	0.65	0.68	0.60	**1.06**	0.62	0.59	0.72	0.60	0.70	0.67	0.81	0.58	0.61
M002.353.A	0.81	0.76	0.78	0.64	0.64	0.68	0.60	0.63	0.71	0.59	0.88	0.94	0.81	0.67	0.69
M002.353.G	0.67	0.63	0.75	0.89	0.60	**1.06**	0.75	0.64	0.74	0.66	0.81	0.79	0.97	0.60	0.64
M002.354.A	0.71	0.60	0.77	0.85	0.56	0.95	0.67	0.68	0.72	0.69	0.78	0.76	0.84	0.59	0.63
M002.354.T	0.70	0.79	0.72	0.62	0.71	0.65	0.56	0.65	0.82	0.57	0.84	0.81	0.81	0.63	0.60
M002.380.A	0.60	0.69	0.64	0.63	0.64	0.65	0.62	0.61	0.58	0.64	0.56	0.57	0.58	0.84	0.90
M002.410.A	0.65	0.66	**1.01**	0.93	0.63	0.96	0.78	0.78	0.70	0.67	0.68	0.66	0.80	0.69	0.73

M002.411.T	0.69	0.74	0.77	0.74	0.69	0.64	0.71	0.64	0.74	0.68	0.85	0.84	0.97	0.79	0.67
M002.413.C	0.63	0.66	0.76	0.85	0.66	0.96	0.72	0.71	0.69	0.67	0.64	0.64	0.71	0.64	0.72
M002.459.A	0.58	0.53	0.57	0.68	0.53	0.60	0.68	0.59	0.66	0.70	0.52	0.52	0.61	0.52	0.82
M002.486.A	0.63	0.71	**1.21**	**1.31**	0.66	**1.58**	0.97	0.88	0.73	0.74	0.74	0.69	**1.12**	0.73	0.98
X16364.098.A	0.77	0.69	0.71	0.72	0.73	0.67	0.63	0.74	0.71	0.67	0.89	0.83	0.72	0.65	0.66
X16364.137.T	0.54	0.94	**1.11**	0.91	0.60	**1.60**	**1.27**	0.77	0.80	0.70	0.86	0.74	**1.21**	**1.26**	**1.04**
X16364.200.C	0.76	0.65	0.94	**1.33**	0.61	**1.90**	**1.31**	0.94	0.92	**1.09**	0.63	0.60	0.95	0.73	**1.74**
X16364.232.A	0.64	0.83	0.98	0.80	0.49	**1.42**	**1.21**	0.78	**1.13**	**1.28**	0.53	0.51	0.80	**1.06**	3.00
X16364.232.T	0.99	0.73	0.71	0.97	0.78	**1.18**	0.99	**1.30**	0.75	0.96	0.78	0.82	0.69	0.70	0.80
X16364.320.G	0.60	0.58	0.59	0.62	0.59	0.67	0.63	0.76	0.83	0.63	0.61	0.58	0.66	0.62	0.60
X16364.320.A	0.67	0.66	0.72	0.73	0.78	0.64	0.67	0.76	0.69	0.63	0.84	0.78	0.72	0.74	0.63
X16364.321.T	0.68	0.56	0.53	0.53	0.62	0.52	0.55	0.85	0.68	0.51	0.69	0.72	0.72	0.49	0.62
X16364.321.C	0.80	0.82	0.80	**1.05**	0.67	0.73	0.74	**1.03**	**1.02**	0.75	0.81	0.79	0.74	0.67	0.77
X16364.392.T	0.69	0.55	0.54	0.56	0.58	0.57	0.59	0.78	0.67	0.59	0.61	0.63	0.60	0.51	0.62
X16364.392.C	0.83	0.74	0.67	0.68	0.70	0.68	0.63	0.69	0.93	0.78	0.76	0.76	0.66	0.65	0.89
X3870.024.T	0.62	0.63	0.79	0.80	0.66	0.61	0.65	0.71	0.57	0.72	0.67	0.68	0.70	0.63	0.54
X3870.069.A	0.58	0.53	0.99	**1.49**	0.58	0.59	0.85	**1.96**	0.74	0.80	0.53	0.52	0.69	0.53	0.60
X3870.096.G	0.67	0.70	**1.02**	0.87	0.73	0.64	0.64	0.82	0.79	0.63	0.67	0.68	0.67	0.66	0.65
X3870.096.C	0.86	0.52	0.77	0.56	0.75	0.54	0.54	0.58	0.71	0.62	0.70	0.72	0.58	0.76	0.58
X3870.179.A	0.58	0.72	0.59	0.64	0.86	0.60	0.61	0.78	**1.01**	0.59	0.64	0.59	0.61	0.60	0.76
X3870.181.T	0.63	0.59	0.61	0.63	0.65	0.77	0.62	0.64	0.65	0.65	0.59	0.58	0.62	0.64	0.91
X3870.182.C	0.60	0.65	0.61	0.63	0.61	0.70	0.65	0.61	0.71	0.74	0.61	0.60	0.66	0.63	0.90
X3870.216.A	0.58	0.74	0.72	0.64	0.62	0.60	0.59	0.56	0.63	0.60	0.70	0.78	0.87	0.65	0.66
X3870.250.C	0.55	**1.55**	0.69	0.65	0.92	0.56	0.58	0.55	0.59	0.61	0.72	0.70	0.68	0.92	0.52
X3870.349.C	0.86	0.88	0.79	0.64	0.65	0.63	0.63	0.63	0.59	0.65	0.84	**1.12**	0.83	0.99	0.63
X3870.380.A	0.64	0.69	0.74	0.62	0.62	0.62	0.60	0.53	0.57	0.69	0.68	0.71	0.71	0.61	0.56
X3870.450.T	0.64	0.60	**1.04**	0.74	0.54	0.53	0.62	0.67	0.59	0.62	0.65	0.69	0.64	0.59	0.55
X3870.533.A	0.69	0.56	0.96	**1.42**	0.65	0.81	0.93	**1.53**	0.60	0.87	0.58	0.61	0.64	0.57	0.63
X4312.059.A	0.57	0.58	0.60	0.59	0.59	0.62	0.60	0.60	0.58	0.59	0.55	0.54	0.60	0.56	0.63
X4312.099.C	0.63	0.61	0.75	0.70	0.56	0.59	0.64	0.60	0.62	0.58	0.86	0.76	0.77	0.77	0.63
X4312.122.G	0.79	0.59	0.65	0.91	0.62	**1.16**	0.85	0.61	**1.09**	0.99	0.58	0.62	0.79	0.60	**1.12**
X4312.122.A	0.69	0.79	0.88	0.81	0.76	**1.10**	0.87	0.72	0.74	0.71	0.81	0.76	0.86	0.91	0.79
X4312.207.C	0.58	0.53	0.53	0.59	0.49	0.52	0.60	0.54	0.65	0.81	0.49	0.48	0.73	0.57	0.67
X4312.211.G	0.63	0.65	0.66	0.65	0.63	0.66	0.68	0.65	0.72	0.65	0.65	0.62	0.67	0.66	0.68
X4312.236.G	**1.29**	**1.04**	**1.14**	0.70	**1.00**	0.67	0.65	0.71	0.72	0.70	**1.76**	**2.12**	**1.24**	**1.40**	0.66
X4312.245.A	0.73	0.63	0.74	0.64	0.58	0.62	0.58	0.62	0.61	0.60	0.77	0.85	0.64	0.83	0.57
X4312.255.T	0.70	0.85	0.84	0.61	0.91	0.53	0.61	0.56	0.60	0.52	**1.01**	0.95	0.73	0.90	0.55
X4312.269.G	**1.46**	**1.26**	**1.59**	0.85	0.93	0.75	0.70	0.78	0.73	0.77	**1.53**	**1.82**	**1.15**	**1.51**	0.71
X4312.293.T	0.65	0.85	0.61	0.62	0.82	0.74	0.66	0.63	**1.27**	0.71	0.66	0.63	0.75	0.69	0.86
X4312.303.G	0.58	0.82	0.85	0.58	0.71	0.64	0.58	0.72	0.57	0.53	0.66	0.65	0.61	0.84	0.66
X4312.400.T	0.56	0.63	0.64	0.61	0.58	0.56	0.56	0.57	0.59	0.60	0.60	0.60	0.84	0.67	0.62
X5811.332.A	0.70	0.61	0.74	0.57	0.61	0.54	0.54	0.51	0.56	0.59	0.66	0.65	0.61	0.58	0.54
X5811.397.G	0.66	**2.07**	3.57	**1.98**	0.65	0.95	**1.60**	0.89	0.82	0.96	**1.42**	**1.45**	3.28	4.07	**1.22**
X5811.397.A	0.61	**2.80**	**2.77**	**1.51**	0.74	**1.01**	**1.34**	0.79	0.88	0.70	**1.99**	**2.09**	3.80	5.33	**1.48**
X9644_2.023.G	0.74	**1.94**	0.85	0.67	**1.54**	0.75	**1.11**	0.67	0.80	0.66	**1.27**	**1.25**	0.91	**2.00**	0.67
X9644_2.024.G	**1.18**	**2.58**	**2.89**	4.52	0.56	6.81	**16.96**	4.09	**2.17**	**11.39**	0.78	0.60	3.14	3.50	6.23
X9644_2.028.G	0.61	0.71	0.74	0.78	0.60	0.74	0.62	0.80	0.83	0.59	0.64	0.61	0.64	0.65	0.84
X9644_2.047.G	0.84	0.65	0.66	0.76	0.76	**1.95**	0.82	0.76	0.85	0.80	0.71	0.80	0.68	0.61	**1.37**
X9644_2.122.T	0.62	0.78	0.60	0.60	0.70	0.62	0.56	0.68	**1.16**	0.58	0.65	0.61	0.57	0.61	0.67
X9644_2.219.A	0.65	0.71	0.69	0.66	0.65	0.68	0.69	0.61	0.78	0.80	0.64	0.63	0.70	0.65	0.79
X8398_2.126.G	0.82	3.44	0.88	0.67	3.36	0.76	0.80	0.62	3.63	0.60	**1.49**	**1.15**	0.82	3.19	**1.62**
X8398_2.201.A	0.75	0.54	0.52	0.53	0.49	0.96	0.65	0.55	0.80	0.87	0.54	0.57	0.52	0.49	0.79
X8398_2.266.A	0.82	6.94	**1.17**	0.58	3.62	0.57	0.75	0.55	**2.04**	0.57	**2.49**	**1.85**	**1.31**	4.66	**1.11**
X8398_2.410.C	0.94	3.99	**1.23**	0.67	**2.57**	0.64	0.88	0.64	**1.40**	0.66	**1.78**	**1.45**	**1.22**	3.70	**1.25**

BIO2	mean diurnal range of temperatures deficit
BIO3	isothermality
BIO6	minimum temperature of the coldest month
BIO13	precipitation of the wettest month
BIO14	precipitation of the driest month
BIO15	precipitation seasonality
CMD	Hargreaves climate moisture deficit
DD18	degree-days > 18 °C
radiation	yearly average of solar radiation
radJan	January average of solar radiation
radOct	October average of solar radiation
vapDec	vapour pressure in December

Strength of evidence for the selection model:

BF>1.00	Barely worth mentioning
BF>3.00	Substantial
BF>10.00	Strong