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*Supplement of*

## **Thermal alteration of soil organic matter properties: a systematic study to infer response of Sierra Nevada climosequence soils to forest fires**

**Samuel N. Araya et al.**

*Correspondence to:* Samuel N. Araya (saraya@ucmerced.edu)

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## S1. Bulk soil analysis

One-way ANOVA tables and, where  $p < 0.05$ , Tukey's HSD test comparison of means 95% family-wise confidence level.

### Vista series (210m)

One-way analysis of variance for **Macro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	197.5	32.91	1.371	0.292
Residuals	14	336.1	24.01		

One-way analysis of variance for **Micro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	170.3	28.39	1.919	0.148
Residuals	14	207.2	14.80		

One-way analysis of variance for **silt-Clay size particles weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	7.97	1.328	0.606	0.722
Residuals	14	30.68	2.191		

One-way analysis of variance for **δ15N (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	52.23	8.706	47.6	<2e-16 ***
Residuals	41	7.50	0.183		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	-0.68283	-1.44804	0.082373	0.107754
250-25	0.394333	-0.37087	1.15954	0.684788
350-25	1.209212	0.444006	1.974418	0.000294
450-25	-0.27662	-1.04183	0.488585	0.918142
550-25	-0.68032	-1.343	-0.01763	0.040852
650-25	-2.65308	-3.41828	-1.88787	4.40E-12
250-150	1.077167	0.31196	1.842373	0.001529
350-150	1.892045	1.126839	2.657252	3.97E-08
450-150	0.406212	-0.35899	1.171418	0.65472
550-150	0.002518	-0.66017	0.665206	1
650-150	-1.97024	-2.73545	-1.20504	1.45E-08
350-250	0.814879	0.049673	1.580085	0.030301
450-250	-0.67095	-1.43616	0.094252	0.119505
550-250	-1.07465	-1.73734	-0.41196	0.000197
650-250	-3.04741	-3.81262	-2.2822	8.74E-13
450-350	-1.48583	-2.25104	-0.72063	8.11E-06
550-350	-1.88953	-2.55222	-1.22684	1.00E-09

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
650-350	-3.86229	-4.6275	-3.09708	8.16E-13
550-450	-0.40369	-1.06638	0.258994	0.499444
650-450	-2.37646	-3.14166	-1.61125	9.30E-11
650-550	-1.97276	-2.63545	-1.31007	3.06E-10

**One-way analysis of variance for  $\delta_{13C}$  (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	41.23	6.872	22.51	3.37e-10 ***
Residuals	32	9.77	0.305		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
150-25	-0.17167	-1.17428	0.830945	0.998006
250-25	-0.42417	-1.42678	0.578445	0.832959
350-25	0.668601	-0.33401	1.671213	0.378984
450-25	2.099934	1.097323	3.102546	3.98E-06
550-25	1.741157	0.738545	2.743768	9.87E-05
650-25	2.348334	1.120391	3.576278	2.03E-05
250-150	-0.2525	-1.25511	0.750111	0.984166
350-150	0.840268	-0.16234	1.842879	0.149353
450-150	2.271601	1.26899	3.274213	8.77E-07
550-150	1.912823	0.910212	2.915435	2.11E-05
650-150	2.520001	1.292058	3.747944	5.80E-06
350-250	1.092768	0.090156	2.095379	0.025466
450-250	2.524101	1.52149	3.526713	9.97E-08
550-250	2.165323	1.162712	3.167935	2.23E-06
650-250	2.772501	1.544558	4.000444	9.39E-07
450-350	1.431333	0.428722	2.433945	0.001543
550-350	1.072556	0.069944	2.075167	0.029728
650-350	1.679733	0.45179	2.907677	0.002589
550-450	-0.35878	-1.36139	0.643834	0.915668
650-450	0.2484	-0.97954	1.476343	0.995013
650-550	0.607178	-0.62077	1.835121	0.710922

**One-way analysis of variance for N (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	0.14249	0.023749	174.4	<2e-16 ***
Residuals	41	0.00558	0.000136		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
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Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-0.01018	-0.03106	0.0107	0.736676
250-25	-0.02977	-0.05065	-0.00889	0.001293
350-25	-0.05438	-0.07527	-0.0335	1.08E-08
450-25	-0.10249	-0.12337	-0.08161	8.16E-13
550-25	-0.1336	-0.15169	-0.11552	8.16E-13
650-25	-0.13686	-0.15774	-0.11598	8.16E-13
250-150	-0.01959	-0.04047	0.001294	0.078597
350-150	-0.0442	-0.06508	-0.02332	1.39E-06
450-150	-0.09231	-0.11319	-0.07143	8.21E-13
550-150	-0.12342	-0.14151	-0.10534	8.16E-13
650-150	-0.12668	-0.14756	-0.1058	8.16E-13
350-250	-0.02462	-0.0455	-0.00374	0.011864
450-250	-0.07272	-0.0936	-0.05184	3.95E-12
550-250	-0.10384	-0.12192	-0.08575	8.16E-13
650-250	-0.10709	-0.12798	-0.08621	8.16E-13
450-350	-0.04811	-0.06899	-0.02723	2.12E-07
550-350	-0.07922	-0.0973	-0.06114	8.22E-13
650-350	-0.08248	-0.10336	-0.0616	8.90E-13
550-450	-0.03111	-0.0492	-0.01303	7.41E-05
650-450	-0.03437	-0.05525	-0.01349	0.000155
650-550	-0.00326	-0.02134	0.014825	0.997624

**One-way analysis of variance for C (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	15.197	2.533	57.61	<2e-16 ***
Residuals	41	1.803	0.044		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-0.39558	-0.77078	-0.02039	0.032936
250-25	-0.50336	-0.87855	-0.12816	0.002817
350-25	-1.06566	-1.44086	-0.69047	1.11E-09
450-25	-1.43611	-1.8113	-1.06091	9.98E-13
550-25	-1.48973	-1.81466	-1.1648	8.17E-13
650-25	-1.49848	-1.87367	-1.12328	8.70E-13
250-150	-0.10777	-0.48297	0.26742	0.972047
350-150	-0.67008	-1.04528	-0.29489	3.87E-05
450-150	-1.04053	-1.41572	-0.66533	2.11E-09
550-150	-1.09415	-1.41908	-0.76922	9.43E-12
650-150	-1.1029	-1.47809	-0.7277	4.35E-10
350-250	-0.56231	-0.9375	-0.18711	0.000647
450-250	-0.93275	-1.30795	-0.55756	3.47E-08

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
550-250	-0.98638	-1.3113	-0.66145	1.77E-10
650-250	-0.99512	-1.37032	-0.61993	6.81E-09
450-350	-0.37045	-0.74564	0.004749	0.054958
550-350	-0.42407	-0.749	-0.09914	0.003923
650-350	-0.43281	-0.80801	-0.05762	0.014705
550-450	-0.05362	-0.37855	0.271307	0.998546
650-450	-0.06237	-0.43756	0.312828	0.998486
650-550	-0.00874	-0.33367	0.316183	1

#### One-way analysis of variance for C/N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	577.2	96.2	74.06	<2e-16 ***
Residuals	32	41.6	1.3		

#### Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-2.15428	-4.22252	-0.08603	0.036782
250-25	-1.85542	-3.92366	0.212828	0.102312
350-25	-5.89259	-7.96083	-3.82434	6.36E-09
450-25	-9.18243	-11.2507	-7.11419	1.81E-13
550-25	-9.73663	-11.8049	-7.66839	1.18E-13
650-25	-10.0536	-12.5867	-7.52058	1.72E-12
250-150	0.29886	-1.76938	2.367104	0.999234
350-150	-3.73831	-5.80655	-1.67007	5.22E-05
450-150	-7.02816	-9.0964	-4.95991	9.05E-11
550-150	-7.58236	-9.6506	-5.51412	1.31E-11
650-150	-7.89937	-10.4324	-5.3663	7.52E-10
350-250	-4.03717	-6.10541	-1.96893	1.42E-05
450-250	-7.32702	-9.39526	-5.25877	3.15E-11
550-250	-7.88122	-9.94946	-5.81298	4.84E-12
650-250	-8.19823	-10.7313	-5.66516	3.04E-10
450-350	-3.28984	-5.35809	-1.2216	0.000365
550-350	-3.84405	-5.91229	-1.7758	3.29E-05
650-350	-4.16106	-6.69413	-1.62799	0.000229
550-450	-0.5542	-2.62245	1.51404	0.978327
650-450	-0.87122	-3.40429	1.661855	0.929148
650-550	-0.31701	-2.85008	2.216058	0.999664

#### Musick series (1384m)

##### One-way analysis of variance for Macro aggregate weight (%)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	1243.8	207.30	15.39	1.93e-05 ***
Residuals	14	188.6	13.47		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	95% Confidence Limits	P adj
150-25	-3.47332	-13.7054	6.758739	0.898147
250-25	-11.7035	-21.9356	-1.47145	0.020614
350-25	-16.0988	-26.3309	-5.86675	0.001474
450-25	-19.2834	-29.5155	-9.05133	0.000246
550-25	-21.0115	-31.2436	-10.7795	9.82E-05
650-25	-19.3156	-29.5476	-9.08351	0.000241
250-150	-8.23019	-18.4622	2.001873	0.156762
350-150	-12.6255	-22.8575	-2.39343	0.011765
450-150	-15.8101	-26.0421	-5.57801	0.001744
550-150	-17.5382	-27.7703	-7.30617	0.000645
650-150	-15.8422	-26.0743	-5.61019	0.001712
350-250	-4.3953	-14.6274	5.836761	0.758701
450-250	-7.57988	-17.8119	2.652176	0.220417
550-250	-9.30804	-19.5401	0.924022	0.085874
650-250	-7.61206	-17.8441	2.620002	0.216838
450-350	-3.18459	-13.4166	7.047475	0.929151
550-350	-4.91274	-15.1448	5.319321	0.661988
650-350	-3.21676	-13.4488	7.015301	0.926027
550-450	-1.72815	-11.9602	8.503906	0.996568
650-450	-0.03217	-10.2642	10.19989	1
650-550	1.69598	-8.53608	11.92804	0.996902

One-way analysis of variance for **Micro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	1402.1	233.68	25.48	9.04e-07 ***
Residuals	14	128.4	9.17		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	95% Confidence Limits	P adj
150-25	3.785301	-4.65809	12.22869	0.723787
250-25	10.84056	2.397174	19.28395	0.008622
350-25	17.81534	9.371947	26.25873	7.30E-05
450-25	21.91129	13.4679	30.35468	6.78E-06
550-25	21.06403	12.62064	29.50742	1.08E-05
650-25	19.59251	11.14912	28.0359	2.51E-05
250-150	7.055264	-1.38813	15.49865	0.131685
350-150	14.03004	5.586647	22.47343	0.000875
450-150	18.12599	9.682603	26.56938	6.03E-05
550-150	17.27873	8.835338	25.72212	0.000102
650-150	15.80721	7.363821	24.2506	0.000263

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
350-250	6.974773	-1.46862 15.41816	0.138937
450-250	11.07073	2.627339 19.51412	0.007281
550-250	10.22346	1.780074 18.66685	0.013584
650-250	8.751947	0.308557 17.19534	0.040001
450-350	4.095956	-4.34743 12.53935	0.652133
550-350	3.248691	-5.1947 11.69208	0.834936
650-350	1.777174	-6.66622 10.22056	0.989
550-450	-0.84727	-9.29065 7.596125	0.999818
650-450	-2.31878	-10.7622 6.124608	0.959505
650-550	-1.47152	-9.91491 6.971873	0.995933

**One-way analysis of variance for Silt-clay size particles weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	25.04	4.173	0.925	0.506
Residuals	14	63.15	4.511		

**One-way analysis of variance for δ15N (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	108.94	18.156	52.02	<2e-16 ***
Residuals	41	14.31	0.349		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	0.008333	-1.04876 1.065423	1
250-25	1.009167	-0.04792 2.066256	0.069796
350-25	1.888879	0.831789 2.945968	3.83E-05
450-25	0.985712	-0.07138 2.042802	0.08174
550-25	-1.7554	-2.67087 -0.83993	1.03E-05
650-25	-2.66191	-3.719 -1.60482	2.53E-08
250-150	1.000833	-0.05626 2.057923	0.073856
350-150	1.880545	0.823456 2.937635	4.15E-05
450-150	0.977379	-0.07971 2.034468	0.086384
550-150	-1.76373	-2.6792 -0.84827	9.44E-06
650-150	-2.67024	-3.72733 -1.61315	2.34E-08
350-250	0.879712	-0.17738 1.936802	0.159134
450-250	-0.02345	-1.08054 1.033635	1
550-250	-2.76457	-3.68003 -1.8491	2.05E-10
650-250	-3.67108	-4.72817 -2.61399	4.23E-12
450-350	-0.90317	-1.96026 0.153923	0.138306
550-350	-3.64428	-4.55974 -2.72881	8.75E-13
650-350	-4.55079	-5.60788 -3.4937	8.23E-13
550-450	-2.74111	-3.65658 -1.82564	2.60E-10
650-450	-3.64762	-4.70471 -2.59053	4.95E-12

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
650-550	-0.90651	-1.82198 0.008955	0.053795

**One-way analysis of variance for  $\delta_{13C}$  (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	55.71	9.285	84.86	<2e-16 ***
Residuals	32	3.50	0.109		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.108	-0.70827 0.492274	0.997374
250-25	-0.1965	-0.79677 0.403774	0.943314
350-25	0.338601	-0.26167 0.938875	0.574721
450-25	2.124434	1.524161 2.724708	3.23E-11
550-25	2.35849	1.758216 2.958764	2.22E-12
650-25	3.054668	2.319486 3.78985	5.78E-13
250-150	-0.0885	-0.68877 0.511774	0.999141
350-150	0.446601	-0.15367 1.046875	0.257618
450-150	2.232434	1.632161 2.832708	9.06E-12
550-150	2.46649	1.866216 3.066764	7.44E-13
650-150	3.162668	2.427486 3.89785	2.90E-13
350-250	0.535101	-0.06517 1.135375	0.106215
450-250	2.320934	1.720661 2.921208	3.33E-12
550-250	2.55499	1.954716 3.155264	3.51E-13
650-250	3.251168	2.515986 3.98635	1.91E-13
450-350	1.785833	1.18556 2.386107	2.32E-09
550-350	2.019889	1.419615 2.620163	1.16E-10
650-350	2.716067	1.980885 3.451249	1.07E-11
550-450	0.234056	-0.36622 0.834329	0.878939
650-450	0.930233	0.195051 1.665415	0.006189
650-550	0.696178	-0.039 1.43136	0.072927

**One-way analysis of variance for N (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	0.6827	0.11378	400.4	<2e-16 ***
Residuals	41	0.0117	0.00028		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.01239	-0.04255 0.017772	0.86004
250-25	-0.01992	-0.05009 0.01024	0.402202
350-25	-0.0493	-0.07947 -0.01914	0.000173



Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
450-25	-0.21542	-0.24559	-0.18526	8.16E-13
550-25	-0.26802	-0.29414	-0.2419	8.16E-13
650-25	-0.26971	-0.29988	-0.23955	8.16E-13
250-150	-0.00753	-0.0377	0.022631	0.986226
350-150	-0.03691	-0.06707	-0.00675	0.008074
450-150	-0.20303	-0.2332	-0.17287	8.16E-13
550-150	-0.25563	-0.28175	-0.2295	8.16E-13
650-150	-0.25732	-0.28749	-0.22716	8.16E-13
350-250	-0.02938	-0.05954	0.000785	0.060662
450-250	-0.1955	-0.22566	-0.16534	8.16E-13
550-250	-0.24809	-0.27422	-0.22197	8.16E-13
650-250	-0.24979	-0.27995	-0.21963	8.16E-13
450-350	-0.16612	-0.19629	-0.13596	8.16E-13
550-350	-0.21872	-0.24484	-0.19259	8.16E-13
650-350	-0.22041	-0.25058	-0.19025	8.16E-13
550-450	-0.05259	-0.07872	-0.02647	3.94E-06
650-450	-0.05429	-0.08445	-0.02413	3.37E-05
650-550	-0.0017	-0.02782	0.024426	0.999994

**One-way analysis of variance for C (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	400.8	66.80	138.3	<2e-16 ***
Residuals	41	19.8	0.48		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-1.65895	-2.90241	-0.41549	0.003015
250-25	-2.73545	-3.97891	-1.49199	6.03E-07
350-25	-4.95906	-6.20251	-3.7156	8.71E-13
450-25	-7.40759	-8.65104	-6.16413	8.16E-13
550-25	-7.55772	-8.63458	-6.48085	8.16E-13
650-25	-7.58201	-8.82546	-6.33855	8.16E-13
250-150	-1.0765	-2.31996	0.166959	0.128528
350-150	-3.30011	-4.54356	-2.05665	6.69E-09
450-150	-5.74864	-6.99209	-4.50518	8.17E-13
550-150	-5.89877	-6.97563	-4.8219	8.16E-13
650-150	-5.92306	-7.16652	-4.6796	8.17E-13
350-250	-2.22361	-3.46706	-0.98015	3.78E-05
450-250	-4.67214	-5.91559	-3.42868	1.13E-12
550-250	-4.82227	-5.89913	-3.7454	8.19E-13
650-250	-4.84656	-6.09002	-3.6031	9.23E-13
450-350	-2.44853	-3.69199	-1.20507	6.15E-06

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
550-350	-2.59866	-3.67553 -1.52179	7.15E-08
650-350	-2.62295	-3.86641 -1.37949	1.50E-06
550-450	-0.15013	-1.227 0.926736	0.999442
650-450	-0.17442	-1.41788 1.069037	0.999422
650-550	-0.02429	-1.10116 1.052576	1

#### One-way analysis of variance for C/N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	4477	746.1	140	<2e-16 ***
Residuals	32	171	5.3		

#### Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-5.18768	-9.37757 -0.99779	0.007759
250-25	-9.03486	-13.2247 -4.84496	2.30E-06
350-25	-16.9618	-21.1516 -12.7719	1.06E-12
450-25	-26.706	-30.8959 -22.5161	1.00E-13
550-25	-27.6117	-31.8016 -23.4218	1.00E-13
650-25	-28.4236	-33.5551 -23.292	1.00E-13
250-150	-3.84717	-8.03706 0.342719	0.088827
350-150	-11.7741	-15.964 -7.58418	8.73E-09
450-150	-21.5183	-25.7082 -17.3284	1.02E-13
550-150	-22.424	-26.6139 -18.2341	1.01E-13
650-150	-23.2359	-28.3675 -18.1044	1.47E-13
350-250	-7.92689	-12.1168 -3.737	2.44E-05
450-250	-17.6712	-21.861 -13.4813	4.20E-13
550-250	-18.5768	-22.7667 -14.3869	1.84E-13
650-250	-19.3887	-24.5203 -14.2572	6.02E-12
450-350	-9.74426	-13.9342 -5.55437	5.20E-07
550-350	-10.6499	-14.8398 -6.46005	8.11E-08
650-350	-11.4618	-16.5934 -6.3303	1.16E-06
550-450	-0.90568	-5.09558 3.284207	0.992877
650-450	-1.71758	-6.84913 3.413963	0.937281
650-550	-0.8119	-5.94345 4.319648	0.998719

#### Shaver series (1737m)

##### One-way analysis of variance for Macro aggregate weight (%)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	29.92	4.987	1.357	0.297
Residuals	14	51.47	3.676		

##### One-way analysis of variance for Micro aggregate weight (%)

Df	Sum Sq	Mean Sq	F value	Pr(>F)
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Temp	6	24.21	4.036	2.199	0.105
Residuals	14	25.69	1.835		

One-way analysis of variance for **Silt-clay size particles weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	6.94	1.157	0.404	0.864
Residuals	14	40.06	2.862		

One-way analysis of variance for **δ15N (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	38.68	6.446	10.93	3.04e-07 ***
Residuals	41	24.19	0.590		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.5185	-1.89284 0.855837	0.901535
250-25	0.720813	-0.65352 2.09515	0.667135
350-25	1.842545	0.468209 3.216882	0.00284
450-25	0.324879	-1.04946 1.699216	0.989655
550-25	-0.43865	-1.62886 0.751562	0.910954
650-25	-1.33241	-2.70675 0.041927	0.06268
250-150	1.239313	-0.13502 2.61365	0.101112
350-150	2.361045	0.986709 3.735382	7.61E-05
450-150	0.843379	-0.53096 2.217716	0.490679
550-150	0.079851	-1.11036 1.270062	0.999992
650-150	-0.81391	-2.18825 0.560427	0.532882
350-250	1.121732	-0.2526 2.496069	0.175606
450-250	-0.39593	-1.77027 0.978403	0.971642
550-250	-1.15946	-2.34967 0.030749	0.060572
650-250	-2.05322	-3.42756 -0.67889	0.000676
450-350	-1.51767	-2.892 -0.14333	0.022092
550-350	-2.28119	-3.47141 -1.09098	1.04E-05
650-350	-3.17496	-4.54929 -1.80062	2.00E-07
550-450	-0.76353	-1.95374 0.426683	0.437323
650-450	-1.65729	-3.03163 -0.28295	0.009422
650-550	-0.89376	-2.08397 0.29645	0.25606

One-way analysis of variance for **δ13C (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	30.839	5.140	16.93	1.08e-08 ***
Residuals	32	9.715	0.304		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
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Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.14417	-1.14406 0.855724	0.999243
250-25	-0.30121	-1.3011 0.698686	0.961571
350-25	0.260768	-0.73912 1.260659	0.981089
450-25	1.835934	0.836043 2.835825	4.03E-05
550-25	0.83249	-0.1674 1.832381	0.154502
650-25	2.456168	1.231556 3.680779	8.79E-06
250-150	-0.15704	-1.15693 0.842852	0.998771
350-150	0.404934	-0.59496 1.404825	0.859017
450-150	1.980101	0.98021 2.979992	1.10E-05
550-150	0.976657	-0.02323 1.976548	0.059109
650-150	2.600334	1.375723 3.824946	3.08E-06
350-250	0.561973	-0.43792 1.561864	0.578793
450-250	2.13714	1.137249 3.137031	2.72E-06
550-250	1.133695	0.133804 2.133586	0.018069
650-250	2.757373	1.532762 3.981984	9.92E-07
450-350	1.575167	0.575276 2.575058	0.000419
550-350	0.571722	-0.42817 1.571613	0.559372
650-350	2.1954	0.970789 3.420011	5.96E-05
550-450	-1.00344	-2.00334 -0.00355	0.048723
650-450	0.620233	-0.60438 1.844845	0.688146
650-550	1.623678	0.399066 2.848289	0.003712

**One-way analysis of variance for N (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	0.1470	0.024497	205.1	<2e-16 ***
Residuals	41	0.0049	0.000119		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.00478	-0.02434 0.014771	0.987636
250-25	-0.00969	-0.02924 0.009866	0.722238
350-25	-0.03005	-0.04961 -0.0105	0.000448
450-25	-0.09598	-0.11553 -0.07642	8.16E-13
550-25	-0.12578	-0.14272 -0.10885	8.16E-13
650-25	-0.12837	-0.14792 -0.10881	8.16E-13
250-150	-0.00491	-0.02446 0.014648	0.985899
350-150	-0.02527	-0.04482 -0.00572	0.0044
450-150	-0.0912	-0.11075 -0.07164	8.17E-13
550-150	-0.121	-0.13794 -0.10407	8.16E-13
650-150	-0.12359	-0.14314 -0.10403	8.16E-13
350-250	-0.02037	-0.03992 -0.00081	0.036408
450-250	-0.08629	-0.10584 -0.06674	8.22E-13

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
550-250	-0.1161	-0.13303	-0.09916	8.16E-13
650-250	-0.11868	-0.13823	-0.09913	8.16E-13
450-350	-0.06592	-0.08548	-0.04637	9.12E-12
550-350	-0.09573	-0.11267	-0.0788	8.16E-13
650-350	-0.09832	-0.11787	-0.07876	8.16E-13
550-450	-0.02981	-0.04674	-0.01287	5.00E-05
650-450	-0.03239	-0.05194	-0.01284	0.00014
650-550	-0.00258	-0.01952	0.01435	0.999066

**One-way analysis of variance for C (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	74.03	12.338	117.1	<2e-16 ***
Residuals	41	4.32	0.105		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-0.09575	-0.67662	0.485119	0.998555
250-25	-0.26093	-0.8418	0.319943	0.802736
350-25	-1.3574	-1.93827	-0.77653	1.53E-07
450-25	-2.73221	-3.31308	-2.15134	8.17E-13
550-25	-2.80411	-3.30716	-2.30106	8.16E-13
650-25	-2.81731	-3.39818	-2.23644	8.16E-13
250-150	-0.16518	-0.74604	0.415694	0.97341
350-150	-1.26165	-1.84252	-0.68078	7.98E-07
450-150	-2.63646	-3.21733	-2.05559	8.18E-13
550-150	-2.70836	-3.21141	-2.20531	8.16E-13
650-150	-2.72156	-3.30242	-2.14069	8.17E-13
350-250	-1.09648	-1.67735	-0.51561	1.40E-05
450-250	-2.47128	-3.05215	-1.89042	8.26E-13
550-250	-2.54318	-3.04623	-2.04014	8.16E-13
650-250	-2.55638	-3.13725	-1.97551	8.22E-13
450-350	-1.37481	-1.95568	-0.79394	1.13E-07
550-350	-1.44671	-1.94975	-0.94366	7.93E-10
650-350	-1.4599	-2.04077	-0.87903	2.65E-08
550-450	-0.0719	-0.57495	0.431148	0.999357
650-450	-0.0851	-0.66596	0.495774	0.99926
650-550	-0.0132	-0.51624	0.489852	1

**One-way analysis of variance for C/N ratio**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	3168	528.0	188.1	<2e-16 ***
Residuals	32	90	2.8		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.09705	-3.13763 2.94353	1
250-25	-0.70217	-3.74275 2.33841	0.989895
350-25	-7.53873	-10.5793 -4.49815	1.38E-07
450-25	-19.3467	-22.3872 -16.3061	1.00E-13
550-25	-20.0789	-23.1195 -17.0383	1.00E-13
650-25	-20.5746	-24.2986 -16.8507	1.00E-13
250-150	-0.60512	-3.6457 2.435459	0.995435
350-150	-7.44168	-10.4823 -4.4011	1.81E-07
450-150	-19.2496	-22.2902 -16.209	1.00E-13
550-150	-19.9818	-23.0224 -16.9413	1.00E-13
650-150	-20.4776	-24.2015 -16.7537	1.00E-13
350-250	-6.83656	-9.87714 -3.79598	1.02E-06
450-250	-18.6445	-21.6851 -15.6039	1.00E-13
550-250	-19.3767	-22.4173 -16.3361	1.00E-13
650-250	-19.8725	-23.5964 -16.1485	1.01E-13
450-350	-11.8079	-14.8485 -8.76736	2.98E-12
550-350	-12.5402	-15.5807 -9.49958	6.83E-13
650-350	-13.0359	-16.7598 -9.31198	4.27E-11
550-450	-0.73222	-3.7728 2.308362	0.987426
650-450	-1.22797	-4.95191 2.495959	0.94139
650-550	-0.49576	-4.21969 3.228177	0.99952

Sirretta series (2317m)

One-way analysis of variance for **Macro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	135.3	22.55	2.147	0.112
Residuals	14	147.1	10.51		

One-way analysis of variance for **Micro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	35.71	5.952	0.836	0.562
Residuals	14	99.72	7.123		

One-way analysis of variance for **Silt-clay size particles weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	62.18	10.364	8.517	0.000505 ***
Residuals	14	17.04	1.217		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	0.683154	-2.39235 3.758662	0.985527
250-25	1.187633	-1.88787 4.263141	0.832745

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
350-25	3.156077	0.080569 6.231585	0.042618
450-25	3.966435	0.890927 7.041943	0.008318
550-25	4.82334	1.747832 7.898848	0.001519
650-25	3.715029	0.63952 6.790537	0.01383
250-150	0.504479	-2.57103 3.579987	0.997073
350-150	2.472922	-0.60259 5.54843	0.157007
450-150	3.283281	0.207773 6.358789	0.033057
550-150	4.140185	1.064677 7.215693	0.005863
650-150	3.031874	-0.04363 6.107382	0.054494
350-250	1.968444	-1.10706 5.043952	0.360406
450-250	2.778802	-0.29671 5.85431	0.089042
550-250	3.635707	0.560199 6.711215	0.016239
650-250	2.527395	-0.54811 5.602904	0.142306
450-350	0.810359	-2.26515 3.885867	0.966628
550-350	1.667263	-1.40825 4.742771	0.538755
650-350	0.558952	-2.51656 3.63446	0.994907
550-450	0.856904	-2.2186 3.932412	0.956718
650-450	-0.25141	-3.32691 2.824101	0.999945
650-550	-1.10831	-4.18382 1.967197	0.870937

One-way analysis of variance for **δ15N (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	52.38	8.730	25.43	2.34e-12 ***
Residuals	41	14.08	0.343		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.03017	-1.07861 1.018277	1
250-25	0.957212	-0.09123 2.005656	0.093628
350-25	1.922379	0.873935 2.970822	2.40E-05
450-25	-0.62195	-1.6704 0.426489	0.530906
550-25	-1.09273	-2.00071 -0.18475	0.009619
650-25	-1.23291	-2.28135 -0.18447	0.012174
250-150	0.987379	-0.06106 2.035822	0.076548
350-150	1.952545	0.904102 3.000989	1.80E-05
450-150	-0.59179	-1.64023 0.456656	0.588216
550-150	-1.06257	-1.97054 -0.15459	0.012776
650-150	-1.20274	-2.25119 -0.1543	0.015513
350-250	0.965167	-0.08328 2.01361	0.088839
450-250	-1.57917	-2.62761 -0.53072	0.000602
550-250	-2.04994	-2.95792 -1.14197	3.37E-07
650-250	-2.19012	-3.23857 -1.14168	1.84E-06

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
450-350	-2.54433	-3.59278	-1.49589	6.25E-08
550-350	-3.01511	-3.92309	-2.10713	1.39E-11
650-350	-3.15529	-4.20373	-2.10685	2.26E-10
550-450	-0.47078	-1.37876	0.437201	0.678717
650-450	-0.61096	-1.6594	0.437488	0.551754
650-550	-0.14018	-1.04816	0.767801	0.999002

**One-way analysis of variance for  $\delta 13C$  (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	28.979	4.830	35.36	8.91e-13 ***
Residuals	32	4.371	0.137		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	-0.20717	-0.87784	0.463511	0.956714
250-25	0.627601	-0.04308	1.298278	0.078789
350-25	0.492768	-0.17791	1.163445	0.270673
450-25	2.367268	1.69659	3.037945	3.46E-11
550-25	1.504157	0.833479	2.174834	1.07E-06
650-25	1.261168	0.439759	2.082576	0.000598
250-150	0.834768	0.16409	1.505445	0.007351
350-150	0.699934	0.029257	1.370612	0.036227
450-150	2.574434	1.903757	3.245112	4.01E-12
550-150	1.711323	1.040646	2.382001	7.47E-08
650-150	1.468334	0.646926	2.289743	6.24E-05
350-250	-0.13483	-0.80551	0.535844	0.995177
450-250	1.739667	1.068989	2.410344	5.23E-08
550-250	0.876556	0.205878	1.547233	0.004358
650-250	0.633567	-0.18784	1.454975	0.221646
450-350	1.8745	1.203823	2.545177	9.88E-09
550-350	1.011389	0.340711	1.682066	0.000762
650-350	0.7684	-0.05301	1.589809	0.078955
550-450	-0.86311	-1.53379	-0.19243	0.005163
650-450	-1.1061	-1.92751	-0.28469	0.00311
650-550	-0.24299	-1.0644	0.57842	0.964772

**One-way analysis of variance for N (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	0.18121	0.030202	58.85	<2e-16 ***
Residuals	41	0.02104	0.000513		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**



Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-0.01509	-0.05562	0.025448	0.907065
250-25	-0.02573	-0.06626	0.014808	0.450193
350-25	-0.03529	-0.07583	0.005244	0.124469
450-25	-0.11946	-0.15999	-0.07892	4.05E-10
550-25	-0.14525	-0.18035	-0.11014	8.39E-13
650-25	-0.14765	-0.18819	-0.10712	1.62E-12
250-150	-0.01064	-0.05118	0.029896	0.982215
350-150	-0.0202	-0.06074	0.020332	0.716724
450-150	-0.10437	-0.14491	-0.06383	1.45E-08
550-150	-0.13016	-0.16527	-0.09506	1.29E-12
650-150	-0.13257	-0.1731	-0.09203	2.13E-11
350-250	-0.00956	-0.0501	0.030971	0.989755
450-250	-0.09373	-0.13427	-0.05319	1.95E-07
550-250	-0.11952	-0.15463	-0.08442	7.00E-12
650-250	-0.12193	-0.16246	-0.08139	2.29E-10
450-350	-0.08417	-0.1247	-0.04363	2.09E-06
550-350	-0.10996	-0.14506	-0.07485	7.30E-11
650-350	-0.11236	-0.1529	-0.07183	2.14E-09
550-450	-0.02579	-0.0609	0.009313	0.279401
650-450	-0.0282	-0.06873	0.012338	0.341033
650-550	-0.00241	-0.03751	0.0327	0.999991

**One-way analysis of variance for C (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	162.05	27.008	32.5	4.4e-14 ***
Residuals	41	34.07	0.831		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-0.82377	-2.45493	0.807387	0.704377
250-25	-1.61873	-3.24989	0.012424	0.052934
350-25	-3.15271	-4.78387	-1.52155	8.87E-06
450-25	-4.6437	-6.27486	-3.01254	1.05E-09
550-25	-4.6945	-6.10712	-3.28187	1.36E-11
650-25	-4.70607	-6.33723	-3.07491	7.27E-10
250-150	-0.79496	-2.42612	0.836196	0.737064
350-150	-2.32894	-3.9601	-0.69778	0.001267
450-150	-3.81993	-5.45109	-2.18877	1.45E-07
550-150	-3.87072	-5.28335	-2.4581	2.91E-09
650-150	-3.8823	-5.51346	-2.25114	9.93E-08
350-250	-1.53398	-3.16514	0.097181	0.077277
450-250	-3.02497	-4.65613	-1.39381	1.95E-05

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
550-250	-3.07576	-4.48839	-1.66314	7.56E-07
650-250	-3.08734	-4.71849	-1.45618	1.33E-05
450-350	-1.49099	-3.12215	0.140168	0.09293
550-350	-1.54178	-2.95441	-0.12916	0.024516
650-350	-1.55336	-3.18452	0.077799	0.070991
550-450	-0.05079	-1.46342	1.361831	1
650-450	-0.06237	-1.69353	1.56879	1
650-550	-0.01158	-1.4242	1.401049	1

#### One-way analysis of variance for C/N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	5946	990.9	70.03	<2e-16 ***
Residuals	32	453	14.2		

#### Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
150-25	-2.53094	-9.3574	4.295522	0.901827
250-25	-6.43251	-13.259	0.393954	0.075322
350-25	-17.4154	-24.2418	-10.5889	7.50E-08
450-25	-29.1358	-35.9623	-22.3093	3.33E-13
550-25	-29.7579	-36.5844	-22.9314	2.34E-13
650-25	-30.1558	-38.5164	-21.7951	1.99E-11
250-150	-3.90157	-10.728	2.924894	0.559867
350-150	-14.8844	-21.7109	-8.05796	1.86E-06
450-150	-26.6049	-33.4313	-19.7784	2.72E-12
550-150	-27.227	-34.0534	-20.4005	1.52E-12
650-150	-27.6248	-35.9855	-19.2641	1.82E-10
350-250	-10.9829	-17.8093	-4.15639	0.000311
450-250	-22.7033	-29.5298	-15.8768	1.55E-10
550-250	-23.3254	-30.1519	-16.4989	7.88E-11
650-250	-23.7232	-32.0839	-15.3626	6.99E-09
450-350	-11.7204	-18.5469	-4.89398	0.000118
550-350	-12.3425	-19.169	-5.51608	5.19E-05
650-350	-12.7404	-21.1011	-4.37972	0.000662
550-450	-0.62209	-7.44856	6.204369	0.999947
650-450	-1.01995	-9.38063	7.340722	0.99971
650-550	-0.39786	-8.75853	7.962815	0.999999

#### Chiquito series (2865m)

##### One-way analysis of variance for Aggregate stability (water stable %)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	9865	1644.1	15.61	1.78e-05 ***
Residuals	14	1475	105.3		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	3.63	-24.9847	32.24467	0.999301
250-25	1.19	-27.4247	29.80467	0.999999
350-25	-37.5867	-66.2013	-8.972	0.007174
450-25	-41.06	-69.6747	-12.4453	0.003399
550-25	-44.658	-73.2727	-16.0433	0.00159
650-25	-44.3867	-73.0013	-15.772	0.001682
250-150	-2.44	-31.0547	26.17467	0.999929
350-150	-41.2167	-69.8313	-12.602	0.003287
450-150	-44.69	-73.3047	-16.0753	0.001579
550-150	-48.288	-76.9027	-19.6733	0.000752
650-150	-48.0167	-76.6313	-19.402	0.000795
350-250	-38.7767	-67.3913	-10.162	0.005547
450-250	-42.25	-70.8647	-13.6353	0.002639
550-250	-45.848	-74.4627	-17.2333	0.001241
650-250	-45.5767	-74.1913	-16.962	0.001313
450-350	-3.47333	-32.088	25.14134	0.999456
550-350	-7.07133	-35.686	21.54334	0.97545
650-350	-6.8	-35.4147	21.81467	0.979727
550-450	-3.598	-32.2127	25.01667	0.999335
650-450	-3.32667	-31.9413	25.288	0.999575
650-550	0.271333	-28.3433	28.886	1

One-way analysis of variance for pH (water)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	28.176	4.696	22.32	2.06e-06 ***
Residuals	14	2.946	0.210		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	-0.45	-1.72888	0.828881	0.882415
250-25	-0.30333	-1.58221	0.975548	0.979917
350-25	0.863333	-0.41555	2.142214	0.306154
450-25	2.023333	0.744452	3.302214	0.001399
550-25	2.363333	1.084452	3.642214	0.000301
650-25	2.293333	1.014452	3.572214	0.00041
250-150	0.146667	-1.13221	1.425548	0.999606
350-150	1.313333	0.034452	2.592214	0.042425
450-150	2.473333	1.194452	3.752214	0.000187
550-150	2.813333	1.534452	4.092214	4.59E-05
650-150	2.743333	1.464452	4.022214	6.08E-05

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
350-250	1.166667	-0.11221	2.445548	0.084588
450-250	2.326667	1.047786	3.605548	0.000354
550-250	2.666667	1.387786	3.945548	8.31E-05
650-250	2.596667	1.317786	3.875548	0.000111
450-350	1.16	-0.11888	2.438881	0.087223
550-350	1.5	0.221119	2.778881	0.017201
650-350	1.43	0.151119	2.708881	0.024172
550-450	0.34	-0.93888	1.618881	0.965191
650-450	0.27	-1.00888	1.548881	0.988827
650-550	-0.07	-1.34888	1.208881	0.999995

**One-way analysis of variance for pH (CaCl2)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	39.54	6.590	40.98	4.3e-08 ***
Residuals	14	2.25	0.161		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
150-25	0.033333	-1.08465	1.151317	1
250-25	0.14	-0.97798	1.257984	0.99935
350-25	1.456667	0.338683	2.57465	0.007662
450-25	2.766667	1.648683	3.88465	1.19E-05
550-25	2.996667	1.878683	4.11465	4.61E-06
650-25	3.256667	2.138683	4.37465	1.68E-06
250-150	0.106667	-1.01132	1.22465	0.999864
350-150	1.423333	0.30535	2.541317	0.009219
450-150	2.733333	1.61535	3.851317	1.37E-05
550-150	2.963333	1.84535	4.081317	5.27E-06
650-150	3.223333	2.10535	4.341317	1.90E-06
350-250	1.316667	0.198683	2.43465	0.016694
450-250	2.626667	1.508683	3.74465	2.17E-05
550-250	2.856667	1.738683	3.97465	8.15E-06
650-250	3.116667	1.998683	4.23465	2.87E-06
450-350	1.31	0.192016	2.427984	0.017325
550-350	1.54	0.422016	2.657984	0.004834
650-350	1.8	0.682016	2.917984	0.001185
550-450	0.23	-0.88798	1.347984	0.990223
650-450	0.49	-0.62798	1.607984	0.742629
650-550	0.26	-0.85798	1.377984	0.981783

**One-way analysis of variance for SSA (m<sup>2</sup>/g)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
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Temp	6	12.113	2.019	7.56	0.000922	***
Residuals	14	3.739	0.267			

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.32903	-1.76978 1.11172	0.983361
250-25	-0.27811	-1.71886 1.162644	0.992989
350-25	1.383205	-0.05754 2.823955	0.063648
450-25	1.350353	-0.0904 2.791103	0.072946
550-25	1.417901	-0.02285 2.858651	0.055048
650-25	1.072001	-0.36875 2.512752	0.216707
250-150	0.050924	-1.38983 1.491675	1
350-150	1.712235	0.271485 3.152985	0.015616
450-150	1.679383	0.238633 3.120133	0.017997
550-150	1.746931	0.306181 3.187681	0.013442
650-150	1.401032	-0.03972 2.841782	0.059082
350-250	1.661311	0.220561 3.102061	0.019458
450-250	1.628459	0.187709 3.069209	0.02242
550-250	1.696006	0.255256 3.136756	0.016751
650-250	1.350107	-0.09064 2.790857	0.07302
450-350	-0.03285	-1.4736 1.407898	1
550-350	0.034695	-1.40605 1.475446	1
650-350	-0.3112	-1.75195 1.129546	0.987442
550-450	0.067547	-1.3732 1.508298	0.999998
650-450	-0.27835	-1.7191 1.162398	0.992957
650-550	-0.3459	-1.78665 1.094851	0.978681

**One-way analysis of variance for CEC (cmolc/kg)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	66.46	11.077	3.352	0.0291 *
Residuals	14	46.27	3.305		

**One-way analysis of variance for Macro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	41.24	6.874	3.23	0.0331 *
Residuals	14	29.80	2.128		

**One-way analysis of variance for Micro aggregate weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	21.04	3.507	1.445	0.266
Residuals	14	33.96	2.426		

**One-way analysis of variance for Silt-clay size particles weight (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	62.73	10.455	3.406	0.0276 *
Residuals	14	42.97	3.069		

One-way analysis of variance for **δ15N (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	104.29	17.382	36.1	7.54e-15 ***
Residuals	41	19.74	0.481		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	-0.31067	-1.5522	0.930869	0.986083
250-25	1.188879	-0.05266	2.430415	0.068341
350-25	1.974379	0.732843	3.215915	0.000267
450-25	-0.26879	-1.51032	0.972748	0.993515
550-25	-1.76157	-2.83677	-0.68636	0.000167
650-25	-2.71358	-3.95511	-1.47204	6.95E-07
250-150	1.499545	0.25801	2.741081	0.009266
350-150	2.285045	1.04351	3.526581	2.24E-05
450-150	0.041879	-1.19966	1.283415	1
550-150	-1.4509	-2.5261	-0.3757	0.002622
650-150	-2.40291	-3.64445	-1.16137	8.64E-06
350-250	0.7855	-0.45604	2.027036	0.454006
450-250	-1.45767	-2.6992	-0.21613	0.012368
550-250	-2.95044	-4.02565	-1.87524	2.80E-09
650-250	-3.90246	-5.14399	-2.66092	6.60E-11
450-350	-2.24317	-3.4847	-1.00163	3.14E-05
550-350	-3.73594	-4.81115	-2.66074	4.18E-12
650-350	-4.68796	-5.92949	-3.44642	1.09E-12
550-450	-1.49278	-2.56798	-0.41758	0.00183
650-450	-2.44479	-3.68632	-1.20325	6.15E-06
650-550	-0.95201	-2.02721	0.12319	0.112874

One-way analysis of variance for **δ13C (%)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	29.72	4.954	20.07	1.41e-09 ***
Residuals	32	7.90	0.247		

Tukey's HSD test comparisons of means 95% family-wise confidence level

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Confidence Limits	P adj
150-25	-0.201	-1.10268	0.700679	0.991611
250-25	0.654768	-0.24691	1.556446	0.283127
350-25	1.005934	0.104256	1.907613	0.020852
450-25	2.159601	1.257922	3.06128	2.85E-07
550-25	0.95049	0.048811	1.852169	0.033472
650-25	-0.97133	-2.07566	0.132994	0.114783

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
250-150	0.855768	-0.04591	1.757446	0.071851
350-150	1.206934	0.305256	2.108613	0.003332
450-150	2.360601	1.458922	3.26228	4.27E-08
550-150	1.15149	0.249811	2.053169	0.005609
650-150	-0.77033	-1.87466	0.333994	0.327329
350-250	0.351167	-0.55051	1.252845	0.879516
450-250	1.504833	0.603155	2.406512	0.000181
550-250	0.295722	-0.60596	1.197401	0.942823
650-250	-1.6261	-2.73043	-0.52177	0.001042
450-350	1.153667	0.251988	2.055345	0.005497
550-350	-0.05544	-0.95712	0.846234	0.999995
650-350	-1.97727	-3.08159	-0.87294	6.08E-05
550-450	-1.20911	-2.11079	-0.30743	0.003263
650-450	-3.13093	-4.23526	-2.02661	7.12E-09
650-550	-1.92182	-3.02615	-0.8175	9.55E-05

**One-way analysis of variance for N (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	0.26900	0.04483	139.9	<2e-16 ***
Residuals	41	0.01314	0.00032		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous Confidence Limits	95% Limits	P adj
150-25	-0.02083	-0.05287	0.011197	0.420677
250-25	-0.02521	-0.05724	0.006821	0.208844
350-25	-0.05341	-0.08544	-0.02137	0.000126
450-25	-0.14685	-0.17888	-0.11482	8.17E-13
550-25	-0.17917	-0.20691	-0.15143	8.16E-13
650-25	-0.17816	-0.21019	-0.14613	8.16E-13
250-150	-0.00438	-0.03641	0.027656	0.999503
350-150	-0.03257	-0.0646	-0.00054	0.044029
450-150	-0.12602	-0.15805	-0.09398	9.00E-13
550-150	-0.15833	-0.18607	-0.13059	8.16E-13
650-150	-0.15732	-0.18936	-0.12529	8.16E-13
350-250	-0.02819	-0.06023	0.003838	0.116879
450-250	-0.12164	-0.15367	-0.08961	1.05E-12
550-250	-0.15396	-0.1817	-0.12622	8.16E-13
650-250	-0.15295	-0.18498	-0.12091	8.17E-13
450-350	-0.09345	-0.12548	-0.06141	5.36E-10
550-350	-0.12576	-0.1535	-0.09802	8.18E-13
650-350	-0.12475	-0.15678	-0.09272	9.26E-13
550-450	-0.03232	-0.06006	-0.00458	0.01336

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
650-450	-0.03131	-0.06334 0.000725	0.059161
650-550	0.00101	-0.02673 0.02875	1

**One-way analysis of variance for C (weight %)**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	138.92	23.154	172	<2e-16 ***
Residuals	41	5.52	0.135		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	-0.29241	-0.94892 0.364093	0.808818
250-25	-1.0034	-1.6599 -0.34689	0.000486
350-25	-2.90058	-3.55708 -2.24407	8.21E-13
450-25	-4.01729	-4.6738 -3.36079	8.16E-13
550-25	-4.06499	-4.63354 -3.49644	8.16E-13
650-25	-4.06528	-4.72179 -3.40878	8.16E-13
250-150	-0.71098	-1.36749 -0.05448	0.026241
350-150	-2.60816	-3.26467 -1.95166	8.79E-13
450-150	-3.72488	-4.38139 -3.06837	8.16E-13
550-150	-3.77258	-4.34113 -3.20403	8.16E-13
650-150	-3.77287	-4.42938 -3.11636	8.16E-13
350-250	-1.89718	-2.55369 -1.24067	6.95E-10
450-250	-3.0139	-3.6704 -2.35739	8.17E-13
550-250	-3.0616	-3.63015 -2.49304	8.16E-13
650-250	-3.06189	-3.71839 -2.40538	8.17E-13
450-350	-1.11672	-1.77322 -0.46021	9.00E-05
550-350	-1.16442	-1.73297 -0.59586	2.78E-06
650-350	-1.16471	-1.82121 -0.5082	4.35E-05
550-450	-0.0477	-0.61625 0.520853	0.999971
650-450	-0.04799	-0.7045 0.608517	0.999987
650-550	-0.00029	-0.56884 0.568261	1

**One-way analysis of variance for C/N ratio**

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	6	3821	636.9	950.6	<2e-16 ***
Residuals	32	21	0.7		

**Tukey's HSD test comparisons of means 95% family-wise confidence level**

Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	P adj
150-25	0.60896	-0.87638 2.094301	0.852039
250-25	-3.16802	-4.65336 -1.68267	2.83E-06



Temperature Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		P adj
350-25	-13.9972	-15.4826	-12.5119	1.00E-13
450-25	-21.8152	-23.3005	-20.3299	1.00E-13
550-25	-22.3786	-23.8639	-20.8933	1.00E-13
650-25	-22.3446	-24.1637	-20.5254	1.00E-13
250-150	-3.77698	-5.26232	-2.29163	8.05E-08
350-150	-14.6062	-16.0915	-13.1209	1.00E-13
450-150	-22.4242	-23.9095	-20.9388	1.00E-13
550-150	-22.9876	-24.4729	-21.5022	1.00E-13
650-150	-22.9535	-24.7727	-21.1344	1.00E-13
350-250	-10.8292	-12.3146	-9.34388	1.00E-13
450-250	-18.6472	-20.1325	-17.1618	1.00E-13
550-250	-19.2106	-20.6959	-17.7252	1.00E-13
650-250	-19.1766	-20.9957	-17.3574	1.00E-13
450-350	-7.81797	-9.30331	-6.33263	1.01E-13
550-350	-8.38137	-9.86671	-6.89603	1.00E-13
650-350	-8.34733	-10.1665	-6.52817	1.34E-13
550-450	-0.5634	-2.04874	0.92194	0.891954
650-450	-0.52937	-2.34853	1.289797	0.967461
650-550	0.034035	-1.78513	1.853199	1

## S2. Analysis by aggregate size fraction

One-way ANOVA tables and, where  $p < 0.05$ , Tukey's HSD test comparison of means 95% family-wise confidence level.

### Vista series (210m)

One-way ANOVA, Vista series Macro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	2.8634	0.7158	10.95	0.00113 **
Residuals	10	0.6538	0.0654		

Vista series Macro aggregates: C concentration					
Temp. Comparison	Difference	Lower	Upper	p adj	
150-25	0.404955033	-0.28215	1.092064	0.357931	
250-25	0.301721333	-0.38539	0.988831	0.615554	
350-25	-0.45279093	-1.1399	0.234318	0.265509	
450-25	-0.73538493	-1.42249	-0.04828	0.034916	
250-150	-0.1032337	-0.79034	0.583876	0.986092	
350-150	-0.85774597	-1.54486	-0.17064	0.014165	
450-150	-1.14033997	-1.82745	-0.45323	0.001988	
350-250	-0.75451227	-1.44162	-0.0674	0.030291	
450-250	-1.03710627	-1.72422	-0.35	0.003977	
450-350	-0.282594	-0.9697	0.404515	0.667343	

One-way ANOVA, Vista series Macro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	199.87	49.97	15.52	0.000273 ***
Residuals	10	32.19	3.22		

Vista series Macro aggregates: C:N ratio

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.553308053	-4.26823	5.374846	0.994954	
250-25	-2.29517432	-7.11671	2.526364	0.547298	
350-25	-1.700433	-6.52197	3.121105	0.772329	
450-25	-9.60122439	-14.4228	-4.77969	0.000478	
250-150	-2.84848237	-7.67002	1.973056	0.355842	
350-150	-2.25374105	-7.07528	2.567797	0.563053	
450-150	-10.1545324	-14.9761	-5.33299	0.000302	
350-250	0.59474132	-4.2268	5.416279	0.993358	
450-250	-7.30605007	-12.1276	-2.48451	0.003867	
450-350	-7.90079139	-12.7223	-3.07925	0.002186	

One-way ANOVA, Vista series Macro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	24.106	6.026	15.1	0.000306 ***
Residuals	10	3.992	0.399		

Vista series Macro aggregates: d13C

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.154500003	-1.54334	1.852341	0.997936	
250-25	0.6489394	-1.0489	2.34678	0.720505	
350-25	0.485166673	-1.21267	2.183008	0.874757	
450-25	3.438625003	1.740784	5.136466	0.000417	
250-150	0.494439397	-1.2034	2.19228	0.867406	
350-150	0.330666667	-1.36717	2.028508	0.964526	
450-150	3.284125	1.586284	4.981966	0.000605	
350-250	-0.16377273	-1.86161	1.534068	0.997413	
450-250	2.789685603	1.091845	4.487527	0.002143	
450-350	2.95345833	1.255617	4.651299	0.001392	

One-way ANOVA, Vista series Macro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	21.11	5.277	4.263	0.0287 *
Residuals	10	12.38	1.238		

Vista series Macro aggregates: d15N

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	2.379166667	-0.61044	5.368774	0.139664	
250-25	2.69339394	-0.29621	5.683001	0.082759	
350-25	3.541000001	0.551393	6.530607	0.019535	
450-25	2.557333334	-0.43227	5.54694	0.104021	
250-150	0.314227273	-2.67538	3.303834	0.996397	
350-150	1.161833334	-1.82777	4.15144	0.708922	
450-150	0.178166667	-2.81144	3.167774	0.999608	
350-250	0.847606061	-2.142	3.837213	0.87771	
450-250	-0.13606061	-3.12567	2.853546	0.999865	
450-350	-0.98366667	-3.97327	2.00594	0.811325	

One-way ANOVA, Vista series Macro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.022765	0.005691	15.24	0.000294 ***
Residuals	10	0.003735	0.000373		

Vista series Macro aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.0297982	-0.02213	0.081728	0.381279	
250-25	0.0440657	-0.00786	0.095995	0.107633	
350-25	-0.03510887	-0.08704	0.016821	0.245879	
450-25	-0.06014427	-0.11207	-0.00821	0.022312	
250-150	0.0142675	-0.03766	0.066197	0.888941	
350-150	-0.06490707	-0.11684	-0.01298	0.014054	
450-150	-0.08994247	-0.14187	-0.03801	0.001439	
350-250	-0.07917457	-0.1311	-0.02724	0.003701	

450-250	-0.10420997	-0.15614	-0.05228	0.000449
450-350	-0.0250354	-0.07696	0.026894	0.53623

One-way ANOVA, Vista series Micro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	9.987	2.4966	2.72	0.0909 .
Residuals	10	9.181	0.9181		

One-way ANOVA, Vista series Micro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	125.69	31.423	19.23	0.000109 ***
Residuals	10	16.34	1.634		

Vista series Micro aggregates: C:N ratio

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.045772117	-3.38885	3.480395	0.999999	
250-25	-3.53286687	-6.96749	-0.09824	0.0432	
350-25	-3.98992029	-7.42454	-0.5553	0.021921	
450-25	-7.72922016	-11.1638	-4.2946	0.000173	
250-150	-3.57863899	-7.01326	-0.14402	0.040355	
350-150	-4.03569241	-7.47032	-0.60107	0.02049	
450-150	-7.77499228	-11.2096	-4.34037	0.000165	
350-250	-0.45705342	-3.89168	2.97757	0.991154	
450-250	-4.19635329	-7.63098	-0.76173	0.016183	
450-350	-3.73929987	-7.17392	-0.30468	0.031777	

One-way ANOVA, Vista series Micro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	11.217	2.8041	4.264	0.0286 *
Residuals	10	6.577	0.6577		

Vista series Micro aggregates: d13C

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.792833337	-1.3864	2.972064	0.753132	
250-25	0.881606067	-1.29762	3.060837	0.679779	
350-25	0.850166673	-1.32906	3.029398	0.706201	
450-25	2.63229167	0.453061	4.811523	0.017354	
250-150	0.08877273	-2.09046	2.268004	0.999913	
350-150	0.057333337	-2.1219	2.236564	0.999985	
450-150	1.839458333	-0.33977	4.018689	0.110061	
350-250	-0.03143939	-2.21067	2.147792	0.999999	
450-250	1.750685603	-0.42855	3.929917	0.134605	
450-350	1.782124997	-0.39711	3.961356	0.125386	

One-way ANOVA, Vista series Micro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	13.28	3.319	2.894	0.0788 .
Residuals	10	11.47	1.147		

One-way ANOVA, Vista series Micro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.05525	0.013812	3.218	0.0609 .
Residuals	10	0.04293	0.004293		

One-way ANOVA, Vista series Silt-clay size aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	5.622	1.4055	22.39	5.62e-05 ***
Residuals	10	0.628	0.0628		

Vista series Silt-clay size aggregates: C concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.05221837	-0.72541	0.620976	0.998893	
250-25	-0.10195657	-0.77515	0.571238	0.985674	
350-25	-0.9931553	-1.66635	-0.31996	0.004673	
450-25	-1.51343107	-2.18663	-0.84024	0.000175	
250-150	-0.0497382	-0.72293	0.623456	0.999085	
350-150	-0.94093693	-1.61413	-0.26774	0.006782	
450-150	-1.4612127	-2.13441	-0.78802	0.000235	
350-250	-0.89119873	-1.56439	-0.218	0.009734	
450-250	-1.4114745	-2.08467	-0.73828	0.000313	
450-350	-0.52027577	-1.19347	0.152919	0.15616	

One-way ANOVA, Vista series Silt-clay size aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	43.22	10.806	54.66	9.26e-07 ***
Residuals	10	1.98	0.198		

Vista series Silt-clay size aggregates: C:N ratio

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	1.058695713	-0.13612	2.253515	0.089193	
250-25	-1.48427128	-2.67909	-0.28945	0.014603	
350-25	-1.94021746	-3.13504	-0.7454	0.002338	
450-25	-3.89270782	-5.08753	-2.69789	6.48E-06	
250-150	-2.54296699	-3.73779	-1.34815	0.000277	
350-150	-2.99891318	-4.19373	-1.80409	6.77E-05	
450-150	-4.95140354	-6.14622	-3.75658	6.78E-07	
350-250	-0.45594618	-1.65077	0.738873	0.721606	
450-250	-2.40843654	-3.60326	-1.21362	0.000433	
450-350	-1.95249036	-3.14731	-0.75767	0.002231	

One-way ANOVA, Vista series Silt-clay size aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	6.187	1.5467	8.468	0.00299 **
Residuals	10	1.827	0.1827		

Vista series Silt-clay size aggregates: d13C

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.618500003	-0.52994	1.76694	0.437669	
250-25	0.491272733	-0.65717	1.639713	0.636691	
350-25	0.389500007	-0.75894	1.53794	0.794944	
450-25	1.894958337	0.746518	3.043399	0.002076	
250-150	-0.12722727	-1.27567	1.021213	0.99559	
350-150	-0.229	-1.37744	0.91944	0.96148	
450-150	1.276458333	0.128018	2.424899	0.028294	
350-250	-0.10177273	-1.25021	1.046668	0.998138	
450-250	1.403685603	0.255245	2.552126	0.016145	
450-350	1.50545833	0.357018	2.653899	0.010378	

One-way ANOVA, Vista series Silt-clay size aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	4.196	1.0490	2.97	0.0741 .
Residuals	10	3.532	0.3532		

One-way ANOVA, Vista series Silt-clay size aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.05266	0.013166	23.29	4.72e-05 ***
Residuals	10	0.00565	0.000565		

Vista series Micro aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.06358493	-0.23964	0.112474	0.75775	
250-25	-0.0357695	-0.21183	0.140289	0.958891	

350-25	-0.12633983	-0.3024	0.049719	0.203112
450-25	-0.1674802	-0.34354	0.008578	0.064106
250-150	0.027815433	-0.14824	0.203874	0.983265
350-150	-0.0627549	-0.23881	0.113304	0.765886
450-150	-0.10389527	-0.27995	0.072163	0.356818
350-250	-0.09057033	-0.26663	0.085488	0.478706
450-250	-0.1317107	-0.30777	0.044348	0.175858
450-350	-0.04114037	-0.2172	0.134918	0.93392

### Musick series (1384m)

One-way ANOVA, Musick series Macro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	62.54	15.63	74.43	2.12e-07 ***
Residuals	10	2.10	0.21		

Musick series Macro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-1.004509	-2.23609	0.227071	0.126723
250-25	-1.29566573	-2.52725	-0.06409	0.038324
350-25	-3.54349603	-4.77508	-2.31192	2.01E-05
450-25	-5.66502423	-6.8966	-4.43344	2.56E-07
250-150	-0.29115673	-1.52274	0.940424	0.931328
350-150	-2.53898703	-3.77057	-1.30741	0.00036
450-150	-4.66051523	-5.8921	-3.42893	1.60E-06
350-250	-2.2478303	-3.47941	-1.01625	0.000959
450-250	-4.3693585	-5.60094	-3.13778	2.93E-06
450-350	-2.1215282	-3.35311	-0.88995	0.0015

One-way ANOVA, Musick series Macro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	944.6	236.15	62.01	5.07e-07 ***
Residuals	10	38.1	3.81		

Musick series Macro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	1.499721223	-3.74413	6.743569	0.874437
250-25	-6.21711147	-11.461	-0.97326	0.019421
350-25	-10.2894054	-15.5333	-5.04556	0.000539
450-25	-20.4995819	-25.7434	-15.2557	1.18E-06
250-150	-7.71683269	-12.9607	-2.47299	0.004756
350-150	-11.7891266	-17.033	-6.54528	0.000175
450-150	-21.9993032	-27.2432	-16.7555	6.04E-07
350-250	-4.07229388	-9.31614	1.171554	0.15336
450-250	-14.2824705	-19.5263	-9.03862	3.29E-05
450-350	-10.2101766	-15.454	-4.96633	0.000573

One-way ANOVA, Musick series Macro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	15.183	3.796	35.39	7.09e-06 ***
Residuals	10	1.072	0.107		

Musick series Macro aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.433500003	-0.4465	1.313498	0.517256
250-25	0.3949394	-0.48506	1.274937	0.597538
350-25	0.466166673	-0.41383	1.346164	0.45246
450-25	2.80329167	1.923294	3.683289	7.97E-06
250-150	-0.0385606	-0.91856	0.841437	0.999884
350-150	0.03266667	-0.84733	0.912664	0.99994
450-150	2.369791667	1.489794	3.249789	3.64E-05
350-250	0.071227273	-0.80877	0.951225	0.998693
450-250	2.40835227	1.528355	3.28835	3.15E-05
450-350	2.337124997	1.457127	3.217123	4.12E-05

One-way ANOVA, Musick series Macro aggregates: dl5N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	5.395	1.3488	2.374	0.122
Residuals	10	5.682	0.5682		

One-way ANOVA, Musick series Macro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.10553	0.026382	38.4	4.86e-06 ***
Residuals	10	0.00687	0.000687		

Musick series Macro aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.0540035	-0.12444	0.016428	0.160824
250-25	0.000498633	-0.06993	0.07093	1
350-25	-0.0920909	-0.16252	-0.02166	0.010551
450-25	-0.2270506	-0.29748	-0.15662	7.15E-06
250-150	0.054502133	-0.01593	0.124934	0.15542
350-150	-0.0380874	-0.10852	0.032344	0.433999
450-150	-0.1730471	-0.24348	-0.10262	8.15E-05
350-250	-0.09258953	-0.16302	-0.02216	0.010188
450-250	-0.22754923	-0.29798	-0.15712	7.00E-06
450-350	-0.1349597	-0.20539	-0.06453	0.000652

One-way ANOVA, Musick series Micro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	136.14	34.04	10.41	0.00137 **
Residuals	10	32.68	3.27		

Musick series Micro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-1.12607077	-5.98392	3.731776	0.935658
250-25	-1.78494593	-6.64279	3.072901	0.746793
350-25	-4.8910031	-9.74885	-0.03316	0.048286
450-25	-8.29695887	-13.1548	-3.43911	0.001601
250-150	-0.65887517	-5.51672	4.198972	0.990499
350-150	-3.76493233	-8.62278	1.092915	0.154526
450-150	-7.1708881	-12.0287	-2.31304	0.004654
350-250	-3.10605717	-7.9639	1.75179	0.289475
450-250	-6.51201293	-11.3699	-1.65417	0.008967
450-350	-3.40595577	-8.2638	1.451891	0.219277

One-way ANOVA, Musick series Micro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	761.5	190.38	82.22	1.31e-07 ***
Residuals	10	23.2	2.32		

Musick series Micro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.1830991	-3.90591	4.272105	0.999874
250-25	-6.38040813	-10.4694	-2.2914	0.003132
350-25	-11.5180894	-15.6071	-7.42908	2.44E-05
450-25	-18.5219654	-22.611	-14.433	2.95E-07
250-150	-6.56350723	-10.6525	-2.4745	0.002547
350-150	-11.7011885	-15.7902	-7.61218	2.11E-05
450-150	-18.7050645	-22.7941	-14.6161	2.70E-07
350-250	-5.13768126	-9.22669	-1.04868	0.013601
450-250	-12.1415573	-16.2306	-8.05255	1.51E-05
450-350	-7.00387604	-11.0929	-2.91487	0.001566

One-way ANOVA, Musick series Micro aggregates: dl3C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
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Temp	4	9.324	2.331	33.32	9.36e-06	***
Residuals	10	0.700	0.070			

Musick series Micro aggregates: d13C

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.18616667	-0.52461	0.896947	0.904363	
250-25	0.287606067	-0.42317	0.998386	0.679622	
350-25	0.650166673	-0.06061	1.360947	0.077179	
450-25	2.179625003	1.468845	2.890405	1.13E-05	
250-150	0.101439397	-0.60934	0.81222	0.988507	
350-150	0.464000003	-0.24678	1.17478	0.272892	
450-150	1.993458333	1.282678	2.704239	2.53E-05	
350-250	0.362560607	-0.34822	1.073341	0.486283	
450-250	1.892018937	1.181239	2.602799	4.04E-05	
450-350	1.52945833	0.818678	2.240239	0.000252	

One-way ANOVA, Musick series Micro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	20.774	5.194	9.647	0.00184 **
Residuals	10	5.384	0.538		

Musick series Micro aggregates: d15N

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.2825	-1.68917	2.254174	0.988337	
250-25	1.264060607	-0.70761	3.235735	0.287306	
350-25	-0.658	-2.62967	1.313674	0.803789	
450-25	2.725	0.753326	4.696674	0.007318	
250-150	0.981560607	-0.99011	2.953235	0.507931	
350-150	-0.9405	-2.91217	1.031174	0.545508	
450-150	2.4425	0.470826	4.414174	0.014858	
350-250	-1.92206061	-3.89373	0.049614	0.056854	
450-250	1.460939394	-0.51073	3.432614	0.181938	
450-350	3.383	1.411326	5.354674	0.001546	

One-way ANOVA, Musick series Micro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.24546	0.06137	8.109	0.0035 **
Residuals	10	0.07567	0.00757		

Musick series Micro aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.0556976	-0.28945	0.178057	0.929528	
250-25	0.026422033	-0.20733	0.260177	0.995237	
350-25	-0.082588	-0.31634	0.151167	0.771246	
450-25	-0.3327758	-0.56653	-0.09902	0.005984	
250-150	0.082119633	-0.15164	0.315875	0.774653	
350-150	-0.0268904	-0.26065	0.206865	0.994907	
450-150	-0.2770782	-0.51083	-0.04332	0.019447	
350-250	-0.10901003	-0.34277	0.124745	0.565057	
450-250	-0.35919783	-0.59295	-0.12544	0.003499	
450-350	-0.2501878	-0.48394	-0.01643	0.034909	

One-way ANOVA, Musick series Silt-clay size aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	137.13	34.28	66.56	3.62e-07 ***
Residuals	10	5.15	0.52		

Musick series Silt-clay size aggregates: C concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.21265267	-2.14123	1.715925	0.995669	
250-25	-0.6852983	-2.61388	1.24328	0.76778	
350-25	-4.04664093	-5.97522	-2.11806	0.000311	

450-25	-7.844158	-9.77274	-5.91558	8.09E-07
250-150	-0.47264563	-2.40122	1.455932	0.922731
350-150	-3.83398827	-5.76257	-1.90541	0.000485
450-150	-7.63150533	-9.56008	-5.70293	1.05E-06
350-250	-3.36134263	-5.28992	-1.43276	0.001371
450-250	-7.1588597	-9.08744	-5.23028	1.92E-06
450-350	-3.79751707	-5.72609	-1.86894	0.000524

One-way ANOVA, Musick series Silt-clay size aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	746.5	186.62	104.9	4.02e-08 ***
Residuals	10	17.8	1.78		

Musick series Silt-clay size aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.91929062	-2.66487	4.50345	0.910523
250-25	-5.89934754	-9.48351	-2.31519	0.002115
350-25	-11.2784943	-14.8627	-7.69434	8.92E-06
450-25	-17.8511121	-21.4353	-14.267	1.24E-07
250-150	-6.81863816	-10.4028	-3.23448	0.000691
350-150	-12.1977849	-15.7819	-8.61363	4.33E-06
450-150	-18.7704028	-22.3546	-15.1862	7.77E-08
350-250	-5.37914671	-8.96331	-1.79499	0.00414
450-250	-11.9517646	-15.5359	-8.36761	5.23E-06
450-350	-6.57261789	-10.1568	-2.98846	0.000924

One-way ANOVA, Musick series Silt-clay size aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	4.951	1.2377	29.2	1.71e-05 ***
Residuals	10	0.424	0.0424		

Musick series Silt-clay size aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.005500003	-0.54776	0.558758	1
250-25	0.0869394	-0.46632	0.640198	0.983592
350-25	0.551500007	-0.00176	1.104758	0.050818
450-25	1.503625003	0.950367	2.056883	3.36E-05
250-150	0.081439397	-0.47182	0.634698	0.987107
350-150	0.546000003	-0.00726	1.099258	0.053465
450-150	1.498125	0.944867	2.051383	3.47E-05
350-250	0.464560607	-0.0887	1.017819	0.112499
450-250	1.416685603	0.863427	1.969944	5.68E-05
450-350	0.952124997	0.398867	1.505383	0.001511

One-way ANOVA, Musick series Silt-clay size aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	11.245	2.8113	16.8	0.000195 ***
Residuals	10	1.674	0.1674		

Musick series Silt-clay size aggregates: d15N

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.226833333	-0.87252	1.326187	0.956633
250-25	0.957060607	-0.14229	2.056414	0.09642
350-25	-0.921	-2.02035	0.178354	0.113575
450-25	1.627	0.527646	2.726354	0.00457
250-150	0.730227273	-0.36913	1.829581	0.259353
350-150	-1.14783333	-2.24719	-0.04848	0.03991
450-150	1.400166667	0.300813	2.49952	0.012485
350-250	-1.87806061	-2.97741	-0.77871	0.001598
450-250	0.669939394	-0.42941	1.769293	0.329273
450-350	2.548	1.448646	3.647354	0.000135

One-way ANOVA, Musick series Silt-clay size aggregates: N concentration



	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.27575	0.06894	43.51	2.71e-06 ***
Residuals	10	0.01585	0.00158		

Musick series Silt-clay size aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.02320857	-0.13017	0.083758	0.948484	
250-25	0.078529	-0.02844	0.185495	0.187909	
350-25	-0.02316263	-0.13013	0.083804	0.94883	
450-25	-0.31779277	-0.42476	-0.21083	1.51E-05	
250-150	0.101737567	-0.00523	0.208704	0.064157	
350-150	4.59E-05	-0.10692	0.107012	1	
450-150	-0.2945842	-0.40155	-0.18762	2.98E-05	
350-250	-0.10169163	-0.20866	0.005275	0.064298	
450-250	-0.39632177	-0.50329	-0.28936	1.95E-06	
450-350	-0.29463013	-0.4016	-0.18766	2.98E-05	

### Shaver series (1737m)

One-way ANOVA, Shaver series Macro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	9.788	2.4470	2.963	0.0745 .
Residuals	10	8.259	0.8259		

One-way ANOVA, Shaver series Macro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	3413	853.3	41.46	3.4e-06 ***
Residuals	10	206	20.6		

Shaver series Macro aggregates: C:N ratio

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.15192557	-12.3428	12.03897	0.999999	
250-25	-5.95773885	-18.1486	6.233161	0.524288	
350-25	-3.30199627	-15.4929	8.888903	0.893745	
450-25	-39.6604134	-51.8513	-27.4695	6.57E-06	
250-150	-5.80581328	-17.9967	6.385086	0.546903	
350-150	-3.1500707	-15.341	9.040829	0.908385	
450-150	-39.5084879	-51.6994	-27.3176	6.81E-06	
350-250	2.65574258	-9.53516	14.84664	0.947775	
450-250	-33.7026746	-45.8936	-21.5118	2.88E-05	
450-350	-36.3584172	-48.5493	-24.1675	1.46E-05	

One-way ANOVA, Shaver series Macro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	3.095	0.7738	2.628	0.0981 .
Residuals	10	2.944	0.2944		

One-way ANOVA, Shaver series Macro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	10.79	2.697	1.463	0.284
Residuals	10	18.43	1.843		

One-way ANOVA, Shaver series Macro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.011015	0.0027538	4.274	0.0284 *
Residuals	10	0.006443	0.0006443		

Shaver series Macro aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.00984203	-0.07805	0.058368	0.988028	

250-25	0.019288369	-0.04892	0.087498	0.878676
350-25	-0.0254888	-0.0937	0.042721	0.735761
450-25	-0.06121087	-0.12942	0.006999	0.084247
250-150	0.029130402	-0.03908	0.09734	0.638002
350-150	-0.01564677	-0.08386	0.052563	0.937862
450-150	-0.05136883	-0.11958	0.016841	0.171715
350-250	-0.04477717	-0.11299	0.023433	0.268501
450-250	-0.08049924	-0.14871	-0.01229	0.019962
450-350	-0.03572207	-0.10393	0.032488	0.462714

One-way ANOVA, Shaver series Micro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	28.57	7.144	6.832	0.00643 **
Residuals	10	10.46	1.046		

Shaver series Micro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.36625597	-3.11399	2.381482	0.991099
250-25	-0.28144841	-3.02919	2.466289	0.996737
350-25	-1.8233762	-4.57111	0.924362	0.260098
450-25	-3.68235903	-6.4301	-0.93462	0.008983
250-150	0.084807554	-2.66293	2.832545	0.999971
350-150	-1.45712023	-4.20486	1.290618	0.45151
450-150	-3.31610307	-6.06384	-0.56837	0.017446
350-250	-1.54192779	-4.28967	1.20581	0.40099
450-250	-3.40091062	-6.14865	-0.65317	0.014939
450-350	-1.85898283	-4.60672	0.888755	0.245363

One-way ANOVA, Shaver series Micro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	1458.7	364.7	21.67	6.49e-05 ***
Residuals	10	168.3	16.8		

Shaver series Micro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	1.158058803	-9.86458	12.1807	0.996403
250-25	-6.61594595	-17.6386	4.406692	0.3422
350-25	-6.20013674	-17.2228	4.822502	0.398893
450-25	-26.2769025	-37.2995	-15.2543	0.000106
250-150	-7.77400475	-18.7966	3.248634	0.215106
350-150	-7.35819555	-18.3808	3.664443	0.255521
450-150	-27.4349613	-38.4576	-16.4123	7.28E-05
350-250	0.415809203	-10.6068	11.43845	0.999936
450-250	-19.6609565	-30.6836	-8.63832	0.001147
450-350	-20.0767657	-31.0994	-9.05413	0.000974

One-way ANOVA, Shaver series Micro aggregates: dl3C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	13.459	3.365	14.34	0.000379 ***
Residuals	10	2.347	0.235		

Shaver series Micro aggregates: dl3C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.0255	-1.32729	1.276286	0.999995
250-25	0.1239394	-1.17785	1.425726	0.997541
350-25	0.670500007	-0.63129	1.972286	0.477614
450-25	2.474958337	1.173172	3.776745	0.000694
250-150	0.149439397	-1.15235	1.451226	0.994947
350-150	0.696000003	-0.60579	1.997786	0.444189
450-150	2.500458333	1.198672	3.802245	0.00064
350-250	0.546560607	-0.75523	1.848347	0.651431
450-250	2.351018937	1.049233	3.652805	0.001041
450-350	1.80445833	0.502672	3.106245	0.007174

One-way ANOVA, Shaver series Micro aggregates: dl5N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	15.02	3.756	3.009	0.0718
Residuals	10	12.48	1.248		

One-way ANOVA, Shaver series Micro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.03518	0.008794	7.39	0.00489 **
Residuals	10	0.01190	0.001190		

Shaver series Micro aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.0163405	-0.10904	0.076356	0.975096
250-25	0.022111155	-0.07059	0.114808	0.929276
350-25	-0.04907097	-0.14177	0.043626	0.453079
450-25	-0.1170722	-0.20977	-0.02438	0.013167
250-150	0.038451655	-0.05425	0.131148	0.660797
350-150	-0.03273047	-0.12543	0.059966	0.771618
450-150	-0.1007317	-0.19343	-0.00803	0.032108
350-250	-0.07118212	-0.16388	0.021515	0.159931
450-250	-0.13918336	-0.23188	-0.04649	0.004127
450-350	-0.06800123	-0.1607	0.024696	0.188407

One-way ANOVA, Shaver series Silt-clay size aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	120.9	30.234	54.52	3.49e-07 ***
Residuals	11	6.1	0.555		

Shaver series Silt-clay size aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.29463283	-2.26094	1.671672	0.987242
250-25	-0.65681883	-2.62312	1.309486	0.81286
350-25	-2.84820507	-4.81451	-0.8819	0.004796
450-25	-6.89050448	-8.72981	-5.05119	8.51E-07
250-150	-0.36218599	-2.32849	1.604119	0.972894
350-150	-2.55357223	-4.51988	-0.58727	0.010353
450-150	-6.59587165	-8.43518	-4.75656	1.33E-06
350-250	-2.19138624	-4.15769	-0.22508	0.027286
450-250	-6.23368565	-8.073	-4.39438	2.36E-06
450-350	-4.04229941	-5.88161	-2.20299	0.000153

One-way ANOVA, Shaver series Silt-clay size aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	1559.0	389.8	62.94	1.65e-07 ***
Residuals	11	68.1	6.2		

Shaver series Silt-clay size aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	1.141678303	-5.42935	7.712706	0.978035
250-25	-5.51187619	-12.0829	1.059151	0.115383
350-25	-8.96976212	-15.5408	-2.39873	0.007343
450-25	-24.5958445	-30.7425	-18.4492	4.29E-07
250-150	-6.6535545	-13.2246	-0.08253	0.046795
350-150	-10.1114404	-16.6825	-3.54041	0.003051
450-150	-25.7375228	-31.8842	-19.5909	2.67E-07
350-250	-3.45788593	-10.0289	3.113141	0.470814
450-250	-19.0839683	-25.2306	-12.9373	5.69E-06
450-350	-15.6260824	-21.7727	-9.47945	3.97E-05

One-way ANOVA, Shaver series Silt-clay size aggregates: dl3C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	13.15	3.288	33.8	4.02e-06 ***
Residuals	11	1.07	0.097		

Shaver series Silt-clay size aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.24016666	-1.06373	0.583401	0.874178
250-25	0.002606067	-0.82096	0.826174	1
350-25	0.592166673	-0.2314	1.415735	0.207671
450-25	2.09054167	1.320164	2.860919	2.13E-05
250-150	0.24277273	-0.5808	1.066341	0.869993
350-150	0.832333337	0.008765	1.655901	0.04727
450-150	2.330708333	1.560331	3.101086	7.36E-06
350-250	0.589560607	-0.23401	1.413128	0.210789
450-250	2.087935603	1.317558	2.858313	2.15E-05
450-350	1.498374997	0.727998	2.268752	0.000452

One-way ANOVA, Shaver series Silt-clay size aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	14.036	3.509	9.781	0.00126 **
Residuals	11	3.946	0.359		

Shaver series Silt-clay size aggregates: d15N

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.552166667	-1.02941	2.133739	0.788633
250-25	1.508060607	-0.07351	3.089633	0.063834
350-25	-0.556333333	-2.13791	1.025239	0.784292
450-25	1.910666667	0.431241	3.390092	0.010748
250-150	0.95589394	-0.62568	2.537466	0.3464
350-150	-1.1085	-2.69007	0.473072	0.226076
450-150	1.3585	-0.12093	2.837926	0.076726
350-250	-2.06439394	-3.64597	-0.48282	0.010003
450-250	0.40260606	-1.07682	1.882032	0.898412
450-350	2.467	0.987574	3.946426	0.001628

One-way ANOVA, Shaver series Silt-clay size aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.1286	0.03215	86.23	3.14e-08 ***
Residuals	11	0.0041	0.00037		

Shaver series Silt-clay size aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.01864923	-0.06964	0.032338	0.760728
250-25	0.024657634	-0.02633	0.075645	0.546507
350-25	-0.04630353	-0.09729	0.004684	0.080864
450-25	-0.21050131	-0.2582	-0.16281	1.54E-07
250-150	0.043306867	-0.00768	0.094294	0.109366
350-150	-0.0276543	-0.07864	0.023333	0.443381
450-150	-0.19185208	-0.23955	-0.14416	4.06E-07
350-250	-0.07096117	-0.12195	-0.01997	0.006402
450-250	-0.23515895	-0.28285	-0.18746	4.98E-08
450-350	-0.16419778	-0.21189	-0.1165	2.02E-06

**Sirretta series (2317m)**

One-way ANOVA, Sirretta series Macro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	48.11	12.028	8.179	0.0034 **
Residuals	10	14.71	1.471		

Sirretta series Macro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
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150-25	-1.4820218	-4.74062	1.776576	0.586384
250-25	-1.3590322	-4.61763	1.899566	0.656622
350-25	-3.94727077	-7.20587	-0.68867	0.017056
450-25	-4.846177	-8.10477	-1.58758	0.004416
250-150	0.122989598	-3.13561	3.381588	0.999936
350-150	-2.46524897	-5.72385	0.793349	0.168912
450-150	-3.3641552	-6.62275	-0.10556	0.042371
350-250	-2.58823857	-5.84684	0.670359	0.140714
450-250	-3.4871448	-6.74574	-0.22855	0.034938
450-350	-0.89890623	-4.1575	2.359692	0.88755

One-way ANOVA, Sirretta series Macro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	5831	1458	56.05	8.21e-07 ***
Residuals	10	260	26		

Sirretta series Macro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-2.2002124	-15.9041	11.50371	0.982249
250-25	-14.6535096	-28.3574	-0.94958	0.035089
350-25	-24.110938	-37.8149	-10.407	0.001275
450-25	-54.4337618	-68.1377	-40.7298	1.01E-06
250-150	-12.4532972	-26.1572	1.25063	0.079552
350-150	-21.9107256	-35.6147	-8.2068	0.002622
450-150	-52.2335494	-65.9375	-38.5296	1.49E-06
350-250	-9.45742847	-23.1614	4.246499	0.230656
450-250	-39.7802522	-53.4842	-26.0763	1.86E-05
450-350	-30.3228237	-44.0268	-16.6189	0.0002

One-way ANOVA, Sirretta series Macro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	19.138	4.784	12.61	0.000641 ***
Residuals	10	3.794	0.379		

Sirretta series Macro aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.113888893	-1.54124	1.769019	0.999308
250-25	0.085272733	-1.56986	1.740403	0.999779
350-25	0.723166673	-0.93196	2.378297	0.619639
450-25	2.98029167	1.325161	4.635422	0.001066
250-150	-0.02861616	-1.68375	1.626514	0.999997
350-150	0.60927778	-1.04585	2.264408	0.745599
450-150	2.866402777	1.211272	4.521533	0.00144
350-250	0.63789394	-1.01724	2.293024	0.714754
450-250	2.895018937	1.239888	4.550149	0.001334
450-350	2.257124997	0.601995	3.912255	0.008003

One-way ANOVA, Sirretta series Macro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	8.651	2.1627	2.719	0.0909 .
Residuals	10	7.954	0.7954		

One-way ANOVA, Sirretta series Macro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.025007	0.006252	6.441	0.00786 **
Residuals	10	0.009706	0.000971		

Sirretta series Macro aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.03236913	-0.11609	0.051347	0.712497
250-25	-0.00660222	-0.09032	0.077114	0.998819
350-25	-0.0709283	-0.15464	0.012788	0.108344

450-25	-0.10835297	-0.19207	-0.02464	0.011266
250-150	0.025766914	-0.05795	0.109483	0.843895
350-150	-0.03855917	-0.12228	0.045157	0.575667
450-150	-0.07598383	-0.1597	0.007733	0.079998
350-250	-0.06432608	-0.14804	0.01939	0.159564
450-250	-0.10175075	-0.18547	-0.01803	0.016709
450-350	-0.03742467	-0.12114	0.046292	0.600802

One-way ANOVA, Sirretta series Micro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	92.16	23.041	3.977	0.031 *
Residuals	11	63.73	5.794		

Sirretta series Micro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	1.236855733	-5.11914	7.592849	0.967047
250-25	-0.18508938	-6.54108	6.170904	0.999979
350-25	-3.45460138	-9.40009	2.490886	0.381225
450-25	-5.27996687	-11.636	1.076026	0.12021
250-150	-1.42194511	-7.77794	4.934048	0.946556
350-150	-4.69145711	-10.6369	1.25403	0.148002
450-150	-6.5168226	-12.8728	-0.16083	0.043749
350-250	-3.269512	-9.215	2.675975	0.430857
450-250	-5.09487749	-11.4509	1.261116	0.1391
450-350	-1.82536549	-7.77085	4.120122	0.853193

One-way ANOVA, Sirretta series Micro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	2916.7	729.2	116.7	6.25e-09 ***
Residuals	11	68.7	6.2		

Sirretta series Micro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	2.03141261	-4.5687	8.631529	0.852107
250-25	-13.5095151	-20.1096	-6.9094	0.00029
350-25	-22.0128718	-28.1867	-15.839	1.41E-06
450-25	-34.8223055	-41.4224	-28.2222	2.54E-08
250-150	-15.5409277	-22.141	-8.94081	8.15E-05
350-150	-24.0442845	-30.2181	-17.8704	5.69E-07
450-150	-36.8537181	-43.4538	-30.2536	1.43E-08
350-250	-8.50335676	-14.6772	-2.32951	0.006894
450-250	-21.3127904	-27.9129	-14.7127	3.85E-06
450-350	-12.8094337	-18.9833	-6.63559	0.000257

One-way ANOVA, Sirretta series Micro aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	16.626	4.157	46.83	7.66e-07 ***
Residuals	11	0.976	0.089		

Sirretta series Micro aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.08194445	-0.70475	0.868634	0.99679
250-25	0.320272733	-0.46642	1.106962	0.687394
350-25	0.63008334	-0.1058	1.365964	0.105612
450-25	2.830958337	2.044269	3.617648	1.29E-06
250-150	0.238328283	-0.54836	1.025018	0.858884
350-150	0.54813889	-0.18774	1.28402	0.183615
450-150	2.749013887	1.962324	3.535703	1.73E-06
350-250	0.309810607	-0.42607	1.045691	0.661936
450-250	2.510685603	1.723996	3.297375	4.33E-06
450-350	2.200874997	1.464994	2.936756	8.24E-06

One-way ANOVA, Sirretta series Micro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	12.43	3.107	0.721	0.595
Residuals	11	47.39	4.308		

One-way ANOVA, Sirretta series Micro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.06160	0.0154	2.61	0.0936
Residuals	11	0.06491	0.0059		

One-way ANOVA, Sirretta series Silt-clay size aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	112.07	28.016	5.19	0.0159 *
Residuals	10	53.99	5.399		

Sirretta series Silt-clay size aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.9467624	-7.19029	5.296761	0.985609
250-25	-0.83180152	-7.07532	5.411722	0.991116
350-25	-4.34145313	-10.585	1.90207	0.225188
450-25	-7.26176213	-13.5053	-1.01824	0.021765
250-150	0.114960883	-6.12856	6.358484	0.999996
350-150	-3.39469073	-9.63821	2.848832	0.429142
450-150	-6.31499973	-12.5585	-0.07148	0.047159
350-250	-3.50965162	-9.75317	2.733871	0.399467
450-250	-6.42996062	-12.6735	-0.18644	0.042923
450-350	-2.920309	-9.16383	3.323214	0.562497

One-way ANOVA, Sirretta series Silt-clay size aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	1992.2	498.0	70.37	2.77e-07 ***
Residuals	10	70.8	7.1		

Sirretta series Silt-clay size aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	1.919425763	-5.22963	9.068481	0.896619
250-25	-8.72296771	-15.872	-1.57391	0.016316
350-25	-18.8934871	-26.0425	-11.7444	4.30E-05
450-25	-28.571779	-35.7208	-21.4227	9.54E-07
250-150	-10.6423935	-17.7914	-3.49334	0.004386
350-150	-20.8129129	-27.962	-13.6639	1.81E-05
450-150	-30.4912048	-37.6403	-23.3421	5.17E-07
350-250	-10.1705194	-17.3196	-3.02146	0.006012
450-250	-19.8488113	-26.9979	-12.6998	2.77E-05
450-350	-9.67829187	-16.8273	-2.52924	0.008402

One-way ANOVA, Sirretta series Silt-clay size aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	12.066	3.0165	32.63	1.03e-05 ***
Residuals	10	0.924	0.0924		

Sirretta series Silt-clay size aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.101611117	-0.71541	0.918635	0.993148
250-25	0.421272733	-0.39575	1.238297	0.476648
350-25	0.539500007	-0.27752	1.356524	0.263924
450-25	2.45229167	1.635268	3.269316	1.37E-05
250-150	0.319661617	-0.49736	1.136686	0.704148
350-150	0.43788889	-0.37914	1.254913	0.442003
450-150	2.350680553	1.533657	3.167705	2.01E-05
350-250	0.118227273	-0.6988	0.935251	0.9879
450-250	2.031018937	1.213995	2.848043	7.36E-05
450-350	1.912791663	1.095768	2.729816	0.000124

One-way ANOVA, Sirretta series Silt-clay size aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	6.935	1.734	1.571	0.256
Residuals	10	11.039	1.104		

Sirretta series Silt-clay size aggregates: d15N

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.553611111	-2.26968	3.376905	0.96367	
250-25	1.49839394	-1.3249	4.321688	0.450789	
350-25	0.636666667	-2.18663	3.459961	0.941315	
450-25	1.877333334	-0.94596	4.700627	0.258528	
250-150	0.944782829	-1.87851	3.768077	0.802314	
350-150	0.083055556	-2.74024	2.90635	0.999976	
450-150	1.323722222	-1.49957	4.147016	0.560432	
350-250	-0.86172727	-3.68502	1.961567	0.847652	
450-250	0.378939394	-2.44435	3.202233	0.990865	
450-350	1.240666666	-1.58263	4.063961	0.614953	

One-way ANOVA, Sirretta series Silt-clay size aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	4	0.09671	0.024177	3.759	0.0407 *
Residuals	10	0.06432	0.006432		

Sirretta series Silt-clay size aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.04034257	-0.25586	0.17517	0.969147	
250-25	0.040276619	-0.17524	0.255789	0.969325	
350-25	-0.01795333	-0.23347	0.197559	0.998537	
450-25	-0.19406237	-0.40957	0.02145	0.082948	
250-150	0.080619186	-0.13489	0.296132	0.735052	
350-150	0.022389233	-0.19312	0.237902	0.996555	
450-150	-0.1537198	-0.36923	0.061793	0.207256	
350-250	-0.05822995	-0.27374	0.157283	0.894555	
450-250	-0.23433899	-0.44985	-0.01883	0.031997	
450-350	-0.17610903	-0.39162	0.039404	0.125766	

### Chiquito series (2865m)

One-way ANOVA, Chiquito series Macro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	23.06	7.687	35.3	2.64e-05 ***
Residuals	9	1.96	0.218		

Chiquito series Macro aggregates: C concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.4234364	-1.53606	0.689185	0.648668	
250-25	-1.50416026	-2.6936	-0.31472	0.01464	
450-25	-3.52071363	-4.71016	-2.33127	3.32E-05	
250-150	-1.08072386	-2.19334	0.031897	0.05721	
450-150	-3.09727723	-4.2099	-1.98466	5.47E-05	
450-250	-2.01655337	-3.206	-0.82711	0.002291	

One-way ANOVA, Chiquito series Macro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	3290	1096.8	23.88	0.000128 ***
Residuals	9	413	45.9		

Chiquito series Macro aggregates: C:N ratio

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.362332382	-15.7964	16.52105	0.999867	
250-25	-11.8851013	-29.1595	5.389291	0.209621	



450-25	-39.3740134	-56.6484	-22.0996	0.000264
250-150	-12.2474337	-28.4061	3.911281	0.153777
450-150	-39.7363458	-55.8951	-23.5776	0.000147
450-250	-27.4889121	-44.7633	-10.2145	0.003514

One-way ANOVA, Chiquito series Macro aggregates: dl3C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	12.65	4.215	3.165	0.0783 .
Residuals	9	11.98	1.332		

One-way ANOVA, Chiquito series Macro aggregates: dl5N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	4.836	1.6120	2.88	0.0954 .
Residuals	9	5.037	0.5597		

One-way ANOVA, Chiquito series Macro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	0.022504	0.007501	16.12	0.00058 ***
Residuals	9	0.004188	0.000465		

Chiquito series Macro aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.00896543	-0.0604	0.042469	0.945824
250-25	-0.01895315	-0.07394	0.036033	0.711736
450-25	-0.1068326	-0.16182	-0.05185	0.000874
250-150	-0.00998772	-0.06142	0.041447	0.927556
450-150	-0.09786718	-0.1493	-0.04643	0.001016
450-250	-0.08787945	-0.14287	-0.03289	0.003414

One-way ANOVA, Chiquito series Micro aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	47.78	15.928	8.864	0.00473 **
Residuals	9	16.17	1.797		

Chiquito series Micro aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.021861442	-3.17426	3.217987	0.999996
250-25	-0.39125051	-3.80805	3.025551	0.983352
450-25	-4.64273265	-8.05953	-1.22593	0.009583
250-150	-0.41311196	-3.60924	2.783013	0.97646
450-150	-4.66459409	-7.86072	-1.46847	0.006158
450-250	-4.25148214	-7.66828	-0.83468	0.016059

One-way ANOVA, Chiquito series Micro aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	1178	392.6	70.65	1.41e-06 ***
Residuals	9	50	5.6		

Chiquito series Micro aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-1.11151707	-6.73223	4.509193	0.923967
250-25	-7.70852427	-13.7173	-1.69973	0.013475
450-25	-24.2973769	-30.3062	-18.2886	2.44E-06
250-150	-6.5970072	-12.2177	-0.9763	0.022213
450-150	-23.1858599	-28.8066	-17.5652	2.06E-06
450-250	-16.5888527	-22.5976	-10.5801	5.84E-05

One-way ANOVA, Chiquito series Micro aggregates: dl3C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	12.534	4.178	25.35	0.000101 ***

Residuals 9 1.483 0.165

Chiquito series Micro aggregates: d13C

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.04247474	-1.01037	0.925417	0.999011
250-25	0.102494953	-0.93222	1.137215	0.989052
450-25	2.340847223	1.306127	3.375567	0.00028
250-150	0.144969697	-0.82292	1.112862	0.964341
450-150	2.383321967	1.41543	3.351214	0.000145
450-250	2.23835227	1.203632	3.273072	0.000394

One-way ANOVA, Chiquito series Micro aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	10.47	3.491	0.821	0.514
Residuals	9	38.26	4.252		

One-way ANOVA, Chiquito series Micro aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	0.07893	0.026310	6.459	0.0127 *
Residuals	9	0.03666	0.004074		

Chiquito series Micro aggregates: N concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	0.011163967	-0.14101	0.163342	0.995457
250-25	0.048859938	-0.11382	0.211545	0.786198
450-25	-0.16106414	-0.32375	0.001621	0.052396
250-150	0.037695971	-0.11448	0.189874	0.864551
450-150	-0.1722281	-0.32441	-0.02005	0.026983
450-250	-0.20992408	-0.37261	-0.04724	0.013025

One-way ANOVA, Chiquito series Silt-clay size aggregates: C concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	113.61	37.87	19.97	0.000451 ***
Residuals	8	15.17	1.90		

Chiquito series Silt-clay size aggregates: C concentration

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.5830327	-4.18389	3.017821	0.952276
250-25	-0.69222561	-4.29308	2.908628	0.924242
450-25	-7.50477388	-11.1056	-3.90392	0.000713
250-150	-0.10919291	-3.71005	3.49166	0.999643
450-150	-6.92174118	-10.5226	-3.32089	0.001228
450-250	-6.81254827	-10.4134	-3.21169	0.001364

One-way ANOVA, Chiquito series Silt-clay size aggregates: C:N ratio

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	992.2	330.7	228.9	4.31e-08 ***
Residuals	8	11.6	1.4		

Chiquito series Silt-clay size aggregates: C:N ratio

Temp. Comparison	Difference	Lower	Upper	p adj
150-25	-0.53846159	-3.68165	2.604729	0.944349
250-25	-6.12076608	-9.26396	-2.97758	0.001126
450-25	-22.4763238	-25.6195	-19.3331	4.89E-08
250-150	-5.58230449	-8.7255	-2.43911	0.002061
450-150	-21.9378622	-25.0811	-18.7947	5.95E-08
450-250	-16.3555577	-19.4987	-13.2124	8.13E-07

One-way ANOVA, Chiquito series Silt-clay size aggregates: d13C

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
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Temp	3	4.176	1.3921	25.05	0.000203	***
Residuals	8	0.445	0.0556			

Chiquito series Silt-clay size aggregates: d13C

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	0.02757071	-0.58883	0.643975	0.998861	
250-25	0.13977273	-0.47663	0.756177	0.884	
450-25	1.412791667	0.796388	2.029196	0.00037	
250-150	0.11220202	-0.5042	0.728606	0.934473	
450-150	1.385220957	0.768817	2.001625	0.000424	
450-250	1.273018937	0.656615	1.889423	0.000758	

One-way ANOVA, Chiquito series Silt-clay size aggregates: d15N

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	13.064	4.355	12.73	0.00206 **
Residuals	8	2.737	0.342		

Chiquito series Silt-clay size aggregates: d15N

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	1.175318182	-0.35416	2.704795	0.141935	
250-25	1.231227273	-0.29825	2.760704	0.120572	
450-25	2.9275	1.398023	4.456977	0.001263	
250-150	0.055909091	-1.47357	1.585386	0.999376	
450-150	1.752181818	0.222705	3.281659	0.026119	
450-250	1.696272727	0.166796	3.22575	0.030697	

One-way ANOVA, Chiquito series Silt-clay size aggregates: N concentration

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Temp	3	0.19049	0.06350	11.95	0.00252 **
Residuals	8	0.04251	0.00531		

Chiquito series Silt-clay size aggregates: N concentration

Temp. Comparison		Difference	Lower	Upper	p adj
150-25	-0.0167294	-0.20733	0.173872	0.991647	
250-25	0.061348682	-0.12925	0.251951	0.737358	
450-25	-0.26824761	-0.45885	-0.07765	0.008566	
250-150	0.078078082	-0.11252	0.26868	0.581181	
450-150	-0.25151821	-0.44212	-0.06092	0.012338	
450-250	-0.32959629	-0.5202	-0.13899	0.002445	