

Table S1. Mean, standard deviation, range, and number of data points per chemolithostratigraphic unit of representative proxies for total terrestrial input, weathering/rainfall, salinity, redox, biological production, and grain size percentages %sand, %silt, and %clay

proxy	4910 to 4590 mean	4910 to 4590 sd	4910 to 4590 min	4910 to 4590 max	4910 to 4590 n
Al	6.684621395	0.1182933294	6.552363532	6.81491652	5
Ti	0.4414381087	0.002073630133	0.4390327803	0.4438081561	5
Fe	5.481553567	0.03272720012	5.437146817	5.511342723	5
CIA	70.40601217	0.3954486125	69.8509131	70.83936568	5
Ti/Al	0.06605386507	0.001172808213	0.06512305101	0.06751439662	5
Zr/Al	13.40311302	0.2216302844	13.05182835	13.66587563	5
Hf/Al	0.3784175109	0.1609774895	0.1744747478	0.6089091985	5
Th/Al	0.3218133269	0.149470093	0.178211867	0.5482646026	5
Nb/Al	0.6331729587	0.04130526557	0.580126238	0.6820763285	5
Zr/Ti	202.9341669	3.115885634	199.0925286	206.4561248	5
Hf/Ti	5.74259498	2.47655517	2.598628571	9.350133156	5
Th/Ti	4.859162206	2.202428231	2.736540507	8.120706546	5
Nb/Ti	9.587421628	0.6285714424	8.640405769	10.10267976	5
Zr/Hf	42.20710407	21.75818016	21.43476956	78.3258082	5
Th/Hf	0.954911281	0.408005803	0.2926739611	1.239178188	5
Nb/Hf	1.954092471	0.8648029782	0.9910578354	3.324986827	5
Th/Zr	0.02397720629	0.01106944683	0.01365416876	0.04078860518	5
Nb/Zr	0.04725194705	0.003168228703	0.0424507184	0.05074364082	5
Nb/Th	2.269672066	0.8529468196	1.244064135	3.386218001	5
K/Rb	0.03278785246	0.0004461760362	0.03202360999	0.03310985548	5
Ca/Ti	5.138518696	0.517371551	4.699959904	6.00172448	5
Sr/Ti	438.4492133	27.53303736	413.188518	485.4634238	5
P/Ti	0.1165287549	0.02750511668	0.1010865903	0.1653872312	5
TOC/S	0.0002553215583	4.03E-05	0.0002080577263	0.0003046457644	4
Sr/Ba	1.312086447	0.1149805859	1.209871438	1.486068869	5
Mn/Ti	0.2134830059	0.004650562677	0.2085202756	0.219328737	5
S/Ti	21557.27242	473.4029324	20785.12801	22037.07423	5
Mo/Ti	18.98792625	1.384703133	17.90686463	21.32605196	5
U/Ti	6.646606275	1.728394288	4.263132722	8.554121442	5
Corg:P	122.7164953	32.49759869	83.99977871	152.9381336	4
TOC	2.4225	0.328062494	2	2.78	4
TOC/Ti	5.494084018	0.75016241	4.533854996	6.332101212	4
bioSi/Al*	6.144760143	0.1754255174	5.872734146	6.346222634	5
Ba/Ti	334.9429349	15.71555709	316.1045803	358.5635974	5
Si/Al	3.879058994	0.02980164483	3.854061548	3.928168175	5
Si/Fe	4.730309176	0.07856521374	4.594626936	4.78466142	5

Zr/Rb	3.725828185	0.03389750455	3.69155896	3.771799632	5
Zr/V	0.7122210727	0.01368997826	0.6966056571	0.7256342878	5
(Zr+Ba)/Rb	9.873930015	0.2502228113	9.552746738	10.21930485	5
Ti/V	0.003509733876	5.18E-05	0.003433779388	0.003573576149	5
Y/Rb	0.8692952888	0.04366966613	0.8153051419	0.9325132039	5
Y/V	0.1661346428	0.007745011616	0.1538499534	0.1743256348	5
proxy	5310 to 4910 mean	5310 to 4910 sd	5310 to 4910 min	5310 to 4910 max	5310 to 4910 n
Al	6.103731935	0.32092863	5.594023144	6.465691311	5
Ti	0.414480373	0.01435140366	0.3908232546	0.4274298966	5
Fe	5.132884615	0.209277245	4.809485407	5.334832994	5
CIA	67.19733675	0.6659287698	66.27395289	67.85171205	5
Ti/Al	0.06796025579	0.001335138926	0.06610737755	0.0698644329	5
Zr/Al	14.63237774	0.356999683	14.02719824	14.91567019	5
Hf/Al	0.5195720378	0.2579562965	0.204395176	0.7961475247	5
Th/Al	0.4432610744	0.08362934327	0.3093820948	0.5379800306	5
Nb/Al	0.7386394643	0.01725783498	0.7158838585	0.7570920888	5
Zr/Ti	215.3119291	3.515866113	211.2810689	218.9438932	5
Hf/Ti	7.611135927	3.697097205	3.007874129	11.68647714	5
Th/Ti	6.534733928	1.281672996	4.428320419	7.91690023	5
Nb/Ti	10.8711983	0.2927673186	10.38401811	11.11319085	5
Zr/Hf	36.38737568	22.4234913	18.73480696	72.64103927	5
Th/Hf	1.172388258	0.8878930254	0.4114269409	2.632058354	5
Nb/Hf	1.837998681	1.127701538	0.9509444736	3.647301858	5
Th/Zr	0.0302970879	0.005634489013	0.02095938099	0.03623376511	5
Nb/Zr	0.05048669085	0.0008479952227	0.04914788705	0.05128205128	5
Nb/Th	1.720346812	0.3643926733	1.385722263	2.344911192	5
K/Rb	0.03357350657	0.001025150821	0.03277407042	0.03513489806	5
Ca/Ti	8.281753355	0.6980651648	7.317919601	9.193216097	5
Sr/Ti	649.7822223	57.24853706	577.5930222	725.4889872	5
P/Ti	0.2054009931	0.02700700412	0.1731885157	0.2442470567	5
TOC/S	0.0002422749044	2.53E-05	0.0002271919036	0.0002868091036	5
Sr/Ba	1.890462991	0.1953645198	1.624084883	2.109441311	5
Mn/Ti	0.2160212493	0.005807513166	0.2100023706	0.2255836826	5
S/Ti	21052.55837	460.1096983	20629.02137	21687.0617	5
Mo/Ti	24.64582272	1.486807255	23.30704524	26.56298099	5
U/Ti	11.93358864	3.601074026	7.900912522	15.46236359	5
Corg:P	64.44755561	6.300694315	57.55211993	73.36562176	5
TOC	1.945	0.4501888493	1.11	2.47	6
TOC/Ti	5.096843556	0.4940743669	4.725921176	5.965933696	5

bioSi/Al*	7.503038783	2.438720509	5.318187846	11.61746164	5
Ba/Ti	344.4329364	15.73015118	325.8557897	363.9870186	5
Si/Al	4.207991873	0.4845023067	3.782152957	5.036391956	5
Si/Fe	4.995233576	0.495324552	4.616090121	5.857943372	5
Zr/Rb	4.002732015	0.1330517299	3.830059778	4.201392841	5
Zr/V	0.712385991	0.01479303962	0.6953488372	0.7247890947	5
(Zr+Ba)/Rb	10.40058544	0.2639198197	10.18197454	10.80108733	5
Ti/V	0.003308919431	6.55E-05	0.003224410078	0.003406068238	5
Y/Rb	0.9361890062	0.04150160077	0.8817250213	0.9870267321	5
Y/V	0.1666458766	0.006956841961	0.1600775194	0.1771280652	5
proxy	5750 to 5310 mean	5750 to 5310 sd	5750 to 5310 min	5750 to 5310 max	5750 to 5310 n
Al	6.622715536	0.1306524534	6.459102918	6.811687687	5
Ti	0.426658343	0.01467937667	0.4134666182	0.4517285339	5
Fe	5.227836565	0.2523392945	5.034097891	5.663676341	5
CIA	68.67668899	2.698835336	65.85077223	71.66662023	5
Ti/Al	0.06441891875	0.001569070672	0.06255555615	0.06631668312	5
Zr/Al	13.88660485	0.5576655758	13.45398415	14.81457989	5
Hf/Al	0.3239665651	0.1309083169	0.1768133643	0.4436420684	4
Th/Al	0.3654344243	0.1029588639	0.2281643535	0.493214925	5
Nb/Al	0.6471225597	0.07163649497	0.5607306614	0.7491781323	5
Zr/Ti	215.6229033	8.65021281	202.8759079	225.3467234	5
Hf/Ti	5.065945257	2.047832385	2.764004661	7.091969054	4
Th/Ti	5.699120575	1.699958218	3.440527222	7.765808025	5
Nb/Ti	10.06789735	1.323999131	8.455348414	11.97620449	5
Zr/Hf	49.57560611	21.75883034	31.10114298	78.68538417	4
Th/Hf	1.391928765	0.5655711604	0.8398843262	1.965485009	4
Nb/Hf	2.369720251	1.077192559	1.48077095	3.859903228	4
Th/Zr	0.02635976032	0.007730007745	0.01695877671	0.03665939544	5
Nb/Zr	0.0466288256	0.005189902035	0.04167743968	0.0542970233	5
Nb/Th	1.871396777	0.4614651131	1.246261014	2.457573467	5
K/Rb	0.03398283073	0.00140065823	0.03252265137	0.03572384895	5
Ca/Ti	7.6532924	2.116388737	5.237729048	9.787132694	5
Sr/Ti	630.3150518	164.611863	425.5989462	809.1017395	5
P/Ti	0.1437427607	0.02509605923	0.1039504375	0.1699209482	5
TOC/S	0.0003175018416	6.32E-05	0.0002521905156	0.0003784315055	3
Sr/Ba	1.641869465	0.5305741619	0.9419130196	2.069561814	5
Mn/Ti	0.2058324004	0.004680010042	0.2033914094	0.2141553589	5
S/Ti	19646.78804	2851.33212	15059.75073	22794.66367	5
Mo/Ti	23.66025325	5.080816111	16.33885742	28.39385015	5

U/Ti	13.80419897	4.956010656	7.57037112	18.63844803	5
Corg:P	95.21287634	5.04832136	92.1448963	101.0394381	3
TOC	2.463333333	0.3370954365	2.15	2.82	3
TOC/Ti	5.825689724	0.7764192135	5.120354067	6.657630964	3
bioSi/Al*	5.107833213	1.561366121	3.880996966	7.81191973	5
Ba/Ti	397.2662006	79.20459924	321.7374119	527.2861806	5
Si/Al	3.734073406	0.2514562726	3.52938428	4.169072167	5
Si/Fe	4.736222234	0.3522025872	4.244780597	5.240621178	5
Zr/Rb	3.941014203	0.3645467986	3.599991055	4.557569492	5
Zr/V	0.6993772572	0.01728522666	0.67052816	0.7149371294	5
(Zr+Ba)/Rb	11.24552383	2.246346454	9.788863336	15.22177341	5
Ti/V	0.003246585241	0.0001204687088	0.003142736286	0.003438333497	5
Y/Rb	0.8781706899	0.07760675747	0.791398932	0.9687065647	5
Y/V	0.1559251587	0.00656577397	0.1505282911	0.1672875394	5
proxy	6070 to 5750 mean	6070 to 5750 sd	6070 to 5750 min	6070 to 5750 max	6070 to 5750 n
Al	6.160240455	0.1896031136	5.951262136	6.411144889	4
Ti	0.4381143062	0.01022946449	0.4265551577	0.4514378473	4
Fe	5.363081815	0.127030649	5.256259046	5.547441968	4
CIA	61.4410249	0.8510977854	60.73231961	62.62753404	4
Ti/Al	0.07113175786	0.0005245799196	0.07041454454	0.07167473856	4
Zr/Al	15.87025944	0.2719590871	15.47829339	16.10204766	4
Hf/Al	0.2892435155	0.1557458766	0.115384147	0.4936720705	4
Th/Al	0.6566567529	0.1396212344	0.4860172404	0.7923016629	4
Nb/Al	0.734790279	0.03620538542	0.6876725961	0.7732863422	4
Zr/Ti	223.1015097	2.555326472	219.8167082	226.0162957	4
Hf/Ti	4.059302383	2.179127066	1.63864082	6.929425065	4
Th/Ti	9.241352053	2.020863989	6.780872176	11.25196035	4
Nb/Ti	10.331001	0.5300337251	9.659016636	10.85422912	4
Zr/Hf	70.85455476	43.94540372	32.61689008	134.1457539	4
Th/Hf	3.158487195	2.564675941	1.219853586	6.866642285	4
Nb/Hf	3.308119247	2.175908086	1.566396781	6.490771907	4
Th/Zr	0.04146611088	0.009350402691	0.03041514537	0.05118792124	4
Nb/Zr	0.04631004742	0.002409736551	0.04319212759	0.04838596616	4
Nb/Th	1.162884656	0.2794104799	0.9216890092	1.500502322	4
K/Rb	0.03546856193	0.001028497495	0.03396295729	0.0362875552	4
Ca/Ti	6.225754624	0.3577400047	5.718815577	6.544233063	4
Sr/Ti	521.1577653	19.61844835	493.2438238	538.7487025	4
P/Ti	0.1388407756	0.00845830762	0.131646371	0.1495556708	4
TOC/S	0.0002812398852	5.67E-05	0.000241128792	0.0003213509784	2

Sr/Ba	1.4430268	0.04562649501	1.396443292	1.504491636	4
Mn/Ti	0.2176249203	0.003642621024	0.2132635289	0.2217830738	4
S/Ti	17719.04411	241.6014479	17478.1725	17955.32394	4
Mo/Ti	28.07981747	4.459057553	24.45640155	34.24293721	4
U/Ti	13.40396522	2.102877224	11.02629337	15.74375315	4
Corg:P	93.51863987	15.80655198	82.34171978	104.69556	2
TOC	2.21	0.4242640687	1.91	2.51	2
TOC/Ti	4.990967411	1.074861265	4.230925722	5.7510091	2
bioSi/Al*	9.124023528	1.008417716	7.855770611	10.00883537	4
Ba/Ti	361.152816	7.495802212	353.2143603	370.8770611	4
Si/Al	4.445021075	0.2022009619	4.184959096	4.64142917	4
Si/Fe	5.104085124	0.2045870934	4.836531733	5.272743823	4
Zr/Rb	3.873916689	0.07879945832	3.762519512	3.948079336	4
Zr/V	0.7041755971	0.01326743677	0.6850739281	0.7140496146	4
(Zr+Ba)/Rb	10.14469592	0.2266878067	9.808356215	10.28932907	4
Ti/V	0.003156575522	6.73E-05	0.003063438197	0.003208985806	4
Y/Rb	0.8563378089	0.01474683502	0.8433266326	0.8745723855	4
Y/V	0.1557035555	0.004884016115	0.1495752558	0.1605793734	4
proxy	6260 to 6070 mean	6260 to 6070 sd	6260 to 6070 min	6260 to 6070 max	6260 to 6070 n
Al	6.040987875	0.2683323869	5.604956858	6.323002861	6
Ti	0.4390393773	0.01455563082	0.4144018023	0.4533166105	6
Fe	5.390550323	0.1666118018	5.094631388	5.564490214	6
CIA	59.7142109	0.9541332595	57.86811909	60.39135065	6
Ti/Al	0.07270851498	0.0009098269833	0.07169324774	0.07393487814	6
Zr/Al	16.25489219	0.4433806695	15.65850379	16.74961255	6
Hf/Al	0.4613963052	0.1947466164	0.1564721412	0.6623233739	6
Th/Al	0.6187599642	0.1618397944	0.3987469182	0.8043579217	6
Nb/Al	0.7882558956	0.02826793316	0.7492188282	0.8316018974	6
Zr/Ti	223.5337129	3.744180267	218.252396	228.5613515	6
Hf/Ti	6.345023917	2.665831764	2.135182766	9.14919999	6
Th/Ti	8.501847199	2.1998913	5.561847605	11.21135493	6
Nb/Ti	10.8398163	0.3052572472	10.45034019	11.24776179	6
Zr/Hf	45.207301	31.35674915	24.0882025	107.0453336	6
Th/Hf	1.751961231	1.275953557	0.7044127629	4.04271508	6
Nb/Hf	2.163120744	1.41729605	1.208643885	4.938102766	6
Th/Zr	0.03805099617	0.009993215598	0.02491728926	0.05136875989	6
Nb/Zr	0.0485088143	0.001739170344	0.04613094845	0.05029113548	6
Nb/Th	1.352146543	0.3648697305	0.9675618185	1.878933213	6
K/Rb	0.03736312688	0.0006647703471	0.03631690243	0.03811601353	6

Ca/Ti	5.875438645	0.2045241731	5.556204468	6.095031659	6
Sr/Ti	543.9071984	16.6934475	518.5155788	563.1195528	6
P/Ti	0.1464419049	0.01130543963	0.1238482966	0.1554424565	6
TOC/S	0.0002805211749	0.00010174167	0.0001646380473	0.0003551867621	3
Sr/Ba	1.311426017	0.04894655084	1.221317518	1.356985399	6
Mn/Ti	0.2199190821	0.003111715098	0.2172074314	0.2248496211	6
S/Ti	17410.92509	337.7644482	17028.57861	17954.48527	6
Mo/Ti	25.89701981	3.279692342	21.6900298	30.36225769	6
U/Ti	16.61469749	3.26919867	13.55090924	22.44073538	6
Corg:P	87.87423873	23.05820409	61.55045316	104.4965521	3
TOC	2.143333333	0.7225187425	1.34	2.74	3
TOC/Ti	4.912005676	1.708080005	2.955991395	6.109200874	3
bioSi/Al*	7.47979886	1.600811827	5.072477727	9.69730007	6
Ba/Ti	414.9183813	9.497372758	403.2621929	427.7064084	6
Si/Al	4.209051199	0.3215073835	3.761854784	4.689758012	6
Si/Fe	4.711532719	0.3015131828	4.274644692	5.159527614	6
Zr/Rb	3.888726778	0.06638370466	3.77794744	3.963948837	6
Zr/V	0.6910957473	0.01124275565	0.6777396652	0.7057042177	6
(Zr+Ba)/Rb	11.10749871	0.2528036052	10.79551075	11.48700713	6
Ti/V	0.003092066749	5.20E-05	0.003036299532	0.003183889443	6
Y/Rb	0.8867212658	0.03653217166	0.8281694433	0.9304521947	6
Y/V	0.1575003543	0.003087265794	0.1535085148	0.1608451364	6
proxy	6510 to 6260 mean	6510 to 6260 sd	6510 to 6260 min	6510 to 6260 max	6510 to 6260 n
Al	6.847415097	0.3242391065	6.430916125	7.309214579	9
Ti	0.482994618	0.02109192823	0.4514562452	0.5065725861	9
Fe	6.051488003	0.2733136591	5.638608746	6.334136629	9
CIA	60.24536004	0.9446520372	59.13121664	61.53564614	9
Ti/Al	0.07055420826	0.001119472444	0.06930602197	0.07216886113	9
Zr/Al	16.09281414	0.4588681904	15.31684043	16.67966516	9
Hf/Al	0.4642670282	0.171124724	0.2244435363	0.7023360929	8
Th/Al	0.6790855995	0.107974009	0.5022386799	0.8296020977	9
Nb/Al	0.7646037319	0.07463179512	0.6505466875	0.8868011825	9
Zr/Ti	228.0625936	3.825498263	219.9332195	231.9650462	9
Hf/Ti	6.562083517	2.412175404	3.190895412	10.00465616	8
Th/Ti	9.632494954	1.579470456	7.140286266	11.8101572	9
Nb/Ti	10.82737439	0.9195752712	9.386582422	12.28786444	9
Zr/Hf	39.72201996	16.36180134	23.18570898	72.18633994	8
Th/Hf	1.60715389	0.6294499706	0.9630539355	2.695133175	8
Nb/Hf	1.911103466	0.8030367162	1.101502597	3.590316357	8

Th/Zr	0.04228375766	0.007209482743	0.03099902482	0.05163713013	9
Nb/Zr	0.04746401998	0.003794308765	0.04179771231	0.0531666058	9
Nb/Th	1.158416393	0.2510302704	0.8094507229	1.604462842	9
K/Rb	0.03640740868	0.0006594997121	0.03562503628	0.03749208786	9
Ca/Ti	5.721958827	0.2293405647	5.413920254	6.070479953	9
Sr/Ti	512.6903448	37.89037642	468.6967608	560.3146567	9
P/Ti	0.1324988586	0.009332862784	0.1222947411	0.148622051	9
TOC/S	0.0001616886446	2.92E-05	0.0001387768275	0.0002110892204	5
Sr/Ba	1.065212906	0.09260458348	0.9709953578	1.205338921	9
Mn/Ti	0.2401700773	0.001563902518	0.2371136847	0.2419852178	9
S/Ti	14046.03266	1553.46437	12332.38104	16112.47863	9
Mo/Ti	16.64125714	3.32297868	13.25026062	23.60009942	9
U/Ti	12.3882988	1.594263553	8.499094797	14.37589967	9
Corg:P	44.59671254	10.19029896	35.95226085	60.96318874	5
TOC	1.086	0.258611678	0.86	1.5	5
TOC/Ti	2.262862876	0.6174040873	1.711448716	3.220967629	5
bioSi/Al*	4.485805143	2.099201784	2.38666902	7.416629149	9
Ba/Ti	481.8547695	11.50489553	462.8593725	505.6507413	9
Si/Al	3.628067024	0.3393384595	3.290406238	4.112905947	9
Si/Fe	4.105645213	0.3932773624	3.647238017	4.690829665	9
Zr/Rb	3.706201522	0.08774864847	3.603883693	3.883728409	9
Zr/V	0.676280808	0.02386739358	0.6312670933	0.7026669889	9
(Zr+Ba)/Rb	11.53942432	0.3638306307	11.04111681	12.13897478	9
Ti/V	0.002964644763	6.37E-05	0.002870267142	0.003056454826	9
Y/Rb	0.8094504642	0.03307499438	0.7765546405	0.8734787988	9
Y/V	0.1475827092	0.003365932522	0.1438112331	0.1522888417	9
proxy	6590 to 6510 mean	6590 to 6510 sd	6590 to 6510 min	6590 to 6510 max	6590 to 6510 n
Al	5.254867279	1.1009084	4.476407485	6.033327074	2
Ti	0.4180807357	0.05574776792	0.378661111	0.4575003605	2
Fe	4.978914463	0.2359266166	4.812089152	5.145739773	2
CIA	74.45982526	8.763139401	68.26334997	80.65630056	2
Ti/Al	0.08020963511	0.006195340695	0.0758288677	0.08459040253	2
Zr/Al	18.79858421	1.097261684	18.02270304	19.57446539	2
Hf/Al	0.1717101504	0.0588118069	0.1301239229	0.2132963778	2
Th/Al	0.9252698289	0.2264769928	0.7651264115	1.085413246	2
Nb/Al	0.9111667465	0.03234860513	0.8882928284	0.9340406645	2
Zr/Ti	234.5394626	4.435753796	231.402911	237.6760142	2
Hf/Ti	2.175573739	0.9012661299	1.538282346	2.812865131	2
Th/Ti	11.67952908	3.725682759	9.045073539	14.31398462	2

Nb/Ti	11.37818193	0.4755427247	11.04192245	11.71444142	2
Zr/Hf	117.4627355	46.62192297	84.49605764	150.4294134	2
Th/Hf	5.484369391	0.5594816647	5.088756112	5.87998267	2
Nb/Hf	5.671339859	2.130860342	4.164594061	7.178085657	2
Th/Zr	0.04965638036	0.0149459679	0.0390879851	0.06022477561	2
Nb/Zr	0.04850236886	0.001110253068	0.04771730139	0.04928743633	2
Nb/Th	1.019578915	0.2845221615	0.8183913652	1.220766465	2
K/Rb	0.02392576838	0.005608671996	0.01995983838	0.02789169838	2
Ca/Ti	2.596717801	0.2115767273	2.447110463	2.74632514	2
Sr/Ti	295.3862058	19.407804	281.662816	309.1095956	2
P/Ti	0.1532687616	0.02900892531	0.1327563538	0.1737811694	2
TOC/S	0.0005541042211	NA	0.0005541042211	0.0005541042211	1
Sr/Ba	0.8446272161	0.5577062497	0.4502693451	1.238985087	2
Mn/Ti	0.2025785606	0.002195380915	0.2010261919	0.2041309294	2
S/Ti	12117.23322	10026.65363	5027.318443	19207.148	2
Mo/Ti	102.4932135	137.119104	5.535365261	199.4510618	2
U/Ti	20.98554128	28.37154082	0.9238323765	41.04725019	2
Corg:P	157.931861	NA	157.931861	157.931861	1
TOC	3.925	0.148492424	3.82	4.03	2
TOC/Ti	10.64276178	NA	10.64276178	10.64276178	1
bioSi/Al*	15.31752979	5.57351068	11.37646259	19.25859699	2
Ba/Ti	437.5145422	265.9123294	249.4861309	625.5429535	2
Si/Al	6.053552432	1.708822851	4.845232206	7.261872658	2
Si/Fe	6.218142026	0.759654701	5.680985036	6.755299017	2
Zr/Rb	5.437003911	1.019992113	4.715760572	6.158247251	2
Zr/V	0.5784138538	0.1068799432	0.5028383212	0.6539893865	2
(Zr+Ba)/Rb	16.08313338	8.885637097	9.80003913	22.36622762	2
Ti/V	0.002462299696	0.0004091328041	0.002172999116	0.002751600277	2
Y/Rb	1.240874288	0.1961415648	1.102181258	1.379567319	2
Y/V	0.1320755101	0.0212511165	0.1170487015	0.1471023187	2
proxy	6640 to 6590 mean	6640 to 6590 sd	6640 to 6590 min	6640 to 6590 max	6640 to 6590 n
Al	6.024693216	0.5518238276	5.634494845	6.414891586	2
Ti	0.4422874372	0.05362655001	0.40436774	0.4802071343	2
Fe	5.434915774	0.7157820388	4.92878144	5.941050107	2
CIA	67.94619403	15.08098444	57.28232766	78.6100604	2
Ti/Al	0.07331232118	0.002186180086	0.07176645842	0.07485818394	2
Zr/Al	17.47191801	0.6375992654	17.02106725	17.92276878	2
Hf/Al	0.397670307	0.4162329669	0.1033491535	0.6919914605	2
Th/Al	0.8546926179	0.07048403161	0.8048528812	0.9045323546	2

Nb/Al	0.8050097697	0.08929489372	0.7418687448	0.8681507945	2
Zr/Ti	238.5574539	15.81083236	227.3775071	249.7374006	2
Hf/Ti	5.342054079	5.518230335	1.440075989	9.244032169	2
Th/Ti	11.67776676	1.309653428	10.75170194	12.60383158	2
Nb/Ti	10.96726792	0.8909617093	10.33726285	11.59727299	2
Zr/Hf	99.00841033	105.2333124	24.59722153	173.4195991	2
Th/Hf	4.957647758	5.366305779	1.163096551	8.752198964	2
Nb/Hf	4.216422308	4.188693609	1.254568653	7.178275964	2
Th/Zr	0.04887701323	0.002250473236	0.04728568834	0.05046833812	2
Nb/Zr	0.04619850826	0.006796679595	0.04139253003	0.05100448649	2
Nb/Th	0.9494068002	0.1827708691	0.8201682792	1.078645321	2
K/Rb	0.02991519054	0.006936911915	0.02501005308	0.034820328	2
Ca/Ti	4.791264301	1.912912383	3.438630983	6.143897619	2
Sr/Ti	406.7460035	157.7262126	295.216729	518.2752781	2
P/Ti	0.2361488598	0.1447346478	0.1338060089	0.3384917107	2
TOC/S	0.0002028535019	NA	0.0002028535019	0.0002028535019	1
Sr/Ba	0.6296873009	0.3164811894	0.4059013057	0.853473296	2
Mn/Ti	0.215989413	0.01895316122	0.2025875042	0.2293913219	2
S/Ti	9227.670105	3064.975752	7060.404967	11394.93524	2
Mo/Ti	13.67103856	8.794760374	7.452203862	19.88987326	2
U/Ti	6.615257148	NA	6.615257148	6.615257148	1
Corg:P	44.54888933	NA	44.54888933	44.54888933	1
TOC	1.11	NA	1.11	1.11	1
TOC/Ti	2.311502518	NA	2.311502518	2.311502518	1
bioSi/Al*	9.07769168	5.685625728	5.057347172	13.09803619	2
Ba/Ti	667.2829213	84.89337468	607.2542404	727.3116022	2
Si/Al	4.516124701	1.08628557	3.748004809	5.284244594	2
Si/Fe	5.04389456	1.409913517	4.046935151	6.040853969	2
Zr/Rb	5.075221421	2.465686932	3.331717472	6.818725371	2
Zr/V	0.6288651058	0.03295860837	0.6055598503	0.6521703612	2
(Zr+Ba)/Rb	19.45331499	10.21574376	12.2296933	26.67693668	2
Ti/V	0.002637329993	3.66E-05	0.002611424479	0.002663235507	2
Y/Rb	1.117811033	0.5229343005	0.7480406426	1.487581423	2
Y/V	0.1391196008	0.004467046228	0.1359609221	0.1422782794	2