

Table A3

Site	Facies	Sample	GSZ class (μm)	% finer	% class	% coarser	method	tHMcounted	total grains	Operator	HMC	tHMC	HM %weight	tHM %weight	zircon	tourmaline	rutile	Ti oxides	titanite	apatite	topaz	epidote group	epidote in RF	garnet
Vanesinha	beach	S4958	<500	0%	97%	3%	Point	445	572	S.Andò	15.1	11.7	14.5	11.5	0.2	0.9	0.0	0.0	0.2	0.4	0.0	4.9	4.3	70.1
Riscos	eolian dune	S5059	<500	0%	100%	0%	Point	201	257	S.Andò	1.9	1.5	2.5	1.9	3.0	1.0	0.0	0.5	1.5	0.0	0.0	11.9	1.0	41.8
Saco dos Tigres	beach	S5057	<500	0%	99%	1%	Point	201	303	S.Andò	2.0	1.3	3.7	2.5	0.5	2.0	0.0	0.0	2.5	0.5	0.0	6.5	1.5	46.3
Praia dos Esponjas	eolian dune	S5056	<500	0%	40%	60%	Point	203	279	S.Andò	3.0	2.2	2.7	2.0	1.5	0.0	0.0	0.0	0.5	2.5	0.5	11.3	8.9	7.4
Foz do Cunene	eolian dune	S5054	<500	0%	100%	0%	Point	200	264	S.Andò	4.6	3.5	4.9	3.7	0.0	1.0	0.0	0.0	2.0	0.0	0.0	15.5	3.0	12.5
Foz do Cunene	beach	S5053	<500	0%	44%	56%	Point	203	348	S.Andò	14.2	8.3	17.7	10.3	0.0	0.5	0.0	0.0	1.5	0.5	0.0	12.3	6.4	23.2
Foz do Cunene	river mouth	S5052	15-500	0%	95%	5%	Point	216	285	S.Andò	5.6	4.2	5.4	4.1	0.5	0.0	0.5	0.0	1.9	0.9	0.0	13.9	5.6	10.2
INTRASAMPLE VARIABILITY			\emptyset max																					
Vanesinha	beach	S4958	<300				Point	122	170	S.Andò					0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.6	81.1
Vanesinha	beach	S4958	>300				Point	323	402	S.Andò					0.0	1.2	0.0	0.0	0.3	0.6	0.0	5.6	5.3	65.9
Riscos	eolian dune	S5059	<300				Point	188	234	S.Andò					3.2	0.5	0.0	0.5	1.6	0.0	0.0	12.8	0.5	43.1
Riscos	eolian dune	S5059	>300				Point	13	23	S.Andò					0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	7.7	23.1
Saco dos Tigres	beach	S5057	<300				Point	162	244	S.Andò					0.6	2.5	0.0	0.0	0.6	0.6	0.0	5.6	0.6	54.3
Saco dos Tigres	beach	S5057	>300				Point	39	59	S.Andò					0.0	0.0	0.0	0.0	10.3	0.0	0.0	10.3	5.1	12.8
Praia dos Esponjas	eolian dune	S5056	<300				Point	145	195	S.Andò					2.1	0.0	0.0	0.0	0.7	2.8	0.0	13.8	0.0	7.6
Praia dos Esponjas	eolian dune	S5056	>300				Point	58	84	S.Andò					0.0	0.0	0.0	0.0	0.0	1.7	1.7	5.2	31.0	6.9
Foz do Cunene	eolian dune	S5054	<300				Point	177	236	S.Andò					0.0	1.1	0.0	0.0	1.7	0.0	0.0	14.7	2.3	13.6
Foz do Cunene	eolian dune	S5054	>300				Point	23	28	S.Andò					0.0	0.0	0.0	0.0	4.3	0.0	0.0	21.7	8.7	4.3
Foz do Cunene	beach	S5053	<300				Point	145	253	S.Andò					0.0	0.7	0.0	0.0	2.1	0.7	0.0	12.4	2.1	26.9
Foz do Cunene	beach	S5053	>300				Point	58	95	S.Andò					0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	17.2	13.8
Foz do Cunene	river mouth	S5052	<300				Point	114	156	S.Andò					0.9	0.0	0.9	0.0	0.9	1.8	0.0	16.7	4.4	17.5
Foz do Cunene	river mouth	S5052	>300				Point	102	129	S.Andò					0.0	0.0	0.0	0.0	2.9	0.0	0.0	10.8	6.9	2.0

staurolite	andalusite	kyanite	sillimanite	amphibole	oxy-hornblende	amphibole in RF	clinopyroxene	clinopyroxene in RF	hypersthene	enstatite	olivine	spinel	total	HCl	MMI	ZTR	% transparent	% opaques	% Fe oxides	% Ti oxides	% turbid HM	% rock fragments	% soils & turbid	% glaucony/phosphat	% chlorite	% biotite	% carbonates	% light minerals	total	
3.4	0.0	0.0	0.2	5.8	0.0	0.7	7.4	0.0	1.3	0.0	0.0	0.0	100.0	20	53	1	78%	14%	1%	1%	0%	6%	1%	0%	0%	0%	0%	0%	100%	
3.0	0.0	0.0	0.5	8.5	0.0	0.5	21.4	3.5	2.0	0.0	0.0	0.0	100.0	18	57	4	78%	12%	2%	1%	0%	5%	1%	1%	0%	0%	0%	0%	100%	
1.5	0.0	0.0	0.0	10.9	0.0	0.0	20.4	2.0	5.5	0.0	0.0	0.0	100.0	9	n.d.	2	66%	24%	0%	0%	0%	8%	0%	1%	0%	0%	1%	0%	100%	
1.0	0.0	0.0	0.0	18.2	0.5	0.5	36.0	2.0	9.4	0.0	0.0	0.0	100.0	12	n.d.	2	73%	13%	1%	0%	0%	9%	1%	0%	1%	1%	1%	1%	100%	
1.5	0.0	0.0	0.0	17.0	0.5	2.5	36.0	2.5	6.0	0.0	0.0	0.0	100.0	21	n.d.	1	76%	15%	1%	1%	0%	5%	2%	0%	0%	0%	0%	0%	1%	100%
0.5	0.0	0.0	0.0	16.3	1.0	1.0	33.5	0.0	3.0	0.5	0.0	0.0	100.0	26	n.d.	0	58%	33%	1%	1%	0%	5%	0%	1%	0%	1%	0%	1%	100%	
4.2	0.9	0.0	0.5	28.7	0.5	3.7	19.9	2.8	5.6	0.0	0.0	0.0	100.0	9	54	1	76%	8%	2%	1%	0%	11%	0%	1%	0%	1%	0%	0%	100%	
0.8	0.0	0.0	0.0	3.3	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	100.0	n.d.	n.d.	1	72%	27%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	100%	
4.3	0.0	0.0	0.3	6.8	0.0	0.9	6.8	0.0	1.9	0.0	0.0	0.0	100.0	21	53	1	80%	8%	1%	1%	0%	8%	1%	0%	0%	0%	0%	0%	100%	
3.2	0.0	0.0	0.0	8.5	0.0	0.0	22.9	2.1	1.1	0.0	0.0	0.0	100.0	19	50	4	80%	13%	2%	1%	0%	2%	1%	1%	0%	0%	0%	0%	100%	
0.0	0.0	0.0	7.7	7.7	0.0	7.7	0.0	23.1	15.4	0.0	0.0	0.0	100.0	n.d.	n.d.	8	57%	0%	9%	0%	0%	35%	0%	0%	0%	0%	0%	0%	100%	
1.9	0.0	0.0	0.0	8.0	0.0	0.0	21.0	2.5	1.9	0.0	0.0	0.0	100.0	10	n.d.	3	66%	28%	0%	0%	0%	3%	0%	1%	0%	0%	1%	0%	100%	
0.0	0.0	0.0	0.0	23.1	0.0	0.0	17.9	0.0	20.5	0.0	0.0	0.0	100.0	7	n.d.	0	66%	7%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	100%	
1.4	0.0	0.0	0.0	15.2	0.0	0.0	47.6	2.1	6.9	0.0	0.0	0.0	100.0	10	n.d.	2	74%	16%	2%	0%	0%	5%	1%	0%	1%	1%	1%	0%	100%	
0.0	0.0	0.0	0.0	25.9	1.7	1.7	6.9	1.7	15.5	0.0	0.0	0.0	100.0	20	n.d.	0	69%	5%	0%	0%	0%	17%	1%	1%	2%	2%	0%	2%	100%	
1.7	0.0	0.0	0.0	14.7	0.6	2.8	39.0	2.8	5.1	0.0	0.0	0.0	100.0	16	n.d.	1	75%	17%	0%	0%	0%	4%	2%	0%	0%	0%	0%	0%	1%	100%
0.0	0.0	0.0	0.0	34.8	0.0	0.0	13.0	0.0	13.0	0.0	0.0	0.0	100.0	38	n.d.	0	82%	4%	4%	4%	0%	7%	0%	0%	0%	0%	0%	0%	100%	
0.7	0.0	0.0	0.0	11.7	0.7	1.4	37.9	0.0	2.1	0.7	0.0	0.0	100.0	20	n.d.	1	57%	36%	1%	1%	0%	3%	0%	1%	0%	0%	0%	0%	100%	
0.0	0.0	0.0	0.0	27.6	1.7	0.0	22.4	0.0	5.2	0.0	0.0	0.0	100.0	33	n.d.	0	61%	24%	1%	1%	0%	9%	0%	0%	0%	2%	0%	1%	100%	
0.9	1.8	0.0	0.9	26.3	0.0	2.6	21.1	1.8	1.8	0.0	0.0	0.0	100.0	7	n.d.	2	73%	15%	3%	1%	0%	6%	1%	1%	0%	0%	0%	0%	100%	
7.8	0.0	0.0	0.0	31.4	1.0	4.9	18.6	3.9	9.8	0.0	0.0	0.0	100.0	11	50	0	79%	1%	1%	0%	0%	17%	0%	0%	0%	2%	0%	0%	100%	