

Table A2

P4948 Bentiaba beach placer										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon				Monazite
1929	1	1827	10	18	14	56				3
Grain size	3.510	3.498	3.791	3.367	3.392	3.589				3.668
( $\phi$ units)		0.42	0.77	0.30	0.28	0.34				0.29
Roundness	0.648	0.376	0.403	0.258	0.243	0.457				0.642
Fourier method		0.21	0.29	0.22	0.22	0.21				0.17
Roundness	0.547	0.581	0.614	0.509	0.526	0.620				0.677
Wadell method		0.07	0.13	0.09	0.07	0.09				0.05

S4953 Namibe beach										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Apatite		
471	38	149	10	117	95	5	47			10
Grain size	2.157	2.785	2.360	2.036	2.288	2.973	2.130			2.230
( $\phi$ units)		0.42	0.37	0.40	0.42	0.47	0.08			0.31
Roundness	0.227	0.237	0.163	0.236	0.231	0.487	0.219			0.433
Fourier method		0.20	0.18	0.17	0.20	0.19	0.21			0.13
Roundness	0.575	0.634	0.557	0.563	0.572	0.730	0.562			0.622
Wadell method		0.07	0.08	0.10	0.08	0.07	0.07			0.09

S4954 Subida Grande beach										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite	Rutile
740	326	107	90	88	90	9	9	9	11	1
Grain size	2.493	2.715	2.533	2.034	2.333	2.888	1.857	2.259	2.611	2.074
( $\phi$ units)		0.36	0.38	0.32	0.49	0.46	0.22	0.47	0.26	0.59
Roundness	0.770	0.635	0.512	0.601	0.677	0.742	0.538	0.480	0.602	0.627
Fourier method		0.19	0.20	0.20	0.22	0.21	0.09	0.19	0.16	0.31
Roundness	0.748	0.747	0.681	0.691	0.721	0.765	0.663	0.637	0.773	0.746
Wadell method		0.08	0.08	0.08	0.08	0.05	0.09	0.07	0.07	0.09

S4774 Tombua dune										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite	Rutile
373	118	52	85	43	49	5	9	9	2	1
Grain size	2.638	2.825	2.532	2.299	2.525	3.161	2.355	2.007	2.434	2.557
( $\phi$ units)		0.42	0.32	0.36	0.62	0.56	0.40	0.40	0.46	0.04
Roundness	0.634	0.513	0.444	0.641	0.535	0.511	0.623	0.521	0.943	0.513
Fourier method		0.25	0.27	0.23	0.22	0.23	0.16	0.10	0.27	0.08
Roundness	0.710	0.706	0.645	0.678	0.690	0.752	0.671	0.568	0.742	0.706
Wadell method		0.12	0.14	0.10	0.07	0.06	0.09	0.06	0.22	0.08

S4958 Vanesinha beach										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite		Monazite
594	55	162	293	23	25	11	7	17		1
Grain size	2.090	2.323	1.920	1.655	1.915	2.526	1.903	1.925		2.772
( $\phi$ units)		0.41	0.45	0.47	0.39	0.46	0.20	0.44		0.28
Roundness	0.693	0.685	0.598	0.701	0.761	0.700	0.602	0.725		0.875
Fourier method		0.18	0.17	0.20	0.14	0.18	0.13	0.10		0.17
Roundness	0.701	0.713	0.665	0.699	0.724	0.714	0.677	0.693		0.806
Wadell method		0.07	0.08	0.07	0.07	0.09	0.03	0.09		

P4958 Vanesinha beach placer										
total grains	Clinopyroxene	Opaque	Garnet		Epidote	Zircon	Hypersthene	Staurolite		Monazite
1773	5	1378	336		7	31	3	5		8
Grain size	3.797	3.969	3.766		3.785	4.104	4.293	3.770		4.065
( $\phi$ units)		0.21	0.35	0.35		0.40	0.31	0.30		0.28
Roundness	0.563	0.689	0.581		0.697	0.681	0.644	0.468		0.731
Fourier method		0.27	0.17	0.20		0.21	0.10	0.16		0.22
Roundness	0.718	0.730	0.682		0.708	0.750	0.716	0.662		0.741
Wadell method		0.09	0.07	0.08		0.08	0.03	0.09		0.07

P4959 Praia do Navio beach placer										
total grains	Clinopyroxene	Opaque	Garnet		Epidote	Zircon	Hypersthene	Staurolite		Monazite
409	6	248	136		3	4	3	6		3
Grain size	2.987	2.043	2.605		2.894	2.309	2.365	2.328		2.333
( $\phi$ units)		0.04	0.20	0.14		0.03	0.02	0.01		0.04
Roundness	0.819	0.663	0.754		0.823	0.554	0.649	0.656		0.732
Fourier method		0.12	0.19	0.17		0.21	0.12	0.24		0.20
Roundness	0.727	0.601	0.674		0.821	0.653	0.591	0.638		0.673
Wadell method		0.02	0.07	0.07		0.04	0.07	0.06		0.04

S5057 Saco dos Tigres beach										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite		
487	99	178	130	17	40	14	5	4		
Grain size	2.467	2.558	2.268	2.074	2.274	2.644	2.270	2.336		
( $\phi$ units)		0.36	0.32	0.35	0.36	0.45	0.31	0.25		0.34
Roundness	0.732	0.712	0.531	0.563	0.702	0.675	0.689	0.474		
Fourier method		0.21	0.16	0.18	0.16	0.17	0.23	0.16		0.19
Roundness	0.732	0.738	0.660	0.648	0.702	0.723	0.679	0.630		
Wadell method		0.08	0.07	0.07	0.08	0.09	0.12	0.05		

S5056 Praia dos Esponjas dune										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite	
449	191	110	27	60	38	6	9	3	5	
Grain size	2.405	2.873	2.398	2.304	2.810	2.857	2.649	2.228	2.744	
( $\phi$ units)		0.46	0.41	0.53	0.78	0.56	0.24	0.86	0.20	0.53
Roundness	0.621	0.550	0.443	0.401	0.398	0.583	0.277	0.365	0.522	
Fourier method		0.22	0.22	0.19	0.21	0.26	0.16	0.15	0.12	0.08
Roundness	0.657	0.687	0.603	0.602	0.636	0.684	0.575	0.568	0.661	
Wadell method		0.07	0.07	0.08	0.09	0.08	0.11	0.03	0.08	

S5052 Cunene River @ Foz do Cunene										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite	Rutile
618	149	185	98	68	70	13	22	6	5	2
Grain size	2.583	2.700	2.507	1.952	2.360	2.920	1.749	2.530	2.289	2.686
( $\phi$ units)		0.48	0.48	0.36	0.64	0.31	0.58	0.32	0.49	0.14
Roundness	0.557	0.393	0.404	0.273	0.289	0.597	0.220	0.395	0.696	0.561
Fourier method		0.24	0.23	0.22	0.24	0.26	0.15	0.21	0.13	0.28
Roundness	0.651	0.659	0.625	0.563	0.607	0.664	0.525	0.651	0.621	0.687
Wadell method		0.10	0.10	0.10	0.12	0.10	0.08	0.10	0.08	0.13

S4775 Cunene River @ Epupa Falls										
total grains	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Apatite		
362	41	110	7	111	54	2	28			9
Grain size	1.479	1.737	2.011	1.952	1.982	1.665	1.794			2.074
( $\phi$ units)		0.42	0.45	0.36	0.78	0.52	0.25			0.63
Roundness	0.149	0.288	0.071	0.175	0.156	0.381	0.128			0.311
Fourier method		0.16	0.19	0.09	0.18	0.19	0.18			0.24
Roundness	0.470	0.534	0.498	0.513	0.501	0.535	0.497			0.568
Wadell method		0.06	0.07	0.09	0.08	0.01	0.07			0.10

S4358 Möwe Bay dune

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Staurolite	Apatite
<b>206</b>	108	34	18	16	16	3	4	7
<b>Grain size</b>	2.822	3.239	2.453	2.804	3.204	3.320	2.265	3.075
( $\phi$ units)	0.46	0.60	0.71	0.50	0.35	0.21	0.41	0.50
<b>Roundness</b>	0.578	0.416	0.440	0.376	0.373	0.478	0.382	0.505
Fourier method	0.23	0.26	0.23	0.27	0.19	0.43	0.12	0.40
<b>Roundness</b>	0.742	0.766	0.673	0.710	0.723	0.764	0.644	0.754
Wadell method	0.07	0.09	0.07	0.08	0.09	0.10	0.04	0.11

#### S4353 Torra Bay dune

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite
<b>198</b>	96	44	39	6	9	2		2
<b>Grain size</b>	2.650	2.863	2.177	2.382	2.787	2.537		2.581
( $\phi$ units)	0.39	0.31	0.53	0.33	0.50	0.85		0.12
<b>Roundness</b>	0.614	0.572	0.371	0.301	0.416	0.393		0.303
Fourier method	0.22	0.22	0.22	0.17	0.29	0.22		0.43
<b>Roundness</b>	0.730	0.740	0.623	0.657	0.729	0.699		0.644
Wadell method	0.07	0.08	0.08	0.05	0.03	0.18		0.08

#### S4354 Torra Bay beach

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite
<b>341</b>	161	32	72	33	17	7		15	4
<b>Grain size</b>	2.301	2.667	2.132	2.118	2.296	2.915		2.032	2.143
( $\phi$ units)	0.32	0.27	0.48	0.47	0.64	0.27		0.54	0.07
<b>Roundness</b>	0.648	0.590	0.387	0.302	0.552	0.608		0.301	0.513
Fourier method	0.24	0.24	0.20	0.23	0.20	0.11		0.27	0.25
<b>Roundness</b>	0.693	0.710	0.602	0.602	0.634	0.740		0.570	0.709
Wadell method	0.09	0.09	0.10	0.07	0.18	0.07		0.11	0.06

#### NAM1 Walwis Bay dune

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite
<b>303</b>	233	25	26	4	12			2	1
<b>Grain size</b>	2.654	2.877	2.409	2.391	2.639			2.401	2.792
( $\phi$ units)	0.33	0.27	0.36	0.46	0.44			0.07	
<b>Roundness</b>	0.713	0.693	0.420	0.541	0.553			0.476	0.879
Fourier method	0.16	0.15	0.14	0.21	0.19			0.19	
<b>Roundness</b>	0.743	0.769	0.647	0.733	0.715			0.679	0.826
Wadell method	0.07	0.07	0.06	0.04	0.08			0.05	

#### S4331 Fishersbrun beach

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Hypersthene	Staurolite	Apatite	Rutile
<b>135</b>	96	14	11	6	5	1		1		1
<b>Grain size</b>	2.288	2.818	2.211	2.073	1.931	3.076		1.728		1.775
( $\phi$ units)	0.33	0.23	0.53	0.27	0.40					
<b>Roundness</b>	0.737	0.651	0.447	0.654	0.789	0.734		0.524		0.618
Fourier method	0.15	0.12	0.19	0.33	0.13					
<b>Roundness</b>	0.720	0.771	0.653	0.665	0.679	0.758		0.635		0.682
Wadell method	0.06	0.05	0.07	0.10	0.09					

#### S4324 South Namib dune

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Staurolite	Apatite	Rutile
<b>763</b>	515	157	22	30	14	11	1	5	8
<b>Grain size</b>	3.376	3.798	3.200	3.217	3.530	3.740	2.074	3.779	3.734
( $\phi$ units)	0.49	0.48	0.82	0.42	0.50	0.38		0.25	0.36
<b>Roundness</b>	0.422	0.368	0.352	0.436	0.361	0.425	0.564	0.532	0.446
Fourier method	0.22	0.24	0.13	0.19	0.23	0.17		0.31	0.23
<b>Roundness</b>	0.741	0.795	0.688	0.730	0.771	0.809	0.577	0.804	0.804
Wadell method	0.07	0.08	0.11	0.07	0.05	0.12		0.12	0.09

#### NAM12 Lüderitz dune

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon
<b>127</b>	109	9	3	2	3	1
<b>Grain size</b>	2.734	2.999	2.824	2.512	2.756	3.027
( $\phi$ units)	0.21	0.35	0.10	0.31	0.21	
<b>Roundness</b>	0.504	0.491	0.395	0.405	0.583	<b>0.254</b>
Fourier method	0.20	0.18	0.16	0.10	0.17	
<b>Roundness</b>	0.691	0.677	0.695	0.685	0.752	0.690
Wadell method	0.07	0.10	0.03	0.09	0.01	

#### S4321 Agate beach

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Apatite
<b>583</b>	447	46	9	49	24	3	5
<b>Grain size</b>	2.957	3.254	3.057	2.637	3.031	3.478	3.042
( $\phi$ units)	0.26	0.24	0.26	0.25	0.20	0.10	0.09
<b>Roundness</b>	0.423	0.494	0.229	0.441	0.385	0.639	0.627
Fourier method	0.21	0.17	0.20	0.22	0.22	0.04	0.21
<b>Roundness</b>	0.691	0.741	0.666	0.635	0.669	0.794	0.770
Wadell method	0.07	0.08	0.07	0.07	0.08	0.03	0.07

#### S4322 Grossebucht

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Apatite	Rutile
<b>385</b>	327	9	4	30	13			2
<b>Grain size</b>	3.189	3.455	3.465	2.967	3.162			3.600
( $\phi$ units)	0.21	0.22	0.23	0.28	0.23			0.03
<b>Roundness</b>	0.205	0.309	0.224	0.231	0.142			0.164
Fourier method	0.18	0.28	0.17	0.18	0.02			0.06
<b>Roundness</b>	0.659	0.688	0.680	0.637	0.644			0.619
Wadell method	0.08	0.10	0.13	0.07	0.08			0.11

#### NAM14A Orange River @ Alexander Bay

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Apatite
<b>334</b>	167	54	17	29	57	5	5
<b>Grain size</b>	3.153	3.544	3.171	2.898	3.455	3.918	3.146
( $\phi$ units)	0.60	0.53	0.46	0.57	0.60	0.35	0.55
<b>Roundness</b>	0.198	0.311	0.297	0.166	0.187	0.534	0.447
Fourier method	0.17	0.21	0.21	0.17	0.19	0.21	0.20
<b>Roundness</b>	0.649	0.724	0.671	0.615	0.712	0.881	0.744
Wadell method	0.10	0.11	0.07	0.11	0.12	0.07	0.13

#### NAM13R Orange River @ Richtersveld

<b>total grains</b>	Clinopyroxene	Opaque	Garnet	Amphibole	Epidote	Zircon	Apatite
<b>190</b>	158	11	6	9	5		1
<b>Grain size</b>	1.95	2.34	1.99	1.92	2.26		2.63
( $\phi$ units)	0.67	0.58	0.64	0.63	0.83		
<b>Roundness</b>	0.23	0.25	0.20	0.15	0.30		0.74
Fourier method	0.20	0.25	0.21	0.22	0.29		
<b>Roundness</b>	0.53	0.59	0.53	0.50	0.58		0.67
Wadell method	0.08	0.11	0.09	0.05	0.11		