

Provenance of the Lower Jurassic Badaowan and Sangonghe Formations in Dongdaohaizi Depression, Junggar Basin and its Constraint on the Karamaili Ocean

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Table S1. Components and contents of Badaowan and Sangonghe Formation samples in the Dongdaohaizi Depression.

No.	Starta	Q		F		L		Lt	Lt
		Qm	Qp	Q=Qt		Lv	Ls		
C1-1	J _{1b3}	24.34	16.38	40.72	17.27	7.43	34.58	42.02	58.39
C1-2		41.45	7.05	48.49	22.96	6.76	21.79	28.55	35.60
C1-3		43.40	8.75	52.15	8.03	5.89	33.93	39.82	48.57
C1-4		38.72	10.73	49.45	17.22	6.45	26.88	33.33	44.06
C1-5		27.35	15.85	43.20	4.01	9.45	43.34	52.79	68.64
C1-6		36.62	16.28	52.90	12.73	2.25	32.12	34.37	50.65
C1-7		50.07	5.94	56.02	7.39	4.31	32.28	36.59	42.53
C1-8		24.78	15.23	40.01	5.53	5.57	48.89	54.46	69.69
C1-9		33.58	9.17	42.76	25.98	2.08	29.19	31.26	40.44
C1-10		36.71	10.92	47.63	5.46	2.77	44.14	46.91	57.83
C3-1	J _{1b2}	36.52	11.21	47.74	17.02	0.38	35.62	35.25	46.46
C3-2		39.41	15.05	54.46	3.35	7.68	34.51	42.20	57.24
C3-3		41.83	12.63	54.46	8.38	6.74	30.43	37.17	49.80
C3-4		27.79	18.96	46.75	11.04	4.30	37.91	42.21	61.17
C3-5		29.76	9.60	39.36	7.14	14.08	39.42	53.50	63.10
C3-6		25.10	10.21	35.32	17.78	5.25	41.65	46.90	57.11
C3-7		5.79	27.80	33.59	11.40	6.58	48.44	55.01	82.81
C3-8		33.72	8.18	41.90	10.92	10.21	36.97	47.18	55.36
C3-9		32.90	11.43	44.33	16.13	4.71	34.84	39.54	50.97
C3-10		26.05	11.05	37.10	10.22	6.81	45.86	52.67	63.72
C3-11	J _{1b1}	37.79	11.81	49.60	5.63	9.76	35.02	44.78	56.59
C3-12		44.08	7.68	51.76	22.85	3.07	22.33	25.40	33.07
C3-13		35.81	15.65	51.46	5.93	1.67	40.95	42.62	58.27
C3-14		44.42	12.10	56.52	20.08	1.63	21.77	23.40	35.51
C3-15		24.82	8.88	33.70	19.19	7.30	39.81	47.12	55.99
C3-16		21.64	15.13	36.77	17.50	9.05	36.69	45.74	60.86
C3-17		26.46	11.18	37.63	15.17	0.34	46.86	47.20	58.38
C3-18		28.11	12.44	40.55	11.21	11.87	36.37	48.24	60.68
C3-19		49.48	4.48	53.96	23.16	6.03	16.85	22.88	27.36
C3-20		43.06	13.48	56.54	3.65	6.78	33.03	39.81	53.29
C1-11	J _{1s2} ²	19.56	15.60	35.16	13.72	9.34	41.78	51.12	66.72
C1-12		22.13	15.53	37.66	10.06	10.35	41.94	52.29	67.82
C1-13		28.80	16.26	45.06	13.92	7.74	33.28	41.02	57.28
C1-14		31.91	10.47	42.38	5.32	7.30	45.00	52.30	62.77

C1-15		33.79	8.41	42.20	7.40	5.87	44.52	50.39	58.81
C1-16		26.51	13.35	39.86	9.73	12.38	38.03	50.40	63.76
C1-17		27.52	13.55	41.06	6.48	0.56	51.90	52.46	66.00
C1-18		32.57	10.14	42.71	6.84	11.34	39.11	50.45	60.59
C1-19		38.82	16.06	54.88	10.24	2.02	32.87	34.89	50.94
C1-20		42.98	5.86	48.84	20.89	8.01	22.25	30.27	36.13
C1-21		35.39	6.56	41.95	18.92	5.89	33.24	39.12	45.68
C1-22		50.36	4.21	54.58	22.36	6.56	16.51	23.07	27.28
C1-23		36.55	11.83	48.38	14.74	8.06	28.82	36.88	48.71
C1-24		45.13	7.29	52.42	19.45	5.27	22.86	28.13	35.42
C1-25		25.82	15.04	40.86	23.29	5.30	30.55	35.85	50.89
C1-26	J _{1S2} ¹	14.44	20.62	35.06	7.91	1.22	58.25	57.03	77.65
C1-27		49.90	6.80	56.70	21.17	2.51	19.62	22.13	28.93
C1-28		27.68	10.61	38.29	15.13	11.62	34.95	46.58	57.19
C1-29		16.93	22.56	39.49	5.22	8.76	46.53	55.29	77.85
C1-30		43.24	6.61	49.85	17.22	9.36	23.58	32.93	39.54
C1-31		17.08	17.12	34.20	3.50	12.02	50.27	62.30	79.41
C1-32		18.90	23.14	42.04	12.78	3.47	41.72	45.18	68.32
C1-33		24.69	14.47	39.16	19.92	1.36	42.28	40.92	55.39
C1-34		31.35	7.92	39.26	22.88	3.90	33.95	37.85	45.77
C1-35	J _{1S1}	29.81	12.40	42.20	20.20	6.57	31.03	37.60	50.00
C1-36		37.70	15.10	52.80	7.64	1.62	37.93	39.56	54.66
C1-37		22.20	20.22	42.42	21.56	0.40	36.42	36.02	56.24
C1-38		41.95	11.75	53.70	23.30	0.26	23.26	23.00	34.75
C1-39		28.08	10.53	38.62	8.28	12.83	40.28	53.10	63.64
C1-40		26.83	16.75	43.58	7.08	0.25	49.58	49.34	66.09

Note: Q = total monocrystalline (Qm) and polycrystalline (Qp) quartz grains; F = total potassium feldspar (K) and plagioclase (P) grains; L = aphanitic unstable lithic grains, including sedimentary (Ls), metamorphic (Lm) and volcanic (Lv) fragments.

Table S2. LA-ICP-MS zircon U-Pb dating results of sandstones from the Badaowan and Sangonghe formations in Dongdaohaizi Depression, Junggar basin.

No	Th (ppm)	U (ppm)	Th/U	CORRECTED RATIOS						CORRECTED AGES (Ma)					
				²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	2σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	2σ
Badaowan Formation (C3NL)															
1	593	628	1.02	0.05486	0.00180	0.28981	0.00914	0.04137	0.00040	269.00	80	262.07	7	259.07	3
2	121	201	0.62	0.06159	0.00238	0.55424	0.02273	0.06696	0.00072	530.04	65	437.41	15	418.19	5
3	132	221	0.62	0.05440	0.00230	0.35302	0.01411	0.04903	0.00057	249.37	101	301.09	11	305.87	4
4	249	206	1.21	0.05069	0.00200	0.34480	0.01352	0.04936	0.00061	227.85	93	300.80	10	310.59	4
5	127	71	1.97	0.12899	0.00301	6.40085	0.15722	0.37659	0.00384	2117.50	44	2126.87	22	2151.54	18
6	138	158	0.88	0.05636	0.00247	0.54690	0.02348	0.07059	0.00081	464.86	98	442.96	15	439.71	5
7	140	544	0.26	0.05321	0.00172	0.32166	0.01064	0.04363	0.00045	338.95	74	283.18	8	275.28	3
8	133	209	0.64	0.05786	0.00184	0.66990	0.02103	0.08358	0.00076	524.11	70	520.65	13	517.44	5
9	62	583	0.11	0.05429	0.00134	0.46648	0.01184	0.06196	0.00058	383.39	56	388.76	8	387.53	4
10	123	67	1.84	0.12403	0.00292	6.21441	0.14694	0.36211	0.00356	2016.67	42	2006.48	21	1992.17	17
11	394	320	1.23	0.05283	0.00190	0.37125	0.01293	0.05098	0.00056	320.43	114	320.58	10	320.55	3
12	251	220	1.14	0.05245	0.00224	0.36707	0.01527	0.05093	0.00058	305.62	94	317.48	11	320.20	4
13	206	391	0.53	0.04995	0.00187	0.31012	0.01134	0.04498	0.00049	190.82	87	274.28	9	283.66	3
14	199	325	0.61	0.05249	0.00193	0.33793	0.01193	0.04672	0.00050	305.62	83	295.60	9	294.33	3
15	136	218	0.69	0.06164	0.00257	0.57998	0.02477	0.07094	0.00092	519.21	95	461.75	16	450.81	6
16	336	327	1.03	0.05109	0.00224	0.28154	0.01251	0.03988	0.00042	255.62	102	251.88	10	252.09	3
17	331	799	0.41	0.05885	0.00139	0.65036	0.01526	0.07997	0.00079	561.15	52	508.70	9	495.95	5
18	151	252	0.64	0.05758	0.00201	0.56288	0.01944	0.07288	0.00098	481.55	82	450.65	13	454.50	6
19	115	195	0.59	0.05702	0.00231	0.51319	0.02104	0.06501	0.00069	500.04	61	420.59	14	406.01	4

20	632	740	0.85	0.05085	0.00144	0.26932	0.00759	0.03810	0.00035	235.25	65	242.15	6	241.02	2
21	485	477	1.11	0.05142	0.00192	0.28241	0.01020	0.04302	0.00044	198.45	87	263.26	8	271.96	3
22	144	577	0.27	0.05534	0.00178	0.33453	0.01096	0.04625	0.00048	366.06	79	291.67	9	297.30	3
23	141	226	0.62	0.05198	0.00202	0.36759	0.01348	0.05153	0.00064	283.40	89	317.87	10	323.91	4
24	291	565	0.51	0.05579	0.00160	0.49850	0.01440	0.06405	0.00060	442.64	58	410.68	10	400.23	4
25	44	53	0.84	0.05303	0.00404	0.33058	0.01993	0.04623	0.00094	331.54	174	290.01	15	291.32	6
26	104	213	0.53	0.05642	0.00252	0.33723	0.01542	0.04759	0.00066	306.29	115	310.59	12	297.10	4
27	327	1615	0.22	0.09158	0.00181	2.69146	0.05807	0.22129	0.00241	1363.23	41	1334.65	17	1317.33	12
28	136	240	0.59	0.05911	0.00201	0.64086	0.02148	0.08225	0.00085	520.76	84	511.84	14	510.65	5
29	29	29	1.00	0.04716	0.00576	0.30307	0.03110	0.04490	0.00112	57.50	267	268.80	24	283.16	7
30	312	1538	0.20	0.08479	0.00171	2.53911	0.05478	0.21485	0.00223	1310.80	39	1283.32	16	1254.60	12
31	225	414	0.56	0.05532	0.00177	0.35069	0.01102	0.04719	0.00050	306.29	77	302.65	9	300.37	3
32	256	220	1.28	0.05475	0.00212	0.37238	0.01393	0.05232	0.00065	243.79	99	321.86	11	332.33	4
33	388	253	1.64	0.05430	0.00237	0.34309	0.01356	0.04811	0.00054	332.56	98	304.65	11	300.65	3
34	565	598	0.94	0.05127	0.00166	0.27866	0.00888	0.03940	0.00037	253.77	76	249.59	7	249.11	2
35	431	434	0.99	0.05107	0.00159	0.37664	0.01223	0.05306	0.00056	242.66	75	324.56	9	333.28	3
36	147	299	0.49	0.05742	0.00222	0.53233	0.01933	0.06692	0.00075	509.30	85	433.36	13	417.55	5
37	226	250	0.90	0.06007	0.00209	0.65195	0.02338	0.08581	0.00097	469.66	84	522.83	14	546.84	6
38	32	202	0.16	0.04972	0.00252	0.28464	0.01412	0.04183	0.00053	188.97	117	254.33	11	264.18	3
39	405	339	1.29	0.05706	0.00204	0.38238	0.01332	0.05506	0.00060	336.45	117	339.81	10	346.19	4
40	257	227	1.13	0.05536	0.00207	0.53541	0.01891	0.07059	0.00090	427.83	83	435.39	13	439.71	5
41	212	402	0.53	0.05219	0.00167	0.32471	0.01030	0.04494	0.00048	294.51	72	285.52	8	283.37	3
42	140	156	0.90	0.05174	0.00253	0.30347	0.01451	0.04268	0.00056	272.29	108	269.11	11	269.40	3
43	34	208	0.17	0.05221	0.00267	0.29318	0.01525	0.04476	0.00056	200.31	126	264.51	12	272.11	4
44	353	353	1.09	0.05314	0.00236	0.30406	0.01338	0.04267	0.00044	268.40	109	266.99	11	264.69	3
45	259	228	1.24	0.05455	0.00237	0.37808	0.01573	0.05449	0.00060	317.84	96	336.53	12	336.21	4
46	90	125	0.78	0.05894	0.00238	0.64786	0.02538	0.08532	0.00097	433.38	96	523.05	16	523.74	6
47	204	302	0.70	0.05612	0.00193	0.46796	0.01560	0.06271	0.00065	394.37	77	379.43	11	396.55	4
48	109	156	0.72	0.05514	0.00260	0.39236	0.01713	0.05393	0.00064	334.07	113	332.56	13	342.18	4
49	283	262	1.11	0.05770	0.00212	0.49360	0.01840	0.06622	0.00074	442.05	84	421.39	13	417.89	5
50	184	169	1.09	0.05426	0.00216	0.47945	0.01877	0.06423	0.00081	388.94	89	397.70	13	401.30	5
51	74	126	0.59	0.05476	0.00270	0.47260	0.02330	0.06263	0.00083	466.71	111	392.99	16	391.59	5
52	120	200	0.64	0.06272	0.00223	0.73116	0.02525	0.08514	0.00098	600.87	80	561.71	16	552.91	6
53	103	147	0.70	0.05252	0.00252	0.37015	0.01648	0.05185	0.00061	309.32	109	319.76	12	325.88	4
54	190	280	0.68	0.05396	0.00182	0.43735	0.01515	0.05861	0.00062	368.57	71	368.38	11	367.18	4
55	211	243	0.87	0.05562	0.00194	0.63296	0.02165	0.08251	0.00090	438.94	78	497.94	13	511.06	5
56	250	235	1.12	0.05872	0.00198	0.57837	0.01807	0.07588	0.00072	495.88	77	473.08	12	464.00	5
57	147	238	0.62	0.05591	0.00194	0.52606	0.01834	0.06811	0.00091	450.05	78	429.19	12	424.77	6
58	377	243	1.55	0.05272	0.00220	0.32367	0.01279	0.04455	0.00050	316.73	94	284.72	10	280.98	3
59	345	839	0.43	0.06120	0.00146	0.69589	0.01633	0.08237	0.00083	606.04	53	539.23	10	520.75	5
60	131	233	0.56	0.05739	0.00196	0.61621	0.02065	0.07759	0.00082	505.60	79	487.47	13	481.74	5
61	189	179	1.17	0.05643	0.00222	0.50822	0.01971	0.06616	0.00084	420.06	94	429.51	14	417.36	5
62	157	323	0.53	0.06087	0.00233	0.57492	0.02049	0.06892	0.00079	524.58	89	459.36	13	442.60	5
63	452	921	0.54	0.05709	0.00135	0.52387	0.01254	0.07002	0.00063	449.22	49	435.63	9	417.13	4
64	430	853	0.50	0.05543	0.00125	0.49893	0.01194	0.06484	0.00058	427.83	45	410.98	8	404.98	4
65	272	252	1.08	0.05496	0.00196	0.47922	0.01752	0.06306	0.00070	409.31	80	397.54	12	394.23	4
66	100	197	0.51	0.05224	0.00245	0.32741	0.01468	0.04576	0.00063	294.51	107	287.59	11	288.45	4
67	113	192	0.59	0.05917	0.00212	0.67700	0.02382	0.08266	0.00090	572.26	78	524.96	14	511.95	5
68	250	297	0.84	0.05320	0.00256	0.33152	0.01576	0.04557	0.00060	344.50	105	290.72	12	287.28	4
69	134	146	0.93	0.06154	0.00238	0.73019	0.02853	0.09292	0.00105	618.04	89	576.75	18	558.28	6
70	207	344	0.64	0.05616	0.00204	0.34807	0.01240	0.04999	0.00053	323.95	87	310.38	10	314.93	3
71	258	306	0.89	0.05586	0.00268	0.35804	0.01671	0.04785	0.00062	365.17	112	313.98	13	310.26	4
72	457	456	1.02	0.05260	0.00163	0.39171	0.01260	0.05677	0.00059	262.07	79	337.55	10	359.94	4
73	670	785	0.90	0.05238	0.00152	0.28817	0.00790	0.03924	0.00038	247.01	68	251.83	7	253.07	2
74	233	224	1.04	0.05646	0.00191	0.54563	0.01754	0.07026	0.00069	472.27	74	442.13	12	437.74	4
75	306	594	0.55	0.05970	0.00173	0.52841	0.01512	0.06790	0.00063	478.05	60	435.32	10	420.24	4
76	123	114	1.17	0.05294	0.00323	0.31458	0.02017	0.04817	0.00077	160.59	157	292.27	16	306.57	5
77	149	242	0.67	0.05354	0.00208	0.39332	0.01402	0.05359	0.00069	300.40	95	330.58	11	346.58	4

78	128	213	0.60	0.05084	0.00217	0.32992	0.01331	0.04714	0.00055	235.25	98	289.51	10	296.96	3
79	86	118	0.73	0.05509	0.00227	0.61118	0.02350	0.08125	0.00095	416.72	93	484.31	15	503.59	6
80	461	402	1.24	0.05895	0.00141	0.65979	0.01632	0.08319	0.00072	465.70	59	512.11	10	510.93	4
81	77	132	0.63	0.05914	0.00289	0.51041	0.02399	0.06513	0.00088	504.05	119	424.43	17	407.25	5
82	40	66	0.62	0.05884	0.00344	0.55082	0.03017	0.07389	0.00118	457.42	136	437.66	20	443.40	7
83	277	236	1.16	0.05923	0.00213	0.57824	0.02005	0.07624	0.00097	449.22	89	465.87	14	461.69	6
84	435	358	1.21	0.05425	0.00186	0.34956	0.01234	0.04646	0.00050	388.94	78	304.39	9	292.74	3
85	79	382	0.22	0.05673	0.00171	0.47272	0.01490	0.06509	0.00064	344.23	72	391.87	11	410.98	4
86	456	387	1.30	0.05859	0.00192	0.37054	0.01283	0.04971	0.00053	420.06	83	322.65	10	304.45	3
87	462	442	1.05	0.04992	0.00179	0.27419	0.00953	0.03984	0.00042	190.82	83	246.03	8	251.81	3
88	124	139	0.89	0.05917	0.00229	0.70892	0.02744	0.08684	0.00097	572.26	84	544.10	16	536.81	6
89	137	219	0.68	0.06018	0.00189	0.69669	0.02272	0.09026	0.00082	555.56	74	557.10	14	553.66	5
90	31	31	1.06	0.05046	0.00599	0.32126	0.03297	0.04760	0.00115	60.38	283	287.61	26	305.81	8
91	66	612	0.11	0.05646	0.00142	0.50380	0.01231	0.06692	0.00062	410.22	57	419.86	9	403.03	4
92	76	360	0.21	0.05302	0.00165	0.45454	0.01433	0.06199	0.00061	327.84	70	380.46	10	387.72	4
93	48	55	0.89	0.05621	0.00429	0.35372	0.02093	0.04946	0.00101	341.49	188	310.31	16	308.80	6
94	118	107	1.10	0.04901	0.00308	0.30541	0.01903	0.04545	0.00072	150.09	150	270.62	15	286.51	4
95	152	162	0.93	0.05536	0.00268	0.31257	0.01567	0.04438	0.00060	288.62	116	279.87	12	288.26	4
96	132	202	0.65	0.05707	0.00238	0.54204	0.02315	0.06887	0.00085	494.49	93	439.77	15	429.34	5
97	431	373	1.16	0.05561	0.00137	0.61662	0.01554	0.07999	0.00069	435.23	56	487.73	10	496.05	4
98	145	164	0.95	0.05805	0.00257	0.57972	0.02536	0.07271	0.00087	497.40	102	460.68	16	461.70	5
99	212	406	0.55	0.05195	0.00192	0.32563	0.01225	0.04768	0.00053	200.36	91	290.73	9	306.35	3
100	37	64	0.57	0.05551	0.00334	0.51964	0.02820	0.06906	0.00111	431.53	131	424.91	19	430.48	7

Sangonghe Formation (C1NL)

1	118	219	0.55	0.05667	0.00227	0.42826	0.01615	0.05838	0.00069	344.23	95	359.48	12	359.57	4
2	232	190	1.22	0.05431	0.00197	0.56448	0.02092	0.07504	0.00086	383.39	81	454.44	14	466.47	5
3	147	224	0.66	0.05098	0.00202	0.37101	0.01385	0.05291	0.00069	238.96	91	320.40	10	332.33	4
4	280	345	0.87	0.06227	0.00187	0.58792	0.01743	0.07337	0.00085	670.02	67	495.21	11	453.17	5
5	317	310	1.11	0.05641	0.00238	0.43180	0.01585	0.05715	0.00065	412.28	102	365.42	12	348.84	4
6	242	641	0.37	0.05372	0.00192	0.33339	0.00963	0.04617	0.00045	324.06	86	284.09	8	283.34	3
7	45	53	0.84	0.05417	0.00420	0.36676	0.02597	0.04939	0.00094	388.94	174	317.25	19	310.77	6
8	110	190	0.58	0.05363	0.00256	0.34955	0.01638	0.04781	0.00063	286.07	118	293.25	13	307.16	4
9	549	369	1.57	0.05829	0.00153	0.66204	0.01699	0.08541	0.00080	504.53	62	527.20	11	524.79	5
10	278	297	0.93	0.05425	0.00187	0.51558	0.01793	0.06860	0.00070	388.94	78	422.19	12	427.74	4
11	223	250	0.95	0.08956	0.00167	2.83948	0.05645	0.24299	0.00203	1403.51	37	1403.57	15	1395.59	11
12	68	439	0.16	0.20646	0.00407	13.89393	0.27089	0.51802	0.00442	2922.18	34	2831.18	20	2693.28	20
13	124	235	0.53	0.05185	0.00193	0.32500	0.01228	0.04519	0.00048	279.69	85	285.74	9	284.95	3
14	127	241	0.53	0.05030	0.00223	0.30028	0.01316	0.04349	0.00054	209.33	104	266.62	10	274.40	3
15	154	224	0.70	0.05965	0.00226	0.51168	0.02048	0.06744	0.00078	433.03	93	419.93	14	417.50	5
16	400	375	1.14	0.05187	0.00183	0.38127	0.01287	0.05298	0.00064	223.69	83	328.04	10	336.29	4
17	129	275	0.49	0.07208	0.00171	1.20066	0.02855	0.13381	0.00101	873.05	48	820.61	13	798.13	6
18	290	585	0.52	0.05427	0.00152	0.32757	0.00913	0.04628	0.00039	243.79	74	279.32	8	297.52	3
19	63	410	0.15	0.19477	0.00377	13.23232	0.26300	0.48870	0.00410	2783.03	32	2696.37	19	2565.03	18
20	137	296	0.49	0.05461	0.00219	0.39352	0.01412	0.05483	0.00056	330.97	95	339.35	11	331.84	3
21	151	241	0.63	0.05332	0.00240	0.33805	0.01407	0.04599	0.00060	342.65	104	295.69	11	289.87	4
22	140	206	0.68	0.05470	0.00220	0.49016	0.01751	0.06474	0.00065	466.71	91	405.02	12	404.40	4
23	132	280	0.47	0.05251	0.00206	0.37478	0.01371	0.05125	0.00053	309.32	89	323.19	10	322.17	3
24	254	304	0.85	0.05883	0.00248	0.54176	0.01982	0.06910	0.00072	509.29	90	440.14	14	423.41	4
25	297	309	0.98	0.05696	0.00200	0.55682	0.01901	0.07135	0.00074	416.17	83	443.30	13	461.96	5
26	160	204	0.78	0.05256	0.00196	0.44963	0.01618	0.06176	0.00069	309.32	79	377.02	11	386.31	4
27	113	115	1.08	0.05936	0.00285	0.45222	0.01977	0.05832	0.00081	495.88	110	380.00	14	366.07	5
28	36	393	0.09	0.05312	0.00148	0.46270	0.01303	0.06297	0.00065	344.50	31	386.14	9	393.66	4
29	178	247	0.72	0.05259	0.00198	0.45078	0.01625	0.06219	0.00064	322.28	81	377.83	11	388.96	4
30	381	357	1.07	0.05035	0.00170	0.35633	0.01203	0.05144	0.00060	213.04	78	309.47	9	323.36	4
31	139	200	0.70	0.05447	0.00219	0.47947	0.01909	0.06403	0.00071	390.79	91	397.71	13	400.10	4
32	278	332	0.88	0.06606	0.00210	0.55191	0.01813	0.06798	0.00084	627.52	66	472.77	12	453.68	5
33	80	164	0.49	0.05191	0.00265	0.33550	0.01708	0.04670	0.00059	283.40	117	293.75	13	294.20	4
34	362	562	0.67	0.06842	0.00129	1.19329	0.02251	0.13633	0.00120	756.40	43	832.50	11	834.18	7

35	250	279	0.95	0.05337	0.00211	0.36597	0.01419	0.05151	0.00061	298.07	96	317.97	11	333.44	4
36	109	206	0.53	0.05296	0.00210	0.39654	0.01496	0.05456	0.00064	327.84	89	339.13	11	342.44	4
37	248	360	0.73	0.05648	0.00193	0.37487	0.01340	0.05282	0.00053	339.66	86	331.69	10	323.20	3
38	234	340	0.69	0.05279	0.00187	0.35702	0.01241	0.04891	0.00050	320.43	81	309.99	9	307.81	3
39	274	552	0.50	0.05072	0.00144	0.30614	0.00887	0.04366	0.00038	227.85	69	271.18	7	275.48	2
40	265	322	0.82	0.06232	0.00198	0.52067	0.01760	0.06353	0.00079	592.00	62	459.00	11	428.00	5
41	176	227	0.78	0.05784	0.00154	0.61242	0.01619	0.07674	0.00076	524.11	62	485.09	10	476.64	5
42	114	220	0.55	0.05785	0.00185	0.69751	0.02113	0.08611	0.00085	489.47	71	545.31	14	543.48	5
43	345	540	0.64	0.06335	0.00123	1.13647	0.02186	0.12984	0.00115	720.38	41	770.83	10	786.96	7
44	110	107	1.03	0.05653	0.00271	0.41873	0.01883	0.05451	0.00077	472.27	106	355.14	13	342.12	5
45	101	144	0.70	0.05626	0.00284	0.50347	0.02395	0.06576	0.00088	461.16	113	414.05	16	410.54	5
46	115	197	0.58	0.05081	0.00196	0.36210	0.01421	0.05139	0.00059	231.55	91	313.78	11	323.06	4
47	229	220	1.05	0.05663	0.00233	0.40467	0.01583	0.05595	0.00056	356.74	93	354.17	12	354.85	4
48	291	261	1.12	0.05112	0.00194	0.32535	0.01206	0.04602	0.00051	255.62	82	286.01	9	290.05	3
49	156	242	0.71	0.05302	0.00210	0.38585	0.01468	0.05608	0.00072	258.07	96	330.01	11	352.27	5
50	82	156	0.54	0.05715	0.00272	0.39207	0.01597	0.05460	0.00061	370.59	117	341.06	12	333.47	4
51	123	205	0.62	0.05335	0.00201	0.37297	0.01535	0.05550	0.00064	247.76	93	332.61	11	342.45	4
52	47	55	0.91	0.05742	0.00445	0.38143	0.02675	0.05136	0.00100	400.61	188	339.46	21	320.09	6
53	230	380	0.60	0.05343	0.00198	0.35203	0.01078	0.04777	0.00047	346.35	83	306.25	8	300.79	3
54	227	623	0.36	0.05215	0.00185	0.30869	0.00926	0.04275	0.00043	300.06	81	273.17	7	269.85	3
55	125	142	0.96	0.05542	0.00300	0.39526	0.02028	0.05416	0.00075	313.12	130	340.64	15	353.50	5
56	151	282	0.54	0.05206	0.00185	0.40276	0.01499	0.05569	0.00076	287.10	81	343.65	11	349.35	5
57	149	206	0.74	0.05882	0.00230	0.49865	0.02043	0.06723	0.00077	414.24	94	417.60	14	416.11	5
58	287	283	1.05	0.05091	0.00192	0.33760	0.01303	0.05080	0.00056	131.61	94	295.16	10	311.11	4
59	239	411	0.65	0.05770	0.00210	0.36259	0.01154	0.05111	0.00049	374.06	86	321.56	9	315.83	3
60	509	348	1.46	0.05660	0.00146	0.62457	0.01603	0.07983	0.00075	475.97	57	492.71	10	495.09	4
61	76	151	0.51	0.05341	0.00259	0.37699	0.01479	0.05151	0.00057	346.35	111	324.82	11	323.76	4
62	155	290	0.57	0.05570	0.00192	0.43498	0.01589	0.05736	0.00078	304.33	86	367.70	12	366.81	5
63	232	260	0.89	0.05181	0.00203	0.35531	0.01378	0.04953	0.00057	275.99	91	308.71	10	311.63	4
64	223	306	0.78	0.06267	0.00177	0.70828	0.01973	0.08446	0.00076	563.41	60	553.01	13	518.46	5
65	39	413	0.10	0.05631	0.00152	0.49509	0.01355	0.06801	0.00070	358.28	32	405.44	10	409.41	4
66	189	196	0.96	0.05692	0.00255	0.38556	0.01633	0.05094	0.00060	499.38	103	333.45	12	329.85	4
67	104	131	0.80	0.05164	0.00295	0.34915	0.01874	0.04888	0.00068	333.39	131	304.08	14	307.64	4
68	119	134	0.89	0.05228	0.00281	0.37644	0.01932	0.05259	0.00072	298.21	122	324.42	14	330.38	4
69	148	213	0.72	0.05798	0.00229	0.52447	0.01891	0.06863	0.00069	480.71	94	425.27	13	416.54	4
70	302	290	1.04	0.05424	0.00231	0.39982	0.01510	0.05341	0.00063	388.94	94	341.52	11	335.42	4
71	109	212	0.52	0.05617	0.00173	0.65188	0.02013	0.08360	0.00080	457.45	67	509.64	12	517.60	5
72	191	259	0.77	0.05417	0.00207	0.48685	0.01674	0.06655	0.00067	338.39	83	396.72	12	416.18	4
73	216	294	0.74	0.05803	0.00165	0.65581	0.01915	0.08121	0.00074	531.52	56	512.05	12	503.36	4
74	300	444	0.72	0.05514	0.00177	0.40835	0.01374	0.05629	0.00068	298.58	82	338.66	10	356.97	4
75	66	488	0.14	0.05472	0.00160	0.45341	0.01293	0.05994	0.00053	466.71	60	379.66	9	375.27	3
76	193	261	0.81	0.05845	0.00267	0.41970	0.01600	0.05422	0.00067	497.88	112	352.80	12	328.41	4
77	264	322	0.82	0.06045	0.00180	0.57079	0.01660	0.06857	0.00081	620.39	65	458.53	11	427.52	5
78	214	240	0.89	0.08529	0.00160	2.73027	0.05227	0.23141	0.00197	1324.07	36	1336.73	14	1341.91	10
79	68	503	0.14	0.05800	0.00166	0.47608	0.01331	0.06474	0.00056	504.05	63	391.05	10	401.54	3
80	300	272	1.16	0.05521	0.00204	0.34487	0.01267	0.04786	0.00055	270.96	87	308.89	10	313.25	3
81	248	196	1.28	0.05594	0.00209	0.60964	0.02196	0.07805	0.00092	406.39	87	481.70	15	480.47	6
82	212	213	0.99	0.05342	0.00216	0.38540	0.01537	0.05229	0.00053	346.35	91	331.00	11	328.56	3
83	113	137	0.83	0.05525	0.00319	0.37359	0.01930	0.05084	0.00072	346.73	135	313.20	15	319.95	4
84	184	242	0.76	0.05675	0.00259	0.39224	0.01553	0.05020	0.00062	483.38	106	336.00	11	315.77	4
85	189	241	0.83	0.06131	0.00166	0.65529	0.01732	0.08135	0.00078	560.80	65	519.04	11	500.47	5
86	145	215	0.67	0.05523	0.00219	0.48271	0.01914	0.06362	0.00076	420.42	89	399.93	13	397.62	5
87	133	133	1.00	0.05343	0.00251	0.36551	0.01679	0.04968	0.00067	346.35	106	316.32	12	312.54	4
88	106	149	0.72	0.05907	0.00304	0.52361	0.02539	0.07102	0.00095	474.99	116	434.75	17	443.38	6
89	266	269	0.99	0.04849	0.00186	0.31552	0.01229	0.04704	0.00053	124.16	89	278.45	9	296.30	3
90	175	189	0.93	0.05473	0.00236	0.36720	0.01512	0.04898	0.00057	466.71	96	317.57	11	308.27	3
91	103	183	0.56	0.05156	0.00244	0.32366	0.01516	0.04554	0.00060	264.88	109	284.71	12	287.07	4
92	142	139	1.03	0.05503	0.00266	0.39109	0.01763	0.05266	0.00070	360.20	109	328.97	13	334.42	4

93	286	411	0.70	0.05202	0.00168	0.37810	0.01272	0.05261	0.00064	287.10	79	325.64	9	330.53	4
94	240	295	0.81	0.05657	0.00231	0.51109	0.01906	0.06519	0.00068	475.97	86	419.18	13	407.13	4
95	85	170	0.51	0.05399	0.00275	0.35227	0.01793	0.04996	0.00061	306.07	121	311.38	14	314.79	4
96	131	261	0.55	0.05332	0.00232	0.30929	0.01369	0.04566	0.00058	226.08	112	274.62	11	290.87	4
97	125	265	0.47	0.06674	0.00163	1.14348	0.02693	0.12390	0.00096	831.48	45	774.16	13	752.96	6
98	172	221	0.80	0.05466	0.00211	0.48111	0.01683	0.06423	0.00074	330.97	85	388.33	12	397.90	5
99	132	252	0.55	0.05496	0.00204	0.34125	0.01290	0.04791	0.00052	302.07	90	302.89	10	307.75	3
100	158	253	0.68	0.05598	0.00255	0.36172	0.01449	0.04737	0.00062	370.06	111	304.57	11	313.05	4