

**Table S1: Parameters test set**

ID	Bl	Slb	St	Slc	LB	Wc	Wr	Lr	Hr	vol	Hc
5	-540	0.55	0.86	9.79	65.91	6.95	269.48	334.8	5.93	0.443	1.60
6	122	0.01	1.85	8.21	36.92	3.84	251.0	355.5	5.03	0.371	1.71
9	-14	0.45	1.61	9.72	152.6	8.4	94.1	303.4	12.8	0.293	1.43
35	-172	0.34	1.35	4.05	508.9	8.9	221.9	241.3	7.58	0.335	1.1
36	284	0.8	0.85	0.2	100.5	5.6	53.6	326.0	15	0.201	1.55
37	-350	0.83	1.29	8.6	138.1	6.4	224.1	132.1	10.32	0.253	1.77
38	621.5	0.63	1.1	3.23	376.9	3.1	256.9	98.2	8.34	0.174	0.34
55	510	0.78	1.41	4.2	430.2	2.1	226.5	158.7	6.7	0.199	0.66
60	-285	0.66	0.63	1.55	27.1	1.4	297.6	68.8	10.78	0.184	0.19
61	-234	0.75	0.06	1.32	445.9	4.7	262.5	83.0	10.37	0.188	1.53
62	612.8	0.1	1.61	6.02	422.3	8.7	274.4	131.9	5.42	0.163	2.03
63	-277	0.46	0.24	4.42	212.6	1.8	57.5	264.0	8.36	0.098	1.22
64	302	0.35	0.9	0.52	356.3	7.2	109.4	272.9	8.13	0.196	1.27
65	-206	0.57	1.31	9.63	265.6	6.8	294.4	99.2	9.99	0.243	0.35
66	-418	0.65	0.15	3.02	44.1	8.1	115.5	310.1	14.77	0.428	1.47
67	291	0.98	1.56	7.44	260.2	2.8	162.3	262.8	11.81	0.413	1.22
68	-471	0.43	0.78	8.7	394.6	3.5	70.2	130.5	6.19	0.045	0.51
69	-72	0.61	1.76	7.73	317.0	1.8	170.6	68.3	9.44	0.090	0.18
75	555	0.25	1.86	5.79	363.5	3.0	152.3	238.3	14	0.416	1.09
76	-603	0.12	1.36	0.59	407.2	3.2	74.6	316.4	8.64	0.161	1.5
77	-242	0.16	0.65	9.85	86.5	7.9	203.9	301.7	5.84	0.296	1.42
78	171	0.35	0.53	1.1	350.5	7.4	58.5	180.9	14.04	0.115	0.78
79	184	0.24	0.29	2.8	323.0	5.1	297.0	288.9	5.61	0.400	1.36
80	683	0.18	1.44	8.37	258.8	3.7	145.5	312.2	12.48	0.463	1.48
81	490	0.08	1.29	1.2	272.6	3.7	240.2	221.6	8.16	0.360	1

82	-435	0.91	1.71	0.28	137.6	9.2	51.6	250.9	14.38	0.142	1.15
83	-567	0.5	1.51	3.92	115.0	3.8	160.4	91.1	14.63	0.175	0.31
84	634	0.54	0.2	6.36	397.3	5.9	171.6	296.8	10.21	0.427	1.4
85	-363	0.33	0.59	3.47	176.4	3.3	300.0	161.3	10.55	0.425	1.58
99	590	0.87	1.54	4.53	95.0	8.3	177.2	161.0	6.64	0.156	0.68
112	441	0.08	0.74	9.21	236.0	8.5	258.5	151.5	14.42	0.469	0.63
113	216	0.61	1.14	0.33	267.2	6.2	124.6	210.9	13.92	0.297	0.94
114	-24	0.97	1.3	2.13	243.8	7.6	272.1	307.1	5.47	0.379	1.45
115	382	0.78	0.31	4.89	462.2	2.2	55.8	83.0	14.67	0.052	0.26
116	-227	0.93	1.65	0.12	464.4	8.7	118.8	295.1	5.66	0.161	1.39
140	335	0.62	1.37	7.62	13.8	9.2	234.7	89.5	7.86	0.137	0.3
141	-725.1	0.67	1.04	4.71	481.3	10.0	59.7	314.8	11.31	0.165	1.49
142	626.5	0.71	0.35	2.21	304.7	10.0	247.0	125.2	8.56	0.219	0.49
143	-427	0.79	1.9	9.91	293.2	4.2	164.3	291.6	10.06	0.395	1.94
144	-676.4	0.57	1.63	2.27	429.2	7.3	157.3	201.4	13	0.337	0.89
145	78	0.2	0.66	5.28	372.8	9.1	99.7	326.5	9.74	0.255	1.56
146	-188	0.75	1.21	2.4	318.6	1.6	57.0	173.1	11	0.084	0.74
147	643	0.44	1.17	6.53	210.8	4.5	80.2	364.1	6.12	0.142	2.04
148	-265	0.25	1.04	6.21	43.2	4.8	254.3	352.5	5.07	0.376	1.69
149	232	0.49	1.63	8.13	112.9	6.4	63.5	356.5	10.1	0.178	1.72
173	318	0.92	1.09	4.68	12.1	0.0	201.0	97.5	9.75	0.158	0
174	-548	0.29	0.55	8.82	493.6	0.0	52.1	365.4	11.42	0.166	0
175	699	0.38	0.47	4.06	96.7	0.0	121.1	53.1	6.08	0.032	0
199	220	0.18	1.78	2.23	42.6	0.0	182.0	59.0	8.03	0.071	0
200	442	0.98	1.81	3.26	164.2	0.0	114.0	108.0	8	0.080	0