Table 1. Henize S stars: CORAVEL data

Hen	GCGSS	HD/CoD	var	Tc	N_C	ΔT [days]	V_r [km/s]	$\sigma(V_r)$ [km/s]	$\overline{\epsilon}_1$ [km/s]	Sb [km/s]	PR	V_{ran} [km/s]
1	3	310		n	6	2338	10.3	0.5	0.2	4.3	0.41	1.4
2	39	9810		n	8	4931	21.5	3.7	1.3	4.2	0.42	11.0
3	104	29704	HQ Eri	n	5	1826	26.5	2.3	1.0	6.1	0.30	5.3
4	107			–	4	1826	-6.8	0.2	0.2	4.5	0.43	0.5
5	139			n	4	1826	77.6	2.2	1.1	5.0	0.36	4.7
6	141			n	4	1826	49.0	2.4	1.2	6.1	0.30	5.1
7	178	40706		n	4	1829	53.8	6.0	3.0	4.3	0.40	13.2
8	202	-39:2449		y	4	1827	47.4	2.1	1.1	6.2	0.28	6.0
9	204	-60:1381		n	4	1827	-7.2	0.7	0.4	3.8	0.43	1.8
10	206			–	4	1829	-9.6	5.4	2.7	4.8	0.32	12.9
11	229		CSV777	–	–	–	–	–	–	–	–	–
12	230	-43:2537		–	3	1827	110.5	1.2	0.7	9.3	0.13	1.4
13	236		CSV793	–	–	–	–	–	–	–	–	–
14	242	-34:3019		n	5	1826	31.2	1.2	0.6	4.3	0.42	3.1
15	245			–	2	1826	49.2	6.7	4.7	2.6	0.11	10.5
16	248			y	5	1829	38.1	0.8	0.4	6.0	0.34	1.8
17	256			–	5	1827	76.8	2.9	1.3	4.8	0.34	7.2
18	294			n	6	1828	67.6	6.6	2.7	5.6	0.22	13.8
19	328			y	5	1828	71.5	1.3	0.6	6.0	0.34	2.4
20	342	-45:3132		y	5	1829	-13.5	1.0	0.5	6.2	0.29	2.7
21	353			–	4	1416	35.5	0.6	0.4	7.2	0.18	2.0
22	359	-53:1875		–	4	1825	-10.4	3.0	1.5	3.3	0.46	7.4
23	361			–	3	717	55.6	2.1	1.2	7.8	0.22	4.6
24	368			–	3	714	35.3	3.5	2.0	9.6	0.25	6.1
25	372		CSV6592	–	–	–	–	–	–	–	–	–
26	371			–	–	–	–	–	–	–	–	–
27	380			–	1	–	4.0	–	1.4	18.6	0.25	–
28	390	62340		n	4	1827	25.9	2.0	1.0	4.4	0.39	4.1
29	393			–	4	1828	49.0	0.8	0.4	5.9	0.39	1.9
30	407		KU Pup	–	3	1154	26.0	3.0	1.7	9.1	0.33	6.9
31	434	65152		n	5	1827	-15.5	1.8	0.8	4.1	0.42	4.4
32	436		SU Pup	–	4	1746	68.8	2.8	1.4	8.5	0.11	6.4
33	438	-29:5241		–	–	–	–	–	–	–	–	–
34	446		X Vol	y	3	763	17.9	1.9	1.1	9.6	0.16	3.4
35	447	-71:435		n	5	1828	-13.6	3.3	1.5	3.9	0.46	10.2
36	448	-31:5393		y	5	1779	39.4	1.9	0.8	7.2	0.18	4.9
37	456	-41:3702		y	5	1780	12.8	1.4	0.6	7.1	0.27	2.8
38	457			–	3	1411	34.0	1.9	1.1	6.5	0.33	3.9
39	461	-65:601		y	6	1827	12.1	1.1	0.4	6.2	0.31	3.3
40	470	-30:5736		–	3	740	74.5	1.7	1.0	7.4	0.27	3.4
41	474	-27:5131		y	3	766	11.8	1.5	0.9	7.0	0.15	3.2
42	476			–	2	351	56.6	1.8	1.2	5.9	0.34	2.5
43	487	-26:5801		n	5	1829	37.9	6.3	2.8	5.1	0.35	14.2
44	489	-29:5912		–	4	1780	32.4	2.1	1.1	6.1	0.30	4.5
45	490	-32:5117		y	5	1778	16.4	0.8	0.4	4.9	0.38	1.9
46	498	-36:4526		–	4	1778	29.4	0.8	0.4	5.2	0.35	2.0
47	506	-35:4598		–	4	1779	8.9	1.6	0.8	7.1	0.32	4.3
48	523			–	4	1826	81.8	3.1	1.5	6.2	0.29	9.3
49	526			–	2	715	27.9	0.8	0.6	6.2	0.50	1.5
50	533	-36:4827	WY Pyx	–	3	833	59.9	1.1	0.6	10.0	0.14	2.3
51	540			–	4	1828	18.8	0.4	0.2	7.8	0.33	0.7

Table 1. Henize S stars: CORAVEL data (continued)

Hen	GCGSS	HD/CoD	var	Tc	N_C	ΔT [days]	V_r [km/s]	$\sigma(V_r)$ [km/s]	$\overline{c}_1$ [km/s]	Sb [km/s]	PR	V_{ran} [km/s]
52	541			–	4	1826	-12.6	3.0	1.5	5.0	0.37	6.2
53	542	-38:4762		–	4	1156	37.3	1.8	0.9	8.5	0.26	3.5
54	543		CSV1356	–	–	–	–	–	–	–	–	–
55	550			–	–	–	–	–	–	–	–	–
56	558			–	4	1762	34.5	1.7	0.8	6.8	0.20	4.3
57	559			y	5	1827	5.3	1.1	0.5	6.0	0.29	2.6
58	567			–	–	–	–	–	–	–	–	–
59	570			–	4	1827	31.4	3.5	1.7	4.2	0.36	10.7
60	575			–	–	–	–	–	–	–	–	–
61	580			–	4	1412	47.9	3.2	1.6	4.7	0.38	7.6
62	584			–	–	–	–	–	–	–	–	–
63	588	-33:5772		n	6	1945	19.3	0.6	0.3	4.5	0.40	1.8
64	591	-28:6970		y	4	1827	44.3	0.5	0.3	6.9	0.32	1.3
65	592	-41:4839		–	5	1825	67.5	3.4	1.5	5.7	0.34	8.6
66	593	-33:5803		y	5	1828	7.3	0.7	0.3	6.7	0.31	1.9
67	611	-81:302		–	6	1898	-22.8	0.8	0.3	5.2	0.36	2.4
68	614	298563	UU Vel	–	1	–	2.5	–	1.1	13.9	0.28	–
69	617			–	5	1780	-2.4	2.8	1.2	8.5	0.27	6.6
70	625	-46:5417		–	5	1780	57.0	4.0	1.8	5.6	0.32	10.3
71	628			–	6	1827	-26.4	1.8	0.8	4.3	0.41	4.5
72	629			–	4	743	21.5	5.8	2.9	12.4	0.25	16.4
73	633			–	–	–	–	–	–	–	–	–
74	638			–	4	1825	-0.9	6.2	3.1	4.5	0.41	13.0
75	640			–	–	–	–	–	–	–	–	–
76	646	-32:6905		–	5	1780	-11.5	3.8	1.7	4.0	0.43	9.1
77	650			–	5	1827	7.6	1.1	0.5	6.5	0.30	2.7
78	652			–	4	1827	7.2	3.8	1.9	10.0	0.28	13.0
79	653			n	5	1744	-34.1	0.4	0.2	4.8	0.36	1.0
80	656			y	3	701	-0.2	4.1	2.4	7.9	0.11	6.8
81	657			–	–	–	–	–	–	–	–	–
82	659			–	4	1416	20.6	3.2	1.6	12.3	0.25	6.1
83	660			–	4	1413	26.8	4.6	2.3	3.6	0.43	9.3
84	661			–	–	–	–	–	–	–	–	–
85	662			–	4	1078	3.2	1.1	0.6	7.7	0.23	2.6
86	663	-39:6149		–	5	1747	-2.0	4.8	2.2	4.4	0.40	10.6
87	664	-60:2927		–	4	1829	21.5	1.1	0.6	10.3	0.44	3.2
88	667	-30:8296		y	5	1827	-1.2	0.9	0.4	6.3	0.31	2.2
89	668			y	4	1827	3.8	1.4	0.7	6.8	0.29	3.2
90	672	-54:3378		n	4	1413	12.2	1.5	0.7	4.8	0.38	3.2
91	677			–	2	742	-3.3	3.7	2.6	7.7	0.12	5.5
92	682			–	4	1096	-21.1	1.1	0.6	6.7	0.32	2.7
93	687			–	3	716	37.3	1.4	0.8	9.2	0.28	2.8
94	692			–	3	467	-4.4	3.1	1.8	7.7	0.31	5.2
95	693			y	5	1825	15.7	1.2	0.6	7.1	0.27	3.9
96	695			–	3	1092	-15.3	1.7	1.0	6.7	0.30	3.7
97	696	92681	HP Vel	y	5	1828	0.8	0.9	0.4	7.7	0.26	2.1
98	699			–	4	1763	0.5	0.8	0.4	6.9	0.25	2.0
99	702			–	4	1156	3.5	2.3	1.2	9.6	0.31	6.1
100	703		TT 9	–	2	1780	-4.0	4.3	3.0	11.0	0.42	6.3
101	704	-34:6961	Z Ant	y	4	1074	-3.8	2.5	1.2	10.0	0.20	7.1
102	705			–	–	–	–	–	–	–	–	–

Table 1. Henize S stars: CORAVEL data (continued)

Hen	GCGSS	HD/CoD	var	Tc	N_C	ΔT [days]	V_r [km/s]	$\sigma(V_r)$ [km/s]	$\overline{c}_1$ [km/s]	Sb [km/s]	PR	V_{ran} [km/s]
103	710		CSV1667	–	–	–	–	–	–	–	–	–
104	714	95013		y	4	1946	-14.3	1.1	0.6	5.7	0.33	2.0
105	715			–	4	1183	-30.7	1.4	0.7	5.4	0.33	3.0
106	718			–	2	1064	-46.0	2.5	1.8	6.7	0.26	3.6
107	719			–	4	1154	-39.8	2.3	1.2	6.0	0.34	4.5
108	720	95875		n	10	1826	44.1	10.1	3.2	5.0	0.39	23.6
109	724		CSV1705	–	–	–	–	–	–	–	–	–
110	725			–	4	1093	-4.2	2.1	1.1	4.0	0.45	5.1
111	728		TT12	–	3	1092	-16.7	0.4	0.3	7.6	0.38	0.6
112	734	-49:5949		–	–	–	–	–	–	–	–	–
113	736			–	6	1535	-11.1	2.1	0.9	6.6	0.26	4.3
114	742		RY Car	–	–	–	–	–	–	–	–	–
115	749			–	–	–	–	–	–	–	–	–
116	–			–	–	–	–	–	–	–	–	–
117	772			–	–	–	–	–	–	–	–	–
118	777			–	3	1412	6.4	3.4	2.0	3.9	0.38	6.8
119	778	104361		n	6	1781	-22.2	4.3	1.7	4.4	0.41	11.2
120	788		BH Cru	–	5	1093	-0.4	2.8	1.2	7.3	0.27	10.1
121	792	-27:8661		n	11	1778	-4.9	6.9	2.1	6.0	0.22	20.0
122	794		CSV1862	–	3	717	-3.3	7.6	4.4	6.8	0.32	13.7
123	795	-47:7642		n	5	1764	0.2	2.6	1.2	4.6	0.41	6.1
124	798			–	7	1414	6.3	3.6	1.4	4.6	0.32	9.4
125	801	-25:9367	FI Hya	–	3	743	53.7	2.6	1.5	7.1	0.13	4.7
126	802			n	5	747	-29.8	2.7	1.2	4.6	0.38	6.2
127	804	110994	BQ Oct	–	8	2147	-1.0	0.7	0.2	5.7	0.35	2.2
128	807	-42:7915		–	–	–	–	–	–	–	–	–
129	808	-46:8238		n	6	1779	-25.4	3.4	1.4	5.3	0.35	7.9
130	810			–	6	1781	-5.5	2.2	0.9	6.0	0.35	6.7
131	811			–	4	1111	-48.3	1.6	0.8	6.6	0.32	3.7
132	813	-72:869		n	7	1898	-44.7	0.8	0.3	4.4	0.40	2.5
133	814	114586		n	7	1764	1.1	0.8	0.3	5.4	0.36	2.1
134	815	-30:10427	V957 Cen	–	9	1705	61.5	2.4	0.8	6.3	0.26	7.3
135	816	115236	UY Cen	–	7	1882	-22.2	1.5	0.6	7.8	0.40	4.5
136	820		NZ Cen	–	3	328	-56.6	8.8	5.1	25.2	0.26	19.4
137	824	-50:7894		n	9	1780	-21.1	4.6	1.5	7.2	0.31	11.1
138	826	118685		n	8	1902	8.3	1.0	0.4	5.7	0.32	2.7
139	831			–	4	682	-21.1	0.5	0.3	4.9	0.33	1.0
140	832	120179		y	6	1781	-34.7	1.0	0.4	5.8	0.35	2.9
141	834	120460	VX Cen	y	4	835	-54.9	1.4	0.7	7.6	0.19	3.0
142	837		RY Cir	–	2	470	-3.6	2.1	1.5	7.7	0.17	3.0
143	839	122434		n	6	1106	-26.0	3.5	1.4	4.5	0.41	8.6
144	842		V335 Cen	–	5	1094	-28.7	2.4	1.1	7.9	0.23	5.8
145	846			–	4	1626	-26.2	2.0	1.0	6.3	0.31	3.9
146	850		KQ Cen	–	7	1572	-12.2	1.3	0.5	7.1	0.25	3.5
147	858	-25:10393		n	8	1579	-9.9	7.1	2.5	4.2	0.41	16.7
148	861		CSV2170	–	–	–	–	–	–	–	–	–
149	864	130859		n	6	1108	25.0	2.9	1.2	4.5	0.40	7.5
150	867	131217	CR Cir	n	8	1781	23.9	2.1	0.8	4.9	0.37	6.2
151	869			–	1	–	-22.0	–	1.9	21.1	0.21	–
152	870			–	2	466	-56.9	8.7	6.2	16.4	0.32	18.9
153	872		GI Lup	–	3	955	15.4	2.3	1.3	9.3	0.21	5.6

Table 1. Henize S stars: CORAVEL data (continued)

Hen	GCGSS	HD/CoD	var	Tc	N_C	ΔT [days]	V_r [km/s]	$\sigma(V_r)$ [km/s]	$\bar{c}_1$ [km/s]	Sb [km/s]	PR	V_{ran} [km/s]
154	873			–	6	1112	-12.9	0.5	0.2	3.4	0.35	1.2
155	889		GN Lup	–	2	624	-55.7	2.0	1.4	9.8	0.22	3.0
156	899			–	–	–	–	–	–	–	–	–
157	904	-74:1067	VY Aps	–	5	1034	-38.3	1.5	0.7	8.1	0.41	4.9
158	909			–	–	–	–	–	–	–	–	–
159	913			–	1	–	16.9	–	1.4	–	0.08	–
160	914		Y TrA	–	3	1827	-50.7	0.6	0.4	8.0	0.11	3.1
161	923			–	–	–	–	–	–	–	–	–
162	927			y	6	1865	8.8	1.0	0.4	6.8	0.28	2.4
163	929			–	–	–	–	–	–	–	–	–
164	930			–	–	–	–	–	–	–	–	–
165	931	149511	ST Sco	–	5	1108	-12.9	1.9	0.9	9.5	0.23	5.0
166	935			–	4	958	-16.4	2.2	1.1	8.0	0.41	5.4
167	936		V650 Ara	–	3	680	-13.1	1.7	1.0	9.5	0.31	3.7
168	940	-60:6462	LQ Ara	–	4	759	0.4	2.5	1.3	7.9	0.41	5.5
169	–			–	4	761	-39.6	2.0	1.0	3.5	0.44	5.3
170	947		LS Ara	–	–	–	–	–	–	–	–	–
171	948			–	1	–	39.0	–	1.0	–	0.12	–
172	954	153858	RT Sco	–	1	–	-44.3	–	0.6	6.3	0.11	–
173	962			n	4	686	39.0	0.2	0.2	4.6	0.37	0.4
174	971			–	3	682	-0.4	2.7	1.6	7.2	0.24	5.0
175	974	156957	V635 Sco	y	5	1108	-34.0	0.6	0.3	6.5	0.28	1.4
176	975			–	–	–	–	–	–	–	–	–
177	977	-32:12687		y	5	1901	-20.7	0.7	0.3	6.2	0.30	1.7
178	978	157335	V521 Oph	y	3	833	56.5	1.8	1.0	9.0	0.18	4.6
179	994	160379		n	3	684	36.0	0.9	0.5	5.7	0.32	1.6
180	1003			–	–	–	–	–	–	–	–	–
181	1004	320767	V407 Sco	–	3	334	-29.0	2.8	1.6	7.1	0.12	6.4
182	1010	163896		n	5	1827	31.2	5.9	2.6	5.2	0.34	13.7
183	1014	164392	V354 Pav	n	7	1827	-7.2	5.0	1.9	4.7	0.37	15.4
184	1020			–	3	330	-68.3	1.2	0.7	7.7	0.41	2.4
185	1021			–	4	1749	5.9	1.1	0.6	5.8	0.27	2.9
186	1023	165774		n	5	886	-31.6	5.1	2.3	4.6	0.39	10.9
187	1025	165843	V355 Pav	n	6	1827	-26.0	1.4	0.6	4.8	0.38	3.5
188	1026	-36:12314	V659 Sgr	–	4	760	-30.8	1.8	0.9	7.0	0.33	4.3
189	1030			–	4	1748	-68.7	3.3	1.6	5.1	0.31	7.4
190	1044			–	4	1748	-85.9	4.0	2.0	3.9	0.37	10.1
191	1056	171100	V3574 Sgr	y	4	757	-56.6	1.1	0.5	7.0	0.22	3.0
192	1062		V2017 Sgr	–	–	–	–	–	–	–	–	–
193	1073	-23:14695		n	5	1823	-34.9	1.1	0.5	4.2	0.42	2.5
194	1119			–	4	1748	-43.2	3.3	1.6	5.9	0.33	6.7
195	1123			–	–	–	–	–	–	–	–	–
196	1162			–	4	758	-106.8	0.5	0.3	5.8	0.29	1.1
197	1195	191630	V378 Pav	y	8	2150	-12.9	0.6	0.2	5.6	0.36	1.8
198	1196	192194	RZ Sgr	–	4	757	-32.0	4.0	2.0	12.9	0.27	9.5
199	1212			n	4	760	2.4	2.6	1.3	4.5	0.40	6.8
200	1268	-48:13866		–	–	–	–	–	–	–	–	–
201	1275	-26:15676		n	3	682	7.3	8.3	4.8	3.9	0.42	16.6
202	1294	212087	π1 Gru	y	7	846	-5.7	1.5	0.6	8.9	0.23	4.2
203	1295			n	4	757	8.5	0.9	0.4	4.9	0.36	2.1
204	1303		CSV103101	n	3	682	-9.1	5.0	2.9	3.9	0.39	9.6
205	1324			–	–	–	–	–	–	–	–	–

Table 2. Henize S stars: Geneva photometric data

Hen	N_p	V	U-B	B-V	n_U	V_0	$(U$-$B)_0$	$(B$-$V)_0$	m	$\sigma_r(U)$	$\sigma_r(B)$	$\sigma_r(V)$
1	3	7.49	3.22	1.21	0	7.37	3.19	1.17	3	0.05	0.03	0.02
2	20	8.48	3.27	1.20	0	8.22	3.21	1.12	2	0.02	0.01	0.01
3	4	8.26	2.94	1.03	0	8.16	2.92	1.00	2	0.12	0.08	0.08
4	3	9.81	3.37	1.27	0	9.53	3.31	1.18	2	0.10	0.04	0.03
5	3	11.01	3.18	1.17	0	10.98	3.17	1.16	2	0.00	0.02	0.02
6	5	9.88	3.02	1.07	0	9.84	3.01	1.06	2	0.03	0.03	0.04
7	3	8.89	3.18	1.25	0	8.79	3.16	1.22	2	0.06	0.02	0.00
8	8	11.03	3.25	1.40	0	10.84	3.21	1.34	2	0.23	0.24	0.25
9	4	9.52	3.27	1.22	0	9.48	3.26	1.20	2	0.03	0.01	0.00
10	4	9.33	3.11	1.23	0	8.78	2.99	1.05	2	0.06	0.06	0.07
11	1	14.37	–	0.85	1	14.27	–	0.82	2	–	–	–
12	3	12.38	2.37	0.95	2	12.20	2.33	0.89	2	–	1.65	1.86
13	3	13.02	–	1.39	3	12.83	–	1.33	2	–	0.25	0.27
14	3	10.32	3.31	1.28	0	10.04	3.26	1.19	2	0.06	0.01	0.02
15	2	12.01	2.54	1.21	0	11.63	2.46	1.09	2	0.37	0.41	0.31
16	2	11.20	3.37	1.30	0	10.92	3.31	1.21	2	0.05	0.13	0.13
17	3	12.37	–	1.21	3	12.09	–	1.12	2	–	0.00	0.00
18	13	10.60	1.57	0.99	0	9.98	1.44	0.79	2	0.22	0.09	0.06
19	1	10.49	3.84	1.66	0	10.30	3.80	1.59	3	–	–	–
20	1	10.29	3.14	1.25	0	9.93	3.06	1.14	2	–	–	–
21	2	12.37	–	1.75	2	12.07	–	1.65	1	–	0.00	0.01
22	–	–	–	–	–	–	–	–	–	–	–	–
23	–	–	–	–	–	–	–	–	–	–	–	–
24	2	11.83	–	2.05	2	10.83	–	1.73	1	–	0.35	0.30
25	–	–	–	–	–	–	–	–	–	–	–	–
26	–	–	–	–	–	–	–	–	–	–	–	–
27	1	12.65	–	2.23	1	12.18	–	2.08	2	–	–	–
28	3	8.87	3.33	1.47	0	8.38	3.23	1.31	2	0.01	0.02	0.01
29	2	11.61	–	2.44	2	10.99	–	2.24	1	–	0.08	0.06
30	1	13.73	–	2.65	1	12.13	–	2.14	1	–	–	–
31	1	7.18	3.34	1.38	0	6.82	3.27	1.26	2	–	–	–
32	2	8.69	1.98	0.97	0	8.34	1.91	0.85	3	1.43	1.47	1.65
33	–	–	–	–	–	–	–	–	–	–	–	–
34	2	10.16	2.74	1.22	0	9.70	2.64	1.07	2	0.37	0.48	0.62
35	2	9.83	3.32	1.31	0	9.46	3.24	1.19	2	0.00	0.00	0.00
36	2	9.01	2.27	0.92	0	8.86	2.24	0.88	1	0.02	0.07	0.09
37	5	10.95	3.38	1.49	0	10.59	3.30	1.38	3	0.15	0.09	0.10
38	3	11.26	3.37	1.41	0	10.90	3.29	1.29	3	0.02	0.05	0.07
39	3	9.31	3.20	1.29	0	8.87	3.11	1.15	2	0.05	0.03	0.02
40	3	11.39	2.88	1.29	0	10.09	2.60	0.87	1	0.00	0.05	0.06
41	1	9.46	2.32	1.00	0	9.16	2.26	0.91	1	–	–	–
42	1	12.43	–	2.68	1	12.04	–	2.56	3	–	–	–
43	1	10.59	3.58	1.31	0	10.29	3.52	1.22	1	–	–	–
44	2	10.69	3.22	1.40	0	10.39	3.16	1.30	1	0.17	0.18	0.19
45	7	9.58	2.80	1.20	0	8.98	2.68	1.01	1	0.10	0.04	0.02
46	3	11.42	–	1.64	3	10.02	–	1.19	1	–	0.00	0.02
47	–	–	–	–	–	–	–	–	–	–	–	–
48	–	–	–	–	–	–	–	–	–	–	–	–
49	3	12.57	–	3.40	3	10.77	–	2.82	1	–	0.00	0.13
50	3	10.78	2.37	0.93	0	9.00	1.99	0.36	1	0.51	0.56	0.60
51	3	10.68	–	2.58	3	10.15	–	2.41	3	–	0.27	0.24

Table 2. Henize S stars: Geneva photometric data (continued)

Hen	N_p	V	U-B	B-V	n_U	V_0	$(U$-$B)_0$	$(B$-$V)_0$	m	$\sigma_r(U)$	$\sigma_r(B)$	$\sigma_r(V)$
52	3	11.78	–	1.90	3	10.18	–	1.38	1	–	0.02	0.02
53	3	9.98	3.41	2.05	0	8.83	3.17	1.68	1	0.66	0.54	0.40
54	4	11.18	3.35	1.58	1	10.91	3.29	1.50	3	0.31	0.76	0.89
55	–	–	–	–	–	–	–	–	–	–	–	–
56	5	12.39	1.73	1.39	1	11.79	1.60	1.20	3	0.30	0.11	0.05
57	6	10.32	3.58	1.59	0	9.32	3.37	1.27	1	0.20	0.14	0.15
58	–	–	–	–	–	–	–	–	–	–	–	–
59	4	10.69	3.21	1.27	0	10.42	3.15	1.18	2	0.06	0.00	0.00
60	–	–	–	–	–	–	–	–	–	–	–	–
61	1	12.04	–	2.06	1	10.83	–	1.67	3	–	–	–
62	4	12.73	–	2.70	4	11.52	–	2.31	3	–	0.30	0.20
63	6	9.82	3.48	1.40	0	9.55	3.42	1.31	3	0.06	0.02	0.02
64	4	10.22	3.67	1.64	0	9.53	3.52	1.42	2	0.10	0.11	0.11
65	14	10.91	2.89	1.73	13	9.62	2.62	1.31	1	–	0.08	0.06
66	3	10.40	3.30	1.43	0	10.13	3.24	1.34	3	0.11	0.05	0.06
67	4	8.91	3.25	1.18	0	8.64	3.19	1.09	2	0.00	0.01	0.01
68	2	11.35	–	3.13	2	9.38	–	2.49	1	–	0.69	0.48
69	3	11.18	–	1.97	3	10.55	–	1.77	2	–	0.31	0.30
70	3	11.04	–	1.85	3	10.18	–	1.57	3	–	0.04	0.00
71	3	10.32	3.54	1.45	0	9.85	3.44	1.29	3	0.00	0.03	0.03
72	3	10.38	4.14	2.43	2	9.90	4.04	2.28	3	–	0.72	0.54
73	–	–	–	–	–	–	–	–	–	–	–	–
74	4	11.12	3.52	1.51	0	10.42	3.38	1.29	1	0.00	0.01	0.01
75	3	13.60	–	2.04	3	12.90	–	1.81	1	–	0.24	0.23
76	4	10.80	3.32	1.23	0	10.43	3.24	1.11	2	0.07	0.02	0.01
77	3	11.16	3.29	1.53	0	9.68	2.98	1.05	1	0.09	0.14	0.17
78	3	11.61	–	3.13	3	10.51	–	2.78	1	–	0.71	0.48
79	2	10.58	3.50	1.43	0	10.05	3.38	1.25	2	0.05	0.05	0.04
80	1	9.29	2.38	1.36	0	8.89	2.29	1.23	2	–	–	–
81	–	–	–	–	–	–	–	–	–	–	–	–
82	–	–	–	–	–	–	–	–	–	–	–	–
83	5	12.04	–	1.95	5	10.44	–	1.43	1	–	0.00	0.02
84	–	–	–	–	–	–	–	–	–	–	–	–
85	3	11.63	3.02	1.64	1	10.93	2.87	1.41	1	0.00	0.11	0.13
86	3	10.91	3.48	1.38	0	10.37	3.36	1.21	2	0.20	0.03	0.03
87	3	11.00	–	2.88	3	10.30	–	2.65	1	–	0.27	0.25
88	4	9.63	3.25	1.21	0	9.40	3.20	1.13	2	0.09	0.08	0.09
89	3	9.85	2.97	1.37	0	9.15	2.82	1.15	1	0.30	0.03	0.04
90	9	9.80	3.35	1.35	0	9.12	3.20	1.14	1	0.16	0.02	0.02
91	3	12.09	2.33	1.33	0	11.77	2.26	1.23	3	0.36	0.49	0.46
92	3	11.56	–	1.67	3	10.96	–	1.47	1	–	0.18	0.19
93	2	11.85	–	2.36	2	11.37	–	2.21	3	–	0.27	0.25
94	–	–	–	–	–	–	–	–	–	–	–	–
95	5	10.37	3.79	1.39	2	9.12	3.53	0.99	1	0.83	0.10	0.03
96	3	12.12	–	1.95	3	11.52	–	1.76	1	–	0.30	0.35
97	6	8.60	2.82	1.18	0	8.15	2.72	1.04	1	0.11	0.14	0.15
98	3	11.21	3.38	1.50	0	10.21	3.17	1.18	1	0.00	0.09	0.07
99	3	10.34	3.30	2.05	1	9.74	3.17	1.86	1	0.04	0.37	0.17
100	–	–	–	–	–	–	–	–	–	–	–	–
101	6	9.45	2.96	1.48	0	9.26	2.92	1.43	2	0.16	0.14	0.13
102	–	–	–	–	–	–	–	–	–	–	–	–

Table 2. Henize S stars: Geneva photometric data (continued)

Hen	N_p	V	U-B	B-V	n_U	V_0	$(U$-$B)_0$	$(B$-$V)_0$	m	$\sigma_r(U)$	$\sigma_r(B)$	$\sigma_r(V)$
103	–	–	–	–	–	–	–	–	–	–	–	–
104	3	10.07	3.24	1.33	0	9.68	3.15	1.20	3	0.10	0.02	0.02
105	–	–	–	–	–	–	–	–	–	–	–	–
106	3	12.10	–	1.61	3	10.71	–	1.17	1	–	0.10	0.09
107	3	12.57	–	2.72	3	11.57	–	2.40	1	–	0.19	0.10
108	4	8.77	3.19	1.12	0	8.62	3.16	1.07	1	0.02	0.04	0.04
109	–	–	–	–	–	–	–	–	–	–	–	–
110	3	11.26	3.47	1.58	1	10.36	3.28	1.29	1	0.00	0.00	0.00
111	3	12.43	–	2.60	3	11.23	–	2.21	1	–	0.28	0.23
112	–	–	–	–	–	–	–	–	–	–	–	–
113	3	12.05	–	1.86	3	10.65	–	1.41	1	–	0.03	0.03
114	–	–	–	–	–	–	–	–	–	–	–	–
115	2	13.42	–	2.08	2	12.02	–	1.63	1	–	0.30	0.35
116	–	–	–	–	–	–	–	–	–	–	–	–
117	–	–	–	–	–	–	–	–	–	–	–	–
118	4	11.71	3.22	1.35	2	11.34	3.15	1.23	2	0.00	0.03	0.03
119	5	8.83	3.17	1.21	0	8.23	3.04	1.02	1	0.07	0.00	0.00
120	6	7.48	3.69	3.02	0	7.12	3.62	2.91	1	1.50	1.02	0.62
121	30	10.45	1.94	1.07	0	10.20	1.89	0.99	2	0.54	0.20	0.10
122	1	13.98	–	3.84:	1	13.70	–	3.75:	2	–	–	–
123	8	9.25	3.37	1.29	0	8.83	3.28	1.15	2	0.04	0.02	0.02
124	6	11.50	3.03	1.20	0	11.16	2.96	1.09	2	0.14	0.05	0.05
125	3	10.57	2.39	0.95	0	10.34	2.34	0.87	2	0.24	0.20	0.23
126	1	10.57	3.31	1.27	0	10.11	3.21	1.12	3	–	–	–
127	3	6.88	3.25	1.26	0	6.66	3.21	1.19	2	0.05	0.03	0.03
128	–	–	–	–	–	–	–	–	–	–	–	–
129	31	9.41	3.35	1.44	0	8.97	3.25	1.30	2	0.13	0.06	0.06
130	1	11.09	3.27	1.99	0	10.34	3.11	1.75	1	–	–	–
131	4	11.79	–	1.97	4	10.69	–	1.61	1	–	0.10	0.08
132	4	9.31	3.44	1.59	0	8.76	3.33	1.41	2	0.03	0.04	0.04
133	1	9.01	2.98	1.34	0	8.55	2.89	1.19	3	–	–	–
134	6	11.58	3.08	1.34	1	11.39	3.05	1.28	2	0.19	0.06	0.09
135	9	7.01	5.09	2.78	0	6.76	5.04	2.70	2	0.09	0.10	0.08
136	2	11.96	–	2.77	2	10.36	–	2.25	1	–	0.60	0.44
137	30	9.09	2.92	1.23	0	8.86	2.87	1.15	2	0.16	0.05	0.05
138	4	7.05	3.23	1.39	0	6.35	3.09	1.17	3	0.17	0.15	0.14
139	1	11.66	3.07	1.32	0	10.66	2.86	0.99	1	–	–	–
140	7	8.41	3.20	1.32	0	7.81	3.07	1.13	3	0.02	0.02	0.04
141	4	9.24	2.91	1.61	0	8.20	2.69	1.27	1	0.20	0.16	0.14
142	3	11.95	2.61	2.07	2	10.95	2.40	1.75	1	–	1.72	1.43
143	10	8.45	3.23	1.13	0	8.29	3.19	1.07	2	0.05	0.02	0.02
144	3	11.95	–	2.16	3	10.97	–	1.84	1	–	0.03	0.07
145	2	12.25	–	2.20	2	11.05	–	1.81	1	–	0.00	0.01
146	5	10.87	3.24	1.81	0	9.61	2.98	1.40	1	0.06	0.03	0.01
147	26	10.46	3.29	1.17	0	10.21	3.23	1.09	2	0.19	0.03	0.02
148	–	–	–	–	–	–	–	–	–	–	–	–
149	10	9.40	3.30	1.19	0	9.18	3.25	1.12	2	0.03	0.02	0.02
150	6	7.50	3.32	1.28	0	6.85	3.18	1.07	1	0.05	0.04	0.04
151	–	–	–	–	–	–	–	–	–	–	–	–
152	3	13.03	–	2.92	3	12.10	–	2.62	3	–	0.47	0.34
153	1	10.53	–	2.64	1	10.35	–	2.58	2	–	–	–

Table 2. Henize S stars: Geneva photometric data (continued)

Hen	N_p	V	U-B	B-V	n_U	V_0	$(U$-$B)_0$	$(B$-$V)_0$	m	$\sigma_r(U)$	$\sigma_r(B)$	$\sigma_r(V)$
154	–	–	–	–	–	–	–	–	–	–	–	–
155	–	–	–	–	–	–	–	–	–	–	–	–
156	3	11.63	2.58	2.04	2	9.36	2.10	1.31	1	–	0.70	0.74
157	2	9.40	–	3.06	2	9.11	–	2.96	2	–	0.06	0.03
158	1	13.37	–	1.44	1	12.44	–	1.14	3	–	–	–
159	1	12.56	–	2.45	1	12.01	–	2.27	3	–	–	–
160	2	11.25	2.35	0.64	0	10.69	2.24	0.46	3	0.24	0.31	0.30
161	2	11.53	–	2.49	2	10.70	–	2.22	2	–	0.11	0.05
162	1	9.53	3.16	1.38	0	8.73	2.99	1.12	1	–	–	–
163	2	11.76	–	2.77	2	10.40	–	2.34	1	–	0.00	0.03
164	–	–	–	–	–	–	–	–	–	–	–	–
165	2	9.77	3.45	2.21	1	9.08	3.31	1.99	2	–	0.77	0.60
166	1	10.89	–	2.80	1	10.10	–	2.54	1	–	–	–
167	3	11.67	–	2.38	3	10.32	–	1.94	1	–	0.39	0.33
168	1	10.19	–	2.99	1	9.37	–	2.73	2	–	–	–
169	1	10.56	3.38	1.37	0	10.47	3.37	1.34	2	–	–	–
170	–	–	–	–	–	–	–	–	–	–	–	–
171	3	12.65	2.22	0.84	0	11.30	1.94	0.40	1	0.50	0.49	0.39
172	1	11.06	1.69	1.36	0	9.10	1.28	0.73	1	–	–	–
173	1	10.15	3.27	1.41	0	9.15	3.06	1.09	1	–	–	–
174	12	10.90	2.65	1.71	2	9.86	2.44	1.38	3	0.40	0.11	0.10
175	1	8.57	3.43	1.66	0	7.67	3.24	1.37	1	–	–	–
176	–	–	–	–	–	–	–	–	–	–	–	–
177	1	10.17	3.38	1.59	0	9.17	3.17	1.27	1	–	–	–
178	2	10.55	2.77	1.84	0	8.55	2.35	1.19	1	0.00	0.13	0.19
179	3	9.24	3.23	1.27	0	8.84	3.15	1.14	2	0.15	0.08	0.09
180	–	–	–	–	–	–	–	–	–	–	–	–
181	–	–	–	–	–	–	–	–	–	–	–	–
182	1	8.37	3.01	1.19	0	7.94	2.92	1.05	1	–	–	–
183	4	8.45	3.18	1.15	0	8.21	3.13	1.07	2	0.04	0.03	0.03
184	2	11.29	–	3.21	2	9.74	–	2.71	3	–	0.45	0.26
185	1	11.46	–	1.69	1	9.91	–	1.19	3	–	–	–
186	3	8.18	3.19	1.15	0	7.83	3.12	1.03	1	0.07	0.05	0.06
187	3	8.42	3.28	1.32	0	8.17	3.23	1.24	2	0.04	0.05	0.05
188	2	10.16	–	2.36	2	9.38	–	2.11	1	–	0.10	0.08
189	26	11.13	2.72	1.14	0	10.81	2.65	1.04	2	0.19	0.07	0.07
190	1	11.34	3.36	1.48	0	10.62	3.21	1.25	3	–	–	–
191	3	9.94	3.05	1.36	0	9.60	2.98	1.25	2	0.09	0.14	0.16
192	–	–	–	–	–	–	–	–	–	–	–	–
193	3	10.11	3.68	1.51	0	9.17	3.48	1.20	3	0.20	0.02	0.00
194	4	11.32	3.28	1.37	0	11.01	3.21	1.27	2	0.10	0.09	0.10
195	3	11.56	2.25	1.71	2	11.40	2.21	1.66	2	–	1.54	1.36
196	3	11.38	3.42	1.45	0	10.98	3.34	1.32	2	0.00	0.16	0.18
197	4	6.77	3.17	1.22	0	6.66	3.15	1.19	2	0.09	0.05	0.05
198	7	8.07	3.78	2.62	2	8.05	3.77	2.61	2	1.38	1.34	1.05
199	3	10.20	3.25	1.28	0	10.11	3.23	1.25	2	0.07	0.03	0.02
200	5	11.24	–	4.54	5	11.22	–	4.53	2	–	0.53	0.22
201	4	10.01	3.20	1.26	0	9.81	3.16	1.20	3	0.02	0.00	0.00
202	22	6.60	2.84	1.94	0	6.43	2.81	1.89	3	0.19	0.27	0.25
203	3	9.71	3.24	1.43	0	9.55	3.20	1.38	3	0.10	0.13	0.14
204	3	9.74	3.20	1.23	0	9.58	3.17	1.18	3	0.00	0.02	0.03
205	2	10.55	3.35	1.37	0	10.32	3.30	1.29	2	0.00	0.00	0.00

Table 3. Henize S stars: Infrared photometric data

Hen	K	J-H	H-K	K-L	$(V$-$K)_0$	IRAS	K-[12]	K-[25]	$m_{\rm bol}$	$m_{{\rm bol},V}$
1	3.10	0.93	0.19	0.12	4.28	00051-6235	0.57	0.65	5.90	5.46
2	4.07	0.92	0.20	0.15	4.18	01309-7913	–	–	6.84	6.32
3	2.67	0.96	0.25	0.18	5.50	04374-3033	0.69	0.81	5.63	6.25
4	5.22	0.95	0.20	0.01	4.34	04309-8416	0.62	–	8.03	7.62
5	5.80	0.81	0.08	0.14	5.18	05224-3354	–	–	8.56	9.07
6	4.18	0.96	0.24	0.22	5.65	05265-5113	0.84	0.64	7.14	7.93
7	4.64	0.92	0.18	0.14	4.16	05571-3804	0.64	–	7.43	7.21
8	5.50	0.94	0.25	0.28	5.36	06112-3932	1.95	2.72	8.42	8.09
9	5.30	0.97	0.17	-0.09	4.18	06116-6056	0.69	–	8.12	7.57
10	–	–	–	–	–	06024-8403	–	–	–	7.19
11	5.73	1.24	0.60	0.39	8.55	06308-2608	2.38	2.86	9.09	9.97
12	3.84	1.03	0.33	0.28	8.37	06312-4351	-0.55	–	6.92	7.89
13	–	–	–	–	–	06340-4748	–	–	–	10.92
14	5.82	0.95	0.16	0.09	4.25	06384-3450	–	–	8.58	8.13
15	4.82	0.86	0.14	0.23	6.85	06384-2738	-0.09	–	7.61	7.33
16	6.09	1.02	0.29	0.19	4.86	06388-3858	–	–	9.03	8.17
17	–	–	–	–	–	–	–	–	–	10.18
18	5.00	0.95	0.27	0.19	5.03	06591-2902	0.68	–	7.85	7.36
19	5.41	0.96	0.22	0.10	4.91	07148-3014	0.71	–	8.30	7.55
20	4.31	1.01	0.25	0.11	5.65	07207-4510	0.94	1.17	7.25	7.17
21	–	–	–	–	–	07250-3125	–	–	–	7.77
22	7.53	0.83	0.05	-0.12	–	07272-5331	–	–	–	–
23	4.68	1.15	0.32	0.34	–	07289-3056	1.11	–	–	–
24	–	–	–	–	–	07328-3408	–	–	–	6.53
25	–	–	–	–	–	07336-5949	–	–	–	–
26	–	–	–	–	–	–	–	–	–	–
27	5.86	0.81	0.54	–	6.37	07296-8238	2.57	3.06	–	7.88
28	3.96	0.95	0.24	0.12	4.47	07380-7013	0.65	0.68	6.76	6.48
29	5.41	1.17	0.32	0.36	5.64	07405-2544	0.70	–	8.42	8.23
30	–	–	–	–	–	07454-3026	–	–	–	7.83
31	2.46	0.98	0.22	0.18	4.40	07530-6027	0.61	0.69	5.27	4.91
32	–	–	–	–	–	07545-4400	–	–	–	4.03
33	–	–	–	–	–	07559-2929	–	–	–	–
34	3.06	0.98	0.32	0.35	6.68	07573-6509	1.27	1.61	6.04	5.40
35	5.59	0.80	0.18	-0.08	3.90	07568-7124	–	–	8.25	7.56
36	2.60	1.02	0.29	0.28	6.27	07595-3139	0.87	1.00	5.63	4.94
37	4.17	1.12	0.28	0.27	6.46	08023-4154	0.80	1.08	7.19	7.84
38	–	–	–	–	–	08024-4258	–	–	–	8.15
39	3.49	1.01	0.27	0.20	5.42	08023-6541	0.72	0.79	6.42	6.12
40	4.88	1.08	0.32	0.36	5.32	08074-3040	0.85	1.79	7.70	6.17
41	2.61	1.06	0.32	0.33	6.58	08098-2809	1.09	1.41	5.65	5.25
42	–	–	–	–	–	08102-3105	–	–	–	9.29
43	5.50	0.95	0.24	0.36	4.82	08150-2631	0.62	–	8.36	8.71
44	5.06	1.00	0.31	0.33	5.36	08164-2946	1.04	–	8.03	7.64
45	4.75	0.97	0.21	0.21	4.29	08166-3239	0.52	–	7.50	6.23
46	5.41	1.04	0.31	0.20	4.74	08199-3707	0.73	–	8.16	8.11
47	4.01	1.18	0.36	0.34	–	08234-3536	–	–	–	–
48	5.55	0.96	0.28	0.18	–	08304-2952	0.84	–	–	–
49	–	–	–	–	–	08308-3840	–	–	–	8.02
50	2.68	0.99	0.38	0.46	6.48	08348-3617	1.65	1.95	5.44	5.08
51	3.34	1.20	0.39	0.34	6.86	08388-5116	1.51	1.92	6.46	7.40

Table 3. Henize S stars: Infrared photometric data (continued)

Hen	K	J-H	H-K	K-L	$(V$-$K)_0$	IRAS	K-[12]	K-[25]	$m_{\rm bol}$	$m_{{\rm bol},V}$
52	5.29	1.16	0.34	0.08	5.04	08390-4914	0.70	–	8.10	8.27
53	1.67	1.22	0.38	0.35	7.27	08403-3853	0.95	1.64	4.68	4.53
54	3.61	1.13	0.37	0.35	7.32	08416-3220	1.43	1.49	6.73	6.60
55	2.52	1.06	0.31	0.26	–	08457-4548	–	–	–	–
56	–	–	–	–	–	08487-5657	–	–	–	7.87
57	3.81	1.08	0.31	0.21	5.61	08490-5026	0.82	1.10	6.70	6.57
58	–	–	–	–	–	–	–	–	–	–
59	5.60	0.95	0.26	0.25	4.84	08547-7108	0.75	–	8.48	8.51
60	–	–	–	–	–	–	–	–	–	–
61	6.10	1.10	0.34	0.39	4.84	–	–	–	8.94	8.92
62	–	–	–	–	–	09049-4038	–	–	–	7.22
63	4.50	1.01	0.24	0.23	5.08	09062-3319	0.59	–	7.42	7.65
64	3.35	1.03	0.29	0.29	6.25	09070-2847	0.76	1.04	6.27	6.77
65	4.57	1.10	0.27	0.26	5.16	09070-4149	–	–	7.37	7.71
66	4.33	1.06	0.26	0.18	5.83	09081-3413	0.69	0.93	7.32	7.38
67	3.73	0.99	0.24	0.18	4.93	09166-8205	0.68	0.68	6.63	6.73
68	2.75	1.17	0.53	0.62	6.81	09338-5349	1.78	2.61	5.67	5.07
69	3.00	1.18	0.36	0.30	7.60	09358-6536	0.88	1.12	6.08	6.24
70	3.96	1.14	0.33	0.32	6.31	09400-4642	0.78	0.59	6.93	8.27
71	5.32	0.97	0.22	0.38	4.57	09411-6417	0.66	–	8.13	7.94
72	4.06	1.00	0.38	0.41	5.88	09415-6327	1.29	1.63	7.06	5.60
73	–	–	–	–	–	–	–	–	–	–
74	6.20	1.05	0.21	0.46	4.29	09471-6111	–	–	8.96	8.84
75	–	–	–	–	–	09484-6344	–	–	–	8.59
76	6.21	1.01	0.16	0.38	4.25	09549-3244	–	–	8.97	8.52
77	5.05	1.01	0.30	–	4.77	09572-4943	0.85	–	–	6.93
78	2.60	1.17	0.38	0.34	8.00	10015-4634	0.91	1.25	5.61	6.20
79	–	–	–	–	–	10009-6834	–	–	–	8.14
80	2.72	1.06	0.36	0.33	6.21	10017-7012	1.05	1.21	5.76	4.58
81	5.33	0.93	0.48	–	–	10038-6055	1.69	2.19	–	–
82	3.44	1.27	0.45	–	–	10041-6136	-0.98	–	–	–
83	6.25	1.05	0.20	0.21	4.34	–	–	–	8.85	8.86
84	4.83	1.21	0.49	0.60	–	10045-5955	2.32	2.92	–	–
85	3.71	1.12	0.34	0.26	7.28	10053-4602	0.97	1.65	6.74	6.62
86	6.00	1.05	0.21	0.16	4.42	10053-4015	–	–	8.81	8.78
87	3.44	1.30	0.42	0.39	6.93	10053-6042	1.16	1.74	6.58	7.55
88	4.28	1.00	0.24	0.22	5.15	10139-3045	0.84	–	7.20	6.65
89	3.59	1.02	0.32	–	5.62	10138-6046	1.05	1.18	–	6.39
90	4.73	0.97	0.23	0.25	4.45	10155-5439	0.67	–	7.50	7.22
91	–	–	–	–	–	10213-4602	–	–	–	7.47
92	4.76	1.14	0.31	0.18	6.25	10256-5158	0.87	–	7.78	8.20
93	2.31	1.15	0.38	0.34	9.11	10308-6707	0.88	1.36	5.42	7.07
94	–	–	–	–	–	10358-6028	–	–	–	–
95	3.77	0.97	0.28	0.26	5.47	–	–	–	6.53	6.37
96	–	–	–	–	–	10380-5256	–	–	–	8.76
97	1.87	1.03	0.30	0.24	6.32	10389-5149	0.81	1.03	4.85	5.40
98	4.42	1.13	0.30	0.30	5.89	10410-5624	–	–	7.33	7.45
99	3.05	1.17	0.36	0.35	6.74	10422-5448	0.88	1.45	6.12	5.43
100	3.83	1.60	0.62	0.52	–	–	–	–	–	–
101	1.64	1.17	0.33	0.34	7.64	10436-3459	1.71	2.45	4.76	4.96
102	–	–	–	–	–	–	–	–	–	–

Table 3. Henize S stars: Infrared photometric data (continued)

Hen	K	J-H	H-K	K-L	$(V$-$K)_0$	IRAS	K-[12]	K-[25]	$m_{\rm bol}$	$m_{{\rm bol},V}$
103	–	–	–	–	–	–	–	–	–	–
104	4.21	1.08	0.25	0.24	5.51	10551-5250	–	–	7.16	6.92
105	4.75	1.04	0.32	0.32	–	–	–	–	–	–
106	–	–	–	–	–	10590-6210	–	–	–	7.96
107	4.88	1.17	0.44	–	6.78	10599-5615	0.95	–	–	8.82
108	4.32	0.90	0.20	0.18	4.31	11006-5600	0.71	–	7.12	7.03
109	6.25	0.56	0.40	1.51	–	11041-6820	2.46	2.64	–	–
110	–	–	–	–	–	11045-6142	–	–	–	8.45
111	–	–	–	–	–	–	–	–	–	8.47
112	–	–	–	–	–	11111-5002	–	–	–	–
113	5.15	1.29	0.34	0.20	5.63	11160-6553	0.62	–	8.08	7.90
114	–	–	–	–	–	11179-6135	–	–	–	–
115	–	–	–	–	–	11232-6059	–	–	–	7.72
116	–	–	–	–	–	–	–	–	–	–
117	–	–	–	–	–	11512-5944	–	–	–	–
118	–	–	–	–	–	–	–	–	–	9.43
119	4.24	0.90	0.22	0.21	4.04	11583-5548	0.71	0.56	6.93	6.64
120	1.56	1.18	0.47	0.33	5.59	12135-5600	1.23	1.54	4.72	4.37
121	4.14	0.96	0.27	0.25	6.08	12219-2802	0.66	–	7.10	7.58
122	5.21	0.96	0.27	–	8.52	12238-5208	1.18	–	–	9.40
123	4.47	1.00	0.20	0.14	4.39	12262-4735	0.56	–	7.27	6.92
124	6.06	0.91	0.24	0.01	5.13	12311-4219	–	–	8.93	9.25
125	3.73	0.86	0.42	0.54	6.63	12372-2623	1.50	1.71	6.75	6.42
126	5.35	0.99	0.24	0.24	4.80	12407-5328	0.62	–	8.20	8.20
127	1.47	1.36	0.70	0.70	5.21	13079-8931	0.80	0.85	4.80	3.91
128	–	–	–	–	–	12464-4249	–	–	–	–
129	4.11	1.01	0.22	0.14	4.90	12505-4654	0.68	–	6.97	7.07
130	4.34	1.18	0.32	0.27	6.07	12581-6638	0.90	1.24	7.35	7.58
131	4.26	1.19	0.36	0.36	6.53	12598-6042	0.90	1.32	7.24	7.93
132	4.14	1.04	0.22	0.22	4.67	13074-7256	0.72	0.75	6.98	6.85
133	3.60	0.97	0.27	0.09	5.00	13093-5644	0.60	0.80	6.48	6.64
134	6.20	0.84	0.28	0.23	5.21	13117-3110	–	–	9.10	8.64
135	0.58	1.15	0.36	0.37	6.21	13136-4426	1.30	1.79	3.69	4.01
136	3.62	1.51	0.66	0.66	6.88	13226-6302	2.17	3.39	6.83	6.05
137	3.59	0.97	0.26	0.18	5.29	13328-5056	0.58	0.57	6.52	6.95
138	–	–	–	–	–	13372-7136	–	–	–	4.44
139	–	–	–	–	–	13462-6747	–	–	–	7.91
140	2.72	1.03	0.28	0.16	5.15	13460-5507	0.65	0.68	5.62	5.06
141	0.44	1.07	0.36	0.30	7.85	13477-6009	0.98	1.25	3.40	3.90
142	6.92	0.87	0.00	0.36	4.12	13517-6702	4.64	5.22	9.39	6.65
143	3.89	0.90	0.21	0.17	4.41	13597-4144	0.51	0.57	6.70	6.38
144	3.18	1.15	0.37	0.33	7.87	14069-5905	0.94	1.32	6.19	6.66
145	–	–	–	–	–	14134-5959	–	–	–	8.29
146	2.51	1.14	0.36	0.30	7.22	14215-6346	0.80	0.99	5.45	5.31
147	5.84	0.86	0.17	0.08	4.40	14297-2558	–	–	8.58	8.63
148	–	–	–	–	–	14372-6106	–	–	–	–
149	4.72	0.97	0.17	–	4.48	14485-3746	0.67	–	–	7.27
150	2.06	1.00	0.26	0.14	4.84	14510-6052	0.59	0.68	4.91	4.94
151	–	–	–	–	–	14549-6313	–	–	–	–
152	–	–	–	–	–	14556-5455	–	–	–	7.80
153	2.19	1.24	0.56	0.66	8.17	15030-4116	1.91	2.50	5.49	6.04

Table 3. Henize S stars: Infrared photometric data (continued)

Hen	K	J-H	H-K	K-L	$(V$-$K)_0$	IRAS	K-[12]	K-[25]	$m_{\rm bol}$	$m_{{\rm bol},V}$
154	–	–	–	–	–	15048-7216	–	–	–	–
155	3.68	1.00	0.45	0.39	–	15209-3251	0.86	1.10	–	–
156	–	–	–	–	–	15437-5451	–	–	–	5.05
157	2.50	1.15	0.32	0.42	6.64	15548-7420	0.86	1.14	5.57	6.36
158	5.49	1.16	0.31	0.37	7.03	16026-5436	3.48	4.07	8.46	8.13
159	4.46	1.16	0.36	0.32	7.59	16079-6305	0.85	1.55	7.54	7.70
160	–	–	–	–	–	16097-6158	–	–	–	6.39
161	2.42	1.34	0.46	0.34	8.36	16209-2808	1.03	1.86	5.59	6.39
162	2.85	1.05	0.32	0.22	5.95	16245-5611	0.84	1.00	5.78	5.97
163	1.53	2.08	0.73	0.83	9.00	16316-5026	2.52	3.23	4.97	6.10
164	3.69	1.60	0.63	0.58	–	16317-4933	1.83	2.59	–	–
165	0.56	1.23	0.39	0.34	8.58	16334-3107	1.22	1.84	3.67	4.78
166	3.80	1.16	0.40	0.33	6.37	16382-5727	0.87	1.25	6.85	7.34
167	2.98	1.17	0.35	0.28	7.46	16396-5542	0.78	1.00	5.92	6.01
168	2.67	1.19	0.41	0.38	6.78	16472-6056	0.93	1.35	5.74	6.62
169	–	–	–	–	–	–	–	–	–	8.56
170	3.35	1.13	0.45	0.40	–	16546-6000	1.33	1.56	–	–
171	2.99	1.19	0.50	0.46	8.44	16552-5335	1.64	2.05	6.04	7.38
172	0.26	1.17	0.55	0.63	9.02	17001-3651	2.14	2.75	3.21	5.18
173	4.53	1.01	0.23	-0.04	4.71	17105-3219	–	–	7.29	7.24
174	3.81	1.04	0.41	–	6.15	17169-2311	0.87	–	–	5.95
175	1.43	1.07	0.31	0.24	6.33	17188-4141	0.73	0.96	4.36	4.92
176	–	–	–	–	–	17186-2914	–	–	–	–
177	3.12	1.15	0.32	0.28	6.14	17204-3258	0.92	–	6.07	6.42
178	–	–	–	–	–	17206-2826	–	–	–	4.63
179	3.71	1.00	0.22	0.12	5.17	17385-5356	0.74	0.89	6.60	6.93
180	4.62	1.78	0.78	0.68	–	17483-2811	2.43	–	–	–
181	3.05	1.07	0.55	–	–	17490-3502	1.47	–	–	–
182	3.04	0.97	0.24	0.19	4.95	17566-3019	0.51	0.89	5.90	6.36
183	3.47	1.31	0.23	–	4.77	18006-6510	0.68	0.69	–	6.63
184	–	–	–	–	–	18028-2555	–	–	–	6.98
185	4.57	1.09	0.28	0.03	5.48	18029-2541	–	–	7.34	7.16
186	3.28	0.85	0.25	0.18	4.58	18058-3658	0.53	0.76	6.08	6.24
187	3.40	0.99	0.22	0.16	4.80	18081-6749	0.60	0.64	6.27	6.26
188	3.23	1.15	0.33	0.35	6.22	18085-3625	1.00	1.41	6.22	6.62
189	–	–	–	–	–	18134-4902	–	–	–	8.90
190	–	–	–	–	–	18246-3304	–	–	–	8.72
191	2.66	1.04	0.30	0.28	6.97	18310-3541	0.95	1.37	5.68	5.29
192	–	–	–	–	–	18354-3436	–	–	–	–
193	4.74	1.03	0.25	0.14	4.52	18425-2341	0.71	–	7.50	7.26
194	–	–	–	–	–	19155-3922	–	–	–	9.10
195	–	–	–	–	–	–	–	–	–	7.10
196	5.96	0.75	0.34	0.27	5.06	19477-3221	–	–	8.80	8.23
197	1.66	0.96	0.22	0.17	5.02	20100-6225	0.58	0.74	4.57	3.91
198	1.30	1.06	0.39	0.35	6.76	20120-4433	1.62	2.72	4.45	3.75
199	–	–	–	–	–	20231-4046	–	–	–	8.20
200	4.02	1.33	0.93	–	7.21	21172-4819	2.54	2.86	–	6.92
201	5.76	0.90	0.18	0.10	4.07	21307-2820	–	–	8.50	8.22
202	-2.12	1.14	0.43	0.44	8.57	22196-4612	1.64	2.41	1.07	2.13
203	5.01	0.86	0.23	0.21	4.55	22200-5412	0.81	–	7.83	7.64
204	5.17	0.92	0.21	0.16	4.42	22421-4508	0.51	–	7.99	7.99
205	4.99	1.00	0.25	0.19	5.35	–	–	–	7.93	8.41

Table 4. Spectroscopic data and clustering results

Hen	I_{ZrO}	I_{TiO}	I_{NaD}	I_{LaO}	S/N	w	l	b	C_2	C_6	C_f
1	–	–	–	–	–	4.27	311.9	-53.7	1	2	e
2	–	–	–	–	–	4.59	300.6	-37.7	1	2	e
3	0.14	0.44	0.54	0.04	188	4.52	231.1	-40.9	1	2	e
4	0.08	0.23	0.43	0.06	182	3.37	297.5	-30.3	1	2	e
5	0.18	0.31	0.43	0.03	157	3.47	237.6	-32.3	1	2	e
6	0.17	0.43	0.55	0.05	233	3.61	258.3	-33.9	1	2	e
7	0.16	0.19	0.37	0.03	70	3.22	244.2	-26.5	1	1	e
8	0.28	0.34	0.46	0.03	188	3.15	246.5	-24.2	2	4	i
9	0.16	0.18	0.41	0.05	306	3.27	270.0	-28.2	1	2	e
10	0.22	0.39	0.54	0.06	192	3.27	296.3	-28.2	1	1	e
11	0.28	0.71	0.90	0.20	107	3.01	234.6	-15.8	2	6	i
12	0.20	0.33	0.42	0.03	174	3.10	252.2	-22.0	2	6	i
13	0.19	0.34	0.45	0.04	65	3.12	256.2	-22.6	1	2	e
14	0.18	0.21	0.43	0.05	157	3.03	243.6	-17.7	1	2	e
15	0.28	0.70	0.91	0.17	64	3.00	236.7	-14.8	2	6	i
16	0.15	0.35	0.47	0.04	125	3.05	247.8	-18.9	2	4	i
17	0.24	0.36	0.51	0.04	109	3.02	243.6	-16.7	1	2	e
18	0.27	0.36	0.47	0.02	139	2.96	239.9	-11.2	1	3	e
19	0.31	0.24	0.49	0.04	172	2.95	242.5	-8.7	2	4	i
20	0.17	0.44	0.54	0.04	155	2.99	256.8	-14.1	2	4	i
21	0.30	0.54	0.72	0.10	186	2.94	244.6	-7.3	2	6	i
22	0.06	0.09	0.34	0.06	90	3.01	265.2	-16.5	0	0	–
23	0.50	0.28	0.66	0.13	123	2.94	244.6	-6.3	2	6	i
24	0.36	0.40	0.73	0.08	201	2.94	247.8	-7.1	2	6	i
25	0.27	0.77	0.90	0.20	81	3.04	271.6	-18.3	2	6	i
26	–	–	–	–	–	2.92	239.0	-1.3	0	0	–
27	0.49	0.21	0.84	0.18	79	3.19	294.8	-25.7	2	6	i
28	0.27	0.21	0.44	0.06	219	3.10	282.1	-21.6	1	2	e
29	0.37	0.17	0.77	0.05	169	2.92	241.2	-1.6	2	4	i
30	0.51	0.33	0.76	0.20	119	2.93	245.9	-3.0	2	6	i
31	0.16	0.21	0.41	0.04	172	3.01	273.2	-16.3	1	2	e
32	0.28	0.82	0.94	0.13	171	2.95	258.5	-8.3	2	6	i
33	0.57	0.39	0.99	0.56	31	2.92	246.2	-0.5	0	0	i
34	0.17	0.53	0.62	0.04	215	3.03	277.9	-17.9	2	6	i
35	0.14	0.14	0.44	0.07	243	3.08	283.8	-20.6	1	2	e
36	0.16	0.39	0.48	0.03	210	2.92	248.4	-1.0	2	5	i
37	0.15	0.50	0.59	0.02	218	2.93	257.5	-5.9	2	4	i
38	0.18	0.39	0.50	0.05	194	2.94	258.4	-6.4	2	4	i
39	0.18	0.42	0.52	0.04	95	3.03	278.6	-17.7	2	4	i
40	0.12	0.43	0.59	0.04	211	2.92	248.5	0.9	2	5	i
41	0.21	0.38	0.50	0.03	202	2.93	246.7	2.8	2	5	i
42	0.44	0.21	0.81	0.17	104	2.92	249.2	1.2	2	4	i
43	0.25	0.31	0.51	0.03	237	2.93	245.8	4.5	1	1	e
44	0.24	0.40	0.51	0.03	207	2.93	248.8	3.1	2	4	i
45	0.17	0.24	0.46	0.05	147	2.92	251.2	1.5	2	4	i
46	0.29	0.28	0.50	0.05	126	2.92	255.3	-0.4	2	2	e
47	0.52	0.29	0.88	0.10	118	2.92	254.5	1.0	2	4	i
48	0.24	0.41	0.55	0.02	155	2.93	250.6	5.5	2	4	i
49	0.38	0.18	0.90	0.14	94	2.92	257.8	0.4	2	4	i
50	0.25	0.67	0.79	0.41	49	2.93	256.3	2.3	2	5	i
51	0.42	0.19	0.89	0.30	122	2.93	268.8	-6.0	2	4	i

Table 4. Spectroscopic data and clustering results (continued)

Hen	I_{ZrO}	I_{TiO}	I_{NaD}	I_{LaO}	S/N	w	l	b	C_2	C_6	C_f
52	0.20	0.30	0.46	0.05	97	2.93	267.2	-4.7	1	2	e
53	0.45	0.39	0.84	0.18	127	2.92	259.1	1.7	2	6	i
54	0.59	0.43	0.78	0.03	147	2.93	254.1	6.0	2	6	i
55	0.36	0.19	0.94	0.16	108	2.92	265.2	-1.7	2	6	i
56	0.29	0.45	0.59	0.04	169	2.95	274.2	-8.3	2	5	i
57	0.23	0.44	0.54	0.03	162	2.93	269.1	-4.2	2	4	i
58	0.09	0.27	0.43	0.05	71	2.92	266.5	-1.0	1	1	e
59	0.20	0.32	0.44	0.04	98	3.01	286.1	-16.5	1	2	e
60	–	–	–	–	–	2.95	277.6	-9.4	0	0	–
61	0.20	0.18	0.42	0.06	60	2.93	262.8	4.0	1	2	e
62	0.40	0.18	0.87	0.20	78	2.93	263.5	4.3	2	6	i
63	0.12	0.29	0.48	0.04	271	2.95	258.2	9.3	1	2	e
64	0.51	0.30	0.72	0.09	179	2.97	254.8	12.4	2	4	i
65	0.15	0.38	0.53	0.04	227	2.93	264.6	3.8	1	2	e
66	0.16	0.39	0.52	0.03	152	2.95	259.1	9.0	2	4	i
67	0.10	0.41	0.50	0.04	146	3.11	296.1	-22.3	2	2	e
68	0.49	0.22	0.97	0.37	73	2.92	276.3	-1.5	2	6	i
69	0.53	0.30	0.84	0.19	124	2.95	284.5	-10.0	2	6	i
70	0.19	0.38	0.52	0.03	133	2.93	272.3	4.5	1	2	e
71	0.19	0.22	0.45	0.05	110	2.95	284.0	-8.6	1	2	e
72	0.36	0.21	0.93	0.26	128	2.94	283.5	-8.0	2	6	i
73	0.29	0.63	0.75	0.05	86	2.93	273.0	4.9	2	6	i
74	0.16	0.21	0.41	0.05	82	2.93	282.4	-5.9	1	1	e
75	0.51	0.28	0.88	0.17	65	2.94	284.3	-7.7	2	6	i
76	0.18	0.22	0.47	0.06	142	3.02	265.2	16.9	1	2	e
77	0.23	0.36	0.48	0.04	112	2.93	276.4	4.0	2	4	i
78	0.44	0.23	0.93	0.25	159	2.94	275.1	6.9	2	6	i
79	0.16	0.35	0.51	0.08	164	2.96	288.4	-10.7	1	2	e
80	0.33	0.56	0.70	0.05	205	2.97	289.4	-12.0	2	6	i
81	0.41	0.17	0.72	0.25	43	2.93	283.9	-4.4	2	6	i
82	0.27	0.15	0.59	0.07	116	2.93	284.3	-5.0	2	5	i
83	0.23	0.17	0.52	0.07	77	2.93	278.5	3.2	1	1	e
84	0.23	0.15	0.95	0.07	108	2.93	283.4	-3.5	2	6	i
85	0.27	0.49	0.63	0.07	143	2.94	275.3	7.7	2	6	i
86	0.23	0.24	0.48	0.04	144	2.97	271.8	12.4	1	1	e
87	0.32	0.20	0.97	0.23	151	2.93	284.0	-4.1	2	4	i
88	0.17	0.42	0.52	0.04	224	3.08	267.2	21.0	2	4	i
89	0.17	0.37	0.52	0.07	234	2.93	284.8	-3.6	2	4	i
90	0.22	0.28	0.47	0.05	158	2.92	281.5	1.7	1	2	e
91	0.25	0.72	0.92	0.15	115	2.95	277.6	9.3	2	6	i
92	0.24	0.38	0.53	0.04	141	2.93	281.4	4.7	2	4	i
93	0.50	0.29	0.80	0.24	172	2.94	289.9	-7.9	2	6	i
94	0.45	0.22	0.89	0.20	69	2.92	287.0	-1.9	2	6	i
95	0.18	0.46	0.55	0.05	259	2.92	286.9	-1.7	2	4	i
96	0.47	0.23	0.87	0.25	79	2.93	283.5	4.8	2	4	i
97	0.21	0.43	0.55	0.05	185	2.93	283.1	5.9	2	4	i
98	0.26	0.42	0.53	0.04	155	2.92	285.6	2.0	2	4	i
99	0.39	0.29	0.87	0.10	230	2.93	284.9	3.5	2	6	i
100	0.30	0.24	0.93	0.08	157	2.92	287.1	-0.5	2	4	i
101	0.30	0.58	0.77	0.09	102	3.08	275.2	20.9	2	6	i
102	0.14	0.41	0.56	0.04	52	2.92	287.4	-0.6	0	0	–

Table 4. Spectroscopic data and clustering results (continued)

Hen	$I_{\rm ZrO}$	$I_{\rm TiO}$	$I_{\rm NaD}$	$I_{\rm LaO}$	S/N	w	l	b	C_2	C_6	C_f
103	0.39	0.32	0.88	0.16	71	2.92	288.1	0.0	2	6	i
104	0.17	0.41	0.55	0.05	155	2.93	285.8	6.1	2	4	i
105	0.22	0.38	0.52	0.05	92	2.92	289.1	-0.7	2	4	i
106	0.17	0.43	0.56	0.05	96	2.92	290.2	-2.1	2	4	i
107	0.44	0.21	0.88	0.21	75	2.93	287.9	3.3	2	4	i
108	0.14	0.26	0.50	0.06	293	2.93	287.8	3.6	1	1	e
109	0.28	0.55	0.66	0.04	165	2.94	293.3	-7.5	2	6	i
110	0.14	0.19	0.45	0.05	173	2.92	290.6	-1.4	1	2	e
111	0.44	0.19	0.89	0.24	134	2.92	290.2	0.3	2	4	i
112	0.14	0.71	0.88	0.05	108	2.95	286.9	9.7	2	6	i
113	0.24	0.32	0.50	0.04	139	2.93	293.4	-4.8	2	4	i
114	0.60	0.34	0.90	0.12	172	2.92	292.1	-0.7	2	6	i
115	0.47	0.26	0.73	0.13	84	2.92	292.3	0.0	2	6	i
116	–	–	–	–	–	2.93	296.4	-3.3	0	0	–
117	0.28	0.15	0.82	0.07	121	2.93	295.3	2.2	2	4	i
118	0.16	0.22	0.39	0.06	112	3.10	291.7	21.7	1	2	e
119	0.20	0.24	0.49	0.05	267	2.94	295.4	6.3	1	1	e
120	0.25	0.21	0.97	0.09	174	2.94	297.6	6.5	2	4	i
121	0.24	0.42	0.51	0.04	102	3.66	295.0	34.4	1	3	e
122	0.59	0.51	0.86	0.40	64	2.96	298.6	10.5	2	6	i
123	0.13	0.24	0.42	0.04	217	3.00	298.5	15.1	1	2	e
124	0.23	0.39	0.49	0.05	192	3.07	298.9	20.4	1	2	e
125	0.21	0.57	0.72	0.10	198	3.95	299.0	36.4	2	5	i
126	0.19	0.32	0.49	0.04	206	2.95	301.3	9.4	1	2	e
127	0.08	0.38	0.51	0.03	143	3.22	303.0	-26.7	2	4	i
128	0.35	0.15	0.89	0.39	67	3.07	302.0	20.1	2	6	i
129	0.25	0.29	0.46	0.05	260	3.01	302.8	16.0	1	2	e
130	0.49	0.23	0.82	0.18	152	2.93	303.6	-3.8	2	4	i
131	0.26	0.37	0.58	0.04	124	2.93	304.0	2.2	2	4	i
132	0.24	0.23	0.50	0.05	164	2.95	304.1	-10.1	1	2	e
133	0.24	0.31	0.47	0.06	203	2.93	305.4	6.1	1	2	e
134	0.19	0.35	0.43	0.03	105	3.43	308.1	31.5	2	4	i
135	0.24	0.14	0.91	0.06	129	3.04	307.1	18.3	2	4	i
136	0.51	0.27	0.99	0.47	44	2.92	306.4	-0.4	2	6	i
137	0.15	0.38	0.52	0.05	252	2.97	309.6	11.4	1	2	e
138	0.15	0.41	0.52	0.03	172	2.95	306.6	-9.1	1	2	e
139	0.17	0.41	0.54	0.05	88	2.93	308.1	-5.5	2	4	i
140	0.14	0.39	0.55	0.06	171	2.94	310.7	6.9	2	4	i
141	0.29	0.60	0.78	0.07	175	2.92	309.9	2.0	2	6	i
142	0.75	0.60	1.03	0.46	28	2.93	308.7	-4.8	2	6	i
143	0.15	0.28	0.51	0.07	178	3.05	316.4	19.3	1	2	e
144	0.45	0.47	0.76	0.14	148	2.93	312.5	2.4	2	6	i
145	0.21	0.38	0.54	0.06	100	2.92	312.9	1.3	2	4	i
146	0.42	0.46	0.67	0.09	176	2.93	312.6	-2.6	2	6	i
147	0.19	0.27	0.45	0.04	198	3.45	329.1	31.9	1	1	e
148	0.35	0.18	0.87	0.12	154	2.92	315.4	-0.8	2	6	i
149	0.20	0.28	0.46	0.06	159	3.06	327.1	19.5	1	2	e
150	0.16	0.35	0.51	0.03	134	2.92	317.0	-1.3	1	2	e
151	0.57	0.37	0.89	0.22	77	2.93	316.2	-3.6	2	6	i
152	0.43	0.17	0.95	0.32	51	2.93	320.2	3.7	2	6	i
153	0.42	0.18	0.93	0.45	119	3.00	327.9	15.1	2	6	i

Table 4. Spectroscopic data and clustering results (continued)

Hen	$I_{\rm ZrO}$	$I_{\rm TiO}$	$I_{\rm NaD}$	$I_{\rm LaO}$	S/N	w	l	b	C_2	C_6	C_f
154	0.05	0.06	0.22	0.07	152	2.97	312.8	-12.0	0	0	–
155	0.52	0.25	0.76	0.19	144	3.07	335.9	20.3	2	6	i
156	0.46	0.68	0.85	0.09	125	2.92	326.0	0.1	2	6	i
157	0.31	0.14	0.96	0.07	245	3.01	314.5	-15.8	2	4	i
158	0.44	0.22	0.98	0.24	70	2.92	328.3	-1.5	2	6	i
159	–	–	–	–	–	2.94	323.2	-8.2	2	6	i
160	0.22	0.75	0.90	0.23	74	2.94	324.1	-7.5	2	6	i
161	0.51	0.28	0.90	0.14	88	3.00	349.2	15.4	2	6	i
162	0.21	0.42	0.54	0.03	249	2.93	329.5	-4.7	2	4	i
163	–	–	–	–	–	2.92	334.4	-1.5	2	6	i
164	0.77	0.64	1.08	0.25	64	2.92	335.1	-0.9	2	6	i
165	0.48	0.37	0.81	0.22	167	2.96	348.9	11.3	2	6	i
166	–	–	–	–	–	2.94	329.9	-7.0	2	4	i
167	–	–	–	–	–	2.93	331.3	-5.9	2	6	i
168	–	–	–	–	–	2.95	327.9	-10.1	2	4	i
169	–	–	–	–	–	3.02	321.1	-16.7	1	2	e
170	–	–	–	–	–	2.96	329.3	-10.3	2	6	i
171	–	–	–	–	–	2.94	334.4	-6.3	2	5	i
172	–	–	–	–	–	2.93	348.0	3.5	2	5	i
173	–	–	–	–	–	2.93	353.0	4.4	1	2	e
174	–	–	–	–	–	2.95	1.3	8.5	2	5	i
175	–	–	–	–	–	2.93	346.3	-2.4	2	4	i
176	–	–	–	–	–	2.93	356.5	4.8	0	0	i
177	–	–	–	–	–	2.93	353.7	2.3	2	4	i
178	–	–	–	–	–	2.93	357.4	4.9	2	5	i
179	–	–	–	–	–	2.97	337.8	-11.8	1	2	e
180	–	–	–	–	–	2.92	0.9	-0.1	2	6	i
181	–	–	–	–	–	2.93	355.1	-3.8	2	5	i
182	–	–	–	–	–	2.93	360.0	-2.7	1	1	e
183	–	–	–	–	–	3.05	328.7	-19.4	1	1	e
184	–	–	–	–	–	2.92	4.5	-1.8	2	4	i
185	–	–	–	–	–	2.92	4.7	-1.5	2	4	i
186	–	–	–	–	–	2.94	355.1	-7.7	1	1	e
187	–	–	–	–	–	3.08	326.3	-21.0	1	2	e
188	–	–	–	–	–	2.94	355.9	-7.9	2	4	i
189	–	–	–	–	–	2.99	344.8	-14.4	2	2	e
190	–	–	–	–	–	2.95	0.4	-9.3	1	2	e
191	–	–	–	–	–	2.97	358.6	-11.6	2	6	i
192	–	–	–	–	–	2.97	0.0	-12.0	0	0	i
193	–	–	–	–	–	2.95	10.7	-8.7	1	2	e
194	–	–	–	–	–	3.09	358.5	-21.2	1	2	e
195	–	–	–	–	–	3.17	347.0	-24.8	2	6	i
196	–	–	–	–	–	3.18	7.9	-25.3	2	4	i
197	–	–	–	–	–	3.53	334.2	-32.9	2	4	i
198	–	–	–	–	–	3.49	355.4	-32.5	2	6	i
199	–	–	–	–	–	3.63	0.3	-34.1	1	2	e
200	–	–	–	–	–	4.47	350.7	-43.8	2	6	i
201	–	–	–	–	–	4.43	22.5	-45.4	1	1	e
202	–	–	–	–	–	4.25	350.2	-54.5	2	6	i
203	–	–	–	–	–	4.32	338.0	-51.3	1	2	e
204	–	–	–	–	–	4.17	349.4	-58.6	1	1	e
205	–	–	–	–	–	3.38	304.8	-30.7	1	2	e