

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
2	Apollonius	61.1	4.5	2	38				
3	Condorcet	69.6	12.1	2	38				
4	Firmicus	63.4	7.3	2	38				
5	Mare Spumans	65.0	1.0	2	38				
6	Mare Undarum	69.0	7.0	2	38				
7	Sinus Successus	58.0	1.0	2	38				
8	Eimart	64.8	24.0	3	27				
9	Mare Anguis	67.0	22.0	3	27				
10	Holden	62.5	-19.1	4	60				
11	Lame	64.5	-14.7	4	49, 60				
12	Lohse	60.2	-13.7	4	49				
13	Vendelinus	61.8	-16.3	4	60				
14	Atwood	57.7	-5.8	5	49				
15	Bilharz	56.3	-5.8	5	49				
16	Langrenus	60.9	-8.9	5	49				
17	Naonobu	57.8	-4.6	5	49				
18	Webb	60.0	-0.9	5	49				
19	Hase	62.5	-29.4	6	59				
20	Petavius	60.4	-25.3	6	59				
21	Rimae Petavius	60.0	-25.2	6	59				
22	Wrottesley	56.8	-23.9	6	59				
23	Fraunhofer	59.1	-39.5	7	69				
24	Furnerius	60.4	-36.3	7	69				
25	Berosus	69.9	33.5	8	16				
26	Geminus	56.7	34.5	8	16				
27	Hahn	73.6	31.3	8	16				
28	Lacus Spei	65.0	43.0	8	16				
29	Messala	59.9	39.2	8	16				
30	Endymion	56.5	53.6	9	7				
31	Mare Humboldtianum	80.0	57.0	9	7, II				Libration object
32	Borda	46.6	-25.1	10	59				
33	Santbech	44.0	-20.9	10	59				
34	Snellius	55.7	-29.3	10	59, 69				
35	Vallis Snellius	59.0	-31.0	10	59, 69				
36	Cleomedes	55.5	27.7	11	26				
37	Debes	51.7	29.5	11	26				
38	Delmotte	60.2	27.1	11	26				
39	Macrobius	46.0	21.3	11	26				
40	Rima Cleomedes	56.0	28.0	11	26				
41	Tralles	52.8	28.4	11	26				
42	Reichenbach	48.0	-30.3	12	59, 69				
43	Stevinus	54.2	-32.5	12	69				
44	Mallet	54.2	-45.4	14	68				
45	Neander	39.9	-31.3	14	68				
46	Rheita	47.2	-37.1	14	68				
47	Vallis Rheita	51.0	-42.0	14	68				
48	Young	50.9	-41.5	14	68				
49	Dorsum Opper	52.0	19.0	15	26				
50	Promontorium Lavinium	49.0	15.0	15	26				
51	Promontorium Olivium	49.0	15.0	15	26				
52	Cepheus	45.8	40.8	16	15				
53	Franklin	47.7	38.8	16	15				
54	Steinheil	46.5	-48.6	17	68, 76				
55	Watt	48.6	-49.5	17	76				
56	Palus Somni	44.0	15.0	18	26, 37				
57	Proclus	46.8	16.1	18	26				
58	Newcomb	43.8	29.9	19	15, 25				
59	Brenner	39.3	-39.0	20	68				
60	Fabricius	42.0	-42.9	20	68				
61	Metius	43.3	-40.4	20	68				
62	Sinus Concordiae	43.0	11.0	21	37				
63	Janssen	41.5	-44.9	22	67, 68				
64	Lockyer	36.7	-46.2	22	67				
65	Montes Pyrenaeus	41.0	-14.0	23	48, 58				
66	Atlas	44.4	46.7	24	15				
67	Hercules	39.1	46.7	24	14				
68	Beaumont	28.8	-18.0	25	57, 58				
69	Bohnenberger	40.0	-16.2	25	58				
70	Daguerre	33.6	-11.9	25	47				
71	Mare Nectaris	35.0	-15.0	25	47, 58				
72	Rosse	35.0	-17.9	25	58				
73	Cauchy	38.6	9.6	26	36				

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	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
74	Rima Cauchy	39.0	10.0	26	36				
75	Rupes Cauchy	37.0	9.0	26	36				
76	Carmichael	40.4	19.6	27	25				
77	Hill	40.8	20.9	27	25				
78	Maraldi	34.9	19.4	27	25				
79	Mons Maraldi	35.0	20.0	27	25				
80	Montes Taurus	36.0	26.0	27	25				
81	Romer	36.4	25.4	27	25				
82	Sinus Amoris	38.0	19.0	27	25				
83	Capella	34.9	-7.6	28	47				
84	Censorinus	32.7	-0.4	28	47				
85	Isidorus	33.5	-8.0	28	47				
86	Vallis Capella	35.0	-7.0	28	47				
87	Fracastorius	33.0	-21.2	29	58				
88	Biela	51.3	-54.9	30	75, 76				
89	Hagecius	46.6	-59.8	30	75				
90	Hommel	33.0	-54.6	30	75				
91	Nearch	39.1	-58.5	30	75				
92	Pitiscus	30.9	-50.4	30	75				
93	Rosenberger	43.1	-55.4	30	75				
94	Vlacq	38.8	-53.3	30	75				
95	Piccolomini	32.2	-29.7	31	58, 68				
96	Nicolai	25.9	-42.4	32	67				
97	Spallanzani	24.7	-46.3	32	67				
98	Stiborius	32.0	-34.4	32	67				
99	Wohler	31.4	-38.2	32	67				
100	Chacornac	31.7	29.8	33	14, 25				
101	Posidinius	29.9	31.8	33	14				
102	Catena Littrow	29.0	22.0	34	24				
103	Dorsa Aldovandri	29.0	24.0	34	24				
104	Le Monnier	30.6	26.6	34	24, 25				
105	Mons Argaeus	29.0	19.0	34	24, 25				
106	Mons Vitrovius	31.0	19.0	34	25				
107	Rimae Littrow	31.0	23.0	34	25				See VMA Littrow LAC LM
108	Dorsa Barlow	31.0	15.0	35	25, 36				
109	Jansen	28.7	13.5	35	36				
110	Maskelyne	30.1	2.2	35	36				
111	Sinas	31.6	8.8	35	36				
112	Burg	28.2	45.0	36	14				
113	Lacus Mortis	27.0	45.0	36	14				
114	Mason	30.5	42.6	36	14				
115	Plana	28.2	42.2	36	14				
116	Rimae Burg	26.0	45.0	36	14				
117	Madler	29.8	-11.0	37	47				
118	Theophilus	26.4	-11.4	37	46, 47				
119	Cyrellus	24.0	-13.2	38	46				
120	Ibn Rushd	21.7	-11.7	38	46				
121	Kant	20.1	-10.6	38	46				
122	Mons Penck	22.0	-10.0	38	46				
123	Catharina	23.6	-18.0	39	57				
124	Hypatia	22.6	-4.3	40	46				
125	Rupes Altai	23.0	-24.0	40	57				
126	Tacitus	19.0	-16.2	40	57				
127	Dorsa Lister	22.0	19.0	41	24				
128	Dorsa Smirnov	25.0	25.0	41	24				
129	Dorsum Azara	20.0	26.0	41	24				
130	Dorsum Nicol	23.0	18.0	41	24				
131	Sarabhai	21.0	24.7	41	24				
132	Very	25.3	25.6	41	24				
133	Sinus Asperitatis	25.0	-6.0	42	46, 47				
134	Torricelli	28.5	-4.6	42	47				
135	Dawes	26.4	17.2	43	24				
136	Plinius	23.7	15.4	43	24				
137	Promontorium Archerusia	22.0	17.0	43	24				
138	Rimae Plinius	24.0	17.0	43	24				
139	Aldrin	22.1	1.4	44	35				
140	Arago	21.4	6.2	44	35				
141	Armstrong	25.0	1.4	44	35				
142	Collins	23.7	1.3	44	35				
143	Lamont	23.2	5.0	44	35				
144	Ritter	19.2	2.0	44	35				
145	Ross	21.7	11.7	44	35				

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146	Sabine	20.1	1.4	44	35				
147	Sinus Honoris	18.0	12.0	44	35				
148	Moltke	24.2	-0.6	45	46				
149	Rimae Hypatia	23.0	-1.0	45	46				
150	Celsius	20.1	-34.1	46	67				
151	Lindenau	24.9	-32.3	46	67				
152	Rabbi Levi	23.6	-34.7	46	67				
153	Rothmann	27.7	-30.8	46	67				
154	Zagut	22.1	-32.0	46	67				
155	Delambre	17.5	-1.9	47	46				
156	Theon Jr	15.8	-2.3	47	45, 46				
157	Theon Sr	15.4	-0.8	47	45, 46				
158	Aristoteles	17.4	50.2	48	5				
159	Arnold	35.9	66.8	48	5				
160	C Mayer	17.3	63.2	48	5				
161	Egede	10.6	48.7	48	13, 5				
162	Eudoxus	16.3	44.3	48	13				
163	Galle	22.3	55.9	48	5				
164	Mitchell	20.2	49.7	48	5				
165	Sheepshanks	16.9	59.2	48	5				
166	Playfair	8.4	-23.5	49	56				
167	Sacrobosco	16.7	-23.7	49	56, 57				
168	Barocius	16.8	-44.9	50	66				
169	Breislak	18.3	-48.2	50	66				
170	Buch	17.7	-38.8	50	66				
171	Busching	20.0	-38.0	50	66				
172	Clairaut	13.9	-47.7	50	66				
173	Maurolycus	14.0	-41.8	50	66				
174	Gemma Frisius	13.3	-34.2	51	66				
175	Goodacre	14.1	-32.7	51	66				
176	Poisson	10.6	-30.4	51	56, 66				
177	Lacus Doloris	9.0	17.0	52	23				
178	Lacus Felicitatis	5.0	19.0	52	22				
179	Lacus Gaudii	13.0	17.0	52	23				
180	Lacus Hiemalis	14.0	15.0	52	23				
181	Lacus Lenitatis	12.0	14.0	52	23, 34				
182	Lacus Odii	7.0	19.0	52	23				
183	Montes Haemus	13.0	17.0	52	23				
184	Julius Caesar	15.4	9.0	53	34				
185	Rima Ariadaeus	13.0	7.0	53	34				
186	Abulfeda	13.9	-13.8	54	45				
187	Catena Abulfeda	17.0	-17.0	54	56, 57				
188	Abenezra	11.9	-21.0	55	56				
189	Almanon	15.2	-16.8	55	56				
190	Apianus	7.9	-26.9	55	56				
191	Azophi	12.7	-22.1	55	56				
192	Geber	13.9	-19.4	55	56				
193	Dorsum Buckland	12.0	21.0	56	23				
194	Dorsum Gast	9.0	24.0	56	23				
195	Dorsum Owen	11.0	25.0	56	23				
196	Dorsum Von Cotta	12.0	24.0	56	23				
197	Menelaus	16.0	16.3	56	23				
198	Rimae Menelaus	17.0	17.0	56	24				
199	Rimae Sulpicius Gallus	10.0	21.0	56	23				
200	Sulpicius Gallus	11.6	19.6	56	23				
201	Linne	11.8	27.7	57	23				
202	Asclepi	25.4	-55.1	58	74				
203	Baco	19.1	-51.0	58	74				
204	Cuvier	9.9	-50.3	58	74				
205	Jacobi	11.4	-56.7	58	74				
206	Kinau	15.1	-60.8	58	74				
207	Manzinus	26.8	-67.7	58	74				
208	Mutus	30.1	-63.6	58	74				
209	Tannerus	22.0	-56.4	58	74				
210	Manilius	9.1	14.5	59	23, 34				
211	Calippus	10.7	38.9	60	13				
212	Montes Caucasus	9.0	39.0	60	13				
213	Agrippa	10.5	4.1	61	34				
214	Godin	10.2	1.8	61	34				
215	Hyginus	6.3	7.8	61	34				
216	Rima Hyginus	6.3	7.8	61	33, 34				
217	Faraday	8.7	-42.4	62	66				

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	A	B	C	D	E	F	G	H	I
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218	Fernelius	4.9	-38.1	62	65				
219	Heraclitus	6.2	-49.2	62	73				Also required for Objective 81
220	Kaiser	6.5	-36.5	62	65, 66				
221	Licetus	6.7	-47.1	62	65				
222	Stofler	6.0	-41.1	62	65, 66				
223	Airy	5.7	-18.1	63	55, 56				
224	Argelander	5.8	-16.5	63	56				
225	Vogel	5.9	-15.1	63	56				
226	Blagg	1.5	1.3	64	33				
227	Bruce	0.4	1.1	64	33				
228	Murchison	-0.1	5.1	64	33				
229	Pallas	-1.6	5.5	64	33				
230	Rhaeticus	4.9	0.0	64	33, 44				
231	Rimae Triesnecker	4.0	4.0	64	33, 34				
232	Sinus Medii	0.0	0.0	64	33, 44				
233	Triesnecker	3.6	4.2	64	33				
234	Halley	5.7	-8.0	65	45				
235	Hind	7.4	-7.9	65	45				
236	Hipparchus	4.8	-5.5	65	44, 45				
237	Horrocks	5.9	-4.0	65	45				
238	Reaumur	0.7	-2.4	65	44				
239	Seeliger	3.0	-2.2	65	44				
240	Albatagnius	4.1	-11.2	66	44, 45				
241	Klein	2.6	-12.0	66	44				
242	Aliacensis	5.2	-30.6	67	55, 65				
243	Werner	3.3	-28.0	67	55				
244	Cassini	4.6	40.2	68	12				
245	Mons Blanc	1.0	45.0	68	12				
246	Montes Alpes	2.0	46.0	68	12				
247	Promontorium Agassiz	2.0	42.0	68	12				
248	Promontorium Deville	1.0	43.0	68	12				
249	Theaetetus	6.0	37.0	68	12				
250	Vallis Alpes	3.0	49.0	68	4, 12				
251	Aristillus	1.2	33.9	69	12				
252	Autolycus	1.5	30.7	69	12				
253	Sinus Lunicus	-1.0	32.0	69	12				
254	Mons Ampere	-4.0	19.0	70	22				
255	Mons Bradley	1.0	22.0	70	22				
256	Mons Hadley	5.0	27.0	70	22				
257	Mons Hadley Delta	4.0	26.0	70	22				
258	Mons Huygens	-3.0	20.0	70	22				
259	Mons Wolff	-7.0	17.0	70	21				
260	Montes Apenninus	-3.0	20.0	70	22				
261	Rima Hadley	3.0	25.0	70	22				
262	Nonius	3.8	-34.8	71	65				
263	Walter	0.7	-33.0	71	65				
264	Huggins	-1.4	-41.1	72	65				
265	Miller	0.8	-39.3	72	65				
266	Nasireddin	0.2	-41.0	72	65				
267	Orontius	-4.0	-40.3	72	65				
268	Proctor	-5.1	-46.4	72	65				
269	Saussure	-3.8	-43.4	72	65				
270	Purbach	-1.9	-25.5	73	55				
271	Regiomontanus	-1.0	-28.4	73	55				
272	Alpetragius	-4.5	-16.0	74	55				
273	Arzachel	-1.9	-18.2	74	55				
274	Rimae Arzachel	-1.2	-18.2	74	55				200mm
275	Thebit	-4.0	-22.0	74	55				
276	Alphonsus	-2.8	-13.4	75	44, 55				
277	Ammonius	-0.8	-8.5	75	44				
278	Flammarion	-3.7	-3.4	75	44				
279	Herschel	-2.1	-5.7	75	44				
280	Ptolemaeus	-1.8	-9.2	75	44				
281	Rima Flammarion	-5.0	-2.0	75	44				
282	Anaxagoras	-10.1	73.4	76	4				
283	Archytas	5.0	58.7	76	4				
284	Goldschmidt	-2.9	73.0	76	4				
285	W Bond	3.7	65.3	76	4				
286	Kirch	5.6	39.2	77	12				
287	Mons Piton	-1.0	41.0	77	12				
288	Montes Spitzbergen	-5.0	35.0	77	12				
289	Piazzi Smyth	-3.2	41.9	77	12				

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290	Archimedes	-4.0	29.7	78	22, 12				
291	Montes Archimedes	-5.0	26.0	78	22				
292	Deslandres	-5.2	-32.5	79	64, 65				
293	Hell	-7.8	-32.4	79	64				
294	Lexell	-4.2	-35.8	79	65				
295	Curtius	4.4	-67.2	80	73				
296	Cysatus	-6.1	-66.2	80	73				
297	Gruemberger	-10.0	-66.9	80	73				
298	Moretus	-5.5	-70.6	80	73				
299	Newton	-16.9	-76.7	80	73				
300	Pentland	11.5	-64.6	80	73, 74				
301	Short	-7.3	-74.6	80	73				
302	Simpelius	15.2	-73.0	80	73				
303	Zach	5.3	-60.9	80	73				
304	Deluc	-2.8	-55.0	81	73				
305	Heraclitus	6.2	-49.2	81	73				Also required for Objective 62
306	Lilius	6.2	-54.5	81	73				
307	Maginus	-6.2	-50.0	81	65, 73				
308	Catena Davy	-7.0	-11.0	82	43				
309	Davy	-8.1	-11.8	82	43				
310	Lalande	-8.6	-4.4	82	43				
311	Mosting	-5.9	-0.7	82	43				
312	Birt	-8.5	-22.4	83	54				
313	Promontorium Taenarium	-8.0	-19.0	83	54				
314	Rima Birt	-9.0	-21.0	83	54				
315	Rupes Recta	-7.0	-22.0	83	54				
316	Mons Pico	-9.0	46.0	84	11				
317	Montes Teneriffe	-13.0	48.0	84	3, 11				
318	Fontenelle	-18.9	63.4	85	3				
319	Philolaus	-32.4	72.1	85	3				
320	Plato	-9.3	51.6	85	3, 4				
321	Pictet	-7.4	-43.6	86	64, 65				
322	Sasserides	-9.3	-39.1	86	64				
323	Street	-10.5	-46.5	86	64				
324	Tycho	-11.2	-43.3	86	64				
325	Eratosthenes	-11.3	14.5	87	21, 32				
326	Sinus Aestuum	-8.0	12.0	87	32, 33				
327	Ball	-8.4	-35.9	88	64				
328	Gauricus	-12.6	-33.8	88	64				
329	Wurzelbauer	-15.9	-33.9	88	64				
330	Beer	-9.1	27.1	89	21				
331	Dorsum Grabau	-14.0	30.0	89	11				
332	Dorsum Higazy	-17.0	28.0	89	21				
333	Feuillee	-9.4	27.4	89	21				
334	Heinrich	-15.3	24.8	89	21				
335	Landsteiner	-14.8	31.3	89	11				
336	Timocharis	-13.1	26.7	89	21				
337	Pitatus	-13.5	-29.8	90	54, 64				
338	Rimae Pitatus	-12.3	-29.2	90	54				
339	Stadius	-13.7	10.5	91	32				
340	Clavius	-14.4	-58.4	92	72, 73				
341	Porter	-10.1	-56.1	92	72				
342	Rutherford	-12.1	-60.9	92	72				
343	Bonpland	-17.4	-8.3	93	42				
344	Dorsum Guettard	-18.0	-10.0	93	42				
345	Fra Mauro	-17.0	-6.0	93	42, 43				
346	Parry	-15.8	-7.9	93	42, 43				
347	Rimae Parry	-17.0	-8.0	93	42, 43				300mm
348	Montes Recti	-20.0	48.0	94	11				
349	Copernicus	-20.0	9.7	95	31				
350	Mare Imbrium	-20.0	30.0	96	9-12, 19-21				
351	Heinsius	-17.7	-39.5	97	64				
352	Montanari	-20.6	-45.8	97	64				
353	Wilhelm	-20.8	-43.1	97	63, 64				
354	Blancanus	-21.5	-63.6	98	72				
355	Kircher	-45.3	-67.1	98	71, 72				
356	Scheiner	-27.8	-60.5	98	72				
357	Wilson	-42.4	-69.2	98	72				
358	Longomontanus	-22.0	-49.5	99	64, 72				
359	Bullialdus	-22.2	-20.7	100	53				
360	Konig	-24.6	-24.1	100	53				
361	Campanus	-27.8	-28.0	101	53				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
362	Kies	-22.5	-26.3	101	53				
363	Mercator	-26.1	-29.3	101	53				
364	Rupes Mercator	-23.0	-30.0	101	53				
365	Darney	-23.6	-14.5	102	42, 53				
366	Kuiper	-22.7	-9.8	102	42				
367	Mare Cognitum	-23.0	-10.0	102	42				
368	Mons Moro	-20.0	-12.0	102	42				
369	Lansberg	-26.6	-0.3	103	42				
370	Reinhold	-22.8	3.3	103	31				
371	Dorsum Heim	-29.0	31.0	104	10				
372	Dorsum Zirkel	-24.0	29.0	104	10, 20				
373	Lambert	-21.0	25.8	104	20				
374	Mons La Hire	-25.0	28.0	104	20				
375	Pytheas	-20.6	20.5	104	20				
376	Montes Carpatius	-25.0	15.0	105	20, 31				
377	Rima Guy-Lussac	-22.0	13.0	105	31				
378	Bianchini	-34.3	48.7	106	2, 10				
379	C Herschel	-31.2	34.5	106	10				
380	Helicon	-23.1	40.4	106	10				
381	Le Verrier	-20.6	40.3	106	11				
382	Mairan	-43.4	41.6	106	9				
383	Maupertuis	-27.3	49.6	106	2				
384	Montes Jura	-37.0	47.0	106	10				
385	Promontorium Heraclides	-34.0	41.0	106	10				
386	Promontorium La Place	-26.0	46.0	106	10				
387	Sharp	-40.2	45.7	106	9, 10				
388	Sinus Iridum	-32.0	45.0	106	10				Also required for Objective Part 1-B
389	Casatus	-30.5	-72.6	107	72				
390	Klaproth	-26.0	-69.7	107	72				
391	Capuanus	-26.7	-34.1	108	63				
392	Cichus	-21.1	-33.3	108	63				
393	Hesiodus	-16.3	-29.4	108	54				
394	Lepaute	-33.6	-33.3	108	62				
395	Palus Epidemiarum	-27.0	-32.0	108	53, 63				
396	Ramsden	-31.8	-32.9	108	63				
397	Rima Hesiodus	-21.0	-30.0	108	53,54,63				
398	Rimae Ramsden	-31.0	-33.0	108	63				
399	Weiss	-19.5	-31.8	108	63, 64				
400	Epimenides	-30.2	-40.9	109	63				
401	Haidinger	-25.0	-39.2	109	63				
402	Hainzel	-33.5	-41.3	109	63				
403	Lacus Timoris	-28.0	-39.0	109	63				
404	Euclides	-29.5	-7.4	110	41				
405	Montes Rhipaeus	-28.0	-7.0	110	41, 42				
406	Hortensius	-28.0	6.5	111	30				
407	Mare Insularum	-22.0	7.0	111	30-32,41,42				
408	Milichius	-30.2	10.0	112	30				
409	Tobias Mayer	-29.1	15.6	112	19				
410	Agatharchides	-30.9	-19.8	113	52				
411	Hippalus	-30.2	-24.8	113	52, 53				
412	Promontorium Kelvin	-33.0	-27.0	113	52				
413	Rimae Hippalus	-29.0	-25.0	113	52, 53				200mm
414	Rupes Kelvin	-33.0	-28.0	113	52				
415	Delisle	-34.6	29.9	114	9, 19				
416	Diophantus	-34.3	27.6	114	19				
417	Mons Delisle	-36.0	29.0	114	19				
418	Mons Vinogradov	-43.4	22.4	114	19				
419	Encke	-36.6	4.6	115	30				
420	Kepler	-38.0	8.1	115	30				
421	Gassendi	-39.9	-17.5	116	52				
422	Gruithuisen	-39.7	32.9	117	9				
423	Mons Gruithuisen Delta	-39.5	36.0	117	9				
424	Mons Gruithuisen Gamma	-40.5	36.6	117	9				
425	Bayer	-35.0	-51.6	118	71				
426	Phocyclides	-57.3	-52.9	118	70				
427	Rost	-33.7	-56.4	118	71				
428	Schiller	-40.0	-51.8	118	71				
429	Weigel	-38.8	-58.2	118	71				
430	Montes Harbinger	-41.0	27.0	119	19				
431	Prinz	-44.1	25.5	119	19				
432	Dorsa Rubey	-42.0	-10.0	120	40				
433	Flamsteed	-44.3	-4.5	120	40				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
434	Letronne	-42.4	-10.6	120	40				
435	Doppelmayr	-41.4	-28.5	121	52				
436	Rimae Doppelmayr	-45.0	-26.0	121	52				
437	Rupes Liebig	-46.0	-25.0	121	51				
438	Aristarchus	-47.4	23.7	122	18				
439	Herodotus	-49.7	23.2	122	18				
440	Mons Herodotus	-53.0	27.0	122	18				Not in VMA
441	Montes Agricola	-54.0	29.0	122	18				
442	Rimae Aristarchus	-47.0	28.0	122	18,19				300mm
443	Rupes Toscanelli	-47.0	27.0	122	18				
444	Toscanelli	-47.5	27.9	122	18				
445	Vallis Schroter	-51.0	26.0	122	18				
446	Mersenius	-49.2	-21.5	123	51				
447	Rimae Mersenius	-45.0	-20.0	123	51				
448	Billy	-50.1	-13.8	124	40				
449	Hansteen	-52.0	-11.5	124	40				
450	Mons Hansteen	-50.0	-12.0	124	40				
451	Bettinus	-44.8	-63.4	125	71				
452	Segner	-48.3	-58.9	125	71				
453	Zucchius	-50.3	-61.4	125	71				
454	Marius	-50.8	11.9	126	29				
455	Reiner	-54.9	7.0	126	29				
456	Rima Galilaei	-59.0	13.0	126	28				
457	Clausius	-43.8	-36.9	127	62				
458	Drebbel	-49.0	-40.9	127	62				
459	Inghirami	-68.8	-47.5	127	61, 62				
460	Lacus Excellentiae	-43.0	-36.0	127	62				
461	Lee	-40.7	-30.7	127	62				
462	Lehmann	-56.0	-40.0	127	61, 62				
463	Schickard	-54.6	-44.4	127	62				
464	Vitello	-37.5	-30.4	127	62				
465	Cavendish	-53.7	-24.5	128	51				
466	Fourier	-53.0	-30.3	128	51, 61				
467	Henry	-56.8	-24.0	128	51				
468	Henry Freres	-58.9	-23.5	128	51				
469	Vieta	-56.3	-29.2	128	51, 61				
470	Nasmyth	-56.2	-50.5	129	70				
471	Noggerath	-45.7	-48.8	129	62, 70				
472	Wargentini	-60.2	-49.6	129	70				
473	Mons Rumker	-58.0	41.0	130	8				
474	Cavalerius	-66.8	5.1	131	28				
475	Galilaei	-62.7	10.5	131	28				
476	Hevelius	-67.3	2.2	131	28				
477	Planitia Descensus	-64.0	7.0	131	28				
478	Reiner Gamma	-59.0	8.0	131	28				
479	Cruger	-66.8	-16.7	132	50				
480	Rima Sirsalis	-60.0	-14.0	132	39, 50				
481	Rimae Darwin	-67.0	-20.0	132	50				300mm
482	Sirsalis	-60.4	-12.5	132	39				
483	Babbage	-56.8	59.5	133	2				
484	Bouguer	-35.8	52.3	133	2				
485	Foucault	-39.7	50.4	133	2				
486	Harpalus	-43.4	52.6	133	2				
487	J Herschel	-41.2	62.1	133	2				
488	Pythagoras	-62.8	63.5	133	2, 1				
489	Grimaldi	-68.6	-5.2	134	39				Libration object
490	Rimae Grimaldi	-64.0	-9.0	134	39				
491	Lacroix	-59.0	-37.9	135	61				
492	Vallis Baade	-76.0	-46.0	135	61, VI				
493	Vallis Inghirami	-73.0	-44.0	135	61				
494	Dorsa Geikie	53.0	-3.0	13a	48				
495	Dorsa Mawson	53.0	-7.0	13a	48				
496	Dorsum Cayeux	51.0	1.0	13a	37				
497	Dorsa Cato	47.0	1.0	13b	37				
498	Messier	47.6	-1.9	13b	48				
499	Montes Secchi	43.0	3.0	13b	37				
500	Secchi	43.5	2.4	13b	37				
501	Taruntius	46.5	5.6	13b	37				
502	Colombo	45.8	-15.1	13c	59				
503	Goclenius	45.0	-10.0	13c	48				
504	Gutenberg	41.2	-8.6	13c	48				
505	Lubbock	41.8	-3.9	13c	48				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
506	Dorsa Harker	64.0	14.0	1a	27, 38				
507	Dorsa Tetyaev	65.0	19.0	1a	27				
508	Mons Usov	63.0	12.0	1a	38				
509	Promontorium Agarum	66.0	14.0	1a	38				
510	Greaves	52.7	13.2	1b	37				
511	Lick	52.7	12.4	1b	37				
512	Mare Crisium	59.0	17.0	1b	26,27,37,38				
513	Peirce	53.5	18.3	1b	26				
514	Picard	54.7	14.6	1b	26, 37				
515	Swift	53.4	19.3	1b	26				
516	Yerkes	51.7	14.6	1b	26, 37				
517	Mare Australe	91.0	-46.0	L1	76, IV, V				Libration object
518	Oken	75.9	-43.7	L1	69, IV				Libration object
519	Mare Orientale	-95.0	-20.0	L10	50, VII				Libration object
520	Montes Cordillera	-80.0	-20.0	L10	39,50,VII				Libration object
521	Mare Marginus	88.0	12.0	L2	27, 38, III				Libration object
522	Mare Smythii	87.0	-2.0	L3	38,49,III,IV				Libration object
523	Hubble	86.9	22.1	L4	27, III				Libration object
524	Cusanus	70.8	72.0	L5	6, II				Libration object
525	Democritus	35.0	62.3	L5	5				
526	Gartner	34.6	59.1	L5	6				
527	Petermann	66.3	74.2	L5	5, II				Libration object
528	Cleostratus	-77.0	60.4	L6	1, I				Libration object
529	Markov	-62.7	53.4	L6	1				Libration object
530	Oenopides	-64.1	57.0	L6	1				Libration object
531	Volta	-84.9	54.0	L6	1, I				Libration object
532	Xenophanes	-81.4	57.6	L6	1, I				Libration object
533	Briggs	-69.1	26.5	L7	17				Libration object
534	Cardanus	-72.4	13.2	L7	28				Libration object
535	Eddington	-71.8	21.5	L7	17				Libration object
536	Krafft	-72.6	16.6	L7	17				Libration object
537	Russell	-75.4	26.5	L7	17				Libration object
538	Seleucus	-66.6	21.0	L7	17				Libration object
539	Struve	-76.6	23.0	L7	17,VIII				Libration object
540	Baily	-69.4	-66.8	L8	71, VIII				Libration object
541	Aston	-87.7	32.9	L9	8				Libration object
542	Ulugh Beigh	-81.9	32.7	L9	8, VII				Libration object
543	Mare Fecunditatis	52.0	-2.0	Part 1-B	37,48,49,59				
544	Mare Frigoris	-20.0	58.0	Part 1-B	1 to 6				
545	Mare Humorum	-39.0	-24.0	Part 1-B	51, 52				
546	Mare Nubium	-15.0	-20.0	Part 1-B	53, 54				
547	Mare Serenitatis	18.0	28.0	Part 1-B	13,14,23,24				
548	Mare Tranquillitatis	28.0	8.0	Part 1-B	35,36,47				
549	Mare Vaporum	3.0	13.0	Part 1-B	22, 33, 34				
550	Oceanus Procellarum	-50.0	0.0	Part 1-B	28				Also RUKL 8,9,17-19,29,39-41,VII
551	Sinus Iridum	-32.0	45.0	Part 1-B	10				Also required for Objective 106
552	Sinus Roris	-60.0	45.0	Part 1-B	1,8,9,I,VIII				
553	Abbot	54.8	5.6		37				
554	Abel	85.8	-34.6		69, IV				Libration object
555	Abetti	27.7	19.9		24				
556	Acosta	60.1	-5.6		49				
557	Adams	68.2	-31.9		69				
558	Al-Bakri	20.2	14.3		35				
559	Al-Biruni	92.5	17.9		III				Libration object
560	Alexander	13.5	40.3		13				
561	Alfraganus	19.0	-5.4		46				
562	Alhazen	71.8	15.9		27				
563	Al-Marrakushi	55.8	-10.4		48				
564	Ameghino	57.0	3.3		38				
565	Amontons	46.8	-5.3		48				
566	Amundsen	82.8	-84.5		73, 74, V				Libration object
567	Anaximander	-51.3	66.9		2				
568	Anaximenes	-44.5	72.5		3				
569	Andel	12.4	-10.4		45				
570	Andersson	-95.3	-49.7		VI				Libration object
571	Angstrom	-41.6	29.9		19				
572	Ansgarius	79.7	-12.7		49, IV				Libration object
573	Anuchin	101.3	-49.0		V				Libration object
574	Anville	49.5	1.9		37				
575	Aratus	4.5	23.6		22				
576	Ariadaeus	17.3	4.6		35				
577	Arrhenius	-91.3	-55.6		VI				Libration object



## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
578	Artemis	-25.4	25.0		20				300mm
579	Artsimovich	-36.6	27.6		19				
580	Aryabhata	35.1	6.2		36				
581	Asada	49.9	7.3		37				
582	Ashbrook	-112.5	-81.4		VI				Libration object
583	Auwers	17.2	15.1		24				
584	Auzout	64.1	10.3		38				
585	Avery	81.4	-1.4		49, IV				Libration object
586	Avicenna	-97.2	39.7		VIII				Libration object
587	Baade	-81.8	-44.8		61, VI, VII				Libration object
588	Babcock	93.9	4.2		III				Libration object
589	Back	80.7	1.1		38, III				Libration object
590	Baillaud	37.5	74.6		5				
591	Baily	30.4	49.7		6				
592	Balboa	-83.2	19.1		17, VIII				Libration object
593	Balmer	70.6	-20.1		60				
594	Banachiewicz	80.1	5.2		38, III				Libration object
595	Bancroft	-6.4	28.0		21, 22				
596	Banting	16.4	26.6		23				
597	Barkla	67.2	-10.7		49				
598	Barnard	86.4	-29.6		60, 69, IV				Libration object
599	Barrow	7.7	71.3		4				
600	Bartels	-89.9	24.5		17, VIII				Libration object
601	Beals	86.5	37.3		16, III				Libration object
602	Behaim	79.4	-16.5		60, IV				Libration object
603	Beketov	29.2	16.3		25				
604	Bela	2.3	24.7		22				
605	Belkovich	90.0	61.5		7, II				Libration object
606	Bell	-96.4	21.8		VIII				Libration object
607	Bellot	48.2	-12.4		48				
608	Bernouilli	60.7	35.0		16				
609	Berzelius	50.9	36.6		15				
610	Bessarion	-37.3	14.9		19				
611	Bessel	17.9	21.8		24				
612	Biot	51.1	-22.6		59				
613	Birmingham	-10.5	65.1		4, 3				
614	Black	80.4	-9.2		49, IV				Libration object
615	Blanchard	-94.4	-58.5		VI				Libration object
616	Blanchinus	2.5	-25.4		55				
617	Bliss	-13.5	53.0		3				
618	Bobillier	15.5	19.6		23				
619	Bode	-2.4	6.7		33				
620	Boethius	72.3	5.6		38				
621	Boguslawsky	43.2	-72.9		74				
622	Bohr	-86.4	12.8		28, VIII				Libration object
623	Boltzmann	-90.7	-74.9		VI				Libration object
624	Bombelli	56.2	5.3		38				
625	Boole	-87.4	63.7		2, I				Libration object
626	Borel	26.4	22.3		24				
627	Born	66.8	-6.0		49				
628	Boscovich	11.1	9.8		34				
629	Boss	89.2	45.8		16, III				Libration object
630	Boussingault	54.7	-70.4		74, 75				Libration object
631	Bowen	9.1	17.6		23				
632	Brackett	23.6	17.9		24				
633	Bragg	-102.9	42.5		VIII				Libration object
634	Brayley	-36.9	20.9		19				
635	Brewster	34.7	23.3		25				
636	Brianchon	-86.5	74.8		2, 3, I				Libration object
637	Brisbane	68.5	-49.1		76, V				Libration object
638	Brown	-17.9	-46.4		64				
639	Brunner	90.9	-9.9		IV				Libration object
640	Bunsen	-85.3	41.4		8, VIII				Libration object
641	Burckhardt	56.5	31.1		16				
642	Burnham	7.3	-13.9		45				
643	Byrd	9.8	85.3		4, II				Libration object
644	Byrgius	-65.3	-24.7		50, 51				Libration object
645	Cabeus	-35.5	-84.9		73, VI				Libration object
646	Cajal	31.1	12.6		36				
647	Cameron	45.9	6.2		37				
648	Cannizzaro	-100.7	55.6		I				Libration object
649	Cannon	81.4	19.9		27, III				Libration object

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
650	Carlini	-24.1	33.7		10				
651	Carpenter	-50.9	69.4		2, 3				
652	Carrel	26.7	10.7		35				
653	Carrillo	80.9	-2.2		49, IV				Libration object
654	Carrington	62.1	44.0		15				
655	Cartan	59.3	4.2		38				
656	Catalan	-87.3	-45.7		61, VI				Libration object
657	Catena Dziewulski	99.0	21.0		III				Libration object
658	Catena Humboldt	85.0	-22.0		60, IV				Libration object
659	Catena Krafft	-72.0	15.0		17, 28				200mm
660	Catena Sylvester	-80.0	80.0		I				Libration object
661	Catena Timocharis	-13.0	29.0		21				500mm
662	Caventou	-29.4	29.8		20				
663	Cayley	15.1	4.0		34				
664	Chadwick	-101.3	-52.7		VI				Libration object
665	Challis	9.2	79.5		4				
666	Chamberlin	95.7	-58.9		V				Libration object
667	Chapman	-100.7	50.4		I				Libration object
668	Chappe	-91.5	-61.2		VI				Libration object
669	Chevallier	51.2	44.9		15				
670	Ching-te	30.0	20.0		25				
671	Chladni	1.1	4.0		33				
672	Clerke	29.8	21.7		25				
673	Compton	105.0	56.0		II				Libration object
674	Condon	60.4	1.9		38				
675	Conon	2.0	21.6		22				
676	Cook	48.9	-17.5		59				
677	Couder	-92.4	-4.8		VII				Libration object
678	Cremona	-90.6	67.5		2, I				Libration object
679	Crile	46.0	14.2		37				
680	Crozier	50.8	-13.5		48				
681	Curie	91.8	-23.0		IV				Libration object
682	Curtis	56.6	14.6		26				
683	da Vinci	45.0	9.1		37				
684	Dale	82.9	-9.6		49, IV				Libration object
685	Dalton	-84.3	17.1		17, VIII				Libration object
686	Daly	59.6	5.7		38				
687	Damoiseau	-61.1	4.8		39				
688	Daniell	31.1	35.3		14				
689	d'Arrest	14.7	2.3		34				
690	Darwin	-69.1	-19.8		50				
691	Daubree	14.7	15.7		23				
692	De Gasparis	-50.7	-25.9		51				
693	de Gerlache	-87.1	-88.5		VI				Libration object
694	De La Rue	53.0	59.1		6				
695	de Morgan	14.9	3.3		34				
696	de Roy	-99.1	-55.3		VI				Libration object
697	de Sitter	39.6	80.1		5, II				Libration object
698	de Vico	-60.2	-19.7		50, 51				
699	Debus	99.6	-10.5		IV				Libration object
700	Dechen	-68.2	46.1		8				
701	Delaunay	2.5	-22.2		55				
702	Dembowski	7.2	2.9		34				
703	Demonax	59.0	-78.2		74, V				Libration object
704	Desargues	-73.3	70.2		2, I				
705	Descartes	15.7	-11.7		45				
706	Desailligny	20.6	21.1		24				
707	Dionysius	17.3	2.8		35				
708	Doerful	-107.9	-69.1		VI				Libration object
709	Dollond	14.4	-10.4		45				
710	Dome Milichius (Pi)	-31.2	10.2		30				
711	Donati	5.2	-20.7		55				
712	Donner	98.0	-31.4		IV				Libration object
713	Dorsa Andrusov	57.0	-1.0		49				
714	Dorsa Argand	-40.0	28.0		19				
715	Dorsa Burnet	-57.0	27.0		18				
716	Dorsa Ewing	-38.0	-11.0		41				
717	Dorsa Stille	-19.0	27.0		20				
718	Dorsa Whiston	-57.0	30.0		8				
719	Dorsum Arduino	-36.0	26.0		19				
720	Dorsum Bucher	-39.0	31.0		9				
721	Dorsum Cushman	49.0	1.0		37				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
722	Dorsum Niggli	-52.0	29.0		18				
723	Dorsum Scilla	-60.0	32.0		8				
724	Dorsum Termier	58.0	11.0		37, 38				
725	Dove	31.5	-46.7		67				
726	Draper	-21.7	17.6		20				
727	Dreyer	96.9	10.0		III				Libration object
728	Drude	-91.8	-38.5		VII				Libration object
729	Drygalski	-86.8	-79.7		72, VI				Libration object
730	Dubiago	70.0	4.4		38				
731	Dugan	103.3	64.2		II				Libration object
732	Dunthorne	-31.6	-30.1		62, 63				
733	Dziewulski	98.9	21.2		III				Libration object
734	Eckert	58.3	17.3		26				
735	Edison	99.1	25.0		III				Libration object
736	Einstein	-88.5	16.6		17, VIII				Libration object
737	Eischstadt	-78.3	-22.6		50, VII				Libration object
738	Elger	-29.8	-35.3		63				
739	Ellison	-107.5	55.1		I				Libration object
740	Elmer	84.1	-10.1		49, IV				Libration object
741	Epigenes	-4.6	67.5		4				
742	Erro	98.5	5.7		III				Libration object
743	Esclangon	42.1	21.5		25				
744	Euctemon	31.3	76.4		5				
745	Euler	-29.2	23.3		20				
746	Fabbroni	29.2	18.7		25				
747	Fabry	101.0	43.0		II, III				Libration object
748	Fahrenheit	61.7	13.1		38				
749	Faustini	77.0	-87.3		V				Libration object
750	Fauth	-20.1	6.3		31				
751	Faye	3.9	-21.4		55				
752	Fedorov	-37.0	28.2		19				
753	Fenyi	-105.1	-44.9		VI, VII				Libration object
754	Fermat	19.8	-22.6		57				
755	Finsch	21.3	23.6		24				
756	Focas	-93.8	-33.7		VII				Libration object
757	Fontana	-56.6	-16.1		51				
758	Fox	98.2	0.5		III				Libration object
759	Fra Mauro Eta	-15.5	-2.3		43				<a href="http://www.lpod.org/?p=1200">http://www.lpod.org/?p=1200</a>
760	Franck	35.5	22.6		25				
761	Franz	40.2	16.6		25				
762	Fredholm	46.5	18.4		26				
763	Freud	-52.3	25.8		18				
764	Froelich	-109.7	80.3		I				Libration object
765	Fryxell	-101.4	-21.3		VII				Libration object
766	G Bond	36.2	32.4		15				
767	Galen	5.0	21.9		22				
768	Galvani	-84.6	49.6		1, 8, I				Libration object
769	Gambart	-15.2	1.0		32				
770	Ganswindt	110.3	-79.6		V				Libration object
771	Gardner	33.8	17.7		25				
772	Gaudibert	37.8	-10.9		47				
773	Gauss	79.1	35.9		16				Libration object
774	Gay-Lussac	-20.8	13.9		31				
775	Geissler	76.5	-2.6		49				
776	Gerard	-80.0	44.5		8, VIII				Libration object
777	Gernsback	99.7	-36.5		IV				Libration object
778	Gibbs	84.3	-18.4		60, IV				Libration object
779	Gilbert	76.0	-3.2		49				
780	Gill	75.9	-63.9		75, V				Libration object
781	Ginzel	97.4	14.3		III				Libration object
782	Gioja	2.0	83.3		4				
783	Giordano Bruno	103.0	37.0		III				Libration object
784	Glaisher	49.5	13.2		37				
785	Glushko	-77.6	8.4		28				
786	Goddard	89.0	14.8		27, III				Libration object
787	Golgi	-60.0	27.8		18				
788	Gould	-17.2	-19.2		53				
789	Graff	-88.6	-42.4		61, VII				Libration object
790	Grove	32.9	40.3		14				
791	Guericke	-14.1	-11.5		43				
792	Gum	88.6	-40.4		69, IV				Libration object
793	Guthnick	-93.9	-47.7		VI				Libration object

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
794	Gylden	0.3	-5.3		44				
795	Haldane	84.1	-1.7		49, IV				Libration object
796	Hale	90.8	-74.2		74,75,V				Libration object
797	Hall	37.0	33.7		15				
798	Hamilton	84.7	-42.8		69, IV				Libration object
799	Hanno	71.2	-56.3		76, V				Libration object
800	Hansen	72.5	14.0		38				
801	Hanskiy	97.0	-9.7		IV				Libration object, Ganskiy in VMA
802	Harding	-71.7	43.5		8				
803	Hargreaves	64.0	-2.2		49				
804	Harkhebi	99.8	39.9		III				Libration object
805	Harlan	79.5	-38.5		69, IV				Libration object
806	Hartwig	-80.5	-6.1		39, VII				Libration object
807	Hausen	-88.4	-65.5		71, VI				Libration object
808	Hayn	85.2	64.7		6, II				Libration object
809	Hecataeus	79.6	-21.8		60, IV				Libration object
810	Hedervari	84.0	-81.8		V				Libration object
811	Hedin	-76.5	2.9		28				
812	Heis	-31.9	32.4		10				
813	Helmert	87.6	-7.6		49, IV				Libration object
814	Helmholtz	64.1	-68.1		75, V				Libration object
815	Herigonius	-33.9	-13.3		41				
816	Hermann	-57.3	-0.9		39				
817	Hermite	-87.3	86.4		4, II				Libration object
818	Heyrovsky	-95.3	-39.6		VII				Libration object
819	Hirayama	93.7	-6.0		IV				Libration object
820	Hohmann	-94.1	-17.9		VII				Libration object
821	Hooke	54.9	41.2		15				
822	Hornsby	12.5	23.8		23				
823	Horrebow	-40.8	58.7		2				
824	Houtermans	87.2	-9.4		49, IV				Libration object
825	Humason	-56.6	30.7		8				
826	Humboldt	80.9	-27.2		60				Libration object
827	Hume	90.4	-4.7		IV				Libration object
828	Huxley	-4.5	20.2		22				
829	Ibn Battuta	50.4	-6.9		48				
830	Ibn Yunus	91.1	14.1		III				Libration object
831	Ideler	22.3	-49.2		74				
832	Idelson	110.9	-81.5		V				Libration object
833	Il'in	-97.5	-17.8		VII				Libration object
834	Ivan	-43.3	26.9		19				
835	Jansky	89.5	8.5		38, III				Libration object
836	Jeans	91.4	-55.8		V				Libration object
837	Jehan	-31.9	20.7		19				
838	Jenkins	78.1	0.3		38				
839	Jenner	95.9	-42.1		IV				Libration object
840	Joliot	92.7	25.6		III				Libration object
841	Joy	6.6	25.0		23				
842	Kane	26.1	63.1		5				
843	Kao	87.6	-6.7		49, IV				Libration object
844	Kapteyn	70.6	-10.8		49				
845	Kastner	79.1	-7.0		49				Libration object
846	Keldysh	43.6	51.2		6				
847	Kiess	84.0	-6.4		49, IV				Libration object
848	Kirchhoff	38.8	30.3		15				
849	Knox-Shaw	80.2	5.3		38, III				Libration object
850	Kopff	-89.6	-17.4		50, VII				Libration object
851	Kovalskiy	98.1	-21.1		IV				Libration object
852	Kramarov	-98.8	-2.3		VII				Libration object
853	Krasnov	-79.6	-29.9		50, VII				Libration object
854	Kreiken	84.6	-9.0		49, IV				Libration object
855	Krieger	-45.6	29.0		19				
856	Krishna	11.3	24.5		23				
857	Krogh	65.7	9.4		38				
858	Krusenstern	5.9	-26.2		55, 56				
859	Kugler	103.7	-53.8		V				Libration object
860	Kundt	-11.5	-11.5		43				
861	Kunowsky	-32.5	3.2		30				
862	la Caille	1.1	-23.8		55				
863	La Condamine	-28.2	53.4		2				
864	la Perouse	76.3	-10.7		49				
865	Lacus Aestatis	-69.0	-15.0		39, 50				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
866	Lacus Autumni	-82.0	-14.0		39,50,VII				Libration object
867	Lacus Bonitatis	44.0	23.0		25, 26				
868	Lacus Perseverantiae	62.0	8.0		38				
869	Lacus Somniorum	28.0	39.0		14				
870	Lacus Temporis	57.0	46.0		15				
871	Lacus Veris	-87.0	-13.0		39,50,VII				Libration object
872	Lade	10.1	-1.3		45				
873	Lagalla	-22.5	-44.6		63				
874	Lagrange	-72.0	-33.2		61				
875	Lallemand	-84.1	-14.3		39, VII				Libration object
876	Lamarck	-69.8	-22.9		50				
877	Lamb	100.8	-42.8		IV				Libration object
878	Lamech	13.1	42.7		13				
879	Langley	-86.3	51.1		1, I				Libration object
880	Lassell	-7.9	-15.5		54				
881	Laue	-96.7	28.0		VIII				Libration object
882	Lauritsen	96.1	-27.6		IV				Libration object
883	Lavoisier	-81.2	38.2		8, VIII				Libration object
884	Lawrence	43.2	7.4		37				
885	le Gentil	-76.5	-74.4		72, VI				Libration object
886	Leakey	37.4	-3.2		47				
887	Lebesgue	89.0	-5.1		49, IV				Libration object
888	Legendre	70.2	-28.9		59, 60				
889	Liapunov	89.3	26.3		27, III				Libration object
890	Lichtenberg	-67.7	31.8		8				
891	Liebig	-48.2	-24.3		51				
892	Lindbergh	52.9	-5.4		48				
893	Lindblad	-98.8	70.4		I				Libration object
894	Lindsay	13.0	-7.0		45				
895	Liouville	73.5	2.6		38				
896	Lippershey	-10.3	-25.9		54				
897	Littrow	31.4	21.5		25				
898	Loewy	-32.8	-22.7		52				
899	Lohrmann	-67.2	-0.5		39				
900	Lomonosov	98.0	27.3		III				Libration object
901	Longfellow	91.3	-7.5		IV				Libration object
902	Lorentz	-96.9	34.3		VIII				Libration object
903	Louise	-34.2	28.5		19				
904	Louville	-46.0	44.0		9				
905	Lovelace	-106.4	82.3		I				Libration object
906	Lubiniezky	-23.8	-17.8		53				
907	Lucian	36.7	14.3		25, 36				
908	Ludwig	97.4	-7.7		IV				Libration object
909	Luther	24.1	33.2		14				
910	Lyell	40.6	13.6		36				
911	Lyot	84.1	-50.2		69,76,V				Libration object
912	Maclaurin	68.0	-1.9		49				
913	Maclear	20.1	10.5		35				
914	Macmillan	-7.8	24.2		21				
915	Maestlin	-40.6	4.9		29				
916	Magelhaens	44.1	-11.9		48				
917	Main	10.1	80.8		4				
918	Mairan T	-48.2	41.7		9				
919	Malapert	12.9	-84.9		73, V				Libration object
920	Manners	20.0	4.6		35				
921	Marco Polo	-2.0	15.4		22				
922	Marinus	76.5	-39.4		69				
923	Marth	-29.3	-31.1		63				
924	Maunder	-93.8	-14.6		VII				Libration object
925	Maury	39.6	37.1		15				
926	Maxwell	98.6	30.0		III				Libration object
927	McAdie	92.1	2.1		III				Libration object
928	McClure	50.3	-15.3		59				
929	McDonald	-20.9	30.4		10				
930	McLaughlin	-92.9	47.1		I				Libration object
931	Mee	-35.0	-43.7		63				
932	Mees	-96.1	13.6		VIII				Libration object
933	Mendel	-109.9	-48.8		VI				Libration object
934	Menzel	36.9	3.4		36				
935	Mercurius	66.2	46.6		15, 16				
936	Merril	-116.3	75.2		I				Libration object
937	Meton	19.2	73.8		4, 5				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
938	Moigno	28.9	66.4		5				
939	Monge	47.6	-19.2		59				
940	Mons Esam	35.7	14.6		36				
941	Montes Rook	-83.0	-20.0		50, VII				Libration object
942	Morley	64.6	-2.8		49				
943	Moseley	-90.1	20.9		VIII				Libration object
944	Mouchez	-26.6	78.3		3, 4				
945	Moulton	97.2	-61.1		V				Libration object
946	Muller	2.1	-7.6		44				
947	Nansen	95.3	81.3		5, II				Libration object
948	Natasha	-31.3	20.0		19				
949	Naumann	-62.0	35.4		8				
950	Neison	25.1	68.3		5				
951	Neper	84.5	8.8		38, III				Libration object
952	Nernst	-94.5	35.4		VIII				Libration object
953	Neumayer	70.7	-71.1		75, V				Libration object
954	Nicholson	-85.1	-26.2		50, VII				Libration object
955	Nicollet	-12.5	-21.9		54				
956	Nielsen	-51.8	31.8		8				
957	Niepcze	-119.1	72.7		I				Libration object
958	Nobile	53.5	-85.2		V				Libration object
959	Nobili	75.9	0.2		38				
960	Noether	-113.5	66.6		I				Libration object
961	Norman	-30.4	-11.8		41				
962	Nunn	91.1	4.6		III				Libration object
963	Oersted	47.2	43.1		15				
964	Olbers	-75.9	7.4		28				
965	Omar Khayyam	-102.1	58.0		I				Libration object
966	Opelt	-17.5	-16.3		53				
967	Oppolzer	-0.5	-1.5		44				
968	Palisa	-7.2	-9.4		43				
969	Palitzsch	64.5	-28.0		59				
970	Palmieri	-47.7	-28.6		51				
971	Palus Putredinis	0.0	27.0		22				
972	Paneth	-94.8	63.0		I				Libration object
973	Parkhurst	103.6	-33.4		IV				Libration object
974	Parrot	3.3	-14.5		44, 55				
975	Pascal	-70.1	74.3		3, I				Libration object
976	Peary	33.0	88.6		4, II				Libration object
977	Peek	86.9	2.6		38, III				Libration object
978	Peirescius	67.6	-46.5		68, 69				
979	Peters	29.5	68.1		5				
980	Petit	63.5	2.3		38				
981	Petrov	88.0	-61.4		76, V				Libration object
982	Pettit	-86.6	-27.5		50, VII				Libration object
983	Petzval	-110.4	-62.7		VI				Libration object
984	Phillips	76.0	-26.6		60				
985	Piazzzi	-67.9	-36.2		61				
986	Pickering	7.0	-2.9		45				
987	Pilatre	-86.4	-60.3		70, VI				Libration object
988	Pingre	-73.7	-58.7		70, VI				Libration object
989	Plaskett	176.0	82.3		II				Libration object
990	Plutarch	79.0	24.1		27, III				Libration object
991	Poczobutt	-99.3	57.5		I				Libration object
992	Polybius	25.6	-22.4		57				
993	Pomortsev	66.9	0.7		38				
994	Poncelet	-54.1	75.8		3, I				Libration object
995	Pons	21.5	-25.3		57				
996	Pontanus	14.4	-28.4		56				
997	Pontecoulant	66.0	-58.7		76				
998	Popov	99.7	17.2		III				Libration object
999	Priestly	108.4	-57.3		V				Libration object
1000	Promontorium Fresnel	5.0	29.0		22				
1001	Protagoras	7.3	56.0		4				
1002	Puiseux	-39.0	-27.8		52				
1003	Pupin	-11.0	23.8		21				300mm
1004	Purkyne	94.9	-1.6		IV				Libration object
1005	Raman	-55.1	27.0		18				
1006	Rankine	71.5	-3.9		49				
1007	Rayleigh	89.2	29.0		27, III				Libration object
1008	Regnault	-88.0	54.1		1, I				Libration object
1009	Reimarus	60.3	-47.7		68				

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
1010	Repsold	-78.5	51.4		1				
1011	Respighi	71.9	2.8		38				
1012	Riccioli	-74.3	-3.0		39				
1013	Riccus	26.5	-36.9		67				
1014	Richardson	100.3	31.1		III				Libration object
1015	Riemann	87.2	39.5		16, III				Libration object
1016	Rima Agatharchides	-28.0	-20.0		53				300mm
1017	Rima Archytas	5.0	53.0		4				
1018	Rima Artsimovich	-39.0	27.0		19				Not in VMA, but east of Dorsa Argand
1019	Rima Billy	-48.0	-15.0		51				300mm
1020	Rima Bradley	-2.0	23.0		22				
1021	Rima Brayley	-36.0	23.0		19				500mm +
1022	Rima Calippus	13.0	37.0		13				
1023	Rima Cardanus	-73.0	11.0		28				
1024	Rima Conon	2.0	18.0		22				
1025	Rima Delisle	-33.0	31.0		9				500mm +
1026	Rima Diophantus	-33.0	29.0		19				500mm +
1027	Rima Furnerius	60.4	-36.3		69				Located in crater Furnerius
1028	Rima G Bond	35.0	33.0		15				
1029	Rima Gartner	36.0	65.0		6				300mm
1030	Rima Hansteen	-53.0	-12.0		40				
1031	Rima Hase	66.0	-33.0		69				200mm
1032	Rima Herigonius	-37.0	-13.0		41				500mm
1033	Rima Jansen	29.0	15.0		25, 36				
1034	Rima Mairan	-47.0	38.0		9				300mm
1035	Rima Marius	-49.0	17.0		18				
1036	Rima Messier	45.0	-1.0		37, 48				500mm
1037	Rima Milichius	-33.0	8.0		30				500mm +
1038	Rima Oppolzer	2.0	-1.0		44				300mm
1039	Rima Reaumur	3.0	-3.0		44				300mm
1040	Rima Schroter	-6.0	1.0		32				300mm
1041	Rima Sharp	-51.0	44.0		9				500mm +
1042	Rima Sheepshanks	24.0	58.0		5				500mm +
1043	Rima Suess	-47.0	6.0		29				500mm +
1044	Rimae Alphonsus	-2.8	-13.4		44				500mm
1045	Rimae Archimedes	-4.0	27.0		22				100mm
1046	Rimae Atlas	44.4	46.7		15				200mm
1047	Rimae Bode	-4.0	10.0		33				300mm
1048	Rimae Boscovich	11.1	9.8		34				500mm
1049	Rimae Chacornac	32.0	29.0		14				300mm
1050	Rimae Daniell	26.0	37.0		14				200mm
1051	Rimae de Gasparis	-50.0	-25.0		51				200mm
1052	Rimae Fresnel	4.0	28.0		22				200mm
1053	Rimae Gassendi	-39.9	-17.5		52				200mm
1054	Rimae Goclenius	43.0	-8.0		48				200mm
1055	Rimae Gutenberg	38.0	-5.0		47				300mm
1056	Rimae Hevelius	-66.0	2.0		28				300mm
1057	Rimae Janssen	39.0	-46.0		67				200mm
1058	Rimae Maclear	20.0	13.0		35				300mm
1059	Rimae Maestlin	-40.0	2.0		29				300mm
1060	Rimae Maupertuis	-22.0	51.0		3				500mm +
1061	Rimae Opelt	-18.0	-13.0		42				300mm
1062	Rimae Palmieri	-47.0	-28.0		51				300mm
1063	Rimae Plato	-2.0	51.0		4				300mm
1064	Rimae Posidonius	29.9	31.8		14				300mm
1065	Rimae Prinz	-43.0	27.0		19				300mm
1066	Rimae Repsold	-80.0	51.0		1, I				Libration object
1067	Rimae Riccioli	-74.0	-2.0		39				300mm
1068	Rimae Ritter	18.0	3.0		35				200mm
1069	Rimae Romer	35.0	27.0		25				200mm
1070	Rimae Secchi	44.0	1.0		37				200mm
1071	Rimae Sosigenes	19.0	7.0		35				300mm
1072	Rimae Theaetetus	6.0	33.0		12				300mm Rima in VMA
1073	Rimae Zupus	-53.0	-15.0		51				300mm
1074	Ritchey	8.5	-11.1		45				
1075	Rittenhouse	106.5	-74.5		V				Libration object
1076	Ritz	92.2	-15.1		IV				Libration object
1077	Robinson	-45.9	59.0		2				
1078	Rocca	-72.8	-12.7		39				
1079	Rocco	-45.0	28.9		19				
1080	Rontgen	-91.4	33.0		VIII				Libration object
1081	Rozhdstvenskiy	-159.1	85.8		I				Libration object

## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
1082	Runge	86.7	-2.5		49, IV				Libration object
1083	Ruth	-45.1	28.7		19				
1084	Rydberg	-96.3	-46.5		VI				Libration object
1085	Rynin	-103.5	47.0		I				Libration object
1086	Sabatier	79.0	13.2		38				Libration object
1087	Sampson	-16.5	29.7		21				
1088	Santos-Dumont	4.8	27.7		22				
1089	Saunder	8.8	-4.2		45				
1090	Scheele	-37.8	-9.4		41				
1091	Schiaparelli	-58.8	23.4		18				
1092	Schluter	-83.3	-5.9		39, VII, VIII				Libration object
1093	Schmidt	18.8	1.0		35				
1094	Schomberger	24.9	-76.7		73, 74				
1095	Schonfeld	-98.1	44.8		VIII				Libration object
1096	Schorr	89.7	-19.5		60, IV				Libration object
1097	Schrodinger	133.7	-75.6		V				Libration object
1098	Schroter	-7.0	2.6		32				
1099	Schubert	81.0	2.8		38, III				Libration object
1100	Schumacher	60.7	42.4		16				
1101	Schwabe	45.6	65.1		6				
1102	Schwarzschild	119.6	70.6		II				Libration object
1103	Scoresby	14.1	77.7		4				
1104	Scott	45.3	-81.9		73, 74, V				Libration object
1105	Seneca	80.2	26.6		27, III				Libration object
1106	Shackleton	0.0	-89.9		V, VI				Libration object
1107	Shaler	-85.2	-32.9		61, VII				Libration object
1108	Shapley	56.9	9.4		38				
1109	Shi Shen	104.1	76.0		II				Libration object
1110	Shoemaker	44.9	-88.1		V				Libration object
1111	Shuckburgh	52.8	42.6		15				
1112	Shuleykin	-92.5	-27.1		VII				Libration object
1113	Sikorsky	103.2	-66.1		V				Libration object
1114	Silberschlag	12.5	6.2		34				
1115	Sinus Fidei	2.0	18.0		22				
1116	Skłodowska	96.0	-18.0		IV				Libration object
1117	Slocum	89.0	-3.0		49, IV				Libration object
1118	Smithson	53.6	2.4		37				
1119	Smoluchowski	-96.8	60.3		I				Libration object
1120	Somerville	64.9	-8.3		49				
1121	Sommering	-7.5	0.1		32, 43				
1122	Sosigenes	17.6	8.7		35				
1123	South	-50.8	57.7		2				
1124	Sporer	-1.8	-4.3		44				
1125	Spurr	-1.2	27.9		22				
1126	Stewart	67.0	2.2		38				
1127	Stokes	-88.1	52.5		1, I				Libration object
1128	Strabo	54.3	61.9		6				
1129	Suess	-47.6	4.4		29				
1130	Sundman	-91.6	10.8		VIII				Sumner in VMA?
1131	Swasey	89.7	-5.5		49, IV				Libration object
1132	Sylvester	-79.6	82.7		3, I				Libration object
1133	Tacchini	85.5	4.9		38, III				Libration object
1134	Tacquet	19.2	16.6		24				
1135	Talbot	85.3	-2.5		49, IV				Libration object
1136	Taylor	16.7	-5.3		46				
1137	Tebutt	53.6	9.6		37				
1138	Tempel	11.9	3.9		34				
1139	Thales	50.3	61.8		6				
1140	Theiler	83.3	13.4		38, III				Libration object
1141	Theophrastus	39.0	17.5		25				
1142	Timaeus	-0.5	62.8		4				
1143	Tisserand	48.2	21.4		26				
1144	Titius	100.7	-26.8		IV				Libration object
1145	Tolansky	-16.0	-9.5		42, 43				
1146	Townley	63.3	3.4		38				
1147	Trouvelot	5.8	49.3		4				
1148	Tucker	88.2	-5.6		49, IV				Libration object
1149	Turner	-13.2	-1.4		43				
1150	Ukert	1.4	7.8		33				
1151	Urey	87.4	27.9		27, III				Libration object
1152	Vaisala	-47.8	25.9		18				
1153	Vallis Bohr	-88.6	9.9		VIII				Libration object, not in VMA



## LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LONGITUDE	LATITUDE	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
1154	Vallis Bouvard	-83.0	-39.0		61, VII				Libration object
1155	Vallis Palitzsch	65.0	-25.0		59				
1156	Vallis Schrodinger	105.0	-67.0		V				Libration object
1157	Van Albada	64.3	9.4		38				
1158	Van Biesbroeck	-45.6	28.7		19				
1159	Van Vleck	78.3	-1.9		49				
1160	Vasco da Gama	-83.8	13.9		28, VIII				Libration object
1161	Vashakidze	93.3	43.6		III				Libration object
1162	Vega	63.4	-45.4		68				
1163	Vera	-43.7	26.3		19				
1164	Verne	-25.3	24.9		20				300mm
1165	Vestine	93.9	33.9		III				Libration object
1166	Virchow	83.7	9.8		38, III				Libration object
1167	Vitruvius	31.3	17.6		25				
1168	von Behring	71.8	-7.8		49				
1169	von Braun	-78.0	41.1		8, VIII				Libration object
1170	Voskresenskiy	-88.1	28.0		17, VIII				Libration object
1171	Wallace	-8.7	20.3		21				
1172	Wallach	32.3	4.9		36				
1173	Warner	87.3	-4.0		49, IV				Libration object
1174	Watts	46.3	8.9		37				
1175	Weierstrass	77.2	-1.3		49				
1176	Weinek	37.0	-27.5		58				
1177	Wexler	90.2	-69.1		75, V				Libration object
1178	Whewell	13.7	4.2		34				
1179	Wichmann	-38.1	-7.5		41				
1180	Widmanstätten	85.5	-6.1		49, IV				Libration object
1181	Wiechert	165.0	-84.5		V				Libration object
1182	Wildt	75.8	9.0		38				
1183	Wilkins	19.6	-29.4		57, 67				
1184	Williams	37.2	42.0		14, 15				
1185	Winthrop	-44.4	-10.7		40				
1186	Wolf	-16.6	-22.7		54				
1187	Wollaston	-46.9	30.6		9				
1188	Wright	-86.6	-31.6		61, VII				Libration object
1189	Wyld	98.1	-1.4		IV				Libration object
1190	Yakovkin	-78.8	-54.5		70, VI				Libration object
1191	Yangel	4.7	17.0		22				
1192	Zahringer	40.2	5.6		37				
1193	Zasyadko	94.2	3.9		III				Libration object
1194	Zeeman	-134.8	-75.2		VI				Libration object
1195	Zeno	72.9	45.2		16, III				Libration object
1196	Zinner	-58.8	26.6		18				
1197	Zollner	18.9	-8.0		46				
1198	Zsigmondi	-104.7	59.7		I				Libration object
1199	Zupus	-52.3	-17.2		51				