

LUNAR 1000 CHALLENGE

	A	B	C	D	E	F	G	H	I
1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
2	Abbot	5.6	54.8		37				
3	Abel	-34.6	85.8		69, IV				Libration object
4	Abenezra	-21.0	11.9	55	56				
5	Abetti	19.9	27.7		24				
6	Abulfeda	-13.8	13.9	54	45				
7	Acosta	-5.6	60.1		49				
8	Adams	-31.9	68.2		69				
9	Agatharchides	-19.8	-30.9	113	52				
10	Agrippa	4.1	10.5	61	34				
11	Airy	-18.1	5.7	63	55, 56				
12	Al-Bakri	14.3	20.2		35				
13	Al-Biruni	17.9	92.5		III				Libration object
14	Al-Marrakushi	-10.4	55.8		48				
15	Albategnius	-11.2	4.1	66	44, 45				
16	Aldrin	1.4	22.1	44	35				
17	Alexander	40.3	13.5		13				
18	Alfraganus	-5.4	19.0		46				
19	Alhazen	15.9	71.8		27				
20	Aliacensis	-30.6	5.2	67	55, 65				
21	Almanon	-16.8	15.2	55	56				
22	Alpetragius	-16.0	-4.5	74	55				
23	Alphonsus	-13.4	-2.8	75	44, 55				
24	Ameghino	3.3	57.0		38				
25	Ammonius	-8.5	-0.8	75	44				
26	Amontons	-5.3	46.8		48				
27	Amundsen	-84.5	82.8		73, 74, V				Libration object
28	Anaxagoras	73.4	-10.1	76	4				
29	Anaximander	66.9	-51.3		2				
30	Anaximenes	72.5	-44.5		3				
31	Andel	-10.4	12.4		45				
32	Andersson	-49.7	-95.3		VI				Libration object
33	Angstrom	29.9	-41.6		19				
34	Ansgarius	-12.7	79.7		49, IV				Libration object
35	Anuchin	-49.0	101.3		V				Libration object
36	Anville	1.9	49.5		37				
37	Apianus	-26.9	7.9	55	56				
38	Apollonius	4.5	61.1	2	38				
39	Arago	6.2	21.4	44	35				
40	Aratus	23.6	4.5		22				
41	Archimedes	29.7	-4.0	78	22, 12				
42	Archytas	58.7	5.0	76	4				
43	Argelander	-16.5	5.8	63	56				
44	Ariadaeus	4.6	17.3		35				
45	Aristarchus	23.7	-47.4	122	18				
46	Aristillus	33.9	1.2	69	12				
47	Aristoteles	50.2	17.4	48	5				
48	Armstrong	1.4	25.0	44	35				
49	Arnold	66.8	35.9	48	5				
50	Arrhenius	-55.6	-91.3		VI				Libration object
51	Artemis	25.0	-25.4		20				300mm
52	Artsimovich	27.6	-36.6		19				
53	Aryabhata	6.2	35.1		36				
54	Arzachel	-18.2	-1.9	74	55				
55	Asada	7.3	49.9		37				
56	Asclepi	-55.1	25.4	58	74				
57	Ashbrook	-81.4	-112.5		VI				Libration object
58	Aston	32.9	-87.7	L9	8				Libration object
59	Atlas	46.7	44.4	24	15				
60	Atwood	-5.8	57.7	5	49				
61	Autolycus	30.7	1.5	69	12				
62	Auwers	15.1	17.2		24				
63	Auzout	10.3	64.1		38				
64	Avery	-1.4	81.4	CAN1	49, IV				Libration object
65	Avicenna	39.7	-97.2		VIII				Libration object
66	Azophi	-22.1	12.7	55	56				
67	Baade	-44.8	-81.8		61, VI, VII				Libration object
68	Babbage	59.5	-56.8	133	2				
69	Babcock	4.2	93.9		III				Libration object
70	Back	1.1	80.7		38, III				Libration object
71	Baco	-51.0	19.1	58	74				
72	Baillaud	74.6	37.5		5				
73	Bailly	-66.8	-69.4	L8	71, VIII				Libration object
74	Baily	49.7	30.4		6				
75	Balboa	19.1	-83.2		17, VIII				Libration object
76	Ball	-35.9	-8.4	88	64				
77	Balmer	-20.1	70.6		60				

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78	Banachiewicz	5.2	80.1		38, III				Libration object
79	Bancroft	28.0	-6.4		21, 22				
80	Banting	26.6	16.4	CAN2	23				
81	Barkla	-10.7	67.2		49				
82	Barnard	-29.6	86.4		60, 69, IV				Libration object
83	Barocius	-44.9	16.8	50	66				
84	Barrow	71.3	7.7		4				
85	Bartels	24.5	-89.9		17, VIII				Libration object
86	Bayer	-51.6	-35.0	118	71				
87	Beals	37.3	86.5	CAN3	16, III				Libration object
88	Beaumont	-18.0	28.8	25	57, 58				
89	Beer	27.1	-9.1	89	21				
90	Behaim	-16.5	79.4		60, IV				Libration object
91	Beketov	16.3	29.2		25				
92	Bela	24.7	2.3		22				
93	Belkovich	61.5	90.0		7, II				Libration object
94	Bell	21.8	-96.4		VIII				Libration object
95	Bellot	-12.4	48.2		48				
96	Bernouilli	35.0	60.7		16				
97	Berosus	33.5	69.9	8	16				
98	Berzelius	36.6	50.9		15				
99	Bessarion	14.9	-37.3		19				
100	Bessel	21.8	17.9		24				
101	Bettinus	-63.4	-44.8	125	71				
102	Bianchini	48.7	-34.3	106	2, 10				
103	Biela	-54.9	51.3	30	75, 76				
104	Bilharz	-5.8	56.3	5	49				
105	Billy	-13.8	-50.1	124	40				
106	Biot	-22.6	51.1		59				
107	Birmingham	65.1	-10.5		4, 3				
108	Birt	-22.4	-8.5	83	54				
109	Black	-9.2	80.4		49, IV				Libration object
110	Blagg	1.3	1.5	64	33				
111	Blancanus	-63.6	-21.5	98	72				
112	Blanchard	-58.5	-94.4		VI				Libration object
113	Blanchinus	-25.4	2.5		55				
114	Bliss	53.0	-13.5		3				Formerly called Plato A
115	Bobillier	19.6	15.5		23				
116	Bode	6.7	-2.4		33				
117	Boethius	5.6	72.3		38				
118	Boguslawsky	-72.9	43.2		74				
119	Bohnenberger	-16.2	40.0	25	58				
120	Bohr	12.8	-86.4		28, VIII				Libration object
121	Boltzmann	-74.9	-90.7		VI				Libration object
122	Bombelli	5.3	56.2		38				
123	Bonpland	-8.3	-17.4	93	42				
124	Boole	63.7	-87.4		2, 1				Libration object
125	Borda	-25.1	46.6	10	59				
126	Borel	22.3	26.4		24				
127	Born	-6.0	66.8		49				
128	Boscovich	9.8	11.1		34				
129	Boss	45.8	89.2		16, III				Libration object
130	Bouguer	52.3	-35.8	133	2				
131	Boussingault	-70.4	54.7		74, 75				Libration object
132	Bowen	17.6	9.1		23				
133	Brackett	17.9	23.6		24				
134	Bragg	42.5	-102.9		VIII				Libration object
135	Brayley	20.9	-36.9		19				
136	Breislak	-48.2	18.3	50	66				
137	Brenner	-39.0	39.3	20	68				
138	Brewster	23.3	34.7		25				
139	Brianchon	74.8	-86.5		2, 3, I				Libration object
140	Briggs	26.5	-69.1	L7	17				Libration object
141	Brisbane	-49.1	68.5		76, V				Libration object
142	Brown	-46.4	-17.9		64				
143	Bruce	1.1	0.4	64	33				
144	Brunner	-9.9	90.9		IV				Libration object
145	Buch	-38.8	17.7	50	66				
146	Bullialdus	-20.7	-22.2	100	53				
147	Bunsen	41.4	-85.3		8, VIII				Libration object
148	Burckhardt	31.1	56.5		16				
149	Burg	45.0	28.2	36	14				
150	Burnham	-13.9	7.3		45				
151	Busching	-38.0	20.0	50	66				
152	Byrd	85.3	9.8		4, II				Libration object
153	Byrgius	-24.7	-65.3		50, 51				Libration object

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
154	C Herschel	34.5	-31.2	106	10				
155	C Mayer	63.2	17.3	48	5				
156	Cabeus	-84.9	-35.5		73, VI				Libration object
157	Cajal	12.6	31.1		36				
158	Calippus	38.9	10.7	60	13				
159	Cameron	6.2	45.9		37				
160	Campanus	-28.0	-27.8	101	53				
161	Cannizzaro	55.6	-100.7		I				Libration object
162	Cannon	19.9	81.4		27, III				Libration object
163	Capella	-7.6	34.9	28	47				
164	Capuanus	-34.1	-26.7	108	63				
165	Cardanus	13.2	-72.4	L7	28				Libration object
166	Carlini	33.7	-24.1		10				
167	Carmichael	19.6	40.4	27	25				
168	Carpenter	69.4	-50.9		2, 3				
169	Carrel	10.7	26.7		35				
170	Carrillo	-2.2	80.9		49, IV				Libration object
171	Carrington	44.0	62.1		15				
172	Cartan	4.2	59.3		38				
173	Casatus	-72.6	-30.5	107	72				
174	Cassini	40.2	4.6	68	12				
175	Catalan	-45.7	-87.3		61, VI				Libration object
176	Catena Abulfeda	-17.0	17.0	54	56, 57				
177	Catena Davy	-11.0	-7.0	82	43				
178	Catena Dziewulski	21.0	99.0		III				Libration object
179	Catena Humboldt	-22.0	85.0		60, IV				Libration object
180	Catena Krafft	15.0	-72.0		17, 28				200mm
181	Catena Littrow	22.0	29.0	34	24				
182	Catena Sylvester	80.0	-80.0		I				Libration object
183	Catena Timocharis	29.0	-13.0		21				500mm
184	Catharina	-18.0	23.6	39	57				
185	Cauchy	9.6	38.6	26	36				
186	Cavalerius	5.1	-66.8	131	28				
187	Cavendish	-24.5	-53.7	128	51				
188	Caventou	29.8	-29.4		20				
189	Cayley	4.0	15.1		34				
190	Celsius	-34.1	20.1	46	67				
191	Censorinus	-0.4	32.7	28	47				
192	Cepheus	40.8	45.8	16	15				
193	Chacornac	29.8	31.7	33	14, 25				
194	Chadwick	-52.7	-101.3		VI				Libration object
195	Challis	79.5	9.2		4				
196	Chamberlin	-58.9	95.7		V				Libration object
197	Chapman	50.4	-100.7		I				Libration object
198	Chappe	-61.2	-91.5		VI				Libration object
199	Chevallier	44.9	51.2		15				
200	Ching-te	20.0	30.0		25				
201	Chladni	4.0	1.1		33				
202	Cichus	-33.3	-21.1	108	63				
203	Clairaut	-47.7	13.9	50	66				
204	Clausius	-36.9	-43.8	127	62				
205	Clavius	-58.4	-14.4	92	72, 73				
206	Cleomedes	27.7	55.5	11	26				
207	Cleostratus	60.4	-77.0	L6	1, I				Libration object
208	Clerke	21.7	29.8		25				
209	Collins	1.3	23.7	44	35				
210	Colombo	-15.1	45.8	13c	59				
211	Compton	56.0	105.0		II				Libration object
212	Condon	1.9	60.4		38				
213	Condorcet	12.1	69.6	2	38				
214	Conon	21.6	2.0		22				
215	Cook	-17.5	48.9	CAN4	59				
216	Copernicus	9.7	-20.0	95	31				
217	Couder	-4.8	-92.4		VII				Libration object
218	Cremona	67.5	-90.6		2, I				Libration object
219	Crile	14.2	46.0		37				
220	Crozier	-13.5	50.8		48				
221	Cruger	-16.7	-66.8	132	50				
222	Curie	-23.0	91.8		IV				Libration object
223	Curtis	14.6	56.6		26				
224	Curtius	-67.2	4.4	80	73				
225	Cusanus	72.0	70.8	L5	6, II				Libration object
226	Cuvier	-50.3	9.9	58	74				
227	Cyrillus	-13.2	24.0	38	46				
228	Cysatus	-66.2	-6.1	80	73				
229	d'Arrest	2.3	14.7		34				

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230	da Vinci	9.1	45.0		37				
231	Daguerre	-11.9	33.6	25	47				
232	Dale	-9.6	82.9		49, IV				Libration object
233	Dalton	17.1	-84.3		17, VIII				Libration object
234	Daly	5.7	59.6	CAN5	38				
235	Damoiseau	4.8	-61.1		39				
236	Daniell	35.3	31.1		14				
237	Darney	-14.5	-23.6	102	42, 53				
238	Darwin	-19.8	-69.1		50				
239	Daubree	15.7	14.7		23				
240	Davy	-11.8	-8.1	82	43				
241	Dawes	17.2	26.4	43	24				
242	De Gasparis	-25.9	-50.7		51				
243	de Gerlache	-88.5	-87.1		VI				Libration object
244	De La Rue	59.1	53.0		6				
245	de Morgan	3.3	14.9		34				
246	de Roy	-55.3	-99.1		VI				Libration object
247	de Sitter	80.1	39.6		5, II				Libration object
248	de Vico	-19.7	-60.2		50, 51				
249	Debes	29.5	51.7	11	26				
250	Debus	-10.5	99.6		IV				Libration object
251	Dechen	46.1	-68.2		8				
252	Delambre	-1.9	17.5	47	46				
253	Delaunay	-22.2	2.5		55				
254	Delisle	29.9	-34.6	114	9, 19				
255	Delmotte	27.1	60.2	11	26				
256	Deluc	-55.0	-2.8	81	73				
257	Dembowski	2.9	7.2		34				
258	Democritus	62.3	35.0	L5	5				
259	Demonax	-78.2	59.0		74, V				Libration object
260	Desargues	70.2	-73.3		2, I				
261	Descartes	-11.7	15.7		45				
262	Deseilligny	21.1	20.6		24				
263	Deslandres	-32.5	-5.2	79	64, 65				
264	Dionysius	2.8	17.3		35				
265	Diophantus	27.6	-34.3	114	19				
266	Doerfl	-69.1	-107.9		VI				Libration object
267	Dollond	-10.4	14.4		45				
268	Dome Milichius	10.2	-31.2		30				
269	Donati	-20.7	5.2		55				
270	Donner	-31.4	98.0		IV				Libration object
271	Doppelmayr	-28.5	-41.4	121	52				
272	Dorsa Aldovandri	24.0	29.0	34	24				
273	Dorsa Andrusov	-1.0	57.0		49				
274	Dorsa Argand	28.0	-40.0		19				
275	Dorsa Barlow	15.0	31.0	35	25, 36				
276	Dorsa Burnet	27.0	-57.0		18				
277	Dorsa Cato	1.0	47.0	13b	37				
278	Dorsa Ewing	-11.0	-38.0		41				
279	Dorsa Geikie	-3.0	53.0	13a	48				
280	Dorsa Harker	14.0	64.0	1a	27, 38				
281	Dorsa Lister	19.0	22.0	41	24				
282	Dorsa Mawson	-7.0	53.0	13a	48				
283	Dorsa Rubey	-10.0	-42.0	120	40				
284	Dorsa Smirnov	25.0	25.0	41	24				
285	Dorsa Stiile	27.0	-19.0		20				
286	Dorsa Tetyaev	19.0	65.0	1a	27				
287	Dorsa Whiston	30.0	-57.0		8				
288	Dorsum Arduino	26.0	-36.0		19				
289	Dorsum Azara	26.0	20.0	41	24				
290	Dorsum Bucher	31.0	-39.0		9				
291	Dorsum Buckland	21.0	12.0	56	23				
292	Dorsum Cayeux	1.0	51.0	13a	37				
293	Dorsum Cushman	1.0	49.0		37				
294	Dorsum Gast	24.0	9.0	56	23				
295	Dorsum Grabau	30.0	-14.0	89	11				
296	Dorsum Guettard	-10.0	-18.0	93	42				
297	Dorsum Heim	31.0	-29.0	104	10				
298	Dorsum Higazy	28.0	-17.0	89	21				
299	Dorsum Nicol	18.0	23.0	41	24				
300	Dorsum Niggli	29.0	-52.0		18				
301	Dorsum Opper	19.0	52.0	15	26				
302	Dorsum Owen	25.0	11.0	56	23				
303	Dorsum Scilla	32.0	-60.0		8				
304	Dorsum Termier	11.0	58.0		37, 38				
305	Dorsum Von Cotta	24.0	12.0	56	23				

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306	Dorsum Zirkel	29.0	-24.0		104	10, 20			
307	Dove	-46.7	31.5			67			
308	Draper	17.6	-21.7			20			
309	Drebbel	-40.9	-49.0	127		62			
310	Dreyer	10.0	96.9			III			Libration object
311	Drude	-38.5	-91.8			VII			Libration object
312	Drygalski	-79.7	-86.8			72, VI			Libration object
313	Dubiago	4.4	70.0			38			
314	Dugan	64.2	103.3			II			Libration object
315	Dunthorne	-30.1	-31.6	108		62, 63			
316	Dziewulski	21.2	98.9			III			Libration object
317	Eckert	17.3	58.3			26			
318	Eddington	21.5	-71.8	L7		17			Libration object
319	Edison	25.0	99.1			III			Libration object
320	Égede	48.7	10.6	48		13, 5			
321	Eimmart	24.0	64.8	3		27			
322	Einstein	16.6	-88.5			17, VIII			Libration object
323	Eischstadt	-22.6	-78.3			50, VII			Libration object
324	Elger	-35.3	-29.8			63			
325	Ellison	55.1	-107.5			I			Libration object
326	Elmer	-10.1	84.1			49, IV			Libration object
327	Encke	4.6	-36.6	115		30			
328	Endymion	53.6	56.5	9		7			
329	Épigènes	67.5	-4.6			4			
330	Epimenides	-40.9	-30.2	109		63			
331	Eratosthenes	14.5	-11.3	87		21, 32			
332	Erro	5.7	98.5			III			Libration object
333	Esclançon	21.5	42.1			25			
334	Euclides	-7.4	-29.5	110		41			
335	Euctemon	76.4	31.3			5			
336	Éudoxus	44.3	16.3	48		13			
337	Euler	23.3	-29.2			20			
338	Fabbroni	18.7	29.2			25			
339	Fabricius	-42.9	42.0	20		68			
340	Fabry	43.0	101.0			II, III			Libration object
341	Fahrenheit	13.1	61.7			38			Fahrenheit in VMA
342	Faraday	-42.4	8.7	62		66			
343	Faustini	-87.3	77.0			V			Libration object
344	Fauth	6.3	-20.1			31			
345	Faye	-21.4	3.9			55			
346	Fedorov	28.2	-37.0			19			
347	Fenyi	-44.9	-105.1			VI, VII			Libration object
348	Fermat	-22.6	19.8			57			
349	Fernelius	-38.1	4.9	62		65			
350	Feuillee	27.4	-9.4	89		21			
351	Finsch	23.6	21.3			24			
352	Firmicus	7.3	63.4	2		38			
353	Flammarion	-3.4	-3.7	75		44			
354	Flamsteed	-4.5	-44.3	120		40			
355	Focas	-33.7	-93.8			VII			Libration object
356	Fontana	-16.1	-56.6			51			
357	Fontenelle	63.4	-18.9	85		3			
358	Foucault	50.4	-39.7	133		2			
359	Fourier	-30.3	-53.0	128		51, 61			
360	Fox	0.5	98.2			III			Libration object
361	Fra Mauro	-6.0	-17.0	93		42, 43			
362	Fra Mauro Eta	-2.3	-15.5			43			http://www.lpod.org/?p=1200
363	Fracastorius	-21.2	33.0	29		58			
364	Franck	22.6	35.5			25			
365	Franklin	38.8	47.7	16		15			
366	Franz	16.6	40.2			25			
367	Fraunhofer	-39.5	59.1	7		69			
368	Fredholm	18.4	46.5			26			
369	Freud	25.8	-52.3			18			
370	Froelich	80.3	-109.7			I			Libration object
371	Fryxell	-21.3	-101.4			VII			Libration object
372	Furnerius	-36.3	60.4	7		69			
373	G Bond	32.4	36.2			15			
374	Galen	21.9	5.0			22			
375	Galliaei	10.5	-62.7	131		28			
376	Galle	55.9	22.3	48		5			
377	Galvani	49.6	-84.6			1, 8, I			Libration object
378	Gambart	1.0	-15.2			32			
379	Ganswindt	-79.6	110.3			V			Libration object
380	Gardner	17.7	33.8			25			
381	Gartner	59.1	34.6	L5		6			

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
382	Gassendi	-17.5	-39.9	116	52				
383	Gaudibert	-10.9	37.8		47				
384	Gauricus	-33.8	-12.6	88	64				
385	Gauss	35.9	79.1		16				Libration object
386	Gay-Lussac	13.9	-20.8		31				
387	Geber	-19.4	13.9	55	56				
388	Geissler	-2.6	76.5		49				
389	Geminus	34.5	56.7	8	16				
390	Gemma Frisius	-34.2	13.3	51	66				
391	Gerard	44.5	-80.0		8, VIII				Libration object
392	Gernsback	-36.5	99.7		IV				Libration object
393	Gibbs	-18.4	84.3		60, IV				Libration object
394	Gilbert	-3.2	76.0		49				
395	Gill	-63.9	75.9		75, V				Libration object
396	Ginzel	14.3	97.4		III				Libration object
397	Gioja	83.3	2.0		4				
398	Giordano Bruno	37.0	103.0		III				Libration object
399	Glaisher	13.2	49.5		37				
400	Glushko	8.4	-77.6		28				
401	Goclenius	-10.0	45.0	13c	48				
402	Goddard	14.8	89.0		27, III				Libration object
403	Godin	1.8	10.2	61	34				
404	Goldschmidt	73.0	-2.9	76	4				
405	Golgi	27.8	-60.0		18				
406	Goodacre	-32.7	14.1	51	66				
407	Gould	-19.2	-17.2		53				
408	Graff	-42.4	-88.6		61, VII				Libration object
409	Greaves	13.2	52.7	1b	37				
410	Grimaldi	-5.2	-68.6	134	39				Libration object
411	Grove	40.3	32.9		14				
412	Gruemberger	-66.9	-10.0	80	73				
413	Gruithuisen	32.9	-39.7	117	9				
414	Guericke	-11.5	-14.1		43				
415	Gum	-40.4	88.6		69, IV				Libration object
416	Gutenberg	-8.6	41.2	13c	48				
417	Guthnick	-47.7	-93.9		VI				Libration object
418	Gylden	-5.3	0.3		44				
419	Hagecius	-59.8	46.6	30	75				
420	Hahn	31.3	73.6	8	16				
421	Haidinger	-39.2	-25.0	109	63				
422	Hainzel	-41.3	-33.5	109	63				
423	Haldane	-1.7	84.1		49, IV				Libration object
424	Hale	-74.2	90.8		74,75,V				Libration object
425	Hall	33.7	37.0		15				
426	Halley	-8.0	5.7	65	45				
427	Hamilton	-42.8	84.7		69, IV				Libration object
428	Hanno	-56.3	71.2		76, V				Libration object
429	Hansen	14.0	72.5		38				
430	Hanskiy	-9.7	97.0		IV				Libration object, Ganskiy in VMA
431	Hansteen	-11.5	-52.0	124	40				
432	Harding	43.5	-71.7		8				
433	Hargreaves	-2.2	64.0		49				
434	Harkhebi	39.9	99.8		III				Libration object
435	Harlan	-38.5	79.5		69, IV				Libration object
436	Harpalus	52.6	-43.4	133	2				
437	Hartwig	-6.1	-80.5		39, VII				Libration object
438	Hase	-29.4	62.5	6	59				
439	Hausen	-65.5	-88.4		71, VI				Libration object
440	Hayn	64.7	85.2		6, II				Libration object
441	Hecataeus	-21.8	79.6		60, IV				Libration object
442	Hedervari	-81.8	84.0		V				Libration object
443	Hedin	2.9	-76.5		28				
444	Heinrich	24.8	-15.3	89	21				
445	Heinsius	-39.5	-17.7	97	64				
446	Heis	32.4	-31.9		10				
447	Helicon	40.4	-23.1	106	10				
448	Hell	-32.4	-7.8	79	64				
449	Helmert	-7.6	87.6		49, IV				Libration object
450	Heimholtz	-68.1	64.1		75, V				Libration object
451	Henry	-24.0	-56.8	128	51				
452	Henry Freres	-23.5	-58.9	128	51				
453	Heraclitus	-49.2	6.2	62	73				Also required for Objective 81
454	Heraclitus	-49.2	6.2	81	73				Also required for Objective 62
455	Hercules	46.7	39.1	24	14				
456	Herigonius	-13.3	-33.9		41				
457	Hermann	-0.9	-57.3		39				

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458	Hermite	86.4	-87.3		4, II				Libration object
459	Herodotus	23.2	-49.7	122	18				
460	Herschel	-5.7	-2.1	75	44				
461	Hesiodus	-29.4	-16.3	108	54				
462	Hevelius	2.2	-67.3	131	28				
463	Heyrovsky	-39.6	-95.3		VII				Libration object
464	Hill	20.9	40.8	27	25				
465	Hind	-7.9	7.4	65	45				
466	Hippalus	-24.8	-30.2	113	52, 53				
467	Hipparchus	-5.5	4.8	65	44, 45				
468	Hirayama	-6.0	93.7		IV				Libration object
469	Hohmann	-17.9	-94.1		VII				Libration object
470	Holden	-19.1	62.5	4	60				
471	Hommel	-54.6	33.0	30	75				
472	Hooke	41.2	54.9		15				
473	Hornsby	23.8	12.5		23				
474	Horrebow	58.7	-40.8		2				
475	Horrocks	-4.0	5.9	65	45				
476	Hortensius	6.5	-28.0	111	30				
477	Houtermans	-9.4	87.2		49, IV				Libration object
478	Hubble	22.1	86.9	L4	27, III				Libration object
479	Huggins	-41.1	-1.4	72	65				
480	Humason	30.7	-56.6		8				
481	Humboldt	-27.2	80.9		60				Libration object
482	Hume	-4.7	90.4		IV				Libration object
483	Huxley	20.2	-4.5		22				
484	Hyginus	7.8	6.3	61	34				
485	Hypatia	-4.3	22.6	40	46				
486	Ibn Battuta	-6.9	50.4		48				
487	Ibn Rushd	-11.7	21.7	38	46				
488	Ibn Yunus	14.1	91.1		III				Libration object
489	Ideler	-49.2	22.3		74				
490	Idelson	-81.5	110.9		V				Libration object
491	Il'in	-17.8	-97.5		VII				Libration object
492	Inghirami	-47.5	-68.8	127	61, 62				
493	Isidorus	-8.0	33.5	28	47				
494	Ivan	26.9	-43.3		19				
495	J Herschel	62.1	-41.2	133	2				
496	Jacobi	-56.7	11.4	58	74				
497	Janssen	13.5	28.7	35	36				
498	Jansky	8.5	89.5		38, III				Libration object
499	Janssen	-44.9	41.5	22	67, 68				
500	Jeans	-55.8	91.4		V				Libration object
501	Jehan	20.7	-31.9		19				Wrong loc'n in VMA, use Euler K
502	Jenkins	0.3	78.1		38				
503	Jenner	-42.1	95.9		IV				Libration object
504	Joliot	25.6	92.7		III				Libration object
505	Joy	25.0	6.6		23				
506	Julius Caesar	9.0	15.4	53	34				
507	Kaiser	-36.5	6.5	62	65, 66				
508	Kane	63.1	26.1		5				
509	Kant	-10.6	20.1	38	46				
510	Kao	-6.7	87.6		49, IV				Libration object
511	Kapteyn	-10.8	70.6		49				
512	Kastner	-7.0	79.1		49				Libration object
513	Keldysh	51.2	43.6		6				
514	Kepler	8.1	-38.0	115	30				
515	Kies	-26.3	-22.5	101	53				
516	Kiess	-6.4	84.0		49, IV				Libration object
517	Kinau	-60.8	15.1	58	74				
518	Kirch	39.2	5.6	77	12				
519	Kircher	-67.1	-45.3	125	71, 72				
520	Kirchhoff	30.3	38.8		15				
521	Klaproth	-69.7	-26.0	107	72				
522	Klein	-12.0	2.6	66	44				
523	Knox-Shaw	5.3	80.2		38, III				Libration object
524	Konig	-24.1	-24.6	100	53				
525	Kopff	-17.4	-89.6		50, VII				Libration object
526	Kovalskiy	-21.1	98.1		IV				Libration object
527	Krafft	16.6	-72.6	L7	17				Libration object
528	Kramarov	-2.3	-98.8		VII				Libration object
529	Krasnov	-29.9	-79.6		50, VII				Libration object
530	Kreiken	-9.0	84.6		49, IV				Libration object
531	Krieger	29.0	-45.6		19				
532	Krishna	24.5	11.3		23				
533	Krogh	9.4	65.7		38				

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
534	Krusenstern	-26.2	5.9		55, 56				
535	Kugler	-53.8	103.7		V				Libration object
536	Kuiper	-9.8	-22.7	102	42				
537	Kundt	-11.5	-11.5		43				
538	Kunowsky	3.2	-32.5		30				
539	la Caille	-23.8	1.1		55				
540	La Condamine	53.4	-28.2		2				
541	la Prouse	-10.7	76.3		49				
542	Lacroix	-37.9	-59.0	135	61				
543	Lacus Aestatis	-15.0	-69.0		39, 50				
544	Lacus Autumni	-14.0	-82.0		39, 50, VII				Libration object
545	Lacus Bonitatis	23.0	44.0		25, 26				
546	Lacus Doloris	17.0	9.0	52	23				
547	Lacus Excellentiae	-36.0	-43.0	127	62				
548	Lacus Felicitatis	19.0	5.0	52	22				
549	Lacus Gaudii	17.0	13.0	52	23				
550	Lacus Hiemalis	15.0	14.0	52	23				
551	Lacus Lenitatis	14.0	12.0	52	23, 34				
552	Lacus Mortis	45.0	27.0	36	14				
553	Lacus Odii	19.0	7.0	52	23				
554	Lacus Perseverantiae	8.0	62.0		38				
555	Lacus Somniorum	39.0	28.0	36	14				
556	Lacus Spei	43.0	65.0	8	16				
557	Lacus Temporis	46.0	57.0		15				
558	Lacus Timoris	-39.0	-28.0	109	63				
559	Lacus Veris	-13.0	-87.0		39, 50, VII				Libration object
560	Lade	-1.3	10.1		45				
561	Lagalla	-44.6	-22.5		63				
562	Lagrange	-33.2	-72.0		61				
563	Lalande	-4.4	-8.6	82	43				
564	Lallemant	-14.3	-84.1		39, VII				Libration object
565	Lamarck	-22.9	-69.8		50				
566	Lamb	-42.8	100.8		IV				Libration object
567	Lambert	25.8	-21.0	104	20				
568	Lame	-14.7	64.5	4	49, 60				
569	Lamech	42.7	13.1		13				
570	Lamont	5.0	23.2	44	35				
571	Landsteiner	31.3	-14.8	89	11				
572	Langley	51.1	-86.3		1, I				Libration object
573	Langrenus	-8.9	60.9	5	49				
574	Lansberg	-0.3	-26.6	103	42				
575	Lassell	-15.5	-7.9		54				
576	Laue	28.0	-96.7		VIII				Libration object
577	Lauritsen	-27.6	96.1		IV				Libration object
578	Lavoisier	38.2	-81.2		8, VIII				Libration object
579	Lawrence	7.4	43.2		37				
580	le Gentil	-74.4	-76.5		72, VI				Libration object
581	Le Monnier	26.6	30.6	34	24, 25				
582	Le Verrier	40.3	-20.6	106	11				
583	Leakey	-3.2	37.4		47				
584	Lebesgue	-5.1	89.0		49, IV				Libration object
585	Lee	-30.7	-40.7	127	62				
586	Legendre	-28.9	70.2		59, 60				
587	Lehmann	-40.0	-56.0	127	61, 62				
588	Lepaute	-33.3	-33.6	108	62				
589	Letronne	-10.6	-42.4	120	40				
590	Lexell	-35.8	-4.2	79	65				
591	Liapunov	26.3	89.3		27, III				Libration object
592	Licetus	-47.1	6.7	62	65				
593	Lichtenberg	31.8	-67.7		8				
594	Lick	12.4	52.7	1b	37				
595	Liebig	-24.3	-48.2		51				
596	Lilius	-54.5	6.2	81	73				
597	Lindbergh	-5.4	52.9		48				
598	Lindblad	70.4	-98.8		I				Libration object
599	Lindenau	-32.3	24.9	46	67				
600	Lindsay	-7.0	13.0		45				
601	Linne	27.7	11.8	57	23				
602	Liouville	2.6	73.5		38				
603	Lippershey	-25.9	-10.3		54				
604	Littrow	21.5	31.4		25				
605	Lockyer	-46.2	36.7	22	67				
606	Loewy	-22.7	-32.8		52				
607	Lohrmann	-0.5	-67.2		39				
608	Lohse	-13.7	60.2	4	49				
609	Lomonosov	27.3	98.0		III				Libration object

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610	Longfellow	-7.5	91.3		IV				Libration object
611	Longomontanus	-49.5	-22.0	99	64, 72				
612	Lorentz	34.3	-96.9		VIII				Libration object
613	Louise	28.5	-34.2		19				
614	Louville	44.0	-46.0		9				
615	Lovelace	82.3	-106.4		I				Libration object
616	Lubbock	-3.9	41.8	13c	48				
617	Lubiniezky	-17.8	-23.8		53				
618	Lucian	14.3	36.7		25, 36				
619	Ludwig	-7.7	97.4		IV				Libration object
620	Luther	33.2	24.1		14				
621	Lyell	13.6	40.6		36				
622	Lytot	-50.2	84.1		69,76,V				Libration object
623	Maclaurin	-1.9	68.0		49				
624	Maclear	10.5	20.1		35				
625	Macmillan	24.2	-7.8		21				
626	Macrobius	21.3	46.0	11	26				
627	Madler	-11.0	29.8	37	47				
628	Maestlin	4.9	-40.6		29				
629	Magelhaens	-11.9	44.1		48				
630	Maginus	-50.0	-6.2	81	65, 73				
631	Main	80.8	10.1		4				
632	Mairan	41.6	-43.4	106	9				
633	Mairan T	41.7	-48.2	117	9				
634	Malapert	-84.9	12.9		73, V				Libration object
635	Mallet	-45.4	54.2	14	68				
636	Manilius	14.5	9.1	59	23, 34				
637	Manners	4.6	20.0		35				
638	Manzinus	-67.7	26.8	58	74				
639	Maraldi	19.4	34.9	27	25				
640	Marco Polo	15.4	-2.0		22				
641	Mare Anguis	22.0	67.0	3	27				
642	Mare Australe	-46.0	91.0	L1	76, IV, V				Libration object
643	Mare Cognitum	-10.0	-23.0	102	42				
644	Mare Crisium	17.0	59.0	1b	26,27,37,38				
645	Mare Fecunditatis	-2.0	52.0	Part 1-B	37,48,49,59				
646	Mare Frigoris	58.0	-20.0	Part 1-B	1 to 6				
647	Mare Humboldtianum	57.0	80.0	9	7, II				Libration object
648	Mare Humorum	-24.0	-39.0	Part 1-B	51, 52				
649	Mare Imbrium	30.0	-20.0	96	9-12, 19-21				
650	Mare Insularum	7.0	-22.0	111	30-32,41,42				
651	Mare Marginis	12.0	88.0	L2	27, 38, III				Libration object
652	Mare Nectaris	-15.0	35.0	25	47, 58				
653	Mare Nubium	-20.0	-15.0	Part 1-B	53, 54				
654	Mare Orientale	-20.0	-95.0	L10	50, VII				Libration object
655	Mare Serenitatis	28.0	18.0	Part 1-B	13,14,23,24				
656	Mare Smythii	-2.0	87.0	L3	38,49,III,IV				Libration object
657	Mare Spumans	1.0	65.0	2	38				
658	Mare Tranquillitatis	8.0	28.0	Part 1-B	35,36,47				
659	Mare Undarum	7.0	69.0	2	38				
660	Mare Vaporum	13.0	3.0	Part 1-B	22, 33, 34				
661	Marinus	-39.4	76.5		69				
662	Marius	11.9	-50.8	126	29				
663	Markov	53.4	-62.7	L6	1				Libration object
664	Marth	-31.1	-29.3		63				
665	Maskelyne	2.2	30.1	35	36				
666	Mason	42.6	30.5	36	14				
667	Maunder	-14.6	-93.8		VII				Libration object
668	Maupertuis	49.6	-27.3	106	2				
669	Maurolycus	-41.8	14.0	50	66				
670	Maury	37.1	39.6		15				
671	Maxwell	30.0	98.6		III				Libration object
672	McAdie	2.1	92.1		III				Libration object
673	McClure	-15.3	50.3		59				
674	McDonald	30.4	-20.9		10				
675	McLaughlin	47.1	-92.9		I				Libration object
676	Mee	-43.7	-35.0		63				
677	Mees	13.6	-96.1		VIII				Libration object
678	Mendel	-48.8	-109.9		VI				Libration object
679	Menelaus	16.3	16.0	56	23				
680	Menzel	3.4	36.9		36				
681	Mercator	-29.3	-26.1	101	53				
682	Mercurius	46.6	66.2		15, 16				
683	Merril	75.2	-116.3		I				Libration object
684	Mersenius	-21.5	-49.2	123	51				
685	Messala	39.2	59.9	8	16				

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686	Messier	-1.9	47.6	13b	48				
687	Metius	-40.4	43.3	20	68				
688	Meton	73.8	19.2		4, 5				
689	Milichius	10.0	-30.2	112	30				
690	Miller	-39.3	0.8	72	65				
691	Mitchell	49.7	20.2	48	5				
692	Moigno	66.4	28.9		5				
693	Moltke	-0.6	24.2	45	46				
694	Monge	-19.2	47.6		59				
695	Mons Ampere	19.0	-4.0	70	22				
696	Mons Argaeus	19.0	29.0	34	24, 25				
697	Mons Blanc	45.0	1.0	68	12				
698	Mons Bradley	22.0	1.0	70	22				
699	Mons Delisle	29.0	-36.0	114	19				
700	Mons Esam	14.6	35.7		36				
701	Mons Gruithuisen Delta	36.0	-39.5	117	9				
702	Mons Gruithuisen Gamma	36.6	-40.5	117	9				
703	Mons Hadley	27.0	5.0	70	22				
704	Mons Hadley Delta	26.0	4.0	70	22				
705	Mons Hansteen	-12.0	-50.0	124	40				
706	Mons Herodotus	27.0	-53.0	122	18				Not in VMA
707	Mons Huygens	20.0	-3.0	70	22				
708	Mons La Hire	28.0	-25.0	104	20				
709	Mons Maraldi	20.0	35.0	27	25				
710	Mons Moro	-12.0	-20.0	102	42				
711	Mons Penck	-10.0	22.0	38	46				
712	Mons Pico	46.0	-9.0	84	11				
713	Mons Piton	41.0	-1.0	77	12				
714	Mons Rumker	41.0	-58.0	130	8				
715	Mons Usov	12.0	63.0	1a	38				
716	Mons Vinogradov	22.4	-43.4	114	19				
717	Mons Vitrovius	19.0	31.0	34	25				
718	Mons Wolff	17.0	-7.0	70	21				
719	Montanari	-45.8	-20.6	97	64				
720	Montes Agricola	29.0	-54.0	122	18				
721	Montes Alpes	46.0	2.0	68	12				
722	Montes Apenninus	20.0	-3.0	70	22				
723	Montes Archimedes	26.0	-5.0	78	22				
724	Montes Carpatius	15.0	-25.0	105	20, 31				
725	Montes Caucasus	39.0	9.0	60	13				
726	Montes Cordillera	-20.0	-80.0	L10	39, 50, VII				Libration object
727	Montes Haemus	17.0	13.0	52	23				
728	Montes Harbinger	27.0	-41.0	119	19				
729	Montes Jura	47.0	-37.0	106	10				
730	Montes Pyrenaeus	-14.0	41.0	23	48, 58				
731	Montes Recti	48.0	-20.0	94	11				
732	Montes Rhiphaeus	-7.0	-28.0	110	41, 42				
733	Montes Rook	-20.0	-83.0		50, VII				Libration object
734	Montes Secchi	3.0	43.0	13b	37				
735	Montes Spitzbergen	35.0	-5.0	77	12				
736	Montes Taurus	26.0	36.0	27	25				
737	Montes Teneriffe	48.0	-13.0	84	3, 11				
738	Moretus	-70.6	-5.5	80	73				
739	Morley	-2.8	64.6		49				
740	Moseley	20.9	-90.1		VIII				Libration object
741	Mosting	-0.7	-5.9	82	43				
742	Mouchez	78.3	-26.6		3, 4				
743	Moulton	-61.1	97.2		V				Libration object
744	Muller	-7.6	2.1		44				
745	Murchison	5.1	-0.1	64	33				
746	Mutus	-63.6	30.1	58	74				
747	Nansen	81.3	95.3		5, II				Libration object
748	Naonobu	-4.6	57.8	5	49				
749	Nasireddin	-41.0	0.2	72	65				
750	Nasmyth	-50.5	-56.2	129	70				
751	Natasha	20.0	-31.3		19				
752	Naumann	35.4	-62.0		8				
753	Neander	-31.3	39.9	14	68				
754	Nearch	-58.5	39.1	30	75				
755	Neison	68.3	25.1		5				
756	Neper	8.8	84.5		38, III				Libration object
757	Nernst	35.4	-94.5		VIII				Libration object
758	Neumayer	-71.1	70.7		75, V				Libration object
759	Newcomb	29.9	43.8	19, CAN6	15, 25				
760	Newton	-76.7	-16.9	80	73				
761	Nicholson	-26.2	-85.1		50, VII				Libration object

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
762	Nicolai	-42.4	25.9	32	67				
763	Nicollet	-21.9	-12.5		54				
764	Nielsen	31.8	-51.8		8				
765	Niepce	72.7	-119.1		I				Libration object
766	Nobile	-85.2	53.5		V				Libration object
767	Nobili	0.2	75.9		38				
768	Noether	66.6	-113.5		I				Libration object
769	Noggerath	-48.8	-45.7	129	62, 70				
770	Nonius	-34.8	3.8	71	65				
771	Norman	-11.8	-30.4		41				
772	Nunn	4.6	91.1		III				Libration object
773	Oceanus Procellarum	0.0	-50.0	Part 1-B	28				Also RUKL 8,9,17-19,29,39-41,VII
774	Oenopides	57.0	-64.1	L6	1				Libration object
775	Oersted	43.1	47.2		15				
776	Oken	-43.7	75.9	L1	69, IV				Libration object
777	Olbers	7.4	-75.9		28				
778	Omar Khayyam	58.0	-102.1		I				Libration object
779	Opelt	-16.3	-17.5		53				
780	Oppolzer	-1.5	-0.5		44				
781	Orontius	-40.3	-4.0	72	65				
782	Palisa	-9.4	-7.2		43				
783	Palitzsch	-28.0	64.5		59				
784	Pallas	5.5	-1.6	64	33				
785	Palmieri	-28.6	-47.7		51				
786	Palus Epidemiarum	-32.0	-27.0	108	53, 63				
787	Palus Putredinis	27.0	0.0		22				
788	Palus Somni	15.0	44.0	18	26, 37				
789	Paneth	63.0	-94.8		I				Libration object
790	Parkhurst	-33.4	103.6		IV				Libration object
791	Parrot	-14.5	3.3		44, 55				
792	Parry	-7.9	-15.8	93	42, 43				
793	Pascal	74.3	-70.1		3, I				Libration object
794	Peary	88.6	33.0		4, II				Libration object
795	Peek	2.6	86.9		38, III				Libration object
796	Peirce	18.3	53.5	1b	26				
797	Peirescius	-46.5	67.6		68, 69				
798	Pentland	-64.6	11.5	80	73, 74				
799	Petavius	-25.3	60.4	6	59				
800	Petermann	74.2	66.3	L5	5, II				Libration object
801	Peters	68.1	29.5		5				
802	Petit	2.3	63.5		38				
803	Petrov	-61.4	88.0		76, V				Libration object
804	Petit	-27.5	-86.6		50, VII				Libration object
805	Petzval	-62.7	-110.4		VI				Libration object
806	Phillips	-26.6	76.0		60				
807	Philolaus	72.1	-32.4	85	3				
808	Phocyclides	-52.9	-57.3	118	70				
809	Piazz	-36.2	-67.9		61				
810	Piazz Smyth	41.9	-3.2	77	12				
811	Picard	14.6	54.7	1b	26, 37				
812	Piccolomini	-29.7	32.2	31	58, 68				
813	Pickering	-2.9	7.0		45				
814	Pictet	-43.6	-7.4	86	64, 65				
815	Pilatre	-60.3	-86.4		70, VI				Libration object
816	Pingre	-58.7	-73.7		70, VI				Libration object
817	Pitatus	-29.8	-13.5	90	54, 64				
818	Pitiscus	-50.4	30.9	30	75				
819	Plana	42.2	28.2	36	14				
820	Planitia Descensus	7.0	-64.0	131	28				Planitia Descensus in VMA
821	Plaskett	82.3	176.0	CAN7	II				Libration object
822	Plato	51.6	-9.3	85	3, 4				
823	Playfair	-23.5	8.4	49	56				
824	Plinius	15.4	23.7	43	24				
825	Plutarch	24.1	79.0		27, III				Libration object
826	Poczobutt	57.5	-99.3		I				Libration object
827	Poisson	-30.4	10.6	51	56, 66				
828	Polybius	-22.4	25.6		57				
829	Pomortsev	0.7	66.9		38				
830	Poncelet	75.8	-54.1		3, I				Libration object
831	Pons	-25.3	21.5		57				
832	Pontanus	-28.4	14.4		56				
833	Pontecoulant	-58.7	66.0		76				
834	Popov	17.2	99.7		III				Libration object
835	Porter	-56.1	-10.1	92	72				
836	Posidinius	31.8	29.9	33	14				
837	Priestly	-57.3	108.4		V				Libration object

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838	Prinz	25.5	-44.1		119				
839	Proclus	16.1	46.8	18	26				
840	Proctor	-46.4	-5.1	72	65				
841	Promontorium Agarum	14.0	66.0	1a	38				
842	Promontorium Agassiz	42.0	2.0	68	12				
843	Promontorium Archerusia	17.0	22.0	43	24				
844	Promontorium Deville	43.0	1.0	68	12				
845	Promontorium Fresnel	29.0	5.0		22				
846	Promontorium Heraclides	41.0	-34.0	106	10				
847	Promontorium Kelvin	-27.0	-33.0	113	52				
848	Promontorium La Place	46.0	-26.0	106	10				
849	Promontorium Lavinium	15.0	49.0	15	26				
850	Promontorium Olivium	15.0	49.0	15	26				
851	Promontorium Taenarium	-19.0	-8.0	83	54				
852	Protagoras	56.0	7.3		4				
853	Ptolemaeus	-9.2	-1.8	75	44				
854	Puiseux	-27.8	-39.0		52				
855	Pupin	23.8	-11.0		21				300mm
856	Purbach	-25.5	-1.9	73	55				
857	Purkyne	-1.6	94.9		IV				Libration object
858	Pythagoras	63.5	-62.8	133	2, I				
859	Pytheas	20.5	-20.6	104	20				
860	Rabbi Levi	-34.7	23.6	46	67				
861	Raman	27.0	-55.1		18				
862	Ramsden	-32.9	-31.8	108	63				
863	Rankine	-3.9	71.5		49				
864	Rayleigh	29.0	89.2		27, III				Libration object
865	Reaumur	-2.4	0.7	65	44				
866	Regiomontanus	-28.4	-1.0	73	55				
867	Regnault	54.1	-88.0		1, I				Libration object
868	Reichenbach	-30.3	48.0	12	59, 69				
869	Reimarus	-47.7	60.3		68				
870	Reiner	7.0	-54.9	126	29				
871	Reiner Gamma	8.0	-59.0	131	28				
872	Reinhold	3.3	-22.8	103	31				
873	Repsold	51.4	-78.5		1				
874	Respighi	2.8	71.9		38				
875	Rhaeticus	0.0	4.9	64	33, 44				
876	Rheita	-37.1	47.2	14	68				
877	Riccioli	-3.0	-74.3		39				
878	Riccus	-36.9	26.5		67				
879	Richardson	31.1	100.3		III				Libration object
880	Riemann	39.5	87.2		16, III				Libration object
881	Rima Agatharchides	-20.0	-28.0		53				300mm
882	Rima Archytas	53.0	5.0		4				
883	Rima Ariadaeus	7.0	13.0	53	34				
									http://www.lpod.org/coppermine/displayimage.php?album=22&pos=20 (Half way between Montes Harbinger and Artsimovich) N/S configuration
884	Rima Artsimovich	27.0	-39.0		19				
885	Rima Billy	-15.0	-48.0		51				300mm
886	Rima Birt	-21.0	-9.0	83	54				
887	Rima Bradley	23.0	-2.0		22				
888	Rima Brayley	23.0	-36.0		19				500mm +
889	Rima Calippus	37.0	13.0		13				
890	Rima Cardanus	11.0	-73.0		28				
891	Rima Cauchy	10.0	39.0	26	36				
892	Rima Cleomedes	28.0	56.0	11	26				
893	Rima Conon	18.0	2.0		22				
894	Rima Delisle	31.0	-33.0		9				500mm +
895	Rima Diophantus	29.0	-33.0		19				500mm +
896	Rima Flammarian	-2.0	-5.0	75	44				
897	Rima Furnerius	-36.3	60.4		69				Located in crater Furnerius
898	Rima G Bond	33.0	35.0		15				
899	Rima Galliae	13.0	-59.0	126	28				
900	Rima Gartner	59.1	34.6		6				300mm Location wrong in VMA
901	Rima Guy-Lussac	13.0	-22.0	105	31				
902	Rima Hadley	25.0	3.0	70	22				
903	Rima Hansteen	-12.0	-53.0		40				
904	Rima Hase	-33.0	66.0		69				200mm
905	Rima Herigonius	-13.0	-37.0		41				500mm
906	Rima Hesiodus	-30.0	-21.0	108	53, 54, 63				
907	Rima Hyginus	7.8	6.3	61	33, 34				
908	Rima Jansen	15.0	29.0		25, 36				
909	Rima Mairan	38.0	-47.0		9				300mm
910	Rima Marius	17.0	-49.0		18				

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
911	Rima Messier	-1.0	45.0		37, 48				500mm
912	Rima Milichius	8.0	-33.0		30				500mm +
913	Rima Oppolzer	-1.0	2.0		44				300mm
914	Rima Reaumur	-3.0	3.0		44				300mm
915	Rima Schroter	1.0	-6.0		32				300mm
916	Rima Sharp	44.0	-51.0		9				500mm +
917	Rima Sheepshanks	58.0	24.0		5				500mm +
918	Rima Sirsalis	-14.0	-60.0	132	39, 50				
919	Rima Suess	6.0	-47.0		29				500mm +
920	Rimae Alphonsus	-13.4	-2.8		44				500mm
921	Rimae Archimedes	27.0	-4.0		22				100mm
922	Rimae Aristarchus	28.0	-47.0	122	18, 19				300mm
923	Rimae Arzachel	-18.2	-1.2	74	55				200mm
924	Rimae Atlas	46.7	44.4		15				200mm
925	Rimae Bode	10.0	-4.0		33				300mm
926	Rimae Boscovich	9.8	11.1		34				500mm
927	Rimae Burg	45.0	26.0	36	14				
928	Rimae Chacornac	29.0	32.0		14				300mm
929	Rimae Daniell	37.0	26.0		14				200mm
930	Rimae Darwin	-20.0	-67.0	132	50				300mm
931	Rimae de Gasparis	-25.0	-50.0		51				200mm
932	Rimae Doppelmayer	-26.0	-45.0	121	52				
933	Rimae Fresnel	28.0	4.0		22				200mm
934	Rimae Gassendi	-17.5	-39.9		52				200mm
935	Rimae Goclenius	-8.0	43.0		48				200mm
936	Rimae Grimaldi	-9.0	-64.0	134	39				
937	Rimae Gutenberg	-5.0	38.0		47				300mm
938	Rimae Hevelius	2.0	-66.0		28				300mm
939	Rimae Hippalus	-25.0	-29.0	113	52, 53				200mm
940	Rimae Hypatia	-1.0	23.0	45	46				
941	Rimae Janssen	-46.0	39.0		67				200mm
942	Rimae Littrow	23.0	31.0	34	25				See VMA Littrow LAC LM
943	Rimae Maclear	13.0	20.0		35				300mm
944	Rimae Maestlin	2.0	-40.0		29				300mm
945	Rimae Maupertuis	51.0	-22.0		3				500mm +
946	Rimae Menelaus	17.0	17.0	56	24				
947	Rimae Mersenius	-20.0	-45.0	123	51				
948	Rimae Opelt	-13.0	-18.0		42				300mm
949	Rimae Palmieri	-28.0	-47.0		51				300mm
950	Rimae Parry	-8.0	-17.0	93	42, 43				300mm
951	Rimae Petavius	-25.2	60.0	6	59				
952	Rimae Pitatus	-29.2	-12.3	90	54				
953	Rimae Plato	51.0	-2.0		4				300mm
954	Rimae Plinius	17.0	24.0	43	24				
955	Rimae Posidonius	31.8	29.9		14				300mm
956	Rimae Prinz	27.0	-43.0		19				300mm
957	Rimae Ramsden	-33.0	-31.0	108	63				
958	Rimae Repsold	51.0	-80.0		1, 1				Libration object
959	Rimae Riccioli	-2.0	-74.0		39				300mm
960	Rimae Ritter	3.0	18.0		35				200mm
961	Rimae Romer	27.0	35.0		25				200mm
962	Rimae Secchi	1.0	44.0		37				200mm
963	Rimae Sosigenes	7.0	19.0		35				300mm
964	Rimae Sulpicius Gallus	21.0	10.0	56	23				
965	Rimae Theaetetus	33.0	6.0		12				300mm Rima in VMA
966	Rimae Triesnecker	4.0	4.0	64	33, 34				
967	Rimae Zupus	-15.0	-53.0		51				300mm
968	Ritchey	-11.1	8.5		45				
969	Rittenhouse	-74.5	106.5		V				Libration object
970	Ritter	2.0	19.2	44	35				
971	Ritz	-15.1	92.2		IV				Libration object
972	Robinson	59.0	-45.9		2				
973	Rocca	-12.7	-72.8		39				
974	Rocco	28.9	-45.0		19				
975	Romer	25.4	36.4	27	25				
976	Röntgen	33.0	-91.4		VIII				Libration object
977	Rosenberger	-55.4	43.1	30	75				
978	Ross	11.7	21.7	44	35				
979	Rosse	-17.9	35.0	25	58				
980	Rost	-56.4	-33.7	118	71				
981	Rothmann	-30.8	27.7	46	67				
982	Rozhdestvenskiy	85.8	-159.1		I				Libration object
983	Runge	-2.5	86.7		49, IV				Libration object
984	Rupes Altai	-24.0	23.0	40	57				
985	Rupes Cauchy	9.0	37.0	26	36				
986	Rupes Kelvin	-28.0	-33.0	113	52				

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
987	Rupes Liebig	-25.0	-46.0	121	51				
988	Rupes Mercator	-30.0	-23.0	101	53				
989	Rupes Recta	-22.0	-7.0	83	54				
990	Rupes Toscanelli	27.0	-47.0	122	18				
991	Russell	26.5	-75.4	L7	17				Libration object
992	Ruth	28.7	-45.1		19				
993	Rutherford	-60.9	-12.1	92	72				
994	Rydberg	-46.5	-96.3		VI				Libration object
995	Rynin	47.0	-103.5		I				Libration object
996	Sabatier	13.2	79.0		38				Libration object
997	Sabine	1.4	20.1	44	35				
998	Sacrobosco	-23.7	16.7	49	56, 57				
999	Sampson	29.7	-16.5		21				
1000	Santbech	-20.9	44.0	10	59				
1001	Santos-Dumont	27.7	4.8		22				
1002	Sarabhai	24.7	21.0	41	24				
1003	Sasserides	-39.1	-9.3	86	64				
1004	Saunder	-4.2	8.8		45				
1005	Saussure	-43.4	-3.8	72	65				
1006	Scheele	-9.4	-37.8		41				
1007	Scheiner	-60.5	-27.8	98	72				
1008	Schiaparelli	23.4	-58.8		18				
1009	Schickard	-44.4	-54.6	127	62				
1010	Schiller	-51.8	-40.0	118	71				
1011	Schluter	-5.9	-83.3		39, VII, VIII				Libration object
1012	Schmidt	1.0	18.8		35				
1013	Schomberger	-76.7	24.9		73, 74				
1014	Schorfeld	44.8	-98.1		VIII				Libration object
1015	Schorr	-19.5	89.7		60, IV				Libration object
1016	Schrodinger	-75.6	133.7		V				Libration object
1017	Schroter	2.6	-7.0		32				
1018	Schubert	2.8	81.0		38, III				Libration object
1019	Schumacher	42.4	60.7		16				
1020	Schwabe	65.1	45.6		6				
1021	Schwarzschild	70.6	119.6		II				Libration object
1022	Scoresby	77.7	14.1		4				
1023	Scott	-81.9	45.3		73, 74, V				Libration object
1024	Secchi	2.4	43.5	13b	37				
1025	Seeliger	-2.2	3.0	65	44				
1026	Segner	-58.9	-48.3	125	71				
1027	Selencus	21.0	-66.6	L7	17				Libration object
1028	Seneca	26.6	80.2		27, III				Libration object
1029	Shackleton	-89.9	0.0		V, VI				Libration object
1030	Shaler	-32.9	-85.2		61, VII				Libration object
1031	Shapley	9.4	56.9		38				
1032	Sharp	45.7	-40.2	106	9, 10				
1033	Sheepshanks	59.2	16.9	48	5				
1034	Shi Shen	76.0	104.1		II				Libration object
1035	Shoemaker	-88.1	44.9		V				Libration object
1036	Short	-74.6	-7.3	80	73				
1037	Shuckburgh	42.6	52.8		15				
1038	Shuleykin	-27.1	-92.5		VII				Libration object
1039	Sikorsky	-66.1	103.2		V				Libration object
1040	Silberschlag	6.2	12.5		34				
1041	Simpelius	-73.0	15.2	80	73				
1042	Sinas	8.8	31.6	35	36				
1043	Sinus Aestuum	12.0	-8.0	87	32, 33				
1044	Sinus Amoris	19.0	38.0	27	25				
1045	Sinus Asperitatis	-6.0	25.0	42	46, 47				
1046	Sinus Concordiae	11.0	43.0	21	37				
1047	Sinus Fidei	18.0	2.0		22				
1048	Sinus Honoris	12.0	18.0	44	35				
1049	Sinus Iridum	45.0	-32.0	106	10				Also required for Objective Part 1-B
1050	Sinus Iridum	45.0	-32.0	Part 1-B	10				Also required for Objective 106
1051	Sinus Lunicus	32.0	-1.0	69	12				
1052	Sinus Medii	0.0	0.0	64	33, 44				
1053	Sinus Roris	45.0	-60.0	Part 1-B	1, 8, 9, I, VIII				
1054	Sinus Successus	1.0	58.0	2	38				
1055	Sirsalis	-12.5	-60.4	132	39				
1056	Skłodowska	-18.0	96.0		IV				Libration object
1057	Slocum	-3.0	89.0		49, IV				Libration object
1058	Smithson	2.4	53.6		37				
1059	Smoluchowski	60.3	-96.8		I				Libration object
1060	Snellius	-29.3	55.7	10	59, 69				
1061	Somerville	-8.3	64.9		49				
1062	Sommering	0.1	-7.5		32, 43				

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1	LUNAR OBJECT	LAT	LONG	LUNAR PROGRAM BOOKLET OBJECTIVE	RUKL	DATE VIEWED	LOG BOOK	PAGE	NOTES
1063	Sosigenes	8.7	17.6		35				
1064	South	57.7	-50.8		2				
1065	Spallanzani	-46.3	24.7	32	67				
1066	Spörer	-4.3	-1.8		44				
1067	Spurr	27.9	-1.2		22				
1068	Stadius	10.5	-13.7	91	32				
1069	Steinheil	-48.6	46.5	17	68, 76				
1070	Stevinus	-32.5	54.2	12	69				
1071	Stewart	2.2	67.0		38				
1072	Stiborius	-34.4	32.0	32	67				
1073	Stofler	-41.1	6.0	62	65, 66				
1074	Stokes	52.5	-88.1		1, 1				Libration object
1075	Strabo	61.9	54.3		6				
1076	Street	-46.5	-10.5	86	64				
1077	Struve	23.0	-76.6	L7	17, VIII				Libration object
1078	Suess	4.4	-47.6		29				
1079	Sulpicius Gallus	19.6	11.6	56	23				
1080	Sundman	10.8	-91.6		VIII				Sumner in VMA?
1081	Swasey	-5.5	89.7		49, IV				Libration object
1082	Swift	19.3	53.4	1b	26				
1083	Sylvester	82.7	-79.6		3, I				Libration object
1084	Tacchini	4.9	85.5		38, III				Libration object
1085	Tacitus	-16.2	19.0	40	57				
1086	Tacquet	16.6	19.2		24				
1087	Talbot	-2.5	85.3		49, IV				Libration object
1088	Tannerus	-56.4	22.0	58	74				
1089	Taruntius	5.6	46.5	13b	37				
1090	Taylor	-5.3	16.7		46				
1091	Tebbutt	9.6	53.6		37				Tebutt in VMA
1092	Tempel	3.9	11.9		34				
1093	Thales	61.8	50.3		6				
1094	Theaetetus	37.0	6.0	68	12				
1095	Thebit	-22.0	-4.0	74	55				
1096	Theiler	13.4	83.3		38, III				Libration object
1097	Theon Jr	-2.3	15.8	47	45, 46				
1098	Theon Sr	-0.8	15.4	47	45, 46				
1099	Theophilus	-11.4	26.4	37	46, 47				
1100	Theophrastus	17.5	39.0		25				
1101	Timaeus	62.8	-0.5		4				
1102	Timocharis	26.7	-13.1	89	21				
1103	Tisserand	21.4	48.2		26				
1104	Titius	-26.8	100.7		IV				Libration object
1105	Tobias Mayer	15.6	-29.1	112	19				
1106	Tolansky	-9.5	-16.0		42, 43				
1107	Tolstoy	-4.2	93.3						Not in RUKL
1108	Torricelli	-4.6	28.5	42	47				
1109	Toscanelli	27.9	-47.5	122	18				
1110	Townley	3.4	63.3		38				
1111	Tralles	28.4	52.8	11	26				
1112	Triesnecker	4.2	3.6	64	33				
1113	Trouvelot	49.3	5.8		4				
1114	Tucker	-5.6	88.2		49, IV				Libration object
1115	Turner	-1.4	-13.2		43				
1116	Tycho	-43.3	-11.2	86	64				
1117	Ukert	7.8	1.4		33				
1118	Ulugh Beigh	32.7	-81.9	L9	8, VII				Libration object
1119	Urey	27.9	87.4		27, III				Libration object
1120	Vaisala	25.9	-47.8		18				
1121	Vallis Alpes	49.0	3.0	68	4, 12				
1122	Vallis Baade	-46.0	-76.0	135	61, VI				
1123	Vallis Bohr	9.9	-88.6		VIII				Libration object, not in VMA
1124	Vallis Bouvard	-39.0	-83.0		61, VII				Libration object
1125	Vallis Capella	-7.0	35.0	28	47				
1126	Vallis Inghirami	-44.0	-73.0	135	61				
1127	Vallis Palitzsch	-25.0	65.0		59				
1128	Vallis Rheita	-42.0	51.0	14	68				
1129	Vallis Schrodinger	-67.0	105.0		V				Libration object
1130	Vallis Schroter	26.0	-51.0	122	18				
1131	Vallis Snellius	-31.0	59.0	10	59, 69				
1132	Van Albada	9.4	64.3		38				
1133	Van Biesbroeck	28.7	-45.6		19				Van Bisbroeck in VMA
1134	Van Vleck	-1.9	78.3		49				
1135	Vasco da Gama	13.9	-83.8		28, VIII				Libration object
1136	Vashakidze	43.6	93.3		III				Libration object
1137	Vega	-45.4	63.4		68				
1138	Vendelinus	-16.3	61.8	4	60				

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1139	Vera	26.3	-43.7		19				
1140	Verne	24.9	-25.3		20				300mm
1141	Very	25.6	25.3	41	24				
1142	Vestine	33.9	93.9		III				Libration object
1143	Vieta	-29.2	-56.3	128	51, 61				
1144	Virchow	9.8	83.7		38, III				Libration object
1145	Vitello	-30.4	-37.5	127	62				
1146	Vitruvius	17.6	31.3		25				
1147	Vlacq	-53.3	38.8	30	75				
1148	Vogel	-15.1	5.9	63	56				
1149	Volta	54.0	-84.9	L6	1, I				Libration object
1150	von Behring	-7.8	71.8		49				
1151	von Braun	41.1	-78.0		8, VIII				Libration object, formerly called Lavoisier D
1152	Voskresenskiy	28.0	-88.1		17, VIII				Libration object
1153	W Bond	65.3	3.7	76	4				
1154	Wallace	20.3	-8.7		21				
1155	Wallach	4.9	32.3		36				
1156	Walter	-33.0	0.7	71	65				
1157	Wargentin	-49.6	-60.2	129	70				
1158	Warner	-4.0	87.3		49, IV				Libration object
1159	Watt	-49.5	48.6	17	76				
1160	Watts	8.9	46.3		37				
1161	Webb	-0.9	60.0	5	49				
1162	Weierstrass	-1.3	77.2		49				
1163	Weigel	-58.2	-38.8	118	71				
1164	Weinek	-27.5	37.0		58				
1165	Weiss	-31.8	-19.5	108	63, 64				
1166	Werner	-28.0	3.3	67	55				
1167	Wexler	-69.1	90.2		75, V				Libration object
1168	Whewell	4.2	13.7		34				
1169	Wichmann	-7.5	-38.1		41				
1170	Widmanstätten	-6.1	85.5		49, IV				Libration object
1171	Wiechert	-84.5	165.0		V				Libration object
1172	Wildt	9.0	75.8		38				
1173	Wilhelm	-43.1	-20.8	97	63, 64				
1174	Wilkins	-29.4	19.6		57, 67				
1175	Williams	42.0	37.2		14, 15				
1176	Wilson	-69.2	-42.4	98	72				
1177	Winthrop	-10.7	-44.4		40				
1178	Wöhler	-38.2	31.4	32	67				
1179	Wolf	-22.7	-16.6		54				
1180	Wollaston	30.6	-46.9		9				
1181	Wright	-31.6	-86.6		61, VII				Libration object
1182	Wrottesley	-23.9	56.8	6	59				
1183	Wurzelbauer	-33.9	-15.9	88	64				
1184	Wyld	-1.4	98.1		IV				Libration object
1185	Xenophanes	57.6	-81.4	L6	1, I				Libration object
1186	Yakovkin	-54.5	-78.8		70, VI				Libration object
1187	Yangel	17.0	4.7		22				
1188	Yerkes	14.6	51.7	1b	26, 37				
1189	Young	-41.5	50.9	14	68				
1190	Zach	-60.9	5.3	80	73				
1191	Zagut	-32.0	22.1	46	67				
1192	Zahringer	5.6	40.2		37				
1193	Zasyadko	3.9	94.2		III				Libration object
1194	Zeeman	-75.2	-134.8		VI				Libration object
1195	Zeno	45.2	72.9		16, III				Libration object
1196	Zinner	26.6	-58.8		18				
1197	Zollner	-8.0	18.9		46				
1198	Zsigmondi	59.7	-104.7		I				Libration object
1199	Zucchi	-61.4	-50.3	125	71				
1200	Zupus	-17.2	-52.3		51				