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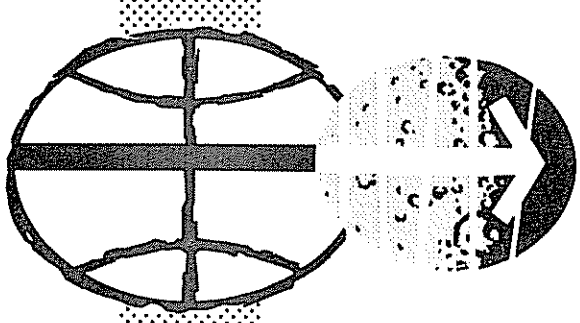
APOLLO 16 INDEX OF MAPPING CAMERA AND PANORAMIC CAMERA PHOTOGRAPHS

AUGUST 1972



MAPPING SCIENCES BRANCH
EARTH OBSERVATIONS DIVISION
SCIENCE AND APPLICATIONS DIRECTORATE
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

PREFACE

This report was prepared by Lockheed Electronics Company, Inc., Houston Aerospace Systems Division, under Contract NAS 9-12200, Project Work Order 63-0117-5714, and issued at the Manned Spacecraft Center, Houston, Texas.

The major contributors to this document were R. G. Cook, R. A. Pinter and F. W. Solomon of the Image Analysis Section with the support of personnel of the Mapping Science Department.

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APPOLO 16
INDEX OF MAPPING CAMERA
AND PANORAMIC CAMERA PHOTOGRAPHS

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INTRODUCTION

This index contains supplemental data for all photographs from the Apollo 16 Panoramic Camera and Mapping (or Metric) Camera, the two systems in the Scientific Instrument Module Bay (SIM Bay) of the Service Module.

The photographs are listed in two ways: (1) chronological order, and (2) by longitude in 10° increments. Where listed by longitude, the photographs within each 10° segment are listed in chronological order so that all photographs taken on a single revolution within that 10° segment are listed together.

The Mapping Camera was operated on 16 passes during the period of lunar orbit and twice during Transearth Coast, the first time for 2 hours 29 minutes, and a second time for approximately 13 minutes. The orbital passes included one forward-looking oblique (Rev. 25), two north-looking obliques (Revs. 27, 37), and two south-looking obliques (Revs. 26, 48). On Rev. 59 the camera was turned on while the spacecraft was completing a maneuver to "SIM Bay" attitude resulting in a sequence of photographs going from oblique to almost vertical at the western terminator.

The Panoramic Camera was operated on eight passes, all in the stereo mode, and for approximately 34 minutes during Transearth Coast.

In indexing Mapping Camera and Panoramic Camera photographs, individual frames are matched to imagery on the 1:2,750,000 scale Lunar Planning Chart (LOC) series. Each frame is outlined on the base map and the principal point is determined. The latitude and longitude of each principal point, to the nearest 0.1 degree, is recorded in the tabular section of this index.

Each frame is described in terms of a lunar surface feature within the boundaries of the frame or the nearest named feature outside the frame.

Spacecraft altitude, rounded to the nearest kilometer, is derived from spacecraft trajectory data. A lunar radius of 1738 km is assumed, and where the local lunar radius differs from that figure, actual spacecraft altitude differs from the value reported.

Sun elevation at the principal point of each photograph is expressed to the nearest degree.

SOURCES OF INFORMATION

1. Apollo 16 Flight Plan, Final, Changes A, B, C, D
2. Spacecraft Operational Trajectory for Apollo 16 (Pre-Mission)
3. Apollo 16 Near-Real Time Trajectory Support Parameters
4. SIM Bay Telemetry Data
5. Apollo 16 Technical Air-To-Ground Voice Transcription
6. Apollo 16 Command Module On-Board Voice Transcription
7. Copy of CMP On-Board Annotated Flight Plan
8. Lunar Orbiter Photographs
9. Lunar Orbital Science Flight Chart (LSF) Scale 1:2,750,000
10. Atlas and Gazetteer of the Near Side of the Moon, MSC, 1971
11. Apollo 15 Photographic Standards Documentation, MSC Technical Report TTR 71-3
12. Apollo 15 SIM Bay Photographic Equipment and Mission Summary, Mapping Sciences Branch, MSC, August, 1971
13. Lunar Equatorial Zone Mosaic (LEMC), Scale 1:2,500,000

MAPPING (METRIC) CAMERA

The optic axis of the Mapping Camera is at a fixed angle relative to the spacecraft and is vertical when the spacecraft is in normal "SIM Bay" attitude. Mapping Camera stereo coverage is obtained by overlap, nominally 78 percent, of consecutive frames along the groundtrack. Oblique views are obtained by spacecraft attitude changes.

TABLE 1. MAPPING CAMERA CHARACTERISTICS

LENS	FOCAL LENGTH:	3 INCH (7.62 CM)
	FIELD OF VIEW:	74° BY 74°
FILM	WIDTH:	5 INCH
	IMAGE:	4.5 BY 4.5 INCH
	TYPE:	3400, PANATOMIC-X AERIAL

PANORAMIC CAMERA

The Panoramic Camera can be operated in monoscopic (vertical) and stereo modes. In either mode the optical system scans crosstrack to record an image 45 by 4.5 inches. In the vertical mode the optic axis is nominally aligned with local vertical, parallel with the optic axis of the Mapping Camera, and consecutive frames overlap approximately 10 percent. In the stereo mode the camera optics are pointed alternately forward and aft 12.5° from local vertical. The stereo mate of forward-looking frame N is aft-looking frame N+5. The convergent angle is 25°, and overlap is nominally 100 percent. The overlap of consecutive forward frames or consecutive aft frames is 10 percent.

TABLE 2. PANORAMIC CAMERA CHARACTERISTICS

LENS	FOCAL LENGTH:	24 INCH (60.96 CM)
	FIELD OF VIEW:	CROSSTRACK 108° ALONG TRACK 10° 46'
FILM	WIDTH:	5 INCH
	IMAGE:	45.24 BY 4.5 INCH
	TYPE:	3414

TABLE 3. SUMMARY OF APOLLO 16 MAPPING CAMERA PHOTOGRAPHS

REV	ATTITUDE	NASA PHOTO NOS. AS16-	NO FRAMES	START		STOP	
				LAT.	LONG.	LAT.	LONG.
3/4	VERT	0001-0026	26	9.3N	165.1W	7.2N	168.1E
17	VERT	0027-0174	148	8.9N	179.1W	9.3S	0.7W
18	VERT	0313-0452	140	9.4N	179.2W	9.3S	0.1W
25	FWD OBLIQUE	0453-0585	133	9.0N	170.0E	8.6S	9.7W
26	SOUTH OBLIQUE	0587-0717	131	5.7N	169.0E	12.2S	8.6W
27	NORTH OBLIQUE	0719-0850	132	12.2N	168.6E	5.8S	9.9W
28	VERT	0853-0999	147	8.5N	169.2E	9.1S	13.3W
29	VERT	1144-1290	147	9.1N	168.3E	9.1S	14.1W
37	NORTH OBLIQUE	1292-1423	132	12.2N	156.4E	5.7S	22.0W
38	VERT	1551-1691	141	9.5N	160.8E	9.6S	22.9W
39	VERT	1840-1986	147	9.6N	159.8E	9.4S	22.7W
47	VERT	2069-2217	149	9.4N	150.2E	9.4S	31.6W
48	SOUTH OBLIQUE	2357-2499	143	6.2N	149.0E	12.7S	30.2W
59	S/C MNVR	2501-2532	32	—	—	9.2S	43.0W
60	VERT	2692-2845	154	10.6N	137.6E	10.2S	46.5W
63	VERT	2852-2999	148	10.3N	135.8E	10.1S	48.3W
TEC		3000-3440	441	13.8N	115.5E	—	—
		TOTAL	2,491				

TABLE 4. SUMMARY OF APOLLO 16 PANORAMIC CAMERA PHOTOGRAPHS

REV	NASA PHOTO NOS. AS16-	NO. FRAMES	START		STOP	
			LAT	LONG	LAT	LONG
3	4091-4094	4	8.8N	166.9W	8.8N	168.9W
17	4095-4347	253	9.0N	179.9E	1.8S	89.6E
18	4348-4613	265	1.9S	89.8E	9.2S	1.7W
28	4614-4627	14	9.0S	18.3E	9.1S	12.6E
38	4628-4716	89	8.7S	9.5E	9.3S	22.0W
39	4717-4911	195	9.2N	158.5E	1.6N	91.7E
47	4912-5203	292	9.4N	150.2E	3.1S	52.6E
63	5204-5506	303	0.5S	59.2E	9.9S	47.8W
TEC	5507-5677	171				
	TOTAL	1,586				

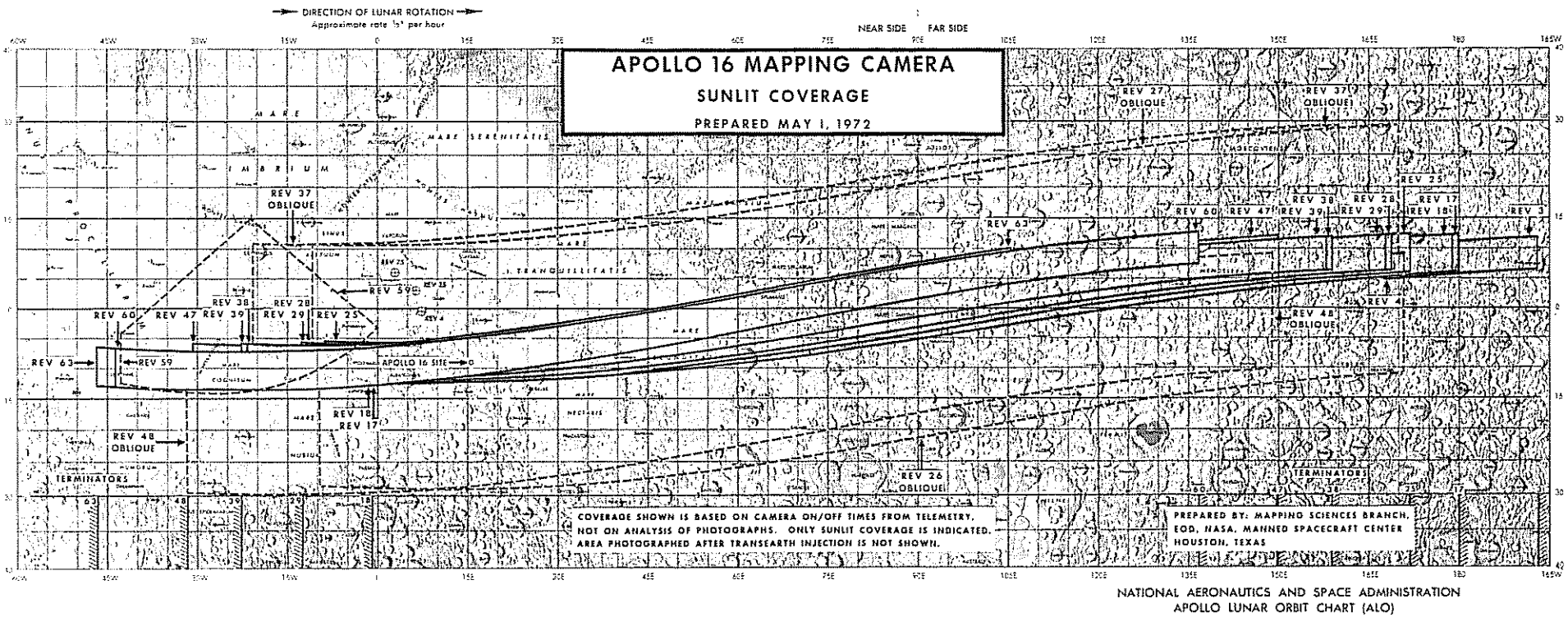

Figure 1. Apollo 16 Mapping Camera Coverage.

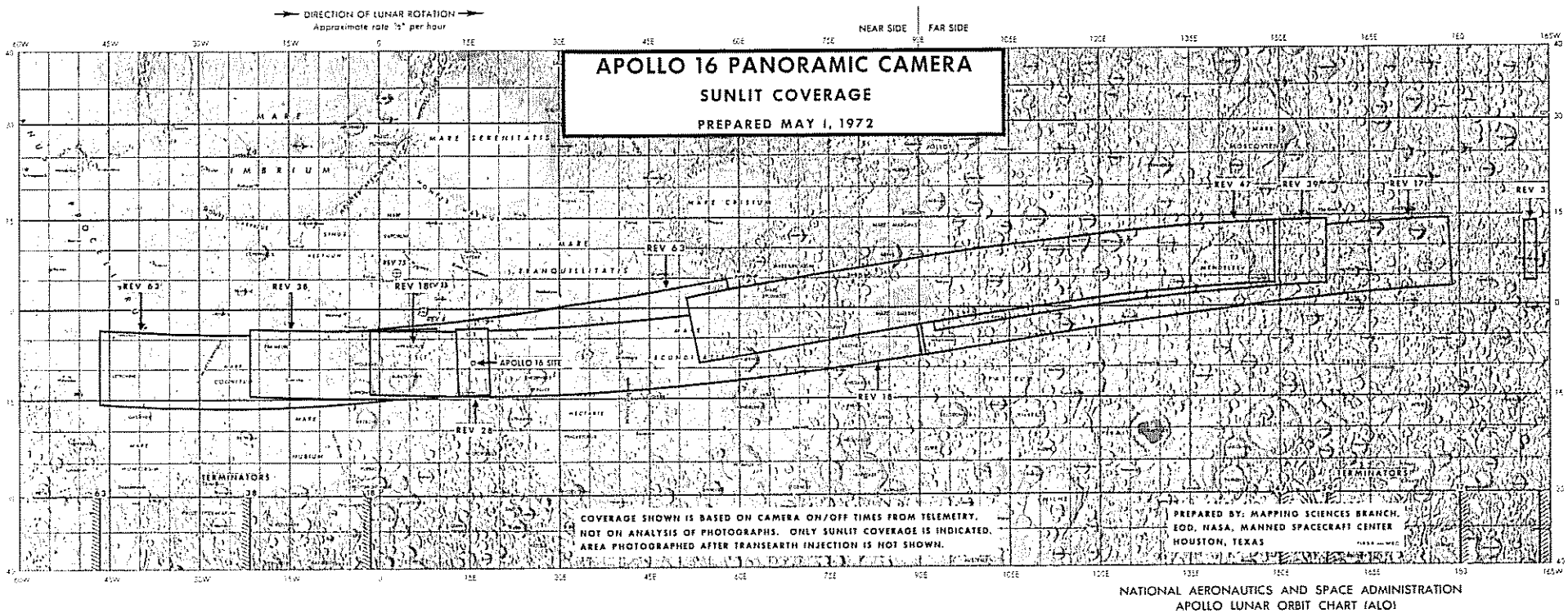

Figure 2. Apollo 16 Panoramic Camera Coverage.

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1	03	105	9.3 N	165.1 W	VERT		-2	LEBEDINSKY
2	03	105	9.3 N	166.2 W	VERT		-1	ZHUKOVSKY
3	03	104	9.2 N	167.3 W	VERT		0	ZHUKOVSKY
4	03	104	9.4 N	168.3 W	VERT		1	ZHUKOVSKY
5	03	104	9.3 N	169.5 W	VERT		2	ZHUKOVSKY
6	03	103	9.0 N	170.6 W	VERT		3	ZHUKOVSKY, W OF
7	03	103	9.0 N	171.6 W	VERT		4	ZHUKOVSKY, W OF
8	03	102	8.8 N	172.5 W	VERT		5	ZHUKOVSKY, W OF
9	03	102	8.8 N	173.7 W	VERT		6	ZHUKOVSKY, W OF
10	03	101	8.8 N	174.9 W	VERT		7	ZHUKOVSKY, W OF
11	03	100	8.6 N	175.9 W	VERT		8	ZHUKOVSKY, W OF
12	03	100	8.5 N	176.9 W	VERT		9	STEIN, E OF
13	03	100	8.3 N	178.0 W	VERT		10	STEIN, E OF
14	03	99	8.3 N	179.1 W	VERT		11	STEIN
15	04	99	8.2 N	179.7 E	VERT		12	STEIN
16	04	98	8.0 N	178.5 E	VERT		13	STEIN, SAFARIK
17	04	98	8.0 N	177.2 E	VERT		14	STEIN, SAFARIK
18	04	97	8.0 N	176.2 E	VERT		15	STEIN, VALIER
19	04	96	7.9 N	175.4 E	VERT		17	VALIER
20	04	96	7.9 N	174.0 E	VERT		18	VALIER
21	04	95	7.7 N	172.8 E	VERT		19	VALIER
22	04	94	7.7 N	171.9 E	VERT		20	VALIER, DUFAY
23	04	94	7.5 N	171.0 E	VERT		21	VALIER, DUFAY
24	04	93	7.5 N	170.1 E	VERT		22	DUFAY
25	04	92	7.3 N	168.8 E	VERT		23	DUFAY
26	04	92	7.2 N	168.1 E	VERT		24	DUFAY
27	17	115	8.9 N	179.1 W	VERT		-1	STEIN
28	17	115	8.8 N	179.8 E	VERT		0	STEIN
29	17	116	8.7 N	178.7 E	VERT		1	STEIN, SAFARIK
30	17	116	8.8 N	177.4 E	VERT		2	STEIN, SAFARIK
31	17	116	8.8 N	176.2 E	VERT		4	VALIER, SAFARIK
32	17	116	8.8 N	175.1 E	VERT		5	VALIER, SAFARIK
33	17	117	8.7 N	174.0 E	VERT		6	VALIER, SAFARIK
34	17	117	8.7 N	173.7 E	VERT		6	VALIER, SHARONOV
35	17	117	8.7 N	171.5 E	VERT		8	VALIER, SHARONOV
36	17	117	8.5 N	170.2 E	VERT		10	DUFAY, N RIM
37	17	118	8.5 N	169.2 E	VERT		11	DUFAY, N RIM
38	17	118	8.4 N	167.7 E	VERT		12	DUFAY, N RIM
39	17	118	8.3 N	166.7 E	VERT		13	PAPALESKI
40	17	118	8.1 N	165.5 E	VERT		14	PAPALESKI

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MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
41	17	119	8.1 N	164.5 E	VERT		15	PAPALESKI, MANDEL'SHTAM
42	17	119	8.2 N	163.2 E	VERT		16	PAPALESKI, MANDEL'SHTAM
43	17	119	8.0 N	161.8 E	VERT		18	PAPALESKI, MANDEL'SHTAM
44	17	119	7.8 N	160.6 E	VERT		19	PAPALESKI, MANDEL'SHTAM
45	17	120	7.7 N	159.7 E	VERT		20	PAPALESKI
46	17	120	7.7 N	158.7 E	VERT		21	MANDEL'SHTAM, MILLS
47	17	120	7.5 N	157.7 E	VERT		22	MILLS
48	17	120	7.4 N	156.7 E	VERT		23	MILLS
49	17	120	7.3 N	155.3 E	VERT		24	MILLS, HENDERSON
50	17	120	7.3 N	154.0 E	VERT		25	MILLS, HENDERSON
51	17	120	7.2 N	153.0 E	VERT		26	MILLS, HENDERSON
52	17	121	7.0 N	151.8 E	VERT		28	MILLS
53	17	121	6.8 N	150.7 E	VERT		29	MILLS
54	17	121	6.7 N	149.5 E	VERT		30	MILLS, SCHUSTER
55	17	121	6.7 N	148.0 E	VERT		31	SCHUSTER
56	17	121	6.7 N	147.2 E	VERT		32	SCHUSTER, MENDELEEV
57	17	121	6.5 N	146.1 E	VERT		33	SCHUSTER, MENDELEEV
58	17	122	6.4 N	144.8 E	VERT		34	SCHUSTER, MENDELEEV
59	17	122	6.1 N	143.5 E	VERT		36	SCHUSTER, MENDELEEV
60	17	122	5.9 N	142.5 E	VERT		37	SCHUSTER, MENDELEEV
61	17	122	5.9 N	141.4 E	VERT		38	MENDELEEV
62	17	122	5.9 N	140.2 E	VERT		39	MENDELEEV
63	17	123	5.7 N	138.8 E	VERT		41	MENDELEEV
64	17	123	5.6 N	137.7 E	VERT		42	MENDELEEV, HARTMANN
65	17	123	5.6 N	136.6 E	VERT		43	MENDELEEV, HARTMANN
66	17	123	5.4 N	135.2 E	VERT		44	MENDELEEV, HARTMANN, GREEN
67	17	123	5.2 N	134.2 E	VERT		45	MENDELEEV, HARTMANN, GREEN
68	17	123	5.3 N	133.2 E	VERT		46	HARTMANN, GREEN
69	17	123	5.2 N	132.2 E	VERT		47	HARTMANN, GREEN
70	17	124	5.1 N	130.7 E	VERT		49	GREEN, GREGORY, MOROZOV
71	17	124	4.5 N	129.8 E	VERT		50	GREEN, GREGORY, MOROZOV
72	17	124	4.3 N	128.7 E	VERT		51	GREGORY, MOROZOV
73	17	124	4.2 N	127.3 E	VERT		52	GREGORY, MOROZOV
74	17	124	4.0 N	126.4 E	VERT		53	GREGORY, MOROZOV
75	17	124	3.8 N	125.2 E	VERT		55	GREGORY, MOROZOV
76	17	124	3.8 N	123.8 E	VERT		56	KING, F RIM
77	17	124	3.7 N	122.7 E	VERT		57	KING
78	17	124	3.4 N	121.3 E	VERT		58	KING
79	17	124	3.3 N	120.3 E	VERT		59	KING
80	17	124	3.1 N	118.9 E	VERT		61	KING, ABUL WAFA

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
81	17	124	3.1 N	117.7 E	VERT		62	KING, ABUL WAFA
82	17	124	3.0 N	116.7 E	VERT		63	ABUL WAFA
83	17	124	2.8 N	115.7 E	VERT		64	ABUL WAFA, FIRSOV
84	17	124	2.5 N	114.8 E	VERT		65	ABUL WAFA, FIRSOV
85	17	124	1.9 N	113.8 E	VERT		66	ABUL WAFA, FIRSOV
86	17	124	1.5 N	112.5 E	VERT		67	FIRSOV, BUISSON
87	17	124	1.5 N	111.4 E	VERT		68	FIRSOV, BUISSON
88	17	124	1.1 N	110.3 E	VERT		69	FIRSOV, BUISSON
89	17	124	1.0 N	109.0 E	VERT		70	SAHA, E OF
90	17	124	.7 N	107.9 E	VERT		71	SAHA, E OF
91	17	124	.5 N	106.8 E	VERT		73	SAHA, E RIM
92	17	124	.4 N	105.6 E	VERT		74	SAHA
93	17	124	.2 N	104.2 E	VERT		75	SAHA
94	17	124	.1 N	102.9 E	VERT		77	SAHA
95	17	124	.1 S	101.4 E	VERT		78	SAHA, WYLD
96	17	124	.3 S	100.0 E	VERT		79	SAHA, WYLD
97	17	124	.4 S	98.8 E	VERT		81	SAHA, WYLD
98	17	124	.3 S	97.3 E	VERT		82	WYLD, PURKYNE
99	17	124	.6 S	96.2 E	VERT		83	WYLD, PURKYNE
100	17	124	.5 S	95.0 E	VERT		84	WYLD, PURKYNE
101	17	124	.6 S	93.7 E	VERT		86	PURKYNE
102	17	124	1.3 S	92.4 E	VERT		86	PURKYNE, SMYTH'S SEA
103	17	123	1.7 S	91.0 E	VERT		87	SMYTH'S SEA
104	17	123	1.9 S	89.4 E	VERT		87	SMYTH'S SEA
105	17	123	2.1 S	88.3 E	VERT		86	SMYTH'S SEA
106	17	123	2.3 S	86.8 E	VERT		85	SMYTH'S SEA
107	17	123	2.5 S	85.3 E	VERT		84	SMYTH'S SEA
108	17	123	2.8 S	83.7 E	VERT		83	SMYTH'S SEA, GILBERT U
109	17	123	2.9 S	82.4 E	VERT		81	GILBERT U, KASTNER G
110	17	122	3.0 S	81.2 E	VERT		80	GILBERT M, U, KASTNER, G
111	17	122	3.2 S	79.8 E	VERT		79	GILBERT, M. U. KASTNER, G
112	17	122	3.5 S	78.6 E	VERT		78	KASTNER, A, G, GILBERT
113	17	122	3.7 S	77.5 E	VERT		77	KASTNER, A, G. GILBERT
114	17	122	3.9 S	76.0 E	VERT		75	KASTNER, A, G. GILBERT
115	17	122	4.0 S	74.5 E	VERT		74	KASTNER, A, GILBERT, K, J
116	17	122	4.4 S	73.2 E	VERT		73	GILBERT, K, J
117	17	122	5.0 S	71.8 E	VERT		71	GILBERT, K, J, MACLAURIN B, F
118	17	121	5.3 S	70.8 E	VERT		70	GILBERT, K, J, MACLAURIN B, F
119	17	121	5.3 S	69.5 E	VERT		69	MACLAURIN B, F
120	17	121	5.2 S	68.2 E	VERT		68	MACLAURIN B, M, A

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
121	17	121	5.2 S	66.8 E	VERT		66	MACLAURIN A, E, U
122	17	121	5.3 S	65.5 E	VERT		65	MACLAURIN U, LANGRENUS T
123	17	121	5.3 S	64.4 E	VERT		64	LANGRENUS, T
124	17	120	5.3 S	63.0 E	VERT		63	LANGRENUS, T, C
125	17	120	5.3 S	62.7 E	VERT		62	LANGRENUS, T, C
126	17	120	5.8 S	60.5 E	VERT		60	LANGRENUS, T, C, K, B
127	17	120	6.0 S	59.2 E	VERT		59	LANGRENUS, C, F, K, B
128	17	119	6.5 S	57.8 E	VERT		57	LANGRENUS, C, F, K, B
129	17	119	6.5 S	56.7 E	VERT		56	LANGRENUS, F, K, B
130	17	119	6.5 S	55.5 E	VERT		55	LANGRENUS F, K, B, MESSIER G
131	17	119	6.6 S	54.2 E	VERT		54	LANGRENUS F, MESSIER G
132	17	118	6.7 S	52.8 E	VERT		52	GOCLENIUS A, MESSIER G
133	17	118	6.8 S	51.8 E	VERT		51	GOCLENIUS A, MESSIER G
134	17	118	7.0 S	50.3 E	VERT		50	GOCLENIUS A, MESSIER G
135	17	118	7.3 S	49.4 E	VERT		49	GOCLENIUS A
136	17	118	7.5 S	48.3 E	VERT		48	GOCLENIUS, A
137	17	118	7.6 S	47.1 E	VERT		46	GOCLENIUS
138	17	117	7.8 S	45.8 E	VERT		45	GOCLENIUS, RILLES
139	17	117	7.7 S	44.2 E	VERT		44	GOCLENIUS, RILLES, GUTENBERG
140	17	117	7.6 S	42.8 E	VERT		42	GOCLENIUS, RILLES, GUTENBERG
141	17	116	7.8 S	41.8 E	VERT		41	GOCLENIUS, RILLES, GUTENBERG
142	17	116	8.1 S	40.2 E	VERT		40	GUTENBERG, G
143	17	116	8.0 S	39.0 E	VERT		39	GUTENBERG, G
144	17	115	8.1 S	37.7 E	VERT		37	GUTENBERG G, CAPELLA
145	17	115	8.1 S	36.5 E	VERT		36	ISIDORUS, CAPELLA
146	17	114	8.2 S	34.9 E	VERT		35	ISIDORUS, CAPELLA
147	17	114	8.6 S	33.9 E	VERT		34	ISIDORUS, CAPELLA
148	17	114	8.8 S	32.7 E	VERT		33	ISIDORUS, CAPELLA
149	17	114	8.8 S	31.6 E	VERT		32	ISIDORUS, MADLER,
150	17	114	8.8 S	30.3 E	VERT		30	THEOPHILUS, MADLER
151	17	113	9.0 S	28.8 E	VERT		29	THEOPHILUS, MADLER
152	17	113	9.1 S	27.5 E	VERT		28	THEOPHILUS, MADLER
153	17	113	9.0 S	26.1 E	VERT		26	THEOPHILUS, CYRILLUS
154	17	112	9.3 S	24.8 E	VERT		25	THEOPHILUS, CYRILLUS
155	17	112	9.2 S	23.5 E	VERT		23	THEOPHILUS, CYRILLUS, B
156	17	112	9.0 S	22.5 E	VERT		22	KANT, E, ZOLLNER F
157	17	112	9.1 S	21.0 E	VERT		21	KANT, E, ZOLLNER, F
158	17	111	9.5 S	19.8 E	VERT		20	KANT, E, D, ZOLLNER
159	17	111	9.6 S	18.5 E	VERT		19	KANT, E, G, ZOLLNER
160	17	111	9.4 S	17.4 E	VERT		18	DESCARTES, APOLLO 16 LANDING SITE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
161	17	110	9.2 S	16.0 E	VERT		16	DESCARTES, APOLLO 16 LANDING SITE
162	17	110	9.1 S	14.5 E	VERT		14	DESCARTES, APOLLO 16 LANDING SITE
163	17	110	9.1 S	13.5 E	VERT		13	DESCARTES, APOLLO 16 LANDING SITE
164	17	110	9.1 S	12.3 E	VERT		12	ANDEL, DOLLAND, B, C
165	17	110	9.1 S	10.8 E	VERT		11	ANDEL, DOLLAND C
166	17	109	9.1 S	9.7 E	VERT		10	HIND, RITCHEY, ANDEL
167	17	109	9.1 S	8.3 E	VERT		8	HIND, RITCHEY
168	17	108	9.2 S	7.2 E	VERT		7	HIND, RITCHEY, HALLEY
169	17	108	9.2 S	5.9 E	VERT		6	ALBATEGNIUS, HALLEY, HIND
170	17	108	9.2 S	4.5 E	VERT		5	ALBATEGNIUS, HALLEY
171	17	108	9.0 S	3.1 E	VERT		3	ALBATEGNIUS, MUELLER
172	17	108	9.1 S	1.9 E	VERT		2	ALBATEGNIUS, PTOLEMAEUS
173	17	107	9.2 S	.4 E	VERT		1	PTOLEMAEUS
174	17	107	9.3 S	.7 W	VERT		-1	PTOLEMAEUS
175	17							0175-0312, DARK, REVS 17-18
313	18	115	9.4 N	179.2 W	VERT		-2	STEIN
314	18	115	9.1 N	179.6 E	VERT		-1	STEIN, SAFARIK
315	18	115	9.1 N	178.5 E	VERT		1	STEIN, SAFARIK
316	18	115	8.8 N	177.2 E	VERT		2	STEIN, SAFARIK, VALIER
317	18	115	8.6 N	176.0 E	VERT		3	VALIER, SAFARIK
318	18	116	8.7 N	174.3 E	VERT		4	VALIER, SAFARIK, SHARANOV
319	18	116	8.7 N	173.0 E	VERT		6	VALIER, SHARANOV
320	18	116	8.6 N	171.9 E	VERT		7	VALIER, SHARANOV, DUFAY
321	18	116	8.5 N	170.8 E	VERT		8	DUFAY
322	18	116	8.5 N	169.5 E	VERT		9	DUFAY
323	18	116	8.5 N	168.2 E	VERT		10	DUFAY
324	18	117	8.3 N	167.0 E	VERT		11	PAPALESKI
325	18	117	8.2 N	165.6 E	VERT		13	PAPALESKI, MANDEL'SHTAM
326	18	118	8.3 N	164.3 E	VERT		14	PAPALESKI, MANDEL'SHTAM
327	18	118	8.2 N	163.0 E	VERT		15	PAPALESKI, MANDEL'SHTAM
328	18	118	8.2 N	161.6 E	VERT		17	PAPALESKI, MANDEL'SHTAM
329	18	118	8.0 N	160.4 E	VERT		18	PAPALESKI, MANDEL'SHTAM
330	18	119	7.8 N	158.7 E	VERT		20	MANDEL'SHTAM, MILLS
331	18	119	7.7 N	157.8 E	VERT		21	MANDEL'SHTAM, MILLS
332	18	119	7.8 N	157.0 E	VERT		22	MILLS
333	18	119	7.5 N	155.8 E	VERT		23	MILLS
334	18	119	7.3 N	154.4 E	VERT		24	MILLS, HENDERSON
335	18	119	7.2 N	153.2 E	VERT		25	MILLS, HENDERSON
336	18	120	7.3 N	152.0 E	VERT		26	HENDERSON
337	18	120	7.2 N	150.4 E	VERT		28	HENDERSON

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
338	18	120	7.2 N	149.3 E	VERT		29	HENDERSON, SCHUSTER
339	18	120	7.0 N	148.0 E	VERT		30	SCHUSTER
340	18	121	6.8 N	146.6 E	VERT		32	SCHUSTER, MENDELEEV
341	18	121	6.6 N	145.3 E	VERT		33	SCHUSTER, MENDELEEV
342	18	121	6.4 N	143.7 E	VERT		35	SCHUSTER, MENDELEEV
343	18	121	6.2 N	142.7 E	VERT		36	SCHUSTER, MENDELEEV
344	18	121	6.0 N	141.3 E	VERT		37	MENDELEEV
345	18	121	6.0 N	139.4 E	VERT		39	MENDELEEV
346	18	121	5.9 N	138.3 E	VERT		40	MENDELEEV
347	18	122	5.6 N	137.0 E	VERT		41	MENDELEEV, HARTMANN
348	18	122	5.2 N	135.3 E	VERT		43	MENDELEEV, HARTMANN, GREEN
349	18	122	5.2 N	134.0 E	VERT		44	MENDELEEV, HARTMANN, GREEN
350	18	122	5.1 N	132.7 E	VERT		46	HARTMANN, GREEN
351	18	122	5.0 N	131.5 E	VERT		47	GREEN
352	18	123	4.8 N	130.0 E	VERT		48	GREEN
353	18	123	4.6 N	128.7 E	VERT		50	MOROZOV, GREGORY
354	18	123	4.5 N	127.6 E	VERT		51	MOROZOV, GREGORY
355	18	123	4.3 N	126.1 E	VERT		52	MOROZOV, GREGORY
356	18	123	4.3 N	124.4 E	VERT		54	GREGORY, KING
357	18	123	4.0 N	122.8 E	VERT		56	KING
358	18	123	4.0 N	121.8 E	VERT		57	KING
359	18	123	3.6 N	120.6 E	VERT		58	KING
360	18	123	3.5 N	119.5 E	VERT		59	KING, ABUL WAFA
361	18	123	3.2 N	117.8 E	VERT		61	KING, ABUL WAFA
362	18	123	3.0 N	116.6 E	VERT		62	ABUL WAFA
363	18	123	2.6 N	115.2 E	VERT		63	ABUL WAFA, FIRSOV
364	18	123	2.1 N	114.2 E	VERT		64	ABUL WAFA, FIRSOV
365	18	123	1.6 N	112.4 E	VERT		66	FIRSOV
366	18	124	1.4 N	111.1 E	VERT		67	FIRSOV, BUISSON
367	18	124	1.2 N	109.7 E	VERT		69	FIRSOV
368	18	124	1.0 N	108.3 E	VERT		70	SAHA, NE OF
369	18	124	.8 N	107.2 E	VERT		71	SAHA, NE OF
370	18	124	.7 N	105.5 E	VERT		73	SAHA
371	18	124	.5 N	104.3 E	VERT		74	SAHA
372	18	124	.3 N	103.1 E	VERT		75	SAHA
373	18	124	.1 S	101.8 E	VERT		77	SAHA
374	18	124	.4 S	100.7 E	VERT		78	SAHA, WYLD
375	18	123	.7 S	99.5 E	VERT		79	SAHA, WYLD
376	18	123	.6 S	98.0 E	VERT		80	WYLD
377	18	123	.7 S	96.7 E	VERT		82	WYLD, PURKYNE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
378	18	123	.7 S	95.4 E	VERT		83	WYLD, PURKYNE
379	18	123	.6 S	94.0 E	VERT		84	PURKYNE
380	18	123	1.2 S	92.5 E	VERT		85	PURKYNE, HIRAYAMA
381	18	123	1.5 S	91.5 E	VERT		86	SMYTH'S SEA
382	18	123	1.7 S	90.0 E	VERT		86	SMYTH'S SEA
383	18	123	2.0 S	88.6 E	VERT		86	SMYTH'S SEA
384	18	123	2.1 S	87.1 E	VERT		86	SMYTH'S SEA
385	18	123	2.5 S	85.8 E	VERT		85	SMYTH'S SEA
386	18	123	2.5 S	84.0 E	VERT		84	SMYTH'S SEA, GILBERT U
387	18	122	2.7 S	82.8 E	VERT		83	KASTNER G
388	18	122	2.8 S	81.6 E	VERT		82	KASTNER, G
389	18	122	3.1 S	80.5 E	VERT		81	KASTNER, G, GILBERT M
390	18	122	3.3 S	78.8 E	VERT		79	KASTNER, G, GILBERT, M
391	18	122	3.5 S	77.7 E	VERT		78	KASTNER, G, GILBERT, M
392	18	122	3.9 S	76.3 E	VERT		77	KASTNER, G, GILBERT, M
393	18	122	4.2 S	74.7 E	VERT		75	KASTNER, GILBERT, K
394	18	122	4.0 S	73.5 E	VERT		74	GILBERT, J. K, MACLAURIN B
395	18	121	4.2 S	71.9 E	VERT		72	GILBERT J, K, MACLAURIN B
396	18	121	4.3 S	70.6 E	VERT		71	GILBERT J, MACLAURIN B
397	18	121	4.4 S	69.6 E	VERT		70	MACLAURIN B, P, M, A
398	18	121	4.7 S	68.4 E	VERT		69	MACLAURIN P, M, A, U
399	18	121	4.9 S	67.4 E	VERT		68	MACLAURIN P, M, A, U
400	18	120	5.0 S	66.2 E	VERT		67	MACLAURIN A, E, U
401	18	120	5.0 S	64.8 E	VERT		65	LANGRENUS, T, MACLAURIN U, E
402	18	120	5.2 S	63.8 E	VERT		64	LANGRENUS, T
403	18	120	5.4 S	62.1 E	VERT		63	LANGRENUS, T, C
404	18	120	5.7 S	61.2 E	VERT		62	LANGRENUS, T, C
405	18	120	6.0 S	59.8 E	VERT		60	LANGRENUS, B, C, K
406	18	120	6.1 S	58.8 E	VERT		59	LANGRENUS, B, C, K, F
407	18	119	6.4 S	57.4 E	VERT		58	LANGRENUS, B, K, F
408	18	119	6.3 S	56.0 E	VERT		57	LANGRENUS B, K, F
409	18	119	6.4 S	54.8 E	VERT		55	LANGRENUS F, MESSIER G
410	18	119	6.7 S	53.5 E	VERT		54	LANGRENUS F, MESSIER G
411	18	118	6.9 S	51.9 E	VERT		52	MESSIER G, GOCLENIUS A
412	18	118	7.0 S	50.8 E	VERT		51	MESSIER G, GOCLENIUS A
413	18	118	7.2 S	49.7 E	VERT		50	GOCLENIUS A
414	18	117	7.2 S	48.4 E	VERT		49	GOCLENIUS A
415	18	117	7.2 S	47.2 E	VERT		48	GOCLENIUS
416	18	117	7.5 S	45.9 E	VERT		47	GOCLENIUS, RILLES
417	18	117	7.5 S	44.5 E	VERT		45	GOCLENIUS, RILLES, GUTENBERG

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62Cm) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
418	18	117	7.6 S	43.3 E	VERT		44	GOCLENIUS, RILLES, GUTENBERG
419	18	116	7.8 S	42.0 E	VERT		43	GOCLENIUS, RILLES, GUTENBERG
420	18	116	8.0 S	40.6 E	VERT		41	GUTENBERG, G, RILLES
421	18	116	8.2 S	39.6 E	VERT		40	GUTENBERG, G, RILLES
422	18	116	8.1 S	38.3 E	VERT		39	GUTENBERG, G, RILLES
423	18	116	7.9 S	37.0 E	VERT		38	CAPELLA, GUTENBERG RILLES
424	18	115	7.9 S	35.8 E	VERT		37	CAPELLA, ISIDORUS
425	18	115	8.2 S	34.5 E	VERT		35	CAPELLA, ISIDORUS
426	18	114	8.3 S	33.0 E	VERT		34	CAPELLA, ISIDORUS
427	18	114	8.4 S	32.0 E	VERT		33	CAPELLA, ISIDORUS
428	18	114	8.6 S	30.6 E	VERT		32	ISIDORUS, MADLER
429	18	114	8.9 S	29.2 E	VERT		30	MADLER, THEOPHILUS
430	18	113	9.1 S	27.8 E	VERT		29	MADLER, THEOPHILUS
431	18	113	9.2 S	26.3 E	VERT		27	THEOPHILUS
432	18	112	9.4 S	25.0 E	VERT		26	THEOPHILUS
433	18	112	9.0 S	23.8 E	VERT		25	THEOPHILUS, ZOLLNER F
434	18	112	9.0 S	23.0 E	VERT		24	ZOLLNER F, KANT, E
435	18	112	9.1 S	21.9 E	VERT		23	KANT, E, ZOLLNER F
436	18	112	9.0 S	20.7 E	VERT		22	KANT, D, E, ZOLLNER, F
437	18	112	9.0 S	19.0 E	VERT		20	KANT, D, E, ZOLLNER
438	18	111	9.1 S	17.7 E	VERT		19	KANT, D, ZOLLNER, DESCARTES
439	18	111	9.1 S	16.5 E	VERT		18	DESCARTES, APOLLO 16 LANDING SITE
440	18	111	9.1 S	15.2 E	VERT		16	DESCARTES, APOLLO 16 LANDING SITE
441	18	110	9.1 S	13.8 E	VERT		15	DESCARTES, APOLLO 16 LANDING SITE
442	18	110	9.2 S	12.7 E	VERT		14	ANDEL, DOLLAND
443	18	110	9.2 S	11.4 E	VERT		13	ANDEL, DOLLAND B, C
444	18	110	9.2 S	10.0 E	VERT		11	ANDEL, RITCHEY, HIND
445	18	110	9.0 S	9.0 E	VERT		10	RITCHEY, HIND, HIPPARCHUS C
446	18	109	9.0 S	7.5 E	VERT		9	ALBATEGNIUS, HALLEY, HIND
447	18	108	8.9 S	6.2 E	VERT		8	ALBATEGNIUS, HALLEY, HIPPARCHUS
448	18	108	9.0 S	4.5 E	VERT		6	ALBATEGNIUS, HALLEY, HIPPARCHUS
449	18	108	9.1 S	3.0 E	VERT		5	ALBATEGNIUS, MUELLER
450	18	108	9.2 S	2.0 E	VERT		4	ALBATEGNIUS, PTOLEMAEUS
451	18	108	9.3 S	1.0 E	VERT		2	ALBATEGNIUS, PTOLEMAEUS
452	18	108	9.3 S	.1 W	VERT		1	PTOLEMAEUS
453	25	113	9.0 N	170.0 E	25	265	2	PAPALESKI
454	25	114	9.0 N	168.5 E	25		3	PAPALESKI, MANDEL'SHTAM
455	25	114	8.9 N	167.3 E	25		4	PAPALESKI, MANDEL'SHTAM
456	25	114	8.8 N	165.6 E	25		6	PAPALESKI, MANDEL'SHTAM
457	25	114	8.8 N	164.5 E	25		7	PAPALESKI, MANDEL'SHTAM

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
458	25	114	8.6 N	163.0 E	25		8	PAPALESKI, MANDEL'SHTAM
459	25	115	8.4 N	161.4 E	25		10	PAPALESKI, MANDEL'SHTAM, MILLS
460	25	115	8.5 N	160.0 E	25	264	11	MANDEL'SHTAM, MILLS
461	25	115	8.3 N	158.8 E	25		13	MILLS
462	25	115	8.3 N	157.6 E	25		14	MILLS, HENDERSON
463	25	115	8.4 N	156.6 E	25		15	MILLS, HENDERSON
464	25	116	8.3 N	155.0 E	25		16	MILLS, HENDERSON
465	25	116	8.1 N	153.6 E	25		18	MILLS, HENDERSON
466	25	117	7.8 N	152.2 E	25		19	HENDERSON, SCHUSTER
467	25	117	7.6 N	151.0 E	25		20	HENDERSON, SCHUSTER
468	25	117	7.5 N	148.8 E	25		22	SCHUSTER, MENDELEEV
469	25	117	7.6 N	147.4 E	25		24	SCHUSTER, MENDELEEV
470	25	117	7.6 N	146.5 E	25	270	25	SCHUSTER, MENDELEEV
471	25	118	7.2 N	144.9 E	25		26	SCHUSTER, MENDELEEV
472	25	118	7.1 N	143.7 E	25		28	SCHUSTER, MENDELEEV
473	25	118	7.0 N	142.2 E	25		29	MENDELEEV
474	25	118	7.0 N	140.9 E	25		30	MENDELEEV, HARTMANN
475	25	118	6.9 N	139.6 E	25		32	MENDELEEV, HARTMANN
476	25	118	6.7 N	138.2 E	25		33	MENDELEEV, HARTMANN, GREEN
477	25	118	6.7 N	136.7 E	25		34	MENDELEEV, HARTMANN, GREEN
478	25	118	6.3 N	135.3 E	25		36	MENDELEEV, HARTMANN, GREEN
479	25	119	6.3 N	133.9 E	25		37	GREEN, MOROZOV, GREGORY
480	25	119	6.2 N	132.7 E	25	266	38	GREEN, MOROZOV, GREGORY
481	25	119	6.2 N	131.3 E	25		40	GREEN, MOROZOV, GREGORY
482	25	119	5.8 N	130.1 E	25		41	MOROZOV, GREGORY
483	25	120	5.7 N	128.9 E	25		42	MOROZOV, GREGORY
484	25	120	5.4 N	127.6 E	25		43	MOROZOV, GREGORY, KING
485	25	120	5.3 N	126.3 E	25		45	MOROZOV, KING
486	25	120	5.2 N	124.8 E	25		46	KING
487	25	120	4.9 N	123.5 E	25		48	KING
488	25	120	4.7 N	122.2 E	25		49	KING, ABUL WAFA
489	25	120	4.5 N	120.8 E	25		50	KING, ABUL WAFA
490	25	120	4.5 N	119.5 E	25	269	52	KING, ABUL WAFA
491	25	120	4.1 N	118.0 E	25		53	KING, ABUL WAFA, FIRSOV
492	25	121	4.0 N	116.7 E	25		55	ABUL WAFA, FIRSOV, BUISSON
493	25	121	3.7 N	115.2 E	25		56	ABUL WAFA, FIRSOV, BUISSON
494	25	121	3.1 N	113.5 E	25		58	ABUL WAFA, FIRSOV, BUISSON
495	25	121	2.7 N	112.4 E	25		59	FIRSOV
496	25	121	2.5 N	111.0 E	25		60	SAENGER, SAHA
497	25	121	2.4 N	109.6 E	25		62	SAENGER, SAHA

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
498	25	121	2.3 N	108.4 E	25		63	SAENGER, SAHA
499	25	121	2.0 N	107.1 E	25		64	SAENGER, SAHA
500	25	121	1.7 N	105.7 E	25	264	66	SAENGER, SAHA
501	25	121	1.4 N	104.2 E	25		67	SAENGER, SAHA, WYLD
502	25	121	1.2 N	103.2 E	25		68	SAENGER, SAHA, WYLD
503	25	121	.9 N	101.7 E	25		70	SAENGER, SAHA, WYLD
504	25	121	.6 N	100.4 E	25		71	SAENGER, SAHA, WYLD
505	25	121	.5 N	98.9 E	25		72	WYLD, PURKYNE, HIRAYAMA
506	25	121	.4 N	97.8 E	25		73	WYLD, PURKYNE, HIRAYAMA
507	25	121	.3 N	96.4 E	25		74	WYLD, PURKYNE, HIRAYAMA
508	25	121	.3 N	95.1 E	25		76	WYLD, PURKYNE, SMYTH'S SEA
509	25	121	.2 N	94.1 E	25		77	PURKYNE, SMYTH'S SEA
510	25	121	.1 N	92.7 E	25	263	78	PURKYNE, SMYTH'S SEA
511	25	121	.4 S	91.3 E	25		80	SMYTH'S SEA
512	25	121	.5 S	89.9 E	25		81	SMYTH'S SEA
513	25	121	.9 S	88.5 E	25		82	SMYTH'S SEA
514	25	121	1.3 S	87.0 E	25		84	SMYTH'S SEA
515	25	121	1.5 S	85.6 E	25		85	SMYTH'S SEA, KASTNER, G
516	25	121	1.6 S	84.4 E	25		86	KASTNER, G
517	25	121	1.8 S	83.0 E	25		86	KASTNER, G, GILBERT
518	25	121	1.9 S	81.5 E	25		87	KASTNER, G, GILBERT
519	25	121	2.1 S	80.2 E	25		86	KASTNER, G, GILBERT
520	25	121	2.2 S	79.0 E	25	263	85	KASTNER, G, GILBERT
521	25	121	2.5 S	77.6 E	25		84	KASTNER, G, GILBERT
522	25	121	2.5 S	76.1 E	25		83	GILBERT, J, MACLAURIN B, F
523	25	121	2.7 S	74.9 E	25		82	GILBERT, J, MACLAURIN, A, B
524	25	121	3.1 S	73.3 E	25		81	GILBERT, J, MACLAURIN, A, B
525	25	121	3.2 S	72.2 E	25		80	GILBERT J, MACLAURIN, A, U
526	25	120	3.4 S	70.7 E	25		78	GILBERT J, MACLAURIN, A, U
527	25	120	3.6 S	69.5 E	25		77	MACLAURIN, U, E, H
528	25	120	3.7 S	68.3 E	25		76	MACLAURIN, LANGRENUS, T
529	25	120	4.0 S	67.2 E	25		75	MACLAURIN, LANGRENUS, T
530	25	120	4.3 S	65.7 E	25	267	73	LANGRENUS, T, WEBB
531	25	120	4.5 S	64.4 E	25		72	LANGRENUS, T, WEBB
532	25	120	4.7 S	63.3 E	25		71	LANGRENUS, T, WEBB
533	25	120	4.8 S	61.8 E	25		70	LANGRENUS, T, B, F, K
534	25	120	5.0 S	60.4 E	25		68	LANGRENUS, T, B, F, K
535	25	120	5.1 S	58.8 E	25		67	LANGRENUS, B, F, K
536	25	119	5.4 S	57.6 E	25		65	LANGRENUS B, F, K, MESSIER S
537	25	119	5.6 S	56.3 E	25		64	LANGRENUS B, F, K, MESSIER S

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
538	25	119	5.8 S	54.9 E	25		63	LANGRENUS F, GOCLENIUS A
539	25	119	6.0 S	53.5 E	25		61	MESSIER G, GOCLENIUS A
540	25	119	6.0 S	52.1 E	25	270	60	MESSIER G, D, GOCLENIUS A
541	25	119	6.3 S	50.7 E	25		58	MESSIER G, D, GOCLENIUS A
542	25	119	6.4 S	49.5 E	25		57	GOCLENIUS, A, RILLES
543	25	119	6.5 S	48.4 E	25		56	GOCLENIUS, A, RILLES
544	25	119	6.7 S	47.2 E	25		55	GOCLENIUS, RILLES, GUTENBERG
545	25	118	6.8 S	45.9 E	25		54	GOCLENIUS, RILLES, GUTENBERG
546	25	118	6.9 S	44.4 E	25		52	GOCLENIUS, RILLES, GUTENBERG, RILLES
547	25	118	7.0 S	42.7 E	25		51	GOCLENIUS, RILLES, GUTENBERG, RILLES
548	25	117	7.1 S	41.2 E	25		49	GUTENBERG, G, RILLES
549	25	117	7.2 S	40.1 E	25		48	GUTENBERG, G, RILLES
550	25	117	7.4 S	38.7 E	25	269	46	GUTENBERG, G, RILLES
551	25	117	7.5 S	37.0 E	25		45	DAGUERRE, ISIDORUS, CAPELLA
552	25	116	7.7 S	35.7 E	25		44	DAGUERRE, ISIDORUS, CAPELLA
553	25	116	8.0 S	34.4 E	25		42	DAGUERRE, ISIDORUS, CAPELLA
554	25	116	8.0 S	33.0 E	25		41	THEOPHILUS, ISIDORUS, MADLER
555	25	116	8.2 S	31.7 E	25		40	THEOPHILUS, ISIDORUS, MADLER
556	25	115	8.4 S	30.4 E	25		38	THEOPHILUS, MADLER
557	25	115	8.4 S	28.9 E	25		37	THEOPHILUS, MADLER
558	25	115	8.5 S	27.5 E	25		36	THEOPHILUS, CYRILLUS
559	25	115	8.5 S	26.2 E	25		35	THEOPHILUS, CYRILLUS
560	25	114	8.7 S	24.8 E	25	269	33	THEOPHILUS, ZOLLNER F, KANT
561	25	114	8.8 S	23.4 E	25		32	KANT, ZOLLNER, F
562	25	114	9.0 S	22.3 E	25		31	KANT, ZOLLNER, F
563	25	114	9.0 S	21.2 E	25		30	KANT, ZOLLNER, DESCARTES
564	25	114	9.1 S	19.7 E	25		28	DESCARTES, APOLLO 16 LANDING SITE
565	25	113	9.2 S	18.0 E	25		26	DESCARTES, APOLLO 16 LANDING SITE
566	25	113	9.2 S	16.8 E	25		25	DESCARTES, APOLLO 16 LANDING SITE
567	25	113	9.2 S	15.4 E	25		24	DESCARTES, APOLLO 16 LANDING SITE
568	25	113	9.2 S	14.2 E	25		23	DESCARTES, APOLLO 16 LANDING SITE
569	25	113	9.2 S	12.5 E	25		21	ANDEL, DOLLOND, C
570	25	112	9.1 S	11.0 E	25	273	19	ANDEL, RITCHEY, HIND
571	25	112	9.1 S	9.5 E	25		18	ALBATEGNIUS, HIPPARCHUS
572	25	112	9.2 S	8.0 E	25		16	ALBATEGNIUS, HIPPARCHUS
573	25	112	9.2 S	6.7 E	25		15	ALBATEGNIUS, HIPPARCHUS
574	25	111	9.2 S	5.5 E	25		14	ALBATEGNIUS, HIPPARCHUS
575	25	111	9.3 S	4.2 E	25		13	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS
576	25	111	9.3 S	3.7 E	25		12	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS
577	25	111	9.3 S	1.4 E	25		10	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
578	25	111	9.1 S	.2 W	25		8	ALPHONSUS, PTOLEMAEUS
579	25	110	9.0 S	1.4 W	25		7	ALPHONSUS, PTOLEMAEUS
580	25	110	8.9 S	3.0 W	25	272	5	PTOLEMAEUS, DAVY, Y
581	25	110	9.0 S	4.2 W	25		4	PTOLEMAEUS, DAVY, Y
582	25	110	9.2 S	5.8 W	25		3	PTOLEMAEUS, DAVY, Y
583	25	109	8.8 S	7.2 W	25		1	DAVY, Y, PALISA
584	25	109	8.7 S	8.5 W	25		0	DAVY, Y, PALISA
585	25	109	8.6 S	9.7 W	25	271	-1	DAVY, Y, PALISA
586								DOUBLE EXPOSURE
587	26	114	5.7 N	169.0 E	40	178	2	DUFAY,CORIOLIS
588	26	114	5.5 N	167.5 E	40		03	DUFAY CORIOLIS, VENING MEINESZ
589	26	114	5.5 N	166.0 E	40		05	MANDEL'SHTAM, VENING MEINESZ
590	26	115	5.2 N	164.8 E	40	177	06	MANDEL'SHTAM, VENING MEINESZ
591	26	115	5.5 N	163.5 E	40		07	MANDEL'SHTAM, VENING MEINESZ
592	26	115	5.2 N	162.4 E	40		08	MANDEL'SHTAM, VENING MEINESZ
593	26	115	5.3 N	160.7 E	40		10	MANDEL'SHTAM, VENING MEINESZ
594	26	115	5.1 N	159.4 E	40		11	MANDEL'SHTAM, VENING MEINESZ
595	26	116	5.4 N	158.0 E	40		13	SCHLIEMANN, VENING MEINESZ
596	26	116	5.2 N	156.6 E	40		14	SCHLIEMANN, VENING MEINESZ
597	26	116	5.2 N	155.3 E	40		15	HENDERSON, SCHLIEMANN
598	26	116	5.4 N	154.2 E	40		17	HENDERSON, SCHLIEMANN
599	26	116	4.7 N	152.8 E	40		18	HENDERSON, SCHLIEMANN
600	26	117	4.8 N	151.3 E	40	175	20	HENDERSON, SCHLIEMANN
601	26	117	4.8 N	149.9 E	40		21	SCHUSTER, HENDERSON
602	26	117	4.5 N	148.5 E	40		22	SCHUSTER, HENDERSON
603	26	117	4.3 N	147.0 E	40		24	SCHUSTER, HENDERSON
604	26	117	4.3 N	145.8 E	40		25	SCHUSTER, MENDELEEV
605	26	117	4.1 N	144.4 E	40		26	MENDELEEV, SCHUSTER
606	26	118	3.9 N	143.0 E	40		28	MENDELEEV
607	26	118	3.5 N	141.7 E	40		29	MENDELEEV
608	26	118	3.5 N	140.4 E	40		30	MENDELEEV
609	26	118	3.5 N	138.7 E	40		32	MENDELEEV
610	26	118	3.4 N	137.6 E	40	174	33	MENDELEEV
611	26	119	3.4 N	136.2 E	40		34	MENDELEEV, HARTMANN
612	26	119	3.5 N	134.9 E	40		36	GREEN, HARTMANN
613	26	119	3.0 N	133.4 E	40		37	GREEN, HARTMANN
614	26	119	2.9 N	132.2 E	40		38	GREEN, HARTMANN
615	26	119	2.7 N	130.7 E	40		39	GREEN, GREGORY
616	26	119	2.7 N	129.3 E	40		41	MOROZOV, GREGORY
617	26	120	2.1 N	128.0 E	40		43	MOROZOV, GREGORY

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
618	26	120	2.0 N	126.7 E	40		44	MOROZOV, GREGORY
619	26	120	2.0 N	125.2 E	40		45	MOROZOV, GREGORY
620	26	120	1.7 N	123.8 E	40	172	47	GREGORY, BECVAR
621	26	120	1.9 N	122.5 E	40		48	KING
622	26	120	1.5 N	121.4 E	40		49	KING
623	26	120	1.2 N	119.8 E	40		51	KING, ABUL WAFA
624	26	121	1.0 N	118.4 E	40		52	ABUL WAFA
625	26	121	.8 N	117.1 E	40		53	ABUL WAFA, VESALIUS
626	26	121	.8 N	115.8 E	40		55	ABUL WAFA, VESALIUS
627	26	121	.5 N	114.4 E	40		56	ABUL WAFA, VESALIUS
628	26	121	.2 S	113.2 E	40		57	BUISSON, VESALIUS
629	26	121	.5 S	111.7 E	40		59	BUISSON, VESALIUS
630	26	121	.8 S	110.5 E	40	171	60	BUISSON, VESALIUS
631	26	121	1.2 S	109.2 E	40		61	BUISSON, EINTHOVEN
632	26	121	1.3 S	107.8 E	40		63	EINTHOVEN
633	26	121	1.4 S	106.6 E	40		64	SAHA, EINTHOVEN
634	26	121	2.2 S	105.2 E	40		65	SAHA
635	26	121	2.3 S	103.6 E	40		67	SAHA
636	26	121	2.3 S	102.7 E	40		68	SAHA
637	26	121	2.5 S	101.4 E	40		69	SAHA, WYLD
638	26	121	2.4 S	99.9 E	40		70	WYLD, SAHA
639	26	121	2.6 S	98.7 E	40		72	WYLD
640	26	121	2.8 S	97.2 E	40	170	73	WYLD, PURKYNE
641	26	121	2.8 S	95.8 E	40		74	WYLD, PURKYNE
642	26	122	2.8 S	94.8 E	40		75	HIRAYAMA, PURKYNE
643	26	122	3.3 S	93.4 E	40		76	HIRAYAMA, PURKYNE
644	26	121	3.6 S	92.2 E	40		77	HIRAYAMA, PURKYNE
645	26	121	4.1 S	90.6 E	40		79	HIRAYAMA
646	26	121	4.3 S	89.4 E	40		80	HIRAYAMA, BRUNNER
647	26	121	4.6 S	87.8 E	40		81	HIRAYAMA, BRUNNER
648	26	121	4.6 S	86.6 E	40		82	BRUNNER
649	26	121	4.9 S	85.2 E	40		82	BRUNNER, ANSGARIUS
650	26	121	5.2 S	83.9 E	40	172	83	KASTNER, F, ANSGARIUS
651	26	121	5.4 S	82.4 E	40		83	KASTNER, F, ANSGARIUS
652	26	121	5.5 S	81.3 E	40		83	KASTNER, F, G, ANSGARIUS
653	26	121	5.6 S	79.9 E	40		83	KASTNER, F, G, ANSGARIUS
654	26	121	5.8 S	78.6 E	40		82	KASTNER, G, LA PEROUSE
655	26	121	5.8 S	77.0 E	40		82	KASTNER, G, LA PEROUSE
656	26	121	5.8 S	75.6 E	40		81	GILBERT, LA PEROUSE
657	26	121	6.0 S	74.3 E	40		80	GILBERT, LA PEROUSE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
658	26	121	6.4 S	73.2 E	40		79	MACLAURIN F, LA PEROUSE
659	26	121	6.7 S	71.8 E	40		78	MACLAURIN F, LA PEROUSE
660	26	121	7.0 S	70.3 E	40	172	77	MACLAURIN F, KAPTEYN
661	26	121	7.0 S	68.9 E	40		75	LANGRENUS A, KAPTEYN
662	26	120	7.2 S	67.7 E	40		74	LANGRENUS A, KAPTEYN
663	26	120	7.5 S	66.3 E	40		73	LANGRENUS, A
664	26	120	7.7 S	65.2 E	40		72	LANGRENUS, A
665	26	120	8.0 S	63.8 E	40		71	LANGRENUS, A
666	26	120	8.3 S	62.4 E	40		69	LANGRENUS, A
667	26	120	8.6 S	60.9 E	40		68	LANGRENUS
668	26	120	8.6 S	59.3 E	40		66	LANGRENUS
669	26	120	8.7 S	58.0 E	40		65	LANGRENUS
670	26	119	8.8 S	56.8 E	40	173	64	LANGRENUS
671	26	119	9.0 S	55.4 E	40		63	CROZIER, LOHSE
672	26	119	9.1 S	54.0 E	40		61	CROZIER, D
673	26	119	9.3 S	52.7 E	40		60	CROZIER, D
674	26	119	9.4 S	51.3 E	40		59	CROZIER, D
675	26	119	9.6 S	49.9 E	40		57	CROZIER, D, COLOMBO
676	26	119	9.8 S	48.6 E	40		56	GOCLENIUS, COLOMBO
677	26	118	9.9 S	47.2 E	40		55	GOCLENIUS, RILLES
678	26	118	10.2 S	45.8 E	40		53	GOCLENIUS, RILLES
679	26	118	10.2 S	44.4 E	40		52	GOCLENIUS, RILLES
680	26	118	10.4 S	43.2 E	40	174	51	GOCLENIUS, GUTENBERG
681	26	118	10.5 S	41.6 E	40		49	GOCLENIUS, GUTENBERG
682	26	118	10.4 S	40.3 E	40		48	GUTENBERG, PYRENEES MTS
683	26	118	10.7 S	38.9 E	40		47	GUTENBERG, PYRENEES MTS
684	26	117	10.8 S	37.4 E	40		45	DAGUERRE, PYRENEES MTS
685	26	117	11.1 S	36.2 E	40		44	DAGUERRE, PYRENEES MTS
686	26	117	11.1 S	34.7 E	40		43	DAGUERRE
687	26	117	11.3 S	33.3 E	40		41	DAGUERRE, MADLER
688	26	116	11.5 S	32.1 E	40		40	DAGUERRE, MADLER
689	26	116	11.7 S	30.6 E	40		38	THEOPHILUS, MADLER
690	26	116	11.5 S	29.2 E	40	176	37	THEOPHILUS, MADLER
691	26	116	11.6 S	27.8 E	40		36	THEOPHILUS, MADLER
692	26	115	11.8 S	26.5 E	40		35	THEOPHILUS, CYRILLUS
693	26	115	11.9 S	25.1 E	40		33	THEOPHILUS, CYRILLUS
694	26	115	11.8 S	23.8 E	40		32	THEOPHILUS, CYRILLUS
695	26	115	12.0 S	22.3 E	40		30	KANT, CYRILLUS
696	26	115	11.9 S	20.8 E	40		29	KANT, CYRILLUS
697	26	114	11.8 S	19.5 E	40		28	KANT, CYRILLUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
698	26	114	11.8 S	18.0 E	40		26	DESCARTES, KANT
699	26	114	12.2 S	16.7 E	40		25	ABULFEDA, DESCARTES
700	26	114	12.3 S	15.2 E	40	180	24	ABULFEDA, DESCARTES
701	26	113	12.5 S	13.8 E	40		22	ABULFEDA, DESCARTES
702	26	113	12.5 S	12.5 E	40		21	ABULFEDA, ANDEL
703	26	113	12.5 S	11.1 E	40		20	RITCHEY, ABULFEDA
704	26	113	12.4 S	9.7 E	40		18	RITCHEY, ABULFEDA
705	26	113	12.2 S	8.3 E	40		17	ALBATEGNIUS, RITCHEY
706	26	112	12.3 S	6.9 E	40		15	ALBATEGNIUS, RITCHEY
707	26	112	12.4 S	5.5 E	40		14	ALBATEGNIUS
708	26	112	12.5 S	4.2 E	40		13	ALBATEGNIUS
709	26	112	12.5 S	2.8 E	40		11	ALBATEGNIUS
710	26	111	12.5 S	1.4 E	40	181	10	PTOLEMAEUS, ALBATEGNIUS
711	26	111	12.5 S	.3 W	40		08	PTOLEMAEUS, ALPHONSUS
712	26	111	12.6 S	1.5 W	40		07	PTOLEMAEUS, ALPHONSUS
713	26	111	12.3 S	3.0 W	40		06	PTOLEMAEUS, ALPHONSUS
714	26	110	12.3 S	4.4 W	40		04	PTOLEMAEUS, ALPHONSUS
715	26	110	12.2 S	5.7 W	40		03	DAVY RILLE, ALPHONSUS
716	26	110	12.2 S	7.2 W	40		02	DAVY RILLE
717	26	110	12.2 S	8.6 W	40	182	0	DAVY RILLE,
718								DOUBLE EXPOSURE
719	27	114	12.2 N	168.6 E	40	358	1	SPENCER JONES
720	27	114	12.0 N	167.0 E	40		03	PAPALESKI, SPENCER JONES
721	27	114	11.9 N	165.8 E	40		04	PAPALESKI, SPENCER JONES
722	27	114	11.8 N	164.2 E	40		05	PAPALESKI, SPENCER JONES
723	27	114	11.8 N	163.1 E	40		06	PAPALESKI, SPENCER JONES
724	27	115	11.8 N	161.6 E	40		08	PAPALESKI, VAN GENT
725	27	115	11.5 N	160.4 E	40		09	PAPALESKI, VAN GENT
726	27	115	11.7 N	159.3 E	40		10	KOHLSCHUTTER, VAN GENT
727	27	115	11.8 N	157.6 E	40		12	KOHLSCHUTTER, MILLS
728	27	116	11.8 N	156.4 E	40		13	KOHLSCHUTTER, MILLS
729	27	116	11.6 N	154.7 E	40		15	KOHLSCHUTTER, MILLS
730	27	116	11.5 N	153.4 E	40	355	16	KOHLSCHUTTER, MILLS
731	27	116	11.3 N	152.1 E	40		17	KOHLSCHUTTER, ST JOHN
732	27	116	11.4 N	150.5 E	40		19	KOHLSCHUTTER, ST JOHN
733	27	116	11.3 N	149.3 E	40		20	ST JOHN
734	27	117	11.2 N	147.8 E	40		21	ST JOHN
735	27	117	11.0 N	146.5 E	40		22	MENDELEEV, NE RIM
736	27	117	10.8 N	145.1 E	40		24	MENDELEEV, NE RIM
737	27	117	10.7 N	143.6 E	40		26	MENDELEEV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
738	27	117	10.6 N	142.2 E	40		27	MENDELEEV
739	27	118	10.4 N	141.0 E	40		28	MENDELEEV
740	27	118	10.3 N	139.8 E	40	354	29	MENDELEEV
741	27	118	10.4 N	138.2 E	40		31	MENDELEEV
742	27	118	10.3 N	136.8 E	40		32	MENDELEEV, NW RIM
743	27	118	10.1 N	135.4 E	40		34	MENDELEEV, NW RIM, VETCHINKIN
744	27	118	9.9 N	133.8 E	40		35	VETCHINKIN
745	27	119	9.6 N	132.7 E	40		36	VETCHINKIN
746	27	119	9.4 N	131.3 E	40		38	VETCHINKIN
747	27	119	9.3 N	129.9 E	40		39	VETCHINKIN, MESHCHERSKY
748	27	119	9.3 N	128.4 E	40		41	VETCHINKIN, MESHCHERSKY
749	27	119	9.2 N	127.1 E	40		42	OSTWALD, MESHCHERSKY
750	27	119	9.3 N	125.8 E	40	352	43	OSTWALD, MESHCHERSKY
751	27	119	9.2 N	124.3 E	40		45	OSTWALD, MESHCHERSKY
752	27	120	8.8 N	123.0 E	40		46	KING, OSTWALD
753	27	120	8.8 N	121.8 E	40		47	KING, OSTWALD, GUYOT
754	27	120	8.8 N	120.8 E	40		48	KING, OSTWALD, GUYOT
755	27	120	8.7 N	119.9 E	40		49	KING, OSTWALD, GUYOT
756	27	120	7.5 N	117.8 E	40		51	KING, OSTWALD, GUYOT
757	27	120	7.5 N	116.2 E	40		53	LOBACHEVSKY, GUYOT
758	27	120	7.0 N	114.6 E	40		54	FIRSOV, LOBACHEVSKY, GUYOT
759	27	120	6.5 N	113.0 E	40		56	FIRSOV, LOBACHEVSKY, GUYOT
760	27	121	6.4 N	112.0 E	40	351	57	FIRSOV, LOBACHEVSKY
761	27	121	6.3 N	111.0 E	40		58	FIRSOV, LOBACHEVSKY
762	27	121	6.2 N	109.5 E	40		60	FIRSOV, LOBACHEVSKY
763	27	122	5.6 N	108.0 E	40		61	MOISEEV
764	27	122	5.4 N	106.8 E	40		62	SAENGER, MOISEEV
765	27	121	5.3 N	105.3 E	40		64	SAENGER, MOISEEV
766	27	121	5.1 N	104.3 E	40		65	SAENGER, MOISEEV
767	27	121	4.8 N	102.9 E	40		66	SAENGER, MOISEEV
768	27	121	4.6 N	101.5 E	40		68	ERRO, SAENGER
769	27	121	4.5 N	100.1 E	40		69	ERRO, SAENGER
770	27	121	4.3 N	98.5 E	40	350	71	ERRO
771	27	121	4.2 N	97.1 E	40		72	BABCOCK, ERRO
772	27	121	4.0 N	95.8 E	40		73	BABCOCK, ERRO
773	27	121	3.7 N	94.5 E	40		75	BABCOCK
774	27	121	3.5 N	93.4 E	40		76	BABCOCK
775	27	121	3.3 N	92.3 E	40		77	BABCOCK
776	27	121	3.0 N	91.0 E	40		78	NEPER, K, BABCOCK
777	27	121	3.0 N	89.6 E	40		80	NEPER, K

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
778	27	121	2.9 N	88.3 E	40		81	NEPER, K
779	27	121	2.6 N	86.7 E	40		83	NEPER, K
780	27	121	2.3 N	85.6 E	40	350	84	SCHUBERT, NEPER, K
781	27	121	1.8 N	84.0 E	40		85	SCHUBERT, NEPER, K
782	27	121	1.7 N	82.9 E	40		86	SCHUBERT, NEPER, K
783	27	121	1.3 N	81.6 E	40		88	SCHUBERT, NEPER
784	27	121	1.4 N	80.2 E	40		89	SCHUBERT, GILBERT M
785	27	121	1.3 N	79.0 E	40		90	SCHUBERT, GILBERT M
786	27	121	1.3 N	77.3 E	40		88	SCHUBERT, GILBERT, M
787	27	121	1.2 N	75.9 E	40		87	GILBERT, N
788	27	121	1.2 N	74.8 E	40		85	GILBERT, N, SCHUBERT N
789	27	121	.8 N	73.6 E	40		84	MACLAURIN L, GILBERT
790	27	121	.6 N	72.3 E	40	352	83	MACLAURIN L, SCHUBERT N
791	27	121	.2 N	91.0 E	40		82	MACLAURIN, L
792	27	120	.1 N	69.7 E	40		80	MACLAURIN, L
793	27	120	.0	68.2 E	40		79	MACLAURIN
794	27	120	.2 S	66.7 E	40		77	MACLAURIN, WEBB J
795	27	120	.4 S	65.4 E	40		76	MACLAURIN, WEBB J
796	27	120	.8 S	63.8 E	40		74	WEBB, J
797	27	120	.9 S	62.2 E	40		73	WEBB, J
798	27	120	1.3 S	61.0 E	40		71	WEBB, J
799	27	120	1.4 S	59.9 E	40		70	WEBB, LANGRENUS B
800	27	120	1.4 S	58.3 E	40	353	69	WEBB, LANGRENUS B
801	27	119	1.4 S	57.3 E	40		68	WEBB, LANGRENUS B
802	27	119	1.6 S	56.1 E	40		67	LANGRENUS B
803	27	119	2.0 S	54.5 E	40		65	MESSIER G
804	27	119	2.2 S	53.1 E	40		63	MESSIER G
805	27	119	2.3 S	51.6 E	40		62	MESSIER, G
806	27	119	2.7 S	49.8 E	40		60	MESSIER, A
807	27	118	2.7 S	48.5 E	40		59	MESSIER, A, D
808	27	118	2.8 S	47.5 E	40		58	MESSIER, A, D
809	27	118	3.1 S	46.3 E	40		57	MESSIER, A, D
810	27	118	3.3 S	45.0 E	40	354	55	MESSIER, A, LUBBOCK
811	27	118	3.8 S	43.6 E	40		54	MESSIER D, LUBBOCK
812	27	118	3.7 S	42.2 E	40		52	GUTENBERG G, LUBBOCK
813	27	118	3.7 S	41.2 E	40		51	GUTENBERG G, RILLES
814	27	118	4.0 S	39.4 E	40		50	GUTENBERG G, RILLES
815	27	117	4.1 S	37.7 E	40		48	GUTENBERG G, RILLES
816	27	117	4.1 S	36.7 E	40		47	CAPELLA, GUTENBERG RILLES
817	27	117	4.2 S	35.5 E	40		46	CAPELLA, ISIDORUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
818	27	117	4.6 S	34.1 E	40		44	CAPELLA, ISIDORUS, B
819	27	116	4.6 S	32.8 E	40		43	CAPELLA, ISIDORUS, B
820	27	116	4.6 S	31.4 E	40	356	42	TORRICELLI, ISIDORUS B
821	27	116	4.8 S	30.0 E	40		40	TORRICELLI, ISIDORUS B
822	27	116	5.0 S	28.6 E	40		39	TORRICELLI
823	27	116	4.9 S	27.4 E	40		38	TORRICELLI
824	27	116	5.0 S	25.8 E	40		36	TORRICELLI, HYPATIA
825	27	115	5.4 S	24.4 E	40		35	HYPATIA, ZOLLNER F
826	27	115	5.3 S	23.3 E	40		34	HYPATIA, ZOLLNER F
827	27	115	5.5 S	21.9 E	40		32	HYPATIA, ZOLLNER F
828	27	115	5.4 S	20.7 E	40		31	ZOLLNER, ALFRAGANUS
829	27	115	5.7 S	19.1 E	40		29	ZOLLNER, ALFRAGANUS
830	27	114	5.8 S	17.7 E	40	359	28	ZOLLNER, ALFRAGANUS
831	27	114	5.9 S	16.3 E	40		27	DOLLOND B, TAYLOR
832	27	114	5.9 S	15.1 E	40		25	DOLLOND B, TAYLOR
833	27	114	6.0 S	13.8 E	40		24	DOLLOND B, TAYLOR
834	27	113	6.0 S	12.3 E	40		23	DOLLOND B, C
835	27	113	6.0 S	10.7 E	40		21	DOLLOND C, HIPPARCHUS C
836	27	113	6.2 S	9.5 E	40		20	HIPPARCHUS, HIND
837	27	113	6.2 S	8.3 E	40		19	HIPPARCHUS, HIND
838	27	112	6.1 S	6.7 E	40		17	HIPPARCHUS
839	27	112	6.2 S	5.2 E	40		16	HIPPARCHUS
840	27	112	6.3 S	3.9 E	40	360	14	HIPPARCHUS
841	27	112	6.3 S	2.6 E	40		13	HIPPARCHUS
842	27	112	6.2 S	1.2 E	40		12	PTOLEMAEUS, HIPPARCHUS
843	27	111	6.2 S	.2 W	40		10	PTOLEMAEUS
844	27	111	6.2 S	1.7 W	40		09	PTOLEMAEUS
845	27	111	6.4 S	3.0 W	40		07	PTOLEMAEUS
846	27	111	6.3 S	4.4 W	40		06	PTOLEMAEUS
847	27	111	6.2 S	5.8 W	40		05	LALANDE, PTOLEMAEUS
848	27	110	6.0 S	7.2 W	40		03	LALANDE
849	27	110	5.9 S	8.6 W	40		02	LALANDE
850	27	110	5.8 S	9.9 W	40	002	1	LALANDE
851								DOUBLE EXPOSURE
852	28	113			VERT		-1	PAPALESKI, E OF
853	28	113	8.5 N	169.2 E	VERT		0	PAPALESKI, E OF
854	28	114	8.8 N	167.3 E	VERT		2	PAPALESKI
855	28	114	8.9 N	166.2 E	VERT		3	PAPALESKI
856	28	114	9.0 N	164.8 E	VERT		4	PAPALESKI
857	28	114	8.8 N	163.4 E	VERT		5	PAPALESKI, MANDEL'SHTAM

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. A516-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
858	28	114	8.8 N	162.2 E	VERT		6	PAPALESKI, MANDEL'SHTAM
859	28	114	8.7 N	161.0 E	VERT		7	PAPALESKI, MANDEL'SHTAM
860	28	115	8.8 N	159.8 E	VERT		8	MANDEL'SHTAM
861	28	115	8.7 N	158.8 E	VERT		10	MILLS
862	28	115	8.5 N	157.6 E	VERT		11	MILLS
863	28	115	8.4 N	156.2 E	VERT		12	MILLS
864	28	115	8.3 N	154.8 E	VERT		14	MILLS
865	28	115	8.3 N	153.5 E	VERT		15	MILLS
866	28	116	8.3 N	152.3 E	VERT		16	ST JOHN
867	28	116	8.0 N	151.2 E	VERT		18	ST JOHN
868	28	116	7.9 N	149.5 E	VERT		19	ST JOHN
869	28	116	8.0 N	148.1 E	VERT		20	SCHUSTER
870	28	116	7.8 N	147.2 E	VERT		21	SCHUSTER
871	28	117	7.7 N	146.2 E	VERT		22	MENDELEEV, SCHUSTER
872	28	117	7.5 N	144.8 E	VERT		23	MENDELEEV, SCHUSTER
873	28	117	7.4 N	143.3 E	VERT		25	MENDELEEV
874	28	117	7.3 N	142.1 E	VERT		26	MENDELEEV
875	28	117	7.0 N	140.8 E	VERT		29	MENDELEEV
876	28	117	7.1 N	139.3 E	VERT		30	MENDELEEV
877	28	117	7.0 N	138.1 E	VERT		31	MENDELEEV
878	28	118	7.0 N	136.8 E	VERT		32	MENDELEEV
879	28	118	6.9 N	135.7 E	VERT		33	MENDELEEV, GREEN
880	28	118	6.8 N	134.4 E	VERT		34	GREEN
881	28	118	6.7 N	133.3 E	VERT		35	GREEN
882	28	119	6.3 N	132.0 E	VERT		36	GREEN
883	28	119	6.2 N	130.8 E	VERT		38	GREEN
884	28	119	6.0 N	129.4 E	VERT		39	MOROZOV
885	28	119	5.9 N	128.2 E	VERT		40	MOROZOV
886	28	119	5.7 N	126.8 E	VERT		42	MOROZOV
887	28	119	5.6 N	125.7 E	VERT		43	MOROZOV
888	28	119	5.6 N	124.5 E	VERT		44	MOROZOV
889	28	119	5.2 N	123.2 E	VERT		45	KING
890	28	119	4.9 N	122.0 E	VERT		46	KING
891	28	119	4.8 N	120.7 E	VERT		48	KING
892	28	119	4.7 N	119.4 E	VERT		49	KING
893	28	119	4.6 N	118.3 E	VERT		50	KING, ABUL WAFA
894	28	119	4.5 N	116.8 E	VERT		51	ABUL WAFA
895	28	119	4.3 N	115.5 E	VERT		52	ABUL WAFA
896	28	119	4.0 N	114.0 E	VERT		54	ABUL WAFA, FIRSOV
897	28	120	3.5 N	113.0 E	VERT		56	ABUL WAFA, FIRSOV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
898	28	120	3.2 N	112.0 E	VERT		57	FIRSOV
899	28	120	2.8 N	110.6 E	VERT		59	FIRSOV
900	28	120	2.7 N	109.4 E	VERT		60	FIRSOV, W OF
901	28	120	2.6 N	108.5 E	VERT		61	FIRSOV, W OF
902	28	120	2.4 N	107.1 E	VERT		62	FIRSOV, W OF
903	28	120	2.2 N	105.8 E	VERT		63	SAHA, SAENGER
904	28	120	1.9 N	104.5 E	VERT		64	SAHA, SAENGER
905	28	120	1.7 N	103.4 E	VERT		65	SAHA, SAENGER
906	28	120	1.4 N	102.0 E	VERT		66	SAHA, SAENGER
907	28	120	1.4 N	100.7 E	VERT		67	WYLD
908	28	120	1.1 N	99.6 E	VERT		68	WYLD
909	28	120	1.0 N	98.2 E	VERT		69	WYLD, PURKYNE
910	28	121	.9 N	97.0 E	VERT		71	WYLD, PURKYNE
911	28	121	.8 N	95.7 E	VERT		72	WYLD, PURKYNE
912	28	121	.7 N	94.6 E	VERT		74	WYLD, PURKYNE
913	28	121	.3 N	93.3 E	VERT		75	PURKYNE
914	28	121	.1 S	92.5 E	VERT		76	SMYTH'S SEA
915	28	121	.2 S	91.3 E	VERT		77	SMYTH'S SEA
916	28	121	.3 S	89.8 E	VERT		78	SMYTH'S SEA
917	28	121	.5 S	88.6 E	VERT		79	SMYTH'S SEA
918	28	121	.7 S	87.4 E	VERT		80	SMYTH'S SEA
919	28	121	1.0 S	86.0 E	VERT		81	SMYTH'S SEA
920	28	121	1.2 S	84.7 E	VERT		83	SMYTH'S SEA
921	28	121	1.4 S	83.5 E	VERT		84	SMYTH'S SEA
922	28	121	1.6 S	82.3 E	VERT		85	KASTNER G, SMYTH'S SEA
923	28	121	1.6 S	81.1 E	VERT		86	KASTNER G, SMYTH'S SEA
924	28	121	1.8 S	79.9 E	VERT		86	KASTNER G, SMYTH'S SEA
925	28	121	1.9 S	78.6 E	VERT		87	KASTNER G, GILBERT
926	28	121	2.2 S	77.2 E	VERT		86	KASTNER G, GILBERT
927	28	121	2.3 S	76.0 E	VERT		85	KASTNER G, GILBERT
928	28	121	2.5 S	74.9 E	VERT		84	GILBERT, J
929	28	121	2.6 S	73.7 E	VERT		83	GILBERT, J
930	28	121	2.8 S	72.3 E	VERT		82	MACLAURIN B, GILBERT J
931	28	121	3.0 S	71.0 E	VERT		81	MACLAURIN B, GILBERT J
932	28	120	3.2 S	69.8 E	VERT		80	MACLAURIN, B
933	28	120	3.5 S	68.8 E	VERT		79	MACLAURIN, B
934	28	120	3.7 S	67.3 E	VERT		78	MACLAURIN, E
935	28	120	3.8 S	66.2 E	VERT		77	MACLAURIN, E
936	28	120	4.1 S	65.2 E	VERT		76	MACLAURIN H, E
937	28	120	4.2 S	64.0 E	VERT		75	MACLAURIN H, E

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
938	28	120	4.4 S	62.5 E	VERT		74	LANGRENUS, C, T
939	28	120	4.5 S	61.3 E	VERT		72	LANGRENUS, C, T
940	28	120	4.6 S	60.3 E	VERT		71	LANGRENUS, B, C
941	28	120	4.7 S	59.2 E	VERT		69	LANGRENUS, B, C
942	28	120	4.8 S	57.9 E	VERT		68	LANGRENUS F, B
943	28	120	5.2 S	56.5 E	VERT		67	LANGRENUS F, B
944	28	119	5.4 S	55.2 E	VERT		66	MESSIER G, LANGRENUS F
945	28	119	5.7 S	53.8 E	VERT		65	MESSIER G, LANGRENUS F
946	28	119	5.8 S	52.5 E	VERT		63	MESSIER G, GOCLENIUS A
947	28	119	5.9 S	51.3 E	VERT		62	MESSIER G, GOCLENIUS A
948	28	119	5.9 S	50.1 E	VERT		61	GOCLENIUS A
949	28	119	6.0 S	48.9 E	VERT		60	GOCLENIUS A
950	28	119	6.1 S	47.7 E	VERT		59	GOCLENIUS, A
951	28	119	6.2 S	46.3 E	VERT		57	GOCLENIUS, RILLES
952	28	118	6.3 S	45.0 E	VERT		56	GOCLENIUS, RILLES
953	28	118	6.5 S	44.1 E	VERT		55	GOCLENIUS, RILLES
954	28	118	6.6 S	42.6 E	VERT		53	GUTENBERG
955	28	118	6.8 S	41.3 E	VERT		52	GUTENBERG, RILLES
956	28	118	7.0 S	39.9 E	VERT		50	GUTENBERG, RILLES
957	28	118	7.2 S	38.6 E	VERT		49	GUTENBERG, RILLES
958	28	118	7.4 S	37.1 E	VERT		48	CAPELLA
959	28	117	7.5 S	35.9 E	VERT		47	CAPELLA, ISIDORUS
960	28	117	7.6 S	34.8 E	VERT		46	CAPELLA, ISIDORUS
961	28	117	7.8 S	33.6 E	VERT		45	CAPELLA, ISIDORUS
962	28	117	8.0 S	32.2 E	VERT		44	CAPELLA, ISIDORUS
963	28	117	8.1 S	31.1 E	VERT		42	MADLER, ISIDORUS
964	28	117	8.2 S	29.8 E	VERT		41	MADLER
965	28	117	8.3 S	28.5 E	VERT		40	THEOPHILUS
966	28	116	8.4 S	27.1 E	VERT		39	THEOPHILUS
967	28	116	8.5 S	26.0 E	VERT		37	THEOPHILUS
968	28	116	8.6 S	24.9 E	VERT		36	THEOPHILUS
969	28	116	8.7 S	23.6 E	VERT		35	THEOPHILUS
970	28	116	8.8 S	22.5 E	VERT		33	THEOPHILUS, KANT
971	28	115	8.8 S	20.8 E	VERT		31	KANT, ZOLLNER
972	28	115	8.8 S	19.6 E	VERT		30	KANT, ZOLLNER
973	28	115	8.9 S	18.5 E	VERT		29	KANT, ZOLLNER
974	28	115	9.0 S	17.1 E	VERT		28	DESCARTES, APOLLO 16 LANDING SITE
975	28	115	9.0 S	16.0 E	VERT		27	DESCARTES, APOLLO 16 LANDING SITE
976	28	114	9.0 S	14.7 E	VERT		26	DESCARTES, APOLLO 16 LANDING SITE
977	28	114	9.0 S	13.3 E	VERT		25	DESCARTES, APOLLO 16 LANDING SITE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62Cm) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
978	28	114	9.0 S	12.2 E	VERT		24	ANDEL, DOLLOND
979	28	114	9.0 S	10.9 E	VERT		22	RITCHEY, ANDEL
980	28	114	9.1 S	9.9 E	VERT		21	RITCHEY, ANDEL
981	28	114	9.2 S	8.7 E	VERT		20	RITCHEY, HIND
982	28	113	9.2 S	7.3 E	VERT		19	ALBATEGNIUS, HALLEY
983	28	113	9.2 S	6.0 E	VERT		18	ALBATEGNIUS, HALLEY
984	28	113	9.3 S	4.8 E	VERT		17	ALBATEGNIUS, HALLEY
985	28	113	9.3 S	3.7 E	VERT		15	ALBATEGNIUS, HALLEY
986	28	113	9.3 S	2.5 E	VERT		14	PTOLEMAEUS, ALBATEGNIUS
987	28	113	9.3 S	1.3 E	VERT		13	PTOLEMAEUS, ALBATEGNIUS
988	28	112	9.4 S	.1 E	VERT		12	PTOLEMAEUS
989	28	112	9.3 S	1.2 W	VERT		10	PTOLEMAEUS
990	28	112	9.2 S	2.5 W	VERT		9	PTOLEMAEUS
991	28	112	9.2 S	3.6 W	VERT		8	PTOLEMAEUS
992	28	112	9.2 S	4.8 W	VERT		7	PTOLEMAEUS, DAVY RILLE
993	28	111	9.2 S	6.0 W	VERT		6	PTOLEMAEUS, DAVY RILLE
994	28	111	9.2 S	7.1 W	VERT		5	DAVY, Y
995	28	111	9.3 S	8.4 W	VERT		3	DAVY, Y
996	28	111	9.3 S	9.4 W	VERT		2	DAVY, Y
997	28	110	9.3 S	10.6 W	VERT		1	DAVY, Y
998	28	110	9.2 S	12.0 W	VERT		-1	GUERICKE C, LALANDE A
999	28	110	9.1 S	13.3 W	VERT		-2	GUERICKE C
1000	28							1000-1006, DARK
1007								1007-1014, DARK, GAMMA RAY SPEC
1015								1015-1133, DARK
1134	29							1134-1143, DARK, GAMMA RAY SPEC
1144	29	112	9.1 N	168.3 E	VERT		0	PAPALESKI, E OF
1145	29	112	9.0 N	166.9 E	VERT		1	PAPALESKI
1146	29	112	9.0 N	165.5 E	VERT		2	PAPALESKI
1147	29	112	9.0 N	164.2 E	VERT		4	PAPALESKI
1148	29	112	8.9 N	162.9 E	VERT		5	PAPALESKI, MANDEL'SHTAM
1149	29	113	8.8 N	161.7 E	VERT		6	PAPALESKI, MANDEL'SHTAM
1150	29	113	8.7 N	160.7 E	VERT		7	PAPALESKI, MANDEL'SHTAM
1151	29	113	8.8 N	159.3 E	VERT		8	MANDEL'SHTAM
1152	29	113	8.7 N	158.3 E	VERT		9	MILLS
1153	29	113	8.6 N	157.0 E	VERT		10	MILLS
1154	29	114	8.5 N	155.7 E	VERT		12	MILLS
1155	29	114	8.4 N	154.3 E	VERT		13	MILLS
1156	29	114	8.2 N	153.0 E	VERT		15	ST JOHN
1157	29	114	8.1 N	151.8 E	VERT		16	ST JOHN

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
1158	29	114	8.1 N	150.6 E	VERT		17	ST JOHN
1159	29	115	8.0 N	149.2 E	VERT		18	SCHUSTER, ST JOHN
1160	29	115	8.1 N	148.0 E	VERT		19	SCHUSTER
1161	29	115	7.9 N	146.6 E	VERT		21	SCHUSTER, MENDELEEV
1162	29	115	7.7 N	145.3 E	VERT		22	MENDELEEV
1163	29	116	7.5 N	144.2 E	VERT		24	MENDELEEV
1164	29	116	7.4 N	142.8 E	VERT		25	MENDELEEV
1165	29	116	7.4 N	141.5 E	VERT		26	MENDELEEV
1166	29	116	7.3 N	140.0 E	VERT		27	MENDELEEV
1167	29	116	7.3 N	138.8 E	VERT		28	MENDELEEV
1168	29	117	7.1 N	137.5 E	VERT		30	MENDELEEV
1169	29	117	7.0 N	136.4 E	VERT		31	MENDELEEV
1170	29	117	6.9 N	135.1 E	VERT		32	MENDELEEV, GREEN
1171	29	117	6.8 N	133.7 E	VERT		33	GREEN
1172	29	117	6.7 N	132.6 E	VERT		34	GREEN
1173	29	117	6.5 N	131.3 E	VERT		36	GREEN
1174	29	118	6.3 N	130.1 E	VERT		37	MOROZOV, GREEN
1175	29	118	6.2 N	128.8 E	VERT		39	MOROZOV
1176	29	118	6.0 N	127.6 E	VERT		40	MOROZOV
1177	29	118	5.8 N	126.2 E	VERT		41	MOROZOV
1178	29	118	5.7 N	125.0 E	VERT		42	MOROZOV
1179	29	118	5.5 N	123.8 E	VERT		43	KING
1180	29	118	5.3 N	122.4 E	VERT		45	KING
1181	29	118	5.2 N	121.3 E	VERT		46	KING
1182	29	119	5.0 N	119.9 E	VERT		47	KING
1183	29	119	4.9 N	118.7 E	VERT		49	KING
1184	29	119	4.7 N	117.4 E	VERT		50	KING, ABUL WAFA
1185	29	119	4.5 N	116.2 E	VERT		51	ABUL WAFA
1186	29	119	4.1 N	114.7 E	VERT		52	ABUL WAFA, FIRSOV
1187	29	119	3.9 N	113.5 E	VERT		54	ABUL WAFA, FIRSOV
1188	29	119	3.3 N	112.3 E	VERT		55	FIRSOV
1189	29	119	3.2 N	111.3 E	VERT		56	FIRSOV
1190	29	119	3.0 N	109.9 E	VERT		57	FIRSOV
1191	29	119	2.8 N	108.6 E	VERT		58	FIRSOV, W OF
1192	29	120	2.7 N	107.3 E	VERT		60	FIRSOV, W OF
1193	29	120	2.5 N	106.2 E	VERT		62	SAENGER
1194	29	120	2.4 N	104.9 E	VERT		63	SAENGER
1195	29	120	2.2 N	103.5 E	VERT		64	SAENGER, SAHA
1196	29	120	1.7 N	102.3 E	VERT		65	SAENGER, SAHA
1197	29	120	1.5 N	101.3 E	VERT		66	SAENGER, SAHA

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1198	29	120	1.3 N	100.1 E	VERT		67	WYLD
1199	29	120	1.1 N	98.8 E	VERT		68	WYLD
1200	29	120	1.1 N	97.6 E	VERT		69	WYLD
1201	29	120	.9 N	96.2 E	VERT		70	WYLD, PURKYNE
1202	29	120	.6 N	95.1 E	VERT		72	WYLD, PURKYNE
1203	29	120	.4 N	93.8 E	VERT		73	PURKYNE, BABCOCK
1204	29	120	.4 N	92.8 E	VERT		75	PURKYNE, BABCOCK
1205	29	120	.2 N	91.7 E	VERT		76	SMYTH'S SEA
1206	29	120	.0	90.3 E	VERT		77	SMYTH'S SEA
1207	29	120	.1 S	89.0 E	VERT		78	SMYTH'S SEA
1208	29	120	.3 S	87.8 E	VERT		79	SMYTH'S SEA
1209	29	120	.6 S	86.3 E	VERT		80	SMYTH'S SEA
1210	29	120	.9 S	85.2 E	VERT		81	SMYTH'S SEA
1211	29	120	1.3 S	84.0 E	VERT		82	SMYTH'S SEA
1212	29	120	1.3 S	82.7 E	VERT		83	GILBERT U, SCHUBERT B
1213	29	120	1.5 S	81.5 E	VERT		84	KASTNER G
1214	29	120	1.5 S	80.2 E	VERT		85	KASTNER G
1215	29	120	1.8 S	79.0 E	VERT		86	KASTNER G
1216	29	120	1.8 S	77.8 E	VERT		87	KASTNER G, GILBERT
1217	29	120	2.1 S	76.6 E	VERT		86	KASTNER G, GILBERT
1218	29	120	2.1 S	75.1 E	VERT		86	GILBERT
1219	29	120	2.2 S	74.0 E	VERT		85	GILBERT, J
1220	29	120	2.4 S	72.8 E	VERT		84	GILBERT J, MACLAURIN L
1221	29	120	2.7 S	71.4 E	VERT		83	GILBERT J, MACLAURIN L
1222	29	120	3.1 S	70.2 E	VERT		82	MACLAURIN, L
1223	29	120	3.2 S	68.9 E	VERT		81	MACLAURIN, B
1224	29	120	3.5 S	67.8 E	VERT		79	MACLAURIN, E
1225	29	120	3.7 S	66.7 E	VERT		78	MACLAURIN, E
1226	29	120	3.8 S	65.4 E	VERT		77	MACLAURIN, E
1227	29	120	4.1 S	64.1 E	VERT		76	LANGRENUS T
1228	29	120	4.3 S	63.1 E	VERT		75	LANGRENUS, T
1229	29	120	4.4 S	61.9 E	VERT		73	LANGRENUS, T
1230	29	120	4.5 S	60.5 E	VERT		71	LANGRENUS, T
1231	29	120	4.8 S	59.3 E	VERT		70	LANGRENUS, K
1232	29	120	4.8 S	58.0 E	VERT		69	LANGRENUS F, B
1233	29	119	5.1 S	56.8 E	VERT		67	LANGRENUS F
1234	29	119	5.2 S	55.7 E	VERT		66	LANGRENUS F
1235	29	119	5.4 S	54.4 E	VERT		65	MESSIER G, LANGRENUS F
1236	29	119	5.6 S	53.0 E	VERT		64	MESSIER G
1237	29	119	5.7 S	51.7 E	VERT		63	MESSIER G, GOCLENIUS A

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1238	29	119	5.8 S	50.6 E	VERT		61	MESSIER G, GOCLENIUS A
1239	29	119	5.8 S	49.2 E	VERT		60	GOCLENIUS A
1240	29	119	6.1 S	48.0 E	VERT		59	GOCLENIUS A
1241	29	119	6.2 S	46.6 E	VERT		58	GOCLENIUS
1242	29	118	6.4 S	45.2 E	VERT		57	GOCLENIUS, RILLES
1243	29	118	6.5 S	43.9 E	VERT		55	GOCLENIUS, RILLES
1244	29	118	6.6 S	42.8 E	VERT		54	GUTENBERG
1245	29	118	6.7 S	41.6 E	VERT		53	GUTENBERG
1246	29	118	6.8 S	40.2 E	VERT		52	GUTENBERG, RILLES
1247	29	118	7.0 S	39.1 E	VERT		51	GUTENBERG, RILLES
1248	29	118	7.2 S	37.7 E	VERT		50	CAPELLA, GUTENBERG
1249	29	118	7.3 S	36.5 E	VERT		48	CAPELLA
1250	29	117	7.7 S	35.1 E	VERT		47	CAPELLA, ISIDORUS
1251	29	117	7.8 S	33.8 E	VERT		46	CAPELLA, ISIDORUS
1252	29	117	8.0 S	32.6 E	VERT		45	CAPELLA, ISIDORUS
1253	29	117	8.0 S	31.4 E	VERT		43	MADLER, ISIDORUS
1254	29	117	8.0 S	30.2 E	VERT		42	MADLER
1255	29	117	8.1 S	29.0 E	VERT		41	THEOPHILUS
1256	29	117	8.1 S	27.7 E	VERT		40	THEOPHILUS
1257	29	116	8.2 S	26.5 E	VERT		39	THEOPHILUS
1258	29	116	8.2 S	25.1 E	VERT		38	THEOPHILUS
1259	29	116	8.3 S	23.9 E	VERT		36	THEOPHILUS, ZOLLNER F
1260	29	116	8.5 S	22.5 E	VERT		35	KANT, ZOLLNER F
1261	29	116	8.6 S	21.2 E	VERT		34	KANT, ZOLLNER F
1262	29	115	8.7 S	20.0 E	VERT		33	KANT, ZOLLNER
1263	29	115	8.9 S	18.7 E	VERT		31	KANT, ZOLLNER
1264	29	115	9.0 S	17.6 E	VERT		30	DESCARTES, APOLLO 16 LANDING SITE
1265	29	115	9.0 S	16.3 E	VERT		29	DESCARTES, APOLLO 16 LANDING SITE
1266	29	115	9.0 S	15.0 E	VERT		28	DESCARTES, APOLLO 16 LANDING SITE
1267	29	115	9.0 S	13.6 E	VERT		26	DESCARTES, APOLLO 16 LANDING SITE
1268	29	114	9.1 S	12.4 E	VERT		24	ANDEL, DOLLOND, C, B
1269	29	114	9.1 S	11.0 E	VERT		23	ANDEL, RITCHEY
1270	29	114	9.2 S	9.9 E	VERT		22	ANDEL, RITCHEY
1271	29	114	9.2 S	8.8 E	VERT		21	HIND, RITCHEY
1272	29	114	9.2 S	7.5 E	VERT		20	ALBATEGNIUS, HALLEY
1273	29	113	9.1 S	6.2 E	VERT		19	ALBATEGNIUS, HALLEY
1274	29	113	9.3 S	5.0 E	VERT		17	ALBATEGNIUS, HALLEY
1275	29	113	9.3 S	3.8 E	VERT		16	ALBATEGNIUS, HALLEY
1276	29	113	9.2 S	2.6 E	VERT		15	ALBATEGNIUS
1277	29	112	9.3 S	1.4 E	VERT		14	PTOLEMAEUS, ALBATEGNIUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1278	29	112	9.3 S	.2 E	VERT		13	PTOLEMAEUS
1279	29	112	9.2 S	.9 W	VERT		12	PTOLEMAEUS
1280	29	112	9.3 S	2.2 W	VERT		11	PTOLEMAEUS
1281	29	112	9.2 S	3.3 W	VERT		9	PTOLEMAEUS
1282	29	112	9.2 S	4.7 W	VERT		8	PTOLEMAEUS, DAVY RILLE
1283	29	111	9.2 S	5.8 W	VERT		7	PTOLEMAEUS, DAVY Y
1284	29	111	9.1 S	6.9 W	VERT		6	DAVY Y
1285	29	111	9.0 S	8.1 W	VERT		4	DAVY Y
1286	29	111	9.0 S	9.3 W	VERT		3	DAVY Y
1287	29	111	9.2 S	10.5 W	VERT		2	GUERICKE C, LALANDE A
1288	29	111	9.1 S	11.8 W	VERT		1	GUERICKE C, LALANDE A
1289	29	110	9.0 S	13.1 W	VERT		-1	GUERICKE C
1290	29	110	9.1 S	14.1 W	VERT		-2	GUERICKE C
1291								DOUBLE EXPOSURE
1292	37	110	12.2 N	156.4 E	40	356	3	KOHLSCHUTTER
1293	37	110	12.1 N	155.1 E	40		4	KOHLSCHUTTER
1294	37	110	12.0 N	153.7 E	40		6	KOHLSCHUTTER
1295	37	110	12.0 N	152.3 E	40		7	ST JOHN, KOHLSCHUTTER
1296	37	110	11.8 N	150.8 E	40		9	ST JOHN
1297	37	111	11.9 N	149.4 E	40		10	ST JOHN
1298	37	111	11.8 N	148.2 E	40		11	ST JOHN
1299	37	111	11.6 N	146.6 E	40		13	MENDELEEV
1300	37	111	11.5 N	145.1 E	40	355	14	MENDELEEV
1301	37	111	11.4 N	143.7 E	40		16	MENDELEEV
1302	37	111	11.3 N	142.4 E	40		17	MENDELEEV
1303	37	111	11.2 N	141.2 E	40		18	MENDELEEV
1304	37	112	11.2 N	139.8 E	40		19	MENDELEEV
1305	37	112	11.0 N	138.2 E	40		21	MENDELEEV
1306	37	112	11.0 N	136.8 E	40		22	MENDELEEV
1307	37	112	10.9 N	135.5 E	40		24	MENDELEEV
1308	37	113	10.9 N	134.2 E	40		25	VETCHINKIN
1309	37	113	10.8 N	132.8 E	40		26	VETCHINKIN
1310	37	113	10.7 N	131.5 E	40	353	28	VETCHINKIN
1311	37	113	10.5 N	130.0 E	40		29	VETCHINKIN, MESHCHERSKY
1312	37	113	10.4 N	128.7 E	40		30	VETCHINKIN, MESHCHERSKY
1313	37	113	10.3 N	127.4 E	40		32	MESHCHERSKY
1314	37	114	10.2 N	125.9 E	40		33	MESHCHERSKY, OSTWALD
1315	37	114	10.1 N	124.5 E	40		35	MESHCHERSKY, OSTWALD
1316	37	114	9.8 N	123.4 E	40		36	OSTWALD
1317	37	114	9.5 N	121.8 E	40		37	OSTWALD

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1318	37	114	9.3 N	120.4 E	40		39	OSTWALD, GUYOT
1319	37	114	9.0 N	119.2 E	40		40	OSTWALD, GUYOT
1320	37	114	8.4 N	117.4 E	40	352	42	GUYOT, LOBACHEVSKY, KOSTINSKY
1321	37	115	8.6 N	116.0 E	40		43	GUYOT, LOBACHEVSKY, KOSTINSKY
1322	37	115	8.3 N	114.8 E	40		44	GUYOT, LOBACHEVSKY, KOSTINSKY
1323	37	115	7.8 N	113.2 E	40		46	GUYOT, LOBACHEVSKY
1324	37	115	7.7 N	111.8 E	40		47	GUYOT, LOBACHEVSKY
1325	37	115	7.4 N	110.4 E	40		49	HERTZ, LOBACHEVSKY
1326	37	115	7.3 N	109.3 E	40		50	HERTZ, LOBACHEVSKY
1327	37	116	7.0 N	107.7 E	40		51	HERTZ, MOISEEV
1328	37	116	6.9 N	106.5 E	40		53	HERTZ, MOISEEV
1329	37	116	6.8 N	105.2 E	40		54	HERTZ, MOISEEV, SAENGER
1330	37	116	6.6 N	103.9 E	40	351	55	HERTZ, MOISEEV, SAENGER
1331	37	116	6.4 N	102.4 E	40		57	HERTZ, MOISEEV, SAENGER
1332	37	116	6.2 N	101.1 E	40		58	ERRO, MOISEEV, SAENGER
1333	37	116	5.9 N	99.8 E	40		59	ERRO, MOISEEV
1334	37	116	5.7 N	98.3 E	40		61	ERRO, BABCOCK
1335	37	116	5.4 N	97.0 E	40		62	ERRO, BABCOCK
1336	37	117	5.2 N	95.7 E	40		64	ERRO, BABCOCK
1337	37	117	5.1 N	94.3 E	40		65	ERRO, BABCOCK
1338	37	117	4.8 N	93.1 E	40		66	JANSKY, BABCOCK
1339	37	117	4.7 N	91.8 E	40		67	JANSKY, BABCOCK, NEPER
1340	37	117	4.6 N	90.6 E	40	350	69	JANSKY, NEPER
1341	37	117	4.3 N	89.4 E	40		70	JANSKY, NEPER
1342	37	117	4.0 N	88.2 E	40		71	JANSKY, NEPER
1343	37	117	3.9 N	86.6 E	40		73	JANSKY, NEPER
1344	37	117	3.9 N	85.2 E	40		74	JANSKY, NEPER
1345	37	117	3.7 N	83.8 E	40		75	SCHUBERT, NEPER
1346	37	117	3.4 N	82.6 E	40		77	SCHUBERT, NEPER
1347	37	118	3.3 N	81.2 E	40		78	SCHUBERT, NEPER
1348	37	118	3.0 N	79.8 E	40		80	SCHUBERT, BANACHIEWICZ
1349	37	118	2.7 N	78.5 E	40		81	SCHUBERT, BANACHIEWICZ
1350	37	118	2.3 N	77.2 E	40	351	82	SCHUBERT X, Y, BANACHIEWICZ
1351	37	118	2.3 N	76.1 E	40		83	SCHUBERT X, BANACHIEWICZ
1352	37	118	2.2 N	74.8 E	40		85	SCHUBERT N, X, Y
1353	37	118	2.2 N	73.4 E	40		86	SCHUBERT N, DUBIAGO
1354	37	118	2.3 N	72.2 E	40		87	SCHUBERT N, DUBIAGO
1355	37	118	2.3 N	70.8 E	40		88	SCHUBERT N, DUBIAGO
1356	37	118	1.9 N	69.4 E	40		90	DUBIAGO, J, M, FIRMICUS
1357	37	118	1.4 N	67.8 E	40		88	DUBIAGO, M, O, FIRMICUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1358	37	118	1.1 N	66.7 E	40		87	DUBIAGO, M, Q, FIRMICUS
1359	37	118	1.0 N	65.3 E	40		86	APOLLONIUS, FIRMICUS
1360	37	118	.4 N	63.8 E	40	351	84	APOLLONIUS, FIRMICUS
1361	37	118	.2 N	62.4 E	40		83	APOLLONIUS, FIRMICUS, WEBB
1362	37	118	.0	60.8 E	40		81	APOLLONIUS, H, D, WEBB, R
1363	37	118	.2 S	59.7 E	40		80	APOLLONIUS, H, D, WEBB, R
1364	37	118	.2 S	58.3 E	40		79	APOLLONIUS, H, D, WEBB, R
1365	37	118	.5 S	57.1 E	40		77	WEBB, FERTILITY, SEA OF
1366	37	118	.7 S	55.6 E	40		76	FERTILITY, SEA OF
1367	37	118	.7 S	54.3 E	40		75	TARUNTIUS
1368	37	118	.8 S	53.0 E	40		73	TARUNTIUS
1369	37	118	.8 S	51.5 E	40		72	TARUNTIUS, MESSIER
1370	37	118	1.3 S	50.2 E	40	352	71	TARUNTIUS, MESSIER, A
1371	37	118	1.5 S	48.7 E	40		69	TARUNTIUS, MESSIER, A
1372	37	118	1.8 S	47.5 E	40		68	TARUNTIUS, MESSIER, A
1373	37	118	1.9 S	46.0 E	40		66	TARUNTIUS, MESSIER, A
1374	37	118	2.0 S	44.7 E	40		65	TARUNTIUS, MESSIER, A
1375	37	118	2.2 S	43.4 E	40		64	TARUNTIUS, MESSIER A
1376	37	118	2.3 S	42.3 E	40		63	LUBBOCK, R, SECCHI, X
1377	37	118	2.5 S	40.9 E	40		61	GUTENBERG G, RILLES, GOCLENIUS RILLES
1378	37	118	2.7 S	39.4 E	40		60	GUTENBERG G, CENSORINUS N
1379	37	118	3.0 S	38.2 E	40		58	CENSORINUS, N
1380	37	118	3.1 S	36.6 E	40	353	57	CENSORINUS, N, GUTENBERG RILLES
1381	37	118	3.3 S	35.4 E	40		56	ISIDORUS B, CENSORINUS, MASKELYNE
1382	37	118	3.6 S	34.0 E	40		54	ISIDORUS B, CENSORINUS, MASKELYNE
1383	37	118	3.7 S	32.7 E	40		53	ISIDORUS B, CENSORINUS, MASKELYNE
1384	37	118	3.8 S	31.6 E	40		52	TORRICELLI, CENSORINUS, MASKELYNE
1385	37	117	4.0 S	30.2 E	40		50	TORRICELLI, CENSORINUS, MASKELYNE
1386	37	117	4.0 S	28.5 E	40		49	TORRICELLI, CENSORINUS, MASKELYNE
1387	37	117	4.2 S	27.3 E	40		48	MOLTKE, TORRICELLI, MASKELYNE
1388	37	117	4.3 S	25.7 E	40		46	MOLTKE, TORRICELLI, MASKELYNE
1389	37	117	4.6 S	24.6 E	40		45	HYPATIA, MOLTKE
1390	37	117	4.7 S	23.2 E	40	356	43	HYPATIA, MOLTKE
1391	37	117	4.8 S	21.7 E	40		42	HYPATIA, ALFRAGANUS
1392	37	117	5.0 S	20.2 E	40		41	HYPATIA, ALFRAGANUS
1393	37	117	5.1 S	19.0 E	40		39	ALFRAGANUS, ZOLLNER, DELAMBRE
1394	37	116	5.1 S	17.6 E	40		38	ALFRAGANUS, TAYLOR, DELAMBRE
1395	37	116	5.2 S	16.4 E	40		36	OVEREXPOSED
1396	37	116	5.2 S	15.0 E	40		35	DOLLOND B, TAYLOR
1397	37	116	5.2 S	13.3 E	40		34	DOLLOND B, TAYLOR

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1398	37	116	5.3 S	12.1 E	40		32	DOLLOND B, TAYLOR
1399	37	116	5.4 S	10.8 E	40		31	HIPPARCHUS C, LADE
1400	37	116	5.6 S	9.4 E	40	358	30	HIND, HIPPARCHUS C
1401	37	116	5.7 S	7.9 E	40		28	HIND, HIPPARCHUS, C
1402	37	116	5.8 S	6.7 E	40		27	HIND, HIPPARCHUS, C
1403	37	116	5.9 S	5.4 E	40		26	HIPPARCHUS
1404	37	115	5.9 S	4.1 E	40		24	HIPPARCHUS
1405	37	115	6.0 S	2.7 E	40		23	HIPPARCHUS
1406	37	115	6.2 S	1.3 E	40		21	PTOLEMAEUS, MUELLER
1407	37	115	6.2 S	.2 W	40		20	PTOLEMAEUS, MUELLER
1408	37	115	6.3 S	1.6 W	40		19	PTOLEMAEUS, HERSCHEL
1409	37	115	6.3 S	2.8 W	40		17	PTOLEMAEUS, HERSCHEL
1410	37	115	6.2 S	4.3 W	40	360	16	PTOLEMAEUS, HERSCHEL, LALANDE
1411	37	114	6.1 S	5.6 W	40		15	LALANDE, A, PALISA T
1412	37	114	6.0 S	7.2 W	40		13	LALANDE, A, PALISA T
1413	37	114	6.0 S	8.4 W	40		12	LALANDE, A, PALISA T
1414	37	114	6.0 S	9.8 W	40		11	LALANDE, A, PALISA T
1415	37	114	5.8 S	11.0 W	40		9	LALANDE, A
1416	37	113	5.7 S	12.4 W	40		8	LALANDE, A
1417	37	113	5.7 S	13.9 W	40		6	PARRY, FRA MAURO
1418	37	113	5.8 S	15.3 W	40		5	PARRY, FRA MAURO
1419	37	113	5.8 S	16.6 W	40		4	PARRY, FRA MAURO, BONPLAND
1420	37	113	5.7 S	18.2 W	40	002	2	PARRY, FRA MAURO, BONPLAND
1421	37	113	5.7 S	19.5 W	40		1	FRA MAURO, BONPLAND
1422	37	113	5.7 S	20.7 W	40		0	FRA MAURO, BONPLAND
1423	37	112	5.7 S	22.0 W	40		-1	FRA MAURO, W OF
1424	37							1424-1435, DARK, GAMMA RAY SPEC
1436								1436-1538, DARK, REVS 37-38
1539	38							1539-1550, DARK, GAMMA RAY SPEC
1551	38	109	9.5 N	160.8 E	VERT		-2	MILLS, E OF
1552	38	109	9.4 N	159.3 E	VERT		-1	MILLS, E OF
1553	38	109	9.4 N	158.3 E	VERT		0	MILLS
1554	38	109	9.3 N	156.9 E	VERT		2	MILLS
1555	38	109	9.3 N	155.5 E	VERT		3	MILLS
1556	38	110	9.2 N	154.0 E	VERT		5	MILLS
1557	38	110	9.1 N	152.6 E	VERT		6	ST JOHN
1558	38	110	9.0 N	151.1 E	VERT		8	ST JOHN
1559	38	110	8.8 N	149.7 E	VERT		9	ST JOHN
1560	38	110	8.6 N	148.3 E	VERT		10	ST JOHN
1561	38	110	8.4 N	147.1 E	VERT		11	MENDELEEV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1562	38	111	8.3 N	145.8 E	VERT		13	MENDELEEV
1563	38	111	8.3 N	144.4 E	VERT		14	MENDELEEV
1564	38	111	8.3 N	142.8 E	VERT		16	MENDELEEV
1565	38	111	8.2 N	141.3 E	VERT		17	MENDELEEV
1566	38	112	8.3 N	139.8 E	VERT		19	MENDELEEV
1567	38	112	8.2 N	138.6 E	VERT		20	MENDELEEV
1568	38	112	8.1 N	137.9 E	VERT		21	MENDELEEV
1569	38	112	8.0 N	135.8 E	VERT		23	MENDELEEV
1570	38	112	8.0 N	134.6 E	VERT		24	MENDELEEV
1571	38	112	7.8 N	133.0 E	VERT		25	VETCHINKIN
1572	38	112	7.5 N	131.7 E	VERT		27	VETCHINKIN
1573	38	113	7.4 N	130.1 E	VERT		28	VETCHINKIN
1574	38	113	7.3 N	128.7 E	VERT		30	MOROZOV
1575	38	113	7.2 N	127.5 E	VERT		31	MOROZOV
1576	38	113	6.9 N	126.2 E	VERT		32	MOROZOV
1577	38	113	6.7 N	124.8 E	VERT		34	MOROZOV
1578	38	113	6.7 N	123.4 E	VERT		35	KING
1579	38	113	6.6 N	122.1 E	VERT		36	KING
1580	38	113	6.6 N	120.7 E	VERT		38	KING
1581	38	114	6.2 N	119.5 E	VERT		39	KING
1582	38	114	6.0 N	117.9 E	VERT		41	KING
1583	38	114	5.8 N	116.5 E	VERT		42	KING, W OF
1584	38	114	5.8 N	115.0 E	VERT		43	FIRSOV
1585	38	114	5.1 N	113.4 E	VERT		45	FIRSOV
1586	38	115	4.7 N	112.3 E	VERT		46	FIRSOV
1587	38	115	4.4 N	110.8 E	VERT		48	FIRSOV
1588	38	115	4.1 N	109.7 E	VERT		49	FIRSOV
1589	38	115	4.0 N	108.1 E	VERT		50	FIRSOV, W OF
1590	38	115	3.7 N	106.9 E	VERT		52	SAENGER, E OF
1591	38	115	3.3 N	105.6 E	VERT		53	SAENGER
1592	38	116	3.1 N	104.3 E	VERT		54	SAENGER
1593	38	116	3.0 N	103.0 E	VERT		56	SAENGER
1594	38	116	3.0 N	101.5 E	VERT		57	SAENGER
1595	38	116	3.0 N	100.1 E	VERT		58	SAENGER, EPPD
1596	38	116	2.8 N	98.6 E	VERT		60	EPPD
1597	38	116	2.7 N	97.4 E	VERT		61	EPPD, BABCOCK
1598	38	116	2.4 N	96.0 E	VERT		62	BABCOCK
1599	38	117	2.0 N	94.8 E	VERT		64	BABCOCK
1600	38	117	1.8 N	93.6 E	VERT		65	BABCOCK
1601	38	117	1.8 N	92.1 E	VERT		66	SMYTH'S SEA, BABCOCK

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
1602	38	117	1.4 N	90.9 E	VERT		68	SMYTH'S SEA, BABCOCK
1603	38	117	1.2 N	89.6 E	VERT		69	SMYTH'S SEA
1604	38	117	1.0 N	88.2 E	VERT		70	SMYTH'S SEA
1605	38	117	.7 N	86.7 E	VERT		72	SMYTH'S SEA
1606	38	117	.3 N	85.3 E	VERT		73	SMYTH'S SEA
1607	38	117	.2 N	83.9 E	VERT		75	SMYTH'S SEA
1608	38	118	.0	82.6 E	VERT		76	SMYTH'S SEA, SCHUBERT B, GILBERT U
1609	38	118	.1 S	81.5 E	VERT		77	SMYTH'S SEA, SCHUBERT B, GILBERT U
1610	38	118	.2 S	80.2 E	VERT		78	SCHUBERT B, GILBERT U
1611	38	118	.3 S	79.0 E	VERT		79	GILBERT, M, N
1612	38	118	.4 S	77.6 E	VERT		81	GILBERT, N, M, SCHUBERT X, Y
1613	38	118	.5 S	76.2 E	VERT		82	GILBERT, SCHUBERT X, Y
1614	38	118	.8 S	74.7 E	VERT		83	GILBERT, SCHUBERT X, Y
1615	38	118	1.0 S	73.4 E	VERT		84	MACLAURIN B, L, GILBERT
1616	38	118	1.1 S	72.2 E	VERT		85	MACLAURIN B, L
1617	38	118	.9 S	71.6 E	VERT		86	MACLAURIN B, L
1618	38	118	1.0 S	69.2 E	VERT		87	MACLAURIN
1619	38	118	1.2 S	67.7 E	VERT		87	MACLAURIN
1620	38	118	1.3 S	66.4 E	VERT		86	MACLAURIN, H
1621	38	118	1.8 S	64.9 E	VERT		85	MACLAURIN H
1622	38	118	2.0 S	63.8 E	VERT		84	MACLAURIN H, LANGRENUS T
1623	38	118	2.3 S	62.6 E	VERT		83	MACLAURIN H, LANGRENUS T
1624	38	119	2.7 S	60.9 E	VERT		82	WEBB, LANGRENUS C
1625	38	119	2.9 S	59.8 E	VERT		80	WEBB, LANGRENUS C
1626	38	119	3.2 S	58.7 E	VERT		79	WEBB, LANGRENUS C, B
1627	38	119	3.5 S	57.4 E	VERT		78	LANGRENUS B, K, F
1628	38	119	3.6 S	56.0 E	VERT		77	LANGRENUS B, K, F
1629	38	119	3.9 S	54.6 E	VERT		75	MESSIER G, LANGRENUS F
1630	38	119	4.4 S	52.9 E	VERT		73	MESSIER G
1631	38	119	4.8 S	51.4 E	VERT		72	MESSIER G, GOCLENIUS A
1632	38	119	5.2 S	50.3 E	VERT		71	MESSIER G, GOCLENIUS A
1633	38	119	5.5 S	49.0 E	VERT		69	MESSIER D, GOCLENIUS A
1634	38	119	5.8 S	47.7 E	VERT		68	MESSIER D, GOCLENIUS A
1635	38	119	5.6 S	46.4 E	VERT		67	MESSIER D
1636	38	119	5.7 S	44.8 E	VERT		65	MESSIER D, GOCLENIUS RILLES
1637	38	119	5.8 S	43.6 E	VERT		64	GUTENBERG, GOCLENIUS RILLES
1638	38	119	5.8 S	42.3 E	VERT		63	GUTENBERG, GOCLENIUS RILLES
1639	38	119	6.1 S	40.9 E	VERT		61	GUTENBERG, G, RILLES
1640	38	119	6.3 S	39.7 E	VERT		60	GUTENBERG, G, RILLES
1641	38	119	6.4 S	38.2 E	VERT		59	GUTENBERG, G, RILLES

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1642	38	119	6.5 S	36.9 E	VERT		58	CAPELLA, GUTENBERG RILLES
1643	38	119	6.6 S	35.5 E	VERT		56	CAPELLA, ISIDORUS
1644	38	118	6.7 S	34.2 E	VERT		55	CAPELLA, ISIDORUS
1645	38	118	6.9 S	32.7 E	VERT		53	CAPELLA, ISIDORUS
1646	38	118	7.0 S	31.3 E	VERT		52	TORICELLI, R, ISIDORUS
1647	38	118	7.2 S	29.8 E	VERT		50	TORICELLI, R
1648	38	118	7.3 S	28.5 E	VERT		49	TORICELLI, R, THEOPHILUS
1649	38	118	7.4 S	27.4 E	VERT		49	THEOPHILUS, TORRICELLI, R
1650	38	118	7.5 S	26.2 E	VERT		47	THEOPHILUS, TORRICELLI
1651	38	118	7.6 S	24.7 E	VERT		45	THEOPHILUS, ZOLLNER F
1652	38	118	8.0 S	23.2 E	VERT		44	THEOPHILUS, ZOLLNER F
1653	38	118	8.2 S	21.8 E	VERT		43	KANT, ZOLLNER F
1654	38	118	8.2 S	20.6 E	VERT		41	KANT, ZOLLNER
1655	38	118	8.3 S	19.7 E	VERT		40	KANT, ZOLLNER
1656	38	118	8.4 S	18.5 E	VERT		39	KANT, ZOLLNER
1657	38	118	8.5 S	17.3 E	VERT		38	APOLLO 16 LANDING SITE
1658	38	118	8.6 S	16.0 E	VERT		37	APOLLO 16 LANDING SITE
1659	38	118	8.7 S	14.8 E	VERT		36	APOLLO 16 LANDING SITE
1660	38	117	8.8 S	13.7 E	VERT		34	APOLLO 16 LANDING SITE
1661	38	117	8.8 S	12.6 E	VERT		33	APOLLO 16 LANDING SITE
1662	38	117	8.8 S	11.4 E	VERT		32	DOLLOND C, ANDEL
1663	38	117	9.1 S	10.3 E	VERT		31	RITCHEY, ANDEL
1664	38	117	9.1 S	9.2 E	VERT		30	RITCHEY, HIND
1665	38	117	9.2 S	7.9 E	VERT		29	RITCHEY, HIND
1666	38	117	9.5 S	6.6 E	VERT		27	ALBATEGNIUS, HALLEY
1667	38	116	9.4 S	5.4 E	VERT		26	ALBATEGNIUS, HALLEY
1668	38	116	9.4 S	4.4 E	VERT		25	ALBATEGNIUS, HALLEY
1669	38	116	9.3 S	3.2 E	VERT		24	ALBATEGNIUS
1670	38	116	9.3 S	2.1 E	VERT		23	ALBATEGNIUS, PTOLEMAEUS
1671	38	116	9.4 S	.7 E	VERT		22	PTOLEMAEUS
1672	38	116	9.5 S	.4 W	VERT		21	PTOLEMAEUS
1673	38	116	9.5 S	1.6 W	VERT		19	PTOLEMAEUS
1674	38	116	9.4 S	2.8 W	VERT		18	PTOLEMAEUS
1675	38	116	9.4 S	4.0 W	VERT		17	PTOLEMAEUS
1676	38	116	9.3 S	5.2 W	VERT		16	PTOLEMAEUS, DAVY Y
1677	38	116	9.4 S	6.4 W	VERT		16	PTOLEMAEUS, DAVY, Y
1678	38	115	9.4 S	7.5 W	VERT		15	PALISA T, DAVY, Y
1679	38	115	9.4 S	8.8 W	VERT		14	PALISA T, DAVY, Y
1680	38	115	9.4 S	9.9 W	VERT		11	GUERICKE C, DAVY, Y
1681	38	115	9.4 S	11.0 W	VERT		10	GUERICKE C

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
1682	38	115	9.5 S	12.2 W	VERT		9	GUERICKE, C
1683	38	115	9.4 S	13.3 W	VERT		8	GUERICKE, C, PARRY
1684	38	115	9.5 S	14.7 W	VERT		6	GUERICKE, PARRY
1685	38	115	9.5 S	15.8 W	VERT		5	BONPLAND, PARRY, RILLES
1686	38	114	9.4 S	17.1 W	VERT		4	BONPLAND, PARRY, RILLES
1687	38	114	9.5 S	18.4 W	VERT		3	BONPLAND, PARRY, RILLES
1688	38	114	9.6 S	19.7 W	VERT		2	BONPLAND, KNOWN SEA
1689	38	114	9.6 S	20.7 W	VERT		1	KNOWN SEA
1690	38	114	9.6 S	21.6 W	VERT		0	KNOWN SEA
1691	38	113	9.6 S	22.9 W	VERT		-2	KNOWN SEA
1692	38							1692-1707, DARK, GAMMA RAY SPEC
1708								1708-1825, DARK, REVS 38-39
1826	39							1826-1832, DARK, GAMMA RAY SPEC
1833	39							1833-1839, DARK
1840	39	108	9.6 N	159.8 E	VERT		-2	MILLS, E OF
1841	39	108	9.7 N	158.7 E	VERT		-1	MILLS
1842	39	108	9.4 N	157.5 E	VERT		0	MILLS
1843	39	108	9.3 N	156.4 E	VERT		1	MILLS
1844	39	108	9.0 N	155.2 E	VERT		2	MILLS
1845	39	109	8.9 N	153.8 E	VERT		4	MILLS
1846	39	109	8.8 N	152.6 E	VERT		5	ST JOHN
1847	39	109	8.7 N	151.3 E	VERT		6	ST JOHN
1848	39	109	8.6 N	150.0 E	VERT		8	ST JOHN
1849	39	109	8.5 N	148.6 E	VERT		9	ST JOHN
1850	39	110	8.3 N	147.3 E	VERT		10	SCHUSTER, MENDELEEV
1851	39	110	8.3 N	146.1 E	VERT		11	MENDELEEV
1852	39	110	8.2 N	144.7 E	VERT		13	MENDELEEV
1853	39	110	8.4 N	143.2 E	VERT		14	MENDELEEV
1854	39	110	8.4 N	141.7 E	VERT		16	MENDELEEV
1855	39	110	8.3 N	140.3 E	VERT		17	MENDELEEV
1856	39	111	8.3 N	139.0 E	VERT		19	MENDELEEV
1857	39	111	8.2 N	137.8 E	VERT		20	MENDELEEV
1858	39	111	8.2 N	136.4 E	VERT		21	MENDELEEV
1859	39	111	8.0 N	135.3 E	VERT		22	MENDELEEV,
1860	39	111	7.8 N	134.0 E	VERT		23	GREEN, VETCHINKIN
1861	39	112	7.8 N	132.8 E	VERT		25	GREEN, VETCHINKIN
1862	39	112	7.7 N	131.6 E	VERT		26	VETCHINKIN
1863	39	112	7.6 N	130.2 E	VERT		27	MOROZOV, VETCHINKIN
1864	39	112	7.5 N	128.8 E	VERT		29	MOROZOV
1865	39	112	7.4 N	127.7 E	VERT		30	MOROZOV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1866	39	112	7.1 N	126.5 E	VERT		31	MOROZOV
1867	39	112	7.0 N	125.0 E	VERT		32	MOROZOV
1868	39	113	6.8 N	123.7 E	VERT		34	KING
1869	39	113	6.6 N	122.6 E	VERT		35	KING
1870	39	113	6.4 N	121.5 E	VERT		36	KING
1871	39	113	6.5 N	120.3 E	VERT		37	KING
1872	39	113	6.3 N	118.7 E	VERT		39	KING
1873	39	113	6.2 N	117.7 E	VERT		40	KING
1874	39	114	6.0 N	116.2 E	VERT		41	KING, W OF
1875	39	114	5.7 N	144.8 E	VERT		43	FIRSOV
1876	39	114	5.4 N	113.4 E	VERT		44	FIRSOV
1877	39	114	4.9 N	112.5 E	VERT		45	FIRSOV
1878	39	114	4.7 N	111.0 E	VERT		46	FIRSOV
1879	39	114	4.6 N	109.8 E	VERT		48	FIRSOV
1880	39	115	4.3 N	108.6 E	VERT		49	FIRSOV, W OF
1881	39	115	4.2 N	107.3 E	VERT		50	SAENGER, E OF
1882	39	115	3.9 N	105.8 E	VERT		52	SAENGER
1883	39	115	3.6 N	104.8 E	VERT		53	SAENGER
1884	39	115	3.3 N	103.6 E	VERT		54	SAENGER
1885	39	115	3.0 N	102.5 E	VERT		55	SAENGER
1886	39	115	3.2 N	101.0 E	VERT		56	SAENGER
1887	39	116	2.9 N	99.8 E	VERT		58	ERRO, SAENGER
1888	39	116	2.7 N	98.6 E	VERT		59	ERRO, WYLD
1889	39	116	2.5 N	97.5 E	VERT		60	ERRO, BABCOCK
1890	39	116	2.3 N	96.1 E	VERT		61	BABCOCK, PURKYNE
1891	39	116	2.0 N	94.9 E	VERT		63	BABCOCK, PURKYNE
1892	39	116	1.8 N	93.5 E	VERT		64	BABCOCK, PURKYNE
1893	39	116	1.5 N	92.3 E	VERT		65	BABCOCK, PURKYNE
1894	39	116	.9 N	91.2 E	VERT		66	SMYTH'S SEA
1895	39	116	1.2 N	89.9 E	VERT		68	SMYTH'S SEA
1896	39	117	1.1 N	88.7 E	VERT		69	SMYTH'S SEA
1897	39	117	1.0 N	87.6 E	VERT		70	SMYTH'S SEA
1898	39	117	.7 N	86.4 E	VERT		71	SMYTH'S SEA
1899	39	117	.4 N	84.9 E	VERT		73	SMYTH'S SEA
1900	39	117	.3 N	83.8 E	VERT		74	SMYTH'S SEA, SCHUBERT
1901	39	117	.0	82.6 E	VERT		75	SCHUBERT, B, GILBERT U
1902	39	117	.2 S	81.2 E	VERT		76	SCHUBERT, KASTNER G
1903	39	117	.3 S	80.0 E	VERT		77	KASTNER G, SCHUBERT
1904	39	117	.4 S	78.9 E	VERT		79	KASTNER G, GILBERT M, N
1905	39	117	.4 S	77.6 E	VERT		80	GILBERT N, M, SCHUBERT Z

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1906	39	118	.6 S	76.3 E	VERT		81	SCHUBERT X, Y, GILBERT
1907	39	118	.7 S	75.0 E	VERT		82	GILBERT, SCHUBERT X, Y
1908	39	118	.9 S	73.9 E	VERT		83	GILBERT, SCHUBERT Y
1909	39	118	.9 S	72.6 E	VERT		84	GILBERT, MACLAURIN L
1910	39	118	1.1 S	71.6 E	VERT		85	MACLAURIN L
1911	39	118	1.2 S	70.4 E	VERT		86	MACLAURIN, L
1912	39	118	1.9 S	69.0 E	VERT		86	MACLAURIN, L
1913	39	118	2.1 S	67.6 E	VERT		87	MACLAURIN, E
1914	39	118	2.3 S	66.4 E	VERT		86	MACLAURIN, E
1915	39	118	2.5 S	65.3 E	VERT		86	MACLAURIN, E
1916	39	118	2.6 S	64.0 E	VERT		85	LANGRENUS T
1917	39	118	2.8 S	62.5 E	VERT		84	LANGRENUS T, WEBB
1918	39	118	3.2 S	61.2 E	VERT		82	LANGRENUS T, WEBB
1919	39	118	3.3 S	59.9 E	VERT		81	LANGRENUS T, WEBB
1920	39	118	3.4 S	58.8 E	VERT		80	LANGRENUS C, B, K, WEBB
1921	39	119	3.6 S	57.5 E	VERT		79	LANGRENUS B, F, K
1922	39	119	3.8 S	56.3 E	VERT		78	LANGRENUS B, F, K
1923	39	119	4.2 S	54.8 E	VERT		76	LANGRENUS F, MESSIER G
1924	39	119	4.4 S	53.6 E	VERT		75	LANGRENUS F, MESSIER G
1925	39	119	4.4 S	52.3 E	VERT		74	GOCLENIUS A, MESSIER G
1926	39	119	4.6 S	51.2 E	VERT		73	GOCLENIUS A, MESSIER G
1927	39	119	4.7 S	50.1 E	VERT		72	GOCLENIUS A, MESSIER G
1928	39	119	4.9 S	49.0 E	VERT		71	GOCLENIUS A, MESSIER D
1929	39	119	5.1 S	47.7 E	VERT		69	GOCLENIUS A, MESSIER D
1930	39	119	5.2 S	46.3 E	VERT		68	MESSIER D
1931	39	119	5.4 S	45.0 E	VERT		67	GOCLENIUS RILLES, MESSIER D
1932	39	119	5.7 S	43.7 E	VERT		65	GOCLENIUS RILLES, MESSIER D
1933	39	119	5.8 S	42.3 E	VERT		64	GUTENBERG, LUBBOCK
1934	39	119	6.0 S	41.2 E	VERT		63	GUTENBERG, G, RILLES
1935	39	119	6.2 S	40.1 E	VERT		62	GUTENBERG, G, RILLES
1936	39	119	6.3 S	38.8 E	VERT		60	GUTENBERG, G, RILLES
1937	39	119	6.5 S	37.7 E	VERT		59	CAPELLA, GUTENBERG, RILLES
1938	39	119	6.7 S	36.2 E	VERT		58	CAPELLA, GUTENBERG RILLES
1939	39	119	6.8 S	35.1 E	VERT		57	CAPELLA, ISIDORUS
1940	39	119	7.0 S	33.9 E	VERT		55	CAPELLA, ISIDORUS
1941	39	119	7.1 S	32.6 E	VERT		54	CAPELLA, ISIDORUS
1942	39	118	7.2 S	31.1 E	VERT		52	TORRICELLI R, ISIDORUS
1943	39	118	7.3 S	29.8 E	VERT		51	TORRICELLI R
1944	39	118	7.4 S	28.5 E	VERT		50	TORRICELLI R, THEOPHILUS
1945	39	118	7.5 S	27.3 E	VERT		49	TORRICELLI R, THEOPHILUS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62Cm) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
1946	39	118	7.6 S	26.0 E	VERT		48	TORRICELLI R, THEOPHILUS
1947	39	118	7.7 S	24.8 E	VERT		46	ZOLLNER F, THEOPHILUS
1948	39	118	7.8 S	23.7 E	VERT		45	ZOLLNER F, THEOPHILUS
1949	39	118	7.9 S	22.4 E	VERT		44	ZOLLNER F, KANT, E
1950	39	118	8.0 S	21.3 E	VERT		42	ZOLLNER, F, KANT, E
1951	39	118	8.1 S	20.0 E	VERT		41	ZOLLNER, F, KANT, E
1952	39	118	8.2 S	18.5 E	VERT		40	ZOLLNER, KANT, E
1953	39	118	8.3 S	17.0 E	VERT		38	APOLLO 16 LANDING SITE
1954	39	118	8.4 S	15.8 E	VERT		37	APOLLO 16 LANDING SITE
1955	39	118	8.5 S	14.7 E	VERT		36	APOLLO 16 LANDING SITE
1956	39	117	8.6 S	13.4 E	VERT		35	APOLLO 16 LANDING SITE
1957	39	117	8.6 S	12.3 E	VERT		34	APOLLO 16 LANDING SITE
1958	39	117	8.7 S	11.0 E	VERT		33	RITCHEY, ANDEL
1959	39	117	8.8 S	9.8 E	VERT		32	RITCHEY, ANDEL
1960	39	117	8.9 S	8.4 E	VERT		31	RITCHEY, HIND
1961	39	117	9.0 S	7.3 E	VERT		29	ALBATEGNIUS, HALLEY
1962	39	117	9.2 S	6.0 E	VERT		28	ALBATEGNIUS, HALLEY
1963	39	117	9.2 S	4.8 E	VERT		27	ALBATEGNIUS, HALLEY
1964	39	117	9.2 S	3.4 E	VERT		25	ALBATEGNIUS, HALLEY
1965	39	117	9.2 S	2.3 E	VERT		24	ALBATEGNIUS, PTOLEMAEUS
1966	39	117	9.2 S	1.1 E	VERT		23	ALBATEGNIUS, PTOLEMAEUS
1967	39	116	9.2 S	.3 W	VERT		22	PTOLEMAEUS
1968	39	116	9.2 S	1.4 W	VERT		21	PTOLEMAEUS
1969	39	116	9.2 S	2.7 W	VERT		19	PTOLEMAEUS
1970	39	116	9.2 S	3.8 W	VERT		18	PTOLEMAEUS
1971	39	116	9.3 S	5.2 W	VERT		17	DAVY Y, PTOLEMAEUS
1972	39	116	9.4 S	6.4 W	VERT		16	DAVY, Y, PTOLEMAEUS
1973	39	116	9.4 S	7.2 W	VERT		15	DAVY, Y, PALISA T
1974	39	115	9.4 S	8.4 W	VERT		14	DAVY, Y, PALISA T
1975	39	115	9.4 S	9.6 W	VERT		12	DAVY, Y, PALISA T
1976	39	115	9.5 S	10.8 W	VERT		11	GUERICKE C, DAVY
1977	39	115	9.6 S	12.1 W	VERT		10	GUERICKE, C
1978	39	115	9.7 S	13.3 W	VERT		9	GUERICKE, C, PARRY
1979	39	115	9.6 S	14.3 W	VERT		8	BONPLAND, PARRY
1980	39	115	9.6 S	15.5 W	VERT		7	BONPLAND, PARRY
1981	39	114	9.7 S	16.8 W	VERT		5	BONPLAND, PARRY
1982	39	114	9.6 S	18.3 W	VERT		4	BONPLAND, PARRY
1983	39	114	9.6 S	19.4 W	VERT		3	BONPLAND, FRA MAURO
1984	39	114	9.5 S	20.3 W	VERT		2	BONPLAND, FRA MAURO
1985	39	114	9.5 S	21.4 W	VERT		1	KNOWN SEA

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
1986	39	114	9.4 S	22.7 W	VERT		0	KNOWN SEA
1987								1987-2052, DARK
2053								2053-2057, DARK, GAMMA RAY SPEC RETRACT
2058	47							2058-2068, DARK
2069	47	105	9.4 N	150.2 E	VERT		0	ST. JOHN
2070	47	105	9.3 N	148.8 E	VERT		2	ST. JOHN
2071	47	105	9.3 N	147.7 E	VERT		3	ST. JOHN, MENDELEEV, E RIM
2072	47	106	9.2 N	146.7 E	VERT		4	MENDELEEV, E RIM
2073	47	106	9.1 N	145.3 E	VERT		5	MENDELEEV, E RIM
2074	47	106	9.1 N	144.1 E	VERT		6	MENDELEEV
2075	47	106	9.0 N	142.8 E	VERT		7	MENDELEEV
2076	47	106	9.0 N	141.4 E	VERT		8	MENDELEEV
2077	47	106	8.8 N	140.2 E	VERT		9	MENDELEEV
2078	47	106	8.8 N	139.0 E	VERT		10	MENDELEEV
2079	47	106	8.8 N	138.0 E	VERT		11	MENDELEEV
2080	47	107	8.7 N	136.9 E	VERT		13	MENDELEEV, W RIM
2081	47	107	8.7 N	135.6 E	VERT		14	MENDELEEV, W RIM
2082	47	107	8.6 N	134.5 E	VERT		15	MENDELEEV, W RIM, VETCHINKIN
2083	47	107	8.6 N	133.3 E	VERT		16	MENDELEEV, W RIM, VETCHINKIN
2084	47	107	8.5 N	132.3 E	VERT		17	VETCHINKIN
2085	47	107	8.4 N	131.1 E	VERT		18	VETCHINKIN
2086	47	107	8.4 N	129.8 E	VERT		20	VETCHINKIN, MOROZOV, NE RIM
2087	47	107	8.3 N	128.5 E	VERT		21	MOROZOV, N RIM
2088	47	108	8.2 N	127.4 E	VERT		22	MOROZOV, N RIM
2089	47	108	8.1 N	126 3 E	VERT		23	OSTWALD, E OF
2090	47	108	8.0 N	125.1 E	VERT		24	OSTWALD
2091	47	108	7.9 N	123.8 E	VERT		26	OSTWALD, KING
2092	47	108	7.8 N	122.5 E	VERT		27	OSTWALD, KING
2093	47	108	7.7 N	121.3 E	VERT		28	OSTWALD, KING
2094	47	109	7.6 N	120.3 E	VERT		29	OSTWALD, KING, GUYOT
2095	47	109	7.6 N	119.2 E	VERT		30	OSTWALD, KING, GUYOT
2096	47	109	7.3 N	117.9 E	VERT		32	KING, GUYOT
2097	47	109	7.0 N	116.7 E	VERT		33	GUYOT, S RIM
2098	47	109	6.7 N	115.5 E	VERT		34	LOBACHEVSKY
2099	47	109	6.2 N	114.2 E	VERT		35	LOBACHEVSKY, FIRSOV
2100	47	109	5.8 N	112.8 E	VERT		36	FIRSOV
2101	47	109	5.7 N	112.0 E	VERT		37	FIRSOV
2102	47	109	5.7 N	110.8 E	VERT		39	FIRSOV
2103	47	109	5.5 N	109.5 E	VERT		40	FIRSOV
2104	47	110	5.3 N	108.4 E	VERT		41	FIRSOV, W OF

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2105	47	110	5.1 N	107.4 E	VERT		42	FIRSOV, W OF
2106	47	110	4.9 N	106.1 E	VERT		43	SAENGER, E RIM
2107	47	110	4.8 N	104.8 E	VERT		45	SAENGER
2108	47	110	4.6 N	103.8 E	VERT		46	SAENGER
2109	47	110	4.4 N	102.7 E	VERT		47	SAENGER
2110	47	110	4.3 N	101.5 E	VERT		48	SAENGER
2111	47	110	4.0 N	100.4 E	VERT		49	SAENGER, ERRO
2112	47	111	3.9 N	99.0 E	VERT		50	ERRO
2113	47	111	3.7 N	98.0 E	VERT		51	ERRO
2114	47	111	3.6 N	96.8 E	VERT		53	ERRO, BABCOCK
2115	47	111	3.5 N	95.6 E	VERT		54	BABCOCK
2116	47	111	3.3 N	94.5 E	VERT		55	BABCOCK
2117	47	112	3.0 N	93.2 E	VERT		56	BABCOCK
2118	47	112	3.0 N	92.3 E	VERT		57	BABCOCK
2119	47	112	2.8 N	91.3 E	VERT		58	BABCOCK, SMYTH'S SEA
2120	47	112	2.6 N	90.0 E	VERT		59	SMYTH'S SEA
2121	47	112	2.5 N	89.0 E	VERT		60	SMYTH'S SEA, NEPER K
2122	47	112	2.4 N	87.8 E	VERT		62	SMYTH'S SEA, NEPER K
2123	47	112	2.1 N	86.5 E	VERT		63	SMYTH'S SEA, NEPER K
2124	47	112	1.9 N	85.1 E	VERT		64	SMYTH'S SEA, NEPER K
2125	47	113	1.7 N	83.9 E	VERT		66	SMYTH'S SEA, SCHUBERT
2126	47	113	1.5 N	82.7 E	VERT		67	SMYTH'S SEA, SCHUBERT
2127	47	113	1.3 N	81.4 E	VERT		68	GILBERT U, SCHUBERT, B
2128	47	113	1.0 N	80.2 E	VERT		69	GILBERT U, M, N, SCHUBERT, B, Z
2129	47	114	.8 N	78.8 E	VERT		71	GILBERT, N, SCHUBERT, X
2130	47	114	.8 N	77.7 E	VERT		72	GILBERT M, N, SCHUBERT X, Y
2131	47	114	.6 N	76.5 E	VERT		73	GILBERT M, N, SCHUBERT X, Y
2132	47	114	.5 N	75.3 E	VERT		74	GILBERT N, SCHUBERT X, Y, N
2133	47	114	.4 N	73.8 E	VERT		76	SCHUBERT Y, N, MACLAURIN L
2134	47	114	.3 N	72.6 E	VERT		77	SCHUBERT N, MACLAURIN L
2135	47	114	.2 N	71.5 E	VERT		78	SCHUBERT N, MACLAURIN L
2136	47	114	.1 S	70.0 E	VERT		79	MACLAURIN, L
2137	47	115	.6 S	69.0 E	VERT		80	MACLAURIN, L
2138	47	115	.7 S	68.0 E	VERT		81	MACLAURIN
2139	47	115	.9 S	66.7 E	VERT		82	MACLAURIN, WEBB J
2140	47	115	1.1 S	65.5 E	VERT		83	MACLAURIN, WEBB J
2141	47	115	1.4 S	64.1 E	VERT		84	WEBB J
2142	47	115	1.7 S	62.8 E	VERT		85	WEBB, J
2143	47	116	1.8 S	61.5 E	VERT		85	WEBB
2144	47	116	2.0 S	60.2 E	VERT		86	WEBB

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2145	47	116	2.2 S	58.7 E	VERT		86	WEBB, LANGRENUS B
2146	47	116	2.4 S	57.8 E	VERT		85	WEBB, LANGRENUS B
2147	47	116	2.7 S	56.7 E	VERT		84	LANGRENUS B
2148	47	116	2.8 S	55.3 E	VERT		83	LANGRENUS B, F, MESSIER G
2149	47	116	3.1 S	54.0 E	VERT		82	LANGRENUS F, MESSIER G
2150	47	116	3.3 S	52.8 E	VERT		81	MESSIER G
2151	47	116	3.5 S	51.4 E	VERT		80	MESSIER G
2152	47	116	3.5 S	50.3 E	VERT		79	MESSIER, G
2153	47	117	3.7 S	48.9 E	VERT		78	MESSIER, A, D
2154	47	117	3.7 S	47.6 E	VERT		77	MESSIER, A, D
2155	47	117	3.9 S	46.4 E	VERT		76	MESSIER, A, D
2156	47	117	4.1 S	45.3 E	VERT		75	MESSIER A, D
2157	47	117	4.4 S	44.0 E	VERT		74	MESSIER D, GOCLENIUS RILLES, LUBBOCK
2158	47	117	4.6 S	42.8 E	VERT		73	LUBBOCK GOCLENIUS RILLES, GUTENBERG G
2159	47	117	4.8 S	41.5 E	VERT		72	LUBBOCK, GOCLENIUS RILLES, GUTENBERG G
2160	47	117	5.0 S	40.4 E	VERT		71	LUBBOCK, GUTENBERG, G
2161	47	117	5.1 S	39.0 E	VERT		69	GUTENBERG, G, RILLES
2162	47	117	5.2 S	37.7 E	VERT		67	GUTENBERG G, RILLES
2163	47	117	5.5 S	36.5 E	VERT		66	GUTENBERG RILLES, CAPELLA
2164	47	117	5.8 S	35.4 E	VERT		65	GUTENBERG RILLES, CAPELLA, ISIDORUS
2165	47	117	5.9 S	34.1 E	VERT		64	CAPELLA, ISIDORUS, B
2166	47	118	6.1 S	32.7 E	VERT		63	CAPELLA, ISIDORUS, B
2167	47	118	6.3 S	31.5 E	VERT		61	ISIDORUS, B
2168	47	118	6.4 S	30.3 E	VERT		60	TORRICELLI, R
2169	47	118	6.5 S	29.1 E	VERT		59	TORRICELLI, R
2170	47	118	6.7 S	27.7 E	VERT		57	TORRICELLI, R
2171	47	118	6.8 S	26.4 E	VERT		56	TORRICELLI, R
2172	47	119	7.0 S	25.2 E	VERT		55	TORRICELLI, W OF
2173	47	119	7.2 S	24.0 E	VERT		54	HYPATIA, ZOLLNER F
2174	47	119	7.4 S	22.8 E	VERT		53	ZOLLNER F
2175	47	119	7.4 S	21.5 E	VERT		51	ZOLLNER, F, KANT, E, G, ALFRAGANUS
2176	47	119	7.5 S	20.2 E	VERT		50	ZOLLNER, F, KANT, ALFRAGANUS
2177	47	119	7.8 S	18.9 E	VERT		48	ZOLLNER
2178	47	119	7.7 S	17.8 E	VERT		47	APOLLO 16 LANDING SITE
2179	47	119	7.8 S	16.4 E	VERT		46	APOLLO 16 LANDING SITE
2180	47	119	7.9 S	15.2 E	VERT		45	APOLLO 16 LANDING SITE
2181	47	119	8.9 S	13.8 E	VERT		43	APOLLO 16 LANDING SITE
2182	47	119	8.3 S	12.5 E	VERT		42	DOLLOND, B, C, ANDEL
2183	47	119	8.4 S	11.3 E	VERT		41	DOLLOND C, ANDEL
2184	47	119	8.5 S	10.2 E	VERT		40	ANDEL, HIND

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
2185	47	119	8.6 S	8.9 E	VERT		39	RITCHEY HIPPARCHUS, C, HIND
2186	47	119	8.6 S	7.7 E	VERT		37	HIND, HIPPARCHUS, C, HALLEY
2187	47	119	8.7 S	6.4 E	VERT		36	ALBATEGNIUS, HIPPARCHUS
2188	47	119	8.7 S	5.0 E	VERT		35	ALBATEGNIUS, HIPPARCHUS
2189	47	119	8.9 S	3.8 E	VERT		34	ALBATEGNIUS, HIPPARCHUS
2190	47	119	8.8 S	2.4 E	VERT		32	ALBATEGNIUS, HIPPARCHUS, PTOLEMAEUS
2191	47	119	8.9 S	1.4 E	VERT		31	ALBATEGNIUS, HIPPARCHUS, PTOLEMAEUS
2192	47	119	9.2 S	.0	VERT		30	PTOLEMAEUS
2193	47	118	9.1 S	1.3 W	VERT		29	PTOLEMAEUS
2194	47	118	9.1 S	2.6 W	VERT		27	PTOLEMAEUS
2195	47	118	9.2 S	3.8 W	VERT		26	PTOLEMAEUS, DAVY RILLE
2196	47	118	9.1 S	5.0 W	VERT		25	PTOLEMAEUS, DAVY RILLE
2197	47	118	9.2 S	6.5 W	VERT		24	DAVY, RILLE
2198	47	118	9.3 S	7.5 W	VERT		23	DAVY, RILLE
2199	47	118	9.4 S	9.0 W	VERT		21	DAVY, RILLE, GUERICKE C
2200	47	118	9.5 S	10.4 W	VERT		20	DAVY, GUERICKE C
2201	47	118	9.4 S	11.7 W	VERT		19	GUERICKE, C, LALANDE A
2202	47	118	9.5 S	12.8 W	VERT		18	GUERICKE, C, PARRY, M
2203	47	118	9.5 S	13.9 W	VERT		16	GUERICKE, PARRY, RILLES
2204	47	117	9.7 S	15.5 W	VERT		15	BONPLAND, PARRY, RILLES
2205	47	117	9.7 S	16.8 W	VERT		13	BONPLAND, PARRY, RILLES
2206	47	117	9.6 S	18.2 W	VERT		12	BONPLAND, PARRY, RILLES
2207	47	117	9.7 S	19.4 W	VERT		11	BONPLAND, PARRY RILLES
2208	47	117	9.5 S	20.4 W	VERT		10	BONPLAND
2209	47	117	9.5 S	21.8 W	VERT		9	BONPLAND, W OF
2210	47	117	9.5 S	22.9 W	VERT		8	BONPLAND, W OF
2211	47	117	9.4 S	24.2 W	VERT		6	EUCLIDES D
2212	47	117	9.3 S	25.6 W	VERT		5	EUCLIDES D, RIPHAEN MOUNTAINS
2213	47	117	9.4 S	26.7 W	VERT		4	EUCLIDES, D, RIPHAEN MOUNTAINS
2214	47	116	9.4 S	27.8 W	VERT		3	EUCLIDES, D, RIPHAEN MOUNTAINS
2215	47	116	9.4 S	29.3 W	VERT		2	EUCLIDES, B, RIPHAEN MOUNTAINS
2216	47	116	9.4 S	30.5 W	VERT		1	EUCLIDES, B, RIPHAEN MOUNTAINS
2217	47	116	9.4 S	31.6 W	VERT		-1	EUCLIDES, B
2218	47							2218-2232, DARK, GAMMA RAY SPEC
2233								2233-2342, DARK, REVS 47-48
2343	48							2343-2356, DARK, GAMMA RAY SPEC
2357	48	104	6.2 N	149.0 E	40	176	-1	HENDERSON, SCHUSTER
2358	48	104	6.2 N	148.0 E	40		0	SCHUSTER
2359	48	104	6.1 N	146.8 E	40		1	SCHUSTER, MENDELEEV
2360	48	105	6.1 N	146.0 E	40		2	SCHUSTER, MENDELEEV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2361	48	105	6.0 N	145.0 E	40		3	SCHUSTER, MENDELEEV
2362	48	105	5.9 N	143.5 E	40		5	SCHUSTER, MENDELEEV
2363	48	105	5.8 N	142.0 E	40		6	MENDELEEV
2364	48	105	6.0 N	140.8 E	40		7	MENDELEEV
2365	48	105	5.7 N	139.4 E	40		9	MENDELEEV
2366	48	105	5.8 N	138.2 E	40		10	MANDELEEV, HARTMANN
2367	48	106	5.7 N	137.0 E	40		11	MENDELEEV, HARTMANN
2368	48	106	5.8 N	135.1 E	40		13	MENDELEEV, HARTMANN, GREEN
2369	48	106	5.7 N	134.3 E	40		14	MENDELEEV, HARTMANN, GREEN
2370	48	106	5.7 N	133.2 E	40	177	15	HARTMANN, GREEN
2371	48	106	5.6 N	131.7 E	40		16	HARTMANN, GREEN
2372	48	106	5.5 N	130.5 E	40		17	GREEN, MOROZOV, GREGORY
2373	48	106	5.4 N	129.3 E	40		18	GREEN, MOROZOV, GREGORY
2374	48	106	5.2 N	128.0 E	40		19	MOROZOV, GREGORY
2375	48	106	4.9 N	126.6 E	40		21	MOROZOV, GREGORY
2376	48	106	4.8 N	125.4 E	40		23	MOROZOV, GREGORY
2377	48	106	4.6 N	124.1 E	40		24	KING, GREGORY
2378	48	107	4.6 N	122.9 E	40		25	KING
2379	48	107	4.5 N	121.5 E	40		26	KING
2380	48	107	4.4 N	120.3 E	40	174	28	KING
2381	48	107	4.3 N	119.1 E	40		29	KING, ABUL WAFA
2382	48	107	4.2 N	117.8 E	40		30	KING, ABUL WAFA
2383	48	108	3.9 N	116.5 E	40		31	ABUL WAFA
2384	48	108	3.3 N	115.3 E	40		33	ABUL WAFA, FIRSOV
2385	48	108	3.0 N	113.8 E	40		34	FIRSOV, ABUL WAFA
2386	48	108	3.0 N	112.6 E	40		35	FIRSOV, ABUL WAFA
2387	48	108	2.9 N	111.2 E	40		37	FIRSOV, BUISSON
2388	48	108	2.6 N	110.0 E	40		38	FIRSOV, BUISSON
2389	48	109	2.6 N	108.7 E	40		39	BUISSON
2390	48	109	2.2 N	107.4 E	40	174	40	SAHA, BUISSON
2391	48	109	2.0 N	106.3 E	40		41	SAHA
2392	48	109	1.8 N	105.1 E	40		42	SAHA, SAENGER
2393	48	110	1.5 N	103.8 E	40		44	SAENGER, SAHA
2394	48	110	1.2 N	102.5 E	40		45	SAENGER, SAHA
2395	48	110	1.3 N	101.3 E	40		46	SAENGER, SAHA, WYLD
2396	48	110	1.0 N	100.0 E	40		48	SAHA, WYLD
2397	48	110	.7 N	98.8 E	40		49	WYLD, SAHA
2398	48	110	.7 N	97.5 E	40		50	WYLD, PURKYNE
2399	48	110	.6 N	96.4 E	40		51	WYLD, PURKYNE
2400	48	111	.4 N	95.0 E	40	174	53	PURKYNE, WYLD

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2401	48	111	.1 N	93.9 E	40		54	PURKYNE, WYLD
2402	48	111	.1 S	92.9 E	40		55	PURKYNE, HIRAYAMA
2403	48	111	.1 S	91.8 E	40		56	PURKYNE, HIRAYAMA
2404	48	111	.3 S	90.3 E	40		58	HIRAYAMA
2405	48	112	.6 S	88.8 E	40		59	SMYTH'S SEA, OVEREXPOSED
2406	48	112	.9 S	87.6 E	40		60	SMYTH'S SEA, HIRAYAMA
2407	48	112	1.2 S	86.2 E	40		61	SMYTH'S SEA, BRUNNER
2408	48	112	1.3 S	85.1 E	40		63	SMYTH'S SEA, KASTNER, BRUNNER
2409	48	112	1.5 S	83.8 E	40		64	SMYTH'S SEA, KASTNER
2410	48	113	1.8 S	82.5 E	40	172	65	KASTNER, G
2411	48	113	1.9 S	81.2 E	40		66	KASTNER, G
2412	48	113	2.1 S	80.0 E	40		67	KASTNER, G
2413	48	113	2.3 S	78.7 E	40		69	KASTNER, G, GILBERT
2414	48	113	2.5 S	77.8 E	40		70	KASTNER, G, GILBERT
2415	48	114	2.6 S	76.4 E	40		71	KASTNER, G, GILBERT
2416	48	114	2.8 S	75.0 E	40		72	KASTNER, G, GILBERT
2417	48	114	3.1 S	73.9 E	40		73	GILBERT, KASTNER
2418	48	114	3.3 S	72.7 E	40		74	GILBERT, J
2419	48	114	3.4 S	71.4 E	40		75	GILBERT J, MACLAURIN, B
2420	48	114	3.8 S	70.2 E	40	173	76	MACLAURIN B, F, M
2421	48	115	3.5 S	69.0 E	40		78	MACLAURIN, B, F, M
2422	48	115	3.7 S	67.5 E	40		79	MACLAURIN, A
2423	48	115	4.0 S	66.5 E	40		80	MACLAURIN, U, LANGRENUS
2424	48	115	4.4 S	65.4 E	40		81	MACLAURIN U, LANGRENUS, T
2425	48	115	4.8 S	64.0 E	40		81	MACLAURIN U, LANGRENUS, T
2426	48	115	4.8 S	63.0 E	40		82	LANGRENUS, T
2427	48	116	5.0 S	61.4 E	40		83	LANGRENUS, T
2428	48	116	5.4 S	60.3 E	40		83	LANGRENUS, C, T
2429	48	116	5.8 S	59.1 E	40		83	LANGRENUS, K, B
2430	48	116	5.9 S	57.9 E	40	170	82	LANGRENUS, K, F, B
2431	48	116	5.9 S	56.7 E	40		82	LANGRENUS, K, F, B
2432	48	116	6.2 S	55.6 E	40		82	LANGRENUS, K, F, B
2433	48	116	6.4 S	54.0 E	40		81	LANGRENUS F, MESSIER G
2434	48	117	6.7 S	52.8 E	40		80	GOCLENIUS A, MESSIER G
2435	48	117	6.8 S	51.7 E	40		79	GOCLENIUS A, MESSIER G
2436	48	117	7.0 S	50.2 E	40		78	GOCLENIUS A, MESSIER G
2437	48	117	7.2 S	49.0 E	40		77	GOCLENIUS, A
2438	48	117	7.4 S	47.7 E	40		76	GOCLENIUS, A, COLUMB
2439	48	117	7.6 S	46.4 E	40		75	GOCLENIUS, FILLES
2440	48	117	7.7 S	45.2 E	40	170	74	GOCLENIUS, FILLES, GUTENBERG

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2441	48	118	7.7 S	43.7 E	40		73	GOCLENIUS, RILLES, GUTENBERG
2442	48	118	8.3 S	42.7 E	40		72	GUTENBERG, GOCLENIUS
2443	48	118	8.2 S	41.3 E	40		70	GUTENBERG, GOCLENIUS
2444	48	118	8.5 S	40.2 E	40		69	GUTENBERG, G, GOCLENIUS
2445	48	118	8.6 S	38.9 E	40		68	GUTENBERG, G, GAUDIBERT
2446	48	118	8.9 S	37.7 E	40		67	GUTENBERG G, GAUDIBERT
2447	48	118	8.8 S	36.5 E	40		66	CAPELLA, ISIDORUS
2448	48	118	9.3 S	35.3 E	40		65	CAPELLA, ISIDORUS
2449	48	118	9.5 S	34.0 E	40		63	CAPELLA, ISIDORUS
2450	48	119	9.5 S	32.5 E	40	170	62	CAPELLA, ISIDORUS, MADLER
2451	48	119	9.8 S	31.3 E	40		61	ISIDORUS, MADLER
2452	48	119	9.9 S	30.2 E	40		60	MADLER, THEOPHILUS
2453	48	119	10.2 S	28.8 E	40		58	MADLER, THEOPHILUS
2454	48	119	10.0 S	27.6 E	40		57	THEOPHILUS, CYRILLUS, MADLER
2455	48	119	10.3 S	26.3 E	40		56	THEOPHILUS, CYRILLUS, MADLER
2456	48	119	10.4 S	24.9 E	40		55	THEOPHILUS, CYRILLUS
2457	48	119	10.6 S	23.3 E	40		53	CYRILLUS, THEOPHILUS, KANT
2458	48	119	10.7 S	22.3 E	40		52	CYRILLUS, THEOPHILUS, KANT
2459	48	119	10.9 S	21.0 E	40		51	KANT, E, CYRILLUS
2460	48	119	11.0 S	19.7 E	40	170	50	KANT, D, E, CYRILLUS, B
2461	48	119	11.0 S	18.7 E	40		49	DESCARTES, APOLLO 16 LANDING SITE
2462	48	119	11.1 S	17.4 E	40		47	DESCARTES, APOLLO 16 LANDING SITE
2463	48	119	11.4 S	16.2 E	40		46	DESCARTES, APOLLO 16 LANDING SITE
2464	48	119	11.7 S	14.8 E	40		45	DESCARTES, APOLLO 16 LANDING SITE
2465	48	119	11.6 S	13.3 E	40		43	ANDEL, ABULFEDA
2466	48	119	11.4 S	12.3 E	40		42	ANDEL, ABULFEDA
2467	48	119	11.5 S	11.0 E	40		41	ANDEL, ABULFEDA
2468	48	119	11.7 S	9.7 E	40		40	ABULFEDA, D, ANDEL, RITCHEY
2469	48	119	11.8 S	8.4 E	40		39	RITCHEY, ALBATEGNIUS
2470	48	119	11.9 S	7.2 E	40	174	37	RITCHEY, ALBATENIUS
2471	48	119	12.0 S	6.1 E	40		36	RITCHEY, ALBATENIUS
2472	48	119	12.2 S	4.8 E	40		35	ALBATEGNIUS
2473	48	119	12.4 S	3.4 E	40		34	ALBATEGNIUS
2474	48	119	12.5 S	2.2 E	40		33	ALBATEGNIUS
2475	48	119	12.4 S	.8 E	40		31	PTOLEMAEUS, ALPHONSUS, ALBATEGNIUS
2476	48	119	12.4 S	.5 W	40		30	PTOLEMAEUS, ALPHONSUS,
2477	48	119	12.5 S	1.8 W	40		29	PTOLEMAEUS, ALPHONSUS,
2478	48	119	12.6 S	3.2 W	40		28	PTOLEMAEUS, ALPHONSUS,
2479	48	119	12.6 S	4.4 W	40		27	PTOLEMAEUS, ALPHONSUS, DAVY RILLE
2480	48	119	12.4 S	5.7 W	40	178	25	PTOLEMAEUS, ALPHONSUS, DAVY RILLE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2481	48	119	12.4 S	6.8 W	40		24	DAVY Y, RILLE
2482	48	119	12.7 S	8.2 W	40		23	DAVY, Y, RILLE
2483	48	119	12.8 S	9.6 W	40		21	DAVY, Y
2484	48	119	12.9 S	10.7 W	40		20	DAVY Y, GUERICKE C
2485	48	119	13.0 S	12.1 W	40		19	GUERICKE, C
2486	48	119	13.1 S	13.4 W	40		17	GUERICKE, B, C
2487	48	119	13.0 S	14.7 W	40		16	GUERICKE, B
2488	48	119	13.0 S	16.2 W	40		15	GUERICKE, B
2489	48	118	12.8 S	17.4 W	40		14	GUERICKE B, F, OPELT
2490	48	118	13.0 S	18.5 W	40	180	13	GUERICKE B, F, OPELT
2491	48	118	12.9 S	19.7 W	40		11	BULLIALDUS, W, OPELT
2492	48	118	13.0 S	21.2 W	40		10	BULLIALDUS, W. DARNEY
2493	48	118	13.1 S	22.2 W	40		9	BULLIALDUS, W. DARNEY
2494	48	118	13.2 S	23.4 W	40		8	DARNEY, C
2495	48	118	12.9 S	24.9 W	40		6	DARNEY, C
2496	48	118	12.6 S	26.4 W	40		5	DARNEY, C, F
2497	48	118	12.6 S	27.5 W	40		4	DARNEY C, F, EUCLIDES B, C
2498	48	117	12.6 S	28.8 W	40		3	EUCLIDES B, C
2499	48	117	12.7 S	30.2 W	40	180	1	EUCLIDES B, C
2500								DOUBLE EXPOSURE
2501	59	124				35		LALANDE, A, MNVR TO VERTICAL
2502	59	124				35		LALANDE, A
2503	59	124				33		LALANDE, A
2504	59	124				42		LALANDE, TURNER
2505	59	124				41		LALANDE, TURNER
2506	59	124				45		PARRY, FRA MAURO
2507	59	124				32		PARRY, FRA MAURO
2508	59	124				31		PARRY, FRA MAURO, BONPLAND
2509	59	124				30		PARRY, FRA MAURO, BONPLAND
2510	59	124				30		FRA MAURO
2511	59	124	1.6 N	14.1 W		30	29	FRA MAURO
2512	59	124	1.5 N	15.2 W		30	28	FRA MAURO
2513	59	124	1.1 N	16.6 W		30	26	FRA MAURO, LANSBERG
2514	59	124	.1 N	18.8 W		30	24	FRA MAURO A, B, LANSBERG
2515	59	124	1.5 S	21.1 W		30	22	EUCLIDES D, RIPHAEN MOUNTAINS
2516	59	124	2.6 S	22.2 W		30	20	EUCLIDES D, RIPHAEN MOUNTAINS
2517	59	124	4.1 S	24.1 W		30	18	EUCLIDES, RIPHAEN MOUNTAINS
2518	59	124	4.6 S	24.7 W		30	18	EUCLIDES, RIPHAEN MOUNTAINS
2519	59	124	5.2 S	26.4 W		30	16	EUCLIDES, RIPHAEN MOUNTAINS
2520	59	124	5.8 S	27.7 W		30	15	EUCLIDES, RIPHAEN MOUNTAINS

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62Cm) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2521	59	124	6.4 S	29.0 W		30	13	EUCLIDES, RIPHAEN MOUNTAINS
2522	59	124	7.1 S	31.1 W		31	11	EUCLIDES, RIPHAEN MOUNTAINS
2523	59	124	7.4 S	32.0 W		32	10	EUCLIDES, RIPHAEN MOUNTAINS
2524	59	124	7.9 S	33.4 W		33	9	EUCLIDES, RIPHAEN MOUNTAINS
2525	59	124	8.2 S	34.9 W		35	8	WICHMANN
2526	59	124	8.5 S	36.6 W		35	6	WICHMANN, R
2527	59	124	8.7 S	37.8 W		35	5	WICHMANN, R
2528	59	124	8.9 S	38.9 W		40	4	WICHMANN, R
2529	59	123	8.7 S	40.5 W		40	2	WICHMANN, R
2530	59	123	8.6 S	41.5 W		40	1	FLAMSTEED A
2531	59	123	8.7 S	42.3 W		45	0	FLAMSTEED A
2532	59	123	9.2 S	43.0 W		50	-1	FLAMSTEED A
2533	59							2533-2548, DARK, GAMMA RAY SPEC
2549								2549-2675, DARK, REVS 59-60
2676	60							2676-2691, DARK, GAMMA RAY SPEC
2692	60	101	10.6 N	137.6 E	VERT		-1	MENDELEEV, NW RIM
2693	60	101	10.5 N	136.6 E	VERT		0	MENDELEEV, NW RIM
2694	60	101	10.3 N	135.7 E	VERT		1	MENDELEEV, NW RIM
2695	60	101	10.3 N	134.5 E	VERT		2	VETCHINKIN, MENDELEEV, NW RIM
2696	60	101	10.1 N	133.5 E	VERT		3	VETCHINKIN
2697	60	101	10.1 N	132.3 E	VERT		4	VETCHINKIN
2698	60	101	10.1 N	131.4 E	VERT		5	VETCHINKIN
2699	60	101	9.9 N	130.2 E	VERT		6	VETCHINKIN
2700	60	101	9.8 N	129.0 E	VERT		7	VETCHINKIN
2701	60	101	9.7 N	127.8 E	VERT		8	VETCHINKIN, W OF
2702	60	101	9.7 N	126.7 E	VERT		9	MESHCHERSKY
2703	60	101	9.6 N	125.7 E	VERT		10	MESHCHERSKY, OSTWALD
2704	60	101	9.5 N	124.6 E	VERT		11	MESHCHERSKY, OSTWALD
2705	60	101	9.4 N	123.4 E	VERT		12	MESHCHERSKY, OSTWALD
2706	60	101	9.3 N	122.6 E	VERT		13	OSTWALD
2707	60	102	9.1 N	121.7 E	VERT		14	OSTWALD
2708	60	102	9.2 N	120.7 E	VERT		15	OSTWALD
2709	60	102	9.0 N	119.0 E	VERT		17	GUYOT, OSTWALD
2710	60	102	8.5 N	117.5 E	VERT		18	GUYOT
2711	60	102	8.5 N	116.5 E	VERT		19	GUYOT
2712	60	103	8.2 N	115.5 E	VERT		20	LOBACHEVSKI, GUYOT
2713	60	103	8.0 N	114.4 E	VERT		21	LOBACHEVSKI, GUYOT
2714	60	103	7.8 N	113.2 E	VERT		23	LOBACHEVSKI
2715	60	103	7.6 N	112.0 E	VERT		24	LOBACHEVSKI
2716	60	103	7.4 N	110.8 E	VERT		25	LOBACHEVSKI

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	LONG.	CAMERA TILT	AZ	SUN EL.	DESCRIPTION
2717	60	104	7.3 N	109.5 E	VERT		26	LOBACHEVSKI
2718	60	104	7.2 N	108.6 E	VERT		27	LOBACHEVSKY, W OF
2719	60	104	7.1 N	107.8 E	VERT		28	LOBACHEVSKY, W OF
2720	60	104	6.9 N	106.6 E	VERT		29	LOBACHEVSKY, W OF
2721	60	104	6.8 N	105.4 E	VERT		30	SAENGER, MOISEEV
2722	60	104	6.6 N	104.3 E	VERT		31	SAENGER, MOISEEV
2723	60	104	6.3 N	103.2 E	VERT		32	SAENGER, MOISEEV
2724	60	104	6.1 N	102.2 E	VERT		33	SAENGER, MOISEEV
2725	60	105	5.8 N	100.8 E	VERT		35	ERRO, SAENGER, MOISEEV
2726	60	105	5.7 N	99.8 E	VERT		36	ERRO, SAENGER
2727	60	105	5.7 N	98.7 E	VERT		37	ERRO
2728	60	105	5.6 N	97.4 E	VERT		38	ERRO
2729	60	105	5.4 N	96.4 E	VERT		39	ERRO, BABCOCK, OVEREXPOSED
2730	60	105	5.0 N	95.3 E	VERT		41	BABCOCK
2731	60	106	4.9 N	94.1 E	VERT		42	BABCOCK
2732	60	106	4.8 N	93.2 E	VERT		43	BABCOCK
2733	60	106	4.5 N	92.0 E	VERT		44	BABCOCK
2734	60	106	4.2 N	91.0 E	VERT		45	BABCOCK
2735	60	106	4.1 N	89.8 E	VERT		46	BABCOCK, W OF
2736	60	107	3.9 N	88.7 E	VERT		47	NEPER K
2737	60	107	3.7 N	87.4 E	VERT		48	NEPER K
2738	60	107	3.5 N	86.3 E	VERT		49	NEPER K
2739	60	108	3.3 N	85.0 E	VERT		51	NEPER K
2740	60	108	3.2 N	84.0 E	VERT		52	NEPER K
2741	60	108	3.0 N	83.0 E	VERT		53	SCHUBERT
2742	60	108	2.8 N	81.7 E	VERT		54	SCHUBERT
2743	60	109	2.7 N	80.5 E	VERT		55	SCHUBERT
2744	60	109	2.6 N	79.4 E	VERT		56	SCHUBERT, Z
2745	60	109	2.4 N	78.0 E	VERT		58	SCHUBERT F, Z
2746	60	109	2.2 N	76.8 E	VERT		59	SCHUBERT F, Y, Z
2747	60	110	1.8 N	75.5 E	VERT		60	SCHUBERT N, Y
2748	60	110	1.7 N	74.4 E	VERT		61	SCHUBERT N
2749	60	110	1.5 N	73.4 E	VERT		62	SCHUBERT N
2750	60	110	1.2 N	72.4 E	VERT		63	SCHUBERT N
2751	60	110	1.1 N	71.1 E	VERT		64	MACLAURIN L, SCHUBERT N
2752	60	111	1.0 N	70.3 E	VERT		65	MACLAURIN, L, DUBIAGO J
2753	60	111	.7 N	69.0 E	VERT		67	MACLAURIN, DUBIAGO O
2754	60	111	.4 N	67.7 E	VERT		68	MACLAURIN, DUBIAGO O
2755	60	111	.3 N	66.7 E	VERT		69	MACLAURIN, DUBIAGO O
2756	60	111	.2 N	65.5 E	VERT		70	MACLAURIN H, WEBB C

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2757	60	112	.0	64.3 E	VERT		71	MACLAURIN H, WEBB C
2758	60	112	.4 S	62.6 E	VERT		73	MACLAURIN H, WEBB C
2759	60	113	.7 S	61.6 E	VERT		74	WEBB
2760	60	113	.8 S	60.6 E	VERT		75	WEBB
2761	60	114	1.0 S	59.6 E	VERT		76	WEBB, R, FERTILITY,SEA OF
2762	60	114	1.2 S	58.3 E	VERT		77	WEBB, FERTILITY, SEA OF
2763	60	114	1.3 S	57.1 E	VERT		79	FERTILITY, SEA OF
2764	60	114	1.6 S	56.0 E	VERT		80	FERTILITY, SEA OF
2765	60	114	1.8 S	54.8 E	VERT		81	FERTILITY, SEA OF
2766	60	114	2.0 S	53.7 E	VERT		82	FERTILITY, SEA OF
2767	60	115	2.2 S	52.7 E	VERT		83	FERTILITY, SEA OF
2768	60	115	2.4 S	51.6 E	VERT		84	FERTILITY, SEA OF
2769	60	115	2.6 S	50.3 E	VERT		84	MESSIER, A, B
2770	60	115	2.7 S	49.1 E	VERT		84	MESSIER, A, B, D
2771	60	115	3.0 S	47.8 E	VERT		85	MESSIER, A, B, D
2772	60	116	3.3 S	46.4 E	VERT		85	MESSIER, A, B, D
2773	60	116	3.5 S	45.1 E	VERT		84	MESSIER, A
2774	60	116	3.7 S	44.0 E	VERT		84	LUBBOCK
2775	60	117	3.9 S	42.7 E	VERT		83	LUBBOCK
2776	60	117	4.2 S	41.6 E	VERT		83	LUBBOCK, GUTENBERG G
2777	60	117	4.5 S	40.2 E	VERT		82	LUBBOCK, GUTENBERG G
2778	60	117	4.7 S	38.9 E	VERT		80	GUTENBERG G, GUTENBERG RILLES
2779	60	118	5.2 S	37.4 E	VERT		79	GUTENBERG G, GUTENBERG RILLES
2780	60	118	5.4 S	36.5 E	VERT		78	CAPELLA
2781	60	118	5.4 S	35.2 E	VERT		77	ISIDORUS, B, CAPELLA
2782	60	118	5.7 S	34.1 E	VERT		76	ISIDORUS, B, CAPELLA
2783	60	118	6.0 S	32.9 E	VERT		75	ISIDORUS, B, CAPELLA
2784	60	119	6.1 S	31.8 E	VERT		74	ISIDORUS, B, CAPELLA
2785	60	119	6.4 S	30.3 E	VERT		73	TORRICELLI, R
2786	60	119	6.5 S	29.0 E	VERT		71	TORRICELLI, R
2787	60	119	6.7 S	27.9 E	VERT		70	TORRICELLI, R
2788	60	119	6.8 S	26.8 E	VERT		69	TORRICELLI, R
2789	60	120	7.0 S	25.3 E	VERT		68	THEOPHILUS, N OF
2790	60	120	7.1 S	23.7 E	VERT		67	ZOLLNER F
2791	60	120	7.2 S	22.5 E	VERT		65	ZOLLNER F
2792	60	120	7.3 S	21.4 E	VERT		64	ZOLLNER, F, KANT, E, G
2793	60	120	7.5 S	20.0 E	VERT		62	ZOLLNER, F, KANT, E, G
2794	60	121	8.0 S	18.7 E	VERT		61	ZOLLNER, ALFRAGANUS, C
2795	60	121	7.9 S	17.6 E	VERT		60	ZOLLNER, TAYLOR
2796	60	121	8.4 S	16.5 E	VERT		59	ALFRAGANUS C

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2797	60	121	8.4 S	15.3 E	VERT		58	DOLLOND, B, C
2798	60	121	8.5 S	13.9 E	VERT		56	ANDEL, DOLLOND, B, C
2799	60	122	8.5 S	12.6 E	VERT		55	ANDEL, DOLLOND, B, C
2800	60	122	8.6 S	11.2 E	VERT		54	ANDEL, DOLLOND C
2801	60	122	8.7 S	10.1 E	VERT		53	ANDEL, RITCHEY
2802	60	122	8.8 S	8.8 E	VERT		52	RITCHEY, HIND
2803	60	122	9.0 S	7.5 E	VERT		50	HIND, HALLEY
2804	60	122	9.1 S	6.2 E	VERT		49	HIND, HALLEY, ALBATEGNIUS
2805	60	122	9.3 S	4.8 E	VERT		47	ALBATEGNIUS, KLEIN, HALLEY
2806	60	123	9.5 S	3.7 E	VERT		46	ALBATEGNIUS, KLEIN, HALLEY
2807	60	123	9.6 S	2.4 E	VERT		45	ALBATEGNIUS, KLEIN, HALLEY
2808	60	123	9.6 S	1.2 E	VERT		44	ALBATEGNIUS, G, MULLER
2809	60	123	9.6 S	.1 W	VERT		43	ALBATEGNIUS, PTOLEMAEUS
2810	60	123	9.7 S	1.4 W	VERT		41	PTOLEMAEUS
2811	60	123	9.8 S	2.7 W	VERT		40	PTOLEMAEUS
2812	60	123	10.1 S	3.8 W	VERT		39	PTOLEMAEUS
2813	60	124	10.2 S	5.4 W	VERT		38	DAVY, Y, G, PALISA
2814	60	124	10.3 S	6.7 W	VERT		37	DAVY, Y, G, PALISA
2815	60	124	10.3 S	7.7 W	VERT		36	DAVY, Y, PALISA
2816	60	124	10.3 S	9.0 W	VERT		35	DAVY, Y
2817	60	124	10.4 S	10.5 W	VERT		32	DAVY, Y, GUERICKE C
2818	60	124	10.5 S	11.6 W	VERT		31	GUERICKE C
2819	60	124	10.6 S	12.9 W	VERT		30	GUERICKE, C
2820	60	124	10.7 S	14.2 W	VERT		29	GUERICKE, C, PARRY
2821	60	124	10.7 S	15.6 W	VERT		27	GUERICKE, F, PARRY, A, M
2822	60	124	10.8 S	17.0 W	VERT		26	GUERICKE, PARRY, BONPLAND
2823	60	124	10.8 S	18.0 W	VERT		25	BONPLAND, PARRY A
2824	60	124	10.8 S	19.2 W	VERT		24	BONPLAND
2825	60	124	10.8 S	20.3 W	VERT		23	KNOWN SEA
2826	60	124	10.8 S	21.4 W	VERT		22	KNOWN SEA
2827	60	124	10.6 S	22.9 W	VERT		20	KNOWN SEA
2828	60	124	10.7 S	24.4 W	VERT		19	KNOWN SEA, EUCLIDES D
2829	60	124	10.7 S	25.5 W	VERT		17	KNOWN SEA, EUCLIDES D
2830	60	124	10.7 S	26.7 W	VERT		16	KNOWN SEA, RIPHAEN MOUNTAINS
2831	60	124	10.7 S	28.1 W	VERT		15	RIPHAEN MOUNTAINS, EUCLIDES C, B
2832	60	124	10.5 S	29.5 W	VERT		14	RIPHAEN MOUNTAINS, EUCLIDES C, B
2833	60	124	10.7 S	30.7 W	VERT		13	EUCLIDES B
2834	60	124	10.6 S	31.9 W	VERT		11	EUCLIDES B
2835	60	124	10.5 S	33.3 W	VERT		10	HERIGONIUS RILLE 1
2836	60	124	10.6 S	34.5 W	VERT		9	HERIGONIUS RILLE 1

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2837	60	124	10.6 S	35.7 W	VERT		8	HERIGONIUS RILLE 1
2838	60	124	10.5 S	37.1 W	VERT		7	HERIGONIUS RILLE 1, LETRONNE A
2839	60	124	10.4 S	38.3 W	VERT		6	HERIGONIUS RILLE 1, LETRONNE A
2840	60	124	10.3 S	39.5 W	VERT		5	LETRONNE, A
2841	60	124	10.3 S	40.9 W	VERT		3	LETRONNE, A, FLAMSTEED A
2842	60	124	10.2 S	42.3 W	VERT		1	LETRONNE, FLAMSTEED A
2843	60	124	10.2 S	43.8 W	VERT		0	LETRONNE, FLAMSTEED A
2844	60	124	10.2 S	45.1 W	VERT		-1	LETRONNE, FLAMSTEED A
2845	60	124	10.2 S	46.5 W	VERT		-2	BILLY B, LETRONNE, P
2846								2846-2851, DARK, GAMMA RAY, MASS SPEC BOOM
2852	63	98	10.3 N	135.8 E	VERT		-2	MENDELEEV, NW OF
2853	63	98	10.3 N	134.7 E	VERT		-1	MENDELEEV, NW OF
2854	63	98	10.3 N	133.7 E	VERT		0	MENDELEEV, NW OF
2855	63	98	10.3 N	132.6 E	VERT		1	VETCHINKIN
2856	63	98	10.2 N	131.6 E	VERT		2	VETCHINKIN
2857	63	98	10.2 N	130.7 E	VERT		3	VETCHINKIN
2858	63	98	10.1 N	129.8 E	VERT		4	VETCHINKIN
2859	63	98	10.0 N	128.4 E	VERT		5	VETCHINKIN, W OF
2860	63	98	10.0 N	127.4 E	VERT		6	MESHCHERSKY
2861	63	99	9.8 N	126.2 E	VERT		7	MESHCHERSKY
2862	63	99	9.9 N	125.1 E	VERT		8	OSTWALD, MESHCHERSKY
2863	63	99	9.7 N	124.1 E	VERT		9	OSTWALD
2864	63	99	9.5 N	123.2 E	VERT		10	OSTWALD
2865	63	99	9.5 N	122.1 E	VERT		11	OSTWALD
2866	63	99	9.4 N	121.0 E	VERT		12	OSTWALD
2867	63	100	9.4 N	120.4 E	VERT		13	OSTWALD
2868	63	100	9.3 N	119.0 E	VERT		14	KING, N OF
2869	63	100	8.8 N	116.8 E	VERT		16	GUYOT
2870	63	100	8.6 N	115.8 E	VERT		17	GUYOT
2871	63	100	8.5 N	115.0 E	VERT		18	LOBACHEVSKY, GUYOT
2872	63	101	8.2 N	113.6 E	VERT		19	LOBACHEVSKY
2873	63	101	8.0 N	112.6 E	VERT		21	LOBACHEVSKY
2874	63	101	7.8 N	111.5 E	VERT		22	LOBACHEVSKY
2875	63	101	7.7 N	110.3 E	VERT		23	LOBACHEVSKY
2876	63	101	7.6 N	109.2 E	VERT		24	LOBACHEVSKY, W OF
2877	63	101	7.5 N	108.1 E	VERT		25	LOBACHEVSKY, W OF
2878	63	101	7.3 N	107.1 E	VERT		26	LOBACHEVSKY, W OF
2879	63	102	7.0 N	106.1 E	VERT		27	MOISEEV
2880	63	102	7.0 N	105.0 E	VERT		28	SAENGER, MOISEEV
2881	63	102	6.9 N	103.8 E	VERT		29	SAENGER, MOISEEV

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2882	63	102	6.5 N	102.7 E	VERT		30	SAENGER, MOISEEV
2883	63	102	6.4 N	101.6 E	VERT		31	SAENGER, MOISEEV
2884	63	102	6.3 N	100.6 E	VERT		32	ERRO
2885	63	103	6.0 N	99.5 E	VERT		33	ERRO
2886	63	103	5.9 N	98.1 E	VERT		35	ERRO
2887	63	103	5.8 N	97.2 E	VERT		36	ERRO, BABCOCK
2888	63	104	5.6 N	96.2 E	VERT		37	BABCOCK
2889	63	104	5.5 N	95.0 E	VERT		38	BABCOCK
2890	63	104	5.2 N	94.1 E	VERT		39	BABCOCK
2891	63	104	5.1 N	93.0 E	VERT		40	BABCOCK, SMYTH'S SEA
2892	63	104	5.0 N	91.9 E	VERT		41	BABCOCK, SMYTH'S SEA
2893	63	104	4.9 N	91.0 E	VERT		42	BABCOCK, SMYTH'S SEA
2894	63	105	4.7 N	90.0 E	VERT		43	SMYTH'S SEA
2895	63	105	4.5 N	88.7 E	VERT		44	SMYTH'S SEA, NEPER K
2896	63	105	4.4 N	87.7 E	VERT		45	SMYTH'S SEA, NEPER K
2897	63	105	4.3 N	86.5 E	VERT		47	SMYTH'S SEA, NEPER K
2898	63	105	4.0 N	85.1 E	VERT		48	SMYTH'S SEA, NEPER K
2899	63	106	3.8 N	84.0 E	VERT		49	SCHUBERT, BANACHIEWICZ, NEPER K
2900	63	106	3.6 N	82.8 E	VERT		51	SCHUBERT, B, BANACHIEWICZ
2901	63	106	3.5 N	81.6 E	VERT		52	SCHUBERT, B, BANACHIEWICZ
2902	63	107	3.3 N	80.6 E	VERT		53	SCHUBERT, B, Z, BANACHIEWICZ
2903	63	107	3.2 N	79.3 E	VERT		54	SCHUBERT, B, Z, BANACHIEWICZ
2904	63	108	3.0 N	78.0 E	VERT		55	SCHUBERT E, K, Z, GILBERT N
2905	63	108	2.7 N	77.0 E	VERT		56	SCHUBERT K, X, Y, GILBERT N
2906	63	108	2.5 N	76.0 E	VERT		57	SCHUBERT K, X, Y, GILBERT N
2907	63	108	2.2 N	74.8 E	VERT		58	SCHUBERT K, N, X, Y
2908	63	108	2.0 N	73.8 E	VERT		59	SCHUBERT N, Y, DUBIAGO C
2909	63	108	1.8 N	72.8 E	VERT		60	SCHUBERT N, DUBIAGO C, MACLAURIN L
2910	63	109	1.7 N	71.3 E	VERT		62	SCHUBERT N, DUBIAGO C, MACLAURIN L
2911	63	109	1.5 N	70.1 E	VERT		63	MACLAURIN L, DUBIAGO J. M
2912	63	110	1.3 N	68.8 E	VERT		64	MACLAURIN, K, DUBIAGO J, M, P, O
2913	63	110	1.0 N	67.8 E	VERT		65	MACLAURIN, K, DUBIAGO J, M, P, O
2914	63	110	.7 N	66.8 E	VERT		66	MACLAURIN, K, DUBIAGO M, P, O
2915	63	110	.5 N	65.6 E	VERT		67	MACLAURIN, K, MACLAURIN H, WEBB C, J
2916	63	110	.5 N	64.3 E	VERT		69	WEBB C, J. APOLLONIUS S
2917	63	111	.3 N	63.2 E	VERT		70	WEBB C, J, P, MACLAURIN H, WEBB C, J, P
2918	63	111	.1 N	61.8 E	VERT		71	WEBB, C, J, P, APOLLONIUS S
2919	63	112	.1 S	60.6 E	VERT		72	WEBB, P
2920	63	112	.4 S	59.5 E	VERT		73	WEBB, P, FERTILITY, SEA OF
2921	63	112	.6 S	58.5 E	VERT		74	WEBB, P, FERTILITY, SEA OF

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2922	63	112	.7 S	57.1 E	VERT		76	WEBB, FERTILITY, SEA OF
2923	63	112	1.0 S	55.8 E	VERT		77	FERTILITY, SEA OF
2924	63	113	1.2 S	54.3 E	VERT		78	FERTILITY, SEA OF
2925	63	113	1.5 S	53.3 E	VERT		79	FERTILITY, SEA OF
2926	63	113	1.8 S	51.9 E	VERT		81	FERTILITY, SEA OF, TARUNTIUS H
2927	63	114	2.0 S	50.5 E	VERT		82	MESSIER, B, TARUNTIUS H
2928	63	114	2.3 S	49.1 E	VERT		83	MESSIER, A, B, TARUNTIUS H
2929	63	115	2.5 S	47.8 E	VERT		84	MESSIER, A, B, D
2930	63	115	2.8 S	46.4 E	VERT		85	MESSIER, A, B, D, SECCHI X
2931	63	115	3.1 S	45.1 E	VERT		85	MESSIER, A, D, SECCHI X
2932	63	115	3.3 S	43.8 E	VERT		85	LUBBOCK, MESSIER D, SECCHI X
2933	63	116	3.4 S	42.3 E	VERT		85	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES
2934	63	116	3.9 S	41.0 E	VERT		84	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES
2935	63	116	4.2 S	39.6 E	VERT		83	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES
2936	63	116	4.5 S	38.3 E	VERT		82	GUTENBERG G, RILLES, CENSORINUS N
2937	63	116	4.6 S	36.9 E	VERT		81	GUTENBERG RILLES, CENSORINUS N, CAPELLA
2938	63	117	4.9 S	35.4 E	VERT		80	ISIDORUS, B, CAPELLA, CENSORINUS C
2939	63	117	5.0 S	34.4 E	VERT		79	ISIDORUS, B, CAPELLA, CENSORINUS C
2940	63	118	5.4 S	32.9 E	VERT		78	ISIDORUS, B, CAPELLA, CENSORINUS C
2941	63	118	5.6 S	31.8 E	VERT		77	ISIDORUS, B, CAPELLA
2942	63	118	5.8 S	30.4 E	VERT		75	TORRICELLI, R
2943	63	118	6.0 S	28.5 E	VERT		74	TORRICELLI, R
2944	63	119	6.2 S	27.3 E	VERT		73	TORRICELLI, R
2945	63	119	6.4 S	25.9 E	VERT		72	TORRICELLI, W OF
2946	63	119	6.6 S	24.6 E	VERT		70	TORRICELLI, W OF
2947	63	119	6.7 S	23.2 E	VERT		69	HYPATIA, ZOLLNER F
2948	63	119	6.8 S	22.0 E	VERT		67	ZOLLNER F, ALFRAGANUS, HYPATIA
2949	63	120	7.0 S	20.7 E	VERT		66	ZOLLNER, F, ALFRAGANUS, C, KANT G
2950	63	120	7.2 S	19.5 E	VERT		65	ZOLLNER, F, ALFRAGANUS, C, KANT G
2951	63	120	7.5 S	18.0 E	VERT		64	ZOLLNER, ALFRAGANUS C, KANT G, TAYLOR
2952	63	120	7.7 S	16.5 E	VERT		62	ZOLLNER, ALFRAGANUS C, KANT G, TAYLOR
2953	63	121	7.9 S	15.1 E	VERT		61	DOLLOND, B, C, TAYLOR
2954	63	121	8.0 S	13.9 E	VERT		59	DOLLOND, B, C, ANDEL
2955	63	121	8.2 S	12.4 E	VERT		58	DOLLOND, B, C, ANDEL
2956	63	121	8.4 S	11.1 E	VERT		57	ANDEL, DOLLOND C
2957	63	121	8.5 S	9.8 E	VERT		55	HIND, RITCHEY, HIPPARCHUS C, ANDEL
2958	63	122	8.7 S	8.6 E	VERT		54	HIND, RITCHEY, HIPPARCHUS C, HALLEY
2959	63	122	8.8 S	7.0 E	VERT		53	HIND, HALLEY, HIPPARCHUS, ALBATEGNIUS
2960	63	122	9.0 S	5.6 E	VERT		51	HIND, HALLEY, HIPPARCHUS, ALBATEGNIUS
2961	63	122	9.2 S	4.3 E	VERT		50	ALBATEGNIUS, G, KLEIN, MULLER, HALLEY

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
2962	63	122	9.3 S	2.8 E	VERT		48	ALBATEGNIUS, G, KLEIN, MULLER, HALLEY
2963	63	122	9.5 S	1.3 E	VERT		47	ALBATEGNIUS, G, KLEIN, PTOLEMAEUS
2964	63	123	9.5 S	.1 E	VERT		46	PTOLEMAEUS, KLEIN
2965	63	123	9.6 S	1.3 W	VERT		45	PTOLEMAEUS
2966	63	123	9.7 S	2.8 W	VERT		43	PTOLEMAEUS
2967	63	123	9.8 S	4.2 W	VERT		42	PTOLEMAEUS, E, DAVY Y, G
2968	63	123	9.8 S	5.7 W	VERT		40	PTOLEMAEUS, E, DAVY Y, G
2969	63	123	10.0 S	6.8 W	VERT		39	DAVY, Y, G, PALISA, T
2970	63	123	10.2 S	8.1 W	VERT		38	DAVY, Y, G, PALISA, T
2971	63	123	10.3 S	9.6 W	VERT		36	DAVY, Y, PALISA, T, GUERICKE C
2972	63	123	10.3 S	11.1 W	VERT		35	DAVY, GUERICKE C
2973	63	123	10.4 S	12.2 W	VERT		34	GUERICKE, C, PARRY M
2974	63	123	10.5 S	13 6 W	VERT		32	GUERICKE, C, F, PARRY, A, M
2975	63	123	10.6 S	15.2 W	VERT		31	GUERICKE, F, PARRY, A, M, BONPLAND
2976	63	123	10.7 S	16.4 W	VERT		30	GUERICKE, F, PARRY, A, M, BONPLAND
2977	63	123	10.8 S	17.7 W	VERT		28	BONPLAND, PARRY, A, RILLES
2978	63	123	10.8 S	19.2 W	VERT		27	BONPLAND, PARRY RILLES
2979	63	123	10.8 S	20.5 W	VERT		26	BONPLAND
2980	63	123	10.9 S	21.8 W	VERT		24	KNOWN SEA
2981	63	123	10.5 S	23.2 W	VERT		23	KNOWN SEA, EUCLIDES D
2982	63	123	10.4 S	24.6 W	VERT		21	EUCLIDES D, DARNEY F
2983	63	123	10.4 S	25.9 W	VERT		20	RIPHAEN MOUNTAINS
2984	63	123	10.5 S	27.3 W	VERT		19	RIPHAEN MOUNTAINS, EUCLIDES, B, C
2985	63	123	10.6 S	28.7 W	VERT		18	RIPHAEN MOUNTAINS, EUCLIDES, B, C
2986	63	123	10.7 S	30.1 W	VERT		16	RIPHAEN MOUNTAINS, EUCLIDES, B, C
2987	63	123	10.7 S	31.7 W	VERT		15	EUCLIDES, B, C, HERIGONIUS
2988	63	123	10.7 S	33.0 W	VERT		13	EUCLIDES B, C, HERIGONIUS
2989	63	123	10.6 S	34.3 W	VERT		12	HERIGONIUS, RILLE 1
2990	63	123	10.5 S	35.7 W	VERT		11	HERIGONIUS, RILLE 1
2991	63	123	10.5 S	37.1 W	VERT		9	HERIGONIUS RILLE 1, LETRONNE A
2992	63	123	10.5 S	38.6 W	VERT		8	HERIGONIUS RILLE 1, LETRONNE A
2993	63	123	10.4 S	40.0 W	VERT		7	LETRONNE, A, LICHMANN, FLAMSTEED A
2994	63	123	10 3 S	41.5 W	VERT		5	LETRONNE, A, FLAMSTEED A
2995	63	123	10.2 S	42 9 W	VERT		4	LETRONNE, P, FLAMSTEED A
2996	63	123	10.2 S	44.2 W	VERT		2	LETRONNE, P, FLAMSTEED A
2997	63	122	10.2 S	45.6 W	VERT		1	LETRONNE, P
2998	63	122	10.2 S	46.9 W	VERT		0	LETRONNE, P
2999	63	122	10.1 S	48.3 W	VERT		-2	LETRONNE P, W OF, DOUBLE EXPOSURE
3000	TE		13.6 N	115 5 E				KING, OSTWALD, SUYDT, KOSTINSKY
3001	TE		12.6 N	116.2 E				KING, OSTWALD, SUYDT, KOSTINSKY

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
3002	TE		12.5 N	118.1 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3003	TE		12.6 N	116.4 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3004	TE		12.4 N	114.8 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3005	TE		12.8 N	113.8 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3006	TE		12.2 N	112.1 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3007	TE		12.3 N	110.8 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3008	TE		13.0 N	109.8 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3009	TE		12.5 N	108.7 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3010	TE		12.4 N	107.0 E				KING, OSTWALD, GUYOT, VIEW 130E-80E
3011	TE		12.8 N	105.6 E				MOISEEV, HERTZ, VIEW 130E-80E
3012	TE		12.3 N	103.7 E				MOISEEV, HERTZ, VIEW 130E-80E
3013	TE		11.8 N	102.4 E				MOISEEV, HERTZ, VIEW 130E-80E
3014	TE		11.7 N	100.7 E				MOISEEV, HERTZ, VIEW 130E-80E
3015	TE		11.3 N	99.1 E				MOISEEV, HERTZ, VIEW 130E-80E
3016	TE		11.3 N	97.2 E				MOISEEV, HERTZ, VIEW 120E-60E
3017	TE		11.0 N	96.0 E				MOISEEV, HERTZ, VIEW 120E-60E
3018	TE		11.0 N	98.0 E				MOISEEV, HERTZ, VIEW 120E-60E
3019	TE		11.2 N	100.2 E				MOISEEV, HERTZ, VIEW 120E-60E
3020	TE		11.6 N	102.2 E				MOISEEV, HERTZ, VIEW 120E-60E
3021	TE		12.0 N	103.7 E				MOISEEV, HERTZ, VIEW 120E-60E
3022	TE		13.5 N	103.5 E				MOISEEV, HERTZ, VIEW 120E-60E
3023	TE		12.2 N	103.9 E				MOISEEV, HERTZ, VIEW 130E-50E
3024	TE		12.0 N	103.3 E				MOISEEV, HERTZ, VIEW 130E-50E
3025	TE		12.0 N	101.9 E				MOISEEV, HERTZ, VIEW 130E-50E
3026	TE		11.3 N	101.7 E				MOISEEV, HERTZ, VIEW 130E-50E
3027	TE		12.0 N	101.9 E				MOISEEV, HERTZ, VIEW 130E-50E
3028	TE		12.0 N	101.0 E				MOISEEV, HERTZ, VIEW 130E-50E
3029	TE		11.2 N	100.2 E				MOISEEV, HERTZ, VIEW 130E-50E
3030	TE		11.2 N	100.2 E				MOISEEV, HERTZ, VIEW 130E-50E
3031	TE		11.2 N	100.2 E				HERTZ, SAENGER, VIEW 130E-50E
3032	TE		11.0 N	98.6 E				HERTZ, SAENGER, VIEW 130E-50E
3033	TE		11.2 N	98.6 E				HERTZ, SAENGER, VIEW 130E-50E
3034	TE		11.3 N	97.2 E				HERTZ, SAENGER, VIEW 130E-50E
3035	TE		11.3 N	97.2 E				HERTZ, SAENGER, VIEW 130E-50E
3036	TE		10.9 N	95.7 E				HERTZ, SAENGER, VIEW 130E-50E
3037	TE		10.9 N	96.7 E				HERTZ, SAENGER, VIEW 130E-50E
3038	TE		10.9 N	95.7 E				HERTZ, SAENGER, VIEW 130E-50E
3039	TE		10.5 N	95.8 E				HERTZ, SAENGER, VIEW 130E-50E
3040	TE		10.5 N	95.8 E				HERTZ, SAENGER, VIEW 130E-50E
3041	TE		10.9 N	95.7 E				HERTZ, SAENGER, VIEW 130E-50E

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
3042	TE		11.3 N	94.7 E				HERTZ, SAENGER, VIEW 130E-30E
3043	TE		11.3 N	93.8 E				HERTZ, SAENGER, VIEW 130E-30E
3044	TE		11.3 N	93.8 E				HERTZ, SAENGER, VIEW 130E-30E
3045	TE		10.0 N	91.9 E				HERTZ, SAENGER, VIEW 130E-30E
3046	TE		9.4 N	91.4 E				JANSKY, NEPER, VIEW 130E-20E
3047	TE		9.4 N	91.4 E				JANSKY, NEPER, VIEW 130E-20E
3048	TE		9.4 N	91.4 E				JANSKY, NEPER, VIEW 130E-20E
3049	TE		9.5 N	91.4 E				JANSKY, NEPER, VIEW 130E-20E
3050	TE		10.0 N	90.5 E				JANSKY, NEPER, VIEW 130E-20E
3051	TE		10.0 N	89.7 E				JANSKY, NEPER, VIEW 130E-20E
3052	TE		.0	.0				DOUBLE EXPOSURE
3053	TE		10.2 N	86.8 E				NEPER, JANSKY, VIEW 130E-5W
3054	TE		10.0 N	86.5 E				NEPER, JANSKY, VIEW 130E-5W
3055	TE		10.0 N	86.5 E				NEPER, JANSKY, VIEW 130E-5W
3056	TE		9.2 N	86.3 E				NEPER, JANSKY, VIEW 130E-5W
3057	TE		10.0 N	85.4 E				NEPER, JANSKY, VIEW 130E-5W
3058	TE		10.2 N	86.8 E				NEPER, JANSKY, VIEW 130E-5W
3059	TE		10.0 N	87.0 E				NEPER, JANSKY, VIEW 130E-5W
3060	TE		10.2 N	86.8 E				NEPER, JANSKY, VIEW 130E-5W
3061	TE		10.6 N	86.4 E				SMYTH'S SEA, VIEW 130E-5W
3062	TE		11.0 N	85.4 E				SMYTH'S SEA, VIEW 130E-5W
3063	TE		10.8 N	84.5 E				SMYTH'S SEA, VIEW 130E-5W
3064	TE		10.5 N	84.2 E				SMYTH'S SEA, VIEW 130E-5W
3065	TE		9.8 N	84.3 E				SMYTH'S SEA, VIEW 130E-5W
3066	TE		9.7 N	84.3 E				SMYTH'S SEA, VIEW 130E-5W
3067	TE		9.7 N	83.5 E				SMYTH'S SEA, VIEW 130E-5W
3068	TE		9.6 N	82.7 E				SMYTH'S SEA, VIEW 130E-5W
3069	TE		9.6 N	82.7 E				SMYTH'S SEA, VIEW 130E-5W
3070	TE		9.5 N	82.1 E				SMYTH'S SEA, VIEW 130E-5W
3071	TE		9.5 N	82.1 E				SMYTH'S SEA, VIEW 130E-5W
3072	TE		10.0 N	82.0 E				SMYTH'S SEA, VIEW 130E-5W
3073	TE		10.0 N	82.0 E				SMYTH'S SEA, VIEW 130E-5W
3074	TE		10.4 N	81.4 E				SMYTH'S SEA, VIEW 130E-5W
3075	TE		10.4 N	81.4 E				SMYTH'S SEA, VIEW 130E-5W
3076	TE		10.4 N	81.4 E				SMYTH'S SEA, VIEW 130E-5W
3077	TE		10.4 N	81.4 E				SMYTH'S SEA, VIEW 130E-5W
3078	TE		10.0 N	81.4 E				SMYTH'S SEA, VIEW 130E-5W
3079	TE		8.8 N	81.8 E				SMYTH'S SEA, VIEW 130E-5W
3080	TE		8.8 N	81.8 E				SMYTH'S SEA, VIEW 130E-5W
3081	TE		8.7 N	80.9 E				SMYTH'S SEA, VIEW 130E-5W

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
3 INCH (7.62CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	REV	ALT. KM.	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	CAMERA TILT	CAMERA AZ	SUN EL.	DESCRIPTION
3082	TE		8.7 N	80.9 E				SMYTH'S SEA, VIEW 130E-5W
3083	TE		9.2 N	80.0 E				SMYTH'S SEA, VIEW 130E-5W
3084	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3085	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3086	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3087	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3088	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3089	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3090	TE		9.5 N	79.0 E				SMYTH'S SEA, VIEW 130E-5W
3091	TE		8.2 N	75.5 E				OVEREXPOSED, VIEW 130E-5W
3092	TE		8.2 N	75.5 E				OVEREXPOSED, VIEW 130E-5W
3093	TE		8.5 N	75.5 E				OVEREXPOSED, VIEW 130E-5W
3094	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3095	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3096	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3097	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3098	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3099	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3100	TE		8.5 N	76.0 E				OVEREXPOSED, VIEW 130E-5W
3101	TE		12.0 N	81.0 E				OVEREXPOSED, VIEW 130E-5W
3102	TE							OVEREXPOSED, FULL DISC
3103	TE							OVEREXPOSED, FULL DISC
3104	TE							OVEREXPOSED, FULL DISC
3105	TE							OVEREXPOSED, FULL DISC
3106	TE							3106-3140, OVEREXPOSED, PARTLY IN FOV
3141	TE							3141-3440, OVEREXPOSED, GAMMA RAY SPEC
3441	TE							3441-3480, NO IMAGE

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 160 TO 170 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
1	LEBEDINSKY	9.3 N	165.1 W	03	105	VERT		-2
2	ZHUKOVSKY	9.3 N	166.2 W	03	105	VERT		-1
3	ZHUKOVSKY	9.2 N	167.3 W	03	104	VERT		0
4	ZHUKOVSKY	9.4 N	168.3 W	03	104	VERT		1
5	ZHUKOVSKY	9.3 N	169.5 W	03	104	VERT		2

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 170 TO 180 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
6	ZHUKOVSKY, W OF	9.0 N	170.6 W	03	103	VERT		3
7	ZHUKOVSKY, W OF	9.0 N	171.6 W	03	103	VERT		4
8	ZHUKOVSKY, W OF	8.8 N	172.5 W	03	102	VERT		5
9	ZHUKOVSKY, W OF	8.8 N	173.7 W	03	102	VERT		6
10	ZHUKOVSKY, W OF	8.8 N	174.9 W	03	101	VERT		7
11	ZHUKOVSKY, W OF	8.6 N	175.9 W	03	100	VERT		8
12	STEIN, E OF	8.5 N	176.9 W	03	100	VERT		9
13	STEIN, E OF	8.3 N	178.0 W	03	100	VERT		10
14	STEIN	8.3 N	179.1 W	03	99	VERT		11
27	STEIN	8.9 N	179.1 W	17	115	VERT		-1
313	STEIN	9.4 N	179.2 W	18	115	VERT		-2

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 170 TO 180 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
15	STEIN	8.2 N	179.7 E	04	99	VERT		12
16	STEIN, SAFARIK	8.0 N	178.5 E	04	98	VERT		13
17	STEIN, SAFARIK	8.0 N	177.2 E	04	98	VERT		14
18	STEIN, VALIER	8.0 N	176.2 E	04	97	VERT		15
19	VALIER	7.9 N	175.4 E	04	96	VERT		17
20	VALIER	7.9 N	174.0 E	04	96	VERT		18
21	VALIER	7.7 N	172.8 E	04	95	VERT		19
22	VALIER, DUFAY	7.7 N	171.9 E	04	94	VERT		20
23	VALIER, DUFAY	7.5 N	171.0 E	04	94	VERT		21
24	DUFAY	7.5 N	170.1 E	04	93	VERT		22
28	STEIN	8.8 N	179.8 E	17	115	VERT		0
29	STEIN, SAFARIK	8.7 N	178.7 E	17	116	VERT		1
30	STEIN, SAFARIK	8.8 N	177.4 E	17	116	VERT		2
31	VALIER, SAFARIK	8.8 N	176.2 E	17	116	VERT		4
32	VALIER, SAFARIK	8.8 N	175.1 E	17	116	VERT		5
33	VALIER, SAFARIK	8.7 N	174.0 E	17	117	VERT		6
34	VALIER, SHARONOV	8.7 N	173.7 E	17	117	VERT		6
35	VALIER, SHARONOV	8.7 N	171.5 E	17	117	VERT		8
36	DUFAY, N RIM	8.5 N	170.2 E	17	117	VERT		10
314	STEIN, SAFARIK	9.1 N	179.6 E	18	115	VERT		-1
315	STEIN, SAFARIK	9.1 N	178.5 E	18	115	VERT		1
316	STEIN, SAFARIK, VALIER	8.8 N	177.2 E	18	115	VERT		2
317	VALIER, SAFARIK	8.6 N	176.0 E	18	115	VERT		3
318	VALIER, SAFARIK, SHARANOV	8.7 N	174.3 E	18	116	VERT		4
319	VALIER, SHARANOV	8.7 N	173.0 E	18	116	VERT		6
320	VALIER, SHARANOV, DUFAY	8.6 N	171.9 E	18	116	VERT		7
321	DUFAY	8.5 N	170.8 E	18	116	VERT		8
852	PAPALESKI, E OF			28	113	VERT		-1

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 160 TO 170 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	LONG.	REV	ALT KM	CAMERA TILT	AZ	SUN EL
25	DUFAY	7.3 N	168.8 E	04	92	VERT		23
26	DUFAY	7.2 N	168.1 E	04	92	VERT		24
37	DUFAY, N RIM	8.5 N	169.2 E	17	118	VERT		11
38	DUFAY, N RIM	8.4 N	167.7 E	17	118	VERT		12
39	PAPALESKI	8.3 N	166.7 E	17	118	VERT		13
40	PAPALESKI	8.1 N	165.5 E	17	118	VERT		14
41	PAPALESKI, MANDEL'SHTAM	8.1 N	164.5 E	17	119	VERT		15
42	PAPALESKI, MANDEL'SHTAM	8.2 N	163.2 E	17	119	VERT		16
43	PAPALESKI, MANDEL'SHTAM	8.0 N	161.8 E	17	119	VERT		18
44	PAPALESKI, MANDEL'SHTAM	7.8 N	160.6 E	17	119	VERT		19
322	DUFAY	8.5 N	169.5 E	18	116	VERT		9
323	DUFAY	8.5 N	168.2 E	18	116	VERT		10
324	PAPALESKI	8.3 N	167.0 E	18	117	VERT		11
325	PAPALESKI, MANDEL'SHTAM	8.2 N	165.6 E	18	117	VERT		13
326	PAPALESKI, MANDEL'SHTAM	8.3 N	164.3 E	18	118	VERT		14
327	PAPALESKI, MANDEL'SHTAM	8.2 N	163.0 E	18	118	VERT		15
328	PAPALESKI, MANDEL'SHTAM	8.2 N	161.6 E	18	118	VERT		17
329	PAPALESKI, MANDEL'SHTAM	8.0 N	160.4 E	18	118	VERT		18
453	PAPALESKI	9.0 N	170.0 E	25	113	25	265	2
454	PAPALESKI, MANDEL'SHTAM	9.0 N	168.5 E	25	114	25		3
455	PAPALESKI, MANDEL'SHTAM	8.9 N	167.3 E	25	114	25		4
456	PAPALESKI, MANDEL'SHTAM	8.8 N	165.6 E	25	114	25		6
457	PAPALESKI, MANDEL'SHTAM	8.8 N	164.5 E	25	114	25		7
458	PAPALESKI, MANDEL'SHTAM	8.6 N	163.0 E	25	114	25		8
459	PAPALESKI, MANDEL'SHTAM, MILLS	8.4 N	161.4 E	25	115	25		10
587	DUFAY,CORIOLIS	5.7 N	169.0 E	26	114	40	178	2
588	DUFAY CORIOLIS, VENING MEINESZ	5.5 N	167.5 E	26	114	40		03
589	MANDEL'SHTAM, VENING MEINESZ	5.5 N	166.0 E	26	114	40		05
590	MANDEL'SHTAM, VENING MEINESZ	5.2 N	164.8 E	26	115	40	177	06
591	MANDEL'SHTAM, VENING MEINESZ	5.5 N	163.5 E	26	115	40		07
592	MANDEL'SHTAM, VENING MEINESZ	5.2 N	162.4 E	26	115	40		08
593	MANDEL'SHTAM, VENING MEINESZ	5.3 N	160.7 E	26	115	40		10
719	SPENCER JONES	12.2 N	168.6 E	27	114	40	358	1
720	PAPALESKI, SPENCER JONES	12.0 N	167.0 E	27	114	40		03
721	PAPALESKI, SPENCER JONES	11.9 N	165.8 E	27	114	40		04
722	PAPALESKI, SPENCER JONES	11.8 N	164.2 E	27	114	40		05
723	PAPALESKI, SPENCER JONES	11.8 N	163.1 E	27	114	40		06
724	PAPALESKI, VAN GENT	11.8 N	161.6 E	27	115	40		08
725	PAPALESKI, VAN GENT	11.5 N	160.4 E	27	115	40		09
853	PAPALESKI, E OF	8.5 N	169.2 E	28	113	VERT		0

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 160 TO 170 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
854	PAPALESKI	8.8 N	167.3 E	28	114	VERT		2
855	PAPALESKI	8.9 N	166.2 E	28	114	VERT		3
856	PAPALESKI	9.0 N	164.8 E	28	114	VERT		4
857	PAPALESKI, MANDEL'SHTAM	8.8 N	163.4 E	28	114	VERT		5
858	PAPALESKI, MANDEL'SHTAM	8.8 N	162.2 E	28	114	VERT		6
859	PAPALESKI, MANDEL'SHTAM	8.7 N	161.0 E	28	114	VERT		7
1144	PAPALESKI, E OF	9.1 N	168.3 E	29	112	VERT		0
1145	PAPALESKI	9.0 N	166.9 E	29	112	VERT		1
1146	PAPALESKI	9.0 N	165.5 E	29	112	VERT		2
1147	PAPALESKI	9.0 N	164.2 E	29	112	VERT		4
1148	PAPALESKI, MANDEL'SHTAM	8.9 N	162.9 E	29	112	VERT		5
1149	PAPALESKI, MANDEL'SHTAM	8.8 N	161.7 E	29	113	VERT		6
1150	PAPALESKI, MANDEL'SHTAM	8.7 N	160.7 E	29	113	VERT		7
1551	MILLS, E OF	9.5 N	160.8 E	38	109	VERT		-2

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 150 TO 160 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
45	PAPALESKI	7.7 N	159.7 E	17	120	VERT		20
46	MANDEL'SHTAM, MILLS	7.7 N	158.7 E	17	120	VERT		21
47	MILLS	7.5 N	157.7 E	17	120	VERT		22
48	MILLS	7.4 N	156.7 E	17	120	VERT		23
49	MILLS, HENDERSON	7.3 N	155.3 E	17	120	VERT		24
50	MILLS, HENDERSON	7.3 N	154.0 E	17	120	VERT		25
51	MILLS, HENDERSON	7.2 N	153.0 E	17	120	VERT		26
52	MILLS	7.0 N	151.8 E	17	121	VERT		28
53	MILLS	6.8 N	150.7 E	17	121	VERT		29
330	MANDEL'SHTAM, MILLS	7.8 N	158.7 E	18	119	VERT		20
331	MANDEL'SHTAM, MILLS	7.7 N	157.8 E	18	119	VERT		21
332	MILLS	7.8 N	157.0 E	18	119	VERT		22
333	MILLS	7.5 N	155.8 E	18	119	VERT		23
334	MILLS, HENDERSON	7.3 N	154.4 E	18	119	VERT		24
335	MILLS, HENDERSON	7.2 N	153.2 E	18	119	VERT		25
336	HENDERSON	7.3 N	152.0 E	18	120	VERT		26
337	HENDERSON	7.2 N	150.4 E	18	120	VERT		28
460	MANDEL'SHTAM, MILLS	8.5 N	160.0 E	25	115	25	264	11
461	MILLS	8.3 N	158.8 E	25	115	25		13
462	MILLS, HENDERSON	8.3 N	157.6 E	25	115	25		14
463	MILLS, HENDERSON	8.4 N	156.6 E	25	115	25		15
464	MILLS, HENDERSON	8.3 N	155.0 E	25	116	25		16
465	MILLS, HENDERSON	8.1 N	153.6 E	25	116	25		18
466	HENDERSON, SCHUSTER	7.8 N	152.2 E	25	117	25		19
467	HENDERSON, SCHUSTER	7.6 N	151.0 E	25	117	25		20
594	MANDEL'SHTAM, VENING MEINESZ	5.1 N	159.4 E	26	115	40		11
595	SCHLIEMANN, VENING MEINESZ	5.4 N	158.0 E	26	116	40		13
596	SCHLIEMANN, VENING MEINESZ	5.2 N	156.6 E	26	116	40		14
597	HENDERSON, SCHLIEMANN	5.2 N	155.3 E	26	116	40		15
598	HENDERSON, SCHLIEMANN	5.4 N	154.2 E	26	116	40		17
599	HENDERSON, SCHLIEMANN	4.7 N	152.8 E	26	116	40		18
600	HENDERSON, SCHLIEMANN	4.8 N	151.3 E	26	117	40	175	20
726	KOHLSCHUTTER, VAN GENT	11.7 N	159.3 E	27	115	40		10
727	KOHLSCHUTTER, MILLS	11.8 N	157.6 E	27	115	40		12
728	KOHLSCHUTTER, MILLS	11.8 N	156.4 E	27	116	40		13
729	KOHLSCHUTTER, MILLS	11.6 N	154.7 E	27	116	40		15
730	KOHLSCHUTTER, MILLS	11.5 N	153.4 E	27	116	40	355	16
731	KOHLSCHUTTER, ST JOHN	11.3 N	152.1 E	27	116	40		17
732	KOHLSCHUTTER, ST JOHN	11.4 N	150.5 E	27	116	40		19
860	MANDEL'SHTAM	8.8 N	159.8 E	28	115	VERT		P

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 150 TO 160 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
861	MILLS	8.7 N	158.8 E	28	115	VERT		10
862	MILLS	8.5 N	157.6 E	28	115	VERT		11
863	MILLS	8.4 N	156.2 E	28	115	VERT		12
864	MILLS	8.3 N	154.8 E	28	115	VERT		14
865	MILLS	8.3 N	153.5 E	28	115	VERT		15
866	ST JOHN	8.3 N	152.3 E	28	116	VERT		16
867	ST JOHN	8.0 N	151.2 E	28	116	VERT		18
1151	MANDEL'SHTAM	8.8 N	159.3 E	29	113	VERT		8
1152	MILLS	8.7 N	158.3 E	29	113	VERT		9
1153	MILLS	8.6 N	157.0 E	29	113	VERT		10
1154	MILLS	8.5 N	155.7 E	29	114	VERT		12
1155	MILLS	8.4 N	154.3 E	29	114	VERT		13
1156	ST JOHN	8.2 N	153.0 E	29	114	VERT		15
1157	ST JOHN	8.1 N	151.8 E	29	114	VERT		16
1158	ST JOHN	8.1 N	150.6 E	29	114	VERT		17
1292	KOHLSCHUTTER	12.2 N	156.4 E	37	110	40	356	3
1293	KOHLSCHUTTER	12.1 N	155.1 E	37	110	40		4
1294	KOHLSCHUTTER	12.0 N	153.7 E	37	110	40		6
1295	ST JOHN, KOHLSCHUTTER	12.0 N	152.3 E	37	110	40		7
1296	ST JOHN	11.8 N	150.8 E	37	110	40		9
1552	MILLS, E OF	9.4 N	159.3 E	38	109	VERT		-1
1553	MILLS	9.4 N	158.3 E	38	109	VERT		0
1554	MILLS	9.3 N	156.9 E	38	109	VERT		2
1555	MILLS	9.3 N	155.5 E	38	109	VERT		3
1556	MILLS	9.2 N	154.0 E	38	110	VERT		5
1557	ST JOHN	9.1 N	152.6 E	38	110	VERT		6
1558	ST JOHN	9.0 N	151.1 E	38	110	VERT		8
1840	MILLS, E OF	9.6 N	159.8 E	39	108	VERT		-2
1841	MILLS	9.7 N	158.7 E	39	108	VERT		-1
1842	MILLS	9.4 N	157.5 E	39	108	VERT		0
1843	MILLS	9.3 N	156.4 E	39	108	VERT		1
1844	MILLS	9.0 N	155.2 E	39	108	VERT		2
1845	MILLS	8.9 N	153.8 E	39	109	VERT		4
1846	ST JOHN	8.8 N	152.6 E	39	109	VERT		5
1847	ST JOHN	8.7 N	151.3 E	39	109	VERT		6
2069	ST. JOHN	9.4 N	150.2 E	47	105	VERT		0

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 140 TO 150 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
54	MILLS, SCHUSTER	6.7 N	149.5 E	17	121	VERT		30
55	SCHUSTER	6.7 N	148.0 E	17	121	VERT		31
56	SCHUSTER, MENDELEEV	6.7 N	147.2 E	17	121	VERT		32
57	SCHUSTER, MENDELEEV	6.5 N	146.1 E	17	121	VERT		33
58	SCHUSTER, MENDELEEV	6.4 N	144.8 E	17	122	VERT		34
59	SCHUSTER, MENDELEEV	6.1 N	143.5 E	17	122	VERT		36
60	SCHUSTER, MENDELEEV	5.9 N	142.5 E	17	122	VERT		37
61	MENDELEEV	5.9 N	141.4 E	17	122	VERT		38
62	MENDELEEV	5.9 N	140.2 E	17	122	VERT		39
338	HENDERSON, SCHUSTER	7.2 N	149.3 E	18	120	VERT		29
339	SCHUSTER	7.0 N	148.0 E	18	120	VERT		30
340	SCHUSTER, MENDELEEV	6.8 N	146.6 E	18	121	VERT		32
341	SCHUSTER, MENDELEEV	6.6 N	145.3 E	18	121	VERT		33
342	SCHUSTER, MENDELEEV	6.4 N	143.7 E	18	121	VERT		35
343	SCHUSTER, MENDELEEV	6.2 N	142.7 E	18	121	VERT		36
344	MENDELEEV	6.0 N	141.3 E	18	121	VERT		37
468	SCHUSTER, MENDELEEV	7.5 N	148.8 E	25	117	25		22
469	SCHUSTER, MENDELEEV	7.6 N	147.4 E	25	117	25		24
470	SCHUSTER, MENDELEEV	7.6 N	146.5 E	25	117	25	270	25
471	SCHUSTER, MENDELEEV	7.2 N	144.9 E	25	118	25		26
472	SCHUSTER, MENDELEEV	7.1 N	143.7 E	25	118	25		28
473	MENDELEEV	7.0 N	142.2 E	25	118	25		29
474	MENDELEEV, HARTMANN	7.0 N	140.9 E	25	118	25		30
601	SCHUSTER, HENDERSON	4.8 N	149.9 E	26	117	40		21
602	SCHUSTER, HENDERSON	4.5 N	148.5 E	26	117	40		22
603	SCHUSTER, HENDERSON	4.3 N	147.0 E	26	117	40		24
604	SCHUSTER, MENDELEEV	4.3 N	145.8 E	26	117	40		25
605	MENDELEEV, SCHUSTER	4.1 N	144.4 E	26	117	40		26
606	MENDELEEV	3.9 N	143.0 E	26	118	40		28
607	MENDELEEV	3.5 N	141.7 E	26	118	40		29
608	MENDELEEV	3.5 N	140.4 E	26	118	40		30
733	ST JOHN	11.3 N	149.3 E	27	116	40		20
734	ST JOHN	11.2 N	147.8 E	27	117	40		21
735	MENDELEEV, NE RIM	11.0 N	146.5 E	27	117	40		22
736	MENDELEEV, NE RIM	10.8 N	145.1 E	27	117	40		24
737	MENDELEEV	10.7 N	143.6 E	27	117	40		26
738	MENDELEEV	10.6 N	142.2 E	27	117	40		27
739	MENDELEEV	10.4 N	141.0 E	27	118	40		28
868	ST JOHN	7.9 N	149.5 E	28	116	VERT		19
869	SCHUSTER	8.0 N	148.1 E	28	116	VERT		20

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 140 TO 150 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
870	SCHUSTER	7.8 N	147.2 E	28	116	VERT		21
871	MENDELEEV, SCHUSTER	7.7 N	146.2 E	28	117	VERT		22
872	MENDELEEV, SCHUSTER	7.5 N	144.8 E	28	117	VERT		23
873	MENDELEEV	7.4 N	143.3 E	28	117	VERT		25
874	MENDELEEV	7.3 N	142.1 E	28	117	VERT		26
875	MENDELEEV	7.0 N	140.8 E	28	117	VERT		29
1159	SCHUSTER, ST JOHN	8.0 N	149.2 E	29	115	VERT		18
1160	SCHUSTER	8.1 N	148.0 E	29	115	VERT		19
1161	SCHUSTER, MENDELEEV	7.9 N	146.6 E	29	115	VERT		21
1162	MENDELEEV	7.7 N	145.3 E	29	115	VERT		22
1163	MENDELEEV	7.5 N	144.2 E	29	116	VERT		24
1164	MENDELEEV	7.4 N	142.8 E	29	116	VERT		25
1165	MENDELEEV	7.4 N	141.5 E	29	116	VERT		26
1297	ST JOHN	11.9 N	149.4 E	37	111	40		10
1298	ST JOHN	11.8 N	148.2 E	37	111	40		11
1299	MENDELEEV	11.6 N	146.6 E	37	111	40		13
1300	MENDELEEV	11.5 N	145.1 E	37	111	40	355	14
1301	MENDELEEV	11.4 N	143.7 E	37	111	40		16
1302	MENDELEEV	11.3 N	142.4 E	37	111	40		17
1303	MENDELEEV	11.2 N	141.2 E	37	111	40		18
1559	ST JOHN	8.8 N	149.7 E	38	110	VERT		9
1560	ST JOHN	8.6 N	148.3 E	38	110	VERT		10
1561	MENDELEEV	8.4 N	147.1 E	38	110	VERT		11
1562	MENDELEEV	8.3 N	145.8 E	38	111	VERT		13
1563	MENDELEEV	8.3 N	144.4 E	38	111	VERT		14
1564	MENDELEEV	8.3 N	142.8 E	38	111	VERT		16
1565	MENDELEEV	8.2 N	141.3 E	38	111	VERT		17
1848	ST JOHN	8.6 N	150.0 E	39	109	VERT		8
1849	ST JOHN	8.5 N	148.6 E	39	109	VERT		9
1850	SCHUSTER, MENDELEEV	8.3 N	147.3 E	39	110	VERT		10
1851	MENDELEEV	8.3 N	146.1 E	39	110	VERT		11
1852	MENDELEEV	8.2 N	144.7 E	39	110	VERT		13
1853	MENDELEEV	8.4 N	143.2 E	39	110	VERT		14
1854	MENDELEEV	8.4 N	141.7 E	39	110	VERT		16
1855	MENDELEEV	8.3 N	140.3 E	39	110	VERT		17
1875	FIRSOV	5.7 N	144.8 E	39	114	VERT		43
2070	ST. JOHN	9.3 N	148.8 E	47	105	VERT		2
2071	ST. JOHN, MENDELEEV, E RIM	9.3 N	147.7 E	47	105	VERT		3
2072	MENDELEEV, E RIM	9.2 N	146.7 E	47	106	VERT		4
2073	MENDELEEV, E RIM	9.1 N	145.3 E	47	106	VERT		5

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 140 TO 150 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2074	MENDELEEV	9.1 N	144.1 E	47	106	VERT		6
2075	MENDELEEV	9.0 N	142.8 E	47	106	VERT		7
2076	MENDELEEV	9.0 N	141.4 E	47	106	VERT		8
2077	MENDELEEV	8.8 N	140.2 E	47	106	VERT		9
2357	HENDERSON, SCHUSTER	6.2 N	149.0 E	48	104	40	176	-1
2358	SCHUSTER	6.2 N	148.0 E	48	104	40		0
2359	SCHUSTER, MENDELEEV	6.1 N	146.8 E	48	104	40		1
2360	SCHUSTER, MENDELEEV	6.1 N	146.0 E	48	105	40		2
2361	SCHUSTER, MENDELEEV	6.0 N	145.0 E	48	105	40		3
2362	SCHUSTER, MENDELEEV	5.9 N	143.5 E	48	105	40		5
2363	MENDELEEV	5.8 N	142.0 E	48	105	40		6
2364	MENDELEEV	6.0 N	140.8 E	48	105	40		7

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 130 TO 140 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
63	MENDELEEV	5.7 N	138.8 E	17	123	VERT		41
64	MENDELEEV, HARTMANN	5.6 N	137.7 E	17	123	VERT		42
65	MENDELEEV, HARTMANN	5.6 N	136.6 E	17	123	VERT		43
66	MENDELEEV, HARTMANN, GREEN	5.4 N	135.2 E	17	123	VERT		44
67	MENDELEEV, HARTMANN, GREEN	5.2 N	134.2 E	17	123	VERT		45
68	HARTMANN, GREEN	5.3 N	133.2 E	17	123	VERT		46
69	HARTMANN, GREEN	5.2 N	132.2 E	17	123	VERT		47
70	GREEN, GREGORY, MOROZOV	5.1 N	130.7 E	17	124	VERT		49
345	MENDELEEV	6.0 N	139.4 E	18	121	VERT		39
346	MENDELEEV	5.9 N	138.3 E	18	121	VERT		40
347	MENDELEEV, HARTMANN	5.6 N	137.0 E	18	122	VERT		41
348	MENDELEEV, HARTMANN, GREEN	5.2 N	135.3 E	18	122	VERT		43
349	MENDELEEV, HARTMANN, GREEN	5.2 N	134.0 E	18	122	VERT		44
350	HARTMANN, GREEN	5.1 N	132.7 E	18	122	VERT		46
351	GREEN	5.0 N	131.5 E	18	122	VERT		47
475	MENDELEEV, HARTMANN	6.9 N	139.6 E	25	118	25		32
476	MENDELEEV, HARTMANN, GREEN	6.7 N	138.2 E	25	118	25		33
477	MENDELEEV, HARTMANN, GREEN	6.7 N	136.7 E	25	118	25		34
478	MENDELEEV, HARTMANN, GREEN	6.3 N	135.3 E	25	118	25		36
479	GREEN, MOROZOV, GREGORY	6.3 N	133.9 E	25	119	25		37
480	GREEN, MOROZOV, GREGORY	6.2 N	132.7 E	25	119	25	266	38
481	GREEN, MOROZOV, GREGORY	6.2 N	131.3 E	25	119	25		40
482	MOROZOV, GREGORY	5.8 N	130.1 E	25	119	25		41
609	MENDELEEV	3.5 N	138.7 E	26	118	40		32
610	MENDELEEV	3.4 N	137.6 E	26	118	40	174	33
611	MENDELEEV, HARTMANN	3.4 N	136.2 E	26	119	40		34
612	GREEN, HARTMANN	3.5 N	134.9 E	26	119	40		36
613	GREEN, HARTMANN	3.0 N	133.4 E	26	119	40		37
614	GREEN, HARTMANN	2.9 N	132.2 E	26	119	40		38
615	GREEN, GREGORY	2.7 N	130.7 E	26	119	40		39
740	MENDELEEV	10.3 N	139.8 E	27	118	40	354	29
741	MENDELEEV	10.4 N	138.2 E	27	118	40		31
742	MENDELEEV, NW RIM	10.3 N	136.8 E	27	118	40		32
743	MENDELEEV, NW RIM, VETCHINKIN	10.1 N	135.4 E	27	118	40		34
744	VETCHINKIN	9.9 N	133.8 E	27	118	40		35
745	VETCHINKIN	9.6 N	132.7 E	27	119	40		36
746	VETCHINKIN	9.4 N	131.3 E	27	119	40		38
876	MENDELEEV	7.1 N	139.2 E	28	117	VERT		30
877	MENDELEEV	7.0 N	138.1 E	28	117	VERT		31
878	MENDELEEV	7.0 N	136.8 E	28	118	VERT		32

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 130 TO 140 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
879	MENDELEEV, GREEN	6.9 N	135.7 E	28	118	VERT		33
880	GREEN	6.8 N	134.4 E	28	118	VERT		34
881	GREEN	6.7 N	133.3 E	28	118	VERT		35
882	GREEN	6.3 N	132.0 E	28	119	VERT		36
883	GREEN	6.2 N	130.8 E	28	119	VERT		38
1166	MENDELEEV	7.3 N	140.0 E	29	116	VERT		27
1167	MENDELEEV	7.3 N	138.8 E	29	116	VERT		28
1168	MENDELEEV	7.1 N	137.5 E	29	117	VERT		30
1169	MENDELEEV	7.0 N	136.4 E	29	117	VERT		31
1170	MENDELEEV, GREEN	6.9 N	135.1 E	29	117	VERT		32
1171	GREEN	6.8 N	133.7 E	29	117	VERT		33
1172	GREEN	6.7 N	132.6 E	29	117	VERT		34
1173	GREEN	6.5 N	131.3 E	29	117	VERT		36
1174	MOROZOV, GREEN	6.3 N	130.1 E	29	118	VERT		37
1304	MENDELEEV	11.2 N	139.8 E	37	112	40		19
1305	MENDELEEV	11.0 N	138.2 E	37	112	40		21
1306	MENDELEEV	11.0 N	136.8 E	37	112	40		22
1307	MENDELEEV	10.9 N	135.5 E	37	112	40		24
1308	VETCHINKIN	10.9 N	134.2 E	37	113	40		25
1309	VETCHINKIN	10.8 N	132.8 E	37	113	40		26
1310	VETCHINKIN	10.7 N	131.5 E	37	113	40	353	28
1566	MENDELEEV	8.3 N	139.8 E	38	112	VERT		19
1567	MENDELEEV	8.2 N	138.6 E	38	112	VERT		20
1568	MENDELEEV	8.1 N	137.9 E	38	112	VERT		21
1569	MENDELEEV	8.0 N	135.8 E	38	112	VERT		23
1570	MENDELEEV	8.0 N	134.6 E	38	112	VERT		24
1571	VETCHINKIN	7.8 N	133.0 E	38	112	VERT		25
1572	VETCHINKIN	7.5 N	131.7 E	38	112	VERT		27
1573	VETCHINKIN	7.4 N	130.1 E	38	113	VERT		28
1856	MENDELEEV	8.3 N	139.0 E	39	111	VERT		19
1857	MENDELEEV	8.2 N	137.8 E	39	111	VERT		20
1858	MENDELEEV	8.2 N	136.4 E	39	111	VERT		21
1859	MENDELEEV	8.0 N	135.3 E	39	111	VERT		22
1860	GREEN, VETCHINKIN	7.8 N	134.0 E	39	111	VERT		23
1861	GREEN, VETCHINKIN	7.8 N	132.8 E	39	112	VERT		25
1862	VETCHINKIN	7.7 N	131.6 E	39	112	VERT		26
1863	MOROZOV, VETCHINKIN	7.6 N	130.2 E	39	112	VERT		27
2078	MENDELEEV	8.8 N	139.0 E	47	106	VERT		10
2079	MENDELEEV	8.8 N	138.0 E	47	106	VERT		11
2080	MENDELEEV, W RIM	8.7 N	136.9 E	47	107	VERT		12

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 130 TO 140 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2081	MENDELEEV, W RIM	8.7 N	135.6 E	47	107	VERT		14
2082	MENDELEEV, W RIM, VETCHINKIN	8.6 N	134.5 E	47	107	VERT		15
2083	MENDELEEV, W RIM, VETCHINKIN	8.6 N	133.3 E	47	107	VERT		16
2084	VETCHINKIN	8.5 N	132.3 E	47	107	VERT		17
2085	VETCHINKIN	8.4 N	131.1 E	47	107	VERT		18
2365	MENDELEEV	5.7 N	139.4 E	48	105	40		9
2366	MANDELEEV, HARTMANN	5.8 N	138.2 E	48	105	40		10
2367	MENDELEEV, HARTMANN	5.7 N	137.0 E	48	106	40		11
2368	MENDELEEV, HARTMANN, GREEN	5.8 N	135.1 E	48	106	40		13
2369	MENDELEEV, HARTMANN, GREEN	5.7 N	134.3 E	48	106	40		14
2370	HARTMANN, GREEN	5.7 N	133.2 E	48	106	40	177	15
2371	HARTMANN, GREEN	5.6 N	131.7 E	48	106	40		16
2372	GREEN, MOROZOV, GREGORY	5.5 N	130.5 E	48	106	40		17
2692	MENDELEEV, NW RIM	10.6 N	137.6 E	60	101	VERT		-1
2693	MENDELEEV, NW RIM	10.5 N	136.6 E	60	101	VERT		0
2694	MENDELEEV, NW RIM	10.3 N	135.7 E	60	101	VERT		1
2695	VETCHINKIN, MENDELEEV, NW RIM	10.3 N	134.5 E	60	101	VERT		2
2696	VETCHINKIN	10.1 N	133.5 E	60	101	VERT		3
2697	VETCHINKIN	10.1 N	132.3 E	60	101	VERT		4
2698	VETCHINKIN	10.1 N	131.4 E	60	101	VERT		5
2699	VETCHINKIN	9.9 N	130.2 E	60	101	VERT		6
2852	MENDELEEV, NW OF	10.3 N	135.8 E	63	98	VERT		-2
2853	MENDELEEV, NW OF	10.3 N	134.7 E	63	98	VERT		-1
2854	MENDELEEV, NW OF	10.3 N	133.7 E	63	98	VERT		0
2855	VETCHINKIN	10.3 N	132.6 E	63	98	VERT		1
2856	VETCHINKIN	10.2 N	131.6 E	63	98	VERT		2
2857	VETCHINKIN	10.2 N	130.7 E	63	98	VERT		3

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 120 TO 130 E

NASA PHOTO A516-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
71	GREEN, GREGORY, MOROZOV	4.5 N	129.8 E	17	124	VERT		50
72	GREGORY, MOROZOV	4.3 N	128.7 E	17	124	VERT		51
73	GREGORY, MOROZOV	4.2 N	127.3 E	17	124	VERT		52
74	GREGORY, MOROZOV	4.0 N	126.4 E	17	124	VERT		53
75	GREGORY, MOROZOV	3.8 N	125.2 E	17	124	VERT		55
76	KING, E RIM	3.8 N	123.8 E	17	124	VERT		56
77	KING	3.7 N	122.7 E	17	124	VERT		57
78	KING	3.4 N	121.3 E	17	124	VERT		58
79	KING	3.3 N	120.3 E	17	124	VERT		59
352	GREEN	4.8 N	130.0 E	18	123	VERT		48
353	MOROZOV, GREGORY	4.6 N	128.7 E	18	123	VERT		50
354	MOROZOV, GREGORY	4.5 N	127.6 E	18	123	VERT		51
355	MOROZOV, GREGORY	4.3 N	126.1 E	18	123	VERT		52
356	GREGORY, KING	4.3 N	124.4 E	18	123	VERT		54
357	KING	4.0 N	122.8 E	18	123	VERT		56
358	KING	4.0 N	121.8 E	18	123	VERT		57
359	KING	3.6 N	120.6 E	18	123	VERT		58
483	MOROZOV, GREGORY	5.7 N	128.9 E	25	120	25		42
484	MOROZOV, GREGORY, KING	5.4 N	127.6 E	25	120	25		43
485	MOROZOV, KING	5.3 N	126.3 E	25	120	25		45
486	KING	5.2 N	124.8 E	25	120	25		46
487	KING	4.9 N	123.5 E	25	120	25		48
488	KING, ABUL WAFA	4.7 N	122.2 E	25	120	25		49
489	KING, ABUL WAFA	4.5 N	120.8 E	25	120	25		50
616	MOROZOV, GREGORY	2.7 N	129.3 E	26	119	40		41
617	MOROZOV, GREGORY	2.1 N	128.0 E	26	120	40		43
618	MOROZOV, GREGORY	2.0 N	126.7 E	26	120	40		44
619	MOROZOV, GREGORY	2.0 N	125.2 E	26	120	40		45
620	GREGORY, BECVAR	1.7 N	123.8 E	26	120	40	172	47
621	KING	1.9 N	122.5 E	26	120	40		48
622	KING	1.5 N	121.4 E	26	120	40		49
747	VETCHINKIN, MESHCHERSKY	9.3 N	129.9 E	27	119	40		39
748	VETCHINKIN, MESHCHERSKY	9.3 N	128.4 E	27	119	40		41
749	OSTWALD, MESHCHERSKY	9.2 N	127.1 E	27	119	40		42
750	OSTWALD, MESHCHERSKY	9.3 N	125.8 E	27	119	40	352	43
751	OSTWALD, MESHCHERSKY	9.2 N	124.3 E	27	119	40		45
752	KING, OSTWALD	8.8 N	123.0 E	27	120	40		46
753	KING, OSTWALD, GUYOT	8.8 N	121.8 E	27	120	40		47
754	KING, OSTWALD, GUYOT	8.8 N	120.6 E	27	120	40		48
884	MOROZOV	6.0 N	129.4 E	28	119	VERT		39

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 120 TO 130 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
885	MOROZOV	5.9 N	128.2 E	28	119	VERT		40
886	MOROZOV	5.7 N	126.8 E	28	119	VERT		42
887	MOROZOV	5.6 N	125.7 E	28	119	VERT		43
888	MOROZOV	5.6 N	124.5 E	28	119	VERT		44
889	KING	5.2 N	123.2 E	28	119	VERT		45
890	KING	4.9 N	122.0 E	28	119	VERT		46
891	KING	4.8 N	120.7 E	28	119	VERT		48
1175	MOROZOV	6.2 N	128.8 E	29	118	VERT		39
1176	MOROZOV	6.0 N	127.6 E	29	118	VERT		40
1177	MOROZOV	5.8 N	126.2 E	29	118	VERT		41
1178	MOROZOV	5.7 N	125.0 E	29	118	VERT		42
1179	KING	5.5 N	123.8 E	29	118	VERT		43
1180	KING	5.3 N	122.4 E	29	118	VERT		45
1181	KING	5.2 N	121.3 E	29	118	VERT		46
1311	VETCHINKIN, MESHCHERSKY	10.5 N	130.0 E	37	113	40		29
1312	VETCHINKIN, MESHCHERSKY	10.4 N	128.7 E	37	113	40		30
1313	MESHCHERSKY	10.3 N	127.4 E	37	113	40		32
1314	MESHCHERSKY, OSTWALD	10.2 N	125.9 E	37	114	40		33
1315	MESHCHERSKY, OSTWALD	10.1 N	124.5 E	37	114	40		35
1316	OSTWALD	9.8 N	123.4 E	37	114	40		36
1317	OSTWALD	9.5 N	121.8 E	37	114	40		37
1318	OSTWALD, GUYOT	9.3 N	120.4 E	37	114	40		39
1574	MOROZOV	7.3 N	128.7 E	38	113	VERT		30
1575	MOROZOV	7.2 N	127.5 E	38	113	VERT		31
1576	MOROZOV	6.9 N	126.2 E	38	113	VERT		32
1577	MOROZOV	6.7 N	124.8 E	38	113	VERT		34
1578	KING	6.7 N	123.4 E	38	113	VERT		35
1579	KING	6.6 N	122.1 E	38	113	VERT		36
1580	KING	6.6 N	120.7 E	38	113	VERT		38
1864	MOROZOV	7.5 N	128.8 E	39	112	VERT		29
1865	MOROZOV	7.4 N	127.7 E	39	112	VERT		30
1866	MOROZOV	7.1 N	126.5 E	39	112	VERT		31
1867	MOROZOV	7.0 N	125.0 E	39	112	VERT		32
1868	KING	6.8 N	123.7 E	39	113	VERT		34
1869	KING	6.6 N	122.6 E	39	113	VERT		35
1870	KING	6.4 N	121.5 E	39	113	VERT		36
1871	KING	6.5 N	120.3 E	39	113	VERT		37
2086	VETCHINKIN, MOROZOV, NE RIM	8.4 N	129.8 E	47	107	VERT		20
2087	MOROZOV, N RIM	8.3 N	128.5 E	47	107	VERT		21
2088	MOROZOV, N RIM	8.2 N	127.4 E	47	108	VERT		22

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 120 TO 130 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2089	OSTWALD, E OF	8.1 N	126.3 E	47	108	VERT		23
2090	OSTWALD	8.0 N	125.1 E	47	108	VERT		24
2091	OSTWALD, KING	7.9 N	123.8 E	47	108	VERT		26
2092	OSTWALD, KING	7.8 N	122.5 E	47	108	VERT		27
2093	OSTWALD, KING	7.7 N	121.3 E	47	108	VERT		28
2094	OSTWALD, KING, GUYOT	7.6 N	120.3 E	47	109	VERT		29
2373	GREEN, MOROZOV, GREGORY	5.4 N	129.3 E	48	106	40		18
2374	MOROZOV, GREGORY	5.2 N	128.0 E	48	106	40		19
2375	MOROZOV, GREGORY	4.9 N	126.6 E	48	106	40		21
2376	MOROZOV, GREGORY	4.8 N	125.4 E	48	106	40		23
2377	KING, GREGORY	4.6 N	124.1 E	48	106	40		24
2378	KING	4.6 N	122.9 E	48	107	40		25
2379	KING	4.5 N	121.5 E	48	107	40		26
2380	KING	4.4 N	120.3 E	48	107	40	174	28
2700	VETCHINKIN	9.8 N	129.0 E	60	101	VERT		7
2701	VETCHINKIN, W OF	9.7 N	127.8 E	60	101	VERT		8
2702	MESHCHERSKY	9.7 N	126.7 E	60	101	VERT		9
2703	MESHCHERSKY, OSTWALD	9.6 N	125.7 E	60	101	VERT		10
2704	MESHCHERSKY, OSTWALD	9.5 N	124.6 E	60	101	VERT		11
2705	MESHCHERSKY, OSTWALD	9.4 N	123.4 E	60	101	VERT		12
2706	OSTWALD	9.3 N	122.6 E	60	101	VERT		13
2707	OSTWALD	9.1 N	121.7 E	60	102	VERT		14
2708	OSTWALD	9.2 N	120.7 E	60	102	VERT		15
2858	VETCHINKIN	10.1 N	129.8 E	63	98	VERT		4
2859	VETCHINKIN, W OF	10.0 N	128.4 E	63	98	VERT		5
2860	MESHCHERSKY	10.0 N	127.4 E	63	98	VERT		6
2861	MESHCHERSKY	9.8 N	126.2 E	63	99	VERT		7
2862	OSTWALD, MESHCHERSKY	9.9 N	125.1 E	63	99	VERT		8
2863	OSTWALD	9.7 N	124.1 E	63	99	VERT		9
2864	OSTWALD	9.5 N	123.2 E	63	99	VERT		10
2865	OSTWALD	9.5 N	122.1 E	63	99	VERT		11
2866	OSTWALD	9.4 N	121.0 E	63	99	VERT		12
2867	OSTWALD	9.4 N	120.4 E	63	100	VERT		13

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 110 TO 120 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
80	KING, ABUL WAFA	3.1 N	118.9 E	17	124	VERT		61
81	KING, ABUL WAFA	3.1 N	117.7 E	17	124	VERT		62
82	ABUL WAFA	3.0 N	116.7 E	17	124	VERT		63
83	ABUL WAFA, FIRSOV	2.8 N	115.7 E	17	124	VERT		64
84	ABUL WAFA, FIRSOV	2.5 N	114.8 E	17	124	VERT		65
85	ABUL WAFA, FIRSOV	1.9 N	113.8 E	17	124	VERT		66
86	FIRSOV, BUISSON	1.5 N	112.5 E	17	124	VERT		67
87	FIRSOV, BUISSON	1.5 N	111.4 E	17	124	VERT		68
88	FIRSOV, BUISSON	1.1 N	110.3 E	17	124	VERT		69
360	KING, ABUL WAFA	3.5 N	119.5 E	18	123	VERT		59
361	KING, ABUL WAFA	3.2 N	117.8 E	18	123	VERT		61
362	ABUL WAFA	3.0 N	116.6 E	18	123	VERT		62
363	ABUL WAFA, FIRSOV	2.6 N	115.2 E	18	123	VERT		63
364	ABUL WAFA, FIRSOV	2.1 N	114.2 E	18	123	VERT		64
365	FIRSOV	1.6 N	112.4 E	18	123	VERT		66
366	FIRSOV, BUISSON	1.4 N	111.1 E	18	124	VERT		67
490	KING, ABUL WAFA	4.5 N	119.5 E	25	120	25	269	52
491	KING, ABUL WAFA, FIRSOV	4.1 N	118.0 E	25	120	25		53
492	ABUL WAFA, FIRSOV, BUISSON	4.0 N	116.7 E	25	121	25		55
493	ABUL WAFA, FIRSOV, BUISSON	3.7 N	115.2 E	25	121	25		56
494	ABUL WAFA, FIRSOV, BUISSON	3.1 N	113.5 E	25	121	25		58
495	FIRSOV	2.7 N	112.4 E	25	121	25		59
496	SAENGER, SAHA	2.5 N	111.0 E	25	121	25		60
623	KING, ABUL WAFA	1.2 N	119.8 E	26	120	40		51
624	ABUL WAFA	1.0 N	118.4 E	26	121	40		52
625	ABUL WAFA, VESALIUS	.8 N	117.1 E	26	121	40		53
626	ABUL WAFA, VESALIUS	.8 N	115.8 E	26	121	40		55
627	ABUL WAFA, VESALIUS	.5 N	114.4 E	26	121	40		56
628	BUISSON, VESALIUS	.2 S	113.2 E	26	121	40		57
629	BUISSON, VESALIUS	.5 S	111.7 E	26	121	40		59
630	BUISSON, VESALIUS	.8 S	110.5 E	26	121	40	171	60
755	KING, OSTWALD, GUYOT	8.7 N	119.9 E	27	120	40		49
756	KING, OSTWALD, GUYOT	7.5 N	117.8 E	27	120	40		51
757	LOBACHEVSKY, GUYOT	7.5 N	116.2 E	27	120	40		53
758	FIRSOV, LOBACHEVSKY, GUYOT	7.0 N	114.6 E	27	120	40		54
759	FIRSOV, LOBACHEVSKY, GUYOT	6.5 N	113.0 E	27	120	40		56
760	FIRSOV, LOBACHEVSKY	6.4 N	112.0 E	27	121	40	351	57
761	FIRSOV, LOBACHEVSKY	6.3 N	111.0 E	27	121	40		58
892	KING	4.7 N	119.4 E	28	119	VERT		49
893	KING, ABUL WAFA	4.6 N	118.3 E	28	119	VERT		50

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 110 TO 120 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
894	ABUL WAFA	4.5 N	116.8 E	28	119	VERT		51
895	ABUL WAFA	4.3 N	115.5 E	28	119	VERT		52
896	ABUL WAFA, FIRSOV	4.0 N	114.0 E	28	119	VERT		54
897	ABUL WAFA, FIRSOV	3.5 N	113.0 E	28	120	VERT		56
898	FIRSOV	3.2 N	112.0 E	28	120	VERT		57
899	FIRSOV	2.8 N	110.6 E	28	120	VERT		59
1182	KING	5.0 N	119.9 E	29	119	VERT		47
1183	KING	4.9 N	118.7 E	29	119	VERT		49
1184	KING, ABUL WAFA	4.7 N	117.4 E	29	119	VERT		50
1185	ABUL WAFA	4.5 N	116.2 E	29	119	VERT		51
1186	ABUL WAFA, FIRSOV	4.1 N	114.7 E	29	119	VERT		52
1187	ABUL WAFA, FIRSOV	3.9 N	113.5 E	29	119	VERT		54
1188	FIRSOV	3.3 N	112.3 E	29	119	VERT		55
1189	FIRSOV	3.2 N	111.3 E	29	119	VERT		56
1319	OSTWALD, GUYOT	9.0 N	119.2 E	37	114	40		40
1320	GUYOT, LOBACHEVSKY, KOSTINSKY	8.4 N	117.4 E	37	114	40	352	42
1321	GUYOT, LOBACHEVSKY, KOSTINSKY	8.6 N	116.0 E	37	115	40		43
1322	GUYOT, LOBACHEVSKY, KOSTINSKY	8.3 N	114.8 E	37	115	40		44
1323	GUYOT, LOBACHEVSKY	7.8 N	113.2 E	37	115	40		46
1324	GUYOT, LOBACHEVSKY	7.7 N	111.8 E	37	115	40		47
1325	HERTZ, LOBACHEVSKY	7.4 N	110.4 E	37	115	40		49
1581	KING	6.2 N	119.5 E	38	114	VERT		39
1582	KING	6.0 N	117.9 E	38	114	VERT		41
1583	KING, W OF	5.8 N	116.5 E	38	114	VERT		42
1584	FIRSOV	5.8 N	115.0 E	38	114	VERT		43
1585	FIRSOV	5.1 N	113.4 E	38	114	VERT		45
1586	FIRSOV	4.7 N	112.3 E	38	115	VERT		46
1587	FIRSOV	4.4 N	110.8 E	38	115	VERT		48
1872	KING	6.3 N	118.7 E	39	113	VERT		39
1873	KING	6.2 N	117.7 E	39	113	VERT		40
1874	KING, W OF	6.0 N	116.2 E	39	114	VERT		41
1876	FIRSOV	5.4 N	113.4 E	39	114	VERT		44
1877	FIRSOV	4.9 N	112.5 E	39	114	VERT		45
1878	FIRSOV	4.7 N	111.0 E	39	114	VERT		46
2095	OSTWALD, KING, GUYOT	7.6 N	119.2 E	47	109	VERT		30
2096	KING, GUYOT	7.3 N	117.9 E	47	109	VERT		32
2097	GUYOT, S RIM	7.0 N	116.7 E	47	109	VERT		33
2098	LOBACHEVSKY	6.7 N	115.5 E	47	109	VERT		34
2099	LOBACHEVSKY, FIRSOV	6.2 N	114.2 E	47	109	VERT		35
2100	FIRSOV	5.8 N	112.8 E	47	109	VERT		36

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 110 TO 120 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2101	FIRSOV	5.7 N	112.0 E	47	109	VERT		37
2102	FIRSOV	5.7 N	110.8 E	47	109	VERT		39
2381	KING, ABUL WAFA	4.3 N	119.1 E	48	107	40		29
2382	KING, ABUL WAFA	4.2 N	117.8 E	48	107	40		30
2383	ABUL WAFA	3.9 N	116.5 E	48	108	40		31
2384	ABUL WAFA, FIRSOV	3.3 N	115.3 E	48	108	40		33
2385	FIRSOV, ABUL WAFA	3.0 N	113.8 E	48	108	40		34
2386	FIRSOV, ABUL WAFA	3.0 N	112.6 E	48	108	40		35
2387	FIRSOV, BUISSON	2.9 N	111.2 E	48	108	40		37
2709	GUYOT, OSTWALD	9.0 N	119.0 E	60	102	VERT		17
2710	GUYOT	8.5 N	117.5 E	60	102	VERT		18
2711	GUYOT	8.5 N	116.5 E	60	102	VERT		19
2712	LOBACHEVSKI, GUYOT	8.2 N	115.5 E	60	103	VERT		20
2713	LOBACHEVSKI, GUYOT	8.0 N	114.4 E	60	103	VERT		21
2714	LOBACHEVSKI	7.8 N	113.2 E	60	103	VERT		23
2715	LOBACHEVSKI	7.6 N	112.0 E	60	103	VERT		24
2716	LOBACHEVSKI	7.4 N	110.8 E	60	103	VERT		25
2868	KING, N OF	9.3 N	119.0 E	63	100	VERT		14
2869	GUYOT	8.8 N	116.8 E	63	100	VERT		16
2870	GUYOT	8.6 N	115.8 E	63	100	VERT		17
2871	LOBACHEVSKY, GUYOT	8.5 N	115.0 E	63	100	VERT		18
2872	LOBACHEVSKY	8.2 N	113.6 E	63	101	VERT		19
2873	LOBACHEVSKY	8.0 N	112.6 E	63	101	VERT		21
2874	LOBACHEVSKY	7.8 N	111.5 E	63	101	VERT		22
2875	LOBACHEVSKY	7.7 N	110.3 E	63	101	VERT		23
3000	KING, OSTWALD, GUYOT, KOSTINSKY	13.8 N	115.5 E	TE				
3001	KING, OSTWALD, GUYOT, KOSTINSKY	12.6 N	116.2 E	TE				
3002	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.5 N	118.1 E	TE				
3003	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.6 N	116.4 E	TE				
3004	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.4 N	114.8 E	TE				
3005	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.8 N	113.8 E	TE				
3006	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.2 N	112.1 E	TE				
3007	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.3 N	110.8 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
89	SAHA, E OF	1.0 N	109.0 E	17	124	VERT		70
90	SAHA, E OF	.7 N	107.9 E	17	124	VERT		71
91	SAHA, E RIM	.5 N	106.8 E	17	124	VERT		73
92	SAHA	.4 N	105.6 E	17	124	VERT		74
93	SAHA	.2 N	104.2 E	17	124	VERT		75
94	SAHA	.1 N	102.9 E	17	124	VERT		77
95	SAHA, WYLD	.1 S	101.4 E	17	124	VERT		78
367	FIRSOV	1.2 N	109.7 E	18	124	VERT		69
368	SAHA, NE OF	1.0 N	108.3 E	18	124	VERT		70
369	SAHA, NE OF	.8 N	107.2 E	18	124	VERT		71
370	SAHA	.7 N	105.5 E	18	124	VERT		73
371	SAHA	.5 N	104.3 E	18	124	VERT		74
372	SAHA	.3 N	103.1 E	18	124	VERT		75
373	SAHA	.1 S	101.8 E	18	124	VERT		77
374	SAHA, WYLD	.4 S	100.7 E	18	124	VERT		78
497	SAENGER, SAHA	2.4 N	109.6 E	25	121	25		62
498	SAENGER, SAHA	2.3 N	108.4 E	25	121	25		63
499	SAENGER, SAHA	2.0 N	107.1 E	25	121	25		64
500	SAENGER, SAHA	1.7 N	105.7 E	25	121	25	264	66
501	SAENGER, SAHA, WYLD	1.4 N	104.2 E	25	121	25		67
502	SAENGER, SAHA, WYLD	1.2 N	103.2 E	25	121	25		68
503	SAENGER, SAHA, WYLD	.9 N	101.7 E	25	121	25		70
504	SAENGER, SAHA, WYLD	.6 N	100.4 E	25	121	25		71
631	BUISSON, EINTHOVEN	1.2 S	109.2 E	26	121	40		61
632	EINTHOVEN	1.3 S	107.8 E	26	121	40		63
633	SAHA, EINTHOVEN	1.4 S	106.6 E	26	121	40		64
634	SAHA	2.2 S	105.2 E	26	121	40		65
635	SAHA	2.3 S	103.6 E	26	121	40		67
636	SAHA	2.3 S	102.7 E	26	121	40		68
637	SAHA, WYLD	2.5 S	101.4 E	26	121	40		69
762	FIRSOV, LOBACHEVSKY	6.2 N	109.5 E	27	121	40		60
763	MOISEEV	5.6 N	108.0 E	27	122	40		61
764	SAENGER, MOISEEV	5.4 N	106.8 E	27	122	40		62
765	SAENGER, MOISEEV	5.3 N	105.3 E	27	121	40		64
766	SAENGER, MOISEEV	5.1 N	104.3 E	27	121	40		65
767	SAENGER, MOISEEV	4.8 N	102.9 E	27	121	40		66
768	ERRO, SAENGER	4.6 N	101.5 E	27	121	40		68
769	ERRO, SAENGER	4.5 N	100.1 E	27	121	40		69
900	FIRSOV, W OF	2.7 N	109.4 E	28	120	VERT		60
901	FIRSOV, W OF	2.6 N	108.5 E	28	120	VERT		61

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
902	FIRSOV, W OF	2.4 N	107.1 E	28	120	VERT		62
903	SAHA, SAENGER	2.2 N	105.8 E	28	120	VERT		63
904	SAHA, SAENGER	1.9 N	104.5 E	28	120	VERT		64
905	SAHA, SAENGER	1.7 N	103.4 E	28	120	VERT		65
906	SAHA, SAENGER	1.4 N	102.0 E	28	120	VERT		66
907	WYLD	1.4 N	100.7 E	28	120	VERT		67
1190	FIRSOV	3.0 N	109.9 E	29	119	VERT		57
1191	FIRSOV, W OF	2.8 N	108.6 E	29	119	VERT		58
1192	FIRSOV, W OF	2.7 N	107.3 E	29	120	VERT		60
1193	SAENGER	2.5 N	106.2 E	29	120	VERT		62
1194	SAENGER	2.4 N	104.9 E	29	120	VERT		63
1195	SAENGER, SAHA	2.2 N	103.5 E	29	120	VERT		64
1196	SAENGER, SAHA	1.7 N	102.3 E	29	120	VERT		65
1197	SAENGER, SAHA	1.5 N	101.3 E	29	120	VERT		66
1198	WYLD	1.3 N	100.1 E	29	120	VERT		67
1326	HERTZ, LOBACHEVSKY	7.3 N	109.3 E	37	115	40		50
1327	HERTZ, MOISEEV	7.0 N	107.7 E	37	116	40		51
1328	HERTZ, MOISEEV	6.9 N	106.5 E	37	116	40		53
1329	HERTZ, MOISEEV, SAENGER	6.8 N	105.2 E	37	116	40		54
1330	HERTZ, MOISEEV, SAENGER	6.6 N	103.9 E	37	116	40	351	55
1331	HERTZ, MOISEEV, SAENGER	6.4 N	102.4 E	37	116	40		57
1332	ERRO, MOISEEV, SAENGER	6.2 N	101.1 E	37	116	40		58
1588	FIRSOV	4.1 N	109.7 E	38	115	VERT		49
1589	FIRSOV, W OF	4.0 N	108.1 E	38	115	VERT		50
1590	SAENGER, E OF	3.7 N	106.9 E	38	115	VERT		52
1591	SAENGER	3.3 N	105.6 E	38	115	VERT		53
1592	SAENGER	3.1 N	104.3 E	38	116	VERT		54
1593	SAENGER	3.0 N	103.0 E	38	116	VERT		56
1594	SAENGER	3.0 N	101.5 E	38	116	VERT		57
1595	SAENGER, ERRO	3.0 N	100.1 E	38	116	VERT		58
1879	FIRSOV	4.6 N	109.8 E	39	114	VERT		48
1880	FIRSOV, W OF	4.3 N	108.6 E	39	115	VERT		49
1881	SAENGER, E OF	4.2 N	107.3 E	39	115	VERT		50
1882	SAENGER	3.9 N	105.8 E	39	115	VERT		52
1883	SAENGER	3.6 N	104.8 E	39	115	VERT		53
1884	SAENGER	3.3 N	103.6 E	39	115	VERT		54
1885	SAENGER	3.0 N	102.5 E	39	115	VERT		55
1886	SAENGER	3.2 N	101.0 E	39	115	VERT		56
2103	FIRSOV	5.5 N	109.5 E	47	109	VERT		40
2104	FIRSOV, W OF	5.3 N	108.4 E	47	110	VERT		41

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2105	FIRSOV, W OF	5.1 N	107.4 E	47	110	VERT		42
2106	SAENGER, E RIM	4.9 N	106.1 E	47	110	VERT		43
2107	SAENGER	4.8 N	104.8 E	47	110	VERT		45
2108	SAENGER	4.6 N	103.8 E	47	110	VERT		46
2109	SAENGER	4.4 N	102.7 E	47	110	VERT		47
2110	SAENGER	4.3 N	101.5 E	47	110	VERT		48
2111	SAENGER, ERRO	4.0 N	100.4 E	47	110	VERT		49
2388	FIRSOV, BUISSON	2.6 N	110.0 E	48	108	40		38
2389	BUISSON	2.6 N	108.7 E	48	109	40		39
2390	SAHA, BUISSON	2.2 N	107.4 E	48	109	40	174	40
2391	SAHA	2.0 N	106.3 E	48	109	40		41
2392	SAHA, SAENGER	1.8 N	105.1 E	48	109	40		42
2393	SAENGER, SAHA	1.5 N	103.8 E	48	110	40		44
2394	SAENGER, SAHA	1.2 N	102.5 E	48	110	40		45
2395	SAENGER, SAHA, WYLD	1.3 N	101.3 E	48	110	40		46
2717	LOBACHEVSKI	7.3 N	109.5 E	60	104	VERT		26
2718	LOBACHEVSKY, W OF	7.2 N	108.6 E	60	104	VERT		27
2719	LOBACHEVSKY, W OF	7.1 N	107.8 E	60	104	VERT		28
2720	LOBACHEVSKY, W OF	6.9 N	106.6 E	60	104	VERT		29
2721	SAENGER, MOISEEV	6.8 N	105.4 E	60	104	VERT		30
2722	SAENGER, MOISEEV	6.6 N	104.3 E	60	104	VERT		31
2723	SAENGER, MOISEEV	6.3 N	103.2 E	60	104	VERT		32
2724	SAENGER, MOISEEV	6.1 N	102.2 E	60	104	VERT		33
2725	ERRO, SAENGER, MOISEEV	5.8 N	100.8 E	60	105	VERT		35
2876	LOBACHEVSKY, W OF	7.6 N	109.2 E	63	101	VERT		24
2877	LOBACHEVSKY, W OF	7.5 N	108.1 E	63	101	VERT		25
2878	LOBACHEVSKY, W OF	7.3 N	107.1 E	63	101	VERT		26
2879	MOISEEV	7.0 N	106.1 E	63	102	VERT		27
2880	SAENGER, MOISEEV	7.0 N	105.0 E	63	102	VERT		28
2881	SAENGER, MOISEEV	6.9 N	103.8 E	63	102	VERT		29
2882	SAENGER, MOISEEV	6.5 N	102.7 E	63	102	VERT		30
2883	SAENGER, MOISEEV	6.4 N	101.6 E	63	102	VERT		31
2884	ERRO	6.3 N	100.6 E	63	102	VERT		32
3008	KING, OSTWALD, GUYOT, VIEW 130E-80E	13.0 N	109.8 E	TE				
3009	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.5 N	108.7 E	TE				
3010	KING, OSTWALD, GUYOT, VIEW 130E-80E	12.4 N	107.6 E	TE				
3011	MOISEEV, HERTZ, VIEW 130E-80E	12.8 N	105.6 E	TE				
3012	MOISEEV, HERTZ, VIEW 130E-80E	12.3 N	103.7 E	TE				
3013	MOISEEV, HERTZ, VIEW 130E-80E	11.8 N	102.4 E	TE				
3014	MOISEEV, HERTZ, VIEW 130E-80E	11.7 N	100.7 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
3019	MOISEEV, HERTZ, VIEW 120E-60E	11.2 N	100.2 E	TE				
3020	MOISEEV, HERTZ, VIEW 120E-60E	11.6 N	102.2 E	TE				
3021	MOISEEV, HERTZ, VIEW 120E-60E	12.0 N	103.7 E	TE				
3022	MOISEEV, HERTZ, VIEW 120E-60E	13.5 N	103.5 E	TE				
3023	MOISEEV, HERTZ, VIEW 130E-50E	12.2 N	103.9 E	TE				
3024	MOISEEV, HERTZ, VIEW 130E-50E	12.0 N	103.3 E	TE				
3025	MOISEEV, HERTZ, VIEW 130E-50E	12.0 N	101.9 E	TE				
3026	MOISEEV, HERTZ, VIEW 130E-50E	11.3 N	101.7 E	TE				
3027	MOISEEV, HERTZ, VIEW 130E-50E	12.0 N	101.9 E	TE				
3028	MOISEEV, HERTZ, VIEW 130E-50E	12.0 N	101.0 E	TE				
3029	MOISEEV, HERTZ, VIEW 130E-50E	11.2 N	100.2 E	TE				
3030	MOISEEV, HERTZ, VIEW 130E-50E	11.2 N	100.2 E	TE				
3031	HERTZ, SAENGER, VIEW 130E-50E	11.2 N	100.2 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 90 TO 100 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
96	SAHA, WYLD	.3 S	100.0 E	17	124	VERT		79
97	SAHA, WYLD	.4 S	98.8 E	17	124	VERT		81
98	WYLD, PURKYNE	.3 S	97.3 E	17	124	VERT		82
99	WYLD, PURKYNE	.6 S	96.2 E	17	124	VERT		83
100	WYLD, PURKYNE	.5 S	95.0 E	17	124	VERT		84
101	PURKYNE	.6 S	93.7 E	17	124	VERT		86
102	PURKYNE, SMYTH'S SEA	1.3 S	92.4 E	17	124	VERT		86
103	SMYTH'S SEA	1.7 S	91.0 E	17	123	VERT		87
375	SAHA, WYLD	.7 S	99.5 E	18	123	VERT		79
376	WYLD	.6 S	98.0 E	18	123	VERT		80
377	WYLD, PURKYNE	.7 S	96.7 E	18	123	VERT		82
378	WYLD, PURKYNE	.7 S	95.4 E	18	123	VERT		83
379	PURKYNE	.6 S	94.0 E	18	123	VERT		84
380	PURKYNE, HIRAYAMA	1.2 S	92.5 E	18	123	VERT		85
381	SMYTH'S SEA	1.5 S	91.5 E	18	123	VERT		86
505	WYLD, PURKYNE, HIRAYAMA	.5 N	98.9 E	25	121	25		72
506	WYLD, PURKYNE, HIRAYAMA	.4 N	97.8 E	25	121	25		73
507	WYLD, PURKYNE, HIRAYAMA	.3 N	96.4 E	25	121	25		74
508	WYLD, PURKYNE, SMYTH'S SEA	.3 N	95.1 E	25	121	25		76
509	PURKYNE, SMYTH'S SEA	.2 N	94.1 E	25	121	25		77
510	PURKYNE, SMYTH'S SEA	.1 N	92.7 E	25	121	25	263	78
511	SMYTH'S SEA	.4 S	91.3 E	25	121	25		80
638	WYLD, SAHA	2.4 S	99.9 E	26	121	40		70
639	WYLD	2.6 S	98.7 E	26	121	40		72
640	WYLD, PURKYNE	2.8 S	97.2 E	26	121	40	170	73
641	WYLD, PURKYNE	2.8 S	95.8 E	26	121	40		74
642	HIRAYAMA, PURKYNE	2.8 S	94.8 E	26	122	40		75
643	HIRAYAMA, PURKYNE	3.3 S	93.4 E	26	122	40		76
644	HIRAYAMA, PURKYNE	3.6 S	92.2 E	26	121	40		77
645	HIRAYAMA	4.1 S	90.6 E	26	121	40		79
770	ERRO	4.3 N	98.5 E	27	121	40	350	71
771	BABCOCK, ERRO	4.2 N	97.1 E	27	121	40		72
772	BABCOCK, ERRO	4.0 N	95.8 E	27	121	40		73
773	BABCOCK	3.7 N	94.5 E	27	121	40		75
774	BABCOCK	3.5 N	93.4 E	27	121	40		76
775	BABCOCK	3.3 N	92.3 E	27	121	40		77
776	NEPER, K, BABCOCK	3.0 N	91.0 E	27	121	40		78
791	MACLAURIN, L	.2 N	91.0 E	27	121	40		82
908	WYLD	1.1 N	99.6 E	28	120	VERT		68
909	WYLD, PURKYNE	1.0 N	98.2 E	28	120	VERT		69

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 90 TO 100 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
910	WYLD, PURKYNE	.9 N	97.0 E	28	121	VERT		71
911	WYLD, PURKYNE	.8 N	95.7 E	28	121	VERT		72
912	WYLD, PURKYNE	.7 N	94.6 E	28	121	VERT		74
913	PURKYNE	.3 N	93.3 E	28	121	VERT		75
914	SMYTH'S SEA	.1 S	92.5 E	28	121	VERT		76
915	SMYTH'S SEA	.2 S	91.3 E	28	121	VERT		77
1199	WYLD	1.1 N	98.8 E	29	120	VERT		68
1200	WYLD	1.1 N	97.6 E	29	120	VERT		69
1201	WYLD, PURKYNE	.9 N	96.2 E	29	120	VERT		70
1202	WYLD, PURKYNE	.6 N	95.1 E	29	120	VERT		72
1203	PURKYNE, BABCOCK	.4 N	93.8 E	29	120	VERT		73
1204	PURKYNE, BABCOCK	.4 N	92.8 E	29	120	VERT		75
1205	SMYTH'S SEA	.2 N	91.7 E	29	120	VERT		76
1206	SMYTH'S SEA	.0	90.3 E	29	120	VERT		77
1333	ERRO, MOISEEV	5.9 N	99.8 E	37	116	40		59
1334	ERRO, BABCOCK	5.7 N	98.3 E	37	116	40		61
1335	ERRO, BABCOCK	5.4 N	97.0 E	37	116	40		62
1336	ERRO, BABCOCK	5.2 N	95.7 E	37	117	40		64
1337	ERRO, BABCOCK	5.1 N	94.3 E	37	117	40		65
1338	JANSKY, BABCOCK	4.8 N	93.1 E	37	117	40		66
1339	JANSKY, BABCOCK, NEPER	4.7 N	91.8 E	37	117	40		67
1340	JANSKY, NEPER	4.6 N	90.6 E	37	117	40	350	69
1596	ERRO	2.8 N	98.6 E	38	116	VERT		60
1597	ERRO, BABCOCK	2.7 N	97.4 E	38	116	VERT		61
1598	BABCOCK	2.4 N	96.0 E	38	116	VERT		62
1599	BABCOCK	2.0 N	94.8 E	38	117	VERT		64
1600	BABCOCK	1.8 N	93.6 E	38	117	VERT		65
1601	SMYTH'S SEA, BABCOCK	1.8 N	92.1 E	38	117	VERT		66
1602	SMYTH'S SEA, BABCOCK	1.4 N	90.9 E	38	117	VERT		68
1887	ERRO, SAENGER	2.9 N	99.8 E	39	116	VERT		58
1888	ERRO, WYLD	2.7 N	98.6 E	39	116	VERT		59
1889	ERRO, BABCOCK	2.5 N	97.5 E	39	116	VERT		60
1890	BABCOCK, PURKYNE	2.3 N	96.1 E	39	116	VERT		61
1891	BABCOCK, PURKYNE	2.0 N	94.9 E	39	116	VERT		63
1892	BABCOCK, PURKYNE	1.8 N	93.5 E	39	116	VERT		64
1893	BABCOCK, PURKYNE	1.5 N	92.3 E	39	116	VERT		65
1894	SMYTH'S SEA	.9 N	91.2 E	39	116	VERT		66
2112	ERRO	3.9 N	99.0 E	47	111	VERT		50
2113	ERRO	3.7 N	98.0 E	47	111	VERT		51
2114	ERRO, BABCOCK	3.6 N	96.8 E	47	111	VERT		53

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 90 TO 100 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2115	BABCOCK	3.5 N	95.6 E	47	111	VERT		54
2116	BABCOCK	3.3 N	94.5 E	47	111	VERT		55
2117	BABCOCK	3.0 N	93.2 E	47	112	VERT		56
2118	BABCOCK	3.0 N	92.3 E	47	112	VERT		57
2119	BABCOCK, SMYTH'S SEA	2.8 N	91.3 E	47	112	VERT		58
2396	SAHA, WYLD	1.0 N	100.0 E	48	110	40		48
2397	WYLD, SAHA	.7 N	98.8 E	48	110	40		49
2398	WYLD, PURKYNE	.7 N	97.5 E	48	110	40		50
2399	WYLD, PURKYNE	.6 N	96.4 E	48	110	40		51
2400	PURKYNE, WYLD	.4 N	95.0 E	48	111	40	174	53
2401	PURKYNE, WYLD	.1 N	93.9 E	48	111	40		54
2402	PURKYNE, HIRAYAMA	.1 S	92.9 E	48	111	40		55
2403	PURKYNE, HIRAYAMA	.1 S	91.8 E	48	111	40		56
2404	HIRAYAMA	.3 S	90.3 E	48	111	40		58
2726	ERRO, SAENGER	5.7 N	99.8 E	60	105	VERT		36
2727	ERRO	5.7 N	98.7 E	60	105	VERT		37
2728	ERRO	5.6 N	97.4 E	60	105	VERT		38
2729	ERRO, BABCOCK, OVEREXPOSED	5.4 N	96.4 E	60	105	VERT		39
2730	BABCOCK	5.0 N	95.3 E	60	105	VERT		41
2731	BABCOCK	4.9 N	94.1 E	60	106	VERT		42
2732	BABCOCK	4.8 N	93.2 E	60	106	VERT		43
2733	BABCOCK	4.5 N	92.0 E	60	106	VERT		44
2734	BABCOCK	4.2 N	91.0 E	60	106	VERT		45
2885	ERRO	6.0 N	99.5 E	63	103	VERT		33
2886	ERRO	5.9 N	98.1 E	63	103	VERT		35
2887	ERRO, BABCOCK	5.8 N	97.2 E	63	103	VERT		36
2888	BABCOCK	5.6 N	96.2 E	63	104	VERT		37
2889	BABCOCK	5.5 N	95.0 E	63	104	VERT		38
2890	BABCOCK	5.2 N	94.1 E	63	104	VERT		39
2891	BABCOCK, SMYTH'S SEA	5.1 N	93.0 E	63	104	VERT		40
2892	BABCOCK, SMYTH'S SEA	5.0 N	91.9 E	63	104	VERT		41
2893	BABCOCK, SMYTH'S SEA	4.9 N	91.0 E	63	104	VERT		42
3015	MOISEEV, HERTZ, VIEW 130E-80E	11.3 N	99.1 E	TE				
3016	MOISEEV, HERTZ, VIEW 120E-60E	11.3 N	97.2 E	TE				
3017	MOISEEV, HERTZ, VIEW 120E-60E	11.0 N	96.0 E	TE				
3018	MOISEEV, HERTZ, VIEW 120E-60E	11.0 N	98.0 E	TE				
3032	HERTZ, SAENGER, VIEW 130E-50E	11.0 N	98.6 E	TE				
3033	HERTZ, SAENGER, VIEW 120E-50E	11.2 N	98.6 E	TE				
3034	HERTZ, SAENGER, VIEW 130E-50E	11.3 N	97.2 E	TE				
3035	HERTZ, SAENGER, VIEW 130E-50E	11.3 N	97.2 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
3036	HERTZ, SAENGER, VIEW 130E-50E	10.9 N	95.7 E	TE				
3037	HERTZ, SAENGER, VIEW 130E-50E	10.9 N	96.7 E	TE				
3038	HERTZ, SAENGER, VIEW 130E-30E	10.9 N	95.7 E	TE				
3039	HERTZ, SAENGER, VIEW 130E-30E	10.5 N	95.8 E	TE				
3040	HERTZ, SAENGER, VIEW 130E-30E	10.5 N	95.8 E	TE				
3041	HERTZ, SAENGER, VIEW 130E-30E	10.9 N	95.7 E	TE				
3042	HERTZ, SAENGER, VIEW 130E-30E	11.3 N	94.7 E	TE				
3043	HERTZ, SAENGER, VIEW 130E-30E	11.3 N	93.8 E	TE				
3044	HERTZ, SAENGER, VIEW 130E-30E	11.3 N	93.8 E	TE				
3045	HERTZ, SAENGER, VIEW 130E-30E	10.0 N	91.9 E	TE				
3046	JANSKY, NEPER, VIEW 130E-20E	9.4 N	91.4 E	TE				
3047	JANSKY, NEPER, VIEW 130E-20E	9.4 N	91.4 E	TE				
3048	JANSKY, NEPER, VIEW 130E-20E	9.4 N	91.4 E	TE				
3049	JANSKY, NEPER, VIEW 130E-20E	9.5 N	91.4 E	TE				
3050	JANSKY, NEPER, VIEW 130E-20E	10.0 N	90.5 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 80 TO 90 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
104	SMYTH'S SEA	1.9 S	89.4 E	17	123	VERT		87
105	SMYTH'S SEA	2.1 S	88.3 E	17	123	VERT		86
106	SMYTH'S SEA	2.3 S	86.8 E	17	123	VERT		85
107	SMYTH'S SEA	2.5 S	85.3 E	17	123	VERT		84
108	SMYTH'S SEA, GILBERT U	2.8 S	83.7 E	17	123	VERT		83
109	GILBERT U, KASTNER G	2.9 S	82.4 E	17	123	VERT		81
110	GILBERT M, U, KASTNER, G	3.0 S	81.2 E	17	122	VERT		80
382	SMYTH'S SEA	1.7 S	90.0 E	18	123	VERT		86
383	SMYTH'S SEA	2.0 S	88.6 E	18	123	VERT		86
384	SMYTH'S SEA	2.1 S	87.1 E	18	123	VERT		86
385	SMYTH'S SEA	2.5 S	85.8 E	18	123	VERT		85
386	SMYTH'S SEA, GILBERT U	2.5 S	84.0 E	18	123	VERT		84
387	KASTNER G	2.7 S	82.8 E	18	122	VERT		83
388	KASTNER, G	2.8 S	81.6 E	18	122	VERT		82
389	KASTNER, G, GILBERT M	3.1 S	80.5 E	18	122	VERT		81
512	SMYTH'S SEA	.5 S	89.9 E	25	121	25		81
513	SMYTH'S SEA	.9 S	88.5 E	25	121	25		82
514	SMYTH'S SEA	1.3 S	87.0 E	25	121	25		84
515	SMYTH'S SEA, KASTNER, G	1.5 S	85.6 E	25	121	25		85
516	KASTNER, G	1.6 S	84.4 E	25	121	25		86
517	KASTNER, G, GILBERT	1.8 S	83.0 E	25	121	25		86
518	KASTNER, G, GILBERT	1.9 S	81.5 E	25	121	25		87
519	KASTNER, G, GILBERT	2.1 S	80.2 E	25	121	25		86
646	HIRAYAMA, BRUNNER	4.3 S	89.4 E	26	121	40		80
647	HIRAYAMA, BRUNNER	4.6 S	87.8 E	26	121	40		81
648	BRUNNER	4.6 S	86.6 E	26	121	40		82
649	BRUNNER, ANSGARIUS	4.9 S	85.2 E	26	121	40		82
650	KASTNER, F, ANSGARIUS	5.2 S	83.9 E	26	121	40	172	83
651	KASTNER, F, ANSGARIUS	5.4 S	82.4 E	26	121	40		83
652	KASTNER, F, G, ANSGARIUS	5.5 S	81.3 E	26	121	40		83
777	NEPER, K	3.0 N	89.6 E	27	121	40		80
778	NEPER, K	2.9 N	88.3 E	27	121	40		81
779	NEPER, K	2.6 N	86.7 E	27	121	40		83
780	SCHUBERT, NEPER, K	2.3 N	85.6 E	27	121	40	350	84
781	SCHUBERT, NEPER, K	1.8 N	84.0 E	27	121	40		85
782	SCHUBERT, NEPER, K	1.7 N	82.9 E	27	121	40		86
783	SCHUBERT, NEPER	1.3 N	81.6 E	27	121	40		88
784	SCHUBERT, GILBERT M	1.4 N	80.2 E	27	121	40		89
916	SMYTH'S SEA	.3 S	89.8 E	28	121	VERT		78
917	SMYTH'S SEA	.5 S	88.6 E	28	121	VERT		79

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 80 TO 90 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
918	SMYTH'S SEA	.7 S	87.4 E	28	121	VERT		80
919	SMYTH'S SEA	1.0 S	86.0 E	28	121	VERT		81
920	SMYTH'S SEA	1.2 S	84.7 E	28	121	VERT		83
921	SMYTH'S SEA	1.4 S	83.5 E	28	121	VERT		84
922	KASTNER G, SMYTH'S SEA	1.6 S	82.3 E	28	121	VERT		85
923	KASTNER G, SMYTH'S SEA	1.6 S	81.1 E	28	121	VERT		86
1207	SMYTH'S SEA	.1 S	89.0 E	29	120	VERT		78
1208	SMYTH'S SEA	.3 S	87.8 E	29	120	VERT		79
1209	SMYTH'S SEA	.6 S	86.3 E	29	120	VERT		80
1210	SMYTH'S SEA	.9 S	85.2 E	29	120	VERT		81
1211	SMYTH'S SEA	1.3 S	84.0 E	29	120	VERT		82
1212	GILBERT U, SCHUBERT B	1.3 S	82.7 E	29	120	VERT		83
1213	KASTNER G	1.5 S	81.5 E	29	120	VERT		84
1214	KASTNER G	1.5 S	80.2 E	29	120	VERT		85
1341	JANSKY, NEPER	4.3 N	89.4 E	37	117	40		70
1342	JANSKY, NEPER	4.0 N	88.2 E	37	117	40		71
1343	JANSKY, NEPER	3.9 N	86.6 E	37	117	40		73
1344	JANSKY, NEPER	3.9 N	85.2 E	37	117	40		74
1345	SCHUBERT, NEPER	3.7 N	83.8 E	37	117	40		75
1346	SCHUBERT, NEPER	3.4 N	82.6 E	37	117	40		77
1347	SCHUBERT, NEPER	3.3 N	81.2 E	37	118	40		78
1603	SMYTH'S SEA	1.2 N	89.6 E	38	117	VERT		69
1604	SMYTH'S SEA	1.0 N	88.2 E	38	117	VERT		70
1605	SMYTH'S SEA	.7 N	86.7 E	38	117	VERT		72
1606	SMYTH'S SEA	.3 N	85.3 E	38	117	VERT		73
1607	SMYTH'S SEA	.2 N	83.9 E	38	117	VERT		75
1608	SMYTH'S SEA, SCHUBERT B, GILBERT U	.0	82.6 E	38	118	VERT		76
1609	SMYTH'S SEA, SCHUBERT B, GILBERT U	.1 S	81.5 E	38	118	VERT		77
1610	SCHUBERT B, GILBERT U	.2 S	80.2 E	38	118	VERT		78
1895	SMYTH'S SEA	1.2 N	89.9 E	39	116	VERT		68
1896	SMYTH'S SEA	1.1 N	88.7 E	39	117	VERT		69
1897	SMYTH'S SEA	1.0 N	87.6 E	39	117	VERT		70
1898	SMYTH'S SEA	.7 N	86.4 E	39	117	VERT		71
1899	SMYTH'S SEA	.4 N	84.9 E	39	117	VERT		73
1900	SMYTH'S SEA, SCHUBERT	.3 N	83.8 E	39	117	VERT		74
1901	SCHUBERT, B, GILBERT U	.0	82.6 E	39	117	VERT		75
1902	SCHUBERT, KASTNER G	.2 S	81.2 E	39	117	VERT		76
2120	SMYTH'S SEA	2.6 N	90.0 E	47	112	VERT		59
2121	SMYTH'S SEA, NEPER K	2.5 N	89.0 E	47	112	VERT		60
2122	SMYTH'S SEA, NEPER K	2.4 N	87.8 E	47	112	VERT		62

APOLLO 16
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2123	SMYTH'S SEA, NEPER K	2.1 N	86.5 E	47	112	VERT		63
2124	SMYTH'S SEA, NEPER K	1.9 N	85.1 E	47	112	VERT		64
2125	SMYTH'S SEA, SCHUBERT	1.7 N	83.9 E	47	113	VERT		66
2126	SMYTH'S SEA, SCHUBERT	1.5 N	82.7 E	47	113	VERT		67
2127	GILBERT U, SCHUBERT, B	1.3 N	81.4 E	47	113	VERT		68
2128	GILBERT U, M, N, SCHUBERT, B, Z	1.0 N	80.2 E	47	113	VERT		69
2405	SMYTH'S SEA, OVEREXPOSED	.6 S	88.8 E	48	112	40		59
2406	SMYTH'S SEA, HIRAYAMA	.9 S	87.6 E	48	112	40		60
2407	SMYTH'S SEA, BRUNNER	1.2 S	86.2 E	48	112	40		61
2408	SMYTH'S SEA, KASTNER, BRUNNER	1.3 S	85.1 E	48	112	40		63
2409	SMYTH'S SEA, KASTNER	1.5 S	83.8 E	48	112	40		64
2410	KASTNER, G	1.8 S	82.5 E	48	113	40	172	65
2411	KASTNER, G	1.9 S	81.2 E	48	113	40		66
2735	BABCOCK, W OF	4.1 N	89.8 E	60	106	VERT		46
2736	NEPER K	3.9 N	88.7 E	60	107	VERT		47
2737	NEPER K	3.7 N	87.4 E	60	107	VERT		48
2738	NEPER K	3.5 N	86.3 E	60	107	VERT		49
2739	NEPER K	3.3 N	85.0 E	60	108	VERT		51
2740	NEPER K	3.2 N	84.0 E	60	108	VERT		52
2741	SCHUBERT	3.0 N	83.0 E	60	108	VERT		53
2742	SCHUBERT	2.8 N	81.7 E	60	108	VERT		54
2743	SCHUBERT	2.7 N	80.5 E	60	109	VERT		55
2894	SMYTH'S SEA	4.7 N	90.0 E	63	105	VERT		43
2895	SMYTH'S SEA, NEPER K	4.5 N	88.7 E	63	105	VERT		44
2896	SMYTH'S SEA, NEPER K	4.4 N	87.7 E	63	105	VERT		45
2897	SMYTH'S SEA, NEPER K	4.3 N	86.5 E	63	105	VERT		47
2898	SMYTH'S SEA, NEPER K	4.0 N	85.1 E	63	105	VERT		48
2899	SCHUBERT, BANACHIEWICZ, NEPER K	3.8 N	84.0 E	63	106	VERT		49
2900	SCHUBERT, B, BANACHIEWICZ	3.6 N	82.8 E	63	106	VERT		51
2901	SCHUBERT, B, BANACHIEWICZ	3.5 N	81.6 E	63	106	VERT		52
2902	SCHUBERT, B, Z, BANACHIEWICZ	3.3 N	80.6 E	63	107	VERT		53
3051	JANSKY, NEPER, VIEW 130E-20E	10.0 N	89.7 E	TE				
3053	NEPER, JANSKY, VIEW 130E-5W	10.2 N	86.8 E	TE				
3054	NEPER, JANSKY, VIEW 130E-5W	10.0 N	86.5 E	TE				
3055	NEPER, JANSKY, VIEW 130E-5W	10.0 N	86.5 E	TE				
3056	NEPER, JANSKY, VIEW 130E-5W	9.2 N	86.3 E	TE				
3057	NEPER, JANSKY, VIEW 130E-5W	10.0 N	85.4 E	TE				
3058	NEPER, JANSKY, VIEW 130E-5W	10.2 N	86.8 E	TE				
3059	NEPER, JANSKY, VIEW 130E-5W	10.0 N	87.0 E	TE				
3060	NEPER, JANSKY, VIEW 130E-5W	10.2 N	86.8 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
3061	SMYTH'S SEA, VIEW 130E-5W	10.6 N	86.4 E	TE				
3062	SMYTH'S SEA, VIEW 130E-5W	11.0 N	85.4 E	TE				
3063	SMYTH'S SEA, VIEW 130E-5W	10.8 N	84.5 E	TE				
3064	SMYTH'S SEA, VIEW 130E-5W	10.5 N	84.2 E	TE				
3065	SMYTH'S SEA, VIEW 130E-5W	9.8 N	84.3 E	TE				
3066	SMYTH'S SEA, VIEW 130E-5W	9.7 N	84.3 E	TE				
3067	SMYTH'S SEA, VIEW 130E-5W	9.7 N	83.5 E	TE				
3068	SMYTH'S SEA, VIEW 130E-5W	9.6 N	82.7 E	TE				
3069	SMYTH'S SEA, VIEW 130E-5W	9.6 N	82.7 E	TE				
3070	SMYTH'S SEA, VIEW 130E-5W	9.5 N	82.1 E	TE				
3071	SMYTH'S SEA, VIEW 130E-5W	9.5 N	82.1 E	TE				
3072	SMYTH'S SEA, VIEW 130E-5W	10.0 N	82.0 E	TE				
3073	SMYTH'S SEA, VIEW 130E-5W	10.0 N	82.0 E	TE				
3074	SMYTH'S SEA, VIEW 130E-5W	10.4 N	81.4 E	TE				
3075	SMYTH'S SEA, VIEW 130E-5W	10.4 N	81.4 E	TE				
3076	SMYTH'S SEA, VIEW 130E-5W	10.4 N	81.4 E	TE				
3077	SMYTH'S SEA, VIEW 130E-5W	10.4 N	81.4 E	TE				
3078	SMYTH'S SEA, VIEW 130E-5W	10.0 N	81.4 E	TE				
3079	SMYTH'S SEA, VIEW 130E-5W	8.8 N	81.8 E	TE				
3080	SMYTH'S SEA, VIEW 130E-5W	8.8 N	81.8 E	TE				
3081	SMYTH'S SEA, VIEW 130E-5W	8.7 N	80.9 E	TE				
3082	SMYTH'S SEA, VIEW 130E-5W	8.7 N	80.9 E	TE				
3101	OVEREXPOSED, VIEW 130E-5W	12.0 N	81.0 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 70 TO 80 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
111	GILBERT, M. U. KASTNER, G	3.2 S	79.8 E	17	122	VERT		79
112	KASTNER, A, G, GILBERT	3.5 S	78.6 E	17	122	VERT		78
113	KASTNER, A, G. GILBERT	3.7 S	77.5 E	17	122	VERT		77
114	KASTNER, A, G. GILBERT	3.9 S	76.0 E	17	122	VERT		75
115	KASTNER, A, GILBERT, K, J	4.0 S	74.5 E	17	122	VERT		74
116	GILBERT, K, J	4.4 S	73.2 E	17	122	VERT		73
117	GILBERT, K, J, MACLAURIN B, F	5.0 S	71.8 E	17	122	VERT		71
118	GILBERT, K, J, MACLAURIN B, F	5.3 S	70.8 E	17	121	VERT		70
390	KASTNER, G, GILBERT, M	3.3 S	78.8 E	18	122	VERT		79
391	KASTNER, G, GILBERT, M	3.5 S	77.7 E	18	122	VERT		78
392	KASTNER, G, GILBERT, M	3.9 S	76.3 E	18	122	VERT		77
393	KASTNER, GILBERT, K	4.2 S	74.7 E	18	122	VERT		75
394	GILBERT, J. K, MACLAURIN B	4.0 S	73.5 E	18	122	VERT		74
395	GILBERT J, K, MACLAURIN B	4.2 S	71.9 E	18	121	VERT		72
396	GILBERT J, MACLAURIN B	4.3 S	70.6 E	18	121	VERT		71
520	KASTNER, G, GILBERT	2.2 S	79.0 E	25	121	25	263	85
521	KASTNER, G, GILBERT	2.5 S	77.6 E	25	121	25		84
522	GILBERT, J, MACLAURIN B, F	2.5 S	76.1 E	25	121	25		83
523	GILBERT, J, MACLAURIN, A, B	2.7 S	74.9 E	25	121	25		82
524	GILBERT, J, MACLAURIN, A, B	3.1 S	73.3 E	25	121	25		81
525	GILBERT J, MACLAURIN, A, U	3.2 S	72.2 E	25	121	25		80
526	GILBERT J, MACLAURIN, A, U	3.4 S	70.7 E	25	120	25		78
653	KASTNER, F, G, ANSGARIUS	5.6 S	79.9 E	26	121	40		83
654	KASTNER, G, LA PEROUSE	5.8 S	78.6 E	26	121	40		82
655	KASTNER, G, LA PEROUSE	5.8 S	77.0 E	26	121	40		82
656	GILBERT, LA PEROUSE	5.8 S	75.6 E	26	121	40		81
657	GILBERT, LA PEROUSE	6.0 S	74.3 E	26	121	40		80
658	MACLAURIN F, LA PEROUSE	6.4 S	73.2 E	26	121	40		79
659	MACLAURIN F, LA PEROUSE	6.7 S	71.8 E	26	121	40		78
660	MACLAURIN F, KAPTEYN	7.0 S	70.3 E	26	121	40	172	77
785	SCHUBERT, GILBERT M	1.3 N	79.0 E	27	121	40		90
786	SCHUBERT, GILBERT, M	1.3 N	77.3 E	27	121	40		88
787	GILBERT, N	1.2 N	75.9 E	27	121	40		87
788	GILBERT, N, SCHUBERT N	1.2 N	74.8 E	27	121	40		85
789	MACLAURIN L, GILBERT	.8 N	73.6 E	27	121	40		84
790	MACLAURIN L, SCHUBERT N	.6 N	72.3 E	27	121	40	352	83
924	KASTNER G, SMYTH'S SEA	1.8 S	79.9 E	28	121	VERT		86
925	KASTNER G, GILBERT	1.9 S	78.6 E	28	121	VERT		87
926	KASTNER G, GILBERT	2.2 S	77.2 E	28	121	VERT		86
927	KASTNER G, GILBERT	2.3 S	76.0 E	28	121	VERT		85

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
928	GILBERT, J	2.5 S	74.9 E	28	121	VERT		84
929	GILBERT, J	2.6 S	73.7 E	28	121	VERT		83
930	MACLAURIN B, GILBERT J	2.8 S	72.3 E	28	121	VERT		82
931	MACLAURIN B, GILBERT J	3.0 S	71.0 E	28	121	VERT		81
1215	KASTNER G	1.8 S	79.0 E	29	120	VERT		86
1216	KASTNER G, GILBERT	1.8 S	77.8 E	29	120	VERT		87
1217	KASTNER G, GILBERT	2.1 S	76.6 E	29	120	VERT		86
1218	GILBERT	2.1 S	75.1 E	29	120	VERT		86
1219	GILBERT, J	2.2 S	74.0 E	29	120	VERT		85
1220	GILBERT J, MACLAURIN L	2.4 S	72.8 E	29	120	VERT		84
1221	GILBERT J, MACLAURIN L	2.7 S	71.4 E	29	120	VERT		83
1222	MACLAURIN, L	3.1 S	70.2 E	29	120	VERT		82
1348	SCHUBERT, BANACHIEWICZ	3.0 N	79.8 E	37	118	40		80
1349	SCHUBERT, BANACHIEWICZ	2.7 N	78.5 E	37	118	40		81
1350	SCHUBERT X, Y, BANACHIEWICZ	2.3 N	77.2 E	37	118	40	351	82
1351	SCHUBERT X, BANACHIEWICZ	2.3 N	76.1 E	37	118	40		83
1352	SCHUBERT N, X, Y	2.2 N	74.8 E	37	118	40		85
1353	SCHUBERT N, DUBIAGO	2.2 N	73.4 E	37	118	40		86
1354	SCHUBERT N, DUBIAGO	2.3 N	72.2 E	37	118	40		87
1355	SCHUBERT N, DUBIAGO	2.3 N	70.8 E	37	118	40		88
1611	GILBERT, M, N	.3 S	79.0 E	38	118	VERT		79
1612	GILBERT, N, M, SCHUBERT X, Y	.4 S	77.6 E	38	118	VERT		81
1613	GILBERT, SCHUBERT X, Y	.5 S	76.2 E	38	118	VERT		82
1614	GILBERT, SCHUBERT X, Y	.8 S	74.7 E	38	118	VERT		83
1615	MACLAURIN B, L, GILBERT	1.0 S	73.4 E	38	118	VERT		84
1616	MACLAURIN B, L	1.1 S	72.2 E	38	118	VERT		85
1617	MACLAURIN B, L	.9 S	71.6 E	38	118	VERT		86
1903	KASTNER G, SCHUBERT	.3 S	80.0 E	39	117	VERT		77
1904	KASTNER G, GILBERT M, N	.4 S	78.9 E	39	117	VERT		79
1905	GILBERT N, M, SCHUBERT Z	.4 S	77.6 E	39	117	VERT		80
1906	SCHUBERT X, Y, GILBERT	.6 S	76.3 E	39	118	VERT		81
1907	GILBERT, SCHUBERT X, Y	.7 S	75.0 E	39	118	VERT		82
1908	GILBERT, SCHUBERT Y	.9 S	73.9 E	39	118	VERT		83
1909	GILBERT, MACLAURIN L	.9 S	72.6 E	39	118	VERT		84
1910	MACLAURIN L	1.1 S	71.6 E	39	118	VERT		85
1911	MACLAURIN, L	1.2 S	70.4 E	39	118	VERT		86
2129	GILBERT, N, SCHUBERT, X	.8 N	78.8 E	47	114	VERT		71
2130	GILBERT M, N, SCHUBERT X, Y	.8 N	77.7 E	47	114	VERT		72
2131	GILBERT M, N, SCHUBERT X, Y	.6 N	76.5 E	47	114	VERT		73
2132	GILBERT N, SCHUBERT X, Y, N	.5 N	75.3 E	47	114	VERT		74

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2133	SCHUBERT Y, N, MACLAURIN L	.4 N	73.8 E	47	114	VERT		76
2134	SCHUBERT N, MACLAURIN L	.3 N	72.6 E	47	114	VERT		77
2135	SCHUBERT N, MACLAURIN L	.2 N	71.5 E	47	114	VERT		78
2412	KASTNER, G	2.1 S	80.0 E	48	113	40		67
2413	KASTNER, G, GILBERT	2.3 S	78.7 E	48	113	40		69
2414	KASTNER, G, GILBERT	2.5 S	77.8 E	48	113	40		70
2415	KASTNER, G, GILBERT	2.6 S	76.4 E	48	114	40		71
2416	KASTNER, G, GILBERT	2.8 S	75.0 E	48	114	40		72
2417	GILBERT, KASTNER	3.1 S	73.9 E	48	114	40		73
2418	GILBERT, J	3.3 S	72.7 E	48	114	40		74
2419	GILBERT J, MACLAURIN, B	3.4 S	71.4 E	48	114	40		75
2420	MACLAURIN B, F, M	3.8 S	70.2 E	48	114	40	173	76
2744	SCHUBERT, Z	2.6 N	79.4 E	60	109	VERT		56
2745	SCHUBERT F, Z	2.4 N	78.0 E	60	109	VERT		58
2746	SCHUBERT F, Y, Z	2.2 N	76.8 E	60	109	VERT		59
2747	SCHUBERT N, Y	1.8 N	75.5 E	60	110	VERT		60
2748	SCHUBERT N	1.7 N	74.4 E	60	110	VERT		61
2749	SCHUBERT N	1.5 N	73.4 E	60	110	VERT		62
2750	SCHUBERT N	1.2 N	72.4 E	60	110	VERT		63
2751	MACLAURIN L, SCHUBERT N	1.1 N	71.1 E	60	110	VERT		64
2752	MACLAURIN, L, DUBIAGO J	1.0 N	70.3 E	60	111	VERT		65
2903	SCHUBERT, B, Z, BANACHIEWICZ	3.2 N	79.3 E	63	107	VERT		54
2904	SCHUBERT E, K, Z, GILBERT N	3.0 N	78.0 E	63	108	VERT		55
2905	SCHUBERT K, X, Y, GILBERT N	2.7 N	77.0 E	63	108	VERT		56
2906	SCHUBERT K, X, Y, GILBERT N	2.5 N	76.0 E	63	108	VERT		57
2907	SCHUBERT K, N, X, Y	2.2 N	74.8 E	63	108	VERT		58
2908	SCHUBERT N, Y, DUBIAGO C	2.0 N	73.8 E	63	108	VERT		59
2909	SCHUBERT N, DUBIAGO C, MACLAURIN L	1.8 N	72.8 E	63	108	VERT		60
2910	SCHUBERT N, DUBIAGO C, MACLAURIN L	1.7 N	71.3 E	63	109	VERT		62
2911	MACLAURIN L, DUBIAGO J, M	1.5 N	70.1 E	63	109	VERT		63
3083	SMYTH'S SEA, VIEW 130E-5W	9.2 N	80.0 E	TE				
3084	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3085	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3086	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3087	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3088	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3089	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3090	SMYTH'S SEA, VIEW 130E-5W	9.5 N	79.0 E	TE				
3091	OVEREXPOSED, VIEW 130E-5W	8.2 N	75.5 E	TE				
3092	OVEREXPOSED, VIEW 130E-5W	8.2 N	75.5 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 70 TO 80 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
3093	OVEREXPOSED, VIEW 130E-5W	8.5 N	75.5 E	TE				
3094	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3095	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3096	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3097	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3098	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3099	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				
3100	OVEREXPOSED, VIEW 130E-5W	8.5 N	76.0 E	TE				

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 60 TO 70 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
119	MACLAURIN B, F	5.3 S	69.5 E	17	121	VERT		69
120	MACLAURIN B, M, A	5.2 S	68.2 E	17	121	VERT		68
121	MACLAURIN A, E, U	5.2 S	66.8 E	17	121	VERT		66
122	MACLAURIN U, LANGRENUS T	5.3 S	65.5 E	17	121	VERT		65
123	LANGRENUS, T	5.3 S	64.4 E	17	121	VERT		64
124	LANGRENUS, T, C	5.3 S	63.0 E	17	120	VERT		63
125	LANGRENUS, T, C	5.3 S	62.7 E	17	120	VERT		62
126	LANGRENUS, T, C, K, B	5.8 S	60.5 E	17	120	VERT		60
397	MACLAURIN B, P, M, A	4.4 S	69.6 E	18	121	VERT		70
398	MACLAURIN P, M, A, U	4.7 S	68.4 E	18	121	VERT		69
399	MACLAURIN P, M, A, U	4.9 S	67.4 E	18	121	VERT		68
400	MACLAURIN A, E, U	5.0 S	66.2 E	18	120	VERT		67
401	LANGRENUS, T, MACLAURIN U, E	5.0 S	64.8 E	18	120	VERT		65
402	LANGRENUS, T	5.2 S	63.8 E	18	120	VERT		64
403	LANGRENUS, T, C	5.4 S	62.1 E	18	120	VERT		63
404	LANGRENUS, T, C	5.7 S	61.2 E	18	120	VERT		62
527	MACLAURIN, U, E, H	3.6 S	69.5 E	25	120	25		77
528	MACLAURIN, LANGRENUS, T	3.7 S	68.3 E	25	120	25		76
529	MACLAURIN, LANGRENUS, T	4.0 S	67.2 E	25	120	25		75
530	LANGRENUS, T, WEBB	4.3 S	65.7 E	25	120	25	267	73
531	LANGRENUS, T, WEBB	4.5 S	64.4 E	25	120	25		72
532	LANGRENUS, T, WEBB	4.7 S	63.3 E	25	120	25		71
533	LANGRENUS, T, B, F, K	4.8 S	61.8 E	25	120	25		70
534	LANGRENUS, T, B, F, K	5.0 S	60.4 E	25	120	25		68
661	LANGRENUS A, KAPTEYN	7.0 S	68.9 E	26	121	40		75
662	LANGRENUS A, KAPTEYN	7.2 S	67.7 E	26	120	40		74
663	LANGRENUS, A	7.5 S	66.3 E	26	120	40		73
664	LANGRENUS, A	7.7 S	65.2 E	26	120	40		72
665	LANGRENUS, A	8.0 S	63.8 E	26	120	40		71
666	LANGRENUS, A	8.3 S	62.4 E	26	120	40		69
667	LANGRENUS	8.6 S	60.9 E	26	120	40		68
792	MACLAURIN, L	.1 N	69.7 E	27	120	40		80
793	MACLAURIN	.0	68.2 E	27	120	40		79
794	MACLAURIN, WEBB J	.2 S	66.7 E	27	120	40		77
795	MACLAURIN, WEBB J	.4 S	65.4 E	27	120	40		76
796	WEBB, J	.8 S	63.8 E	27	120	40		74
797	WEBB, J	.9 S	62.2 E	27	120	40		73
798	WEBB, J	1.3 S	61.0 E	27	120	40		71
932	MACLAURIN, B	3.2 S	69.8 E	28	120	VERT		80
933	MACLAURIN, B	3.5 S	68.8 E	28	120	VERT		79

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 60 TO 70 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
934	MACLAURIN, E	3.7 S	67.3 E	28	120	VERT		78
935	MACLAURIN, E	3.8 S	66.2 E	28	120	VERT		77
936	MACLAURIN H, E	4.1 S	65.2 E	28	120	VERT		76
937	MACLAURIN H, E	4.2 S	64.0 E	28	120	VERT		75
938	LANGRENUS, C, T	4.4 S	62.5 E	28	120	VERT		74
939	LANGRENUS, C, T	4.5 S	61.3 E	28	120	VERT		72
940	LANGRENUS, B, C	4.6 S	60.3 E	28	120	VERT		71
1223	MACLAURIN, B	3.2 S	68.9 E	29	120	VERT		81
1224	MACLAURIN, E	3.5 S	67.8 E	29	120	VERT		79
1225	MACLAURIN, E	3.7 S	66.7 E	29	120	VERT		78
1226	MACLAURIN, E	3.8 S	65.4 E	29	120	VERT		77
1227	LANGRENUS T	4.1 S	64.1 E	29	120	VERT		76
1228	LANGRENUS, T	4.3 S	63.1 E	29	120	VERT		75
1229	LANGRENUS, T	4.4 S	61.9 E	29	120	VERT		73
1230	LANGRENUS, T	4.5 S	60.5 E	29	120	VERT		71
1356	DUBIAGO, J, M, FIRMICUS	1.9 N	69.4 E	37	118	40		90
1357	DUBIAGO, M, Q, FIRMICUS	1.4 N	67.8 E	37	118	40		88
1358	DUBIAGO, M, Q, FIRMICUS	1.1 N	66.7 E	37	118	40		87
1359	APOLLONIUS, FIRMICUS	1.0 N	65.3 E	37	118	40		86
1360	APOLLONIUS, FIRMICUS	.4 N	63.8 E	37	118	40	351	84
1361	APOLLONIUS, FIRMICUS, WEBB	.2 N	62.4 E	37	118	40		83
1362	APOLLONIUS, H, D, WEBB, R	.0	60.8 E	37	118	40		81
1618	MACLAURIN	1.0 S	69.2 E	38	118	VERT		87
1619	MACLAURIN	1.2 S	67.7 E	38	118	VERT		87
1620	MACLAURIN, H	1.3 S	66.4 E	38	118	VERT		86
1621	MACLAURIN H	1.8 S	64.9 E	38	118	VERT		85
1622	MACLAURIN H, LANGRENUS T	2.0 S	63.8 E	38	118	VERT		84
1623	MACLAURIN H, LANGRENUS T	2.3 S	62.6 E	38	118	VERT		83
1624	WEBB, LANGRENUS C	2.7 S	60.9 E	38	119	VERT		82
1912	MACLAURIN, L	1.9 S	69.0 E	39	118	VERT		86
1913	MACLAURIN, E	2.1 S	67.6 E	39	118	VERT		87
1914	MACLAURIN, E	2.3 S	66.4 E	39	118	VERT		86
1915	MACLAURIN, E	2.5 S	65.3 E	39	118	VERT		86
1916	LANGRENUS T	2.6 S	64.0 E	39	118	VERT		85
1917	LANGRENUS T, WEBB	2.8 S	62.5 E	39	118	VERT		84
1918	LANGRENUS T, WEBB	3.2 S	61.2 E	39	118	VERT		82
2136	MACLAURIN, L	.1 S	70.0 E	47	114	VERT		79
2137	MACLAURIN, L	.6 S	69.0 E	47	115	VERT		80
2138	MACLAURIN	.7 S	68.0 E	47	115	VERT		81
2139	MACLAURIN, WEBB J	.9 S	66.7 E	47	115	VERT		82

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 60 TO 70 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2140	MACLAURIN, WEBB J	1.1 S	65.5 E	47	115	VERT		83
2141	WEBB J	1.4 S	64.1 E	47	115	VERT		84
2142	WEBB, J	1.7 S	62.8 E	47	115	VERT		85
2143	WEBB	1.8 S	61.5 E	47	116	VERT		85
2144	WEBB	2.0 S	60.2 E	47	116	VERT		86
2421	MACLAURIN, B, F, M	3.5 S	69.0 E	48	115	40		78
2422	MACLAURIN, A	3.7 S	67.5 E	48	115	40		79
2423	MACLAURIN, U, LANGRENUS	4.0 S	66.5 E	48	115	40		80
2424	MACLAURIN U, LANGRENUS, T	4.4 S	65.4 E	48	115	40		81
2425	MACLAURIN U, LANGRENUS, T	4.8 S	64.0 E	48	115	40		81
2426	LANGRENUS, T	4.8 S	63.0 E	48	115	40		82
2427	LANGRENUS, T	5.0 S	61.4 E	48	116	40		83
2428	LANGRENUS, C, T	5.4 S	60.3 E	48	116	40		83
2753	MACLAURIN, DUBIAGO Q	.7 N	69.0 E	60	111	VERT		67
2754	MACLAURIN, DUBIAGO Q	.4 N	67.7 E	60	111	VERT		68
2755	MACLAURIN, DUBIAGO Q	.3 N	66.7 E	60	111	VERT		69
2756	MACLAURIN H, WEBB C	.2 N	65.5 E	60	111	VERT		70
2757	MACLAURIN H, WEBB C	.0	64.3 E	60	112	VERT		71
2758	MACLAURIN H, WEBB C	.4 S	62.6 E	60	112	VERT		73
2759	WEBB	.7 S	61.6 E	60	113	VERT		74
2760	WEBB	.8 S	60.6 E	60	113	VERT		75
2912	MACLAURIN, K, DUBIAGO J, M, P, Q	1.3 N	68.8 E	63	110	VERT		64
2913	MACLAURIN, K, DUBIAGO J, M, P, Q	1.0 N	67.8 E	63	110	VERT		65
2914	MACLAURIN, K, DUBIAGO M, P, Q	.7 N	66.8 E	63	110	VERT		66
2915	MACLAURIN, K, MACLAURIN H, WEBB C, J	.5 N	65.6 E	63	110	VERT		67
2916	WEBB C, J. APOLLONIUS S	.5 N	64.3 E	63	110	VERT		69
2917	WEBB C, J, R, MACLAURIN H, WEBB C, J, R	.3 N	63.2 E	63	111	VERT		70
2918	WEBB, C, J, R, APOLLONIUS S	.1 N	61.8 E	63	111	VERT		71
2919	WEBB, R	.1 S	60.6 E	63	112	VERT		72

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 50 TO 60 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
127	LANGRENUS, C, F, K, B	6.0 S	59.2 E	17	120	VERT		59
128	LANGRENUS, C, F, K, B	6.5 S	57.8 E	17	119	VERT		57
129	LANGRENUS, F, K, B	6.5 S	56.7 E	17	119	VERT		56
130	LANGRENUS F, K, B, MESSIER G	6.5 S	55.5 E	17	119	VERT		55
131	LANGRENUS F, MESSIER G	6.6 S	54.2 E	17	119	VERT		54
132	GOCLENIUS A, MESSIER G	6.7 S	52.8 E	17	118	VERT		52
133	GOCLENIUS A, MESSIER G	6.8 S	51.8 E	17	118	VERT		51
134	GOCLENIUS A, MESSIER G	7.0 S	50.3 E	17	118	VERT		50
405	LANGRENUS, B, C, K	6.0 S	59.8 E	18	120	VERT		60
406	LANGRENUS, B, C, K, F	6.1 S	58.8 E	18	120	VERT		59
407	LANGRENUS, B, K, F	6.4 S	57.4 E	18	119	VERT		58
408	LANGRENUS B, K, F	6.3 S	56.0 E	18	119	VERT		57
409	LANGRENUS F, MESSIER G	6.4 S	54.8 E	18	119	VERT		55
410	LANGRENUS F, MESSIER G	6.7 S	53.5 E	18	119	VERT		54
411	MESSIER G, GOCLENIUS A	6.9 S	51.9 E	18	118	VERT		52
412	MESSIER G, GOCLENIUS A	7.0 S	50.8 E	18	118	VERT		51
535	LANGRENUS, B, F, K	5.1 S	58.8 E	25	120	25		67
536	LANGRENUS B, F, K, MESSIER G	5.4 S	57.6 E	25	119	25		65
537	LANGRENUS B, F, K, MESSIER G	5.6 S	56.3 E	25	119	25		64
538	LANGRENUS F, GOCLENIUS A	5.8 S	54.9 E	25	119	25		63
539	MESSIER G, GOCLENIUS A	6.0 S	53.5 E	25	119	25		61
540	MESSIER G, D, GOCLENIUS A	6.0 S	52.1 E	25	119	25	270	60
541	MESSIER G, D, GOCLENIUS A	6.3 S	50.7 E	25	119	25		58
668	LANGRENUS	8.6 S	59.3 E	26	120	40		66
669	LANGRENUS	8.7 S	58.0 E	26	120	40		65
670	LANGRENUS	8.8 S	56.8 E	26	119	40	173	64
671	CROZIER, LOHSE	9.0 S	55.4 E	26	119	40		63
672	CROZIER, D	9.1 S	54.0 E	26	119	40		61
673	CROZIER, D	9.3 S	52.7 E	26	119	40		60
674	CROZIER, D	9.4 S	51.3 E	26	119	40		59
799	WEBB, LANGRENUS B	1.4 S	59.9 E	27	120	40		70
800	WEBB, LANGRENUS B	1.4 S	58.3 E	27	120	40	353	69
801	WEBB, LANGRENUS B	1.4 S	57.3 E	27	119	40		68
802	LANGRENUS B	1.6 S	56.1 E	27	119	40		67
803	MESSIER G	2.0 S	54.5 E	27	119	40		65
804	MESSIER G	2.2 S	53.1 E	27	119	40		63
805	MESSIER, G	2.3 S	51.6 E	27	119	40		62
941	LANGRENUS, B, C	4.7 S	59.2 E	28	120	VERT		69
942	LANGRENUS F, B	4.8 S	57.9 E	28	120	VERT		68
943	LANGRENUS F, B	5.2 S	56.5 E	28	120	VERT		67

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 50 TO 60 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
944	MESSIER G, LANGRENUS F	5.4 S	55.2 E	28	119	VERT		66
945	MESSIER G, LANGRENUS F	5.7 S	53.8 E	28	119	VERT		65
946	MESSIER G, GOCLENIUS A	5.8 S	52.5 E	28	119	VERT		63
947	MESSIER G, GOCLENIUS A	5.9 S	51.3 E	28	119	VERT		62
948	GOCLENIUS A	5.9 S	50.1 E	28	119	VERT		61
1231	LANGRENUS, K	4.8 S	59.3 E	29	120	VERT		70
1232	LANGRENUS F, B	4.8 S	58.0 E	29	120	VERT		69
1233	LANGRENUS F	5.1 S	56.8 E	29	119	VERT		67
1234	LANGRENUS F	5.2 S	55.7 E	29	119	VERT		66
1235	MESSIER G, LANGRENUS F	5.4 S	54.4 E	29	119	VERT		65
1236	MESSIER G	5.6 S	53.0 E	29	119	VERT		64
1237	MESSIER G, GOCLENIUS A	5.7 S	51.7 E	29	119	VERT		63
1238	MESSIER G, GOCLENIUS A	5.8 S	50.6 E	29	119	VERT		61
1363	APOLLONIUS, H, D, WEBB, R	.2 S	59.7 E	37	118	40		80
1364	APOLLONIUS, H, D, WEBB, R	.2 S	58.3 E	37	118	40		79
1365	WEBB, FERTILITY, SEA OF	.5 S	57.1 E	37	118	40		77
1366	FERTILITY, SEA OF	.7 S	55.6 E	37	118	40		76
1367	TARUNTIUS	.7 S	54.3 E	37	118	40		75
1368	TARUNTIUS	.8 S	53.0 E	37	118	40		73
1369	TARUNTIUS, MESSIER	.8 S	51.5 E	37	118	40		72
1370	TARUNTIUS, MESSIER, A	1.3 S	50.2 E	37	118	40	352	71
1625	WEBB, LANGRENUS C	2.9 S	59.8 E	38	119	VERT		80
1626	WEBB. LANGRENUS C, B	3.2 S	58.7 E	38	119	VERT		79
1627	LANGRENUS B, K, F	3.5 S	57.4 E	38	119	VERT		78
1628	LANGRENUS B, K, F	3.6 S	56.0 E	38	119	VERT		77
1629	MESSIER G, LANGRENUS F	3.9 S	54.6 E	38	119	VERT		75
1630	MESSIER G	4.4 S	52.9 E	38	119	VERT		73
1631	MESSIER G, GOCLENIUS A	4.8 S	51.4 E	38	119	VERT		72
1632	MESSIER G, GOCLENIUS A	5.2 S	50.3 E	38	119	VERT		71
1919	LANGRENUS T, WEBB	3.3 S	59.9 E	39	118	VERT		81
1920	LANGRENUS C, B, K, WEBB	3.4 S	58.8 E	39	118	VERT		80
1921	LANGRENUS B, F, K	3.6 S	57.5 E	39	119	VERT		79
1922	LANGRENUS B, F, K	3.8 S	56.3 E	39	119	VERT		78
1923	LANGRENUS F, MESSIER G	4.2 S	54.8 E	39	119	VERT		76
1924	LANGRENUS F, MESSIER G	4.4 S	53.6 E	39	119	VERT		75
1925	GOCLENIUS A, MESSIER G	4.4 S	52.3 E	39	119	VERT		74
1926	GOCLENIUS A, MESSIER G	4.6 S	51.2 E	39	119	VERT		73
1927	GOCLENIUS A, MESSIER G	4.7 S	50.1 E	39	119	VERT		72
2145	WEBB, LANGRENUS B	2.2 S	58.7 E	47	116	VERT		86
2146	WEBB, LANGRENUS B	2.4 S	57.8 E	47	116	VERT		85

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 50 TO 60 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2147	LANGRENUS B	2.7 S	56.7 E	47	116	VERT		84
2148	LANGRENUS B, F, MESSIER G	2.8 S	55.3 E	47	116	VERT		83
2149	LANGRENUS F, MESSIER G	3.1 S	54.0 E	47	116	VERT		82
2150	MESSIER G	3.3 S	52.8 E	47	116	VERT		81
2151	MESSIER G	3.5 S	51.4 E	47	116	VERT		80
2152	MESSIER, G	3.5 S	50.3 E	47	116	VERT		79
2429	LANGRENUS, K, B	5.8 S	59.1 E	48	116	40		83
2430	LANGRENUS, K, F, B	5.9 S	57.9 E	48	116	40	170	82
2431	LANGRENUS, K, F, B	5.9 S	56.7 E	48	116	40		82
2432	LANGRENUS, K, F, B	6.2 S	55.6 E	48	116	40		82
2433	LANGRENUS F, MESSIER G	6.4 S	54.0 E	48	116	40		81
2434	GOCLENIUS A, MESSIER G	6.7 S	52.8 E	48	117	40		80
2435	GOCLENIUS A, MESSIER G	6.8 S	51.7 E	48	117	40		79
2436	GOCLENIUS A, MESSIER G	7.0 S	50.2 E	48	117	40		78
2761	WEBB, R, FERTILITY,SEA OF	1.0 S	59.6 E	60	114	VERT		76
2762	WEBB, FERTILITY, SEA OF	1.2 S	58.3 E	60	114	VERT		77
2763	FERTILITY, SEA OF	1.3 S	57.1 E	60	114	VERT		79
2764	FERTILITY, SEA OF	1.6 S	56.0 E	60	114	VERT		80
2765	FERTILITY, SEA OF	1.8 S	54.8 E	60	114	VERT		81
2766	FERTILITY, SEA OF	2.0 S	53.7 E	60	114	VERT		82
2767	FERTILITY, SEA OF	2.2 S	52.7 E	60	115	VERT		83
2768	FERTILITY, SEA OF	2.4 S	51.6 E	60	115	VERT		84
2769	MESSIER, A, B	2.6 S	50.3 E	60	115	VERT		84
2920	WEBB, R, FERTILITY, SEA OF	.4 S	59.5 E	63	112	VERT		73
2921	WEBB, R, FERTILITY, SEA OF	.6 S	58.5 E	63	112	VERT		74
2922	WEBB, FERTILITY, SEA OF	.7 S	57.1 E	63	112	VERT		76
2923	FERTILITY, SEA OF	1.0 S	55.8 E	63	112	VERT		77
2924	FERTILITY, SEA OF	1.2 S	54.3 E	63	113	VERT		78
2925	FERTILITY, SEA OF	1.5 S	53.3 E	63	113	VERT		79
2926	FERTILITY, SEA OF, TARUNTIUS H	1.8 S	51.9 E	63	113	VERT		81
2927	MESSIER, B, TARUNTIUS H	2.0 S	50.5 E	63	114	VERT		82

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
135	GOCLENIUS A	7.3 S	49.4 E	17	118	VERT		49
136	GOCLENIUS, A	7.5 S	48.3 E	17	118	VERT		48
137	GOCLENIUS	7.6 S	47.1 E	17	118	VERT		46
138	GOCLENIUS, RILLES	7.8 S	45.8 E	17	117	VERT		45
139	GOCLENIUS, RILLES, GUTENBERG	7.7 S	44.2 E	17	117	VERT		44
140	GOCLENIUS, RILLES, GUTENBERG	7.6 S	42.8 E	17	117	VERT		42
141	GOCLENIUS, RILLES, GUTENBERG	7.8 S	41.8 E	17	116	VERT		41
142	GUTENBERG, G	8.1 S	40.2 E	17	116	VERT		40
413	GOCLENIUS A	7.2 S	49.7 E	18	118	VERT		50
414	GOCLENIUS A	7.2 S	48.4 E	18	117	VERT		49
415	GOCLENIUS	7.2 S	47.2 E	18	117	VERT		48
416	GOCLENIUS, RILLES	7.5 S	45.9 E	18	117	VERT		47
417	GOCLENIUS, RILLES, GUTENBERG	7.5 S	44.5 E	18	117	VERT		45
418	GOCLENIUS, RILLES, GUTENBERG	7.6 S	43.3 E	18	117	VERT		44
419	GOCLENIUS, RILLES, GUTENBERG	7.8 S	42.0 E	18	116	VERT		43
420	GUTENBERG, G, RILLES	8.0 S	40.6 E	18	116	VERT		41
542	GOCLENIUS, A, RILLES	6.4 S	49.5 E	25	119	25		57
543	GOCLENIUS, A, RILLES	6.5 S	48.4 E	25	119	25		56
544	GOCLENIUS, RILLES, GUTENBERG	6.7 S	47.2 E	25	119	25		55
545	GOCLENIUS, RILLES, GUTENBERG	6.8 S	45.9 E	25	118	25		54
546	GOCLENIUS, RILLES, GUTENBERG, RILLES	6.9 S	44.4 E	25	118	25		52
547	GOCLENIUS, RILLES, GUTENBERG, RILLES	7.0 S	42.7 E	25	118	25		51
548	GUTENBERG, G, RILLES	7.1 S	41.2 E	25	117	25		49
549	GUTENBERG, G, RILLES	7.2 S	40.1 E	25	117	25		48
675	CROZIER, D, COLOMBO	9.6 S	49.9 E	26	119	40		57
676	GOCLENIUS, COLOMBO	9.8 S	48.6 E	26	119	40		56
677	GOCLENIUS, RILLES	9.9 S	47.2 E	26	118	40		55
678	GOCLENIUS, RILLES	10.2 S	45.8 E	26	118	40		53
679	GOCLENIUS, RILLES	10.2 S	44.4 E	26	118	40		52
680	GOCLENIUS, GUTENBERG	10.4 S	43.2 E	26	118	40	174	51
681	GOCLENIUS, GUTENBERG	10.5 S	41.6 E	26	118	40		49
682	GUTENBERG, PYRENEES MTS	10.4 S	40 3 E	26	118	40		48
806	MESSIER, A	2.7 S	49.8 E	27	119	40		60
807	MESSIER, A, D	2.7 S	48.5 E	27	118	40		59
808	MESSIER, A, D	2.8 S	47.5 E	27	118	40		58
809	MESSIER, A, D	3.1 S	46.3 E	27	118	40		57
810	MESSIER, A, LUBBOCK	3.3 S	45.0 E	27	118	40	354	55
811	MESSIER D, LUBBOCK	3.8 S	43.6 E	27	118	40		54
812	GUTENBERG G, LUBBOCK	3.7 S	42.2 E	27	118	40		52
813	GUTENBERG G, RILLES	3.7 S	41.2 E	27	118	40		51

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
949	GOCLENIUS A	6.0 S	48.9 E	28	119	VERT		60
950	GOCLENIUS, A	6.1 S	47.7 E	28	119	VERT		59
951	GOCLENIUS, RILLES	6.2 S	46.3 E	28	119	VERT		57
952	GOCLENIUS, RILLES	6.3 S	45.0 E	28	118	VERT		56
953	GOCLENIUS, RILLES	6.5 S	44.1 E	28	118	VERT		55
954	GUTENBERG	6.6 S	42.6 E	28	118	VERT		53
955	GUTENBERG, RILLES	6.8 S	41.3 E	28	118	VERT		52
1239	GOCLENIUS A	5.8 S	49.2 E	29	119	VERT		60
1240	GOCLENIUS A	6.1 S	48.0 E	29	119	VERT		59
1241	GOCLENIUS	6.2 S	46.6 E	29	119	VERT		58
1242	GOCLENIUS, RILLES	6.4 S	45.2 E	29	118	VERT		57
1243	GOCLENIUS, RILLES	6.5 S	43.9 E	29	118	VERT		55
1244	GUTENBERG	6.6 S	42.8 E	29	118	VERT		54
1245	GUTENBERG	6.7 S	41.6 E	29	118	VERT		53
1246	GUTENBERG, RILLES	6.8 S	40.2 E	29	118	VERT		52
1371	TARUNTIUS, MESSIER, A	1.5 S	48.7 E	37	118	40		69
1372	TARUNTIUS, MESSIER, A	1.8 S	47.5 E	37	118	40		68
1373	TARUNTIUS, MESSIER, A	1.9 S	46.0 E	37	118	40		66
1374	TARUNTIUS, MESSIER, A	2.0 S	44.7 E	37	118	40		65
1375	TARUNTIUS, MESSIER A	2.2 S	43.4 E	37	118	40		64
1376	LUBBOCK, R, SECCHI, X	2.3 S	42.3 E	37	118	40		63
1377	GUTENBERG G, RILLES, GOCLENIUS RILLES	2.5 S	40.9 E	37	118	40		61
1633	MESSIER D, GOCLENIUS A	5.5 S	49.0 E	38	119	VERT		69
1634	MESSIER D, GOCLENIUS A	5.8 S	47.7 E	38	119	VERT		68
1635	MESSIER D	5.6 S	46.4 E	38	119	VERT		67
1636	MESSIER D, GOCLENIUS RILLES	5.7 S	44.8 E	38	119	VERT		65
1637	GUTENBERG, GOCLENIUS RILLES	5.8 S	43.6 E	38	119	VERT		64
1638	GUTENBERG, GOCLENIUS RILLES	5.8 S	42.3 E	38	119	VERT		63
1639	GUTENBERG, G, RILLES	6.1 S	40.9 E	38	119	VERT		61
1928	GOCLENIUS A, MESSIER D	4.9 S	49.0 E	39	119	VERT		71
1929	GOCLENIUS A, MESSIER D	5.1 S	47.7 E	39	119	VERT		69
1930	MESSIER D	5.2 S	46.3 E	39	119	VERT		68
1931	GOCLENIUS RILLES, MESSIER D	5.4 S	45.0 E	39	119	VERT		67
1932	GOCLENIUS RILLES, MESSIER D	5.7 S	43.7 E	39	119	VERT		65
1933	GUTENBERG, LUBBOCK	5.8 S	42.3 E	39	119	VERT		64
1934	GUTENBERG, G, RILLES	6.0 S	41.2 E	39	119	VERT		63
1935	GUTENBERG, G, RILLES	6.2 S	40.1 E	39	119	VERT		62
2153	MESSIER, A, D	3.7 S	48.9 E	47	117	VERT		78
2154	MESSIER, A, D	3.7 S	47.6 E	47	117	VERT		77
2155	MESSIER, A, D	3.9 S	46.4 E	47	117	VERT		76

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2156	MESSIER A, D	4.1 S	45.3 E	47	117	VERT		75
2157	MESSIER D, GOCLENIUS RILLES, LUBBOCK	4.4 S	44.0 E	47	117	VERT		74
2158	LUBBOCK GOCLENIUS RILLES, GUTENBERG G	4.6 S	42.8 E	47	117	VERT		73
2159	LUBBOCK, GOCLENIUS RILLES, GUTENBERG G	4.8 S	41.5 E	47	117	VERT		72
2160	LUBBOCK, GUTENBERG, G	5.0 S	40.4 E	47	117	VERT		71
2437	GOCLENIUS, A	7.2 S	49.0 E	48	117	40		77
2438	GOCLENIUS, A, COLUMBO	7.4 S	47.7 E	48	117	40		76
2439	GOCLENIUS, RILLES	7.6 S	46.4 E	48	117	40		75
2440	GOCLENIUS, RILLES, GUTENBERG	7.7 S	45.3 E	48	117	40	170	74
2441	GOCLENIUS, RILLES, GUTENBERG	7.7 S	43.7 E	48	118	40		73
2442	GUTENBERG, GOCLENIUS	8.3 S	42.7 E	48	118	40		72
2443	GUTENBERG, GOCLENIUS	8.2 S	41.3 E	48	118	40		70
2444	GUTENBERG, G, GOCLENIUS	8.5 S	40.2 E	48	118	40		69
2770	MESSIER, A, B, D	2.7 S	49.1 E	60	115	VERT		84
2771	MESSIER, A, B, D	3.0 S	47.8 E	60	115	VERT		85
2772	MESSIER, A, B, D	3.3 S	46.4 E	60	116	VERT		85
2773	MESSIER, A	3.5 S	45.1 E	60	116	VERT		84
2774	LUBBOCK	3.7 S	44.0 E	60	116	VERT		84
2775	LUBBOCK	3.9 S	42.7 E	60	117	VERT		83
2776	LUBBOCK, GUTENBERG G	4.2 S	41.6 E	60	117	VERT		83
2777	LUBBOCK, GUTENBERG G	4.5 S	40.2 E	60	117	VERT		82
2928	MESSIER, A, B, TARUNTIUS H	2.3 S	49.1 E	63	114	VERT		83
2929	MESSIER, A, B, D	2.5 S	47.8 E	63	115	VERT		84
2930	MESSIER, A, B, D, SECCHI X	2.8 S	46.4 E	63	115	VERT		85
2931	MESSIER, A, D, SECCHI X	3.1 S	45.1 E	63	115	VERT		85
2932	LUBBOCK, MESSIER D, SECCHI X	3.3 S	43.8 E	63	115	VERT		85
2933	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES	3.4 S	42.3 E	63	116	VERT		85
2934	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES	3.9 S	41.0 E	63	116	VERT		84

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
143	GUTENBERG, G	8.0 S	39.0 E	17	116	VERT		39
144	GUTENBERG G, CAPELLA	8.1 S	37.7 E	17	115	VERT		37
145	ISIDORUS, CAPELLA	8.1 S	36.5 E	17	115	VERT		36
146	ISIDORUS, CAPELLA	8.2 S	34.9 E	17	114	VERT		35
147	ISIDORUS, CAPELLA	8.6 S	33.9 E	17	114	VERT		34
148	ISIDORUS, CAPELLA	8.8 S	32.7 E	17	114	VERT		33
149	ISIDORUS, MADLER,	8.8 S	31.6 E	17	114	VERT		32
150	THEOPHILUS, MADLER	8.8 S	30.3 E	17	114	VERT		30
421	GUTENBERG, G, RILLES	8.2 S	39.6 E	18	116	VERT		40
422	GUTENBERG, G, RILLES	8.1 S	38.3 E	18	116	VERT		39
423	CAPELLA, GUTENBERG RILLES	7.9 S	37.0 E	18	116	VERT		38
424	CAPELLA, ISIDORUS	7.9 S	35.8 E	18	115	VERT		37
425	CAPELLA, ISIDORUS	8.2 S	34.5 E	18	115	VERT		35
426	CAPELLA, ISIDORUS	8.3 S	33.0 E	18	114	VERT		34
427	CAPELLA, ISIDORUS	8.4 S	32.0 E	18	114	VERT		33
428	ISIDORUS, MADLER	8.6 S	30.6 E	18	114	VERT		32
550	GUTENBERG, G, RILLES	7.4 S	38.7 E	25	117	25	269	46
551	DAGUERRE, ISIDORUS, CAPELLA	7.5 S	37.0 E	25	117	25		45
552	DAGUERRE, ISIDORUS, CAPELLA	7.7 S	35.7 E	25	116	25		44
553	DAGUERRE, ISIDORUS, CAPELLA	8.0 S	34.4 E	25	116	25		42
554	THEOPHILUS, ISIDORUS, MADLER	8.0 S	33.0 E	25	116	25		41
555	THEOPHILUS, ISIDORUS, MADLER	8.2 S	31.7 E	25	116	25		40
556	THEOPHILUS, MADLER	8.4 S	30.4 E	25	115	25		38
683	GUTENBERG, PYRENEES MTS	10.7 S	38.9 E	26	118	40		47
684	DAGUERRE, PYRENEES MTS	10.8 S	37.4 E	26	117	40		45
685	DAGUERRE, PYRENEES MTS	11.1 S	36.2 E	26	117	40		44
686	DAGUERRE	11.1 S	34.7 E	26	117	40		43
687	DAGUERRE, MADLER	11.3 S	33.3 E	26	117	40		41
688	DAGUERRE, MADLER	11.5 S	32.1 E	26	116	40		40
689	THEOPHILUS, MADLER	11.7 S	30.6 E	26	116	40		38
814	GUTENBERG G, RILLES	4.0 S	39.4 E	27	118	40		50
815	GUTENBERG G, RILLES	4.1 S	37.7 E	27	117	40		48
816	CAPELLA, GUTENBERG RILLES	4.1 S	36.7 E	27	117	40		47
817	CAPELLA, ISIDORUS	4.2 S	35.5 E	27	117	40		46
818	CAPELLA, ISIDORUS, B	4.6 S	34.1 E	27	117	40		44
819	CAPELLA, ISIDORUS, B	4.6 S	32.8 E	27	116	40		43
820	TORRICELLI, ISIDORUS B	4.6 S	31.4 E	27	116	40	356	42
956	GUTENBERG, RILLES	7.0 S	39.9 E	28	118	VERT		50
957	GUTENBERG, RILLES	7.2 S	38.6 E	28	118	VERT		49
958	CAPELLA	7.4 S	37.1 E	28	116	VERT		48

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
959	CAPELLA, ISIDORUS	7.5 S	35.9 E	28	117	VERT		47
960	CAPELLA, ISIDORUS	7.6 S	34.8 E	28	117	VERT		46
961	CAPELLA, ISIDORUS	7.8 S	33.6 E	28	117	VERT		45
962	CAPELLA, ISIDORUS	8.0 S	32.2 E	28	117	VERT		44
963	MADLER, ISIDORUS	8.1 S	31.1 E	28	117	VERT		42
1247	GUTENBERG, RILLES	7.0 S	39.1 E	29	118	VERT		51
1248	CAPELLA, GUTENBERG	7.2 S	37.7 E	29	118	VERT		50
1249	CAPELLA	7.3 S	36.5 E	29	118	VERT		48
1250	CAPELLA, ISIDORUS	7.7 S	35.1 E	29	117	VERT		47
1251	CAPELLA, ISIDORUS	7.8 S	33.8 E	29	117	VERT		46
1252	CAPELLA, ISIDORUS	8.0 S	32.6 E	29	117	VERT		45
1253	MADLER, ISIDORUS	8.0 S	31.4 E	29	117	VERT		43
1254	MADLER	8.0 S	30.2 E	29	117	VERT		42
1378	GUTENBERG G, CENSORINUS N	2.7 S	39.4 E	37	118	40		60
1379	CENSORINUS, N	3.0 S	38.2 E	37	118	40		58
1380	CENSORINUS, N, GUTENBERG RILLES	3.1 S	36.6 E	37	118	40	353	57
1381	ISIDORUS B, CENSORINUS, MASKELYNE	3.3 S	35.4 E	37	118	40		56
1382	ISIDORUS B, CENSORINUS, MASKELYNE	3.6 S	34.0 E	37	118	40		54
1383	ISIDORUS B, CENSORINUS, MASKELYNE	3.7 S	32.7 E	37	118	40		53
1384	TORRICELLI, CENSORINUS, MASKELYNE	3.8 S	31.6 E	37	118	40		52
1385	TORRICELLI, CENSORINUS, MASKELYNE	4.0 S	30.2 E	37	117	40		50
1640	GUTENBERG, G, RILLES	6.3 S	39.7 E	38	119	VERT		60
1641	GUTENBERG, G, RILLES	6.4 S	38.2 E	38	119	VERT		59
1642	CAPELLA, GUTENBERG RILLES	6.5 S	36.9 E	38	119	VERT		58
1643	CAPELLA, ISIDORUS	6.6 S	35.5 E	38	119	VERT		56
1644	CAPELLA, ISIDORUS	6.7 S	34.2 E	38	118	VERT		55
1645	CAPELLA, ISIDORUS	6.9 S	32.7 E	38	118	VERT		53
1646	TORICELLI, R, ISIDORUS	7.0 S	31.3 E	38	118	VERT		52
1936	GUTENBERG, G, RILLES	6.3 S	38.8 E	39	119	VERT		60
1937	CAPELLA, GUTENBERG, RILLES	6.5 S	37.7 E	39	119	VERT		59
1938	CAPELLA, GUTENBERG RILLES	6.7 S	36.2 E	39	119	VERT		58
1939	CAPELLA, ISIDORUS	6.8 S	35.1 E	39	119	VERT		57
1940	CAPELLA, ISIDORUS	7.0 S	33.9 E	39	119	VERT		55
1941	CAPELLA, ISIDORUS	7.1 S	32.6 E	39	119	VERT		54
1942	TORRICELLI R, ISIDORUS	7.2 S	31.1 E	39	118	VERT		53
2161	GUTENBERG, G, RILLES	5.1 S	39.0 E	47	117	VERT		69
2162	GUTENBERG G, RILLES	5.2 S	37.7 E	47	117	VERT		67
2163	GUTENBERG RILLES, CAPELLA	5.5 S	36.5 E	47	117	VERT		66
2164	GUTENBERG RILLES, CAPELLA, ISIDORUS	5.8 S	35.4 E	47	117	VERT		65
2165	CAPELLA, ISIDORUS, B	5.9 S	34.1 E	47	117	VERT		64

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2166	CAPELLA, ISIDORUS, B	6.1 S	32.7 E	47	118	VERT		63
2167	ISIDORUS, B	6.3 S	31.5 E	47	118	VERT		61
2168	TORRICELLI, R	6.4 S	30.3 E	47	118	VERT		60
2445	GUTENBERG, G, GAUDIBERT	8.6 S	38.9 E	48	118	40		68
2446	GUTENBERG G, GAUDIBERT	8.9 S	37.7 E	48	118	40		67
2447	CAPELLA, ISIDORUS	8.8 S	36.5 E	48	118	40		66
2448	CAPELLA, ISIDORUS	9.3 S	35.3 E	48	118	40		65
2449	CAPELLA, ISIDORUS	9.5 S	34.0 E	48	118	40		63
2450	CAPELLA, ISIDORUS, MADLER	9.5 S	32.5 E	48	119	40	170	62
2451	ISIDORUS, MADLER	9.8 S	31.3 E	48	119	40		61
2452	MADLER, THEOPHILUS	9.9 S	30.2 E	48	119	40		60
2778	GUTENBERG G, GUTENBERG RILLES	4.7 S	38.9 E	60	117	VERT		80
2779	GUTENBERG G, GUTENBERG RILLES	5.2 S	37.4 E	60	118	VERT		79
2780	CAPELLA	5.4 S	36.5 E	60	118	VERT		78
2781	ISIDORUS, B, CAPELLA	5.4 S	35.2 E	60	118	VERT		77
2782	ISIDORUS, B, CAPELLA	5.7 S	34.1 E	60	118	VERT		76
2783	ISIDORUS, B, CAPELLA	6.0 S	32.9 E	60	118	VERT		75
2784	ISIDORUS, B, CAPELLA	6.1 S	31.8 E	60	119	VERT		74
2785	TORRICELLI, R	6.4 S	30.3 E	60	119	VERT		73
2935	LUBBOCK, GUTENBERG G, GOCLENIUS RILLES	4.2 S	39.6 E	63	116	VERT		83
2936	GUTENBERG G, RILLES, CENSORINUS N	4.5 S	38.3 E	63	116	VERT		82
2937	GUTENBERG RILLES, CENSORINUS N, CAPELLA	4.6 S	36.9 E	63	116	VERT		81
2938	ISIDORUS, B, CAPELLA, CENSORINUS C	4.9 S	35.4 E	63	117	VERT		80
2939	ISIDORUS, B, CAPELLA, CENSORINUS C	5.0 S	34.4 E	63	117	VERT		79
2940	ISIDORUS, B, CAPELLA, CENSORINUS C	5.4 S	32.9 E	63	118	VERT		78
2941	ISIDORUS, B, CAPELLA	5.6 S	31.8 E	63	118	VERT		77
2942	TORRICELLI, R	5.8 S	30.4 E	63	118	VERT		75

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
151	THEOPHILUS, MADLER	9.0 S	28.8 E	17	113	VERT		29
152	THEOPHILUS, MADLER	9.1 S	27.5 E	17	113	VERT		28
153	THEOPHILUS, CYRILLUS	9.0 S	26.1 E	17	113	VERT		26
154	THEOPHILUS, CYRILLUS	9.3 S	24.8 E	17	112	VERT		25
155	THEOPHILUS, CYRILLUS, B	9.2 S	23.5 E	17	112	VERT		23
156	KANT, E, ZOLLNER F	9.0 S	22.5 E	17	112	VERT		22
157	KANT, E, ZOLLNER, F	9.1 S	21.0 E	17	112	VERT		21
429	MADLER, THEOPHILUS	8.9 S	29.2 E	18	114	VERT		30
430	MADLER, THEOPHILUS	9.1 S	27.8 E	18	113	VERT		29
431	THEOPHILUS	9.2 S	26.3 E	18	113	VERT		27
432	THEOPHILUS	9.4 S	25.0 E	18	112	VERT		26
433	THEOPHILUS, ZOLLNER F	9.0 S	23.8 E	18	112	VERT		25
434	ZOLLNER F, KANT, E	9.0 S	23.0 E	18	112	VERT		24
435	KANT, E, ZOLLNER F	9.1 S	21.9 E	18	112	VERT		23
436	KANT, D, E, ZOLLNER, F	9.0 S	20.7 E	18	112	VERT		22
557	THEOPHILUS, MADLER	8.4 S	28.9 E	25	115	25		37
558	THEOPHILUS, CYRILLUS	8.5 S	27.5 E	25	115	25		36
559	THEOPHILUS, CYRILLUS	8.5 S	26.2 E	25	115	25		35
560	THEOPHILUS, ZOLLNER F, KANT	8.7 S	24.8 E	25	114	25	269	33
561	KANT, ZOLLNER, F	8.8 S	23.4 E	25	114	25		32
562	KANT, ZOLLNER, F	9.0 S	22.3 E	25	114	25		31
563	KANT, ZOLLNER, DESCARTES	9.0 S	21.2 E	25	114	25		30
690	THEOPHILUS, MADLER	11.5 S	29.2 E	26	116	40	176	37
691	THEOPHILUS, MADLER	11.6 S	27.8 E	26	116	40		36
692	THEOPHILUS, CYRILLUS	11.8 S	26.5 E	26	115	40		35
693	THEOPHILUS, CYRILLUS	11.9 S	25.1 E	26	115	40		33
694	THEOPHILUS, CYRILLUS	11.8 S	23.8 E	26	115	40		32
695	KANT, CYRILLUS	12.0 S	22.3 E	26	115	40		30
696	KANT, CYRILLUS	11.9 S	20.8 E	26	115	40		29
821	TORRICELLI, ISIDORUS B	4.8 S	30.0 E	27	116	40		40
822	TORRICELLI	5.0 S	28.6 E	27	116	40		39
823	TORRICELLI	4.9 S	27.4 E	27	116	40		38
824	TORRICELLI, HYPATIA	5.0 S	25.8 E	27	116	40		36
825	HYPATIA, ZOLLNER F	5.4 S	24.4 E	27	115	40		35
826	HYPATIA, ZOLLNER F	5.3 S	23.3 E	27	115	40		34
827	HYPATIA, ZOLLNER F	5.5 S	21.9 E	27	115	40		32
828	ZOLLNER, ALFRAGANUS	5.4 S	20.7 E	27	115	40		31
964	MADLER	8.2 S	29.8 E	28	117	VERT		41
965	THEOPHILUS	8.2 S	28.5 E	28	117	VERT		40
966	THEOPHILUS	8.4 S	27.1 E	28	116	VERT		39

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
967	THEOPHILUS	8.5 S	26.0 E	28	116	VERT		37
968	THEOPHILUS	8.6 S	24.9 E	28	116	VERT		36
969	THEOPHILUS	8.7 S	23.6 E	28	116	VERT		35
970	THEOPHILUS, KANT	8.8 S	22.5 E	28	116	VERT		33
971	KANT, ZOLLNER	8.8 S	20.8 E	28	115	VERT		31
1255	THEOPHILUS	8.1 S	29.0 E	29	117	VERT		41
1256	THEOPHILUS	8.1 S	27.7 E	29	117	VERT		40
1257	THEOPHILUS	8.2 S	26.5 E	29	116	VERT		39
1258	THEOPHILUS	8.2 S	25.1 E	29	116	VERT		38
1259	THEOPHILUS, ZOLLNER F	8.3 S	23.9 E	29	116	VERT		36
1260	KANT, ZOLLNER F	8.5 S	22.5 E	29	116	VERT		35
1261	KANT, ZOLLNER F	8.6 S	21.2 E	29	116	VERT		34
1386	TORRICELLI, CENSORINUS, MASKELYNE	4.0 S	28.5 E	37	117	40		49
1387	MOLTKE, TORRICELLI, MASKELYNE	4.2 S	27.3 E	37	117	40		48
1388	MOLTKE, TORRICELLI, MASKELYNE	4.3 S	25.7 E	37	117	40		46
1389	HYPATIA, MOLTKE	4.6 S	24.6 E	37	117	40		45
1390	HYPATIA, MOLTKE	4.7 S	23.2 E	37	117	40	356	43
1391	HYPATIA, ALFRAGANUS	4.8 S	21.7 E	37	117	40		42
1392	HYPATIA, ALFRAGANUS	5.0 S	20.2 E	37	117	40		41
1647	TORICELLI, R	7.2 S	29.8 E	38	118	VERT		50
1648	TORICELLI, R, THEOPHILUS	7.3 S	28.5 E	38	118	VERT		49
1649	THEOPHILUS, TORRICELLI, R	7.4 S	27.4 E	38	118	VERT		49
1650	THEOPHILUS, TORRICELLI	7.5 S	26.2 E	38	118	VERT		47
1651	THEOPHILUS, ZOLLNER F	7.6 S	24.7 E	38	118	VERT		45
1652	THEOPHILUS, ZOLLNER F	8.0 S	23.2 E	38	118	VERT		44
1653	KANT, ZOLLNER F	8.2 S	21.8 E	38	118	VERT		43
1654	KANT, ZOLLNER	8.2 S	20.6 E	38	118	VERT		41
1943	TORRICELLI R	7.3 S	29.8 E	39	118	VERT		51
1944	TORRICELLI R, THEOPHILUS	7.4 S	28.5 E	39	118	VERT		50
1945	TORRICELLI R, THEOPHILUS	7.5 S	27.3 E	39	118	VERT		49
1946	TORRICELLI R, THEOPHILUS	7.6 S	26.0 E	39	118	VERT		48
1947	ZOLLNER F, THEOPHILUS	7.7 S	24.8 E	39	118	VERT		46
1948	ZOLLNER F, THEOPHILUS	7.8 S	23.7 E	39	118	VERT		45
1949	ZOLLNER F, KANT, E	7.9 S	22.4 E	39	118	VERT		44
1950	ZOLLNER, F, KANT, E	8.0 S	21.3 E	39	118	VERT		42
2169	TORRICELLI, R	6.5 S	29.1 E	47	118	VERT		59
2170	TORRICELLI, R	6.7 S	27.7 E	47	118	VERT		57
2171	TORRICELLI, R	6.8 S	26.4 E	47	118	VERT		56
2172	TORRICELLI, W OF	7.0 S	25.2 E	47	119	VERT		55
2173	HYPATIA, ZOLLNER F	7.2 S	24.0 E	47	119	VERT		54

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2174	ZOLLNER F	7.4 S	22.8 E	47	119	VERT		53
2175	ZOLLNER, F, KANT, E, G, ALFRAGANUS	7.4 S	21.5 E	47	119	VERT		51
2176	ZOLLNER, F, KANT, ALFRAGANUS	7.5 S	20.2 E	47	119	VERT		50
2453	MADLER, THEOPHILUS	10.2 S	28.8 E	48	119	40		58
2454	THEOPHILUS, CYRILLUS, MADLER	10.0 S	27.6 E	48	119	40		57
2455	THEOPHILUS, CYRILLUS, MADLER	10.3 S	26.3 E	48	119	40		56
2456	THEOPHILUS, CYRILLUS	10.4 S	24.9 E	48	119	40		55
2457	CYRILLUS, THEOPHILUS, KANT	10.6 S	23.3 E	48	119	40		53
2458	CYRILLUS, THEOPHILUS, KANT	10.7 S	22.3 E	48	119	40		52
2459	KANT, E, CYRILLUS	10.9 S	21.0 E	48	119	40		51
2786	TORRICELLI, R	6.5 S	29.0 E	60	119	VERT		71
2787	TORRICELLI, R	6.7 S	27.9 E	60	119	VERT		70
2788	TORRICELLI, R	6.8 S	26.8 E	60	119	VERT		69
2789	THEOPHILUS, N OF	7.0 S	25.3 E	60	120	VERT		68
2790	ZOLLNER F	7.1 S	23.7 E	60	120	VERT		67
2791	ZOLLNER F	7.2 S	22.5 E	60	120	VERT		65
2792	ZOLLNER, F, KANT, E, G	7.3 S	21.4 E	60	120	VERT		64
2943	TORRICELLI, R	6.0 S	28.5 E	63	118	VERT		74
2944	TORRICELLI, R	6.2 S	27.3 E	63	119	VERT		73
2945	TORRICELLI, W OF	6.4 S	25.9 E	63	119	VERT		72
2946	TORRICELLI, W OF	6.6 S	24.6 E	63	119	VERT		70
2947	HYPATIA, ZOLLNER F	6.7 S	23.2 E	63	119	VERT		69
2948	ZOLLNER F, ALFRAGANUS, HYPATIA	6.8 S	22.0 E	63	119	VERT		67
2949	ZOLLNER, F, ALFRAGANUS, C, KANT G	7.0 S	20.7 E	63	120	VERT		66

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
158	KANT, E, D, ZOLLNER	9.5 S	19.8 E	17	111	VERT		20
159	KANT, E, G, ZOLLNER	9.6 S	18.5 E	17	111	VERT		19
160	DESCARTES, APOLLO 16 LANDING SITE	9.4 S	17.4 E	17	111	VERT		18
161	DESCARTES, APOLLO 16 LANDING SITE	9.2 S	16.0 E	17	110	VERT		16
162	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	14.5 E	17	110	VERT		14
163	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	13.5 E	17	110	VERT		13
164	ANDEL, DOLLAND, B, C	9.1 S	12.3 E	17	110	VERT		12
165	ANDEL, DOLLAND C	9.1 S	10.8 E	17	110	VERT		11
437	KANT, D, E, ZOLLNER	9.0 S	19.0 E	18	112	VERT		20
438	KANT, D, ZOLLNER, DESCARTES	9.1 S	17.7 E	18	111	VERT		19
439	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	16.5 E	18	111	VERT		18
440	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	15.2 E	18	111	VERT		16
441	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	13.8 E	18	110	VERT		15
442	ANDEL, DOLLAND	9.2 S	12.7 E	18	110	VERT		14
443	ANDEL, DOLLAND B, C	9.2 S	11.4 E	18	110	VERT		13
564	DESCARTES, APOLLO 16 LANDING SITE	9.1 S	19.7 E	25	114	25		28
565	DESCARTES, APOLLO 16 LANDING SITE	9.2 S	18.0 E	25	113	25		26
566	DESCARTES, APOLLO 16 LANDING SITE	9.2 S	16.8 E	25	113	25		25
567	DESCARTES, APOLLO 16 LANDING SITE	9.2 S	15.4 E	25	113	25		24
568	DESCARTES, APOLLO 16 LANDING SITE	9.2 S	14.2 E	25	113	25		23
569	ANDEL, DOLLOND, C	9.2 S	12.5 E	25	113	25		21
570	ANDEL, RITCHEY, HIND	9.1 S	11.0 E	25	112	25	273	19
697	KANT, CYRILLUS	11.8 S	19.5 E	26	114	40		28
698	DESCARTES, KANT	11.8 S	18.0 E	26	114	40		26
699	ABULFEDA, DESCARTES	12.2 S	16.7 E	26	114	40		25
700	ABULFEDA, DESCARTES	12.3 S	15.2 E	26	114	40	180	24
701	ABULFEDA, DESCARTES	12.5 S	13.8 E	26	113	40		22
702	ABULFEDA, ANDEL	12.5 S	12.5 E	26	113	40		21
703	RITCHEY, ABULFEDA	12.5 S	11.1 E	26	113	40		20
829	ZOLLNER, ALFRAGANUS	5.7 S	19.1 E	27	115	40		29
830	ZOLLNER, ALFRAGANUS	5.8 S	17.7 E	27	114	40	359	28
831	DOLLOND B, TAYLOR	5.9 S	16.3 E	27	114	40		27
832	DOLLOND B, TAYLOR	5.9 S	15.1 E	27	114	40		25
833	DOLLOND B, TAYLOR	6.0 S	13.8 E	27	114	40		24
834	DOLLOND B, C	6.0 S	12.3 E	27	113	40		23
835	DOLLOND C, HIPPARCHUS C	6.0 S	10.7 E	27	113	40		21
972	KANT, ZOLLNER	8.8 S	19.6 E	28	115	VERT		30
973	KANT, ZOLLNER	8.9 S	18.5 E	28	115	VERT		29
974	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	17.1 E	28	115	VERT		28
975	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	16.0 E	28	115	VERT		27

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
976	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	14.7 E	28	114	VERT		26
977	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	13.3 E	28	114	VERT		25
978	ANDEL, DOLLOND	9.0 S	12.2 E	28	114	VERT		24
979	RITCHEY, ANDEL	9.0 S	10.9 E	28	114	VERT		22
1262	KANT, ZOLLNER	8.7 S	20.0 E	29	115	VERT		33
1263	KANT, ZOLLNER	8.9 S	18.7 E	29	115	VERT		31
1264	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	17.6 E	29	115	VERT		30
1265	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	16.3 E	29	115	VERT		29
1266	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	15.0 E	29	115	VERT		28
1267	DESCARTES, APOLLO 16 LANDING SITE	9.0 S	13.6 E	29	115	VERT		26
1268	ANDEL, DOLLOND, C, B	9.1 S	12.4 E	29	114	VERT		24
1269	ANDEL, RITCHEY	9.1 S	11.0 E	29	114	VERT		23
1393	ALFRAGANUS, ZOLLNER, DELAMBRE	5.1 S	19.0 E	37	117	40		39
1394	ALFRAGANUS, TAYLOR, DELAMBRE	5.1 S	17.6 E	37	116	40		38
1395	OVEREXPOSED	5.2 S	16.4 E	37	116	40		36
1396	DOLLOND B, TAYLOR	5.2 S	15.0 E	37	116	40		35
1397	DOLLOND B, TAYLOR	5.2 S	13.3 E	37	116	40		34
1398	DOLLOND B, TAYLOR	5.3 S	12.1 E	37	116	40		32
1399	HIPPARCHUS C, LADE	5.4 S	10.8 E	37	116	40		31
1655	KANT, ZOLLNER	8.3 S	19.7 E	38	118	VERT		40
1656	KANT, ZOLLNER	8.4 S	18.5 E	38	118	VERT		39
1657	APOLLO 16 LANDING SITE	8.5 S	17.3 E	38	118	VERT		38
1658	APOLLO 16 LANDING SITE	8.6 S	16.0 E	38	118	VERT		37
1659	APOLLO 16 LANDING SITE	8.7 S	14.8 E	38	118	VERT		36
1660	APOLLO 16 LANDING SITE	8.8 S	13.7 E	38	117	VERT		34
1661	APOLLO 16 LANDING SITE	8.8 S	12.6 E	38	117	VERT		33
1662	DOLLOND C, ANDEL	8.8 S	11.4 E	38	117	VERT		32
1663	RITCHEY, ANDEL	9.1 S	10.3 E	38	117	VERT		31
1951	ZOLLNER, F, KANT, E	8.1 S	20.0 E	39	118	VERT		41
1952	ZOLLNER, KANT, E	8.2 S	18.5 E	39	118	VERT		40
1953	APOLLO 16 LANDING SITE	8.3 S	17.0 E	39	118	VERT		38
1954	APOLLO 16 LANDING SITE	8.4 S	15.8 E	39	118	VERT		37
1955	APOLLO 16 LANDING SITE	8.5 S	14.7 E	39	118	VERT		36
1956	APOLLO 16 LANDING SITE	8.6 S	13.4 E	39	117	VERT		35
1957	APOLLO 16 LANDING SITE	8.6 S	12.3 E	39	117	VERT		34
1958	RITCHEY, ANDEL	8.7 S	11.0 E	39	117	VERT		33
2177	ZOLLNER	7.8 S	18.4 E	47	119	VERT		48
2178	APOLLO 16 LANDING SITE	7.7 S	17.8 E	47	119	VERT		47
2179	APOLLO 16 LANDING SITE	7.8 S	16.4 E	47	119	VERT		46
2180	APOLLO 16 LANDING SITE	7.9 S	15.2 E	47	119	VERT		45

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2181	APOLLO 16 LANDING SITE	8.9 S	13.8 E	47	119	VERT		43
2182	DOLLOND, B, C, ANDEL	8.3 S	12.5 E	47	119	VERT		42
2183	DOLLOND C, ANDEL	8.4 S	11.3 E	47	119	VERT		41
2184	ANDEL, HIND	8.5 S	10.2 E	47	119	VERT		40
2460	KANT, D, E, CYRILLUS, B	11.0 S	19.7 E	48	119	40	170	50
2461	DESCARTES, APOLLO 16 LANDING SITE	11.0 S	18.7 E	48	119	40		49
2462	DESCARTES, APOLLO 16 LANDING SITE	11.1 S	17.4 E	48	119	40		47
2463	DESCARTES, APOLLO 16 LANDING SITE	11.4 S	16.2 E	48	119	40		46
2464	DESCARTES, APOLLO 16 LANDING SITE	11.7 S	14.8 E	48	119	40		45
2465	ANDEL, ABULFEDA	11.6 S	13.3 E	48	119	40		43
2466	ANDEL, ABULFEDA	11.4 S	12.3 E	48	119	40		42
2467	ANDEL, ABULFEDA	11.5 S	11.0 E	48	119	40		41
2793	ZOLLNER, F, KANT, E, G	7.5 S	20.0 E	60	120	VERT		62
2794	ZOLLNER, ALFRAGANUS, C	8.0 S	18.7 E	60	121	VERT		61
2795	ZOLLNER, TAYLOR	7.9 S	17.6 E	60	121	VERT		60
2796	ALFRAGANUS C	8.4 S	16.5 E	60	121	VERT		59
2797	DOLLOND, B, C	8.4 S	15.3 E	60	121	VERT		58
2798	ANDEL, DOLLOND, B, C	8.5 S	13.9 E	60	121	VERT		56
2799	ANDEL, DOLLOND, B, C	8.5 S	12.6 E	60	122	VERT		55
2800	ANDEL, DOLLOND C	8.6 S	11.2 E	60	122	VERT		54
2801	ANDEL, RITCHEY	8.7 S	10.1 E	60	122	VERT		53
2950	ZOLLNER, F, ALFRAGANUS, C, KANT G	7.2 S	19.5 E	63	120	VERT		65
2951	ZOLLNER, ALFRAGANUS C, KANT G, TAYLOR	7.5 S	18.0 E	63	120	VERT		64
2952	ZOLLNER, ALFRAGANUS C, KANT G, TAYLOR	7.7 S	16.5 E	63	120	VERT		62
2953	DOLLOND, B, C, TAYLOR	7.9 S	15.1 E	63	121	VERT		61
2954	DOLLOND, B, C, ANDEL	8.0 S	13.9 E	63	121	VERT		59
2955	DOLLOND, B, C, ANDEL	8.2 S	12.4 E	63	121	VERT		58
2956	ANDEL, DOLLOND C	8.4 S	11.1 E	63	121	VERT		57

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 0 TO 10 E

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
166	HIND, RITCHEY, ANDEL	9.1 S	9.7 E	17	109	VERT		10
167	HIND, RITCHEY	9.1 S	8.3 E	17	109	VERT		8
168	HIND, RITCHEY, HALLEY	9.2 S	7.2 E	17	108	VERT		7
169	ALBATEGNIUS, HALLEY, HIND	9.2 S	5.9 E	17	108	VERT		6
170	ALBATEGNIUS, HALLEY	9.2 S	4.5 E	17	108	VERT		5
171	ALBATEGNIUS, MUELLER	9.0 S	3.1 E	17	108	VERT		3
172	ALBATEGNIUS, PTOLEMAEUS	9.1 S	1.9 E	17	108	VERT		2
173	PTOLEMAEUS	9.2 S	.4 E	17	107	VERT		1
444	ANDEL, RITCHEY, HIND	9.2 S	10.0 E	18	110	VERT		11
445	RITCHEY, HIND, HIPPARCHUS C	9.0 S	9.0 E	18	110	VERT		10
446	ALBATEGNIUS, HALLEY, HIND	9.0 S	7.5 E	18	109	VERT		9
447	ALBATEGNIUS, HALLEY, HIPPARCHUS	8.9 S	6.2 E	18	108	VERT		8
448	ALBATEGNIUS, HALLEY, HIPPARCHUS	9.0 S	4.5 E	18	108	VERT		6
449	ALBATEGNIUS, MUELLER	9.1 S	3.0 E	18	108	VERT		5
450	ALBATEGNIUS, PTOLEMAEUS	9.2 S	2.0 E	18	108	VERT		4
451	ALBATEGNIUS, PTOLEMAEUS	9.3 S	1.0 E	18	108	VERT		2
571	ALBATEGNIUS, HIPPARCHUS	9.1 S	9.5 E	25	112	25		18
572	ALBATEGNIUS, HIPPARCHUS	9.2 S	8.0 E	25	112	25		16
573	ALBATEGNIUS, HIPPARCHUS	9.2 S	6.7 E	25	112	25		15
574	ALBATEGNIUS, HIPPARCHUS	9.2 S	5.5 E	25	111	25		14
575	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS	9.3 S	4.2 E	25	111	25		13
576	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS	9.3 S	3.7 E	25	111	25		12
577	ALBATEGNIUS, ALPHONSUS, PTOLEMAEUS	9.3 S	1.4 E	25	111	25		10
704	RITCHEY, ABULFEDA	12.4 S	9.7 E	26	113	40		18
705	ALBATEGNIUS, RITCHEY	12.2 S	8.3 E	26	113	40		17
706	ALBATEGNIUS, RITCHEY	12.3 S	6.9 E	26	112	40		15
707	ALBATEGNIUS	12.4 S	5.5 E	26	112	40		14
708	ALBATEGNIUS	12.5 S	4.2 E	26	112	40		13
709	ALBATEGNIUS	12.5 S	2.8 E	26	112	40		11
710	PTOLEMAEUS, ALBATEGNIUS	12.5 S	1.4 E	26	111	40	181	10
836	HIPPARCHUS, HIND	6.2 S	9.5 E	27	113	40		20
837	HIPPARCHUS, HIND	6.2 S	8.3 E	27	113	40		19
838	HIPPARCHUS	6.1 S	6.7 E	27	112	40		17
839	HIPPARCHUS	6.2 S	5.2 E	27	112	40		16
840	HIPPARCHUS	6.3 S	3.9 E	27	112	40	360	14
841	HIPPARCHUS	6.3 S	2.6 E	27	112	40		13
842	PTOLEMAEUS, HIPPARCHUS	6.2 S	1.2 E	27	112	40		12
980	RITCHEY, ANDEL	9.1 S	9.9 E	28	114	VERT		21
981	RITCHEY, HIND	9.2 S	8.7 E	28	114	VERT		20
982	ALBATEGNIUS, HALLEY	9.2 S	7.3 E	28	113	VERT		19

APOLLO 16
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
983	ALBATEGNIUS, HALLEY	9.2 S	6.0 E	28	113	VERT		18
984	ALBATEGNIUS, HALLEY	9.3 S	4.8 E	28	113	VERT		17
985	ALBATEGNIUS, HALLEY	9.3 S	3.7 E	28	113	VERT		15
986	PTOLEMAEUS, ALBATEGNIUS	9.3 S	2.5 E	28	113	VERT		14
987	PTOLEMAEUS, ALBATEGNIUS	9.3 S	1.3 E	28	113	VERT		13
988	PTOLEMAEUS	9.4 S	.1 E	28	112	VERT		12
1270	ANDEL, RITCHEY	9.2 S	9.9 E	29	114	VERT		22
1271	HIND, RITCHEY	9.2 S	8.8 E	29	114	VERT		21
1272	ALBATEGNIUS, HALLEY	9.2 S	7.5 E	29	114	VERT		20
1273	ALBATEGNIUS, HALLEY	9.1 S	6.2 E	29	113	VERT		19
1274	ALBATEGNIUS, HALLEY	9.3 S	5.0 E	29	113	VERT		17
1275	ALBATEGNIUS, HALLEY	9.3 S	3.8 E	29	113	VERT		16
1276	ALBATEGNIUS	9.2 S	2.6 E	29	113	VERT		15
1277	PTOLEMAEUS, ALBATEGNIUS	9.3 S	1.4 E	29	112	VERT		14
1278	PTOLEMAEUS	9.3 S	.2 E	29	112	VERT		13
1400	HIND, HIPPARCHUS C	5.6 S	9.4 E	37	116	40	358	30
1401	HIND, HIPPARCHUS, C	5.7 S	7.9 E	37	116	40		28
1402	HIND, HIPPARCHUS, C	5.8 S	6.7 E	37	116	40		27
1403	HIPPARCHUS	5.9 S	5.4 E	37	116	40		26
1404	HIPPARCHUS	5.9 S	4.1 E	37	115	40		24
1405	HIPPARCHUS	6.0 S	2.7 E	37	115	40		23
1406	PTOLEMAEUS, MUELLER	6.2 S	1.3 E	37	115	40		21
1664	RITCHEY, HIND	9.1 S	9.2 E	38	117	VERT		30
1665	RITCHEY, HIND	9.2 S	7.9 E	38	117	VERT		29
1666	ALBATEGNIUS, HALLEY	9.5 S	6.6 E	38	117	VERT		27
1667	ALBATEGNIUS, HALLEY	9.4 S	5.4 E	38	116	VERT		26
1668	ALBATEGNIUS, HALLEY	9.4 S	4.4 E	38	116	VERT		25
1669	ALBATEGNIUS	9.3 S	3.2 E	38	116	VERT		24
1670	ALBATEGNIUS, PTOLEMAEUS	9.3 S	2.1 E	38	116	VERT		23
1671	PTOLEMAEUS	9.4 S	.7 E	38	116	VERT		22
1959	RITCHEY, ANDEL	8.8 S	9.8 E	39	117	VERT		32
1960	RITCHEY, HIND	8.9 S	8.4 E	39	117	VERT		31
1961	ALBATEGNIUS, HALLEY	9.0 S	7.3 E	39	117	VERT		29
1962	ALBATEGNIUS, HALLEY	9.2 S	6.0 E	39	117	VERT		28
1963	ALBATEGNIUS, HALLEY	9.2 S	4.8 E	39	117	VERT		27
1964	ALBATEGNIUS, HALLEY	9.2 S	3.4 E	39	117	VERT		25
1965	ALBATEGNIUS, PTOLEMAEUS	9.2 S	2.3 E	39	117	VERT		24
1966	ALBATEGNIUS, PTOLEMAEUS	9.2 S	1.1 E	39	117	VERT		23
2185	RITCHEY HIPPARCHUS, C, HIND	8.6 S	8.9 E	47	119	VERT		39
2186	HIND, HIPPARCHUS, C, HALLEY	8.6 S	7.7 E	47	119	VERT		37

APOLLO 16
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2187	ALBATEGNIUS, HIPPARCHUS	8.7 S	6.4 E	47	119	VERT		36
2188	ALBATEGNIUS, HIPPARCHUS	8.7 S	5.0 E	47	119	VERT		35
2189	ALBATEGNIUS, HIPPARCHUS	8.9 S	3.8 E	47	119	VERT		34
2190	ALBATEGNIUS, HIPPARCHUS, PTOLEMAEUS	8.8 S	2.4 E	47	119	VERT		32
2191	ALBATEGNIUS, HIPPARCHUS, PTOLEMAEUS	8.9 S	1.4 E	47	119	VERT		31
2468	ABULFEDA, D, ANDEL, RITCHEY	11.7 S	9.7 E	48	119	40		40
2469	RITCHEY, ALBATEGNIUS	11.8 S	8.4 E	48	119	40		39
2470	RITCHEY, ALBATENIUS	11.9 S	7.2 E	48	119	40	174	37
2471	RITCHEY, ALBATENIUS	12.0 S	6.1 E	48	119	40		36
2472	ALBATEGNIUS	12.2 S	4.8 E	48	119	40		35
2473	ALBATEGNIUS	12.4 S	3.4 E	48	119	40		34
2474	ALBATEGNIUS	12.5 S	2.2 E	48	119	40		33
2475	PTOLEMAEUS, ALPHONSUS, ALBATEGNIUS	12.4 S	.8 E	48	119	40		31
2802	RITCHEY, HIND	8.8 S	8.8 E	60	122	VERT		52
2803	HIND, HALLEY	9.0 S	7.5 E	60	122	VERT		50
2804	HIND, HALLEY, ALBATEGNIUS	9.1 S	6.2 E	60	122	VERT		49
2805	ALBATEGNIUS, KLEIN, HALLEY	9.3 S	4.8 E	60	122	VERT		47
2806	ALBATEGNIUS, KLEIN, HALLEY	9.5 S	3.7 E	60	123	VERT		46
2807	ALBATEGNIUS, KLEIN, HALLEY	9.6 S	2.4 E	60	123	VERT		45
2808	ALBATEGNIUS, G, MULLER	9.6 S	1.2 E	60	123	VERT		44
2957	HIND, RITCHEY, HIPPARCHUS C, ANDEL	8.5 S	9.8 E	63	121	VERT		55
2958	HIND, RITCHEY, HIPPARCHUS C, HALLEY	8.7 S	8.6 E	63	122	VERT		54
2959	HIND, HALLEY, HIPPARCHUS, ALBATEGNIUS	8.8 S	7.0 E	63	122	VERT		53
2960	HIND, HALLEY, HIPPARCHUS, ALBATEGNIUS	9.0 S	5.6 E	63	122	VERT		51
2961	ALBATEGNIUS, G, KLEIN, MULLER, HALLEY	9.2 S	4.3 E	63	122	VERT		50
2962	ALBATEGNIUS, G, KLEIN, MULLER, HALLEY	9.3 S	2.8 E	63	122	VERT		48
2963	ALBATEGNIUS, G, KLEIN, PTOLEMAEUS	9.5 S	1.3 E	63	122	VERT		47
2964	PTOLEMAEUS, KLEIN	9.5 S	.1 E	63	123	VERT		46

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 0 TO 10 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
174	PTOLEMAEUS	9.3 S	.7 W	17	107	VERT		-1
452	PTOLEMAEUS	9.3 S	.1 W	18	108	VERT		1
578	ALPHONSUS, PTOLEMAEUS	9.1 S	.2 W	25	111	25		8
579	ALPHONSUS, PTOLEMAEUS	9.0 S	1.4 W	25	110	25		7
580	PTOLEMAEUS, DAVY, Y	8.9 S	3.0 W	25	110	25	272	5
581	PTOLEMAEUS, DAVY, Y	9.0 S	4.2 W	25	110	25		4
582	PTOLEMAEUS, DAVY, Y	9.2 S	5.8 W	25	110	25		3
583	DAVY, Y, PALISA	8.8 S	7.2 W	25	109	25		1
584	DAVY, Y, PALISA	8.7 S	8.5 W	25	109	25		0
585	DAVY, Y, PALISA	8.6 S	9.7 W	25	109	25	271	-1
711	PTOLEMAEUS, ALPHONSUS	12.5 S	.3 W	26	111	40		08
712	PTOLEMAEUS, ALPHONSUS	12.6 S	1.5 W	26	111	40		07
713	PTOLEMAEUS, ALPHONSUS	12.3 S	3.0 W	26	111	40		06
714	PTOLEMAEUS, ALPHONSUS	12.3 S	4.4 W	26	110	40		04
715	DAVY RILLE, ALPHONSUS	12.2 S	5.7 W	26	110	40		03
716	DAVY RILLE	12.2 S	7.2 W	26	110	40		02
717	DAVY RILLE,	12.2 S	8.6 W	26	110	40	182	0
843	PTOLEMAEUS	6.2 S	.2 W	27	111	40		10
844	PTOLEMAEUS	6.2 S	1.7 W	27	111	40		09
845	PTOLEMAEUS	6.4 S	3.0 W	27	111	40		07
846	PTOLEMAEUS	6.3 S	4.4 W	27	111	40		06
847	LALANDE, PTOLEMAEUS	6.2 S	5.8 W	27	111	40		05
848	LALANDE	6.0 S	7.2 W	27	110	40		03
849	LALANDE	5.9 S	8.6 W	27	110	40		02
850	LALANDE	5.8 S	9.9 W	27	110	40	002	1
989	PTOLEMAEUS	9.3 S	1.2 W	28	112	VERT		10
990	PTOLEMAEUS	9.2 S	2.5 W	28	112	VERT		9
991	PTOLEMAEUS	9.2 S	3.6 W	28	112	VERT		8
992	PTOLEMAEUS, DAVY RILLE	9.2 S	4.8 W	28	112	VERT		7
993	PTOLEMAEUS, DAVY RILLE	9.2 S	6.0 W	28	111	VERT		6
994	DAVY, Y	9.2 S	7.1 W	28	111	VERT		5
995	DAVY, Y	9.3 S	8.4 W	28	111	VERT		3
996	DAVY, Y	9.3 S	9.4 W	28	111	VERT		2
1279	PTOLEMAEUS	9.2 S	.9 W	29	112	VERT		12
1280	PTOLEMAEUS	9.3 S	2.2 W	29	112	VERT		11
1281	PTOLEMAEUS	9.2 S	3.3 W	29	112	VERT		9
1282	PTOLEMAEUS, DAVY RILLE	9.2 S	4.7 W	29	112	VERT		8
1283	PTOLEMAEUS, DAVY Y	9.2 S	5.8 W	29	111	VERT		7
1284	DAVY Y	9.1 S	6.9 W	29	111	VERT		6
1285	DAVY Y	9.0 S	8.1 W	29	111	VERT		4

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
1286	DAVY Y	9.0 S	9.3 W	29	111	VERT		3
1407	PTOLEMAEUS, MUELLER	6.2 S	.2 W	37	115	40		20
1408	PTOLEMAEUS, HERSCHEL	6.3 S	1.6 W	37	115	40		19
1409	PTOLEMAEUS, HERSCHEL	6.3 S	2.8 W	37	115	40		17
1410	PTOLEMAEUS, HERSCHEL, LALANDE	6.2 S	4.3 W	37	115	40	360	16
1411	LALANDE, A, PALISA T	6.1 S	5.6 W	37	114	40		15
1412	LALANDE, A, PALISA T	6.0 S	7.2 W	37	114	40		13
1413	LALANDE, A, PALISA T	6.0 S	8.4 W	37	114	40		12
1414	LALANDE, A, PALISA T	6.0 S	9.8 W	37	114	40		11
1672	PTOLEMAEUS	9.5 S	.4 W	38	116	VERT		21
1673	PTOLEMAEUS	9.5 S	1.6 W	38	116	VERT		19
1674	PTOLEMAEUS	9.4 S	2.8 W	38	116	VERT		18
1675	PTOLEMAEUS	9.4 S	4.0 W	38	116	VERT		17
1676	PTOLEMAEUS, DAVY Y	9.3 S	5.2 W	38	116	VERT		16
1677	PTOLEMAEUS, DAVY, Y	9.4 S	6.4 W	38	116	VERT		16
1678	PALISA T, DAVY, Y	9.4 S	7.5 W	38	115	VERT		15
1679	PALISA T, DAVY, Y	9.4 S	8.8 W	38	115	VERT		14
1680	GUERICKE C, DAVY, Y	9.4 S	9.9 W	38	115	VERT		11
1967	PTOLEMAEUS	9.2 S	.3 W	39	116	VERT		22
1968	PTOLEMAEUS	9.2 S	1.4 W	39	116	VERT		21
1969	PTOLEMAEUS	9.2 S	2.7 W	39	116	VERT		19
1970	PTOLEMAEUS	9.2 S	3.8 W	39	116	VERT		18
1971	DAVY Y, PTOLEMAEUS	9.3 S	5.2 W	39	116	VERT		17
1972	DAVY, Y, PTOLEMAEUS	9.4 S	6.4 W	39	116	VERT		16
1973	DAVY, Y, PALISA T	9.4 S	7.2 W	39	116	VERT		15
1974	DAVY, Y, PALISA T	9.4 S	8.4 W	39	115	VERT		14
1975	DAVY, Y, PALISA T	9.4 S	9.6 W	39	115	VERT		12
2192	PTOLEMAEUS	9.2 S	.0	47	119	VERT		30
2193	PTOLEMAEUS	9.1 S	1.3 W	47	118	VERT		29
2194	PTOLEMAEUS	9.1 S	2.6 W	47	118	VERT		27
2195	PTOLEMAEUS, DAVY RILLE	9.2 S	3.8 W	47	118	VERT		26
2196	PTOLEMAEUS, DAVY RILLE	9.1 S	5.0 W	47	118	VERT		25
2197	DAVY, RILLE	9.2 S	6.5 W	47	118	VERT		24
2198	DAVY, RILLE	9.3 S	7.5 W	47	118	VERT		23
2199	DAVY, RILLE, GUERICKE C	9.4 S	9.0 W	47	118	VERT		21
2476	PTOLEMAEUS, ALPHONSUS,	12.4 S	.5 W	48	119	40		30
2477	PTOLEMAEUS, ALPHONSUS,	12.5 S	1.8 W	48	119	40		29
2478	PTOLEMAEUS, ALPHONSUS,	12.6 S	3.2 W	48	119	40		28
2479	PTOLEMAEUS, ALPHONSUS, DAVY RILLE	12.6 S	4.4 W	48	119	40		27
2480	PTOLEMAEUS, ALPHONSUS, DAVY RILLE	12.4 S	5.7 W	48	119	40	178	25

APOLLO 16
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NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2481	DAVY Y, RILLE	12.4 S	6.8 W	48	119	40		24
2482	DAVY, Y, RILLE	12.7 S	8.2 W	48	119	40		23
2483	DAVY, Y	12.8 S	9.6 W	48	119	40		21
2501	LALANDE, A, MNVR TO VERTICAL			59	124			35
2502	LALANDE, A			59	124			35
2503	LALANDE, A			59	124			33
2809	ALBATEGNIUS, PTOLEMAEUS	9.6 S	.1 W	60	123	VERT		43
2810	PTOLEMAEUS	9.7 S	1.4 W	60	123	VERT		41
2811	PTOLEMAEUS	9.8 S	2.7 W	60	123	VERT		40
2812	PTOLEMAEUS	10.1 S	3.8 W	60	123	VERT		39
2813	DAVY, Y, G, PALISA	10.2 S	5.4 W	60	124	VERT		38
2814	DAVY, Y, G, PALISA	10.3 S	6.7 W	60	124	VERT		37
2815	DAVY, Y, PALISA	10.3 S	7.7 W	60	124	VERT		36
2816	DAVY, Y	10.3 S	9.0 W	60	124	VERT		35
2965	PTOLEMAEUS	9.6 S	1.3 W	63	123	VERT		45
2966	PTOLEMAEUS	9.7 S	2.8 W	63	123	VERT		43
2967	PTOLEMAEUS, E, DAVY Y, G	9.8 S	4.2 W	63	123	VERT		42
2968	PTOLEMAEUS, E, DAVY Y, G	9.8 S	5.7 W	63	123	VERT		40
2969	DAVY, Y, G, PALISA, T	10.0 S	6.8 W	63	123	VERT		39
2970	DAVY, Y, G, PALISA, T	10.2 S	8.1 W	63	123	VERT		38
2971	DAVY, Y, PALISA, T, GUERICKE C	10.3 S	9.6 W	63	123	VERT		36

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
997	DAVY, Y	9.3 S	10.6 W	28	110	VERT		1
998	GUERICKE C, LALANDE A	9.2 S	12.0 W	28	110	VERT		-1
999	GUERICKE C	9.1 S	13.3 W	28	110	VERT		-2
1287	GUERICKE C, LALANDE A	9.2 S	10.5 W	29	111	VERT		2
1288	GUERICKE C, LALANDE A	9.1 S	11.8 W	29	111	VERT		1
1289	GUERICKE C	9.0 S	13.1 W	29	110	VERT		-1
1290	GUERICKE C	9.1 S	14.1 W	29	110	VERT		-2
1415	LALANDE, A	5.8 S	11.0 W	37	114	40		9
1416	LALANDE, A	5.7 S	12.4 W	37	113	40		8
1417	PARRY, FRA MAURO	5.7 S	13.9 W	37	113	40		6
1418	PARRY, FRA MAURO	5.8 S	15.3 W	37	113	40		5
1419	PARRY, FRA MAURO, BONPLAND	5.8 S	16.6 W	37	113	40		4
1420	PARRY, FRA MAURO, BONPLAND	5.7 S	18.2 W	37	113	40	002	2
1421	FRA MAURO, BONPLAND	5.7 S	19.5 W	37	113	40		1
1681	GUERICKE C	9.4 S	11.0 W	38	115	VERT		10
1682	GUERICKE, C	9.5 S	12.2 W	38	115	VERT		9
1683	GUERICKE, C, PARRY	9.4 S	13.3 W	38	115	VERT		8
1684	GUERICKE, PARRY	9.5 S	14.7 W	38	115	VERT		6
1685	BONPLAND, PARRY, RILLES	9.5 S	15.8 W	38	115	VERT		5
1686	BONPLAND, PARRY, RILLES	9.4 S	17.1 W	38	114	VERT		4
1687	BONPLAND, PARRY, RILLES	9.5 S	18.4 W	38	114	VERT		3
1688	BONPLAND, KNOWN SEA	9.6 S	19.7 W	38	114	VERT		2
1976	GUERICKE C, DAVY	9.5 S	10.8 W	39	115	VERT		11
1977	GUERICKE, C	9.6 S	12.1 W	39	115	VERT		10
1978	GUERICKE, C, PARRY	9.7 S	13.3 W	39	115	VERT		9
1979	BONPLAND, PARRY	9.6 S	14.3 W	39	115	VERT		8
1980	BONPLAND, PARRY	9.6 S	15.5 W	39	115	VERT		7
1981	BONPLAND, PARRY	9.7 S	16.8 W	39	114	VERT		5
1982	BONPLAND, PARRY	9.6 S	18.3 W	39	114	VERT		4
1983	BONPLAND, FRA MAURO	9.6 S	19.4 W	39	114	VERT		3
2200	DAVY, GUERICKE C	9.5 S	10.4 W	47	118	VERT		20
2201	GUERICKE, C, LALANDE A	9.4 S	11.7 W	47	118	VERT		19
2202	GUERICKE, C, PARRY, M	9.5 S	12.8 W	47	118	VERT		18
2203	GUERICKE, PARRY, RILLES	9.5 S	13.9 W	47	118	VERT		16
2204	BONPLAND, PARRY, RILLES	9.7 S	15.5 W	47	117	VERT		15
2205	BONPLAND, PARRY, RILLES	9.7 S	16.8 W	47	117	VERT		13
2206	BONPLAND, PARRY, RILLES	9.6 S	18.2 W	47	117	VERT		12
2207	BONPLAND, PARRY RILLES	9.7 S	19.4 W	47	117	VERT		11
2484	DAVY Y, GUERICKE C	12.9 S	10.7 W	48	119	40		20
2485	GUERICKE, C	13.0 S	12.1 W	48	119	40		19

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2486	GUERICKE, B, C	13.1 S	13.4 W	48	119	40		17
2487	GUERICKE, B	13.0 S	14.7 W	48	119	40		16
2488	GUERICKE, B	13.0 S	16.2 W	48	119	40		15
2489	GUERICKE B, F, OPELT	12.8 S	17.4 W	48	118	40		14
2490	GUERICKE B, F, OPELT	13.0 S	18.5 W	48	118	40	180	13
2491	BULLIALDUS, W, OPELT	12.9 S	19.7 W	48	118	40		11
2504	LALANDE, TURNER			59	124		42	
2505	LALANDE, TURNER			59	124		41	
2506	PARRY, FRA MAURO			59	124		45	
2507	PARRY, FRA MAURO			59	124		32	
2508	PARRY, FRA MAURO, BONPLAND			59	124		31	
2509	PARRY, FRA MAURO, BONPLAND			59	124		30	
2510	FRA MAURO			59	124		30	
2511	FRA MAURO	1.6 N	14.1 W	59	124		30	29
2512	FRA MAURO	1.5 N	15.2 W	59	124		30	28
2513	FRA MAURO, LANSBERG	1.1 N	16.6 W	59	124		30	26
2514	FRA MAURO A, B, LANSBERG	.1 N	18.8 W	59	124		30	24
2817	DAVY, Y, GUERICKE C	10.4 S	10.5 W	60	124	VERT		32
2818	GUERICKE C	10.5 S	11.6 W	60	124	VERT		31
2819	GUERICKE, C	10.6 S	12.9 W	60	124	VERT		30
2820	GUERICKE, C, PARRY	10.7 S	14.2 W	60	124	VERT		29
2821	GUERICKE, F, PARRY, A, M	10.7 S	15.6 W	60	124	VERT		27
2822	GUERICKE, PARRY, BONPLAND	10.8 S	17.0 W	60	124	VERT		26
2823	BONPLAND, PARRY A	10.8 S	18.0 W	60	124	VERT		25
2824	BONPLAND	10.8 S	19.2 W	60	124	VERT		24
2972	DAVY, GUERICKE C	10.3 S	11.1 W	63	123	VERT		35
2973	GUERICKE, C, PARRY M	10.4 S	12.2 W	63	123	VERT		34
2974	GUERICKE, C, F, PARRY, A, M	10.5 S	13.6 W	63	123	VERT		32
2975	GUERICKE, F, PARRY, A, M, BONPLAND	10.6 S	15.2 W	63	123	VERT		31
2976	GUERICKE, F, PARRY, A, M, BONPLAND	10.7 S	16.4 W	63	123	VERT		30
2977	BONPLAND, PARRY, A, RILLES	10.8 S	17.7 W	63	123	VERT		28
2978	BONPLAND, PARRY RILLES	10.8 S	19.2 W	63	123	VERT		27

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 20 TO 30 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
1422	FRA MAURO, BONPLAND	5.7 S	20.7 W	37	113	40		0
1423	FRA MAURO, W OF	5.7 S	22.0 W	37	112	40		-1
1689	KNOWN SEA	9.6 S	20.7 W	38	114	VERT		1
1690	KNOWN SEA	9.6 S	21.6 W	38	114	VERT		0
1691	KNOWN SEA	9.6 S	22.9 W	38	113	VERT		-2
1984	BONPLAND, FRA MAURO	9.5 S	20.3 W	39	114	VERT		2
1985	KNOWN SEA	9.5 S	21.4 W	39	114	VERT		1
1986	KNOWN SEA	9.4 S	22.7 W	39	114	VERT		0
2208	BONPLAND	9.5 S	20.4 W	47	117	VERT		10
2209	BONPLAND, W OF	9.5 S	21.8 W	47	117	VERT		9
2210	BONPLAND, W OF	9.5 S	22.9 W	47	117	VERT		8
2211	EUCLIDES D	9.4 S	24.2 W	47	117	VERT		6
2212	EUCLIDES D, RIPHAEN MOUNTAINS	9.3 S	25.6 W	47	117	VERT		5
2213	EUCLIDES, D, RIPHAEN MOUNTAINS	9.4 S	26.7 W	47	117	VERT		4
2214	EUCLIDES, D, RIPHAEN MOUNTAINS	9.4 S	27.8 W	47	116	VERT		3
2215	EUCLIDES, B, RIPHAEN MOUNTAINS	9.4 S	29.3 W	47	116	VERT		2
2492	BULLIALDUS, W. DARNEY	13.0 S	21.2 W	48	118	40		10
2493	BULLIALDUS, W. DARNEY	13.1 S	22.2 W	48	118	40		9
2494	DARNEY, C	13.2 S	23.4 W	48	118	40		8
2495	DARNEY, C	12.9 S	24.9 W	48	118	40		6
2496	DARNEY, C, F	12.6 S	26.4 W	48	118	40		5
2497	DARNEY C, F, EUCLIDES B, C	12.6 S	27.5 W	48	118	40		4
2498	EUCLIDES B, C	12.6 S	28.8 W	48	117	40		3
2515	EUCLIDES D, RIPHAEN MOUNTAINS	1.5 S	21.1 W	59	124		30	22
2516	EUCLIDES D, RIPHAEN MOUNTAINS	2.6 S	22.2 W	59	124		30	20
2517	EUCLIDES, RIPHAEN MOUNTAINS	4.1 S	24.1 W	59	124		30	18
2518	EUCLIDES, RIPHAEN MOUNTAINS	4.6 S	24.7 W	59	124		30	18
2519	EUCLIDES, RIPHAEN MOUNTAINS	5.2 S	26.4 W	59	124		30	16
2520	EUCLIDES, RIPHAEN MOUNTAINS	5.8 S	27.7 W	59	124		30	15
2521	EUCLIDES, RIPHAEN MOUNTAINS	6.4 S	29.0 W	59	124		30	13
2825	KNOWN SEA	10.8 S	20.3 W	60	124	VERT		23
2826	KNOWN SEA	10.8 S	21.4 W	60	124	VERT		22
2827	KNOWN SEA	10.6 S	22.9 W	60	124	VERT		20
2828	KNOWN SEA, EUCLIDES D	10.7 S	24.4 W	60	124	VERT		19
2829	KNOWN SEA, EUCLIDES D	10.7 S	25.5 W	60	124	VERT		17
2830	KNOWN SEA, RIPHAEN MOUNTAINS	10.7 S	26.7 W	60	124	VERT		16
2831	RIPHAEN MOUNTAINS, EUCLIDES C, B	10.7 S	28.1 W	60	124	VERT		15
2832	RIPHAEN MOUNTAINS, EUCLIDES C, B	10.5 S	29.5 W	60	124	VERT		14
2979	BONPLAND	10.8 S	20.5 W	63	123	VERT		26
2980	KNOWN SEA	10.9 S	21.8 W	63	123	VERT		24

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 20 TO 30 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2981	KNOWN SEA, EUCLIDES D	10.5 S	23.2 W	63	123	VERT		23
2982	EUCLIDES D, DARNEY F	10.4 S	24.6 W	63	123	VERT		21
2983	RIPHAEN MOUNTAINS	10.4 S	25.9 W	63	123	VERT		20
2984	RIPHAEN MOUNTAINS, EUCLIDES, B, C	10.5 S	27.3 W	63	123	VERT		19
2985	RIPHAEN MOUNTAINS, EUCLIDES, B, C	10.6 S	28.7 W	63	123	VERT		18

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2216	EUCLIDES, B, RIPHAEN MOUNTAINS	9.4 S	30.5 W	47	116	VERT		1
2217	EUCLIDES, B	9.4 S	31.6 W	47	116	VERT		-1
2499	EUCLIDES B, C	12.7 S	30.2 W	48	117	40	180	1
2522	EUCLIDES, RIPHAEN MOUNTAINS	7.1 S	31.1 W	59	124		31	11
2523	EUCLIDES, RIPHAEN MOUNTAINS	7.4 S	32.0 W	59	124		32	10
2524	EUCLIDES, RIPHAEN MOUNTAINS	7.9 S	33.4 W	59	124		33	9
2525	WICHMANN	8.2 S	34.9 W	59	124		35	8
2526	WICHMANN, R	8.5 S	36.6 W	59	124		35	6
2527	WICHMANN, R	8.7 S	37.8 W	59	124		35	5
2528	WICHMANN, R	8.9 S	38.9 W	59	124		40	4
2833	EUCLIDES B	10.7 S	30.7 W	60	124	VERT		13
2834	EUCLIDES B	10.6 S	31.9 W	60	124	VERT		11
2835	HERIGONIUS RILLE 1	10.5 S	33.3 W	60	124	VERT		10
2836	HERIGONIUS RILLE 1	10.6 S	34 5 W	60	124	VERT		9
2837	HERIGONIUS RILLE 1	10.6 S	35 7 W	60	124	VERT		8
2838	HERIGONIUS RILLE 1, LETRONNE A	10.5 S	37.1 W	60	124	VERT		7
2839	HERIGONIUS RILLE 1, LETRONNE A	10.4 S	38.3 W	60	124	VERT		6
2840	LETRONNE, A	10.3 S	39.5 W	60	124	VERT		5
2986	RIPHAEN MOUNTAINS, EUCLIDES, B, C	10.7 S	30.1 W	63	123	VERT		16
2987	EUCLIDES, B, C, HERIGONIUS	10.7 S	31.7 W	63	123	VERT		15
2988	EUCLIDES B, C, HERIGONIUS	10.7 S	33.0 W	63	123	VERT		13
2989	HERIGONIUS, RILLE 1	10.6 S	34.3 W	63	123	VERT		12
2990	HERIGONIUS, RILLE 1	10.5 S	35.7 W	63	123	VERT		11
2991	HERIGONIUS RILLE 1, LETRONNE A	10.5 S	37.1 W	63	123	VERT		9
2992	HERIGONIUS RILLE 1, LETRONNE A	10.5 S	38.6 W	63	123	VERT		8

APOLLO 16
MAPPING CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 W

NASA PHOTO AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	REV	ALT KM	CAMERA TILT	CAMERA AZ	SUN EL
2529	WICHMANN, R	8.7 S	40.5 W	59	123		40	2
2530	FLAMSTEED A	8.6 S	41.5 W	59	123		40	1
2531	FLAMSTEED A	8.7 S	42.3 W	59	123		45	0
2532	FLAMSTEED A	9.2 S	43.0 W	59	123		50	-1
2841	LETRONNE, A, FLAMSTEED A	10.3 S	40.9 W	60	124	VERT		3
2842	LETRONNE, FLAMSTEED A	10.2 S	42.3 W	60	124	VERT		1
2843	LETRONNE, FLAMSTEED A	10.2 S	43.8 W	60	124	VERT		0
2844	LETRONNE, FLAMSTEED A	10.2 S	45.1 W	60	124	VERT		-1
2845	BILLY B, LETRONNE, P	10.2 S	46.5 W	60	124	VERT		-2
2993	LETRONNE, A, WICHMANN, FLAMSTEED A	10.4 S	40.0 W	63	123	VERT		7
2994	LETRONNE, A, FLAMSTEED A	10.3 S	41.5 W	63	123	VERT		5
2995	LETRONNE, P, FLAMSTEED A	10.2 S	42.9 W	63	123	VERT		4
2996	LETRONNE, P, FLAMSTEED A	10.2 S	44.2 W	63	123	VERT		2
2997	LETRONNE, P	10.2 S	45.6 W	63	122	VERT		1
2998	LETRONNE, P	10.2 S	46.9 W	63	122	VERT		0
2999	LETRONNE P, W OF, DOUBLE EXPOSURE	10.1 S	48.3 W	63	122	VERT		-2

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4091	FWD		8.8 N	168.2 W	103	3	11	ZHUKOVSKY
4092	AFT		8.8 N	166.9 W	103	3	11	ZHUKOVSKY
4093	FWD		8.8 N	168.9 W	103	3	11	ZHUKOVSKY, W OF
4094	AFT		8.8 N	167.5 W	103	3	12	ZHUKOVSKY
4095	FWD	4100	8.9 N	178.5 E	116	17	1	STEIN, W OF
4096	AFT		9.0 N	179.9 E	116	17	0	STEIN, E OF
4097	FWD	4102	8.9 N	177.8 E	116	17	2	SAFARIK, E OF
4098	AFT		8.9 N	179.2 E	116	17	1	STEIN
4099	FWD	4104	9.0 N	177.0 E	116	17	3	SAFARIK
4101	FWD	4106	9.0 N	176.4 E	116	17	3	SAFARIK
4103	FWD	4108	8.9 N	175.7 E	117	17	4	VALIER, E OF
4105	FWD	4110	8.8 N	175.1 E	117	17	5	VALIER
4107	FWD	4112	8.7 N	174.4 E	117	17	5	VALIER, SHARONOV
4109	FWD	4114	9.0 N	173.7 E	117	17	6	VALIER, SHARONOV
4111	FWD	4116	8.8 N	173.0 E	117	17	7	SHARONOV
4113	FWD	4118	8.8 N	172.4 E	117	17	7	SHARONOV
4115	FWD	4120	8.5 N	171.7 E	118	17	8	SHARONOV, SW OF
4117	FWD	4122	8.5 N	170.9 E	118	17	9	SHARONOV, SW OF
4119	FWD	4124	8.5 N	170.1 E	118	17	9	DUFAY
4121	FWD	4126	8.4 N	169.4 E	118	17	10	DUFAY
4123	FWD	4128	8.5 N	168.7 E	118	17	11	DUFAY, W OF
4125	FWD	4130	8.5 N	167.8 E	118	17	12	SPENCER JONES
4127	FWD	4132	8.5 N	167.1 E	119	17	13	SPENCER JONES
4129	FWD	4134	8.3 N	166.4 E	119	17	13	SPENCER JONES
4131	FWD	4136	8.2 N	165.7 E	119	17	14	SPENCER JONES
4133	FWD	4138	8.3 N	165.0 E	119	17	15	PAPALESKI
4135	FWD	4140	8.2 N	164.4 E	119	17	15	PAPALESKI
4137	FWD	4142	8.0 N	163.6 E	119	17	16	PAPALESKI
4139	FWD	4144	8.1 N	162.8 E	119	17	17	MANDEL'SHTAM
4141	FWD	4146	8.0 N	162.1 E	119	17	17	MANDEL'SHTAM
4143	FWD	4148	7.8 N	161.4 E	120	17	18	MANDEL'SHTAM
4145	FWD	4150	7.9 N	160.6 E	120	17	19	MANDEL'SHTAM, W OF
4147	FWD	4152	7.8 N	160.1 E	120	17	19	MANDEL'SHTAM, W OF
4149	FWD	4154	7.9 N	159.6 E	120	17	20	MANDEL'SHTAM, W OF
4151	FWD	4156	7.8 N	158.8 E	120	17	21	MILLS, E OF
4153	FWD	4158	7.7 N	158.1 E	120	17	22	MILLS, E OF
4155	FWD	4160	7.6 N	157.3 E	120	17	22	MILLS, E OF
4157	FWD	4162	7.5 N	156.6 E	120	17	23	MILLS
4159	FWD	4164	7.4 N	155.8 E	120	17	24	MILLS
4161	FWD	4166	7.3 N	155.1 E	121	17	24	MILLS, W OF

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4163	FWD	4168	7.3 N	154.3 E	121	17	25	MILLS, W OF
4165	FWD	4170	7.3 N	153.7 E	121	17	26	HENDERSON, E OF
4167	FWD	4172	7.2 N	153.0 E	121	17	27	HENDERSON, E RIM
4169	FWD	4174	7.1 N	152.4 E	121	17	27	HENDERSON
4171	FWD	4176	7.1 N	151.7 E	121	17	28	HENDERSON
4173	FWD	4178	7.0 N	150.8 E	121	17	29	ST JOHN
4175	FWD	4180	7.0 N	150.1 E	122	17	29	SCHUSTER, E OF
4177	FWD	4182	6.9 N	149.3 E	122	17	30	SCHUSTER, E OF
4179	FWD	4184	6.8 N	148.7 E	122	17	31	SCHUSTER, E OF
4181	FWD	4186	6.8 N	147.9 E	122	17	32	SCHUSTER
4183	FWD	4188	6.7 N	147.4 E	122	17	32	SCHUSTER
4185	FWD	4190	6.6 N	146.8 E	122	17	33	SCHUSTER
4187	FWD	4192	6.5 N	146.1 E	122	17	33	SCHUSTER
4189	FWD	4194	6.5 N	145.2 E	122	17	34	MENDELEEV, SCHUSTER
4191	FWD	4196	6.4 N	144.5 E	122	17	35	MENDELEEV
4193	FWD	4198	6.3 N	143.8 E	122	17	36	MENDELEEV
4195	FWD	4200	6.3 N	143.2 E	122	17	36	MENDELEEV
4197	FWD	4202	6.3 N	142.6 E	123	17	37	MENDELEEV
4199	FWD	4204	6.1 N	141.8 E	123	17	38	MENDELEEV
4201	FWD	4206	6.0 N	141.1 E	123	17	38	MENDELEEV
4203	FWD	4208	5.9 N	140.3 E	123	17	39	MENDELEEV
4205	FWD	4210	5.8 N	139.4 E	123	17	40	MENDELEEV
4207	FWD	4212	5.8 N	138.7 E	123	17	41	MENDELEEV
4209	FWD	4214	5.7 N	138.2 E	123	17	41	MENDELEEV
4211	FWD	4216	5.6 N	137.3 E	123	17	42	MENDELEEV
4213	FWD	4218	5.5 N	136.6 E	123	17	43	MENDELEEV
4215	FWD	4220	5.4 N	135.9 E	123	17	44	MENDELEEV, HARTMANN
4217	FWD	4222	5.4 N	135.1 E	123	17	44	HARTMANN
4219	FWD	4224	5.3 N	134.5 E	123	17	45	HARTMANN
4221	FWD	4226	5.2 N	134.0 E	123	17	45	GREEN, E RIM
4223	FWD	4228	5.2 N	133.2 E	124	17	46	GREEN, VETCHINKIN
4225	FWD	4230	5.1 N	132.5 E	124	17	47	GREEN, VETCHINKIN
4227	FWD	4232	5.0 N	131.7 E	124	17	48	GREEN, W RIM
4229	FWD	4234	4.9 N	131.0 E	124	17	48	GREEN, W OF
4231	FWD	4236	4.8 N	130.3 E	124	17	49	GREEN, W OF
4233	FWD	4238	4.7 N	129.6 E	124	17	50	GREGORY, E OF
4235	FWD	4240	4.5 N	128.9 E	124	17	51	GREGORY, E OF
4237	FWD	4242	4.4 N	128.1 E	124	17	51	GREGORY, MOROZOV
4239	FWD	4244	4.3 N	127.5 E	124	17	52	GREGORY, MOROZOV
4241	FWD	4246	4.3 N	126.9 E	124	17	53	GREGORY, MOROZOV

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4243	FWD	4248	4.2 N	126.1 E	124	17	53	GREGORY, W RIM
4245	FWD	4250	4.1 N	125.4 E	124	17	54	GREGORY, W OF
4247	FWD	4252	4.0 N	124.6 E	124	17	55	GREGORY, W OF
4249	FWD	4254	3.9 N	123.9 E	124	17	56	GREGORY, W OF
4251	FWD	4256	3.8 N	123.1 E	124	17	56	KING, E OF
4253	FWD	4258	3.7 N	122.4 E	124	17	57	KING, E OF
4255	FWD	4260	3.6 N	121.8 E	124	17	58	KING, E RIM
4257	FWD	4262	3.5 N	121.2 E	124	17	58	KING
4259	FWD	4264	3.5 N	120.4 E	124	17	59	KING
4261	FWD	4266	3.4 N	119.7 E	124	17	60	KING, W RIM
4263	FWD	4268	3.3 N	119.0 E	124	17	60	KING, W OF
4265	FWD	4270	3.2 N	118.4 E	124	17	61	KING, W OF
4267	FWD	4272	3.1 N	117.6 E	124	17	62	ABUL WAFA, E OF
4269	FWD	4274	3.0 N	116.9 E	124	17	63	ABUL WAFA
4271	FWD	4276	2.8 N	116.1 E	124	17	63	ABUL WAFA
4273	FWD	4278	2.6 N	115.4 E	124	17	64	ABUL WAFA
4275	FWD	4280	2.3 N	114.7 E	124	17	65	VESALIUS
4277	FWD	4282	2.1 N	114.0 E	124	17	66	VESALIUS
4279	FWD	4284	1.8 N	113.1 E	124	17	66	BUISSON, FIRSOV
4281	FWD	4286	1.6 N	112.5 E	124	17	67	BUISSON, FIRSOV
4283	FWD	4288	1.5 N	111.8 E	124	17	68	BUISSON
4285	FWD	4290	1.6 N	111.2 E	124	17	68	BUISSON, W RIM
4287	FWD	4292	1.4 N	110.6 E	124	17	69	BUISSON, W OF
4289	FWD	4294	1.3 N	109.9 E	124	17	70	BUISSON, W OF
4291	FWD	4296	1.2 N	109.1 E	125	17	70	BUISSON, W OF
4293	FWD	4298	1.1 N	108.7 E	125	17	71	BUISSON, W OF
4295	FWD	4300	.9 N	107.9 E	125	17	72	BUISSON, W OF
4297	FWD	4302	.8 N	107.2 E	125	17	72	BUISSON, W OF
4299	FWD	4304	.6 N	106.4 E	125	17	73	SAHA, E OF
4301	FWD	4306	.4 N	105.9 E	125	17	74	SAHA, E OF
4303	FWD	4308	.3 N	105.2 E	125	17	74	SAHA, E OF
4305	FWD	4310	.1 N	104.5 E	125	17	75	SAHA, SAENGER
4307	FWD	4312	.1 S	103.7 E	125	17	76	SAHA, SAENGER
4309	FWD	4314	.2 S	103.0 E	124	17	77	SAHA, SAENGER
4311	FWD	4316	.3 S	102.3 E	124	17	77	SAHA
4313	FWD	4318	.4 S	101.6 E	124	17	78	SAHA, W RIM
4315	FWD	4320	.5 S	100.8 E	124	17	79	SAHA, W OF
4317	FWD	4322	.5 S	100.2 E	124	17	79	WYLD, E OF
4319	FWD	4324	.6 S	99.6 E	124	17	80	WYLD
4321	FWD	4326	.7 S	98.8 E	124	17	80	WYLD

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4323	FWD	4328	.7 S	98.1 E	124	17	81	WYLD
4325	FWD	4330	.7 S	97.5 E	124	17	82	WYLD
4327	FWD	4332	.7 S	96.9 E	124	17	82	WYLD, W RIM
4329	FWD	4334	.7 S	96.2 E	124	17	83	PURKYNE, E RIM
4331	FWD	4336	.8 S	95.3 E	124	17	84	PURKYNE, BABCOCK
4333	FWD	4338	.9 S	94.7 E	124	17	84	PURKYNE, BABCOCK
4335	FWD	4340	1.0 S	94.0 E	124	17	85	HIRAYAMA, BABCOCK
4337	FWD	4342	1.2 S	93.3 E	124	17	85	HIRAYAMA, BABCOCK
4339	FWD	4344	1.2 S	92.7 E	124	17	86	HIRAYAMA
4341	FWD	4346	1.3 S	91.9 E	124	17	86	HIRAYAMA
4343	FWD		1.5 S	91.1 E	124	17	87	SMYTH'S SEA
4345	FWD		1.7 S	90.4 E	124	17	87	SMYTH'S SEA
4347	FWD		1.8 S	89.6 E	124	17	87	SMYTH'S SEA
4348	FWD	4353	2.1 S	88.3 E	123	18	86	SMYTH'S SEA
4349	AFT		1.9 S	89.8 E	123	18	86	SMYTH'S SEA
4350	FWD	4355	2.2 S	87.4 E	123	18	86	SMYTH'S SEA
4351	AFT		2.0 S	89.1 E	123	18	86	SMYTH'S SEA
4352	FWD	4357	2.3 S	86.6 E	123	18	86	SMYTH'S SEA
4354	FWD	4359	2.3 S	85.8 E	123	18	85	SMYTH'S SEA
4356	FWD	4361	2.4 S	85.0 E	123	18	85	SMYTH'S SEA
4358	FWD	4363	2.5 S	84.3 E	123	18	84	SMYTH'S SEA
4360	FWD	4365	2.6 S	83.7 E	123	18	84	SMYTH'S SEA
4362	FWD	4367	2.7 S	83.0 E	123	18	83	SMYTH'S SEA
4364	FWD	4369	2.8 S	82.4 E	123	18	83	SMYTH'S SEA
4366	FWD	4371	2.8 S	81.7 E	123	18	82	GILBERT U
4368	FWD	4373	2.9 S	80.9 E	123	18	81	SCHUBERT B
4370	FWD	4375	3.0 S	80.1 E	123	18	80	KASTNER, G
4372	FWD	4377	3.1 S	79.3 E	123	18	80	KASTNER, G
4374	FWD	4379	3.2 S	78.7 E	123	18	79	KASTNER, G, GILBERT M
4376	FWD	4381	3.3 S	78.0 E	123	18	78	KASTNER, GILBERT N, M
4378	FWD	4383	3.4 S	77.2 E	123	18	78	KASTNER A, GILBERT, N
4380	FWD	4385	3.5 S	76.3 E	123	18	77	GILBERT, SCHUBERT Y
4382	FWD	4387	3.6 S	75.6 E	122	18	76	GILBERT
4384	FWD	4389	3.7 S	74.9 E	122	18	75	GILBERT
4386	FWD	4391	3.8 S	74.2 E	122	18	75	GILBERT, W CF
4388	FWD	4393	3.9 S	73.4 E	122	18	74	GILBERT J, K
4390	FWD	4395	4.1 S	72.7 E	122	18	73	GILBERT J, K
4392	FWD	4397	4.2 S	72.2 E	122	18	73	GILBERT J, K
4394	FWD	4399	4.3 S	71.4 E	122	18	72	MACLAURIN B, F, L
4396	FWD	4401	4.4 S	70.7 E	122	18	71	MACLAURIN B, F

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4398	FWD	4403	4.6 S	70.2 E	121	18	71	MACLAURIN P, E OF
4400	FWD	4405	4.7 S	69.5 E	121	18	70	MACLAURIN, P, M
4402	FWD	4407	4.8 S	68.8 E	121	18	69	MACLAURIN, P, M
4404	FWD	4409	4.9 S	68.0 E	121	18	68	MACLAURIN, A
4406	FWD	4411	5.1 S	67.2 E	121	18	67	MACLAURIN K, LANGRENUS W
4408	FWD	4413	5.2 S	66.6 E	121	18	67	MACLAURIN U
4410	FWD	4415	5.3 S	65.9 E	121	18	66	MACLAURIN E, LANGRENUS M
4412	FWD	4417	5.4 S	65.1 E	121	18	66	MACLAURIN E, W OF
4414	FWD	4419	5.5 S	64.4 E	121	18	65	MACLAURIN H
4416	FWD	4421	5.6 S	63.7 E	121	18	64	LANGRENUS, E OF
4418	FWD	4423	5.7 S	62.9 E	121	18	63	LANGRENUS, T
4420	FWD	4425	5.7 S	62.1 E	121	18	63	LANGRENUS
4422	FWD	4427	5.8 S	61.4 E	121	18	62	LANGRENUS
4424	FWD	4429	5.9 S	60.9 E	120	18	61	LANGRENUS
4426	FWD	4431	6.0 S	60.4 E	120	18	61	LANGRENUS, C
4428	FWD	4433	6.0 S	59.7 E	120	18	60	LANGRENUS, C
4430	FWD	4435	6.1 S	59.1 E	120	18	60	LANGRENUS
4432	FWD	4437	6.1 S	58.4 E	120	18	59	LANGRENUS B, K
4434	FWD	4439	6.2 S	57.7 E	120	18	58	LANGRENUS K, B
4436	FWD	4441	6.3 S	57.1 E	120	18	58	LANGRENUS F
4438	FWD	4443	6.4 S	56.5 E	120	18	57	LANGRENUS F
4440	FWD	4445	6.4 S	55.8 E	119	18	56	LANGRENUS F
4442	FWD	4447	6.5 S	55.1 E	119	18	56	FERTILITY, SEA OF
4444	FWD	4449	6.6 S	54.5 E	119	18	55	FERTILITY, SEA OF
4446	FWD	4451	6.6 S	53.7 E	119	18	54	FERTILITY, SEA OF
4448	FWD	4453	6.7 S	52.8 E	119	18	53	MESSIER G
4450	FWD	4455	6.8 S	52.1 E	119	18	53	MESSIER G, W OF
4452	FWD	4457	6.8 S	51.6 E	118	18	52	GOCLENIUS A, E OF
4454	FWD	4459	6.9 S	50.8 E	118	18	52	GOCLENIUS A
4456	FWD	4461	7.0 S	50.1 E	118	18	51	GOCLENIUS A
4458	FWD	4463	7.0 S	49.4 E	118	18	50	FERTILITY, SEA OF
4460	FWD	4465	7.1 S	48.8 E	118	18	49	FERTILITY, SEA OF, MESSIER
4462	FWD	4467	7.1 S	48.2 E	118	18	49	FERTILITY, SEA OF, MESSIER, A
4464	FWD	4469	7.2 S	47.5 E	118	18	48	FERTILITY, SEA OF, MESSIER A
4466	FWD	4471	7.2 S	46.6 E	118	18	47	MESSIER D
4468	FWD	4473	7.3 S	45.9 E	117	18	47	GOCLENIUS
4470	FWD	4475	7.4 S	45.1 E	117	18	46	GOCLENIUS
4472	FWD	4477	7.5 S	44.4 E	117	18	45	GOCLENIUS, RILLES
4474	FWD	4479	7.6 S	43.7 E	117	18	44	GOCLENIUS, RILLES
4476	FWD	4481	7.6 S	43.0 E	117	18	44	GOCLENIUS RILLES

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4478	FWD	4483	7.6 S	42.4 E	117	18	43	GUTENBERG E, D
4480	FWD	4485	7.6 S	41.8 E	117	18	42	GUTENBERG, E
4482	FWD	4487	7.7 S	41.3 E	117	18	42	GUTENBERG
4484	FWD	4489	7.6 S	40.5 E	117	18	41	GUTENBERG, G
4486	FWD	4491	7.7 S	39.8 E	116	18	41	GUTENBERG G
4488	FWD	4493	7.8 S	39.3 E	116	18	40	GUTENBERG RILLES
4490	FWD	4495	7.9 S	38.5 E	116	18	39	GUTENBERG RILLES
4492	FWD	4497	7.9 S	37.9 E	116	18	39	GUTENBERG RILLES
4494	FWD	4499	8.0 S	37.2 E	116	18	38	CAPELLA, E OF
4496	FWD	4501	8.1 S	36.6 E	115	18	37	CAPELLA, E OF
4498	FWD	4503	8.1 S	35.9 E	115	18	37	CAPELLA, E OF
4500	FWD	4505	8.2 S	35.2 E	115	18	36	CAPELLA
4502	FWD	4507	8.3 S	34.5 E	115	18	35	CAPELLA
4504	FWD	4509	8.4 S	33.6 E	115	18	34	ISIDORUS, DAGUERRE
4506	FWD	4511	8.5 S	32.9 E	115	18	34	ISIDORUS, DAGUERRE
4508	FWD	4513	8.5 S	32.2 E	115	18	33	ISIDORUS, W OF
4510	FWD	4515	8.5 S	31.5 E	115	18	32	ISIDORUS, W OF
4512	FWD	4517	8.5 S	30.9 E	114	18	32	ISIDORUS, W OF
4514	FWD	4519	8.6 S	30.4 E	114	18	31	MADLER
4516	FWD	4521	8.5 S	29.8 E	114	18	31	MADLER
4518	FWD	4523	8.6 S	29.1 E	114	18	30	MADLER, TORRICELLI, R
4520	FWD	4525	8.6 S	28.2 E	114	18	29	TORRICELLI, R
4522	FWD	4527	8.6 S	27.6 E	114	18	28	THEOPHILUS
4524	FWD	4529	8.7 S	26.9 E	114	18	28	THEOPHILUS
4526	FWD	4531	8.7 S	26.2 E	114	18	27	THEOPHILUS
4528	FWD	4533	8.6 S	25.6 E	114	18	26	THEOPHILUS
4530	FWD	4535	8.7 S	25.0 E	114	18	26	THEOPHILUS
4532	FWD	4537	8.7 S	24.3 E	113	18	25	CYRILLUS
4534	FWD	4539	8.7 S	23.7 E	113	18	25	CYRILLUS
4536	FWD	4541	8.8 S	23.1 E	113	18	24	CYRILLUS, HYPATIA
4538	FWD	4543	8.9 S	22.5 E	113	18	23	CYRILLUS, HYPATIA
4540	FWD	4545	8.9 S	21.7 E	113	18	23	CYRILLUS B
4542	FWD	4547	8.9 S	21.0 E	112	18	22	KANT E
4544	FWD	4549	9.0 S	20.3 E	112	18	21	KANT
4546	FWD	4551	9.1 S	19.6 E	112	18	21	KANT, G
4548	FWD	4553	9.1 S	19.1 E	112	18	20	ZOLLNER, KANT D
4550	FWD	4555	9.2 S	18.6 E	112	18	19	ZOLLNER, KANT D
4552	FWD	4557	9.3 S	17.9 E	112	18	19	ZOLLNER, W OF
4554	FWD	4559	9.3 S	17.1 E	112	18	18	DESCARTES, E OF
4556	FWD	4561	9.3 S	16.5 E	112	18	17	DESCARTES, E OF

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4865	FWD	4870	4.1 N	107.1 E	115	39	50	SAENGER, E OF
4867	FWD	4872	4.0 N	106.3 E	115	39	51	SAENGER, E OF
4869	FWD	4874	3.8 N	105.7 E	115	39	52	SAENGER, E OF
4871	FWD	4876	3.8 N	104.9 E	115	39	52	SAENGER, E OF
4873	FWD	4878	3.7 N	104.4 E	115	39	53	SAENGER, E OF
4875	FWD	4880	3.6 N	103.7 E	115	39	54	SAENGER
4877	FWD	4882	3.5 N	103.2 E	115	39	54	SAENGER, SAHA
4879	FWD	4884	3.3 N	102.6 E	115	39	55	SAENGER, SAHA
4881	FWD	4886	3.4 N	101.7 E	115	39	56	SAENGER, W RIM, SAHA
4883	FWD	4888	3.2 N	101.1 E	115	39	56	SAENGER, W OF
4885	FWD	4890	2.9 N	100.4 E	115	39	57	SAENGER, W OF
4887	FWD	4892	2.9 N	99.6 E	116	39	58	ERRO
4889	FWD	4894	3.0 N	99.0 E	116	39	58	ERRO, WYLD
4891	FWD	4896	2.7 N	98.4 E	116	39	59	ERRO, WYLD
4893	FWD	4898	2.6 N	97.7 E	116	39	60	ERRO, WYLD
4895	FWD	4900	2.5 N	97.0 E	116	39	60	WYLD
4897	FWD	4902	2.4 N	96.4 E	116	39	61	WYLD
4899	FWD	4904	2.3 N	95.5 E	116	39	62	BABCOCK
4901	FWD	4906	2.0 N	94.9 E	116	39	63	BABCOCK, PURKYNE
4903	FWD	4908	1.9 N	94.3 E	116	39	63	BABCOCK, PURKYNE
4905	FWD	4910	1.8 N	93.7 E	116	39	64	BABCOCK, PURKYNE
4907	FWD		1.7 N	93.2 E	116	39	64	BABCOCK
4909	FWD		1.8 N	92.4 E	116	39	65	BABCOCK, W OF
4911	FWD		1.6 N	91.7 E	116	39	66	SMYTH'S SEA
4912	FWD	4917	9.4 N	149.1 E	105	47	1	ST JOHN, W OF
4913	AFT		9.4 N	150.2 E	105	47	0	ST JOHN
4914	FWD	4919	9.3 N	148.3 E	105	47	1	SCHUSTER, E OF
4915	AFT		9.4 N	149.7 E	105	47	0	ST JOHN
4916	FWD	4921	9.3 N	147.7 E	105	47	2	SCHUSTER
4918	FWD	4923	9.3 N	147.1 E	105	47	3	SCHUSTER
4920	FWD	4925	9.3 N	146.6 E	105	47	3	SCHUSTER
4922	FWD	4927	9.2 N	146.1 E	106	47	4	SCHUSTER
4924	FWD	4929	9.1 N	145.5 E	106	47	4	SCHUSTER
4926	FWD	4931	9.2 N	144.6 E	106	47	5	SCHUSTER
4928	FWD	4933	9.1 N	143.9 E	106	47	6	MENDELEEV
4930	FWD	4935	9.0 N	143.3 E	106	47	6	MENDELEEV
4932	FWD	4937	8.9 N	142.7 E	106	47	7	MENDELEEV
4934	FWD	4939	8.9 N	142.1 E	106	47	8	MENDELEEV
4936	FWD	4941	8.9 N	141.5 E	106	47	8	MENDELEEV
4938	FWD	4943	8.9 N	140.8 E	106	47	9	MENDELEEV

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
4940	FWD	4945	8.9 N	140.1 E	106	47	10	MENDELEEV
4942	FWD	4947	8.9 N	139.2 E	106	47	10	MENDELEEV
4944	FWD	4949	8.9 N	138.6 E	106	47	11	MENDELEEV
4946	FWD	4951	8.7 N	137.9 E	106	47	12	MENDELEEV
4948	FWD	4953	8.7 N	137.3 E	106	47	12	MENDELEEV
4950	FWD	4955	8.6 N	136.8 E	106	47	13	MENDELEEV
4952	FWD	4957	8.7 N	136.1 E	107	47	13	MENDELEEV
4954	FWD	4959	8.6 N	135.4 E	107	47	14	MENDELEEV, HARTMANN
4956	FWD	4961	8.7 N	134.8 E	107	47	15	MENDELEEV, W OF
4958	FWD	4963	8.6 N	134.2 E	107	47	15	MENDELEEV, W OF
4960	FWD	4965	8.7 N	133.4 E	107	47	16	GREEN
4962	FWD	4967	8.6 N	132.8 E	107	47	17	VETCHINKIN, GREEN
4964	FWD	4969	8.5 N	132.1 E	107	47	17	VETCHINKIN, GREEN
4966	FWD	4971	8.5 N	131.3 E	107	47	18	VETCHINKIN
4968	FWD	4973	8.4 N	130.7 E	107	47	19	VETCHINKIN, W OF
4970	FWD	4975	8.4 N	130.0 E	107	47	20	VETCHINKIN, W OF
4972	FWD	4977	8.3 N	129.2 E	107	47	20	VETCHINKIN, W OF
4974	FWD	4979	8.2 N	128.4 E	107	47	21	MOROZOV, E OF
4976	FWD	4981	8.2 N	127.8 E	107	47	22	MOROZOV
4978	FWD	4983	8.1 N	127.1 E	108	47	22	MOROZOV, MESHCHERSKY
4980	FWD	4985	8.0 N	126.5 E	108	47	23	MOROZOV, MESHCHERSKY
4982	FWD	4987	8.0 N	125.8 E	108	47	24	MESHCHERSKY
4984	FWD	4989	7.9 N	125.1 E	108	47	24	OSTWALD, E OF
4986	FWD	4991	7.8 N	124.3 E	108	47	25	OSTWALD, E OF
4988	FWD	4993	7.8 N	123.7 E	108	47	26	OSTWALD
4990	FWD	4995	7.7 N	122.8 E	108	47	27	OSTWALD
4992	FWD	4997	7.7 N	122.2 E	108	47	27	OSTWALD
4994	FWD	4999	7.6 N	121.5 E	108	47	28	KING, OSTWALD
4996	FWD	5001	7.5 N	120.6 E	109	47	29	KING, OSTWALD
4998	FWD	5003	7.4 N	120.1 E	109	47	29	KING
5000	FWD	5005	7.3 N	119.3 E	109	47	30	KING
5002	FWD	5007	7.4 N	118.4 E	109	47	31	GUYOT, KING
5004	FWD	5009	7.3 N	118.0 E	109	47	31	GUYOT
5006	FWD	5011	7.3 N	117.4 E	109	47	32	GUYOT
5008	FWD	5013	7.2 N	117.0 E	109	47	32	GUYOT
5010	FWD	5015	7.2 N	116.4 E	109	47	33	GUYOT
5012	FWD	5017	7.1 N	115.8 E	109	47	34	GUYOT, W OF, ABUL WAFA
5014	FWD	5019	6.9 N	115.2 E	109	47	34	LOBACHEVSKY
5016	FWD	5021	6.3 N	114.4 E	109	47	35	LOBACHEVSKY
5018	FWD	5023	6.2 N	113.7 E	109	47	36	LOBACHEVSKY

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5020	FWD	5025	6.1 N	113.0 E	109	47	36	LOBACHEVSKY, FIRSOV
5022	FWD	5027	5.8 N	112.4 E	109	47	37	LOBACHEVSKY, FIRSOV
5024	FWD	5029	5.8 N	111.9 E	110	47	38	FIRSOV
5026	FWD	5031	5.7 N	111.3 E	110	47	38	FIRSOV, W OF
5028	FWD	5033	5.6 N	110.6 E	110	47	39	FIRSOV, W OF
5030	FWD	5035	5.5 N	109.9 E	110	47	40	FIRSOV, W OF
5032	FWD	5037	5.4 N	109.2 E	110	47	40	FIRSOV, W OF
5034	FWD	5039	5.3 N	108.4 E	110	47	41	FIRSOV, W OF
5036	FWD	5041	5.3 N	108.0 E	110	47	41	FIRSOV, W OF
5038	FWD	5043	5.2 N	107.5 E	110	47	42	FIRSOV, W OF
5040	FWD	5045	5.1 N	106.8 E	110	47	43	SAENGER, E OF
5042	FWD	5047	4.8 N	106.1 E	110	47	43	SAENGER, E OF
5044	FWD	5049	4.9 N	105.5 E	110	47	44	SAENGER, E OF
5046	FWD	5051	4.8 N	104.9 E	111	47	45	MOISEEV
5048	FWD	5053	4.7 N	104.0 E	111	47	45	MOISEEV
5050	FWD	5055	4.6 N	103.3 E	111	47	46	SAENGER, MOISEEV
5052	FWD	5057	4.5 N	102.7 E	111	47	47	SAENGER, MOISEEV
5054	FWD	5059	4.5 N	102.2 E	111	47	47	SAENGER
5056	FWD	5061	4.4 N	101.6 E	111	47	48	SAENGER
5058	FWD	5063	4.3 N	100.9 E	111	47	49	SAENGER, W OF
5060	FWD	5065	4.1 N	100.2 E	111	47	49	ERRO, E OF
5062	FWD	5067	4.0 N	99.5 E	111	47	50	ERRO
5064	FWD	5069	4.0 N	98.7 E	111	47	51	ERRO
5066	FWD	5071	4.0 N	98.1 E	111	47	51	ERRO, WYLD
5068	FWD	5073	3.9 N	97.5 E	111	47	52	WYLD
5070	FWD	5075	3.6 N	96.7 E	112	47	53	WYLD
5072	FWD	5077	3.4 N	96.1 E	112	47	53	WYLD
5074	FWD	5079	3.3 N	95.4 E	112	47	54	BABCOCK
5076	FWD	5081	3.4 N	94.9 E	112	47	55	BABCOCK
5078	FWD	5083	3.3 N	94.1 E	112	47	55	BABCOCK, PURKYNE
5080	FWD	5085	3.2 N	93.6 E	112	47	56	BABCOCK, PURKYNE
5082	FWD	5087	3.1 N	93.0 E	112	47	56	BABCOCK
5084	FWD	5089	2.9 N	92.4 E	112	47	57	BABCOCK, W OF
5086	FWD	5091	2.8 N	91.9 E	112	47	58	SMYTH'S SEA
5088	FWD	5093	2.8 N	91.2 E	112	47	58	SMYTH'S SEA
5090	FWD	5095	2.7 N	90.5 E	112	47	59	SMYTH'S SEA
5092	FWD	5097	2.6 N	89.8 E	113	47	60	SMYTH'S SEA
5094	FWD	5099	2.6 N	89.1 E	113	47	60	SMYTH'S SEA
5096	FWD	5101	2.5 N	88.4 E	113	47	61	SMYTH'S SEA
5098	FWD	5103	2.3 N	87.8 E	113	47	62	SMYTH'S SEA

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5100	FWD	5105	2.1 N	87.2 E	113	47	62	SMYTH'S SEA, NEPER K
5102	FWD	5107	2.0 N	86.4 E	113	47	63	SMYTH'S SEA, NEPER K
5104	FWD	5109	1.9 N	85.7 E	113	47	64	SMYTH'S SEA
5106	FWD	5111	1.8 N	85.2 E	113	47	64	SMYTH'S SEA
5108	FWD	5113	1.9 N	84.5 E	113	47	65	SMYTH'S SEA
5110	FWD	5115	1.6 N	83.8 E	113	47	66	SMYTH'S SEA
5112	FWD	5117	1.5 N	83.3 E	113	47	66	SMYTH'S SEA
5114	FWD	5119	1.3 N	82.6 E	113	47	67	SMYTH'S SEA
5116	FWD	5121	1.2 N	81.7 E	114	47	68	SCHUBERT
5118	FWD	5123	1.1 N	81.1 E	114	47	68	SCHUBERT, B, GILBERT U
5120	FWD	5125	.9 N	80.4 E	114	47	69	SCHUBERT B
5122	FWD	5127	1.0 N	79.7 E	114	47	70	KASTNER G
5124	FWD	5129	.9 N	79.0 E	114	47	70	KASTNER G
5126	FWD	5131	1.1 N	78.5 E	114	47	71	SCHUBERT Z
5128	FWD	5133	.9 N	77.9 E	114	47	72	SCHUBERT Z
5130	FWD	5135	.7 N	77.3 E	114	47	72	SCHUBERT X, GILBERT
5132	FWD	5137	.7 N	76.4 E	114	47	73	SCHUBERT X, Y, GILBERT
5134	FWD	5139	.6 N	75.6 E	114	47	74	GILBERT
5136	FWD	5141	.4 N	74.9 E	114	47	75	GILBERT
5138	FWD	5143	.3 N	74.3 E	115	47	75	SCHUBERT N
5140	FWD	5145	.4 N	73.5 E	115	47	76	SCHUBERT N
5142	FWD	5147	.2 N	72.8 E	115	47	77	DUBIAGO C
5144	FWD	5149	.1 N	72.2 E	115	47	77	MACLAURIN L, E OF
5146	FWD	5151	.1 S	71.5 E	115	47	78	MACLAURIN L
5148	FWD	5153	.2 S	70.8 E	115	47	79	MACLAURIN L
5150	FWD	5155	.2 S	70.2 E	115	47	79	MACLAURIN B
5152	FWD	5157	.4 S	69.6 E	115	47	80	DUBIAGO M
5154	FWD	5159	.4 S	69.1 E	115	47	80	DUBIAGO M
5156	FWD	5161	.4 S	68.5 E	115	47	81	MACLAURIN, M
5158	FWD	5163	.6 S	67.9 E	115	47	81	MACLAURIN
5160	FWD	5165	.8 S	67.1 E	115	47	82	MACLAURIN A
5162	FWD	5167	1.2 S	66.3 E	115	47	83	FOAMING SEA, MACLAURIN U
5164	FWD	5169	1.3 S	65.6 E	115	47	83	MACLAURIN E
5166	FWD	5171	1.4 S	64.9 E	115	47	84	WEBB C, J
5168	FWD	5173	1.6 S	64.1 E	116	47	84	WEBB C, J
5170	FWD	5175	1.7 S	63.3 E	116	47	85	APOLLONIUS S
5172	FWD	5177	1.8 S	62.6 E	116	47	85	LANGRENUS T
5174	FWD	5179	1.9 S	61.9 E	116	47	86	LANGRENUS T
5176	FWD	5181	2.0 S	61.2 E	116	47	86	WEBB P, LANGRENUS
5178	FWD	5183	2.1 S	60.8 E	116	47	86	WEBB, P, LANGRENUS

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5180	FWD	5185	2.2 S	60.2 E	116	47	86	WEBB, LANGRENUS
5182	FWD	5187	2.2 S	59.7 E	116	47	86	LANGRENUS, C
5184	FWD	5189	2.2 S	58.9 E	116	47	86	WEBB P
5186	FWD	5191	2.4 S	58.2 E	116	47	86	LANGRENUS B
5188	FWD	5193	2.4 S	57.5 E	116	47	86	LANGRENUS B, K
5190	FWD	5195	2.5 S	56.9 E	116	47	85	LANGRENUS F, K
5192	FWD	5197	2.6 S	56.3 E	117	47	85	LANGRENUS F
5194	FWD	5199	2.7 S	55.5 E	117	47	84	LANGRENUS F
5196	FWD	5201	2.7 S	54.7 E	117	47	84	FERTILITY, SEA OF
5198	FWD	5203	2.8 S	54.1 E	117	47	83	FERTILITY, SEA OF
5200	FWD		2.9 S	53.2 E	117	47	82	FERTILITY, SEA OF
5202	FWD		3.1 S	52.6 E	117	47	82	MESSIER G
5204	FWD	5209	.8 S	57.7 E	112	63	75	LANGRENUS B
5205	AFT		.5 S	59.2 E	112	63	74	WEBB, W OF
5206	FWD	5211	1.0 S	56.9 E	112	63	76	LANGRENUS B, K
5207	AFT		.6 S	58.4 E	112	63	75	WEBB, W OF
5208	FWD	5213	1.2 S	56.2 E	112	63	77	LANGRENUS F
5210	FWD	5215	1.3 S	55.5 E	112	63	77	LANGRENUS F
5212	FWD	5217	1.4 S	54.8 E	113	63	78	FERTILITY, SEA OF
5214	FWD	5219	1.5 S	54.3 E	113	63	78	FERTILITY, SEA OF
5216	FWD	5221	1.6 S	53.8 E	113	63	78	FERTILITY, SEA OF
5218	FWD	5223	1.7 S	53.2 E	113	63	79	FERTILITY, SEA OF
5220	FWD	5225	1.8 S	52.6 E	113	63	80	MESSIER G
5222	FWD	5227	1.9 S	51.8 E	114	63	81	MESSIER G
5224	FWD	5229	2.1 S	51.1 E	114	63	81	MESSIER G, W OF
5226	FWD	5231	2.2 S	50.6 E	114	63	82	TARUNTIUS H
5228	FWD	5233	2.4 S	49.8 E	114	63	82	GOCLENIUS A
5230	FWD	5235	2.4 S	49.2 E	114	63	82	MESSIER, E OF
5232	FWD	5237	2.5 S	48.5 E	115	63	83	MESSIER B
5234	FWD	5239	2.6 S	47.8 E	115	63	83	MESSIER
5236	FWD	5241	2.7 S	47.1 E	115	63	84	MESSIER A
5238	FWD	5243	2.8 S	46.5 E	115	63	84	MESSIER D
5240	FWD	5245	3.0 S	45.9 E	115	63	84	MESSIER D
5242	FWD	5247	3.0 S	45.2 E	115	63	85	MESSIER D, W OF
5244	FWD	5249	3.2 S	44.6 E	115	63	85	SECCHI X
5246	FWD	5251	3.3 S	44.0 E	115	63	85	SECCHI X
5248	FWD	5253	3.4 S	43.4 E	115	63	85	LUBBOCK, E OF
5250	FWD	5255	3.5 S	42.6 E	116	63	85	GOCLENIUS RILLES
5252	FWD	5257	3.6 S	41.9 E	116	63	84	LUBBOCK
5254	FWD	5259	3.7 S	41.3 E	116	63	84	LUBBOCK, W OF, GUTENBERG

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5256	FWD	5261	3.8 S	40.6 E	116	63	84	GUTENBERG, G
5258	FWD	5263	3.9 S	40.0 E	116	63	83	GUTENBERG, G
5260	FWD	5265	4.0 S	39.4 E	116	63	83	GUTENBERG, G
5262	FWD	5267	4.1 S	38.8 E	116	63	83	GUTENBERG RILLES
5264	FWD	5269	4.2 S	38.0 E	116	63	82	GUTENBERG RILLES
5266	FWD	5271	4.3 S	37.2 E	116	63	82	GUTENBERG RILLES
5268	FWD	5273	4.4 S	36.4 E	117	63	81	GUTENBERG RILLES
5270	FWD	5275	4.5 S	35.7 E	117	63	81	GUTENBERG I RILLE
5272	FWD	5277	4.6 S	35.0 E	117	63	80	CENSORINUS C, CAPELLA
5274	FWD	5279	4.8 S	34.4 E	117	63	79	CENSORINUS C, CAPELLA
5276	FWD	5281	4.9 S	33.8 E	118	63	78	CENSORINUS, ISIDORUS, CAPELLA
5278	FWD	5283	5.1 S	33.2 E	118	63	78	ISIDORUS, B
5280	FWD	5285	5.2 S	32.5 E	118	63	78	ISIDORUS, B
5282	FWD	5287	5.3 S	31.6 E	118	63	77	ISIDORUS B, W OF
5284	FWD	5289	5.5 S	30.9 E	118	63	76	ISIDORUS B, W OF
5286	FWD	5291	5.6 S	30.2 E	118	63	75	TORRICELLI, E OF
5288	FWD	5293	5.8 S	29.7 E	118	63	75	TORRICELLI, E OF
5290	FWD	5295	6.0 S	28.8 E	118	63	74	TORRICELLI, R
5292	FWD	5297	6.0 S	28.2 E	118	63	74	TORRICELLI, R
5294	FWD	5299	6.2 S	27.5 E	119	63	73	TORRICELLI, W OF
5296	FWD	5301	6.3 S	26.8 E	119	63	73	THEOPHILUS
5298	FWD	5303	6.4 S	26.1 E	119	63	72	THEOPHILUS
5300	FWD	5305	6.5 S	25.3 E	119	63	71	THEOPHILUS
5302	FWD	5307	6.6 S	24.6 E	119	63	70	THEOPHILUS
5304	FWD	5309	6.7 S	23.8 E	119	63	70	ZOLLNER F, E OF
5306	FWD	5311	6.7 S	23.2 E	119	63	69	HYPATIA
5308	FWD	5313	6.8 S	22.6 E	119	63	68	HYPATIA
5310	FWD	5315	6.9 S	21.8 E	120	63	67	ZOLLNER F
5312	FWD	5317	7.0 S	21.0 E	120	63	66	KANT E
5314	FWD	5319	7.2 S	20.4 E	120	63	66	KANT, E
5316	FWD	5321	7.3 S	19.6 E	120	63	65	KANT, G, ZOLLNER
5318	FWD	5323	7.4 S	18.9 E	120	63	65	ZOLLNER
5320	FWD	5325	7.5 S	18.2 E	120	63	64	ZOLLNER, ALFRAGANUS C
5322	FWD	5327	7.7 S	17.5 E	120	63	63	TAYLOR
5324	FWD	5329	7.7 S	16.9 E	120	63	62	TAYLOR
5326	FWD	5331	7.8 S	16.3 E	120	63	62	TAYLOR A
5328	FWD	5333	8.0 S	15.6 E	121	63	61	DESCARTES, APOLLO 16 LANDING SITE
5330	FWD	5335	8.1 S	14.9 E	121	63	61	DESCARTES
5332	FWD	5337	8.1 S	14.3 E	121	63	60	DOLLOND, B
5334	FWD	5339	8.2 S	13.4 E	121	63	59	DOLLOND B, C

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5336	FWD	5341	8.2 S	12.7 E	121	63	58	ANDEL, DOLLOND C
5338	FWD	5343	8.3 S	11.9 E	121	63	58	ANDEL
5340	FWD	5345	8.3 S	11.3 E	121	63	57	ANDEL, W OF
5342	FWD	5347	8.4 S	10.5 E	121	63	57	ANDEL, W OF
5344	FWD	5349	8.4 S	9.8 E	121	63	56	RITCHEY, E OF
5346	FWD	5351	8.5 S	9.1 E	122	63	55	RITCHEY, E OF
5348	FWD	5353	8.6 S	8.6 E	122	63	55	RITCHEY, HIPPARCHUS C
5350	FWD	5355	8.6 S	7.9 E	122	63	54	RITCHEY, HIND
5352	FWD	5357	8.7 S	7.2 E	122	63	53	HIND, HIPPARCHUS
5354	FWD	5359	8.7 S	6.4 E	122	63	52	HIPPARCHUS
5356	FWD	5361	8.8 S	5.8 E	122	63	51	HIPPARCHUS, HALLEY
5358	FWD	5363	8.9 S	5.2 E	122	63	51	HIPPARCHUS, ALBATEGNIUS
5360	FWD	5365	9.1 S	4.4 E	122	63	50	HIPPARCHUS, ALBATEGNIUS
5362	FWD	5367	9.1 S	3.8 E	122	63	50	HIPPARCHUS, ALBATEGNIUS
5364	FWD	5369	9.2 S	3.1 E	122	63	49	KLEIN
5366	FWD	5371	9.3 S	2.4 E	122	63	48	KLEIN, MULLER
5368	FWD	5373	9.3 S	1.8 E	122	63	47	ALBATEGNIUS G
5370	FWD	5375	9.4 S	1.1 E	122	63	46	PTOLEMAEUS, E OF
5372	FWD	5377	9.4 S	.3 E	123	63	46	PTOLEMAEUS
5374	FWD	5379	9.5 S	.4 W	123	63	45	PTOLEMAEUS
5376	FWD	5381	9.5 S	1.2 W	123	63	44	PTOLEMAEUS
5378	FWD	5383	9.6 S	1.9 W	123	63	44	PTOLEMAEUS, ALPHONSUS
5380	FWD	5385	9.7 S	2.7 W	123	63	43	PTOLEMAEUS, ALPHONSUS
5382	FWD	5387	9.7 S	3.4 W	123	63	42	PTOLEMAEUS, ALPHONSUS
5384	FWD	5389	9.7 S	4.2 W	123	63	42	PTOLEMAEUS E
5386	FWD	5391	9.8 S	4.9 W	123	63	41	PTOLEMAEUS E, DAVY G
5388	FWD	5393	9.7 S	5.5 W	123	63	40	DAVY G
5390	FWD	5395	9.9 S	6.3 W	123	63	39	DAVY Y
5392	FWD	5397	9.9 S	7.1 W	123	63	38	DAVY Y, PALISA
5394	FWD	5399	10.0 S	7.7 W	123	63	38	DAVY, Y
5396	FWD	5401	10.1 S	8.4 W	123	63	37	DAVY, PALISA T
5398	FWD	5403	10.1 S	9.2 W	123	63	37	LASSELL C, LALANDE A
5400	FWD	5405	10.2 S	9.9 W	123	63	36	LASSELL C, LALANDE A
5402	FWD	5407	10.2 S	10.8 W	123	63	35	GUERICKE C, E OF
5404	FWD	5409	10.3 S	11.5 W	123	63	34	GUERICKE C
5406	FWD	5411	10.4 S	12.2 W	123	63	34	GUERICKE C
5408	FWD	5413	10.4 S	12.8 W	123	63	33	GUERICKE, E OF
5410	FWD	5415	10.4 S	13.6 W	123	63	32	GUERICKE
5412	FWD	5417	10.5 S	14.2 W	123	63	31	GUERICKE, PARRY M
5414	FWD	5419	10.5 S	14.8 W	123	63	31	GUERICKE, PARRY M

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.	DESCRIPTION
5416	FWD	5421	10.5 S	15.5 W	123	63	30	PARRY, A
5418	FWD	5423	10.5 S	16.3 W	123	63	30	PARRY, A
5420	FWD	5425	10.6 S	17.0 W	123	63	29	BONPLAND, FRA MAURO
5422	FWD	5427	10.7 S	17.7 W	124	63	28	BONPLAND, FRA MAURO
5424	FWD	5429	10.7 S	18.4 W	124	63	28	BONPLAND, W RIM
5426	FWD	5431	10.7 S	19.2 W	124	63	27	KNOWN SEA
5428	FWD	5433	10.7 S	19.9 W	124	63	26	KNOWN SEA
5430	FWD	5435	10.7 S	20.8 W	124	63	25	KNOWN SEA, FRA MAURO A
5432	FWD	5437	10.7 S	21.6 W	124	63	24	KNOWN SEA
5434	FWD	5439	10.7 S	22.3 W	124	63	23	KNOWN SEA
5436	FWD	5441	10.7 S	23.0 W	124	63	23	KNOWN SEA, DARNEY
5438	FWD	5443	10.7 S	23.7 W	124	63	22	KNOWN SEA, DARNEY
5440	FWD	5445	10.7 S	24.3 W	124	63	22	KNOWN SEA
5442	FWD	5447	10.7 S	25.1 W	124	63	21	KNOWN SEA
5444	FWD	5449	10.6 S	25.8 W	124	63	20	DARNEY C, EUCLIDES D
5446	FWD	5451	10.6 S	26.5 W	124	63	19	DARNEY F, RIPHAEN MOUNTAINS
5448	FWD	5453	10.6 S	27.3 W	123	63	18	LUBINIEZKY E, RIPHAEN MOUNTAINS
5450	FWD	5455	10.6 S	28.0 W	123	63	18	RIPHAEN MOUNTAINS
5452	FWD	5457	10.6 S	28.8 W	123	63	17	EUCLIDES
5454	FWD	5459	10.6 S	29.5 W	123	63	17	EUCLIDES, C
5456	FWD	5461	10.6 S	30.3 W	123	63	16	EUCLIDES B, C
5458	FWD	5463	10.6 S	31.0 W	123	63	15	EUCLIDES B, W OF
5460	FWD	5465	10.6 S	31.8 W	123	63	14	EUCLIDES B, W OF
5462	FWD	5467	10.6 S	32.5 W	123	63	13	HERIGONIUS, E OF
5464	FWD	5469	10.6 S	33.2 W	123	63	13	HERIGONIUS, E OF
5466	FWD	5471	10.6 S	33.9 W	123	63	13	HERIGONIUS
5468	FWD	5473	10.5 S	34.8 W	123	63	12	HERIGONIUS, W OF
5470	FWD	5475	10.5 S	35.5 W	123	63	11	HERIGONIUS I RILLE
5472	FWD	5477	10.5 S	36.2 W	123	63	11	HERIGONIUS I RILLE
5474	FWD	5479	10.4 S	36.8 W	123	63	10	HERIGONIUS I RILLE
5476	FWD	5481	10.4 S	37.6 W	123	63	10	WICHMANN, E OF
5478	FWD	5483	10.3 S	38.3 W	123	63	9	WICHMANN
5480	FWD	5485	10.3 S	39.0 W	123	63	8	LETRONNE A
5482	FWD	5487	10.3 S	39.6 W	123	63	7	GASSENDI A, WICHMANN F
5484	FWD	5489	10.2 S	40.3 W	123	63	6	GASSENDI B
5486	FWD	5491	10.2 S	41.0 W	123	63	6	LETRONNE
5488	FWD	5493	10.2 S	41.8 W	123	63	5	LETRONNE
5490	FWD	5495	10.2 S	42.5 W	123	63	4	LETRONNE, FLAMSTEED A
5492	FWD	5497	10.1 S	43.3 W	123	63	4	LETRONNE, FLAMSTEED A
5494	FWD	5499	10.1 S	44.0 W	123	63	3	LETRONNE, FLAMSTEED

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
24 INCH (60.96CM) FOCAL LENGTH

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO	SUN EL.	DESCRIPTION
5496	FWD	5501	10.1 S	44.9 W	123	63	2	LETRONNE P, FLAMSTEED
5498	FWD	5503	10.0 S	45.7 W	122	63	1	LETRONNE P, W OF
5500	FWD	5505	10.0 S	46.4 W	122	63	0	LETRONNE P, W OF, FLAMSTEED C
5502	FWD		9.9 S	47.1 W	122	63	-1	LETRONNE P, W OF
5504	FWD		9.9 S	47.8 W	122	63	-1	LETRONNE P, W OF
5506	FWD				122	63		DARK
5507	VERT		13.8 N	122.4 E		TE		OSTWALD, MESHCHERSKY, 130E TO 95E
5510	VERT		13.6 N	118.1 E		TE		OSTWALD, KOSTINSKY, MAXWELL
5520	VERT		13.3 N	109.6 E		TE		KING, FLEMING, JOLIOT
5530	VERT		12.7 N	100.6 E		TE		TSIOLKOVSKY, VESALIUS, MOISEEV, HUBBLE
5540	VERT		13.2 N	103.4 E		TE		DANJON, FIRSOV, HERTZ, GAUSS
5550	VERT		12.6 N	102.5 E		TE		DANJON, HERTZ, JOLIOT, GAUSS
5560	VERT		13.0 N	99.8 E		TE		TSIOLKOVSKY, HERTZ, HUBBLE, BEROSUS
5570	VERT		13.4 N	96.5 E		TE		TSIOLKOVSKY, SAENGER, AL-BIRUNI, BEROSUS
5580	VERT		12.7 N	93.4 E		TE		FERMI, SAENGER, AL-BIRUNI, BEROSUS
5590	VERT		14.4 N	91.1 E		TE		FERMI, GODDARD, MESSALA
5600	VERT		13.7 N	89.5 E		TE		FERMI, GODDARD, MESSALA
5610	VERT		13.7 N	89.0 E		TE		FERMI, GODDARD, MESSALA
5620	VERT		13.0 N	86.7 E		TE		SMYTH'S, BORDER SEAS, SEA OF CRISES
5630	VERT		13.7 N	84.3 E		TE		SMYTH'S, BORDER SEAS, SEA OF CRISES
5640	VERT		13.8 N	83.8 E		TE		SMYTH'S, BORDER SEAS, SEA OF CRISES
5650	VERT		13.6 N	82.0 E		TE		SMYTH'S, BORDER SEAS, CRISES, SERENITY
5660	VERT		13.5 N	81.4 E		TE		SMYTH'S, BORDER SEAS, CRISES, SERENITY
5676	VERT		15.9 N	80.7 E		TE		SMYTH'S, BORDER SEAS, CRISES, SERENITY
5677	VERT					TE		HERCULES, ATLAS, SEA OF COLD (PART. FR)

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 160 TO 170 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4091	FWD		ZHUKOVSKY	8.8 N	168.2 W	103	3	11
4092	AFT		ZHUKOVSKY	8.8 N	166.9 W	103	3	11
4093	FWD		ZHUKOVSKY, W OF	8.8 N	168.9 W	103	3	11
4094	AFT		ZHUKOVSKY	8.8 N	167.5 W	103	3	12

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 170 TO 180 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4095	FWD	4100	STEIN, W OF	8.9 N	178.5 E	116	17	1
4096	AFT		STEIN, E OF	9.0 N	179.9 E	116	17	0
4097	FWD	4102	SAFARIK, E OF	8.9 N	177.8 E	116	17	2
4098	AFT		STEIN	8.9 N	179.2 E	116	17	1
4099	FWD	4104	SAFARIK	9.0 N	177.0 E	116	17	3
4101	FWD	4106	SAFARIK	9.0 N	176.4 E	116	17	3
4103	FWD	4108	VALIER, E OF	8.9 N	175.7 E	117	17	4
4105	FWD	4110	VALIER	8.8 N	175.1 E	117	17	5
4107	FWD	4112	VALIER, SHARONOV	8.7 N	174.4 E	117	17	5
4109	FWD	4114	VALIER, SHARONOV	9.0 N	173.7 E	117	17	6
4111	FWD	4116	SHARONOV	8.8 N	173.0 E	117	17	7
4113	FWD	4118	SHARONOV	8.8 N	172.4 E	117	17	7
4115	FWD	4120	SHARONOV, SW OF	8.5 N	171.7 E	118	17	8
4117	FWD	4122	SHARONOV, SW OF	8.5 N	170.9 E	118	17	9
4119	FWD	4124	DUFAY	8.5 N	170.1 E	118	17	9

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 160 TO 170 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4121	FWD	4126	DUFAY	8.4 N	169.4 E	118	17	10
4123	FWD	4128	DUFAY, W OF	8.5 N	168.7 E	118	17	11
4125	FWD	4130	SPENCER JONES	8.5 N	167.8 E	118	17	12
4127	FWD	4132	SPENCER JONES	8.5 N	167.1 E	119	17	13
4129	FWD	4134	SPENCER JONES	8.3 N	166.4 E	119	17	13
4131	FWD	4136	SPENCER JONES	8.2 N	165.7 E	119	17	14
4133	FWD	4138	PAPALESKI	8.3 N	165.0 E	119	17	15
4135	FWD	4140	PAPALESKI	8.2 N	164.4 E	119	17	15
4137	FWD	4142	PAPALESKI	8.0 N	163.6 E	119	17	16
4139	FWD	4144	MANDEL'SHTAM	8.1 N	162.8 E	119	17	17
4141	FWD	4146	MANDEL'SHTAM	8.0 N	162.1 E	119	17	17
4143	FWD	4148	MANDEL'SHTAM	7.8 N	161.4 E	120	17	18
4145	FWD	4150	MANDEL'SHTAM, W OF	7.9 N	160.6 E	120	17	19
4147	FWD	4152	MANDEL'SHTAM, W OF	7.8 N	160.1 E	120	17	19

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 150 TO 160 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4149	FWD	4154	MANDEL'SHTAM, W OF	7.9 N	159.6 E	120	17	20
4151	FWD	4156	MILLS, E OF	7.8 N	158.8 E	120	17	21
4153	FWD	4158	MILLS, E OF	7.7 N	158.1 E	120	17	22
4155	FWD	4160	MILLS, E OF	7.6 N	157.3 E	120	17	22
4157	FWD	4162	MILLS	7.5 N	156.6 E	120	17	23
4159	FWD	4164	MILLS	7.4 N	155.8 E	120	17	24
4161	FWD	4166	MILLS, W OF	7.3 N	155.1 E	121	17	24
4163	FWD	4168	MILLS, W OF	7.3 N	154.3 E	121	17	25
4165	FWD	4170	HENDERSON, E OF	7.3 N	153.7 E	121	17	26
4167	FWD	4172	HENDERSON, E RIM	7.2 N	153.0 E	121	17	27
4169	FWD	4174	HENDERSON	7.1 N	152.4 E	121	17	27
4171	FWD	4176	HENDERSON	7.1 N	151.7 E	121	17	28
4173	FWD	4178	ST JOHN	7.0 N	150.8 E	121	17	29
4175	FWD	4180	SCHUSTER, E OF	7.0 N	150.1 E	122	17	29
4717	FWD	4722	MILLS, E OF	9.1 N	157.3 E	108	39	1
4718	AFT		MILLS, E OF	9.2 N	158.5 E	108	39	-1
4719	FWD	4724	MILLS	9.0 N	156.5 E	108	39	1
4720	AFT		MILLS, E OF	9.1 N	157.8 E	108	39	0
4721	FWD	4726	MILLS	9.0 N	155.9 E	108	39	2
4723	FWD	4728	MILLS, W OF	8.9 N	155.1 E	109	39	3
4725	FWD	4730	MILLS, W OF	9.0 N	154.4 E	109	39	3
4727	FWD	4732	MILLS, W OF	9.0 N	153.8 E	109	39	4
4729	FWD	4734	HENDERSON	9.0 N	153.1 E	109	39	5
4731	FWD	4736	HENDERSON	9.1 N	152.7 E	109	39	5
4733	FWD	4738	HENDERSON	9.0 N	151.9 E	109	39	6
4735	FWD	4740	ST JOHN	8.9 N	151.0 E	109	39	6
4737	FWD	4742	ST JOHN	8.9 N	150.3 E	109	39	7
4913	AFT		ST JOHN	9.4 N	150.2 E	105	47	0

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 140 TO 150 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4177	FWD	4182	SCHUSTER, E OF	6.9 N	149.3 E	122	17	30
4179	FWD	4184	SCHUSTER, E OF	6.8 N	148.7 E	122	17	31
4181	FWD	4186	SCHUSTER	6.8 N	147.9 E	122	17	32
4183	FWD	4188	SCHUSTER	6.7 N	147.4 E	122	17	32
4185	FWD	4190	SCHUSTER	6.6 N	146.8 E	122	17	33
4187	FWD	4192	SCHUSTER	6.5 N	146.1 E	122	17	33
4189	FWD	4194	MENDELEEV, SCHUSTER	6.5 N	145.2 E	122	17	34
4191	FWD	4196	MENDELEEV	6.4 N	144.5 E	122	17	35
4193	FWD	4198	MENDELEEV	6.3 N	143.8 E	122	17	36
4195	FWD	4200	MENDELEEV	6.3 N	143.2 E	122	17	36
4197	FWD	4202	MENDELEEV	6.3 N	142.6 E	123	17	37
4199	FWD	4204	MENDELEEV	6.1 N	141.8 E	123	17	38
4201	FWD	4206	MENDELEEV	6.0 N	141.1 E	123	17	38
4203	FWD	4208	MENDELEEV	5.9 N	140.3 E	123	17	39
4739	FWD	4744	ST JOHN, W OF	8.9 N	149.6 E	109	39	8
4741	FWD	4746	ST JOHN, W OF	8.9 N	148.8 E	110	39	9
4743	FWD	4748	SCHUSTER, E RIM	8.8 N	148.3 E	110	39	9
4745	FWD	4750	SCHUSTER	8.8 N	147.8 E	110	39	10
4747	FWD	4752	SCHUSTER	8.7 N	147.2 E	110	39	11
4749	FWD	4754	SCHUSTER	8.7 N	146.7 E	110	39	11
4751	FWD	4756	SCHUSTER	8.6 N	146.0 E	110	39	12
4753	FWD	4758	MENDELEEV	8.6 N	145.1 E	110	39	13
4755	FWD	4760	MENDELEEV	8.5 N	144.5 E	110	39	13
4757	FWD	4762	MENDELEEV	8.4 N	143.6 E	110	39	13
4759	FWD	4764	MENDELEEV	8.4 N	142.9 E	110	39	14
4761	FWD	4766	MENDELEEV	8.3 N	142.3 E	110	39	15
4763	FWD	4768	MENDELEEV	8.4 N	141.5 E	110	39	16
4765	FWD	4770	MENDELEEV	8.4 N	140.5 E	110	39	17
4912	FWD	4917	ST JOHN, W OF	9.4 N	149.1 E	105	47	1
4914	FWD	4919	SCHUSTER, E OF	9.3 N	148.3 E	105	47	1
4915	AFT		ST JOHN	9.4 N	149.7 E	105	47	0
4916	FWD	4921	SCHUSTER	9.3 N	147.7 E	105	47	2
4918	FWD	4923	SCHUSTER	9.3 N	147.1 E	105	47	3
4920	FWD	4925	SCHUSTER	9.3 N	146.6 E	105	47	3
4922	FWD	4927	SCHUSTER	9.2 N	146.1 E	106	47	4
4924	FWD	4929	SCHUSTER	9.1 N	145.5 E	106	47	4
4926	FWD	4931	SCHUSTER	9.2 N	144.6 E	106	47	5
4928	FWD	4933	MENDELEEV	9.1 N	143.9 E	106	47	6
4930	FWD	4935	MENDELEEV	9.0 N	143.3 E	106	47	6
4932	FWD	4937	MENDELEEV	8.9 N	142.7 E	106	47	7

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 140 TO 150 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4934	FWD	4939	MENDELEEV	8.9 N	142.1 E	106	47	8
4936	FWD	4941	MENDELEEV	8.9 N	141.5 E	106	47	8
4938	FWD	4943	MENDELEEV	8.9 N	140.8 E	106	47	9
4940	FWD	4945	MENDELEEV	8.9 N	140.1 E	106	47	10

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 110 TO 120 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4261	FWD	4266	KING, W RIM	3.4 N	119.7 E	124	17	60
4263	FWD	4268	KING, W OF	3.3 N	119.0 E	124	17	60
4265	FWD	4270	KING, W OF	3.2 N	118.4 E	124	17	61
4267	FWD	4272	ABUL WAFA, E OF	3.1 N	117.6 E	124	17	62
4269	FWD	4274	ABUL WAFA	3.0 N	116.9 E	124	17	63
4271	FWD	4276	ABUL WAFA	2.8 N	116.1 E	124	17	63
4273	FWD	4278	ABUL WAFA	2.6 N	115.4 E	124	17	64
4275	FWD	4280	VESALIUS	2.3 N	114.7 E	124	17	65
4277	FWD	4282	VESALIUS	2.1 N	114.0 E	124	17	66
4279	FWD	4284	BUISSON, FIRSOV	1.8 N	113.1 E	124	17	66
4281	FWD	4286	BUISSON, FIRSOV	1.6 N	112.5 E	124	17	67
4283	FWD	4288	BUISSON	1.5 N	111.8 E	124	17	68
4285	FWD	4290	BUISSON, W RIM	1.6 N	111.2 E	124	17	68
4287	FWD	4292	BUISSON, W OF	1.4 N	110.6 E	124	17	69
4829	FWD	4834	KING, W RIM	6.2 N	119.1 E	113	39	38
4831	FWD	4836	GUYOT	6.1 N	118.5 E	113	39	39
4833	FWD	4838	GUYOT	6.3 N	117.9 E	113	39	39
4835	FWD	4840	GUYOT	6.3 N	117.4 E	113	39	40
4837	FWD	4842	GUYOT, ABUL WAFA	6.1 N	116.6 E	113	39	41
4839	FWD	4844	GUYOT, ABUL WAFA	6.1 N	116.0 E	114	39	41
4841	FWD	4846	LOBACHEVSKY, E OF	5.9 N	115.1 E	114	39	42
4843	FWD	4848	LOBACHEVSKY	5.1 N	114.4 E	114	39	43
4845	FWD	4850	LOBACHEVSKY	4.9 N	113.9 E	114	39	43
4847	FWD	4852	LOBACHEVSKY	4.8 N	113.2 E	114	39	44
4849	FWD	4854	LOBACHEVSKY, FIRSOV	4.8 N	112.5 E	114	39	45
4851	FWD	4856	FIRSOV	4.8 N	111.9 E	114	39	45
4853	FWD	4858	FIRSOV, W OF	4.7 N	111.2 E	114	39	46
4855	FWD	4860	FIRSOV, W OF	4.6 N	110.3 E	114	39	47
5000	FWD	5005	KING	7.3 N	119.3 E	109	47	30
5002	FWD	5007	GUYOT, KING	7.4 N	118.4 E	109	47	31
5004	FWD	5009	GUYOT	7.3 N	118.0 E	109	47	31
5006	FWD	5011	GUYOT	7.3 N	117.4 E	109	47	32
5008	FWD	5013	GUYOT	7.2 N	117.0 E	109	47	32
5010	FWD	5015	GUYOT	7.2 N	116.4 E	109	47	33
5012	FWD	5017	GUYOT, W OF, ABUL WAFA	7.1 N	115.8 E	109	47	34
5014	FWD	5019	LOBACHEVSKY	6.9 N	115.2 E	109	47	34
5016	FWD	5021	LOBACHEVSKY	6.3 N	114.4 E	109	47	35
5018	FWD	5023	LOBACHEVSKY	6.2 N	113.7 E	109	47	36
5020	FWD	5025	LOBACHEVSKY, FIRSOV	6.1 N	113.0 E	109	47	36
5022	FWD	5027	LOBACHEVSKY, FIRSOV	5.8 N	112.4 E	109	47	37

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 110 TO 120 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5024	FWD	5029	FIRSOV	5.8 N	111.9 E	110	47	38
5026	FWD	5031	FIRSOV, W OF	5.7 N	111.3 E	110	47	38
5028	FWD	5033	FIRSOV, W OF	5.6 N	110.6 E	110	47	39
5510	VERT		OSTWALD, KOSTINSKY, MAXWELL	13.6 N	118.1 E		TE	

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4289	FWD	4294	BUISSON, W OF	1.3 N	109.9 E	124	17	70
4291	FWD	4296	BUISSON, W OF	1.2 N	109.1 E	125	17	70
4293	FWD	4298	BUISSON, W OF	1.1 N	108.7 E	125	17	71
4295	FWD	4300	BUISSON, W OF	.9 N	107.9 E	125	17	72
4297	FWD	4302	BUISSON, W OF	.8 N	107.2 E	125	17	72
4299	FWD	4304	SAHA, E OF	.6 N	106.4 E	125	17	73
4301	FWD	4306	SAHA, E OF	.4 N	105.9 E	125	17	74
4303	FWD	4308	SAHA, E OF	.3 N	105.2 E	125	17	74
4305	FWD	4310	SAHA, SAENGER	.1 N	104.5 E	125	17	75
4307	FWD	4312	SAHA, SAENGER	.1 S	103.7 E	125	17	76
4309	FWD	4314	SAHA, SAENGER	.2 S	103.0 E	124	17	77
4311	FWD	4316	SAHA	.3 S	102.3 E	124	17	77
4313	FWD	4318	SAHA, W RIM	.4 S	101.6 E	124	17	78
4315	FWD	4320	SAHA, W OF	.5 S	100.8 E	124	17	79
4317	FWD	4322	WYLD, E OF	.5 S	100.2 E	124	17	79
4857	FWD	4862	FIRSOV, W OF	4.5 N	109.7 E	114	39	48
4859	FWD	4864	FIRSOV, W OF	4.3 N	109.2 E	114	39	48
4861	FWD	4866	FIRSOV, W OF	4.3 N	108.4 E	115	39	49
4863	FWD	4868	FIRSOV, W OF	4.2 N	107.7 E	115	39	50
4865	FWD	4870	SAENGER, E OF	4.1 N	107.1 E	115	39	50
4867	FWD	4872	SAENGER, E OF	4.0 N	106.3 E	115	39	51
4869	FWD	4874	SAENGER, E OF	3.8 N	105.7 E	115	39	52
4871	FWD	4876	SAENGER, E OF	3.8 N	104.9 E	115	39	52
4873	FWD	4878	SAENGER, E OF	3.7 N	104.4 E	115	39	53
4875	FWD	4880	SAENGER	3.6 N	103.7 E	115	39	54
4877	FWD	4882	SAENGER, SAHA	3.5 N	103.2 E	115	39	54
4879	FWD	4884	SAENGER, SAHA	3.3 N	102.6 E	115	39	55
4881	FWD	4886	SAENGER, W RIM, SAHA	3.4 N	101.7 E	115	39	56
4883	FWD	4888	SAENGER, W OF	3.2 N	101.1 E	115	39	56
4885	FWD	4890	SAENGER, W OF	2.9 N	100.4 E	115	39	57
5030	FWD	5035	FIRSOV, W OF	5.5 N	109.9 E	110	47	40
5032	FWD	5037	FIRSOV, W OF	5.4 N	109.2 E	110	47	40
5034	FWD	5039	FIRSOV, W OF	5.3 N	108.4 E	110	47	41
5036	FWD	5041	FIRSOV, W OF	5.3 N	108.0 E	110	47	41
5038	FWD	5043	FIRSOV, W OF	5.2 N	107.5 E	110	47	42
5040	FWD	5045	SAENGER, E OF	5.1 N	106.8 E	110	47	43
5042	FWD	5047	SAENGER, E OF	4.8 N	106.1 E	110	47	43
5044	FWD	5049	SAENGER, E OF	4.9 N	105.5 E	110	47	44
5046	FWD	5051	MOISEEV	4.8 N	104.9 E	111	47	45
5048	FWD	5053	MOISEEV	4.7 N	104.0 E	111	47	45

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 100 TO 110 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5050	FWD	5055	SAENGER, MOISEEV	4.6 N	103.3 E	111	47	46
5052	FWD	5057	SAENGER, MOISEEV	4.5 N	102.7 E	111	47	47
5054	FWD	5059	SAENGER	4.5 N	102.2 E	111	47	47
5056	FWD	5061	SAENGER	4.4 N	101.6 E	111	47	48
5058	FWD	5063	SAENGER, W OF	4.3 N	100.9 E	111	47	49
5060	FWD	5065	ERRO, E OF	4.1 N	100.2 E	111	47	49
5520	VERT		KING, FLEMING, JOLIOT	13.3 N	109.6 E		TE	
5530	VERT		TSIOLKOVSKY, VESALIUS, MOISEEV, HUBBLE	12.7 N	100.6 E		TE	
5540	VERT		DANJON, FIRSOV, HERTZ, GAUSS	13.2 N	103.4 E		TE	
5550	VERT		DANJON, HERTZ, JOLIOT, GAUSS	12.6 N	102.5 E		TE	

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 90 TO 100 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4319	FWD	4324	WYLD	.6 S	99.6 E	124	17	80
4321	FWD	4326	WYLD	.7 S	98.8 E	124	17	80
4323	FWD	4328	WYLD	.7 S	98.1 E	124	17	81
4325	FWD	4330	WYLD	.7 S	97.5 E	124	17	82
4327	FWD	4332	WYLD, W RIM	.7 S	96.9 E	124	17	82
4329	FWD	4334	PURKYNE, E RIM	.7 S	96.2 E	124	17	83
4331	FWD	4336	PURKYNE, BABCOCK	.8 S	95.3 E	124	17	84
4333	FWD	4338	PURKYNE, BABCOCK	.9 S	94.7 E	124	17	84
4335	FWD	4340	HIRAYAMA, BABCOCK	1.0 S	94.0 E	124	17	85
4337	FWD	4342	HIRAYAMA, BABCOCK	1.2 S	93.3 E	124	17	85
4339	FWD	4344	HIRAYAMA	1.2 S	92.7 E	124	17	86
4341	FWD	4346	HIRAYAMA	1.3 S	91.9 E	124	17	86
4343	FWD		SMYTH'S SEA	1.5 S	91.1 E	124	17	87
4345	FWD		SMYTH'S SEA	1.7 S	90.4 E	124	17	87
4887	FWD	4892	ERRO	2.9 N	99.6 E	116	39	58
4889	FWD	4894	ERRO, WYLD	3.0 N	99.0 E	116	39	58
4891	FWD	4896	ERRO, WYLD	2.7 N	98.4 E	116	39	59
4893	FWD	4898	ERRO, WYLD	2.6 N	97.7 E	116	39	60
4895	FWD	4900	WYLD	2.5 N	97.0 E	116	39	60
4897	FWD	4902	WYLD	2.4 N	96.4 E	116	39	61
4899	FWD	4904	BABCOCK	2.3 N	95.5 E	116	39	62
4901	FWD	4906	BABCOCK, PURKYNE	2.0 N	94.9 E	116	39	63
4903	FWD	4908	BABCOCK, PURKYNE	1.9 N	94.3 E	116	39	63
4905	FWD	4910	BABCOCK, PURKYNE	1.8 N	93.7 E	116	39	64
4907	FWD		BABCOCK	1.7 N	93.2 E	116	39	64
4909	FWD		BABCOCK, W OF	1.8 N	92.4 E	116	39	65
4911	FWD		SMYTH'S SEA	1.6 N	91.7 E	116	39	66
5062	FWD	5067	ERRO	4.0 N	99.5 E	111	47	50
5064	FWD	5069	ERRO	4.0 N	98.7 E	111	47	51
5066	FWD	5071	ERRO, WYLD	4.0 N	98.1 E	111	47	51
5068	FWD	5073	WYLD	3.9 N	97.5 E	111	47	52
5070	FWD	5075	WYLD	3.6 N	96.7 E	112	47	53
5072	FWD	5077	WYLD	3.4 N	96.1 E	112	47	53
5074	FWD	5079	BABCOCK	3.3 N	95.4 E	112	47	54
5076	FWD	5081	BABCOCK	3.4 N	94.9 E	112	47	55
5078	FWD	5083	BABCOCK, PURKYNE	3.3 N	94.1 E	112	47	55
5080	FWD	5085	BABCOCK, PURKYNE	3.2 N	93.6 E	112	47	56
5082	FWD	5087	BABCOCK	3.1 N	93.0 E	112	47	56
5084	FWD	5089	BABCOCK, W OF	2.9 N	92.4 E	112	47	57
5086	FWD	5091	SMYTH'S SEA	2.8 N	91.9 E	112	47	58

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 90 TO 100 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5088	FWD	5093	SMYTH'S SEA	2.8 N	91.2 E	112	47	58
5090	FWD	5095	SMYTH'S SEA	2.7 N	90.5 E	112	47	59
5560	VERT		TSIOLKOVSKY, HERTZ, HUBBLE, BEROSUS	13.0 N	99.8 E		TE	
5570	VERT		TSIOLKOVSKY, SAENGER, AL-BIRUNI, BEROSUS	13.4 N	96.5 E		TE	
5580	VERT		FERMI, SAENGER, AL-BIRUNI, BEROSUS	12.7 N	93.4 E		TE	
5590	VERT		FERMI, GODDARD, MESSALA	14.4 N	91.1 E		TE	

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 80 TO 90 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4347	FWD		SMYTH'S SEA	1.8 S	89.6 E	124	17	87
4348	FWD	4353	SMYTH'S SEA	2.1 S	88.3 E	123	18	86
4349	AFT		SMYTH'S SEA	1.9 S	89.8 E	123	18	86
4350	FWD	4355	SMYTH'S SEA	2.2 S	87.4 E	123	18	86
4351	AFT		SMYTH'S SEA	2.0 S	89.1 E	123	18	86
4352	FWD	4357	SMYTH'S SEA	2.3 S	86.6 E	123	18	86
4354	FWD	4359	SMYTH'S SEA	2.3 S	85.8 E	123	18	85
4356	FWD	4361	SMYTH'S SEA	2.4 S	85.0 E	123	18	85
4358	FWD	4363	SMYTH'S SEA	2.5 S	84.3 E	123	18	84
4360	FWD	4365	SMYTH'S SEA	2.6 S	83.7 E	123	18	84
4362	FWD	4367	SMYTH'S SEA	2.7 S	83.0 E	123	18	83
4364	FWD	4369	SMYTH'S SEA	2.8 S	82.4 E	123	18	83
4366	FWD	4371	GILBERT U	2.8 S	81.7 E	123	18	82
4368	FWD	4373	SCHUBERT B	2.9 S	80.9 E	123	18	81
4370	FWD	4375	KASTNER, G	3.0 S	80.1 E	123	18	80
5092	FWD	5097	SMYTH'S SEA	2.6 N	89.8 E	113	47	60
5094	FWD	5099	SMYTH'S SEA	2.6 N	89.1 E	113	47	60
5096	FWD	5101	SMYTH'S SEA	2.5 N	88.4 E	113	47	61
5098	FWD	5103	SMYTH'S SEA	2.3 N	87.8 E	113	47	62
5100	FWD	5105	SMYTH'S SEA, NEPER K	2.1 N	87.2 E	113	47	62
5102	FWD	5107	SMYTH'S SEA, NEPER K	2.0 N	86.4 E	113	47	63
5104	FWD	5109	SMYTH'S SEA	1.9 N	85.7 E	113	47	64
5106	FWD	5111	SMYTH'S SEA	1.8 N	85.2 E	113	47	64
5108	FWD	5113	SMYTH'S SEA	1.9 N	84.5 E	113	47	65
5110	FWD	5115	SMYTH'S SEA	1.6 N	83.8 E	113	47	66
5112	FWD	5117	SMYTH'S SEA	1.5 N	83.3 E	113	47	66
5114	FWD	5119	SMYTH'S SEA	1.3 N	82.6 E	113	47	67
5116	FWD	5121	SCHUBERT	1.2 N	81.7 E	114	47	68
5118	FWD	5123	SCHUBERT, B, GILBERT U	1.1 N	81.1 E	114	47	68
5120	FWD	5125	SCHUBERT B	.9 N	80.4 E	114	47	69
5600	VERT		FERMI, GODDARD, MESSALA	13.7 N	89.5 E		TE	
5610	VERT		FERMI, GODDARD, MESSALA	13.7 N	89.0 E		TE	
5620	VERT		SMYTH'S, BORDER SEAS, SEA OF CRISES	13.0 N	86.7 E		TE	
5630	VERT		SMYTH'S, BORDER SEAS, SEA OF CRISES	13.7 N	84.3 E		TE	
5640	VERT		SMYTH'S, BORDER SEAS, SEA OF CRISES	13.8 N	83.8 E		TE	
5650	VERT		SMYTH'S, BORDER SEAS, CRISES, SERENITY	13.6 N	82.0 E		TE	
5660	VERT		SMYTH'S, BORDER SEAS, CRISES, SERENITY	13.5 N	81.4 E		TE	
5676	VERT		SMYTH'S, BORDER SEAS, CRISES, SERENITY	15.9 N	80.7 E		TE	
5677	VERT		HERCULES, ATLAS, SEA OF COLD (PART. FR.)				TE	

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 70 TO 80 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4372	FWD	4377	KASTNER, G	3.1 S	79.3 E	123	18	80
4374	FWD	4379	KASTNER, G, GILBERT M	3.2 S	78.7 E	123	18	79
4376	FWD	4381	KASTNER, GILBERT N, M	3.3 S	78.0 E	123	18	78
4378	FWD	4383	KASTNER A, GILBERT, N	3.4 S	77.2 E	123	18	78
4380	FWD	4385	GILBERT, SCHUBERT Y	3.5 S	76.3 E	123	18	77
4382	FWD	4387	GILBERT	3.6 S	75.6 E	122	18	76
4384	FWD	4389	GILBERT	3.7 S	74.9 E	122	18	75
4386	FWD	4391	GILBERT, W OF	3.8 S	74.2 E	122	18	75
4388	FWD	4393	GILBERT J, K	3.9 S	73.4 E	122	18	74
4390	FWD	4395	GILBERT J, K	4.1 S	72.7 E	122	18	73
4392	FWD	4397	GILBERT J, K	4.2 S	72.2 E	122	18	73
4394	FWD	4399	MACLAURIN B, F, L	4.3 S	71.4 E	122	18	72
4396	FWD	4401	MACLAURIN B, F	4.4 S	70.7 E	122	18	71
4398	FWD	4403	MACLAURIN P, E OF	4.6 S	70.2 E	121	18	71
5122	FWD	5127	KASTNER G	1.0 N	79.7 E	114	47	70
5124	FWD	5129	KASTNER G	.9 N	79.0 E	114	47	70
5126	FWD	5131	SCHUBERT Z	1.1 N	78.5 E	114	47	71
5128	FWD	5133	SCHUBERT Z	.9 N	77.9 E	114	47	72
5130	FWD	5135	SCHUBERT X, GILBERT	.7 N	77.3 E	114	47	72
5132	FWD	5137	SCHUBERT X, Y, GILBERT	.7 N	76.4 E	114	47	73
5134	FWD	5139	GILBERT	.6 N	75.6 E	114	47	74
5136	FWD	5141	GILBERT	.4 N	74.9 E	114	47	75
5138	FWD	5143	SCHUBERT N	.3 N	74.3 E	115	47	75
5140	FWD	5145	SCHUBERT N	.4 N	73.5 E	115	47	76
5142	FWD	5147	DUBIAGO C	.2 N	72.8 E	115	47	77
5144	FWD	5149	MACLAURIN L, E OF	.1 N	72.2 E	115	47	77
5146	FWD	5151	MACLAURIN L	.1 S	71.5 E	115	47	78
5148	FWD	5153	MACLAURIN L	.2 S	70.8 E	115	47	79
5150	FWD	5155	MACLAURIN B	.2 S	70.2 E	115	47	79

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 60 TO 70 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4400	FWD	4405	MACLAURIN, P, M	4.7 S	69.5 E	121	18	70
4402	FWD	4407	MACLAURIN, P, M	4.8 S	68.8 E	121	18	69
4404	FWD	4409	MACLAURIN, A	4.9 S	68.0 E	121	18	68
4406	FWD	4411	MACLAURIN K, LANGRENUS W	5.1 S	67.2 E	121	18	67
4408	FWD	4413	MACLAURIN U	5.2 S	66.6 E	121	18	67
4410	FWD	4415	MACLAURIN E, LANGRENUS M	5.3 S	65.9 E	121	18	66
4412	FWD	4417	MACLAURIN E, W OF	5.4 S	65.1 E	121	18	66
4414	FWD	4419	MACLAURIN H	5.5 S	64.4 E	121	18	65
4416	FWD	4421	LANGRENUS, E OF	5.6 S	63.7 E	121	18	64
4418	FWD	4423	LANGRENUS, T	5.7 S	62.9 E	121	18	63
4420	FWD	4425	LANGRENUS	5.7 S	62.1 E	121	18	63
4422	FWD	4427	LANGRENUS	5.8 S	61.4 E	121	18	62
4424	FWD	4429	LANGRENUS	5.9 S	60.9 E	120	18	61
4426	FWD	4431	LANGRENUS, C	6.0 S	60.4 E	120	18	61
5152	FWD	5157	DUBIAGO M	.4 S	69.6 E	115	47	80
5154	FWD	5159	DUBIAGO M	.4 S	69.1 E	115	47	80
5156	FWD	5161	MACLAURIN, M	.4 S	68.5 E	115	47	81
5158	FWD	5163	MACLAURIN	.6 S	67.9 E	115	47	81
5160	FWD	5165	MACLAURIN A	.8 S	67.1 E	115	47	82
5162	FWD	5167	FOAMING SEA, MACLAURIN U	1.2 S	66.3 E	115	47	83
5164	FWD	5169	MACLAURIN E	1.3 S	65.6 E	115	47	83
5166	FWD	5171	WEBB C, J	1.4 S	64.9 E	115	47	84
5168	FWD	5173	WEBB C, J	1.6 S	64.1 E	116	47	84
5170	FWD	5175	APOLLONIUS S	1.7 S	63.3 E	116	47	85
5172	FWD	5177	LANGRENUS T	1.8 S	62.6 E	116	47	85
5174	FWD	5179	LANGRENUS T	1.9 S	61.9 E	116	47	86
5176	FWD	5181	WEBB R, LANGRENUS	2.0 S	61.2 E	116	47	86
5178	FWD	5183	WEBB, R, LANGRENUS	2.1 S	60.8 E	116	47	86
5180	FWD	5185	WEBB, LANGRENUS	2.2 S	60.2 E	116	47	86

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 50 TO 60 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4428	FWD	4433	LANGRENUS, C	6.0 S	59.7 E	120	18	60
4430	FWD	4435	LANGRENUS	6.1 S	59.1 E	120	18	60
4432	FWD	4437	LANGRENUS B, K	6.1 S	58.4 E	120	18	59
4434	FWD	4439	LANGRENUS K, B	6.2 S	57.7 E	120	18	58
4436	FWD	4441	LANGRENUS F	6.3 S	57.1 E	120	18	58
4438	FWD	4443	LANGRENUS F	6.4 S	56.5 E	120	18	57
4440	FWD	4445	LANGRENUS F	6.4 S	55.8 E	119	18	56
4442	FWD	4447	FERTILITY, SEA OF	6.5 S	55.1 E	119	18	56
4444	FWD	4449	FERTILITY, SEA OF	6.6 S	54.5 E	119	18	55
4446	FWD	4451	FERTILITY, SEA OF	6.6 S	53.7 E	119	18	54
4448	FWD	4453	MESSIER G	6.7 S	52.8 E	119	18	53
4450	FWD	4455	MESSIER G, W OF	6.8 S	52.1 E	119	18	53
4452	FWD	4457	GOCLENIUS A, E OF	6.8 S	51.6 E	118	18	52
4454	FWD	4459	GOCLENIUS A	6.9 S	50.8 E	118	18	52
4456	FWD	4461	GOCLENIUS A	7.0 S	50.1 E	118	18	51
5182	FWD	5187	LANGRENUS, C	2.2 S	59.7 E	116	47	86
5184	FWD	5189	WEBB P	2.2 S	58.9 E	116	47	86
5186	FWD	5191	LANGRENUS B	2.4 S	58.2 E	116	47	86
5188	FWD	5193	LANGRENUS B, K	2.4 S	57.5 E	116	47	86
5190	FWD	5195	LANGRENUS F, K	2.5 S	56.9 E	116	47	85
5192	FWD	5197	LANGRENUS F	2.6 S	56.3 E	117	47	85
5194	FWD	5199	LANGRENUS F	2.7 S	55.5 E	117	47	84
5196	FWD	5201	FERTILITY, SEA OF	2.7 S	54.7 E	117	47	84
5198	FWD	5203	FERTILITY, SEA OF	2.8 S	54.1 E	117	47	83
5200	FWD		FERTILITY, SEA OF	2.9 S	53.2 E	117	47	82
5202	FWD		MESSIER G	3.1 S	52.6 E	117	47	82
5204	FWD	5209	LANGRENUS B	.8 S	57.7 E	112	63	75
5205	AFT		WEBB, W OF	.5 S	59.2 E	112	63	74
5206	FWD	5211	LANGRENUS B, K	1.0 S	56.9 E	112	63	76
5207	AFT		WEBB, W OF	.6 S	58.4 E	112	63	75
5208	FWD	5213	LANGRENUS F	1.2 S	56.2 E	112	63	77
5210	FWD	5215	LANGRENUS F	1.3 S	55.5 E	112	63	77
5212	FWD	5217	FERTILITY, SEA OF	1.4 S	54.8 E	113	63	78
5214	FWD	5219	FERTILITY, SEA OF	1.5 S	54.3 E	113	63	78
5216	FWD	5221	FERTILITY, SEA OF	1.6 S	53.8 E	113	63	78
5218	FWD	5223	FERTILITY, SEA OF	1.7 S	53.2 E	113	63	79
5220	FWD	5225	MESSIER G	1.8 S	52.6 E	113	63	80
5222	FWD	5227	MESSIER G	1.9 S	51.8 E	114	63	81
5224	FWD	5229	MESSIER G, W OF	2.1 S	51.1 E	114	63	81
5226	FWD	5231	TARUNTIUS H	2.2 S	50.6 E	114	63	82

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4458	FWD	4463	FERTILITY, SEA OF	7.0 S	49.4 E	118	18	50
4460	FWD	4465	FERTILITY, SEA OF, MESSIER	7.1 S	48.8 E	118	18	49
4462	FWD	4467	FERTILITY, SEA OF, MESSIER, A	7.1 S	48.2 E	118	18	49
4464	FWD	4469	FERTILITY, SEA OF, MESSIER A	7.2 S	47.5 E	118	18	48
4466	FWD	4471	MESSIER D	7.2 S	46.6 E	118	18	47
4468	FWD	4473	GOCLENIUS	7.3 S	45.9 E	117	18	47
4470	FWD	4475	GOCLENIUS	7.4 S	45.1 E	117	18	46
4472	FWD	4477	GOCLENIUS, RILLES	7.5 S	44.4 E	117	18	45
4474	FWD	4479	GOCLENIUS, RILLES	7.6 S	43.7 E	117	18	44
4476	FWD	4481	GOCLENIUS RILLES	7.6 S	43.0 E	117	18	44
4478	FWD	4483	GUTENBERG E, D	7.6 S	42.4 E	117	18	43
4480	FWD	4485	GUTENBERG, E	7.6 S	41.8 E	117	18	42
4482	FWD	4487	GUTENBERG	7.7 S	41.3 E	117	18	42
4484	FWD	4489	GUTENBERG, G	7.6 S	40.5 E	117	18	41
5228	FWD	5233	GOCLENIUS A	2.4 S	49.8 E	114	63	82
5230	FWD	5235	MESSIER, E OF	2.4 S	49.2 E	114	63	82
5232	FWD	5237	MESSIER B	2.5 S	48.5 E	115	63	83
5234	FWD	5239	MESSIER	2.6 S	47.8 E	115	63	83
5236	FWD	5241	MESSIER A	2.7 S	47.1 E	115	63	84
5238	FWD	5243	MESSIER D	2.8 S	46.5 E	115	63	84
5240	FWD	5245	MESSIER D	3.0 S	45.9 E	115	63	84
5242	FWD	5247	MESSIER D, W OF	3.0 S	45.2 E	115	63	85
5244	FWD	5249	SECCHI X	3.2 S	44.6 E	115	63	85
5246	FWD	5251	SECCHI X	3.3 S	44.0 E	115	63	85
5248	FWD	5253	LUBBOCK, E OF	3.4 S	43.4 E	115	63	85
5250	FWD	5255	GOCLENIUS RILLES	3.5 S	42.6 E	116	63	85
5252	FWD	5257	LUBBOCK	3.6 S	41.9 E	116	63	84
5254	FWD	5259	LUBBOCK, W OF, GUTENBERG	3.7 S	41.3 E	116	63	84
5256	FWD	5261	GUTENBERG, G	3.8 S	40.6 E	116	63	84

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4486	FWD	4491	GUTENBERG G	7.7 S	39.8 E	116	18	41
4488	FWD	4493	GUTENBERG RILLES	7.8 S	39.3 E	116	18	40
4490	FWD	4495	GUTENBERG RILLES	7.9 S	38.5 E	116	18	39
4492	FWD	4497	GUTENBERG RILLES	7.9 S	37.9 E	116	18	39
4494	FWD	4499	CAPELLA, E OF	8.0 S	37.2 E	116	18	38
4496	FWD	4501	CAPELLA, E OF	8.1 S	36.6 E	115	18	37
4498	FWD	4503	CAPELLA, E OF	8.1 S	35.9 E	115	18	37
4500	FWD	4505	CAPELLA	8.2 S	35.2 E	115	18	36
4502	FWD	4507	CAPELLA	8.3 S	34.5 E	115	18	35
4504	FWD	4509	ISIDORUS, DAGUERRE	8.4 S	33.6 E	115	18	34
4506	FWD	4511	ISIDORUS, DAGUERRE	8.5 S	32.9 E	115	18	34
4508	FWD	4513	ISIDORUS, W OF	8.5 S	32.2 E	115	18	33
4510	FWD	4515	ISIDORUS, W OF	8.5 S	31.5 E	115	18	32
4512	FWD	4517	ISIDORUS, W OF	8.5 S	30.9 E	114	18	32
4514	FWD	4519	MADLER	8.6 S	30 4 E	114	18	31
5258	FWD	5263	GUTENBERG, G	3.9 S	40.0 E	116	63	83
5260	FWD	5265	GUTENBERG, G	4.0 S	39.4 E	116	63	83
5262	FWD	5267	GUTENBERG RILLES	4.1 S	38.8 E	116	63	83
5264	FWD	5269	GUTENBERG RILLES	4.2 S	38.0 E	116	63	82
5266	FWD	5271	GUTENBERG RILLES	4.3 S	37.2 E	116	63	82
5268	FWD	5273	GUTENBERG RILLES	4.4 S	36.4 E	117	63	81
5270	FWD	5275	GUTENBERG I RILLE	4.5 S	35.7 E	117	63	81
5272	FWD	5277	CENSORINUS C, CAPELLA	4.6 S	35.0 E	117	63	80
5274	FWD	5279	CENSORINUS C, CAPELLA	4.8 S	34.4 E	117	63	79
5276	FWD	5281	CENSORINUS, ISIDORUS, CAPELLA	4.9 S	33.8 E	118	63	78
5278	FWD	5283	ISIDORUS, B	5.1 S	33.2 E	118	63	78
5280	FWD	5285	ISIDORUS, B	5.2 S	32.5 E	118	63	78
5282	FWD	5287	ISIDORUS B, W OF	5.3 S	31.6 E	118	63	77
5284	FWD	5289	ISIDORUS B, W OF	5.5 S	30.9 E	118	63	76
5286	FWD	5291	TORRICELLI, E OF	5.6 S	30.2 E	118	63	75

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 20 TO 30 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4516	FWD	4521	MADLER	8.5 S	29.8 E	114	18	31
4518	FWD	4523	MADLER, TORRICELLI, R	8.6 S	29.1 E	114	18	30
4520	FWD	4525	TORRICELLI, R	8.6 S	28.2 E	114	18	29
4522	FWD	4527	THEOPHILUS	8.6 S	27.6 E	114	18	28
4524	FWD	4529	THEOPHILUS	8.7 S	26.9 E	114	18	28
4526	FWD	4531	THEOPHILUS	8.7 S	26.2 E	114	18	27
4528	FWD	4533	THEOPHILUS	8.6 S	25.6 E	114	18	26
4530	FWD	4535	THEOPHILUS	8.7 S	25.0 E	114	18	26
4532	FWD	4537	CYRILLUS	8.7 S	24.3 E	113	18	25
4534	FWD	4539	CYRILLUS	8.7 S	23.7 E	113	18	25
4536	FWD	4541	CYRILLUS, HYPATIA	8.8 S	23.1 E	113	18	24
4538	FWD	4543	CYRILLUS, HYPATIA	8.9 S	22.5 E	113	18	23
4540	FWD	4545	CYRILLUS B	8.9 S	21.7 E	113	18	23
4542	FWD	4547	KANT E	8.9 S	21.0 E	112	18	22
4544	FWD	4549	KANT	9.0 S	20.3 E	112	18	21
5288	FWD	5293	TORRICELLI, E OF	5.8 S	29.7 E	118	63	75
5290	FWD	5295	TORRICELLI, R	6.0 S	28.8 E	118	63	74
5292	FWD	5297	TORRICELLI, R	6.0 S	28.2 E	118	63	74
5294	FWD	5299	TORRICELLI, W OF	6.2 S	27.5 E	119	63	73
5296	FWD	5301	THEOPHILUS	6.3 S	26.8 E	119	63	73
5298	FWD	5303	THEOPHILUS	6.4 S	26.1 E	119	63	72
5300	FWD	5305	THEOPHILUS	6.5 S	25.3 E	119	63	71
5302	FWD	5307	THEOPHILUS	6.6 S	24.6 E	119	63	70
5304	FWD	5309	ZOLLNER F, E OF	6.7 S	23.8 E	119	63	70
5306	FWD	5311	HYPATIA	6.7 S	23.2 E	119	63	69
5308	FWD	5313	HYPATIA	6.8 S	22.6 E	119	63	68
5310	FWD	5315	ZOLLNER F	6.9 S	21.8 E	120	63	67
5312	FWD	5317	KANT E	7.0 S	21.0 E	120	63	66
5314	FWD	5319	KANT, E	7.2 S	20.4 E	120	63	66

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4546	FWD	4551	KANT, G	9.1 S	19.6 E	112	18	21
4548	FWD	4553	ZOLLNER, KANT D	9.1 S	19.1 E	112	18	20
4550	FWD	4555	ZOLLNER, KANT D	9.2 S	18.6 E	112	18	19
4552	FWD	4557	ZOLLNER, W OF	9.3 S	17.9 E	112	18	19
4554	FWD	4559	DESCARTES, E OF	9.3 S	17.1 E	112	18	18
4556	FWD	4561	DESCARTES, E OF	9.3 S	16.5 E	112	18	17
4558	FWD	4563	DESCARTES	9.3 S	15.7 E	112	18	17
4560	FWD	4565	DESCARTES, APOLLO 16 LANDING SITE	9.3 S	15.1 E	111	18	16
4562	FWD	4567	DOLLOND, B, ABULFEDA	9.3 S	14.4 E	111	18	15
4564	FWD	4569	DOLLOND B, ABULFEDA	9.3 S	13.6 E	111	18	15
4566	FWD	4571	ANDEL, DOLLOND C	9.2 S	13.0 E	111	18	14
4568	FWD	4573	ANDEL	9.1 S	12.4 E	110	18	13
4570	FWD	4575	ANDEL, W OF	9.1 S	11.6 E	110	18	12
4572	FWD	4577	ANDEL, W OF	9.1 S	10.9 E	110	18	11
4574	FWD	4579	RITCHEY, E OF	9.2 S	10.3 E	110	18	11
4614	FWD	4619	TAYLOR	9.1 S	16.7 E	115	28	28
4615	AFT		KANT D, ZOLLNER	9.0 S	18.3 E	115	28	30
4616	FWD	4621	DESCARTES	9.0 S	15.9 E	115	28	27
4617	AFT		ZOLLNER, W OF	9.1 S	17.6 E	115	28	29
4618	FWD	4623	APOLLO 16 LANDING SITE	9.0 S	15.2 E	115	28	27
4620	FWD	4625	DOLLOND, B	9.1 S	14.3 E	115	28	26
4622	FWD	4627	DOLLOND B	9.1 S	13.8 E	115	28	25
4624	FWD		DOLLOND C	.1 S	13.3 E	115	28	25
4626	FWD		ANDEL	9.1 S	12.6 E	114	28	24
5316	FWD	5321	KANT, G, ZOLLNER	7.3 S	19.6 E	120	63	65
5318	FWD	5323	ZOLLNER	7.4 S	18.9 E	120	63	65
5320	FWD	5325	ZOLLNER, ALFRAGANUS C	7.5 S	18.2 E	120	63	64
5322	FWD	5327	TAYLOR	7.7 S	17.5 E	120	63	63
5324	FWD	5329	TAYLOR	7.7 S	16.9 E	120	63	62
5326	FWD	5331	TAYLOR A	7.8 S	16.3 E	120	63	62
5328	FWD	5333	DESCARTES, APOLLO 16 LANDING SITE	8.0 S	15.6 E	121	63	61
5330	FWD	5335	DESCARTES	8.1 S	14.9 E	121	63	61
5332	FWD	5337	DOLLOND, B	8.1 S	14.3 E	121	63	60
5334	FWD	5339	DOLLOND B, C	8.2 S	13.4 E	121	63	59
5336	FWD	5341	ANDEL, DOLLOND C	8.2 S	12.7 E	121	63	58
5338	FWD	5343	ANDEL	8.3 S	11.9 E	121	63	58
5340	FWD	5345	ANDEL, W OF	8.3 S	11.3 E	121	63	57
5342	FWD	5347	ANDEL, W OF	8.4 S	10.5 E	121	63	57

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 0 TO 10 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4576	FWD	4581	RITCHEY, E OF	9.2 S	9.8 E	110	18	11
4578	FWD	4583	RITCHEY	9.2 S	9.1 E	110	18	10
4580	FWD	4585	RITCHEY, HIPPARCHUS C	9.3 S	8.3 E	110	18	9
4582	FWD	4587	HIND	9.3 S	7.8 E	110	18	9
4584	FWD	4589	HIND	9.2 S	7.2 E	110	18	8
4586	FWD	4591	HIPPARCHUS	9.2 S	6.6 E	110	18	8
4588	FWD	4593	HALLEY, HIPPARCHUS	9.3 S	5.9 E	109	18	7
4590	FWD	4595	ALBATEGNIUS, HIPPARCHUS	9.3 S	5.2 E	109	18	6
4592	FWD	4597	ALBATEGNIUS, HIPPARCHUS	9.2 S	4.6 E	109	18	6
4594	FWD	4599	ALBATEGNIUS, HIPPARCHUS	9.3 S	4.0 E	109	18	5
4596	FWD	4601	ALBATEGNIUS, HIPPARCHUS J	9.2 S	3.3 E	108	18	4
4598	FWD	4603	KLEIN	9.1 S	2.7 E	108	18	4
4600	FWD	4605	ALBATEGNIUS G	9.1 S	2.0 E	108	18	3
4602	FWD	4607	ALBATEGNIUS G	9.1 S	1.5 E	108	18	3
4604	FWD	4609	GLYDEN	9.2 S	.9 E	108	18	2
4606	FWD	4611	PTOLEMAEUS	9.2 S	.2 E	108	18	1
4628	FWD	4633	HIND	8.8 S	7.8 E	117	38	29
4629	AFT		HIPPARCHUS C, E OF	8.7 S	9.5 E	117	38	31
4630	FWD	4635	HIND	8.8 S	7.2 E	117	38	28
4631	AFT		HIPPARCHUS C, RITCHEY	8.8 S	8.7 E	117	38	30
4632	FWD	4637	HALLEY, HIPPARCHUS	9.0 S	6.5 E	117	38	27
4634	FWD	4639	HALLEY, ALBATEGNIUS	9.1 S	5.8 E	117	38	27
4636	FWD	4641	ALBATEGNIUS, HIPPARCHUS	9.2 S	5.3 E	117	38	26
4638	FWD	4643	ALBATEGNIUS, HIPPARCHUS	9.2 S	4.4 E	116	38	25
4640	FWD	4645	ALBATEGNIUS, HIPPARCHUS	9.2 S	3.6 E	116	38	25
4642	FWD	4647	KLEIN	9.3 S	2.9 E	116	38	24
4644	FWD	4649	KLEIN, MULLER	9.3 S	2.2 E	116	38	23
4646	FWD	4651	ALBATEGNIUS G	9.3 S	1.5 E	116	38	22
4648	FWD	4653	PTOLEMAEUS, E WALL	9.3 S	.8 E	116	38	22
5344	FWD	5349	RITCHEY, E OF	8.4 S	9.8 E	121	63	56
5346	FWD	5351	RITCHEY, E OF	8.5 S	9.1 E	122	63	55
5348	FWD	5353	RITCHEY, HIPPARCHUS C	8.6 S	8.6 E	122	63	55
5350	FWD	5355	RITCHEY, HIND	8.6 S	7.9 E	122	63	54
5352	FWD	5357	HIND, HIPPARCHUS	8.7 S	7.2 E	122	63	53
5354	FWD	5359	HIPPARCHUS	8.7 S	6.4 E	122	63	52
5356	FWD	5361	HIPPARCHUS, HALLEY	8.8 S	5.8 E	122	63	51
5358	FWD	5363	HIPPARCHUS, ALBATEGNIUS	8.9 S	5.2 E	122	63	51
5360	FWD	5365	HIPPARCHUS, ALBATEGNIUS	9.1 S	4.4 E	122	63	50
5362	FWD	5367	HIPPARCHUS, ALBATEGNIUS	9.1 S	3.8 E	122	63	50
5364	FWD	5369	KLEIN	9.2 S	3.1 E	122	63	49

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 0 TO 10 E

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5366	FWD	5371	KLEIN, MULLER	9.3 S	2.4 E	122	63	48
5368	FWD	5373	ALBATEGNIUS G	9.3 S	1.8 E	122	63	47
5370	FWD	5375	PTOLEMAEUS, E OF	9.4 S	1.1 E	122	63	46
5372	FWD	5377	PTOLEMAEUS	9.4 S	.3 E	123	63	46

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 0 TO 10 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4608	FWD	4613	PTOLEMAEUS	9.2 S	.4 W	108	18	1
4610	FWD		PTOLEMAEUS	9.2 S	1.1 W	108	18	0
4612	FWD		PTOLEMAEUS	9.2 S	1.7 W	108	18	0
4650	FWD	4655	PTOLEMAEUS	9.2 S	.0	116	38	21
4652	FWD	4657	PTOLEMAEUS	9.2 S	.6 W	116	38	21
4654	FWD	4659	PTOLEMAEUS	9.3 S	1.2 W	116	38	20
4656	FWD	4661	PTOLEMAEUS, HERSCHEL, ALPHONSUS	9.3 S	2.1 W	116	38	19
4658	FWD	4663	PTOLEMAEUS, ALPHONSUS	9.3 S	2.7 W	116	38	18
4660	FWD	4665	PTOLEMAEUS, ALPHONSUS	9.3 S	3.3 W	116	38	18
4662	FWD	4667	PTOLEMAEUS, W WALL	9.3 S	4.0 W	116	38	17
4664	FWD	4669	PTOLEMAEUS E	9.2 S	4.6 W	116	38	16
4666	FWD	4671	DAVY G	9.3 S	5.4 W	116	38	16
4668	FWD	4673	DAVY Y, RILLE	9.3 S	6.1 W	116	38	15
4670	FWD	4675	DAVY Y, RILLE	9.3 S	6.7 W	115	38	14
4672	FWD	4677	DAVY Y	9.3 S	7.3 W	115	38	14
4674	FWD	4679	PALISA T, DAVY	9.3 S	8.2 W	115	38	13
4676	FWD	4681	PALISA T, W OF	9.3 S	8.8 W	115	38	12
4678	FWD	4683	LALANDE A	9.3 S	9.4 W	115	38	12
5374	FWD	5379	PTOLEMAEUS	9.5 S	.4 W	123	63	45
5376	FWD	5381	PTOLEMAEUS	9.5 S	1.2 W	123	63	44
5378	FWD	5383	PTOLEMAEUS, ALPHONSUS	9.6 S	1.9 W	123	63	44
5380	FWD	5385	PTOLEMAEUS, ALPHONSUS	9.7 S	2.7 W	123	63	43
5382	FWD	5387	PTOLEMAEUS, ALPHONSUS	9.7 S	3.4 W	123	63	42
5384	FWD	5389	PTOLEMAEUS E	9.7 S	4.2 W	123	63	42
5386	FWD	5391	PTOLEMAEUS E, DAVY G	9.8 S	4.9 W	123	63	41
5388	FWD	5393	DAVY G	9.7 S	5.5 W	123	63	40
5390	FWD	5395	DAVY Y	9.9 S	6.3 W	123	63	39
5392	FWD	5397	DAVY Y, PALISA	9.9 S	7.1 W	123	63	38
5394	FWD	5399	DAVY, Y	10.0 S	7.7 W	123	63	38
5396	FWD	5401	DAVY, PALISA T	10.1 S	8.4 W	123	63	37
5398	FWD	5403	LASSELL C, LALANDE A	10.1 S	9.2 W	123	63	37
5400	FWD	5405	LASSELL C, LALANDE A	10.2 S	9.9 W	123	63	36

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 10 TO 20 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4680	FWD	4685	LALANDE A	9.3 S	10.1 W	115	38	11
4682	FWD	4687	LALANDE A, W OF	9.3 S	10.7 W	115	38	10
4684	FWD	4689	GUERICKE C	9.2 S	11.4 W	115	38	10
4686	FWD	4691	GUERICKE C, W OF	9.2 S	12.1 W	115	38	9
4688	FWD	4693	GUERICKE, E OF	9.3 S	12.7 W	115	38	8
4690	FWD	4695	GUERICKE, E OF	9.4 S	13.3 W	115	38	8
4692	FWD	4697	PARRY M, GUERICKE	9.4 S	13.9 W	115	38	7
4694	FWD	4699	PARRY M, GUERICKE	9.4 S	14.7 W	114	38	7
4696	FWD	4701	PARRY	9.4 S	15.3 W	114	38	6
4698	FWD	4703	PARRY, A, FRA MAURO	9.4 S	16.1 W	114	38	5
4700	FWD	4705	PARRY RILLES, FRA MAURO	9.4 S	16.7 W	114	38	5
4702	FWD	4707	BONPLAND, FRA MAURO	9.4 S	17.5 W	114	38	4
4704	FWD	4709	BONPLAND	9.5 S	18.2 W	114	38	3
4706	FWD	4711	BONPLAND, W WALL	9.4 S	18.9 W	114	38	2
4708	FWD	4713	BONPLAND, W OF	9.4 S	19.6 W	114	38	2
5402	FWD	5407	GUERICKE C, E OF	10.2 S	10.8 W	123	63	35
5404	FWD	5409	GUERICKE C	10.3 S	11.5 W	123	63	34
5406	FWD	5411	GUERICKE C	10.4 S	12.2 W	123	63	34
5408	FWD	5413	GUERICKE, E OF	10.4 S	12.8 W	123	63	33
5410	FWD	5415	GUERICKE	10.4 S	13.6 W	123	63	32
5412	FWD	5417	GUERICKE, PARRY M	10.5 S	14.2 W	123	63	31
5414	FWD	5419	GUERICKE, PARRY M	10.5 S	14.8 W	123	63	31
5416	FWD	5421	PARRY, A	10.5 S	15.5 W	123	63	30
5418	FWD	5423	PARRY, A	10.5 S	16.3 W	123	63	30
5420	FWD	5425	BONPLAND, FRA MAURO	10.6 S	17.0 W	123	63	29
5422	FWD	5427	BONPLAND, FRA MAURO	10.7 S	17.7 W	124	63	28
5424	FWD	5429	BONPLAND, W RIM	10.7 S	18.4 W	124	63	28
5426	FWD	5431	KNOWN SEA	10.7 S	19.2 W	124	63	27
5428	FWD	5433	KNOWN SEA	10.7 S	19.9 W	124	63	26

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 20 TO 30 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
4710	FWD	4715	BONPLAND, W OF	9.4 S	20.3 W	114	38	1
4712	FWD		KNOWN SEA	9.3 S	20.8 W	114	38	1
4714	FWD		KNOWN SEA	9.3 S	21.4 W	114	38	-1
4716	FWD		KNOWN SEA	9.3 S	22.0 W	114	38	-1
5430	FWD	5435	KNOWN SEA, FRA MAURO A	10.7 S	20.8 W	124	63	25
5432	FWD	5437	KNOWN SEA	10.7 S	21.6 W	124	63	24
5434	FWD	5439	KNOWN SEA	10.7 S	22.3 W	124	63	23
5436	FWD	5441	KNOWN SEA, DARNEY	10.7 S	23.0 W	124	63	23
5438	FWD	5443	KNOWN SEA, DARNEY	10.7 S	23.7 W	124	63	22
5440	FWD	5445	KNOWN SEA	10.7 S	24.3 W	124	63	22
5442	FWD	5447	KNOWN SEA	10.7 S	25.1 W	124	63	21
5444	FWD	5449	DARNEY C, EUCLIDES D	10.6 S	25.8 W	124	63	20
5446	FWD	5451	DARNEY F, RIPHAEN MOUNTAINS	10.6 S	26.5 W	124	63	19
5448	FWD	5453	LUBINIEZKY E, RIPHAEN MOUNTAINS	10.6 S	27.3 W	123	63	18
5450	FWD	5455	RIPHAEN MOUNTAINS	10.6 S	28.0 W	123	63	18
5452	FWD	5457	EUCLIDES	10.6 S	28.8 W	123	63	17
5454	FWD	5459	EUCLIDES, C	10.6 S	29.5 W	123	63	17

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 30 TO 40 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5456	FWD	5461	EUCLIDES B, C	10.6 S	30.3 W	123	63	16
5458	FWD	5463	EUCLIDES B, W OF	10.6 S	31.0 W	123	63	15
5460	FWD	5465	EUCLIDES B, W OF	10.6 S	31.8 W	123	63	14
5462	FWD	5467	HERIGONIUS, E OF	10.6 S	32.5 W	123	63	13
5464	FWD	5469	HERIGONIUS, E OF	10.6 S	33.2 W	123	63	13
5466	FWD	5471	HERIGONIUS	10.6 S	33.9 W	123	63	13
5468	FWD	5473	HERIGONIUS, W OF	10.5 S	34.8 W	123	63	12
5470	FWD	5475	HERIGONIUS I RILLE	10.5 S	35.5 W	123	63	11
5472	FWD	5477	HERIGONIUS I RILLE	10.5 S	36.2 W	123	63	11
5474	FWD	5479	HERIGONIUS I RILLE	10.4 S	36.8 W	123	63	10
5476	FWD	5481	WICHMANN, E OF	10.4 S	37.6 W	123	63	10
5478	FWD	5483	WICHMANN	10.3 S	38.3 W	123	63	9
5480	FWD	5485	LETRONNE A	10.3 S	39.0 W	123	63	8
5482	FWD	5487	GASSENDI A, WICHMANN R	10.3 S	39.6 W	123	63	7

APOLLO 16
PANORAMIC CAMERA PHOTOGRAPHS
INDEXED BY LONGITUDE 40 TO 50 W

NASA PHOTO NO. AS16-	CAMERA LOOK	STEREO FRAME AS16-	DESCRIPTION	PRINCIPAL POINT LAT.	PRINCIPAL POINT LONG.	ALT KM.	REV NO.	SUN EL.
5484	FWD	5489	GASSENDI B	10.2 S	40.3 W	123	63	6
5486	FWD	5491	LETRONNE	10.2 S	41.0 W	123	63	6
5488	FWD	5493	LETRONNE	10.2 S	41.8 W	123	63	5
5490	FWD	5495	LETRONNE, FLAMSTEED A	10.2 S	42.5 W	123	63	4
5492	FWD	5497	LETRONNE, FLAMSTEED A	10.1 S	43.3 W	123	63	4
5494	FWD	5499	LETRONNE, FLAMSTEED	10.1 S	44.0 W	123	63	3
5496	FWD	5501	LETRONNE P, FLAMSTEED	10.1 S	44.9 W	123	63	2
5498	FWD	5503	LETRONNE P, W OF	10.0 S	45.7 W	122	63	1
5500	FWD	5505	LETRONNE P, W OF, FLAMSTEED C	10.0 S	46.4 W	122	63	0
5502	FWD		LETRONNE P, W OF	9.9 S	47.1 W	122	63	-1
5504	FWD		LETRONNE P, W OF	9.9 S	47.8 W	122	63	-1