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APOLLO 10 PHOTOGRAPHY INDEX  
70-mm and 16-mm Frame Index

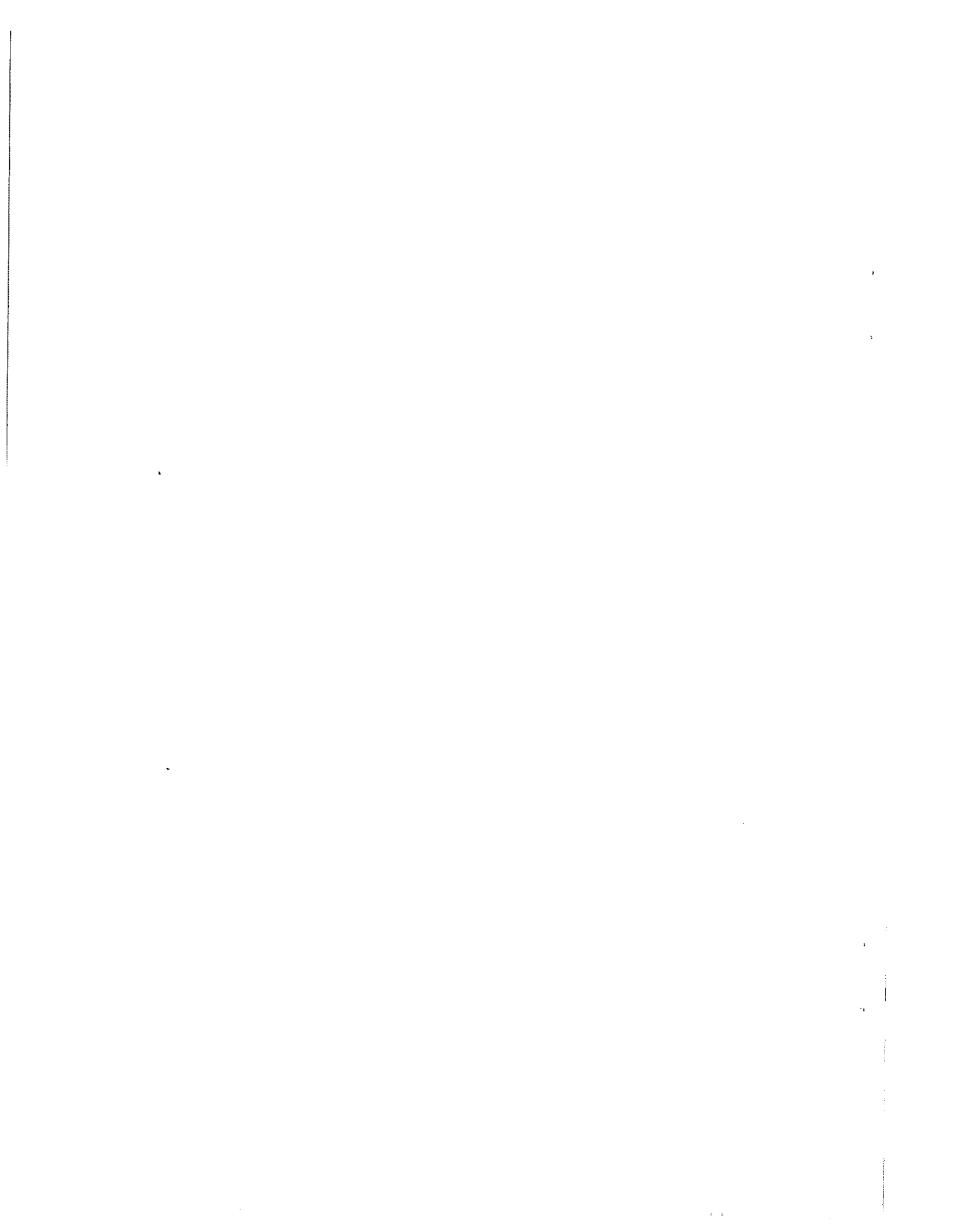
This *Index* contains supporting information about each photograph taken during the Apollo 10 mission, including those photographs taken of the earth. The photographs of the earth, however, are not available from the *NSSDC*. Requests for earth photographs taken from Apollo 10 should be directed to: Technology Application Center, University of New Mexico, Albuquerque, New Mexico 87106 U.S.A.

*NOTE: Please understand that this is a preliminary copy and probably contains errors. This version has been forwarded to provide you with the data as quickly as possible.*

Prepared by the  
Mapping Sciences Laboratory  
at the NASA Manned Spacecraft Center, Houston, Texas

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OCTOBER 1969

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APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine \_\_\_\_\_ M \_\_\_\_\_ Film \_\_\_\_\_ SO-368

Frame No.	Description	F.L.	V E R T	O B J E C T	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5026	Earth	250			TLI (pp in space)					Good	North Africa-Sinai
5027	"	"			"					"	"
5028	"	"			"					"	North Africa
5029	"	"			"					Fair	Earth almost missed.
5030	"	"			"					Good	North Africa
5031	"	"			"					"	"
5032	"	"			"					"	Stereo Pair North Africa
5033	"	"			"					"	"
5034	"	"			"					"	North and South America
5035	"	"			"					"	"
5036	"	"			"					"	"
5037	"	"			"					"	North America
5038	"	"			"					"	"
5039	"	"			"					"	"
5040	"	"			"					"	"
5041	"	"			"					"	"
5042	"	"			"					"	Africa and Mid East

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine M Film SO-368

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG	LAT.	HIGH	MED.	LOW		
5043	Earth	250			TLI (pp in space)					Good	Africa-Mid East
5044	"	"			"					"	"
5045	"	"			"					"	"
5046	"	"			"					"	"
5047	"	"			"					"	"
5048	"	"			"					"	"
5049	"	"			"					"	North West Africa
5050	"	"			"					"	North West Africa to U. S. Coast
5051	"	"			"					"	"
5052	"	"			"					"	"
5053	LM	80			"					"	VHF Antenna Array
5054	Earth	250			"					"	U. S. and Mexico
5055	"	250			"					"	"
5056	LM	80			"					"	LM High Gain Antenna
5057	"	"			"					"	"
5058	"	"			"					"	"
5059	"	"			"					"	"



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine M Film SO-368

Frame No.	Description	F.L.	VERT	OBLIQ	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.		HIGH	MED	LOW		
5077												
5078												
5079												
5080	Sea of Tranquility	80		X	35.2E	2.0N				X	Fair	Washed Out
5081	NEPER	"		X	85.0E	4.0N		X			Good	Not Located
5082	LM	"			(pp in space)							"
5083	"	"			"	"					"	Reflections on Window
5084	"	"			"	"					"	"
5085	"	"			"	"					"	"
5086	"	"			"	"					"	"
5087	"	"			"	"					"	"
5088	"	"			"	"					"	"
5089	"	"			"	"					"	"
5090	"	"			"	"					"	"
5091	"	"			"	"					"	"
5092	"	"			"	"					"	"
5093	Crater Webb and Foam-ing Sea	"		X	65.0E	1.5N				X	"	Reflection on Window

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine M

Film SO-368

Frame No.	Description	F.L.	VERT	OB L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5094	Crater Webb and Foaming Sea	80		X	58.5°E	1°0'S		X		Good	
5095	Sea of Crises Picard and Lick	"		X	54.0°E	9.5°N		X		"	
5096	"	"		X	50.0°E	11°N		X		"	
5097	"	"		X	50.0°E	6°N		X		"	
5098	Tarantius "A" and "U"	"		X	50.0°E	5°N			X	"	
5099	Molke and Landing Site 2	"		X	27.2°E	0.7°N		X		Good	Overlap With 5100
5100	"	"		X	26.2°E	0.7°N		X		Fair	Overlap With 5099
5101		"		X	151°E	1°N		X		Good	
5102		"		X	150°E	1°10'N		X		"	
5103		"		X	147.5°E	1°N		X		"	
5104		"		X	148°E	0.5°N		X		"	
5105		"		X	146.5°E	0.5°N		X		"	
5106	Crater 217	"		X	134.5°E	2.5°N		X		"	LM Approaching GSM
5107		"		X	131°E	0.5°N		X		Fair	"
5108		"		X	130.0°E	1.0°N		X		Good	"
5109		"		X	129.5°E	1°N		X		"	"
5110	Crater 282	"		X	128.5°E	1.2°N		X		"	"



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine M Film SO-368

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle			Photo Qual	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5111	Crater 282	80		X	127.5°E	1.5°N	X			Good	LM Approaching CSM
5112	Crater 282	"		X	126°E	2°N	X			"	"
5113		"		X	122.5°E	2°N	X			"	"
5114		"		X	122°E	2°N	X			"	"
5115		"		X	121.5°E	2°N	X			"	"
5116		"		X	117°E	2°N	X			"	"
5117	LM Docking	"		X	117.5°E	2°N	X			"	"
5118	Censorinus "X", "V" Maskelyne "P"	"		X	37°E	1°N	X			Fair	Over Exposed
5119	Censorinus	"		X	33.2°E	0.5°N	X			"	"
5120	"	"		X	32.5°E	0.5°S				Good	Near Terminator
5121	Terminator	"		X	22°E	1.5°N				Poor	"
5122	Sabine, Ritter, Schmidt	"		X	18.5°E	1.5°N				"	"
5123	Godin	"		X	85°E	2.2°N				Good	Terminator
5124	Dembowski	"		X	7°E	3°N				"	No Imagery
5125	Under-Experiment									Poor	"
5126	Dubiago	80		X	71.5°E	1.5°N				Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     M    

Film     SO-368    

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5127	Sea of Waves Firmicus	80		X	67.2°E	3.5°N	X			Good	
5128	West Edge Foaming Sea	250		X	64.5°E	1°N	X			Good	
5129	"	"		X	64.5°E	1°N	X			Good	
5130	"	"		X	64°E	1°N	X			Good	
5131	Apollonius	"		X	61°E	4°N	X			"	
5132	Apollonius "A"	"		X	60°E	2.5°N	X			"	
5133	Sea of Fertility	"		X	53°E	0.5°N	X			"	75% Overlap
5134	Taruntius "K" and "P"	"		X	52.2°E	0.5°N	X			"	"
5135	"	"		X	52°E	0.5°N	X			"	"
5136	Taruntius "H"	"		X	50°E	0.5°N	X			"	"
5137	Messier "A" and "B"	"		X	48°E	1°S	X			"	50% Side Lap
5138	"	"		X	47.5°E	2°S	X			"	"
5139	Messier "A", "B", "D", "E"	"		X	45.5°E	3°S	X			"	"
5140	SECCHI "X"	"		X	45.5°E	00°	X			"	"
5141	Sea of Fertility	"			47°E	2°N	X			"	"
5142	Lubbock "S"	"			45°E	1°N	X			"	50 % Overlap

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Film 50-368

Magazine M

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5143	Lubbock "S"	250		X	41.5°E	1°N	X			Good	75% Overlap
5144	Lubbock "S"	"			41.2°E	1°N	X			"	75% Overlap
5145	Taruntius "F"	"		X	40.5°E	3.5°N	X			"	95% Overlap
5146	Near Site 1	"		X	35°E	2.2°N		X		"	95% Overlap
5147	"	"		X	35°E	2.2°N		X		"	95% Overlap
5148	"	"		X	"	"		X		"	95% Overlap
5149	"	"		X	"	"		X		"	95% Overlap
5150	"	"	X		"	"		X		"	95% Overlap (1:440,000)
5151	Maskelyne	"	X		30°E	2.2°N		X		"	1:440,000
5152	Maskelyne "Y"	"		X	27.5°E	1.5°N		X		"	
5153	Maskelyne "G" Rima Maskelyne I	"		X	27°E	2.5°N		X		"	
5154	"	"		X	27°E	3°N		X		"	40% Overlap
5155	Near Maskelyne "G"	"		X	27°E	3.5°N		X		"	
5156	Landing Site 2	"		X	24°E	1°N		X		"	90% Overlap
5157	"	"		X	"	"		X		"	60% Overlap
5158	"	"		X	23.7°E	0.7°N		X		"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine M

Film SO-368

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
5159	Landing Site 2	250	X		23.7°E	1°N		X		Fair	70% Overlap (1:440,000)
5160	Ritter	"		X	19°E	2°N				Good	
5161	Schmidt	"		X	19°45'E	1°N				"	
5162	"	"		X	19.7°E	0.7°N				"	
5163	Godin Area	"		X	12.5°E	2°N				"	
5164	Godin	"		X	10°E	2.2°N				"	
5165	"	"		X	"	"				"	
5166	"	"		X	09°E	2.5°N				"	
5167	Godin "C"	"	X		08°E	2°N				"	
5168	Rhaeticus "B"	"		X	07°E	1.5°N				"	
5169	"	"	X		07.2°E	1.5°N				"	
5170	Craters 221, 223	80		X	165°E	4.5°N			X	"	
5171	Crater 302	80		X	161.5°E	5°S			X	"	
5172	Craters 300, 302	80		X	158°E	6°S			X	"	
5173	Craters 300, 301	80		X	157.5°E	9°S			X	"	

50% Overlap

1:440,000

1:440,000

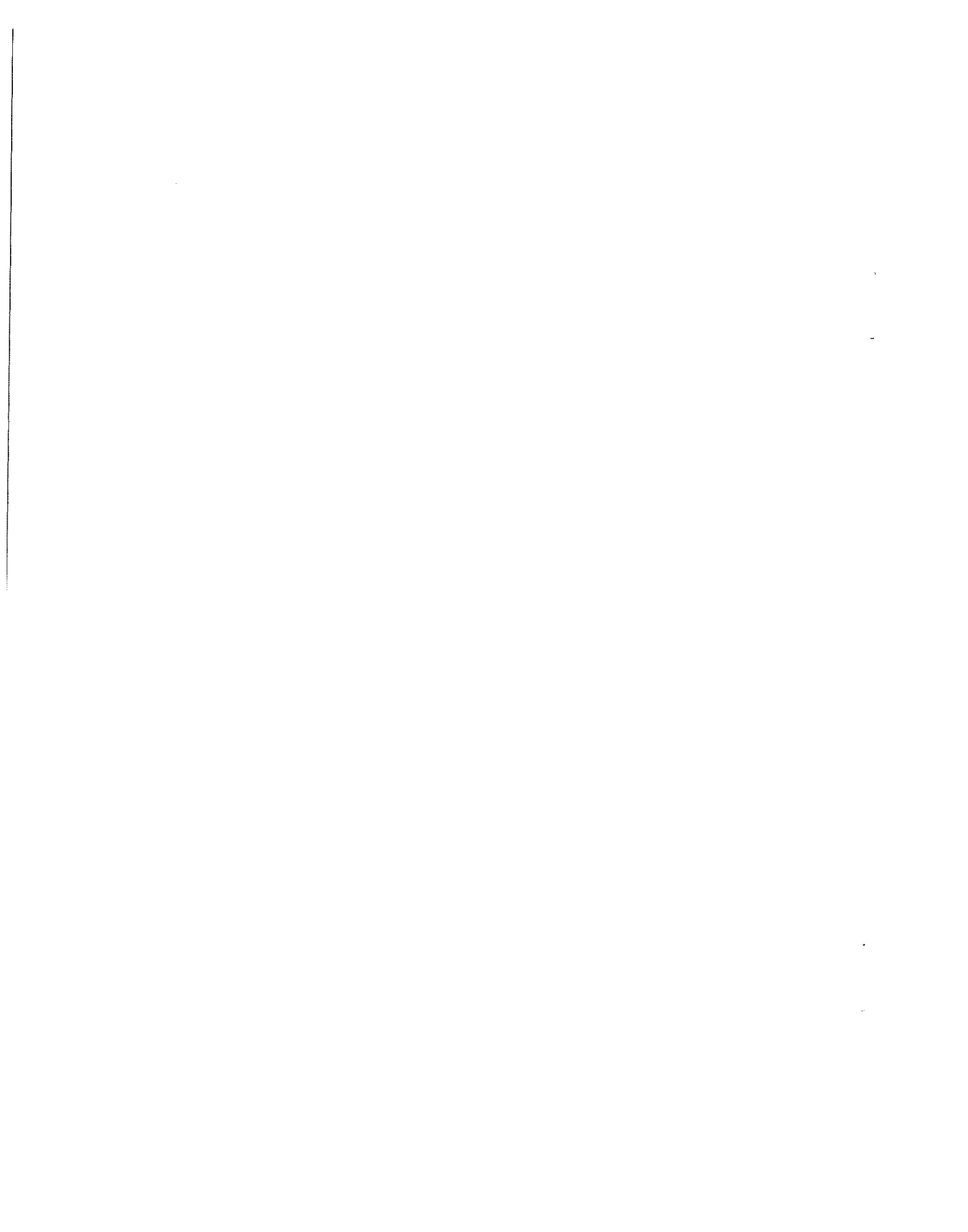
Light Reflection

MAGAZINE "N"

(FRAMES AS10-27-3855 THRU 3987)

Magazine "N" contains high altitude earth and moon shots taken during the translunar coast.

There is an interesting sequence showing the earthrise over the lunar horizon. This magazine has three very good shots of the approach to landing site 3. There are several shots of the earth as seen from lunar orbit. Also, there is a sequence of shots of CSM as seen from LM during the flyby maneuver showing the lunar surface in the background.



AS10-27-3855 thru 3987

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Film 368

Magazine N

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.		
AS10-27										
3855	CSM from LM with limb of moon	250MM		X	P.P. on CSM		X		Poor	IM flyby sequence
3856	"	"		X	"		X		Poor	"
3857	"	"		X	"		X		Good	"
3858	"	"		X	"		X		Good	"
3859	"	"		X	"		X		Good	"
3860	"	"		X	"		X		Good	"
3861	"	"		X	"				Good	"
3862	"	"		X	"				Good	"
3863	"	"		X	"		X		Good	"
3864	"	"		X	"				Good	"
3865	"	"		X	"				Good	"
3866	"	"		X	"				Good	"
3867	"	"		X	"				Good	"
3868	"	"		X	"		X		Good	"
3869	CSM from LM craters 275 & 207	"		X	"		X		Good	"
3870	CSM from LM craters 275 & 207	"		X	"		X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     N    

Film 368

Frame No.	Description	F.L.	V E R T	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED	LOW		
3871	CSM from LM craters 275 & 207	250MM		X	PP on CSM		X			Good	LM flyby sequence
3872	CSM from LM craters 275 & 207	"		X	"		X			Good	"
3873	CSM from LM crater 270	"		X	"		X			Good	"
3874	CSM from LM N.E. Corner Smyth's Sea	"		X	"			X		Good	"
3875	"	"		X	"			X		Good	"
3876	"	"		X	"			X		Good	"
3877	CSM from LM Northern Smyth's Sea	"		X	"			X		Good	"
3878	"	"		X	"		X			Good	"
3879	CSM from LM NW corner Smyth's Sea	"		X	"		X			Good	"
3880	"	"		X	"		X			Good	"
3881	"	"		X	76°E .5°S		X			Good	"
3882	"	"		X	PP on CSM					Good	"
3883	"	"		X	"					Good	"
3884	Crater 192	"		X	96.4°E 3.8°N					Good	"
3885	Earthrise	"		X	PP in Space						Lunar-Earth Sequence



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     N    

Film     368    

Frame No.	Description	F.L.	V E R T	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
3886	Earthrise	250M		X	PP in Space						Lunar-Earth Sequence
3887	Earthrise	"		X	PP in Space		X			Good	
3888	"	"		X	"		X			Good	"
3889	"	"		X	"		X			Good	"
3890	"	"		X	"		X			Good	"
3891	"	"		X	"		X			Good	"
3892	"	"		X	"		X			Good	"
3893	"	"		X	"		X			Good	"
3894	"	"		X	"		X			Good	"
3895	"	"		X	"		X			Good	"
3896	"	"		X	"		X			Good	"
3897	"	"		X	"		X			Good	"
3898	Earth	"			"					Good	"
3899	"	"			"					Good	"
3900	"	"			"					Good	"
3901	"	"			"					Good	"
3902	"	"			"					Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine N Film 368

Frame No.	Description	F.L.	VERT	OBLI	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
3903	Earth	250M			PP in Space					Good	Lunar-Earth Sequence
3904	"	"			"					Good	"
3905	Site 3	80		X	4.3°E	1.1°N			X	Good	"
3906	"	"		X	0.4°E	1.4°N			X	Good	"
3907	"	"		X	1.0°E	1.4°N			X	Good	"
3908	"	"		X	1.0°E	1.0°N			X	Good	"
3909	Tycho	250			TEI					Poor	T.E.I.
3910	"	"			"					Poor	"
3911	Foaming Sea	"			"					Poor	"
3912	"	"			"					Poor	"
3913	Tycho	"			"					Poor	"
3914	"	"			"					Poor	"
3915	Smyth's Sea	"			88°E	3°S		X		Fair	"
3916	Tycho-Ptolemaeus	"									
3917	"	"			TEI					Poor	"
3918	Smyth's Sea	"			90°E	5°S				Poor	"
3919	Tycho	"			TEI					Poor	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine N Film 368

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
3920	Mare Crisium	250MM			TEI					Poor	T.E.I.
3921	Smyth's Sea - Langrenus	"			"					Poor	"
3922	Sea of Moscow Sea of Waves	"			"					Fair	"
3923	" "	"			"					Poor	"
3924	Mare Crisium	"			"					Fair	"
3925	Mare Crisium-Cleomedes	"			"					Fair	"
3926	Mare Crisium Langrenus	"			"					Fair	"
3927	Langrenus - Sea of Moscow	"			"					Fair	"
3928	Langrenus Sea of Moscow	"			"					Fair	"
3929	Smyth's Sea Sea of Moscow	"			"					Fair	"
3930	Langrenus Sea of Moscow	"			"					Fair	"
3931	Langrenus Mare Crisium	"			"					Fair	"
3932	Sea of Tranquility Sea of Crises	"			"					Fair	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     N     Film     368    

Frame No.	Description	F.L.	V E R T	O B L I Q	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
3933	Sea of Nectar Sea of Serenity	250M			TEI				Fair	T.E.I.
3934	Langrenus Sea of Nectar	"			"				Good	"
3935	Sea of Nectar Sea of Crises	"			"				Good	"
3936	Sea of Nectar Border Sea	"			"				Good	"
3937	Langrenus Humbolt	"			"				Good	"
3938	Sea of Nectar Sea of Crises	"			"				Good	"
3939	Sea of Waves Sea of Nectar	"			"				Good	"
3940	Sea of Nectar Smyth's Sea	"			"				Good	"
3941	Sea of Serenity Smyth's Sea	"			"				Good	"
3942	Mare Australe Smyth's Sea	"			"				Good	"
3943	Mare Australe Sea of Nectar	"			"				Good	"
3944	"	"			"				Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     N    

Film 368

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
3945	Mare Australe Sea of Nectar	250MM			TEI					Good	T.E.I.
3946	Sea of Nectar Sea of Crises	"			"					Good	"
3947	Sea of Nectar Endymion	"			"					Good	"
3948	"	"			"					Good	"
3949	"	"			"					Good	"
3950	"	"			"					Fair	"
3951	Southern Sea Sea of Tranquility	"			"					Fair	"
3952	Earth	"			"					Fair	"
3953	Earth	"			"					Fair	"
3954	Lunar	"			"					Poor	"
3955	Lunar	"			"					Good	"
3956	"	"			"					Good	"
3957	"	"			"					Good	"
3958	"	"			"					Good	"
3959	"	"			"					Good	"

(PP in Space)

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine          N          Film          368

Frame No.	Description	F.L.	V E R T	O B J E C T	Principal Point		Sun Angle			Photo Quol.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
3960	Lunar	250MM			TEI (PP in Space)					Good	T.E.I.
3961	"	"			"					Good	"
3962	Inside CSM	"			Inside CSM					Poor	"
3963	"	"			"					Poor	"
3964	"	"			"					Poor	"
3965	"	"			"					Poor	"
3966	Lunar	"			TEI (PP in Space)					Fair	"
3967	"	"			"					Good	"
3968	"	"			"					Good	"
3969	"	"			"					Good	"
3970	Earth	"			"					Good	"
3971	Lunar	"			"					Good	"
3972	"	"			"					Good	"
3973	"	"			"					Good	"
3974	"	"			"					Good	"
3975	"	"			"					Good	"
3976	"	"			"					Good	Arabian Peninsula

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine      N     

Film      638     

Frame No.	Description	F.L.	VERT	OBLIQ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED	LOW		
3977	Lunar	250MM			TEI (FP in Space)					Good	T.E.I.
3978	"	"			"					Good	"
3979	Earth	"			"					Good	Cloud Cover
3980	"	"			"					Good	"
3981	"	"			"					Good	"
3982	"	"			"					Good	"
3983	"	"			"					Good	"
3984	"	"			"					Good	"
3985	"	"			"					Good	"
3986	"	"			"					Good	"
3987	"	"			"					Good	"



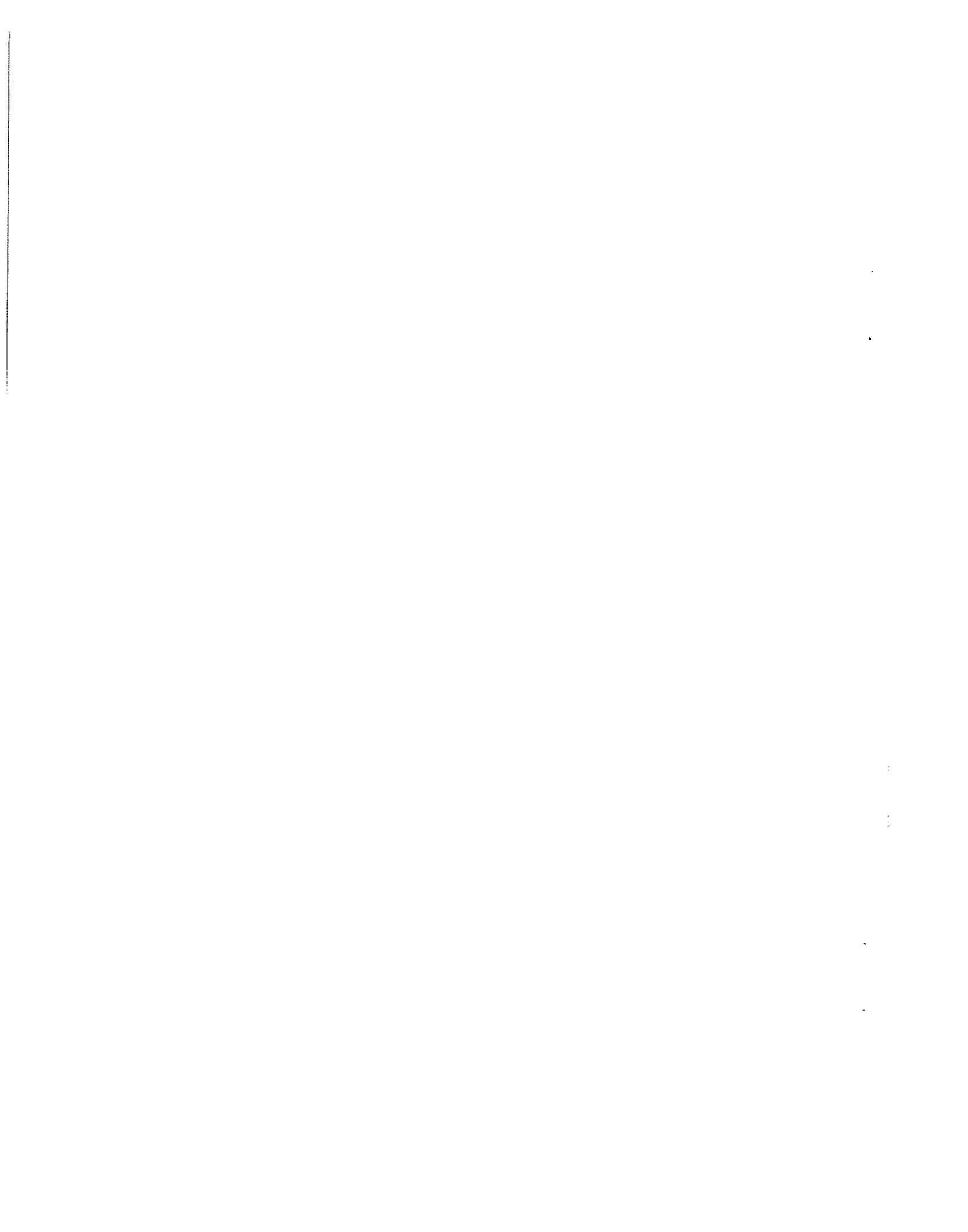


MAGAZINE "O"

(FRAMES AS10-28-3988 THRU 4163)

This magazine contains two near vertical passes. One pass was recorded over site 2 and the other was taken on the central farside of the moon. The 80mm lens was used on both passes.

There are individual 250MM vertical shots taken over the farside lunar surface. The targets of opportunity that are covered are: 29, 33, 41, 43, 45, 78a, 112, 113 and 114. In addition, site 2 is covered with oblique photography.



APOLLO 10 HASSELBLAD PHOTOGRAPHY

AS10-28-3988 thru 4163

Magazine 0 Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	See Remarks	HIGH	MED.	LOW		
3988	Craters 299 & 297	250MM		X	Above horizon	horizon		X			Poor	High oblique
3989	Crater 299 & 297	"		X	"	"		X			Poor	"
3990	"	"		X	"	"		X			Poor	"
3991	Crater 297	"		X	149.0E	4.2S		X			Good	"
3992	T.O. 292	"		X	141.2E	4.4S		X			Good	
3993	Crater 297	"		X	148.8E	1.8S		X			Good	
3994		"		X	139.6E	1.6S		X			Good	
3995		"		X	137.4E	1.9S		X			Good	
3996		"	X		See Remarks			X			Good	1:420,000 not plotted; locate on MAG Oframes 4099 4100
3997	T.O. 33	"			138.3E	4.2S		X			Good	Start of sequence
3998		"			134.1E	1.7S		X			Good	"
3999		"			134.8E	2.2S		X			Good	"
4000		"			140.4E	2.6S		X			Good	End of sequence
4001	Near Crater 217	"			133.0E	0.7S		X			Good	Start of sequence
4002	"	"			133.2E	0.8S					Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No.	Description	F.L.	VERT	SLIG	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4003	Near Crater 217	250M		X	133.5E	0.6N	X			Good	Start of sequence 1:420,000
4004	"	"	X		132.5E	1.1N	X			Good	30% F/OL with 4001 end of sequence
4005	Crater 287 & 288	"		X	132.0E	5.8S	X			Good	
4006	Crater 288 & 290	"		X	133.7E	7.7S	X			Good	High oblique
4007	Craters 284 & 286	"		X	130.4E	4.8S	X			Good	
4008	Crater 286	"		X	129.2E	2.7S	X			Good	
4009	Crater 290	"		X	134.0E	5.4S	X			Good	30% F/OL with 4005, 4006 high oblique.
4010	T.O. 41	"		X	127.5E	4.4S	X			Good	
4011		"		X	127.6E	1.8S	X			Good	
4012	T.O. 45	"		X	122.5E	4.8S	X			Good	
4013	T.O. 43	"		X	123.6E	2.8S	X			Good	
4014		"	X		See Remarks		X			Good	1:420,000 not plotted; Locate on Mag 0 frames 4116, 17 and 18
4015	T.O. 45	"		X	122.3E	4.6S	X			Good	
4016	T.O. 45	"		X	123.7E	5.8S	X			Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 34.00

Frame No	Description	F.L.	VERT	SLIT	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG	LAT	HIGH	HIGH	MED.	LOW		
4017	Crater 279	250MM		X	118.7E	6.2S	X				Good	
4018	"	"		X	120.2E	5.5S	X				Good	
4019	"	"	X		See Remarks		X				Good	1:420,000 not plotted; locate on Mag 0 frames 4121, 22 and 23
4020	Crater 277	"			114.5E	2.2S	X				Good	
4021	"	"			114.3E	3.7S	X				Good	
4022	"	"	X		See Remarks		X				Good	1:420,000 not plotted; locate on Mag 0 frames 4126, 27
4023	"	"	X		"		X				Good	1:420,000 not plotted; locate on Mag. 0 frame 4217
4024	"	"	X		"		X				Good	1:420,000 " "
4025	Crater 273	"			109.8E	5.1S	X				Good	
4026	Crater 202	"			107.8E	0.1S	X				Good	
4027	Crater 270	"			104.4E	4.2S	X				Good	
4028	"	"										Not plottable
4029	T.O. 78a	80MM	X		43.0E	0.4S		X			Fair	1:1,345,000 - Near vertical approach into and over site 2
4030	"	"	X		42.0E	0.5S		X			Fair	1:1,322,000
4031	"	"	X		41.0E	0.4S		X			Fair	1:1,328,000

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0

Film 3400

Frame No.	Description	F.L.	V E R T	O B J E C T	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED, LOW		
4032	T.O. 78a	80MM	X		40.0E	0.4N		X	Fair	1:1,311,000 - Near vertical approach into and over Site
4033	"	"	X		39.1E	0.4N		X	Fair	"
4034	"	"	X		38.0E	0.4N		X	Fair	"
4035	"	"	X		37.1E	0.3N		X	Fair	"
4036	"	"	X		36.0E	0.3N		X	Fair	"
4037	"	"	X		35.0E	0.3N		X	Fair	"
4038	"	"	X		34.5E	0.3N		X	Fair	"
4039	"	"	X		32.9E	0.3N		X	Fair	"
4040	"	"	X		31.8E	0.4N		X	Fair	"
4041	"	"	X		31.1E	0.4N		X	Fair	"
4042	"	"	X		29.8E	0.3N		X	Fair	"
4043	"	"	X		28.8E	0.3N		X	Fair	"
4044	"	"	X		27.9E	0.4N		X	Fair	"
4045	"	"	X		27.5E	0.4N		X	Fair	Vertical photograph over Site 2
4046	"	"	X		27.5E	0.4N		X	Fair	"
4047	"	"	X					X	Fair	Near vertical photograph over site 2

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
4048	Sea of Tranquility	80MM	X		26.6E	0.7N		X		Fair	1:1,328,000- near vertical over site 2
4049	"	"	X		25.9E	0.8N		X		Fair	1:1,396.000 "
4050	"	"		X	25.6E	0.9N		X		Fair	low oblique over site 2
4051	"	"		X	25.6E	0.9N		X		Fair	" "
4052	"	"		X	26.1E	0.8N		Y		Fair	High oblique over site 2
4053	T.O. 122	"		X	27.0E	0.4N		X		Fair	" "
4054	"	"		X	Above horizon			X		Poor	" "
4055	"	"		X	"	"		X		Poor	" "
4056	"	"		X	"	"		X		Poor	End of sequence
4057	Start of sequence along 0° Lat. (4057-4163)	"	X		178.8W	0.1S		X		Good	1:1,320,000 - start of near vertical sequence; long shadows
4058	"	"	X		179.8W	0.1N		X		Good	1:1,320,000 "
4059	"	"	X		179.4E	0.1N		X		Good	1:1,320,000 "
4060	"	"	X		178.5E	0.1N		X		Good	1:1,345,000 "
4061	"	"	X		177.7E	0.2N		X		Good	1:1,3200,000 "
4062	"	"	X		176.7E	0.3N		X		Good	1:1,295,000 - Near vertical pass
4063	"	"	X		175.9E	0.2N		X		Good	" "

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0

Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4064		80MM	X		174.9E	0.3N	X		Good	Near vertical pass 1:1,395,000
4065	Crater 225	"	X		173.9E	0.3N	X		Good	1:1,345,000
4066	"	"	X		172.8E	0.4N	X		Good	"
4067	"	"	X		171.9E	0.4N	X		Good	"
4068	"	"	X		170.9E	0.5N	X		Good	"
4069	"	"	X		169.8E	0.5N	X		Good	"
4070		"	X		168.9E	0.5N	X		Good	"
4071		"	X		167.7E	0.6N	X		Good	1:1,395,000
4072		"	X		166.8E	0.5N	X		Good	"
4073		"	X		165.7E	0.6N	X		Good	1:1,444,000
4074	Crater 303	"	X		164.7E	0.5N	X		Good	1:1,395,000
4075	"	"	X		163.7E	0.5N	X		Good	"
4076	"	"	X		162.7E	0.5N	X		Good	"
4077	"	"	X		161.6E	0.5N	X		Good	"
4078		"	X		160.6E	0.5N	X		Good	"
4079		"	X		159.7E	0.5N	X		Good	"



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No.	Description	F.L.	V E R T	O B L I Q	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED. LOW		
4080		80MM	X		158.9E	0.5N	X		Good	Near vertical pass 1:1,420,000
4081		"	X		158.2E	0.6N	X		Good	1:1,444,000
4082		"	X		157.4E	0.6N	X		Good	"
4083		"	X		156.3E	0.7N	X		Good	1:1,470,000
4084		"	X		155.2E	0.7N	X		Good	"
4085		"	X		154.4E	0.7N	X		Good	1:1,420,000
4086		"	X		153.5E	0.7N	X		Good	"
4087		"	X		152.4E	0.8N	X		Good	"
4088		"	X		151.4E	0.8N	X		Good	1:1,470,000
4089		"	X		150.4E	0.8N	X		Good	1:1,395,000
4090		"	X		149.0E	0.9N	X		Good	"
4091		"	X		148.2E	0.9N	X		Good	1:1,420,000
4092		"	X		147.0E	0.8N	X		Good	1:1,376,000
4093		"	X		146.0E	0.9N	X		Good	1:1,395,000
4094		"	X		144.9E	0.8N	X		Good	1:1,395,000

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No.	Description	F.L.	VERT	OBS	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW			
4095		80MM	X		143.8 <del>W</del> <sup>E</sup>	0.9N	X			Good	Near vertical pass 1:1,395,000	
4096		"	X		142.7 <del>W</del> <sup>E</sup>	0.9N	X			Good	1:1,370,000	
4097		"	X		141.6 <del>W</del>	0.8N	X			Good	1:1,345,000	
4098		"	X		140.5 <del>W</del>	0.7N	X			Good	"	
4099		"	X		139.4 <del>W</del>	0.7N	X			Good	1:1,320,000	
4100		"	X		138.4 <del>W</del>	0.7N	X			Good	"	
4101		"	X		137.1 <del>W</del>	0.7N	X			Good	1:1,395,000	
4102		"	X		136.2 <del>W</del>	0.6N	X			Good	1:1,370,000	
4103		"	X		135.5 <del>W</del>	0.6N	X			Good	1:1,320,000	
4104		"	X		134.4 <del>W</del>	0.6N	X			Good	1:1,395,000	
4105		"	X		133.7 <del>W</del>	0.9N	X			Good	1:1,375,000	
4106		"	X		132.6 <del>W</del>	0.9N	X			Good	1:1,370,000	
4107		"	X		131.4 <del>W</del>	1.0N	X			Good	"	
4108		"	X		130.2 <del>W</del>	1.0N	X			Good	"	
4109		"	X		129.2 <del>W</del> <sup>E</sup>	1.0N	X			Good	"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0

Film 3400

Frame No.	Description	F.L.	V E R T	O B L I G	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4110	Crater 282	80MM	X		127.9E	1.1N	X		Good	Near vertical pass 1:1,370,000
4111	"	"	X		127.0E	1.0N	X		Good	"
4112	"	"	X		126.0E	1.0N	X		Good	"
4113	"	"	X		124.8E	1.0N	X		Good	"
4114		"	X		123.7E	1.0N	X		Good	1:1,395,000 starts washing out due to high sun angles
4115		"	X		122.7E	1.1N	X		Good	1:1,420,000 -- high sun angles
4116		"	X		121.6E	1.0N	X		Good	"
4117		"	X		120.7E	1.0N	X		Good	1:1,370,000
4118		"	X		119.8E	1.1N	X		Good	"
4119		"	X		118.8E	1.0N	X		Good	"
4120		"	X		117.8E	1.0N	X		Good	"
4121		"	X		116.8E	0.9N	X		Good	"
4122		"	X		115.9E	0.8N	X		Good	1:1,345,000
4123		"	X		115.1E	0.9N	X		Good	"
4124		"	X		114.2E	0.7N	X		Good	"
4125	Crater 206 & 207	"	X		113.2E	0.8N	X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No.	Description	F.L.	VERT	OB L G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4126	Crater 207	80MM	X		112.2E	0.9N	X			Good	1:1,345,000 - near vertical pass
4127	"	"	X		111.3E	1.0N	X			Good	"
4128	"	"	X		110.2E	1.1N	X			Good	"
4129	Crater 202	"	X		109.3E	1.1N	X			Good	"
4130	"	"	X		108.2E	1.1N	X			Good	"
4131	"	"	X		107.2E	1.2N	X			Good	"
4132	"	"	X		106.1E	1.3N	X			Good	"
4133	"	"	X		105.0E	1.2N	X			Good	"
4134	"	"	X		103.6E	1.2N	X			Good	"
4135	"	"	X		102.8E	1.3N	X			Good	"
4136	"	"	X		102.1E	1.3N	X			Good	"
4137	"	"	X		101.1E	1.3N	X			Good	"
4138	"	"	X		99.8E	1.3N	X			Good	"
4139	"	"	X		98.8E	1.2N	X			Good	"
4140	Crater 192	"	X		97.5E	1.2N	X			Good	"
4141	"	"	X		96.5E	1.2N	X			Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4142	Crater 192	80MM		X	95.6E	1.0N	X		Good	Start of 180° roll maneuver
4143	"	"		X	94.1E	0.7N	X		Good	"
4144	"	"		X	93.0E	0.1N	X		Good	"
4145	Smyth's Sea	"		X	92.6E	0.1N	X		Good	"
4146	"	"		X	91.8E	0.5S	X		Good	"
4147	"	"		X	91.0E	0.2S	X		Good	End of 180° roll maneuver
4148	"	"	X		90.0E	0.2N	X		Good	Near vertical pass 1:1,245,000
4149	"	"	X		90.3E	0.0N	X		Good	"
4150	"	"	X		89.6E	0.1N	X		Good	"
4151	"	"	X		88.8E	0.1N	X		Good	1:1,295,000
4152	"	"	X		88.1E	0.2N	X		Good	"
4153	"	"	X		86.6E	0.1S	X		Good	1:1,345,000
4154	"	"	X		85.5E	0.3N	X		Good	"
4155	"	"	X		84.7E	0.2N	X		Good	"
4156	"	"	X		83.7E	0.3N	X		Good	"
4157	"	"	X		83.7E	0.0N	X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4158	Smyth's Sea	80MM	X		81.9E	0.1S	X			Good	1:1,295,000 - Near vertical pass
4159	"	"	X		80.6E	0.5S	X			Good	"
4160	Schubert	"	X		79.9E	0.4S	X			Good	"
4161	"	"	X		78.5E	0.9S	X			Good	"
4162	"	"	X		77.5E	1.1S	X			Good	"
4163	"	"	X		76.1E	1.2S	X			Good	" End of sequence

MAGAZINE "P"

(FRAMES AS10-29-4164 THRU 4326)

Magazine "P" contains photographs taken from LM during the descent approach to landing site 2 (just misses site). It also includes several shots of the CSM. Most of the photographs are oblique views of crew select targets. The following targets of opportunity are at least partially covered: 29, 30, 46, 55, 57, 67, 75, 78a and 112.

All photos were taken with an 80MM lens. There are three excellent low altitude obliques of Censorinus.





APOLLO 10 HASSELBLAD. PHOTOGRAPHY

Magazine P (From LM)

Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
4164	Unusable	80		X			X			Poor	Shows window frame 1/8 Frame Lunar Surface
4165	Eastern Sea of Tran- quility	"	X		390E	0.50N		X		Fair	Eastern Sea of Tranquility Shows CSM 1:1,309,000
4166	Eastern Sea of Tran- quility	"	X		39.50E	0.70N		X		Fair	Shows CSM 1:1,309.000
4167	"	"	X		38.70E	0.70N		X		Fair	"
4168	"	"	X		31.10E	10N		X		Fair	"
4169	"	"	X		30.80E	10N		X		Fair	"
4170	"	"	X		300E	0.90N		X		Fair	"
4171	"	"	X		29.50E	0.90N		X		Fair	"
4172	"	"	X		28.70E	10N		X		Fair	"
4173	"	"	X		28.20E	1.20N		X		Fair	"
4174	"	"	X		26.40E	1.40N		X		Fair	"
4175	Crater 303	"		X	161.70E	10S		X		Fair	"
4176	Crater 301	"	X		157.50E	60S		X		Fair	"
4177	Crater 301	"	X		156.40E	80S		X		Fair	"
4178	Crater 301	"	X		157.50E	30S		X		Fair	"
4179	Crater 297 T.O.#29	"			PP ABOVE HORIZON			X		Fair	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P (From LM)

Film 2400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4180	Crater 297 T.O.#29	80		X	149°E	7.5°S		X		Good	
4181	Crater 297	"		X	151°E	8.2°S		X		Fair	
4182	South of "SEA" IX. Near T.O.#30	"		X	142.5°E	1.6°N	X			Fair	
4183	"	"		X	142.5°E	1.6°N	X			Fair	
4184	South Crater 218 Near T.O.#30	"		X	141.5°E	0.6°N	X			Fair	
4185	"	"		X	145°E	1.2°N	X			Fair	
4186	Crater 217 Near T.O.#30	"		X	136.7°E	0.2°N	X			Fair	
4187	South Sea "IX." Near T.O.#30	"		X	142.5°E	0.2°N	X			Fair	
4188	"	"		X	142.2°E	1.2°N	X			Fair	
4189	T.O.#30	"		X	139°E	2.5°N	X			Fair	
4190	South Sea IX Near T.O.#30	"		X	138.1°E	2.2°N	X			Fair	
4191	"	"		X	136.5°E	2.2°N	X			Fair	
4192	"	"		X	138.7°E	1°N	X			Fair	
4193	"	"		X	137.9°E	1°N	X			Fair	
4194	T.O.#30	"		X	136.4°E	3.5°N	X			Fair	
4195	Crater 217 Near T.O.#30	"		X	136.2°E	1.2°N	X			Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P (FROM LM) Film 3400

Frame No.	Description	F.L.	VERT	O L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4196	Crater 217 Near T.O. #30	80	X		136E	1.5N		X		Fair	
4197	Not Plotted	"	X							Fair	
4198	Large Crater South of Crater 216	"		X	133.2E	0.2N		X		Fair	IP
4199	"	"	X		133.2E	0.2N		X		Fair	IP
4200	"	"		X	133.2E	0.2N		X		Fair	IP
4201	Near T.O. #43	"		X	123E	1.5S		X		Fair	
4202	South Crater 211 Near T.O. #46	"		X	118.7E	0.5S		X		Fair	
4203	"	"		X	119.5E	0.5S		X		Fair	
4204	"	"		X	119.5E	0.5S		X		Fair	
4205	"	"		X	119.2E	000		X		Fair	
4206	"	"		X	119.5E	0.5N		X		Fair	
4207	"	"		X	119.5E	0.5N		X		Fair	
4208	Crater 211 T.O.#46	"		X	120E	5N		X		Fair	
4209	"	"		X	120E	5.5N		X		Fair	
4210	East Crater 206	"		X	116E	1.5N		X		Fair	
4211	"	"		X	116.5E	1.5N		X		Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P

Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4212	Images Crater 206 Near Horizon	80MM		X	112E	1.5N	X		Fair	
4213	South Crater 208			X	116E	7N	X		Fair	
4214	East of Crater 207			X	117E	1.5N	X		Fair	
4215	"			X	116.3E	01N			Fair	
4216	Not Plotted			X			X		Fair	
4217	East Crater 202			X	110.5E	00°	X		Fair	
4218	South Crater 201			X	106.5E	03N	X		Fair	
4219	Crater 201 Near T.O. #55			X	107.5E	5.5N	X		Fair	
4220	"			X	107.5E	5.5N	X		Fair	
4221	South Crater 199 Near T.O. #55			X	101.2E	1.7N	X		Fair	
4222	Near T.O. #55			X	99E	04N	X		"	
4223	South Crater 199			X	101.5E	01N	X		"	
4224	West of Crater 199 T.O. #55			X	100E	3.5N	X		"	
4225	Crater 199 T.O.#55			X	97.5E	05N	X		"	
4226	North Crater 269			X	97E	1.5N	X		"	
4227	"			X	97E	1.5N	X		"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P Film 3400

Frame No.	Description	F.L.	VERT	OB L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4228	Crater 189 Near T.O. #55	80MM		X	93.5E	3N	X			Fair	
4229	Near T.O. #59			X	80E	1.5S	X			Fair	
4230	"			X	81.5E	01S	X			Fair	
4231	"			X	78E	01S	X			Fair	
4232	"			X	79.2E	2.5S	X			Fair	
4233	"			X	77.7E	01S	X			Fair	
4234	Gilbert			X	77.5E-	0.5S	X			Fair	
4235	Gilbert			X	77E	0.5S	X			Fair	
4236	Gilbert		X		77.5E	0.5S	X			"	
4237	Not Plotted		X				X			"	
4238	Near Mare Undarum			X	72E	0.2S	X			"	
4239	"			X	70E	0°	X			"	
4240	Mare Spumans			X	67.5E	1.3N	X			"	
4241	"			X	67.5E	0.5N	X			"	
4242	"			X	67.5E	0.5N	X			"	
4243	"			X	64.5E	0.5N	X			"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P

Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4244	T. O. #67	80MM		X	64E	3N	X		Fair	Southern Rim of Sea of Crises
4245	T. O. #67			X	62.5E	2.5N	X		Fair	Southern Rim of Sea of Crises
4246	Near T.O. #69a			X	57E	0°	X		Fair	
4247	Near T.O. #69a			X	56E	1N	X		Fair	
4248	"			X	54.7E	1S	X		Fair	
4249	"			X	53E	1N	X		Fair	
4250	"			X	50.7E	0.2N		X	Good	
4251	"			X	51.2E	0.5N		X	Good	
4252	"			X	50E	0.2S		X	Good	
4253	Near T. O. #75			X	48E	01S		X	Good	
4254	Near T. O. #75			X	48E	01S		X	Good	
4255	Near T. O. #75			X	48E	0.5S		X	Good	
4256	Near T.O. #75			X	47E	3S		X	Good	
4257	Near T.O. #75			X	47.2E	0.5N	X		Fair	
4258	Near T.O. #75			X	47.3E	0.5N		X	Good	
4259	Near T.O. #75			X	46.6E	0.2E		X	Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4260	Near T. O. #75	80		X	46E	0.5N		X	Fair	
4261	"	"		X	45.2E	0°		X	Good	
4262	"	"		X	43.5E	0.7N		X	Fair	
4263	"	"		X	43.5E	1N		X	Fair	
4264	T. O. 78a	"		X	42.5E	0.5S		X	Good	
4265	"	"		X	42.5E	0.5N		X	Good	
4266	"	"		X	41.7E	0.7N		X	Good	Highlands Between Sea of Fertility And Sea of Tranquility
4267	"	"		X	40E	0.2N		X	Fair	Sea of Tranquility
4268	"	"		X	40.5E	0.2S		X	Fair	Pyreneaeus Montes
4269	"	"		X	40E	0.5N		X	Fair	Sea of Tranquility
4270	"	"		X	39.5E	0.5N		X	Fair	
4271	"	"		X	39.5E	0.7N		X	Fair	
4272	"	"		X	39E	0.5N		X	Fair	
4273	"	"		X	38.5E	00°		X	Fair	
4274	"	"		X	38.5E	0.7N		X	Fair	
4275	"	"		X	38.5E	0.5N		X	Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P

Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4276	T. O. 78a	80		X	38E	0.5N		X		Good	
4277	"	"		X	37.5E	0.5N		X		Good	
4278	"	"		X	37E	0.2N		X		Fair	
4279	"	"		X	36.2E	0.5N		X		Good	
4280	"	"		X	35.5E	0.4N		X		Good	
4281	"	"		X	35.5E	0.2N		X		Fair	
4282	"	"		X	35.2E	0.5N		X		Fair	
4283	"	"		X	34.2E	0.5N		X		Fair	Pyrenaeus
4284	"	"		X	34E	0.2N		X		Fair	
4285	"	"	X		34.2E	0.5N		X		Good	1:260,000
4286	"	"	X		34.2E	0.5N		X		Good	"
4287	"	"		X	32.6E	2.4N		X		Fair	Sea of Tranquility
4288	"	"		X	PP ABOVE HORIZON			X		Fair	
4289	"	"		X	32.7E	2.2N		X		Fair	
4290	"	"		X	32.2E	0.3S		X		Good	Censorinus
4291	"	"		X	32.7E	0.2S		X		Good	"



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Frame No.	Magazine	P	Description	F.L.	VERT	OB L I G	Principal Point		Sun Angle		Photo Qual.	Remarks
							LONG	LAT	HIGH	MED. LOW		
4292	T. O. 78a			80		X	32.7E	0.2S	X		Good	Censorinus
4293	"			"		X	32.2E	0.7S	X		Good	Sea of Tranquility
4294	"			"		X	31E	0.6N	X		Fair	
4295	"			"		X	30.7E	0.5N	X		Fair	
4296	Maskelyne			"		X	30.5E	2N	X		Fair	
4297	Sea of Tranquility			"		X	28.5E	0.3N	X		Fair	
4298	"			"		X	28E	0.4N	X		Fair	
4299	"			"		X	28E	0.2N	X		Fair	
4300	"			"		X	28.1E	0.2S	X		Good	
4301	"			"		X	28.2E	0.2N	X		Good	
4302	"			"		X	28.1E	0.5N	X		Good	
4303	"			"		X	27.4E	1.2N	X		Good	
4304	"			"		X	26.6E	1.7N	X		Good	
4305	"			"		X	PP ABOVE HORIZON		X		Fair	
4306	"			"		X	PP ABOVE HORIZON		X		Fair	
4307	"			"		X	26.1E	1.7N	X		Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine P

Film 3490

Frame No.	Description	F.L.	VERT	O B L O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG	LAT.	HIGH	MED.	LOW		
4308	Sea of Tranquility	80MM		X	26.5E	0.4N		X		Fair	
4309	"			X	26.5E	0.5N		X		Fair	
4310	"			X	26.4E	0.5N		X		Fair	
4311	"			X	25.7E	0.5N		X		Fair	
4312	"			X	25.5E	0.5N		X		Fair	
4313	"			X	25.5E	0.5N		X		Fair	
4315	"			X	25.2E	0.2N		X		Fair	
4315	"			X	25.2E	0.2N		X		Good	
4316	"			X	25E	0.5N		X		Fair	
4317	"			X	24.9E	0.5N		X		Fair	
4318	"			X	24.9E	0.5N		X		Fair	
4319	"			X	24.8E	0.5N		X		Fair	
4320	"			X	24.7E	0.5N		X		Fair	
4321	"			X	24.7E	0.6N		X		Fair	
4322	"			X	24.7E	0.5N		X		Good	
4323	"			X	24.7E	0.5N		X		Good	
4324	T. O. #112			X	24.2E	0.3S		X		Good	
4325	Sea of Tranquility		X		24E	0.2N		X		Good	1:300,000
4326	"		X		23.9E	0.2N		X		Good	"

MAGAZINE "Q"

(FRAMES AS10-30-4327 THRU 4499)

Magazine "Q" contains an oblique sequence of landing sites 1 and 2.

The following targets of opportunity are at least partially covered:  
16a, 30, 34, 46, 55, 59, 67, 69a, 70, 74, 75, 76, 78, 112, 113, 114 and  
123.

Several crew select oblique views are present.



AS10-30-4327thru 4499

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED	LOW			
4327	Crater IX T.O. 34	250M	X		138.5E	06.0N		X			Good	First frame of a 10 frame sequence
4328	"	"	X		138.0E	06.0N		X			Good	Low oblique photography of crater floor and western rim
4329	"	"	X		138.0E	06.0N		X			Good	"
4330	"	"	X		137.5E	06.0N		X			Good	"
4331	"	"	X		137.0E	06.0		X			Good	"
4332	"	"	X		136.5E	05.5N		X			Good	"
4333	"	"	X		136.0E	05.5N		X			Good	"
4334	"	"	X		135.5E	05.5N		X			Good	"
4335	"	"	X		135.0E	05.5N		X			Good	"
4336	"	"	X		135.0E	05.5N		X			Good	"
4337	"	"	X		134.5E	05.0N		X			Good	End of 10 frame sequence
4338	Crater 216	"	X		134.5E	04.0N		X			Good	"
4339	"	"	X		133.0E	04.5N		X			Good	Floor and central peak of Crater 216
4340	"	"	X		132.5E	04.5N		X			Good	"
4341	"	"	X		132.5E	04.5N		X			Good	"
4342	"	"	X		132.5E	04.5N		X			Good	"

Magazine Q Film 3400

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No.	Description	F.L.	VERT	OB L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4343	Crater near #212 & 213	250M		X	124.5E	07.0N		X		Good	Medium size crater with high central peak
4344	"	"		X	124.0E	07.0N		X		Good	"
4345	"	"		X	124.0E	07.0N		X		Good	"
4346	"	"		X	124.0E	07.0N		X		Good	"
4347	Crater #212	"		X	123.5E	10.0N		X		Good	Large smooth floored crater
4348	"	"		X	123.5E	10.0N		X		Good	"
4349	Crater #211 T.O. 46	"		X	119.0E	05.0N		X		Good	Large rough rimed crater with massive central peak
4350	"	"		X	119.0E	05.0N		X		Good	"
4351	"	"		X	119.0E	05.0N		X		Good	"
4352	"	"		X	119.0E	05.0N		X		Good	"
4353	"	"		X	119.5E	04.5N		X		Good	"
4354	"	"		X	119.5E	04.5N		X		Good	"
4355	"	"		X	119.5E	04.5N		X		Good	"
4356	"	"		X	119.0E	04.5N		X		Good	"
4357	"	"		X	119.0E	04.5N		X		Good	"
4358	"	"		X	119.0E	04.5N		X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4359	Crater #211 T.O. 46	250MM		X	119.0E	04.5N		X		Good	Large rough rimmed crater with massive central peak
4360	"	"		X	118.5E	04.5N		X		Good	"
4361	"	"		X	118.5E	04.5N		X		Good	"
4362	"	"		X	119.5E	05.0N		X		Good	"
4363	"	"		X	119.5E	05.0N		X		Good	"
4364	"	"		X	119.5E	05.0N		X		Good	"
4365	Near Crater #206	"		X	115.0E	05.0N		X		Fair	Unusual surface configuration
4366	"	"		X	115.0E	05.0N		X		Fair	"
4367	"	"		X	115.0E	05.0N		X		Fair	"
4368	"	"		X	115.0E	05.0N		X		Fair	"
4369	"	"		X	115.0E	05.0N		X		Fair	"
4370	"	"		X	115.0E	05.0N		X		Fair	"
4371	Near Crater #202	"		X	107.0E	0.0N		X		Good	Double impact type crater
4372	Near Crater#199-T.O.55	"		X	100.0E	4.5N		X		Fair	Bright Copernican Crater with extensive ray system
4373	Near Crater#199-T.O.55	"		X	100.0E	4.5N		X		Fair	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0 Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4374	Near Crater 199-T.O. 55	250MM		X	100.0E	4.5N		X	Good	Bright Copernican Crater with extensive ray system
4375	"	"		X	100.0E	4.5N		X	Good	" "
4376	Near Jansky	"		X	92.0E	7.5N		X	Good	Twenty-nine frame sequence over Jansky and Neper
4377	"	"		X	91.5E	7.0N		X	Good	Overlapping obliques
4378	"	"		X	91.0E	7.0N		X	Good	" "
4379	"	"		X	91.0E	7.0N		X	Good	" "
4380	"	"		X	90.5E	7.0N		X	Good	" "
4381	"	"		X	90.5E	7.0N		X	Good	" "
4382	"	"		X	90.0E	7.0N		X	Good	" "
4383	"	"		X	90.0E	7.0N		X	Good	" "
4384	"	"		X	90.0E	7.0N		X	Good	" "
4385	"	"		X	90.0E	7.0N		X	Good	" "
4386	"	"		X	90.0E	7.0N		X	Good	" "
4387	"	"		X	89.5E	7.0N		X	Good	" "
4388	Jansky	"		X	89.0E	7.0N		X	Good	" "



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4389	Jansky	250MM		X	88.5E	6.5N		X	Good	Overlapping obliques
4390	"	"		X	88.0E	6.5N		X	Good	
4391	"	"		X	87.5E	6.5N		X	Good	"
4392	"	"		X	87.5E	6.5N		X	Good	"
4393	"	"		X	86.5E	6.0N		X	Good	"
4394	Near Jansky	"		X	86.5E	6.0N		X	Good	"
4395	"	"		X	85.5E	6.0N		X	Good	"
4396	Neper	"		X	85.5E	6.0N		X	Good	"
4397	Neper	"		X	85.5E	6.0N		X	Good	"
4398	"	"		X	85.5E	6.0N		X	Good	"
4399	"	"		X	85.0E	6.5N		X	Good	"
4400	"	"		X	84.5E	7.0N		X	Good	"
4401	"	"		X	84.5E	7.0N		X	Good	"
4402	"	"		X	84.5E	7.0N		X	Good	"
4403	"	"		X	84.0E	7.0N		X	Good	"
4404	"	"		X	84.0E	7.0N		X	Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q

Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4405	Neper	250MM		X	83.5E	7.0N		X		Good	Overlapping obliques
4406	"	"		X	83.5E	7.0N		X		Good	"
4407	"	"		X	83.5E	7.0N		X		Good	"
4408	"	"		X	83.0E	7.0N		X		Good	"
4409	"	"		X	83.0E	7.0N		X		Good	"
4410	"	"		X	83.0E	7.0N		X		Good	"
4411	Not located	"		X							Unable to locate
4412	"	"		X							"
4413	"	"		X							"
4414	Mare Crisium T.O. 70	"		X	57.0E	12.0N	X			Good	High obliques of floor and rim of Mare Crisium
4415	"	"		X	57.0E	12.0N	X			Good	"
4416	"	"		X	56.0E	11.5N	X			Good	"
4417	"	"		X	55.0E	11.5N	X			Good	"
4418	"	"		X	54.5E	11.0N	X			Good	"
4419	"	"		X	54.0E	11.0N	X			Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
4420	Mare Crisium T.O. 70	250MM		X	53.5E	10.5N	X			Good	High obliques of floor and rim of Mare Crisium
4421	Pickard - T.O. 70	"		X	55.0E	14.0N	X			Good	"
4422	Messier - T.O. 75	"		X	46.5E	2.0S	X			Good	High oblique of Messier and Messier A
4423	Messier - T.O. 75	"		X	46.5E	2.0S	X			Good	"
4424	Secchi	"		X	44.0E	3.0N	X			Good	High oblique of Secchi
4425	Secchi	"		X	44.0E	2.0N	X			Good	"
4426	Near Tarantius-T.O. 74	"		X	50.0E	7.0N	X			Fair	Obliques of Western Rim of Mare Crisium
4427	"	"		X	48.5E	8.5N	X			Fair	"
4428	"	"		X	48.0E	9.0N	X			Fair	"
4429	"	"		X	48.0E	9.0N	X			Fair	"
4430	"	"		X	47.0E	9.0N	X			Fair	"
4431	"	"		X	46.5E	8.5N	X			Fair	"
4432	"	"		X	45.5E	9.5N	X			Fair	Palus Somnii
4433	"	"		X	45.0E	9.0N	X			Fair	"
4434	Tarantius	"		X	47.0E	5.5N	X			Fair	Rim and floor of Tarantius
4435	"	"		X	46.0E	5.5N	X			Fair	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

AS10-30-4327 thru 4499

Magazine Q

Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4436	T.O. 78	250MM		X	37.5E	1.0N	X		Good	Mare Tranquillitatis
4437	T.O. 78	"		X	37.5E	1.5N	X		Good	"
4438	Mare Tranquillitatus	"		X	35.5E	4.0N	X		Good	High oblique
4439	Mare Maskelyne	"		X	35.0E	1.0N	X		Good	High oblique of Maskelyne
4440	Mare Maskelyne	"		X	34.0E	2.0N	X		Good	"
4441	Mare Tranquillitatis T.O. 112 and 113	"		X	25.5E	1.0S		X	Fair	Landing site 2
4442	"	"		X	25.5E	1.0S		X	Fair	"
4443	" T.O. 114	"		X	25.5E	1.0N		X	Fair	"
4444	" T.O. 114	"		X	25.5E	1.0N		X	Fair	"
4445	" T.O. 114	"		X	25.0E	1.0N		X	Fair	"
4446	" T.O. 114	"		X	25.0E	1.0N		X	Fair	"
4447	" T.O. 114	"		X	24.5E	1.0N		X	Fair	"
4448	" T.O. 114	"		X	24.5E	1.0N		X	Fair	"
4449	Rima Ariadaeus-T.O. 123	"		X	17.5E	5.0N		X	Good	High forward oblique of Rima Ariadaeus
4450	Rima Ariadaeus-T.O. 123	"		X	17.5E	5.0N		X	Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point			Sur. Angle		Photo Qual	Remarks
					LONG	LAT	HIGH	MED.	LOW		
4451	Sabine-Ritter	250MM		X	21.0E	1.0N			X	Good	Rim and floor of Sabine-Ritter
4452	Craters 227, 226-T.O.16a	80MM		X	173.0E	9.5N			X	Good	High oblique with low sun
4453	Craters 221, 223	"		X	168.0E	5.0N			X	Good	"
4454	Crater 218	"		X	146.5E	5.0N			X	Good	Long overlapping oblique sequence looking north
4455	Crater 218	"		X	145.0E	5.0N			X	Good	"
4456	Crater 218	"		X	144.0E	4.5N			X	Good	"
4457	Crater IX	"		X	143.0E	4.5N			X	Good	"
4458	Crater IX, T.O. 30 & 34	"		X	141.5E	4.0N			X	Good	"
4459	Crater IX, T.O. 30 & 34	"		X	141.0E	5.0N			X	Good	"
4460	Crater IX, T.O. 30 & 34	"		X	141.0E	5.0N			X	Good	"
4461	Crater IX, T.O. 30 & 34	"		X	140.0E	5.0N			X	Good	"
4462	Crater IX, T.O. 30 & 34	"		X	138.5E	5.5N			X	Good	"
4463	Crater IX, T.O. 30 & 34	"		X	137.0E	5.0N			X	Good	"
4464	Crater IX, T.O. 30 & 34	"		X	137.0E	5.0N			X	Good	"
4465	Craters 216, 217, T.O.34	"		X	135.0E	4.5N			X	Good	"
4466	Craters 216, 217	"		X	135.5E	5.0N			X	Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine Q Film 3400

Frame No	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual	Remarks
					LONG	LAT	HIGH	MED.	LOW		
4467	Crater 216	80MM		X	134.0E	5.0N			X	Good	Long overlapping oblique sequence looking north
4468	"	"		X	133.0E	5.5N			X	Good	"
4469	"	"		X	131.0E	4.5N			X	Good	"
4470	Crater 211 - T.O. 46	"		X	121.5E	4.5N			X	Good	"
4471	Crater 211 - T.O. 46	"		X	120.0E	4.5N			X	Good	"
4472	"	"		X	120.0E	4.5N			X	Good	"
4473	"	"		X	120.0E	4.5N			X	Good	"
4474	"	"		X	120.0E	4.5N			X	Good	"
4475	Mare Smythii-T.O. 59	"		X	84.5E	0.0	X			Fair	Long forward looking oblique sequence over Mare Smythii with earth in background
4476	"	"		X	82.5E	0.0	X			Fair	"
4477	"	"		X	81.0E	0.0	X			Fair	"
4478	"	"		X	30.0E	0.0	X			Fair	"
4479	"	"		X	79.0E	0.0	X			Fair	"
4480	"	"		X	78.0E	0.0	X			Fair	"
4481	"	"		X	77.5E	0.0	X			Fair	"
4482	"	"		X	75.5E	0.5N	X			Fair	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 0

Film 2400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4483	Mare Smythii - T.O. 59	80M		X	74.5E	0.5N		X		Fair	Long forward looking oblique sequence over Mare Smythii with earth in background
4484	"	"		X	72.5E	1.0N		X		Fair	"
4485	"	"		X	71.5E	1.0N		X		Fair	"
4486	"	"		X	69.5E	1.0N		X		Fair	"
4487	"	"		X	68.5E	1.0N		X		Fair	"
4488	"	"		X	67.0E	1.0N		X		Fair	"
4489	"	"		X	67.0E	1.0N		X		Fair	"
4490	"	"		X	66.0E	1.0N		X		Fair	"
4491	"	"		X	65.0E	1.0N		X		Fair	"
4492	"	"		X	64.0E	1.0N		X		Fair	"
4493	"	"		X	On horizon			X		Fair	"
4494	Mare Spuman	"		X	"			X		Fair	"
4495	"	"		X	"			X		Fair	"
4496	"	"		X	"			X		Fair	"
4497	" T.O. 69a & 67	"		X	"			X		Fair	"
4498	"	"		X	"			X		Fair	"
4499	"	"		X	"			X		Fair	"





MAGAZINE "R"

(FRAMES AS10-31-4500 THRU 4674)

Magazine "R" contains a near vertical pass from site 1 through site 2. The areas of interest and named crater regions photographed are: Sea of Fertility, Foaming Sea, Sea of Tranquility, Maskelyne, Sabine, Delambre, and Taruntius G and K. There are farside photos of craters IX, 218 and 221.

The following targets of opportunity (at an oblique angle) are imaged: 67, 70, 74, 76, 78a, 107, 112, 114, 116a, 123 and 128.

Most of the areas were photographed with the 250MM lens and were exposed under a high degree of sun angle.



APOLLO 10 HASSELBLAD PHOTOGRAPHY

AS10-31-4500 thru 4674

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
4500	T.O. 67	80MM	X		62.4E	0.6N	X			Good	1,440,000 Pass over Sites 1 and 2
4501	T.O. 67	"	X		60.3E	1.1N	X			Good	1,440,000 Crater Apollonius
4502	Foaming Sea	"	X		58.9E	1.9N	X			"	1,440,000
4503	"	"	X		58.0E	2.0N	X			"	"
4504	"	"	X		57.3E	2.1N	X			"	"
4505	"	"	X		56.4E	1.6N	X			"	"
4506	Sea of Fertility	"	X		55.9E	1.7N	X			"	"
4507	"	"	X		54.9E	1.6N	X			"	"
4508	"	"	X		54.1E	1.5N	X			"	"
4509	"	"	X		53.7E	1.6N	X			"	1,420,000
4510	Taruntius "K"	"	X		51.7E	1.6N	X			"	"
4511	Taruntius "G"	"	X		50.9E	1.5N	X			"	"
4512	"	"	X		49.6E	1.5N	X			"	"
4513	Sea of Fertility	"	X		48.3E	1.5N	X			"	1,330,000
4514	"	"	X		47.2E	1.4N	X			"	"
4515	"	"	X		46.0E	1.2N	X			"	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH.	MED.	LOW		
4516	Secchi	80MM		X	44.8E	1.0N	X			Good	
4517	"	"		X	43.8E	1.1N	X			"	
4518	"	"		X	43.2E	1.1N	X			"	
4519	Lubbock S	"		X	42.1E	1.1N	X			"	
4520	"	"		X	41.2E	1.2N	X			"	
4521	"	"		X	40.1E	1.5N	X			"	
4522	Site I Approach	"		X	39.4E	1.4N	X			"	
4523	"	"		X	38.2E	1.3N	X			"	
4524	"	"		X	37.5E	1.6N	X			"	
4525	"	"		X	36.4E	1.5N	X			"	
4526	Site 1	"		X	35.6E	1.8N	X			"	
4527	Site 1	"		X	34.4E	1.7N	X			"	
4528	Site 1	"		X	33.4E	1.7N	X			"	
4529		"		X	32.5E	1.4N	X			"	
4530	Maskelyne	"		X	31.8E	1.0N	X			"	
4531	Maskelyne	"	X		30.4E	0.5N	X			"	1,330,000

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED. LOW		
4532	Maskelyne	80MM	X		29.5E	0.5N	X		Good	1:330,000
4533		"	X		28.4E	0.5N	X		"	"
4534		"	X		27.4E	0.6N	X		"	"
4535	T.O. 112	"	X		26.8E	0.3N	X		"	"
4536	T.O. 112	"	X		25.9E	0.0N	X		"	"
4537	Site 2	"	X		24.6E	0.2S	X		"	"
4538	T.O. 114 - Site 2	"	X		23.8E	0.3S	X		"	"
4539	T.O. 114	"	X		22.8E	0.4S	X		"	"
4540	T.O. 114	"		X	22.0E	0.4S	X		"	"
4541	Sabine	"		X	21.0E	0.3S	X		"	"
4542	Sabine	"		X	20.0E	0.4S	X		"	"
4543		"		X	19.1E	0.4S	X		"	"
4544	Delambre	"		X	18.5E	0.5S		X	"	"
4545	Delambre	"		X	16.9E	0.4S		X	"	"
4546		"		X	16.2E	0.3S		X	"	"
4547		"		X	15.3E	0.4S		X	"	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine       R       Film       3400      

Frame No.	Description	F.L.	V E R T	O B J E C T	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	HIGH	MED.	LOW		
4548		80MM		X	14.2E	0.3S				X	Good	
4549		"		X	13.3E	0.4S				X	"	
4550		"		X	12.3E	0.0N				X	"	
4551	T.O. 128	"		X	11.2E	0.2N				X	"	
4552	T.O. 128	"		X	10.1E	0.2N				X	"	
4553	T.O. 128	"		X	9.4E	0.2N				X	"	
4554		"		X	8.2E	0.3N				X	Fair	
4555		"		X	7.0E	0.3N				X	"	
4556		"		X	6.1E	0.4N				X	"	
4557		"		X	5.2E	0.5N				X	Poor	
4558		"		X	4.1E	0.8N				X	"	End of pass over sites 1 & 2
4559		"		X						X	"	
4560	T.O. 70	250MM		X	Above	Horizon			X		Good	
4561	T.O. 67	"		X	60.6E	4.8N			X		"	Apollonius P & F
4562	Palus Sommi	"		X	46.0E	20.0N			X		"	
4563	T.O. 74	"		X	50.4E	7.2N			X		"	Taruntius "A"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Mogazine R Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4564	T.O. 76	250MM		X	45.1E	11.4N	X			Good	
4565	Palus Somnii	"		X	Horizon		X			"	
4566	Taruntius	"		X	46.4E	5.7N	X			"	
4567	Taruntius	"		X	45.9E	6.3N	X			"	
4568	T.O. 76	"		X	Horizon		X			"	Palus Somnii
4569	T.O. 74	"		X	46.8E	5.8N	X			"	Taruntius
4570	Taruntius	"		X	45.6E	5.2N	X			"	
4571	T.O. 76	"		X	43.2E	13.2N	X			"	
4572	T.O. 78a	"		X	33.2E	0.3S	X			Fair	
4573		"		X	43.5E	5.9N	X			Good	
4574	Taruntius "E" & "F"	"		X	40.5E	5.5N	X			Good	
4575	T.O. 78a	"		X	33.3E	0.3S	X			Fair	
4576	T.O. 78a	"		X	33.3E	0.3S	X			Fair	
4577	T.O. 76	"		X	39.4E	7.9N			X	Good	Cauchy
4578	T.O. 76	"		X	38.5E	7.8S			X	Good	Cauchy
4579	T.O. 78a	"		X	31.7E	0.4S	X			Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R

Film

3400

Frame No.	Description	F.L.	VERT	O S L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4580	Near Site 1	250MM		X	35.5E	3.7N	X			Good	
4581	"	"		X	36.0E	2.9N	X			Good	
4582	"	"		X	35.7E	2.8N	X			Good	
4583	"	"		X	35.7E	2.8N	X			Good	
4584	"	"		X	35.5E	2.6N	X			Good	
4585	"	"		X	36.3E	2.6N	X			Good	End of vertical pass over sites 1 and 2
4586	Site 1	"		X	34.7E	2.8N	X			Good	
4587	T.O. 78a	"		X	24.6E	0.9S	X			Good	
4588	Sea of Tranquility	"		X	33.2E	2.8N	X			Good	
4589	"	"		X	33.1E	3.0N	X			Good	
4590	T.O. 76	"		X	33.7E	5.0N	X			Good	
4591	Site 1	"		X	32.8E	2.7N	X			Fair	
4592	Site 1	"		X	32.7E	2.7N	X			Fair	
4593	Maskelyne "H"	"		X	32.4E	2.7N	X			Fair	
4594	Maskelyne "H"	"		X	33.3E	2.8N	X			Fair	
4595	Maskelyne "H"	"		X	33.2E	2.7N	X			Fair	



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OB L G	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4596	Maskelyne "H"	250MM		X	32.9E	2.7N	X		Fair	
4597	Maskelyne "H"	"		X	32.9E	2.7N	X		Fair	
4598	North edge of Sea of Tranquility	"		X	30.1E	10.5N	X		Good	
4599	T.O. 107	"		X	24.8E	14.8N	X		Good	Plinius on the horizon
4600	Maskelyne "M"	"		X	28.5E	5.2N	X		Good	
4601	T.O. 112	"		X	24.5E	0.8S	X		Good	
4602	T.O. 114	"		X	24.2E	0.5N	X		Good	Site 2
4603	T.O. 114	"		X	24.2E	0.5N	X		Good	"
4604	T.O. 114	"		X	24.1E	0.5N	X		Good	"
4605	T.O. 114	"		X	24.1E	0.5N	X		Good	"
4606	T.O. 114	"		X	24.0E	0.5N	X		Good	"
4607	T.O. 114	"		X	24.0E	0.5N	X		Good	"
4608	T.O. 114	"		X	23.9E	0.5N	X		Good	"
4609	T.O. 114	"		X	23.7E	0.5N	X		Good	"
4610	T.O. 114	"		X	23.5E	0.5N	X		Good	"
4611	T.O. 114	"		X	23.4E	0.0N	X		Good	"
4612	T.O. 114	"		X	23.3E	0.0N	X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine     R    

Film     3400    

Frame No.	Description	F.L.	VERT	OB L I G	Principal Point		Sur. Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4613	Site 2 Area	250MM		X	23.1E	0.0N	X			Good	
4614	"	"		X	23.0E	0.0N	X			Good	
4615	"	"		X	22.9E	0.0N	X			Good	
4616	"	"		X	22.7E	0.0N	X			Good	
4617	"	"		X	22.6E	0.0N	X			Good	
4618	"	"		X	22.4E	0.0N	X			Good	
4619	"	"		X	22.3E	0.0N	X			Good	
4620	"	"		X	22.1E	0.0N	X			Good	
4621	"	"		X	22.0E	0.0N	X			Good	
4622	"	"		X	21.9E	0.0N	X			Good	
4623	"	"		X	21.7E	0.0N	X			Good	
4624	Sea of Tranquility	"		X	24.8E	3.5N			X	Good	
4625	"	"		X	24.6E	2.6N			X	Good	
4626	"	"		X	24.6E	5.9N			X	Good	
4627	Sabine	"		X	21.0E	0.4N			X	Good	
4628	Sabine	"		X	20.7E	0.5N			X	Good	



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OB L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT	HIGH	MED.	LOW		
4645	T.O. 123	250MM		X	14.4E	6.7N		X		Good	
4646	T.O. 123	"		X	13.3E	7.1N		X		Good	
4647	T.O. 128	"		X	10.6E	2.1N		X		Good	Godin
4648	Hyginus Rille	"		X	8.5E	7.9N			X	Fair	
4649	"	"		X	8.1E	8.0N			X	Fair	
4650	"	"		X	7.6E	8.1N			X	Fair	
4651	"	"		X	7.1E	8.2N			X	Fair	
4652	"	"		X	6.6E	8.5N			X	Fair	
4653	Crater 221	"		X	164.3E	10.2N			X	Fair	
4654	"	"		X	164.1E	10.0N			X	Fair	
4655	"	"		X	163.9E	10.0N			X	Fair	
4656	"	"		X	163.6E	10.0N			X	Fair	
4657	"	"		X	163.2E	9.8N			X	Fair	
4658	"	"		X	163.0E	9.6N			X	Fair	
4659	Crater 218	"		X	146.6E	6.6N		X		Fair	
4660	"	"		X	146.2E	6.1N		X		Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine R Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG	LAT.	HIGH	MED.	LOW		
4661	Crater 218	250MM		X	145.6E	6.4N	X			Good	
4662	"	"		X	144.8E	6.9N	X			Good	
4663	Basin IX	"		X	143.8E	7.0N	X			Good	
4664	"	"		X	143.5E	7.0N	X			Good	
4665	"	"		X	143.1E	7.1N	X			Good	
4666	"	"		X	142.6E	7.0N	X			Good	
4667	"	"		X	142.1E	7.0N	X			Good	
4668	"	"		X	141.9E	7.0N	X			Good	
4669	"	"		X	141.7E	7.0N	X			Good	
4670	"	"		X	141.1E	7.0N	X			Good	
4671	"	"		X	140.8E	7.0N	X			Good	
4672	"	"		X	140.5E	7.0N	X			Good	
4673	"	"		X	140.1E	7.0N	X			Good	
4674	"	"		X	139.8E	7.0N	X			Good	



MAGAZINE "S"

(FRAMES AS10-32-4675 thru 4856)

Magazine "S" contains high altitude photographs of the lunar surface. Both the 80 and 250MM focal length lens were used.

There are sequences of vertical, near vertical and oblique overlapping photographs covering sites 1, 2 and 3, targets of opportunity 29, 59, 78a, 104, 112, 114, 123, 128, and 142. Also, there are numerous crew select targets of both earthside and farside areas.





## APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S

Film 3400

Frame No	Description	F.L.	VERT	SLIP	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4675	Langrenus	250MM		X	61.1E	9.4S		X	Good	
4676	"	"		X	63.1E	8.6S		X	Good	
4677	"	"		X	62.2E	8.7S		X	Good	
4678	"	"		X	59.2E	7.5S		X	Good	
4679	"	"		X	59.2E	7.5S		X	Good	
4680	"	"		X	59.3E	9.0S		X	Good	
4681	"	"		X	59.4E	10.0S		X	Good	
4682	Sea of Fertility Tarantius H, K, P	"		X	54.1E	0.0S		X	Good	
4683	"	"		X	53.0E	0.3N		X	Good	
4684	Sea of Fertility Tarantius K, H, and G	"		X	52.5E	0.5N		X	Good	
4685	Tarantius G	"		X	50.0E	0.3N		X	Good	
4686	Sea of Fertility	"		X	50.7E	1.8N		X	Good	
4687	Sea of Fertility Tarantius H, K, P	"		X	49.5E	1.0N		X	Good	
4688	Tarantius G	"		X	47.9E	0.3N		X	Good	
4689	Sea of Fertility	"		X	47.0E	1.1N		X	Good	
4690	Secchi	"		X	46.0E	1.1N		X	Good	
4691	"	"		X	44.2E	2.0N		X	Good	Hatch window shadow

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S

Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4692	Lubbock S	250M		X	43.3E	0.7N	X		Good	
4693	Near T.O. 78a, Lubbock S	"		X	42.6E	0.8N	X		Good	
4694	"	"		X	42.2E	0.6N	X		Good	
4695	"	"		X	41.6E	0.6N	X		Good	
4696	"	"		X	41.1E	0.7N	X		Good	
4697	"	"		X	40.4E	1.1N	X		Good	
4698	"	"		X	40.4E	1.2N	X		Good	
4699	"	"		X	40.6E	0.2N	X		Poor	Blurred (blocked view of GSM window).
4700	"	"		X	40.1E	1.1N	X		Good	
4701	"	"		X	39.7E	1.2N	X		Good	
4702	Sea of Tranquility	"		X	39.4E	1.1N	X		Good	
4703	"	"		X	39.0E	1.1N	X		Good	
4704	Site 1	"		X	37.8E	1.4N	X		Good	
4705	"	"		X	36.9E	1.6N	X		Good	
4706	"	"		X	34.6E	2.1N	X		Good	
4707	"	"		X	35.1E	2.0N	X		Good	
4708	"	X		X	35.1E	2.2N	X		Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sur Angle		Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4709	T.O. 78a - Maskelyne	250MM		X	33.5E	2.2N		X	Good	Hand-held obliques blocked view (CSM window)
4710	"	"		X	33.2E	2.3N		X	Good	"
4711	"	"		X	31.3E	1.6N		X	Good	"
4712	"	"		X	30.4E	1.4N		X	Good	"
4713	"	"		X	29.5E	1.3N		X	Good	"
4714	"	"		X	28.6E	1.3N		X	Good	"
4715	Sea of Tranquility	"		X	27.8E	1.1N		X	Good	"
4716	T.O. 104 - Theophilus	"		X	25.3E	12.5S		X	Good	"
4617	"	"		X	25.7E	12.8S		X	Good	"
4718	"	"		X	24.3E	11.9S		X	Good	"
4719	Near T.O. 114 - Site 2	"		X	26.3E	0.2N		X	Good	"
4720	"	"		X	25.9E	0.4N		X	Good	"
4721	"	"		X	25.2E	0.1N		X	Good	"
4722	"	"		X	24.5E	0.1N		X	Good	"
4723	"	"		X	23.4E	0.1N		X	Good	"
4724	"	"		X	24.1E	0.8S		X	Good	"
4725	Sabine	"		X	23.9E	0.4N		X	Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	OB L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4726	Sabine	250MM		X	23.5E	0.4N			X	Good	Hand-held obliques
4727	T.O. 114 Sabine & Ritter	"		X	23.0E	0.4N			X	Good	"
4728	"	"		X	22.5E	0.5N			X	Good	"
4729	"	"		X	22.0E	0.4N			X	Good	"
4730	"	"		X	21.4E	0.5N			X	Good	"
4731	"	"		X	20.6E	0.5N			X	Good	"
4732	Delambre	"		X	Above horizon				X	Good	"
4733	"	"		X	17.2E	2.5S			X	Good	"
4734	Central Bay Triesnekcer T.O. 123	"		X	1.0W	5.0N			X	Good	Looking into darkness
4735	T.O. 142 - Oppolzer	"		X	In darkness				X	Good	"
4736	Albategnius	"		X	Above horizon				X	Good	"
4737	T.O. 142 - Oppolzer	"		X	In darkness				X	Good	"
4738	T.O. 142 - Blagg	"		X	03.0W	02.4S			X	Good	"
4739	T.O. 78a - Mare near Lubbock S	50MM	X		43.1E	0.8N		X		Good	1:1,451,625
4740	"	"	X		42.2E	0.6N		X		Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle		Photo Qual	Remarks
					LONG.	LAT.	HIGH	MED. LOW		
4741	T.O. 78a - Lubbock S	80MM.	X		40.7E	0.6N		X	Good	1:1,451,675
4742	Sea of Tranquility T.O. 78a	"	X		39.3E	0.5N		X	Good	
4743	Sea of Tranquility	"	X		37.8E	0.5N		X	Good	
4744	"	"		X	36.1E	0.5N		X	Good	
4745	Censorinus A Maskelyne T.O. 78	"		X	35.0E	0.5N		X	Good	
4746	"	"		X	32.1E	0.7N		X	Good	
4747	"	"		X	30.3E	0.7N		X	Good	
4748	Maskelyne	"		X	28.2E	0.8N		X	Good	
4749	Site 2 - T.O. 112	"		X	27.0E	0.8N		X	Good	
4750	Site 2 - T.O. 112 & 114	"		X	25.3E	0.6N		X	Good	
4751	"	"		X	25.0E	0.6N		X	Good	
4752	"	"		X	24.6E	0.5N		X	Good	
4753	"	"		X	23.7E	0.5N		X	Good	
4754	Site 2, T.O. 112 Sabine & Ritter	"		X	23.3E	0.5N		X	Good	
4755	" T.O. 114	"		X	22.6E	0.5N		X	Good	
4756	"	"		X	22.0E	0.5N		X	Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	SLIP	Principal Point		Sun Angle			Photo Qual	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4757	Site 2 - T.O. 114 Sabine & Ritter	80MM		X	21.3E	0.4N		X		Good	
4758	Dionysius - T.O. 114 Sabine & Ritter	"		X	20.5E	0.4N		X		Good	
4759	"	"		X	20.0E	0.4N		X		Good	
4760	Sabine & Ritter	"		X	19.2E	0.3N		X		Good	
4761	Sabine & Ritter DeLambre	"		X	18.5E	0.2N		X		Good	
4762	DeLambre	"		X	17.6E	0.1N		X		Good	
4763	Theon Sr.	"		X	16.9E	0.1N		X		Good	
4764	"	"		X	16.1E	0.1N		X		Good	
4765	"	"		X	15.2E	0.0N		X		Good	
4766	"	"	X		14.4E	0.1N		X		Good	1:1,300,000
4767	"	"	X		13.6E	0.1N		X		Good	"
4768	Lade	"	X		12.6E	0.1N		X		Good	"
4769	"	"	X		11.9E	0.1N		X		Good	"
4770	"	"	X		10.9E	0.2N		X		Good	"
4771	"	"	X		10.1E	0.1N		X		Good	"
4772	"	"	X		09.4E	0.0N			X	Good	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 5

Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4773	Lade	80MM	X		98.5E	0.0N			X	Good	1:1,300,000
4774	Highlands	"	X		07.6E	0.0N			X	Good	"
4775	"	"	X		06.7E	0.0N			X	Good	"
4776	"	"	X		05.9E	0.0N			X	Good	"
4777	Central Bay-Highlands	"	X		05.1E	0.3N			X	Good	"
4778	"	"	X		04.4E	0.3N			X	Good	"
4779	"	"	X		04.1E	0.3N			X	Good	"
4780	"	"	X		03.6E	0.4N			X	Good	"
4781	"	"	X		03.2E	0.4N			X	Good	1:1,350,000
4782	Central Bay - Blagg T.O. 142	"	X		03.1E	0.5N			X	Good	1:1,500,000
4783	T.O. 142	"		X	03.0E	0.6N			X	Poor	Bad glare
4784	T.O. 142	"		X	02.6E	0.5N			X	Poor	"
4785	Central Bay, Blagg Eruce Site 3	"		X	01.2E	0.4N			X	Poor	"
4786	T.O. 142	"		X	0.1W	0.3N			X	Poor	"
4787	T.O. 142	"		X	01.2W	0.2N			X	Poor	Bad glare into terminator
4788	T.O. 142 - Oppolzer	"		X	02.5W	0.0N			X	Poor	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S

Film 3400

Frame No.	Description	F.L.	VERT	OB- L-I-G	Principal Point		Sun Angle		Photo Qual	Remarks	
					LONG	LAT	HIGH	MED. LOW			
4789	T.O. 142, Highlands	80MM		X	03.9W	0.2S			X	Poor	Bad glare into terminator
4790	T.O. 29, Crater 302	"		X	161.2E	13.2S		X		Good	
4791	T.O. 29, Crater 302	"		X	159.1E	14.2S		X		Good	
4792	Crater 300, T.O. 29	"		X	157.0E	07.1S		X		Good	
4793	Crater 300, T.O. 29	"		X	Above horizon			X		Good	
4794	T.O. 29, Crater 297	"		X	149.5E	06.2S		X		Good	
4795	"	"		X	149.1E	13.2S		X		Good	
4796	"	"		X	146.0E	10.1S		X		Good	
4797	"	"		X	147.4E	05.0S		X		Good	
4798	"	"		X	144.1E	11.4S		X		Good	
4799	Unknown	"		X	Above horizon			X		Fair	Unable to locate
4800	"	"		X	"	"		X		Fair	"
4801	"	"		X	"	"		X		Fair	"
4802	Smyth's Sea, T.O. 59	"		X	"	"		X		Fair	
4803	"	"		X	"	"		X		Fair	
4804	"	"		X	"	"		X		Fair	
4805	Crater 263	"		X	"	"		X		Fair	



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S

Film 3400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4806	Crater 263, Kastner R	80MM		X	Above horizon		X			Fair	
4807	"	"		X	"		X			Fair	
4808	Earth - Gilbert M Gilbert N	"		X	"		X			Fair	
4809	T.O. 123, Hyginus Rille	"		X	06.5E	09.0N		X		Good	
4810	"	"		X	05.2E	09.5N		X		Good	
4811	Hyginus Rille, T.O. 123	"		X	07.4E	07.2N			X	Good	
4812	Central Bay	"		X	01.2W	01.4N			X	Good	
4813	Hyginus-T.O. 123 Hyginus Rille	"		X	05.3E	08.2N			X	Good	
4814	"	"		X	05.2E	07.4N			X	Good	
4815	"	"		X	05.1E	07.2N			X	Good	
4816	Triesnecker, T.O. 123 Central Bay	"		X	02.3E	08.2N			X	Good	
4817	"	"		X	04.1E	04.5N			X	Good	
4818	Central Bay	"		X	03.1W	01.3N			X	Good	
4819	Triesnecker, T.O. 123 Central Bay	"		X	04.3E	05.2N			X	Good	
4820	"	"		X	0.2W	10.4N			X	Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	HIGH	MED.	LOW		
4821	Triesnecker, T.O. 123 Central Bay	80MM		X	0.5W	8.3N				X	Good	
4822	"	"		X	Above horizon					X	Good	
4823	T.O. 29, Crater 302	"		X	162.2E	10.1S				X	Good	
4824	"	"		X	161.2E	09.3S				X	Good	
4825	North (adjacent) of Crater 299, T.O. 29	"		X				X			Good	
4826	Crater 299, T.O. 29	"		X	156.0E	2.0S		X			Good	
4827	"	"		X	148.1E	04.1N		X			Good	
4828	T.O. 29, Crater 295	"		X	146.5E	04.1S		X			Good	
4829	T.O. 59, Smyth's Sea	"		X	82.3E	01.1S		X			Good	
4830	"	"	X		82.2E	0.2N		X			Good	1:1,202,775
4831	North of (adjacent) to Gilbert M	"	X		76.2E	01.5S		X			Good	"
4832	"	"	X		75.0E	03.0S		X			Good	"
4833	<del>MAE LAURIN</del>	"	X		72.0E	04.0S		X			Good	"
4834	MAE LAURIN	"		X	69.4E	01.5S		X			Good	
4835	MAE LAURIN	"		X	69.4E	01.4N		X			Good	
4836	"	"		X	69.0E	01.1N		X			Good	
4837	"	"		X	66.5E	01.2N		X			Good	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle		Photo Qual	Remarks
					LONG	LAT	HIGH	MED. LOW		
4838	T.O. <del>67</del> <i>67</i>	80MM		X	62.0E	02.5N	X		Good	
4839	<del>67</del>	"		X	66.0E	0.50S	X		Good	
4840	<del>67</del>	"		X	84.2E	01.0S	X		Good	
4841	T.O. <i>78a</i>	"		X	36.3E	03.4S	X		Good	
4842	"	"		X	38.4E	0.5S	X		Good	
4843	Censorinus A	"	X		33.4E	01.0S	X		Good	1:1,587,000
4844	"	"	X		33.0E	0.3S	X		Good	1:1,463,000
4845	"	"	X		32.2E	0.4S	X		Good	1:1,375,000-Hatch frame window
4846	Sea of Tranquility	"	X		28.2E	0.2N		X	Good	"
4847	T.O. 112, Moltke	"	X		25.4E	01.2S		X	Good	1:148,213
4848	"	"	X		24.4E	0.2S		X	Good	1:1,375,000
4849	"	"	X		23.3E	0.3S		X	Good	"
4850	Near T.O. 113	"		X	14.5E	0.4N		X	Good	
4851	"	"		X	14.3E	0.5N		X	Fair	
4852	Near T.O. 113	"		X	13.4E	0.5N		X	Fair	
4853	T.O. 128, Lade Godin	"		X	08.0E	0.1N		X	Fair	
4854	Central Bay, T.O. 142 Blasse, Bruce	"		X	06.0E	0.4N		X	Fair	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine S Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG	LAT	HIGH	MED.	LOW		
4855	Central Bay, T.O. 142 Blagg, Bruce	80MM		X	05.0E	0.4N				Fair	
4856	"	"		X	02.5E	0.3N				Fair	

MAGAZINE "T"

(FRAMES AS10-33-4857 THRU 5008)

Magazine "T" contains targets of opportunity, crew select targets, and a series of obliques into Mare Tranquillitatis. The targets of opportunity photographed are: 29, 33, 34, 41, 45, 46, 55, 59, 75, 78, 114, 120 and 128.



## APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4857	Near Crater #220	250		X	159.5E	3.5N	X			Poor	
4858	"	"		X	158.5E	2.0N	X			Poor	
4859	"	"		X	157.5E	3.5N	X			"	
4860	Crater #220	"		X	159.5E	4.0N	X			"	
4861	"	"		X	160.0E	5.0N	X			"	
4862	Near Crater #220	"		X	158.5E	2.0N	X			"	
4863	Near Crater #301	"		X	160.0E	3.5S	X			"	
4864		"		X	156.5E	1.0N	X			"	
4865	Crater #297	"		X	151.0E	4.5S	X			"	
4866	"	"		X	152.0E	5.0S	X			"	
4867	Removed	"		X	152.0E	5.0S	X			"	
4868	Crater #297	"		X	152.0E	5.0S	X			"	
4869	" #217	"		X	134.5E.	1.5N	X			"	
4870	Near Crater #217	"		X	134.0E	0.0°	X			"	
4871	"	"		X	131.0E	0.0°	X			"	
4872	Near Crater #286	"		X	130.0E	2.0S	X			"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T

Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4873	T. O. 45	250		X	122.0E	5.5S	X			Poor	
4874	T. O. 45	"		X	122.0E	5.5S	X			"	
4875	T. O. 45	"		X	122.0E	6.5S	X			"	
4876	Not Used										
4877	"										
4878	"										
4879	T. O. 45	"		X	122.0E	5.5S	X			"	
4880	Crater #273	"		X	109.0E	6.0S	X			"	
4881	"	"		X	110.5E	4.0S	X			"	
4882	"	"		X	110.5E	4.0S	X			"	
4883	Not Used										
4884	"										
4885	T. O. 59	"		X	90.0E	2.0S	X			"	
4886	Mare Smythii	"		X	88.0E	3.0N	X			"	
4887	T. O. 59	"		X	90.0E	2.0S	X			"	
4888		"		X	89.5E	6.0S	X			"	



APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T

Film 3400

Frame No.	Description	F.L.	VERT	O B L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4889	Near Crater #266	250		X	89.5E	6.0S	X			Poor	
4890	T. O. 59	"		X	90.0E	2.0S	X			"	
4891		"		X	86.5E	7.0S	X			"	
4892	Near Mare Spumans	"		X	66.0E	3.0S	X			"	
4893		"		X	61.5E	3.0S	X			"	
4894		"		X	61.5E	3.0S	X			"	
4895		"		X	63.0E	3.0S	X			"	
4896		"		X	56.0E	2.5S	X			Fair	
4897		"		X	56.5E	3.0S	X			"	
4898		"		X	56.5E	3.0S	X			"	
4899	Sea of Fertility	80	X		53.8E	1.6S		X		"	1:1,250,000
4900	"	"	X		53.9E	2.1S		X		"	"
4901	"	"	X		53.6E	2.6S		X		"	"
4902	"	"	X		52.2E	0.7N		X		Good	1:700,000
4903	"	"	X		52.3E	0		X		"	"
4904	"	"		X	49.9E	2.1N		X		"	"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T Film 3400

Frame No.	Description	F.L.	VERT	OB L I O	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4905	Sea of Fertility	80MM	X		44.3E	1.3N		X		Fair	1:1,000,000
4906	T. O. 75	"	X		48.1E	1.6S		X		"	"
4907	W. of Gensorinus	"	X		38.2E	2.3S		X		"	"
4908	Gutenberg	"		X	40.4E	6.6S			X	"	
4909	W. of Maskeylne	"	X		27.5E	3.6S			X	Poor	1:1,000,000
4910	Theophilus	"		X	25.9E	10.9S		X		Poor	
4911	Crater 227	"		X	174.4E	7.1N		X		Good	
4912	Crater 226	"		X	173.4E	12.2N		X		"	
4913	E. of Crater 221	"		X	166.4E	5.4N		X		"	
4914	T. O. 34	250		X	139.4E	7.1N		X		Poor	
4915	T. O. 34	"		X	130.8E	5.5N		X		"	
4916	W. of T. O. 34	"		X	128.3E	7.3N		X		"	
4917	Crater 212	"		X	124.4E	11.0N		X		"	
4918	T. O. 46	"		X	120.0E	6.6N		X		"	
4919	T. O. 55	"		X	100.2E	4.8N		X		"	
4920	Neper	"		X	84.7E	8.7N		X		"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine 11 Film 13400

Frame No.	Description	F.L.	VERT	O B L I G	Principal Point		Sun Angle			Photo Qual	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4921	Neper	80		X	85.3E	8.7N	X			Poor	
4922	Oblique Strip Tranquillitatus (T.O. 78, 114, 120)	"		X	37.5E	0.7N	X			"	
4923	"	"		X	39.0E	0.8N	X			"	
4924	"	"		X	39.0E	0.2N	X			"	
4925	"	"		X	30.6E	1.3N	X			"	
4926	"	"		X	32.7E	1.4N	X			"	
4927	"	"		X	32.6E	1.2N	X			"	
4928	"	"		X	31.0E	0.9N	X			"	
4929	"	"		X	30.7E	0.9N	X			"	
4930	"	"		X	30.5E	0.9N	X			"	
4931	"	"		X	29.6E	1.1N	X			"	
4932	"	"		X	29.0E	0.9N	X			"	
4933	"	"		X	27.1E	1.0N	X			"	
4934	"	"		X	26.9E	0.9N	X			"	
4935	"	"		X	25.1E	0.8N	X			"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T Film 3400

Frame No.	Description	F.L.	VERT	OB LIQ	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG	LAT	HIGH	MED.	LOW		
4936	Oblique Strip Tranquillitatus	80		X	24.5E	0.8N	X			Poor	
4937	"	"		X	23.3E	0.5N	X			"	
4938	"	"		X	21.5E	0.5N	X			"	
4939	"	"		X	20.1E	0.6N	X			"	
4940	"	"		X	19.1E	0.5N	X			"	
4941	"	"		X	18.5E	0.6N	X			"	
4942	"	"		X	18.0E	0.5N	X			"	
4943	"	"		X	17.7E	0.6N	X			"	
4944	"	"		X	16.6E	0.5N	X			"	
4945	"	"		X	16.0E	0.5N	X			"	
4946	T. O. 128	"	X		6.3E	1.2N			X	Good	1:1,000,000
4947	"	"	X		6.0E	1.3N			X	"	"
4948	"	"	X		5.7E	1.4N			X	"	1:1,000,000
4949	Rhaetigus	"		X	6.7E	1.5N			X	Poor	
4950	"	"		X	6.2E	1.6N			X	"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T

Film 3400

Frame No.	Description	F.L.	V E R T	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4951	Sinus Medii	80		X	4.6E	1.4N				X	Poor
4952	"	"		X	3.3E	1.4N				X	"
4953	"	"		X	1.5E	1.5N				X	"
4954	Craters 302 & 305	"		X	over horizon					X	Good
4955	"	"		X	167.9E	11.4S				X	"
4956	"	"		X	166.3E	12.0S				X	"
4957	"	"		X	166.0E	11.8S				X	"
4958	"	"		X	165.0E	11.5S				X	"
4959	"	"		X	164.4E	11.5S				X	"
4960	"	"		X	163.7E	11.9S				X	"
4961	"	"		X	162.9E	11.9S			X		"
4962	"	"		X	162.0E	11.9S			X		"
4963	"	"		X	over horizon				X		"
4964	"	"		X	"	"			X		"
4965	Crater 297	250		X	152.0E	5.4S			X		"

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T

Film 3400

Frame No.	Description	F.L.	VERT	OBJ	Principal Point			Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.		HIGH	MED.	LOW		
4966	T. O. 29	250		X	146.4E	5.2S		X			Fair	
4967	"	"		X	146.4E	4.4S		X			"	
4968	"	"		X	146.2E	4.9S		X			"	
4969	"	"		X	146.4E	5.7S		X			"	
4970	"	"		X	146.2E	5.7S		X			"	
4971	Craters 292 & 293	"		X	140.4E	6.0S		X			"	
4972	"	"		X	140.1E	6.0S		X			"	
4973	"	"		X	140.1E	5.9S		X			"	
4974	"	"		X	139.4E	6.3S		X			"	
4975	"	"		X	139.4E	5.7S		X			"	
4976	T. O. 33	"		X	136.8E	4.2S		X			"	
4977	"	"		X	137.2E	3.5S		X			"	
4978	T. O. 41	"		X	129.3E	4.6S		X			"	
4979	"	"		X	128.9E	4.7S		X			"	
4980	"	"		X	127.8E	6.0S		X			"	
4981	"	"		X	127.5E	5.0S		X			"	
4982	"	"		X	127.3E	5.7S		X			"	

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T

Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4983	T. O. 41	250		X	126.7E	5.3S	X			Fair	
4984	"	"		X	125.7E	6.0S	X			Poor	
4985	"	"		X	124.9E	6.5S	X			"	
4986	"	"		X	124.0E	6.8S	X			"	
4987	T. O. 45	"		X	122.4E	6.4S	X			"	
4988	"	"		X	122.4E	5.3S	X			"	
4989	"	"		X	122.3E	5.0S	X			"	
4990	"	"		X	122.1E	5.2S	X			"	
4991	Crater 279	"		X	119.2E	11.2S	X			"	
4992	"	"		X	117.9E	10.6S	X			"	
4993	"	"		X	117.2E	11.0S	X			"	
4994	Unused										
4995	Unused										
4996	T. O. 59	"		X	85.9E	0.3S	X			Poor	
4997	"	"		X	83.6E	0.5S	X				
4998	"	"		X	80.1E	3.9S	X				

APOLLO 10 HASSELBLAD PHOTOGRAPHY

Magazine T Film 3400

Frame No.	Description	F.L.	VERT	O B L I Q	Principal Point		Sun Angle			Photo Qual.	Remarks
					LONG.	LAT.	HIGH	MED.	LOW		
4999	T. O. 59	250		X	82.1E	1.0S	X			Poor	
5000	"	"		X	82.0E	0.7S	X			"	
5001	"	"		X	79.5E	1.6S	X			"	
5002	"	"		X	78.9E	1.6S	X			"	
5003	"	"		X	78.6E	1.4S	X			"	
5004	"	"		X	78.1E	1.2S	X			"	
5005	"	"		X	77.8E	0.7S	X			"	
5006	"	"		X	77.8E	0.7S	X			"	
5007	"	"		X	77.8E	0.7S	X			"	
5008	"	"		X	77.2E	0.7S	X			"	



MAGAZINE "U"

This magazine containing special color film was not available for screening.



## APOLLO 10 SEQUENCE PHOTOGRAPHY (16MM)

There are 15 magazines of 16MM sequence photography with SO 368 (CEX) and SO 168 (CIN) Film. Eleven of the magazines contain plottable scenes of the lunar surface. Four magazines contain photographs of IVA, docking and re-entry. A review of the film in the magazines indicates that very good lunar surface detail was obtained from high and low obliques, and near vertical sequences as well as in many panoramic views. Most exposures were good except near subsolar when the rendition of scene was poor.



APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine A Film SO 368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
		Docking - no scene.	Not plotted.

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine AA Film SO 168

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
		IVA	Not plotted.

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine B Film SO 168

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
		IWA	Not plotted.

Magazine       C      Film SO-368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-1120	Not located	Underexposed, window glare scene not identifiable	Not plotted
1121-4376	Sequence from 177°W to 15°E	Continuous near vertical sequence from lunar far-side across Sea of Tranquility.	Plotted
4377-4666	Sequence from 33°E to 18°E	Continuous high oblique sequence over Maskelyne, Sabine and Ritter.	Plotted
4667-5414	8°S, 15°E (approx. center of sequence)	Panoramic high obliques over Delambre and Theon, Jr.	Plotted



APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine D Film SO-368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-1407	2°S, 86°E (approx. center of sequence)	High oblique sequence of earthrise over Smyth's Sea-poor scene rendition.	Plotted
1408-2265	Sequence from 46°E to 4°E	Continuous high to low oblique sequence from edge of Sea of Fertility near Secchi, over LLS1 and 2, Sabine and Ritter, stops at margin of Central Bay.	Plotted
2666-2671		Blank	
2672-3089	1°S, 83°E (approx. center of sequence)	High oblique sequence of earthrise over Smyth's Sea-poor scene radiation	Plotted
3090-3121		Entire moon	Not plottable at map scale
3122-3175		Earth view	Not plotted
3176-3195			
3196-5732			

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine F Film SO-368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-973	5°S, 168°W (approx. center of sequence)	High oblique sequence of lunar farside craters.	Plotted
974-1043	1°S, 163°E (approx. center of sequence)	Near vertical sequence of lunar farside single crater	Plotted
1044-1206	3°N, 143°E (approx. center of sequence)	Near vertical sequence of lunar farside single crater	Plotted
1207-1273	3°N, 132°E (approx. center of sequence)	Near vertical sequence of lunar farside single crater	Plotted
1274-1338	4°N, 120°E (approx. center of sequence)	Near vertical sequence of lunar farside single crater	Plotted
1339-1676	Not located	Earthrise-poor condition of scene	Not plotted
1677-1687		Over-exposure-no scene	Not plotted
1688-2213	Not located	Farside scene near sub-solar-poor condition. Start of roll.	Not plotted
2214-2225		Roll-no scene	Not plotted
2226-5341	Sequence from 51°E to 23°E	Continuous near vertical sequence from Sea of Fertility across Sea of Tranquility, south of LLS2.	Plotted

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine          G          Film SO 368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-5342	Sequence from 62°E to 21°E.	Continuous sequence starting with lunar farside scene at edge of Sea of Waves and Foaming Sea and continues to frontside over Sea of Fertility and ends in Sea of Tranquility. Passes south of LLS 2.	Plotted

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine           H           Film           50 368          

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-5021	Sequence starts at 124°E and ends at 77°E.	Sequence contains near vertical, low and high obliques of lunar farside scenes, Smyth's Sea and earthrise.	Plotted

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine I Film SO 368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-5462	Sequence starts at 171°E and ends at 128°E.	High to low oblique of lunar farside scene. Features not named.	Plotted

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine       J       Film       SO 168      

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
		Overexposed - re-entry. Underexposed - chutes out.	Not plotted.

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine     K     Film     So-368    

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-162 163-2790	Sequence from 115°E to 74°E.	LM photography of CSM only LM photography of CSM with lunar farside scene in background.	Not plotted Plotted--location questionable
2791-3970	Sequence from 38°E to 22°E	LM photography of CSM with lunar frontside scene in background. Sequence over LIS2.	Plotted
3971-4207 4208-4360	6°N, 119°E (approx. center of sequence)	Blank Oblique sequence of lunar farside single crater (No. 211)	Not plotted Plotted
4361-5058	2°S, 80°E (approx. center of sequence)	High oblique sequence of earth rise over Smyth's Sea-poor scene rendition	Plotted

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine     L     Film SO 168

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-929		IVA	Not plotted
930-1955	Sequence from 22°E to 9°E.	Continuous sequence of high to low obliques from Sabine and Ritter to Godin.	Plotted
1956-2234		LM photography of CSM.	Not plotted





APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine \_\_\_\_\_ W \_\_\_\_\_ Film SO 368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-977	Sequence starts at 43° E and ends at 4° W.	Sequence starts with high obliques at edge of Sea of Fertility and passes over Maskelyne, LLS 2, Sabine and Ritter, and LLS 3.	Plotted
977-end		Panoramic high obliques of Tsiolkovsky, quarter, half, and full moon, and earth.	Not plottable at map scale.

APOLLO 10 SEQUENCE PHOTOGRAPHY (16 mm)

Magazine Y Film SO-368

FRAME NO.	LOCATION	DESCRIPTION	REMARKS
1-1492	Not located	Docking-farside scene in background	Not plotted
1493-2050	Sequence from 164°E to 144°E	Continuous high to low oblique sequences of lunar farside scene-features not named.	Plotted
2051-3603	Not located	Broken series of frames of hand-held telephoto panoramic shots of lunar farside scene; mostly low obliques and near vertical. Locations questionable.	Not plotted
3604-5614	Sequence from 44°E to 26°E	High altitude continuous; low oblique to near vertical sequence from edge of Sea of Fertility over Censorinus into Sea of Tranquility.	Plotted

