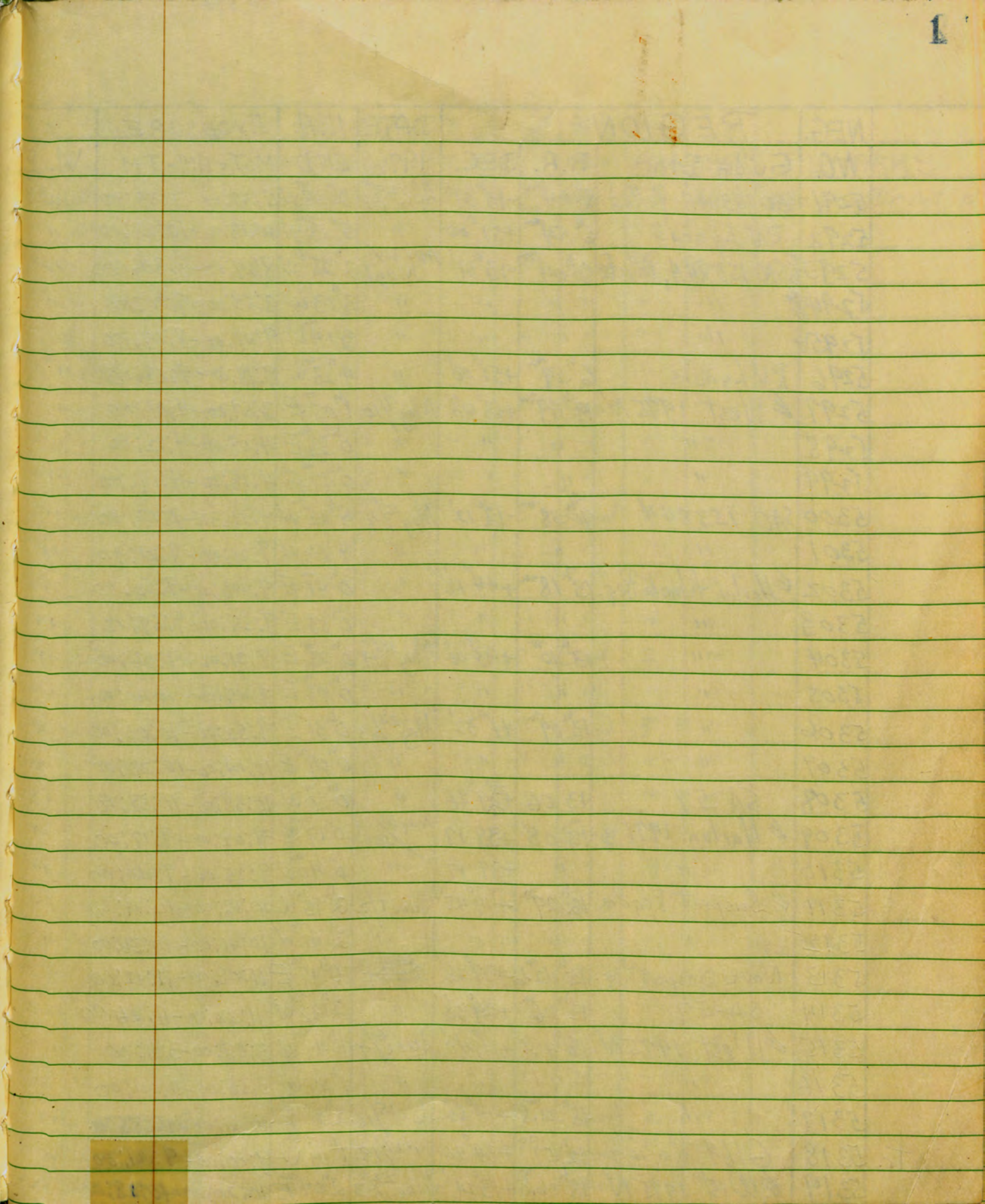


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S. 176





NEG. NO.	REGION		DATE 1976	H.A. END	EXPOSURE	W. E.	INST.	PLATE	tele. Position	DEVELOPMENT			SEEING	OBSV.	REMARKS	
	Guide Star	R.A. DEC.								KIND	TIME	TEMP.				TRANS.
5291	SAD 153844	Pallas	8 <sup>h</sup> 04 <sup>m</sup> -13°31'	Apr. 27/28	2 <sup>h</sup> 48 <sup>m</sup> W 7:57:00-7:58:00	WWV	13"	8x10 103a D	W	D19	5 <sup>m</sup>	68°	N	Good	2	H.G. Gilas Pallas Dec. Star Oct '76
5292	RV Lynceis		6 <sup>h</sup> 54 <sup>m</sup> +51°00'	"	5 <sup>h</sup> 28 <sup>m</sup> W 10:18:00-10:28:00	"	"	4x5 103a D	"	"	"	"	"	"	"	"
5293	SAD 153844	Pallas E	8 <sup>h</sup> 04 <sup>m</sup> -13°31'	Apr 30/ May 1	2 <sup>h</sup> 35 <sup>m</sup> W 8:29:00-8:30:00	"	"	14x17 8x10 "	"	"	"	"	"	Good	3	"
5294	"	"	"	"	3 <sup>h</sup> 03 <sup>m</sup> W 8:58:00-9:00:00	"	"	5" Cook 8x10 103a D	"	"	"	"	"	"	"	"
5295	"	"	"	"	3 <sup>h</sup> 14 <sup>m</sup> W 9:07:00-9:09:00	"	"	5" Cook " "	"	"	"	"	"	"	"	"
5296	RV Lynceis		6 <sup>h</sup> 54 <sup>m</sup> +51°00'	"	4 <sup>h</sup> 28 <sup>m</sup> W 9:18:00-9:28:00	"	"	13" 4x5 103a D	"	"	"	"	"	"	"	"
5297	← West 1975 N		19 <sup>h</sup> 49 <sup>m</sup> +18°08'	May 9/10	1 <sup>h</sup> 05 <sup>m</sup> E 3:59:00-4:01:00	"	"	4x5 103a D	"	"	"	"	"	Good	3	"
5298	"	"	"	"	0 <sup>h</sup> 53 <sup>m</sup> E 4:08:00-4:12:00	"	"	"	"	"	"	"	"	"	"	"
5299	"	"	"	"	0 <sup>h</sup> 47 <sup>m</sup> E 4:18:00-4:19:00	"	"	"	"	"	"	"	"	"	"	"
5300	SAD 153844		7 <sup>h</sup> 58 <sup>m</sup> -12°12'	May 10/11	4 <sup>h</sup> 05 <sup>m</sup> W 9:16:30-9:17:00	"	"	14x17 103a D	E	"	"	"	"	Good	1	"
5301	"	"	"	"	4 <sup>h</sup> 10 <sup>m</sup> W 9:21:00-9:21:30	"	"	"	"	"	"	"	"	"	"	"
5302	← Harlan-Klamola Reg.		13 <sup>h</sup> 18 <sup>m</sup> +44°18'	"	0 <sup>h</sup> 41 <sup>m</sup> E 9:46:00-9:50:00	"	"	4x5 103a D	W	"	"	"	"	"	2	"
5303	"	"	"	"	0 <sup>h</sup> 33 <sup>m</sup> E 9:55:00-9:59:00	"	"	"	"	"	"	"	"	"	"	"
5304	"	13 <sup>h</sup> 10 <sup>m</sup> +43°00'	May 14/19	0 <sup>h</sup> 25 <sup>m</sup> E 9:21:00-9:36:00	"	"	"	4x5 8x10 103a D	"	"	"	"	"	Good	3	"
5305	"	"	"	"	0 <sup>h</sup> 01 <sup>m</sup> E 9:45:00-10:00:00	"	"	"	"	"	"	"	"	"	"	"
5306	"	13 <sup>h</sup> 09 <sup>m</sup> +41°32'	May 22/23	0 <sup>h</sup> 31 <sup>m</sup> E 9:52:00-10:06:00	"	"	"	4x5 103a D	"	"	"	"	"	Good	3	"
5307	"	"	"	"	0 <sup>h</sup> 09 <sup>m</sup> E 10:14:00-10:28:00	"	"	"	"	"	"	"	"	"	"	"
5308	SA 57	13 06 +29°36'	"	0 <sup>h</sup> 20 <sup>m</sup> W 10:38:00-10:52:00	"	"	"	"	"	"	"	"	"	"	"	"
5309	← Harlan 1976 g	13 08 +39°17'	May 31/ June 1	0 <sup>h</sup> 17 <sup>m</sup> W 9:02:00-9:17:00	"	"	"	"	"	"	"	"	"	Good	3	"
5310	"	"	+39°17'	"	0 <sup>h</sup> 40 <sup>m</sup> W 9:25:00-9:40:00	"	"	"	"	"	"	"	"	"	"	"
5311	← Suspect Region	12 <sup>h</sup> 29 <sup>m</sup> +14°45'	June 1/2	2 <sup>h</sup> 15 <sup>m</sup> W 10:16:00-10:31:00	"	"	"	8x10 103a D	"	"	"	"	"	Good	3	No E found
5312	"	"	"	"	2 <sup>h</sup> 40 <sup>m</sup> W 10:41:00-10:56:00	"	"	8x10 103a D	"	"	"	"	"	"	"	No E found
5313	Nova Suspect Reg.	15 <sup>h</sup> 42 <sup>m</sup> +37°18'	June 1/1	0 <sup>h</sup> 17 <sup>m</sup> E 11:08:00-11:12:00	"	"	"	4x5 103a D	"	"	"	"	"	"	"	"
5314	SA-57	13 <sup>h</sup> 06 <sup>m</sup> +29°38'	"	2 <sup>h</sup> 32 <sup>m</sup> W 11:22:00-11:26:00	"	"	"	"	"	"	"	"	"	"	"	"
5315	← West 1975 N	18 <sup>h</sup> 41.5 +16°40'	June 6/7	1 <sup>h</sup> 44 <sup>m</sup> W 3:47:00-3:51:00	"	"	"	"	"	"	"	"	"	Good	3	"
5316	"	"	"	"	1 <sup>h</sup> 57 <sup>m</sup> W 3:58:00-4:04:00	"	"	"	"	"	"	"	"	"	"	"
5317	"	18 <sup>h</sup> 22.5 +14°50'	June 15/16	2 <sup>h</sup> 20 <sup>m</sup> E 10:51:00-10:56:00	"	"	"	"	"	"	"	"	"	Good	2	"
Tr. 5318	G164 Region	12 <sup>h</sup> 57 <sup>m</sup> +34°40'	" 17/18	1 <sup>h</sup> 41 <sup>m</sup> W 9:00:00-9:31:00	"	"	"	14x17 103a D	"	"	4 min	"	"	Good	3	"
5319	← West 1975 N	18 <sup>h</sup> 06.8 +13°24'	June 22/23	2 <sup>h</sup> 04 <sup>m</sup> E 10:20:00-10:28:00	"	"	"	4x5 103a D	"	"	5 min	"	"	Good	3	"



NEG #	OBJECT OR GUIDE	POSITION		DATE	H.A. END	EXPOSURE	W.E.
		R.A.	DEC.				
5349	1976 WA	2 <sup>h</sup> 32 <sup>m</sup>	-25°30'	Dec 21/22	1 <sup>h</sup> 22 <sup>m</sup> W	9:59:00-10:19:00	WWV
5350	m.p. 1604	6 <sup>h</sup> 16 <sup>m</sup>	+31°25'	"	1 <sup>h</sup> 55 <sup>m</sup> E	10:34:00-10:48:00	"
5351	A region	7 <sup>h</sup> 03 <sup>m</sup>	+16°20'	"	2 <sup>h</sup> 20 <sup>m</sup> E	10:58:00-11:08:00	"
5352	m.p. 197 Arete	7 <sup>h</sup> 03 <sup>m</sup>	+26°22'	"	1 <sup>h</sup> 57 <sup>m</sup> E	11:22:00-11:32:00	"
<b>1977</b>							
5353	m.p. 1604	5 <sup>h</sup> 55 <sup>m</sup>	+31°00'	Jan 11/12	1 <sup>h</sup> 34 <sup>m</sup> E	9:13:00-9:25:00	"
5354	"	"	"	"	1 <sup>h</sup> 16 <sup>m</sup> E	9:32:00-9:44:00	"
5355	m.p. 197 Arete	6 <sup>h</sup> 40 <sup>m</sup>	+28°00'	"	1 <sup>h</sup> 41 <sup>m</sup> E	9:53:00-10:03:00	"
5356	"	"	"	"	1 <sup>h</sup> 25 <sup>m</sup> E	10:10:00-10:20:00	"
5357	SAD 158687-Uranus	14 <sup>h</sup> 35 <sup>m</sup> .5	-14°44.4	Feb 2/3	0 <sup>h</sup> 16 <sup>m</sup> E	5:55:00-5:55:30	AM, MST
5358	"	"	"	"	0 <sup>h</sup> 06 <sup>m</sup> E	6:05:00-6:05:20	"
5359	"	"	"	"	M.T.	6:12:00-6:12:10	"
5360	197 Arete	6 <sup>h</sup> 19.2	+28°32'	Feb. 11/12	0 <sup>h</sup> 35 <sup>m</sup> E	8:36:00-8:46:00	"
5361	"	"	"	"	0 <sup>h</sup> 10 <sup>m</sup> E	9:01:00-9:12:00	"
5362	RV Lyncis	6 <sup>h</sup> 53 <sup>m</sup>	+52°00'	"	0 <sup>h</sup> 25 <sup>m</sup> E	9:23:00-9:31:00	"
5363	"	"	"	"	0 <sup>h</sup> 10 <sup>m</sup> E	9:38:00-9:46:00	"
5364	197 Arete	6 <sup>h</sup> 17 <sup>m</sup>	+28°28'	Feb 14/15	0 <sup>h</sup> 01 <sup>m</sup> W	8:59:00-9:09:00	"
5365	"	"	"	"	0 <sup>h</sup> 17 <sup>m</sup> W	9:16:00-9:26:00	"
5366	RV Lyncis	6 <sup>h</sup> 52 <sup>m</sup>	+51°00'	"	0 <sup>h</sup> 03 <sup>m</sup> E	9:35:00-9:40:00	"
5367	"	"	"	"	0 <sup>h</sup> 07 <sup>m</sup> W	9:46:00-9:51:00	"
5368	197 Arete	6 <sup>h</sup> 22 <sup>m</sup>	+28°40'	Mar 11/12	2 <sup>h</sup> 41 <sup>m</sup> W	10:05:00-10:20:00	"
5369	RV Lyncis	6 <sup>h</sup> 51 <sup>m</sup>	+52°	"	2 <sup>h</sup> 34 <sup>m</sup> W	10:35:00-10:40:00	"
5370	<del>197 Arete</del> m.p. 1976 Search	6 <sup>h</sup> 21 <sup>m</sup>	+28°50'	Mar 14/15	0 <sup>h</sup> 52 <sup>m</sup> W	7:57:00-8:12:00	"
5371	RV Lyncis	6 <sup>h</sup> 54 <sup>m</sup>	+51°00'	"	0 <sup>h</sup> 36 <sup>m</sup> W	8:26:00-8:31:00	"
5372	m.p. 1976 YB Search	7 <sup>h</sup> 52 <sup>m</sup>	+59°00'	"	0 <sup>h</sup> 24 <sup>m</sup> W	9:01:04-9:16:04	"
5373	"	"	"	"	0 <sup>h</sup> 54 <sup>m</sup> W	9:32:00-9:47:00	"
5374	RV Lyncis	6 <sup>h</sup> 54 <sup>m</sup>	+51°00'	" ~	2 <sup>h</sup> 20 <sup>m</sup> W	10:05:00-10:11:00	"
5375	"	"	"	Mar 22/23	0 <sup>h</sup> 55 <sup>m</sup> W	8:14:00-8:19:00	"
5376	"	"	"	"	1 <sup>h</sup> 07 <sup>m</sup> W	8:25:10-8:30:10	"

INST	PLATE	tele Position	DEVELOPMENT			WRITING	SEEING		OBSV	REMARKS
			KIND	TIME	TEMP.		TRANS.	STEAD.		
13"	8X8 103a 0	W	D19	5 <sup>min</sup>	68	North	Good	3	H/Gicks	
"	4X5 "	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
<b>1977</b>										
"	4X5 103a 0	W	D19	5 <sup>min</sup>	68°	N	Good	4	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	Good	2+	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	Good	2	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	Good	3	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	Good	3	"	
"	"	"	"	"	"	"	"	"	"	
"	8X8 103a 0	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	
"	4X5 103a 0	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	Good	3	"	
"	"	"	"	"	"	"	"	"	"	

drive SE 14° slip 7 @ 350 dms ~ 22.0

NOT FOUND!

NEG#	OBJ. OR GUIDE	Position		DATE	H.A.	EXPOSURE	W.E.	DEVELOPMENT				SEEING			REMARKS			
		R.A.	DEC					INST.	PLATE	tele. Posit.	KIND	TIME	TEMP	WRITING		TRANS	STEAD	OBSV.
5377	RV Lyncis	6 <sup>h</sup> 52 <sup>m</sup>	+51°	Mar 22/23	1 <sup>h</sup> 19 <sup>m</sup> W	8:36:00-8:41:00	WWV	13"	4x5 103a0	W	D19	5 <sup>m</sup>	68°	N	Good	3	H.Gides	
5378	197 Arctis	6 <sup>h</sup> 24 <sup>m</sup>	+27°40'	"	2 <sup>h</sup> 26 <sup>m</sup> W	8:57:00-9:18:00	"	"	CUT TO 4x5	"	"	"	"	"	"	"	"	"
5379	RV Lyncis	6 <sup>h</sup> 57 <sup>m</sup>	+51°	Mar 30/31	1 <sup>h</sup> 15 <sup>m</sup> W	8:03:00-8:07:00	"	"	4x5 103a0	"	"	3 1/2	"	"	Poor!	3	"	Moon light + Clouds
5380	"	"	"	"	1 <sup>h</sup> 26 <sup>m</sup> W	8:19:00-8:23:00	"	"	"	"	"	"	"	"	Poor	"	"	"
5381	"	"	"	"	1 <sup>h</sup> 48 <sup>m</sup> W	8:36:00-8:40:00	"	"	"	"	"	"	"	"	Poor	"	"	"
5382	"	"	"	"	2 <sup>h</sup> 00 <sup>m</sup> W	8:45:00-8:49:00	"	"	"	"	"	"	"	"	Fair	"	"	"
5383	"	"	"	"	2 <sup>h</sup> 31 <sup>m</sup> W	8:58:00-9:02:00	"	"	"	"	"	"	"	"	Poor	"	"	"
5384	"	"	"	"	2 <sup>h</sup> 34 <sup>m</sup> W	9:10:00-9:13:30	"	"	"	"	"	"	"	"	"	"	"	"
5385	"	"	"	"	2 <sup>h</sup> 44 <sup>m</sup> W	9:31:00-9:34:00	"	"	"	"	"	"	"	"	"	"	"	"
5386	"	"	"	"	3 <sup>h</sup> 07 <sup>m</sup> W	9:54:00-9:58:00	"	"	"	"	"	"	"	"	Fair	"	"	"
5387	"	"	"	"	3 <sup>h</sup> 46 <sup>m</sup> W	10:28:00-10:32:30	"	"	"	"	"	"	"	"	Poor	"	"	"
5388	"	"	"	"	3 <sup>h</sup> 56 <sup>m</sup> W	? 2 1/2 min - 10:47:00	"	"	"	"	"	"	"	"	Fair	"	"	"
5389	"	"	"	"	4 <sup>h</sup> 08 <sup>m</sup> W	10:56:00-10:59:00	"	"	"	"	"	"	"	"	Poor	"	"	"
5390	"	"	"	"	4 <sup>h</sup> 24 <sup>m</sup> W	11:11:00-11:15:06	"	"	"	"	"	"	"	"	"	"	"	"
5391	"	"	"	"	4 <sup>h</sup> 50 <sup>m</sup> W	11:38:00-11:41:06	"	"	"	"	"	"	"	"	"	"	"	"
5392	Uranus Field	14 <sup>h</sup> 33 <sup>m</sup>	-14°40'	Apr. 3/4		2:07:00-2:08:00	"	"	"	"	"	"	"	"	Good	2	"	Full Moon
5393	"	14 <sup>h</sup> 28 <sup>m</sup>	-14°10'	"	0 <sup>h</sup> 07 <sup>m</sup> W	2:16:00-2:16:40	"	"	"	"	"	"	"	"	"	"	"	"
5394	RV Lyncis	6 <sup>h</sup> 54 <sup>m</sup>	+51°00'	Apr. 7/8	1 <sup>h</sup> 50 <sup>m</sup> W	8:06:00-8:10:00	"	"	"	"	5 <sup>m</sup>	"	"	"	Good	2	"	"
5395	"	"	"	"	2 <sup>h</sup> 06 <sup>m</sup> W	8:18:00-8:26:00	"	"	"	"	"	"	"	"	"	"	"	"
5396	"	"	"	"	2:30 <sup>m</sup> W	8:46:00-8:50:00	"	"	"	"	"	"	"	"	"	"	"	4 image sequence 1st, 2x Exposure
5397	"	"	"	"	2:43 <sup>m</sup> W	8:59:00-9:03:00	"	"	"	"	"	"	"	"	"	"	"	"
5398	"	"	"	"	3:03 <sup>m</sup> W	9:18:00-9:22:00	"	"	"	"	"	"	"	"	"	"	"	"
5399	"	"	"	"	3:13 <sup>m</sup> W	9:28:00-9:32:00	"	"	"	"	"	"	"	"	"	"	"	"
5400	"	"	"	"	3:22 <sup>m</sup> W	9:38:00-9:42:00	"	"	"	"	"	"	"	"	"	"	"	"
5401	"	"	"	"	3:30 <sup>m</sup> W	9:46:00-9:50:00	"	"	"	"	"	"	"	"	"	"	"	Two Exposures
5402	"	"	"	"	3:42 <sup>m</sup> W	9:58:00-10:02:00	"	"	"	"	"	"	"	"	"	"	"	"
5403	"	"	"	"	3:50 <sup>m</sup> W	10:06:00-10:10:00	"	"	"	"	"	"	"	"	"	"	"	"
5404	"	"	"	"	4:02 <sup>m</sup> W	10:18:00-10:22:00	"	"	"	"	"	"	"	"	"	"	"	"
5405	"	"	"	"	4:12 <sup>m</sup> W	10:28:00-10:32:00	"	"	"	"	"	"	"	"	"	"	"	"
5406	"	"	"	"	4:30 <sup>m</sup> W	10:46:00-10:50:00	"	"	"	"	"	"	"	"	"	"	"	"
5407	"	"	"	"	4:42 <sup>m</sup> W	10:58:00-11:02:00	"	"	"	"	"	"	"	"	"	"	"	Two Exposure
5408	"	"	"	"	4:58 <sup>m</sup> W	11:13:00-11:17:00	"	"	"	"	"	"	"	"	"	"	"	"
5409	"	"	"	"	5:13 <sup>m</sup> W	11:28:00-11:32:00	"	"	"	"	"	"	"	"	"	"	"	"
5410	"	"	"	"	5:27 <sup>m</sup> W	11:43:00-11:47:00	"	"	"	"	"	"	"	"	"	"	"	"
5411	"	"	"	Apr. 13/14	2 <sup>h</sup> 00 <sup>m</sup> W	7:52:00-7:56:00	"	"	"	"	"	"	"	"	"	"	"	Two Exposure
5412	"	"	"	"	2:14 <sup>m</sup> W	8:05:00-8:09:00	"	"	"	"	"	"	"	"	"	"	"	"
5413	"	"	"	"	2:44 <sup>m</sup> W	8:35:00-8:40:00	"	"	"	"	"	"	"	"	"	"	"	4 exposures on plate begin + end recorded







NEG #	OBJECT OR GUIDE	POSITION		DATE	H.A. END	EXPOSURE MST-AM-PM	W.E.	INST.	PLATE	telescope Position	DEVELOPMENT			WAITING	SEEING		DBSV	REMARKS
		R.A.	DEC.								KIND	TIME	TEMP.		TRANS	STEAD		
5463	1977M Kohler	15 <sup>h</sup> 31 <sup>m</sup>	+27° 55'	Sept 8/9	3 <sup>h</sup> 41 <sup>m</sup> W	8:23:00-8:30:00	WVW	13"	HX5 103a0	W	D19	5 <sup>min</sup>	68	N	Good	3	H.Giclas	
5464	"	"	"	"	3 <sup>h</sup> 57 <sup>m</sup> W	8:38:00-8:45:00	"	"	"	"	"	"	"	"	"	"	"	
5465	"	15 <sup>h</sup> 31 <sup>m</sup>	+27° 40'	Sept 11/15	4 <sup>h</sup> 57 <sup>m</sup> W	9:12:00-9:22:00	"	"	HX5 "	"	"	"	"	"	Good	3	"	
5466	1977RA Wild	22 <sup>h</sup> 59 <sup>m</sup>	+17° 35'	Sept 15/16	1 <sup>h</sup> 15 <sup>m</sup> W	12:50:00-1:05:00	"	"	HX5 "	"	"	"	"	"	Good	3	"	
5467	1977L Chernykh	00 <sup>h</sup> 13 <sup>m</sup>	-5° 10'	Sept 15/16	0 <sup>h</sup> 24 <sup>m</sup> W	1:18:00-1:28:00	"	"	"	"	"	"	"	"	"	"	"	
5468	1977M Kohler	15 <sup>h</sup> 52 <sup>m</sup>	+25° 00'	Sept 17/18	3 <sup>h</sup> 46 <sup>m</sup> W	8:13:00-8:21:00	"	"	HX5 103a0	"	"	"	"	"	Good	3+	"	
5469	"	"	"	"	4 <sup>h</sup> 02 <sup>m</sup> W	8:29:00-8:37:00	"	"	"	"	"	"	"	"	"	"	"	Drive SW 20° #3@600 ~ 9.3
5470	#1741 Giclas 1960BC	23 <sup>h</sup> 25 <sup>m</sup>	-8° 25'	"	2 <sup>h</sup> 08 <sup>m</sup> E	9:15:00-10:00:00	"	"	"	"	"	"	"	"	"	"	"	Drive NW 27° #7@420 ~ 22.1
5471	Helin Obj	23 <sup>h</sup> 43 <sup>m</sup>	+12° 18'	"	1 <sup>h</sup> 38 <sup>m</sup> E	10:28:00-10:48:00	"	"	3x8	"	"	"	"	"	"	"	"	
5472	"	"	"	"	1 <sup>h</sup> 22 <sup>m</sup> E	10:56:00-11:04:00	"	"	HX5	"	"	"	"	"	"	"	"	
5473	1977L Chernykh	00 <sup>h</sup> 11 <sup>m</sup>	-5° 25'	"	1 <sup>h</sup> 34 <sup>m</sup> E	11:14:00-11:20:00	"	"	"	"	"	"	"	"	"	"	"	
5474	"	"	"	"	1 <sup>h</sup> 20 <sup>m</sup> E	11:26:00-11:34:00	"	"	"	"	"	"	"	"	"	"	"	
5475	1977RA Wild	22 <sup>h</sup> 59 <sup>m</sup>	+17° 40'	Sept 18/19	0 <sup>h</sup> 10 <sup>m</sup> E	11:12:00-11:28:00	"	"	"	"	"	"	"	"	Good	4	"	
5476	H45-Lens Helin Obj 1977RB	23 <sup>h</sup> 43 <sup>m</sup>	+12° 18'	"	0 <sup>h</sup> 23 <sup>m</sup> E	11:39:00-11:59:00	"	"	"	"	"	"	"	"	"	"	"	Drive NW 27° #7@420 ~ 22.2
5477	"	23 <sup>h</sup> 41 <sup>m</sup>	+12° 18'	"	0 <sup>h</sup> 06 <sup>m</sup> E	12:05:00-12:13:00	"	"	HX5 103a0	"	"	"	"	"	"	"	"	Drive SW 20° #3@600 ~ 9.3
5478	1960BC Giclas	23 <sup>h</sup> 25 <sup>m</sup>	-8° 20'	"	1 <sup>h</sup> 12 <sup>m</sup> W	12:31:00-1:16:00	"	"	cut HX5 103a0	"	"	"	"	"	"	3	"	
5479	1977L Chernykh	00 <sup>h</sup> 10 <sup>m</sup>	-5° 25'	"	0 <sup>h</sup> 45 <sup>m</sup> W	1:26:00-1:34:00	"	"	HX5 103a0	"	"	"	"	"	Fair	3	"	
5480	m.p. 1741 Giclas	23 <sup>h</sup> 11 <sup>m</sup>	-9° 40'	Oct 3/4	0 <sup>h</sup> 28 <sup>m</sup> E	9:17:00-9:47:00	"	"	8x10	"	"	"	"	"	"	"	"	
5481	1977L Chernykh	00 <sup>h</sup> 02 <sup>m</sup>	-6° 40'	"	1 <sup>h</sup> 35 <sup>m</sup> E	10:00:00-10:06:00	"	"	HX5 103a0	"	"	"	"	"	"	"	"	
5482	m.p. 1741 Giclas	23 <sup>h</sup> 11 <sup>m</sup>	-9° 40'	Oct 4/5	1 <sup>h</sup> 28 <sup>m</sup> E	8:48:00-9:18:00	"	"	8x10	"	"	"	"	"	Fair+	3	"	
5483	1977L Chernykh	00 <sup>h</sup> 02 <sup>m</sup>	-6° 40'	"	1 <sup>h</sup> 55 <sup>m</sup> E	9:32:00-9:44:00	"	"	HX5 103a0	"	"	"	"	"	Good	3	"	
5484	1977M Kohler	16 <sup>h</sup> 15 1/2 <sup>m</sup>	+14° 10'	Oct 10/11	3 <sup>h</sup> 29 <sup>m</sup> W	7:36:00-7:37:00	"	"	HX5 103a0	"	"	"	"	"	"	"	"	
5485	"	"	"	"	3 <sup>h</sup> 36 <sup>m</sup> W	7:44:30-7:45:00	"	"	"	"	"	"	"	"	"	"	"	
5486	G276 BD -13° 386	2 <sup>h</sup> 05.8	-12° 34'	Oct 11/12	0 <sup>h</sup> 24 <sup>m</sup> E	11:55:15-12:15:15	WVW	13"	14x17 103a0	"	"	"	"	"	"	"	N.Thomas	
5487	G276	"	"	"	0 <sup>h</sup> 51 <sup>m</sup> W	12:25:00-12:45:00	WVW	13"	14x17 IaE	"	"	"	"	"	"	"	"	2 exposure interrupts to adj. dome slot.
5488	"	"	"	"	1 <sup>h</sup> 16 <sup>m</sup> E	11:30:00-11:50:00	"	"	14x17 103a0	"	"	"	"	"	"	3-4	"	
5489	"	"	"	"	0 <sup>h</sup> 10 <sup>m</sup> W	12:00:00-13:15:00	"	"	14x17 IaE	"	"	"	"	"	"	3	H.Giclas	
5490	Kohler 1977M	17 <sup>h</sup> 11 <sup>m</sup>	+11° 40'	Oct 14/15	3 <sup>h</sup> 22 <sup>m</sup> W	7:27:00-7:28:00	"	"	HX5 103a0	"	"	"	"	"	Good	3	H.Giclas	

NEG #	Object or Guide Star	Position		DATE	H.A	EXPOSURE	Watch Error
		R.A.	Dec				
5491	Kohler 1977M	17 <sup>h</sup> 11 <sup>m</sup>	+11° 40'	Oct 14/15	End	M.S.T. - A.M. P.M.	WWV
5492	#1741 Giclas	23 <sup>h</sup> 07 <sup>m</sup>	-9° 20'	Oct 17/18	3 <sup>h</sup> 33 <sup>m</sup> W	7:37:00-7:38:00	"
5493	#1977L Chernykh	23 <sup>h</sup> 55 <sup>m</sup>	-7 30	"	1 <sup>h</sup> 50 <sup>m</sup> W	10:41:00-11:41:00	"
5494	#1977M Kohler	18 <sup>h</sup> 18.5 <sup>m</sup>	-00 24	Oct 30/31	1 <sup>h</sup> 36 <sup>m</sup> W	11:55:12-12:15:12	"
5495	"	"	"	"	2 <sup>h</sup> 32 <sup>m</sup> W	6:52:00-6:53:00	"
5496	"	"	"	"	2 <sup>h</sup> 47 <sup>m</sup> W	6:59:00-6:59:30	"
5497	"	18 <sup>h</sup> 39 <sup>m</sup>	-3° 50'	Nov. 3/4	3:20 W	7:12:00-7:32:00	"
5498	"	"	"	"	2 <sup>h</sup> 31 <sup>m</sup> W	6:47:00-6:47:20	"
5499	"	"	"	"	2 <sup>h</sup> 38 <sup>m</sup> W	6:54:00-6:54:12	"
5500	#1977L Chernykh	23 <sup>h</sup> 51 <sup>m</sup>	-8° 00'	"	3 <sup>h</sup> 18 <sup>m</sup> W	7:04:00-7:34:00	"
5501	G276 BD-13 386	2 <sup>h</sup> 05.8	-12° 34'	Nov 8/9	1 <sup>h</sup> 11 E	7:58:00-8:18:00	"
5502	"	"	"	"	0 <sup>h</sup> 34 E	10:25:15-10:45:15	"
5503	Helin #2 Obj VB	1 <sup>h</sup> 14.5 <sup>m</sup>	+8 22'	Nov 9/10	0 <sup>h</sup> 01 W	11:00:00-11:20:00	"
5504	"	"	"	"	0 <sup>h</sup> 03 W	10:16:00-10:30:00	"
5505	1977VA Helin	2 <sup>h</sup> 29 <sup>m</sup>	+13° 50'	"	0 <sup>h</sup> 24 W	10:42:00-10:52:00	"
5506	Helin #4	3 <sup>h</sup> 05 <sup>m</sup>	+19° 20'	"	0 <sup>h</sup> 06 E	11:14:00-11:34:00	"
5507	"	"	"	"	0 <sup>h</sup> 16 E	11:47:00-12:02:00	"
5508	#1977L GC 1333,4	1 <sup>h</sup> 04.6	-2° 00'	Nov 10/11	0 <sup>h</sup> 08 W	12:11:00-12:26:00	"
5509	"	"	"	"	"	10:00:00-10:10:00	"
5510	MP? G276 BD-13 386	2 <sup>h</sup> 05.8	-12° 34'	"	"	10:25:00-10:35:15	"
5511	"	"	"	"	"	10:55:00-10:05:00	"
5512	#1977Q	1 <sup>h</sup> 08 <sup>m</sup>	+2° 20'	Nov 12/13	0 <sup>h</sup> 28 E	9:30:00-9:42:00	"
5513	1977VB Helin	1 <sup>h</sup> 17 <sup>m</sup>	+6 28'	"	0 <sup>h</sup> 03 E	10:00:00-10:16:00	"
5514	"	"	"	"	0 <sup>h</sup> 27 W	10:30:00-10:46:00	"
5515	1977VA Helin	2 <sup>h</sup> 39 <sup>m</sup>	+13° 40'	"	0 <sup>h</sup> 10 E	11:12:00-11:32:00	"
5516	m.p. VC	3 <sup>h</sup> 05 <sup>m</sup>	+19° 50'	"	0 <sup>h</sup> 04 E	11:47:00-12:02:00	"
5517	#1977Q	0 <sup>h</sup> 59 <sup>m</sup>	+1° 06'	Nov 14/15	0 <sup>h</sup> 56 E	8:44:00-9:00:00	"
5518	1977VB	1 <sup>h</sup> 20 <sup>m</sup>	+5° 10'	"	0 <sup>h</sup> 31 E	9:19:00-9:43:00	"
5519	m.p. VB VC	2 <sup>h</sup> 55 <sup>m</sup>	+20° 40'	"	"	10:59:00-11:03	"

Telescope	PLATE Brand+Size	Telescope / Pier	DEVELOPMENT			Writing on Plate	SEEING		Observer	REMARKS
			Kind	Time	Temp		Trans.	Stead.		
13"	4X5 103a0	W	D19	5 <sup>m</sup>	68	N	Good	3	#Giclas	
"	103a0	W	"	"	"	"	Good	3	"	
"	4X5 "	W	"	7 <sup>m</sup>	"	"	"	"	"	
"	4X5 "	"	"	5 <sup>m</sup>	"	"	Good	3	"	
"	4X5 "	"	"	"	"	"	"	"	"	
"	8x8 "	"	"	"	"	"	"	"	"	Drive 36° SW #9 at 240 ~ 66.6
"	4X5 "	"	"	"	"	"	Good	3	"	
"	"	"	"	"	"	"	"	"	"	
"	8x8 "	"	"	6 <sup>m</sup>	"	"	"	"	"	
"	4X5 "	"	"	5 <sup>m</sup>	"	"	"	"	"	Drive 35° SW #9 @ 275 ~ 69.0
"	14x17 103a0	W	"	"	"	"	"	"	N Thomas	
"	14x17 103a0	W	"	"	"	"	"	"	"	
"	cut to 4x5	"	"	"	"	"	Good	3	#Giclas	Dive #8 @ 8300 plus SE PA 167° ~ 46.0
"	cut to 4x5	"	"	"	"	"	"	"	"	Drive #8 @ 390 plus PA 100° SE ~ 34.6
"	4x5	"	"	"	"	"	"	"	"	#JFAS diagram as above
"	8x10 "	"	"	"	"	"	"	"	"	
"	4x5 "	"	"	"	"	"	"	"	"	
"	8x10 103a0	"	"	"	"	"	fair	+4	N. Thomas	some H <sub>2</sub> e
"	"	"	"	"	"	"	"	+3	"	"
"	14x5 "	"	"	"	"	"	"	+3	"	"
"	"	"	"	"	"	"	"	+3	"	"
"	8x10 "	"	"	"	"	"	Good	3	#Giclas	
"	cut to 4x5	"	"	"	"	"	"	"	"	Drive SE #8 @ 345 plus PA 164° ~ 33.7
"	cut to 4x5	"	"	"	"	"	"	"	"	
"	8x8 "	"	"	"	"	"	"	"	"	
"	8x8 "	"	"	"	"	"	"	"	"	Drive SE #8 @ 374 plus PA 100° ~ 34.1
"	cut to 4x5	"	"	"	"	"	"	"	"	
"	cut to 4x5	"	"	"	"	"	"	"	"	
"	4x5 103a0	"	"	"	"	"	Fair	3	"	Drive SE PA 161.4 Clouds #8 at 238 ~ 32.0
"	"	"	"	"	"	"	Fair	3	"	
"	4x5 "	"	"	"	"	"	Poor	"	"	cut off by clouds







NEG. #	OBJECT OR GUIDE	POSITION		DATE 1978	H.A. END	EXPOSURE MST-AM-PM	WE. INST.	PLATE	telescope Position	DEVELOPMENT			WRITING	SEEING		OBSV	REMARKS
		R.A.	DEC.							KIND	TIME	TEMP		TRANS	STEAD		
5603	← 1978 F, Meier	8 <sup>h</sup> 44 <sup>m</sup>	+38°40'	June 25	6 <sup>h</sup> 06 <sup>m</sup> W	9:04:00-9:05:00	WVU 13"	HX5 103a 0	W	D19	5 <sup>m</sup>	68°	N	Good	3+	H/Gides	
5604	" "	" "	" "	" "	6 <sup>h</sup> 18 <sup>m</sup> W	9:14:00-9:16:00	" "	" "	"	"	"	"	"	"	"	"	
5605	" "	8 <sup>h</sup> 54 <sup>m</sup>	+37°00'	June 29	6 <sup>h</sup> 21 <sup>m</sup> W	9:08:00-9:09:00	" "	" "	E	"	"	"	S	Good	2-	"	
5606	Regulus	10 <sup>h</sup> 06 <sup>m</sup>	+12°12'	July 1	4 <sup>h</sup> 45 <sup>m</sup> W	9:25:00-9:45:00	" "	14X17 103a 0	E	"	"	"	S	"	"	"	
5607	← 1978 F, Meier	8 <sup>h</sup> 59 <sup>m</sup>	+36°39'	July 3/4	6 <sup>h</sup> 18 <sup>m</sup> W	9:00:00-9:01:00	" "	HX5 103a 0	W	"	"	"	N	Good	3+	"	
5608	mp. 1352, 1690	16 <sup>h</sup> 41 <sup>m</sup>	-14°50'	" "	0 <sup>h</sup> 04 <sup>m</sup> W	9:58:00-10:28:00	" "	8X10 "	"	"	"	"	"	"	"	"	Cut in 3 pieces all same number
5609	SAO 140552	15 <sup>h</sup> 25 <sup>m</sup>	-9°10'	July 7/8	1 <sup>h</sup> 32 <sup>m</sup> W	10:25:00-10:26:00	" "	4X5 "	"	"	"	"	"	Good	3	"	
5610	" "	" "	" "	" "	1 <sup>h</sup> 40 <sup>m</sup> W	10:33:00-10:33:30	" "	" "	"	"	"	"	"	"	"	"	
5611	mp. 1352, 1690	16 <sup>h</sup> 41 <sup>m</sup>	-14°50'	" "	1 <sup>h</sup> 05 <sup>m</sup> W	10:43:00-11:13:00	" "	8X10 "	"	"	"	"	"	"	"	"	Cut in 3 pieces all same number
5612	AGK3 +13°30'3	2 <sup>h</sup> 28.3	+13°50'	July 11/12	3 <sup>h</sup> 28 <sup>m</sup> E	4:10:00-4:11:00	" "	4X5 "	"	"	"	"	"	Fair	3	"	
5613	" "	" "	" "	" "	3 <sup>h</sup> 22 <sup>m</sup> E	4:16:30-4:17:00	" "	" "	"	"	"	"	"	"	"	"	
5614	Field near Neptune	17 <sup>h</sup> 24 <sup>m</sup>	-21°25'	July 27/28	1 <sup>h</sup> 00 <sup>m</sup> W	10:29:00-10:32:00	" "	4X5 103a 0	"	"	"	"	"	Good	3+	"	
5615	" "	" "	" "	" "	1 <sup>h</sup> 10 <sup>m</sup> W	10:39:00-10:42:00	" "	" "	"	"	"	"	"	"	"	"	
5616	" "	" "	" "	" "	1 <sup>h</sup> 20 <sup>m</sup> W	10:49:00-10:52:00	" "	" "	"	"	"	"	"	"	"	"	
5617	Neptune Reg.	16 <sup>h</sup> 58 <sup>m</sup>	-21°10'	" "	1 <sup>h</sup> 56 <sup>m</sup> W	11:01:00-11:03:00	" "	" "	"	"	"	"	"	"	"	"	
5618	" "	" "	" "	" "	2 <sup>h</sup> 09 <sup>m</sup> W	11:13:00-11:15:00	" "	" "	"	"	"	"	"	"	"	"	
5619	" "	" "	" "	" "	2 <sup>h</sup> 17 <sup>m</sup> W	11:21:00-11:23:00	" "	" "	"	"	"	"	"	"	"	"	
5620	m.p. Field	20 <sup>h</sup> 28 <sup>m</sup>	-27°50'	" "	0 <sup>h</sup> 32 <sup>m</sup> E	11:34:00-12:04:14	" "	" "	"	"	"	"	"	"	2	"	
5621	Future Uranus Field	15 <sup>h</sup> 12 <sup>m</sup>	-17°40'	July 29/30	1 <sup>h</sup> 48 <sup>m</sup> W	8:57:00-9:00:00	" "	14X5 103a 0	"	"	"	"	"	Good	2+	"	
5622	" "	" "	" "	" "	1 <sup>h</sup> 55 <sup>m</sup> W	9:06:00-9:09:00	" "	" "	"	"	"	"	"	"	"	"	
5623	" "	" "	" "	" "	2 <sup>h</sup> 04 <sup>m</sup> W	9:14:00-9:17:00	" "	" "	"	"	"	"	"	"	"	"	
5624	Uranus	14 <sup>h</sup> 39 <sup>m</sup>	-15°10'	" "	2 <sup>h</sup> 47 <sup>m</sup> W	9:27:00-9:28:00	" "	" "	"	"	"	"	"	"	"	"	
5625	" "	" "	" "	" "	2 <sup>h</sup> 54 <sup>m</sup> W	9:34:00-9:35:00	" "	" "	"	"	"	"	"	"	"	"	
5626	" "	" "	" "	" "	3 <sup>h</sup> 02 <sup>m</sup> W	9:41:00-9:42:00	" "	" "	"	"	"	"	"	"	"	"	
5627	Future Uranus Pos	15 <sup>h</sup> 30 <sup>m</sup>	-18°28'	" "	2 <sup>h</sup> 32 <sup>m</sup> W	9:52:00-10:02:00	" "	" "	"	"	"	"	"	"	3	"	
5628	" "	" "	" "	" "	2 <sup>h</sup> 47 <sup>m</sup> W	10:08:00-10:18:00	" "	" "	"	"	"	"	"	"	"	"	
5629	" "	" "	" "	" "	3 <sup>h</sup> 04 <sup>m</sup> W	10:24:00-10:34:00	" "	" "	"	"	"	"	"	"	"	"	
5630	m.p. Field	20 <sup>h</sup> 28 <sup>m</sup>	-27°50'	" "	1 <sup>h</sup> 00 <sup>m</sup> E	11:00:00-11:30:00	" "	" "	"	"	"	"	"	"	2+	"	

NEG #	OBJECT OR GUIDE	POSITION		1978 DATE	H.A. END	EXPOSURE MST-AM-PM	W.E. INST.	PLATE	telescope Position	DEVELOPMENT			WRITINGS	SEEING		REMARKS		
		R.A.	DEC.							KIND	TIME	TEMP		OBSV	TRANS		STEAD	
5631	Meier Region	9 <sup>h</sup> 58 <sup>m</sup>	+24°00'	Aug 4/5	7 <sup>h</sup> 00 W	8:33:00-8:34:00	WWV 13"	103a0	E	D19	4 <sup>m</sup>	68	H Giclas	S	Good	2	Bright Twilight	
5632	Pluto	13 <sup>h</sup> 16 <sup>m</sup>	+10°00'	"	4 <sup>h</sup> 09 W	8:52:00-9:02:00	"	4x5 103a0	E	"	5 <sup>m</sup>	68	"	"	"	3	For Millis + Eliott occ.	
5633	"	"	"	"	4 <sup>h</sup> 28 W	9:09:00-9:19:00	"	"	"	"	"	"	"	"	"	"	"	
5634	"	"	"	"	4 <sup>h</sup> 42 W	9:25:00-9:35:00	"	"	"	"	"	"	"	"	"	"	"	
5635	A Region near P	13 <sup>h</sup> 40 <sup>m</sup>	+8°35'	"	4 <sup>h</sup> 34 W	9:44:00-9:50:00	"	"	"	"	"	"	"	"	"	"	"	
5636	"	"	"	"	4 <sup>h</sup> 47 W	9:57:00-10:03:00	"	"	"	"	"	"	"	"	"	"	"	
5637	"	"	"	"	5 <sup>h</sup> 00 W	10:10:00-10:16:00	"	"	"	"	"	"	"	"	"	"	"	
5638	m.p. Region	20 <sup>h</sup> 16 <sup>m</sup>	-28°10'	"	0 <sup>h</sup> 43 E	10:40:00-11:10:00	"	"	W	"	"	"	N	"	"	"	"	
5639	"	21 30	-19°00'	"	1 <sup>h</sup> 22 E	11:25:00-11:45:00	"	"	"	"	"	"	"	"	"	"	"	
5640	"	"	"	Aug 9/10	0 <sup>h</sup> 23 W	12:49:00-1:09:00	"	"	"	"	"	"	"	"	"	"	"	
5641	MP. HERCULINA	15 <sup>h</sup> 22.7	-8°44'	Aug 17/18	2 <sup>h</sup> 01 W	8:05:00-8:06:00	WWV	4x5 103a0	W	"	"	"	Burnham	"	"	3	"	
5642	"	"	"	"	2 <sup>h</sup> 12 W	8:17:00-8:17:30	"	"	"	"	"	"	"	"	"	"	"	
5643	"	15 <sup>h</sup> 24.1	-8°59'	"	2 <sup>h</sup> 24 W	8:29:00-8:30:00	"	"	"	"	"	"	"	"	"	"	"	
5644	m.p. Region	21 <sup>h</sup> 05 <sup>m</sup>	-19°10'	Aug 22/23	2 <sup>h</sup> 06 E	9:06:00-9:26:00	"	"	H	"	"	"	Giclas	"	Good	2	"	
5645	"	"	"	"	1 <sup>h</sup> 36 E	9:36:00-9:56:00	"	"	"	"	"	"	"	"	"	"	"	
5646	"	19 <sup>h</sup> 36 <sup>m</sup>	-26°00'	"	0 <sup>h</sup> 16 W	10:07:10-10:19:10	"	"	"	"	"	"	"	"	"	3	"	
5647	"	"	"	Aug 25/26	0 <sup>h</sup> 15 E	9:24:00-9:36:00	"	"	"	"	"	"	"	"	"	(Good)	3+	Poor Focus - screw not tight.
5648	"	"	"	"	0 <sup>h</sup> 07 W	9:45:00-9:57:00	"	"	"	"	"	"	"	"	"	"	"	
5649	"	"	"	"	0 <sup>h</sup> 26 W	10:05:00-10:17:00	"	"	"	"	"	"	"	"	"	"	"	
5650	"	21 <sup>h</sup> 05 <sup>m</sup>	-19°10'	"	0 <sup>h</sup> 32 E	10:27:00-10:47:00	"	"	"	"	"	"	"	"	"	"	"	
5651	"	"	"	"	0 <sup>h</sup> 05 E	10:54:00-11:14:00	"	"	"	"	"	"	"	"	"	(Good)	3+	
5652	"	20 <sup>h</sup> 44 <sup>m</sup>	-19°45'	Aug 26/27	0 <sup>h</sup> 08 E	10:26:00-10:46:00	"	"	"	"	"	"	"	"	"	"	"	
5653	"	"	"	"	0 <sup>h</sup> 21 W	10:55:00-11:15:00	"	"	"	"	"	"	"	"	"	"	"	
5654	#1930 1964VA	19 <sup>h</sup> 36 <sup>m</sup>	-25°40'	Aug 29/30	0 <sup>h</sup> 54 W	10:13:00-10:27:00	"	4x5 103a0	"	"	"	"	"	"	"	(Good)	3+	Adj Base point to Guide Telescope
5655	m.p. Region	20 44	-19°50'	"	0 <sup>h</sup> 16 W	10:38:00-10:58:00	"	4x5 13x5	"	"	"	"	"	"	"	"	"	
5656	"	21 <sup>h</sup> 05 <sup>m</sup>	-19°40'	"	0 <sup>h</sup> 27 W	11:10:00-11:30:00	"	"	"	"	"	"	"	"	"	"	"	
5657	"	20 44	-19 40	Sept 1/2	0 <sup>h</sup> 54 W	11:03:00-11:24:00	"	"	"	"	"	"	"	"	(Good)	4	"	
5658	"	"	"	"	1 23 W	11:33:00-11:53:00	"	"	"	"	"	"	"	"	"	"	"	

Blinked

Blinked

m.p. identified

m.p. marked





NEG #	Object or Guide Star	POSITION		DATE	H. A End	EXPOSURE M.S.T. AM-PM	Size	Brand	Telescope Position	DEVELOPMENT			SEEING		Observer	REMARKS	
		R.A.	Dec							Kind	Time	Temp	Writing on Plate	Trans.			Stead
5687	1978 RA Helin	22 <sup>h</sup> 30 <sup>m</sup>	-14°20'	Sept 19/20	2 <sup>h</sup> 29 <sup>m</sup> E	8:31:00-8:37:00	13"	4x5 103 a0	W	D19	5 <sup>m</sup>	68°	N	Good	3-	H. Gibbs	
5688	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Moonrise 8:40
5689	"	"	"	"	2 16 E	8:43:00-8:49:00	"	"	"	"	"	"	"	"	"	"	
5690	"	22 17.5	-17 40	Sept 22/23	1 07 E	9:30:00-9:35:00	"	"	"	"	"	"	"	Good	2	"	
5691	1978 K Henry's	00 <sup>h</sup> 05 <sup>m</sup> 5	-11°48'	"	0 53 E	9:41:00-9:46:00	"	"	"	"	"	"	"	"	"	"	
5692	"	"	"	"	2 13 E	9:55:00-10:15:00	"	"	"	"	"	"	"	"	"	"	
5693	1978 J Honda	22 <sup>h</sup> 00 <sup>m</sup> 5	-41°35'	"	1 46 E	10:22:00-10:42:00	"	"	"	"	"	"	"	"	"	"	
5694	"	"	"	"	0 31 W	10:51:00-10:54:00	"	"	"	"	"	"	"	"	"	"	
5695	1978 J	"	"	"	0 43 W	11:02:00-11:05:00	"	"	"	"	"	"	"	"	"	"	
5696	1978 RA Helin	22 <sup>h</sup> 02 <sup>m</sup>	-22°35'	Sept 26/27	0 40 W	10:08:00-10:18:00	"	"	"	"	"	"	"	Good	3	"	
5697	"	"	"	"	0 30 W	10:29:00-10:39:00	"	"	"	"	"	"	"	"	"	"	1 hr. east of position.
5698	1978 K Henry's	00 <sup>h</sup> 04 <sup>m</sup>	-12°22'	"	0 45 W	10:44:00-10:54:00	"	"	"	"	"	"	"	"	"	"	
5699	1978 RA Helin	21 <sup>h</sup> 49 <sup>m</sup>	-25°30'	Sept 29/30	0 40 E	11:07:00-11:31:00	"	"	"	"	"	"	"	"	"	"	
5700	"	"	"	"	0 46 W	10:17:00-10:32:00	"	CUT TO 8x8	"	"	"	"	"	Good	3+	"	Drive PA 219.4 #8 at 99000 a 51.6
5701	1978 J	22 <sup>h</sup> 49 <sup>m</sup>	-44°00'	"	1 15 W	10:44:00-10:59:00	"	"	"	"	"	"	"	Good	3+	"	
5702	1978 K	00 <sup>h</sup> 03 <sup>m</sup>	-13°00'	"	0 37 W	11:12:00-11:22:00	"	4x5 103a0	"	"	"	"	"	"	"	"	
5703	Ashbrook-Jackson	00 <sup>h</sup> 13 <sup>m</sup>	+2°30'	"	0 13 W	11:52:00-12:12:00	"	"	"	"	"	"	"	"	"	"	
5704	1978 L Macholz	6 <sup>h</sup> 14 <sup>m</sup>	-35°30'	Oct 1/2	0 33 W	12:22:00-12:42:00	"	"	"	"	"	"	"	"	"	"	
5705	"	"	"	"	0 43 E	5:13:00-5:19:00	"	4x5 103a0	"	"	"	"	"	Good	2-	"	at very bottom of plate
5706	"	"	"	"	0 34 E	5:25:00-5:27:00	"	"	"	"	"	"	"	"	"	"	
5707	"	6 <sup>h</sup> 10.5	-38°30'	Oct 2/3	0 41 E	5:08:00-5:12:00	"	"	"	"	"	"	"	Good	3+	"	
5708	6158 GC 283, Cot	0 <sup>h</sup> 12.3	-9°51'	"	0 30 E	5:18:00-5:22:00	"	"	"	"	"	"	"	"	"	"	
5709	"	"	"	Oct 3/4	0 26 W	10:45:00-12:15:00	"	14x17 Ia-E	"	"	"	"	"	Good	3+	N. Thomas	1978 SB +
5710	1978 L Macholz	6 <sup>h</sup> 08 <sup>m</sup>	-40°22'	"	1 02 W	12:25:03-12:58:48	"	" 103a-0	"	"	"	"	"	"	"	"	37 sec. interrupt. bottom at 12:49.3 guide # jumped.
5711	1978 K + 785B	00 <sup>h</sup> 01 <sup>m</sup>	-14°00'	Oct 4/5	0 31 E	4:59:00-5:11:00	"	cut to 4x5 103a0	"	"	"	"	"	Good	3	H. Gibbs	
5712	"	"	"	Oct 6/7	0 18 E	10:50:00-11:10:00	"	8x10 103a0	"	"	"	"	"	Good	3+	"	Both exp on 1 plate turned end for end.
5713	"	"	"	"	0 19 W	11:28:00-11:48:00	"	"	"	"	"	"	"	"	"	"	
5714	"	"	"	"	0 07 E	11:27:00-11:31:00	"	4x5	"	"	"	"	"	"	"	"	
5715	1978 K +	00 <sup>h</sup> 00	-13 40	Oct 9/10	1 05 W	12:13:00-12:33:00	"	"	"	"	"	"	"	"	"	"	
					1 42 W	12:38:00-12:58:00	"	CUT TO 4x5	"	"	"	"	"	Good	3+	"	





NEG #	OBJECT OR GUIDE	Position		DATE	H.A. END	EXPOSURE MST-AM-PM	W.E. INST.	PLATE	telescope Position	DEVELOPMENT			SEEING	OBSV.	REMARKS		
		R.A.	DEC.							KIND	TIME	TEMP.				WRITING	TRANS.
5772	m.p. 1741 Region	6 <sup>h</sup> 08.5	+26°25'	Jan 23/24	1 <sup>h</sup> 17 <sup>m</sup> E	9:00:00-9:10:00	NACOV	13"	8x10 103a0	W	D19	5 <sup>m</sup>	68°	N	Good	4	H.Giclas
5773	Ceres Occultation Candidate	1 <sup>h</sup> 27.1	-4°20'	Jan 27/28	2 <sup>h</sup> 20 <sup>m</sup> W	7:41:00-7:41:30	"	"	"	"	"	"	"	"	"	"	RL Millis
5774	Chiron Field 79/80	2 <sup>h</sup> 36 <sup>m</sup>	+13°35'	"	1 <sup>h</sup> 30 <sup>m</sup> W	8:00:00-8:10:00	"	"	"	"	"	"	"	"	"	"	"
5775	Check & Suspect	12 <sup>h</sup> 42 <sup>m</sup>	+12°50'	Feb 6/7	0 <sup>h</sup> 57 <sup>m</sup> W	4:48:00-5:00:00	"	"	"	"	"	"	"	"	Good	3	H.Giclas
5776	RV Lyncis	6 <sup>h</sup> 53 <sup>m</sup>	+51°00'	Feb 18/19	0 <sup>h</sup> 12 <sup>m</sup> W	9:31:00-9:41:00	"	"	4x5 103a0	"	"	"	"	"	Good	3	" Double Exposure plate
5777	"	"	"	"	0 <sup>h</sup> 32 <sup>m</sup> W	9:51:00-10:01:00	"	"	"	"	"	"	"	"	"	"	"
5778	"	"	"	"	0 <sup>h</sup> 52 <sup>m</sup> W	10:11:00-10:21:00	"	"	"	"	"	"	"	"	"	"	Double Exp. Plate
5779	"	"	"	"	1 <sup>h</sup> 12 <sup>m</sup> W	10:31:00-10:41:00	"	"	"	"	"	"	"	"	"	"	Floating + Forming Clouds - Variable Transparency
5780	"	"	"	Feb 25/26	1 <sup>h</sup> 23 <sup>m</sup> E	7:30:00-7:40:00	"	"	"	"	"	"	"	"	Fair	3±	"
5781	"	"	"	"	1 <sup>h</sup> 06 <sup>m</sup> E	7:47:00-7:57:00	"	"	"	"	"	"	"	"	Fair±	"	"
5782	"	"	"	"	0 <sup>h</sup> 50 <sup>m</sup> E	8:03:00-8:13:00	"	"	"	"	"	"	"	"	Good	"	"
5783	"	"	"	"	0 <sup>h</sup> 34 <sup>m</sup> E	8:18:00-8:28:00	"	"	"	"	"	"	"	"	Fair top	"	"
5784	"	"	"	"	0 <sup>h</sup> 18 <sup>m</sup> E	8:34:00-8:44:00	"	"	"	"	"	"	"	"	Fair	"	"
5785	1978 K	"	"	"	0 <sup>h</sup> 03 <sup>m</sup> E	8:49:00-8:59:00	"	"	"	"	"	"	"	"	Very Poor	"	"
5786	m.p. 428 <sup>xx</sup>	3 <sup>h</sup> 12 <sup>m</sup>	+10°20'	Feb 27/28	3 <sup>h</sup> 15 <sup>m</sup> W	7:47:00-8:27:00	"	"	8x8 103a0	"	"	"	"	"	Good	3	Drive NE PA 69° #7 @ 800 du ~ 25.7 & MARKED-BUT TOO FAINT
5787	"	8 <sup>h</sup> 44 <sup>m</sup>	+28°30'	"	1 <sup>h</sup> 52 <sup>m</sup> E	8:43:00-8:53:00	"	"	8x10 "	"	"	"	"	"	"	4	"
5789	m.p. 2041 <sup>x</sup>	"	"	"	1 <sup>h</sup> 27 <sup>m</sup> E	9:07:00-9:17:00	"	"	"	"	"	"	"	"	"	"	Plates 5788-89, ok time made out of sequence
5788	"	9 <sup>h</sup> 06 <sup>m</sup>	+26°45'	"	1 <sup>h</sup> 29 <sup>m</sup> E	9:27:00-9:37:00	"	"	"	"	"	"	"	"	"	"	"
5790	1979 BA	"	"	"	0 <sup>h</sup> 12 <sup>m</sup> E	10:43:00-10:53:00	"	"	"	"	"	"	"	"	"	"	Drive NW PA 231° #7 @ 700 du ~ 20.8
5791	GC 15908	10 <sup>h</sup> 22 <sup>m</sup>	+33°25'	"	1 <sup>h</sup> 54 <sup>m</sup> E	9:58:00-10:28:00	"	"	CUT TO 4x5 8x8	"	"	"	"	"	"	"	"
5792	"	11 <sup>h</sup> 33.9	+25°18'	Feb 27/28	2 <sup>h</sup> 00 <sup>m</sup> E	11:10:00-11:35:00	"	"	3x10 103a0	"	"	"	"	"	Good	4	N. Thomas 1977 VF Field
5793	mp 609 Fulvia	"	"	"	1 <sup>h</sup> 20 <sup>m</sup> E	11:50:00-12:15:00	"	"	"	"	"	"	"	"	"	4	" " = 2089
5794	"	7 <sup>h</sup> 49 <sup>m</sup>	+17°50'	March 3/4	1 <sup>h</sup> 47 <sup>m</sup> W	11:10:00-11:20:00	"	"	4x5 103a0	"	"	"	"	"	(Good)	4	H.Giclas
5795	m.p. reg.	"	"	"	2 <sup>h</sup> 05 <sup>m</sup> W	11:28:00-11:38:00	"	"	"	"	"	"	"	"	"	"	"
5796	1979 BA	9 <sup>h</sup> 06 <sup>m</sup>	+26°40'	"	1 <sup>h</sup> 07 <sup>m</sup> W	11:45:00-11:55:00	"	"	"	"	"	"	"	"	"	"	Drive PA 336° ~ 29.8 #8 @ 800 du NW
5797	SAO 81833	10 <sup>h</sup> 10 <sup>m</sup>	+37°35'	"	0 <sup>h</sup> 23 <sup>m</sup> W	12:08:00-12:22:00	"	"	CUT TO 4x5 "	"	"	"	"	"	"	"	"
5798	"	11 <sup>h</sup> 24.5	+25°18'	"	0 <sup>h</sup> 05 <sup>m</sup> E	12:35:00-1:00:00	"	"	8x10 103a0	"	"	"	"	"	Good	3	N. Thomas / PL # 5791, 2 (A1, A4, A5 Field)
5799	SAO 81720	"	"	"	0 <sup>h</sup> 32 <sup>m</sup> W	1:12:00-1:37:00	"	"	"	"	"	"	"	"	"	"	"
		11 <sup>h</sup> 10.4	+27°19'	Mar 22/23	2 <sup>h</sup> 07 <sup>m</sup> E	8:38:00-9:03:00 9:20:00-9:30:00	"	"	8x10 103a0	"	"	"	"	"	Good	2-3	"













NEG #	OBJECT OR GUIDE	POSITION		DATE 1979	H.A. END	EXPOSURE MST-AM-PM	W.E.	INST	PLATE TYPE SIZE	teles. Position	DEVELOPMENT			WRITING	SEEING			REMARKS
		R.A.	DEC.								KIND	TIME	TEMP		TRANS	STEAD	OBSV.	
5939	612, 511, 504	4 <sup>h</sup> 07 <sup>m</sup>	+3.4	U.T. OCT 17	1 <sup>h</sup> 22 <sup>m</sup>	U.T. 8 <sup>h</sup> 14 <sup>m</sup> -8 <sup>h</sup> 34 <sup>m</sup>	"	13"	103a08x10	W	D-19	5 <sup>m</sup>	68°	N	Good	3	ELGB	
5940	486, 1914 et al.	3 <sup>h</sup> 25 <sup>m</sup>	+7.9	"	0 <sup>h</sup> 14 <sup>m</sup> E	U.T. 8 <sup>h</sup> 40 <sup>m</sup> -9 <sup>h</sup> 00 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	Cloud in South, increasing at end. NON-photometric much of night, but should be little effect on plate quality
5941	612, 511, 504	4 <sup>h</sup> 07 <sup>m</sup>	+3.4	"	0 <sup>h</sup> 30 <sup>m</sup> E	U.T. 9 <sup>h</sup> 06 <sup>m</sup> -9 <sup>h</sup> 26 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5942	G 28	22 <sup>h</sup> 50 <sup>m</sup>	+3°32'	Oct 21/22	0 <sup>h</sup> 21 <sup>m</sup> W	9:21:00-9:41:00	"	"	14x17 103a0	"	"	"	"	"	Good	3	#Gidas	
5943	"	"	"	"	1 <sup>h</sup> 01 <sup>m</sup> W	10:00:00-10:20:00	"	"	"	"	"	"	"	"	"	"	"	
5944	612	4 <sup>h</sup> 00 <sup>m</sup>	+4.0	Oct 28	0 <sup>h</sup> 40 <sup>m</sup> W	U.T. 9 <sup>h</sup> 25 <sup>m</sup> 9 <sup>h</sup> 45 <sup>m</sup>	"	"	8x10 103a0	"	"	"	"	"	Good	4	ELGB	Bowell
5945	B7, B8, B9	3 <sup>h</sup> 17 <sup>m</sup>	+8.8	Oct 28	1 <sup>h</sup> 50 <sup>m</sup> W	U.T. 9 <sup>h</sup> 52 <sup>m</sup> -10 <sup>h</sup> 12 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5946	"	"	"	"	2 <sup>h</sup> 16 <sup>m</sup> W	U.T. 10 <sup>h</sup> 18 <sup>m</sup> -10 <sup>h</sup> 38 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5947	612	4 <sup>h</sup> 00	+4.0	"	2 <sup>h</sup> 00 <sup>m</sup> W	U.T. 10 <sup>h</sup> 44 <sup>m</sup> -11 <sup>h</sup> 04 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5948	B10, B11	0 <sup>h</sup> 58	-0.1	"	1 <sup>h</sup> 46 <sup>m</sup> W	U.T. 7 <sup>h</sup> 25 <sup>m</sup> -7 <sup>h</sup> 45 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3	"	
5949	B10, B11	"	"	"	2 <sup>h</sup> 12 <sup>m</sup> W	U.T. 7 <sup>h</sup> 50 <sup>m</sup> -8 <sup>h</sup> 10 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3	"	
5950	Helix Obj 1979VA	1 <sup>h</sup> 38.4 <sup>m</sup>	+25°08'	Nov 15/16	0 <sup>h</sup> 22 <sup>m</sup> E	10:03:00-10:07:00	"	"	"	"	"	"	"	"	Good	3	1/Gidas	
5951	"	"	"	"	0 <sup>h</sup> 10 <sup>m</sup> E	10:15:00-10:19:00	"	"	cut to 4x5	"	"	"	"	"	"	"	"	Drive PA 95° #9@400 ~ 81.3
5952	"	"	"	"	0 <sup>h</sup> 14 <sup>m</sup> W	10:32:00-10:42	"	"	8x8	"	"	"	"	"	Good	3	"	
5953	"	1 <sup>h</sup> 46.3 <sup>m</sup>	+25°00	Nov 16/17	0 <sup>h</sup> 36 <sup>m</sup> E	9:55:00-9:57:00	"	"	4x5 103a0	"	"	"	"	"	"	"	"	
5954	"	"	"	"	0 <sup>h</sup> 27 <sup>m</sup> E	10:04:00-10:06:00	"	"	"	"	"	"	"	"	"	4	"	
5955	"	"	"	"	1 <sup>h</sup> 52 <sup>m</sup> E	10:18:00-10:38:00	"	"	"	"	"	"	"	"	"	"	"	
5956	"	"	"	"	1 <sup>h</sup> 25 <sup>m</sup> E	10:44:00-11:04:00	"	"	"	"	"	"	"	"	"	"	"	
5957	B10, B11, B14	0 <sup>h</sup> 46 <sup>m</sup>	+1.3	UT 1979 NOV 22-23	0 <sup>h</sup> 52 <sup>m</sup> E	UT 3 <sup>h</sup> 03 <sup>m</sup> -3 <sup>h</sup> 23 <sup>m</sup>	"	"	8x10 103A0	"	"	"	"	"	"	2	ELGB	Poor Guiding
5958	79 VA	2 <sup>h</sup> 14 <sup>m</sup>	+23.9	NOV U.T. 22.15590	1 <sup>h</sup> 55 <sup>m</sup> E	UT 3 <sup>h</sup> 42 <sup>m</sup> -3 <sup>h</sup> 47 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	Poor tracking rate
5959	"	"	"	NOV U.T. 22.16354	1 <sup>h</sup> 44 <sup>m</sup> E	UT 3 <sup>h</sup> 53 <sup>m</sup> -3 <sup>h</sup> 58 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
5960	B10, B11, B14	0 <sup>h</sup> 46 <sup>m</sup>	+1.3	NOV U.T. 22.17847	0 <sup>h</sup> 11 <sup>m</sup> W	UT 4 <sup>h</sup> 07 <sup>m</sup> -4 <sup>h</sup> 27 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
5961	B7, B8, B9	2 <sup>h</sup> 50 <sup>m</sup>	+9.9	NOV U.T. 22.19722	1 <sup>h</sup> 24 <sup>m</sup> E	UT 4 <sup>h</sup> 34 <sup>m</sup> -4 <sup>h</sup> 54 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	Tracking good
5962	"	"	"	NOV U.T. 22.21667	0 <sup>h</sup> 56 <sup>m</sup> E	U.T. 5 <sup>h</sup> 02 <sup>m</sup> -5 <sup>h</sup> 22 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5963	B12, B13	3 <sup>h</sup> 41 <sup>m</sup>	+2.7	NOV U.T. 22.23542	1 <sup>h</sup> 21 <sup>m</sup> E	U.T. 5 <sup>h</sup> 29 <sup>m</sup> -5 <sup>h</sup> 49 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	2 exposures, displaced in d. diffraction pattern on grid horizontal
5964	Hyades	4 <sup>h</sup> 27 <sup>m</sup>	+16.2	NOV 22.26424	1 <sup>h</sup> 24 <sup>m</sup> E	6 <sup>h</sup> 20 <sup>m</sup> -6 <sup>h</sup> 21 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
5965	B12, B13	3 <sup>h</sup> 41 <sup>m</sup>	+2.7	NOV U.T. 22.26876	0 <sup>h</sup> 00 <sup>m</sup>	U.T. 6 <sup>h</sup> 22 <sup>m</sup> 01 <sup>s</sup> -6 <sup>h</sup> 32 <sup>m</sup> 01 <sup>s</sup>	"	"	"	"	"	"	"	"	"	"	"	cirrus (?) smoke(?) around S. horizon
5966	1482	0 <sup>h</sup> 08 <sup>m</sup>	+2.3	DEC U.T. 07.06319	0 <sup>h</sup> 54 <sup>m</sup> E	U.T. 6 <sup>h</sup> 49 <sup>m</sup> -7 <sup>h</sup> 09 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	4	ELGB	

NEG #	OBJECT OR GUIDE	Position		DATE 1979	H.A. END	EXPOSURE MST-AM-PM	N.E.	INST.	PIATE TYPE		TELESCOPE			DEVELOPMENT			SEEING		OBSV.	REMARKS
		RA.	DEC.						SIZE	Position	KIND	TIME	TEMP	WRITING	TRANS	STEAD				
5967	B11	1 <sup>h</sup> 01 <sup>m</sup>	-1.3	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 22 <sup>m</sup> E	U.T. 1 <sup>h</sup> 48-2 <sup>h</sup> 08 <sup>m</sup>	WWV	13"	4x5 103a0	W	D-19	5 <sup>m</sup>	68	N	Good	4	ELGB			
5968	355Q1, 2009	2 <sup>h</sup> 18 <sup>m</sup>	+11.8	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 11 <sup>m</sup> E	U.T. 2 <sup>h</sup> 16 <sup>m</sup> -2 <sup>h</sup> 36 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"	"	
5969	B7, B8, B9	2 <sup>h</sup> 42 <sup>m</sup>	+10.2	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 07 <sup>m</sup> E	U.T. 2 <sup>h</sup> 44-3 <sup>h</sup> 04 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	"	
5970	77EZ	3 <sup>h</sup> 02 <sup>m</sup>	+39.0	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 00 <sup>m</sup> E	U.T. 3 <sup>h</sup> 11 <sup>m</sup> -3 <sup>h</sup> 31 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	"	
5971	79VA	3 <sup>h</sup> 07 <sup>m</sup>	+21.9	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 52 <sup>m</sup> E	U.T. 3 <sup>h</sup> 38 <sup>m</sup> -3 <sup>h</sup> 43 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"	Moonrise at start	
5972	77EZ	3 <sup>h</sup> 02 <sup>m</sup>	+39.0	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 27 <sup>m</sup> E	U.T. 3 <sup>h</sup> 49 <sup>m</sup> -4 <sup>h</sup> 04 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"	Moon bright, exposure reduced	
5973	B11	1 <sup>h</sup> 02 <sup>m</sup>	+0.7	DEC 7 <sup>U.T.</sup>	0 <sup>h</sup> 47 <sup>m</sup> W	U.T. 3 <sup>h</sup> 55-4 <sup>h</sup> 15	"	"	4x5	"	"	"	"	"	"	3	ELGB			
5974	B12, B13, 612	3 <sup>h</sup> 32 <sup>m</sup>	+1.4	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 14 <sup>m</sup> E	U.T. 4 <sup>h</sup> 22-4 <sup>h</sup> 42	"	"	8x10	"	"	"	"	"	"	"	"	"	Moonrise 4 <sup>h</sup> 20 <sup>m</sup>	
5975	1979 XA	2 <sup>h</sup> 26 <sup>m</sup>	+13.9	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 58 <sup>m</sup> W	U.T. 6 <sup>h</sup> 15 <sup>m</sup> -6 <sup>h</sup> 25 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"	"	
5976	1979 XA	2 <sup>h</sup> 26	+13.9	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 13 <sup>m</sup> W	U.T. 6 <sup>h</sup> 30-6 <sup>h</sup> 40	"	"	4x5	"	"	"	"	"	"	"	"	"	"	
5977	1122	7 <sup>h</sup> 45 <sup>m</sup>	+26.3	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 37 <sup>m</sup> E	U.T. 6 <sup>h</sup> 48 <sup>m</sup> -7 <sup>h</sup> 08 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"	"	
5978	873	8 <sup>h</sup> 52 <sup>m</sup>	+14.2	DEC 7 <sup>U.T.</sup>	2 <sup>h</sup> 45 <sup>m</sup> E	U.T. 7 <sup>h</sup> 36 <sup>m</sup> -8 <sup>h</sup> 06 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"	"	
5979	1122	7 <sup>h</sup> 45 <sup>m</sup>	+26.3	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 15 <sup>m</sup> E	U.T. 8 <sup>h</sup> 13 <sup>m</sup> -8 <sup>h</sup> 33 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	"	
5980	873	8 <sup>h</sup> 52 <sup>m</sup>	+14.2	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 41 <sup>m</sup> E	U.T. 8 <sup>h</sup> 40 <sup>m</sup> -9 <sup>h</sup> 10 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	"	
5981	1979 XA	2 <sup>h</sup> 28 <sup>m</sup>	+14.0	DEC 7 <sup>U.T.</sup>	0 <sup>h</sup> 14 <sup>m</sup> W	U.T. 4 <sup>h</sup> 38 <sup>m</sup> -4 <sup>h</sup> 43 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"	"	
5982	1979 VA	3 <sup>h</sup> 19 <sup>m</sup>	+21.2	DEC 7 <sup>U.T.</sup>	0 <sup>h</sup> 16 <sup>m</sup> E	U.T. 4 <sup>h</sup> 49 <sup>m</sup> -4 <sup>h</sup> 59 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	"	
5983	1979 XA	2 <sup>h</sup> 28 <sup>m</sup>	+14.0	DEC 15/16	0 <sup>h</sup> 40 <sup>m</sup> E	8:38:00-8:52:00	"	"	4x5	"	"	"	"	"	Good	3	#Gicles	wrong ephemeris not on plate		
5984	not on plate	"	"	"	0 <sup>h</sup> 25 <sup>m</sup> E	8:52:00-8:56:00	"	"	"	"	"	"	"	"	"	"	"	"	"	
5985	1979 VA	3 <sup>h</sup> 20 <sup>m</sup>	+25.00	"	0 <sup>h</sup> 58 <sup>m</sup> E	9:09:00-9:15:00	"	"	"	"	"	"	"	"	"	"	"	"	8 setting of plate	
5986	"	"	"	"	0 <sup>h</sup> 45 <sup>m</sup> E	9:22:00-9:28:00	"	"	"	"	"	"	"	"	"	"	"	"	"	
5987	873	8 <sup>h</sup> 52 <sup>m</sup>	+14.4	DEC 7 <sup>U.T.</sup>	0 <sup>h</sup> 21 <sup>m</sup> W	U.T. 10 <sup>h</sup> 34 <sup>m</sup> -11 <sup>h</sup> 04 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"	ELGB	
5988	873	"	"	DEC 7 <sup>U.T.</sup>	1 <sup>h</sup> 17 <sup>m</sup> W	U.T. 11 <sup>h</sup> 30 <sup>m</sup> -12 <sup>h</sup> 00 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"	ELGB Moonrise 11 <sup>h</sup> 50 <sup>m</sup>	
5989	1979 XA	2 <sup>h</sup> 14 <sup>m</sup>	+13.0	DEC 16/17	1 <sup>h</sup> 12 <sup>m</sup> E	7:47:00-7:53:00	"	"	8x10	"	"	"	"	"	"	"	"	"	"	
5990	"	"	"	"	0 <sup>h</sup> 35 <sup>m</sup> E	8:16:00-8:30:00	"	"	8x8	"	"	"	"	"	Good	3	#Gicles			
5991	"	"	"	"	0 <sup>h</sup> 21 <sup>m</sup> E	8:39:00-8:45:00	"	"	4x5	"	"	"	"	"	"	"	"	"	Drive in PA 2460 #9 @ 210 olus ~ 65.2	
5992	1979 VA	3 <sup>h</sup> 24 <sup>m</sup>	+21.05	"	1 <sup>h</sup> 10 <sup>m</sup> E	8:55:00-9:05:00	"	"	4x5	"	"	"	"	"	"	"	"	"	"	
5993	"	"	"	"	0 <sup>h</sup> 51 <sup>m</sup> E	9:14:00-9:24:00	"	"	4x5	"	"	"	"	"	"	"	"	"	"	
5994	1979 XA	2 <sup>h</sup> 09.4	+12.38	DEC 17/18	0 <sup>h</sup> 27 <sup>m</sup> E	8:24:00-8:28:00	"	"	"	"	"	"	"	"	Good	3	"	Not on plate 3 off		











NEG #	OBJECT OR GUIDE	Position		DATE 1980	H.A. END	EXPOSURE MST-AM-PM	W.E. DIST	SIZE PLATE TYPE	Telescope Position	DEVELOPMENT			WRITING	SEEING		REMARKS
		R.A.	DEC.							KIND	TIME	TEMP		TRANS.	STEAD	
6106	B 43	20 <sup>h</sup> 02.7 <sup>M</sup>	+2.6	U.T. JUL 05.23889	2 <sup>h</sup> 50 <sup>E</sup>	U.T. 5 <sup>h</sup> 39-5 <sup>h</sup> 49		103a0 8x10				N		4		
6107	B 32	20 <sup>h</sup> 22.2 <sup>M</sup>	-8.7	U.T. JUL 05.25417	2 <sup>h</sup> 42 <sup>E</sup>	U.T. 5 <sup>h</sup> 56-6 <sup>h</sup> 16 <sup>M</sup>		13" 103a0 8x10	W	D19	5 <sup>M</sup>	68°	N	Good	3	ELGB
6108	B 43	20 <sup>h</sup> 02.7 <sup>M</sup>	+2.6	U.T. JUL 05.26875	2 <sup>h</sup> 07 <sup>E</sup>	U.T. 6 <sup>h</sup> 22 <sup>M</sup> -6 <sup>h</sup> 32 <sup>M</sup>		" " "	"	"	"	"	"	4	"	
6109	B 41	20 <sup>h</sup> 17.0 <sup>M</sup>	-25.2	U.T. JUL 05.28264	1 <sup>h</sup> 56 <sup>E</sup>	U.T. 6 <sup>h</sup> 37 <sup>M</sup> -6 <sup>h</sup> 57 <sup>M</sup>		" " "	"	"	"	"	"	3	"	
6110	B 32	20 <sup>h</sup> 22.2 <sup>M</sup>	-8.7	U.T. JUL 05.30069	1 <sup>h</sup> 36 <sup>E</sup>	U.T. 7 <sup>h</sup> 03-7 <sup>h</sup> 23 <sup>M</sup>		" " "	"	"	"	"	"	4	"	
6111	B 47	20 <sup>h</sup> 35.5 <sup>M</sup>	-31.2	U.T. JUL 05.31806	1 <sup>h</sup> 22 <sup>E</sup>	U.T. 7 <sup>h</sup> 28 <sup>M</sup> -7 <sup>h</sup> 48		" " "	"	"	"	"	"	3	"	Moonrise 7 <sup>h</sup> 35 <sup>M</sup>
6112	B 41	20 <sup>h</sup> 17.0 <sup>M</sup>	-25.2	U.T. JUL 05.33542	0 <sup>h</sup> 39 <sup>E</sup>	U.T. 7 <sup>h</sup> 53 <sup>M</sup> -8 <sup>h</sup> 13 <sup>M</sup>		" " "	"	"	"	"	"	4	"	
6113	B 47	20 <sup>h</sup> 35.5 <sup>M</sup>	-31.2	U.T. JUL 05.35243	0 <sup>h</sup> 35 <sup>E</sup>	U.T. 8 <sup>h</sup> 20 <sup>M</sup> -8 <sup>h</sup> 35 <sup>M</sup>		" " "	"	"	"	"	"	3	"	Good Night
6114	B 43	19 <sup>h</sup> 55.3 <sup>M</sup>	+4.6	U.T. JUL 14.25833	1 <sup>h</sup> 39 <sup>E</sup>	U.T. 6 <sup>h</sup> 07 <sup>M</sup> -6 <sup>h</sup> 17 <sup>M</sup>		" " 4x5	"	"	"	"	"	4	"	
6115	B 32	20 <sup>h</sup> 18.6 <sup>M</sup>	-9.6	U.T. JUL 14.27361	1 <sup>h</sup> 35 <sup>E</sup>	U.T. 6 <sup>h</sup> 24 <sup>M</sup> -6 <sup>h</sup> 44 <sup>M</sup>		" " 8x10	"	"	"	"	"	3	"	
6116	B 43	19 <sup>h</sup> 55.3 <sup>M</sup>	+4.6	U.T. JUL 14.28819	0 <sup>h</sup> 56 <sup>E</sup>	U.T. 6 <sup>h</sup> 50 <sup>M</sup> -7 <sup>h</sup> 00 <sup>M</sup>		" " 4x5	"	"	"	"	"	4	"	
6117	B 32	20 <sup>h</sup> 18.6 <sup>M</sup>	-9.6	U.T. JUL 14.30278	0 <sup>h</sup> 53 <sup>E</sup>	U.T. 7 <sup>h</sup> 06 <sup>M</sup> -7 <sup>h</sup> 26 <sup>M</sup>		" " 8x10	"	"	"	"	"	3	"	
6118	B 41	20 <sup>h</sup> 23.9 <sup>M</sup>	-32.2	U.T. JUL 14.31875	0 <sup>h</sup> 38 <sup>E</sup>	U.T. 7 <sup>h</sup> 32 <sup>M</sup> -7 <sup>h</sup> 46 <sup>M</sup>		" " "	"	"	"	"	"	3	"	
6119	B 41	"	"	U.T. JUL 14.33264	0 <sup>h</sup> 18 <sup>E</sup>	U.T. 7 <sup>h</sup> 52 <sup>M</sup> -8 <sup>h</sup> 06 <sup>M</sup>		" " "	"	"	"	"	"	3	"	
6120	228, 1721 (N)	22 <sup>h</sup> 14.2 <sup>M</sup>	-10.4	U.T. JUL 14.35486	1 <sup>h</sup> 34 <sup>E</sup>	U.T. 8 <sup>h</sup> 21 <sup>M</sup> -8 <sup>h</sup> 41 <sup>M</sup>		" " 10x16	"	"	"	"	"	"	"	First trial of 10x16 (2a 8x10) plateholder
6121	" (S)	"	"	U.T. JUL 14.35486	"	U.T. 8 <sup>h</sup> 21 <sup>M</sup> -8 <sup>h</sup> 41 <sup>M</sup>		" " "	"	"	"	"	"	"	"	"
6122	" (N)	"	"	U.T. JUL 14.37569	1 <sup>h</sup> 04 <sup>E</sup>	U.T. 8 <sup>h</sup> 51-9 <sup>h</sup> 11 <sup>M</sup>		" " "	"	"	"	"	"	"	"	"
6123	" (S)	"	"	U.T. JUL 14.37569	"	U.T. 8 <sup>h</sup> 51-9 <sup>h</sup> 11 <sup>M</sup>		" " "	"	"	"	"	"	"	"	"
6124	B 43	19 <sup>h</sup> 49.7 <sup>M</sup>	+7.6	U.T. JUL 17.26528	1 <sup>h</sup> 11 <sup>E</sup>	U.T. 6 <sup>h</sup> 17 <sup>M</sup> -6 <sup>h</sup> 27 <sup>M</sup>		" " 4x5	"	"	"	"	"	4	"	
6125	B 38, B 42	20 <sup>h</sup> 04.9 <sup>M</sup>	-23.7	U.T. JUL 17.27813	1 <sup>h</sup> 06 <sup>E</sup>	U.T. 6 <sup>h</sup> 33 <sup>M</sup> -6 <sup>h</sup> 48 <sup>M</sup>		" " 8x10	"	"	"	"	"	3	"	
6126	"	"	"	U.T. JUL 17.29132	0 <sup>h</sup> 46 <sup>E</sup>	U.T. 6 <sup>h</sup> 52 <sup>M</sup> -7 <sup>h</sup> 07 <sup>M</sup>		" " "	"	"	"	"	"	"	"	
6127	228, 1721	22 <sup>h</sup> 12.0 <sup>M</sup>	-11.1	U.T. JUL 17.30833	2 <sup>h</sup> 26 <sup>E</sup>	U.T. 7 <sup>h</sup> 14 <sup>M</sup> -7 <sup>h</sup> 34 <sup>M</sup>		" " "	"	"	"	"	"	"	"	
6128	864, 1187, 1578	22 <sup>h</sup> 55.7 <sup>M</sup>	-5.7	U.T. JUL 17.33056	2 <sup>h</sup> 34 <sup>E</sup>	U.T. 7 <sup>h</sup> 41-8 <sup>h</sup> 11 <sup>M</sup>		" " "	"	"	"	"	"	"	"	
6129	228, 1721	22 <sup>h</sup> 12.0 <sup>M</sup>	-11.1	U.T. JUL 17.35139	1 <sup>h</sup> 25 <sup>E</sup>	U.T. 8 <sup>h</sup> 16 <sup>M</sup> -8 <sup>h</sup> 36 <sup>M</sup>		" " "	"	"	"	"	"	4	"	
6130	864, 1187, 1578	22 <sup>h</sup> 55.7 <sup>M</sup>	-5.7	U.T. JUL 17.37222	1 <sup>h</sup> 34 <sup>E</sup>	U.T. 8 <sup>h</sup> 41 <sup>M</sup> -9 <sup>h</sup> 11 <sup>M</sup>		" " "	"	"	"	"	"	"	"	
6131	B 45	22 <sup>h</sup> 29.7 <sup>M</sup>	-10.8	U.T. JUL 19.32431	2 <sup>h</sup> 13 <sup>E</sup>	U.T. 7 <sup>h</sup> 37 <sup>M</sup> -7 <sup>h</sup> 57 <sup>M</sup>		" " "	"	"	"	"	"	"	"	Guiding Poor
6132	B 51	22 <sup>h</sup> 54.1 <sup>M</sup>	-5.2	U.T. JUL 19.34722	1 <sup>h</sup> 59 <sup>E</sup>	U.T. 8 <sup>h</sup> 05 <sup>M</sup> -8 <sup>h</sup> 35 <sup>M</sup>		" " "	"	"	"	"	"	"	"	Cirrus
6133	B 43	19 <sup>h</sup> 28.2 <sup>M</sup>	+12.9	U.T. AUG 04.21400	0 <sup>h</sup> 53 <sup>E</sup>	U.T. 5 <sup>h</sup> 03 <sup>M</sup> -5 <sup>h</sup> 13 <sup>M</sup> 20 <sup>S</sup>		" 4x5 "	"	"	"	"	"	3	"	Plate erroneously marked P 6132





































NEG #	OBJECT OR GUIDE	Position		DATE 1981	H.A. END	EXPOSURE MST-AM-PM
		R.A.	DEC.			
6580	B224	16 <sup>h</sup> 13.2 <sup>m</sup>	-23.3°	U.T. JUN 05.23333	1 <sup>h</sup> 03 <sup>m</sup> E	U.T. 5 <sup>h</sup> 26 <sup>m</sup> - 5 <sup>h</sup> 46 <sup>m</sup>
6581	65WR, 68UP, B217	16 <sup>h</sup> 44.9 <sup>m</sup>	-23.5°	U.T. JUN 05.25208	1 <sup>h</sup> 13 <sup>m</sup> E	U.T. 5 <sup>h</sup> 53 <sup>m</sup> - 6 <sup>h</sup> 13 <sup>m</sup>
6582	B224	16 <sup>h</sup> 13.2 <sup>m</sup>	-23.3°	U.T. JUN 05.26875	0 <sup>h</sup> 13 <sup>m</sup> E	U.T. 6 <sup>h</sup> 17 <sup>m</sup> - 6 <sup>h</sup> 37 <sup>m</sup>
6583	65WR, 68UP, B217	16 <sup>h</sup> 44.9 <sup>m</sup>	-23.5°	U.T. JUN 05.28611	0 <sup>h</sup> 23 <sup>m</sup> E	U.T. 6 <sup>h</sup> 42 <sup>m</sup> - 7 <sup>h</sup> 02 <sup>m</sup>
6584	B39	17 <sup>h</sup> 05.4 <sup>m</sup>	+4.4°	U.T. JUN 05.30694	0 <sup>h</sup> 02 <sup>m</sup> E	U.T. 7 <sup>h</sup> 07 <sup>m</sup> - 7 <sup>h</sup> 37 <sup>m</sup>
6585	65WR, 68UP, B217	16 <sup>h</sup> 44.9 <sup>m</sup>	-23.5°	U.T. JUN 05.34861	1 <sup>h</sup> 12 <sup>m</sup> W	U.T. 8 <sup>h</sup> 12 <sup>m</sup> - 8 <sup>h</sup> 32 <sup>m</sup>
6586	B39	17 <sup>h</sup> 05.4 <sup>m</sup>	+4.4°	U.T. JUN 05.37083	1 <sup>h</sup> 30 <sup>m</sup> W	U.T. 8 <sup>h</sup> 39 <sup>m</sup> - 9 <sup>h</sup> 09 <sup>m</sup>
6587	B35	20 <sup>h</sup> 16.9 <sup>m</sup>	-3.7°	U.T. JUN 06.31875	2 <sup>h</sup> 54 <sup>m</sup> E	U.T. 7 <sup>h</sup> 24 <sup>m</sup> - 7 <sup>h</sup> 54 <sup>m</sup>
6588	(395), 74 KB	19 <sup>h</sup> 57.2 <sup>m</sup>	-22.1°	U.T. JUN 06.34306	2 <sup>h</sup> 29 <sup>m</sup> E	U.T. 7 <sup>h</sup> 59 <sup>m</sup> - 8 <sup>h</sup> 29 <sup>m</sup>
6589	B35	20 <sup>h</sup> 16.9 <sup>m</sup>	-3.7°	U.T. JUN 06.36736	1 <sup>h</sup> 44 <sup>m</sup> E	U.T. 8 <sup>h</sup> 34 <sup>m</sup> - 9 <sup>h</sup> 04 <sup>m</sup>
6590	(395) 74 KB	19 <sup>h</sup> 57.2 <sup>m</sup>	-22.1°	U.T. JUN 06.39167	0 <sup>h</sup> 49 <sup>m</sup> E	U.T. 9 <sup>h</sup> 09 <sup>m</sup> - 9 <sup>h</sup> 39 <sup>m</sup>
6591	B205, B209	14 <sup>h</sup> 12.6 <sup>m</sup>	-12.0°	U.T. JUN 09.22014	0 <sup>h</sup> 54 <sup>m</sup> W	U.T. 5 <sup>h</sup> 07 <sup>m</sup> - 5 <sup>h</sup> 27 <sup>m</sup>
6592	B212, B214	14 <sup>h</sup> 42.9 <sup>m</sup>	-18.8°	U.T. JUN 09.23681	0 <sup>h</sup> 48 <sup>m</sup> W	U.T. 5 <sup>h</sup> 31 <sup>m</sup> - 5 <sup>h</sup> 51 <sup>m</sup>
6593	B218, B220, B221, B223	15 <sup>h</sup> 10.0 <sup>m</sup>	-19.4°	U.T. JUN 09.25347	0 <sup>h</sup> 39 <sup>m</sup> W	U.T. 5 <sup>h</sup> 55 <sup>m</sup> - 6 <sup>h</sup> 15 <sup>m</sup>
6594	B205, B209	14 <sup>h</sup> 12.6 <sup>m</sup>	-12.0°	U.T. JUN 09.27014	2 <sup>h</sup> 06 <sup>m</sup> W	U.T. 6 <sup>h</sup> 19 <sup>m</sup> - 6 <sup>h</sup> 39 <sup>m</sup>
6595	B212, B214	14 <sup>h</sup> 42.9 <sup>m</sup>	-18.8°	U.T. JUN 09.28750	2 <sup>h</sup> 01 <sup>m</sup> W	U.T. 6 <sup>h</sup> 44 <sup>m</sup> - 7 <sup>h</sup> 04 <sup>m</sup>
6596	B218, B220, B221, B223	15 <sup>h</sup> 10.0 <sup>m</sup>	-19.4°	U.T. JUN 09.30417	1 <sup>h</sup> 57 <sup>m</sup> W	U.T. 7 <sup>h</sup> 08 <sup>m</sup> - 7 <sup>h</sup> 28 <sup>m</sup>
6597	B219, B222, B229, B231, B232, B233	15 <sup>h</sup> 34.0 <sup>m</sup>	-18.2°	U.T. JUN 09.32083	1 <sup>h</sup> 58 <sup>m</sup> W	U.T. 7 <sup>h</sup> 32 <sup>m</sup> - 7 <sup>h</sup> 52 <sup>m</sup>
6598	B " " "	" " "	" "	U.T. JUN 09.33750	2 <sup>h</sup> 23 <sup>m</sup> W	U.T. 7 <sup>h</sup> 56 <sup>m</sup> - 8 <sup>h</sup> 16 <sup>m</sup>
6599	B225, B226, B227, B228	19 <sup>h</sup> 56.6 <sup>m</sup>	-22.1°	U.T. JUN 09.35833	1 <sup>h</sup> 25 <sup>m</sup> E	U.T. 8 <sup>h</sup> 21 <sup>m</sup> - 8 <sup>h</sup> 51 <sup>m</sup>
6600	B225, B226, B227, B228	19 <sup>h</sup> 56.6 <sup>m</sup>	-22.1°	U.T. JUN 09.38194	0 <sup>h</sup> 51 <sup>m</sup> E	U.T. 8 <sup>h</sup> 55 <sup>m</sup> - 9 <sup>h</sup> 25 <sup>m</sup>
6601	B212, B214	14 <sup>h</sup> 41.2 <sup>m</sup>	-17.0°	U.T. JUN 23.18403	0 <sup>h</sup> 34 <sup>m</sup> W	U.T. 4 <sup>h</sup> 10 <sup>m</sup> - 4 <sup>h</sup> 40 <sup>m</sup>
6602	B182, B184	13 <sup>h</sup> 22.5 <sup>m</sup>	-3.6°	U.T. JUN 23.20903	2 <sup>h</sup> 36 <sup>m</sup> W	U.T. 4 <sup>h</sup> 46 <sup>m</sup> - 5 <sup>h</sup> 16 <sup>m</sup>
6603	B182, B184	" " "	" "	U.T. JUN 23.23194	3 <sup>h</sup> 03 <sup>m</sup> W	U.T. 5 <sup>h</sup> 19 <sup>m</sup> - 5 <sup>h</sup> 49 <sup>m</sup>
6604	B204, B205, B207	14 <sup>h</sup> 15.5 <sup>m</sup>	-9.2°	U.T. JUN 23.25625	2 <sup>h</sup> 45 <sup>m</sup> W	U.T. 5 <sup>h</sup> 54 <sup>m</sup> - 6 <sup>h</sup> 24 <sup>m</sup>
6605	B212, B214	14 <sup>h</sup> 41.2 <sup>m</sup>	-17.0°	U.T. JUN 23.28056	2 <sup>h</sup> 55 <sup>m</sup> W	U.T. 6 <sup>h</sup> 29 <sup>m</sup> - 6 <sup>h</sup> 59 <sup>m</sup>
6606	B204, B205, B207	14 <sup>h</sup> 15.5 <sup>m</sup>	-9.2°	U.T. JUN 23.30347	3 <sup>h</sup> 52 <sup>m</sup> W	U.T. 7 <sup>h</sup> 02 <sup>m</sup> - 7 <sup>h</sup> 32 <sup>m</sup>
6607	" " "	14 <sup>h</sup> 16.3 <sup>m</sup>	-9.1°	U.T. JUN 24.19931	1 <sup>h</sup> 26 <sup>m</sup> W	U.T. 4 <sup>h</sup> 32 <sup>m</sup> - 5 <sup>h</sup> 02 <sup>m</sup>

W.E. INST.	PLATE SIZE TYPE	Telescope Position	DEVELOPMENT			SEEING	OBSV.	REMARKS		
			KIND	TIME	TEMP.					
13"	4x5 103a0	W	D19	5 <sup>min</sup>	68°	N	4	3	BAS	
"	8x10 "	"	"	"	"	"	"	"	"	"
"	4x5 "	"	"	"	"	"	"	"	"	"
"	" "	"	"	"	"	"	"	"	"	"
"	" "	"	"	"	"	"	"	4	"	"
"	8x10 "	"	"	"	"	"	"	3	"	"
"	4x5 "	"	"	"	"	"	"	4	"	"
"	8x10 "	"	"	"	"	"	"	3	ELG-B	New plateholder used
"	" "	"	"	"	"	"	"	2	ELGB	
"	" "	"	"	"	"	"	"	3	"	
"	" "	"	"	"	"	"	"	"	"	Very good night
"	" "	"	"	"	"	"	5	4	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	Moon down during this plate.
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	Slight breeze rising; seeing deteriorating
"	" "	"	"	"	"	"	"	3	"	
"	" "	"	"	"	"	"	"	4	"	BAS
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	
"	" "	"	"	"	"	"	"	"	"	Moonrise during exposure.
"	" "	"	"	"	"	"	"	"	"	New plateholder. Observer not operating well tonight same guide star as last night's pair. New plate holder all night
"	" "	"	"	"	"	"	"	2	"	
"	" "	"	"	"	"	"	"	4	"	

NEG #	OBJECT OR GUIDE	Position R.A. DEC.	DATE 1981	H.A. END	EXPOSURE MST-AM-PM
6608	(1741), B 230	17 <sup>h</sup> 18.6 <sup>m</sup> -24.4 <sup>o</sup>	U.T. JUN 24.22083	1 <sup>h</sup> 10 <sup>m</sup> E	U.T. 5 <sup>h</sup> 08 <sup>m</sup> - 5 <sup>h</sup> 28 <sup>m</sup>
6609	6750, 75V02, 80DA	17 <sup>h</sup> 45.7 <sup>m</sup> -26.7 <sup>o</sup>	U.T. JUN 24.23889	1 <sup>h</sup> 11 <sup>m</sup> E	U.T. 5 <sup>h</sup> 34 <sup>m</sup> - 5 <sup>h</sup> 54 <sup>m</sup>
6610	B204, B205, B207	14 <sup>h</sup> 16.3 <sup>m</sup> -9.1 <sup>o</sup>	U.T. JUN 24.26042	2 <sup>h</sup> 54 <sup>m</sup> E	U.T. 6 <sup>h</sup> 00 <sup>m</sup> - 6 <sup>h</sup> 30 <sup>m</sup>
6611	(1741), B 230	17 <sup>h</sup> 18.6 <sup>m</sup> -24.4 <sup>o</sup>	U.T. JUN 24.28125	0 <sup>h</sup> 17 <sup>m</sup> W	U.T. 6 <sup>h</sup> 35 <sup>m</sup> - 6 <sup>h</sup> 55 <sup>m</sup>
6612	6750, 75V02, 80DA	17 <sup>h</sup> 45.7 <sup>m</sup> -26.7 <sup>o</sup>	U.T. JUN 24.29861	0 <sup>h</sup> 15 <sup>m</sup> W	U.T. 7 <sup>h</sup> 00 <sup>m</sup> - 7 <sup>h</sup> 20 <sup>m</sup>
6613	B219, B232, B233, B227	15 <sup>h</sup> 32.1 <sup>m</sup> -16.0 <sup>o</sup>	U.T. JUN 25.20417	0 <sup>h</sup> 32 <sup>m</sup> W	U.T. 4 <sup>h</sup> 39 <sup>m</sup> - 5 <sup>h</sup> 09 <sup>m</sup>
6614	(646), B217, B224	16 <sup>h</sup> 14.7 <sup>m</sup> -27.0 <sup>o</sup>	U.T. JUN 25.23056	0 <sup>h</sup> 18 <sup>m</sup> W	U.T. 5 <sup>h</sup> 17 <sup>m</sup> - 5 <sup>h</sup> 47 <sup>m</sup>
6615	(488), 780X, 78RS	18 <sup>h</sup> 22.9 <sup>m</sup> -25.6 <sup>o</sup>	U.T. JUN 25.25278	1 <sup>h</sup> 22 <sup>m</sup> E	U.T. 5 <sup>h</sup> 54 <sup>m</sup> - 6 <sup>h</sup> 14 <sup>m</sup>
6616	B219, B229, B232, B233	15 <sup>h</sup> 32.1 <sup>m</sup> -16.0 <sup>o</sup>	U.T. JUN 25.27604	2 <sup>h</sup> 15 <sup>m</sup> E	U.T. 6 <sup>h</sup> 22 <sup>m</sup> - 6 <sup>h</sup> 53 <sup>m</sup>
6617	(646), B217, B224	16 <sup>h</sup> 14.7 <sup>m</sup> -27.0 <sup>o</sup>	U.T. JUN 25.29583	1 <sup>h</sup> 46 <sup>m</sup> W	U.T. 6 <sup>h</sup> 57 <sup>m</sup> - 7 <sup>h</sup> 15 <sup>m</sup>
6618	(157), 80DC	16 <sup>h</sup> 57.0 <sup>m</sup> -33.3 <sup>o</sup>	U.T. JUN 29.21528	0 <sup>h</sup> 37 <sup>m</sup> E	U.T. 5 <sup>h</sup> 01 <sup>m</sup> - 5 <sup>h</sup> 19 <sup>m</sup>
6619	B204, B205, B207	14 <sup>h</sup> 22.9 <sup>m</sup> -9.6 <sup>o</sup>	U.T. JUN 30.18403	1 <sup>h</sup> 22 <sup>m</sup> W	U.T. 4 <sup>h</sup> 10 <sup>m</sup> - 4 <sup>h</sup> 40 <sup>m</sup>
6620	B204, B205, B207	14 <sup>h</sup> 18.8 <sup>m</sup> -9.7 <sup>o</sup>	U.T. JUL 03.18403	1 <sup>h</sup> 35 <sup>m</sup> W	U.T. 4 <sup>h</sup> 10 <sup>m</sup> - 4 <sup>h</sup> 40 <sup>m</sup>
6621	(157), 1980De	16 <sup>h</sup> 53.5 <sup>m</sup> -33.2 <sup>o</sup>	U.T. JUL 03.20556	0 <sup>h</sup> 38 <sup>m</sup> E	U.T. 4 <sup>h</sup> 46 <sup>m</sup> - 5 <sup>h</sup> 06 <sup>m</sup>
6622	(157), 80DC	16 <sup>h</sup> 53.5 <sup>m</sup> -33.2 <sup>o</sup>	U.T. JUL 03.22222	0 <sup>h</sup> 14 <sup>m</sup> E	U.T. 5 <sup>h</sup> 10 <sup>m</sup> - 5 <sup>h</sup> 30 <sup>m</sup>
6623	B204, B205, B207	14 <sup>h</sup> 18.8 <sup>m</sup> -9.7 <sup>o</sup>	U.T. JUL 03.24306	3 <sup>h</sup> 00 <sup>m</sup> W	U.T. 5 <sup>h</sup> 35 <sup>m</sup> - 6 <sup>h</sup> 05 <sup>m</sup>
6624	(395), 34CD, B225, 227, 228	19 <sup>h</sup> 41.3 <sup>m</sup> -21.6 <sup>o</sup>	U.T. JUL 03.26597	1 <sup>h</sup> 55 <sup>m</sup> E	U.T. 6 <sup>h</sup> 13 <sup>m</sup> - 6 <sup>h</sup> 33 <sup>m</sup>
6625	B 226	19 <sup>h</sup> 43.9 <sup>m</sup> -31.0 <sup>o</sup>	U.T. JUL 03.28715	1 <sup>h</sup> 27 <sup>m</sup> E	U.T. 6 <sup>h</sup> 46 <sup>m</sup> - 7 <sup>h</sup> 01 <sup>m</sup>
6626	(395), 34CD, B225, 227, 228	19 <sup>h</sup> 41.3 <sup>m</sup> -21.6 <sup>o</sup>	U.T. JUL 03.30347	1 <sup>h</sup> 00 <sup>m</sup> E	U.T. 7 <sup>h</sup> 07 <sup>m</sup> - 7 <sup>h</sup> 27 <sup>m</sup>
6627	B 226	19 <sup>h</sup> 43.9 <sup>m</sup> -31.0 <sup>o</sup>	U.T. JUL 03.31979	0 <sup>h</sup> 40 <sup>m</sup> E	U.T. 7 <sup>h</sup> 33 <sup>m</sup> - 7 <sup>h</sup> 48 <sup>m</sup>
6628	74MA (+0.60)	21 <sup>h</sup> 55.0 <sup>m</sup> -23.0 <sup>o</sup>	U.T. JUL 03.36111	1 <sup>h</sup> 50 <sup>m</sup> E	U.T. 8 <sup>h</sup> 30 <sup>m</sup> - 8 <sup>h</sup> 50 <sup>m</sup>
6629	74MA (+0.40)	22 <sup>h</sup> 20.0 <sup>m</sup> -18.0 <sup>o</sup>	U.T. JUL 03.37847	1 <sup>h</sup> 50 <sup>m</sup> E	U.T. 8 <sup>h</sup> 55 <sup>m</sup> - 9 <sup>h</sup> 15 <sup>m</sup>
6630	74MA (+0.60)	21 <sup>h</sup> 55.0 <sup>m</sup> -23.0 <sup>o</sup>	U.T. JUL 03.39792	0 <sup>h</sup> 57 <sup>m</sup> E	U.T. 9 <sup>h</sup> 23 <sup>m</sup> - 9 <sup>h</sup> 43 <sup>m</sup>
6631	74MA (+0.40)	22 <sup>h</sup> 20.0 <sup>m</sup> -18.0 <sup>o</sup>	U.T. JUL 03.41528	0 <sup>h</sup> 57 <sup>m</sup> E	U.T. 9 <sup>h</sup> 48 <sup>m</sup> - 10 <sup>h</sup> 08 <sup>m</sup>
6632	B 232	15 <sup>h</sup> 28.4 <sup>m</sup> -16.4 <sup>o</sup>	U.T. JUL 24.18403	1 <sup>h</sup> 55 <sup>m</sup> W	U.T. 4 <sup>h</sup> 10 <sup>m</sup> - 4 <sup>h</sup> 40 <sup>m</sup>
6633	B 230	16 <sup>h</sup> 53.5 <sup>m</sup> -26.6 <sup>o</sup>	U.T. JUL 24.23542	1 <sup>h</sup> 35 <sup>m</sup> W	U.T. 5 <sup>h</sup> 24 <sup>m</sup> - 5 <sup>h</sup> 54 <sup>m</sup>
6634	B 232	15 <sup>h</sup> 28.4 <sup>m</sup> -16.4 <sup>o</sup>	U.T. JUL 24.26042	2 <sup>h</sup> 45 <sup>m</sup> W	U.T. 6 <sup>h</sup> 00 <sup>m</sup> - 6 <sup>h</sup> 30 <sup>m</sup>
6635	B 230	16 <sup>h</sup> 53.5 <sup>m</sup> -26.6 <sup>o</sup>	U.T. JUL 24.28472	2 <sup>h</sup> 45 <sup>m</sup> W	U.T. 6 <sup>h</sup> 35 <sup>m</sup> - 7 <sup>h</sup> 05 <sup>m</sup>

WE INST.	PLATE SIZE TYPE	Telescope Position	DEVELOPMENT KIND TIME TEMP	WITTING	SEEING TRANS STEAD OBSV.	REMARKS
13"	103a-0 8x10	W	D19 5 MIN 68°	N	4 3 BAS	Field in Dark Cloud of Aphelion
"	8x10 103a-0	"	" " " "	"	" 4 "	
"	" "	"	" " " "	"	" 4? "	
"	" "	"	" " " "	"	" 4 "	Moonrise at end
"	" "	"	" " " "	"	3 "	
"	" "	"	" " " "	"	" 3 "	
"	" "	"	" " " "	"	" "	M28 near plate center
"	" "	"	" " " "	"	" "	Not some guide star Exposure cut short by clouds
"	" "	"	" " " "	"	" 2 "	
"	" "	"	" " " "	"	" 3 "	Cloud, then rain at end. Damn some cirrus at end of twilight
"	" "	"	" " " "	"	" 4 "	
"	" "	"	" " " "	"	4 2 "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" 3 "	
"	" "	"	" " " "	"	" "	aircraft across center of field.
"	" "	"	" " " "	"	" 1 "	NGC 6809 in field
"	" "	"	" " " "	"	" 3 "	
"	" "	"	" " " "	"	" 2 "	Image motion larger, but size smaller compared to P 6625
"	" "	"	" " " "	"	" 3 "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	" "	Good night
"	" "	"	" " " "	"	3 4 "	Many lightning flashes
"	" "	"	" " " "	"	" "	
"	" "	"	" " " "	"	3 3 "	
"	" "	"	" " " "	"	" "	













NEG #	OBJECT OR GUIDE	Position		DATE 1981	H. A. END	EXPOSURE
		R. A.	DEC.			
6776	(2162), 64VY1, 76YX1	1 <sup>h</sup> 12.2 <sup>m</sup>	+5.0	U.T. SEP 26.35417	0 <sup>h</sup> 20 <sup>m</sup> W	U.T. 8 <sup>h</sup> 20 <sup>m</sup> -8 <sup>h</sup> 40 <sup>m</sup>
6777	B49	4 <sup>h</sup> 34.9 <sup>m</sup>	-4.9	U.T. SEP 28.39861	1 <sup>h</sup> 47 <sup>m</sup> E	U.T. 9 <sup>h</sup> 19 <sup>m</sup> -9 <sup>h</sup> 49 <sup>m</sup>
6778	B38, B270	1 <sup>h</sup> 28.0	-7.9	U.T. SEP 28.42014	1 <sup>h</sup> 45 <sup>m</sup> W	U.T. 9 <sup>h</sup> 55 <sup>m</sup> -10 <sup>h</sup> 15 <sup>m</sup>
6779	B38, B270	"	"	U.T. SEP 28.45486	2 <sup>h</sup> 35 <sup>m</sup> W	U.T. 10 <sup>h</sup> 45 <sup>m</sup> -11 <sup>h</sup> 05 <sup>m</sup>
6780	B49	4 <sup>h</sup> 34.9 <sup>m</sup>	-4.9	U.T. SEP 28.47500	0 <sup>h</sup> 03 <sup>m</sup> W	U.T. 11 <sup>h</sup> 09 <sup>m</sup> -11 <sup>h</sup> 39 <sup>m</sup>
6781	T3, T14	20 <sup>h</sup> 15.9	-15.8	U.T. OCT 04.21806	2 <sup>h</sup> 36 <sup>m</sup> W	U.T. 4 <sup>h</sup> 59 <sup>m</sup> -5 <sup>h</sup> 29 <sup>m</sup>
6782	B235, B271-B280	22 <sup>h</sup> 33.5	-13.7	U.T. OCT 04.24375	0 <sup>h</sup> 55 <sup>m</sup> W	U.T. 5 <sup>h</sup> 36 <sup>m</sup> -6 <sup>h</sup> 06 <sup>m</sup>
6783	T3, T14	20 <sup>h</sup> 15.9	-15.8	U.T. OCT 04.26806	3 <sup>h</sup> 48 <sup>m</sup> W	U.T. 6 <sup>h</sup> 11 <sup>m</sup> -6 <sup>h</sup> 41 <sup>m</sup>
6784	B281-B286	22 <sup>h</sup> 58.1	-10.5	U.T. OCT 04.29236	1 <sup>h</sup> 40 <sup>m</sup> W	U.T. 6 <sup>h</sup> 46 <sup>m</sup> -7 <sup>h</sup> 16 <sup>m</sup>
6785	B235, B271-B280	22 <sup>h</sup> 33.5	-13.7	U.T. OCT 04.31669	2 <sup>h</sup> 40 <sup>m</sup> W	U.T. 7 <sup>h</sup> 21 <sup>m</sup> -7 <sup>h</sup> 51 <sup>m</sup>
6786	B281, -B286	22 <sup>h</sup> 58.1	-10.5	U.T. OCT 04.34028	2 <sup>h</sup> 49 <sup>m</sup> W	U.T. 7 <sup>h</sup> 55 <sup>m</sup> -8 <sup>h</sup> 25 <sup>m</sup>
6787	(2162), 64VY, 76YX1	1 <sup>h</sup> 04.1 <sup>m</sup>	+3.9	U.T. OCT 04.36042	1 <sup>h</sup> 09 <sup>m</sup> W	U.T. 8 <sup>h</sup> 29 <sup>m</sup> -8 <sup>h</sup> 49 <sup>m</sup>
6788	B38, B270	1 <sup>h</sup> 23.5 <sup>m</sup>	-7.2	U.T. OCT 04.37778	1 <sup>h</sup> 14 <sup>m</sup> W	U.T. 8 <sup>h</sup> 54 <sup>m</sup> -9 <sup>h</sup> 14 <sup>m</sup>
6789	(2162), 64VY, 76YX1	1 <sup>h</sup> 04.1 <sup>m</sup>	+3.9	U.T. OCT 04.39514	2 <sup>h</sup> 00 <sup>m</sup> W	U.T. 9 <sup>h</sup> 19 <sup>m</sup> -9 <sup>h</sup> 39 <sup>m</sup>
6790	B38, B270	1 <sup>h</sup> 23.5 <sup>m</sup>	-7.2	U.T. OCT 04.41181	2 <sup>h</sup> 04 <sup>m</sup> W	U.T. 9 <sup>h</sup> 43 <sup>m</sup> -10 <sup>h</sup> 03 <sup>m</sup>
6791	B262, etc.	23 <sup>h</sup> 35.5	-1.3	U.T. OCT 05.30833	1 <sup>h</sup> 20 <sup>m</sup> W	U.T. 7 <sup>h</sup> 09 <sup>m</sup> -7 <sup>h</sup> 39 <sup>m</sup>
6792	B263, B267, T47	23 <sup>h</sup> 53.0	-4.8	U.T. OCT 05.32917	1 <sup>h</sup> 33 <sup>m</sup> W	U.T. 7 <sup>h</sup> 44 <sup>m</sup> -8 <sup>h</sup> 04 <sup>m</sup>
6793	B262	23 <sup>h</sup> 35.5	-1.3	U.T. OCT 05.34931	2 <sup>h</sup> 20 <sup>m</sup> W	U.T. 8 <sup>h</sup> 08 <sup>m</sup> -8 <sup>h</sup> 38 <sup>m</sup>
6794	B263, B267, T47	23 <sup>h</sup> 53.0	-4.8	U.T. OCT 05.37014	2 <sup>h</sup> 33 <sup>m</sup> W	U.T. 8 <sup>h</sup> 43 <sup>m</sup> -9 <sup>h</sup> 03 <sup>m</sup>
6795	B49	4 <sup>h</sup> 36.0	-6.2	U.T. OCT 05.38889	1 <sup>h</sup> 38 <sup>m</sup> E	U.T. 9 <sup>h</sup> 10 <sup>m</sup> -9 <sup>h</sup> 30 <sup>m</sup>
6796	B49	"	"	U.T. OCT 05.42569	0 <sup>h</sup> 45 <sup>m</sup> E	U.T. 10 <sup>h</sup> 03 <sup>m</sup> -10 <sup>h</sup> 23 <sup>m</sup>
6797	52 Eur. Field	7 <sup>h</sup> 58.0	+9°10'	U.T. OCT 7.44583	3 <sup>h</sup> 32 <sup>m</sup> E	U.T. 10 <sup>h</sup> 32 <sup>m</sup> 00-10 <sup>h</sup> 52 <sup>m</sup> 00
6798	52 Eur. Field	8 <sup>h</sup> 22.0	+18°30'	U.T. OCT 7.46667	3 <sup>h</sup> 25 <sup>m</sup> E	U.T. 11 <sup>h</sup> 02 <sup>m</sup> 00-11 <sup>h</sup> 22 <sup>m</sup> 00
6799	O.C. Major Field Test of field 14x17 box	6 <sup>h</sup> 52	-24°8'	U.T. OCT 7.49392	1 <sup>h</sup> 15 <sup>m</sup> E	U.T. 11:30-11:45 * 12:00-12:10
6800	451 Patientia	18 <sup>h</sup> 15 <sup>m</sup>	-29°	U.T. OCT 19.10000	2 <sup>h</sup> 40 <sup>m</sup> W	U.T. 02 <sup>h</sup> 14 <sup>m</sup> 00-2 <sup>h</sup> 34 <sup>m</sup> 00
6801	511 Davida field	18 <sup>h</sup> 54	-26°	U.T. OCT 19.12153	2 <sup>h</sup> 32 <sup>m</sup> W	U.T. 02 <sup>h</sup> 45 <sup>m</sup> 00-3 <sup>h</sup> 05 <sup>m</sup> 00
6802	65 Cybele field	20 <sup>h</sup> 32	-17°	U.T. OCT 19.14306	1 <sup>h</sup> 24 <sup>m</sup> W	U.T. 3 <sup>h</sup> 16 <sup>m</sup> 00-3 <sup>h</sup> 36 <sup>m</sup> 00
6803	1 Ceres field	21 <sup>h</sup> 34	-28°	U.T. OCT 19.16528	0 <sup>h</sup> 55 <sup>m</sup> W	U.T. 3 <sup>h</sup> 48 <sup>m</sup> 00-4 <sup>h</sup> 08 <sup>m</sup> 00

INST.	PLATE		telescope Position	DEVELOPMENT			WEIGHTING	SEEING			REMARKS
	SIZE	TYPE		KIND	TIME	TEMP		TRANS.	STEAD.	OBSV.	
13"	8x10	103a-0	W	D19	5 <sup>min</sup>	68°	N	5	4	BAS	Guide star faint
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	3	"	not same guide star but in same guide scope field
"	"	"	"	"	"	"	"	"	4	"	
"	"	"	"	"	"	"	"	4	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	3	"	not same guide star, but close. Pretty low.
"	"	"	"	"	"	"	"	"	4	"	
"	"	"	"	"	"	"	"	"	3	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	4	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	4	4	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	3	3	"
"	"	"	"	"	"	"	"	4	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	4	"	
"	"	"	"	"	"	"	"	3-4	2-3	NGT	
"	"	"	"	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	"	"	"	
"	14x17	103a-0	W	"	"	"	"	"	"	"	
"	"	"	"	"	"	"	"	4	3	"	
"	"	"	"	"	"	"	"	"	3-4	"	
"	"	"	"	"	"	"	"	"	3	"	



















NEG #	OBJECT OR GUIDE	Position R.A. DEC	DATE 1982	H.A. END	EXPOSURE MST-AM-PM	W.E.
7028	B405	11 <sup>h</sup> 00.2 <sup>m</sup> -21.4	U.T. MAR 28.18542	1 <sup>h</sup> 32 <sup>m</sup> E	U.T. 4 <sup>h</sup> 17 <sup>m</sup> - 4 <sup>h</sup> 37 <sup>m</sup>	WWV
7029	(1503), B427	11 <sup>h</sup> 12.9 <sup>m</sup> -13.0	U.T. MAR 28.20278	1 <sup>h</sup> 19 <sup>m</sup> E	U.T. 4 <sup>h</sup> 42 <sup>m</sup> - 5 <sup>h</sup> 02 <sup>m</sup>	"
7030	B405	11 <sup>h</sup> 00.2 <sup>m</sup> -21.4	U.T. MAR 28.22083	0 <sup>h</sup> 41 <sup>m</sup> E	U.T. 5 <sup>h</sup> 08 <sup>m</sup> - 5 <sup>h</sup> 28 <sup>m</sup>	"
7031	B370, B419	9 <sup>h</sup> 08.1 <sup>m</sup> +17.2	U.T. MAR 28.23958	1 <sup>h</sup> 44 <sup>m</sup> W	U.T. 5 <sup>h</sup> 30 <sup>m</sup> - 6 <sup>h</sup> 00 <sup>m</sup>	"
7032	(1503), B427	11 <sup>h</sup> 12.9 <sup>m</sup> -13.0	U.T. MAR 28.25833	0 <sup>h</sup> 13 <sup>m</sup> W	U.T. 6 <sup>h</sup> 02 <sup>m</sup> - 6 <sup>h</sup> 22 <sup>m</sup>	"
7033	B436	12 <sup>h</sup> 47.2 <sup>m</sup> +3.3	U.T. MAR 28.27639	1 <sup>h</sup> 07 <sup>m</sup> E	U.T. 6 <sup>h</sup> 28 <sup>m</sup> - 6 <sup>h</sup> 48 <sup>m</sup>	"
7034	B436	" "	U.T. MAR 28.29375	0 <sup>h</sup> 42 <sup>m</sup> E	U.T. 6 <sup>h</sup> 53 <sup>m</sup> - 7 <sup>h</sup> 13 <sup>m</sup>	"
7035	B436	12 <sup>h</sup> 34.4 <sup>m</sup> +4.5	U.T. MAR 31.34861	1 <sup>h</sup> 02 <sup>m</sup> W	U.T. 8 <sup>h</sup> 12 <sup>m</sup> - 8 <sup>h</sup> 32 <sup>m</sup>	"
7036	41FN, 79MS6, B77	13 <sup>h</sup> 16.8 <sup>m</sup> -13.7	U.T. MAR 31.36528	0 <sup>h</sup> 45 <sup>m</sup> W	U.T. 8 <sup>h</sup> 36 <sup>m</sup> - 8 <sup>h</sup> 56 <sup>m</sup>	"
7037	B436	12 <sup>h</sup> 34.4 <sup>m</sup> +4.5	U.T. MAR 31.38264	1 <sup>h</sup> 51 <sup>m</sup> W	U.T. 9 <sup>h</sup> 01 <sup>m</sup> - 9 <sup>h</sup> 21 <sup>m</sup>	"
7038	41FN, 79MS6, B77	13 <sup>h</sup> 16.8 <sup>m</sup> -13.7	U.T. MAR 31.39931	1 <sup>h</sup> 34 <sup>m</sup> W	U.T. 9 <sup>h</sup> 25 <sup>m</sup> - 9 <sup>h</sup> 45 <sup>m</sup>	"
7039	B441, B442	13 <sup>h</sup> 46.5 <sup>m</sup> -8.0	U.T. MAR 31.41944	1 <sup>h</sup> 34 <sup>m</sup> W	U.T. 9 <sup>h</sup> 49 <sup>m</sup> - 10 <sup>h</sup> 19 <sup>m</sup>	"
7040	B407	13 <sup>h</sup> 53.3 <sup>m</sup> +14.3	U.T. APR 01.36528	0 <sup>h</sup> 12 <sup>m</sup> W	U.T. 8 <sup>h</sup> 36 <sup>m</sup> - 8 <sup>h</sup> 56 <sup>m</sup>	"
7041	"	" "	U.T. APR 01.40347	1 <sup>h</sup> 07 <sup>m</sup> W	U.T. 9 <sup>h</sup> 31 <sup>m</sup> - 9 <sup>h</sup> 51 <sup>m</sup>	"
7042	c/Bowell	18 <sup>h</sup> 00.3 <sup>m</sup> -21.3	U.T. APR 01.41979	2 <sup>h</sup> 40 <sup>m</sup> E	U.T. 9 <sup>h</sup> 57 <sup>m</sup> - 10 <sup>h</sup> 12 <sup>m</sup>	"
7043	(155), (1344), B405	10 <sup>h</sup> 53.9 <sup>m</sup> +18.8	U.T. APR 13.15625	1 <sup>h</sup> 00 <sup>m</sup> E	U.T. 3 <sup>h</sup> 30 <sup>m</sup> - 4 <sup>h</sup> 00 <sup>m</sup>	"
7044	(104), (437), (1134), (1639), (2310), B408, B421, B433	11 <sup>h</sup> 18.5 <sup>m</sup> -5.0	U.T. APR 13.18194	0 <sup>h</sup> 46 <sup>m</sup> E	U.T. 4 <sup>h</sup> 07 <sup>m</sup> - 4 <sup>h</sup> 37 <sup>m</sup>	"
7045	B386	9 <sup>h</sup> 49.3 <sup>m</sup> +23.5	U.T. APR 13.20417	1 <sup>h</sup> 10 <sup>m</sup> W	U.T. 4 <sup>h</sup> 44 <sup>m</sup> - 5 <sup>h</sup> 04 <sup>m</sup>	"
7046	B386	" "	U.T. APR 13.22014	1 <sup>h</sup> 33 <sup>m</sup> W	U.T. 5 <sup>h</sup> 07 <sup>m</sup> - 5 <sup>h</sup> 27 <sup>m</sup>	"
7047	(155), (1344), B405	10 <sup>h</sup> 53.9 <sup>m</sup> +18.8	U.T. APR 13.23889	0 <sup>h</sup> 59 <sup>m</sup> W	U.T. 5 <sup>h</sup> 29 <sup>m</sup> - 5 <sup>h</sup> 59 <sup>m</sup>	"
7048	(134), (437), (1134), (1639), (2310), B408, B421, B433	11 <sup>h</sup> 18.5 <sup>m</sup> -5.0	U.T. APR 13.26250	1 <sup>h</sup> 10 <sup>m</sup> W	U.T. 6 <sup>h</sup> 03 <sup>m</sup> - 6 <sup>h</sup> 33 <sup>m</sup>	"
7049	B434, B435, B438	12 <sup>h</sup> 07.4 <sup>m</sup> -2.1	U.T. APR 14.17153	1 <sup>h</sup> 48 <sup>m</sup> E	U.T. 3 <sup>h</sup> 52 <sup>m</sup> - 4 <sup>h</sup> 22 <sup>m</sup>	"
7050	(146), (751), 406N, B432, B436	12 <sup>h</sup> 32.3 <sup>m</sup> +10.7	U.T. APR 14.20833	1 <sup>h</sup> 17 <sup>m</sup> E	U.T. 4 <sup>h</sup> 45 <sup>m</sup> - 5 <sup>h</sup> 15 <sup>m</sup>	"
7051	B434, B435, B438	12 <sup>h</sup> 07.4 <sup>m</sup> -2.1	U.T. APR 14.25625	0 <sup>h</sup> 14 <sup>m</sup> W	U.T. 5 <sup>h</sup> 54 <sup>m</sup> - 6 <sup>h</sup> 24 <sup>m</sup>	"
7052	(146), (751), 406N, B432, B436	12 <sup>h</sup> 32.3 <sup>m</sup> +10.7	U.T. APR 14.28056	0 <sup>h</sup> 27 <sup>m</sup> W	U.T. 6 <sup>h</sup> 29 <sup>m</sup> - 6 <sup>h</sup> 59 <sup>m</sup>	"
7053	(671), (1168), 41FN, 73502, 79MS6, B77	12 <sup>h</sup> 56.3 <sup>m</sup> -12.3	U.T. APR 18.20347	1 <sup>h</sup> 39 <sup>m</sup> E	U.T. 4 <sup>h</sup> 43 <sup>m</sup> - 5 <sup>h</sup> 03 <sup>m</sup>	"
7054	(1770), 78NC3, B441	13 <sup>h</sup> 16.4 <sup>m</sup> -4.3	U.T. APR 18.22083	1 <sup>h</sup> 35 <sup>m</sup> E	U.T. 5 <sup>h</sup> 08 <sup>m</sup> - 5 <sup>h</sup> 28 <sup>m</sup>	"
7055	(671), (1168), 41FN, 73502, 79MS6, B77	12 <sup>h</sup> 56.3 <sup>m</sup> -12.3	U.T. APR 18.23750	0 <sup>h</sup> 50 <sup>m</sup> E	U.T. 5 <sup>h</sup> 32 <sup>m</sup> - 5 <sup>h</sup> 52 <sup>m</sup>	"

INST.	PLATE SIZE TYPE	Telescope Position	DEVELOPMENT			SEEING	OBSV.	REMARKS
			KIND	TIME	TEMP.			
13"	4x5 103a0	W	D19	5 MIN.	68°	N	4 3	BAS
"	" 8x10 103a0	"	"	"	"	"	" "	"
"	" 4x5 103a0	"	"	"	"	"	" "	"
"	" 8x10 103a0	"	"	"	"	"	" "	New plate holder: focus screws 1/4 turn in.
"	" "	"	"	"	"	"	3	"
"	" "	"	"	"	"	"	" 4	Guide scope fogging
"	" "	"	"	"	"	"	" "	Objective fogged at end seeing 1.2. Some mag motion and intermittent focusing.
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" 3	not quite same guide <sup>star</sup>
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" "	Objective partly frosted seeing 1.5, much noise Moonset ~ 8:40
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" 1	strong wind
"	" "	"	"	"	"	"	" 2	Very windy
"	8x10 103a0	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" "	"
"	4x5 "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" "	less windy
"	8x10 "	"	"	"	"	"	" 3	Moonrise ~ 6:17
"	" "	"	"	"	"	"	" 4	"
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" "	new plate holder, screws, 1/2 turn clockwise
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" 4	seeing 1.2 PHX dim.
"	" "	"	"	"	"	"	" "	"
"	" "	"	"	"	"	"	" 4	"



NEG #	OBJECT OR GUIDE	Position		DATE 1982	H.A. END	EXPOSURE MST-AM-PM	W.E.	INST	PLATE SIZE TYPE	Telescope Position	DEVELOPMENT			SEEING Trans. STEAD	OBSV.	REMARKS		
		R.A.	DEC.								KIND	TIME	TEMP					
7084	(542) (1269) (1387), (1984), (2066), 76 G M2, B9	15 <sup>h</sup> 32.9 <sup>m</sup>	-14.1°	U.T. APR 25.41007	1 <sup>h</sup> 14 <sup>m</sup> W	U.T. 9 <sup>h</sup> 35 <sup>m</sup> - 10 <sup>h</sup> 06 <sup>m</sup>	wwy	13"	8x10 103a0	W	D19	5 <sup>min</sup>	68°	N	4 4	BAS	thin clouds, seeing 1.5; no image motion	
7085	B447, B451-B453, W5, W7	13 <sup>h</sup> 17.0 <sup>m</sup>	-6.1°	U.T. APR 26.25625	0 <sup>h</sup> 10 <sup>m</sup> E	U.T. 5 <sup>h</sup> 59 <sup>m</sup> - 6 <sup>h</sup> 19 <sup>m</sup>	"	"	"	"	"	"	"	"	3 "	BAS		
7086	B450, B454-B457, W3, W4, W6, W8, W9	13 <sup>h</sup> 41.1 <sup>m</sup>	-4.2°	U.T. APR 26.27361	0 <sup>h</sup> 09 <sup>m</sup> E	U.T. 6 <sup>h</sup> 24 <sup>m</sup> - 6 <sup>h</sup> 44 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7087	B447, B451, B453, W5, W7	13 <sup>h</sup> 17.0 <sup>m</sup>	-6.1°	U.T. APR 26.29097	0 <sup>h</sup> 40 <sup>m</sup> W	U.T. 6 <sup>h</sup> 49 <sup>m</sup> - 7 <sup>h</sup> 09 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7088	B450, B454-B457, W3, W4, W6, W8, W9	13 <sup>h</sup> 41.1 <sup>m</sup>	-4.2°	U.T. APR 26.30694	0 <sup>h</sup> 39 <sup>m</sup> W	U.T. 7 <sup>h</sup> 12 <sup>m</sup> - 7 <sup>h</sup> 32 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7089	(56), (65), (124), (1862), (2417), 75 VF2	14 <sup>h</sup> 19.4 <sup>m</sup>	-9.2°	U.T. APR 28.31667	0 <sup>h</sup> 21 <sup>m</sup> W	U.T. 7 <sup>h</sup> 26 <sup>m</sup> - 7 <sup>h</sup> 46 <sup>m</sup>	"	"	"	"	"	"	"	"	4 5	"	Phoenix fairly dim	
7090	(455), (2397), 79 MF4, T17	14 <sup>h</sup> 19.5 <sup>m</sup>	-1.1°	U.T. APR 28.33333	0 <sup>h</sup> 45 <sup>m</sup> W	U.T. 7 <sup>h</sup> 50 <sup>m</sup> - 8 <sup>h</sup> 10 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7091	(56), (65), (124), (1862), (2417), 75 VF2	14 <sup>h</sup> 19.4 <sup>m</sup>	-9.2°	U.T. APR 28.35000	1 <sup>h</sup> 09 <sup>m</sup> W	U.T. 8 <sup>h</sup> 14 <sup>m</sup> - 8 <sup>h</sup> 34 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7092	(455), (2397), 79 MF4, T17	14 <sup>h</sup> 19.5 <sup>m</sup>	-1.1°	U.T. APR 28.36597	1 <sup>h</sup> 32 <sup>m</sup> W	U.T. 8 <sup>h</sup> 37 <sup>m</sup> - 8 <sup>h</sup> 57 <sup>m</sup>	"	"	"	"	"	"	"	"	"	4	"	seeing 1.1, no image motion.
7093	B113, B122, W11	14 <sup>h</sup> 34.8 <sup>m</sup>	+10.0°	U.T. APR 28.38681	1 <sup>h</sup> 53 <sup>m</sup> W	U.T. 9 <sup>h</sup> 02 <sup>m</sup> - 9 <sup>h</sup> 32 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	plate incorrectly marked 7095 upper left; correct upper right
7094	(238), (1386), 78 QB2, 78 TB7	15 <sup>h</sup> 47.6 <sup>m</sup>	-3.7°	U.T. APR 28.41042	1 <sup>h</sup> 14 <sup>m</sup> W	U.T. 9 <sup>h</sup> 36 <sup>m</sup> - 10 <sup>h</sup> 06 <sup>m</sup>	"	"	"	"	"	"	"	"	"	5	"	"
7095	B113, B122, W11	14 <sup>h</sup> 34.8 <sup>m</sup>	+10.0°	U.T. APR 28.43403	3 <sup>h</sup> 01 <sup>m</sup> W	U.T. 10 <sup>h</sup> 10 <sup>m</sup> - 10 <sup>h</sup> 40 <sup>m</sup>	"	"	"	"	"	"	"	"	"	4	"	"
7096	(238), (1386), 78 QB2, 78 TB7	15 <sup>h</sup> 47.6 <sup>m</sup>	-3.7°	U.T. APR 28.45972	2 <sup>h</sup> 25 <sup>m</sup> W	U.T. 10 <sup>h</sup> 47 <sup>m</sup> - 11 <sup>h</sup> 17 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
7097	C / BOWELL	18 <sup>h</sup> 17.1 <sup>m</sup>	-22.2°	U.T. APR 28.47708	0 <sup>h</sup> 09 <sup>m</sup> W	U.T. 11 <sup>h</sup> 22 <sup>m</sup> - 11 <sup>h</sup> 32 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3	"	some twilight
7098	B445	12 <sup>h</sup> 37.0 <sup>m</sup>	-10.6°	U.T. MAY 20.15903	0 <sup>h</sup> 12 <sup>m</sup> E	U.T. 3 <sup>h</sup> 34 <sup>m</sup> - 4 <sup>h</sup> 04 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3 5	"	Much volcanic dust in atmosphere. PHX bright. 0.256 f.p. = 0.22 easily resolved.
7099	B454, B456, W3-U5	13 <sup>h</sup> 20.7 <sup>m</sup>	-3.9°	U.T. MAY 20.18333	0 <sup>h</sup> 27 <sup>m</sup> E	U.T. 4 <sup>h</sup> 09 <sup>m</sup> - 4 <sup>h</sup> 39 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"
7100	B471, B473, B475, B476	13 <sup>h</sup> 54.9 <sup>m</sup>	-7.2°	U.T. MAY 20.20694	0 <sup>h</sup> 21 <sup>m</sup> E	U.T. 4 <sup>h</sup> 43 <sup>m</sup> - 5 <sup>h</sup> 13 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"
7101	B445	12 <sup>h</sup> 37.0 <sup>m</sup>	-10.6°	U.T. MAY 20.23125	1 <sup>h</sup> 32 <sup>m</sup> W	U.T. 5 <sup>h</sup> 18 <sup>m</sup> - 5 <sup>h</sup> 48 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
7102	B454, B456, W3-W5	13 <sup>h</sup> 20.7 <sup>m</sup>	-3.9°	U.T. MAY 20.25833	1 <sup>h</sup> 21 <sup>m</sup> W	U.T. 5 <sup>h</sup> 57 <sup>m</sup> - 6 <sup>h</sup> 27 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	finder field not familiar; set on nominal position
7103	B471, B473, B475, B476	13 <sup>h</sup> 54.9 <sup>m</sup>	-7.2°	U.T. MAY 20.28194	1 <sup>h</sup> 27 <sup>m</sup> W	U.T. 6 <sup>h</sup> 31 <sup>m</sup> - 7 <sup>h</sup> 01 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	Volcanic ash cloud less dense. PHX bright, seeing 0.9
7104	NONE	12 <sup>h</sup> 13.7 <sup>m</sup>	-3.5°	U.T. MAY 21.15833	0 <sup>h</sup> 15 <sup>m</sup> W	U.T. 3 <sup>h</sup> 33 <sup>m</sup> - 4 <sup>h</sup> 03 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
7105	B445	12 <sup>h</sup> 37.0 <sup>m</sup>	-10.5°	U.T. MAY 21.18333	0 <sup>h</sup> 26 <sup>m</sup> W	U.T. 4 <sup>h</sup> 09 <sup>m</sup> - 4 <sup>h</sup> 39 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	"
7106	NONE	12 <sup>h</sup> 13.7 <sup>m</sup>	-3.5°	U.T. MAY 21.20764	1 <sup>h</sup> 26 <sup>m</sup> W	U.T. 4 <sup>h</sup> 44 <sup>m</sup> - 5 <sup>h</sup> 14 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"
7107	B465, B466	14 <sup>h</sup> 50.8 <sup>m</sup>	-16.3°	U.T. MAY 21.22718	0 <sup>h</sup> 49 <sup>m</sup> E	U.T. 5 <sup>h</sup> 18 <sup>m</sup> - 5 <sup>h</sup> 38 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	4	"	"
7108	B445	12 <sup>h</sup> 37.0 <sup>m</sup>	-10.5°	U.T. MAY 21.24792	1 <sup>h</sup> 59 <sup>m</sup> W	U.T. 5 <sup>h</sup> 42 <sup>m</sup> - 6 <sup>h</sup> 12 <sup>m</sup>	"	"	"	"	"	"	"	"	"	5	"	"
7109	B465, B466	14 <sup>h</sup> 50.8 <sup>m</sup>	-16.3°	U.T. MAY 21.26806	0 <sup>h</sup> 09 <sup>m</sup> W	U.T. 6 <sup>h</sup> 16 <sup>m</sup> - 6 <sup>h</sup> 36 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	"
7110	76 G 22, W10	15 <sup>h</sup> 55.0 <sup>m</sup>	-16.0°	U.T. MAY 21.28403	0 <sup>h</sup> 29 <sup>m</sup> E	U.T. 6 <sup>h</sup> 39 <sup>m</sup> - 6 <sup>h</sup> 59 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	"
7111	79 Q L1, B5, B114	15 <sup>h</sup> 50.9 <sup>m</sup>	-23.7°	U.T. MAY 21.30069	0 <sup>h</sup> 04 <sup>m</sup> E	U.T. 7 <sup>h</sup> 03 <sup>m</sup> - 7 <sup>h</sup> 23 <sup>m</sup>	"	"	"	"	"	"	"	"	"	4	"	"



NEG #	OBJECT OR GUIDE	POSITION		DATE 1982	H.A. END	EXPOSURE MST OR U.T.	W.E.	INST. 13"	PLATE SIZE TYPE	telescope Position	DEVELOPMENT			SEEING	OBSV.	REMARKS		
		R.A.	DEC.								KIND	TIME	TEMP				TRANS.	STEAD
7140	W17-W27	15 <sup>h</sup> 52.3 <sup>m</sup>	-21.5	U.T. JUN 17.22778	0 <sup>h</sup> 02 <sup>m</sup> W	V.T. 5 <sup>h</sup> 13 <sup>m</sup> -5 <sup>h</sup> 43 <sup>m</sup>	"	"	8x10.103a0	W	D19	5 <sup>min</sup>	68°	N	3	4	BAS	
7141	B470	13 <sup>h</sup> 59.6 <sup>m</sup>	-7.7	U.T. JUN 17.25139	2 <sup>h</sup> 47 <sup>m</sup> W	U.T. 5 <sup>h</sup> 47 <sup>m</sup> -6 <sup>h</sup> 17 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3	"	
7142	B462-B464	14 <sup>h</sup> 53.7 <sup>m</sup>	-11.5	U.T. JUN 17.29535	2 <sup>h</sup> 08 <sup>m</sup> W	U.T. 6 <sup>h</sup> 21 <sup>m</sup> -6 <sup>h</sup> 52 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7143	W17-W27	15 <sup>h</sup> 52.3 <sup>m</sup>	-21.5	U.T. JUN 17.29931	1 <sup>h</sup> 50 <sup>m</sup> W	U.T. 6 <sup>h</sup> 56 <sup>m</sup> -7 <sup>h</sup> 26 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7144	B462-B464	14 <sup>h</sup> 54.3 <sup>m</sup>	-11.3	U.T. JUN 18.17708	0 <sup>h</sup> 09 <sup>m</sup> E	U.T. 4 <sup>h</sup> 00 <sup>m</sup> -4 <sup>h</sup> 30 <sup>m</sup>	"	"	"	"	"	"	"	"	4	4	"	weak twilight at start
7145	B482, W10	15 <sup>h</sup> 39.5 <sup>m</sup>	-13.0	U.T. JUN 18.20069	0 <sup>h</sup> 20 <sup>m</sup> E	U.T. 4 <sup>h</sup> 34 <sup>m</sup> -5 <sup>h</sup> 04 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7146	B212	17 <sup>h</sup> 09.0 <sup>m</sup>	-10.0	U.T. JUN 18.22083	1 <sup>h</sup> 25 <sup>m</sup> E	U.T. 5 <sup>h</sup> 08 <sup>m</sup> -5 <sup>h</sup> 28 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7147	B462-B464	14 <sup>h</sup> 54.3 <sup>m</sup>	-11.3	U.T. JUN 18.24097	1 <sup>h</sup> 21 <sup>m</sup> W	U.T. 5 <sup>h</sup> 32 <sup>m</sup> -6 <sup>h</sup> 02 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7148	B482, W10	15 <sup>h</sup> 39.5 <sup>m</sup>	-13.0	U.T. JUN 18.26528	1 <sup>h</sup> 13 <sup>m</sup> W	U.T. 6 <sup>h</sup> 07 <sup>m</sup> -6 <sup>h</sup> 37 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7149	B212	17 <sup>h</sup> 09.0 <sup>m</sup>	-10.0	U.T. JUN 18.28542	0 <sup>h</sup> 08 <sup>m</sup> W	U.T. 6 <sup>h</sup> 41 <sup>m</sup> -7 <sup>h</sup> 01 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7150	B471, B475	13 <sup>h</sup> 46.0 <sup>m</sup>	-8.0	U.T. JUN 19.17708	1 <sup>h</sup> 02 <sup>m</sup> W	U.T. 4 <sup>h</sup> 00 <sup>m</sup> -4 <sup>h</sup> 30 <sup>m</sup>	"	"	"	"	"	"	"	"	3	3	"	
7151	B152	16 <sup>h</sup> 49.8 <sup>m</sup>	-25.8	U.T. JUN 19.21667	1 <sup>h</sup> 07 <sup>m</sup> W	U.T. 5 <sup>h</sup> 02 <sup>m</sup> -5 <sup>h</sup> 22 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7152	B471, B475	13 <sup>h</sup> 46.0 <sup>m</sup>	-8.0	U.T. JUN 19.23681	2 <sup>h</sup> 28 <sup>m</sup> W	U.T. 5 <sup>h</sup> 26 <sup>m</sup> -5 <sup>h</sup> 56 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7153	B152	16 <sup>h</sup> 49.8 <sup>m</sup>	-25.8	U.T. JUN 19.25625	0 <sup>h</sup> 05 <sup>m</sup> E	U.T. 5 <sup>h</sup> 59 <sup>m</sup> -6 <sup>h</sup> 19 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7154	38G, 78R25	17 <sup>h</sup> 43.5 <sup>m</sup>	-15.2	U.T. JUN 19.27500	0 <sup>h</sup> 38 <sup>m</sup> E	U.T. 6 <sup>h</sup> 26 <sup>m</sup> -6 <sup>h</sup> 46 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	Seeing 1.4
7155	B232	17 <sup>h</sup> 39.5 <sup>m</sup>	-31.4	U.T. JUN 19.29236	0 <sup>h</sup> 10 <sup>m</sup> E	U.T. 6 <sup>h</sup> 51 <sup>m</sup> -7 <sup>h</sup> 11 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7156	38GC, 78R25	17 <sup>h</sup> 43.5 <sup>m</sup>	-15.2	U.T. JUN 19.31042	0 <sup>h</sup> 13 <sup>m</sup> W	U.T. 7 <sup>h</sup> 17 <sup>m</sup> -7 <sup>h</sup> 37 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	
7157	B232	17 <sup>h</sup> 39.5 <sup>m</sup>	-31.4	U.T. JUN 19.32708	0 <sup>h</sup> 04 <sup>m</sup> W	U.T. 7 <sup>h</sup> 41 <sup>m</sup> -8 <sup>h</sup> 01 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	"	"	
7158	B184	18 <sup>h</sup> 38.2 <sup>m</sup>	-26.2	U.T. JUN 19.34444	0 <sup>h</sup> 06 <sup>m</sup> W	U.T. 8 <sup>h</sup> 06 <sup>m</sup> -8 <sup>h</sup> 26 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	"	"	First out of new box of plates. Exposed on same plate as 7157. Moved s. between exposures. Exposed on same plates as 7157.
7159	AGK+21°1949	19 <sup>h</sup> 14.1 <sup>m</sup>	+21.3	U.T. JUN 19.35	0 <sup>h</sup> 22 <sup>m</sup> E	U.T. 8 <sup>h</sup> 31 <sup>m</sup> 10 <sup>s</sup> exposure	"	"	"	"	"	"	"	"	"	4	"	
7160	B184	18 <sup>h</sup> 38.2 <sup>m</sup>	-26.2	U.T. JUN 19.38750	1 <sup>h</sup> 08 <sup>m</sup> W	U.T. 9 <sup>h</sup> 08 <sup>m</sup> -9 <sup>h</sup> 28 <sup>m</sup>	"	"	"	"	"	"	"	"	"	3	"	
7161	B465, B481	14 <sup>h</sup> 31.7 <sup>m</sup>	-18.3	U.T. JUN 20.17708	0 <sup>h</sup> 21 <sup>m</sup> W	U.T. 4 <sup>h</sup> 00 <sup>m</sup> -4 <sup>h</sup> 30 <sup>m</sup>	"	"	"	"	"	"	"	"	2	4	"	some clouds; seeing 1.2
7162	B465, B481	"	"	U.T. JUN 20.24375	1 <sup>h</sup> 57 <sup>m</sup> W	U.T. 5 <sup>h</sup> 36 <sup>m</sup> -6 <sup>h</sup> 06 <sup>m</sup>	"	"	8x10	"	"	"	"	"	4	3	"	
7163	C/Bowell	18 <sup>h</sup> 11.1 <sup>m</sup>	-22.5	U.T. JUN 20.26424	1 <sup>h</sup> 21 <sup>m</sup> E	U.T. 6 <sup>h</sup> 13 <sup>m</sup> -6 <sup>h</sup> 28 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7164	AGK+21°1949	19 <sup>h</sup> 14.1 <sup>m</sup>	+21.3	U.T. JUN 20.27	2 <sup>h</sup> 15 <sup>m</sup> E	U.T. 6 <sup>h</sup> 34 <sup>m</sup> 5 <sup>s</sup> 6 <sup>h</sup> 34.5 <sup>m</sup> 5 <sup>s</sup> 6 <sup>h</sup> 35.5 <sup>m</sup>	"	"	"	"	"	"	"	"	"	"	"	
7165	(699)	19 <sup>h</sup> 51.7 <sup>m</sup>	+1.1	U.T. JUN 21.30833	1 <sup>h</sup> 52 <sup>m</sup> E	U.T. 7 <sup>h</sup> 14 <sup>m</sup> -7 <sup>h</sup> 34 <sup>m</sup>	"	"	"	"	"	"	"	"	3	5	"	seeing < 1.0
7166	(1370), B7	19 <sup>h</sup> 16.2 <sup>m</sup>	-28.7	U.T. JUN 21.32500	0 <sup>h</sup> 56 <sup>m</sup> E	U.T. 7 <sup>h</sup> 38 <sup>m</sup> -7 <sup>h</sup> 58 <sup>m</sup>	"	"	4x5	"	"	"	"	"	"	3	"	
7167	(699)	19 <sup>h</sup> 51.7 <sup>m</sup>	+1.1	U.T. JUN 21.34306	1 <sup>h</sup> 02 <sup>m</sup> E	U.T. 8 <sup>h</sup> 04 <sup>m</sup> -8 <sup>h</sup> 24 <sup>m</sup>	"	"	8x10	"	"	"	"	"	"	5	"	

1 plate \*

First out of new box of plates. Exposed on same plate as 7157. Moved s. between exposures. Exposed on same plates as 7157.

some clouds; seeing 1.2

seeing < 1.0



















