

Herschel II

INTRODUCTION

Many astronomers have observed the Messier list of deep sky objects, catalogued by Charles Messier in the late 1700s. A subset of dedicated observers continued onward to the Herschel 400 list, a demanding set of 400 deep sky objects from William Herschel's catalogue of 2478 objects from the late 1700's. Observers' skills are pushed to the limit for this long term observing project.

After several observers completed the Herschel 400 program, the excitement of logging object No. 400 was dampened by a "what's next?" letdown. Their thirst for more led to a new observing program -- the Herschel II, also developed by the Rose City Astronomers of Portland, Oregon. Consisting of another 400 deep sky objects catalogued by William Herschel, the Herschel II is the next level observing project after the Ancient City Astronomers' Herschel 400 program.

The Herschel II observing program is an advanced level project focused on improving observers' technical skills by taking thorough field notes and developing accurate technical object descriptions.

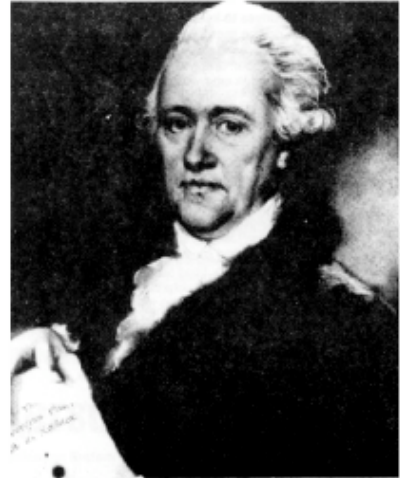


Photo Courtesy of Yerkes Observatory

Friedrich Wilhelm Herschel

ABOUT THE PROGRAM

The 400 objects in this program consist of 323 galaxies, 41 open clusters, 21 nebulae, 9 planetary nebula, 3 cluster-nebula, and 3 globular clusters. Most of the objects are between magnitude 11 and 13. While an 8" aperture scope under good dark skies will be able to do a good portion of the list, a 10" aperture scope or larger will probably be needed to complete the whole program. Since many of the objects are in fields containing numerous other objects, some even superimposed on top of each other, identifying the correct object under these circumstances is a major challenge. Using an advanced set of observing charts will be a necessity. MegaStar 3.1, a computerized charting program, is highly recommended along with "Uranometria."

Herschel II List

PN: planetary nebula SG: spiral galaxy IG: irregular galaxy
 BN: bright nebula EG: elliptical galaxy OC: open cluster
 SR: supernova remnant GC: globular cluster

NGC	Type	Mag	RA	Dec	Con
23	SG	12	00h 09m 53s	+25° 55' 25"	Peg
24	SG	11.6	00h 09m 56s	-24° 57' 49"	Scl
125	SG	12.1	00h 28m 50s	+02° 50' 19"	Psc
151	SG	11.6	00h 34m 03s	-09° 42' 18"	Cet
175	SG	12.8	00h 37m 22s	-19° 56' 05"	Cet
198	SG	14.1	00h 39m 23s	+02° 47' 52"	Psc
206	OC		00h 40m 31s	+40° 44' 22"	And
214	SG	12.3	00h 41m 28s	+25° 30' 00"	And
217	SG	13	00h 41m 34s	-10° 01' 20"	Cet
315	EG	11.1	00h 57m 49s	+30° 21' 09"	Psc
337	SG	11.6	00h 59m 50s	-07° 34' 40"	Cet
357	SG	12	01h 03m 22s	-06° 20' 22"	Cet
410	EG	11.5	01h 10m 59s	+33° 09' 06"	Psc
428	SG	11.5	01h 12m 56s	+00° 58' 55"	Cet
499	SG	12.1	01h 23m 11s	+33° 27' 37"	Psc
513	SG	13.3	01h 24m 27s	+33° 47' 58"	And
514	SG	11.7	01h 24m 04s	+12° 55' 00"	Psc
604	BN	10	01h 34m 33s	+30° 47' 03"	Tri
636	EG	11.5	01h 39m 06s	-07° 30' 46"	Cet
660	SG	11.1	01h 43m 02s	+13° 38' 34"	Psc
665	SG	12.1	01h 44m 56s	+10° 25' 22"	Psc
672	SG	10.8	01h 47m 54s	+27° 25' 59"	Tri
706	SG	12.5	01h 51m 50s	+06° 17' 44"	Psc
718	SG	11.6	01h 53m 13s	+04° 11' 48"	Psc
741	EG	11.3	01h 56m 21s	+05° 37' 44"	Psc
821	EG	10.8	02h 08m 21s	+10° 59' 44"	Ari
890	SG	11.5	02h 22m 01s	+33° 15' 47"	Tri
896	BN	8	02h 25m 28s	+62° 01' 10"	Cas
925	SG	10	02h 27m 17s	+33° 34' 42"	Tri
991	SG	12.1	02h 35m 33s	-07° 09' 20"	Cet
1003	SG	11.5	02h 39m 16s	+40° 52' 22"	Per
1012	SG	13.1	02h 39m 15s	+30° 09' 05"	Ari
1032	SG	13.1	02h 39m 24s	+01° 05' 35"	Cet
1035	SG	12.1	02h 39m 29s	-08° 08' 01"	Cet

NGC	Type	Mag	RA	Dec	Con
1045	SG	13	02h 40m 29s	-11° 16' 42"	Cet
1058	SG	11.5	02h 43m 30s	+37° 20' 29"	Per
1060	EG	13.3	02h 43m 15s	+32° 25' 30"	Tri
1070	SG	13	02h 43m 22s	+04° 58' 05"	Cet
1073	SG	11	02h 43m 41s	+01° 22' 31"	Cet
1087	SG	11	02h 46m 25s	-00° 29' 59"	Cet
1090	SG	11.8	02h 46m 34s	-00° 14' 51"	Cet
1114	SG	13	02h 49m 07s	-16° 59' 37"	Eri
1156	IG	11.6	02h 59m 42s	+25° 14' 11"	Ari
1161	SG	12.6	03h 01m 14s	+44° 53' 49"	Per
1162	EG	13	02h 58m 56s	-12° 23' 56"	Eri
1169	SG	11.6	03h 03m 35s	+46° 23' 08"	Per
1172	EG	12	03h 01m 36s	-14° 50' 13"	Eri
1175	SG	12.8	03h 04m 32s	+42° 20' 22"	Per
1184	SG	12.3	03h 16m 45s	+80° 47' 32"	Cep
1187	SG	11.3	03h 02m 38s	-22° 52' 03"	Eri
1193	OC	12.6	03h 05m 56s	+44° 22' 59"	Per
1199	EG	11.5	03h 03m 38s	-15° 36' 49"	Eri
1207	SG	13.6	03h 08m 15s	+38° 22' 57"	Per
1209	EG	11.3	03h 06m 03s	-15° 36' 42"	Eri
1325	SG	11.6	03h 24m 25s	-21° 32' 41"	Eri
1332	SG	10.3	03h 26m 17s	-21° 20' 04"	Eri
1348	OC		03h 34m 08s	+51° 25' 14"	Per
1353	SG	11.3	03h 32m 03s	-20° 49' 09"	Eri
1400	EG	11.1	03h 39m 30s	-18° 41' 00"	Eri
1421	SG	11.1	03h 42m 29s	-13° 29' 18"	Eri
1491	BN		04h 03m 14s	+51° 18' 58"	Per
1507	SG	12.1	04h 04m 27s	-02° 11' 20"	Eri
1514	PN	10.8	04h 09m 17s	+30° 46' 33"	Tau
1579	BN	11	04h 30m 14s	+35° 16' 47"	Per
1582	OC	7	04h 32m 00s	+43° 50' 53"	Per
1587	EG	11.6	04h 30m 40s	+00° 39' 40"	Tau
1600	EG	12	04h 31m 40s	-05° 05' 16"	Eri
1605	OC	10.6	04h 34m 54s	+45° 16' 11"	Per
1618	SG	12.6	04h 36m 07s	-03° 08' 57"	Eri
1624	OC	11.8	04h 40m 37s	+50° 27' 42"	Per
1637	SG	11	04h 41m 28s	-02° 51' 29"	Eri
1662	OC	6.4	04h 48m 29s	+10° 55' 49"	Ori
1663	OC		04h 49m 20s	+13° 08' 52"	Ori

NGC	Type	Mag	RA	Dec	Con
1700	EG	11	04h 56m 56s	-04° 51' 53"	Eri
1750	OC	9.8	05h 04m 00s	+23° 38' 45"	Tau
1762	SG	13.5	05h 03m 37s	+01° 34' 25"	Ori
1778	OC	7.6	05h 08m 06s	+37° 01' 22"	Aur
1779	SG	13	05h 05m 18s	-09° 08' 51"	Eri
1832	SG	11.3	05h 12m 03s	-15° 41' 16"	Lep
1883	OC	12	05h 25m 54s	+46° 29' 25"	Aur
1977	OC	4.1	05h 35m 18s	-04° 51' 00"	Ori
1990	BN		05h 36m 12s	-04° 51' 00"	Ori
2023	BN	9	05h 41m 36s	-02° 16' 00"	Ori
2071	BN	8	05h 47m 07s	+00° 17' 39"	Ori
2112	OC	9.1	05h 53m 45s	+00° 24' 39"	Ori
2139	SG	11.6	06h 01m 08s	-23° 40' 20"	Lep
2170	BN	12	06h 07m 31s	-06° 23' 53"	Mon
2182	BN	12	06h 09m 30s	-06° 20' 00"	Mon
2192	OC	10.8	06h 15m 17s	+39° 51' 19"	Aur
2196	SG	11.1	06h 12m 09s	-21° 48' 24"	Lep
2236	OC	8.5	06h 29m 40s	+06° 49' 50"	Mon
2245	BN		06h 32m 41s	+10° 09' 24"	Mon
2252	OC	7.6	06h 34m 43s	+05° 21' 59"	Mon
2253	OC		06h 42m 00s	+65° 50' 35"	Cam
2254	OC	9.1	06h 35m 50s	+07° 40' 24"	Mon
2259	OC	10.8	06h 38m 21s	+10° 53' 01"	Mon
2261	BN	10	06h 39m 12s	+08° 44' 00"	Mon
2269	OC	10	06h 43m 17s	+04° 37' 28"	Mon
2274	EG	13.6	06h 47m 17s	+33° 34' 02"	Gem
2283	SG	12.8	06h 45m 53s	-18° 12' 38"	CMA
2302	OC	8.8	06h 51m 57s	-07° 05' 04"	Mon
2309	OC	10.5	06h 56m 04s	-07° 10' 28"	Mon
2316	BN		06h 59m 41s	-07° 46' 40"	Mon
2331	OC	8.5	07h 07m 00s	+27° 15' 42"	Mon
2339	SG	11.6	07h 08m 21s	+18° 46' 49"	Gem
2346	PN	11.8	07h 09m 23s	+00° 48' 24"	Mon
2347	SG	12.5	07h 16m 04s	+64° 42' 40"	Cam
2359	BN		07h 18m 31s	-13° 13' 38"	CMA
2366	IG	10.8	07h 28m 43s	+69° 11' 22"	Cam
2367	OC	7.9	07h 20m 05s	-21° 53' 03"	CMA
2374	OC	8	07h 23m 42s	-13° 16' 00"	CMA
2396	OC	7.4	07h 28m 03s	-11° 43' 11"	Pup

NGC	Type	Mag	RA	Dec	Con
2414	OC	7.9	07h 33m 13s	-15° 27' 14"	Pup
2415	IG	12.5	07h 36m 57s	+35° 14' 31"	Lyn
2432	OC	10.1	07h 40m 54s	-19° 05' 09"	Pup
2467	OC	7.0	07h 52m 30s	-26° 25' 48"	Pup
2493	SG	13.1	08h 00m 24s	+39° 49' 50"	Lyn
2500	SG	11.6	08h 01m 53s	+50° 44' 15"	Lyn
2525	SG	11.6	08h 05m 38s	-11° 25' 41"	Pup
2541	SG	11.8	08h 14m 40s	+49° 03' 41"	Lyn
2610	PN	12.8	08h 33m 24s	-16° 08' 57"	Hya
2639	SG	11.8	08h 43m 38s	+50° 12' 20"	UMa
2756	SG	13.1	09h 09m 01s	+53° 50' 57"	UMa
2765	SG	13.3	09h 07m 37s	+03° 23' 33"	Hya
2781	SG	11.5	09h 11m 27s	-14° 49' 01"	Hya
2784	SG	10.1	09h 12m 19s	-24° 10' 18"	Hya
2805	SG	11.3	09h 20m 20s	+64° 06' 09"	UMa
2855	SG	11.6	09h 21m 27s	-11° 54' 34"	Hya
2880	SG	11.6	09h 29m 35s	+62° 29' 26"	UMa
2889	SG	11.8	09h 27m 12s	-11° 38' 37"	Hya
2986	SG	10.8	09h 44m 16s	-21° 16' 45"	Hya
3067	SG	11.6	09h 58m 22s	+32° 22' 11"	Leo
3078	EG	11.1	09h 58m 24s	-26° 55' 35"	Hya
3065	SG	12	10h 01m 55s	+72° 10' 13"	UMa
3073	SG	13.8	10h 00m 52s	+55° 37' 06"	UMa
3107	SG	13.6	10h 04m 22s	+13° 37' 17"	Leo
3145	SG	12.3	10h 10m 10s	-12° 26' 07"	Hya
3156	SG	12.8	10h 12m 41s	+03° 07' 45"	Sex
3158	EG	11.8	10h 13m 51s	+38° 45' 54"	LMi
3162	SG	11.6	10h 13m 32s	+22° 44' 17"	Leo
3177	SG	12.3	10h 16m 34s	+21° 07' 23"	Leo
3225	SG	13.3	10h 25m 10s	+58° 08' 59"	UMa
3254	SG	11.5	10h 29m 20s	+29° 29' 31"	LMi
3274	IG	12.8	10h 32m 17s	+27° 40' 07"	Leo
3301	SG	11.3	10h 36m 56s	+21° 52' 55"	Leo
3319	SG	11.3	10h 39m 09s	+41° 41' 14"	UMa
3338	SG	10.8	10h 42m 07s	+13° 44' 48"	UMa
3359	SG	10.5	10h 46m 37s	+63° 13' 26"	UMa
3424	SG	13.1	10h 51m 47s	+32° 54' 00"	LMi
3430	SG	11.5	10h 52m 12s	+32° 56' 58"	LMi
3507	SG	11.3	11h 03m 25s	+18° 08' 09"	Leo

NGC	Type	Mag	RA	Dec	Con
3511	SG	11.6	11h 03m 24s	-23° 05' 11"	Crt
3513	SG	12	11h 03m 46s	-23° 14' 39"	Crt
3516	SG	11.6	11h 06m 48s	+72° 34' 06"	UMa
3524	SG	13.3	11h 06m 32s	+11° 23' 07"	Leo
3547	SG	12.8	11h 09m 56s	+10° 43' 15"	Leo
3583	SG	11.6	11h 14m 11s	+48° 19' 06"	UMa
3585	EG	10	11h 13m 17s	-26° 45' 18"	Hya
3596	SG	11.6	11h 15m 06s	+14° 47' 00"	Leo
3599	EG	11.8	11h 15m 24s	+18° 07' 00"	Leo
3605	EG	12.3	11h 16m 48s	+18° 01' 00"	Leo
3611	SG	12.1	11h 17m 30s	+04° 33' 19"	Leo
3622	SG	13.1	11h 20m 12s	+67° 14' 29"	UMa
3636	EG	12.3	11h 20m 25s	-10° 16' 55"	Crt
3637	SG	12.6	11h 20m 40s	-10° 15' 27"	Crt
3642	SG	11.1	11h 22m 18s	+59° 04' 27"	UMa
3646	SG	11.1	11h 21m 43s	+20° 10' 11"	Leo
3652	SG	12.6	11h 22m 39s	+37° 45' 53"	UMa
3659	SG	12.6	11h 23m 45s	+17° 49' 04"	Leo
3666	SG	12.5	11h 24m 26s	+11° 20' 31"	Leo
3668	SG	12.3	11h 25m 30s	+63° 26' 46"	UMa
3669	SG	12.8	11h 25m 27s	+57° 43' 16"	UMa
3672	SG	12	11h 25m 02s	-09° 47' 43"	Crt
3681	SG	11.6	11h 26m 30s	+16° 51' 47"	Leo
3682	SG	12.5	11h 27m 41s	+66° 35' 24"	Dra
3683	SG	12.6	11h 27m 32s	+56° 52' 37"	UMa
3689	SG	12.3	11h 28m 11s	+25° 39' 40"	Leo
3693	SG	13	11h 28m 11s	-13° 11' 42"	Crt
3705	SG	11.5	11h 30m 07s	+09° 16' 36"	Leo
3732	SG	11	11h 34m 14s	-09° 50' 44"	Crt
3756	SG	11.5	11h 36m 48s	+54° 17' 39"	UMa
3887	SG	11	11h 47m 05s	-16° 51' 17"	Crt
3892	SG	13	11h 48m 01s	-10° 57' 44"	Crt
4013	SG	12.3	11h 58m 31s	+43° 56' 51"	UMa
4024	SG	12.6	11h 58m 31s	-18° 20' 49"	Crv
4039	SG	13	12h 01m 54s	-18° 53' 10"	Crv
4045	SG	12	12h 02m 42s	+01° 58' 38"	Vir
4047	SG	12.8	12h 02m 51s	+48° 38' 11"	UMa
4062	SG	11.1	12h 04m 04s	+31° 53' 44"	UMa
4073	EG	11.3	12h 04m 27s	+01° 53' 45"	Vir

NGC	Type	Mag	RA	Dec	Con
4096	SG	10.8	12h 06m 01s	+47° 28' 41"	UMa
4100	SG	11.1	12h 06m 08s	+49° 34' 58"	UMa
4105	EG	10.6	12h 06m 41s	-29° 45' 38"	Hya
4124	SG	12.1	12h 08m 10s	+10° 22' 42"	Vir
4133	SG	13.1	12h 08m 50s	+74° 54' 14"	Dra
4136	SG	12.1	12h 09m 18s	+29° 55' 39"	Com
4138	SG	11.3	12h 09m 30s	+43° 41' 04"	CVn
4144	SG	11.6	12h 09m 59s	+46° 27' 27"	UMa
4152	SG	12.1	12h 10m 38s	+16° 01' 59"	Com
4157	SG	11.3	12h 11m 05s	+50° 29' 08"	UMa
4168	EG	11.1	12h 12m 17s	+13° 12' 19"	Vir
4169	SG	12.1	12h 12m 19s	+29° 10' 46"	Com
4185	SG	13.5	12h 13m 22s	+28° 30' 38"	Com
4189	SG	11.6	12h 13m 48s	+13° 25' 32"	Com
4212	SG	11.8	12h 15m 39s	+13° 54' 06"	Com
4217	SG	11.1	12h 15m 51s	+47° 05' 28"	CVn
4220	SG	11.3	12h 16m 12s	+47° 52' 59"	CVn
4224	SG	11.8	12h 16m 34s	+07° 27' 42"	Vir
4233	SG	11.8	12h 17m 08s	+07° 37' 26"	Vir
4235	SG	11.6	12h 17m 10s	+07° 11' 28"	Vir
4236	SG	9.6	12h 16m 42s	+69° 27' 45"	Dra
4237	SG	11.6	12h 17m 11s	+15° 19' 26"	Com
4241	SG	11.8	12h 18m 00s	+06° 39' 13"	Vir
4244	SG	10.3	12h 17m 30s	+37° 48' 24"	CVn
4248	SG	12.5	12h 17m 50s	+47° 24' 32"	CVn
4250	SG	13	12h 17m 26s	+70° 48' 08"	Dra
4256	SG	12.6	12h 18m 43s	+65° 53' 54"	Dra
4260	SG	11.8	12h 19m 22s	+06° 05' 55"	Vir
4264	SG	12.8	12h 19m 36s	+05° 50' 48"	Vir
4267	SG	10.8	12h 19m 45s	+12° 47' 53"	Vir
4270	SG	12.1	12h 19m 50s	+05° 27' 47"	Vir
4271	EG	13.6	12h 19m 33s	+56° 44' 11"	UMa
4290	SG	12.8	12h 20m 48s	+58° 05' 33"	UMa
4291	EG	11.5	12h 20m 18s	+75° 22' 14"	Dra
4294	SG	12.1	12h 21m 18s	+11° 30' 37"	Vir
4298	SG	11.3	12h 21m 33s	+14° 36' 24"	Com
4299	SG	12.5	12h 21m 41s	+11° 30' 06"	Vir
4302	SG	11.6	12h 21m 42s	+14° 35' 59"	Com
4310	SG	13.5	12h 22m 26s	+29° 12' 30"	Com

NGC	Type	Mag	RA	Dec	Con
4312	SG	11.6	12h 22m 31s	+15° 32' 15"	Com
4313	SG	12.5	12h 22m 39s	+11° 48' 04"	Vir
4319	SG	13	12h 21m 44s	+75° 19' 19"	Dra
4336	SG	13.6	12h 23m 30s	+19° 25' 36"	Com
4339	EG	11.3	12h 23m 35s	+06° 04' 53"	Vir
4340	SG	11.1	12h 23m 35s	+16° 43' 20"	Com
4343	SG	12.1	12h 23m 39s	+06° 57' 15"	Vir
4359	SG	13.8	12h 24m 11s	+31° 31' 18"	Com
4369	SG	11.6	12h 24m 36s	+39° 22' 58"	CVn
4379	SG	11.6	12h 25m 15s	+15° 36' 26"	Com
4395	SG	10.1	12h 25m 49s	+33° 32' 50"	CVn
4487	SG	11.5	12h 31m 04s	-08° 03' 15"	Vir
4519	SG	11.6	12h 33m 30s	+08° 39' 17"	Vir
4571	SG	11.3	12h 36m 56s	+14° 13' 02"	Com
4586	SG	11.6	12h 38m 28s	+04° 19' 08"	Vir
4605	SG	10.8	12h 40m 00s	+61° 36' 28"	UMa
4608	SG	11.1	12h 41m 13s	+10° 09' 19"	Vir
4612	SG	12.8	12h 41m 33s	+07° 18' 52"	Vir
4639	SG	11.5	12h 42m 52s	+13° 15' 25"	Vir
4647	SG	11.3	12h 43m 30s	+11° 35' 00"	Vir
4691	SG	11.1	12h 48m 13s	-03° 20' 01"	Vir
4742	EG	11.1	12h 51m 48s	-10° 27' 19"	Vir
4880	SG	13.3	13h 00m 10s	+12° 29' 00"	Vir
4902	SG	11.1	13h 01m 00s	-14° 30' 49"	Vir
4904	SG	12.1	13h 00m 59s	-00° 01' 45"	Vir
4914	EG	11.6	13h 00m 43s	+37° 18' 54"	CVn
4915	EG	11.8	13h 01m 28s	-04° 32' 48"	Vir
4928	SG	13.3	13h 03m 00s	-08° 05' 07"	Vir
4939	SG	11.3	13h 04m 14s	-10° 20' 25"	Vir
4941	SG	11.1	13h 04m 13s	-05° 33' 06"	Vir
4956	SG	13.5	13h 05m 01s	+35° 10' 40"	CVn
4981	SG	12.1	13h 08m 49s	-06° 46' 44"	Vir
4984	SG	11.8	13h 08m 57s	-15° 31' 01"	Vir
4999	SG	13.5	13h 09m 33s	+01° 40' 23"	Vir
5012	SG	13.6	13h 11m 37s	+22° 54' 56"	Com
5018	SG	10.8	13h 13m 01s	-19° 31' 06"	Vir
5020	SG	13.3	13h 12m 40s	+12° 35' 58"	Vir
5023	SG	13.1	13h 12m 12s	+44° 02' 17"	CVn
5037	SG	12.8	13h 14m 59s	-16° 35' 28"	Vir

NGC	Type	Mag	RA	Dec	Con
5044	EG	11	13h 15m 24s	-16° 23' 09"	Vir
5053	GC	9.8	13h 16m 27s	+17° 41' 52"	Com
5056	SG	13.6	13h 16m 12s	+30° 57' 00"	Com
5061	EG	11.3	13h 18m 05s	-26° 50' 16"	Hya
5068	SG	10.5	13h 18m 55s	-21° 02' 19"	Vir
5077	EG	11.5	13h 19m 32s	-12° 39' 23"	Vir
5078	SG	12	13h 19m 50s	-27° 24' 36"	Hya
5084	SG	12	13h 20m 17s	-21° 49' 40"	Vir
5087	EG	11	13h 20m 25s	-20° 36' 40"	Vir
5103	SG	13.6	13h 20m 30s	+43° 05' 01"	CVn
5129	EG	13.3	13h 24m 10s	+13° 58' 35"	Vir
5134	SG	12.3	13h 25m 19s	-21° 08' 04"	Vir
5204	SG	11.3	13h 29m 36s	+58° 25' 08"	UMa
5308	SG	11.3	13h 47m 01s	+60° 58' 22"	UMa
5371	SG	10.8	13h 55m 40s	+40° 27' 41"	CVn
5383	SG	11.3	13h 57m 05s	+41° 50' 47"	CVn
5426	SG	12.1	14h 03m 25s	-06° 04' 08"	Vir
5430	SG	12.6	14h 00m 46s	+59° 19' 43"	UMa
5440	SG	13.3	14h 03m 01s	+34° 45' 27"	CVn
5443	SG	13.1	14h 02m 11s	+55° 48' 52"	UMa
5444	EG	12.8	14h 03m 24s	+35° 07' 54"	CVn
5445	SG	14.1	14h 03m 32s	+35° 01' 30"	CVn
5447	BN		14h 02m 28s	+54° 16' 32"	UMa
5448	SG	12.6	14h 02m 50s	+49° 10' 21"	UMa
5462	BN		14h 03m 53s	+54° 21' 54"	UMa
5480	SG	12.6	14h 06m 21s	+50° 43' 31"	UMa
5481	EG	13.5	14h 06m 41s	+50° 43' 23"	UMa
5485	SG	11.5	14h 07m 11s	+55° 00' 05"	UMa
5490	EG	13.3	14h 09m 57s	+17° 32' 44"	Boo
5493	SG	11.5	14h 11m 29s	-05° 02' 39"	Vir
5506	SG	13.6	14h 13m 15s	-03° 12' 27"	Vir
5507	SG	13.6	14h 13m 20s	-03° 08' 55"	Vir
5520	SG	13.3	14h 12m 23s	+50° 20' 53"	Boo
5523	SG	13.3	14h 14m 51s	+25° 19' 03"	Boo
5529	SG	12.8	14h 15m 34s	+36° 13' 35"	Boo
5533	SG	11.8	14h 16m 08s	+35° 20' 37"	Boo
5548	SG	12.5	14h 18m 00s	+25° 08' 12"	Boo
5560	SG	12.3	14h 20m 04s	+03° 59' 32"	Vir
5582	EG	13	14h 20m 43s	+39° 41' 36"	Boo

NGC	Type	Mag	RA	Dec	Con
5585	SG	10.8	14h 19m 48s	+56° 43' 46"	UMa
5590	SG	13.6	14h 21m 38s	+35° 12' 16"	Boo
5595	SG	12.5	14h 24m 13s	-16° 43' 21"	Lib
5597	SG	12.1	14h 24m 27s	-16° 45' 46"	Lib
5600	SG	12.6	14h 23m 50s	+14° 38' 20"	Boo
5602	SG	13.5	14h 22m 19s	+50° 30' 07"	Boo
5605	SG	13.1	14h 25m 07s	-13° 09' 48"	Lib
5638	EG	11.3	14h 29m 40s	+03° 14' 00"	Vir
5660	SG	11.8	14h 29m 50s	+49° 37' 20"	Boo
5668	SG	11.5	14h 33m 24s	+04° 27' 02"	Vir
5687	EG	11.8	14h 34m 52s	+54° 28' 32"	Boo
5728	SG	11.3	14h 42m 24s	-17° 15' 12"	Lib
5750	SG	13.1	14h 46m 11s	-00° 13' 25"	Vir
5775	SG	11.3	14h 53m 57s	+03° 32' 41"	Vir
5791	EG	12.8	14h 58m 46s	-19° 16' 02"	Lib
5806	SG	11.6	15h 00m 00s	+01° 53' 28"	Vir
5812	EG	11.1	15h 00m 56s	-07° 27' 29"	Lib
5813	EG	10.6	15h 01m 11s	+01° 42' 06"	Vir
5831	EG	11.5	15h 04m 07s	+01° 13' 10"	Vir
5838	EG	10.8	15h 05m 26s	+02° 05' 57"	Vir
5850	SG	11	15h 07m 08s	+01° 32' 39"	Vir
5854	SG	11.8	15h 07m 48s	+02° 34' 07"	Vir
5861	SG	12.1	15h 09m 16s	-11° 19' 18"	Lib
5864	SG	12.8	15h 09m 34s	+03° 03' 10"	Vir
5878	SG	11.5	15h 13m 46s	-14° 16' 14"	Lib
5879	SG	11.5	15h 09m 47s	+57° 00' 02"	Dra
5899	SG	11.8	15h 15m 03s	+42° 02' 58"	Boo
5970	SG	11.3	15h 38m 30s	+12° 11' 12"	Ser
5985	SG	11	15h 39m 37s	+59° 19' 54"	Dra
6015	SG	11.1	15h 51m 25s	+62° 18' 35"	Dra
6058	PN	13	16h 04m 27s	+40° 40' 59"	Her
6070	SG	11.6	16h 09m 59s	+00° 42' 31"	Ser
6106	SG	12.1	16h 18m 47s	+07° 24' 39"	Her
6155	SG	13	16h 26m 08s	+48° 22' 01"	Her
6166	EG	12	16h 28m 38s	+39° 33' 06"	Her
6181	SG	11.8	16h 32m 21s	+19° 49' 34"	Her
6239	SG	12.5	16h 50m 05s	+42° 44' 22"	Her
6340	SG	11	17h 10m 26s	+72° 18' 22"	Dra
6507	OC	9.6	17h 59m 51s	-17° 27' 01"	Sgr

NGC	Type	Mag	RA	Dec	Con
6526	BN		18h 04m 06s	-24° 26' 31"	Sgr
6548	SG	13.1	18h 05m 59s	+18° 35' 13"	Her
6596	OC		18h 17m 34s	-16° 39' 02"	Sgr
6604	OC	6.5	18h 18m 03s	-12° 14' 35"	Ser
6717	GC	9.1	18h 55m 06s	-22° 42' 00"	Sgr
6772	PN	12.6	19h 14m 36s	-02° 42' 24"	Aql
6793	OC		19h 23m 12s	+22° 11' 00"	Vul
6800	OC		19h 27m 12s	+25° 08' 00"	Vul
6804	PN	12	19h 31m 36s	+09° 13' 31"	Aql
6814	SG	11.1	19h 42m 41s	-10° 19' 24"	Aql
6824	SG	13.1	19h 43m 41s	+56° 06' 33"	Cyg
6857	BN		20h 01m 48s	+33° 31' 00"	Cyg
6888	BN		20h 12m 00s	+38° 21' 00"	Cyg
6894	PN	12.3	20h 16m 24s	+30° 33' 55"	Cyg
6907	SG	11.3	20h 25m 07s	-24° 48' 30"	Cap
6960	SR	7	20h 45m 42s	+30° 43' 00"	Cyg
6991	OC		20h 56m 36s	+47° 25' 00"	Cyg
6992	BN	7	20h 56m 24s	+31° 43' 00"	Cyg
6997	OC	10	20h 56m 24s	+45° 28' 00"	Cyg
7023	OC	7.0	21h 01m 36s	+68° 10' 11"	Cep
7031	OC	9.1	21h 07m 12s	+50° 53' 00"	Cyg
7042	SG	13	21h 13m 46s	+13° 34' 28"	Peg
7067	OC	9.6	21h 24m 23s	+48° 00' 34"	Cyg
7082	OC	7.1	21h 29m 18s	+47° 07' 35"	Cyg
7129	OC		21h 42m 59s	+66° 06' 47"	Cep
7139	PN	13.3	21h 46m 09s	+63° 47' 30"	Cep
7156	SG	13.5	21h 54m 34s	+02° 56' 35"	Peg
7171	SG	12.2	22h 01m 02s	-13° 16' 11"	Aqr
7177	SG	11.1	22h 00m 41s	+17° 44' 16"	Peg
7184	SG	11.1	22h 02m 40s	-20° 48' 46"	Aqr
7218	SG	12.1	22h 10m 12s	-16° 40' 00"	Aqr
7245	OC	9.1	22h 15m 11s	+54° 20' 36"	Lac
7332	SG	11	22h 37m 24s	+23° 48' 00"	Peg
7354	PN	12.1	22h 40m 20s	+61° 17' 08"	Cep
7377	SG	11.6	22h 47m 48s	-22° 19' 00"	Aqr
7392	SG	11.8	22h 51m 48s	-20° 36' 00"	Aqr
7419	OC	13	22h 54m 18s	+60° 50' 00"	Cep
7457	SG	10.6	23h 01m 00s	+30° 09' 00"	Peg
7463	SG	13.5	23h 01m 54s	+15° 59' 00"	Peg

NGC	Type	Mag	RA	Dec	Con
7465	SG	13.3	23h 02m 00s	+15° 58' 00"	Peg
7507	EG	10.3	23h 12m 06s	-28° 32' 00"	Sci
7541	SG	11.6	23h 14m 42s	+04° 32' 00"	Psc
7562	EG	13	23h 16m 00s	+06° 41' 00"	Psc
7600	EG	11.8	23h 18m 54s	-07° 35' 00"	Aqr
7619	EG	11.1	23h 20m 12s	+08° 12' 00"	Peg
7623	SG	12.3	23h 20m 30s	+08° 24' 00"	Peg
7626	EG	11.1	23h 20m 42s	+08° 13' 00"	Peg
7635	BN	6.9	23h 20m 42s	+61° 12' 00"	Cas
7640	SG	10.8	23h 22m 06s	+40° 51' 00"	And
7742	SG	11.5	23h 44m 18s	+10° 46' 00"	Peg
7762	OC	10	23h 50m 01s	+68° 02' 18"	Cep
7785	EG	11.6	23h 55m 18s	+05° 55' 00"	Psc
7814	SG	10.6	00h 03m 15s	+16° 08' 43"	Peg
7832	EG	13.5	00h 06m 28s	-03° 42' 57"	Psc

Herschel II Observing Log (A)

NGC	Date	NGC	Date	NGC	Date
23		1045		1618	
24		1058		1624	
125		1060		1637	
151		1070		1662	
175		1073		1663	
198		1087		1700	
206		1090		1750	
214		1114		1762	
217		1156		1778	
315		1161		1779	
337		1162		1832	
357		1169		1883	
410		1172		1977	
428		1175		1990	
499		1184		2023	
513		1187		2071	
514		1193		2112	
604		1199		2139	
636		1207		2170	
660		1209		2182	
665		1325		2192	
672		1332		2196	
706		1348		2236	
718		1353		2245	
741		1400		2252	
821		1421		2253	
890		1491		2254	
896		1507		2259	
925		1514		2261	
991		1579		2269	
1003		1582		2274	
1012		1587		2283	
1032		1600			
1035		1605			

Herschel II Observing Log (B)

NGC	Date	NGC	Date	NGC	Date
2302		3078		3659	
2309		3107		3666	
2316		3145		3668	
2331		3156		3669	
2339		3158		3672	
2346		3162		3681	
2347		3177		3682	
2359		3225		3683	
2366		3254		3689	
2367		3274		3693	
2374		3301		3705	
2396		3319		3732	
2414		3338		3756	
2415		3359		3887	
2432		3424		3892	
2467		3430		4013	
2493		3507		4024	
2500		3511		4039	
2525		3513		4045	
2541		3524		4047	
2610		3516		4062	
2639		3547		4073	
2756		3583		4096	
2765		3585		4100	
2781		3596		4105	
2784		3599		4124	
2805		3605		4133	
2855		3611		4136	
2880		3622		4138	
2889		3636		4144	
2986		3637		4152	
3065		3642		4157	
3067		3646			
3073		3652			

Herschel II Observing Log (C)

NGC	Date	NGC	Date	NGC	Date
4168		4340		5044	
4169		4343		5053	
4185		4359		5056	
4189		4369		5061	
4212		4379		5068	
4217		4395		5077	
4220		4487		5078	
4224		4519		5084	
4233		4571		5087	
4235		4586		5103	
4236		4605		5129	
4237		4608		5134	
4241		4612		5204	
4244		4639		5308	
4248		4647		5371	
4250		4691		5383	
4256		4742		5426	
4260		4880		5430	
4264		4902		5440	
4267		4904		5443	
4270		4914		5444	
4271		4915		5445	
4291		4928		5447	
4290		4939		5448	
4294		4941		5462	
4298		4956		5480	
4299		4981		5481	
4302		4984		5485	
4310		4999		5490	
4312		5012		5493	
4313		5018		5506	
4319		5020		5507	
4336		5023			
4339		5037			

Herschel II Observing Log (D)

NGC	Date	NGC	Date	NGC	Date
5520		5970		7067	
5523		5985		7082	
5529		6015		7129	
5533		6058		7139	
5548		6070		7156	
5560		6106		7171	
5582		6155		7177	
5585		6166		7184	
5590		6181		7218	
5595		6239		7245	
5597		6340		7332	
5600		6507		7354	
5602		6526		7377	
5605		6548		7392	
5638		6596		7419	
5660		6604		7457	
5668		6717		7463	
5687		6772		7465	
5728		6793		7507	
5750		6800		7541	
5775		6804		7562	
5791		6814		7600	
5806		6824		7619	
5812		6857		7623	
5813		6888		7626	
5831		6894		7635	
5838		6907		7640	
5850		6960		7742	
5854		6991		7762	
5861		6992		7785	
5864		6997		7814	
5878		7023		7832	
5879		7031			
5899		7042			