

Plates taken with the 40"
beginning June 28, 1937
Series "F"

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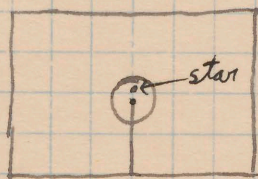
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Plates F 329 - 665. 40"; June 1937 - Sept. 1941. mainly open clusters (E. Ebbighausen)
F 666 - 702. 40"; May 1925 - July 1926. $3\frac{1}{4}$ " x $4\frac{1}{4}$ " plates (F. E. Ross)
(double stars & planets).
F 703 - 722. { 36" Lick refractor with Ross camera. (double stars)
(July, Aug. 1935. (Ross, Wyse, & Kuiper).

All plates of the O-star list and the ^{late} faint type giant list were taken with the sector stem in the middle position and with the star in the same line as that of the sector stem extended. Unless otherwise indicated, the star in question was placed about 1 cm. from the edge of the sector as follows:



All plates of all objects were taken on the Eastman I-D emulsion with the Schott M47, 4 mm. glass filter up to and including F512. F513 begins with the W+W hypersensitive Pan emulsion and sequencing with ~~the~~ F513 the emulsion will always be indicated.

E. Y. Ebbighausen

All thin glass plates were coated with the I-D emulsion

For earlier plates in this "F" series see note book containing E. E. Barnard's plate records for photographs made with the 40-inch telescope

			Exp	Obs	State	Emulsion
F329 ✓	M35	6:03 + 24.3	10 ^m	EE	Feb 8, 1937	I M
330 ✓	"	"	60 ^m	"	Feb 11, 1937	"
331 ✓	"	"	20 ^m	"	"	"
332 ✓	"	"	29 ^m	"	Feb 13, 1937	"
333 ✓	"	"	20 ^m	"	"	"
334 ✓	"	"	60 ^m	"	Feb 22, 1937	"
335 ✓	"	"	15 ^m	"	"	"
336 ✓	"	"	20 ^m	"	"	"
337 ✓	"	"	1 ^h 20 ^m	"	Feb 25, 1937	"
338 ✓	"	"	12 ^m	"	"	"
339 ✓	"	"	12 ^m	"	Mar 25, 1937	"
340 ✓	"	"	8 ^m	"	"	"
341 ✓	"	"	41 ^m	"	Mar 29, 1937	"
342 ✓	"	"	9 ^m	"	"	"

Pl. no.	Object	α	δ	Exp	Obs	
F343	IC 4665	17:41	+5:45	5 ^m	EE	June 28, 1937 I-M
344	"	"	"	5 ^m	EE	"
345	"	"	"	30 ^m	"	"
346	"	"	"	30 ^m	"	"
347	"	"	"	25 ^m	"	"
348	"	"	"	20 ^m	"	"
349	"	"	"	20 ^m	"	"
350	NMC 6633	18:23	+6:30	25 ^m	"	July 7, 1937
351	"	"	"	25 ^m	"	"
352	"	"	"	25 ^m	"	"
353	"	"	"	15 ^m	"	"
354	IC 4725	18:26	-19:19	35 ^m	"	July " "
355	"	"	"	25 ^m	"	"
356	"	"	"	25 ^m	"	"
357	"	"	"	22 ^m	"	"
358	NOC 7092	21:29	+48:00	19 ^m	"	July 10, 1937
359	"	"	"	50 ^m	"	"
360	"	"	"	25 ^m	"	July 18, 1937

				Obs		
F361	✓ NMC 7092	21:29 +48:00	30 ^m	EE	July 18, 1937	double images
362	✓ NMC 6885	20:08 +26:11	15 ^m	"	"	"
363	✓ "	"	30 ^m	"	"	"
364	✓ NMC 7243	22:11 +49:23	20 ^m	"	"	"
365	✓ NMC 7092	21:29 +48:00	15 ^m	"	July 19, 1937	"
366	✓ "	"	40 ^m	"	"	"
367	✓ Am 37	21:37 +57:02	36 ^m	"	July 22, 1937	"
368	✓ "	"	25 ^m	"	"	"
369	✓ "	"	18 ^m	"	"	"
370	✓ "	"	30 ^m	"	"	"
371	✓ NMC 7243	22:11 +49:23	14 ^m	"	July 24, 1937	"
372	✓ "	"	26 ^m	"	"	"
373	✓ Am 37	21:37 +57:02	25 ^m	"	"	"
374	✓ "	"	35 ^m	"	"	"
375	✓ ^{NMC 6633} FC 4756	^{23 +6:30} 18:34 +5:22	20 ^m	"	July 26, 1937	"
376	✓ "	"	20 ^m	"	"	"
377	✓ "	"	20 ^m	"	"	"
378	✓ "	"	20 ^m	"	"	"

				Exp	Obs	
F379	✓ ^{NMC 6633} FC 4756	^{23 +6:30} 18:34 +5:22	20 ^m	20 ^m	EE	July 26, 1937
380	✓ Am 37	21:36 +57:02	25 ^m	"	"	"
381	✓ "	"	20 ^m	"	"	"
382	✓ NMC 7243	22:11 +49:23	16 ^m	"	"	"
383	✓ NMC 6885	20:08 +26:11	25 ^m	"	"	July 29, 1937
384	✓ "	"	30 ^m	"	"	"
385	✓ NMC 6866	20:00 +43:43	25 ^m	"	"	July 30, 1937
386	✓ "	"	30 ^m	"	"	"
387	✓ NMC 752	1:52 +37:11	30 ^m	"	"	"
388	✓ "	"	27 ^m	"	"	"
389	✓ NMC 6811	19:35 +46:20	30 ^m	"	"	July 31, 1937
390	✓ "	"	30 ^m	"	"	Aug 1, 1937
391	✓ "	"	30 ^m	"	"	"
392	✓ "	"	10 ^m	"	"	"
393	✓ NMC 752	1:52 +37:11	25 ^m	"	"	"
394	✓ "	"	16 ^m	"	"	"
395	✓ NMC 6205	16:38 +36:39	15 ^m	"	"	Aug 4, 1937
396	✓ NMC 6494	17:51 -19:00	25 ^m	"	"	"

F 397	✓ NMC 6494	17:51-19:00	25 ^m	EE	Aug 4, 1937
398	✓ NMC 7209	22:01 + 46:00	20 ^m	"	Aug 21, 1937
399	✓ NMC 6494	17:51-19:00	20 ^m	"	Aug 22, 1937
400	✓ NMC 6633	18:23 + 6:30	25 ^m	"	"
401	✓ NMC 6709	18:47 + 10:14	25 ^m	"	"
402	✓ "	"	21 ^m	"	"
403	✓ NMC 6866	20:00 + 43:43	25 ^m	"	"
404	✓ NMC 7654	23:20 + 61:03	25 ^m	"	"
405	✓ "	"	25 ^m	"	"
406	✓ "	"	25 ^m	"	"
407	✓ "	"	25 ^m	"	"
408	NMC 752	1:52 + 37:11	20^m	EE, Su	Sept 9, 1937
408	✓ NMC 225	0:38 + 61:14	20 ^m	EE	Aug 31, 1937
409	✓ "	"	20 ^m	"	"
410	✓ NMC 436	1:09 + 58:17	25 ^m	"	"
411	✓ "	"	20 ^m	"	"
412	✓ NMC 752	1:52 + 37:11	20 ^m	EE, Su	Sept 9, 1937
413	✓ "	"	20 ^m	EE	"

F 414	✓ NMC 752	1:52 + 37:11	25 ^m	EE	Sept 20, 1937
415	✓ "	"	30 ^m	"	"
416	✓ NMC 1528	4:08 + 50:59	26 ^m	"	"
417	✓ "	"	25 ^m	"	"
418	✓ "	"	25 ^m	"	"
419	✓ NMC 1662	4:43 + 10:45	25 ^m	EE, Su	"
420	✓ "	"	25 ^m	EE	"
421	✓ "	"	25 ^m	"	"
422	✓ NMC 7762	23:45 + 67:28	30 ^m	EE	Oct 6, 1937
423	✓ "	"	25 ^m	" Su	"
424	✓ "	"	23 ^m	"	"
425	✓ NMC 752	1:52 + 37:11	20 ^m	"	Oct 7, 1937
426	✓ "	"	25 ^m	"	"
427	✓ "	"	25 ^m	"	"
428	✓ H.D. 108	0:00.9 + 63:07	5, 5 ^m	"	Oct 8, 1937
429	✓ "	"	5, 5 ^m	"	"
430	✓ H.D. 1337	0:12.5 + 50:53	5, 5 ^m	"	"
431	✓ "	"	5, 5 ^m	"	"

432 ✓	H.D. 14947	2:19.5 + 58:25	5 ^m 15 ^m	EE	Oct 8, 1937
433 ✓	"	"	5 ^m 15 ^m	"	"
434 ✓	N0E 1746	4:58 + 73:40	25 ^m	EE, Su	"
435 ✓	"	"	25 ^m	EE	"
436 ✓	"	"	10 ^m	"	"
437 ✓	"	"	25 ^m	EE, Su	"
438 ✓	N0E 2281	6:42 + 41:10	25 ^m	EE	" Double image
439 ✓	"	"	17 ^m	"	"
440 ✓	H.D. 206267	21:36 + 57:02	5 ^m 15 ^m	"	Oct 11, 1937
441 ✓	"	"	"	"	"
442 ✓	H.D. 207538	21:45 + 59:14	5 ^m 15 ^m	"	"
443 ✓	"	"	5 ^m 15 ^m	"	"
444 ✓	H.D. 209481	21:59 + 57:31	5 ^m 15 ^m	"	"
445 ✓	"	"	5 ^m 15 ^m	"	"
446 ✓	H.D. 210839	22:08 + 58:56	5 ^m 15 ^m	"	"
447 ✓	Drum Neb	5:28 - 5.5	20 ^m	"	Oct 27, 1937
448 ✓	"	"	90 ^m	EE, Su	" Trailed elongated
449 ✓	M 35	6:03 + 24.3	16 ^m	EE	"

F 450 ✓	M 35	6:03 + 24.3	20 ^m 15^m	EE	Oct 27, 1937
F 451	H.D. 24912	3:57 + 35:30	5 ^m 15 ^m	EE	Nov 9, 1937
F 452	"	"	"	"	"
453	H.D. 30614	4:44 + 66:10	"	"	"
454	"	"	"	"	"
455 ✓	N0E 2281	6:42 + 41:10	25 ^m	"	"
456	H.D. 36861	5:30 + 9:52	5 ^m 15 ^m	"	Nov 4, 1937
457	"	"	"	"	"
458	H.D. 37022	5:30 - 5:27	"	"	"
459	"	"	"	"	"
460	H.D. 37043	5:30 - 5:59	"	"	"
461	"	"	"	"	"
462	H.D. 41161	5:58 + 48:15	"	"	"
463	"	"	"	"	"
464	H.D. 46149	6:27 + 5:06	5 ^m 15 ^m	"	"
465	"	"	7 ^m 7 ^m	"	"
466	H.D. 210,839	22:08 + 58:56	5 ^m 15 ^m	"	Nov 8, 1937
467	H.D. 218915	23:07 + 52:31	5 ^m 15 ^m	"	"
468	"	"	"	"	"

F469	✓	H.D. 5005	0:47 + 56:05	5 ^m 5 ^m	EE	Nov 8, 1937
F470	✓	NMC 744	1:52 + 54:59	27 ^m	"	"
471	✓	"	"	25 ^m	"	"
472	✓	"	"	25 ^m	"	"
473	✓	H.D. 30614 9 ^{Cam}	4:44 + 66:10	6 ^m 6 ^m	"	"
474	✓	H.D. 37041	5:30 - 5:29	5 ^m , 5 ^m	"	"
475	✓	H.D. 14633	2:17 + 41:02	5 ^m , 5 ^m	"	Nov 17, 1937
476	✓	"	"	"	"	"
477	✓	H.D. 17505	2:43 + 60:01	"	"	"
478	✓	"	"	"	"	"
479	✓	H.D. 16691	2:36 + 56:28	"	"	"
480	✓	"	"	4 ^m , 4 ^m	"	"
481	✓	H.D. 24431	3:48 + 52:21	5 ^m , 5 ^m	"	"
482	✓	H.D. 34078	5:10 + 34:12	"	"	"
483	✓	"	"	"	"	"
484	✓	H.D. 35921	5:23 + 35:18	"	"	Nov 23, 1937
485	✓	"	"	"	"	"
486	✓	θ ² Ori	5:30 - 5:29	"	"	"
487	✓	"	"	"	"	"

F488	✓	θ ² Ori	5:30 - 5:59	5 ^m 5 ^m	EE	Nov 23, 1937
489	✓	H.D. 47839	6:36 + 9:59	"	"	"
490	✓	SM on "	"	"	"	"
491	✓	H.D. 54662	7:05 - 10:11	6 ^m 26 ^m	"	"
492	✓	M 35	6:03 + 24.3	15 ^m	"	Dec 7, 1937
493	✓	M 35	"	13 ^m	"	"
494	✓	H.D. 47129	6:32 + 6:13	5 ^m , 5 ^m	"	"
495	✓	"	"	"	"	"
496	✓	M 35	6:03 + 24.3	20 ^m	"	"
497	✓	M 35	"	30 ^m	"	"
498	✓	NMC 2548	8:09 - 5:30	24 ^m	"	Jan 9, 1938
499	✓	NMC 2548	"	40 ^m	"	"
500	✓	NMC 2548	"	30 ^m	"	Feb 1, 1938
501	✓	M 34	2:36 + 42	25 ^m	"	Feb 14, 1938
502	✓	M 34	"	15 ^m	"	"
503	✓	M 35	6:03 + 24.3	27 ^m	EE	Feb 24, 1938
504	✓	H.D. 48099	6:37 + 6:27	5 ^m , 5 ^m	EE	Mar 1, 1938
505	✓	"	"	"	"	"

F506	✓	B Dra	17:28.7	+52:53 +52:53	5 ^m , 5 ^m	EE	Apr 29, 1938
507	✓	B Dra	"	"	"	"	"
508	✓	45 Dra	18:30.9	+56:58	"	"	"
509	✓	"	"	"	"	"	"
510	✓	H.D. 186,980	19:42	+31:52	"	"	May 10, 1938
511	✓	H.D. 188001	19:45	+18:25	"	"	June 2, 1938
512	✓	"	"	"	"	"	Emulsion
513	✓	M 4	16:18	-26:17	15 ^m	"	" Hy Pan
514	✓	H.D. 186,980	19:42	+31:52	5 ^m , 3 ^m	"	June 23, 1938
515	✓	H.D. 188209	19:49	+46:47	"	"	"
516	✓	H.D. 199579	20:53	+44:33	"	"	"
517	✓	"	"	"	"	"	"
518	✓	H.D. 202,214	21:09	+59:35	"	"	"
519	✓	"	"	"	"	"	"
520	✓	H.D. 190864	20:02	+35:19	"	"	July 13, 1938
521	✓	"	"	"	"	"	"
522	✓	H.D. 190918	20:02	+35:31	"	"	"
523	✓	"	"	"	"	"	"

F524	✓	H.D. 191765	20:06	+35: ⁵³ 33	3 ^m , 3 ^m	EE	July 13, 1938	Hyper Pan
525	✓	"	"	"	"	"	"	"
526	✓	H.D. 192103	20:08	+35:34	"	"	"	"
527	✓	"	"	"	"	"	"	"
528	✓	H.D. 206327	21:36	+61:06	"	"	July 16, 1938	"
529	✓	"	"	"	"	"	"	"
530	✓	H.D. 214,680	22:35	+38:32	"	"	"	"
531	✓	"	"	"	"	"	"	"
532	✓	H.D. 188,209	19:49	+46:47	"	"	July 18, 1938	"
533	✓	H.D. 192,163	20:08	+38:03	"	"	"	"
534	✓	"	"	"	"	"	"	"
535	✓	H.D. 192,281	20:09	+39:58	"	"	"	"
536	✓	"	"	"	"	"	"	"
537	✓	H.D. 203,064	21:15	+43:31	"	"	July 19, 1938	"
538	✓	"	"	"	"	"	"	"
539	✓	H.D. 209,975	22:02	+61:48	"	"	"	"
540	✓	"	"	"	"	"	"	"
541	✓	B.S. 8752 = B.D. 156:2923 HD 217476	22:56	+56:24	"	"	"	"

			Exp	Observations		Emulsion							
F542	✓ BS 8752 = B.D. +56:2923	22:56 +56:24	3 ^m , 3 ^m	EE	July 19, 1938	Hyper Pan	F560	✓ plano	23:49 +56:57	3 ^m , 3 ^m	EE	Aug 11, 1938	H per Pan
543	✓ 20 ♀ And	23:41 +45:52	"	"	"	"	561	✓ ♀ plano	1:14 +57:42	"	"	"	"
544	✓ "	"	"	"	"	"	562	✓ "	"	"	"	"	"
545	✓ Ring Nebula in Lyra		55 ^m	"	July 27, 1938	"	563	✓ 7 Duro	2:43 +55:29	"	"	"	"
546	✓ 9 Peg	21:40 +16:53	5 ^m , 5 ^m	"	July 30, 1938	"	564	✓ "	"	"	"	"	"
547	✓ "	"	6 ^m , 7 ^m	"	"	"	565	✓ H.D. 157,857	17:21 -10:55	"	"	Aug 12, 1938	"
548	✓ H.D. 192,639	20:11 +37:03	3 ^m , 3 ^m	"	"	"	566	✓ "	"	"	"	"	"
549	✓ "	"	5 ^m , 5 ^m	"	"	"	567	✓ H.D. 164,492	17:56 -23:01	4 ^m , 4 ^m	"	"	"
550	✓ H.D. 193,077	20:13 +37:03	4 ^m , 4 ^m	"	"	"	568	✓ "	"	"	"	"	"
551	✓ "	"	"	"	"	"	569	✓ H.D. 164,794	17:58 -24:22	4 ^m , 4 ^m	"	"	"
552	✓ H.D. 193,322	20:15 +40:25	"	"	"	"	570	✓ "	"	"	"	"	"
553	✓ "	"	"	"	"	"	571	✓ H.D. 165,052	17:59 -24:24	"	"	"	"
554	✓ selected Area 40	20:48 +45:07	3 ^h 25 ^m	"	Aug 1, 1938	"	572	✓ "	"	"	"	"	"
555	✓ 21 ♀ Cep	22:07 +57:42	3 ^m , 3 ^m	"	Aug 11, 1938	"	573	✓ H.D. 192,641	20:11 +36:21	"	"	"	"
556	✓ "	"	"	"	"	"	574	✓ "	"	"	"	"	"
557	✓ 24 Cep	22:08 +71:51	4 ^m , 4 ^m	"	"	"	575	✓ H.D. 193,514	20:16 +38:57	3 ^m , 3 ^m	"	"	"
558	✓ "	"	"	"	"	"	576	✓ "	"	"	"	"	"
559	✓ plano	23:49 +56:57	3 ^m , 3 ^m	"	"	"	577	✓ H.D. 193,576	20:16 +38:25	2 ^m , 2 ^m	"	"	"
							578	✓ "	"	"	"	"	"

579A	✓	NPS		50 ^m	EE	Aug 14, 1938	Hyper Pan
579B	✓	NPS		3 ^h 20 ^m	EE	Aug 28, 1938	"
579C	✓	M34	2:36 + 42:21	52 ^m	EE	"	IM thin
580	✓	Pleiades		30 ^m	EE	Aug 28, 1938	Hyper Pan
581	✓	B.D.+33:619	3:12.5 + 33:51	5 ^m 15 ^m	"	"	"
582	✓	HD 20468	"	"	"	"	"
583	✓	NMC 1746	4:58 + 23:40	20 ^m	"	Oct 4, 1938	"
584	✓	NMC 1807	5:05 + 16:24	15 ^m	"	"	"
585	✓	"	"	"	"	"	"
586	✓	NMC 7209	22:01 + 46:00	10 ^m	"	Oct 10, 1938	"
587	✓	NMC 7243	22:11 + 49:23	20 ^m	"	"	"
588	✓	H.D. 19820	3:06 + 59:11	4 ^m 4 ^m	"	"	"
589	✓	H.D. 24,431	3:48 + 52:21	"	"	"	"
590	✓	B.D.+33:619	3:12 + 33:51	5 ^m 15 ^m	"	"	"
591	✓	B.D.+33:619 and 41 v Pers		5 ^m 15 ^m	"	"	"
592	✓	41 v Pers	3:38 + 42:16	"	"	"	"
593	✓	NMC 1807	5:05 + 16:24	20 ^m	"	Dec 17, 1938	"
594	✓	M34	2:36 + 42:21	12 ^m 17 ^m	"	"	IM thin
595	✓	M34	"	20 ^m 15 ^m	"	Jan 7, 1939	IG thin
595A	✓	NGC 2548	8 ^h 09 ^m - 5 ^h 30 ^m		"	Dec 17, 1938	

596	(1)	NGC 2682	2168 6:03 + 24:3	25 ^m	Hetz	Feb. 21, 1939	IG
597	(4)	NGC 2682	8:46 + 2:11	59 ^m	Hetz	Feb 21, 1939	IG
598	(5)	"	10:00 - 11:40	40	Hetz	Mar 1	" ph 11
599	(6)	"	8:49 - 9:29	20	"	"	"
600	(11)	"	9:37 - 9:57	45	"	"	"
601	(2)	"	9:59 - 10:44	20	"	"	"
599A	(5)	"	11:50 - 12:10	30	"	Mar 13	IV-1
599A	(1)	"	8:33 - 9:03	20	"	"	IV-2
597A	(4)	"	9:08 - 9:28	13	"	"	X
600A	(1)	"	9:36 - 9:49	35	"	"	XI
601A	(2)	"	9:55 - 10:30	10	"	"	I-1
602	(2)	"	12:05 - 12:10	15	"	"	I-2
602	(2)	"	12:10 - 12:25	"	"	"	"
603	✓	M39	21 ^h 29 ^m + 48.0	10 ^m 10 ^m	EE	July 19, 1939	I-9
604	✓	"	"	"	"	"	"
605	✓	B.D.+3:3680	18:16 + 3:20	4 ^m 4 ^m	"	Aug 3, 1939	Super Panboro Press
606	✓	B.D.-4:4582	18:42 - 4:51	4 ^m 4 ^m	"	"	"
607	✓	HD 173764	"	"	"	"	"
607	✓	B.D.+17:4042	19:36 + 17:47	"	"	"	"
608	✓	"	"	"	"	"	"
609	✓	B Aquarii	21:26 - 6:01	"	"	"	"
610	✓	B.D.+29:4348	21:09 + 29:49	"	"	"	"
611	✓	H.D. 218,915	23:07 + 52:31	3 ^m 5 ^m	"	"	"
612	✓	"	"	"	"	"	"
613	✓	NMC 6885	20:08 + 26:11	20 ^m	"	Aug 4, 1939	"
614	✓	"	"	13 ^m	"	"	"

F 615	✓	NMC 7209	22:01 +46:00	20 ^m	EE	Aug 1, 1939	
616	✓	"	"	"	"	"	
617	✓	"	"	"	"	"	
618	✓	NMC 7243	22:11 +49:23	"	"	"	
619	✓	"	"	30 ^m	"	"	
620	✓	NMC 7654	23:20 23:20 +61:03	25 ^m	"	Aug 21, 1939	I-M
621	✓	"	"	35 ^m	"	"	"
622	✓	"	"	50 ^m	"	"	"
623	✓	NMC 7142	21:43 +65:20	15 ^m	"		Super Pancho Press
624	✓	NMC 7654	23:20 +61:03	45 ^m	"	Aug 23, 1939	I-M
625	✓	"	"	25 ^m	"	"	"
626	✓	"	"	40 ^m	"	"	"
627	✓	"	"	20 ^m	"	"	"
628	✓	NMC 6940	20:30.4 20:30.4 +27:58	20 ^m	"	Aug 26, 1941	"
629	✓	"	"	"	"	"	"
630	✓	NMC 7654	23:19.8 +61:03	30 ^m	"	"	"
631	✓	"	"	5"	"	"	"
632	✓	h Persei	2:12.0 +56:41	"	"	"	"

633	✓	NMC 6811	19:35.2 +46:20	30 ^m	EE	Aug 27, 1941	W W Pan
634	✓	NMC 6940	20:30.4 +27:58	"	"	"	I-M
635	✓	"	"	"	"	"	"
636	✓	NMC 7654	23:19.8 +61:03	45 ^m	"	"	"
637	✓	"	"	"	"	"	"
638	✓	NMC 436	1:09.4 +58:17	15 ^m	"	"	W W Pan
639	✓	h Persei	2:12.0 +56:41	30 ^m	"	"	I-M
640	✓	NMC 6940	20:30.4 +27:58	40 ^m	"	Aug 28, 1941	"
641	✓	h Persei	2:12.0 +56:41	40 ^m	"	"	"
642	✓	"	"	"	"	"	"
643	✓	"	"	30 ^m	"	"	"
644	✓	"	"	"	"	"	"
645	✓	NMC 6811	19:35.2 +46:20	"	"	Aug 29, 1941	W W Pan
646	✓	NMC 6940	20:30.4 +27:58	45 ^m	"	"	I-M
647	✓	"	"	"	"	"	"
648	✓	N 52 NMC 7654	23:19.8 +61:03	54 ^m	"	"	"
649	✓	h Persei	2:12.0 +56:41	50 ^m	"	"	"
650	✓	NMC 744	1:51.8 +54:59	30 ^m	"	Sept 9, 1941	W W Pan

No.	Object	α	δ	Date	Exp.	Plate	Filter	Observer
F 651 ✓	NMC 6940	20:30.4	+27:58	EE 40 ^m	Sept 10, 1941	I-M		
652 ✓	M52	23:19.8	+61:03	" 30 ^m	" "	"		
653 ✓	h Persei	2:12.0	+56:41	" 30 ^m	" "	"		
654 ✓	"	"	"	" 50 ^m	" "	"		
655 ✓	"	"	"	" 20 ^m	Sept 11, 1941	"		
656 ✓	"	"	"	" "	" "	"		
657 ✓	NMC 1528	4:07.8	+50:59	" 28 ^m	"	WW Pan		
658 ✓	NMC 6885	20:07.8	+26:11	30 " 30 ^m	Sept 16, 1941	"		
659 ✓	"	"	"	" "	" "	"		
660 ✓	"	"	"	" "	" "	"		
661 ✓	"	"	"	" "	" "	"		
662 ✓	NMC 7762	23 ^h 45.0	+67 ^m 28 ^s	" "	" "	"		
663 ✓	"	"	"	" 25 ^m	" "	"		
664 ✓	M52	23:19.8	+61:03	" 5 ^m 15 ^m	" "	"		
665 ✓	"	"	"	" 5 ^m 15 ^m	" "	"		
F 666* ✓	Moon			Ross 1 ^s , 1/2 ^s	1925 May 1	(Cramer Iso yellow F filter		
667* ✓	"			" 20 ^s , 40 ^s	" May 1	Infra red		
F 668* ✓	μ Draconis	17 2.8	+54 38	" various	" 8	yellow filter		

* Plates 3 1/4 x 4 1/4 inches

No.	Object	α	δ	Date	Exp.	Plate	Filter	Observer
F 669 ✓	μ Draconis	17 ^h 2.8	+54 ^m 38 ^s	1925 May 8	4 ^s , 8 ^s	Infra red		Ross
670 ✓	"	17 2.8	+54 38	" 11	7a focus		yellow	"
671 ✓	"	17 2.8	+54 38	" 11	Various		yellow	"
672 ✓	ϵ Lyrae	18 40.4	+39:33	" 11	"		"	"
673 ✓	Arcturus	14 12.9	+19 30	" 11	7a focus	Infra red		"
674 ✓	ϵ Lyrae	18 40.4	+39:33	" 11	Various	" "		"
675 ✓	μ Draconis	17 2.8	+54 38	" 11	"	" "		"
676 ✓	ϵ Lyrae	18 40.4	+39:33	" 18	"	Cramer Iso	yellow	"
677 ✓	ϵ_1 & ϵ_2 Lyrae	18 40.4	+39:33	" 18	"	Ilford Pan	Red	"
678 ✓	μ Draconis	17 2.8	+54 38	" 18	"	Cramer Iso	yellow	"
679 ✓	ϵ Lyrae	18 40.4	+39 33	" 18	"	Infra red		"
680 ✓	μ Draconis	17 2.8	+54 38	" 18	"	" "		"
681 ✓	"	17 2.8	+54 38	" 18	"	Ilford pan	Red	"
682 ✓	β^{30C} 7739	16 39.1	+23 44	June 5	"	Cramer Iso	yellow F	"
683 ✓	ϵ Lyrae	18 40.4	+39 33	" 8	"	" "	" "	"
684 ✓	Saturn			" 15	"	" "	" "	"
F 685 ✓	ϵ Lyrae	18 40.4	+39 33	" 15	"	" "	" "	"

All plates listed on this page are 3 1/4 x 4 1/4

F No.	Object	α	δ	Date	Exp.	Plate	Filter	Observer
F 686*	ϵ Lyrae	18 ^h 40.4 ^m	+39° 33'	1925 June 15	Various	W. W. Panchromatic	Red	Ross
687*	"	18 40.4	+39 33	" 15	10 ^s	Infrared		"
688*	Jupiter			Aug 10	Various	Kryptocyanin	25	"
689*	"			" 10	"	Cramer Iso		"
690*	"			" 31	"	Cramer Iso		"
691*	"			" 31	"	" "		"
692*	"			" 31	"	Infrared		"
693*	"			" 31	"	" "		"
694*	"			" 31	"	Cramer Iso		"
695*	"			" 31	"	" "		"
696*	Uranus			Sept. 3 1925		" "	yellow	"
697	Bar. long per. var.	17 ^h 35 ^m	-11.9	June 17	Various			"
698	" " " "	17 35	-11.9	" 20				"
699	Conjunction Venus, Mercury & Mars			July 10	4 ^s	Cramer Iso		"
F 700	"			" 10	10 ^s	" "		"
701	"			" 10	4 ^s	" "		"
F 702*	β Lyrae	18 ^h 46 ^m 23 ^s	+33° 13'	1926 July 6		" "		"

* Plates 3 1/4 x 4 1/4 inches

No.	Object	α	δ	Date	Exp.	Plate	Filter	Observer
Nos. F 703 to F 722 made with 36 inch Lick refractor and Ross camera								
F 703	ϵ Lyrae	18:40.4	+39:33	1935 July 30		Cramer Iso		Ross
704	β & ϵ Lyrae	19 43.0	+11 31	" 30		"	yellow F	"
705	ϵ Lyrae	18 40.4	+39 33	Aug 8		{ Ilford Proc. Pan		{ Weyer Ross
706	ϵ_2 Lyrae	18 40.4	+39 33	" 8		Cramer Iso		{ Weyer Ross
707	β & ϵ Lyrae	19 43.0	+11 31	" 8		Ilford Pan		{ Weyer Ross
708	β & ϵ Lyrae	21 03.6	+29 43	" 8		" "		"
709	β & ϵ Lyrae	18 30.5	+16 53	" 10		Ilford Proc. Pan		"
710	"	19 56.9	+24 36	" 10		" " "		{ Ross Kuiper
711	"	20 49.0	-12 15	" 10		" " "		"
712	"	17 46.6	+15 21	" 13		" " "		"
713	"	19 43.0	+11 31	" 13		" " "		"
714	"	18 30.5	+16 53	" 13		" " "		"
715	"	19 11.1	+27 15	" 13		" " "		"
716	"	21 23.0	+10 34	" 13		" " "		"
717	"	19:39.5	+38 00	" 13		" " "		"
718	"	20 35.2	+40 09	" 13		" " "		"
F 719	"	22 17.9	-5 27	" 13		" " "		"

F No.	Object	α	δ	Date	Exp	Plate	Filter	Observer
F-720	✓ E ₂ Lyrae	18 ^h 40.4 ^m	+39° 33'	1935 Aug. 19		Offord P. Pan		Ross
721	✓ 70 Ophiuchi	17 59.4	+2 33	" 19		" " "		"
722	✓ Sensitometric exposures	—	—	" 19		" " "	yellow	"
1948								
723	✓ M 15	21 ^h 28 ^m	11° 57'	Oct. 5	40 min.	Kodak I-G	Yellow	A.B.
722a	✓ M 15	"	"	Sept 26	20 "	103aC	—	—
724	✓ M 15	"	"	Oct. 9	45 min	I-G.	—	—
725	✓ M 15	"	"	" "	30 min.	"	"	—
726	✓ NGC 225	0 ^h 40 ^m	61° 34'	" "	5,5 min.	Kodak 103aC	"	"
727	✓ NGC 663	1 ^h 42 ^m	61° 0'	" "	5,5,2 -	"	—	—
728	✓ M 15	21 ^h 28 ^m : 11 ^o 57'		Oct. 14	40 min.	Kodak I-G	—	—
729	✓ M 15	"	"	" "	30 -	"	—	—
730	✓ M 15	"	"	" "	20 -	"	—	—
731	✓ NGC. 225	0 ^h 40 ^m : 61° 35'		" "	8,12,20 ^m	"	—	—
732	✓ NGC 663	1 ^h 42 ^m : 61° 0'		" "	20 min	"	—	—
733	✓ M 15	21 ^h 28 ^m : 11° 57'		Oct. 28	30 min.	Kodak 103aC	Aperture 24"	"
734	✓ M 15	"	"	" "	30 -	"	Ap. 30"	"
735	✓ NGC 225	0 ^h 40 ^m : 61° 35'		" "	10,20 T	Kodak II-G.	Ap. 30"	"
F-736	✓ NGC 663	1 ^h 42 ^m : 61° 0'		" "	5,5,5 min.	Kodak 103aC	Ap. 30"	"

No.	Object	α	δ	Date	Exp.	Plate	Aperture	Observer.
1948								
F 737	✓ M 15	21 ^h 28 ^m : 11° 57'		Oct. 29	30 min.	Kodak 103aC	21 ins.	A.B.
737a	✓ BD-6° 1253	5 31	-6 47	" "	Multiple exp.	I-G	40 "	G.H.
F 738	✓ NGC 663	1 ^h 42 ^m : 61° 0'		" "	20,20 ^m	II-G.	30 ins.	A.B.
738a	✓ Orion Nebula	5 31	-5 30	" "	45 ^m	I-G	40	G.H.
739	✓ M 15	21 ^h 28 ^m : 11 57		Nov. 6	30 m.	I-G.	21 ins.	"
740	✓ M 15	"	"	" "	20 m.	103aC	21 ins.	—
741	✓ M 15	"	"	" "	5 m.	"	"	—
742	✓ M 15	"	"	" "	5 m.	"	"	—
743	✓ NGC 225	0 40 : 61 35		" "	10,10,10 ^T	II-G	"	"
744	✓ NGC 663	1 42 : 61 0		" "	15,15 ^T	II-G.	"	"
745	✓ Orion Nebula	5 31 -5 30		" "	40	I-G	40 m	G.H.
746	✓ NGC 225	0 40 : 61 35		Nov. 10	10,10,10 ^T	II-G.	22 ins.	A.B.
747	✓ NGC 663	1 42 : 61 0		" "	10,10,10 ^T	II-G.	"	—
748	✓ M 15	21 ^h 28 ^m : 11° 57'		Nov. 12	15 min	103aC	24 ins.	—
749	✓ NGC 2429	7 ^h 39 ^m - 31° 30'		Dec. 1 ^{UT}	1 ^m	103a-c	40"	Duke wpl
750	✓ NGC 2439	"		"	15 ^m	103a-c	"	"
1949.								
751	✓ M 13	16 ^h 40 ^m : 36° 32'		April 2	20 min.	I-G.	24 ins.	A.B.
752	✓ M 13	"	"	April 16	60 min	103a-c	"	A.B.
753	✓ M 13	"	"	April 23	60 min.	II-G	"	—
754	✓ M 13	"	"	April 30	60 min.	I-G	"	"
755	✓ M 13	"	"	- 30	10 -	103aC	"	"

T - through glass. All plates with telescope west of pier & yellow filter.
Nos. 723 - 732 Taken with 60" aperture.

F	No.	Object	α δ		Date	Mid-exposure	Plate	Exp.	Aperture	
			h	m		U.T.		(mins)	"	
					1949					
F	756	✓ M 13	16-40	36 32	April 30	8-35	103aC	10	24"	Tel. east AB
F	757	✓ M 13	9-45	I-G	40	"	" " "
	758	✓ "	"	"	May 4	5-23	I-G	90	"	"
	759	✓ "	"	"	May 13	5-10	II-G	100	"	"
	760	✓ "	"	"	May 14	8-42	103aC	25	"	Tel. east.
	761	✓ "	"	"	18	4-52	II-G	105	"	"
	762	✓ "	"	"	23	5-00	II-G	100	"	"
	763	✓ "	"	"	26	7-32	II-G	45	"	Telescope east
	764	✓ "	"	"	27	4-45	II-G	120	"	"
	765	✓ "	"	"	June 6	3-58	II-G	120	"	"
	766	✓ "	"	"	10	3-40	II-G	80	"	"
	767	✓ "	"	"	18	3-20	II-G	100	"	"
	768	✓ "	"	"	18	4-38	103aC	45	"	"
	769	✓ "	"	"	18	6-15	II-G	30	"	Telescope east

The following plates were discovered in 2014. Added to log

		as were plates 666 - 722								
	770	Σ U Ma			1925 April 17		Yellow			
	771	"			"		IR			
	772	Saturn			"		Yellow			
	773	Saturn			"		IR			
	774	Cygnus	20:04	+35.5°	Aug 3			39		19:11 - 19:52 Sid
	775	No. Am Neb	21:09	+45.1	"			60		21:56 - 22:56 Sid
	776	"	21:01	+45.9	Aug 13			60		20:09 - 21:09 Sid
	777	Moon			Sept 3	12:15	IR	20 ^s		12:15
	778	Moon			"	12:20	IR	40 ^s		12:20
	779	Moon			"	12:30	Cramer ISO	1/2 ^{sec}		
F	780	Moon			"	12:35	Cramer ISO	1 ^{sec}		

F

