KG
11366
165

2

Stewart's
Observa-
tions of
Nebulae

KG 11366 1165

KG 11366.165

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JUL 17 1956

Note. where plates are looked at carefully but nothing worth while found. They are noted as follows: "no neb seen" "not exam. *in detail*".

The latter expression means that the stars + N.G.C. objects were not identified and *scales* were not used. this taking an unnecessary amount of time. Wherever objects were found, A.G.C. stars were looked up & measures made with the scales.

DaS

(continued)

Oct 24 1900 Dr L. Stewart

4740 A

20 00 - 77,5 4^h quad. 4

(4803A shows almost nothing on plate of 4^h; less than 1^h exp ought to give. new Emulsion.?

4741 = Eros - 7 expos of 6^m each quad 4
8 x 10 plate

~~4742~~

Oct 26 1900

4742 A

20 20 - 67,5 4^h quad 4.

([illegible] with 4606A)

6943 has spindly appearance tho' not resolved into distinct branches. see p 206a.

4743 Eros 7 exps of 5^m each 4.quad

4740A.

	*	129	156			26898	19 35.2	-77 08.5	
list 3	neb?	97	197	eF. S. (possibly a neb.)	check	new?	19 24.2	-77 45	
list 2	neb	102	198	eF. S. eE at 170° vf * sp. 1' (otc. form)		new	19 25.8	-77 47	
list 3	neb	189	181	eF. S. f * n.p. 1'	check	new	52.9	-77 38	
list 3	neb	200½	~~177~~ 178½	eF. S. eE at 25°, f * 1' n	check	new	56.5	-77 35	
	*	198½	187½			27327	19 55.1	-79 24	7
	*	196½	24			27384	19 56.3	-75 02	7
	*	315½	121			28162	20 2~~8.7~~ 9.7	~~-75 42~~ -76 32	6.3
	*	234½	280			27630	07.9	-79 17	6.8
list 3	neb?	311	136½	eF. S. R. bM.	check	new?	20 28.7	-76 48	
"	neb	319	171	vF. S. cE 120°. bM.	prob. otc. form	new	20 32.2	-77 20	
	neb	319	236	eF. vS. vE at 70°. lbM.	" " "	new	20 35.0	-78 26	
" list 3	neb	346½	157	cB. S. R.			20 40.0	-77 03	
							20		
	*					28354	20 37.8	-77 29.6	

47~~42~~ A

list 3	neb	83	318	vF. S. cE at 15°±. lbM.	check	new	19 56.9	-69 45	
	*	83	322			27413	19 56.9	-69 49.9	
	*	147½	286½			27703	20 09.7	-69 19.1	
list 3	neb?	157½	509	hazy patch, may be only stars	check	new	20 11.7	-69 42	
list 2	neb	151	100	vF. S. cE at 20° mbM.	ok.	new	20 21.8	~~-67~~ -66 15	
	*	155	150			27774	12.1	-67 04	6.8
list 3	neb	154½	158	eF. S. cE at 15°. bM.	check	new	20 12.0	-67 13	
"	neb *	157½	164	eF. S. R (neb star)	"	new	20 12.5	-67 19	
list 2	neb	253	178	F. S. cE at 130°	ok on 4606	nep 2070	20 28.8	-67 32	
	*	276	158			28259	32.8	-67 07	5.6
list 3	neb	292½	201½	eF S R.	check	new	20 36.0	-67 54	
	neb	292½+	202	eF. S. R.	"	new	20 36.1	-67 54	

over

Oct 2$\overset{7}{6}$ 1900

4744

22 10 − 32.5 60^m qual 3

not exam in detail. no neb or trails seen.

4745 1 10 + 12.5 60^m 3 −

plate very spotted.

not exam in detail − no neb or trails seen.

4746 5 50 + 12.5 qual 3 —

not exam in detail − no neb or trails seen.

4747 20 20 − $72^\circ.5 = 4^h$ dbld. see 4749

4748 = Eros 6 expo of 10^m (cldy) 3 −

4749 A 20 20 − 72.5 4^h qual

first half covered by 4738 see p 219 a. do

4750 Eros 8 expo of 6^m qual 4

4751 22 50 − 37.5 60^m qual 4

NGC 7421(?) near middle of plate looks like ring neb.

not ex am in detail.

plate very spotted

4752 0 10 − 17.5 60^m qual 3

not exam in detail − no neb or trails seen.

4753 22 00 − 77.5 60^m qual 4 −

not ex am in detail.

4754 Saturn 60^m qual 4 (hazy)

no trace of Phoebe but no plate here for comparison, 4742 A. continued.

fnt 3	neb ?	289½	86½	vF, hazy patch, *10 2'n,	check	new	20	34.4	-66 00	
	*	380	250½			28713	20	52.3	-68 36	6.7
fnt 3	neb *	331	260	vF neb * .	check	new	20	43.5	-68 49	

also 3 more neb = ok. see p 207 Book A, [illegible].

4749 A. see also 4738

	neb (old)	257½	263			6932 n.g.c.	20	31.0	-73 08.7	
fnt 2	neb	219	205	eF. vS, 1E ch 90° bM.	ok	new	20	21.9	-73 02	
	neb *	219	178	vF, vS, * inv. in neb.	"	"	20	21.9	-72 30	
	neb	231	218½	eeF, eS, *11 s f 1'.	"	"	20	24.7	-73 15	
	neb *	228½	251	F. S. hazy *. bet 2 f. *.	"	"	20	24.1	-73 48	
	*	232½ ~~257½~~	115 ~~263~~			28080		24.7	-71 32	6.7
	*	240	108			28117		26.3	-71 25	6.9
fnt 2	neb	257½	111	eF, S, vE at 15°.	ok	new	20	29.9	-71 27	
	*	303	200	~~eF eS R~~,		28384		38.4	-72° 53.6	
"	neb	303½	167+	eF eS R } close Tg	ok	new	20	40.3	-72 19+	
"	neb	304	168	eF eS R. }	"	"		40.4	-72 20	
"	"	304½	157	eF vS.	"	"		41.4	-72 10	
"	"	307½	157	eF. S.	"	"		42.1	-72 09	
"	"	32~~8~~3	119	cF vS. bM, *11 n 2'	"	"		43.5	-71 31	
"	"	324½	112	cF vS, bet 2 * f *,	"	"		43.6	-71 24	
"	"	315	149	eF eS. bet 2 v f *.	"	"		44.5	-72 00	
"	neb *	324½	240½	vF vS. bM * involved ~~neb *~~.	"	"	20	46.5	-73 32	
"	neb	349	163	cF. vS. R.	"	"	20	49.9	-72 11	
"	neb	348	213½	cB. S. eE ch 20° * n,	"	"		51.0	-73 02	
"	"	347½	234	eF eS. R.	"	"	20	51.6	-73 22	
"	"	355½	217	eF. S. R.	"	"		53.1	-73 05	
"	"	369	169	vF. S. cbM.	"	"		54.5	-72 15	
	~~*~~	~~376~~	~~250~~		"					
	*	376	250	eF neb f for which		28851	20	58.8	-73 34	5.9
	*	392½	215	also 3 more see 4759		28915	21	01.3	-72 57	6.5

Oct 27 Cont.

4755 = Ems 8 exps of 7^{m} qual 4.

4756 = 23 00 − 67.5 60^{m} qual 4 −
not exam in detail.

4757 1 40 − 72.5 60^{m} qual 4
not exam in detail.

4758 3 40 − 72.5 60^{m} qual 4
not exam in detail.

4759 21 00 − 72.5 4^{h} qual 4 −
prec. half covered by [illegible] on 4749 A
fol. checked.. plate 4816 (which shows few stars)
see opp page

Oct 29 1900

4760 Ems 9 exps of 7^{m} qual 4.

4761 22 20 − 82.5 60^{m} defect 2
not exam in detail.

4762 19 50 − 47.5 60^{m} qual 4. spotted

6845 6851 6861 6868 6870 6875 OK.
in desc of 6875 says * 7 n.f.
List 4 —— should be * 7 s.f. 3′
No new neb seen.

crossed off List 3

(a neb on List 3 at 20^{h} 03.6^{m} − 44° 53′ n.s.
3 n.f. * from Δ at that place.)

4763 20 10 − 42.5 60^{m} qual 4 (spotted)
2 bz neb seen but not exam in detail.

4764 Ems 10 exps of 7 m (extra fine) 4.

4765 1 00 − 77.5 60^{m} qual 4 −
not exam, in detail Globular images.

4766 1^{h} 50^{m} − 57.5 60^{m} qual 4
not exam in detail.

4759 A

	*	207	252			28851	20	58.8	-73	34	5.9
List 2	neb	207	267	eF. eS. *10, 2' np.	otc.	new	20	58.5	-74	03	
〃	neb	230	275	vF. vS. *11 3' np.	〃	new	21	04.0	-74	11	
〃	neb	225½	295	vF. vS. R	otc	new	21	02.9	-74	31	
	*	233	55			28995	21	04.0	-70	32	5.5
List 3	neb ?	232½	45		(check ann 4816)	?		03.9	-70	22	
List 2	neb	254	88	eF, vS R.	(4816 = otc	new	21	08.3	-71	04	
List 3	neb ?	260	87	eeF, vS. R.	(ann 4816) check	?	21	09.4	-71	03	
List 2	neb	273½	109½	vF. S. lE at 10°	otc	new	21	12.5	-71	25	
	*	286	160			29261		15.7	-72	14	
〃	neb *	282	251	eF. ad. of * inv in neb.	otc	new		16.4	-73	45	
〃	neb	291	298	eF. S. R.	otc	〃	21	19.2	-74	31	
〃	neb *	309	302	vF. neb *	otc	〃	21	23.9	-74	33	
〃	neb	315½	214½	eF. vS. eM.	otc	〃		23.2	-73	06	
〃	neb	348	117	cF. S. R, ~~* inv in neb~~ *N.	otc	〃	21	28.0	-71	26	
〃	neb	369	144	vF. S. cE at 35°, *10 2' sp.	otc	〃		31.2	-71	50	
〃	neb	~~388~~ 371	208	cF, vS, cE at 15°, *12 1' p.	otc	〃		35.7	-72	53	
〃	neb	379	306	vF. vS.	otc	〃		41.1	-74	28	
	*	388	124			29670		36.7	-71	28	6.2
	*	404	276			29865		45.7	-73	54	7.
〃	neb *	302½	103	F. S. R. neb *	otc	new		19.5	71	16	

Oct 29 cont.

4767

3 50 - 62.5 60m qual 4
not exam in detail. plate shows little.
new Emulsion # 7530 used. as very slow.

4768 - 4779 = 10m exps
4780 - 81 = Eros 7m exps moon light 3 qual.
4782 - 85 = 10m

November 1 1900

4786

2 20 - 62.5 60m qual 4 -
not exam in detail, very little on plate.

4787 4 00 - 77.5 60m qual 4
broken plate.

not exam. in detail.

4788 - 4794 = 10m
4795 - 6 = Eros (from plates)

4797 Saturn 90m qual 3 dbld.
no trace found of Phoebe.

4798 20 10 - 27.5 60m dbld 2
not exam in detail.

4799 = Eros 3 exps qual 3.

4800 18 50 - 32.5 60m qual 4 -
not exam. in detail.

4801 20 30 - 32.5 60m sky fine dbld 2
not exam

4802 21 30 - 27.5 - 46m clouded by clds
not exam. dbld 2

Nov 2 1900 D.S.

4803 21 00 - 77.5 4^h fm day obtd 3½

The v of neb. from 4740 A could not be found on 4803 which has less on than a 60^m plate ought than was badly fogged also.
NGC 6930 is near edge.
7098 O.K., hazy star.
no new nebs seen - many defects.

4804 = Ems = 9 5^m exps | Ems n.s. cldy

4805 2 00 - 77.5 60^m qual 4
not exam. in detail.

4806 3 20 - 62.5 60^m qual 4.
not exam in detail

4807 5 00 - 72.5 60^m qual 4
not exam in detail (one corner of Mag cld)

4808 1 30 - 27.5 60^m qual 4 -
not exam, in detail

4809 Ems 11 exps of 6^m qual 3.

4810 3 00 - 67.5 60^m qual 4 -
not exam in detail.

4811 5 00 - 67.5 Cr of Mag cld 60^m qual 3
not exam in detail

4812 19 30 - 32.5 60^m qual 3
not exam in detail

4813 21 50 - 27.5 60^m qual 4 -

4814-15 10^m exps (clds coming)

Thurs Nov 22 1900

4816 A. 21 40 – 72.5 4^h qual. 3 elongn decl.
prec. half checked with 4759.
but none new found on fol. half. Plate open.

4817 Eros. 8 5^m exps. qual 4.

4818 A. 3 00 – 77.5 60^m qual 4 –
not exam in detail.

4819 A 4 20 – 67.5 40^m qual 2 dbld.
not exam. in detail.

4820 5 20 – 72.5 60^m qual 4
Corner of large Cld.
not exam in detail.

4821 17 47 – 26.5 Comet Swift region.
n.s. exp 20^m

4822 Eros apparatus on " "
90^m exp " " n.s.

4823 22 10 – 27.5 61^m qual. 4
not exam in detail.

4824 Eros. 10 exps 5^m qual 4.

4825 2 20 – 67.5 60^m qual 4.
not exam. in detail.

4826 3 40 – 67.5 60^m qual 4.

List 4 NGC. 1313 ok. may be spiral. 2 br.
" 1511 "
no others seen – no new neb seen.

4827 5 00 – 77.5 60^m qual 4

On 4827 is found an apparent trail, 0.9 mm long at 112°. the fol end of trail is fainter.
RA = 3 59.5 coords 36.5
decl = -78 39.3± do. 268,

List 5

trail	36.5	268	app trail 0.9 mm at 112°. cB maybe defect.–	?	3 59.5	-78 39.3±	
*	62	277		4723	$\overset{4}{5}$ 07.2	-78 54	6.8
*	121	318		5096	$\overset{4}{5}$ 25.0	-78 45	6.9

Date of 4827 = Oct 23 Tues.

Middle of exp 6h 02m S.T. = 4 am ± Oct 24.

9 52
15 54
-1
15:53 or 3:53 am

On 4787 4h -77.5 no trail or line of stars appears at this point.

No trace is found on fol edge of 4805-A at 200 -77.5 as would be barely possible for date of Oct 15 when 4805 was taken (if motion be from prec to fol. in R.A.

4818 3 00 - 77.5 Oct 22 covers same region as app. trail, whether going East or West at 1m ± an hour. N.B. This plate shows much less than 4827 so that the proof is not quite conclusive enough that same is defect.

Nov 26 1900

4828 attempt on Swift's Comet 135^m qual 4
" " ans.

4829 21 50 − 42.5 60^m qual 3
not exam in detail.

4830 Eros. qual 4.
4831 20 30 − 27.5 60^m qual 2 dbl'd
4832 22 50 − 27.5 60^m " 2 " stars very poor.
not exam in detail.

4833 Eros. o.k. qual 4.
4834 22 20 − 72.5 206^m exp cldy qual 2.
not exam, in detail. stopped by clds.
Region ought to be repeated.

4835 22 50 − 37.5 83^m exp poor stars qual 2
plate v poor (~~neb 7201 N.G.C. surf Ring neb n.p.~~)
4836 2 10 − 37.5 61^m qual 2 dbl'd. cldy
not exam in detail.

4837 Eros qual 2 poor stars.
4838 2 10 − 32.5 60^m qual. 3 - trailed.
not exam in detail. (some neb seen)

4839 Eros stopped by clds. S. poor. 2. qual
4840 − 4851 = 10^m.

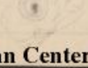
Apr 27 1900

24 - 8 x 10 plates packed.

Comet 1884 II plates reexamined & several defects measured on 4872 & 4873. If further plates are taken in search of this comet, it may be worth while checking them to see ~~that~~ if they are defects or not.

Apr 28 1900

4852 Eros qual 4
4853 " " 4
4854 Comet 1884 II n.s. qual 3.
(8 x 10)
4855 25m on Comet 1884 II " 4 Comet n.s.
4856-7 Eros qual 3 both.
4858-62 = 10m
4863 = Comet 1884 II n.s. qual 4 -.
4864 = Eros ok 4. -
4865-68 = 10m
4869 Comet 1884 II n.s. qual 3
4870 Eros qual 4. ok.
4871 23 30 - 32.5 60m qual 3
not exam. in detail.
4872 & 3 Comet 1884 II n.s. qual 4. 4
4874 Eros ok. 4. qual
4875 23 30 - 32.5 qual 4 -
not exam in detail.
4876 Eros qual 4.
4877 23 50 -32.5 60m qual 4
fst 4 marked N.G.C. 7793 ok - longer exp wanted.
αF, ✱N, αE



part near ✱ circular, with separated

Nov 30 1900

4878-9 Comet 1884 II 2 plates qual 4 & 3.
" " " n.s.

4880 Eros. 9 expo qual 4.
4881 4 00 - 7 75 4^h qual. 2

Dec 7-8 1900 measured & discarded 4881.

1520 NGC. n.s. as a * cluster,
List 4/ about 10 distinct *, no indication of being a cluster, scattering * only.

4882-3 Comet 1884 II Comet n.s.
4884 Eros qual 3+
4885-6 16^m
4887 A 22 30 - 42,5 60^m qual 2 [illegible] (clds)
not exam

fid's / as fid defects

4881

defect a trail	63	70	line like defect(?) 1mm long at 0°		defect?	3	19.2	−75 46	
*	20 ~~10~~	10			3561	3	11.1	−74 41	7
*	134	22			4100	3	39.4	−75 08	7.0
fid's *	103	145			3886	3	27.1	−77 06	6.9
trail a defect	70	150	line like defect 1.5mm long at 350°		defect(?)	3	17.2	−77 07	
*	235	246			4723 ~~[illegible]~~	4 ~~[illegible]~~	07.2	−78 54	6.8
fid's neb	249	225	eeF, eS. vF * 1m nf.	check	new	4	11.7	−78 31	
*	349	195			6453		42.9	−77 50	6.4
fid's neb	361	146	cF, vS, εE at 80°, * N.	ok from ~~check~~	new	4	43.4	−77 01	
fid's neb	346	65	eeF, vS. R. f*1m f.	check	new	4	35.6	−75 45	

Date Nov 17 1900

3 57.5 middle far p S.T.
8 13.5
12 11.0
− 1
12 10. M.T.

Dec 10 1900

4888 A 6 00 - 77.5 60^{m} qual 2 tripled. (clock)
not exam.

4889 Eros qual 4.

4890 2 00 - 77.5 52^{m} qual 4.
not exam

4891 Eros qual 3

4892 1 40 - 72.5 55^{m} qual 2 dbld.
not exam

4893 4 20 - 72.5 60^{m} qual 4.
not exam, in detail.

4894 6 20 - 72.5 60^{m} qual 4
not exam in detail

4895 9 00 - 77.0 45^{m} qual 4
not exam in detail

4896 5 00 - 77.5 60^{m} qual 4.
taken to find suspected trail.
not exam. in detail. " M.S.

Jan 8-9, 1901 DES

4897 1 40 −72.5 4^h [illegible] 3

ok NGC. { 330, 346, 361, 362 (center) 371, 376, 395
406, 411, 416, 419, 422, 456, 458, 460, 465,
602, 796

~~not~~ " ~~339 (on edge)~~

NGC. 362 is found to be at $0^h\ 59^m.9$ $-71°\ 23'.3$
in catalogue given with R.A. $0^h\ 58^m\ 52^s$ (1900)
may be error of 1^m - Is proper motion possible?

" 371 seems like an area of stars but too thin to call Cl.
with small condensation at center.

" 376 looks like double * only (10^s apart at 270°±)

" 395 " " group of 10 ± stars not a neb.
a neb *

" 406 o.k. but (?) be W with S.E. wisps through it at 165°

" 416 " " a round neb. small stellar, cB.

" 422 ok? " only 3 or 4 F *s tg. no neb.

" 456 " several cB. *s inv in nebulae.

" 458 " prob * Cl.. e 8, close no nebulosity seen.

" 460 " Ser. *. with neb inv.

" 465 ?? many * but no neb. - perhaps open Cl.

A positive of 3393 A was used to check the neb. on opp page

4898 Eros 3 - images in very crooked line.

4847

List 2	neb * s	64	61	2 eF* inv in eeF neb.	ok	new	1 *	11.1	-70 20
	*	103½	52			NGC 1333	1	19.0	-70 14.6
	old neb	29½	70½			NGC 406	1	04 02	-70 24.6
	" "	18	132	1st off in RA. neb 22	ok	362	0	59.9	-71 23.3
List 2	~~* cluster~~ cl	59½	154	eF. S. close * cl.	ok	new	1	08.8	-71 52
	old	76½	165½			458	1	11.9	-72 04.5
List 2	neb	18	223	vF* inv in neb.	ok	new	0	56.4	-72 ~~*~~ 53-
	old	13	214½			NGC 346	0	55.7	-72 43.1
List 2	neb	20	225	eF. vS. ~~neb pat~~	ok	new	0	56.7	-72 55-
List 2	neb	40½	201	vF. S. R. ~~neb~~	ok	new	1	02.1	-72 34
	old	55½	218			NGC 416	1	04.9	-72 53.6
List 2	neb	57½	182	eF. eS. R.	ok	new	1	06.2	-72 18
"	neb ?	~~77~~ 76½	179½	eF. vS. R. * N. inv in neb or sF*s	ok	new	1	09.6	-72 17+
	*	54	~~186½~~			1092	1	05.5	-72 22.2
	*	97	137½			1275	1	16.0	-71 38.7
"	neb	126½	138½	vF. vS. R. * 9 mag ± sf 4′	ok	new	1	22.1	-71 42
List 2	neb	52	275½	vF. eS. R.	ok	new	0	03.2	-73 50
"	neb or ~~* cluster~~	85	281	vF. eS. neb or vS group of *s	ok	new	1	09.8	-73 57

Jan 9. 1901

4899. A   4 20 - 6 25   60m   qual 4 -

Int 4/   a spirally looking neb marked proved to be 1559 N.G.C. has double spiral appearance.

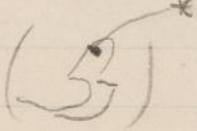


plate not exam in detail.

4900   7 00 - 7 75   60m   qual 4

not exam in detail.

4901   Eros.   fine plate - shows motion well.

Jan 10 1901 DeS

4902 A 3 00 − 82.5 60m qual 4.

has an elliptical ring neb. (trace on 4905) also on 4903 A.
no N.G.C. object listed there ∴ new.

$-84^\circ\ 08$ at RA $4^h\ 05^m.$

From AGC 3870, 5264 + 5310 with a trail plate at −82.5 overlapping. the approx position

$\frac{69.6}{108.1}$ of 69.75 minutes of time = $44^m.90$ gives RA. $4^h\ 05'.3$
3 20.33 + 44.90 = 4 05.23

$\frac{38.5}{108.1}$ of 69.75 = 24.84 " " 4 05.
$4^h\ 30.1 - 24.84 = 4\ 05.3$

measures from the trails on superimposed plate give decl approx as $-84^\circ\ 08'$ ±

No scale for Decl $-82^\circ.5$ is ready yet so close measures could not be made now.

4903 4 30 −82.5 has same neb.
qual 2 dbled.

4904 4 50 −57.5 60m qual 2
scratched + doubled.

[illegible] NGC 1672 found to be prob. spiral - 2 branch irregular. form
also 6 or 8 other ell. neb are seen but not identified - as plates needs to be repeated. dbld scratched

List 2

4902

Ring neb	313½	288½	vF. S. * N. ell. ring.	ok	new	4^h 05. $-84^\circ 08'$
*	246½	263		NGC	3780	
*	336½	335½		"	5264	
*	380½	249		"	5310	

Jan 10 1901

4905
600 - 825 60m quad. 3 -
no neb seen, not exam. in detail.
4906 730 - 825 60m quad
no neb seen not exam in detail.
4907 & 4908 attempts to find Brorsens Comet 8"x10"
fol & prec'd plates
" " n.s.
4909 - 4913 = 10m exps.
4914 on region of Comet Brorsen Stls 2.
" " n.s.
4915 = 10m
4916 A 8x10 " " n.s.
4917 14x17 plate " " "
Shows effect of differential refraction - the images near middle of plate are reasonably good those at prec. edge are ~~twice~~ elongated growing fainter in fol direction. those on fol edge are also elongated but fainter in prec. direction.
4918 2 50 - 475 60m quad 4
no neb seen. not exam in detail.
4919. Com. Brorsen attempt.
" " n.s.
~~4920~~

~~4920~~
Jan 11 1901

4920 1 50 - 47.5 60^m qual 4 -
no neb seen not exam. in detail,

4921 2 30 - 37.5 60^m qual 4 -
no neb seen not exam in detail

4922 8 x 10 Comet Brooks
" " ns.

4923 6 00 - 77.5 4^h qual. 4 except
for diff. refraction.
several new small neb.
Checked on 4927 overlapping

Listed / N.G.C. 1906 a vF neb *.
" 2203 a F Cl, no neb,
see the page

4924 10^m test plate on Comet Brooks qual 4.
" " ns

4925 5 30 - 52.5 60^m qual 4 -
not exam. in detail.

4926 Comet Brooks region 4
" " ns.

4927 5 00 - 77.5 80^m (stopped by broken spring.) qual 4
#2 (started to make 2d exp.)
some neb checked with 4923 above.

4928 5 40 - 67.5 60^m qual 4.
corner of Mag. Cl.
not exam in detail.

4929 8 30 - 27.5 60^m qual 4.
no neb seen not exam. in detail.

4923

	*	79½	88			6405	5	24.9	-76	00.3	
	*	93	33			6415	5	25.5	-75	05.7	
list 2	neb *	81	58	eF. vS. ~~neb *~~	ok	new	5	26.4	-75	32	1
	*	11~~9~~ 6	~~48~~ 39½			6685	5	36.3	-75	18.2	
list 2	neb. *	119	48	eF. vS. -- may be eF. vS. Cl.	ok	new	5	36.6	-75	~~22~~ 26	2
list 2	neb *	142½	56	eF. vS. neb *	ok	"	5	42.7	-75	37.	5
	old neb	96	196			NGC 1956	5	24.6	-77	49.6	
list 2	neb	141	205½	eF. vS, lE at 25°, bM.	ok	new	5	38.4	-78	04	3
	*	155	253			6826	5	41.8	-78	52	
list 2	Cl. ?	130½	009½	vF Cl. bet 2 f *	ok	new?	5	40.8	-74	50	4
list 2	neb	206½	133	vF. S. * h inv in neb.	ok	new	6	00.0	-76	55	
list 3	neb *	209	25½	eF. S. neb *	check	~~new~~ new	6	00.5	-75	08	
	old ~~cl~~ neb.	237	33	a Cl, not a neb as described	NGC 2203		6	08.1	-75	24.9	
list 2	neb	245	38½	eF. eS R. * h, inv. in neb.	check	new	6	10.1	-75	20	

Jan 11 1901 cont.

4930 attempt on Brorsen's Comet 41m qual 4 -

" " n.s.

4931 " " " " 43m qual #3

" " n.s.

4932 2 30 - 42.5 60m qual 3 -

on Mch 19 checked a neb on test 3 at 2 18.8 - 41°50' ok

" " " " " 2 25.6 - 43°32'

" " " " " 2 25.7 - 43°16'

Feb 11 1901 DeS.

4933 3 30 - 42.5 #60^m qual 4-

not examined for neb in detail

4934 Comet 21 35 - 38 55^m fogged 4-

4935 Brown 22 05 " 40^m " 4-

" " N.S. on either plate - many defects.

4936 1 50 - 27.5 60^m ~~a~~ qual 3

no neb seen not exam in detail

4937 2 30 - 27.5 60^m qual 4.-

1079 NGC ok.

one new neb see nx. page.

4938-4949 10^m plates.

also 4950 = " "

4951 - 4956 Eros plates varying number of exps. owing to clds + moonlight.

4957-58 35^m "out of focus" ok.

4959 1 10 - 27.5 60^m qual 3

not exam in detail for neb none seen

4960 Eros ok

4961-63 Out of focus ok

4964-65 Eros ok.

4966-7 Out of focus.

4968 Eros.

4969-71 " " "

4972 " Tel ran poorly - v few best

" N.S.

4973-4979 out of focus

4980-81 Eros

4982-4999 = 10^m

5000 = 11 00 - 77.5 60^m dbld 2

not exam in detail

4937

*	157½	256		abs	2693	2	29.5	-28	40.4
*	370½	238½			3022	2	45.6	-28	21.5
List 3 neb	226½	207½	vT. S. prob R. ~~*~~ ~~15.5~~ ~~*f*~~ 15' s. foce	check	new	2	347	-27	53- ~~52~~

Listing of nebulae & other objects to here
Mch 18 1901 D.E.S.

5000

List 2 neb	226½	90	* in v. neb see 4398 A	new	11 067 -76 04

Checked Mch 18 1901.

4933
Mch 19. 1901
checking neb at 3 33.1 - 44 17 eT. vS. EE at 75°

sent to C Mch 1901

Mch 18 1901

5000 A reexamined to check neb at 11 067 − 7604 ok
" " 11 244 − 7911 neg.
latter prob too faint, marked εεT on 4398
5000A has very little on.

5001 − 5007 Eros plates.
5008 5 10 − 5 25 26^m stopped by clds dewy

not exam in detail.
5009 − 5012 Eros ok
5013 − 5020 10^m & out of focus
* 5021 − 22 Eros
5023 6 50 − 57.5 60^m qual .4.

no neb seen. not exam in detail.

April 6 1901

5024 5025 – 5026 10^{m}

5027 4 20 – 67,5 60^{m} qual. 2 dbld
5028 6 20 " " " 4.
Corner of Large Cloud. not exam in detail.
5029 · 7 40 – 67,5 60^{m} qual 4.

1 27' neb ~~from~~ } 4298 A. checked
2 others n.s }

5030 - 31 - 32 – Eros.
5033 7 30 – 42,5 60^{m} qual 4–
no neb seen not exam in detail
5034 9 30 – 425 60^{m} qual. 4—
no nebulae seen not exam in detail.
5035 – 36 – Eros.
5037 4^{m} exp. clds. – nothing on plate. 2
5038 8 30 – 37,5 60^{m} qual. 4
no nebulae seen, not exam. in detail.
5039 - 5040 Eros.
5041 6 30 + 7,5 60^{m} qual 4—
shows Eros – trail badly broken –
not exam in detail for neb ~~[illegible]~~ /
5042 8 50 – 67,5 60^{m} qual 4-
not exam in detail, no neb seen
5043 Eros :-
5044 10 20 – 67,5 4^{h} qual 4
(compared with 5049 A 3^{h} at 9 40 – 67,5)
3136 NGC OK. = CB neb *

5029

List 2 neb	138	178	eF. eS. R. (see 4298 A) (RA ~~*~~ derd from 4298)	new	7	27.8	-67 21	

5044 A

List 2 neb	135	111	cF. S. 2 br spiral; ~~CEN~~; N. cE ab 10°	Spiral	10	06.2	-66 32	
*	129	38		13875	10	05.7	-65 17	5.7
*	144½	210½		13897		07.0	-68 11	6.4
*	144	124½		?		07.7	-66 46±	
*	160	70		13983		10.7	-65 52	
old neb	123	134	cB N* of c.	3136				

List 3 line of *s or trail	292	37	prob line of stars (0.6mm * E d 95°	prob *s	10	31.8	-65 19	
					10	31.6	-65 19	
*	290½	36½	8 mag * n.p. 1.5'					
*	250	28		14310	10	24.3	-65 12	6.6
*	260	106½		14363		27.1	-66 29	6.7

April 8 1901

5045 8 20 - 72,5 60^m qual 4.
no neb seen not exam in detail.

5046 Eros.

5047-48 "

5049 9 40 - 67,5 3^h qual 4

5050-51 Eros

5052 9 30 - 52,5 ~~60~~ 85^m qual. 4
no neb seen not exam in detail

5053 9 30 - 47,5 60^m qual 4.
no neb seen, not exam in detail,

5044-59 10^m

5060-61 Eros

5062-72 10^m

5073-74 Eros

5075--~~80~~ 87 10^m

50~~88~~-89-90 Eros.

5091-93 10^m

List 3

5049

neb	203	293	eF. vS. eE ab 170°, lbM,	new	9 36.8	-68 38	
*	85½	216		12717	9 15.9	-68 16	6.0
*	237	272½		13367	9 43.3	-69 18	7.

May 20 1901 Ded

5094-95-96-97-98- Eros.

5099 8 10 − 37.5 60^m qual.

no neb seen not exam, in detail,

5100 9 50 − 52.5 60^m qual 4 but trailed.

no neb seen not exam, in detail.

5101 Eros.

5102 10 20 − 72.5 4^h qual. 4

[illegible] ✓ NGC 3059 O.K. { 2 f* inv in circular neb / Ft. S. possibly of Ring neb.

also on 5104 same desc.

5103 Eros.

5104 9 40 − 72.5 4^h qual 4.

no new neb. seen

NGC 3059 O.K. as above

5105 Eros.

5106 9 00 − 72.5 3^h 37^m qual 4.

no neb seen

no N.G.C. objects listed.

May 22 1901 Del.

5107 Eros
5108-10 – out of focus plates.
5111 12 30 –52.5 60m qual ~~×~~3
no neb seen not exam in detail
5112 Eros (by Frost - trip to Cuzco Del)
5113 9 00 –77.5 60m qual. 4 – fogged.
no neb seen. not exam in detail.
5114 10 30 –82.5 60m qual 4
One new neb see opp page
5115 13 30 –82.5 60m dbl qual 2.
5116 Eros.
5117 9 00 – 82.5 60m qual 4
same neb as on 5114 & above – no others seen
5118 12 00 – 82.5 60m qual 4.
no neb seen not exam. in detail.
5119 10 10 – 32.5 60m qual 3
no neb seen. not exam in detail
5120 Eros.
5121 10 00 – 77.5 60m qual. 4
no neb seen not exam in detail
5122 Eros
5123 "
5124 8 10 –27.5 60m qual. 3
no neb seen not exam in detail.
5125 8 30 –17.5 60m qual 4 –
no neb seen not exam. in detail
5126 13 30 – 82.5 60m qual 3 –
no neb seen, not exam in detail.
5127 Eros.
5128 10 00 – 77.5 60m qual 2 dbld
not exa

5114

List 2

new neb 173½ 52 — { εF as. dbl neb (dumbbell), 2 N. new 10 10.2½ −80 23

{ εF * 0.6' prec. OK (on 5117A)

May 22 continued.

5129 8 30 − 2.5 60^m good 3−

no neb seen

trail of Eros marked by Frost.

5130 15 00 − 87.5 60^m 3 ~~−~~

no neb seen not examined in detail

5131 Eros.

5132 7 50 − 52.5 60^m good 4−

no new neb seen.

(Just 3 under 4223)

{ a possible neb. n diffuse on A 4223 at 7 48.9 − 53°36

n.s. on 5132

{ " " " " " " at 7 51.9 − 54 19

n.s. " "

{ " " " " " " 7 53.1 − 53 32

n.s. " "

5133 11 00 − 77.5 60^m good 4.

no neb seen. not examined in detail

May 28 1901

5134 15 00 − 82°.5 60^{m} qual 3 —
no neb seen, not exam in detail.

5135-6 Eros

5137 9 10 −7.5 60^{m} qual 3

one asteroid trail, no neb seen

5138 ~~11 10~~ 10 30 − ~~3 2.5~~ −7.5 60^{m} qual 3

5139-40 Eros no neb seen not exam in detail

5141-5144 10^{m}

5145-6 Eros.

5147 10^{m}

5148 Eros

5149 Comet Halls ½ min. exp. (May 4 1901)

5150-52 Eros.

5153 9 30 −2.5 60^{m} qual. 3 —
Globular images, not exam, in detail.

5154 7^{m} stopped by clds.

5155-6 Eros.

5157 9 50 −7.5 60^{m} qual. 4 —
no neb seen not e. in detail

5158 11 30 −7.5 60^{m} glob images qual 3-
not exam, in detail.

5159 Eros

5160 10 30 −17.5 60^{m} qual 3+
no neb seen not exam, in detail,

5161 11 50 − 2.5 60^{m} qual 3.
no neb seen not exam, in detail.

5162 Eros.

5163-68 10^{m}

5169-5170 Eros

Sent 5/	5137						
Asteroid trail	170	139	vB. E 0.4^{m} at angle 102°		9	07.4	−6 44
*	171½	137		D.C. 4920	9	07.5	−6 42

Date of plate 5137 was Apr 24 1901
M.T. of middle exp. 9^{h} 36^{m}

May 28 continued

fuzzy images

5171 9 30 + 2,5 60^m qual (4-) 3

no neb seen, not exam in detail.

5172 11 30 + 2,5 60^m qual 3 —

5173-75 short exps on Comet region — not successful.

5176 Eros

5177 10 20 — 72,5 60^m qual. 2 dbled.

no neb seen not exam in detail.

5178 10^m 11 10 — 37,5 22^m (cldy) qual. 3 -

5179 Comet n.g.

5180 Eros

5181 11 10 — 37,5 60^m qual 3 -

no neb seen, not exam. in detail. fuzzy images.

5182 11 50 — 62,5 60^m qual 2 (v. sloped)

not exam in detail no neb seen

5183 16 30 — 82,5 qual 4 —

no neb seen, not exam. in detail.

5184 17 00 — 72,5 60^m qual 4.

no neb seen not exam in detail.

5185 18 20 — 67,5 60^m qual 3 + globular images towards one side

not exam in detail. plate not down in holder?

5186-7 = 10^m

5188 Eros $3\frac{1}{2}^h$ to give trail of Eros to test Variability

neg. 3110 + 3115 etc

no new neb seen — Eros trail only faint. —

5189 12 10 — 12,5 60^m qual 2

not exam.

5190 15 40 — 72,5 60^m qual 4 -

no neb seen not exam in detail.

May 28 Continued

5191 17 40 − 72.5 60^m qual 4.

no neb seen, not exam in detail

5192 17 10 − 42.5 60^m qual ~~4~~ 3

no neb seen, not exam in detail.

5193 Eros − $3^h 5^m$ trail for variability.

qual 3

5194 12 30 − 7.5 60^m qual 3.

no neb seen, not exam in detail.

5195 15 20 − 62.5 60^m qual. 4

no neb seen not exam. in detail.

5196 17 00 − 72.5 60^m qual 2 dbld.

no neb seen not exam in detail.

5197 19 00 − 67.5 60^m qual 4.

no neb seen, not exam in detail

5198-9 − 10^m exps

May 29 1901, Drd.

5200 0 50 − 27.5 60^m qual. 2
not exam for neb.

5201 10^m

5202 11 00 − 67.5 $4\frac{1}{2}^h$ qual 4.
no N.G.C. neb − no neb seen. not exam, in detail

5203 10 00 − 77.5 60^m qual 4 − (fogged)
no neb seen not exam in detail.

5204 11 30 − 32.5 60^m qual 4.
one round defect − globe 4^{mm} diameter, near middle of plate.

5205 12 30 − 32.5 60^m qual 3.
see opp page.

5206 13 10 − 32.5 60^m qual 3 −
no neb. seen. not exam in detail.

5207 16 00 − 67.5 60^m qual 4.
no neb seen not exam, in detail.

5208 16 00 − 77.5 60^m qual 4
no neb seen not exam in detail.

5209 18 10 − 42.5 60^m qual 3 +
no neb seen not exam, in detail..

5210 − 11 10^m

5212 8 30 − 17.5 60^m qual. 2 dbld
no neb seen, not exam in detail,

5213 11 10 − 32.5 60^m qual 4 −
list X/ N.G.C. 3621 a fine large close spiral.
needs long exp.

5214 12 10 − 37.5 60^m qual 4
no neb seen not exam in detail

5215 12 50 − 37.5 60^m qual

List 4

5205

old neb	42	203½	eF. R. looks like Ring neb check	NGC 4304.	12 ~~14~~	17.0	-32 55	
neb List 2	53½	272	eF. sh vE ch 20°, lbM, ok,	new	12	18.5	-34 04	
*	62½	320		OGC 16844	12	18.3	-34 51	5.5
*	84	305½		" 16929		20.1	-34 38	
*	100	163		" 16957		21.6	-32 16	

May 29 1901 continued.

5216 17 00 - 67.5 60^{m} qual 4
no neb seen, not exam in detail.

5217 16 10 - 7.5 60^{m} qual 3
no neb seen not exam in detail.

5218 18 10 — 2.5 60^{m} qual 3
very little on plate, not exam, in detail.

5219 - 22 Eros 1 exp on each plate.
(2 pl on Eros & 2 pl on *.)

5223 - 5237 = 10^{m} exps.

May 31 1901 deS

5238 17 40 − 67.5 60^m qual 4.

hunted for 2 neb or defects on my list 3 (Suspected nebulae) neither one seen

no new neb seen – exam. with scales –

5239 18 50 −52.5 60^m qual 4.

NGC 6707 ok

" 6708 "

6725 " p eeF, eS. * n with straight wisp at 40°

6754 ok

6761 ok

5240-43 = Eros.

5244-64 = 10^m

5265 = 19 50 − 62.5 60^m qual 4

no neb seen not exam. in detail.

June 3 1901

5266-69 Eros.
5270-79 = 10^m
5280-81 Eros.

June 10 1901

5253 Eros ok.

5284 - 5304 = 10^{m}

5305 Eros ok

5306 11 50 - 62,5 60^{m} qual

no neb seen - exam, but not in detail.

5307 - 5324 = 10^{m}

5325 Eros trail v. e. faint.

5326 " with planet apparatus v. good.

5327 12 50 - 37.5 60^{m} qual 2 dbed

June 12 1907

5328 13 50 − 375 60^{m} qual 4.

fit * / NGC 3367 etc.
" " 1 br * 8^{mag} nuc in f. neb.

3329 − 33 = 10^{m}
3334 = Eros v. good.
3336 12 50 − 325 60^{m} qual. 2
"guiding * too faint + very blurry"

list 3	5328					
Defect or Possible neb	197½	215	.cF, vE at 165° (prob defect)	?	13 48.7	-37 58
✕	147½	303		18789	44.4	-39 25

June 15 1901

5336 A 13 30 − 32.5 60^m qual 2 dbld
{ 3 or 4 objects seen probably defects.
Check on next plate − region to be repeated; dbld.

a 5337 ~~A~~ 16 50 + 22.5 60^m qual 4
no neb seen, not exam in detail.

a 5338 18 30 + 17.5 60^m qual 4−
no neb seen not exam. in detail.

a 5339 19 20 − 57.5 60^m qual 4
a 5340-41 10^m no neb seen not exam in detail
5342 a Error.

5343 ~~A~~ 13 10 − 27.5 60^m qual 3−
no neb noticed. not exam, in detail.

5344 A 14 10 − 27.5 60^m qual 4.
no neb seen not exam, in detail,

a 5345 17 10 + 32.5 60^m qual 3
no neb seen (little on plate). not exam. in detail

a 5346 21 30 + 32.5 60^m qual 4
no neb seen, not exam in detail.,

a 5347 22 50 + 32.5 60^m qual 4
no neb seen not exam, in detail.

5348 ~~A~~ Error OK

5349 ~~A~~ 11 40 − 67.5 $3\frac{1}{2}^h$ qual. 4
(too far North for longer exp.)

NGC 4071 OK but v faint
no new neb seen, examined very closely.

a 5350 19 30 + 27.5 42^m qual 4. repeat.

July 9 1901 Ded.

a 5351 ok

20 50 + 27.5 60^m qual 4-

no neb seen. not exam in detail.

a 5352 — 21 30 + 27.5 60^m qual 4

no neb measured - two seen? not exam in detail

a 5353 22 30 + 27.5 60^m qual 4

5354 A Ens o.k. qual 4.

~~a~~ 5355 A 11 40 - 72.5 $3\frac{1}{2}^h$ qual 4-

field √ no new neb seen many defects & plate dark

one e v F neb checked - see opp. page

(July 10 1901)

a 5356

19 30 + 37.5 60^m qual 4

no neb seen not exam in detail

a 5357 20 50 + 37.5 60^m qual

no neb seen not exam in detail

List 2/ The εεF. εS. R Cbll neb. found on 4400A & put on
last 3 Swift neb. is also found on 5355.

July 10 1901 Ded

a 5358 21 50 + 37.5 60^m quads 4

no neb seen not exam. in detail

a 5359 - 60 10^m

5361 A Ens

5362 A 15 00 - 12.5 3^h in main eyepiece ~~quads~~

quads 3+ at side near eyepiece }

" 3-- " " opp " }

Elongation 0.3^{mm} + images concave toward 2nd eyepiece.

5362 A

					chek				
Int 3	nb	101	275	eF vS sE at 40°	new		13 49±	−83 47±	
	*	127	232½		agc	~~20121~~ 19284	14 109	−83 13	4.7
	*	113½	184		"	19271	14 096	−82 23	6.8
Int 3	*	184½	201		"	20034	14 442	−82 49	6.0
	Cl	181	140	vF Cl, 4′ diam, 3 vF* inv. in Cl,			14 45±	−81 49±	
Int 3	*	245	280			20818	15 201	−84 09	5.9
	neb	270	111½	eF, vS, E d 145°, betw 2 vF*,	new		15 26±	−81 19±	

July 11 1901 Dad

a 5363   20 20 − 62.5 $3\frac{1}{2}^h$ qual 4 but badly fogged.

NGC 6860 probably obs. but plate badly fogged at that place

2 defects on s. on a 5371 at $20^h 50 - 62^\circ.5$

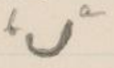
5364 A   Eros   qual 3.

5365   16 00   −87.5 $3\frac{1}{3}^h$ qual 3 - to 2

Images very poor

carefully examined but no neb seen

Images 4 in qual close to eye piece.
but crescent or arc shaped to opp. side



which motion (a to b) should involve flexure of telescope in rotation direction (other flexure, as of weight of tel, is taken out by following in the [illegible] eyepiece) and differences in refraction owing to changing H.A.

1163 a5363

defect N.S. on 5550A

defect in ring neb	158½	250	2T vS. Ring neb, * N. or defect	check new	20	11,6	-63 50	
*	117½	246		arc 27609	20	05,6	-63 43	64
*	148	233½		27725	20	10,2	-63 33	6.7

July 12 1901 DeS

a 5366 19 50 + 37.5 60^{m} qual. 4.
no neb seen not exam in detail
a 5367 21 30 + 37 5 60^{m} " 4.
~~do~~ not exam in detail.
a 5368 22 30 + 37 5 60^{m} qual 4

5369 A Error
5370 A 13 50 − 62.5 4^{h} qual 4 to 5

several cl or coarse groups.
no neb or new neb
a 5371 20 50 − 62.5 4^{h} qual 4 + globular.
scant region or very little on plate.
one defect + 1 - e f neb.
ngc 7020 , ok.
" 7021 n.s
5372 Ard 4 Error.
5373 14 20 − 62.5 4^{h} qual 4 −

Curious rays in film at plate no. end
Caused by cutting plate after coating? Electrical?

~~first~~ already one see 4024A, a5371

neb new	285	245	eeF, eL. eE el, ~~[illegible]~~, m BM.	new	21 01.1	-63 42
*	278½	282	a4c	28900	21 00.2	-64 20
*	337½	332	OK a5374	29136	21 09.7	-65 06

July 13 1901

a 5374 21 20 −62.5 59^m qual 2 dtls
clock spring broke.

Checked a v.f. neb from plate a. 5371.

5375 A Eros ok.
5376 A 14 50 −62.5 4^h qual 4+
many hazy patches but all deficit;
no new neb seen.
5377 A Eros. O.K.
("plate closed on account of sickness of babies" D.S.)
a 5378 17 20 −57.5 60^m qual 4
no neb seen not exam in detail
a 5379 19 40 −67.5 60^m qual 4

{4 neb on list of stars. neb looked for but no s.
Exposure of 4^h 60^m not enough.
a 5380 21 50 −62.5 60^m qual 4−
trailed in decl.
no neb seen not exam in detail
a 5381 10^m
5382 ~~A Eros.~~ OK. qual 3

July 15 1901 Dab

a 5383 19 10 + 32.5 60^{m} qual 4. ~~[illegible]~~
no. neb. seen. not exam in detail.
a 5384 20 10 + 32.5 60^{m} qual 4 − (2 neb on defects) not exam in detail

a 5385 21 50 + 32.5 60^{m} qual 4 no neb seen " " " "
a 5386-88 10^{m}
~~A~~ 5389 A Ens ok.
5390 A 13 30 − 37.5 60^{m} qual 3 (v hazy images) no neb seen " " " "
5391 A 14 30 − 27.5 60^{m} " 3− " " " " " " "
a 5392 19 30 + 42.5 60^{m} " 4− one " " " " " "
a 5393 20 30 + 42.5 60^{m} " 4− no " " " " " "
a 5394 21 30 + 42.5 60^{m} " 4 no " " " " " "
a 5395−97 = 10^{m}
5398 A 16 30 − 82.5 $3\frac{1}{3}^{h}$ qual 3 to 3 − forward 2nd eyepiece.
no neb seen not exam. in detail.
5399 A 12 50 − 42.5 60^{m} qual 3 no neb seen not exam in detail
5400 A 14 10 + 27.5 60^{m} " 3 " " " " " " "
5401 A 14 50 + 27.5 " " 3 } " " " " " " "
5402 A 16 10 + 27.5 " " 3 } scratched " " " "
5403 A 12 50 + 27.5 " " 4− " " " "
5404 A 13 50 " " " 3 " " " "
5405 A 16 10 " " " 4− " " " "
5406 A 16 50 " " " 4− " " " "
5407 A to 5422 = 10^{m}
5423−25 Ens.
5426−33 10^{m}
5434−5438 Ens.
5439 13 10 − 22.5 60^{m} qual 2 blurred.
"guiding ✱ too faint" not exam for neb.

Aug 1 1901

~~5439 A~~

5440 A 15 10 — 2,5 54^m qual 3 —

5441 A Eros ok

5442 A 18 00 — 82,5 $3^h 23^m$ total run, closed for clouds after starting for 59^m.

no neb seen, not exam in detail.

Images toward eye piece qual 4- Those on opp. side trails with blank space at time of clouds.

Elongation 0.5^{mm} * in $3\frac{1}{3}^h$

~~By~~ Pushing the plate holder with the 3rd thumb screw, away from this screw head 0.15^{mm} an hour might correct this trailing.

5443 A Eros.

5444 A 14 30 — 42,5 60^m qual 2 —

"Guiding * very blurry" note.

not exam in detail, no neb seen.

5445 A 15 30 — 42,5 60^m qual 4.

no neb seen not exam in detail.

5446 A Eros

5447 A 15 20 — 62,5 4^h qual. 4+

exam very carefully — no neb seen

5844 N.G.C. O.K. 3 or 4 neb *s only.

5979 " n.s.

Aug 10 1901

5448 A Eros ok
5449 A 15 50 — 62.5 4^h qual 4.

6025 NGC ok. no new neb seen.

5450 A Eros ok
5451 A 16 20 — 62.5 4^h qual 4

6156 NGC ok may be spiral, possibly
no new neb seen,

5452 Eros. ok
3453 A 16 50 — 62.5 4^h qual 3 —

List ×/ 6300 NGC a fine large 2 branch open
spiral!! 2 *s near at center.

also several defects.

5454 A Eros ok

Aug 13 1901

5755 A 1720 — 62,5 – $2\frac{1}{2}^{h}$ clds etc, qual 4

already out

6300 N.G.C. on a fine spiral. checked.

List 4

6328 " on 2F pair of *s only — one hazy.

6398 " on 2cF hazy *. only

6403 " " " " " "

5455 A

Int 3										
	neb *	187½	49	eeF. vS. neb *, b ef * var,		new	17	17.8 -60 49		
	*	166½	36			23472		15.2 -60 35	6.3	
	*	217	47			23636		22.1 -60 37	3.7	
Int 6	neb	257	223	eeF. vS. eE ab 90°, cbM,	on	new	17	28.1 -63 40		
	*	194	179			23554		18.6 -62 57	6.6	
	*	306½	286			23958		35.7 -64 41	3.8	
Int 2	neb	315½	281	F. S. Irr form, 2 * o inv,	on	new	17	~~28.6~~ 37.3 -64 36		
	neb	344½	199	eF. vS. cE, cbM,	on	new	17	39.4 -63 13		
	*	346½	263			24080		40.4 -64 16		

Aug 14 1901. DeS

5436 A Eros ok

5437 A " "

5438 A 17 50 — 62,5 4^h qual 4

3 new ones also on 5455 A see previous page.

6483 NGC O.K

6545 " O.K.

Init4 6575 ~~n~~5 on S. several v F^t stars no neb.

5458A

neb fnt²	279	155½	eF. S. eE at 80°, cbM, *N. ok	new	17 58.8	-62 25	
*	291	133		24618	18 01.1	-62 01.7	5.8
neb fnt²	236	180	e.eF. eS, vE at 45°, cbM, ok	new	17 52.9	-62 50	
*	277	232		24539	17 58.9	-63 40	
neb fnt²	306	282	eF, eS, eE at 85°, cbM, ok	new ~~18 03.6~~	18 03.6	-64 30	
*	350	250½		24848	18 10.0	-63 55	
neb fnt³	349	302	disc, forgotten to note,	new	18 10.4	-64 47	

Aug 15 1901 also Aug 16-17 $^{o\,19}$ — for measurement.

5459 A 1820 — 62,5 $4^h\,25^m$ qual 4 —

6341 — ok

[illegible] 6388 n.s. several εF, xo no neb.

6630 ok

6673 "

6684 "

[illegible] 6706 ok (oF. d. εE ch 120°, * N,

6722 — ok

5459A

a 5458

neb list 2	160	221	eF. vS, eE at 45°, *N, Ol	new	18	11.5	-63	24
*	123	204		24745		06.2	-63	05
*	190	201		25002		16.1	-63	05
×	174	282½		24932	18	13.3	-64	25
neb list 2	206½	317	eF. vS. eE at 125°, *N.	new	18	18.2	-65	00
*	212	332	* crossed by neb line	25078	18	19.1	-65	145
*	228	202½		25139	18	21.6	-63	06.0
*	232½	158		25158	18	22.2	-62	21.5
*	349	161		25577	18	38.8	-62	19.4
*	349½	224½		25601	18	39.6	-63	22.3
neb list 2	260½	224½	vF, vS, R.	new	18	26.3	-63	27
neb list 2	269½	193	eF. vS. R. ef* 0.5 nf.	new	18	27.5	-62	56
neb "	276	184½	vF. cS. R.	new		28.4	-62	47
neb "	277	174½	eF. S. cE at 170°, *N, bM,	new		28.5	-62	37
neb "	280½	199½	vF. vS. eE at 80° *N.	new		29.2	-63	01
neb "	280	224	eeF. vS. eE at 0°, * [illegible] 2' s.	new		29.2	-63	26
neb * "	288½	201	eF. vS. neb *	new	18	30.3	-63	02
neb "	291	279	eF. vS. cE at 10°, bet 2 f *s,	new	18	30.5	-62	41
neb "	296½	137½	eeF. vS. ~~[illegible]~~ eF * s.f. 0.5'	new	18	31.1	-61	57
neb "	299	137½	eeF. vS. , mr eF *,	new	18	31.5	-61	57
neb *	305	130	vF neb *.	new		32.1	-61	51
*	307½	298		25452	18	33.9	-64	38.3
neb "	297½	261	cF. vS. lE 20°. *N. 4 F* nr.	new	18	32.0	-64	02
neb * "	298½	256	cF. vS. R. neb *. f* 1' N.	new		32.2	-63	57
neb "	301½	218	eeF. vS. R, ef* nr.	new		32.3	-63	19
neb "	298½	321	eF. vS., vf* 0.4' p.	neb	18	32.7	-65	02
neb "	30.4	269	eF. S. R. f* 1' s.f.	new		33.0	-64	10
neb "	308	217	eeF. vS. ~~[illegible]~~ 3 f*s nr.	new		33.4	-63	18
neb list 2	310½	203	eeF. vS. R., *11 m.p. 1.5',	new	18	33.6	-63	03

Aug 19. 1901

5460 to 5502 10m + spectrum plates.

5503 + 5504 Ems ok

5505 – 5512 10m

5513 A Ems ok

5514 A 16 10 – 22,5 60m qual 4 –
not exam in detail, no neb seen

5515 A 17 10 – 52,5 60m qual 4 –
not exam in detail – no neb seen

5516 A Ems ok

5517 A 16 10 + 25 60m qual 4 –
not exam in detail
several faint neb seen. —

5518 A 17 10 + 25 60m qual 4 —

5519 – 5542 spectrum.

5543 Ems 3 —

Ok, check measures on plate, 5516 overlapping.

5459 continued

List a

neb *	316	151	vF S, R,		new	18	33.9	-62	12
neb *	317½	151-	vF S, R,		new	18	34.2	-62	12
neb	310½	270	eF vS. R, vF * 1' s.f.		new	18	34.1	-64	11
neb	321½	144½	eF S. R * N, diam 0.'7, possibly Ring neb.		new	18	34.6	-62	05
neb	320½	247	vF S. eE al 90°, * N,		new	18	35.4	-63	47
neb	328½	211	eF vS. R,		new	18	36.2	-63	11
neb	329½	203½	eF vS. R f * 1' n.p.		new	18	36.3	-63	03
neb *	335½	235-	eeF vS. hazy *		new	18	37.5	-63	35
neb *	337½	226	vF S. R, neb *,		new	18	37.7	-63	26
neb *	339½	224	eF vS. neb *		〃	18	38.0	-63	23
neb	340	231	eF vS. vE al 25°, bM,		〃	18	38.1	-63	31
neb	341	216½	eF vS. vE al 170°, bM,		〃	18	38.2	-63	15
neb *	343	221	eeF vS. hazy * ~~eeF~~		〃	18	38.6	-63	29
neb *	345½	222½	eF vS R. * neb *,		〃	18	38.8	-63	21
neb *	365½	132	cF vS, ~~R~~, cE al 35°,		〃	18	40.8	-61	49
neb	361	210	eeF vS, eF * 0.'3 p.	✓	〃	18	~~41.0~~ 41.1	-63	07
neb	370	198	3 eeF *s with neb mv;	✓	〃	18	42.3	-62	54
neb *	375	226½	cF S. R	✓	〃		43.~~3~~4	-63	32
neb	386	240	eeF vS. eE al 35°	✓	〃		45.2	-63	34
neb	388	329	cF S. cE al 45°	✓	〃	18	46.7	-65	0~~4~~3
neb	418	118½		✓	〃	18	47.8	-61	30
neb	414	160		✓	〃	18	47.9	-62	12
neb	418½	131½		✓	〃	18	48.1	-61	43
neb	421½	162½		✓	〃	18	49.1	-62	14
neb	416	224		✓	〃	〃	49.3	-63	16
neb	411	271½		✓	〃	18	49.3	-64	0~~4~~3
neb	410	316		✓	〃	18	49.8	-64	4~~7~~8

Indistinct but seen on 5376 A from which taken descriptions.

List c

List c Plate 5376

Aug 19. 1901 and later –

5548 A Special exam for trail of probable asteroid, which owing to its far southerly position may be worth investigating.

	Date 1901	Middle exp. S.T.		Aug (M.T. Middle exp reduced)	
5548 A	Aug 14	19	57	10	26
5550 A	Aug 15	21	04	11	29
5554 A	Aug 17.	19	22	9	39
5556 A	Aug 20	19	42	9	47
5578 A	Aug 23.	20	08	10	01

3548 A

*	245	144		(1) 26748	19	26.8	−61 50.5
*	249½	124		(2) 19ʰ.1090	19	27.6+	−61 09.2
*	252	103		(3) 19ʰ.1152	19	29.2	−61 08.9
trail 1st's/	263	103	cB, E 1.3mm at 342°	?	19	27.4	−61 30.0

5550 A

* (1)	48	128	as above				
~~trail~~ 1st's/	48	97½					
* (2)	50½	86					
~~trail~~ * (3)	57	85	cT^{6}, E 1.2mm at 352°	?	19	27.2	−61 20.2

5554

*	254	126	as above				
*	261½	85					
*	272½	85					
trail 1st's/	256½	76	T', E 0.6mm at 355°	?	19	27.1	−61 00.5

5556 A

*	249	281	as above				
*	256	240					
*	267½	240					
trail 1st's/	253½	197	plate too faint to give direction of trail.	?	19	27.25	−60 26.7
*	225	198		26664	19	22.4	−60 25.3

over

Aug 28 1901

5544 A   17 50 — 2,5 60^m qual 4 —

"also saw the 4 other instruments"

no neb seen   not exam in detail.

5545 A —— Eros ok

5546 A   18 50 — 62,5 4^h qual 4

see also 5459 at 18 20 -62,5

p 89 + 91

NGC 6733 ok

6739 ok

listed / - 6744 ok fine spiral !! 10' diam. very complex.

6769-70-71 ok. but position in NGC.

reduced gives { 19^h 10^m 28.
40
41

listed / /

I find them at RA | 19 09 28 ±
40 ±
41 ± |

listed /

6776 NGC. reduced gives 19 14 11 RA. }

I find a neb at proper decl at 19 15 50 ± " }

6782 ok

55-78 A asteroid trail

list 5

*	153	109		26664	19	23.4	-60 28.3	
*	140	146½		26634	19	22.0	-59 25.3	8
trail	187	169	cF. E 0.4' at 15°	?	19	28.2	-59 48.5	
*	200½	71		26819	19	30.0	-58 12.0	63

Same as p 91 for 5459A.

55-46 A see also p 91

list 2

neb	184½	108	eF. vS. cE at 130° ok	new	18	47.8	-61 30
neb *	186	150	F. S. R.	"		47.9	-62 12
neb	186	120½	eeF. vS. eE at 40°	"		48.1	-61 43
neb *	194	151½	F. S. R	"		49.1	-62 14
neb	196	213	vF. S. * N inv — oval ell. neb 0.3 to 0.4' diam neb brighter at 170° & 350°	"		49.3	-63 16
neb	197	261	vF. S. * N inv — ring neb 0.4' diam neb brighter at 55° + 235°	"		49.3	-64 03
neb * list 2	201	306	cF. S. R.	"		49.8	-64 48
~~neb *~~	~~197~~	~~242½~~	~~eeF. vS.~~ doubtful prob * 0		~~18~~	~~49.3~~	~~-63 45~~

Same as p 91

list 2

*	257½	155½		26067	18	58.1	-62 17.6
neb	210½	148½	eeF. vS. R	new	18	51.4	-62 12
"	214½	134½	eeF. vS. cE	"		51.9	-61 57
"	219	208	eF. vS. eE at 25°, bM,	"	18	52.6	-63 11
"	229½	157	eF. vS. lE at 20°,	"		54.8	-62 19
" *	255½	128	cF. vS. R,	"		57.6	-61 50
*	221	199½		25952		53.7	-63 02.8
neb	267	235	eeF. vS.	new	18	57.8	-63 37
neb *	285	267	vF. vS.	new	19	02.7	-64 09
neb.	300	154	eF. vS. dbl neb.	new	19	04.0	-62 15
"	302½	153½	vF. vS, cE at 60°,	new		04.5	-62 14
*	307½	163		?	19	05.4	-62 23
neb	305	80	F. S. eE at 170°, * N,		19	04.3	-61 08

list 2

Aug 31 1901

5547 A Eros Region 60m exp. on stars.
13 50 — 225 qual 3 —

5548 A 19 20 — 62.5 4^h qual 4

as neg. cr. calc after 6782 ok on 5546 & 48 —
up to 20^h or 09 (6860 calc)

5549 ~~A~~ Eros

5550 A 19 50 — 62.5 4^h qual 4

5546 A
Continued

List a	neb	309	166	cF. vS. eE at 150. *N. 2 br. spiral	new	19	05.5	-62 26	
	neb *	315½	170	eeF. vS. R.	"	19	06.4	-62 30	
	~~neb~~	~~312~~	~~207~~	~~F. vS. cE at 170°~~ defect	~~"~~	~~19~~	~~06.2~~	~~-63 07~~	
	neb	313½	271	eF. vS. lE at 140°.	"		07.0	-64 11	
	neb	331	41	F. cL, irr form, 2 *s inv.	"		07.3	-60 22	
	neb	327	127	cF, S. eE at 45°	"		07.7	-61 47	
	neb ·	351	71	cF. vS. R.	"		10.5	-60 49	
	neb *	360	55½	cF, neb *, *11 at 0.4', sf.	"	19	11.5	-60 34	
	neb *	405½	56	cF, * inv in neb,	"		17.6	-60 32	
List a	*	417½	32		26572	19	18.9	-60 06.1	8¾

all above ok on 5548

5548 A

List c	*	147	234		2643	19	12.4	-63 18.7	
	neb	172½	121	vF vS. ok	new	19	16.2	-63 06	
	(for asteroid trail see p 93					19	27.4	-61 30)	
	neb *	237½	115	cF. S. R.	new	19	25.7	-61 22	
	neb	248½	108	F. S. R. bM, ~~f *~~ sf. 1'	new	19	27.3	-61 25	
	neb	285	51	vF. eS. cE at 85°, *N,	"		31.9	-60 16	
	neb	307½	88½	vF. vS. eE at 115°. bet 2 f *s.	"		35.5	-60 53	
	neb *	404	86	F. S. R, am 4 *s,	"		48.2	-60 43	
	*	221	62		26664	19	23.4	-60 28.3	6.9
	*	352½	117		27073		41.2	-60 39.3	8½
	*	352	77		27083		41.6	-61 18.3	6.2

Sept 2^{d3} 1901

5530 - continued

6860 NGC ok.

On opp page are 9 neb which need to be checked.

5551 A 1630 - 27.5 60^m qual 4
no neb seen not exam in detail

5552 A 1710 - 27.5 60^m qual 2 dbld.
not exam in detail.

5553 A Eros. ok 1920 - 62.5 qual 4,

5554 special exps of 2^h on asteroid region see p 93.

5555 1750 - $\overset{3}{\cancel{2}}$7.5 60^m qual 3 also dbld
not exam in detail.

5536 sp. region on asteroid, 1^{h}30^m qual 3 - very poor images,
see page 93

5550 A

list 2	neb	194	99	eeF. eS. vE at 130°, m 2 sf *s,	ok on 53-48 A	new	19	47.4	-61	29	
	*	183	96			27174	19	45.7	-61	25.6	6.3
	*	232½	71			27314	19	52.8	-61	00.2	
	*	319 ~~286~~	45 ~~75~~			27579	20	04.3	-60	32.7	
	neb (old)	286	95			NGC 6860	20	00.2	-61	23.2	
list 2	neb (Ring)	270	40	vF. vS. Ring neb, *N, diam 0.7′, vF * 0.7 s.f.	ok	new	19	57.7	-60	29	
	neb	264	114	eF. vS. cE at 20°, 2 F * p & in 1′, ~~[illegible]~~	ok	"		57.2	-61	43	
	neb	275½ ~~264~~	73 ~~114~~	eeF. eS. cE at 150°, vF * 2′ s,	ok	"		58.6	-61	01	
	neb	288½	141	vF. vS. eeE at 170°, vm B m, ~~* N~~	ok	"	20	00.7	-62	09	
list 2	neb **	331	144	2 eF. eS. R neb *s close tog., * 1′ s.p.,	ok	new	20	06.7	-62	10	
	neb *	332½	145½	1 eF eS R neb *, * 3′ n.p.	ok	new	20	06.9	-62	11	
	*	350½	149			27721	20	10.1	-62	12.6	
list 3	neb or defect	266	242	F. S. R. close to B. *. (may be defect)	ns.	ns. on 5653 A ?	19	58.0	-63	50	
list 7	neb	288½	197½	eF. eS. cE at 60°, betw 2 sf *s,	~~ns.~~ OK on 5653 A	new	20 ~~19~~	01.2 ~~58.0~~	-63	05 ~~50~~	
list 8	neb or defect	300	223	eF. vS. R, (may be defect)	ns.	on 5653 "	20	03.0	-63	30	
	*	255	212			27404-5	19 ~~56~~	56.2	-63	20.1	
	*	316½	237½			27546-7	20	02.8	-63	54.5	
	*	312½	298			27608	20	05.5	-64	43.4	
list 2	neb	312½	320½	vF. S. B* 3′ s.f., to check on previous by Ex. at -67.5	ok	new	20	05.5	-65	05	

geo.

Checked above neb on 5637 A 60m exp. on
20 20 - 62.5 quad 4.

Sept 4 1901

5556 (Continued)

checked on 5619 A.

6810 ok cf. S. ~~★N.~~ εE at 170°, ★N.

5557 A 1730 +22.5 60m qual 3 -
Clock rate away off. cond it keep ★ on threads
not exam in detail

5558 A 1850 +22.5 60m qual 3
not exam in detail.

5559 A to 5565 (plate tests) 10m expo -

5559 = Emul 7820½ S best but 11m exp.
5562 } 5560 } next { 7974 S / 7896 S } equal
5563 next 8016 S
5561 / 5564 / 5565 } slowest } 7928 / 8080 / 8130 } apparent

5566 1750 +22.5 60m qual 2 dbld.
not exam

5567 1910 +27.5 60m qual 3 —
no neb seen not exam in detail.

5568 2010 +27.5 60m qual 4
no neb seen not exam in detail,
21 10 +27.5 60m qual 3 —

5536

*	215	135			26634	19	22.0	-59	25.3
*	225	198			26664		23.4	-60	28.3
*	279	62			26819		30.0	-58	12.0
neb	189½	140	vF. cS. R.	ok	new	19	18.7	-59	30
neb	200	107	vF. cS. R.	ok	"	19	20.0	-58	58
neb	258	33	vF. S. eE ∠ 15°,	ok	"	19	27.3	-57	44
~~neb~~	317	105	(NGC 6810) ok		?	19	35.2 ~~28.2~~	-58	53
neb	401	115½	cF. S. (too near edge to discern well)	ok	new	19	46.0	-58	58
*	370	142			27100	19	42.2	-59	25
*	421	129			27237	19	48.7	-59	10

~ 5219

see p 93 for measures fastened trail.

Sept 4. 1901

5570 – 77 10^{m} (moonlight strong)

5578 special exp at 1930 – 60.0 60^{sec} qual 4.
see p 93 for measure of asteroid trail.

5579 – 5618 10^{m} exps.

5619 Special exp for asteroid trail.
1930 – 57.5 90^{m} exp qual 4
middle exp 8:08 P.M.

measured Sept 14. 1901

5648 A measured for asteroid trail

Sept 11 11:27 P.M. middle exp

Measured Sept 30 1901

Sept 18 1901 plate 5658

$9^{h}\,13^{m}$ P.M. middle exp (clds)

5660-61 A asteroid off S edge of plate
(allowed too much for motion)

5671 A 20 20 – 47.5
2 exps M.T. of middle of 1st = 8.08 PM
" " " " 2nd = 9.00 "

Date Sept 30, 1901.

sent / 5619

trail	253½	156	cF, E 1.0^{mm} at 25°		19 35.1	-57 17.5
*	245	160½		26908	19 34.0	-57 22
*	254½	107½		26931	19 35.0+	-56 29.3

Date of exp of 5619 was Sept 2. 1901 8 0 8 P.M. M.T. of
middle of exp. 8 0 8 P.M.

sent / 5648A

Trail	249½	145½	vF E 0.7^{mm} at 30° (60^{m} exp)	-	19 46.3	-54 29.4
*	246½	153		27178	19 45.9+	-54 37.1
*	261½	128½		27217	19 47.6	-54 12.2

sent / 5755A

trail	171	316½	F ε 0.6^{mm} at 36° (in 54^{m}) obs	~~trail~~	19 57.1	-52 06.7
*	110	321½		27277	19 50.5	-52 10.0
*	111	321		27280	19 50.6	-52 09.4
*	165½	279		27422	19 56.5	-51 29.3
*	236½	342		27583	20 04.2	-52 32.3

sent // 5671

trail (a)	201½	186	εF, ε 1.2^{mm} at 38° / 60^{m} } 1.9 mm total	-	20 19.2	-47 34.0	
" (b)	202	185	cF ε .0.5 mm at 38° (30^{m})	-	20 19.25	-47 33.2	
*	200	151		27963	20 19.0	-46 58.8	6.8
*	209	187		27981	20 19.9	-47 34.9+	
*	237	121		28054	20 22.6+	-46 28.7	

5689A MTs of middle exp
Oct 1 1901 9.55 PM

5693

MTs of middle exp
Oct 2. 1901 10:23 PM

5696 Oct 4
middle exp 8:28 P.M.

5700

Oct 5
middle exp 9 25 PM

see page 110
~~Oct 8~~ approx. ~~pos.~~ = ~~20^h $33^m.7$ − 44° 15′ (plate 5707)~~

sent

5689

trail	217	167	εT ~~#~~ E 1.1$^{\text{mm}}$ at 41°	–	20 21.3	-47 08.1
*	194	158		27 963		
*	203½	194	61$^{\text{cm}}$ ap.	27 981		
*	231	128		28 054		

sent

5693

trail	184½	192½	εT E 0.7 at 40°	–	20 23.4	46 43.7
*	140	208½		27963		
*	150	245	40$^{\text{cm}}$ ap.	27 981		
*	177	178		28054		

sent

5696

asteroid	193	177½	εT E 2.4$^{\text{mm}}$ at 42°	trail.	20 27.2	45 56.3
*	110	241		27963	20 19.0	-46 58.8
*	146½	210		28 054	22.6	-46 38.7
*	218½	175		28193	20 29.6	-45 54.0

5700

sent

~~Sky too poor — no trace of the asteroid.~~

asteroid	198½	185			20 29.3	45 30.7
*	85½	276		27963		
*	125	245		28054		
*	197	209		28193		

Oct 7 1901

5620 A Eros.

5621 A 1610 – 375 60^{m} qual 4– no neb seen, not exam in detail.

5622 A 17 50 " " " 4. " " " " " " "

5623 A 18 30 – 425 " " 4– " " " " " " "

5624 A Eros Reg 14 45 – 225 60^{m} " 3 " " " " " " "

5625 A 16 50 – 275 60^{m} " 3– " " " " " " "

5626 A 17 50 – 425 " " 3 " " " " " " "

5627 A 19 30 – 325 " " 4 " " " " " " "

5628 A Eros. n.s. " 3–

5629 A 17 10 – 275 60^{m}. 2 dbld. " " " " " " "

5630 A 17 10 – 425 60^{m} " 3– " " " " " " "

5631 A 18 10 – 475 " " 3 " " " " " " "

5632 A Eros OK " 4–

5633 A 18 10 – 425 11^{m}_{x} " 3 " " " " " " "

5634 A " " 60^{m}, 4– " " " " " " "

5635 A Eros 120^{m} 4– ~~" "~~

5636 A 17 50 – 425 60^{m} qual 4, no neb seen not exam in detail

5637 A 20 20 – 625 65^{m} " 4.

checked several neb also previously seen on 4th exp.

5638 A Eros 2 60^{m} exps. fol on Eros. ok.

5639 A 17 30 – 475 60^{m} " 4 no neb seen not exam in detail.

5640 A 21 00 – 725 60^{m} qual 4 " " " " " " "

5641 A Eros n.s. 60^{m} 1 exp " 3– ———

5642 A 16 50 – 275 ~~17 30 – 475~~ 60^{m} qual 2. dbld. not exam.

5643 A 18 10 – 475 " " 2 "

5644 A 21 40 – 725 " " 4. no neb seen not exam in detail

5645 A Eros Reg 60^{m} " 4. " " " " " " "

5646 A 17 10 – 375 " " 4 " " " " " " "

5647 A 1830 – 575 " " 4–

~~Sept~~ Oct 7. 1901 (cont)

5648 A 19 40 − 55.0 60^{m} exp qual 4.
Asteroid trail for measures see p 102-3. (prev)
5649 A Eros 60^{m} qual 3− poor Eros n.s.
5650 17 10 — 47.5 — 60^{m} qual 4 not exam in detail, no neb seen
5651 18 10 — " " " 3 " " " " " " "
5652 23 00 − 77.5 − " " 4. " " " " " " "
5653 Ray Region 20^{h} 20^{m} − 62.5 − 4½^{h} qual 4.

5653A

List 2/ neb	–	–	checked from 5550A p. 99	new	20	01.2	-63 05

two or three possible neb. - not measured

5702 asteroid.
Oct 7. 1901.
M. T. of middle exp. = 8.15 P.M.

5707
Oct 8 1901
M.T. of middle exp = 10:52 P.M.

5710 Oct 9.
M T of middle exp. 10:12 P.M.

5715 Oct 31
M. T. of middle exp. 8:37 P.M.

Sent /

5702

asteroid	198	174	22^{c}	E 1.7 at 41°		20	33.3	-44	41.8
*	205½	168½		in 90^{m}	28300				
*	220½	207			28340				
*	260	118			28427				

Sent /

5707

asteroid	215½	211	22^{c},	E 2.2 at 38°	trail.	20	35.6	-44	14.2	
*	199	233		in 100^{m}	28300	20	34.0	-44	36.4	
*	214½	271			28340	20	35.4	-45	14.3	6.9
*	253½	181½			284~~88~~27	20	39.0	-43	45.0	8¾

Sent /

5710

asteroid	201	195½	22^{c}	E - at 41°±	trail	20	37.6	-43	50.0
*	163	242			28300				
*	178½	280			28340				
*	216½	191			28427				

Sent /

5715

asteroid.	397½	134	22^{c}	E 2.0± at 46°±		21	24.5	-34	09.0
?	380	125	17^{c}	E 1.3 at 28°	trail	21	23.1	33	07.0
*	350½	145		in 110^{m}	29376	21	20.8	-34	20.4
*	392½	118			29455	21	24.1	-33	52.5
*	403½	117			29472		24.9+	-33	00.4
*	417½	150			29490	21	26.2	-34	23.0

5717

Nov 4, 1901. not on plate

5718 a 5719. not on either plate

Nov 12.

5720

Nov 13. 1901 8 02 P.M.

~~5721~~

5721 Nov 13 1901 8.56 P.M.

5717

sent /

5720

Asteroid	299	189	58T E 1.3 mm at 47°		trail	21 52.5	-28 14.5	
*	200	197	(60m)	AGC	28975	21 45.0	-28 22.9	7.4
*	274½	160		"	29993	21 50.6	-27 40.7	
*	282½	216		"	30012	51.2	-28 41.0	
*	317½	181		"	30076	53.8	-28 06.4	

sent /

5721

Asteroid	299½	188	55T E 0.8 at 48°	trail	21 52.57	28 14.2
*	200	197		28975		
*	274½	159½		29993		
*	282	215		30012		
*	318	181		30076		

5724 Asteroid, n.a.

5724

5654, A 18 20 − 57.5 $4^{h}\,{}^{1}/_{4}$ · and 4.
Mar 28 + 29 ^{830}/1901 (measured)

Lit 4 / NGC 6699. ok on both 5654 + 5655.
an exceedingly close 2 br spiral, 1' diam.,

5654A

List 3	neb	64	102	cF. S. R. vmbM,	new	18	02.9	-56	17	
List 3	*	68	111		24687	18	03.4	-56	25	
	neb	98	249	F. S. Irr. form.	new	18	06.0	-58	43	
List 3	"	102	219	F. S. eE at 20°, lbM.	new		06.7	-58	14	
	" *	119	263	cF. vS. R. neb *. several *s v nr	new		08.7 6	-58	57	
	*	116	217½		ZC 18h.431	18	08.5	-58	12.6	
	*	120½	217½		AGC 24824	18	09.1	-58°	12.7	
List 3	neb	163	280	eF. eS. * inv in neb disc	new	18	14.2	-59	17.	
	*	173	303	may be cll, mis neb	24993	18	15.5	-57	39.6	
List 3	neb	172½	107½	eF. vS, ~~*M~~, vE at 0°, * N	new	18	15.9	-56	15	
	*	197½	82½		25081	18	16.9	-56	00.3	
	*	232	145		25189	18	23.0	-57	02.7	
~~List 3~~ List 3	neb	242	144	eeF, eS, lE 90°, ~~ok 90~~ sp ff 5	new	18	24.2	-57	02	
	neb	246	130	vF. vS. 2 hazy patches tg,	new	18	24.7	-56	48	
	*	244½	249½		25244		24.7	-58	46.2	
List 2	*	252	207		25270		25.6	-58	03.7	
	neb	~~246~~ 244½	~~231~~ 205	F. S. eE at 95°, * N, ok in 5655	new		24.6	-58	02	
	"	246	231	cF. S. eE at ~~170~~ 165°, cbM, " "	"		24.8	-58	28	
	"	252	237	F. cL, E at 150 achromatic neb, shaky. " "	"		25.7	-58	34	
	"	255	195	F. vS. Spiral, 2 br. " "	"	18	25.7	-57	51	
add	neb	244½	334½	cB, S, E at 125°, Br * N, " "	"	18	24.8	-60	11	
	*	262	332½	" "	ZC 18h.1528	18	27.2	-60	08.4	
	neb	287	178	eF. vS. lE at 130° " "	new	18	29.8	-57	34	
	neb	287½	202	eF. eS. R. " "	new	18	30.0	-57	58	
	*	294	159		ZC 18h.1703	18h	30.7	-57	15.2	8½
List 2	neb	332	161	eF. eS. cE at 50° " "	new	18	35.5	-57	16	

5655 A   18 50 −57°.5 4^h qual 4.

Nov 30   measured

Dec 2   "   finished.

~~5657. 17 10 +42.5 60^m qual 4.~~

~~not measured in detail~~, no neb seen.

5653 A

list 2	neb	127½	205½	εF, S, irr. shape, m BM,	ok on 5654	new	18 39.6	-58 02	
	2 *s	157½	205			25703-5	18 43.3	-58 02.3	2 *s
	*	139	266½			25637	18 40.7+	-59 03.1	8
list 2	neb	153	284½	εF. S. ~~R.~~ l E at 120°	" "	new	18 41.2	-59 21	
list 2	"	155	258	εF, vS	" "	new	42.8	-58 55	
list 2	"	166	285	εF, S Diffuse ~~st~~ * N,	" "	new	44.2	-59 22	
list 3	"	128½	161	εF, εS. vE at 15°		new	18 40.0	-57 17	
	"	164	130	εεF. S. vE at 0°		new	44.3	-5~~7~~6 49	
	"	188½	113	εεF, εS, vE at 160°, betw 2 *s,		"	47.3	-56 32	
	*	189	114			25825	18 47.3	-56 32.6	
	neb	148	57	εεF, εS.		new	18 42.6	-55 36	
	*	202	78			25862	48.9	-55 57.2	
	*	224	128½		Z.C.	18h 2716	51.7	-56 47.4	
	neb	235	~~1~~82	εεF, ~~εS~~, εE at 10°, 2 *s v near	check	new	18 52.9	-57 40	
	neb	242	145½	vF. S. ~~Ell~~. Elliptical, also uniform density, check; possibly planetary neb	check	"	18 53.8	-57 04	
list 3	neb	249½	100	εF. S. εεE at 140°, l BM,		"	18 54.6	-56 18	
	*	249½	149½			25982	18 54.7+	-57 07.7	
	*	254½	208			25998	55.4	-58 05.9	
	*	261	229			26025	56.3	-58 26.6	
	neb	260½	246	εεF. S, cE at 100°, ~~εF, S. εεE at 140. l BM, check~~		new	18 56.3	-58 53	
	*	302½	82			26142	19 00.9	-55 58.4	8¼
list 2	neb	276½ ~~287½~~	100½	εF. S. cE at ~~40~~ 0°.	O.K. on 5656	new	18 57.8	-56 18	
list 2	neb	278	38½	cF. S. cE at 90°	" "	new	18 57.8	-55 16	
list 2	neb	275	300	vF. S. εE at 130°	" "	new	18 58.3	-59 37	
list 2	*	287½	295			26120	19 00.1	-59 28.9	
list 2	neb	308	32	vF. vS. εE at 10°	" "	new	19 01.3	-55 10	
list 2	neb	323½	166	εF. εS. R.	" "	new	19 03.9	-57 22	
list	neb	327	293	εF, εS, R, l BM,	" "	"	19 05.1	-59 27	
	neb	324	166	εεF. εS. vE at 20°	" "	new	19 04.2	-5~~7~~6 42	

Later/ NGC 6788 in Cat. gives $19^{h}\,17^{m}.8$ for RA
none seen there but one at $18^{m}.7$

5655A

list 2	neb	340	132	vF, vS., eE at 145°, *N, also on 5656A.		new	19 05.7	-56 47	
list 2	"	344	230½	eF, eS. cE at 0°,	" "	"	19 06.8	-58 24	
list 2	"	357	108½	cF. vS. ~~[illegible]~~	" "	"	19 07.5	-56 23	
	"	385	100	vF. vS.	" "	"	19 10.7	-56 12	
	*	381	107			26383	19 10.4	-56 19.1	
list 2	neb	369	297	eF, eS. cE at 90°.	" "		19 10.6	-59 29	
	*	363½	271			26361	19 09.7	-59 02.7	
list 2	neb	412½	148½	eF. eS. R.	" "	new	19 14.5	-56 58	
	*	368	34	~~=~~		26324	19 08.3	-55 09.1	8
list 2	neb	359	14	F. eS. R. BM,	" "	new	19 07.2	-54 50	
	"	362	12	F. S, * inv in neb,	" "	"	19 07.4	-54 48	
					" "	~~"~~	~~19 15.8~~	~~-60 07~~	
	*					~~26572~~	~~19 18.9~~	~~-60 06.1~~	

5656A

list 2	neb	175	333	eF, eS. cE at 175°, also on 5655	neb	19 15.2	-60 07	
	*	203	332		26572	19 18.9	-60 06.1	
list 3	neb nd defined	163	69	vF. S. eE at 10° nd defined (check)	new	19 14.3	-55 44	
3	" " "	167	36	eeF. S. eE at 0° " "	"	14.8	-55 12	
3	" " "	173	39	eeF. S. eE " 0° " "	"	15.4	-55 15	
	*	183½	42	~~F. S. cE at 70~~	26519	16.8	-55 17.7	
list 4	(neb	200	32	F, S eE at 70°, B* N,	?	19 18.7	-55 09)	
list 3	"	206	30	eF eS. dbl neb.		19 19.4	-55 06	
	*	205½	33		26586	19 19.4	-55 09.6	
	*	179	89		26499	16.2	-56 04.5	
	*	185	155½		26511	16.7	-57 10.0	
list 3	neb	187½	197	cF. S. eE at 15°, vm BM,	new	19 17.1	-57 51	
	"	201½	296	eF. vS. R.	new	18.8	-57 30	

Dec 2 1907 continued

5657 1710 - 42.5 60^m qual 4.
not exam in detail. no neb seen.
5658 see p 103 for asteroid trail measures.
5659 1830 - 42.5 60^m qual 4 -
5660-1 20 03 - 47.5 asteroid - two plates
not measured. asteroid n.f.

5656 entered

List 3/neb	212	263	eeF, cL, prob a br spiral.	check	new	19 203	-58 57
*	227	291			26604	19 220	-57 25.3
List 3/neb	218	191½	vF. eS. cE at 25°	"	new	19 208	-57 46
*	290½	219			26819	19 30.0	-58 12.0
List 2/neb (not listed)	250	225	eeF eS. R. vE 160°,	ok 5695	new	19 249	-58 19
~~" or defect~~	~~254½~~	~~250~~	~~eeF. eS. *N, in Ring neb, 1' diam~~	~~ok on 5690~~ N.S. on 5695	~~"~~	~~255~~	~~-58 44~~
List 2 "	270	190	vF. S., eeE at 5°	ok on 5695	"	19 274	-57 44
" 1	293	234	eF, eS, vE at 40°,	" " "	"	19 304	-58 26
" 5	324	230	eF. eS. cE at 170°	" " "	"	19 343	-58 21
List 2 " 2	314½	92	eF. vS. R	" " "	"	19 323	-56 05
" 4	329	74	vF. vS. vE at 170°	" " "	"	19 339	-55 46
" 3	316½	52	eF. eS. R,	" " "	"	323	-55 25
~~"~~	~~339~~	~~64~~	~~vF. vS. R.~~ = 6812 NGC	~~" " "~~	~~old~~	~~373~~	~~-55 35~~
*	375½	127			27043	19 39.8	-56 35.9
*	382½	299			27100	422	-57 26.3

Dec 4. 1901.

5662 A 20 50 − 52.5 60^m qual 4.
no neb seen not examined in detail.
5663 A 20 50 − 62.5 − 60^m qual 3 − no neb seen not exam in detail
5664 A 20 50 + 22.5 " " 3 " " " " " " "
5665 A 21 50 " " " 4 − " " " " " " "
5666 A 23 10 " " " 4 " " " " " " "
5667 to 5686 = 10^m
except 5671 on Asteroids.
for " see p 102-3 prec.

5687 A Eros Reg. 16 00 − 25. 60^m qual 4 − for comparison with other plates on Eros.

5688 A 18 10 − 47.5 60^m " 3 − not exam in detail no neb seen
5689 A 20 20 − 47.5 61^m " 4 Asteroid ok (see p 104-5)
5690 A 20 10 − 32.5 60^m " 3 not exam in detail, no neb seen
5691 A 17 10 − 27.5 " " 2 dbld " " " " " " "
5692 A 19 30 − " " " 4 − " " " " " " "
5693 A 20 25 − 46.5 40^m " 3 Asteroid ok. (see p 104-5)
5694 A 21 30 − 27.5 60^m qual 3 −
5695 A 19 50 − 57.5 4^h qual 3.

List 4/ 6810 & 6812 NGC ok
NGC 6862 = a small 2 br spiral. ok

5696 Asteroid 20 38 − 46 $1^h 49^m$ qual 4.
5697 (see p 104-5)
21 10 − 37.5 60^m qual 4
not exam in detail no neb seen.

5698 21 10 − 42.5 " qual " " " " " " "

5695A

Lit 2	neb	64	122	εF. vS. R.	ok in 5656	new	19 323	-56 38	
	neb	106½	129	εεF. eS. R, ~~[illegible]~~ f * s 1',	" " "	new	19 37.3	-56 46	
	*	126	117			27043	19 39.8	-56 35.9	
Lit 2	neb	138	275	εεF. eS R, bet 2 εf *s,	" " "	new	40.6	-59 13	
	neb	179½	258½	cF. S. vlE at 135°. Susp. spiral	" " "	new	19 46.0	-58 58	
	*	200½	270			27237	19 48.7	-59 09.6	
Lit 3	neb	179½	117	εεF. eS. cE at 0°	check	new	19 463	-56 38	
	*	180	98			27188	46.4	-56 18.1	8½
Lit 3	neb	201	82½	εF. eS. R.	"	new	19 489	-56 03	
Lit 3	neb	207½	147	εF. eS. cE at 130° am.sw, *s	"	"	19 49.7	-57 08	
Lit 3	neb	229	58	εεF, eS. R. * 1' f.	"	new	52.1	-55 39	
	~~neb~~		—			—	—	—	
	*	248½	78			27368	19 54~~5~~	-55 57.8	
Lit 3	neb or defect	256	93	cF. vS. R. or defect	"	?	53.4	-56 13	
Lit 2	neb	259	34	εF. vS. 2br spiral (open)	~~check~~ ~~ok~~ ok by some	new	19 55.5	-55 15	
Lit 3	neb	262	193	vF. vS. vE at 05°, * 1' s.p.,	check ok	new	19 56.4	-57 52	
	*	315	191½	εF. S. εE at 0°, * N,	ok check	27553	20 02.0	-57 48.7	6.5
Lit 3	neb	270½	~~113~~			new	19 57.3	-56 32	
Lit 3	neb	297½	108	εF. vS. εE at 35°, [illegible],	~~ok~~ check	"	20 00.4	-56 27	
Lit 3	neb	301½	65½	F. vS. cE 10°	"	"	20 00.7	-55 [illegible]	
Lit 3	"	332	54½	F. vS. R	"	"	20 04.2	-55 32	
	"	338½	235	εεF. eS. R.	"	"	20 06.4	-58 40	
	"	348	217	vF. vS. lE at 130°, * 2' s,	"	"	20 07.4	-58 12	
	"	377	45	εεF. eS, cE at 0°, bet 2 f *s	"	"	09.4	-55 20	
	*	385	270			27790	20 12.4	-59 02.2	7½

Dec 4. 1901 Cont.

5699 Cross 8x10 plate 90^m with plane apparatus. qual 3
" n.g.
5700 Asteroid 20^h 30^m −45.5 60^m qual
" E E f. not measured (see p 104-5)
5701 " n.g. clds. plane apparatus.
5702 " 20 34 −45°
" ok, see p 110 + 111.
5703 " with plane app. n.g.
5704 22 10 −52.5 60^m qual. 2 double in decl.
5705 18 30 −2.5 60^m " 3 elong " "
5706 19 50 −2.5 60^m " 3 " " RA.
5707 Asteroid ok. (see p 110 + 111) qual 4.

Dec 5, 1901

5708 16 50 −27.5 60^m qual 4 − not exam in detail.
5709 18 10 −42.5 " " 4 " " " "
5710 Asteroid. 20 38 −43.5 62^m " 4 (see p 110-111)
5711 21 10 −7.5 60^m " 4 − not exam. in detail
5712 Nova Sagittarii 3^h exp qual
" " probably visible (prints made for Cambridge)
5713 21 10 −12.5 23^m closed by clds. dbed 2
5714 22 20 −72.5 62^m qual. 4 − not exam for neb.
5715 21 10 −35.0 110^m " asteroid at f. end.
also another c T^e trail E 1.3^{mm} at 28° (see p 110-111)
21^h 23.1^m −33°.69′ exp 110^m.
5716 22 30 −22.5 60^m. qual 3 not exam, in detail
5717 Asteroid 21 15 −33° asteroid not on plate. (p 112-113)
qual 4 − trail on 5715 looked for on 5717.
at motion of 1.4 − 110^m motion in 4 days = 80.^{mm} ±
searched in both directions (one of trace as detected
at South line 103^{mm})

Dec ~~4~~ 5 1901 Continued

5718 A	21 40	−33	Asteroids. not on plate	4
5719	22 10	− 30	" " " "	4
5720	21 45	−28	" and Old (see p 112 & 113)	
5721	"	"	" " 4 ~~see p~~ " " "	"
5722	22 10	−"	" " 3 not on plate.	3
5723	2 "	"	" " 3 − " "	"
5724	21 55	− 27.5	90m exp good 3 −	

no trace of asteroid plate not developed far enough.

Jan 21 1902

5734 A Asteroid plate.
taken Dec 7. 1901

4 exps of 40^m each.
Fol on Asteroid with planet apparatus .03^{mm} a min at 50°

5733 taken night previous ast. n.s.

exp 1 m.T. of middle = 8 16 P.M.
2 " " " = 8 56
3 " " " = 9 35
(4 " " " = 10 15)

5734 A.

Sixt 5

+		AGC	31 837	22	42,0	-18 04.6	6,9
Asteroid dots	dot			22	42,95	-17 32.0	
" "	"				43,0	-17 31,4	
" "	"				43,05	-17 30.5	
" "	" c m fainter (last ref to W.)				—	—	
×		DC	99 63	22	49.2	-16 21	
*		"	9964	"	49.3	-16 48	

Sixt 5

836 Mean of 3 dots 22 43,0 -17 31.

Jan 22 1902

5725 A Asteroid 22 29 - 20.5 60^{m} qual 4 (scratched) no asteroid seen
5726 A " " " 62^{m} " 3 " " "
5727 A 1 10 - 37.5 67^{m} " 2 dtld. no neb seen.
5728 A " 22 35 - 19 104^{m} " 4 asteroid n.s.
5729 23 30 - 22.5 60^{m} " 4 no neb seen.
5730 A Orion Neb. 5 28 - 5 60^{m} " 4 - v good - plate clear
5731 A " " 5 30 - 5.5 $7\frac{1}{2}^{h}$ exp. " 3 -
(1^{h} 28^{m} to 8^{h} 58^{m})
plate fogged badly by moonlight
{moon rose 7^{h} but I thought its light
{so dim as not to affect plate.

5732 A Nova Sagittarii 18 56 -13. 20^{m} Nova n.s.
to ~~the~~ check a plate taken Oct 10.
Cldy weather knocked out further exps in Oct
5733 A Asteroid. 1 n.s.
2 exps on asteroid & one on stars.
fol in planet app. at 50° angle .03 ^{mm} a min.
5734 A " 22 44 - 17. o.k.
4 exps 40^{m} each with app.
see p 130-1 for measures on same.
5735 - 5750 Spectrum plates. 60^{m} ± very good mostly.
5751 A 1 20 - 62.5 66^{m} qual 3 -
no neb seen
5752 2 30 - 42.5 60 qual 3 - no neb seen
5753 4 10 - 47.5 60 " 4 " " "
5754 Asteroid 2 exps 60^{m} each with app. ast n.s.
plate light-struck in card board box,
5755 2 30 - 37.5 60^{m} qual 4 no neb seen

Jan 22 1902 cont

5756 A	4 10	− 375	60m	small	4	no neb seen, not exam in detail	
5757 A	1 10	− 175	60	"	4	" " " " " " "	
5758 A	1 50	"	60	"	4	" " " " " " "	
5759 A	3 10	"	60	"	3	" " " " " " "	
5760 A	2 20	− 575	60m	"		dble.	2
5761 A	2 10	− 275	60	"	4	" " " " "	4
5762 A	3 30	− "	52	"	stopped by clds.		4

Listed to here Jan 1901

to send to Cambridge.