

Melbourne Mean Time 1874	Name of Com- parison star	$\alpha - \alpha$	Right Ascens. of Comet $\alpha$	$\text{Log } \frac{p}{P}$	$\Delta - \Delta'$	North Polar Dist. of Comet $\Delta$	$\text{Log } \frac{p'}{P}$	Numb. of Meas.
Aug. 4	6 <sup>h</sup> 41 <sup>m</sup> 29 <sup>s</sup> .0	* 8 <sup>1</sup> / <sub>2</sub> Mag	+2 <sup>m</sup> 35 <sup>s</sup> .22	7 <sup>h</sup> 58 <sup>m</sup> 59 <sup>s</sup> .03	+8.7894	-10' 3''28	128°12' 27''02	+9.8283 3
	18 35 34.7	2 Argus	+0 13.51	7 59 22.06	-8.7993	-23 40.48	129 15 7.63	+9.4509 3
	8 6 14 4.5	* 7 <sup>1</sup> / <sub>2</sub> Mag	-0 59.11	8 1 48.91	+8.8488	- 6 56.78	135 21 9.07	+9.7915 4
	10 6 20 12.9	B. A. C. 2752	-2 7.45	8 3 15.26	+8.8617	-12 40.60	138 6 1.34	+9.8037 1
	11 6 16 37.0	" " " 2716	+4 7.49	8 3 58.23	+8.8724	+10 8.64	139 18 37.01	+9.7994 2
	13 6 7 44.6	Lac 3193	--0 39.87	8 5 22.79	+8.8941	+ 0 1.24	141 28 12.19	+9.7880 6
	15 6 27 56.6	* 9 Mag	-1 56.85	8 6 46.21	+8.8885	- 2 39.31	143 21 46.06	+9.8264 4
	19 7 6 38.8	* " "	-2 11.83	8 9 20.98	+8.8519	+ 8 20.19	146 30 24.82	+9.8904 5
	23 17 54 34.1	Lac 3220	+4 48.79	8 11 51.01	-8.9614	+ 7 52.80	149 17 48.39	-7.5948 2
	28 9 27 2.3	* 9 Mag	+1 49.42	8 13 47.06	+8.0000	-20 16.44	151 42 32.36	+9.9924 3
Sept. 4	10 18 56.6	* 8 <sup>1</sup> / <sub>2</sub> "	-2 15.55	8 15 13.07	-8.4871	- 5 12.03	154 47 22.18	+9.9790 4
	10 7 39 23.1	* 9 "	-1 27.28	8 14 34.15	+8.6551	+ 5 54.09	157 2 54.33	+9.9657 3
	16 7 47 34.0	* 7 <sup>1</sup> / <sub>2</sub> "	-0 13.47	8 11 37.27	+8.4443	-12 20.59	159 9 29.70	+9.9745 4
	29 12 54 4.5	* 8 "	-6 3.16	7 53 29.49	-9.2606	+11 3.25	163 18 12.75	+9.4199 4
Oct. 6	9 46 19.9	* 7 <sup>1</sup> / <sub>2</sub> "	+3 5.83	7 35 10.90	-9.1832	+ 1 35.76	165 9 32.20	+9.8260 4

Melbourne Observatory, April 19, 1875.

E. J. White, Acting Govt: Astronomer.

Apparent Right Ascensions and North Polar Distances of Coggia's Comet (c 1874) deduced from observations with the 4<sup>1</sup>/<sub>2</sub> inch equatorial of the Windsor Observatory, N.-S.-Wales.

Windsor M. T. 1874	Comp. Star	Mean R. A. of Star 1875.0	Mean R. A. 1874.0	App. R. A. at Obs.	Comet's App. R. A.	Mean N. P. D. of Star 1875.0	Mean N. P. D. 1874.0	App. N. P. D. at Obs.	Comet's App. N. P. D.
Aug. 1	17 <sup>h</sup> 15 <sup>m</sup> 39 <sup>s</sup> { B. A. C. 2699 } 6 <sup>1</sup> / <sub>2</sub> mag.	7 <sup>h</sup> 58 <sup>m</sup> 11 <sup>s</sup> .35	9 <sup>s</sup> .01	8 <sup>s</sup> .33	7 <sup>h</sup> 57 <sup>m</sup> 16 <sup>s</sup> .71	122° 6' 50''1	40''2	32''0	121°54' 24''9
1	17 44 38 7 <sup>1</sup> / <sub>2</sub> "	7 57 32.55	30.20	29.52	7 57 17.43	121 57 36.0	26.1	17.9	121 57 27.4
2	17 23 2 7 <sup>1</sup> / <sub>2</sub> "	7 59 55.55	53.27	52.51	7 57 56.96	124 32 37.7	27.6	19.5	124 33 24.4
2	17 28 47 7 "	7 58 23.27	21.00	20.23	7 57 56.89	124 43 75.5	65.6	57.2	124 34 13.9
6	6 15 40 { Lac. 3086 } 7 mag.	7 52 46.48	44.47	43.43	8 0 21.26	132 4 20.1	10.7	0.9	132 3 37.1
6	6 15 40 8 "	7 56 26.47	24.45	23.40	8 0 20.25	132 3 74.4	64.6	55.2	132 3 49.1
7	6 19 17 { Lac. 3180 } 5 <sup>1</sup> / <sub>2</sub> mag.	—	—	—	—	133 44 76.6	66.2	57.5	133 46 16.1
7	6 23 49 " "	8 5 28.55	26.57	25.43	8 1 5.52	—	—	—	—
13	6 34 54 { Lac. 3193 } 6 <sup>1</sup> / <sub>2</sub> mag.	8 6 5.87	4.23	2.65	8 5 23.42	141 28 31.5	21.1	11.0	141 28 20.0
14	6 43 41 9 "	—	—	—	—	142 25 74.3	63.9	53.4	142 27 8.6
14	6 51 37 " "	8 4 44.67	43.08	41.45	8 6 5.33	—	—	—	—
18	16 14 29 7 <sup>1</sup> / <sub>2</sub> mag.	8 5 10.79	9.43	7.52	8 9 0.36	146 14 60.0	49.6	37.9	146 3 47.7
18	16 26 41 8 <sup>1</sup> / <sub>2</sub> "	8 8 62.26	60.87	58.96	8 9 1.09	146 2 70.6	59.9	48.7	146 3 53.8
20	6 59 33 8 <sup>1</sup> / <sub>2</sub> "	8 0 56.57	55.29	53.34	8 9 54.68	147 9 61.5	51.4	38.9	147 10 10.9
22	7 7 10 9 <sup>1</sup> / <sub>2</sub> "	8 12 10.35	9.10	6.99	8 11 3.24	148 26 54.1	43.1	31.4	148 26 13.9
24	7 8 26 8 <sup>1</sup> / <sub>2</sub> "	8 17 20.14	18.94	16.72	8 11 26.88	149 29 54.2	42.9	31.3	149 31 32.5
25	7 19 30 7 <sup>1</sup> / <sub>2</sub> "	—	—	—	—	150 9 41.9	30.8	18.5	150 8 24.1
25	7 24 10 7 <sup>1</sup> / <sub>2</sub> "	8 14 34.74	33.61	31.35	8 12 32.24	—	—	—	—
26	6 54 7 6 <sup>1</sup> / <sub>2</sub> "	8 6 3.98	2.94	0.68	8 12 57.26	150 42 36.1	25.6	12.1	150 39 2.7
26	16 1 16 7 <sup>1</sup> / <sub>2</sub> "	8 11 58.73	57 69 55.36	8 13 9.54	151 3 41.9	31.0	18.1	150 51 20.4	

Windsor M. T. 1874		Comp. Star	Mean R. A. of Star	Mean R. A. 1875.0	Mean R. A. 1874.0	App. R. A. at Obs.	App. R. A.	Comet's App. R. A.	Mean N. P. D. of Star 1875.0	Mean N. P. D. 1874.0	App. N. P. D. at Obs.	App. N. P. D.	Comet's N. P. D.
Aug. 26	16 <sup>h</sup> 38 <sup>m</sup> 15 <sup>s</sup>	B. A. C. 2770	8 <sup>h</sup> 6 <sup>m</sup> —	55 <sup>s</sup> .20	52 <sup>s</sup> .92	8 <sup>h</sup> 13 <sup>m</sup> 9 <sup>s</sup> .52	—	—	—	—	—	—	—
26	16 57 42	"	—	—	—	—	—	150° 54'	—	69° 9'	56" 4	150° 52'	7" 3
26	17 0 26	6 <sup>1</sup> / <sub>2</sub> mag.	8 6	3 <sup>s</sup> .98	2.94	0.69	8 13 8.64	—	—	—	—	—	—
26	17 8 39	"	—	—	—	—	—	150 42 36" 1	25.6	12.0	150 52 12.9	—	—
29	17 16 25	B. A. C. 2796	8 13	—	21.27	18.80	8 14 13.69	152 31	—	36.6	23.2	152 20 3.0	—
Sept. 1	16 44 15	{ Lac. 3296 6 <sup>1</sup> / <sub>2</sub> mag.	8 15	13.04	12.23	9.63	8 14 56.41	153 47	53.8	42.7	28.7	153 39	30.6
8	7 40 22	9 "	8 19	54.60	54.03	51.17	8 15 0.20	156 19	59.7	48.2	33.3	156 17	37.5
14	16 24 28	{ Lac. 3202 7 <sup>1</sup> / <sub>2</sub> mag.	8 3	38.22	38.07	35.20	8 12 41.68	158 34	44.3	34.0	16.0	158 35	43.4
14	16 34 36	{ Lac. 3254 7 <sup>1</sup> / <sub>2</sub> mag.	8 8	37.55	37.37	34.43	8 12 42.46	158 36	76.2	65.5	48.0	158 35	46.4
21	11 45 56	9 "	8 5	51.96	52.16	49.11	8 6 44.83	160 48	80.7	70.2	51.2	160 51	22.7
28	7 44 56	8 <sup>1</sup> / <sub>2</sub> "	8 0	38.55	39.25	36.13	7 56 2.14	162 56	40.1	30.0	9.7	162 56	26.8
Oct. 2	9 51 38	8 "	7 46	5.84	6.93	4.10	7 46 46.72	163 56	50.5	41.6	19.6	164 5	44.2
6	9 57 36	{ Lac. 2927 7 mag.	7 29	44.63	46.28	43.74	7 35 15.64	165 19	47.0	39.4	15.9	165 10	8.2
6	9 57 36	{ Lac. 3027 7 <sup>1</sup> / <sub>2</sub> mag.	7 39	2.35	3.89	1.15	7 35 14.28	—	—	—	—	—	—
7	10 23 58	Lac. 2927	7 29	44.63	46.28	43.83	7 31 51.18	—	—	—	—	—	—
7	10 23 58	" 3027	7 39	2.35	3.89	1.24	7 31 51.32	165 14	85.2	76.8	54.0	165 24	9.4

All the comparison stars have been observed at least three times with the Melbourne Transit-circle. The places of B. A. C. 2770 and 2796 are adopted from the Melbourne General Catalogue of 1227 stars for 1870.0. The mean positions of the remaining stars for 1875.0, with the estimated magnitudes are from a manuscript list kindly prepared for me by Mr. E. J. White, the Acting Government Astronomer at Melbourne. I have computed the reductions p and p' to the mean right ascensions and north polar distances for 1874.0 from the following formula:

$$p = -\{3^s.072 + 1^s.337 \sin \alpha \cot \Delta\} \quad p' = 20.054 \cos \alpha.$$

The reductions of the mean places for 1874.0 to the

apparent ones for the dates of observation have been effected by means of the independent quantities on pp. 330 — 337 of the Nautical Almanac.

A comet, which I suppose to be Encke's, was discovered by me at 4<sup>h</sup> 30<sup>m</sup> on the morning of the 7<sup>th</sup> instant in the constellation Cetus. It was observed again on the mornings of the 8<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup>, but was extremely faint and diffused in the telescope, with scarcely any perceptible condensation of light. No ephemeris has yet been received of Encke's comet. The discovery has been telegraphed to Sydney and Melbourne.

Long. of Observatory 10<sup>h</sup> 3<sup>m</sup> 16<sup>s</sup> E. of Greenwich

Lat. " " 33° 36' 29" S.

Windsor, N.-S.-Wales. 1875, Mai 13. *John Tebbutt.*

### Entdeckung eines neuen Planeten (147).

In der Nacht vom 10. auf den 11. Juli bemerkte ich in einer mir bekannten Constellation von Sternen ein schwaches Sternchen 12. Grösse, dessen Entfernung von A. Oe. 2051<sup>u</sup>, ich um etwa 13<sup>h</sup> auf +3<sup>s</sup> und +3' schätzte, doch gelang mir keine eigentliche Beobachtung. Am nächsten Morgen konnte ich constatiren, dass es wirklich ein Planet sei. Bisher erhielt ich von demselben die folgenden Positionen:

1875 M. W. Zt.	$\alpha$ app.	L. f. p.	$\delta$ app.	L. f. p.	
Juli 11	12 <sup>h</sup> 59 <sup>m</sup> 23 <sup>s</sup>	20 <sup>h</sup> 19 <sup>m</sup> 22 <sup>s</sup> .78	6.636 <sup>n</sup>	—17° 29' 53" 6	9.959
12	13 55 55	20 18 36.06	8.076	—17 31 52.8	9.957
13	12 49 0	20 17 53.07	6.801 <sup>n</sup>	—17 33 47.0	9.959

Grösse 12<sup>m</sup>0.

Herr Director von Littrow hatte die Güte, für den Planeten den Namen Protogeneia zu wählen.

Wien, den 15. Juli 1875.

*L. Schulhof.*