(**704**) Interamnia, *1916 Novembre 2.* — Irrégularités dans le chronographe.
Comète 1915 *e* » *Janvier 25.* — Irrégularités dans le chronographe.
» » » *26.* — Observations difficiles et peu sûres.
» » *Février 3,5,7* — A cause de la faiblesse de la comète, on a fait usage d'un micromètre de Cassini.
Csmète 1916 *a* » *Mars 24.* — Observation faite avec un micromètre de Cassini.

Comet 1917 *a* Mellish. Melbourne observations

by M. J. M. Baldwin

The first notification of this comet was received from local sources on April 17, but a number of people in Victoria appear to have seen it on the previous morning (April $15^d\ 7^h$ Greenwich Mean Time). When first seen it was a brilliant object, the nucleus being described as brighter than Venus. Owing to cloud, no observations could be made until April 19, when the nucleus was estimated as of third magnitude, and the slender tail curving slightly towards the north could be traced for fifteen degrees. On May 1, the magnitude as seen in the finder was 6,1, while on May 10 the photographic magnitude was about 9,5. On a plate taken on May 23, there is no trace of the comet. Cloud limited observations for position to four mornings.

Instrument, 13 inch astrograph. Observer, J. M. Baldwin. — Plates mesuared by C. Peel and W. R. Treharne

Date 1917	Melbourne Mean Time	Astrographic Positions AR 1917,0	D 1917,0	Annual aberration Δ AR	Δ D	Parallax factors Logp Δ		Number of Exposures
	h m s	h m s	° ′ ″	s	″			
April 19	17 24 35	0 42 10,51	— 1 19 45,6	— 1,19	— 6,9	9,6622n	0,7277n	2
» 23	17 27 59	0 49 58,04	— 4 22 20,1	— 1,19	— 6,2	9,6597n	0,7200n	2
May 1	17 20 28	1 8 0,18	— 7 50 41,5	— 1,17	— 4,9	9,6603n	0,7083n	1
» 10	17 26 25	1 26 41,76	— 10 5 26,2	— 1,15	— 3,4	9,6516n	0,6910n	1

Source of comparison stars

April 19	A. G. Abbadia	May 1	C. G. A. Cape 80 ; Wien 85 ; Rad 90
» 23	A. G. Strassburg	May 10	A. G. Camb. Mass.

The astrographic positions are referred to the equator and equinox of 1917,0 and are corrected for the part of the aberration due to the earth's motion.

From the above observations of 1917 April 19, April 23 and May 1 Mr C. J. Merfield has computed approximate orbit elements. Mr Merfield experienced considerable difficulty in attempting to adjust these elements, but a large correction to the assumed value of the eccentricity (unity) is indicated. On this account it has appeared desirable to append his elements, in the hope that they may prove useful to other computers.

T	1917 April 10,66871 G M T	
ω	120° 54' 4"	1917.0
Ω	88 16 56	
i	32 46 38	
Log q	9,276 505 2	

These elements give the residuals :

1917		Cos δ da	d δ
March	22,00	− 63,1	+149,7
»	27,00	− 46,7	+180,9
April	19,32	− 0,1	− 0,5
»	23,32	− 2,5	− 34,4
May	1,31	0,0	+ 0,4
»	10,32	− 9,6	+ 29,3

while the parabolic elements given in the " Lick Observatory Bulletin ", N° 290, give the residuals :

May	10,32	+ 183	− 552

Melbourne Observatory, 1917 *June* 11.

Observations of Delavan's Comet (1913 *f*) from photo's taken with the Astrophotographic Refractor at the Cape of Good Hope

by J. Voûte

1915	G.M.T.	N. of exp.	Time of exp.	Centre — Comet		Comet 1915,0 Not corrected for aberr.		Comp. St.
	h m s		m	s	′ ″	h m s	° ′ ″	
May 29	7 6 1	1	10	− 8,00	− 1 13,6	16 3 25,91	− 55 9 39,0	1, 2, 3
» 30	6 8 43	1	9	+ 0,54	− 3 11,7	16 0 42,59	− 55 12 62,8	1, 2, 4, 5, 6
June 1	6 11 2	2	7,6	−16,81	− 2 16,1	15 55 39,94	− 55 18 20,6	4, 5, 7
» 10	7 37 36	1	8	−19,96	− 1 16,7	15 34 32,94	− 55 22 47,7	8, 9, 10, 11
July 5	5 59 15	1	10	− 2,01	− 3 42,7	14 56 14,99	− 53 54 11,5	12, 13, 14
» 19	6 46 25	1	23	+16,55	+ 2 3,5	14 47 34,28	− 52 50 16,3	15, 16

Comparison Stars

1 Gou 21 836
2 ½ (Gou 21 861 + Cape 80 8770)
3 ½ (Gou 21 918 + Cape 80 8796)
4 Gou 21 635
5 ½ (Gou 21 784 + Cape 80 8733)
6 Gou 21 795
7 ½ (Gou 21 640 + Cape 80 8679)
8 G. Z. xv 2041
9 Cape 80 8490
10 » 8522
11 » 8529
12 Gou 20 277
13 » 20 378
14 » 20 381
15 ½ (Gou 20 074 + Cape 80 8065)
16 ½ (Gou 20 189 + Cape 80 8118)

Royal Observatory Cape of Good Hope, 25 *Aug.* 1917.
