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T LEONIS

Patrick Schmeer, West Germany, reports that T Leo (UG star)located at:RA 11h35m53s DEC +03 38.9'(1950) is in outburst. Estimates: Feb 15.931UT, 10.5; 16.909, 12.3.

COMET AUSTIN (1989c1)

Recent estimates:
Feb 7.75UT, 7.2 (A.Boattini, Italy); 13.44, 7.3 (T.Lovejoy, Australia); 14.44, 7.6 (G.Garradd, Australia).
Improved parabolic orbital elements from MPC 15857:

T = 1990 Apr. 9.9138 ET Peri. = 61.5709
Node = 75.3043 1950.0
q = 0.349428 AU Incl. = 58.9370

Extension to ephemeris on E378:

1990 ET	R.A. (1950)	Decl.	Delta	r	m1
Mar. 10	1 22.62	−10 39.1	1.544	0.868	4.8
15	1 29.23	− 5 54.8			
20	1 35.65	− 0 42.7	1.411	0.663	3.5
25	1 41.42	+ 5 02.7			
30	1 45.60	+11 24.8	1.253	0.466	1.7
Apr. 4	1 46.30	+18 17.9			
9	1 40.47	+25 06.0	1.046	0.350	0.0
14	1 26.13	+30 36.1			
19	1 05.41	+34 01.3	0.808	0.435	0.4
24	0 41.60	+35 35.6			
29	0 15.77	+35 47.0	0.600	0.626	1.4
May 4	23 46.88	+34 48.2			
9	23 12.24	+32 27.8	0.418	0.831	1.8
14	22 27.66	+27 58.9			
19	21 28.23	+19 41.9	0.275	1.030	1.8
24	20 13.00	+ 6 04.6			
29	18 52.75	− 9 44.4	0.251	1.220	2.4
June 3	17 44.40	−21 21.8			
8	16 54.82	−27 50.8	0.389	1.402	3.9

Brian Marsden comments:
The above positions should be good to better than 15' in mid-April, but the error could still be around 1 deg in mid-May. The magnitude has been computed from m1 = 4.5 + 5 log delta + 10 log r, which is in good agreement with recent observations. R. H. McNaught, Siding Spring Observatory, has derived the following even more optimistic formula, which satisfies 28 observations 1989 Dec. 17-1990 Jan. 27 with an rms error of 0.3 mag: m1 = 3.8 (+/- 0.4) + 5 log delta + 13.7 (+/- 1.3) log r. It certainly would seem that 1989c1 has the potential to be the best comet since 1976. On the other hand, the disappointing display of comet 1973 XII serves as a reminder that cometary brightness is notoriously unpredictable. The prediction for comet 1989c1 on IAUC 4926 was deliberately intended to be conservative, but it is worth noting that the 7.5 log r term utilized is often quite characteristic of 'new' comets from the Oort Cloud, as 1973 XII and 1989c1 both appear to be.
IAUC 4958

EDITORIAL ABSENCE

The Editor will be away in Jersey from tomorrow morning until Thursday evening during which time please ring Denis Buczynski or Martin Mobberley with any queries,

Guy M Hurst