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COMET P/2009 R2 (PIGOTT-LINEAR-KOWALSKI)

Further to *IAUC* 9072, elements by B. G. Marsden for epoch 2003:

Epoch = 2003 Feb. 10.0 TT

T = 2003 Feb. 1.2551 TT		ω = 357.°0844	}	2000.0
e = 0.480777		Ω = 55.1940	}	
q = 1.915714 AU		i = 46.2617	}	
a = 3.689579 AU	n° = 0.1390717	P = 7.09 years		

On *IAUC* 8044, the suggestion was made that P/2003 A1 = 1783 W1, although it was not possible unequivocally to demonstrate this at the time. Running the above orbit back to 1783 (closest approach to Jupiter 0.19 AU in 1971) yields

Epoch = 1783 Nov. 10.0 TT

T = 1783 Nov. 23.1803 TT		ω = 354.°0531	}	2000.0
e = 0.578766		Ω = 58.5969	}	
q = 1.458960 AU		i = 45.7727	}	
a = 3.463539 AU	n° = 0.1529058	P = 6.45 years		

This result compares very favorably with the orbit by C. H. F. Peters (1860, Brünnow's *Astron. Notes*, No. 19), notably with T, q, and Ω agreeing to 2.275 days, 0.0003 AU, and 0.°08, respectively. Although the quality of the observations is poor, the above orbit by Marsden satisfies fourteen of them made during 1783 Nov. 22–Dec. 4 to within $< 10'$ in each coordinate, provided that T is corrected to 1783 Nov. 19.59.

COMET 88P/HOWELL

J. Crovisier, P. Colom, N. Biver, and D. Bockelée-Morvan, LESIA, Observatoire de Paris, report that observations of the 18-cm lines of OH in comet 88P/Howell with the Nançay radio telescope show an increase in the average OH-production rate from $1.0 \pm 0.2 \times 10^{28}$ molecules/s during Aug. 1–13 to $4.3 \pm 0.5 \times 10^{28}$ molecules/s during Aug. 28–Sept. 3.

COMETS 223P/SKIFF, 224P/LINEAR-NEAT, 225P/LINEAR

Comet P/2009 L18 = 2002 S1 (cf. *IAUC* 9066) has been assigned the permanent number 223P. Comet P/2009 Q2 = 2003 XD_{10} (cf. *IAUC* 9068) has been assigned the permanent number 224P. Comet P/2009 Q3 = 2002 T1 (cf. *IAUC* 9068) has been assigned the permanent number 225P. (See also *MPC* 66864).

