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COMET 73P/SCHWASSMANN-WACHMANN

J. A. Farrell, Jemez Springs, NM, reports that unfiltered CCD exposures obtained with a 0.41-m *f*/8.4 reflector show a companion to comet 73P moving at the same general direction and rate as the primary; separations and position angles ($\pm\ 0^{\circ}.02$) from the primary are as follows: Jan. 6.48831 UT, $1392''.3 \pm 0''.6$ in p.a. $270^{\circ}.28$; 7.51252, $1414''.4 \pm 0''.8$ in p.a. $269^{\circ}.90$; 9.39304 (through high clouds), $1454''.5 \pm 1''.8$ in p.a. $270^{\circ}.04$. On the first two nights, the magnitude of the primary was found to be 16.2–16.4, while the primary was at mag 18.8–19.0.

Z. Sekanina, Jet Propulsion Laboratory, provides a search ephemeris for the companion discovered by Farrell. The few data points available can be reasonably well linked with the 1995–1996 observations of nucleus B, but the final identification should wait for additional observations in coming weeks. The newly found companion is not identical with fragments A, E, or F observed between 1995 and 2001 (cf. Sekanina 2005, *ICQ* **27**, 225-240; online at `http://cfa-www.harvard/edu/icq/sek_icq_V27_225.pdf`). The predicted separation distances from the main comet (in arcmin) and position angles (in degrees, for equinox J2000.0) are as follows: 2006 Jan. 15.0 TT, $29'.9$, $297^{\circ}.9$; 25.0, $35'.4$, $298^{\circ}.0$; Feb. 4.0, $42'.3$, $297^{\circ}.9$; 14.0, $51'.3$, $297^{\circ}.6$; 24.0, $63'.0$, $297^{\circ}.2$; Mar. 6.0, $78'.6$, $296^{\circ}.5$.

COMET P/2005 YQ_{127} (LINEAR)

Further to *IAUC* 8658, Mannucci *et al.* note the presence of a faint $7''$ coma on their images from Jan. 9.9 UT, and numerous other CCD observations confirming the cometary nature of this object have been reported. F. Bellini and L. Buzzi (Varese, Italy, 0.60-m reflector) write that the object was clearly diffuse with a moderate central condensation and a round coma $\sim 10''$ in diameter, elongated in p.a. 135° on Jan. 10.05. S. Foglia, D. Crespi, G. Galli, and S. Minuto (near Novara Veveri, Italy, 0.40-m *f*/4 reflector) note that images taken on Jan. 9.91 show a slightly diffuse coma of diameter $7''$ elongated in p.a. 240°. P. Corelli (Pagnacco, Italy, 0.20-m Schmidt-Cassegrain reflector) adds that images taken on Jan. 8.76 and 9.80 show a faint, diffuse coma of diameter $15''$. C. W. Hergenrother (Steward Observatory, 1.54-m Kuiper telescope) found a diffuse $40''$ coma on his 120-sec *R*-band exposures taken on Jan. 4.39. Images taken by E. Guido and G. Sostero (Castellammare di Stabia, Italy, 0.25-m *f*/3.4 reflector) on Jan. 10.3 show a faint, diffuse coma nearly $20''$ with a total *R*-band magnitude of ~ 16.0.

2006 January 15 *Daniel W. E. Green*