Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

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COMET P/2010 A5 (LINEAR)

An apparently asteroidal object reported by the LINEAR project (discovery observation tabulated below) and placed on the Minor Planet Center's 'NEOCP' webpage has been reported as cometary by other CCD astrometrists. R. Ligustri (Udine, Italy, remotely using a 0.32-m f/9 reflector at RAS Observatory, Moorook, Australia; Jan. 15.7 UT) writes that 24 stacked 60-s image show a coma of size $\sim 20''$. L. Buzzi (Varese, Italy, 0.60-m reflector; Jan. 16.2) reports that stacked images totalling 15 min of exposure time obtained in good seeing show a compact coma elongated in p.a. 300°, with a tail visible in that direction for at least 20". K. Sárneczky (Konkoly Observatory, 1.02-m Ritchey-Chretien telescope; Jan. 16.2) notes that a 120-s co-added image shows a 25"-long fan-shaped tail in p.a. 290°. E. Guido and G. Sostero (remotely using a 0.25-m reflector near Mayhill, NM, U.S.A.; Jan. 16.4) write that fifteen co-added 120-s exposures show a diffuse coma nearly 12'' in diameter, elongated $\sim 20''$ in p.a. 300° . W. H. Ryan (Magdalena Ridge Observatory, 2.4-m reflector; Jan. 16.5) reports that R-band exposures taken by E. V. Ryan and himself show a coma with a tail in p.a. ~ 280°. H. Sato (Ota-ku, Tokyo, Japan, remotely using a 0.25-m reflector at RAS Observatory, near Mayhill, NM; Jan. 16.5) finds a 10" coma elongated toward p.a. 240°. S. Foglia (using a 0.18-m reflector at Tzec Maun Observatory, Cloudcroft, NM, U.S.A., with P. Concari, G. Galli, and M. Tombelli; Jan. 16.5) reports that eight stacked 120-s images show the object to be diffuse with mag ~ 17.1 .

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2010 UT \alpha_{2000} \delta_{2000} Mag. Observer Jan. 14.45298 13^{\text{h}}26^{\text{m}}02^{\text{s}}.76 -15^{\circ}55^{'}53^{''}.3 17.7 LINEAR
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Further astrometry, the following preliminary elliptical orbital elements, and an ephemeris are given on $MPEC\ 2010\ B02$.

COMET P/2010 A3 (HILL)

Elliptical orbital elements from MPEC 2010-A85 for epoch 2010 Mar. 25.0 TT: T=2010 Apr. 3.6804 TT, e=0.732116, q=1.621774 AU, $i=15^\circ.0270, \omega=41^\circ.2825, \Omega=64.8307$ (equinox 2000.0), P = 14.9 years.