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COMET 17P/HOLMES

This comet (currently near opposition) has been observed to be undergoing a very large outburst in brightness; based on normal behavior in recent apparitions, it was predicted to be near total mag 16 for most of 2007 ($H_{15} \approx 9.5$, from *2007 Comet Handbook*) — and, indeed, observers have consistently reported it around mag 16 ± 1 since last May, L. Buzzi (Varese, Italy, 0.60-m reflector) reporting the comet at mag 17.8 on Oct. 20.9 UT and G. Muler (Lanzarote, Spain, 0.20-m reflector) measuring mag 16.8–17.3 on Oct. 23.0. The first known detection of the current outburst was communicated by M. Kidger (Herschel Science Centre, European Space Astronomy Centre, Madrid), who writes that observations by J. A. Henriquez Santana (Tenerife) on Oct. 24.067 show the comet at “nuclear” mag 8.4 (“some 9 mag brighter than previously” seen) with a 0.2-m reflector, and that the comet was brightening by 0.5 mag/hr “over the course of 6 hr”; the outburst was confirmed during Oct. 24.07–24.09 by Muler and by R. Naves and M. Campas (Barcelona) with a bright, almost-stellar inner coma (mag $R = 7.3$ in a 10" square aperture on Oct. 24.136). F. Kugel (Banon, France) reports that unfiltered astrometric CCD images taken by C. Rinner and himself on Oct. 24.21 with a 0.5-m reflector shows an object of stellar appearance of mag 7.4 at the predicted position of 17P.

Following a discussion-group e-mail alert of the outburst, several other observers have confirmed the outburst. E. Guido and G. Sostero (Castellammare di Stabia, Italy, 0.25-m $f/3.4$ reflector) write that ten co-added 5-s B -band CCD exposures taken remotely on Oct. 24.34 with a 0.25-m reflector near Mayhill, NM, show the comet as a bright, featureless, starlike object of total mag ~ 4.6 . A. Hale (Cloudcroft, NM) reports viewing the comet as an easy naked-eye starlike object of mag 4.0 on Oct. 24.50. S. Yoshida (Yokohama City, Kanagawa, Japan) reports the comet to be visible via naked eye even in a large city, at mag 3.5 on Oct. 24.55; with a 6.6-cm refractor, it looked completely stellar. Within two hours, Yoshida adds that the comet had brightened an additional half a magnitude, to mag 3.0 on Oct. 24.63 as seen via naked eye. K. Kadota (Ageo, Saitama-ken, Japan, 0.25-m $f/5$ reflector) notes that his CCD image from Oct. 24.61 yields total mag 3.6 and coma diameter 1'.7 (though starlike with no tail).

Comet 17P also underwent a large outburst in brightness when it was first discovered in Nov. 1892 near total visual mag 4 (which was also about 12 mag over the “normal” brightness); at that time, it faded by ~ 3 mag over the following week (*e.g.*, Kronk 2003, *Cometography* **2**, 694).