Circular No. 8868

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
URL `http://www.cfa.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET P/2007 R2 (GIBBS)

A. R. Gibbs reports his discovery of a comet on four co-added 30-s unfiltered CCD images obtained with the 0.68-m Schmidt telescope in the course of the Catalina Sky Survey ("discovery" observation tabulated below), the comet showing a compact 7″ coma and a short, narrow tail 10″ long in p.a. 250°. Following posting on the Minor Planet Center's 'NEOCP' webpage, other CCD astrometric observers have also commented on the object's cometary appearance. J. W. Young (Table Mountain 0.61-m *f*/16 reflector) notes that his images from Sept. 11.36–11.39 UT show a slightly elongated 8″-diameter coma with a fairly bright condensation, and a very straight tail is 40″ long in p.a. 255° is seen in several long exposures; images from Sept. 12.5 show a 8″ coma slightly elongated toward the 30″-long tail (p.a. 255°–260°). J. E. McGaha (Tucson, AZ, 0.62-m *f*/5.1 reflector) reports that fived stacked 60-s images from Sept. 11.44-11.45 show a 30″ coma elongated in p.a. 245° with a very narrow tail extending 90″ at this same position angle. P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m *f*/6 reflector) writes that his stacked images from Sept. 12.1 show a diffuse coma of diameter 4″ with a 10″ tail in p.a. 260°.

2007 UT	α_{2000}	δ_{2000}	Mag.
Sept.10.41401	$3^{h}06^{m}39^{s}.7$	$+17^{\circ}40'47''$	18.2

The available astrometry, the following preliminary elliptical orbital elements, and an ephemeris appear on *MPEC* 2007-R55.

$$T = 2007\ \text{Aug. } 26.359\ \text{TT} \qquad \omega = 352^{\circ}.796$$
$$e = 0.55779 \qquad \Omega = 8.509 \quad \text{2000.0}$$
$$q = 1.45571\ \text{AU} \qquad i = 1.410$$
$$a = 3.29193\ \text{AU} \qquad n^{\circ} = 0.165017 \qquad P = 6.0\ \text{years}$$

V455 ANDROMEDAE = HS 2331+3905

N. N. Samus, Institute of Astronomy, Moscow, informs us that this cataclysmic variable, which has undergone its first known major outburst this past week (cf. *CBET* 1053), has been assigned the permanent variable-star designation V455 And. E. Broens, Mol, Belgium, reports additional visual magnitude estimates on behalf of the Werkgroep Veranderlijke Sterren, Vereniging Voor Sterrenkunde: Sept. 6.837 UT, 8.7 (A. Diepvens, Balen, Belgium); 7.883, 9.2 (Broens); 9.872, 9.9 (H. Hautecler, Boutsersem, Belgium); 10.809, 10.3 (D. Vansteelant, Varsenare, Belgium).

2007 September 12 *Daniel W. E. Green*