Circular No. 8685

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URL http://cfa-www.harvard.edu/iau/cbat.html ISSN 0081-0304
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COMET 73P/SCHWASSMANN-WACHMANN

E. J. Christensen, Lunar and Planetary Laboratory, writes that four co-added unfiltered 150-s images obtained with the Mt. Lemmon 1.5-m reflector on Mar. 5.4 UT by R. E. Hill — who was following up a new fragment of comet 73P found by R. Kowalski from Mar. 4.4 images — show four additional fragments, all lying along an extension of the arc from component 'B' to component 'G' (p.a. $\approx 300^{\circ}$), and bringing the number of currently observed components to seven (cf. *IAUC* 8679). Kowalski's fragment, designated component 'H', has mag 20.0 and trails fragment 'G' by $\approx 875''$ (corresponding to T = 2006 June 8.29 TT); it displays a diffuse $4''$ coma with no central condensation, slightly elongated toward p.a. 275°. Component 'J', which had been noted by Hill as cometary, trails component 'G' by $\approx 170''$ (T = June 8.14), and displays a diffuse $8''$ coma of mag 19.8 with a very slight central condensation and a $10''$ tail toward p.a. 275°; 90-s images taken by Christensen on Feb. 24 showed nothing at the presumed location of 'J'. Component 'K' (at mag 21.7) lies $\approx 611''$ from fragment 'G' (T = June 8.24) and shows a diffuse $4''$ coma with neither central condensation nor tail. Component 'L' lies $\approx 1145''$ from fragment 'G' (T = June 8.35) and displays a slightly condensed $5''$ coma of mag 19.8 with a $7''$ tail toward p.a. 275°. For comparison, components 'B' and 'G' were of mag 14.5 and 17.3, respectively, on Mar. 5.4 (all the Mt. Lemmon magnitudes being calibrated to V). Christensen searched the line of variation on the Mar. 5 images, out to $3500''$ from fragment 'G', but could find no other fragments (limiting mag $V \approx 22.0$). Inspection of Kowalski's 120-s images from Mar. 4 yields no trace of fragments 'J', 'K', and 'L' — although the area that should contain these fragments was unfortunately affected by reflections from a nearby bright star. Four 150-s unfiltered images taken on Mar. 6.5 show no significant changes in the morphologies of any of the fragments since the previous night, and no additional fragments were detected along the line of variation out to $\approx 2880''$ west-northwest of component 'B' and to $\approx 1580''$ east-southeast of component 'B' (limiting mag $V \approx 22.0$). The new astrometry is published on *MPEC* 2006-E32.

Visual total-magnitude estimates of component 'C': Feb. 27.68 UT, 12.3 (S. Yoshida, Ibaraki, Japan, 0.40-m reflector); 28.19, 12.8 (J. J. Gonzalez, Leon, Spain, 0.20-m reflector); Mar. 2.90, 11.7 (A. Baransky, Pylypovychi, Ukraine, 0.36-m reflector); 5.61, 12.1 (Yoshida); 6.32, 11.3 (W. Robledo, Cordoba, Argentina, 0.20-m reflector); 8.19, 11.9 (Gonzalez). Visual total-magnitude estimates of component 'B': Feb. 27.68, 14.4 (Yoshida); Mar. 8.20, 13.7 (Gonzalez).

  Daniel W. E. Green