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COMET 29P/SCHWASSMANN-WACHMANN

Y. R. Fernandez, University of Central Florida; B. E. A. Mueller, Planetary Science Institute; and N. H. Samarasinha, Planetary Science Institute and National Optical Astronomy Observatories, report that they observed comet 29P with a CCD camera on the Kitt Peak National Observatory 2.1-m telescope for five consecutive nights on Sept. 25.5, 26.5, 27.5, 28.5, and 29.5 UT. During this interval, R-band imaging of the comet's coma showed manifestations of the outburst reported by Henrıquez (*IAUC* 8978). A shell of material is seen expanding outward at $\approx$ 0.1 km/s — most prominent at p.a. $\sim$ 60°–290°. There is also a second, expanding, partial shell of material, closer to the nucleus and on the north side of the coma. At least three persistent radial jets can be discerned, at p.a. $\sim$ 305°, 355°, and 40°. A sample image is posted at website URL `http://www.physics.ucf.edu/~yfernandez/sw1.html`. Further observations to watch the continuing development of 29P's intricate coma morphology during the course of the current outburst are requested.

J. M. Trigo-Rodriguez, Institute of Space Sciences, Consejo Superior de Investigaciones Científicas and Institut Estudis Espacials de Catalunya, reports that the present outburst experienced by 29P is the brightest detected since Sept. 2004; for more details see Trigo-Rodriguez *et al.* (2008, *A.Ap.* **485**, 599), where the outburst frequency of this comet was established to average 7.3 outbursts/year, usually reaching a maximum magnitude of 13 or fainter. A. Sánchez (Gualba, Spain, 36-cm f/6 Schmidt-Cassegrain reflector) has obtained the following recent magnitudes of 29P through a 10″ aperture: Sept. 13.158 UT, R = 14.1; 25.118, R = 11.9; 29.155, V = 12.9, R = 12.4, I = 12.3; Oct. 1.154, V = 13.8, R = 13.4, I = 13.5. On Sept. 29, an asymmetric 55″-wide coma was visible, corresponding to a coma size of 255000 km; a bright fan of material extended from the nuclear condensation in p.a. 235°.

Another bright outburst occurred last January (cf. *IAUC* 8910). Additional total magnitude estimates, visual unless noted otherwise: Jan. 27.89 UT, 11.6 (J. J. Gonzalez, Leon, Spain, 0.20-m reflector); 28.89, 11.2 (W. Hasubick, Buchloe, Germany, 44-cm reflector); Feb. 1.46, 11.2 (Y. Nagai, Gunma, Japan, 300-mm camera lens + CCD); 13.95, 11.6 (J. Qvam, Borrevannet, Horten, Norway, 0.10-m refractor + CCD + V filter); Mar. 1.92, 12.5 (Gonzalez); 26.87, 15.2 (Qvam, 0.46-m reflector + CCD + V filter); Sept. 23.08, 11.2 (V. Nevski, Vitebsk, Belarus, 0.3-m reflector); 25.10, 10.9 (Gonzalez); 29.14, 10.7 (Gonzalez); Oct. 4.76, 10.4 (S. Yoshida, Gunma, Japan, 0.40-m reflector).

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