Circular No. 8905

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 17P/HOLMES

M. R. Combi, University of Michigan: J. T. T. Mäkinen, Finnish Meteorological Institute; and J.-L. Bertaux, E. Quémerais, and S. Ferron, Service d'Aéronomie, CNRS/UVSQ, report that the Solar Wind Anisotropies (SWAN) camera on the Solar and Heliospheric Observatory (SOHO) spacecraft, located at the earth-sun L_1 Lagrange point, makes daily full-sky images of hydrogen Lyα. SWAN detected comet 17P/Holmes beginning with the rapid rise of activity on Oct. 24 UT. The Lyα coma was observed to expand and brighten over the next few days, as water — and subsequently OH — were photodissociated to produce hydrogen. An initial expansion velocity in the range between 17 and 20 km/s was deduced from a preliminary analysis of the images, which is consistent with the initial production of H atoms from the photodissociation of water. A preliminary time-series analysis of the images (Mäkinen and Combi 2005, *Icarus* **177**, 217) yields daily averages of the global water-production rate. This indicates that there was a rapid rise in the water-production rate by Oct. 25, resembling the visual light curve, from a value of 1.2×10^{30} molecules/s to a maximum of 1.4×10^{30} on Oct. 27. This was followed by a fairly steady decrease to a value of 7.8×10^{29} by Nov. 16.

Visual total-magnitude and coma-diameter estimates: Nov. 16.87 UT, 2.8, 40′ (K. Hornoch, Vohancice, Czech Republic, 1×50 monocular); 18.05, 3.0, 37′ (A. Pereira, Cabo da Roca, Portugal, 5×22 monocular); 24.04, 3.0, 35′ (B. H. Granslo, Fjellhamar, Norway, 6×30 monocular); 27.81, 2.9, 40′ (J. J. Gonzalez, Leon, Spain, 4×30 opera glasses); Dec. 1.79, 3.0, 60′ (M. Meyer, Limburg, Germany, 3.5×15 opera glasses); 6.60, 3.3, 50′ (S. Yoshida, Kanagawa, Japan, 10×66 refractor); 8.78, 3.3, 50′ (Gonzalez); 11.89, 3.1, ~ 60′ (Pereira); 15.83, 3.3, 60′ (Meyer); 18.88, 3.3, 65′ (Hornoch; moonlight).

V2467 CYGNI

R. B. Perry, Langley Research Center, NASA; R. J. Rudy, D. K. Lynch, T. R. Prater, S. Mazuk, and A. M. Gilbert, The Aerospace Corporation; and R. C. Puetter, University of California, San Diego; report 0.47- to 2.5-μm spectroscopy of V2467 Cyg (cf. *IAUC* 8821, 8888) on 2007 Dec. 14 UT using VNIRIS on the Lick 3-m telescope. The object remains bright and shows many high-excitation emission lines. Coronal lines of [SI VII], [Ca VIII], [Si X], and [S XI] showed notched, doubled line profiles. Also present were lines of H I, He I, He II, weak O I, and the unidentified novae lines. There was no evidence of thermal emission from dust.

2007 December 20 *Daniel W. E. Green*