Circular No. 8638

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://cfa-www.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

V476 SCUTI

R. B. Perry, Langley Research Center, NASA; C. C. Venturini, R. J. Rudy, S. Mazuk, and D. K. Lynch, The Aerospace Corporation; R. C. Puetter, University of California at San Diego; and B. Walp, Lick Observatory, report 0.47- to 2.5-μm spectroscopy of V476 Sct (cf. *IAUC* 8607, 8612) using the Lick 3.0-m telescope (+ VNIRIS) at Nov. 15.108 UT. The nova is still quite early in its spectral development, showing structured emission in the lines of C I, N I, and Fe II with FWHM of 1600 km/s. He I lines are just emerging and are still very weak. The strongest lines in the visible and infrared spectrum are from O I, and these are produced almost completely by Lyβ fluorescence. The strong red continuum strongly suggests thermal emission from dust, despite the fact that the optical light curve is monotonically decreasing with time. The reddening indicated by the O I lines is $E(B-V) = 2.0$.

COMETS C/2005 T6, T7, T8, W4, W5 (SOHO)

Additional comets have been found on SOHO website images (cf. *IAUC* 8631); all were Kreutz sungrazers except for C/2005 W4 (a Kracht-group object that appeared stellar with no tail in C2 and C3 images, peaking at mag 6.6 on Nov. 23.396 UT at $6.1R_\odot$ in C2) and C/2005 W5 (a Marsden-group object that also was stellar in appearance with no tail in all images, peaking at mag 7.1 on Nov. 29.854 at $5.1R_\odot$ in C2). The Kreutz objects were tiny, stellar, and too faint for photometry in C3 images, but very faint and diffuse in C2 images.

Comet	2005	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2005 T6	Oct.	1.596	$12^h09^m.4$	$-\ 4^\circ42'$	C3/2	HS	2005-X11
C/2005 T7		4.513	12 27.1	− 5 33	C3/2	BZ	2005-X11
C/2005 T8		6.613	12 34.8	− 6 17	C3/2	HS	2005-X11
C/2005 W4	Nov.	23.344	15 51.1	−19 42	C2/3	BZ	2005-X14
C/2005 W5		29.314	16 27.1	−22 59	C2/3	HS	2005-X14

It seems likely that C/2005 W4 is a return of C/2000 O3 (cf. *MPEC* 2000-Q09), a suggestion made by S. Hönig before the observations on *MPEC* 2005-X14 were available, where an orbital linkage by B. G. Marsden ($P =$ 5.32 yr) is published. Comet C/2005 W5 has not been satisfactorily linked to a Marsden-group candidate at its previous perihelion passage, although potential fits to the various 1999 members seem preferable to those involving the comets of Feb. 2000 (cf. *MPEC* 2005-W07).

