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COMET 17P/HOLMES

H. Kobayashi, H. Kawakita, and A. Nishikoji, Kyoto Sangyo University, report that they have obtained low-dispersion spectra of comet 17P on Oct. 24.58 and 25.46 UT with a 28-cm telescope (+ F2SPEC spectrograph; range 380–750 nm, resolution 900 at 600 nm). The comet's spectrum on Oct. 24.58 was dominated by reflected sunlight, and there were no significant emission bands and lines visible. The Oct. 25.46 spectrum was still dominated by reflected sunlight, but emission bands and lines (CN and C_2 bands, as well as [O I] emission lines) appeared in the spectrum. The authors speculate that this delay in the visibility of emission might be at least partly caused by sublimation from icy grains ejected at the outburst.

R. M. Wagner, LBT Observatory; S. Starrfield, Arizona State University; G. Schwarz, West Chester University; S. Larson, Lunar and Planetary Laboratory; and R. Kaitchuck, J. Childers, and G. Turner, Ball State University, write that they obtained several long-slit spectra (slit length 3'.7 in p.a. 90°; range 340–640 nm; resolution 0.6 nm) of comet 17P on Oct. 25.181 and 25.465 UT with the Bok 2.3-m telescope on Kitt Peak. The spectra exhibit a strong reflected continuum arising from dust. The spatial continuum profile along the slit is strongly peaked in the inner 0'.5 but extends out to a diameter of $\sim$ 1'.5; the profile also appears asymmetric to the east and becomes more pronounced and wider in the later spectrum, suggesting that dynamical effects arising from the outburst are visible in the inner coma. Molecular emission bands of CN, C_3, C_2, and NH_2 — typical of other gaseous comets — are detected, as well, and are prominent away from the bright optocenter. Emission from CN (0-0) can be traced out to at least 2'.4 from the optocenter in each direction. Further reductions and analyses are underway. Additional spectroscopy to study the evolution of the dust and gas is encouraged.

A. Fitzsimmons, Queen's University, Belfast; C. Snodgrass, European Southern Observatory; and J. Southworth, University of Warwick, report that spectra of comet 17P, centered on the central condensation, were obtained on Oct. 26.05 UT using the 2.5-m Nordic Optical Telescope (+ FIES échelle spectrograph; range 370–730 nm, resolution 48000) on La Palma. The spectra are dominated by a reflected solar spectrum from dust grains. Molecular emission bands due to CN at 388 nm, C_3 at 405 nm, and C_2 at 516 nm are also visible.

Further naked-eye magnitude estimates (cf. *IAUC* 8886): Oct. 25.29 UT, 2.8 (C. W. Hergenrother, Tucson, AZ, U.S.A.); 26.07, 2.6 (A. Pereira, Carnaxide, Portugal); 26.90, 2.4 (J. Carvajal, Madrid, Spain).

2007 October 26 *Daniel W. E. Green*