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GRB 960409 AND COMET C/1996 B2 (HYAKUTAKE)

T. E. Harrison, New Mexico State University (NMSU); S. D. Barthelmy, Universities Space Research Association (USRA) and Goddard Space Flight Center, NASA; K. Hurley, University of California at Berkeley; G. J. Fishman, C. Kouveliotou (also USRA), and C. Meegan, Marshall Space Flight Center, NASA; R. M. Kippen, University of New Hampshire; B. J. McNamara, NMSU, report: "The gamma-ray burst GRB 960409 fortuitously occurred near the position of comet C/1996 B2. Thus there is the high probability that some C/1996 B2 observers may have serendipitously imaged the GRB error box while the burst was in progress, or shortly thereafter. The burst started at Apr. 9.89243 UT and lasted 105 s, with the peak emission at Apr. 9.89289. The Gamma Ray Observatory (GRO) BATSE team location is R.A. = $2^h50^m30^s$, Dec. = +41°54'.6, with a total (statistical + systematic) error radius of 2°.1. This location is 2°.6 away from the comet's location at the time of the burst. The IPN annulus is centered at R.A. = $10^h19^m48^s$, Dec. = +68°54'28"; it has a radius of 58°.1736 and a total width of 0°.18. The intersection of the IPN annulus and the BATSE error circle defines the corners of a error region with a confidence level of 95 percent: R.A. = $3^h01^m18^s.7$, Dec. = +41°22'36"; $2^h40^m43^s.6$, +42°59'59"; $3^h01^m31^s.7$, +41°33'19"; $2^h41^m16^s.7$, +43°09'10" (equinox 2000.0). The separation of the BATSE location and the annulus point-of-closest-approach is 0°.39. The burst was independently localized by GRO/COMPTEL with a marginal detection (2.5-sigma significance); the COMPTEL localization is consistent with the BATSE and IPN locations (see the map at http://wwwgro.unh.edu/bursts). We strongly encourage researchers to analyze their images for transient objects. The importance of deep images of the GRB error box during the burst can not be overstressed. Please note that for images made while tracking the comet, any transient emission from the GRB source object is likely to be short enough not to be trailed as much as the field stars. Images with limiting magitudes > 9 will set new upper limits on the GRB-related optical emission. For further information, please contact T. Harrison at telephone 505-646-3628 (email tharriso@nmsu.edu)."

SUPERNOVA 1996X IN NGC 5061

Visual magnitude estimates: Apr. 15.27 UT, 13.2 (A. Hale, Cloudcroft, NM); 18.94, 13.6 (D. Rodriguez, Madrid, Spain); 18.94, 13.6 (J. M. San Juan, Madrid, Spain); 18.95, 13.5 (J. Carvajal, Madrid, Spain).

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