COMMISSIONS 27 AND 42 OF THE IAU INFORMATION BULLETIN ON VARIABLE STARS

Number 3882

Konkoly Observatory Budapest 20 May 1993 HU ISSN 0324 - 0676

UNSUCCESSFUL SEARCH FOR AN OPTICAL COUNTERPART OF GRS 1915+105

The detection of a new X-ray "transient" in Aquila (first observation 1992 Aug. 15) by the Granat WATCH experiment was announced by Castro-Tirado et al. (1992). Shortly afterwards GRS 1915+105 was confirmed by the BATSE/Compton Observatory team (Harmon et al. 1992) in the energy band 20-230 keV, also of dates before the original discovery. The source had remained at about 300mCrab between 1992 mid-August and the end of September.

On 11 plates taken by E. Splittgerber at the Sonneberg astrographs 400/1600 mm and 1070 Sonneberg Sky Patrol exposures (limiting magnitude 12^m to 15^m pg) gained from 1928 to 1992 mainly by P. Ahnert, H. Huth, and B. Fuhrmann we searched for an optical counterpart at the ROSAT position (Greiner 1993).

No optical transient, or enhancement of the image of an object, could be detected within a circle of about 1'radius. The threshold of the checked astrograph plates are between 16^m2 and 17^m5pg, the deepest plate being of 1992 Aug. 24.9. By the way, these plates fill the gap in the material of Castro-Tirado et al. (1993).

The work of W. Wenzel has been supported by funds of the German Bundesministerium für Forschung und Technologie under contract no. 05-5S0414.

W. WENZEL
E. SPLITTGERBER
Sternwarte
D O-6400 Sonneberg
J. GREINER
Max-Planck-Institut für
Extraterrestrische Physik
D W-8046 Garching
Germany

References:

Castro-Tirado, A. J., et al., 1992, IAU Circ., 5590
Castro-Tirado, A. J., et al., 1993, INTEGRAL Workshop Feb. 1993 at Les Diableres (paper submitted to Astrophys. J. Suppl.)
Greiner, J., 1993, IAU Circ. in preparation
Harmon, B. A., et al., 1992, IAU Circ., 5619