



INTEGRAL Galactic Plane Scans detect enhanced activity from the HMXBs IGR J19294+1816 and 4U 1909+07

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 on 21 May 2013; 10:46 UT

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Enhanced hard X-ray emission has been detected from the high mass X-ray binary systems IGR J19294+1816 and 4U 1909+07 during recent INTEGRAL observations of the Cygnus region of the Galactic Plane performed in revolution 1294 between 2013-05-19 UTC 01:32:52 and 10:55:38. Neither source was detected at a significant level during observations in the previous revolution (1293) performed between 2013-05-18 UTC 03:55:28 and 15:59:42.

IGR J19294+1816 was detected at an IBIS/ISGRI count rate of 3.1 ± 0.4 counts s^{-1} in the 18-60 keV band, corresponding to a significance of 7.2 sigma and a flux of ~ 17 mCrab, for an exposure of 19.7 ks. 4U 1909+07 was detected at a count rate of 3.7 ± 0.5 counts s^{-1} in the same band, corresponding to a significance of 7.0 sigma and a flux of ~ 20 mCrab (with an exposure of 13.5 ks). Both sources were also in the field of view of the soft X-ray JEM-X instrument for total effective exposures of ~ 7.9 and ~ 2.9 ks respectively but neither were detected, with 6sigma flux upper limits of 6 mCrab and 8 mCrab in the 3-10 keV band respectively.

4U 1909+07 is a wind-fed SgXRB pulsar whose past variability is consistent with the enhanced flux detected in these observations. IGR J19294+1816 is a likely BeXRB pulsar that displays recurrent outbursts, of an approximate duration of 2 months (Bozzo et al. 2011, A&A, 531, A65), modulated on the 117.2 day orbital period (Corbet and Krimm 2009, ATel #2008) along with additional fast flaring behaviour, more typical of Supergiant Fast X-ray Transients (~ 2000 -3000s, see Rodriguez et al. 2009, A&A, 508, 889). The date of this new detection is consistent with the time of peak activity predicted by Corbet and Krimm 2009 (ATel #2008) suggesting that these observations are detecting the onset of a new outburst of the system rather than an isolated fast flare. We encourage multi-wavelength observations of IGR J19294+1816 to follow the evolution of the outburst from this early stage. INTEGRAL will be performing regular hard X-ray monitoring of the Galactic Plane over the coming months with the next observation of this region scheduled to begin on 2013-05-26.

A full description of the INTEGRAL Galactic Plane Scanning programme, along with links to light curves and sky maps can be found in ATel #3361. Please note, for consistency with the GPS archive the IBIS/ISGRI analysis presented here was performed with version 9 of the INTEGRAL Offline Science Analysis (OSA) software. However the results are also seen to be consistent with the current OSA release (v.10).

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