



INTEGRAL detects Swift J1910.2-0546 (= MAXI J1910-057) in the hard X-rays

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Referred to by ATel #: [4347](#)

The black hole candidate Swift J1910.2-0546 (= MAXI J1910-057), which was reported to be transitioning to the hard state (ATels #[4273](#), #[4295](#)), was in the field of view of INTEGRAL's hard X-ray imager ISGRI during observations of the Scutum/Sagittarius region performed from 2012 August 20 at 23:28:03 to August 21 at 03:09:59 UTC (INTEGRAL revolution 1203).

A mosaic image combining 12.6 ks of data reveals that Swift J1910.2-0546 is detected by ISGRI at a significance level of 13.7 sigma in the 18--40 keV energy band and at 9.4 sigma in the 40--100 keV energy band. Source count rates in these bands are 15.3+/-1.1 cps (74+/-5 mCrab) and 7.2+/-0.8 cps (70+/-8 mCrab), respectively. The former is consistent with the most recent daily flux measurement (MJD 56159) by Swift-BAT in a similar energy range (courtesy of H.A. Krimm, GSFC-USRA).

The source spectrum measured by ISGRI shows that Swift J1910.2-0546 is detected up to ~200 keV. Fitting this spectrum (9.1 ks of effective exposure time) with a power-law model yields a photon index of 1.8+/-0.3 (at 90% confidence) for a reduced $\chi^2/d.o.f.=1.0/9$; adding an exponential cutoff does not improve the fit. The observed 20--100-keV flux is 1.5e-9 ergs/cm²/s.

The detection of Swift J1910.2-0546 at these energies confirms that the source is in the hard state. Although it was outside the field of view of INTEGRAL's X-ray monitor JEM-X during this observation, further INTEGRAL observations in the direction of Swift J1910.2-0546 are planned for the next few weeks. Light curves and images of this source (and others in the field) can be found at the ISA project home page:

<http://sprg.ssl.berkeley.edu/~bodaghee/isa>

We thank the ISDC shift team for alerting us to the presence of Swift J1910.2-0546 in our observations and for their help in analyzing the data.



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