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1E 1740.7-2942 (the Great Annihilator) enters a low-intensity state

ATel #4471; ***E. Kuulkers (ESA/ESAC), C. Ferrigno (ISDC), M. Del Santo, A. Bazzano (INAF/IAPS Rome), J. Alfonso-Garzon (CAB/INTA-CSIC), V. Beckmann (APC), A. J. Bird (U. of Southampton), S. Brandt, J. Chenevez (DTU Space), T. J.-L. Courvoisier (ISDC), A. Domingo (CAB/INTA-CSIC), K. Ebisawa (JAXA/ISAS), P. G. Jonker (SRON/CfA/RU), P. Kretschmar (ESA/ESAC), C. B. Markwardt (NASA/GSFC), T. Oosterbroek (ESA/ESTEC), A. Paizis (INAF/IASF Milan), K. Pottschmidt (CRESST-UMBC/NASA-GSFC), C. Sanchez-Fernandez (ESA/ESAC) & R. Wijnands (U. of Amsterdam)***
*on **9 Oct 2012; 21:35 UT***
Credential Certification: Erik Kuulkers (ekuulker@rssd.esa.int)

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INTEGRAL has been monitoring the Galactic center region since the beginning of August 2012 during the Galactic bulge (GB) monitoring program (see ATel #438), the Target of Opportunity observations of Swift J174510.8-262411 (see ATel #4450), as well as during other observing programs.

During the GB monitoring observations taken on UT 2012 October 6, 16:15-21:01, the flux of the black-hole candidate 1E 1740.7-2942, also known as the Great Annihilator, was below the GB monitoring detection limits of both ISGRI (~11 mCrab, 3 sigma, 18-40 keV) and JEM-X (~6 mCrab, 3 sigma, 3-10 keV).

Analysis of the available INTEGRAL data of the region from August 31 to October 8 shows that the intensity averaged over an INTEGRAL satellite orbit (~3 days) has been declining from 47 +/- 1 (53 +/- 2) mCrab to 14 +/- 2 (13 +/- 2) mCrab in the 20-40 (40-80) keV band. The Swift/BAT 15-50 keV Hard X-ray Transient Monitor results confirm these findings. Over the same period, the intensity in the 3-10 (10-20 keV) band declined more erratically from 13 +/- 2 (25 +/- 3) mCrab to 9 +/- 3 (4 +/- 4) mCrab. The source clearly softened over the above time period.

Such low-intensity states are not uncommon in this system, and, over the last decade, have occurred in 2002 (ATel #94), 2004 (ATel #257, Del Santo et al. 2005, A&A 433, 613), 2006 and 2007 (see http://integral.esac.esa.int/BULGE/SOURCES/1E_1740.7-2942/1E_1740.7-2942.html : INTEGRAL, http://swift.gsfc.nasa.gov/docs/swift/results/transient/weak/1E1740.7-2942/ : Swift/BAT). They can last for months.

We encourage observations at all wavelengths. Swift observations have been requested and approved.

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R. E. Rutledge, Editor-in-Chief rrutledge@astronomerstelegram.org

Derek Fox, Editor dfox@astronomerstelegram.org

Mansi M. Kasliwal, Co-Editor mansi@astronomerstelegram.org