Swift/XRT detects a new outburst of the Galactic Center transient AX J1745.6-2901

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Swift/XRT detects a new outburst of the Galactic Center transient AX J1745.6-2901

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Our daily Swift/XRT monitoring observations of the Galactic Center (Degenaar et al. 2015, JHEAp, 7, 137) show X-ray activity of a transient source located ~1.5’ to the south-east of Sgr A*. This object is clearly detected in individual XRT images since September 17 (obs ID 00095329145), with a count rate of ~0.04-0.12 c/s.

Using the tool xrtcentroid on a combined image of the 13 observations taken between September 17 and 29 (obsID 00095329145-157), we determine that the position of the transient is RA = 17:45:36.16, DEC = -29:01:33.24 (J2000) with a 90% confidence error of 3.6’. These coordinates are consistent with the Chandra localisation (ATel #1513) of the 8.4-hr eclipsing low-mass X-ray binary and thermonuclear X-ray burster AX J1745.6-2901. We thus conclude that we have likely detected a new outburst of this transient.

We extracted an average spectrum from the above mentioned observations. This spectrum can be described by an absorbed power-law model with an index of 2.4 +/- 0.4 and a hydrogen column density of (2.0 +/- 0.3)E+23 cm-2 (1-sigma errors). The inferred 2-10 keV unabsorbed flux for this fit is (3.7 +/- 0.9)E-11 erg cm-2 s-1, which translates into a luminosity of ~3E35 erg/s at a distance...
of 8 kpc.

AX J1745.6-2901 is very frequently active: our monitoring program previously detected outbursts from this system in 2006, 2007-2008, 2010 (e.g. Degenaar et al. 2015), 2013-2016 (e.g. ATels #5226, #9196), and two in 2017 (ATels #10323, #10900). The years-long outbursts that occurred in 2007-2008 and 2013-2016 reached a peak luminosity of several times E36 erg/s. All the other outbursts had a shorter duration (months) and a lower peak luminosity of a few times E35 erg/s. It seems that the current outburst belongs to the latter class.

Daily Swift/XRT monitoring of the Galactic Center is ongoing and the results of new observations are automatically posted on http://www.swift-sgra.com.
Swift/BAT monitoring for additional bursts from SGR J1745-29 (Trigger 554491)

Chandra localization of the soft gamma repeater in the Galactic Center region

NuSTAR discovery of a 3.76 second pulsar in the Sgr A* region

Continued Swift Monitoring of the Galactic Center Flare

Swift/BAT detection of an SGR-like flare from near Sgr A*

Ongoing X-ray activity from Sgr A*

Large Flare from Sgr A* Detected by Swift

Transient X-ray burster KS 1741-293 active again

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

Swift detects an X-ray burst and renewed activity from KS 1741-293

Chandra Localization of the Galactic Center X-ray Transient Swift J174535.5-285921

Swift/XRT discovers a new X-ray transient near the Galactic center: Swift J174535.5-285921

Swift/XRT detects new outbursts of the galactic center X-ray transients GRS 1741-2853 and XMM J174457-2850.3

Swift/XRT detects renewed activity of the galactic center X-ray transient AX J1745.6-2901

INTEGRAL spots renewed activity from H1743-322

Swift/XRT observations of the X-ray transients KS1741-293 and XTE J1719-291

Chandra detects activity from the Galactic X-ray transients KS 1741-293, Swift J174535.5-290135.6 and CXOGC J174535.5-290124

Chandra detects Swift J174535.5-290135.6 in a relatively bright state

INTEGRAL Galactic bulge monitoring observations of GRO J1750-27 (AX J1749.1-2639), H1743-322 and SLX 1746-331

Recent and past activity of the supergiant fast X-ray transient IGR J17544-2619 as seen by INTEGRAL

INTEGRAL detects hard X-rays from SAX J1810.8-2609 during its current outburst

Long duration outbursts from the two X-ray bursters AX J1745.6-2901 and GRS 1741.9-2853 suggested by XMM-Newton observations

Chandra Detection of Three Enigmatic X-ray Transients: GRS 1741.9-2853, IGR J17453-2853 = Granat 1741.9-2853?

ATCA radio observations of GX 339-4

Renewed activity of the Galactic center transients
ATel #13150: Swift/XRT detects a new outburst of the Galactic Center transient AX J1745.6-2901

Swift J174535.5-290135.6 and GRS 1741.9-2853 as observed with Swift/XRT

Two active X-ray transients in the Galactic Center region as seen by INTEGRAL

Announcement of the Swift/BAT Hard X-ray Transient Monitor

Renewed activity of the very faint X-ray transient CXOGC J174535.5-290124 and continued activity of the neutron-star X-ray transient SAX J1747.0-2853

New INTEGRAL source, IGR J17354-3255, and continuation of the INTEGRAL Galactic Bulge monitoring program

INTEGRAL detects SWIFT J174535.5-290135.6

Swift/XRT detection of a transient source in the Galactic Center

Three active neutron star X-ray transients: SAX J1747.0-2853, XTE J1739-285 and GRS 1747-312

On the (hard) X-ray activity of SAX J1747.0-2853 as seen with INTEGRAL

Swift Observation of SAX J1747.0-2853

Further Chandra observations of SAX J1747.0-2853 and the region around Sgr A*

Renewed activity of the neutron star X-ray transient SAX J1747.0-2853

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