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## Swift/BAT detects an outburst from an X-ray transient in the globular cluster Terzan 5

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A rate increase from the direction of Terzan 5 was detected in the BAT hard X-ray transient monitor starting on 2015 March 13 (MJD 57094). The flux has been rising and has reached  $0.007 \pm 0.001 \text{ ct s}^{-1} \text{ cm}^{-2}$  ( $\sim 30 \text{ mCrab}$ ; 15-50 keV) on 2015 March 16. This is the brightest this source has been since mid-2012, when it peaked above 120 mCrab. The BAT result is based on the coordinates of EXO 1745-248 (RA = 267.022 deg ; Dec= -24.780 deg). The BAT angular resolution of  $\sim 3$  arc minutes is not sufficiently precise to distinguish this source from another object in the Terzan 5 region. The BAT light curve can be found here:

<http://swift.gsfc.nasa.gov/results/transients/weak/EXO1745-248/>

Terzan 5 is known to have at least three neutron star low-mass X-ray binaries, all of them transient (e.g. Bahramian et al. 2014, ApJ, 780, 127, and references therein). Swift target of opportunity observations have been approved to confirm the Swift/BAT detection, and to test whether the the coordinates are consistent with a new X-ray transient or any of the three known transients.

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