



Publication Year	2015
Acceptance in OA	2020-05-14T14:15:30Z
Title	ATel 7526: Swift simultaneous observations of the VHE flare of S3 1227+25
Authors	PACCIANI, LUIGI
Handle	http://hdl.handle.net/20.500.12386/24818
Journal	The Astronomer's Telegram
Volume	7526

Outside

GCN
IAUCs

Other

ATel on [Twitter](#) and [Facebook](#)
ATELstream
[ATel Community Site](#)

The Astronomer's Telegram

[Post](#) | [Search](#) | [Policies](#)
[Credential](#) | [Feeds](#) | [Email](#)

29 Apr 2020; 15:24 UT

This space for free for your conference.

[[Previous](#) | [Next](#) | [ADS](#)]

Swift simultaneous observations of the VHE flare of S3 1227+25

ATel #7526; **Luigi Pacciani (INAF-IAPS)**
on **18 May 2015; 12:58 UT**

Credential Certification: Luigi Pacciani (luigi.pacciani@iaps.inaf.it)

Subjects: Optical, Ultra-Violet, X-ray, Gamma Ray, >GeV, AGN, Blazar

Referred to by ATel #: [7596](#)

[Tweet](#)

We detected a gamma-ray flare from the low-synchrotron-peaked BL Lac ($z=0.135$) S3 1227+25, triggering on FERMI-LAT data at $E > 10$ GeV with TS ~ 35 , from 2015-05-06 to 2015-05-15, following the prescription of Pacciani et al. 2014, ApJ, 790, 45. The gamma-ray flux was $(41 \pm 4) \times 10^{-8}$ ph cm $^{-2}$ s $^{-1}$, photon index 1.94 ± 0.07 , TS ~ 450 ($E > 0.1$ GeV). The FERMI-LAT revealed gamma-ray emission up to 14 GeV.

We triggered a ToO campaign with Swift, started on 2015-05-16.

VERITAS detected the source (ATEL#[7516](#)) simultaneous to the first Swift observation.

The preliminary Swift-UVOT photometry on 2015-05-16 08:06 is:

V = 14.63 +/- 0.03

B = 14.94 +/- 0.02

U = 14.06 +/- 0.02

UVW1 = 14.00 +/- 0.02

UVM2 = 13.93 +/- 0.01

UVW2 = 14.07 +/- 0.01.

Magnitudes are in the UVOT photometric system (Poole et al. 2008, MNRAS, 383, 627) and have not been corrected for Galactic extinction.

Related

- 7596** [Fermi LAT Detection of a Gamma-ray Flare from the BL Lac Object ON 246](#)
- 7526** [Swift simultaneous observations of the VHE flare of S3 1227+25](#)
- 7523** [Optical follow-up of S3 1227+25](#)
- 7516** [VERITAS Detection of Very High-Energy Gamma-Ray Emission from S3 1227+25](#)
- 7365** [A NIR Flare of the Blazar ON246](#)
- 6982** [Fermi-LAT detection of the first GeV gamma-ray flare from the BL Lac object ON 246 \(S3 1227+25\)](#)

The simultaneous Swift-XRT observation gives a counting rate of 0.43 cps, flux (0.3-10 KeV): $(1.5 \pm 0.1) \text{ E-11 erg/cm}^2/\text{s}$, photon index 2.30 ± 0.07 .

These Optical and X-ray observations show the source almost at its brightest state (see also ATEL#[7523](#), ATEL#[7365](#)).

The Swift observation on 2015-05-17 show the source ~20% fainter.

We thank the Swift team and Swift Observatory Duty Scientist for rapidly scheduling our observations.

[[Telegram Index](#)]

R. E. Rutledge, Editor-in-Chief

rrutledge@astronomerstelegam.org

Derek Fox, Editor

dfox@astronomerstelegam.org

Mansi M. Kasliwal, Co-Editor

mansi@astronomerstelegam.org