

# High-energy gamma-ray observations above 10 GeV with CALET on the International Space Station

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Since the deployment of the CALorimetric Electron Telescope (CALET) on the exposure facility of the Japanese Experiment Module (JEM) 'Kibo' of the International Space Station in 2015, CALET is accumulating cosmic ray data steadily without any serious faults up to now. Although CALET is basically a high-energy cosmic-ray detector, its composite and thick detector structure allow us to separate gamma rays from charged cosmic rays clearly up the TeV energy region.

In this paper, analysis of gamma-ray events above 10 GeV obtained by the 'high-energy' triggers, which is the basic trigger mode of CALET for cosmic-ray observations and is always effective regardless of the ISS position in orbit, are reported. Especially, good energy resolution (less than 3% at 10 GeV) of CALET enables us to search for spectral features in the gamma-ray energy spectrum such as lines possibly caused by annihilation of dark matter particles and preliminary studies will be presented. Lower energy gamma-ray observations and transient events are reported separately.

## Keywords

CALET, International Space Station, gamma rays

## Collaboration

CALET

## other Collaboration

## Subcategory

Experimental Results

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