

Energy Calibration of The Gamma-ray Transients Monitor

The Gamma-ray Transients Monitor (GTM) is a science payload on the Taiwanese satellite Formosat-8B, designed to detect GRBs and other gamma-ray transients in the 50 keV to 2 MeV range. It consists of two detector units, each with four sensor modules using GAGG(Ce) scintillators and Silicon Photomultipliers (SiPMs), providing all-sky coverage.

In this report, we present the energy calibration of GTM, which is essential for accurately interpreting the detector readout signals. We performed radiation measurements using multiple isotopes to establish the ADC-to-energy relationship for all channels. Finally, we obtained the energy resolution as a function of energy for all detectors.

Section

High Energy

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