

Abstract Submitted  
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**CALET Observations of the Quiescent Sun in GeV-energy Gamma Rays** NICHOLAS CANNADY, University of Maryland, Baltimore County, CALET COLLABORATION — Cosmic-ray interactions with the Sun and its radiation field give rise to a secondary gamma-ray signal. The first component of this emission is spatially confined to the Solar disk, coming from nuclear interaction of cosmic-ray protons with the Solar atmosphere. The second, spatially-extended component comes from inverse Compton scattering of the Solar radiation field by high-energy cosmic-ray electrons. These two components have been previously detected by the EGRET instrument on CGRO and the LAT instrument on the Fermi Gamma-ray Space Telescope. Recent results using Fermi-LAT data reveal intriguing features about the disk emission component, including dependence of the flux on the Solar cycle, emission to more than 100 GeV at Solar minimum, and the presence of an unexplained spectral dip at 30—50 GeV. In this study, we report on an independent measurement of the GeV-energy gamma-ray emission with the CALET instrument onboard the International Space Station, seeking particularly to independently validate the time-dependence of the flux and the presence of the spectral dip.

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