

Extension of the space experiment "GRIS" onboard the ISS capabilities: registration of short gamma-ray bursts and TGF

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The GRIS device is a wide-range (0.05-10.00 MeV) multi-detector X-ray and gamma radiation spectrometer, intended for the study of solar flares. The unique capabilities of the detector, based on the CeBr3 crystal (very short flashing time) allow us to expand the range of problems solved in the "GRIS" experiment. In addition to registering solar flares that have characteristic times per minute, this detector allows solving problems in identifying and recording characteristics of geophysical and astrophysical events (short gamma-ray bursts and terrestrial gamma-ray flares - TGF) in the time range of 10 μ s-1 ms. The modification of the hardware of the GRIS device for solving these problems is described and discussed in this paper.

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