

Studies of Very Long GRBs detected by SVOM

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Long (> 2 s) gamma-ray bursts (LGRBs) are thought to be related to the core-collapse of some massive stars and are among the most powerful transients in the Universe. Most GRBs detected by SVOM/ECLAIRs are long ones. Within the LGRB sample detected by ECLAIRs so far, 3 of them display lightcurves showing a precursor followed by a bright multi-peak emission lasting for >300 s. Each of these LGRBs have a well characterized afterglow in both X-rays and optical and a redshift measurement.

In this talk, I will present the detailed analysis of GRB 241217A, focusing on its prompt emission properties as revealed by SVOM and EP, and its afterglow evolution. I will also present GRB 250327B showing a peculiar optical afterglow evolution. I will discuss possible interpretations for these very long duration bursts.