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Determination of Pseudo-redshifts to Long GRBs by the Guiriec Method [Online]

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Gamma Ray Burst (GRBs) are brief and highly energetic gamma ray explosions, which can be classified into short and long bursts based on their duration. Long GRBs last more than two seconds, and are believed to originate from the collapse of massive stars. Determining the distances to GRBs is challenging due to the current limitations of optical telescopes; only approximately 11% of the redshifts of known GRBs have been recorded. The Guiriec method for estimating pseudo-redshifts to GRBs is based on an empirical correlation between the spectral parameters within a fine time analysis and the total released energy in episodes of the burst. This work analyzes a sample of long GRBs using Guiriec's method to determine their pseudo-redshifts.
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