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Search for GRBs possibly associated with GW using HAWC

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Detecting gravitational waves (GWs) associated with Gamma-ray bursts (GRBs) has reaffirmed their importance and interest. In particular, short GRBs have been associated as the electromagnetic counterpart of GWs, the first being the burst GRB 170817A associated with the event GW170817. Due to its large field of view and duty cycle and its many improvements in the reconstruction of events, HAWC is an ideal observatory to study transient phenomena during and after the main emission in the TeV energy regime. In this work, we present the search for TeV emission in the HAWC Observatory from the trigger time to 200 days in GRB 170817A and others with similar characteristics to this burst. We acknowledge the support from PAPIIT IG101320 and IN105921.

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