

Performance of the ROADSTR PSD Plastic Prototype Detector

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The Reactor Operations Antineutrino Detection Surface Testbed Rover (ROADSTR) detector prototype was constructed from Li-6-doped Pulse Shape Discriminating plastic scintillators. Comprising 36 bars of 50cm in length arranged in a 6x6 array, ROADSTR has a mass of about 60kg. Over almost one year of operation, this device has been used to study scintillator characteristics and inverse beta decay backgrounds. Here we will describe the characterization of the detector and a variety of background measurements conducted with it.

Abstract title

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