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# The Maine Automated Density Gauge Experiment: Data from East Antarctica collected on ITASE 2006-2007.

MADGE is a gamma-ray density gauge designed to provide high precision (+/- 0.004 g/cm3) and high vertical resolution (3.3mm) density profiles of firn and ice cores using a fast gamma-ray counting system, electronic calipers and a stepper motor controlled actuator. Density profiles were measured along the recent ITASE traverse route and provide new information regarding the differences in firn structure between medium and low accumulation zones on the East Antarctic plateau. Recent efforts to improve instrument performance will also be discussed.