



The Insight Magnetic Field Measurements: Preliminary Results

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After the initial selection of the InSight Lander payload, a decision was made to carry a magnetometer in order to decorrelate any magnetic fluctuations from the seismic signals at the landing site. The UCLA magnetometry group was asked to provide this sensor, which has a range of $\pm 20,000$ nT and a 10 nT digitization. Data can be obtained up to 20 Hz, but 0.2 Hz is standard sampling rate. Ground testing established that the spacecraft field was (549, -434, 27) nT with a probable error of close to 47 nT in each component. The magnetometer has found a large diurnal variation in the field, partially due to a temperature variation in the magnetometer gain and possibly partly due to spacecraft currents. The status of the measurement of the landing site field and the detection of natural phenomena will be discussed.