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DC and low frequency electric field measurement in BepiColombo/MMO : PWI/EFD

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BepiColombo/MMO will first measure DC electric field and plasma waves around Mercury.

Electric Field Detector (EFD) is one of subsets of a model instrument, Plasma Wave Instrument (PWI), and measure electric field in DC \sim 32 Hz. And it also observes electron density above 0.1/cc by spacecraft potential measurement.

In this paper, we will introduce current plan of DC and low frequency electric field observations by PWI, especially the investigations of electric field sensor.