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# First seismo-magnetic measurements aboard the China Seismo-Electromagnetic Satellite (CSES) mission

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In this study we show first seismo-magnetic measurements obtained with the new type of the scalar magnetometer aboard the China Seismo-Electromagnetic Satellite (CSES), to be launched in 2018. The fluctuations of the total magnetic field are compared with a state of the art magnetic field model and the on-board vector magnetometer. The results of the commissioning phase are correlated with various parameters of ground based seismo-magnetic measurements. In particular, the ground based magnetic field fluctuations obtained by e.g. the South European GeoMagnetic Array (SEGMA) chain are correlated with the Coupled Dark State Magnetometer (CDSM) measurements. The ground based calibration parameters have been obtained by comparison with a commercial magnetometer in a measurement tunnel, which is part of a magnetic observatory.