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GOCE instrument status and data quality

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The main instrument on-board the Gravity field and steady-state Ocean Circulation Explorer (GOCE) satellite, the Electrostatic Gravity Gradiometer, is designed to map the Earth's gravity field at unprecedented spatial resolution and accuracy. It was switched on a few weeks after launch, on 6 April 2009. Together with the satellite-to-satellite tracking instrument it provides a wealth of new information on the spatial variability of the Earth gravity field. At the time of the EGU meeting the mission will have completed its first nominal 6 months gravity field mapping phase. This paper describes the instrument status, including the calibration and validation of the data acquired since launch, with particular focus on the quality of the gravity gradient product.