



GOCE: extended mission status and future plans

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Launched in March 2009 and orbiting at a mere 255 km altitude, the European Space Agency's Gravity field and steady-state Ocean Circulation Explorer (GOCE) mission is continuously delivering three-dimensional gravity gradient data and high-precision satellite positioning data that allow the determination of the gravity field at unprecedented accuracy and spatial resolution. The GOCE data products also allow the full reconstruction (and possible correction) of each individual step in the science data processing chain, all the way back to the instrument source. Till date the mission science teams have released three generations of gravity field models and associated products, and Release 4 is expected in autumn 2012.

This contribution details the overall mission status of the space segment, ground segment and science data systems. Data reprocessing efforts taking into account the experience gained by the mission team since launch are discussed. The paper also covers the Agency's plans for further and future exploitation of the mission, for as long as active drag-compensation is possible using the modulated Xenon-based ion propulsion system.

More info on <http://earth.esa.int/goce>