



GOCE Research in Germany

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With GOCE we expect to observe the Earth gravity field with very high accuracy and spatial resolution by gravity gradiometry. Preparing gradiometric observations and processing GOCE data to global gravity field solutions is a great challenge to geodetic research. Further, the GOCE gravity data and models will enable a set of new applications in Earth science disciplines like solid earth geophysics, oceanography, geodesy, glaciology, and sea level research.

Universities and science institutes in Germany significantly contribute to reach the goals of the GOCE mission. Their activities are based on four main pillars: 1. direct participation in the development of elements of the ESA ground segment, 2. research carried out in the context of the Technology Programme for Geosciences of the German Ministry of Education and Technology, 3. participation in the Priority Programme “Mass Anomalies and Mass Transport in the Earth System”, 4. the establishment of a “Global Geodetic Observing System (GGOS)”. The German GOCE project office intends to foster research and application projects by supporting the science community in terms of information about GOCE and its products and in terms of coordination of research activities. The success of this work is reflected in the large number of ESA approved German GOCE projects, which have been submitted to ESA in answer to the first announcement of opportunity. The poster will summarize the GOCE activities in Germany and will identify application areas of GOCE products.