



## **Status of the planar electrostatic gradiometer GREMLIT for airborne geodesy**

Vincent Lebat, Françoise Liorzou, Phuong-Anh Huynh, Damien Boulanger, Bernard Foulon, and Bruno Christophe

ONERA, Châtillon, France (phuong-anh.huynh@onera.fr)

Taking advantage of technologies, developed by ONERA for the GRACE and GOCE space missions, the GREMLIT airborne gravity gradiometer is based of a planar electrostatic gradiometer configuration.

The feasibility of the instrument and of its performance was proved by realistic simulations, based on actual data and recorded environmental aircraft perturbations, with performance of about one Eötvös along the two horizontal components of the gravity gradient. In order to assess the operation of the electrostatic gradiometer on its associated stabilized platform, a one axis prototype has also been built. The next step is the realization of the stabilization platform, controlled by the common mode outputs of the instrument itself, in order to reject the perturbations induced by the airborne environment in the horizontal directions.

The poster will emphasize the status of realization of the instrument and of its stabilized platform.