Geophysical Research Abstracts, Vol. 7, 07463, 2005

SRef-ID: 1607-7962/gra/EGU05-A-07463 © European Geosciences Union 2005



Investigation of local atmospheric and hydrological gravity signals in Superconducting Gravimeter time series

B. Meurers (1) and M. Van Camp (2)

(1) Institute of Meteorology and Geophysics, University of Vienna, (bruno.meurers@univie.ac.at) (2) Royal Observatory of Belgium, (mvc@oma.be)

The extraction of environmental effects on gravity is mandatory when investigating global geodynamic phenomena by analyses of temporal gravity variations. Environmental effects exhibit different scales from local to global. To compare the gravity signals observed by satellites with those of ground based instruments like superconducting gravimeters also the local effects are important to be known. This paper investigates short and long-term environmental gravity variations predominantly caused by atmospheric and hydrological processes at the GGP sites Vienna and Membach.