



An Alternative DORIS Data Processing Technique

P. Stepanek (1,2), U. Hugentobler (3), K. Le Bail (4), J. Kostelecky (1,2)

(1) Geodesy observatory Pecny, Research Institute of Geodesy, Topography and Cartography, Zdiby, Czech Republic (2) Faculty of Civil Engineering, Czech Technical University, Prague, Czech Republic (3) Astronomical Institute, University of Berne, Switzerland (4) Laboratory for Research in Geodesy, National Geographical Institute, Marne La Valee, France (stepanek@vugtk.cz / Phone: +420 723982752)

The IERS space techniques GPS and DORIS are both based on microwave phase measurements and not fundamentally different. A new DORIS data analysis technique has been developed which follows as much as possible a GPS-like approach. It was implemented in a development version of the Bernese GPS Software. This software test version allows for precise orbit determination, station positioning, troposphere parameter estimation, and beacon frequency offset estimation. Combinations with GPS and SLR observations on the normal equation system level are possible. It is planned to use the Bernese GPS Software for DORIS data processing in the project of a new IDS (International Doris Service) Analysis Center in Geodesy observatory Pecny.