



Some Effects of Data Handling and Background Models on the SLR Dynamical and Geometrical Reference Frame

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From LAGEOS-1 and -2 Satellite Laser Ranging (SLR) data a one year long time series of weekly solutions for station coordinates and low degree harmonics, and Earth Orientation Parameters (EOPs) with daily resolution were generated. Some options for data handling were tested for their impact on dynamical and geometrical reference frame: the effect of the inclusion or exclusion of individual stations in case of one spurious solution, and the effect of particular range bias corrections of one or more stations in the network. Also the effect of some back ground models were tested: two different ocean loading site displacement models (an old-fashioned Scherneck-Schwidersky model versus a new Scherneck model based on an actual ocean model, the FES2004), two tropospheric range correction models (Marini-Murray versus Mendes-Pavlis) and two a priori coordinate sets (ITRF2000 and ITRF2005). The results are evaluated and discussed based on the parameter time series.