



Stability of the DORIS-derived terrestrial scale

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Current realizations of the terrestrial scale are affected by systematic errors (biases, drifts, annual signal, etc.). In order to test and understand the stability of the DORIS-derived scale factor we have analyzed 3 different times series derived from 3 different software packages (GSFC Microcosm, IGN/JPL Gipsy/Oasis, LEGOS/CLS GINS/DYNAMO). We have compared those internally as well as with external standard (ITRF2000). In order to understand the differences related to Analysis Center softwares and analysis strategies, we have compared terrestrial scale derived from single DORIS satellite solutions to understand possible mis-modelling errors. We also discuss possible common errors between solutions from different analysis centers (GM, center of mass correction). The goal of this presentation is to assess the accuracy of the DORIS-derived terrestrial scale, to distinguish between common errors and current differences from current IDS analysis groups. The long-term stability of the DORIS-derived time scale is particularly valuable for new references such as ITRF2004.