

IDS Workshop

INTERNATIONAL DORIS SERVICE, STATUS REPORT AND PERSPECTIVES

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In the last few years, the International DORIS System has significantly evolved: Seven analysis centers (ACs) now actively participate in IDS activities. Over the last several years, all the ACs have improved their data analysis strategies and submitted long time series of weekly station positions. For the first time, these time series were combined by the IDS Combination Center using the CATREF software in order to obtain a unique IDS-3 solution which was submitted to the IERS for the development of ITRF2008. Some validation of the new ITRF2008 solution has also been performed within IDS. The goal of this presentation is to summarize the major improvements, in terms of organization, and in terms of product quality (refined analysis strategies for DORIS data processing as well as for combination of single ACs solutions). In the second step, we will try to investigate how this service could evolve to be more efficient or to provide better and newer products. Possible test campaigns are discussed (orbits, station positions, Earth orientation parameters, geocenter monitoring) as well as possible newer products (combined orbits for altimeter missions, combined use of DORIS/SLR or DORIS/SLR/GPS data to improve orbits and other derived products, combined time series of station coordinates in ITRF2008 for geophysical applications,...). Finally current limitations in DORIS data processing will be addressed, proposing possible ways of future improvements in terms of models or of data analysis strategy.