

DORIS CONTRIBUTION TO THE INTERNATIONAL TERRESTRIAL REFERENCE FRAME

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In addition to VLBI, SLR and GPS, DORIS is being contributing to the realization of the International Terrestrial Reference System (ITRS) since 1994. The International Terrestrial Reference Frame (ITRF), representing the ITRS realization, benefits from the homogeneous network coverage of DORIS, an excellent tracking system for low Earth orbiting satellites. In this paper we will examine the DORIS contribution to ITRF in terms of the network, positioning quality as well as the frame datum definition and in particular the scale and geocenter components.

Some combination and comparison tests involving past and recent DORIS TRF solutions will be presented, both as an ITRF-style as well as times series of station positions and Earth orientation parameters. Some recommendations for future DORIS contribution to ITRF will conclude this paper.