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## IDS contribution to the second update of the ITRF2020

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In the context of its contribution to the second yearly update of the 2020 realization of the International Terrestrial Reference Frame (ITRF2020), the International DORIS Service (IDS) has undertaken the estimation of DORIS station positions and velocities, as well as Earth Rotation Parameters (ERPs), derived from DORIS data. These computations are based on the latest weekly multi-satellite series from the five IDS Analysis Centers and the IDS Associated Analysis Center, covering data from 2024 and 2021 backward.

The primary objectives of this study are to evaluate the DORIS contribution to this update of the ITRF2020 in terms of: (1) geocenter motion and scale, (2) station positions and week-to-week position repeatability, (3) EOPs, and (4) a cumulative position and velocity solution. Additionally, this study examines the benefits of new models as well as the implementation of South Atlantic Anomaly (SAA) mitigation strategies on specific DORIS missions. Particular focus is placed on the enhanced stability of the IDS-derived scale since late 2012.