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Preliminary DORIS results on Precise Orbit Determination and on geocenter and scale solutions from CNES/CLS IDS Analysis Center contribution to the ITRF2020

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The processing configuration for our IDS contribution to the International Terrestrial Reference Frame (ITRF2020) realization was defined. We adopted the last standards and models recommended by IERS. We took into account the IDS recommendations to mitigate the non-conservative force model error on satellites, to mitigate the effect of the South Atlantic Anomaly on the DORIS receivers and to improve the stability of the DORIS scale.

A Precise Orbit Determination (POD) status for DORIS satellites by taking into account all these improvements will be presented for the processed time span. We will give statistical results such as one per revolution empirical acceleration amplitudes and orbit residuals. We will also give some comparisons to some external precise orbits used for altimetry. Some external validations of our orbits will be done, such as with independent SLR measurements processing as well as through the use of altimeter crossovers when available. We will also look at the impact of our new ITRF2020 configuration on the DORIS geocenter and scale.