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Preparations for the ITRF2020 at TU Wien

Anna Zessner-Spitzenberg¹, David Mayer², Andreas Hellerschmied², Markus Mikschi¹, and Sigrid Böhm¹

¹TU Wien, Higher Geodesy, Geodesy and Geoinformation, Austria (anna.zessner-spitzenberg@tuwien.ac.at)

²Bundesamt für Eich- und Vermessungswesen, Vienna, Austria

The next International Terrestrial Reference Frame (ITRF), ITRF2020, will be released in early 2021 and preparations are entering the final phase. It will be realized by using the observations of the space geodetic techniques Very Long Baseline Interferometry (VLBI), Global Navigation Satellite Systems (GNSS), Satellite Laser Ranging (SLR), and Doppler Orbitography and Radiopositioning Integrated by Satellite (DORIS).

The Vienna VLBI group is planning to contribute to the ITRF2020. This poster will present the goals, the methodology and preparations for our contribution. In order to analyse the VLBI observation sessions, the Vienna VLBI and Satellite Software (VieVS) will be used. The poster will focus on the influence of applying the gravitational deformation and the atmospheric loading on the individual solutions and the ITRF. For this purpose, a selected list of more than 800 sessions of the last 40 years, which was released by the International VLBI Service for Geodesy and Astrometry (IVS) to verify the latest changes in the implementation, will be analysed and the results will be presented.