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The Contribution of IVS to the Next Realization of the ITRF

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Since the completion of ITRF2000 the International VLBI Service for Geodesy and Astrometry (IVS) has made considerable progress in generating the VLBI contribution to the next realization of the ITRF. Today, five different IVS Analysis Centers using three different software packages are able to generate TRF solutions, to be submitted either as complete solutions or as session-wise datum-free normal equations in SINEX format. Combinations of the complete solutions which have been carried out for computations of a pure VLBI TRF have revealed noticable differences at a few specific sites. These were identified to be caused by different antenna axis offset tables. As a consequence, investigations in the validity of existing antenna axis offset information have, therefore, been initiated recently. In a re-analysis of the observations, a proper handling of this effect at a number of sites has improved the internal VLBI consistency significantly. Considering the fact that VLBI antenna axis offset errors transform directly into station height, the global VLBI scale does benefit considerably from corrected antenna axis offset tables.