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Intricacies of the estimation of the ICRF3

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The current realisation of the celestial reference frame, the ICRF2, was published 2009. Since then the VLBI technique evolved. New stations were implemented and the amount of data from the Southern Hemisphere increased dramatically. The demands on accuracy of the celestial reference frame are higher than ever, with the GAIA mission providing a catalogue in the visible spectrum with comparable accuracy. These advances in the VLBI technique and new demands on accuracy entail the necessity of a new version of the celestial reference frame which will be called ICRF3. We will report on the progress and plans of the Vienna group to estimate such a reference frame. Furthermore, we will discuss issues which arise during the estimation process such as a declination bias.