

Véron & Véron-based optical extragalactic reference frame – progress report

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Abstract. We present a Véron & Véron based optical extragalactic reference frame progress report.

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Taking as input the quasars from the V&V list, in this project the aim is to build a dense, optical extragalactic reference frame on the ICRS, directly aligned by the ICRF, and bridging the magnitude gap to the *Hipparcos* frame.

Using the UCAC2 as reference star catalog this enables an accurate astrometry independent of the USNO B1.0 catalog. The preliminary B1.0 positions, for the V&V sources, are locally corrected using UCAC2 stars. Here, the northernmost portion is also corrected, by using preliminary extracts of the UCAC2. With this project the sample of quasars with precise radio position was expanded to 4,400 objects (30 % increase). Preliminary reductions using harmonic functions relate the VLBI obtained positions to the Hipparcos frame (through the UCAC2).

The final positions are precise to better than 100 mas, while the resulting frame adheres to the ICRF at the formal level of 3 mas.