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## Selecting sources that define a stable celestial reference frame with the Allan variance

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ICRF2 was adopted by the IAU in 2009 and was based on the position of 3414 radio sources determined by VLBI. Discussions on the next realization of the ICRF (ICRF3) have been underway within the IAU and IVS since 2012. VLBI has made significant advances since ICRF2.

From the latest GSFC solution, we extract a set of sources that defines a stable celestial reference frame, as shown by M. Feissel-Vernier 2003 (A&A) using tools such as the Allan variance and the drift of the position time series. This method also allows us to highlight a set of the least “stable” sources that may need special handling.

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