



Status of VLBI for the ICRF

Megan Johnson

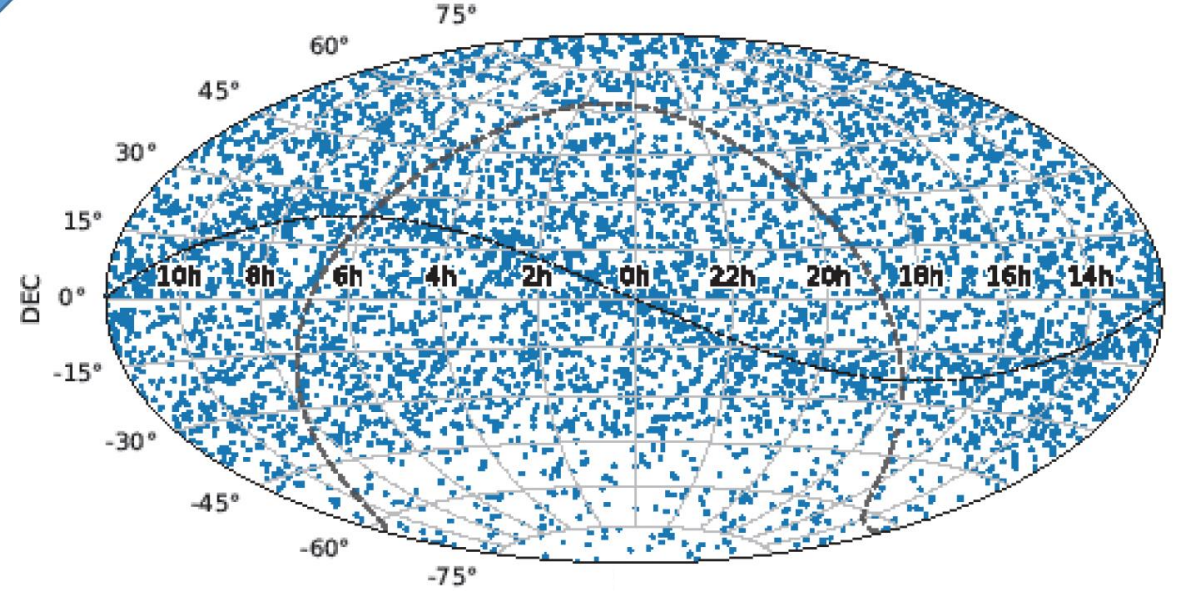
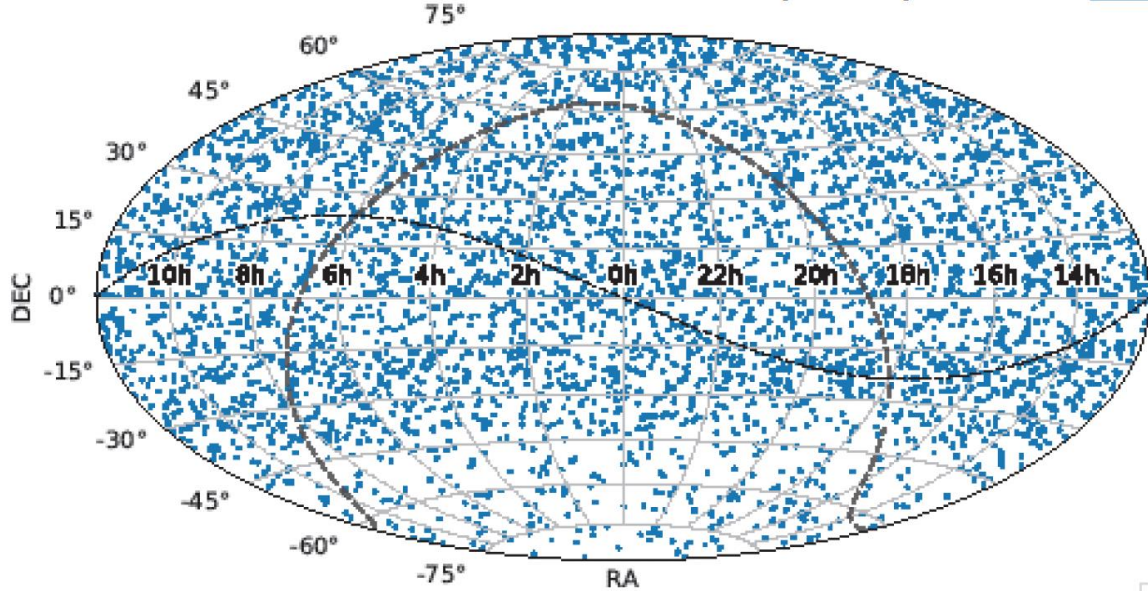
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INTERNATIONAL CELESTIAL REFERENCE FRAME (ICRF)

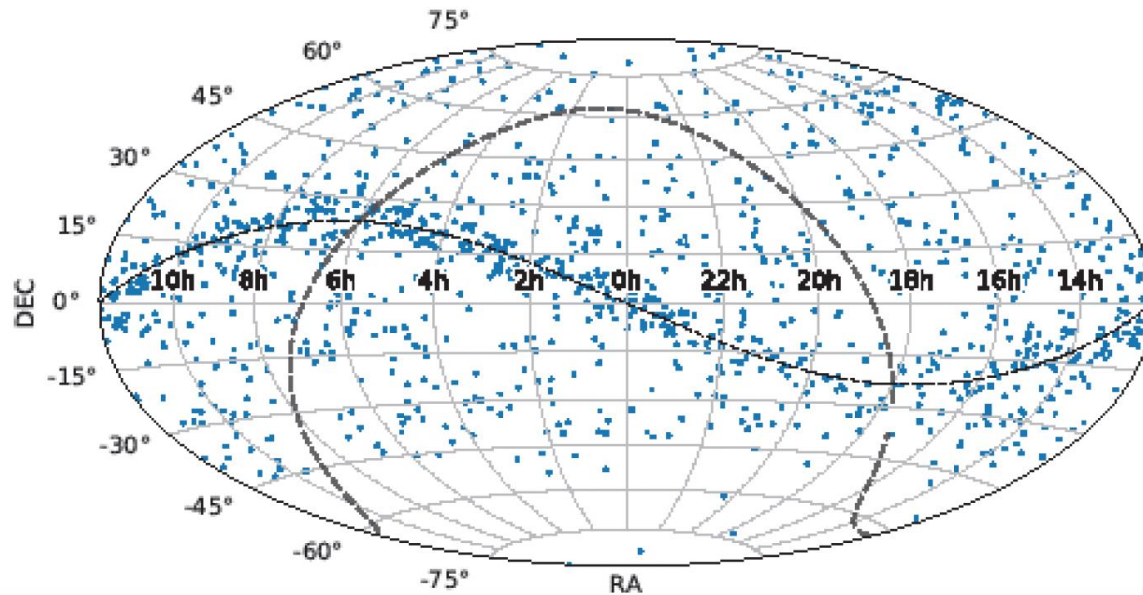
ICRF3-XS: 4536 sources (2018)



2023Oct23-X/S: 5707 sources (current)



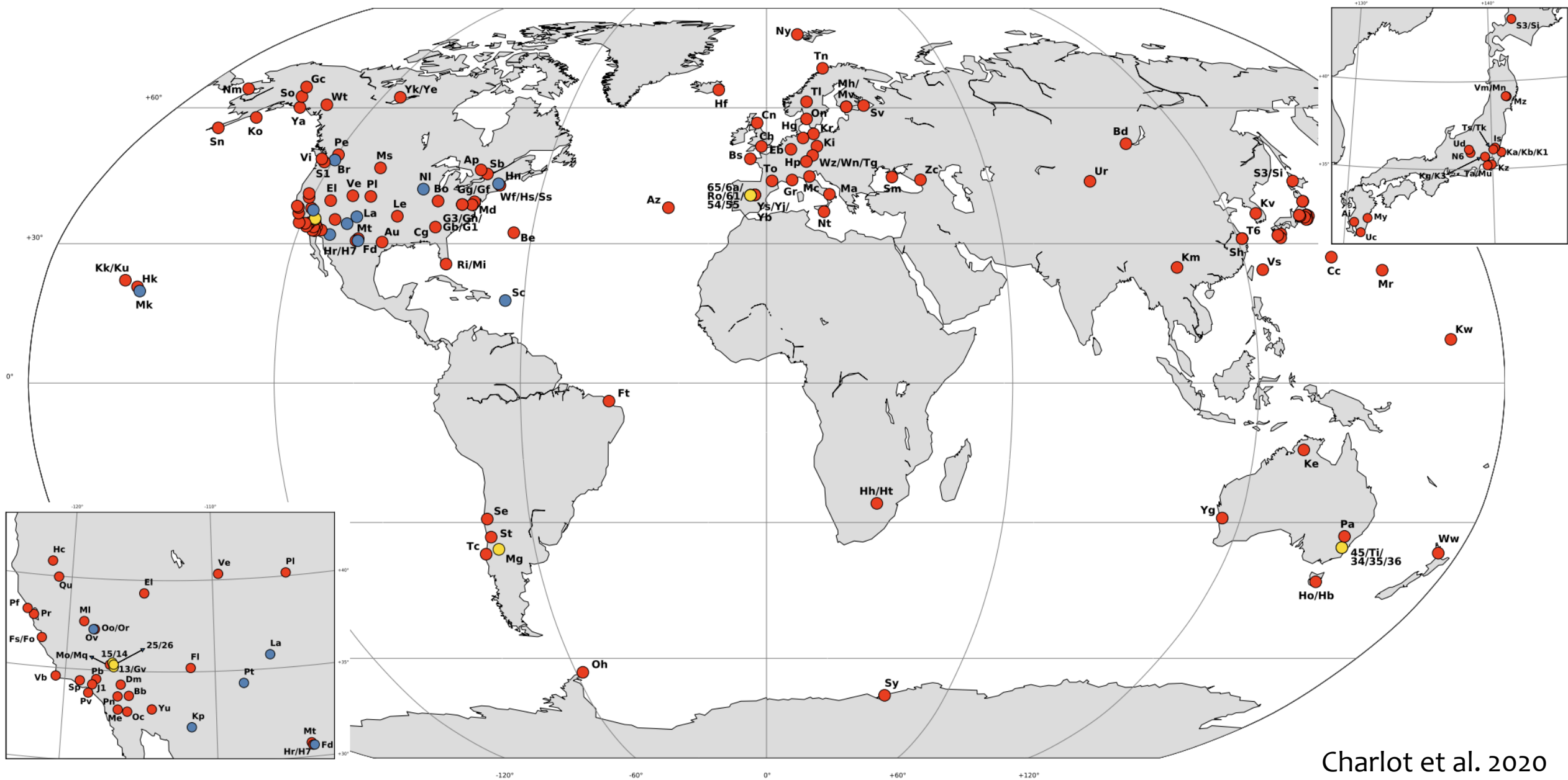
1172 additional X/S sources since ICRF3-X/S



ICRF is...

- the foundation to **all** coordinate systems.
- for connecting atomic time to celestial time.
- to measure precession and nutation of the Earth relative to an inertial background.
- for navigating spacecraft through solar system.

A&A 644, A159 (2020)



Grey = Not in Service/no longer in use

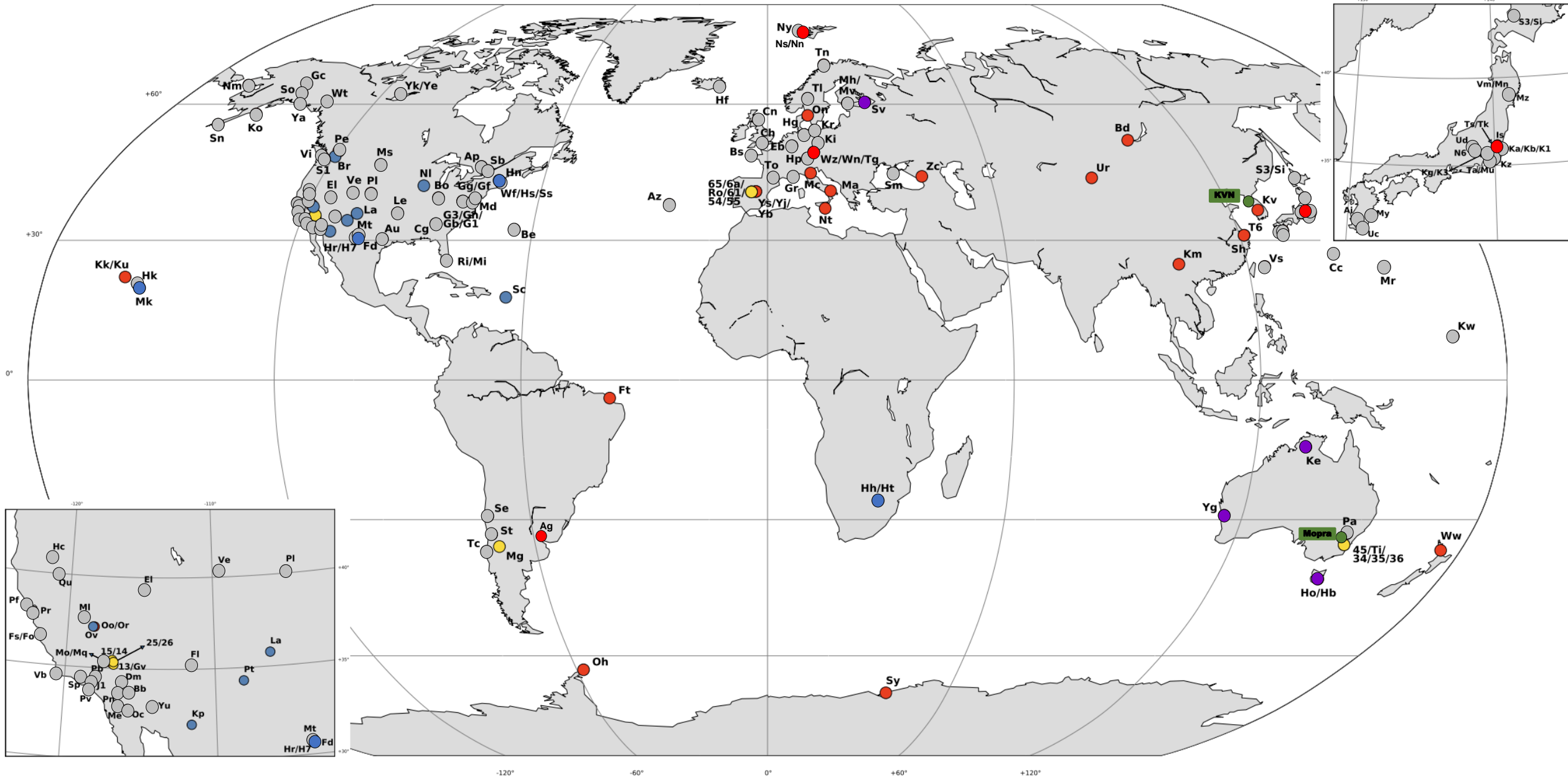
Red = S/X-band

Blue = K- and S/X-band

Green = K-band

Yellow = X/Ka-band

Purple = Signal-to-noise varies





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