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Network effects in VLBI analysis

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A distinctive feature of VLBI is the evolution of stations and station networks, as well as the advances in technology throughout its observing history. It is known that these changes in the station networks affect the EOP time series. Similar effects are to be expected on the source positions. But also, sources and the 'network' they span changes trough time, as in the early years few, but strong sources where used, where today the focus lies more on a good sky coverage.
In this work we investigate different network configurations typically used throughout VLBI history (R1/R4, IRIS, INT) and their impact on the EOP as well as the source positions. Besides, similar analysis we will repeat with the source 'networks', reconstructing similar configurations as in the early years in VLBI. Finally, we will investigate the connection of network volume, scale factor, and changes of individual stations/sources on EOP, source positions and the CRF. The basis for our investigation and reference is the latest continues session: CONT17.