Geophysical Research Abstracts Vol. 17, EGU2015-7884, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



A mitigation of the source structure effect for the EOP statistics during the CONT'14 campaign

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A two-week intensive CONT'14 observational VLBI campaign was organised in May 2014 to obtain an accurate EOP time series.

The total number of VLBI stations participating in CONT'14 was seventeen, including three Australian and one New Zealand 12-meter

radio telescopes. About 70-80 radio sources were observed in each 24-hour session. Among them, a set of astrometrically

unstable radio sources were used for scheduling. Whilst the formal errors of estimated parameters were found to be acceptable,

the post-fit residuals show strong systematic effects (up to 0.4 mas), presumably, due to the extended structure of the

unstable radio sources. In this paper a special procedure we developed to mitigate the radio source structure effect and improve the statistics

of the EOP estimates is presented.