

## Status of EVN Amplitude Calibration

-----

Session 1/2012

-----

The following table shows the median absolute amplitude error for EVN stations in the first session of 2012 (Feb/Mar). These results were derived from the pipeline amplitude self-calibration results. The number in brackets after each entry is the number of experiments that were used to determine the median error for that entry.

Station	18 cm	3.6 cm	6 cm
Jb1	6.23(2)		0.16(6)*
Ef	0.06(2)	0.05(3)	0.07(9)
Mc	0.10(2)	0.10(3)	0.08(5)
On	0.05(2)	0.10(3)	0.12(6)*
Tr	0.16(2)*		0.05(6)
Wb	0.04(2)	0.06(3)	0.04(9)
Ys		0.04(2)	0.07(8)
Hh	0.05(2)	0.09(2)	0.08(8)
Ur	0.07(2)	0.10(2)	0.05(4)
Sh		0.09(2)	0.07(2)
Bd	0.05(2)	0.06(2)	0.05(6)
Sv	0.04(2)	0.10(2)	2.70(9)*
Zc	0.06(2)	0.04(2)	0.08(9)

The blank entries indicates insufficient data. The numbers above are the median absolute error in the antenna gain amplitude (as calculated from pipeline amplitude self calibration). A value above 0.1 indicates a significant error which should be investigated. In addition to the absolute errors summarized here, the EVN pipeline provides details on every experiment processed at JIVE including the sign and time variability of the errors. In each experiment, the self-calibration results of a bright and compact source were used to get the reliable results. Note that nominal SEFDs, listed in the EVN status table, were used to make antab files for Bd, Sv, Zc.

\*Jb1: There were no reliable Tcal measurements available in the rxg file.

\*Tr: Tsys data had slightly larger scattering in some BBC channels.

\*Sv: LCP correlation amplitude was quite low (0.1x) in some experiments (EB051, EG049D, EJ010, EY018A). If all these experiments are excluded, the median error is 0.07(4).

Jun YANG for the Science Operation and Support Group (JIVE)