

EVN Amplitude Calibration

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Calibration Accuracy

Session 2/2013

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Station	6 cm	5 cm	18 cm

Jb2		0.11 (6)	
Jb1	0.06 (6)		0.15 (6) *
Ef	0.07 (6)	0.07 (6)	0.08 (6)
Mc	0.02 (7)	0.06 (6)	0.07 (6)
Nt	0.09 (7)	0.10 (6)	0.10 (6)
On	0.13 (6) *	0.15 (4) *	0.09 (4)
Tr	0.03 (5)	0.07 (6)	0.10 (6)
Wb	0.11 (7)	0.10 (6)	0.04 (6)
Ys	0.08 (7)	0.06 (6)	
Hh	0.04 (2)		0.05 (1)
Ur	0.08 (6)		0.11 (5)
Sh	0.07 (6)		0.21 (3) *
Bd	0.04 (6)		0.06 (5)
Zc	0.11 (6)		0.07 (5)
Sv	1.94 (6) *		0.11 (4)
Ar	0.06 (2)		0.04 (2)
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Session 1/2013

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Station	18 cm	5 cm
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Jb2		0.18(6)*
Jb1	0.19(4)*	
Ef	0.07(6)	0.05(6)
Mc	0.15(8)*	0.12(6)
On	0.04(9)	0.09(6)
Tr	0.05(8)	0.06(6)
Wb	0.03(9)	0.11(6)
Ys		0.05(6)
Hh	0.09(2)	0.03(1)
Ur	0.13(8)*	
Sh	0.10(7)	
Bd	0.05(4)	
Zc	0.12(3)*	
Sv	0.08(3)	
Ar	0.05(1)	
Ro	0.05(1)	

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Numbers here are the median absolute error in the antenna gain amplitude. This number will be approx half the error in the SEFD and is the same that you see in AIPS gain plots. The number in brackets after each entry is the number of experiments that were used to determine the median error for that entry.

Onsala in Session 2/2013

- The new DBBC backend was used.**
- The DBBC 16 MHz filter has a bandwidth of ~13 MHz. This problem will get the current EVN pipeline fail to give a proper amplitude solutions.**

Jodrell Bank 1 and 2

- No reliable observing system.**

Medicina in Session 1/2013

- The L-band receiver was not positioned correctly on the focus.**

Urumqi at 18cm

- Further effort is requested to well upgrade 18cm rxg file.**

Sv, Bd, and Zc

- Nominal SEFD was used in the antabfs file**
- So far, there is no effort confirmed on providing well-measured Tsys data to the EVN users in the upcoming years.**

Shanghai in Session 2/2013

- Long baselines, hard to give proper solution.**
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New antabfs program

Supporting DBBC on-off Tsys measurement and 80Hz radiometry

Supporting mix-mode wide-band VLBI observations

-- Parsing vex file as well to get the default frequency setup information

Adding scan-dependent smoothing or curve fitting to reduce the noise.

-- Requesting data editing as less as possible

Trying to use wide-band Tsys measurement and Tsys-frequency curve to derive Tsys for each subband

-- Less affected by RFI

-- More sensitive for small telescopes

Adding an input file for the EVN pipeline to easily correct the residual amplitude errors of each subband

-- Very useful for the rapid e-VLBI observations

Timely delivery of data

- ⌚ Timely delivery can significantly speed up the correlation, post review, and pipeline processes and make more disk packs be available in the upcoming session.
 - ⌚ Feedbacks, **rxg**, and **antab** files should be delivered **within 2 weeks after the end of a session and ASAP in the case of e-VLBI experiments.**
 - ⌚ Automatically **uploading log files** and gps data are very welcome.
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