

# EVN Amplitude Calibration

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**EVN TOG MEETING, Ventspils, May 23**



**JIVE**

Joint Institute for VLBI  
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**NETWORK**

# Session 2 2016 June

- The following table gives the **median absolute error** in the antenna gain amplitude. This number will be approximately 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.

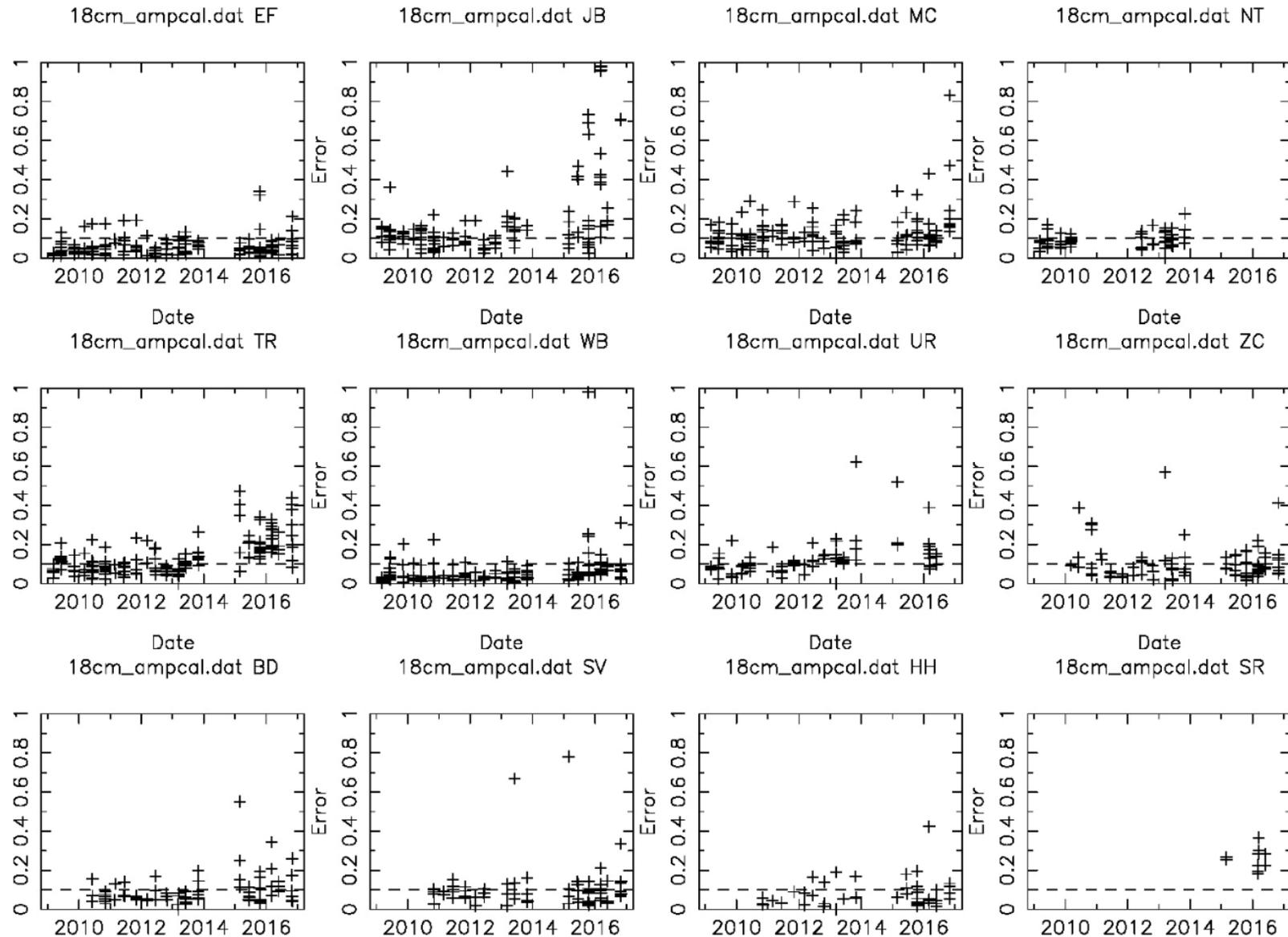
	<b>21cm</b>	<b>18cm</b>	<b>6cm</b>	<b>5cm</b>	<b>1.3cm</b>
<b>BD</b>		0.12 (3)			<b>0.22 (11)</b>
<b>EF</b>	0.01 (1)	0.08 (2)	0.03 (9)	0.07 (19)	0.15 (11)
<b>HH</b>	0.02 (1)	0.05 (3)	0.19 (1)	0.05 (7)	<b>0.23 (5)</b>
<b>IR</b>			0.09 (4)	0.09 (18)	
<b>JB</b>	0.17 (1)	0.19 (3)	<b>0.24 (4)</b>	0.10 (19)	<b>0.50 (10)</b>
<b>MC</b>	0.14 (1)	0.09 (3)	0.07 (9)	0.11 (19)	0.16 (11)
<b>NT</b>			0.08 (9)	0.14 (19)	0.12 (11)
<b>ON</b>	0.02 (1)	0.05 (3)	0.06 (9)	0.08 (19)	<b>0.31 (6)</b>
<b>RO</b>		0.11 (2)			
<b>SR</b>		<b>0.26 (2)</b>		0.05 (16)	0.12 (11)
<b>SV</b>		0.04 (3)			<b>0.25 (11)</b>
<b>TR</b>	0.19 (1)	0.18 (3)	0.06 (9)	0.10 (19)	<b>0.21 (10)</b>
<b>T6</b>		0.09 (3)	0.06 (7)	0.04 (2)	
<b>UR</b>	0.10 (1)	0.14 (2)			
<b>WB</b>	0.07 (1)	0.09 (3)	0.06 (9)	0.18 (18)	
<b>YS</b>			0.05 (9)	0.06 (19)	0.10 (11)
<b>ZC</b>	0.08 (1)	0.14 (3)			<b>0.23 (9)</b>

# Session 3 2016 Feb

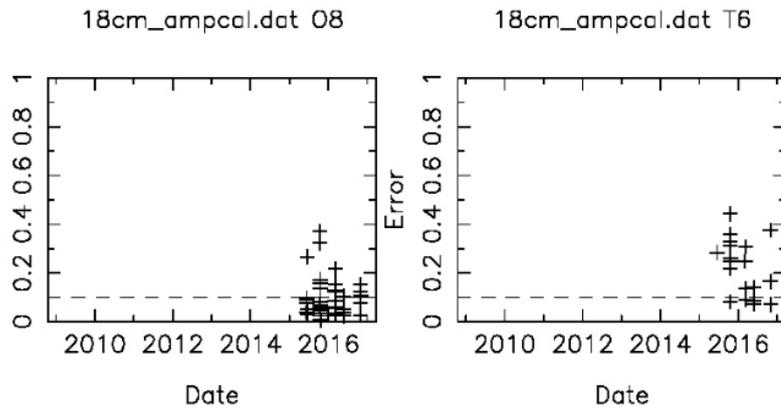
- The following table gives the **median absolute error** in the antenna gain amplitude. This number will be approximately half the error in the SEFD and is the same that you see in AIPS gain plots. The number in brackets after each entry is the number of experiments that were used.

	<b>21cm</b>	<b>18cm</b>	<b>6cm</b>	<b>5cm</b>	<b>1.3cm</b>
<b>BD</b>	0.18 (1)	0.07 (5)	0.09 (10)		<b>0.35 (4)</b>
<b>EF</b>	0.08 (2)	0.08 (7)	0.06 (22)	0.06 (4)	0.15 (4)
<b>HH</b>		0.10 (4)	0.04 (16)		
<b>IR</b>			0.08 (2)	0.04 (1)	
<b>JB</b>		<b>3.80 (5)</b>	<b>0.64 (18)</b>	0.05 (4)	<b>0.35 (4)</b>
<b>MC</b>	0.16 (2)	<b>0.20 (7)</b>	0.08 (22)	0.10 (4)	<b>0.21 (4)</b>
<b>NT</b>			0.08 (19)	0.14 (4)	
<b>ON</b>		0.10 (7)	0.09 (17)	0.06 (4)	<b>0.23 (4)</b>
<b>SR</b>					0.15 (4)
<b>SV</b>	<b>0.20 (2)</b>	0.09 (5)	0.05 (10)		<b>0.52 (4)</b>
<b>TR</b>	<b>0.34 (2)</b>	<b>0.20 (7)</b>	0.07 (15)	0.07 (4)	<b>0.60 (4)</b>
<b>T6</b>		0.17 (3)	0.13 (7)	0.05 (3)	
<b>UR</b>					<b>1.5 (4)</b>
<b>WB</b>	0.07 (2)	0.08 (7)	0.08 (22)	0.12 (4)	
<b>YS</b>			0.05 (21)	0.05 (4)	<b>0.64 (2)</b>
<b>ZC</b>	<b>0.21 (2)</b>	0.10 (6)	<b>0.52 (15)</b>		<b>1.3 (3)</b>

# 18/21cm ampcal vs time

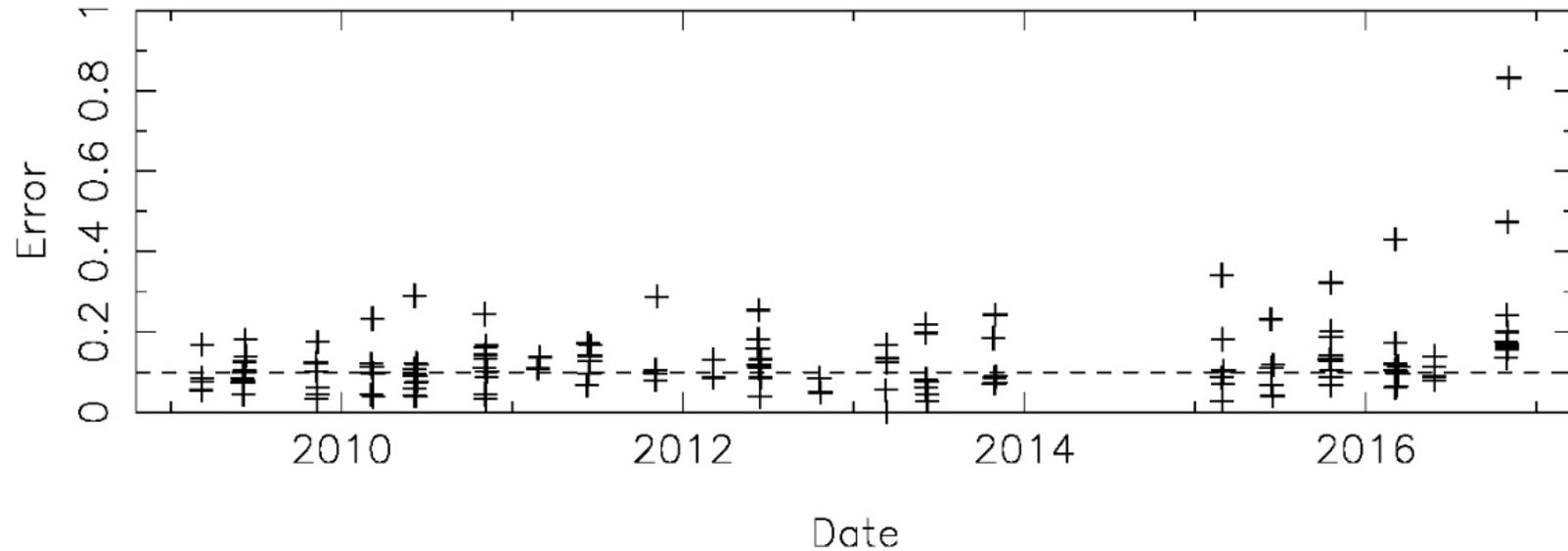


# 18/21cm ampcal vs time

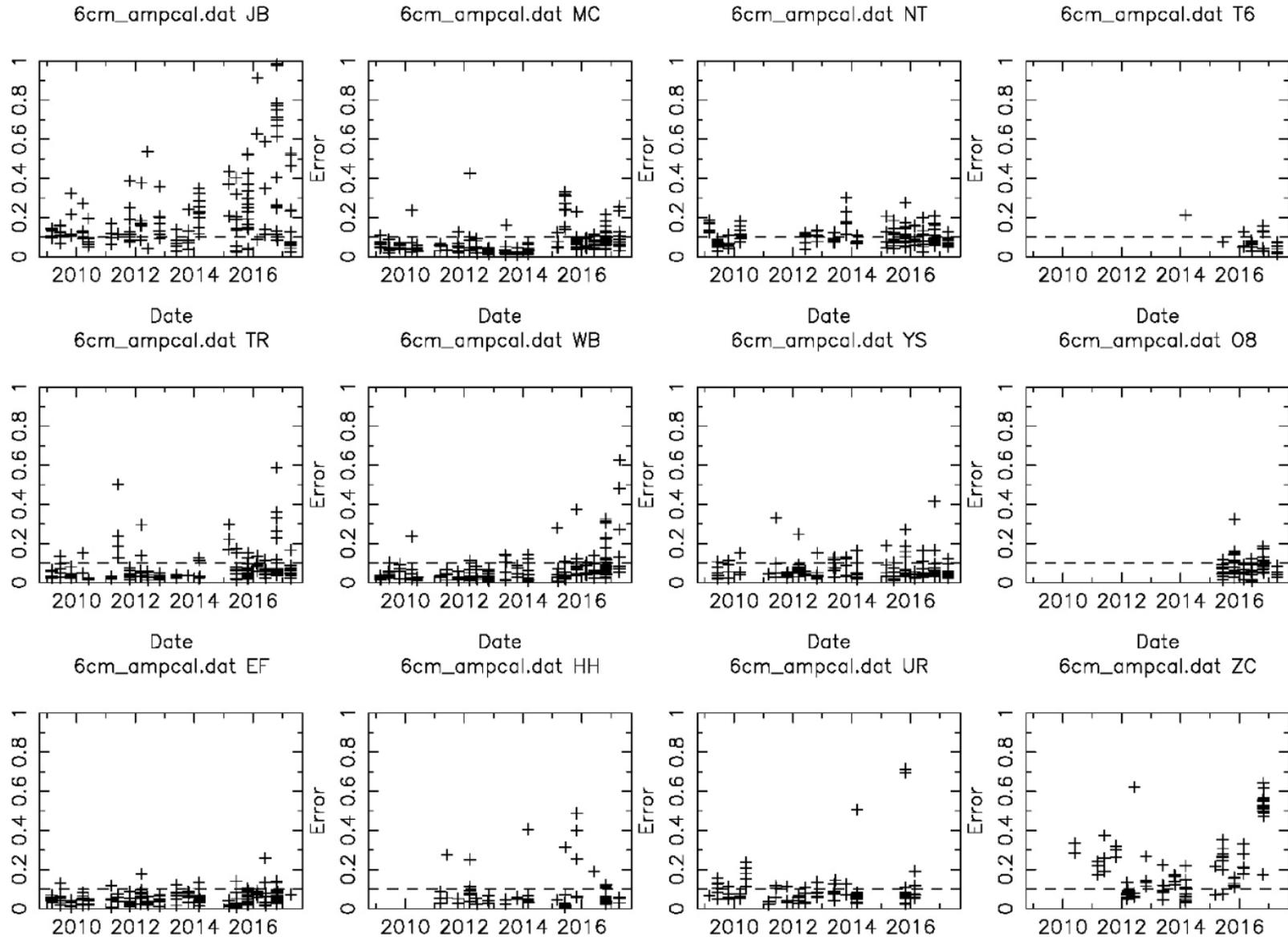


# 18/21cm ampcal vs time

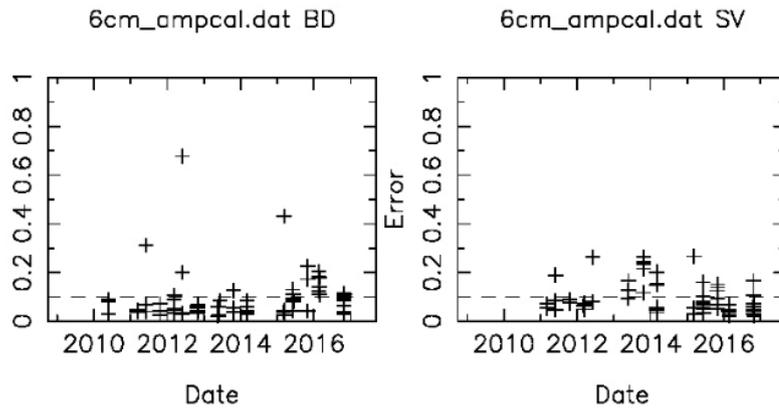
18cm\_ampcal.dat MC



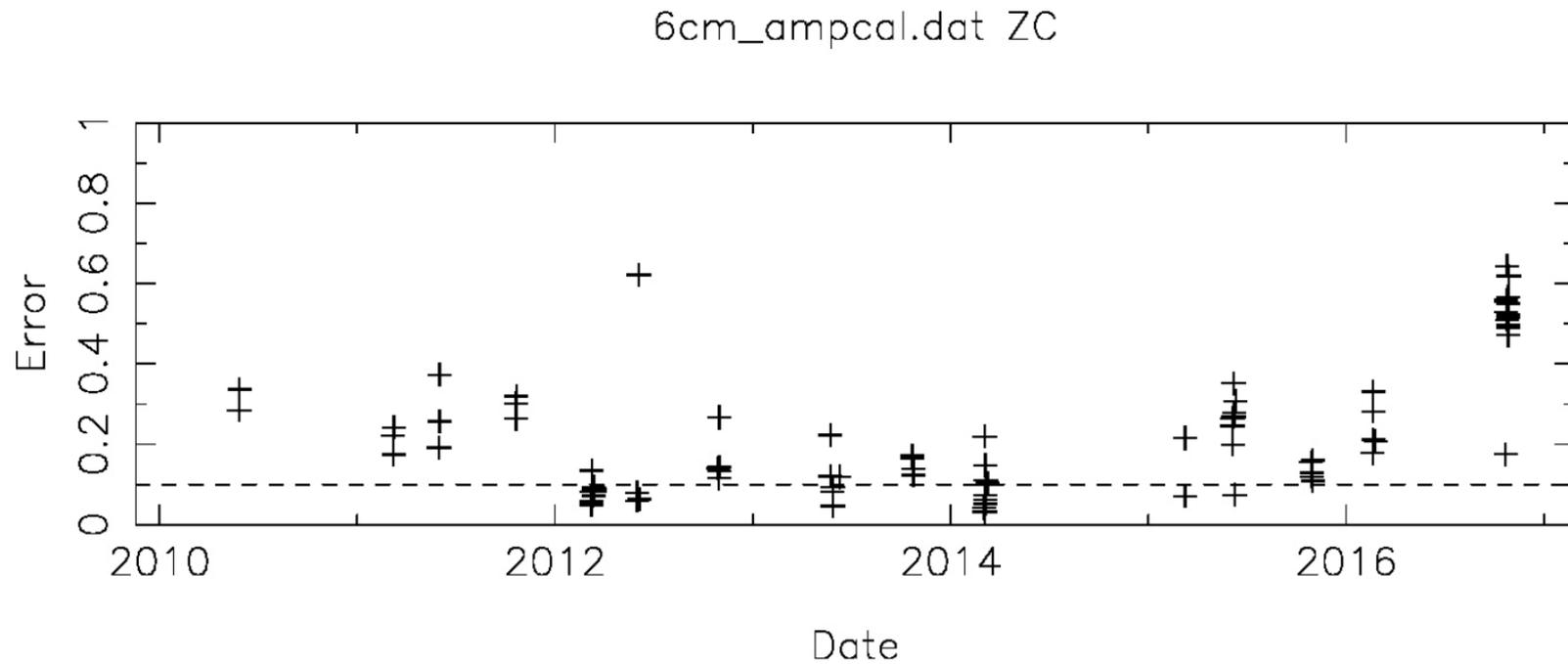
# 6cm ampcal vs time



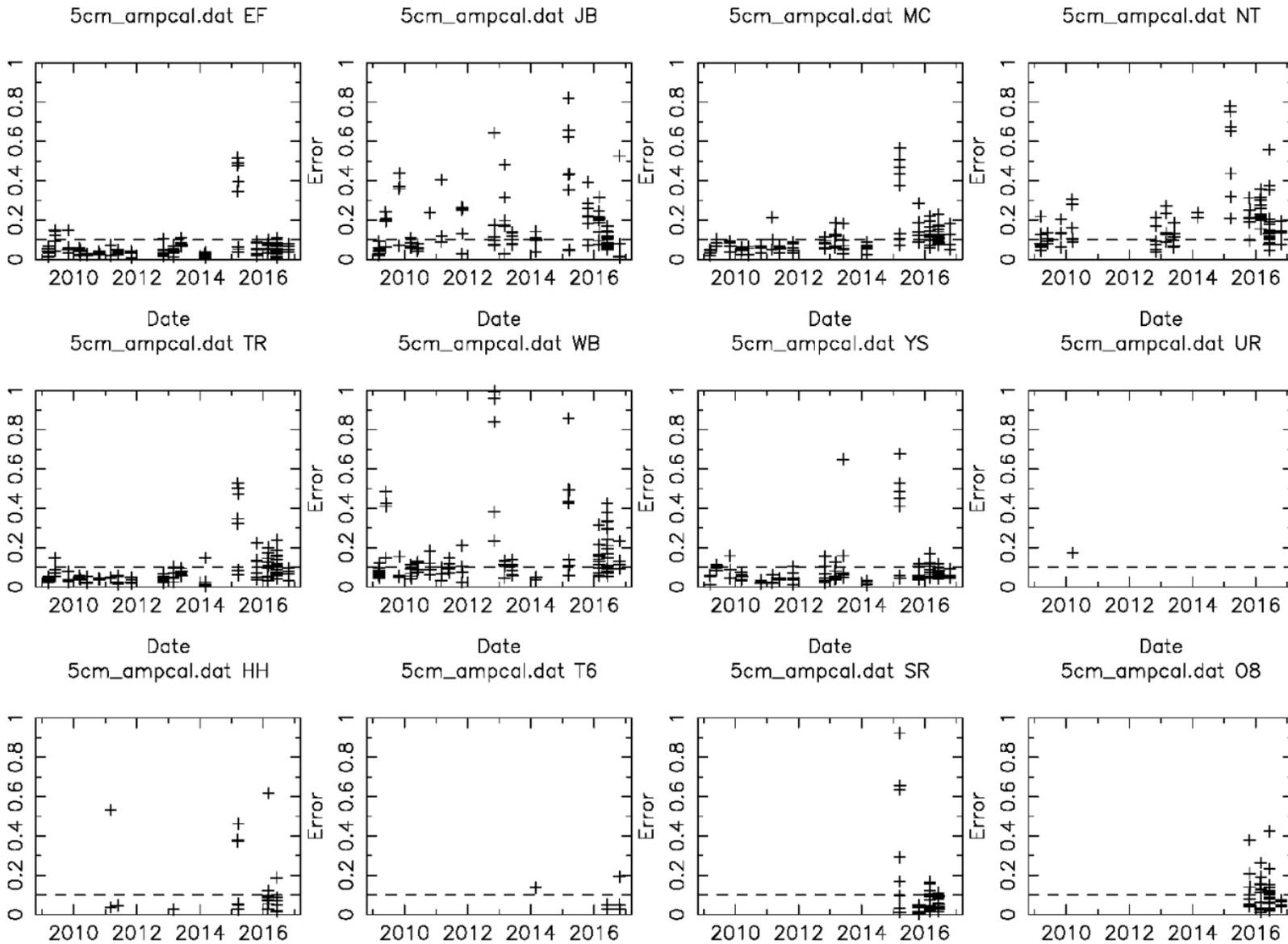
# 6cm ampcal vs time



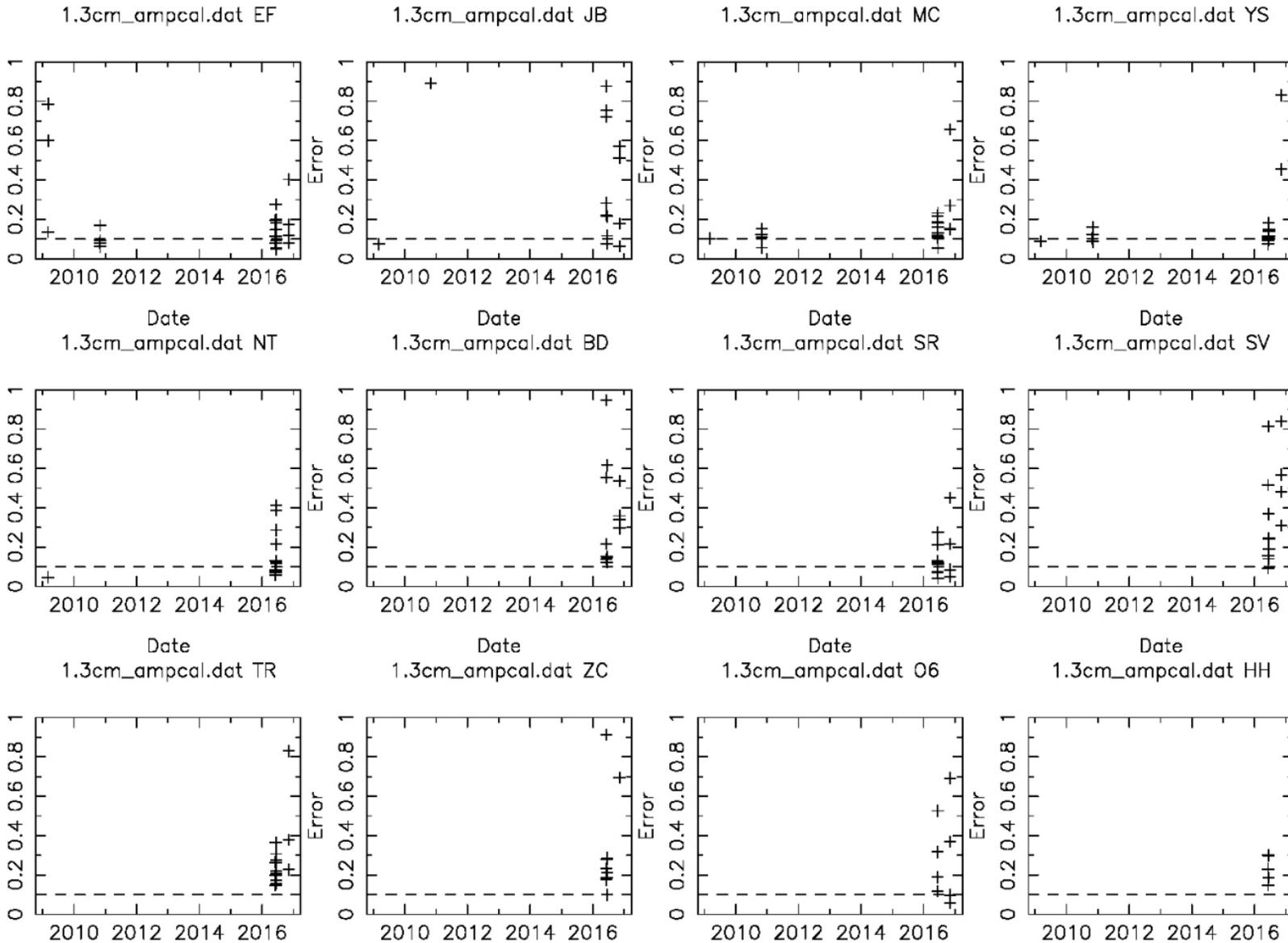
# 6cm ampcal vs time



# 5cm ampcal vs time



# 1.3cm ampcal vs time



# Antabfs and feedback shame

- **JB**

- No antabfs, no feedback.

- Ur

- Missed a couple of a antabfs - did not reply to emails.

- No feedback on web n16x1.

- T6

- Missed a couple of antabfs - sent when requested. Did not upload logfile for n16l2, n16c2.

- Ef

- Slow uploading logfiles n16c2.

- No feedback on web n16x1.

- Mh

- No feedback on web n16k1, n16l3.

- TR

- No feedback on web n16l3, n16m3.

- NT

- No feedback on web n16x1.

- Ys

- No feedback on web n16x1.



# N16K2

## Network Monitoring Report: **K-band** N16K2

**Source:** J1801+4404, J2123+0535, J2148+0657    **Length:** 180 min.    **Observing mode:** Mk V, mode 1024-16-2, dual pol.  
**Reference antenna:** Ef    **Date of observations:** 04/11/16    **Reference date:** 04/11/16; 309d 12h 00m  
**Experiment code:** N16K2    **Date of report:** 31/03/17    **by:** Ross Burns

- ⊗ According to expectation, no special remarks    ☐ Station did not observe (not scheduled)  
 ■ Problem occurred - see enclosed footnote(s)    ○ Entry not applicable/investigated

	Ef	Jb	Mc	Nt	O6	Ur	Tr	Ys	Sv	Zc	Bd	Sr	Hh	Mh	Ky	Ku	Kt
Station has observed	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗
Station produced fringes (ftp)	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Station produced fringes (disk)	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Logs are available (within 72 hours)	■	⊗	⊗	■	⊗	⊗	⊗	⊗	■	■	■	■	⊗	⊗	■	■	■
Feedback on www (within 7 days)	■	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	■	■	■
GPS clock estimate gives fringes	⊗	⊗	⊗	○	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recording okay	⊗	⊗	⊗	○	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Polarization setup okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Strong signal amplitude	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Sampler statistics okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	⊗	⊗
Please check BBC number(s):	8x2																
Previous reported problem(s) corrected																	
Problem(s) first reported																	
See enclosed footnote(s):	d	d		a			b							d	c,d	d	d

**Enclosure:** Footnotes K-band N16K2