

C211C Correlation Report

General Information

- Includes 2 science projects: [MP002](#) and [POLCAL2](#).
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/apr21/feedback_apr21.asc
- A text file with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
[c211c_ALL.antrep](#)

Current Status

Correlation finished, data **released to PI** on 25.11.2021.

The second release was prepared in February 2022.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Fringe overview of all baselines including this antenna in LL(left for each baseline) and RR (right for each baseline).</p> <p>Legend: white box - scheduled, but no data (or sometimes fourfit had trouble with the particular baseline/pol, so no data in alist), blue - no fringe, shades of green and brown -- fringes of varying quality, with bright green designating the best and brownish-red the worst..</p> <p>c211c_FRINGE_RfAnt_Ef_LLRR_AllSrc.pdf</p> <p>Examples of fourfit fringe plots can be found in (all fringe plots with baselines including the given antenna):</p> <p>No0037_B.pdf</p> <p>Antenna statistics:</p> <p>c211c_Ef.antrep</p> <p>Same for all antennas below unless otherwise noted.</p>	<p>Mostly clear sky</p> <p>Participated in 100% scans, fringes in 65% baselines*||pols, mean SNR 153.</p>
On	X	yes	<p>c211c_FRINGE_RfAnt_On_LLRR_AllSrc.pdf</p> <p>No0037_X.pdf</p> <p>c211c_On.antrep</p>	<p>Mostly clear sky.</p> <p>The 4mm receiver was used.</p> <p>Participated in 100% scans, fringes in 65% baselines*||pols, mean SNR 133.</p>
Ys	Y	no		<p>missed the whole experiment due to the blind repairs</p>

Station	Code	Fringes	Plots	Comments
Mh	Z	yes	c211c FRINGE RfAnt Mh LLRR AllSrc.pdf No0029_Z.pdf c211c_Mh.antrep	<p>Bad weather for most of the observations (rain or wet snow, heavy clouds).</p> <p>Participated in 97% scans, fringes in 40% baselines*||pols, mean SNR 37.</p>
Pv	P	yes	c211c FRINGE RfAnt Pv LLRR AllSrc.pdf No0037_P.pdf c211c_Pv.antrep	<p>Bad weather.</p> <p>"Participated" in 100% scans</p> <p>This represents the number of recorded scans, but for more than a half of those the antenna was stowed due to the weather. See the fringe overview for the good and bad scans.</p> <p>fringes in 35% baselines*||pols, mean SNR 211.</p>
GLT: Gl	g	yes	c211c FRINGE RfAnt Gl LLRR AllSrc.pdf No0037_g.pdf, No0077_g.pdf c211c_Gl.antrep	<p>Storm and high wind for part of the observations.</p> <p>Participated in 100% scans, fringes in 55% baselines*||pols, mean SNR 37.</p>
NOEMA: Nn	N	yes	c211c FRINGE RfAnt Nn LLRR AllSrc.pdf No0081_N.pdf, No0093_N.pdf c211c_Nn.antrep	<p>Participated in 100% scans, fringes in 41% baselines*||pols, mean SNR 251.</p> <p>(there was a large clock drift in the first production correlation, but it was fixed in the second release by using a better phase center)</p>
VLBA: Br	b	yes	c211c FRINGE RfAnt Br LLRR AllSrc.pdf No0085_b.pdf, No0120_b.pdf c211c_Br.antrep	<p>Participated in 100% scans, fringes in 49% baselines*||pols, mean SNR 21.</p>
VLBA: Fd	f	yes	c211c FRINGE RfAnt Fd LLRR AllSrc.pdf No0082_f.pdf, No0120_f.pdf c211c_Fd.antrep	<p>Participated in 99% scans, fringes in 53% baselines*||pols, mean SNR 22.</p>

Station	Code	Fringes	Plots	Comments
VLBA: Kp	k	yes	c211c FRINGE RfAnt Kp LLRR AllSrc.pdf No0084_k.pdf, No0120_k.pdf c211c_Kp.antrep	Participated in 100% scans, fringes in 51% baselines*||pols, mean SNR 19.
VLBA: La	l	yes	c211c FRINGE RfAnt La LLRR AllSrc.pdf No0080_l.pdf, No0118_l.pdf c211c_La.antrep	Participated in 100% scans, fringes in 39% baselines*||pols, mean SNR 17.
VLBA: Mk	m	yes	c211c FRINGE RfAnt Mk LLRR AllSrc.pdf No0062_m.pdf, No0102_m.pdf, No0120_m.pdf c211c_Mk.antrep	Participated in 91% scans, fringes in 22% baselines*||pols, mean SNR 14. dropped out for a few scans due to USNO observations
VLBA: Nl	n	yes	c211c FRINGE RfAnt Nl LLRR AllSrc.pdf No0070_n.pdf c211c_Nl.antrep	Participated in 100% scans, fringes in 8% baselines*||pols, mean SNR 15.
VLBA: Ov	o	yes	c211c FRINGE RfAnt Ov LLRR AllSrc.pdf No0068_o.pdf, No0093_o.pdf, No0117_o.pdf c211c_Ov.antrep	Participated in 100% scans, fringes in 50% baselines*||pols, mean SNR 23.
VLBA: Pt	p	yes	c211c FRINGE RfAnt Pt LLRR AllSrc.pdf No0085_p.pdf, No0113_p.pdf c211c_Pt.antrep	Participated in 92% scans, fringes in 37% baselines*||pols, mean SNR 16. dropped out for a few scans due to USNO observations
KVN: Kt	t	yes	c211c FRINGE RfAnt Kt LLRR AllSrc.pdf No0029_t.pdf, No0113_t.pdf, No0120_t.pdf c211c_Kt.antrep	Some bad weather, Participated in 98% scans, fringes in 67% baselines*||pols, mean SNR 124.

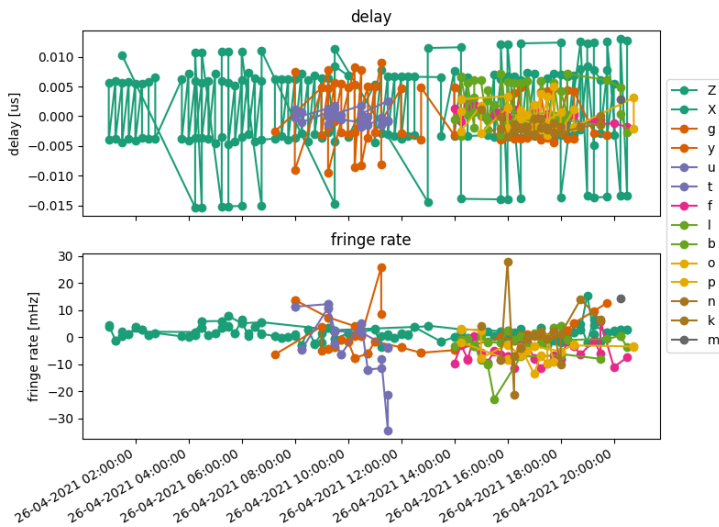
Station	Code	Fringes	Plots	Comments
KVN: Ku	u	yes	c211c FRINGE RfAnt_Ku_LLRR_AllSrc.pdf No0029_u.pdf , No0113_u.pdf , No0120_u.pdf c211c_Ku.antrep	Some bad weather, Participated in 97% scans, fringes in 73% baselines*||pols, mean SNR 140.
KVN: Ky	y	yes	c211c FRINGE RfAnt_Ky_LLRR_AllSrc.pdf No0029_y.pdf , No0113_y.pdf , No0120_y.pdf c211c_Ky.antrep	Some bad weather, Participated in 96% scans, fringes in 69% baselines*||pols, mean SNR 133.

Notes

Post-Correlation checks

Residuals

Ef as reference:

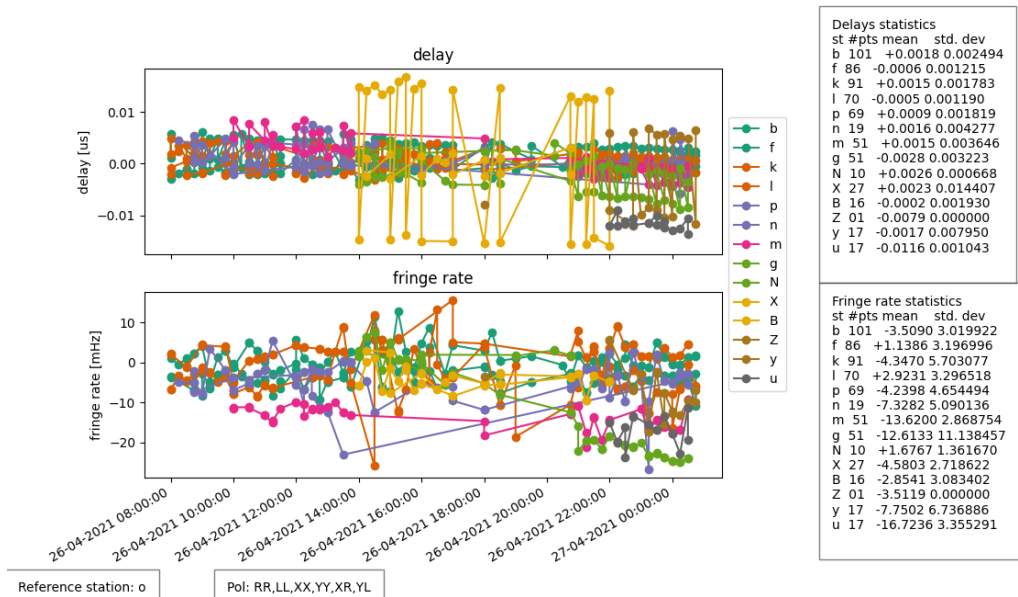


Delays statistics			
st	#pts	mean	std. dev
Z	124	+0.0015	0.005073
X	38	-0.0006	0.012998
g	41	+0.0003	0.004011
y	10	-0.0003	0.008397
u	10	+0.0008	0.001007
t	16	-0.0005	0.000856
f	35	-0.0001	0.000973
l	12	+0.0006	0.001338
b	32	+0.0022	0.003751
o	16	-0.0002	0.001930
p	11	+0.0006	0.002885
n	01	+0.0011	0.000000
k	22	-0.0018	0.000908
m	01	+0.0029	0.000000

Fringe rate statistics			
st	#pts	mean	std. dev
Z	124	+1.1550	2.293108
X	38	+3.2788	2.294653
g	41	-1.1385	4.305585
y	10	+8.1725	7.555922
u	10	+4.7655	6.105572
t	16	-5.8412	11.093272
f	35	-5.6931	3.676446
l	12	-7.9934	5.066319
b	32	-0.4120	2.181483
o	16	-2.8541	3.083402
p	11	-7.0224	3.655259
n	01	+4.1425	0.000000
k	22	+0.0149	9.167985
m	01	+14.1952	0.000000

Reference station: B Pol: RR,LL,XX,YY,XR,YL

Ov as reference:



FITS completeness (plist)

legend:

- o -- station scheduled and fully accounted for in the fits file
- 42 (or another number) -- station scheduled, but data found only for 42% of the scheduled interval
- x -- station scheduled, but corresponding entry not found in the fits file
- . -- station not scheduled

c211c.fits:

			EF	ON	YS	PV	NN	MH	GL	KY	KU	KT	FD	NL	OV	PT	BR	KP	MK	LA
c211c_001	No0001	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_002	No0002	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_003	No0003	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_004	No0004	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_005	No0005	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_006	No0006	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_007	No0007	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_008	No0008	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_009	No0009	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_010	No0010	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_011	No0011	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_012	No0012	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_013	No0013	3C454.3 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_014	No0014	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_015	No0015	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_016	No0016	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_017	No0017	3C454.3 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_018	No0018	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c211c_019	No0019	BLLAC 86ghz	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.

