

C211B Correlation Report

General Information

- Includes 2 science projects: [MK017B1+B2](#) and [POLCAL1](#).
- Includes 3mm and 7mm parts
- 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
- Text files with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
[c211b_3mm_ALL.antrep](#)
[c211b_7mm_ALL.antrep](#)

Current Status

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

The second release, v2, was prepared in February 2022 and fixes 3mm, the 7mm remains unaffected.

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>c211b_3mm_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>c211b_3mm_No0160_all.pdf</p> <p>Antenna statistics:</p> <p>c211b_3mm_Ef.antrep</p> <p>Same for all antennas below unless otherwise noted.</p>	<p>Mostly clear sky</p> <p>Participated in 100% scans (3mm only), fringes in 54% baselines* pols, mean SNR 309.</p>
On	X	yes	<p>c211b_3mm_FRINGE_RfAnt_On_LLRR_AllSrc.pdf</p> <p>c211b_3mm_No0160_all.pdf</p> <p>c211b_3mm_On.antrep</p>	<p>Mostly clear sky.</p> <p>The 4mm receiver was used.</p> <p>Participated in 100% scans (3mm only), fringes in 55% baselines* pols, mean SNR 186.</p>

Station	Code	Fringes	Plots	Comments
Ys	Y	no		missed the whole experiment due to the blind repairs
Mh	Z	yes	c211b_3mm_FRINGE_RfAnt_Mh_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf c211b_3mm_Mh.antrep	<p>Bad weather for most of the observations (rain or wet snow, heavy clouds).</p> <p>Participated in 94% scans (3mm only), fringes in 34% baselines* pols, mean SNR 47.</p>
Pv	P	yes	c211b_3mm_FRINGE_RfAnt_Pv_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf c211b_3mm_Pv.antrep	<p>Bad weather.</p> <p>"Participated" in 62% scans (3mm only).</p> <p>This represents the number of recorded scans, but for part of those the antenna was stowed due to the weather. See the fringe overview for the good and bad scans.</p> <p>fringes in 21% baselines* pols, mean SNR 68.</p>
NOEMA: Nn	N	yes	c211b_3mm_FRINGE_RfAnt_Nn_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf , c211b_3mm_No0177_N.pdf c211b_3mm_Nn.antrep	<p>Participated in 100% scans (3mm only), fringes in 72% baselines* pols, mean SNR 306.</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>
GLT: Gl	g	yes	c211b_3mm_FRINGE_RfAnt_Gl_LLRR_AllSrc.pdf c211b_3mm_No0177_g.pdf c211b_3mm_Gl.antrep	<p>Storm and high wind for part of the observations.</p> <p>Participated in 100% scans (3mm only), fringes in 26% baselines* pols, mean SNR 26.</p>
VLBA: Br	b	yes	c211b_3mm_FRINGE_RfAnt_Br_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf , c211b_3mm_No0254_all.pdf c211b_3mm_Br.antrep c211b_7mm_FRINGE_RfAnt_Br_LLRR_AllSrc.pdf c211b_7mm_No0072_all.pdf	<p>3mm: Participated in 99% scans, fringes in 21% baselines* pols, mean SNR 20.</p> <p>7mm: Participated in 99% scans, fringes in 95%</p>

Station	Code	Fringes	Plots	Comments
			c211b 7mm Br.antrep	baselines* pols, mean SNR 129.
VLBA: Fd	f	yes	c211b 3mm FRINGE RfAnt Fd LLRR AllSrc.pdf c211b 3mm No0160_all.pdf, c211b 3mm No0254_all.pdf c211b 3mm Fd.antrep c211b 7mm FRINGE RfAnt Br LLRR AllSrc.pdf c211b 7mm No0072_all.pdf c211b 7mm Fd.antrep	3mm: Participated in 98% scans, fringes in 34% baselines* pols, mean SNR 23. 7mm: Participated in 98% scans, fringes in 97% baselines* pols, mean SNR 176.
VLBA: Kp	k	yes	c211b 3mm FRINGE RfAnt Kp LLRR AllSrc.pdf c211b 3mm No0160_all.pdf, c211b 3mm No0254_all.pdf c211b 3mm Kp.antrep c211b 7mm FRINGE RfAnt Kp LLRR AllSrc.pdf c211b 7mm No0072_all.pdf c211b 7mm Kp.antrep	3mm: Participated in 100% scans, fringes in 39% baselines* pols, mean SNR 22. 7mm: Participated in 100% scans, fringes in 98% baselines* pols, mean SNR 205.
VLBA: La	l	yes	c211b 3mm FRINGE RfAnt La LLRR AllSrc.pdf c211b 3mm No0160_all.pdf, c211b 3mm No0254_all.pdf c211b 3mm La.antrep c211b 7mm FRINGE RfAnt La LLRR AllSrc.pdf c211b 7mm No0072_all.pdf c211b 7mm La.antrep	3mm: Participated in 100% scans, fringes in 20% baselines* pols, mean SNR 15. 7mm: Participated in 100% scans, fringes in 95% baselines* pols, mean SNR 150.
VLBA: Mk	m	yes	c211b 3mm FRINGE RfAnt Mk LLRR AllSrc.pdf c211b 3mm No0160_all.pdf, c211b 3mm No0254_all.pdf, c211b 3mm No0122_m.pdf c211b 3mm Mk.antrep c211b 7mm FRINGE RfAnt Mk LLRR AllSrc.pdf c211b 7mm No0072_all.pdf	3mm: Participated in 88% scans, fringes in 22% baselines* pols, mean SNR 17. 7mm: Participated in 92% scans, fringes in 97% baselines* pols, mean SNR 114.

Station	Code	Fringes	Plots	Comments
			c211b_7mm_Mk.antrep	dropped out for several scans due to USNO observations
VLBA: Nl	n	yes	c211b_3mm_FRINGE_RfAnt_Nl_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf , c211b_3mm_No0254_all.pdf , c211b_3mm_No0166_n.pdf c211b_3mm_Nl.antrep c211b_7mm_FRINGE_RfAnt_Nl_LLRR_AllSrc.pdf c211b_7mm_No0072_all.pdf c211b_7mm_Nl.antrep	3mm: Participated in 100% scans, fringes in 20% baselines* pols, mean SNR 15. 7mm: Participated in 100% scans, fringes in 95% baselines* pols, mean SNR 128.
VLBA: Ov	o	yes	c211b_3mm_FRINGE_RfAnt_Ov_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf , c211b_3mm_No0254_all.pdf , c211b_3mm_No0101_o.pdf c211b_3mm_Ov.antrep c211b_7mm_FRINGE_RfAnt_Ov_LLRR_AllSrc.pdf c211b_7mm_No0072_all.pdf c211b_7mm_Ov.antrep	. 3mm: Participated in 100% scans, fringes in 26% baselines* pols, mean SNR 25. 7mm: Participated in 100% scans, fringes in 96% baselines* pols, mean SNR 135.
VLBA: Pt	p	yes	c211b_3mm_FRINGE_RfAnt_Pt_LLRR_AllSrc.pdf c211b_3mm_No0160_all.pdf , c211b_3mm_No0254_all.pdf c211b_3mm_Pt.antrep c211b_7mm_FRINGE_RfAnt_Pt_LLRR_AllSrc.pdf c211b_7mm_No0072_all.pdf c211b_7mm_Pt.antrep	3mm: Participated in 93% scans, fringes in 19% baselines* pols, mean SNR 17. 7mm: Participated in 94% scans, fringes in 95% baselines* pols, mean SNR 133. dropped out for several scans due to USNO observations
VLBA: Hn	h		c211b_7mm_FRINGE_RfAnt_Hn_LLRR_AllSrc.pdf c211b_7mm_No0072_all.pdf c211b_7mm_Hn.antrep	Participated in 100% scans (7mm only), fringes in 86% baselines* pols, mean SNR 66

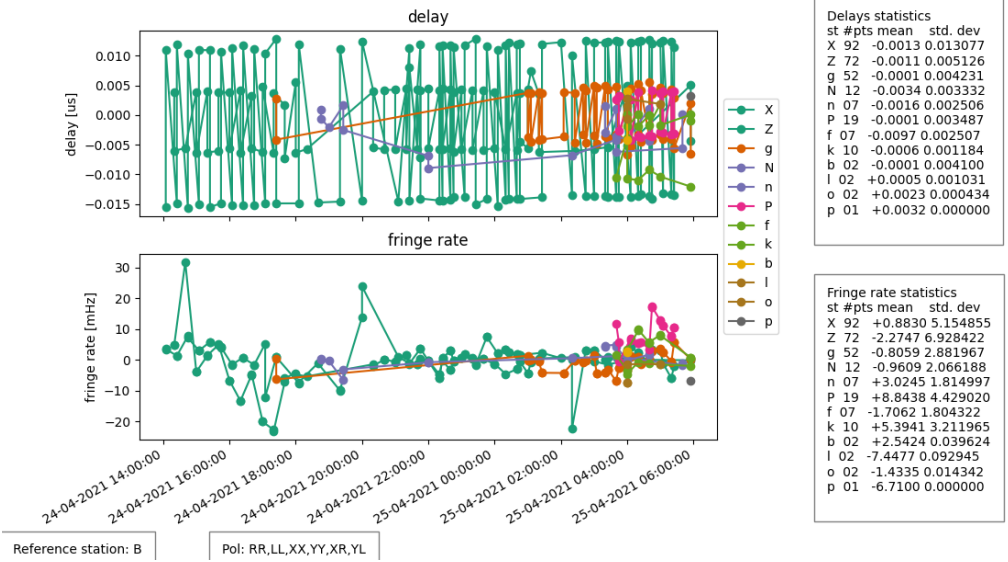
Station	Code	Fringes	Plots	Comments
VLBA: Sc	c		c211b 7mm FRINGE RfAnt_Sc_LLRR_AllSrc.pdf c211b 7mm No0072_all.pdf c211b 7mm Sc.antrep	Participated in 92% scans (7mm only), fringes in 91% baselines* pols, mean SNR 50

Notes

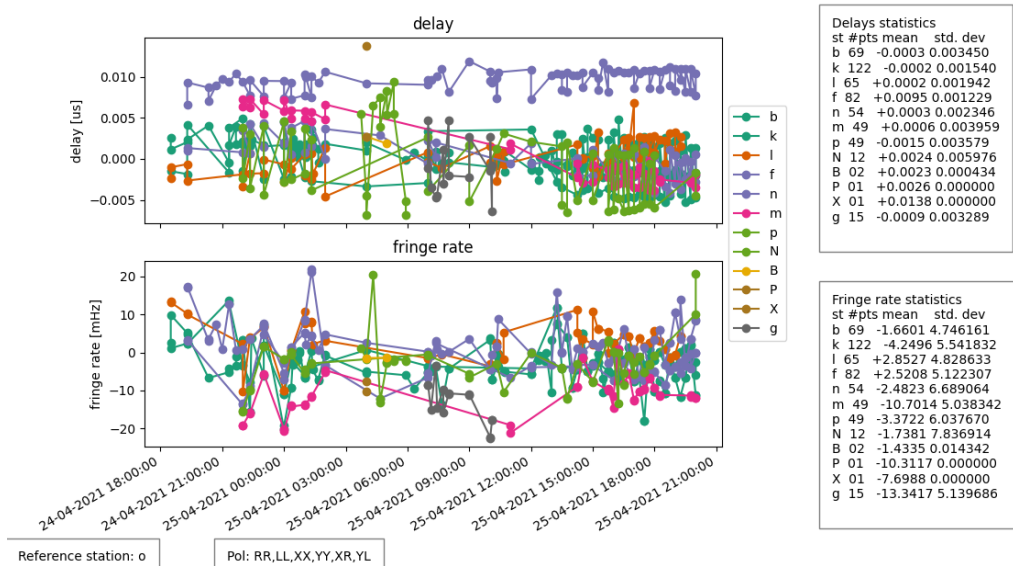
Post-Correlation checks

Residuals

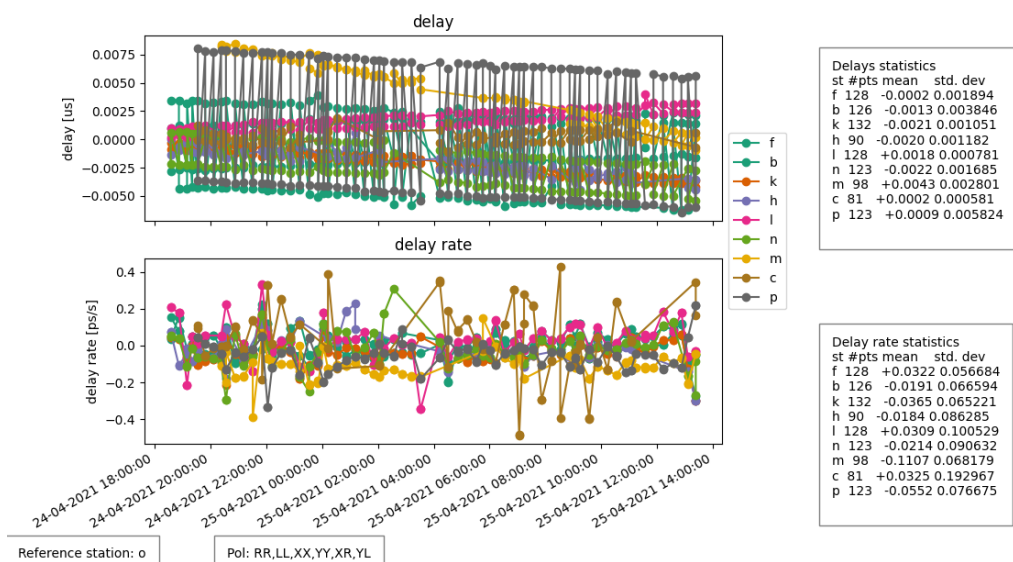
c211b 3mm, Ef as reference:



c211b 3mm, Ov as reference:



c211b 7mm, 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

c211b.3mm.fits:

EF ON YS PV NN MH GL FD NL OV PT BR KP LA MK
c211b_001 No0001 0420-014 86ghz o o x x o o

c211b_38	No0174	1502+106	43ghz	o	o	o	o	o	o	o	o	o	.
c211b_39	No0176	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_40	No0178	3C345	43ghz	o	o	o	o	o	o	o	o	o	.
c211b_41	No0180	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_42	No0183	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_43	No0186	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_44	No0188	3C345	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_45	No0190	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_46	No0193	1502+106	43ghz	o	o	o	o	o	o	o	o	o	x
c211b_47	No0196	1502+106	43ghz	o	o	o	o	o	o	o	o	o	x
c211b_48	No0199	1502+106	43ghz	o	o	o	o	o	o	o	o	o	x
c211b_49	No0202	1502+106	43ghz	o	o	o	o	o	o	o	o	o	x
c211b_50	No0205	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_51	No0207	3C345	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_52	No0209	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_53	No0212	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_54	No0215	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_55	No0218	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_56	No0221	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_57	No0224	1502+106	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_58	No0226	3C345	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_59	No0228	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_60	No0231	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_61	No0234	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_62	No0237	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_63	No0240	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_64	No0243	1502+106	43ghz	o	o	o	o	o	o	o	.	.	o
c211b_65	No0245	3C345	43ghz	o	o	o	o	o	o	o	o	o	o
c211b_66	No0247	3C454.3	43ghz	o	o	o	o	o	o	o	o	o	o