

# POLCAL1 Correlation Report

## General information

- A part of [C202A](#).
- Includes only 3mm part
- PI: KRICHBAUM
- Targets: pol. calibrators
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: [http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/oct20/feedback\\_oct20.asc](http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/oct20/feedback_oct20.asc)
- Text files with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:

[c202a\\_ALL\\_3mm.antrep](#)

## Current Status

Correlation finished, data **released to PI** on 28.04.2021.

## Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p><b>Note: all plots and statistics are done for the whole of c202a</b></p> <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.</p> <p><a href="#">c202a FRINGE RfAnt_Ef_LLRR_AllSrc_3mm.pdf</a></p> <p>Examples of fourfit fringe plots can be found in (all fringe plots with baselines including the given antenna):</p> <p><a href="#">No0189_B_3mm.pdf</a></p> <p>Antenna statistics:</p> <p><a href="#">c202a_Ef_3mm.antrep</a></p> <p><b>Same for all antennas below unless otherwise noted.</b></p>	<p>Participated in 100% scans, fringes in 16% baselines*  pols, mean SNR 48.</p> <p><b>bad weather</b></p>
On	X	yes	<p><a href="#">c202a FRINGE RfAnt_On_LLRR_AllSrc_3mm.pdf</a></p>	<p>Participated in 100% scans, fringes in 23% baselines*  pols, mean SNR 36.</p>

			<a href="#">No0131_X_3mm.pdf</a> <a href="#">c202a_On_3mm.antrep</a>	
Ys	Y	no	<a href="#">c202a_FRINGE_RfAnt_Ys_LLRR_AllSrc_3mm.pdf</a> <a href="#">c202a_Ys_3mm.antrep</a>	No fringes in c202a, due to some problem with clocks: fringes found in the fringe test with one clock setting, and in c202b shifted by more than 0.5us. None of these settings produced fringes in c202a and fringe search with a wide window also yielded no result.
Mh	Z	yes	<a href="#">c202a_FRINGE_RfAnt_Mh_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0087_Z_3mm.pdf</a> <a href="#">c202a_Mh_3mm.antrep</a>	Participated in 100% scans, fringes in 10% baselines*  pols, mean SNR 25.  <b>bad weather</b>
Pv	P	yes	<a href="#">c202a_FRINGE_RfAnt_Pv_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0100_P_3mm.pdf</a> <a href="#">c202a_Pv_3mm.antrep</a>	Participated in 100% scans, fringes in 35% baselines*  pols, mean SNR 52.
VLBA: Br	b	yes	<a href="#">c202a_FRINGE_RfAnt_Br_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0128_b_3mm.pdf</a> <a href="#">c202a_Br_3mm.antrep</a>	3mm: participated in 100% scans, fringes in 23% baselines*  pols, mean SNR 23.
VLBA: Fd	f	yes	<a href="#">c202a_FRINGE_RfAnt_Fd_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0150_f_3mm.pdf</a> <a href="#">c202a_Fd_3mm.antrep</a>	3mm: participated in 100% scans, fringes in 30% baselines*  pols, mean SNR 33.
VLBA: Kp	k	yes	<a href="#">c202a_FRINGE_RfAnt_Kp_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0150_k_3mm.pdf</a> <a href="#">c202a_Kp_3mm.antrep</a>	3mm: participated in 100% scans, fringes in 24% baselines*  pols, mean SNR 24.
VLBA: La	l	yes	<a href="#">c202a_FRINGE_RfAnt_La_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0131_l_3mm.pdf</a> <a href="#">c202a_La_3mm.antrep</a>	3mm: participated in 94% scans, fringes in 30% baselines*  pols, mean SNR 30.  <b>dropped out for several scans due to USNO observations</b>
VLBA: Mk	m	yes	<a href="#">c202a_FRINGE_RfAnt_Mk_LLRR_AllSrc_3mm.pdf</a>	3mm: participated in 97% scans, fringes in 21% baselines*  pols, mean SNR 19.

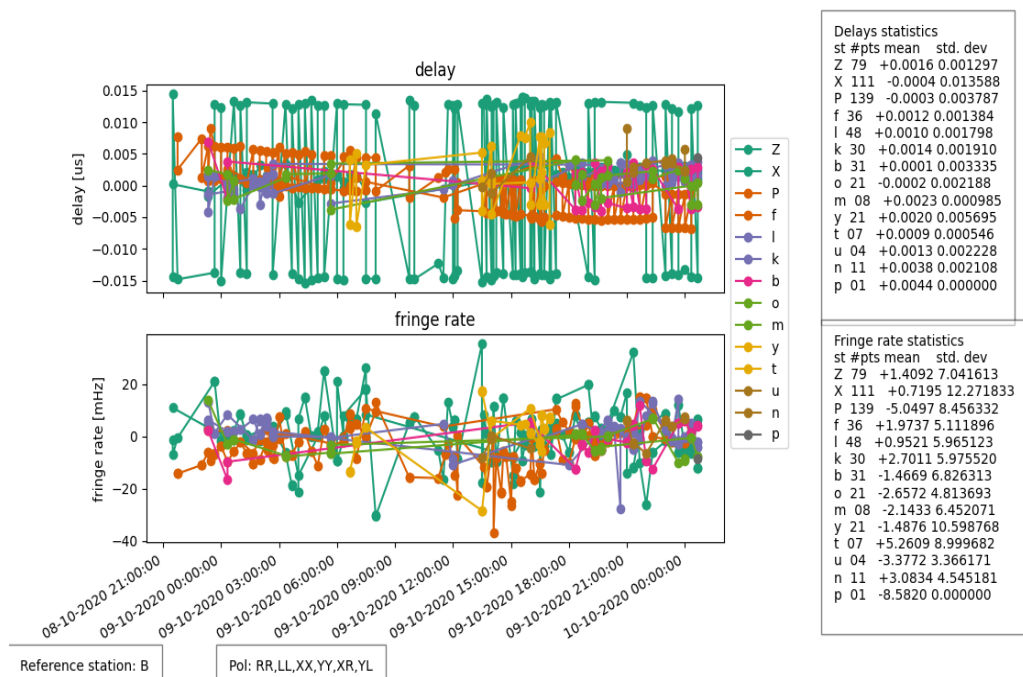
			<a href="#">No0150_m_3mm.pdf</a> <a href="#">c202a_Mk_3mm.antrep</a>	<p><b>dropped out for several scans due to USNO observations</b></p>
VLBA: Nl	n	yes	<a href="#">c202a_FRINGE_RfAnt_Nl_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0122_n_3mm.pdf</a> <a href="#">No0219_n_3mm.pdf</a> <a href="#">c202a_Nl_3mm.antrep</a>	<p>3mm: participated in 100% scans, fringes in 11% baselines*  pols, mean SNR 15.</p>
VLBA: Ov	o	yes	<a href="#">c202a_FRINGE_RfAnt_Ov_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0150_o_3mm.pdf</a> <a href="#">No0228_o_3mm.pdf</a> <a href="#">c202a_Ov_3mm.antrep</a>	<p>3mm: participated in 100% scans, fringes in 27% baselines*  pols, mean SNR 29.</p>
VLBA: Pt	p	yes	<a href="#">c202a_FRINGE_RfAnt_Pt_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0128_p_3mm.pdf</a> <a href="#">c202a_Pt_3mm.antrep</a>	<p>3mm: participated in 95% scans, fringes in 13% baselines*  pols, mean SNR 19.</p> <p><b>lots of technical problems, see logs</b></p>
KVN: Kt	t	yes	<a href="#">c202a_FRINGE_RfAnt_Kt_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0110_t_3mm.pdf</a> <a href="#">c202a_Kt_3mm.antrep</a>	<p>Participated in 99% scans, fringes in 29% baselines*  pols, mean SNR 54.</p>
KVN: Ku	u	yes	<a href="#">c202a_FRINGE_RfAnt_Ku_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0113_u_3mm.pdf</a> <a href="#">c202a_Ku_3mm.antrep</a>	<p>Participated in 86% scans, fringes in 25% baselines*  pols, mean SNR 52.</p>
KVN: Ky	y	yes	<a href="#">c202a_FRINGE_RfAnt_Ky_LLRR_AllSrc_3mm.pdf</a> <a href="#">No0103_y_3mm.pdf</a> <a href="#">No0140_y_3mm.pdf</a> <a href="#">c202a_Ky_3mm.antrep</a> <p>-----</p>	<p>Participated in 100% scans, fringes in 36% baselines*  pols, mean SNR 49.</p>

## Notes

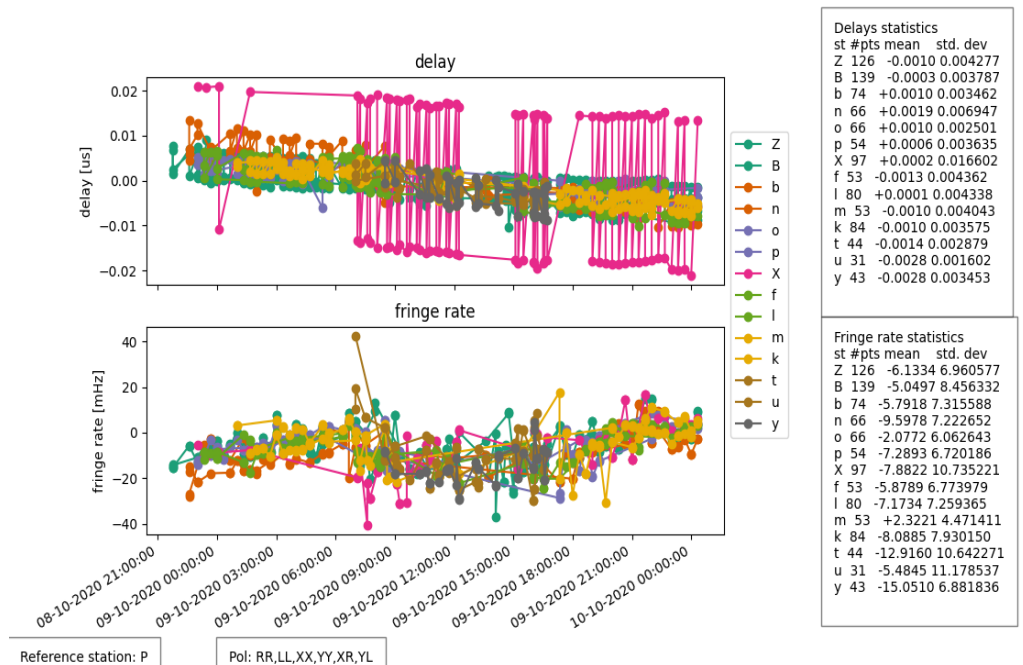
## Post-Correlation checks

### Residuals

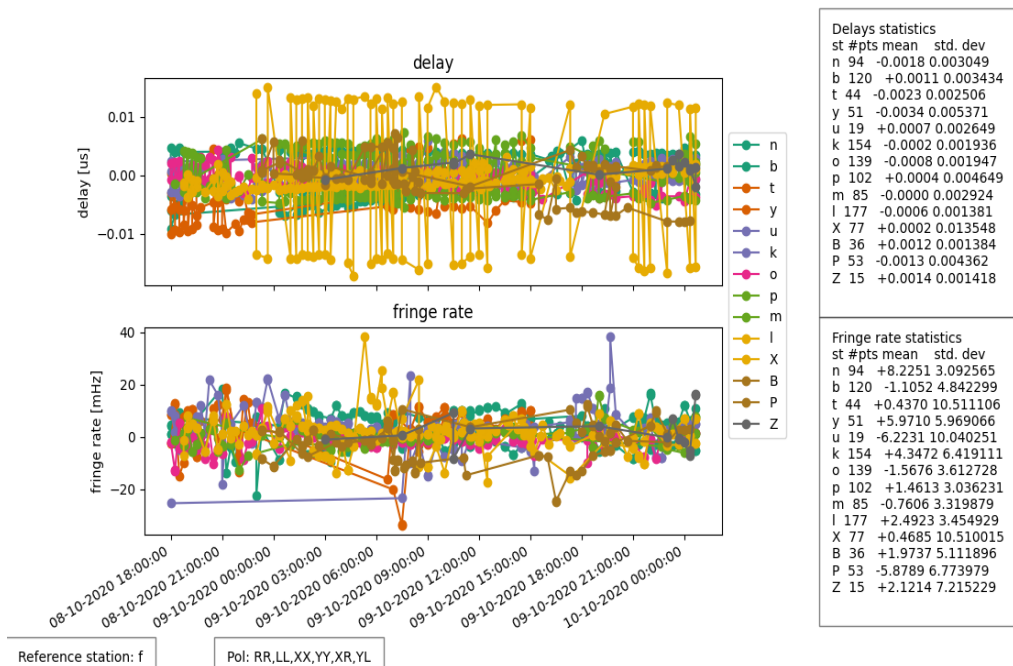
Ef as reference (3mm):



Pv as reference (3mm):



Fd as reference (3mm):



### 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

**polcal1.fits:**

				FD	NL	OV	PT	BR	KP	MK	LA	KY	KU	KT	EF	ON	YS	PV	MH
c202a_001	No0001	OJ287	3mm_ddc	o	o	o	o	o	o	x	x	o	73	o	.	.	.	.	.
c202a_002	No0002	OJ287	3mm_ddc	o	o	o	o	o	o	x	x	o	40	o	.	.	.	.	.
c202a_003	No0003	OJ287	3mm_ddc	o	o	o	o	o	o	x	x	o	16	o	.	.	.	.	.
c202a_004	No0004	OJ287	3mm_ddc	o	o	o	o	o	o	o	o	o	10	o	.	.	.	.	.
c202a_005	No0005	OJ287	3mm_ddc	o	o	o	o	o	o	o	o	o	60	o	.	.	.	.	.
c202a_006	No0006	OJ287	3mm_ddc	o	o	o	73	o	o	o	o	o	06	o	.	.	.	.	.
c202a_007	No0007	OJ287	3mm_ddc	o	o	o	x	o	o	o	o	o	13	o	.	.	.	.	.
c202a_008	No0008	OJ287	3mm_ddc	o	o	o	x	o	o	o	o	o	o	o	.	.	.	.	.
c202a_009	No0009	OJ287	3mm_ddc	o	.	o	x	o	o	o	o	o	o	o	.	.	.	.	.
c202a_010	No0010	OJ287	3mm_ddc	o	.	o	o	o	o	o	o	o	o	o	.	.	.	.	.
c202a_011	No0011	1156+295	3mm_ddc	o	o	o	x	o	o	o	o	o	o	o	.	.	.	.	.
c202a_012	No0012	1156+295	3mm_ddc	o	o	o	x	o	o	o	o	o	46	o	.	.	.	.	.
c202a_013	No0013	1156+295	3mm_ddc	o	o	o	x	o	o	o	o	o	o	o	.	.	.	.	.
c202a_014	No0014	1156+295	3mm_ddc	o	o	o	x	o	o	o	o	x	13	.	.	.	.	.	.
c202a_015	No0015	1156+295	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.
c202a_016	No0016	BLLAC	3mm_ddc	.	.	.	.	.	.	.	.	.	.	o	o	o	o	o	o
c202a_017	No0017	1156+295	3mm_ddc	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.



c202a_144	No0171	3C345	3mm_ddc	o	o	o	o	o	o	o	.	x	.	.	.	o	o	o	o	o
c202a_146	No0174	3C345	3mm_ddc	o	o	o	o	o	o	o	.	x	.	.	.	o	o	o	o	o
c202a_148	No0177	3C345	3mm_ddc	o	o	o	o	o	o	o	.	o	.	.	.	o	o	o	o	o
c202a_150	No0180	3C345	3mm_ddc	o	o	o	o	o	o	o	.	o	.	.	.	o	o	o	o	o
c202a_152	No0183	3C345	3mm_ddc	o	o	o	o	o	o	o	.	o	.	.	.	o	o	o	o	o
c202a_154	No0186	3C345	3mm_ddc	o	o	o	o	o	o	o	.	o	.	.	.	o	o	o	o	o
c202a_156	No0189	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_158	No0192	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_160	No0195	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_162	No0198	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_164	No0201	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_166	No0204	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_168	No0207	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_170	No0210	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_172	No0213	3C345	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_174	No0216	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_176	No0219	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_178	No0222	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_180	No0225	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_182	No0228	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o
c202a_184	No0231	2013+370	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	o	o	o	o	o