

# POLCAL2 Correlation Report

## General information

- A part of [C202B](#).
- 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:  
[c202b 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 c202b</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="#">c202b 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="#">No0055_B_3mm.pdf</a></p> <p>Antenna statistics:</p> <p><a href="#">c202b_Ef_3mm.antrep</a></p> <p><b>Same for all antennas below unless otherwise noted.</b></p>	<p>Participated in 99% scans, fringes in 38% baselines*  pols, mean SNR 67.</p> <p><b>bad weather</b></p>
On	X	yes	<p><a href="#">c202b FRINGE RfAnt On LLRR AllSrc 3mm.pdf</a></p> <p><a href="#">No0082_X_3mm.pdf</a></p> <p><a href="#">No0283_X_3mm.pdf</a></p> <p><a href="#">c202b_On_3mm.antrep</a></p>	<p>Participated in 100% scans, fringes in 39% baselines*  pols, mean SNR 55.</p>

Ys	Y	yes	<a href="#">c202b FRINGE RfAnt Ys LLRR AllSrc 3mm.pdf</a> <a href="#">No0079_Y_3mm.pdf</a> <a href="#">No0080_Y_3mm.pdf</a> <a href="#">c202b Ys 3mm.antrep</a>	Participated in 94% scans, fringes in 47% baselines*  pols, mean SNR 102.
Mh	Z	yes	<a href="#">c202b FRINGE RfAnt Mh LLRR AllSrc 3mm.pdf</a> <a href="#">No0163_Z_3mm.pdf</a> <a href="#">c202b Mh 3mm.antrep</a>	Participated in 84% scans, fringes in 26% baselines*  pols, mean SNR 26.  <b>bad weather</b>
Pv	P	yes	<a href="#">c202b FRINGE RfAnt Pv LLRR AllSrc 3mm.pdf</a> <a href="#">No0079_P_3mm.pdf</a> <a href="#">No0080_P_3mm.pdf</a> <a href="#">c202b Pv 3mm.antrep</a>	Participated in 100% scans, fringes in 61% baselines*  pols, mean SNR 113.
VLBA: Br	b	yes	<a href="#">c202b FRINGE RfAnt Br LLRR AllSrc 3mm.pdf</a> <a href="#">No0079_b_3mm.pdf</a> <a href="#">No0101_b_3mm.pdf</a> <a href="#">c202b Br 3mm.antrep</a>	3mm: participated in 100% scans, fringes in 33% baselines*  pols, mean SNR 22.
VLBA: Fd	f	yes	<a href="#">c202b FRINGE RfAnt Fd LLRR AllSrc 3mm.pdf</a> <a href="#">No0028_f_3mm.pdf</a> <a href="#">No0117_f_3mm.pdf</a> <a href="#">c202b Fd 3mm.antrep</a>	3mm: participated in 99% scans, fringes in 49% baselines*  pols, mean SNR 33.
VLBA: Kp	k	yes	<a href="#">c202b FRINGE RfAnt Kp LLRR AllSrc 3mm.pdf</a> <a href="#">No0119_k_3mm.pdf</a> <a href="#">c202b Kp 3mm.antrep</a>	3mm: participated in 99% scans, fringes in 37% baselines*  pols, mean SNR 26.
VLBA: La	l	yes	<a href="#">c202b FRINGE RfAnt La LLRR AllSrc 3mm.pdf</a> <a href="#">No0070_l_3mm.pdf</a> <a href="#">No0111_l_3mm.pdf</a>	3mm: participated in 80% scans, fringes in 46% baselines*  pols, mean SNR 34.

			<a href="#">c202b La 3mm.antrep</a>	<b>dropped out for several scans due to USNO observations</b>
VLBA: Mk	m	yes	<a href="#">c202b FRINGE RfAnt Mk LLRR AllSrc 3mm.pdf</a> <a href="#">No0105_m 3mm.pdf</a> <a href="#">c202b Mk 3mm.antrep</a>	3mm: participated in 96% scans, fringes in 29% baselines*  pols, mean SNR 17.  <b>dropped out for several scans due to USNO observations</b>
VLBA: Nl	n	yes	<a href="#">c202b FRINGE RfAnt Nl LLRR AllSrc 3mm.pdf</a> <a href="#">No0105_n 3mm.pdf</a> <a href="#">c202b Nl 3mm.antrep</a>	3mm: participated in 100% scans, fringes in 17% baselines*  pols, mean SNR 15.
VLBA: Ov	o	yes	<a href="#">c202b FRINGE RfAnt Ov LLRR AllSrc 3mm.pdf</a> <a href="#">No0103_o 3mm.pdf</a> <a href="#">No0277_o 3mm.pdf</a> <a href="#">c202b Ov 3mm.antrep</a>	3mm: participated in 100% scans, fringes in 31% baselines*  pols, mean SNR 25.
VLBA: Pt	p	yes	<a href="#">c202b FRINGE RfAnt Pt LLRR AllSrc 3mm.pdf</a> <a href="#">No0113_p 3mm.pdf</a> <a href="#">c202b Pt 3mm.antrep</a>	3mm: participated in 100% scans, fringes in 20% baselines*  pols, mean SNR 20.  <b>lots of technical problems, see logs</b>
KVN: Kt	t	yes	<a href="#">c202b FRINGE RfAnt Kt LLRR AllSrc 3mm.pdf</a> <a href="#">No0119_t 3mm.pdf</a> <a href="#">No0162_t 3mm.pdf</a> <a href="#">c202b Kt 3mm.antrep</a>	Participated in 98% scans, fringes in 46% baselines*  pols, mean SNR 98.
KVN: Ku	u	yes	<a href="#">c202b FRINGE RfAnt Ku LLRR AllSrc 3mm.pdf</a> <a href="#">No0119_u 3mm.pdf</a> <a href="#">No0162_u 3mm.pdf</a> <a href="#">c202b Ku 3mm.antrep</a>	Participated in 91% scans, fringes in 45% baselines*  pols, mean SNR 96.

<p>KVN: Ky</p>	<p>y</p>	<p>yes</p>	<p><a href="#">c202b_FRINGE_RfAnt_Ky_LLRR_AllSrc_3mm.pdf</a></p> <p><a href="#">No0117_y_3mm.pdf</a></p> <p><a href="#">No0162_y_3mm.pdf</a></p> <p><a href="#">c202b_Ky_3mm.antrep</a></p> <p>-----</p>	<p>Participated in 97% scans, fringes in 47% baselines*  pols, mean SNR 99.</p>
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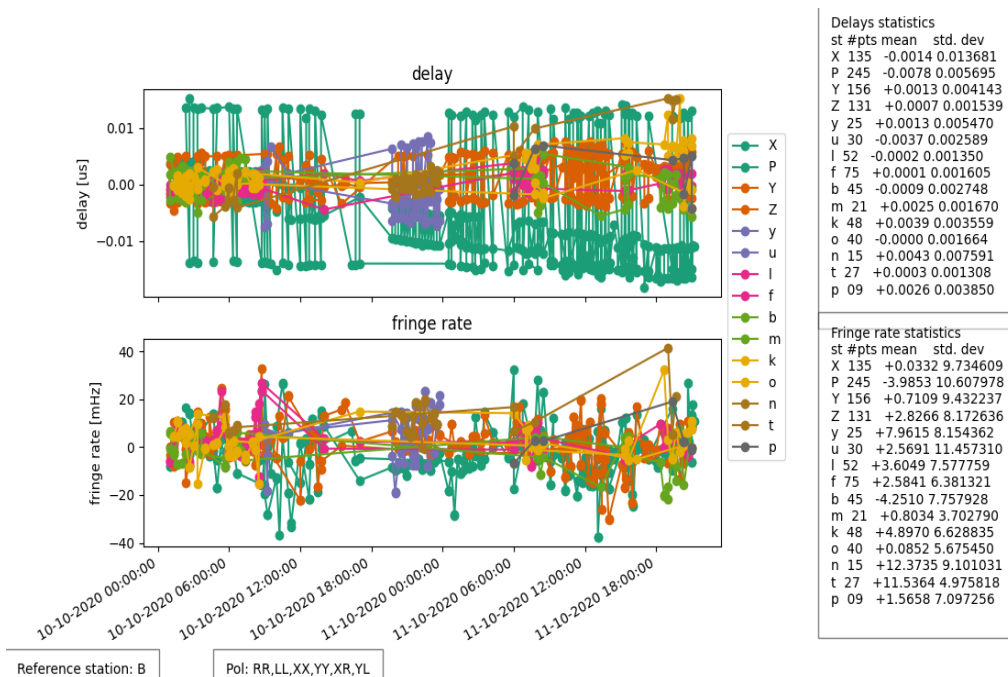
### Notes

Because the correlation experiment c202b is so long, it was correlated with two different sets of EOPs. In most cases merging succeeded, but for this particular set difx2fits was giving errors when trying to merge, so two separate fits files were produced, POLCAL2\_eop1.fits and POLCAL2\_eop2.fits.

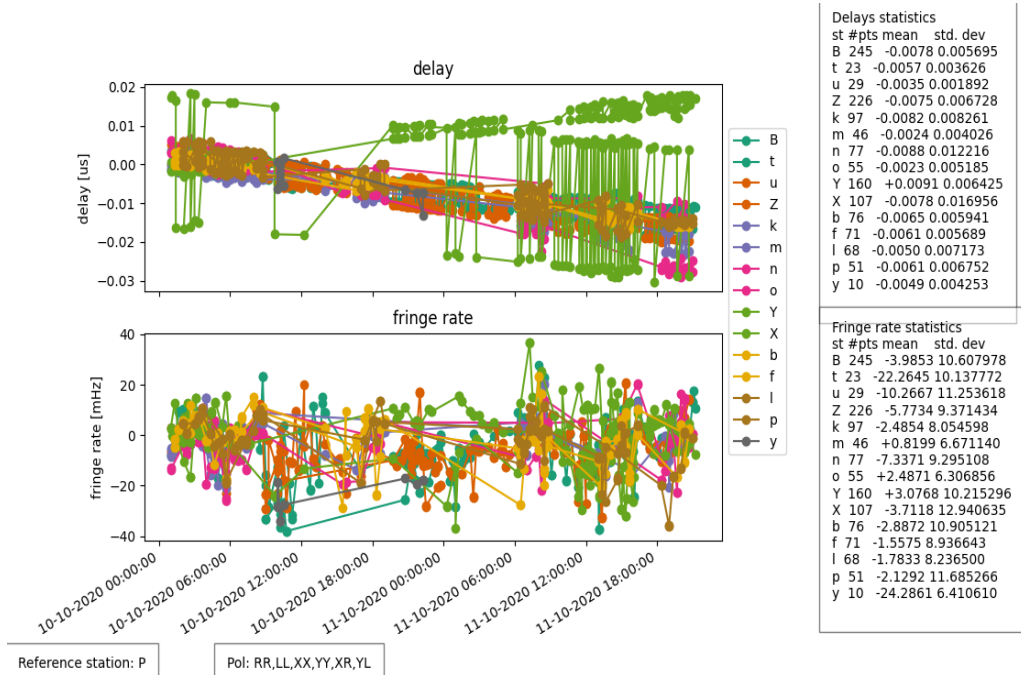
### Post-Correlation checks

#### Residuals

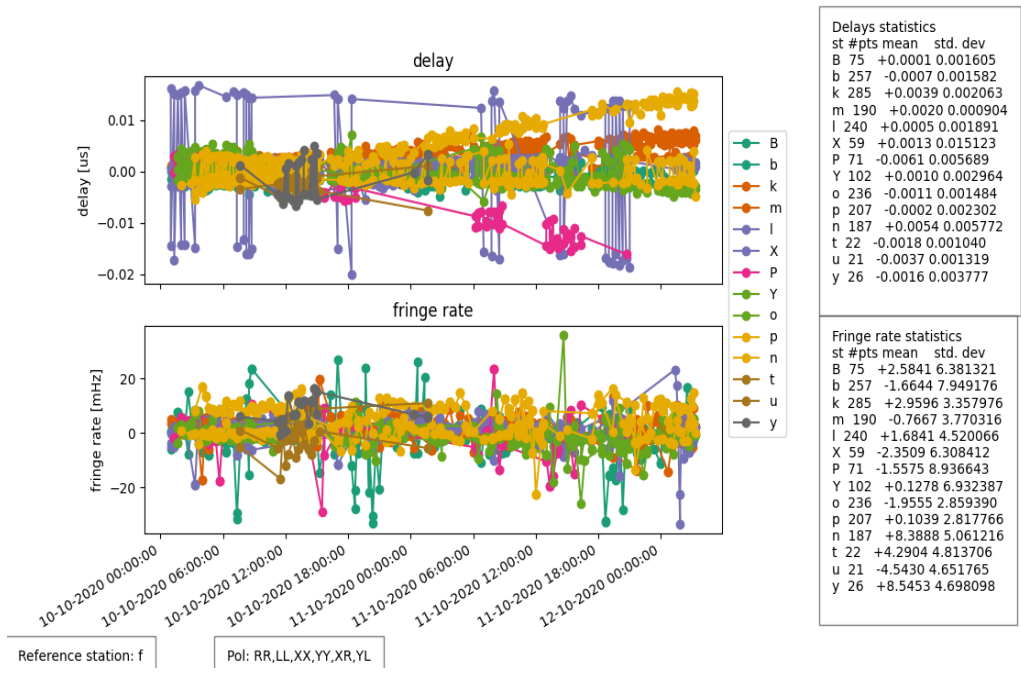
Ef as reference (3mm):



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

## POLCAL2\_eop1.fits (3mm):

				FD	NL	OV	PT	BR	KP	MK	LA	EF	ON	YS	PV	MH	KY	KU	KT	
c202b_001	No0001	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_004	No0005	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_006	No0009	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_008	No0012	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_011	No0017	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_013	No0020	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_015	No0023	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_018	No0028	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_020	No0031	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.		
c202b_048	No0073	BLLAC	3mm_ddc	o	o	o	o	o	o	x	o	.	.	.	.	.	o	o	o	
c202b_049	No0075	3C84	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o	.	.	.	
c202b_050	No0076	3C84	3mm_ddc	o	o	o	o	o	o	x	o	o	o	o	o	o	.	.	.	
c202b_051	No0077	3C84	3mm_ddc	o	o	o	o	o	o	x	o	o	o	o	o	o	.	.	.	
c202b_052	No0078	3C84	3mm_ddc	o	o	o	o	o	o	x	o	o	o	o	o	o	.	.	.	
c202b_053	No0079	3C84	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	
c202b_055	No0081	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_057	No0083	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_059	No0085	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_061	No0087	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_063	No0089	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_065	No0091	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_067	No0093	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_069	No0095	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_071	No0097	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	
c202b_073	No0099	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_075	No0101	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_077	No0103	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_079	No0105	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_081	No0107	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_083	No0109	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_085	No0111	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_087	No0113	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_089	No0115	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_091	No0117	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_093	No0119	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_096	No0122	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_098	No0124	3C84	3mm_ddc	75	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_100	No0126	3C84	3mm_ddc	o	o	o	o	79	o	o	o	.	.	.	.	.	.	o	o	o
c202b_102	No0128	3C84	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_104	No0130	3C84	3mm_ddc	o	.	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_106	No0132	3C84	3mm_ddc	.	.	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_108	No0134	3C84	3mm_ddc	.	.	o	o	o	o	o	o	.	.	.	.	.	.	o	o	o
c202b_138	No0183	3C84	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o	o	o	o	o
c202b_140	No0186	3C84	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o	o	o	o	o
c202b_142	No0189	3C84	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o	o	o	o	o
c202b_144	No0192	3C84	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o	o	o	o	o



c202b_328	No0463	3C454.3	3mm_ddc	o	o	o	o	o	o	o	.	x	.	.	.	.	.	.	.
c202b_329	No0464	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c202b_330	No0465	3C454.3	3mm_ddc	o	o	o	o	o	o	o	.	x	.	.	.	.	.	.	.
c202b_331	No0466	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c202b_332	No0467	3C454.3	3mm_ddc	o	o	o	o	o	o	o	.	x	.	.	.	.	.	.	.
c202b_333	No0468	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_334	No0469	3C454.3	3mm_ddc	o	o	o	o	o	o	o	.	o	.	.	.	.	.	.	.
c202b_335	No0470	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_336	No0471	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_337	No0472	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_338	No0473	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_339	No0474	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_340	No0475	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_341	No0476	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_342	No0477	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_343	No0478	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_344	No0479	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c202b_345	No0480	BLLAC	3mm_ddc	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.