

MH004B Correlation Report

General information

- A part of [C191E](#)
- PI: Hada
- Targets: 3C273, M87, OJ287
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/apr19/feedback_apr19.asc
- Text file with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
[c191e.antrep](#)

Current Status

correlation finished, data **released** on 19/09/2019.

the **second release** was made on 18/01/2020 to fix the double autocorrelation issue.

Fringes

Fourfit fringe plots with fringes to multiple antennas:

Scan No0040, source 3C273, fringes to Ef, On, Ys, Mh, Pv, Gl, Fd, Kp, La, Ov, Pt: [No0040_all.pdf](#)

Scan No0047, source 3C273, fringes to Ef, On, Ys, Pv, Gl, Gb, Br, Fd, Kp, La, Nl, Ov: [No0047_all.pdf](#)

Scan No0067, source 3C273, fringes to Gl, Gb, Br, Fd, Kp, La, Mk, Nl, Pt: [No0067_all.pdf](#)

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Fringe overview of all baselines (all of C191E) including this antenna in LL (left for each baseline) and RR (right for each baseline).</p> <p>Legend: white - scheduled, but no data, blue - no fringe, dark red/brown/green - fringes of different quality.</p> <p>c191e FRINGE RfAnt Ef LLRR AllSrc.pdf</p> <p>Examples of fourfit fringe plots: No0040_all.pdf, No0047_all.pdf</p> <p>Same for all antennas below unless otherwise noted.</p>	Power failure at the start, starting 1 hr late, weather mixed, everything from clear sky to light rain
On	X	yes	<p>c191e FRINGE RfAnt On LLRR AllSrc.pdf</p> <p>No0040_all.pdf, No0047_all.pdf</p>	
Ys	Y	yes	<p>c191e FRINGE RfAnt Ys LLRR AllSrc.pdf</p>	

Station	Code	Fringes	Plots	Comments
			No0040_all.pdf , No0047_all.pdf	
Mh	Z	yes	c191e_FRINGE_RfAnt_Mh_LLRR_AllSrc.pdf No0040_all.pdf	Rain, snow and wet snow over the whole experiment
Pv	P	yes	c191e_FRINGE_RfAnt_Pv_LLRR_AllSrc.pdf No0040_all.pdf , No0047_all.pdf	Down because of the weather in the beginning of this experiment.
GLT: Gl	g	yes	Here bright red - false fringe (mostly to KVN), determined by having extremely large single-band delay, often > 0.1us. c191e_SBD_RfAnt_Gl_LLRR_AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0067_all.pdf	confirmed correct polarization configuration for this session
GBT: Gb	G	yes	c191e_FRINGE_RfAnt_Gb_LLRR_AllSrc.pdf No0047_all.pdf , No0067_all.pdf	broken Cal-Wheel, no Tsys
VLBA: Br	b	yes	Here bright red - false fringe (mostly to KVN), determined by having extremely large single-band delay, often > 0.1us. c191e_SBD_RfAnt_Br_LLRR_AllSrc.pdf No0047_all.pdf , No0067_all.pdf	problems with 7mm, possibly affecting pointing
VLBA: Fd	f	yes	Here bright red - false fringe (mostly to KVN), determined by having extremely large single-band delay, often > 0.1us. c191e_SBD_RfAnt_Fd_LLRR_AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0067_all.pdf	
VLBA: Kp	k	yes	Here bright red - false fringe (mostly to KVN), determined by having extremely large single-band delay, often > 0.1us. c191e_SBD_RfAnt_Kp_LLRR_AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0067_all.pdf	
VLBA: La	l	yes	c191e_FRINGE_RfAnt_La_LLRR_AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0067_all.pdf	

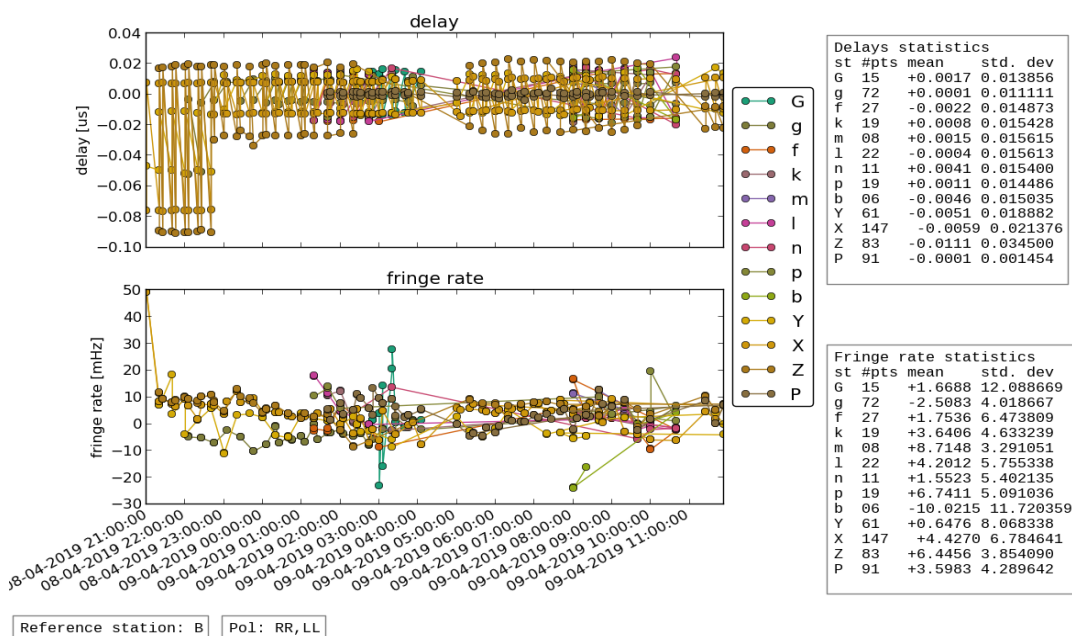
Station	Code	Fringes	Plots	Comments
VLBA: Mk	m	yes	c191e FRINGE RfAnt Mk LLRR AllSrc.pdf No0067_all.pdf	Windy. Taken out for several scans because of USNO observing. Some time loss due to recording failure.
VLBA: Nl	n	yes	c191e FRINGE RfAnt Nl LLRR AllSrc.pdf No0047_all.pdf, No0067_all.pdf	
VLBA: Ov	o	yes	c191e FRINGE RfAnt Ov LLRR AllSrc.pdf No0040_all.pdf, No0047_all.pdf	Down for most of the experiment due to critical technical failures.
VLBA: Pt	p	yes	c191e FRINGE RfAnt Pt LLRR AllSrc.pdf No0040_all.pdf, No0067_all.pdf	Taken out for several scans because of USNO observing. Paked for half hour due to cryo work.

Notes

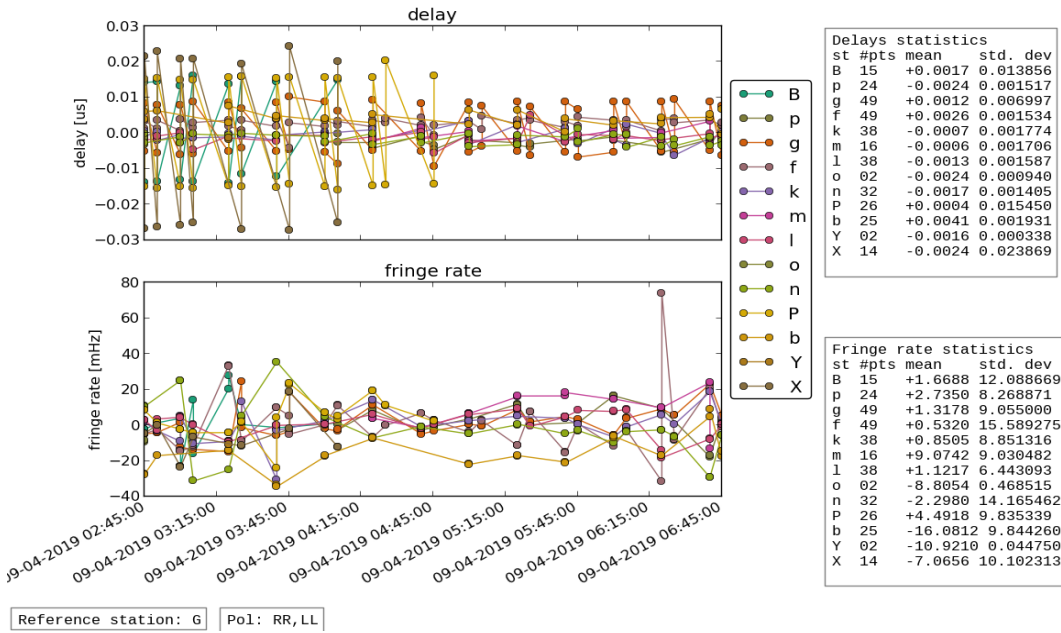
Post-Correlation checks

Residuals

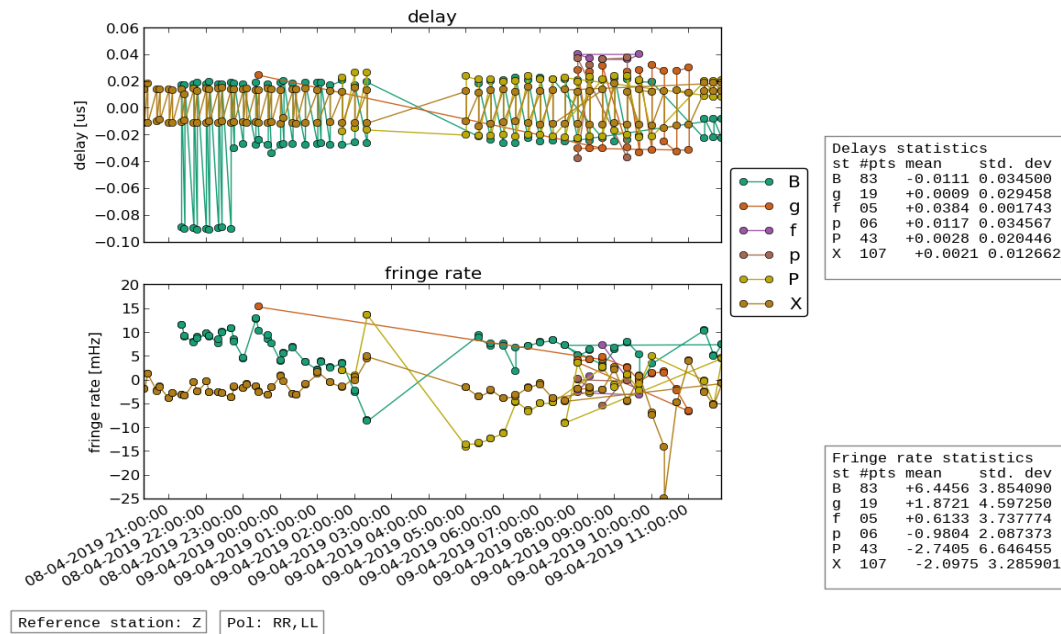
Ef:



GBT:



Mh:



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

mh004b.fits:

				EF	ON	YS	PV	MH	GL	NL	FD	PT	LA	OV	KP	BR	MK	GB	KY	KU	KT	
c191e_001	No0001	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_002	No0002	M87	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_003	No0003	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_004	No0004	M87	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_005	No0005	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_006	No0006	M87	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_007	No0007	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_008	No0008	M87	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_009	No0009	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_010	No0010	M87	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_011	No0011	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_012	No0012	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_013	No0013	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_014	No0014	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_015	No0015	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_016	No0016	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_017	No0017	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_018	No0018	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_019	No0019	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_020	No0020	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_021	No0021	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_022	No0022	M87	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_023	No0023	3C273	3mm_RDBE	o	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_024	No0024	M87	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_025	No0025	OJ287	3mm_RDBE	.	.	.	.	.	.	.	o	96	23	o	o	o	o	.	.	.	.	.
c191e_026	No0026	3C273	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_027	No0027	M87	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_028	No0028	OJ287	3mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	77	59	o	.	.	.	.	.
c191e_029	No0029	OJ287	3mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	77	o	.	.	.	.	.
c191e_030	No0030	3C273	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_031	No0031	M87	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_032	No0032	OJ287	3mm_RDBE	.	.	.	.	.	.	.	16	o	o	o	o	53	o	.	.	.	.	.
c191e_033	No0033	3C273	3mm_RDBE	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c191e_034	No0034	M87	3mm_RDBE	o	o	o	x	o	o	o	57	o	o	.	.	.	.	.	.	.	.	.
c191e_035	No0035	OJ287	3mm_RDBE	.	.	.	.	.	.	.	.	.	.	96	o	06	o	.	.	.	.	.
c191e_036	No0036	3C273	3mm_RDBE	o	o	o	77	o	o	o	22	o	o	.	.	.	.	.	.	.	.	.
c191e_037	No0037	M87	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.
c191e_038	No0038	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	.	o	.	.	.	.	.	.	.
c191e_039	No0039	M87	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	97	o	42	.	.	.	.	.	.
c191e_040	No0040	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	22	.	.	.	.	.	.
c191e_041	No0041	M87	3mm_RDBE	o	o	o	o	o	o	o	57	o	o	o	o	14	.	.	.	.	.	.
c191e_042	No0042	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c191e_043	No0043	M87	3mm_RDBE	o	o	o	o	o	o	o	o	11	o	o	o	16	.	.	.	.	.	.
c191e_044	No0044	M87	3mm_RDBE	o	o	o	o	o	o	o	o	x	o	o	o	46	.	.	.	.	.	.
c191e_045	No0045	M87	3mm_RDBE	.	o	o	.	o	o	o	o	x	o	o	o	33	.	.	.	.	.	.
c191e_046	No0047	3C273	3mm_RDBE	o	o	o	o	.	o	o	33	x	o	o	o	55	.	o	.	.	.	.

c191e_047	No0048	M87	3mm_RDBE	o	o	o	o	o	o	o	x	o	o	o	42	.	o	.	.	.	
c191e_048	No0049	3C273	3mm_RDBE	o	o	o	o	.	o	o	33	x	o	o	o	44	.	o	.	.	.
c191e_049	No0050	M87	3mm_RDBE	o	o	o	o	o	o	o	55	x	o	o	o	05	.	o	.	.	.
c191e_050	No0051	M87	3mm_RDBE	.	o	o	.	o	o	o	20	x	o	o	o	46	.	.	.	.	.
c191e_051	No0053	3C273	3mm_RDBE	o	.	o	o	.	o	o	33	x	o	x	o	33	.	o	.	.	.
c191e_052	No0054	M87	3mm_RDBE	o	o	o	o	.	o	o	61	x	o	x	o	19	.	o	.	.	.
c191e_053	No0055	3C273	3mm_RDBE	o	.	o	o	.	o	o	22	x	o	x	o	66	.	o	.	.	.
c191e_054	No0056	M87	3mm_RDBE	o	o	o	o	.	o	o	o	x	o	x	o	11	.	o	.	.	.
c191e_055	No0057	M87	3mm_RDBE	o	o	o	.	.	o	o	o	x	o	x	o	33	.	.	.	.	.
c191e_056	No0059	3C273	3mm_RDBE	.	.	o	o	.	o	o	33	x	o	x	o	44	.	o	.	.	.
c191e_057	No0060	M87	3mm_RDBE	o	o	o	o	.	o	o	22	o	o	x	o	08	.	o	.	.	.
c191e_058	No0061	3C273	3mm_RDBE	.	.	o	o	.	o	o	22	22	o	x	o	44	o	o	.	.	.
c191e_059	No0062	M87	3mm_RDBE	o	.	o	o	.	o	o	o	o	o	x	o	22	o	o	.	.	.
c191e_060	No0063	M87	3mm_RDBE	.	.	o	o	.	o	o	40	o	o	x	o	06	o	.	.	.	.
c191e_061	No0065	3C273	3mm_RDBE	.	.	.	.	.	o	o	33	33	o	x	o	22	o	o	.	.	.
c191e_062	No0066	M87	3mm_RDBE	.	.	96	o	.	o	o	83	o	o	x	o	16	o	o	.	.	.
c191e_063	No0067	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	x	o	44	o	o	.	.	.
c191e_064	No0068	M87	3mm_RDBE	.	.	.	.	.	o	o	77	o	o	x	o	50	o	o	.	.	.
c191e_065	No0069	M87	3mm_RDBE	.	.	.	.	.	o	o	60	o	o	x	o	33	o	.	.	.	.
c191e_068	No0073	3C273	3mm_RDBE	.	.	.	.	.	o	o	33	33	o	x	o	o	33	88	.	.	.
c191e_069	No0074	M87	3mm_RDBE	.	.	.	.	.	o	o	55	o	o	x	o	14	o	o	.	.	.
c191e_072	No0077	3C273	3mm_RDBE	.	.	.	.	.	o	o	22	22	66	x	o	33	22	o	.	.	.
c191e_073	No0078	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	x	o	o	o	o	.	.	.
c191e_074	No0079	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	x	o	06	o	.	.	.	.
c191e_077	No0083	3C273	3mm_RDBE	.	.	.	.	.	o	o	66	66	o	x	o	55	66	o	.	.	.
c191e_078	No0084	M87	3mm_RDBE	.	.	.	.	.	o	o	46	o	o	x	o	x	o	o	.	.	.
c191e_081	No0087	3C273	3mm_RDBE	.	.	.	.	.	o	o	11	o	22	x	o	o	o	o	.	.	.
c191e_082	No0088	M87	3mm_RDBE	.	.	.	.	.	o	o	26	o	26	x	o	46	o	o	.	.	.
c191e_083	No0089	M87	3mm_RDBE	.	.	.	.	.	o	60	o	o	46	x	o	13	o	.	.	.	.
c191e_086	No0093	3C273	3mm_RDBE	.	.	.	.	.	o	o	66	66	22	x	o	22	66	o	.	.	.
c191e_087	No0094	M87	3mm_RDBE	.	.	.	.	.	o	o	46	13	50	x	o	76	o	o	.	.	.
c191e_090	No0097	3C273	3mm_RDBE	.	.	.	.	.	o	22	22	22	11	x	o	55	22	.	.	.	.
c191e_091	No0098	M87	3mm_RDBE	.	.	.	.	.	o	o	20	o	o	x	o	26	o	.	.	.	.
c191e_094	No0101	3C273	3mm_RDBE	.	.	.	.	.	o	o	44	44	o	x	o	11	44	.	.	.	.
c191e_095	No0102	M87	3mm_RDBE	.	.	.	.	.	o	86	o	o	o	x	o	13	o	.	.	.	.
c191e_098	No0105	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	x	o	40	o	.	.	.	.
c191e_099	No0106	M87	3mm_RDBE	.	.	.	.	.	o	o	03	o	o	x	o	07	o	.	.	.	.
c191e_100	No0107	M87	3mm_RDBE	.	.	.	.	.	o	93	o	o	o	x	o	80	o	.	.	.	.