

C192B/MM017A Correlation Report

General information

- Consists of two science projects: mostly of **MM017A**, but 2013+370 (277:1445-1701) data are also used for [MB011B](#)
- PI: Marscher
- Targets: FERMI sources
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/oct19/feedback_oct19.asc
- Only one production correlation for this experiment, with P3 = Pico Veleta DBBC3 (16 x 32 MHz per pol)
- Text file with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
[c192b ALL.antrep](#)

Current Status

Correlation finished, data **released to PI** on 14.04.2020.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Fringe overview of all baselines (all of C192A) including this antenna in LL(left for each baseline) and RR (right for each baseline).</p> <p>Legend: white box - scheduled, but no data, blue - no fringe, green -- good fringe, red -- false fringe found by fourfit (detected by very large SBD).</p> <p>c192b_SBD_RfAnt_Ef_LLRR_AllSrc.pdf</p> <p>Examples of fourfit fringe plots can be found in: (all baselines to the given antenna in a certain scan):</p> <p>No0205_Ef.pdf</p> <p>Antenna statistics: c192b_Ef.antrep</p> <p>Same for all antennas below unless otherwise noted.</p>	<p>Participated in 125 out of 125 scheduled scans, fringes in 1086 out of 2232 expected baselines in || pols, mean SNR 50. See .antrep file for detailed per source and per scan statistics.</p>

Station	Code	Fringes	Plots	Comments
On	X	yes	c192b_SBD_RfAnt_On_LLRR_AllSrc.pdf No0205_On.pdf c192b_On.antrep	Participated in 123 out of 123 scheduled scans, fringes in 1332 out of 2176 expected baselines in || pols, mean SNR 60 . See .antrep file for detailed per source and per scan statistics.
Ys	Y	yes	c192b_SBD_RfAnt_Ys_LLRR_AllSrc.pdf No0141_Ys.pdf c192b_Ys.antrep	Participated in 128 out of 128 scheduled scans, fringes in 1137 out of 2314 expected baselines in || pols, mean SNR 65 . See .antrep file for detailed per source and per scan statistics.
Mh	Z	yes	c192b_SBD_RfAnt_Mh_LLRR_AllSrc.pdf No0078_Mh.pdf c192b_Mh.antrep	Participated in 114 out of 114 scheduled scans, fringes in 874 out of 1954 expected baselines in || pols, mean SNR 29 . See .antrep file for detailed per source and per scan statistics.
Pv	P	yes	<p>Fringes were found, but this backend was not used in the production correlation.</p>	<p>Pico Veleta with DBBC2 (8 x 64 MHz per pol)</p> <p>Due to an undetermined problem both polarization channels recorded RCP and LCP was completely lost for the whole experiment. That is why the main production correlation used DBBC3 data = P3. A secondary correlation with Pv was not performed for this experiment due to the large volume of data and malfunction of one of the Pv modules.</p>
P3	i	yes	c192b_SBD_RfAnt_P3_LLRR_AllSrc.pdf No0205_P3.pdf c192b_P3.antrep	<p>Pico Veleta with DBBC3 (16 x 32 MHz per pol)</p> <p>Participated in 127 out of 128 scheduled scans, fringes in 1547 out of 2308 expected baselines in || pols, mean SNR 75. See .antrep file for detailed per source and per scan statistics.</p> <p>Special processing was applied to this data, it is described in detail HERE.</p>
GLT: Gl	g	yes	c192b_SBD_RfAnt_Gl_LLRR_AllSrc.pdf No0205_Gl.pdf c192b_Gl.antrep	<p>Participated in 126 out of 126 scheduled scans, fringes in 727 out of 2370 expected baselines in || pols, mean SNR 34. See .antrep file for detailed per source and per scan statistics.</p> <p>Observations interrupted by snow stops, some flagging may be necessary.</p>
VLBA: Br	b	yes	c192b_SBD_RfAnt_Br_LLRR_AllSrc.pdf No0205_Br.pdf c192b_Br.antrep	Participated in 140 out of 140 scheduled scans, fringes in 155 out of 2600 expected baselines in || pols, mean SNR 17 . See .antrep file for detailed per source and per scan statistics.

Station	Code	Fringes	Plots	Comments
				Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Fd	f	yes	c192b_SBD_RfAnt_Fd_LLRR_AllSrc.pdf No0145_Fd.pdf c192b_Fd.antrep	Participated in 141 out of 141 scheduled scans, fringes in 412 out of 2658 expected baselines in || pols, mean SNR 20 . See .antrep file for detailed per source and per scan statistics. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Kp	k	yes	c192b_SBD_RfAnt_Kp_LLRR_AllSrc.pdf No0141_Kp.pdf c192b_Kp.antrep	Participated in 135 out of 141 scheduled scans, fringes in 246 out of 2516 expected baselines in || pols, mean SNR 16 . See .antrep file for detailed per source and per scan statistics. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: La	l	yes	c192b_SBD_RfAnt_La_LLRR_AllSrc.pdf No0115_La.pdf c192b_La.antrep	Participated in 141 out of 141 scheduled scans, fringes in 181 out of 2654 expected baselines in || pols, mean SNR 15 . See .antrep file for detailed per source and per scan statistics. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Mk	m	yes	c192b_SBD_RfAnt_Mk_LLRR_AllSrc.pdf No0106_Mk.pdf c192b_Mk.antrep	Participated in 107 out of 108 scheduled scans, fringes in 335 out of 1786 expected baselines in || pols, mean SNR 20 . See .antrep file for detailed per source and per scan statistics. Taken out for several scans because of USNO observing. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Nl	n	yes	c192b_SBD_RfAnt_Nl_LLRR_AllSrc.pdf No0145_Nl.pdf c192b_Nl.antrep	Participated in 141 out of 141 scheduled scans, fringes in 135 out of 2658 expected baselines in || pols, mean SNR 14 . See .antrep file for detailed per source and per scan statistics. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Ov	o	yes	c192b_SBD_RfAnt_Ov_LLRR_AllSrc.pdf No0053_Ov.pdf	Participated in 142 out of 142 scheduled scans, fringes in 535 out of 2612 expected baselines in || pols, mean SNR 24 . See .antrep file for detailed per source and per scan statistics.

Station	Code	Fringes	Plots	Comments
			c192b_Ov.antrep	Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
VLBA: Pt	p	yes	c192b_SBD_RfAnt_Pt_LLRR_AllSrc.pdf No0205_Pt.pdf c192b_Pt.antrep	Participated in 138 out of 141 scheduled scans, fringes in 199 out of 2592 expected baselines in || pols, mean SNR 13 . See .antrep file for detailed per source and per scan statistics. Taken out for several scans because of USNO observing. Poorly performed. A detailed report on VLBA's poor performance in this session is given HERE .
KVN: Kt	t	yes	c192b_SBD_RfAnt_Kt_LLRR_AllSrc.pdf No0078_Kt.pdf c192b_Kt.antrep	KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session, Participated in 55 out of 59 scheduled scans, fringes in 248 out of 814 expected baselines in || pols, mean SNR 24 . See .antrep file for detailed per source and per scan statistics.
KVN: Ku	u	yes	c192b_SBD_RfAnt_Ku_LLRR_AllSrc.pdf No0078_Ku.pdf c192b_Ku.antrep	KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session, Participated in 53 out of 59 scheduled scans, fringes in 237 out of 794 expected baselines in || pols, mean SNR 19 . See .antrep file for detailed per source and per scan statistics.
KVN: Ky	y	yes	c192b_SBD_RfAnt_Ky_LLRR_AllSrc.pdf No0078_Ky.pdf c192b_Ky.antrep	KVN observed in 8 x 64 MHz mode for the first time (correlated as 16 x 32 MHz with P3). Some loss of data due to bad weather and operational mistakes, but in general performance is much better than in any previous session, Participated in 9 out of 59 scheduled scans, fringes in 104 out of 122 expected baselines in || pols, mean SNR 27 . See .antrep file for detailed per source and per scan statistics.

Notes

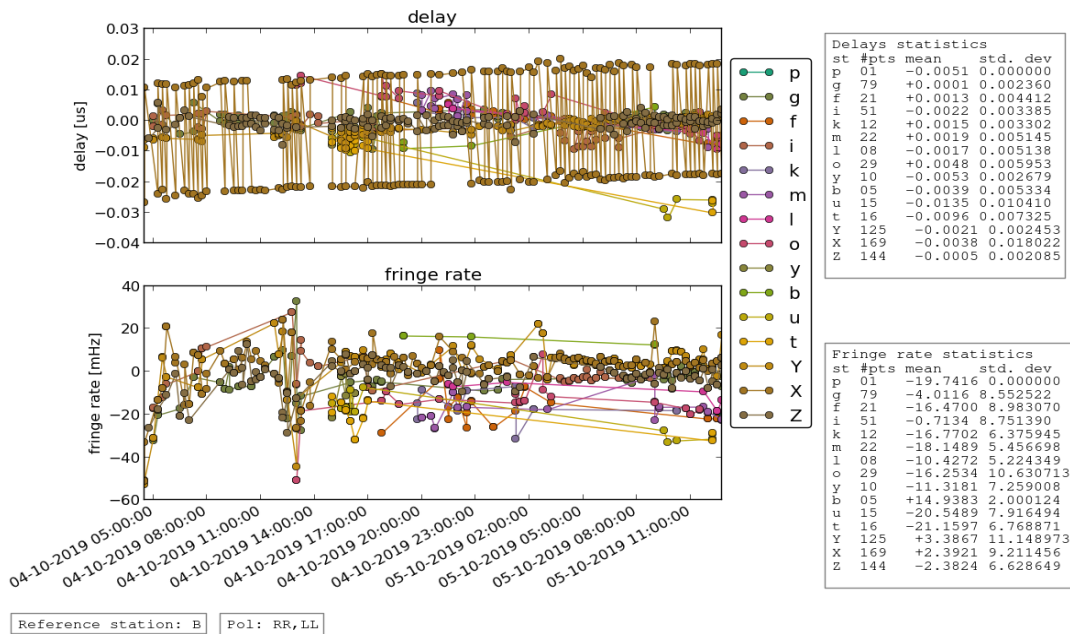
[Special processing of the P3 data](#)

[Report on the VLBA problems in this session](#)

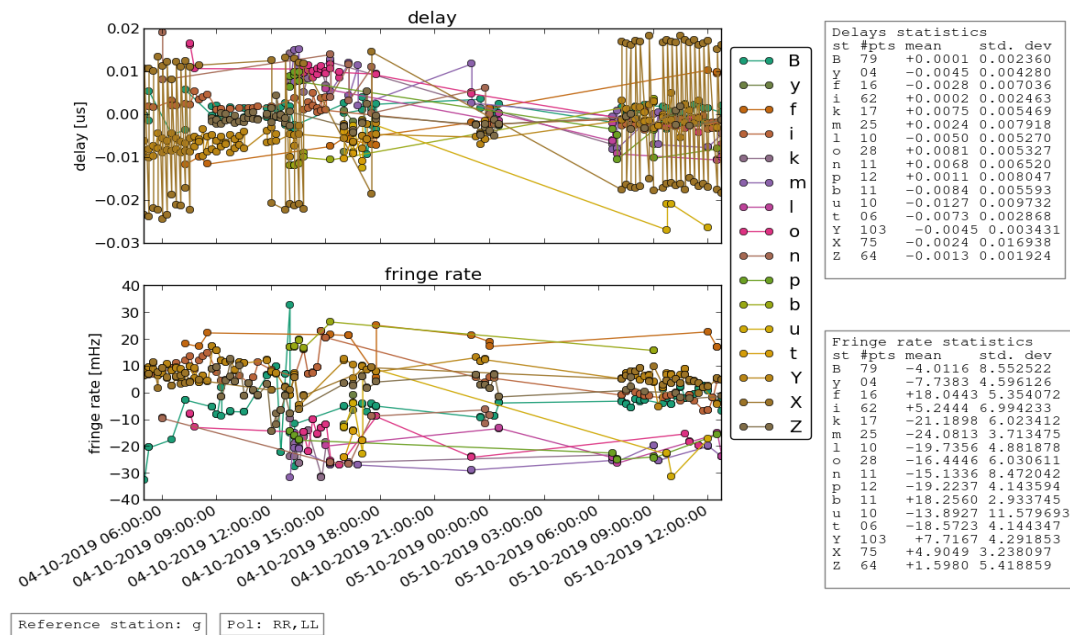
Post-Correlation checks

Residuals

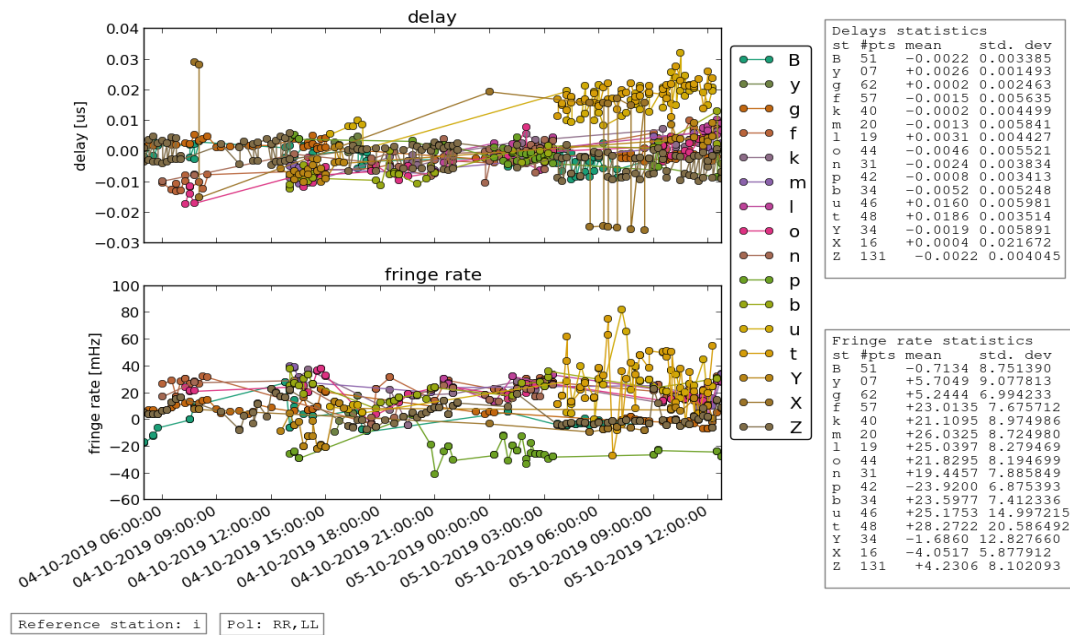
Ef:



GLT:



P3:



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

mm017a.fits:

	EF	P3	YS	ON	MH	GL	NL	FD	PT	LA	KP	OV	BR	MK	KY	KU	KT
c192b_001	No0001	0420-014	3mm_ddc	o	x	o	o	.	.	.	.	.	.	.	.	.	.
c192b_002	No0002	0420-014	3mm_ddc	o	33	o	o	.	.	.	.	.	.	.	.	.	.
c192b_003	No0003	3C120	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.
c192b_004	No0004	3C120	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.
c192b_005	No0005	3C120	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.
c192b_006	No0006	3C120	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.
c192b_007	No0007	3C120	3mm_ddc	o	o	o	o	o	o	x	o	o	.	.	.	.	.
c192b_008	No0008	3C120	3mm_ddc	o	o	o	o	o	o	x	o	o	o	.	.	.	.
c192b_009	No0009	3C120	3mm_ddc	o	o	o	o	o	o	x	o	o	o	.	.	.	.
c192b_010	No0010	3C120	3mm_ddc	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_011	No0011	3C120	3mm_ddc	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_012	No0012	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	.	.	.	.

c192b_013	No0013	3C120	3mm_ddc	o	o	80	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_014	No0014	3C120	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_015	No0015	3C120	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_016	No0016	3C120	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_017	No0017	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_018	No0018	3C120	3mm_ddc	.	o	o	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_019	No0019	3C120	3mm_ddc	.	o	o	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_020	No0020	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_021	No0021	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_022	No0022	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_023	No0023	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_024	No0024	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_025	No0025	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_026	No0026	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_027	No0027	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_028	No0028	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_029	No0029	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_030	No0030	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_031	No0031	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_032	No0032	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_033	No0033	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_034	No0034	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_035	No0035	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_036	No0036	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_037	No0037	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_038	No0038	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_039	No0039	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_040	No0040	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_041	No0041	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_042	No0042	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_043	No0043	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_044	No0044	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_045	No0045	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_046	No0046	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_047	No0047	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_048	No0048	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_049	No0049	3C120	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_050	No0050	OJ287	3mm_ddc	o	o	95	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_051	No0051	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_052	No0052	OJ287	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_053	No0053	OJ287	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_054	No0054	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_055	No0055	OJ287	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_056	No0056	0420-014	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_057	No0057	OJ287	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_058	No0058	1055+018	3mm_ddc	o	o	o	o	.	o	o	o	o	o	o	o	.	.	.	.
c192b_059	No0059	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_060	No0060	1055+018	3mm_ddc	o	o	o	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_061	No0061	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_062	No0062	1055+018	3mm_ddc	o	o	o	.	.	o	o	o	o	o	o	o	.	.	.	.

c192b_063	No0063	1055+018	3mm_ddc	.	o	o	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_064	No0064	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_065	No0065	1055+018	3mm_ddc	.	o	o	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_066	No0066	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_067	No0067	2013+370	3mm_ddc	o	.	.	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_068	No0068	1055+018	3mm_ddc	.	o	o	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_069	No0069	2013+370	3mm_ddc	o	.	.	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_070	No0070	OJ287	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_071	No0071	2013+370	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_072	No0072	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_073	No0073	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_074	No0074	2013+370	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_075	No0075	OJ287	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_076	No0076	2013+370	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_077	No0077	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_078	No0078	2013+370	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o
c192b_079	No0079	OJ287	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_080	No0080	2013+370	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	o
c192b_081	No0081	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_082	No0082	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_083	No0083	2013+370	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o
c192b_084	No0084	OJ287	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_085	No0085	2013+370	3mm_ddc	o	o	o	o	o	.	.	.	.	.	.	.	.	28	o	o	o
c192b_086	No0086	1055+018	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
c192b_087	No0087	2013+370	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	x	o	o
c192b_088	No0088	1633+38	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c192b_089	No0089	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	x	o	o	o	.	.	.	.
c192b_090	No0090	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	x	o	o	o	.	.	.	.
c192b_091	No0091	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	x	o	o	.	.	.	.
c192b_092	No0092	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	x	o	o	.	.	.	.
c192b_093	No0093	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	x	o	o	.	.	.	.
c192b_094	No0094	1633+38	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c192b_095	No0095	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	x	o	o	o	.	.	.	.
c192b_096	No0096	1055+018	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_097	No0097	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_098	No0098	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_099	No0099	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_100	No0100	1510-089	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_101	No0101	1633+38	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c192b_102	No0102	1510-089	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_103	No0103	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_104	No0104	1510-089	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_105	No0105	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_106	No0106	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_107	No0107	1633+38	3mm_ddc	o	o	o	o	o	42	.	.	.	.	.	.	.	.	.	.	.
c192b_108	No0108	1510-089	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_109	No0109	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_110	No0110	1510-089	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.
c192b_111	No0111	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.
c192b_112	No0112	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.

c192b_113	No0113	1633+38	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_114	No0114	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_115	No0115	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_116	No0116	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_117	No0117	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_118	No0118	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_119	No0119	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_120	No0120	1633+38	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_121	No0121	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_122	No0122	3C345	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_123	No0123	1633+38	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c192b_124	No0124	3C345	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_125	No0125	3C454.3	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_126	No0126	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_127	No0127	CTA102	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_128	No0128	3C345	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_129	No0129	3C454.3	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_130	No0130	1510-089	3mm_ddc	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_131	No0131	3C345	3mm_ddc	.	.	.	.	.	.	.	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_132	No0132	CTA102	3mm_ddc	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c192b_133	No0133	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_134	No0134	1633+38	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o	x	x	x	.	.
c192b_135	No0135	CTA102	3mm_ddc	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c192b_136	No0136	3C345	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o	x	x	x	.	.
c192b_137	No0137	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	.	.	.	.	.	.	.	.	.	.
c192b_138	No0138	1633+38	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o	x	x	x	.	.
c192b_139	No0139	CTA102	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_140	No0141	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_141	No0142	1633+38	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	38	38	.	.	.
c192b_142	No0143	CTA102	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_143	No0144	3C345	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	o	o	.	.	.
c192b_144	No0145	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	91	o	o	o	o	.	.	.	.	.	.	.
c192b_145	No0146	1633+38	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	o	o	.	.	.
c192b_146	No0147	CTA102	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.
c192b_147	No0148	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	o	o	.	.	.
c192b_148	No0149	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	o	.	o	x	o	o	.	.
c192b_149	No0150	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_150	No0151	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	o	o	.	.	.
c192b_151	No0152	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	o	.	o	x	o	o	.	.
c192b_152	No0153	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_153	No0154	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	80	80	.	.	.
c192b_154	No0155	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_155	No0156	1510-089	3mm_ddc	.	.	.	.	.	.	.	.	.	.	.	.	.	o	x	o	o	.	.	.
c192b_156	No0157	3C454.3	3mm_ddc	o	o	o	o	o	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_157	No0158	0716+714	3mm_ddc	.	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	x	o	o	.
c192b_158	No0159	3C454.3	3mm_ddc	o	o	o	.	.	o	o	o	90	o	o	o	o	.	.	.	.	.	.	.
c192b_159	No0160	0716+714	3mm_ddc	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	x	o	o	.
c192b_160	No0161	3C454.3	3mm_ddc	.	o	o	.	.	o	o	o	91	o	o	o	o	.	.	.	.	.	.	.
c192b_161	No0162	0716+714	3mm_ddc	o	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	x	o	o	.
c192b_162	No0163	CTA102	3mm_ddc	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.

c192b_213	No0214	0716+714	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o
c192b_214	No0215	0836+710	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o
c192b_215	No0216	0716+714	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o
c192b_216	No0217	0716+714	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o
c192b_217	No0218	0836+710	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	o
c192b_218	No0219	OJ287	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.
c192b_219	No0220	OJ287	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.