

C191E Correlation Report

General information

- Includes two science projects: [MH004B](#) and [MK011](#)
- 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](#)

Scan No0110, source 3C345, fringes to Ef, On, Ys, Mh, Pv, Gl, Br, Fd, Kp, La, Mk, Nl, Pt: [No0110_all.pdf](#)

Scan No0159, source 3C345, fringes to Gl, Br, Fd, Kp, La, Nl, Ov, Pt: [No0159_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, No0110_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, No0110_all.pdf</p>	

Station	Code	Fringes	Plots	Comments
Ys	Y	yes	c191e FRINGE RfAnt Ys LLRR AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0110_all.pdf	
Mh	Z	yes	c191e FRINGE RfAnt Mh LLRR AllSrc.pdf No0040_all.pdf , No0110_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 , No0110_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 , No0110_all.pdf , No0159_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 , No0110_all.pdf , No0159_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 , No0110_all.pdf , No0159_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	

Station	Code	Fringes	Plots	Comments
			No0040_all.pdf , No0047_all.pdf , No0067_all.pdf , No0110_all.pdf , No0159_all.pdf	
VLBA: La	l	yes	c191e FRINGE RfAnt La LLRR AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0067_all.pdf , No0110_all.pdf , No0159_all.pdf	
VLBA: Mk	m	yes	c191e FRINGE RfAnt Mk LLRR AllSrc.pdf No0067_all.pdf , No0110_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 , No0110_all.pdf , No0159_all.pdf	
VLBA: Ov	o	yes	c191e FRINGE RfAnt Ov LLRR AllSrc.pdf No0040_all.pdf , No0047_all.pdf , No0159_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 , No0110_all.pdf , No0159_all.pdf	Taken out for several scans because of USNO observing. Paked for half hour due to cryo work.
KVN: Kt	t	no	Here bright red - false fringe, determined by having extremely large single-band delay, often > 0.1us. c191e SBD RfAnt Kt LLRR AllSrc.pdf	no fringes, except falsely found by fourfit
KVN: Ku	u	no	Here bright red - false fringe, determined by having extremely large single-band delay, often > 0.1us. c191e FRINGE RfAnt Ku LLRR AllSrc.pdf	did not observe
KVN: Ky	y	no	Here bright red - false fringe, determined by having extremely large single-band delay, often > 0.1us. c191e SBD RfAnt Ky LLRR AllSrc.pdf	no fringes, except falsely found by fourfit

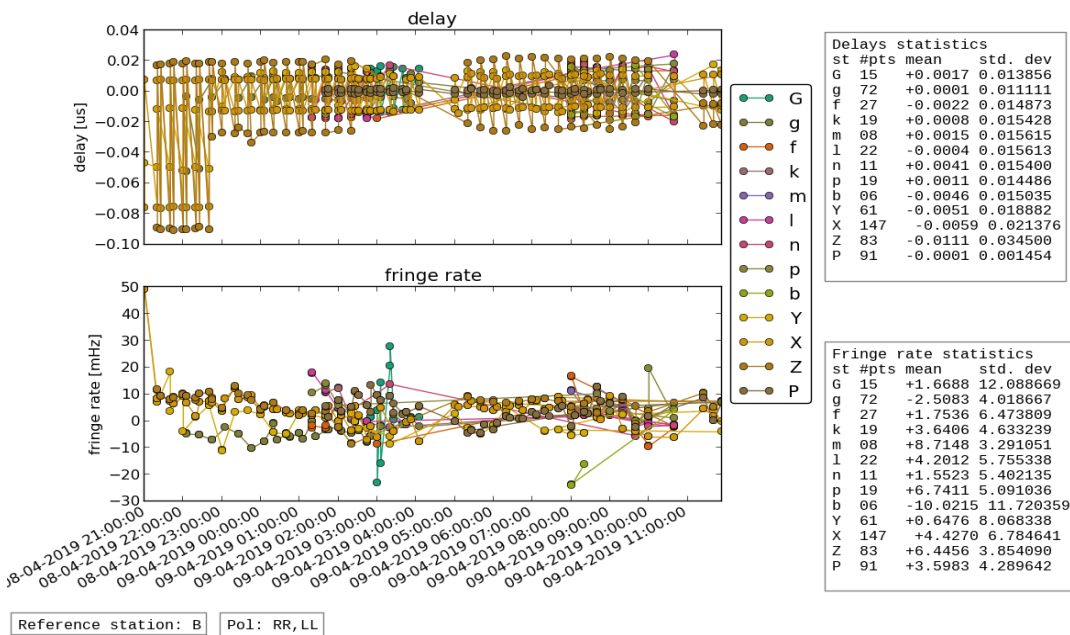
Notes

Due to an unknown yet technical problem fourfit detects false fringes for all baselines from Kt and Ky to GLT and three VLBA antennas, Br, Fd and Kp. They can be weeded off by extremely large fringe single-band delay.

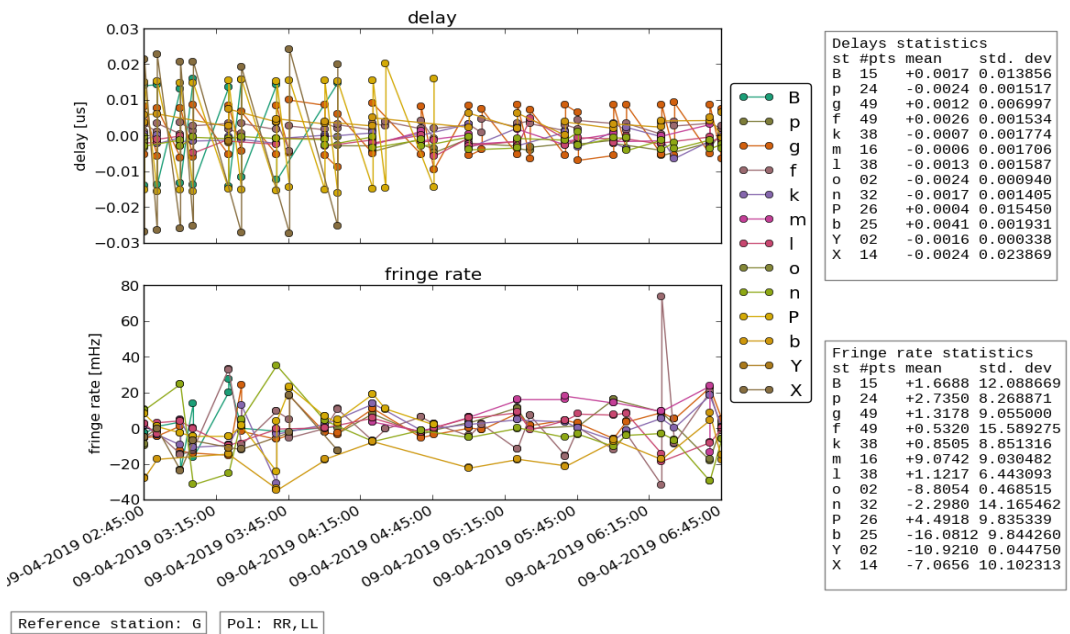
Post-Correlation checks

Residuals

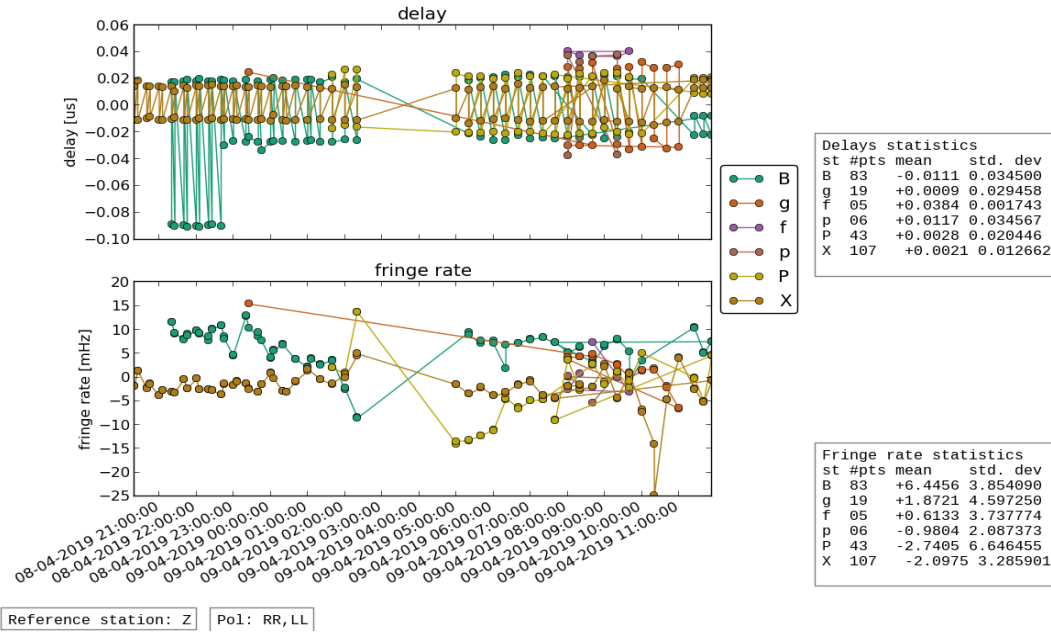
Ef:



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

c191e.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	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	.	.	.	.
c191e_043	No0043	M87	3mm_RDBE	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	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_066	No0070	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.

c191e_067	No0071	MRK501	3mm_RDBE	o	o	o	o	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_070	No0075	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_071	No0076	MRK501	3mm_RDBE	o	o	09	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_075	No0080	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_076	No0081	MRK501	3mm_RDBE	o	o	o	o	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_079	No0085	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_080	No0086	MRK501	3mm_RDBE	o	o	o	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_084	No0090	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_085	No0091	MRK501	3mm_RDBE	o	o	o	o	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_088	No0095	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_089	No0096	MRK501	3mm_RDBE	o	o	o	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_092	No0099	3C345	3mm_RDBE	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_093	No0100	MRK501	3mm_RDBE	o	o	o	o	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_096	No0103	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_097	No0104	MRK501	3mm_RDBE	o	o	o	o	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	.	.
c191e_101	No0108	3C345	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_102	No0109	MRK501	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c191e_103	No0110	3C345	3mm_RDBE	o	o	o	o	o	o	41	33	o	o	x	o	41	o	.	.
c191e_104	No0111	MRK501	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	x	o	14	o	.	.
c191e_105	No0112	3C345	3mm_RDBE	o	o	o	o	o	o	16	41	41	o	x	o	41	o	.	.
c191e_106	No0113	MRK501	3mm_RDBE	o	o	o	o	o	o	o	47	o	o	x	o	38	o	.	.
c191e_107	No0114	3C345	3mm_RDBE	o	o	o	o	o	o	33	41	41	o	x	o	16	41	.	.
c191e_108	No0115	MRK501	3mm_RDBE	o	o	o	o	o	o	42	o	o	04	x	o	19	o	.	.
c191e_109	No0116	1633+38	3mm_RDBE	o	o	o	o	o	o	25	50	50	o	x	o	50	41	.	.
c191e_110	No0117	MRK501	3mm_RDBE	o	o	o	o	o	o	28	14	o	o	x	o	14	o	.	.
c191e_111	No0118	3C345	3mm_RDBE	o	o	o	o	o	o	16	41	41	o	x	o	16	41	.	.
c191e_112	No0119	MRK501	3mm_RDBE	o	o	o	o	o	o	23	o	o	o	x	o	14	o	.	.
c191e_113	No0120	3C345	3mm_RDBE	o	o	o	o	o	o	41	41	o	x	o	50	41	.	.	.
c191e_114	No0121	MRK501	3mm_RDBE	o	o	o	o	o	o	33	o	o	o	x	o	19	o	.	.
c191e_115	No0122	3C345	3mm_RDBE	o	o	o	o	o	o	41	41	o	x	o	25	41	.	.	.
c191e_116	No0123	MRK501	3mm_RDBE	o	o	o	o	o	o	19	o	33	x	o	19	o	.	.	.

c191e_117	No0124	3C345	3mm_RDBE	o	o	o	o	o	o	o	o	41	41	58	x	o	25	41	.	.	.	.
c191e_118	No0125	MRK501	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	52	x	o	14	o	.	.	.	.
c191e_119	No0126	3C345	3mm_RDBE	o	o	o	o	o	o	o	o	41	41	o	x	58	91	41	.	.	.	.
c191e_120	No0127	MRK501	3mm_RDBE	o	o	o	o	o	o	o	o	66	03	o	o	x	o	23	o	.	.	.
c191e_121	No0128	3C345	3mm_RDBE	.	o	.	.	o	o	o	o	83	83	o	x	o	33	83	.	.	.	.
c191e_122	No0129	MRK501	3mm_RDBE	o	o	o	o	o	o	o	o	63	o	96	x	o	10	o	.	.	.	.
c191e_123	No0130	3C345	3mm_RDBE	.	.	.	.	.	o	o	o	25	83	o	x	o	91	83	.	.	.	.
c191e_124	No0131	MRK501	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	x	o	20	o	.	.	.	.
c191e_125	No0132	3C454.3	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_126	No0133	3C454.3	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_127	No0134	3C345	3mm_RDBE	.	.	.	.	.	o	o	o	41	83	o	x	o	o	83	.	.	.	.
c191e_128	No0135	MRK501	3mm_RDBE	.	.	.	.	.	o	09	04	o	o	o	x	o	14	o	.	.	.	.
c191e_129	No0136	3C454.3	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c191e_130	No0137	1633+38	3mm_RDBE	.	.	.	.	.	o	93	40	53	o	x	o	o	60	.	.	.	.	.
c191e_131	No0138	MRK501	3mm_RDBE	.	.	.	.	.	o	06	06	o	o	o	x	o	03	o	.	.	.	.
c191e_132	No0139	3C345	3mm_RDBE	.	.	.	.	.	o	o	66	66	o	x	o	06	66	.	o	x	o	.
c191e_133	No0140	MRK501	3mm_RDBE	.	.	.	.	.	o	90	30	o	63	x	o	10	o	.	o	x	80	.
c191e_134	No0141	3C345	3mm_RDBE	.	.	.	.	.	o	o	58	58	o	x	o	33	58	.	o	x	o	.
c191e_135	No0142	MRK501	3mm_RDBE	.	.	.	.	.	o	43	10	o	o	o	x	o	23	o	.	o	x	o
c191e_136	No0143	3C345	3mm_RDBE	.	.	.	.	.	o	33	41	83	o	x	o	08	83	.	o	x	o	.
c191e_137	No0144	MRK501	3mm_RDBE	.	.	.	.	.	o	o	10	o	o	o	x	o	20	o	.	o	x	o
c191e_138	No0145	3C345	3mm_RDBE	.	.	.	.	.	o	46	86	86	o	x	o	06	86	.	o	x	o	.
c191e_139	No0146	MRK501	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	x	o	13	o	.	o	x	o
c191e_140	No0147	3C345	3mm_RDBE	.	.	.	.	.	o	o	66	66	o	x	o	20	66	.	o	x	o	.
c191e_141	No0148	MRK501	3mm_RDBE	.	.	.	.	.	o	76	63	o	o	o	x	o	13	o	.	o	x	o
c191e_142	No0149	1633+38	3mm_RDBE	.	.	.	.	.	o	o	58	33	o	x	o	66	58	.	o	x	o	.
c191e_143	No0150	MRK501	3mm_RDBE	.	.	.	.	.	o	o	78	o	o	o	x	o	11	x	.	o	x	o
c191e_144	No0151	3C345	3mm_RDBE	.	.	.	.	.	o	o	53	53	o	x	o	26	x	.	o	x	o	.
c191e_145	No0152	MRK501	3mm_RDBE	.	.	.	.	.	o	83	56	o	o	o	x	o	60	x	.	o	x	o
c191e_146	No0153	3C345	3mm_RDBE	.	.	.	.	.	o	06	33	66	o	x	o	33	x	.	o	x	o	.
c191e_147	No0154	MRK501	3mm_RDBE	.	.	.	.	.	o	63	13	o	o	o	x	o	10	o	.	o	x	o
c191e_148	No0155	3C345	3mm_RDBE	.	.	.	.	.	o	o	25	58	o	x	o	58	33	.	o	x	o	.
c191e_149	No0156	MRK501	3mm_RDBE	.	.	.	.	.	o	50	03	o	o	o	x	o	26	o	.	o	x	o
c191e_150	No0157	3C345	3mm_RDBE	.	.	.	.	.	o	o	13	86	o	x	o	13	86	.	o	x	o	.
c191e_151	No0158	MRK501	3mm_RDBE	.	.	.	.	.	o	o	03	o	13	x	o	06	o	.	o	x	o	.
c191e_152	No0159	3C345	3mm_RDBE	.	.	.	.	.	o	o	41	58	o	58	o	08	58	.	o	x	o	.
c191e_153	No0160	MRK501	3mm_RDBE	.	.	.	.	.	o	o	08	o	87	o	o	37	o	.	o	x	o	.
c191e_154	No0161	1633+38	3mm_RDBE	.	.	.	.	.	o	41	o	o	o	o	o	58	o	.	o	x	o	.