

C182B/MM015_pt1 Correlation Report

General information

- The **first part** of science project **MM015**, the [second part of MM015](#) is in [C182C](#).
- 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/sep18/feedback_sep18.asc
- Text file with detailed antenna statistics: [c182b.antrep](#)

Current Status

Correlation finished, data **released** on 14.03.2019.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Fringe overview of all baselines (all of C182B) 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, bright red - false fringe (mostly for baselines to KVN, determined by having extremely large single-band delay, > 0.1us)</p> <p>c182b_SBD_RfAnt_Ef_LLRR_AllSrc.pdf</p> <p>Examples of fourfit fringe plots:</p> <p>c182b_No0239_3C454.3_BX_LL.pdf, c182b_No0239_3C454.3_BX_LR.pdf, c182b_No0239_3C454.3_BX_RL.pdf, c182b_No0239_3C454.3_BX_RR.pdf.</p> <p>c182b_No0002_1055+018_BY_RL.pdf, c182b_No0002_1055+018_BY_RR.pdf, no LL or LR fringes.</p> <p>c182b_No0243_0420-014_BZ_LL.pdf, c182b_No0243_0420-014_BZ_LR.pdf, c182b_No0243_0420-014_BZ_RL.pdf, c182b_No0243_0420-014_BZ_RR.pdf.</p> <p>c182b_No0239_3C454.3_BP_LL.pdf, c182b_No0239_3C454.3_BP_LR.pdf, c182b_No0239_3C454.3_BP_RL.pdf, c182b_No0239_3C454.3_BP_RR.pdf.</p> <p>c182b_No0239_3C454.3_Bg_LL.pdf, c182b_No0239_3C454.3_Bg_LR.pdf, c182b_No0239_3C454.3_Bg_RL.pdf, c182b_No0239_3C454.3_Bg_RR.pdf.</p> <p>c182b_No0239_3C454.3_bB_LL.pdf, c182b_No0239_3C454.3_bB_RR.pdf, no LR or RL fringes.</p>	

Station	Code	Fringes	Plots	Comments
			<p>c182b No0239 3C454.3 Bf LL.pdf, c182b No0239 3C454.3 Bf LR.pdf, c182b No0239 3C454.3 Bf RL.pdf, c182b No0239 3C454.3 Bf RR.pdf.</p> <p>c182b No0239 3C454.3 Bk LL.pdf, c182b No0239 3C454.3 Bk RR.pdf, no LR or RL fringes.</p> <p>c182b No0239 3C454.3 Bl LL.pdf, c182b No0239 3C454.3 Bl RR.pdf, no LR or RL fringes.</p> <p>c182b No0239 3C454.3 Bm LL.pdf, c182b No0239 3C454.3 Bm RR.pdf, no LR or RL fringes</p> <p>c182b No0239 3C454.3 Bn LL.pdf, c182b No0239 3C454.3 Bn RR.pdf, no LR or RL fringes.</p> <p>c182b No0239 3C454.3 Bo LL.pdf, c182b No0239 3C454.3 Bo RR.pdf, no LR or RL fringes.</p> <p>Same for all antennas below unless otherwise noted.</p>	
On	X	yes	<p>c182b SBD RfAnt On LLRR AllSrc.pdf</p> <p>c182b No0239 3C454.3 BX LL.pdf, c182b No0239 3C454.3 BX LR.pdf, c182b No0239 3C454.3 BX RL.pdf, c182b No0239 3C454.3 BX RR.pdf.</p>	
Ys	Y	yes	<p>c182b SBD RfAnt Ys LLRR AllSrc.pdf</p> <p>c182b No0002 1055+018 BY RL.pdf, c182b No0002 1055+018 BY RR.pdf, no LL or LR fringes.</p>	An amplifier burned out just before the beginning of the session, fixed during the fringe test, but after that the antenna consistently produces fringes only to RCP, while in its typical configuration in should have LCP only, duplicated to both channels. But in this session it appears to have RCP only.
Mh	Z	yes	<p>c182b SBD RfAnt Mh LLRR AllSrc.pdf</p> <p>c182b No0243 0420-014 BZ LL.pdf, c182b No0243 0420-014 BZ LR.pdf, c182b No0243 0420-014 BZ RL.pdf, c182b No0243 0420-014 BZ RR.pdf.</p> <p>c182b No0243 0420-014 ZP LL.pdf, c182b No0243 0420-014 ZP LR.pdf, c182b No0243 0420-014 ZP RL.pdf, c182b No0243 0420-014 ZP RR.pdf.</p>	
Pv	P	yes	<p>c182b SBD RfAnt Pv LLRR AllSrc.pdf</p> <p>c182b No0239 3C454.3 BP LL.pdf, c182b No0239 3C454.3 BP LR.pdf, c182b No0239 3C454.3 BP RL.pdf, c182b No0239 3C454.3 BP RR.pdf.</p>	

Station	Code	Fringes	Plots	Comments
			c182b No0243 0420-014 ZP LL.pdf , c182b No0243 0420-014 ZP LR.pdf , c182b No0243 0420-014 ZP RL.pdf , c182b No0243 0420-014 ZP RR.pdf . c182b No0205 0716+714 yP LL.pdf , c182b No0205 0716+714 yP LR.pdf , c182b No0205 0716+714 yP RL.pdf , c182b No0205 0716+714 yP RR.pdf .	
GLT: Gl	g	yes	c182b SBD RfAnt Gl LLRR AllSrc.pdf c182b No0239 3C454.3 Bg LL.pdf , c182b No0239 3C454.3 Bg LR.pdf , c182b No0239 3C454.3 Bg RL.pdf , c182b No0239 3C454.3 Bg RR.pdf .	The GLT was observing in an unknown polarization configuration, linear or some elliptic instead of the circular due to a polarizer misalignment. Unless there is a way to reconstruct the proper circular polarization, this station must be flagged or used only for the total power measurement.
VLBA: Br	b	yes	c182b SBD RfAnt Br LLRR AllSrc.pdf c182b No0239 3C454.3 bB LL.pdf , c182b No0239 3C454.3 bB RR.pdf , no LR or RL fringes.	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: Fd	f	yes	c182b SBD RfAnt Fd LLRR AllSrc.pdf c182b No0239 3C454.3 Bf LL.pdf , c182b No0239 3C454.3 Bf LR.pdf , c182b No0239 3C454.3 Bf RL.pdf , c182b No0239 3C454.3 Bf RR.pdf .	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: Kp	k	yes	c182b SBD RfAnt Kp LLRR AllSrc.pdf c182b No0239 3C454.3 Bk LL.pdf , c182b No0239 3C454.3 Bk RR.pdf , no LR or RL fringes.	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: La	l	yes	c182b SBD RfAnt La LLRR AllSrc.pdf c182b No0239 3C454.3 Bl LL.pdf , c182b No0239 3C454.3 Bl RR.pdf , no LR or RL fringes.	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: Mk	m	yes	c182b SBD RfAnt Mk LLRR AllSrc.pdf c182b No0239 3C454.3 Bm LL.pdf , c182b No0239 3C454.3 Bm RR.pdf , no LR or RL fringes	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: Nl	n	yes	c182b SBD RfAnt Nl LLRR AllSrc.pdf	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.

Station	Code	Fringes	Plots	Comments
			c182b_No0239_3C454.3_Bn_LL.pdf , c182b_No0239_3C454.3_Bn_RR.pdf , no LR or RL fringes.	Data for the first several scans missing, probably due to a lost Mk5 module.
VLBA: Ov	o	yes	c182b_SBD_RfAnt_Ov_LLRR_AllSrc.pdf c182b_No0239_3C454.3_Bo_LL.pdf , c182b_No0239_3C454.3_Bo_RR.pdf , no LR or RL fringes.	All VLBA antennas suffer from the same problem, diminishing the effective observing time in many scans by 30-50%.
VLBA: Pt	p	no	c182b_SBD_RfAnt_Pt_LLRR_AllSrc.pdf -----	All Pt data for this whole session lost due to a malfunctioning Mk5 module. We attempted to save it, but the data has proven to be unrecoverable.
KVN: Kt	t	no	c182b_SBD_RfAnt_Kt_LLRR_AllSrc.pdf c182b_No0205_0716+714_ty_LL.pdf , c182b_No0205_0716+714_ty_LR.pdf , c182b_No0205_0716+714_ty_RL.pdf , c182b_No0205_0716+714_ty_RR.pdf .	All fringes seem to be false ones, even those that have low SBD and appear green in the fringe overview table See the plots for one possible, but very strange fringe to Ky.
KVN: Ku	u	no	c182b_SBD_RfAnt_Ku_LLRR_AllSrc.pdf -----	All fringes seem to be false ones, even those that have low SBD and appear green in the fringe overview table
KVN: Ky	y	yes	c182b_SBD_RfAnt_Ky_LLRR_AllSrc.pdf c182b_No0205_0716+714_yP_LL.pdf , c182b_No0205_0716+714_yP_LR.pdf , c182b_No0205_0716+714_yP_RL.pdf , c182b_No0205_0716+714_yP_RR.pdf . c182b_No0205_0716+714_ty_LL.pdf , c182b_No0205_0716+714_ty_LR.pdf , c182b_No0205_0716+714_ty_RL.pdf , c182b_No0205_0716+714_ty_RR.pdf .	Real fringes only to Pv (with exception of one possible but very strange fringe to Kt, see the plots)

Notes

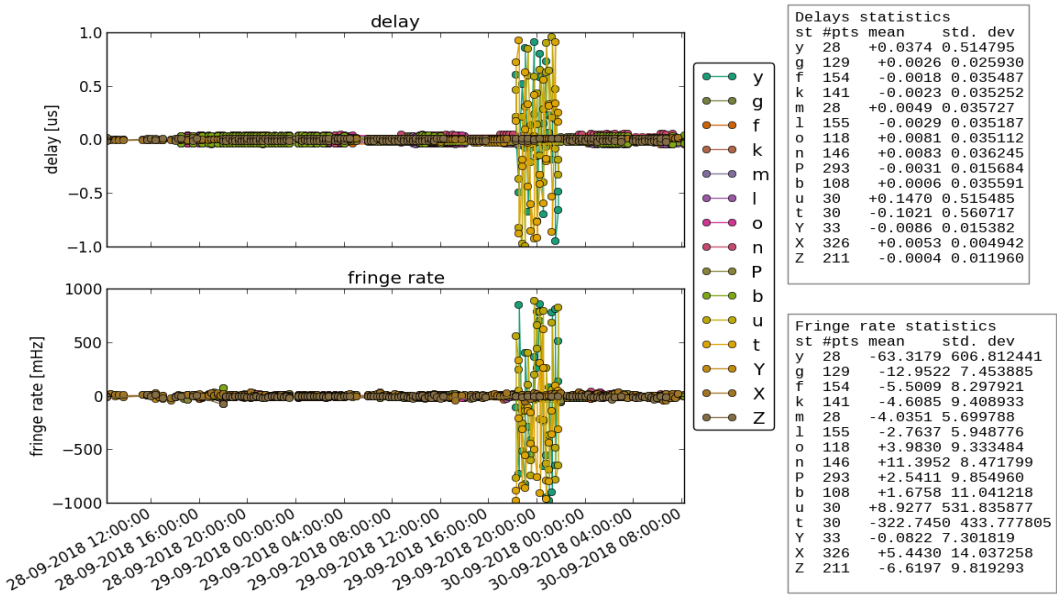
All VLBA antennas are affected by the same problem (probably originating in the control software) during the whole session: for a significant portion of scans the recording starts several seconds or even few minutes late compared with the schedule. This results in effective reduction of observing time by a factor of 30-50%.

For some reason fourfit finds a fringe for every baseline including a KVN antenna. We are still looking how to avoid this problem. Meanwhile in the overview tables above the value of single-band delay is used to tell the difference between the considerably fewer real fringes and false positives.

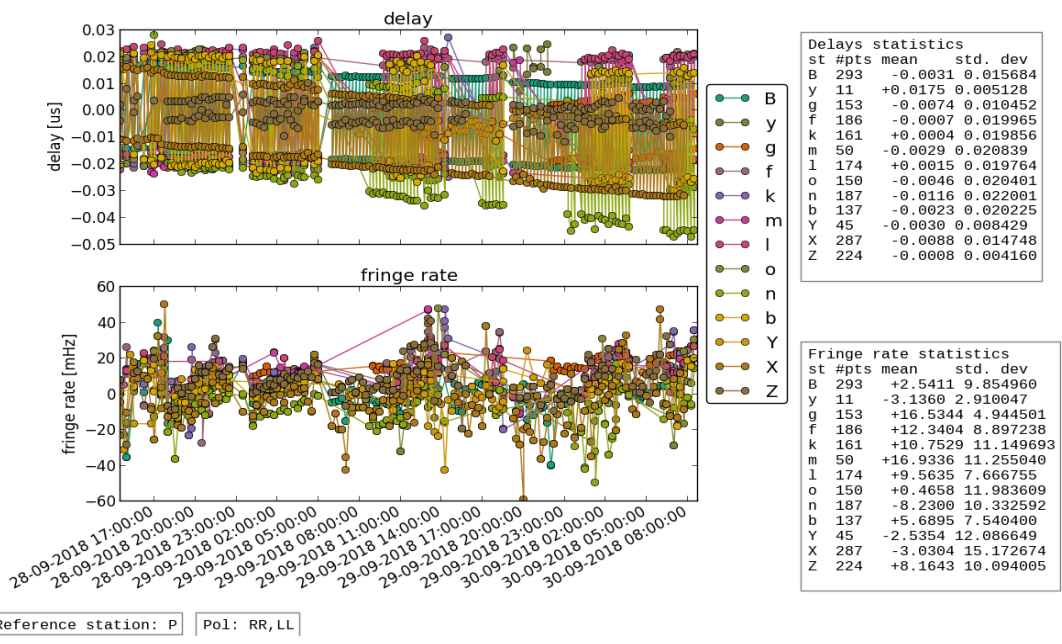
Post-Correlation checks

Residuals

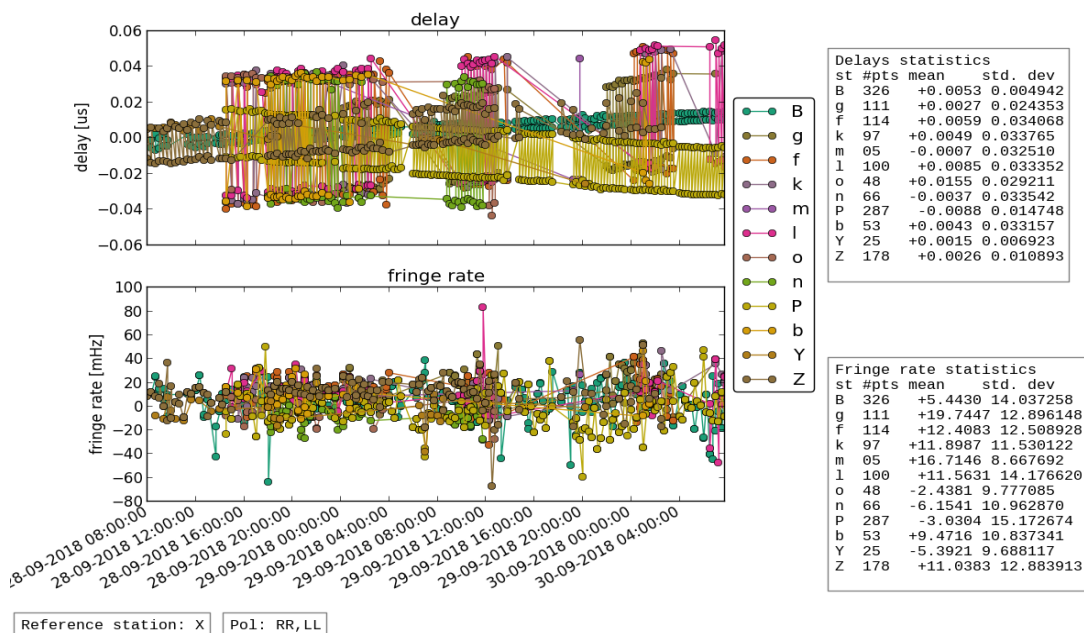
EF (the outliers are due to multiple false fringes in KVN antennas detected by fourfit):



PV:



ON:



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

mm015_pt1.fits:

					EF	GL	ON	YS	PV	MH	FD	NL	OV	PT	BR	KP	LA	MK	KY	KU	KT	
c182b_001	No0001	1156+295	3mm_RDBE	o	x	o	x	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_002	No0002	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_003	No0003	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_004	No0004	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_005	No0005	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_006	No0006	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_007	No0007	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_008	No0008	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_009	No0009	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_010	No0010	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_011	No0011	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_012	No0012	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_013	No0013	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_014	No0014	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_015	No0015	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_016	No0016	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.	.

c182b_017	No0017	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_018	No0018	1055+018	3mm_RDBE	o	.	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_019	No0019	1156+295	3mm_RDBE	o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_020	No0020	1156+295	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_021	No0021	1156+295	3mm_RDBE	o	x	o	o	o	o	63	x	63	x	63	63	63	.	.	.	.	.
c182b_022	No0022	1055+018	3mm_RDBE	o	.	.	o	o	.	63	x	63	x	63	63	63	.	.	.	.	.
c182b_023	No0023	1156+295	3mm_RDBE	o	x	o	o	o	o	68	x	63	x	63	68	68	.	.	.	.	.
c182b_024	No0024	1055+018	3mm_RDBE	.	.	.	o	o	.	63	x	63	x	63	63	63	.	.	.	.	.
c182b_025	No0025	1156+295	3mm_RDBE	o	x	o	o	o	o	68	x	63	x	63	68	68	.	.	.	.	.
c182b_026	No0026	1055+018	3mm_RDBE	.	.	.	.	.	.	73	x	73	x	73	73	73	73	.	.	.	.
c182b_027	No0027	1156+295	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_028	No0028	1156+295	3mm_RDBE	o	x	o	o	o	o	o	x	o	x	o	o	o	o	.	.	.	.
c182b_029	No0029	1156+295	3mm_RDBE	o	x	o	o	o	o	72	x	68	x	68	72	72	68	.	.	.	.
c182b_030	No0030	1055+018	3mm_RDBE	.	.	.	.	.	.	73	73	73	x	73	73	73	73	.	.	.	.
c182b_031	No0031	1156+295	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_032	No0032	1156+295	3mm_RDBE	o	x	o	o	o	o	o	o	o	x	o	o	o	o	.	.	.	.
c182b_033	No0033	1156+295	3mm_RDBE	o	x	o	o	o	o	72	72	68	x	68	72	72	68	.	.	.	.
c182b_034	No0034	1055+018	3mm_RDBE	.	.	.	.	.	.	73	73	73	x	73	73	73	73	.	.	.	.
c182b_035	No0035	1156+295	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_036	No0036	1156+295	3mm_RDBE	o	x	o	o	o	o	o	o	o	x	o	o	o	o	.	.	.	.
c182b_037	No0037	1156+295	3mm_RDBE	o	x	o	o	o	o	77	77	68	x	68	77	77	68	.	.	.	.
c182b_038	No0038	1633+38	3mm_RDBE	o	x	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_039	No0039	3C345	3mm_RDBE	o	x	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_040	No0040	1633+38	3mm_RDBE	o	x	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_041	No0041	3C345	3mm_RDBE	o	x	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_042	No0042	1633+38	3mm_RDBE	o	x	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_043	No0043	3C345	3mm_RDBE	o	x	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_044	No0044	1633+38	3mm_RDBE	o	x	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_045	No0045	3C345	3mm_RDBE	o	x	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_046	No0046	1749+096	3mm_RDBE	o	x	o	x	o	o	63	63	63	x	63	63	63	.	.	.	.	.
c182b_047	No0047	1749+096	3mm_RDBE	o	x	o	x	o	o	63	63	63	x	63	63	63	.	.	.	.	.
c182b_048	No0048	1749+096	3mm_RDBE	o	x	o	x	o	o	63	63	63	x	63	63	63	.	.	.	.	.
c182b_049	No0049	1749+096	3mm_RDBE	o	x	o	x	o	o	59	59	63	x	63	59	59	.	.	.	.	.
c182b_050	No0050	1749+096	3mm_RDBE	o	x	o	x	o	o	59	59	63	x	63	59	59	.	.	.	.	.
c182b_051	No0051	1749+096	3mm_RDBE	o	x	o	x	o	o	59	59	63	x	63	59	59	.	.	.	.	.
c182b_052	No0052	1749+096	3mm_RDBE	o	x	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.
c182b_053	No0053	3C345	3mm_RDBE	o	x	o	x	o	o	68	68	63	x	63	68	68	63	.	.	.	.
c182b_054	No0054	1633+38	3mm_RDBE	o	x	o	x	o	o	68	68	63	x	63	68	68	63	.	.	.	.
c182b_055	No0055	3C345	3mm_RDBE	o	x	o	x	o	o	72	72	63	x	63	72	72	63	.	.	.	.
c182b_056	No0056	1633+38	3mm_RDBE	o	x	o	x	o	o	72	72	63	x	63	72	72	63	.	.	.	.
c182b_057	No0057	3C345	3mm_RDBE	o	x	o	x	o	o	72	72	63	x	63	72	72	63	.	.	.	.
c182b_058	No0058	1633+38	3mm_RDBE	o	x	o	x	o	o	72	72	63	x	63	72	72	63	.	.	.	.
c182b_059	No0059	3C345	3mm_RDBE	o	x	o	x	o	o	77	77	68	x	68	77	77	68	.	.	.	.
c182b_060	No0060	1633+38	3mm_RDBE	o	x	o	x	o	o	77	77	68	x	68	77	77	68	.	.	.	.
c182b_061	No0061	3C345	3mm_RDBE	.	x	o	.	.	.	80	80	80	x	80	80	80	80	.	.	.	.
c182b_062	No0062	1749+096	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.
c182b_063	No0063	BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.	.	.
c182b_064	No0064	BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	63	x	63	63	63	.	.	.	.	.
c182b_065	No0065	BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	63	x	63	63	63	.	.	.	.	.
c182b_066	No0066	BLLAC	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.

c182b_067	No0067	1749+096	3mm_RDBE	.	.	.	.	.	.	73	73	70	x	73	73	73	73	.	.	.
c182b_068	No0068		BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	x	o	o	o	.	.	.	.
c182b_069	No0069		BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	63	x	63	63	63	.	.	.
c182b_070	No0070		BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	72	x	72	63	63	72	.	.
c182b_071	No0071		BLLAC	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.
c182b_072	No0072	1749+096	3mm_RDBE	.	.	.	.	.	.	73	73	70	x	73	73	73	73	.	.	.
c182b_073	No0073		BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.
c182b_074	No0074		BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	77	x	77	63	63	77	.	.
c182b_075	No0075		BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	63	x	63	63	63	63	.	.
c182b_076	No0076		BLLAC	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.
c182b_077	No0077	1749+096	3mm_RDBE	.	.	.	.	.	.	73	73	70	x	73	73	73	73	.	.	.
c182b_078	No0078		BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.
c182b_079	No0079		BLLAC	3mm_RDBE	o	o	o	x	o	o	63	63	68	x	68	63	63	68	.	.
c182b_080	No0080		BLLAC	3mm_RDBE	o	o	o	x	o	o	72	72	68	x	68	72	72	68	.	.
c182b_081	No0081		BLLAC	3mm_RDBE	o	o	o	x	o	o	77	77	68	x	68	77	77	68	.	.
c182b_082	No0082		BLLAC	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.
c182b_083	No0083	1749+096	3mm_RDBE	.	.	.	.	.	.	73	73	73	x	76	73	73	76	o	o	o
c182b_084	No0084		BLLAC	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.
c182b_085	No0085	1749+096	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_086	No0086		BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.
c182b_087	No0087	1749+096	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o
c182b_088	No0088		BLLAC	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.
c182b_089	No0089	1749+096	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o
c182b_090	No0090		BLLAC	3mm_RDBE	o	o	o	x	.	o	o	o	o	x	o	o	o	.	.	.
c182b_091	No0091	1749+096	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o
c182b_092	No0092		BLLAC	3mm_RDBE	.	o	o	.	.	o	o	o	o	x	o	o	o	.	.	.
c182b_093	No0093	1749+096	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o
c182b_094	No0094		BLLAC	3mm_RDBE	.	o	o	.	.	o	o	o	o	x	o	o	o	.	.	.
c182b_095	No0095	1749+096	3mm_RDBE	.	.	.	.	.	.	.	.	o	.	o	o	.	o	o	o	o
c182b_096	No0096		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	.	.	.	.
c182b_097	No0097	OJ287	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_098	No0098		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_099	No0099	OJ287	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_100	No0100		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_101	No0101	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_102	No0102		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_103	No0103	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_104	No0104		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_105	No0105	1055+018	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_106	No0106		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_107	No0107	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_108	No0108		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_109	No0109	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_110	No0110		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_111	No0111	1055+018	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_112	No0112		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_113	No0113	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_114	No0114		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o
c182b_115	No0115	OJ287	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c182b_116	No0116		BLLAC	3mm_RDBE	.	o	.	.	.	o	o	o	x	o	o	o	o	o	o	o

c182b_117	No0117	1055+018	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_118	No0118	BLLAC	3mm_RDBE	.	o	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o	o	o	o	o	o
c182b_119	No0119	OJ287	3mm_RDBE	o	.	o	x	o	o	.	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_120	No0120	BLLAC	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o	o	o	o	o	o
c182b_121	No0121	OJ287	3mm_RDBE	o	90	o	x	o	o	.	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_122	No0122	BLLAC	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o	o	o	o	o	o
c182b_123	No0123	OJ287	3mm_RDBE	o	o	o	x	o	o	.	63	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_124	No0124	BLLAC	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	o	o	o	o	o	o	o	o
c182b_125	No0125	OJ287	3mm_RDBE	o	o	o	x	o	o	.	63	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_126	No0126	OJ287	3mm_RDBE	o	o	o	x	o	o	o	o	.	x	.	.	o	.	.	.	.	.	.	.	.
c182b_127	No0127	BLLAC	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	o	.	o	o	o	o	o	o	o	o	o	o
c182b_128	No0128	OJ287	3mm_RDBE	o	o	o	x	o	o	68	68	.	x	.	.	68	.	.	.	.	.	.	.	.	.
c182b_129	No0129	BLLAC	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	o	.	76	o	o	o	o	o	o	o	o	o
c182b_130	No0130	OJ287	3mm_RDBE	o	o	o	x	o	o	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.
c182b_131	No0131	OJ287	3mm_RDBE	o	o	o	x	o	o	68	68	63	x	63	68	68	.	.	.	.	.	.	.	.	.
c182b_132	No0132	OJ287	3mm_RDBE	o	o	o	x	o	o	68	68	63	x	63	68	68	.	.	.	.	.	.	.	.	.
c182b_133	No0133	OJ287	3mm_RDBE	o	o	o	x	o	o	59	59	63	x	63	59	59	.	.	.	.	.	.	.	.	.
c182b_134	No0134	OJ287	3mm_RDBE	o	o	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_135	No0135	OJ287	3mm_RDBE	o	o	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_136	No0136	OJ287	3mm_RDBE	o	o	o	x	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_137	No0137	OJ287	3mm_RDBE	o	o	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_138	No0138	OJ287	3mm_RDBE	o	o	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_139	No0139	OJ287	3mm_RDBE	o	o	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_140	No0140	OJ287	3mm_RDBE	o	o	o	o	o	o	59	59	59	x	59	59	59	.	.	.	.	.	.	.	.	.
c182b_141	No0141	OJ287	3mm_RDBE	o	o	o	o	o	o	63	63	72	x	72	63	63	72	.	.	.	.	.	.	.	.
c182b_142	No0142	OJ287	3mm_RDBE	o	.	o	o	o	o	63	63	68	x	68	63	63	68	.	.	.	.	.	.	.	.
c182b_143	No0143	OJ287	3mm_RDBE	o	o	o	o	o	o	63	63	72	x	72	63	63	72	.	.	.	.	.	.	.	.
c182b_144	No0144	OJ287	3mm_RDBE	o	o	o	o	o	o	63	63	72	x	72	63	63	72	.	.	.	.	.	.	.	.
c182b_145	No0145	1055+018	3mm_RDBE	o	.	o	o	o	.	63	63	63	x	63	63	63	.	.	.	.	.	.	.	.	.
c182b_146	No0146	OJ287	3mm_RDBE	.	o	.	o	o	.	63	63	72	x	72	63	63	72	.	.	.	.	.	.	.	.
c182b_147	No0147	1055+018	3mm_RDBE	.	.	.	o	o	.	63	63	63	x	63	63	63	.	.	.	.	.	.	.	.	.
c182b_148	No0148	1510-089	3mm_RDBE	o	.	o	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_149	No0149	OJ287	3mm_RDBE	.	o	.	.	.	.	73	73	73	x	73	73	73	73	.	.	.	.	.	.	.	.
c182b_150	No0150	1510-089	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_151	No0151	1055+018	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	.	.	.	.	.	.	.	.	.
c182b_152	No0152	1510-089	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_153	No0153	OJ287	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	73	.	.	.	.	.	.	.	.
c182b_154	No0154	1510-089	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_155	No0155	1055+018	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_156	No0156	1510-089	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_157	No0157	OJ287	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_158	No0158	1510-089	3mm_RDBE	o	.	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_159	No0159	1055+018	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_160	No0160	1510-089	3mm_RDBE	o	.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_161	No0161	OJ287	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_162	No0162	1510-089	3mm_RDBE	o	.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_163	No0163	1055+018	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_164	No0164	1510-089	3mm_RDBE	o	.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_165	No0165	OJ287	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.
c182b_166	No0166	1510-089	3mm_RDBE	o	.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

c182b_167	No0167	1055+018	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	x	o	o	o	o	.	.	.	.
c182b_168	No0168	1510-089	3mm_RDBE	o	.	o	o	o	.	.	o
c182b_169	No0169	OJ287	3mm_RDBE	.	o	.	.	.	.	.	.	o	x	o	o	o	o	.	.	.	.	.
c182b_170	No0170	1510-089	3mm_RDBE	o	.	o	o	o	.	o	68	.	.	.	.	.	.	.	.	.	.	.
c182b_171	No0171	1055+018	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	o	.	o	.	.	.	.	.	.
c182b_172	No0172	1510-089	3mm_RDBE	o	.	o	o	o	.	68	68	.	x	.	.	o	.	.	.	.	.	.
c182b_173	No0173	OJ287	3mm_RDBE	.	o	.	.	.	.	.	.	o	.	o	o	.	o	o	o	o	.	o
c182b_174	No0174	1510-089	3mm_RDBE	o	.	.	o	o	.	68	68	.	x	.	.	68	.	.	.	.	.	.
c182b_175	No0175	1510-089	3mm_RDBE	o	.	.	o	o	.	63	59	.	x	.	.	63	.	.	.	.	.	.
c182b_176	No0176	1510-089	3mm_RDBE	.	.	.	o	o	.	63	63	63	x	.	63	63	.	.	.	.	.	.
c182b_177	No0177	0716+714	3mm_RDBE	o	x	o	.	.	o	.	.	.	.	.	.	.	.	59	o	o	o	.
c182b_178	No0178	1510-089	3mm_RDBE	.	.	.	o	o	.	63	63	63	x	63	63	63	.	.	.	.	.	.
c182b_179	No0179	0836+710	3mm_RDBE	o	x	o	.	.	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_180	No0180	1510-089	3mm_RDBE	.	.	.	o	o	.	63	63	59	x	59	63	63	.	.	.	.	.	.
c182b_181	No0181	0716+714	3mm_RDBE	o	x	o	.	.	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_182	No0182	1510-089	3mm_RDBE	.	.	.	o	o	.	63	63	59	x	59	63	63	.	.	.	.	.	.
c182b_183	No0183	0836+710	3mm_RDBE	o	x	o	.	.	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_184	No0184	1510-089	3mm_RDBE	.	.	.	.	.	.	73	73	70	x	70	73	73	.	.	.	.	.	.
c182b_185	No0185	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_186	No0186	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	.	.	.	.	.	.
c182b_187	No0187	0836+710	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_188	No0188	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	.	.	.	.	.	.
c182b_189	No0189	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	63	77	77	77	.	.
c182b_190	No0190	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_191	No0191	0836+710	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_192	No0192	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_193	No0193	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_194	No0194	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_195	No0195	0836+710	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_196	No0196	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_197	No0197	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_198	No0198	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_199	No0199	0836+710	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_200	No0200	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_201	No0201	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_202	No0202	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_203	No0203	0836+710	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_204	No0204	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_205	No0205	0716+714	3mm_RDBE	o	x	o	o	o	o	.	.	.	.	.	.	.	77	77	77	.	.	.
c182b_206	No0206	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_207	No0207	3C454.3	3mm_RDBE	93	97	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_208	No0208	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_209	No0209	CTA102	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_210	No0210	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_211	No0211	3C454.3	3mm_RDBE	40	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_212	No0212	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.
c182b_213	No0213	CTA102	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_214	No0214	1510-089	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	x	.	.	.	.	.
c182b_215	No0215	3C454.3	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_216	No0216	1510-089	3mm_RDBE	.	.	.	.	.	.	o	.	o	x	o	o	o	o	.	.	.	.	.

c182b_217	No0217	CTA102	3mm_RDBE	o	o	o	x	o	o	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_218	No0218	1510-089	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	x	o	o	o	o	.	.	.	.	.
c182b_219	No0219	3C454.3	3mm_RDBE	o	o	o	x	o	o	.	62	.	.	.	.	.	.	.	.	.	.	.	.
c182b_220	No0220	1510-089	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	x	o	o	o	o	.	.	.	.	.
c182b_221	No0221	CTA102	3mm_RDBE	o	o	o	x	o	o	.	62	.	.	.	.	.	.	.	.	.	.	.	.
c182b_222	No0222	1510-089	3mm_RDBE	.	.	.	.	.	.	.	o	.	o	x	o	o	o	o	.	.	.	.	.
c182b_223	No0223	3C454.3	3mm_RDBE	o	o	o	x	o	o	.	62	.	.	.	.	.	.	.	.	.	.	.	.
c182b_224	No0224	1510-089	3mm_RDBE	.	.	.	.	.	.	.	.	o	x	o	o	o	o	.	.	.	.	.	.
c182b_225	No0225	CTA102	3mm_RDBE	o	o	o	x	o	o	o	62	.	.	.	.	.	.	.	.	.	.	.	.
c182b_226	No0226	1510-089	3mm_RDBE	.	.	.	.	.	.	.	.	o	.	o	o	.	o	.	.	.	.	.	.
c182b_227	No0227	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	.	x	.	.	o	.	.	.	.	.	.	.
c182b_228	No0228	1510-089	3mm_RDBE	.	.	.	.	.	.	.	.	o	.	o	o	.	o	.	.	.	.	.	.
c182b_229	No0229	CTA102	3mm_RDBE	o	o	o	x	o	o	62	62	.	x	.	.	62	.	.	.	.	.	.	.
c182b_230	No0230	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	o	x	o	o	66	.	.	.	.	.	.	.
c182b_231	No0231	CTA102	3mm_RDBE	o	o	o	x	o	o	62	62	62	x	62	62	62	.	.	.	.	.	.	.
c182b_232	No0232	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	66	x	66	66	66	.	.	.	.	.	.	.
c182b_233	No0233	CTA102	3mm_RDBE	o	o	o	x	o	o	62	62	62	x	62	62	62	.	.	.	.	.	.	.
c182b_234	No0234	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	66	x	66	66	66	.	.	.	.	.	.	.
c182b_235	No0235	CTA102	3mm_RDBE	o	o	o	x	o	o	62	62	62	x	62	62	62	.	.	.	.	.	.	.
c182b_236	No0236	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	62	x	62	66	66	.	.	.	.	.	.	.
c182b_237	No0237	CTA102	3mm_RDBE	o	o	o	x	o	o	62	62	62	x	62	62	62	.	.	.	.	.	.	.
c182b_238	No0238	3C454.3	3mm_RDBE	o	o	o	x	o	o	66	66	66	x	66	66	66	66	.	.	.	.	.	.
c182b_239	No0239	3C454.3	3mm_RDBE	o	o	o	x	o	.	66	66	66	x	66	66	66	66	.	.	.	.	.	.
c182b_240	No0240	3C454.3	3mm_RDBE	o	o	o	x	o	.	66	66	66	x	66	66	66	66	.	.	.	.	.	.
c182b_241	No0241	3C454.3	3mm_RDBE	.	o	.	x	o	.	66	66	66	x	66	66	66	66	.	.	.	.	.	.
c182b_242	No0242	CTA102	3mm_RDBE	.	o	.	.	.	.	73	73	73	x	73	73	73	73	.	.	.	.	.	.
c182b_243	No0243	0420-014	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_244	No0244	3C454.3	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_245	No0245	3C120	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_246	No0246	CTA102	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_247	No0247	0420-014	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_248	No0248	3C454.3	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_249	No0249	3C120	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_250	No0250	CTA102	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_251	No0251	0420-014	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_252	No0252	3C454.3	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_253	No0253	3C120	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_254	No0254	CTA102	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_255	No0255	0420-014	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_256	No0256	3C454.3	3mm_RDBE	.	.	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_257	No0257	3C120	3mm_RDBE	o	o	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_258	No0258	CTA102	3mm_RDBE	.	o	.	.	.	.	o	o	o	x	o	o	o	o	.	.	.	.	.	.
c182b_259	No0259	0420-014	3mm_RDBE	o	.	o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c182b_260	No0260	3C454.3	3mm_RDBE	.	.	.	.	.	.	.	.	o	x	o	o	o	o	.	.	.	.	.	.
c182b_261	No0261	3C120	3mm_RDBE	o	o	o	x	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c182b_262	No0262	3C454.3	3mm_RDBE	.	.	.	.	.	.	.	.	o	.	o	o	.	73	.	.	.	.	.	.
c182b_263	No0263	0420-014	3mm_RDBE	o	o	o	x	o	o	66	66	.	x	.	.	o	.	.	.	.	.	.	.
c182b_264	No0264	3C120	3mm_RDBE	o	o	o	x	o	o	62	62	o	x	.	o	62	.	.	.	.	.	.	.
c182b_265	No0265	0420-014	3mm_RDBE	o	o	o	x	o	.	66	66	66	x	66	66	66	.	.	.	.	.	.	.
c182b_266	No0266	3C120	3mm_RDBE	o	o	o	x	o	.	62	62	62	x	62	62	62	.	.	.	.	.	.	.

c182b_267	No0267	0420-014	3mm_RDBE	o	o	o	x	o	.	66	66	66	x	66	66	66	.	.	.	.
c182b_268	No0268	3C120	3mm_RDBE	o	o	o	x	o	.	62	62	62	x	62	62	62	.	.	.	.
c182b_269	No0269	0420-014	3mm_RDBE	.	.	.	x	o	.	66	66	66	x	66	66	66	.	.	.	.
c182b_270	No0270	3C120	3mm_RDBE	o	o	.	x	o	.	62	62	62	x	62	62	62	.	.	.	.
c182b_271	No0271	0420-014	3mm_RDBE	.	.	.	x	o	.	66	66	66	x	66	66	66	.	.	.	.
c182b_272	No0272	3C120	3mm_RDBE	.	o	.	x	o	.	x	x	x	x	x	x	x	.	.	.	.