

MK017B Correlation Report

General information

- A part of [C202B](#).
- Includes 3mm and 7mm parts
- PI: KADLER
- Targets: Neutrino 0506+056
- 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
- Text files with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
[c202b ALL 3mm.antrep](#)
[c202b 7mm ALL.antrep](#)

Current Status

Correlation finished, data **released to PI** on 28.04.2021.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Note: all plots and statistics are done for the whole of c202b</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>c202b FRINGE RfAnt Ef LLRR AllSrc 3mm.pdf</p> <p>Examples of fourfit fringe plots can be found in (all fringe plots with baselines including the given antenna):</p> <p>No0055 B 3mm.pdf</p> <p>Antenna statistics:</p> <p>c202b Ef 3mm.antrep</p> <p>Same for all antennas below unless otherwise noted.</p>	<p>Participated in 99% scans (3mm only), fringes in 38% baselines*||pols, mean SNR 67.</p> <p>bad weather</p>
On	X	yes	<p>c202b FRINGE RfAnt On LLRR AllSrc 3mm.pdf</p> <p>No0082 X 3mm.pdf</p> <p>No0283 X 3mm.pdf</p> <p>c202b On 3mm.antrep</p>	<p>Participated in 100% scans (3mm only), fringes in 39% baselines*||pols, mean SNR 55.</p>

Ys	Y	yes	c202b FRINGE RfAnt Ys LLRR AllSrc 3mm.pdf No0079_Y_3mm.pdf No0080_Y_3mm.pdf c202b_Ys_3mm.antrep	Participated in 94% scans (3mm only), fringes in 47% baselines*||pols, mean SNR 102.
Mh	Z	yes	c202b FRINGE RfAnt Mh LLRR AllSrc 3mm.pdf No0163_Z_3mm.pdf c202b_Mh_3mm.antrep	Participated in 84% scans (3mm only), fringes in 26% baselines*||pols, mean SNR 26. bad weather
Pv	P	yes	c202b FRINGE RfAnt Pv LLRR AllSrc 3mm.pdf No0079_P_3mm.pdf No0080_P_3mm.pdf c202b_Pv_3mm.antrep	Participated in 100% scans (3mm only), fringes in 61% baselines*||pols, mean SNR 113.
VLBA: Br	b	yes	c202b FRINGE RfAnt Br LLRR AllSrc 3mm.pdf No0079_b_3mm.pdf No0101_b_3mm.pdf c202b_Br_3mm.antrep c202b FRINGE RfAnt Br LLRR AllSrc 7mm.pdf No0154_b_7mm.pdf c202b_7mm_Br.antrep	3mm: participated in 100% scans, fringes in 33% baselines*||pols, mean SNR 22. 7mm: participated in 100% scans, fringes in 83% baselines*||pols, mean SNR 200..
VLBA: Fd	f	yes	c202b FRINGE RfAnt Fd LLRR AllSrc 3mm.pdf No0028_f_3mm.pdf No0117_f_3mm.pdf c202b_Fd_3mm.antrep c202b FRINGE RfAnt Fd LLRR AllSrc 7mm.pdf No0154_f_7mm.pdf c202b_7mm_Fd.antrep	3mm: participated in 99% scans, fringes in 49% baselines*||pols, mean SNR 33. 7mm: participated in 99% scans, fringes in 87% baselines*||pols, mean SNR 238.

VLBA: Kp	k	yes	c202b FRINGE RfAnt Kp LLRR AllSrc 3mm.pdf No0119_k_3mm.pdf c202b_Kp_3mm.antrep c202b FRINGE RfAnt Kp LLRR AllSrc 7mm.pdf No0154_k_7mm.pdf c202b_7mm_Kp.antrep	<p>3mm: participated in 99% scans, fringes in 37% baselines*||pols, mean SNR 26.</p> <p>7mm: participated in 99% scans, fringes in 87% baselines*||pols, mean SNR 261.</p>
VLBA: La	l	yes	c202b FRINGE RfAnt La LLRR AllSrc 3mm.pdf No0070_l_3mm.pdf No0111_l_3mm.pdf c202b_La_3mm.antrep c202b FRINGE RfAnt La LLRR AllSrc 7mm.pdf No0154_l_7mm.pdf c202b_7mm_La.antrep	<p>3mm: participated in 80% scans, fringes in 46% baselines*||pols, mean SNR 34.</p> <p>7mm: participated in 80% scans, fringes in 89% baselines*||pols, mean SNR 217.</p> <p>dropped out for several scans due to USNO observations</p>
VLBA: Mk	m	yes	c202b FRINGE RfAnt Mk LLRR AllSrc 3mm.pdf No0105_m_3mm.pdf c202b_Mk_3mm.antrep c202b FRINGE RfAnt Mk LLRR AllSrc 7mm.pdf No0154_m_7mm.pdf c202b_7mm_Mk.antrep	<p>3mm: participated in 96% scans, fringes in 29% baselines*||pols, mean SNR 17.</p> <p>7mm: participated in 96% scans, fringes in 85% baselines*||pols, mean SNR 176.</p> <p>dropped out for several scans due to USNO observations</p>
VLBA: Nl	n	yes	c202b FRINGE RfAnt Nl LLRR AllSrc 3mm.pdf No0105_n_3mm.pdf c202b_Nl_3mm.antrep c202b FRINGE RfAnt Nl LLRR AllSrc 7mm.pdf No0154_n_7mm.pdf c202b_7mm_Nl.antrep	<p>3mm: participated in 100% scans, fringes in 17% baselines*||pols, mean SNR 15.</p> <p>7mm: participated in 100% scans, fringes in 82% baselines*||pols, mean SNR 167.</p>
VLBA: Ov	o	yes	c202b FRINGE RfAnt Ov LLRR AllSrc 3mm.pdf	.

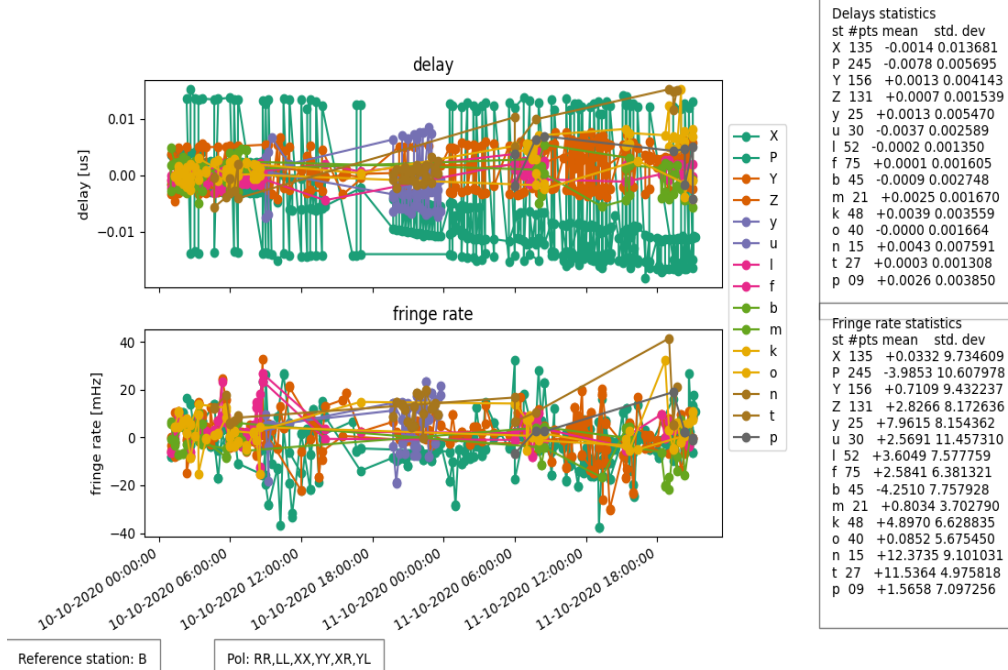
			No0103_o_3mm.pdf No0277_o_3mm.pdf c202b_Ov_3mm.antrep c202b_FRINGE_RfAnt_Ov_LLRR_AllSrc_7mm.pdf No0154_o_7mm.pdf c202b_7mm_Ov.antrep	<p>3mm: participated in 100% scans, fringes in 31% baselines*||pols, mean SNR 25.</p> <p>7mm: participated in 100% scans, fringes in 72% baselines*||pols, mean SNR 187.</p>
VLBA: Pt	p	yes	c202b_FRINGE_RfAnt_Pt_LLRR_AllSrc_3mm.pdf No0113_p_3mm.pdf c202b_Pt_3mm.antrep c202b_FRINGE_RfAnt_Pt_LLRR_AllSrc_7mm.pdf No0154_p_7mm.pdf c202b_7mm_Pt.antrep	<p>3mm: participated in 100% scans, fringes in 20% baselines*||pols, mean SNR 20.</p> <p>7mm: participated in 100% scans, fringes in 66% baselines*||pols, mean SNR 120.</p> <p>lots of technical problems, see logs</p>
VLBA: Hn	h	yes	c202b_FRINGE_RfAnt_Hn_LLRR_AllSrc_7mm.pdf No0154_h_7mm.pdf c202b_7mm_Hn.antrep	<p>Participated in 100% scans (7mm only), fringes in 71% baselines*||pols, mean SNR 106.</p>
VLBA: Sc	c	yes	c202b_FRINGE_RfAnt_Sc_LLRR_AllSrc_7mm.pdf No0154_c_7mm.pdf c202b_7mm_Sc.antrep	<p>Participated in 100% scans (7mm only), fringes in 70% baselines*||pols, mean SNR 94.</p>

Notes

Post-Correlation checks

Residuals

Ef as reference (3mm):



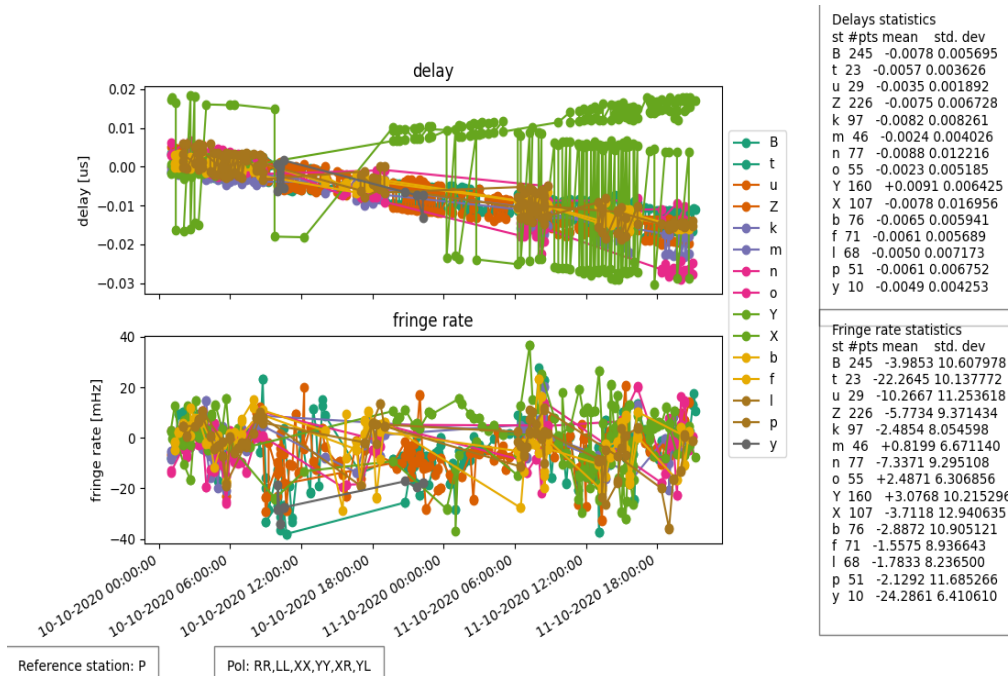
Delays statistics

st	#pts	mean	std. dev
X	135	-0.0014	0.013681
P	245	-0.0078	0.005695
Y	156	+0.0013	0.004143
Z	131	+0.0007	0.001539
y	25	+0.0013	0.005470
u	30	-0.0037	0.002589
l	52	-0.0002	0.001350
f	75	+0.0001	0.001605
b	45	-0.0009	0.002748
m	21	+0.0025	0.001670
k	48	+0.0039	0.003559
o	40	-0.0000	0.001664
n	15	+0.0043	0.007591
t	27	+0.0003	0.001308
p	09	+0.0026	0.003850

Fringe rate statistics

st	#pts	mean	std. dev
X	135	+0.0332	9.734609
P	245	-3.9853	10.607978
Y	156	+0.7109	9.432237
Z	131	+2.8266	8.172636
y	25	+7.9615	8.154362
u	30	+2.5691	11.457310
l	52	+3.6049	7.577759
f	75	+2.5841	6.381321
b	45	-4.2510	7.757928
m	21	+0.8034	3.702790
k	48	+4.8970	6.628835
o	40	+0.0852	5.675450
n	15	+12.3735	9.101031
t	27	+11.5364	4.975818
p	09	+1.5658	7.097256

Pv as reference (3mm):



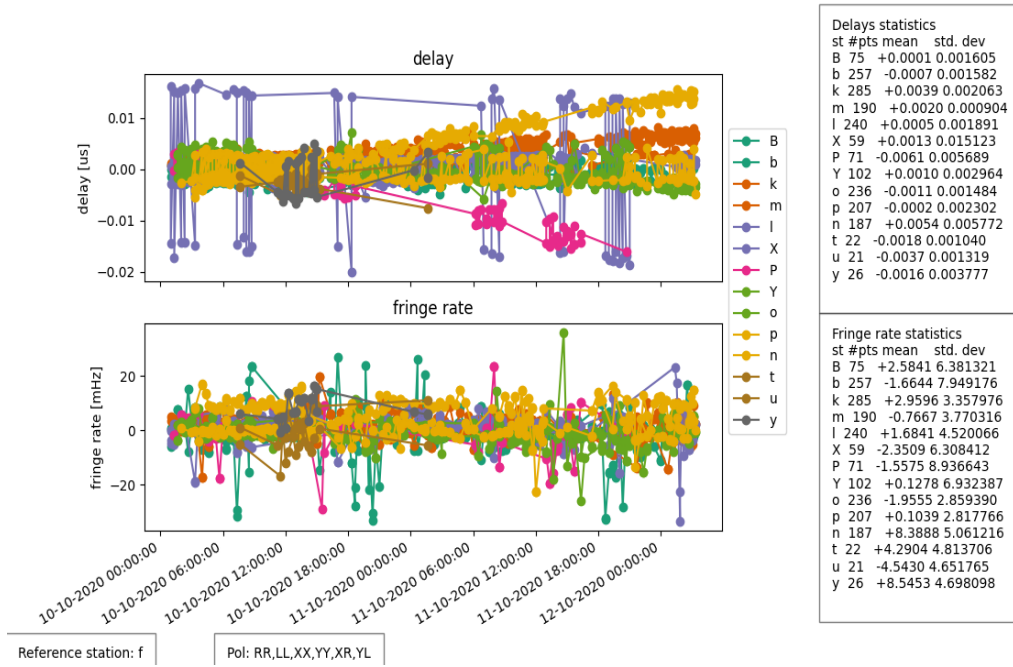
Delays statistics

st	#pts	mean	std. dev
B	245	-0.0078	0.005695
t	23	-0.0057	0.003626
u	29	-0.0035	0.001892
Z	226	-0.0075	0.006728
k	97	-0.0082	0.008261
m	46	-0.0024	0.004026
n	77	-0.0088	0.012216
o	55	-0.0023	0.005185
Y	160	+0.0091	0.006425
X	107	-0.0078	0.016956
b	76	-0.0065	0.005941
f	71	-0.0061	0.005689
l	68	-0.0050	0.007173
p	51	-0.0061	0.006752
y	10	-0.0049	0.004253

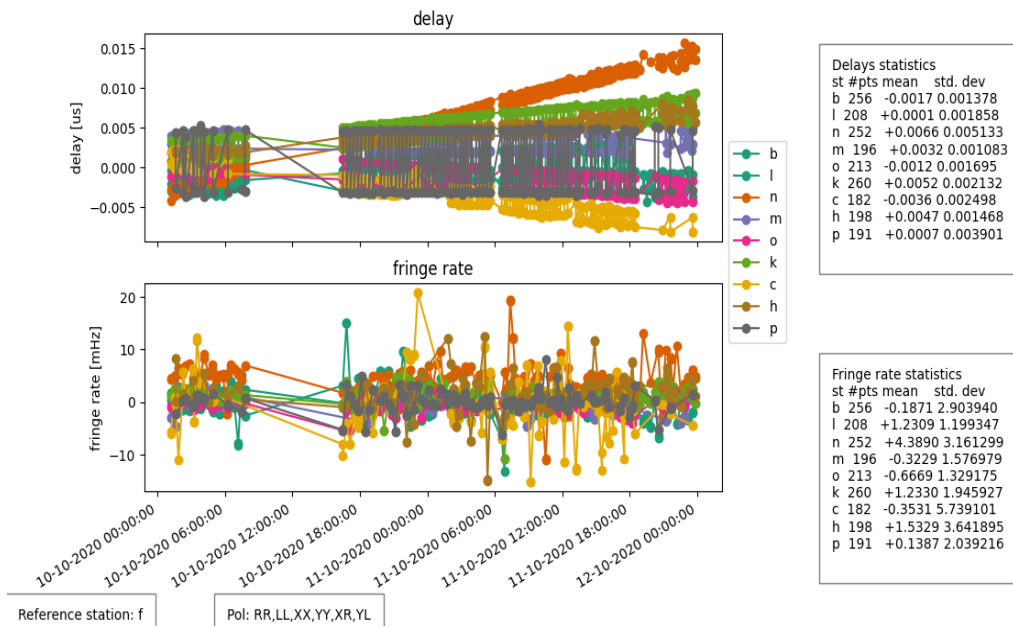
Fringe rate statistics

st	#pts	mean	std. dev
B	245	-3.9853	10.607978
t	23	-22.2645	10.137772
u	29	-10.2667	11.253618
Z	226	-5.7734	9.371434
k	97	-2.4854	8.054598
m	46	+0.8199	6.671140
n	77	-7.3371	9.295108
o	55	+2.4871	6.306856
Y	160	+3.0768	10.215296
X	107	-3.7118	12.940635
b	76	-2.8872	10.905121
f	71	-1.5575	8.936643
l	68	-1.7833	8.236500
p	51	-2.1292	11.685266
y	10	-24.2861	6.410610

Fd as reference (3mm):



Fd as reference (7mm):



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

mk017b.fits (3mm):

				FD	NL	OV	PT	BR	KP	MK	LA	EF	ON	YS	PV	MH
c202b_151	No0202	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_153	No0205	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_155	No0208	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_157	No0211	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_158	No0212	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_160	No0215	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_162	No0218	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_163	No0219	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_165	No0222	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_167	No0225	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_169	No0228	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_171	No0231	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_173	No0234	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_175	No0237	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_177	No0240	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_179	No0243	0229+200	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	o
c202b_180	No0245	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_182	No0248	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_184	No0251	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_186	No0254	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_188	No0257	0420-014	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_190	No0260	0506+056	3mm_ddc	.	.	.	.	.	.	.	.	o	o	o	o	o
c202b_192	No0263	0229+200	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	o
c202b_193	No0265	0420-014	3mm_ddc	o	o	.	o	.	o	.	o	o	o	o	o	.
c202b_194	No0266	0506+056	3mm_ddc	o	o	.	o	.	.	.	o	o	o	o	o	o
c202b_195	No0267	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	o
c202b_196	No0269	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	o
c202b_197	No0271	3C84	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o
c202b_198	No0273	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	.
c202b_199	No0275	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	.
c202b_200	No0277	3C84	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o
c202b_201	No0279	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	.
c202b_202	No0281	0506+056	3mm_ddc	o	o	o	o	o	o	.	o	o	o	o	o	.
c202b_203	No0283	3C84	3mm_ddc	o	o	o	o	o	o	o	o	o	o	o	o	o
c202b_204	No0285	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	o	o	.
c202b_206	No0288	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_207	No0289	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_210	No0293	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_211	No0294	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_214	No0298	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_215	No0299	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_218	No0304	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_219	No0305	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_221	No0308	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_222	No0309	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_225	No0313	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.

c202b_226	No0314	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_229	No0318	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_230	No0319	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_233	No0323	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_234	No0324	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_237	No0329	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_238	No0330	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_241	No0334	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_242	No0335	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_245	No0339	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_246	No0340	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_249	No0345	0420-014	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.
c202b_250	No0346	0506+056	3mm_ddc	o	o	o	o	o	o	o	o	.	.	.	.	.

mk017b.fits (7mm):

				FD	NL	OV	PT	BR	KP	MK	LA	HN	SC
c202b_065	No0244	0229+200	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_072	No0264	0229+200	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_073	No0268	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_074	No0270	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_075	No0272	3C84	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_076	No0274	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_077	No0276	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_078	No0278	3C84	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_079	No0280	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_080	No0282	0506+056	7mm_ddc	o	o	o	o	o	o	.	o	o	o
c202b_081	No0284	3C84	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_082	No0286	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_083	No0290	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_084	No0295	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_085	No0300	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_086	No0301	0420-014	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_087	No0306	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_088	No0310	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_089	No0315	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_090	No0320	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_091	No0325	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_092	No0326	0420-014	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_093	No0331	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_094	No0336	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_095	No0341	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_096	No0342	0420-014	7mm_ddc	o	o	o	o	o	o	o	o	o	o
c202b_097	No0347	0506+056	7mm_ddc	o	o	o	o	o	o	o	o	o	o