

C181C Correlation Report

General information

- Includes [MM013B](#) and [ML005](#).
- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/apr18/feedback_apr18.asc
- GBT calibration info (Tsys files for download) and other related information for this session can be found here: <https://safe.nrao.edu/wiki/bin/view/GB/Observing/WbandVLBACal/C181>
- *Special processing* was applied to all data in order to correlate mismatching frequency setups of ALMA and other GMVA stations. See details [here](#).

Current Status

Correlation finished, data **released** on 10/12/2018.

A **second** data release, with a problem, spotted in the original release, corrected, was made on 31/01/2019.

A **third** data release, rerunning PolConvert with the latest (25.06.2019) ALMA QA2 release, was made on 26/09/2019.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	yes	<p>Fringe overview of all baselines including Ef in LL (left for each baseline) and RR (right for each baseline). Legend: white - scheduled, but no data, blue - no fringe, red-green - fringes of different quality. D -- fourfit error, in this case due to mixing upper and lower subbands in the KVN compatibility mode, no real problem with the data.</p> <p>Scans 30, 33, 77-78, 80, 82-83, 92 are missing from all diagnostic plots due to a difx2mark4 error. They are present in the final correlation products.</p> <p>c181c FRINGE RfAnt_Ef_LLRR_AllSrc.pdf</p> <p>Examples of fourfit fringe plots:</p> <p>c181c_No0075_3C279_AB_LL.pdf, c181c_No0075_3C279_AB_LR.pdf, c181c_No0075_3C279_AB_RL.pdf, c181c_No0075_3C279_AB_RR.pdf</p> <p>c181c_No0032_3C111_Bg_RR.pdf, no LL, LR or RL fringe</p> <p>Same for all antennas below unless otherwise noted.</p>	<p>in the plots Ef is "missing" all the baselines except to ALMA, GLT and KVN. This is due to a fourfit error, the baselines are missing only from some of the diagnostic plots, but are present in the final correlation products.</p>
On	X	yes	<p>c181c FRINGE RfAnt_On_LLRR_AllSrc.pdf</p> <p>c181c_No0075_3C279_AX_LL.pdf, c181c_No0075_3C279_AX_LR.pdf, c181c_No0075_3C279_AX_RL.pdf, c181c_No0075_3C279_AX_RR.pdf</p> <p>c181c_No0032_3C111_gX_LL.pdf, c181c_No0032_3C111_gX_LR.pdf, no RL fringe, c181c_No0032_3C111_gX_RR.pdf</p>	<p>in the plots On is "missing" all the baselines except to ALMA, GLT and KVN. This is due to a fourfit error, the</p>

Station	Code	Fringes	Plots	Comments
			<p>no LL fringe, c181c_No0106_0716+714_tX_LR.pdf, c181c_No0106_0716+714_tX_RL.pdf, c181c_No0106_0716+714_tX_RR.pdf</p>	<p>baselines are missing only from some of the diagnostic plots, but are present in the final correlation products.</p>
Ys	Y	yes	<p>c181c_FRINGE_RfAnt_Ys_LLRR_AllSrc.pdf c181c_No0075_3C279_AY_LL.pdf, c181c_No0075_3C279_AY_LR.pdf, c181c_No0075_3C279_AY_RL.pdf, c181c_No0075_3C279_AY_RR.pdf</p>	<p>As usual, Ys observed LCP only, but it was also recorded as fake RCP, that's why there are common Ys "right" to other antenna's left fringes.</p> <p>in the plots Ys is "missing" all the baselines except to ALMA, GLT and KVN. This is due to a fourfit error, the baselines are missing only from some of the diagnostic plots, but are present in the final correlation products.</p>
Mh	Z	yes	<p>c181c_FRINGE_RfAnt_Mh_LLRR_AllSrc.pdf</p>	<p>in the plots Mh is "missing" all the baselines except to</p>

Station	Code	Fringes	Plots	Comments
			<p>c181c No0071 3C273 AZ LL.pdf, c181c No0071 3C273 AZ LR.pdf, c181c No0071 3C273 AZ RL.pdf, c181c No0071 3C273 AZ RR.pdf</p>	<p>ALMA, GLT and KVN. This is due to a fourfit error, the baselines are missing only from some of the diagnostic plots, but are present in the final correlation products.</p>
Pv	P	yes	<p>c181c FRINGE RfAnt Pv LLRR AllSrc.pdf</p> <p>c181c No0032 3C111 gP LL.pdf, c181c No0032 3C111 gP LR.pdf, c181c No0032 3C111 gP RL.pdf, c181c No0032 3C111 gP RR.pdf</p> <p>c181c No0084 3C273 AP LL.pdf, c181c No0084 3C273 AP LR.pdf, c181c No0084 3C273 AP RL.pdf, c181c No0084 3C273 AP RR.pdf</p> <p>c181c No0084 3C273 gP LL.pdf, c181c No0084 3C273 gP LR.pdf, c181c No0084 3C273 gP RL.pdf, c181c No0084 3C273 gP RR.pdf</p> <p>c181c No0159 0716+714 tP LL.pdf, c181c No0159 0716+714 tP LR.pdf, c181c No0159 0716+714 tP RL.pdf, c181c No0159 0716+714 tP RR.pdf</p> <p>c181c No0140 0716+714 uP LL.pdf, c181c No0140 0716+714 uP LR.pdf, c181c No0140 0716+714 uP RL.pdf, c181c No0140 0716+714 uP RR.pdf</p> <p>c181c No0140 0716+714 yP LL.pdf, c181c No0140 0716+714 yP LR.pdf, c181c No0140 0716+714 yP RL.pdf, c181c No0140 0716+714 yP RR.pdf</p>	<p>in the plots Pv is "missing" all the baselines except to ALMA, GLT and KVN. This is due to a fourfit error, the baselines are missing only from some of the diagnostic plots, but are present in the final correlation products.</p>
VLBA: Br	b	yes	<p>c181c FRINGE RfAnt Br LLRR AllSrc.pdf</p> <p>c181c No0084 3C273 Ab LL.pdf, c181c No0084 3C273 Ab LR.pdf, c181c No0084 3C273 Ab RL.pdf, c181c No0084 3C273 Ab RR.pdf</p> <p>c181c No0187 CTA102 bf LL.pdf, c181c No0187 CTA102 bf LR.pdf, c181c No0187 CTA102 bf RL.pdf, c181c No0187 CTA102 bf RR.pdf</p> <p>c181c No0187 CTA102 bk LL.pdf, c181c No0187 CTA102 bk LR.pdf, c181c No0187 CTA102 bk RL.pdf, c181c No0187 CTA102 bk RR.pdf</p> <p>c181c No0187 CTA102 bl LL.pdf, c181c No0187 CTA102 bl LR.pdf, c181c No0187 CTA102 bl RL.pdf, c181c No0187 CTA102 bl RR.pdf</p>	<p>Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.</p>

Station	Code	Fringes	Plots	Comments
			c181c No0187 CTA102 bm LL.pdf , c181c No0187 CTA102 bm RR.pdf , no LR or RL fringe c181c No0187 CTA102 bn LL.pdf , c181c No0187 CTA102 bn RR.pdf , no LR or RL fringe c181c No0187 CTA102 bo LL.pdf , no LR fringe, c181c No0187 CTA102 bo RL.pdf , c181c No0187 CTA102 bo RR.pdf c181c No0187 CTA102 bp LL.pdf , c181c No0187 CTA102 bp LR.pdf , c181c No0187 CTA102 bp RL.pdf , c181c No0187 CTA102 bp RR.pdf	
VLBA: Fd	f	yes	c181c FRINGE RfAnt Fd LLRR AllSrc.pdf c181c No0075 3C279 Af LL.pdf , c181c No0075 3C279 Af LR.pdf , c181c No0075 3C279 Af RL.pdf , c181c No0075 3C279 Af RR.pdf c181c No0187 CTA102 bf LL.pdf , c181c No0187 CTA102 bf LR.pdf , c181c No0187 CTA102 bf RL.pdf , c181c No0187 CTA102 bf RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
VLBA: Kp	k	yes	c181c FRINGE RfAnt Kp LLRR AllSrc.pdf c181c No0075 3C279 Ak LL.pdf , c181c No0075 3C279 Ak LR.pdf , c181c No0075 3C279 Ak RL.pdf , c181c No0075 3C279 Ak RR.pdf c181c No0187 CTA102 bk LL.pdf , c181c No0187 CTA102 bk LR.pdf , c181c No0187 CTA102 bk RL.pdf , c181c No0187 CTA102 bk RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
VLBA: La	l	yes	c181c FRINGE RfAnt La LLRR AllSrc.pdf c181c No0075 3C279 Al LL.pdf , c181c No0075 3C279 Al LR.pdf , c181c No0075 3C279 Al RL.pdf , c181c No0075 3C279 Al RR.pdf c181c No0187 CTA102 bl LL.pdf , c181c No0187 CTA102 bl LR.pdf , c181c No0187 CTA102 bl RL.pdf , c181c No0187 CTA102 bl RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
VLBA: Mk	m	yes	c181c FRINGE RfAnt Mk LLRR AllSrc.pdf c181c No0103 3C279 Am LL.pdf , c181c No0103 3C279 Am LR.pdf , c181c No0103 3C279 Am RL.pdf , c181c No0103 3C279 Am RR.pdf	Baselines to EVN stations are "missing" due to a fourfit

Station	Code	Fringes	Plots	Comments
			c181c No0187 CTA102 bm LL.pdf , c181c No0187 CTA102 bm RR.pdf , no LR or RL fringe	error. They are present in the final correlation products. Taken out for several scans because of USNO observing.
VLBA: Nl	n	yes	c181c FRINGE RfAnt Nl LLRR AllSrc.pdf c181c No0075 3C279 An LL.pdf , c181c No0075 3C279 An LR.pdf , c181c No0075 3C279 An RL.pdf , c181c No0075 3C279 An RR.pdf c181c No0187 CTA102 bn LL.pdf , c181c No0187 CTA102 bn RR.pdf , no LR or RL fringe	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
VLBA: Ov	o	yes	c181c FRINGE RfAnt Ov LLRR AllSrc.pdf c181c No0103 3C279 Ao LL.pdf , c181c No0103 3C279 Ao LR.pdf , c181c No0103 3C279 Ao RL.pdf , c181c No0103 3C279 Ao RR.pdf c181c No0187 CTA102 bo LL.pdf , no LR fringe, c181c No0187 CTA102 bo RL.pdf , c181c No0187 CTA102 bo RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
VLBA: Pt	p	yes	c181c FRINGE RfAnt Pt LLRR AllSrc.pdf c181c No0075 3C279 Ap LL.pdf , c181c No0075 3C279 Ap LR.pdf , c181c No0075 3C279 Ap RL.pdf , c181c No0075 3C279 Ap RR.pdf c181c No0187 CTA102 bp LL.pdf , c181c No0187 CTA102 bp LR.pdf , c181c No0187 CTA102 bp RL.pdf , c181c No0187 CTA102 bp RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products. Taken out for several scans because of

Station	Code	Fringes	Plots	Comments
				USNO observing.
GBT: Gb	G	yes	c181c FRINGE RfAnt Gb LLRR AllSrc.pdf c181c No0075 3C279 AG LL.pdf , c181c No0075 3C279 AG LR.pdf , c181c No0075 3C279 AG RL.pdf , c181c No0075 3C279 AG RR.pdf	Baselines to EVN stations are "missing" due to a fourfit error. They are present in the final correlation products.
GLT: Gl	g	yes	c181c FRINGE RfAnt Gl LLRR AllSrc.pdf c181c No0071 3C273 Ag LL.pdf , c181c No0071 3C273 Ag LR.pdf , c181c No0071 3C273 Ag RL.pdf , c181c No0071 3C273 Ag RR.pdf c181c No0084 3C273 gP LL.pdf , c181c No0084 3C273 gP LR.pdf , c181c No0084 3C273 gP RL.pdf , c181c No0084 3C273 gP RR.pdf c181c No0032 3C111 Bg RR.pdf , no LL, LR or RL fringe c181c No0032 3C111 gP LL.pdf , c181c No0032 3C111 gP LR.pdf , c181c No0032 3C111 gP RL.pdf , c181c No0032 3C111 gP RR.pdf c181c No0032 3C111 gX LL.pdf , c181c No0032 3C111 gX LR.pdf , no RL fringe, c181c No0032 3C111 gX RR.pdf -----	Data analysis has shown that GLT recorded in unknown polarization instead of circular (most probably unknown elliptic). At this moment IT SHOULD NOT BE USED FOR ANY POLARIMETRY and in general dealt with very carefully.
ALMA: Aa	A	yes	c181c FRINGE RfAnt Aa LLRR AllSrc.pdf c181c No0071 3C273 Ag LL.pdf , c181c No0071 3C273 Ag LR.pdf , c181c No0071 3C273 Ag RL.pdf , c181c No0071 3C273 Ag RR.pdf c181c No0071 3C273 AZ LL.pdf , c181c No0071 3C273 AZ LR.pdf , c181c No0071 3C273 AZ RL.pdf , c181c No0071 3C273 AZ RR.pdf c181c No0075 3C279 AB LL.pdf , c181c No0075 3C279 AB LR.pdf , c181c No0075 3C279 AB RL.pdf , c181c No0075 3C279 AB RR.pdf c181c No0075 3C279 Af LL.pdf , c181c No0075 3C279 Af LR.pdf , c181c No0075 3C279 Af RL.pdf , c181c No0075 3C279 Af RR.pdf	Observed in linear polarization, converted to circular polarization in post- correlation uning PolConvert. For technical reasons the atmospheric

Station	Code	Fringes	Plots	Comments
			<p>c181c No0075 3C279 AG LL.pdf, c181c No0075 3C279 AG LR.pdf, c181c No0075 3C279 AG RL.pdf, c181c No0075 3C279 AG RR.pdf</p> <p>c181c No0075 3C279 Ak LL.pdf, c181c No0075 3C279 Ak LR.pdf, c181c No0075 3C279 Ak RL.pdf, c181c No0075 3C279 Ak RR.pdf</p> <p>c181c No0075 3C279 Al LL.pdf, c181c No0075 3C279 Al LR.pdf, c181c No0075 3C279 Al RL.pdf, c181c No0075 3C279 Al RR.pdf</p> <p>c181c No0075 3C279 An LL.pdf, c181c No0075 3C279 An LR.pdf, c181c No0075 3C279 An RL.pdf, c181c No0075 3C279 An RR.pdf</p> <p>c181c No0075 3C279 Ap LL.pdf, c181c No0075 3C279 Ap LR.pdf, c181c No0075 3C279 Ap RL.pdf, c181c No0075 3C279 Ap RR.pdf</p> <p>c181c No0075 3C279 AX LL.pdf, c181c No0075 3C279 AX LR.pdf, c181c No0075 3C279 AX RL.pdf, c181c No0075 3C279 AX RR.pdf</p> <p>c181c No0075 3C279 AY LL.pdf, c181c No0075 3C279 AY LR.pdf, c181c No0075 3C279 AY RL.pdf, c181c No0075 3C279 AY RR.pdf</p> <p>c181c No0084 3C273 Ab LL.pdf, c181c No0084 3C273 Ab LR.pdf, c181c No0084 3C273 Ab RL.pdf, c181c No0084 3C273 Ab RR.pdf</p> <p>c181c No0103 3C279 Am LL.pdf, c181c No0103 3C279 Am LR.pdf, c181c No0103 3C279 Am RL.pdf, c181c No0103 3C279 Am RR.pdf</p> <p>c181c No0103 3C279 Ao LL.pdf, c181c No0103 3C279 Ao LR.pdf, c181c No0103 3C279 Ao RL.pdf, c181c No0103 3C279 Ao RR.pdf</p> <p>c181c No0084 3C273 AP LL.pdf, c181c No0084 3C273 AP LR.pdf, c181c No0084 3C273 AP RL.pdf, c181c No0084 3C273 AP RR.pdf</p>	<p>correction was applied twice -- both in original ALMA data and during the correlation. Although a special procedure was developed to compensate for this, we found that its application leads to other difficulties, in particular to abnormally high fringe rate jumps, so in the final production run the double atmospheric correction was left as is.</p>
KVN: Kt	t	yes	<p>c181c FRINGE RfAnt Kt LLRR AllSrc.pdf</p> <p>no LL fringe, c181c No0106 0716+714 tX LR.pdf, c181c No0106 0716+714 tX RL.pdf, c181c No0106 0716+714 tX RR.pdf</p> <p>c181c No0159 0716+714 tP LL.pdf, c181c No0159 0716+714 tP LR.pdf, c181c No0159 0716+714 tP RL.pdf, c181c No0159 0716+714 tP RR.pdf</p> <p>c181c No0140 0716+714 tu LR.pdf, c181c No0140 0716+714 tu LR.pdf, c181c No0140 0716+714 tu RL.pdf, c181c No0140 0716+714 tu RR.pdf</p> <p>c181c No0140 0716+714 ty LL.pdf, c181c No0140 0716+714 ty LR.pdf, c181c No0140 0716+714 ty RL.pdf, c181c No0140 0716+714 ty RR.pdf</p>	
KVN: Ku	u	yes	<p>c181c FRINGE RfAnt Ku LLRR AllSrc.pdf</p>	

Station	Code	Fringes	Plots	Comments
			c181c No0140 0716+714 tu LR.pdf , c181c No0140 0716+714 tu LR.pdf , c181c No0140 0716+714 tu RL.pdf , c181c No0140 0716+714 tu RR.pdf c181c No0140 0716+714 uP LL.pdf , c181c No0140 0716+714 uP LR.pdf , c181c No0140 0716+714 uP RL.pdf , c181c No0140 0716+714 uP RR.pdf c181c No0140 0716+714 uy LL.pdf , c181c No0140 0716+714 uy LR.pdf , c181c No0140 0716+714 uy RL.pdf , c181c No0140 0716+714 uy RR.pdf	
KVN: Ky	y	yes	c181c FRINGE RfAnt_Ky_LLRR_AllSrc.pdf c181c No0140 0716+714 ty LL.pdf , c181c No0140 0716+714 ty LR.pdf , c181c No0140 0716+714 ty RL.pdf , c181c No0140 0716+714 ty RR.pdf c181c No0140 0716+714 uy LL.pdf , c181c No0140 0716+714 uy LR.pdf , c181c No0140 0716+714 uy RL.pdf , c181c No0140 0716+714 uy RR.pdf c181c No0140 0716+714 yP LL.pdf , c181c No0140 0716+714 yP LR.pdf , c181c No0140 0716+714 yP RL.pdf , c181c No0140 0716+714 yP RR.pdf	

Notes

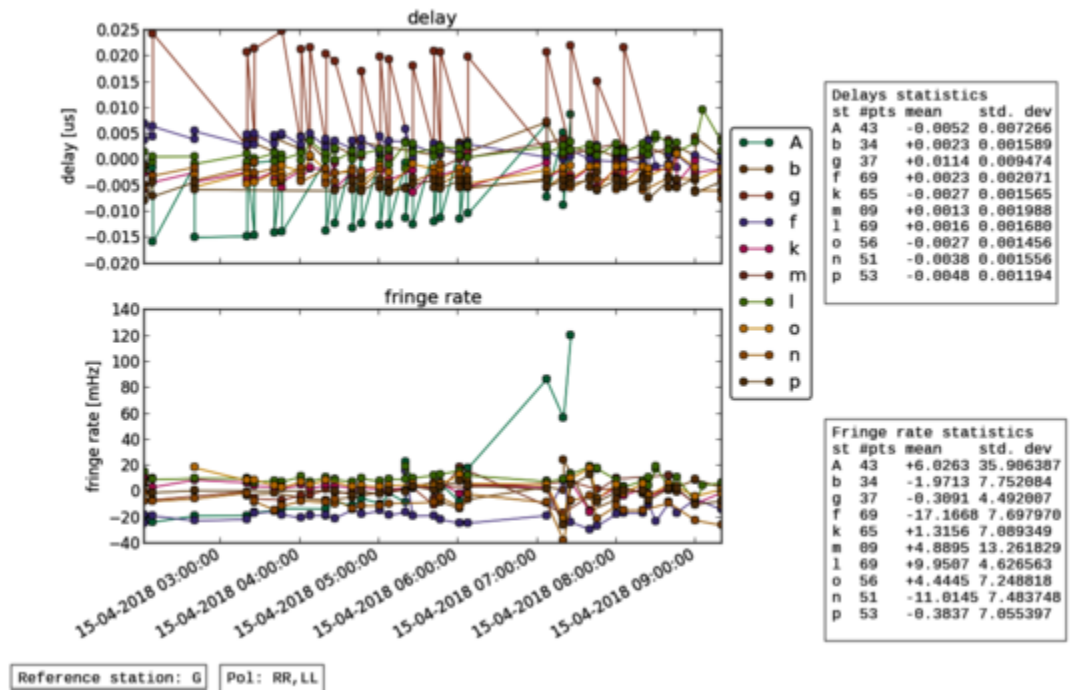
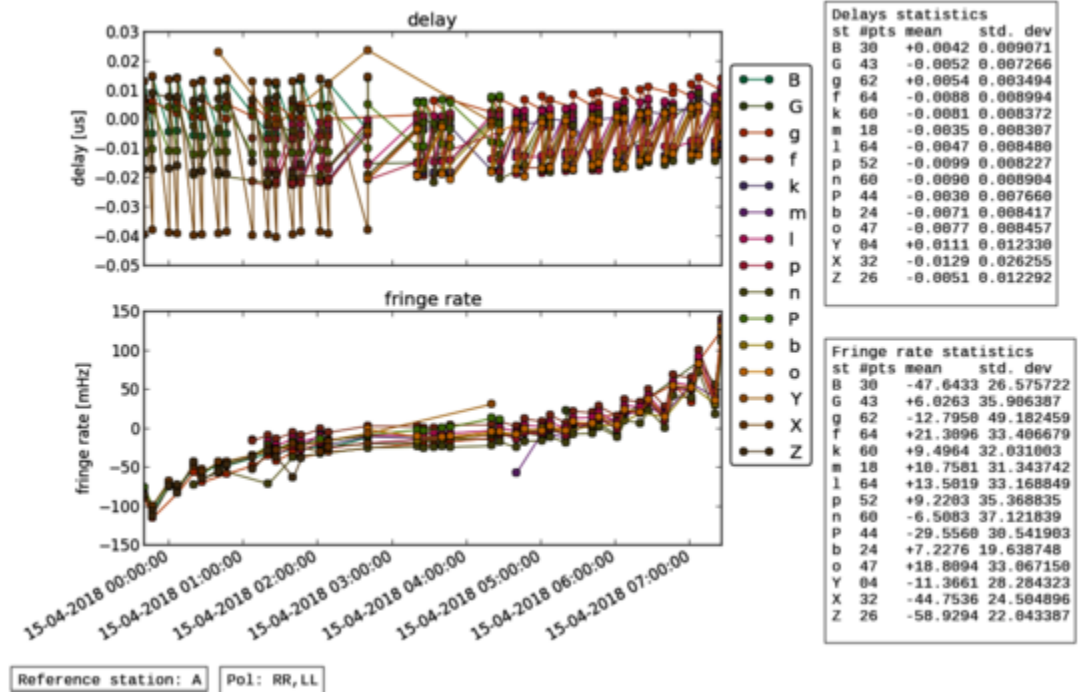
There were problems with some diagnostic plots of this experiment due to yet poorly understood errors of fourfit and other HOPS components. But this does not change the quality of the final correlation products. *(These issues were **fixed** in the second data release of 31/01/2019)*

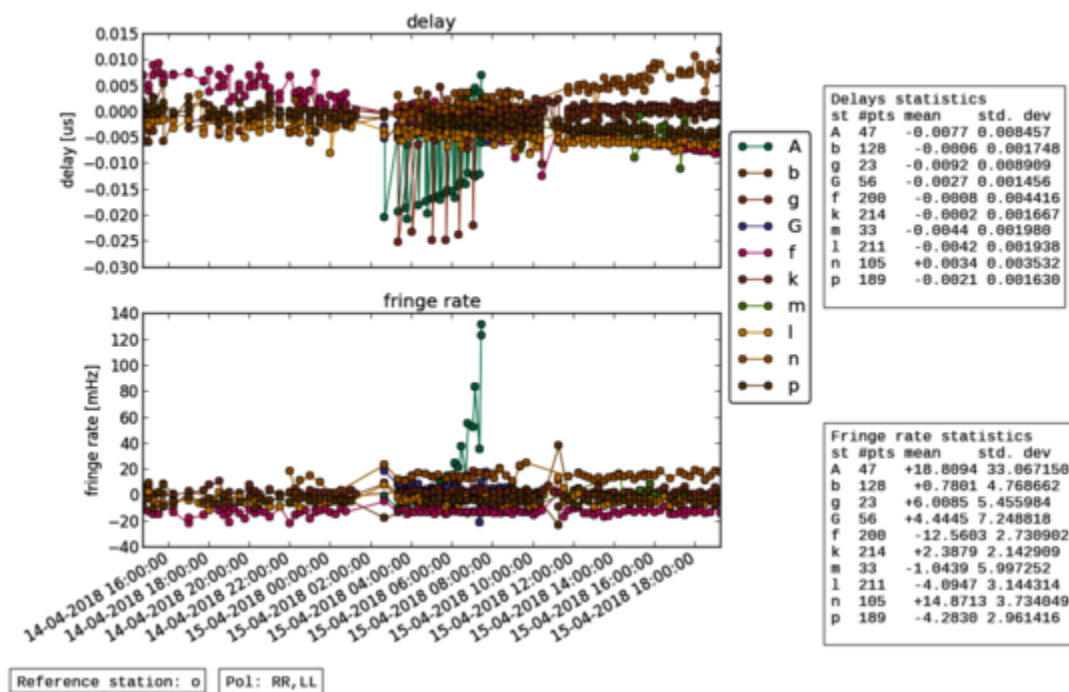
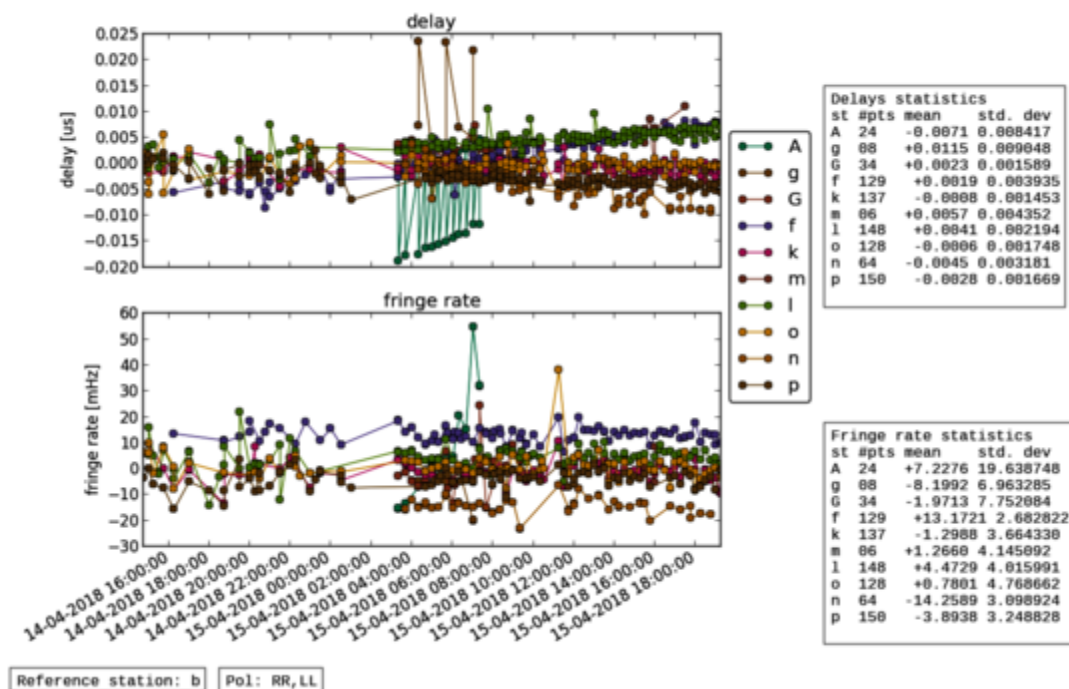
GLT participated in this session for the first time as a test, and serious problems were detected when analysing its data. Be very careful when using them.

For technical reasons the correlation output is saved as 8 different fits files, see their content below in the pclist section.

Post-Correlation checks

Residuals





FITS completeness (pclist)

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

c181c_setup1.fits:

			EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT
c181c_001D2D	No0001	3C84	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_002D2D	No0002	3C84	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_023D2D	No0023	3C111	3mm_RDBE	o	o	.	.	o	.	.	.	.	.	.	x	o	.	.	.	.	.	.
c181c_025D2D	No0025	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_028D2D	No0028	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_031D2D	No0031	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_034D2D	No0034	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_037D2D	No0037	3C84	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_040D2D	No0040	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_043D2D	No0043	3C111	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_046D2D	No0046	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_047D2D	No0047	3C111	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_050D2D	No0050	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_053D2D	No0053	3C111	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_056D2D	No0056	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_057D2D	No0057	3C111	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_060D2D	No0060	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_063D2D	No0063	3C111	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_066D2D	No0066	3C120	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	.	.	.	.
c181c_067D2D	No0067	3C120	3mm_RDBE	.	.	.	.	.	.	.	.	o	o	o	.	o	.	.	.	.	.	.
c181c_072D2D	No0073	M87	3mm_RDBE	.	o	.	.	o	o	o	o	.	o	.	o	.	.	.	.	.	.	.
c181c_090D2D	No0095	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	o	o	o	.	.	.
c181c_091D2D	No0096	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	93	93	o	.	.	.
c181c_093D2D	No0099	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	91	91	o	.	.	.
c181c_094D2D	No0100	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_097D2D	No0103	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	o	o	o	.	.	.
c181c_098D2D	No0104	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_100D2D	No0107	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_101D2D	No0108	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_103D2D	No0111	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	o	o	o	.	.	.
c181c_104D2D	No0112	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_107D2D	No0115	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_108D2D	No0116	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_110D2D	No0118	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	o	o	o	.	.	.
c181c_111D2D	No0119	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	94	94	o	.	.	.
c181c_113D2D	No0122	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_114D2D	No0123	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	94	94	o	.	.	.
c181c_117D2D	No0126	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	o	o	o	.	.	.
c181c_118D2D	No0127	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	.	.	.
c181c_120D2D	No0130	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	o	.	.	.
c181c_121D2D	No0131	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	o	.	.	.
c181c_123D2D	No0134	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	o	.	.	.
c181c_124D2D	No0135	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	o	.	.	.
c181c_127D2D	No0138	3C273	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	o	.	.	.
c181c_129D2D	No0139	M87	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	o	.	.	.
c181c_131D2D	No0142	3C279	3mm_RDBE	.	.	.	.	.	o	o	o	o	o	o	.	o	.	.	o	.	.	.

c181c_009D2D	No0009	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_010D2D	No0010	3C84	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_011D2D	No0011	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_012D2D	No0012	3C120	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	x	.	.	.	.	.
c181c_013D2D	No0013	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_014D2D	No0014	3C120	3mm_RDBE	o	o	o	33	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_015D2D	No0015	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_016D2D	No0016	3C120	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_017D2D	No0017	3C84	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.
c181c_018D2D	No0018	3C120	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_019D2D	No0019	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.
c181c_020D2D	No0020	3C120	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.
c181c_021D2D	No0021	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.
c181c_022D2D	No0022	3C120	3mm_RDBE	.	.	o	o	.	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.
c181c_024D2D	No0024	3C84	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.
c181c_026D2D	No0026	3C111	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	x	.	.	.	.	.	.
c181c_027D2D	No0027	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x	o	.	.	.	.	.
c181c_029D2D	No0029	3C111	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	x	.	.	.	.	.	.
c181c_030D2D	No0030	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.
c181c_032D2D	No0032	3C111	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	o	.	.	.	.	.	.
c181c_033D2D	No0033	3C111	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.

c181c_setup4.fits:

				EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT	
c181c_035D2D	No0035	3C273	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_036D2D	No0036	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	.	.	.	.	.	.	.
c181c_038D2D	No0038	3C279	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_039D2D	No0039	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_041D2D	No0041	3C273	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_042D2D	No0042	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	.	.	.	.	.	.	.
c181c_044D2D	No0044	3C273	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_045D2D	No0045	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	.	.	.	.	.	.	.
c181c_048D2D	No0048	3C279	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c181c_049D2D	No0049	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	.	.	.	.	.	.	.
c181c_051D2D	No0051	3C273	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_052D2D	No0052	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	94	94	.	.	.	.	.
c181c_054D2D	No0054	3C279	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	.	.	.	.	.
c181c_055D2D	No0055	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_058D2D	No0058	3C273	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_059D2D	No0059	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_061D2D	No0061	3C279	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	o	o	.	.	.	.	.
c181c_062D2D	No0062	M87	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	o	.	94	94	.	.	.	.	.
c181c_064D2D	No0064	3C273	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	x	x	.	.	.	.	.
c181c_065D2D	No0065	M87	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_068D2D	No0068	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_069D2D	No0069	M87	3mm_RDBE	o	o	o	o	o	o	o	o	.	.	.	.	o	.	o	o	.	.	.	.	.
c181c_070D2D	No0071	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	.	o	.	o	.	o	o	o	.	.	.	.	.
c181c_071D2D	No0072	M87	3mm_RDBE	o	o	o	o	o	o	o	o	.	o	.	o	.	94	94	o	.	.	.	.	.

c181c_073D2D	No0075	3C279	3mm_RDBE	o	o	o	o	.	o	o	o	o	.	o	.	.	.	o	o	o	.	.	.
c181c_074D2D	No0076	M87	3mm_RDBE	o	o	o	o	.	o	o	o	o	.	o	.	o	.	o	o	o	.	.	.
c181c_075D2D	No0077	3C273	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.	o	o	o	.	.
c181c_076D2D	No0078	M87	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	o	.	o	o	o	.	.	.
c181c_077D2D	No0079	3C279	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	.	.	o	o	o	.	.	.
c181c_078D2D	No0080	M87	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	.	o	o	o	.	.	.	.
c181c_079D2D	No0082	3C273	3mm_RDBE	o	o	o	o	.	o	o	x	o	o	o	o	.	o	o	o	.	.	.	.
c181c_080D2D	No0083	M87	3mm_RDBE	o	o	o	o	.	o	o	x	o	o	o	o	.	o	o	o	.	.	.	.
c181c_081D2D	No0084	3C273	3mm_RDBE	o	.	o	o	.	o	o	x	o	o	o	o	.	o	o	o	.	.	.	.
c181c_082D2D	No0085	M87	3mm_RDBE	o	.	o	o	.	o	o	x	o	o	o	o	.	o	o	o	.	.	.	.
c181c_083D2D	No0086	M87	3mm_RDBE	.	.	.	o	.	o	o	x	o	o	o	o	.	o	o	.	.	.	.	.
c181c_084D2D	No0088	3C279	3mm_RDBE	.	.	o	o	.	o	o	x	o	o	o	.	.	o	o	o	.	.	.	.
c181c_085D2D	No0089	M87	3mm_RDBE	.	.	o	o	.	o	o	x	o	o	o	o	.	o	o	o	.	.	.	.
c181c_086D2D	No0091	3C273	3mm_RDBE	.	.	o	o	.	o	o	x	o	o	o	o	x	91	91	o	.	.	.	.
c181c_087D2D	No0092	M87	3mm_RDBE	.	.	o	o	.	o	o	x	o	o	o	o	x	x	x	o	.	.	.	.
c181c_088D2D	No0093	3C273	3mm_RDBE	.	.	o	o	.	o	o	x	o	o	o	o	x	o	o	o	.	.	.	.
c181c_089D2D	No0094	M87	3mm_RDBE	.	.	o	o	.	o	o	16	o	o	o	o	16	o	o	o	.	.	.	.
c181c_092D2D	No0097	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_095D2D	No0101	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_096D2D	No0102	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_099D2D	No0106	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_102D2D	No0109	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_105D2D	No0113	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_106D2D	No0114	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_109D2D	No0117	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_112D2D	No0120	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_115D2D	No0124	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_116D2D	No0125	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_119D2D	No0128	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_122D2D	No0132	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_125D2D	No0136	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o
c181c_126D2D	No0137	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	o	o	o	o

c181c_setup5.fits:

				EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT
c181c_130D2D	No0140	0716+714	3mm_RDBE	o	o	o	o	14	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_133D2D	No0144	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_136D2D	No0147	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_137D2D	No0148	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_140D2D	No0151	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	x	.	.	.	.	o	o	o
c181c_144D2D	No0155	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	x	.	.	.	.	o	o	o
c181c_148D2D	No0159	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	x	.	.	.	.	o	o	o
c181c_149D2D	No0160	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	x	.	.	.	.	o	o	o
c181c_153D2D	No0164	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	x	.	.	.	.	o	o	o

c181c_setup6.fits:

				EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT
c181c_154D2D	No0165	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c181c_156D2D	No0167	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.

c181c_setup7.fits:

				EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT
c181c_158D2D	No0169	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_159D2D	No0170	CTA102	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_160D2D	No0171	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.

c181c_setup8.fits:

				EF	ON	PV	YS	MH	NL	FD	PT	LA	OV	KP	BR	GL	MK	AA	AA	GB	KY	KU	KT
c181c_161D2D	No0172	CTA102	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_162D2D	No0173	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_163D2D	No0174	CTA102	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_164D2D	No0175	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_165D2D	No0176	CTA102	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_166D2D	No0177	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_167D2D	No0178	CTA102	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_168D2D	No0179	3C454.3	3mm_RDBE	o	o	o	o	o	o	o	o	o	o	o	o	x	.	.	.	.	.	.	.
c181c_169D2D	No0180	CTA102	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	x	o	.	.	.	.	.	.
c181c_170D2D	No0181	3C454.3	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	x	o	.	.	.	.	.	.
c181c_171D2D	No0182	CTA102	3mm_RDBE	.	.	o	o	.	o	o	o	o	o	o	o	x	o	.	.	.	.	.	.
c181c_172D2D	No0183	3C454.3	3mm_RDBE	o	o	o	o	.	o	o	o	o	o	o	o	x	o	.	.	.	.	.	.
c181c_175D2D	No0186	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_177D2D	No0188	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_179D2D	No0190	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_181D2D	No0192	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_183D2D	No0194	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_185D2D	No0196	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_187D2D	No0198	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_189D2D	No0200	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_191D2D	No0202	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_193D2D	No0204	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_195D2D	No0206	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_197D2D	No0208	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_199D2D	No0210	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	o	o	o
c181c_201D2D	No0212	0836+710	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	x	.	.	.	o	o	o
c181c_203D2D	No0214	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	x	.	.	.	o	o	o
c181c_205D2D	No0216	0716+714	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	x	.	.	.	o	o	o
c181c_207D2D	No0218	0954+658	3mm_RDBE	o	o	o	o	o	.	.	.	.	.	.	.	.	x	.	.	.	o	o	o