



ML006B

ML006B Correlation Report

General information

- A part of [C181A](#)
- no KVN participation in this subproject
- Targets: 3C273, 3C279
- 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 12/12/2018.

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 01/10/2019.

Fringes

Station	Code	Fringes	Plots	Cor
Ef	B	yes	<p>Fringe overview of all baselines (all of C181A) 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 209, 210, 213-214 are missing from all diagnostic plots due to a difx2mark4 error. They are present in the final correlation products.</p> <p>c181a_FRINGE_RfAnt_Ef_LLRR_AllSrc.pdf</p>	<p>In the pl "missing baselines ALMA c is due to error, the missing some of plots, bu in the fir products</p>

Station	Code	Fringes	Plots	Cor
			<p>Examples of fourfit fringe plots:</p> <p>c181a_No0199_3C273_AB_LL.pdf, c181a_No0199_3C273_AB_LR.pdf, c181a_No0199_3C273_AB_RL.pdf, c181a_No0199_3C273_AB_RR.pdf</p> <p>c181a_No0208_3C273_AB_LL.pdf, c181a_No0208_3C273_AB_LR.pdf, c181a_No0208_3C273_AB_RL.pdf, c181a_No0208_3C273_AB_RR.pdf</p> <p>Same for all antennas below unless otherwise noted.</p>	
On	X	yes	<p>c181a_FRINGE_RfAnt_On_LLRR_AllSrc.pdf</p> <p>c181a_No0208_3C273_AX_LL.pdf, c181a_No0208_3C273_AX_LR.pdf, c181a_No0208_3C273_AX_RL.pdf, c181a_No0208_3C273_AX_RR.pdf</p>	<p>In the pl "missing baselines ALMA o is due to error, the missing some of plots, bu in the fir products</p>
Ys	Y	yes	<p>c181a_FRINGE_RfAnt_Ys_LLRR_AllSrc.pdf</p> <p>c181a_No0208_3C273_AY_LL.pdf, c181a_No0208_3C273_AY_LR.pdf, c181a_No0208_3C273_AY_RL.pdf, c181a_No0208_3C273_AY_RR.pdf</p> <p>c181a_No0220_3C273_gY_LL.pdf, c181a_No0220_3C273_gY_LR.pdf, no RL or RR fringes</p>	<p>As usual LCP onl also reco RCP, tha are comm "right" to antenna's</p> <p>In the pl "missing baselines ALMA o is due to error, the missing some of plots, bu in the fir products</p>

Station	Code	Fringes	Plots	Cor
Mh	Z	yes	c181a_FRINGE_RfAnt_Mh_LLRR_AllSrc.pdf c181a_No0208_3C273_AZ_LL.pdf , c181a_No0208_3C273_AZ_LR.pdf , c181a_No0208_3C273_AZ_RL.pdf , c181a_No0208_3C273_AZ_RR.pdf	In the pl "missing baselines ALMA o is due to error, the missing some of plots, bu in the fir products
Pv	P	yes	c181a_FRINGE_RfAnt_Pv_LLRR_AllSrc.pdf c181a_No0208_3C273_AP_LL.pdf , c181a_No0208_3C273_AP_LR.pdf , c181a_No0208_3C273_AP_RL.pdf , c181a_No0208_3C273_AP_RR.pdf c181a_No0220_3C273_AP_LL.pdf , c181a_No0220_3C273_AP_LR.pdf , c181a_No0220_3C273_AP_RL.pdf , c181a_No0220_3C273_AP_RR.pdf c181a_No0220_3C273_gP_LL.pdf , c181a_No0220_3C273_gP_LR.pdf , c181a_No0220_3C273_gP_RL.pdf , c181a_No0220_3C273_gP_RR.pdf	In the pl "missing baselines ALMA o is due to error, the missing some of plots, bu in the fir products
VLBA: Br	b	yes	c181a_FRINGE_RfAnt_Br_LLRR_AllSrc.pdf preliminary: c181a_No0225_3C273_bg_LL.pdf , c181a_No0225_3C273_bg_LR.pdf , c181a_No0225_3C273_bg_RL.pdf , c181a_No0225_3C273_bg_RR.pdf final: c181a_No0215_3C273_Ab_LL.pdf , c181a_No0215_3C273_Ab_LR.pdf , c181a_No0215_3C273_Ab_RL.pdf , c181a_No0215_3C273_Ab_RR.pdf c181a_No0220_3C273_bG_LL.pdf , c181a_No0220_3C273_bG_LR.pdf , c181a_No0220_3C273_bG_RL.pdf , c181a_No0220_3C273_bG_RR.pdf	all VLBA were star recordin software data wei other pro
VLBA: Fd	f	yes	c181a_FRINGE_RfAnt_Fd_LLRR_AllSrc.pdf	all VLBA were star recordin software

Station	Code	Fringes	Plots	Cor
			c181a_No0208_3C273_Af_LL.pdf , c181a_No0208_3C273_Af_LR.pdf , c181a_No0208_3C273_Af_RL.pdf , c181a_No0208_3C273_Af_RR.pdf c181a_No0220_3C273_fG_LL.pdf , c181a_No0220_3C273_fG_LR.pdf , c181a_No0220_3C273_fG_RL.pdf , c181a_No0220_3C273_fG_RR.pdf c181a_No0230_3C273_fp_LL.pdf , c181a_No0230_3C273_fp_LR.pdf , c181a_No0230_3C273_fp_RL.pdf , c181a_No0230_3C273_fp_RR.pdf	data wei other pro
VLBA: Kp	k	yes	c181a_FRINGE_RfAnt_Kp_LLRR_AllSrc.pdf c181a_No0230_3C273_kp_LL.pdf , c181a_No0230_3C273_kp_LR.pdf , c181a_No0230_3C273_kp_RL.pdf , c181a_No0230_3C273_kp_RR.pdf	all VLBA were star recordin software data wei other pro
VLBA: La	l	yes	c181a_FRINGE_RfAnt_La_LLRR_AllSrc.pdf c181a_No0230_3C273_lp_LL.pdf , c181a_No0230_3C273_lp_LR.pdf , c181a_No0230_3C273_lp_RL.pdf , c181a_No0230_3C273_lp_RR.pdf	all VLBA were star recordin software data wei other pro
VLBA: Mk	m	yes	c181a_FRINGE_RfAnt_Mk_LLRR_AllSrc.pdf c181a_No0230_3C273_mp_LL.pdf , c181a_No0230_3C273_mp_RR.pdf , no LR or RL fringes c181a_No0220_3C273_Gm_LL.pdf , c181a_No0220_3C273_Gm_RR.pdf , no LR or RL fringes	all VLBA were star recordin software data wei other pro
VLBA: NI	n	yes	c181a_FRINGE_RfAnt_NI_LLRR_AllSrc.pdf c181a_No0208_3C273_An_LL.pdf , c181a_No0208_3C273_An_LR.pdf , c181a_No0208_3C273_An_RL.pdf , c181a_No0208_3C273_An_RR.pdf c181a_No0220_3C273_gn_LL.pdf , c181a_No0220_3C273_gn_LR.pdf , c181a_No0220_3C273_gn_RL.pdf , c181a_No0220_3C273_gn_RR.pdf c181a_No0220_3C273_Gn_LL.pdf , c181a_No0220_3C273_Gn_LR.pdf , c181a_No0220_3C273_Gn_RL.pdf , c181a_No0220_3C273_Gn_RR.pdf	all VLBA were star recordin software data wei other pro

Station	Code	Fringes	Plots	Cor
VLBA: Ov	o	yes	<p>c181a_FRINGE_RfAnt_Ov_LLRR_AllSrc.pdf</p> <p>c181a_No0208_3C273_Ao_LL.pdf, c181a_No0208_3C273_Ao_LR.pdf, c181a_No0208_3C273_Ao_RL.pdf, c181a_No0208_3C273_Ao_RR.pdf</p> <p>c181a_No0220_3C273_go_LL.pdf, c181a_No0220_3C273_go_LR.pdf, c181a_No0220_3C273_go_RL.pdf, c181a_No0220_3C273_go_RR.pdf</p> <p>c181a_No0220_3C273_Go_LL.pdf, c181a_No0220_3C273_Go_LR.pdf, c181a_No0220_3C273_Go_RL.pdf, c181a_No0220_3C273_Go_RR.pdf</p>	all VLBA were star recordin software data wei other pro
VLBA: Pt	p	yes	<p>c181a_FRINGE_RfAnt_Pt_LLRR_AllSrc.pdf</p> <p>preliminary</p> <p>c181a_No0225_3C273_gp_LL.pdf, c181a_No0225_3C273_gp_LR.pdf, c181a_No0225_3C273_gp_RL.pdf, c181a_No0225_3C273_gp_RR.pdf</p> <p>final:</p> <p>c181a_No0208_3C273_Ap_LL.pdf, c181a_No0208_3C273_Ap_LR.pdf, c181a_No0208_3C273_Ap_RL.pdf, c181a_No0208_3C273_Ap_RR.pdf</p> <p>c181a_No0230_3C273_mp_LL.pdf, c181a_No0230_3C273_mp_RR.pdf, no LR or RL fringes</p> <p>c181a_No0230_3C273_kp_LL.pdf, c181a_No0230_3C273_kp_LR.pdf, c181a_No0230_3C273_kp_RL.pdf, c181a_No0230_3C273_kp_RR.pdf</p> <p>c181a_No0230_3C273_lp_LL.pdf, c181a_No0230_3C273_lp_LR.pdf, c181a_No0230_3C273_lp_RL.pdf, c181a_No0230_3C273_lp_RR.pdf</p> <p>c181a_No0230_3C273_fp_LL.pdf, c181a_No0230_3C273_fp_LR.pdf, c181a_No0230_3C273_fp_RL.pdf, c181a_No0230_3C273_fp_RR.pdf</p>	all VLBA were star recordin software data wei other pro
GBT: Gb	G	yes	<p>c181a_FRINGE_RfAnt_Gb_LLRR_AllSrc.pdf</p> <p>preliminary:</p>	

Station	Code	Fringes	Plots	Cor
			<p>c181a_No0225_3C273_Gg_LL.pdf, c181a_No0225_3C273_Gg_LR.pdf, c181a_No0225_3C273_Gg_RL.pdf, c181a_No0225_3C273_Gg_RR.pdf</p> <p>final:</p> <p>c181a_No0215_3C273_AG_LL.pdf, c181a_No0215_3C273_AG_LR.pdf, c181a_No0215_3C273_AG_RL.pdf, c181a_No0215_3C273_AG_RR.pdf</p> <p>c181a_No0220_3C273_AG_LL.pdf, c181a_No0220_3C273_AG_LR.pdf, c181a_No0220_3C273_AG_RL.pdf, c181a_No0220_3C273_AG_RR.pdf</p> <p>c181a_No0220_3C273_Gm_LL.pdf, c181a_No0220_3C273_Gm_RR.pdf, no LR or RL fringes</p> <p>c181a_No0220_3C273_Gg_LL.pdf, c181a_No0220_3C273_Gg_LR.pdf, c181a_No0220_3C273_Gg_RL.pdf, c181a_No0220_3C273_Gg_RR.pdf</p> <p>c181a_No0220_3C273_bG_LL.pdf, c181a_No0220_3C273_bG_LR.pdf, c181a_No0220_3C273_bG_RL.pdf, c181a_No0220_3C273_bG_RR.pdf</p> <p>c181a_No0220_3C273_Gn_LL.pdf, c181a_No0220_3C273_Gn_LR.pdf, c181a_No0220_3C273_Gn_RL.pdf, c181a_No0220_3C273_Gn_RR.pdf</p> <p>c181a_No0220_3C273_Go_LL.pdf, c181a_No0220_3C273_Go_LR.pdf, c181a_No0220_3C273_Go_RL.pdf, c181a_No0220_3C273_Go_RR.pdf</p> <p>c181a_No0220_3C273_fG_LL.pdf, c181a_No0220_3C273_fG_LR.pdf, c181a_No0220_3C273_fG_RL.pdf, c181a_No0220_3C273_fG_RR.pdf</p>	
GLT: Gl	g	yes	<p>c181a_FRINGE_RfAnt_Gl_LLRR_AllSrc.pdf</p> <p>preliminary:</p> <p>c181a_No0225_3C273_bg_LL.pdf, c181a_No0225_3C273_bg_LR.pdf, c181a_No0225_3C273_bg_RL.pdf, c181a_No0225_3C273_bg_RR.pdf</p> <p>c181a_No0225_3C273_Gg_LL.pdf, c181a_No0225_3C273_Gg_LR.pdf, c181a_No0225_3C273_Gg_RL.pdf, c181a_No0225_3C273_Gg_RR.pdf</p> <p>c181a_No0225_3C273_gp_LL.pdf, c181a_No0225_3C273_gp_LR.pdf, c181a_No0225_3C273_gp_RL.pdf, c181a_No0225_3C273_gp_RR.pdf</p>	Data ana shown th recorded polarizat circular probably elliptic). moment SHOUL USED F POLAR in gener very care

Station	Code	Fringes	Plots	Cor
			<p>final:</p> <p>c181a_No0215_3C273_Ag_LL.pdf, c181a_No0215_3C273_Ag_LR.pdf, c181a_No0215_3C273_Ag_RL.pdf, c181a_No0215_3C273_Ag_RR.pdf</p> <p>c181a_No0220_3C273_Ag_LL.pdf, c181a_No0220_3C273_Ag_LR.pdf, c181a_No0220_3C273_Ag_RL.pdf, c181a_No0220_3C273_Ag_RR.pdf</p> <p>c181a_No0220_3C273_gY_LL.pdf, c181a_No0220_3C273_gY_LR.pdf, no RL or RR fringes</p> <p>c181a_No0220_3C273_gP_LL.pdf, c181a_No0220_3C273_gP_LR.pdf, c181a_No0220_3C273_gP_RL.pdf, c181a_No0220_3C273_gP_RR.pdf</p> <p>c181a_No0220_3C273_Gg_LL.pdf, c181a_No0220_3C273_Gg_LR.pdf, c181a_No0220_3C273_Gg_RL.pdf, c181a_No0220_3C273_Gg_RR.pdf</p> <p>c181a_No0220_3C273_gn_LL.pdf, c181a_No0220_3C273_gn_LR.pdf, c181a_No0220_3C273_gn_RL.pdf, c181a_No0220_3C273_gn_RR.pdf</p> <p>c181a_No0220_3C273_go_LL.pdf, c181a_No0220_3C273_go_LR.pdf, c181a_No0220_3C273_go_RL.pdf, c181a_No0220_3C273_go_RR.pdf</p>	
ALMA: Aa	A	yes	<p>c181a_FRINGE_RfAnt_Aa_LLRR_AllSrc.pdf</p> <p>c181a_No0199_3C273_AB_LL.pdf, c181a_No0199_3C273_AB_LR.pdf, c181a_No0199_3C273_AB_RL.pdf, c181a_No0199_3C273_AB_RR.pdf</p> <p>c181a_No0208_3C273_AB_LL.pdf, c181a_No0208_3C273_AB_LR.pdf, c181a_No0208_3C273_AB_RL.pdf, c181a_No0208_3C273_AB_RR.pdf</p> <p>c181a_No0208_3C273_Af_LL.pdf, c181a_No0208_3C273_Af_LR.pdf, c181a_No0208_3C273_Af_RL.pdf, c181a_No0208_3C273_Af_RR.pdf</p> <p>c181a_No0208_3C273_An_LL.pdf, c181a_No0208_3C273_An_LR.pdf, c181a_No0208_3C273_An_RL.pdf, c181a_No0208_3C273_An_RR.pdf</p> <p>c181a_No0208_3C273_Ao_LL.pdf, c181a_No0208_3C273_Ao_LR.pdf, c181a_No0208_3C273_Ao_RL.pdf, c181a_No0208_3C273_Ao_RR.pdf</p>	<p>Observed</p> <p>polarizat</p> <p>converte</p> <p>polarizat</p> <p>correlati</p> <p>PolConv</p> <p>technical</p> <p>atmosph</p> <p>correctio</p> <p>twice --</p> <p>original</p> <p>and durin</p> <p>correlati</p> <p>a special</p> <p>was deve</p> <p>compens</p> <p>we found</p> <p>applicati</p> <p>other dif</p>

Station	Code	Fringes	Plots	Cor
			<p>c181a_No0208_3C273_Ap_LL.pdf, c181a_No0208_3C273_Ap_LR.pdf, c181a_No0208_3C273_Ap_RL.pdf, c181a_No0208_3C273_Ap_RR.pdf</p> <p>c181a_No0208_3C273_AP_LL.pdf, c181a_No0208_3C273_AP_LR.pdf, c181a_No0208_3C273_AP_RL.pdf, c181a_No0208_3C273_AP_RR.pdf</p> <p>c181a_No0208_3C273_AX_LL.pdf, c181a_No0208_3C273_AX_LR.pdf, c181a_No0208_3C273_AX_RL.pdf, c181a_No0208_3C273_AX_RR.pdf</p> <p>c181a_No0208_3C273_AY_LL.pdf, c181a_No0208_3C273_AY_LR.pdf, c181a_No0208_3C273_AY_RL.pdf, c181a_No0208_3C273_AY_RR.pdf</p> <p>c181a_No0208_3C273_AZ_LL.pdf, c181a_No0208_3C273_AZ_LR.pdf, c181a_No0208_3C273_AZ_RL.pdf, c181a_No0208_3C273_AZ_RR.pdf</p> <p>c181a_No0215_3C273_Ab_LL.pdf, c181a_No0215_3C273_Ab_LR.pdf, c181a_No0215_3C273_Ab_RL.pdf, c181a_No0215_3C273_Ab_RR.pdf</p> <p>c181a_No0215_3C273_Ag_LL.pdf, c181a_No0215_3C273_Ag_LR.pdf, c181a_No0215_3C273_Ag_RL.pdf, c181a_No0215_3C273_Ag_RR.pdf</p> <p>c181a_No0220_3C273_Ag_LL.pdf, c181a_No0220_3C273_Ag_LR.pdf, c181a_No0220_3C273_Ag_RL.pdf, c181a_No0220_3C273_Ag_RR.pdf</p> <p>c181a_No0215_3C273_AG_LL.pdf, c181a_No0215_3C273_AG_LR.pdf, c181a_No0215_3C273_AG_RL.pdf, c181a_No0215_3C273_AG_RR.pdf</p> <p>c181a_No0220_3C273_AG_LL.pdf, c181a_No0220_3C273_AG_LR.pdf, c181a_No0220_3C273_AG_RL.pdf, c181a_No0220_3C273_AG_RR.pdf</p> <p>c181a_No0220_3C273_AP_LL.pdf, c181a_No0220_3C273_AP_LR.pdf, c181a_No0220_3C273_AP_RL.pdf, c181a_No0220_3C273_AP_RR.pdf</p>	<p>particula abnorma fringe ra in the fir run the c atmosph correctio is.</p>

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.

Post-Correlation checks

Residuals

[plotRes_A.png](#)

[plotRes_b.png](#)

[plotRes_n.png](#)

FITS completeness (pclist)

legend:

c181a_203D2D	No0224	3C273	3mm_RDBE	o	.	.	.	.	.	o	o	o	71	71	71	71	85	71	85	85
c181a_204D2D	No0225	3C273	3mm_RDBE	o	.	.	.	.	.	o	o	o	71	71	71	71	71	71	71	71
c181a_205D2D	No0226	3C273	3mm_RDBE	.	.	.	.	.	.	.	.	.	80	80	80	80	80	80	80	80
c181a_206D2D	No0227	3C273	3mm_RDBE	.	.	.	.	.	.	.	.	.	80	80	80	80	80	80	80	80
c181a_207D2D	No0228	3C273	3mm_RDBE	.	.	.	.	.	.	.	.	.	80	80	80	80	80	80	80	80
c181a_208D2D	No0229	3C273	3mm_RDBE	.	.	.	.	.	.	.	.	.	80	80	80	80	80	80	80	80
c181a_209D2D	No0230	3C273	3mm_RDBE	.	.	.	.	.	.	.	.	.	60	60	60	60	60	60	60	60