

## C231D Correlation Report

### General information

- Session info: <http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/>
- Station feedback: [https://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/may23/feedback\\_may23.asc](https://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/may23/feedback_may23.asc)
- No fringes to LMT, no data from Hs.
- Kt (no maser) and Br did not observe.

### Status

what	date
Preparing for correlation	5 Dec 2023
Ready to start v1 correlation once A, B tracks finish, and copying of MPI%8027 to /data/c231d/Mk/ has finished	27 Dec 2023
Correlation v1 3mm preparing - todo fix wrong ATCA position, clock adjust	15 Jan 2023
Correlation v1 3mm started with the above fixes	15 Jan 2023
Correlation v1 3mm finished	23 Jan 2023
Waiting for ALMA QA2 calibration tables	...
Sent to PI (ALMA uncorrected)	28 Feb 2024

### Fringes

Station	Code	Fringes	Plots	Comments
ALMA		yes		
NOEMA		yes		
KVN Ku Ky		yes		
KVN-Mopra		yes		
Mopra-ATCA		yes		ATCA IF1 has a delay offset wrt IF2, and had retpad W104 rather than W110
Mopra-JCMT		yes		
GLT-NOEMA		yes		

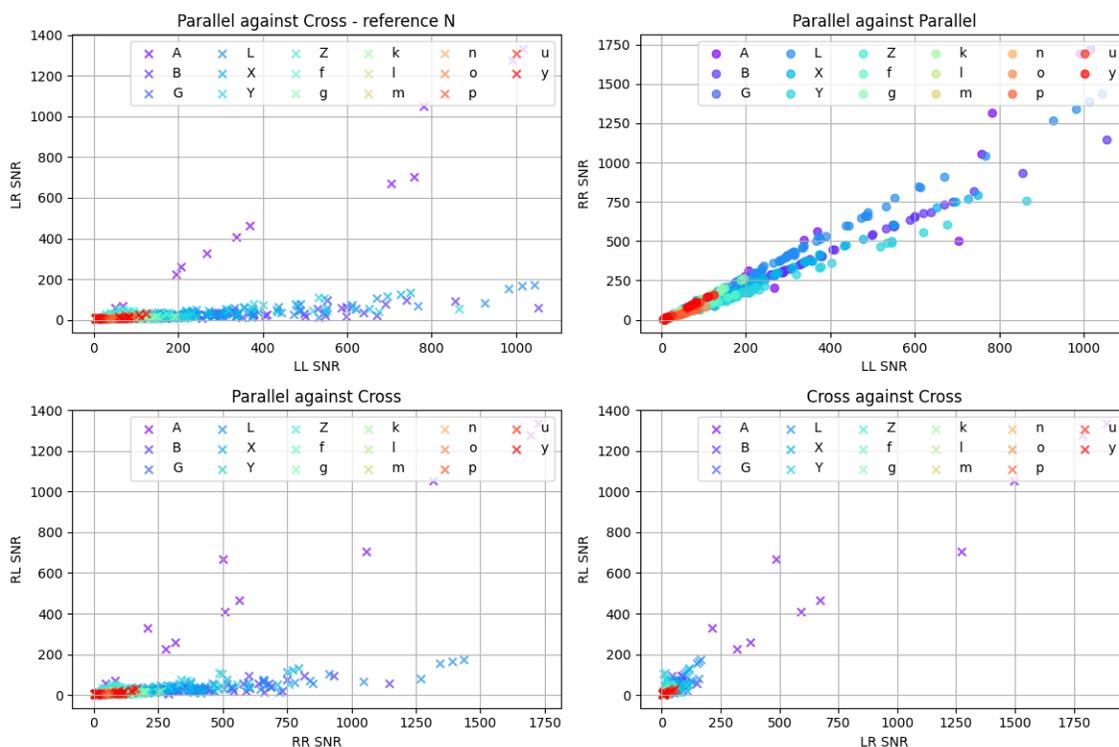
Station	Code	Fringes	Plots	Comments
EU		yes		
EU-VLBA		yes		
LMT		no		

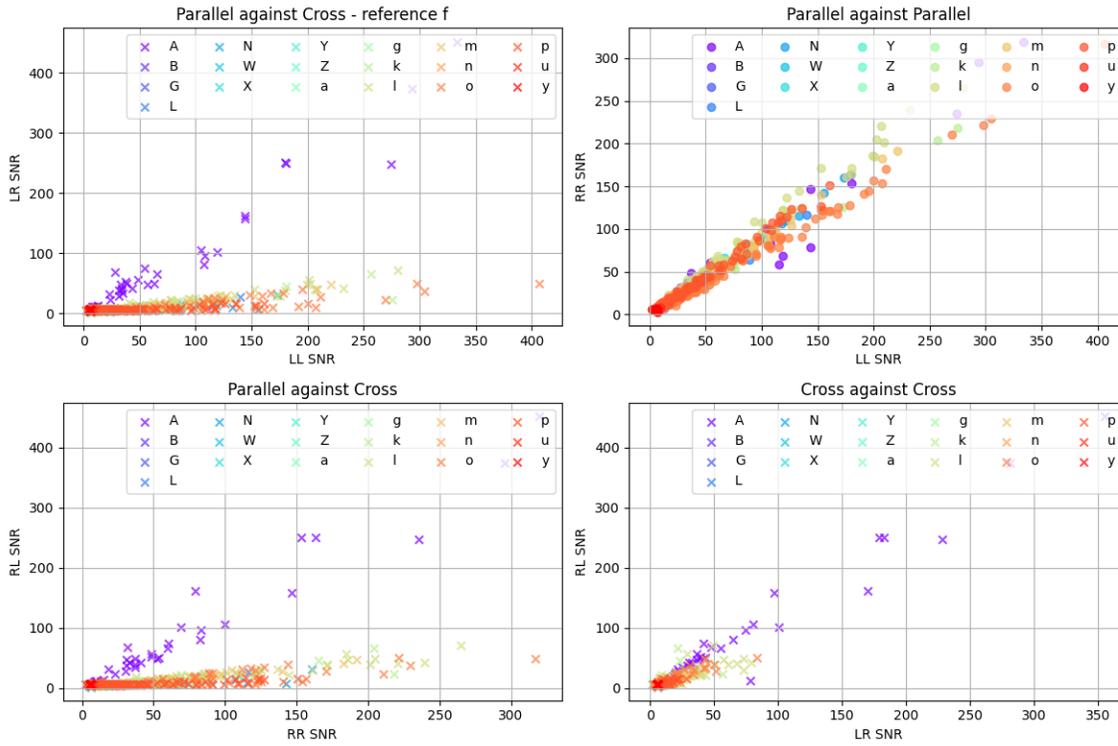
Notes

Post-Correlation checks

Polarization

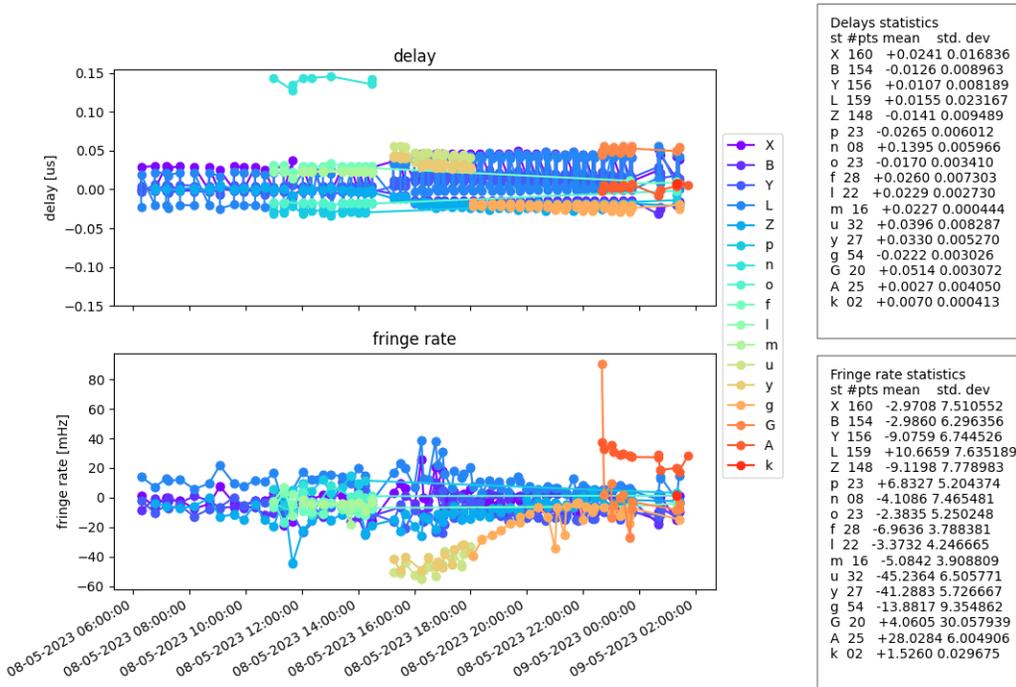
Note, ALMA (A) not polconverted yet.





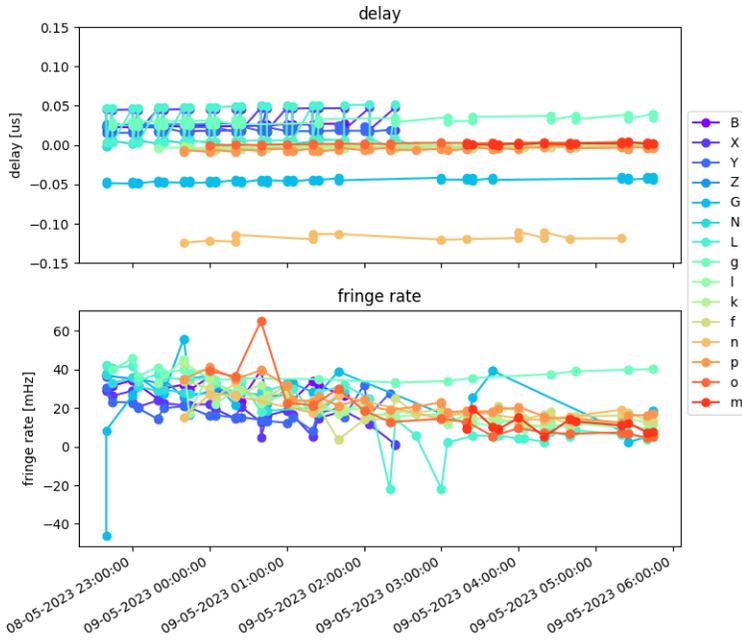
**Residuals**

Residual delay for VLBA\_NL a bit high at 0.10 to 0.15 usec.



Reference station: N

Pol: RR,LL,XX,YY,XR,YL



Delays statistics

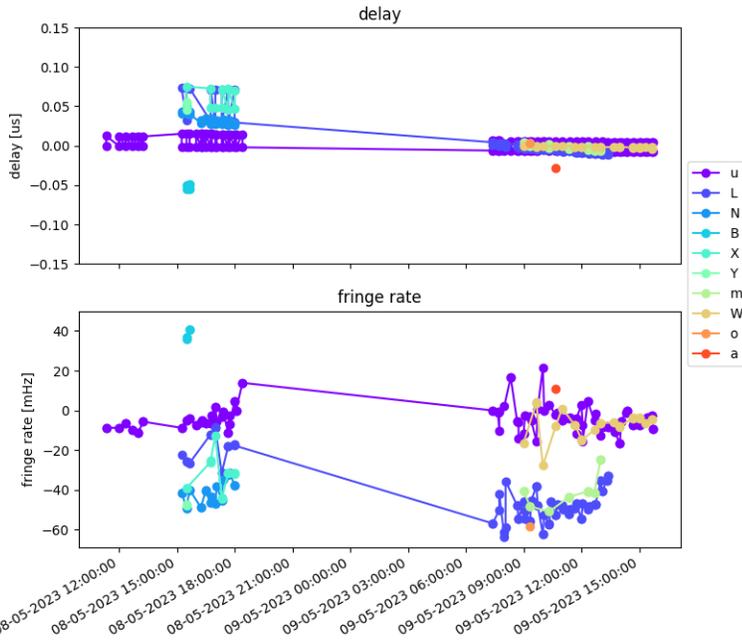
st	#pts	mean	std. dev
B	38	+0.0245	0.001351
X	42	+0.0322	0.013930
Y	43	+0.0199	0.003207
Z	15	+0.0266	0.000751
G	52	-0.0450	0.002259
N	25	+0.0027	0.004050
L	74	+0.0149	0.021669
g	38	+0.0303	0.004179
l	67	-0.0018	0.001580
k	57	-0.0011	0.001535
f	60	-0.0039	0.001566
n	15	-0.1176	0.004101
p	44	-0.0048	0.002322
o	36	+0.0019	0.001121
m	20	+0.0016	0.001115

Fringe rate statistics

st	#pts	mean	std. dev
B	38	+30.2727	4.423822
X	42	+18.2072	7.061248
Y	43	+18.3799	5.637325
Z	15	+31.0055	3.970128
G	52	+24.9048	15.319982
N	25	+28.0284	6.004906
L	74	+18.6886	16.747501
g	38	+37.8688	3.036442
l	67	+18.1632	8.365366
k	57	+18.4230	7.663444
f	60	+19.4650	6.724466
n	15	+18.7715	5.075057
p	44	+23.0471	8.079291
o	36	+18.1378	15.468467
m	20	+10.7801	3.557549

Reference station: A

Pol: RR,LL,XX,YY,XR,YL



Delays statistics

st	#pts	mean	std. dev
u	129	+0.0015	0.007837
L	82	+0.0058	0.023795
N	27	+0.0330	0.005270
B	04	-0.0523	0.002667
X	11	+0.0590	0.012299
Y	02	+0.0505	0.005430
m	14	-0.0015	0.003513
W	23	-0.0016	0.000896
o	01	+0.0037	0.000000
a	01	-0.0281	0.000000

Fringe rate statistics

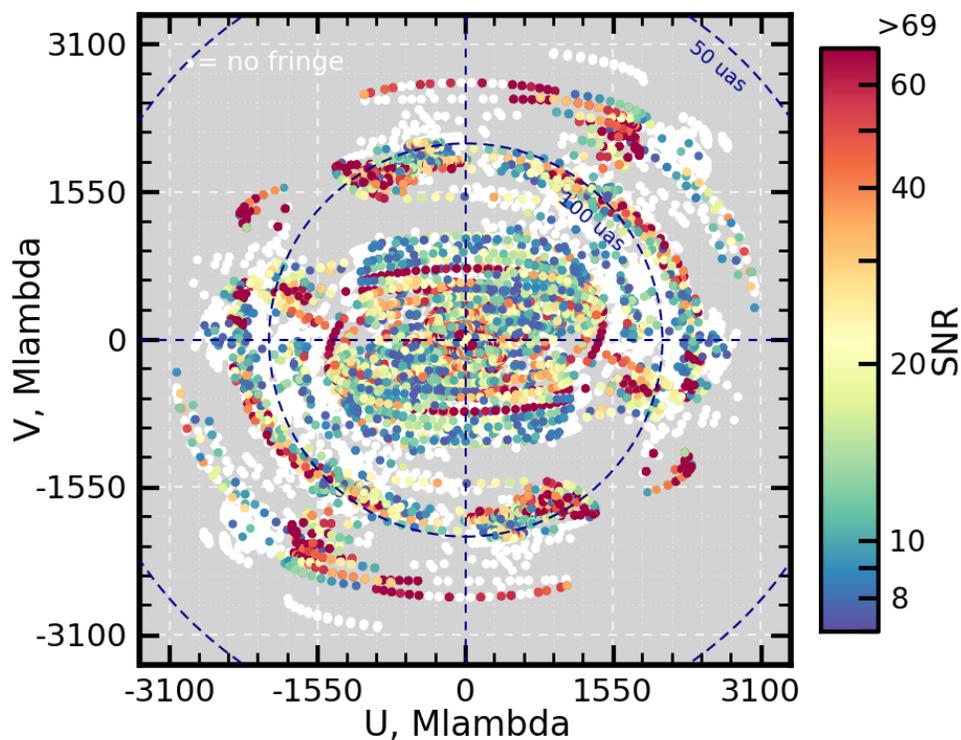
st	#pts	mean	std. dev
u	129	-4.3816	6.109125
L	82	-43.7274	12.992202
N	27	-41.2883	5.726667
B	04	+38.6238	2.291773
X	11	-32.5185	8.840444
Y	02	-47.6263	0.032087
m	14	-41.5627	7.749022
W	23	-7.1025	6.618389
o	01	-58.2605	0.000000
a	01	+10.9636	0.000000

Reference station: y

Pol: RR,LL,XX,YY,XR,YL

Detections 3mm

UV cov.: all sources, all antennas, all pols.



#### FITS completeness (pclist)

											EF	LM	ON	OD	YS	NN	MH	FD	NL	OV	PT	BR	KP	
LA	KY	KU	KT	MK	HS	GL	GB	AA	MM	AT	MP													
c231d_1000	No0001					3C345		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1001	No0002					UGC06728		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1002	No0003					NGC6232		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1003	No0004					2013+370		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1004	No0005					2018+407		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1005	No0006					2117+516		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1006	No0007					2013+370		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1007	No0008					4C50.55		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1008	No0009					2117+516		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1009	No0010					2013+370		86ghz				x												
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1010	No0011					NGC6232		86ghz				x												

c231d_1011	No0012	UGC06728	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1012	No0013	BLLAC	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1013	No0014	2018+407	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1014	No0015	2117+516	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1015	No0016	2127+566	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1016	No0017	BLLAC	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1017	No0018	UGC12282	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1018	No0019	0954+658	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1019	No0020	NGC3516	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1020	No0021	NGC6232	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1021	No0022	2013+370	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1022	No0023	2018+407	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1023	No0024	BLLAC	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1024	No0025	UGC12282	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1025	No0026	2127+566	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1026	No0027	BLLAC	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1027	No0028	2117+516	86ghz	o	x	o	o	o	o	o	.	.	.	.	.	.
c231d_1028	No0029	0059+581	86ghz	o	x	o	o	o	o	o	x	x	x	x	x	x
x x x x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1029	No0030	0025+684	86ghz	o	x	o	o	o	o	o	o	o	o	o	x	x
o 85 76 x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1030	No0031	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	x	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1031	No0032	UGC06728	86ghz	o	x	o	o	o	o	o	o	o	o	o	x	x
o o o x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1032	No0033	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	x	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1033	No0034	UGC12282	86ghz	o	x	o	o	o	o	o	o	o	o	o	x	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1034	No0035	0954+658	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231d_1035	No0036	NGC3079	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.

. o o x . . . . .	c231d_1036	No0037	3C454.3	86ghz	o	x	o	x	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1037	No0038	NGC6232	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o o o x x . . . . .	c231d_1038	No0039	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1039	No0040	2018+407	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1040	No0041	0954+658	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1041	No0042	NGC3516	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1042	No0043	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1043	No0044	2117+516	86ghz	22	x	22	22	22	22	22	22	22	22	22	22	x	x
22 . . . . .																		
c231d_1044	No0045	4C50.55	86ghz	38	x	38	38	38	38	38	38	38	38	38	38	38	x	x
38 . . . . .																		
c231d_1045	No0046	0954+658	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1046	No0047	UGC06728	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1047	No0048	1156+295	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1048	No0049	NGC4051	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1049	No0050	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1050	No0051	2127+566	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1051	No0052	0059+581	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1052	No0053	0025+684	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1053	No0054	0250+547	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1054	No0055	1156+295	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1055	No0056	NGC4102	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1056	No0057	1156+295	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1057	No0058	NGC4138	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
. o o x . . . . .	c231d_1058	No0059	BLLAC	86ghz	o	x	o	o	o	o	o	o	o	o	o	o	x	x
o . . . . .	c231d_1059	No0060	UGC12282	86ghz	o	x	o	o	o	o	o	o	o	88	o	o	x	x
o . . . . .																		
c231d_1060	No0061	BLLAC	86ghz	o	.	o	o	o	o	o	o	o	o	o	o	o	x	x

o . . . o x . . . . .	c231d_1061	No0062	BLLAC	86ghz	o . . o o o o o o o o o x x
o . . . o x . . . . .	c231d_1062	No0063	BLLAC	86ghz	o . . o o o o o o o o o x x
o . . . o x . . . . .	c231d_1063	No0064	BLLAC	86ghz	o . . o o o o o o o o o x x
o . . . o x . . . . .	c231d_1064	No0065	BLLAC	86ghz	o . . o o o . o o o o o x x
o . . . o x . . . . .	c231d_1065	No0066	BLLAC	86ghz	o . . o o o . o o o o o x x
o . . . o x . . . . .	c231d_1066	No0067	1156+295	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1067	No0068	3C454.3	86ghz	. . . . . o o o o x x
o . . . o x . . . . .	c231d_1068	No0069	1156+295	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1069	No0070	BLLAC	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1070	No0071	1156+295	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1071	No0072	3C454.3	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1072	No0073	M87	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1073	No0074	BLLAC	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1074	No0075	3C273	86ghz	. . . o o . o o o . . . . .
. o o x . . . . .	c231d_1075	No0076	M87	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1076	No0077	3C454.3	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1077	No0078	M87	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1078	No0079	BLLAC	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1079	No0080	3C273	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1080	No0081	M87	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1081	No0082	3C454.3	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1082	No0083	3C273	86ghz	o . . o o o o o o . . . . .
. o o x . . . . .	c231d_1083	No0084	M87	86ghz	o . . o o 98 o o . . . . .
. o o x . . . . .	c231d_1084	No0085	BLLAC	86ghz	. . . . . o o o o x o
o . . . o x . . . . .	c231d_1085	No0086	3C454.3	86ghz	. . . . . o o o o x o

c231d_1086	No0087	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1087	No0088	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1088	No0089	BLLAC	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1089	No0090	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1090	No0091	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1091	No0092	3C454.3	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1092	No0093	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1093	No0094	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1094	No0095	BLLAC	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1095	No0096	3C454.3	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1096	No0097	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1097	No0098	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1098	No0099	BLLAC	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1099	No0100	3C279	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1100	No0101	M87	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1101	No0102	3C454.3	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1102	No0103	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1103	No0104	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1104	No0105	BLLAC	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1105	No0106	3C454.3	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1106	No0107	3C273	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1107	No0108	M87	86ghz	o	.	o	o	98	o	o	.	.	.	.	.	.
c231d_1108	No0109	BLLAC	86ghz	.	.	.	.	.	.	o	o	o	o	x	o	
c231d_1109	No0110	3C279	86ghz	x	.	o	o	o	o	o	.	.	.	.	.	.
c231d_1110	No0111	M87	86ghz	o	.	o	o	o	o	o	.	.	.	.	.	.











