

C231A 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
- No fringes to LMT, no data from Hs.
- Not observed: JCMT, Mopra, GBT, Kt (no maser), Br, Od (receiver selection problem at backend; On is fine).

Status

what	date
Preparing correlation setup	14 Dec 2023
Correlation v1 running	22 Dec 2023
Correlation 3mm v1 finished	28 Dec 2023
Packaging done, but still pending PolConvert and PI project -based split	09 Jan 2023
Waiting for ALMA QA2 calibration tables	...
Sent to PI (ALMA uncorrected)	28 Feb 2024
Polconvert (partial) and Polswap for Aa and G1 running in v1	27.Aug.2024

Fringes

Station	Code	Fringes	Plots	Comments
VLBA		yes		
EU (Ef On Mh Ys)		yes		
KVN (Ku Ky)		marginal		only 1 weak fringe, only intra-KVN, only 5 scans observed
ALMA		yes		ALMA-VLBA, ALMA-EU
NOEMA		yes		NOEMA-VLBA, NOEMA-EU

Notes

- LMT, GLT, Br, Kt did not observe
- Onsala Od/L (DBBC3) IF input misconfigured to wrong receiver, but On/X (DBBC2) was fine

Subband order for ALMA ANTAB

Doing subband 33 of 178 (fringe plot)
 Doing subband 34 of 178 (not plotted)
 Doing subband 39 of 178 (not plotted)
 Doing subband 40 of 178 (not plotted)
 Doing subband 41 of 178 (not plotted)
 Doing subband 50 of 178 (not plotted)
 Doing subband 51 of 178 (not plotted)
 Doing subband 52 of 178 (fringe plot)
 Doing subband 53 of 178 (not plotted)
 Doing subband 54 of 178 (not plotted)
 Doing subband 55 of 178 (not plotted)
 Doing subband 56 of 178 (not plotted)
 Doing subband 57 of 178 (not plotted)
 Doing subband 58 of 178 (not plotted)
 Doing subband 59 of 178 (not plotted)
 Doing subband 60 of 178 (fringe plot)
 Doing subband 61 of 178 (not plotted)
 Doing subband 66 of 178 (not plotted)
 Doing subband 67 of 178 (not plotted)
 Doing subband 68 of 178 (not plotted)
 Doing subband 69 of 178 (fringe plot)
 Doing subband 70 of 178 (not plotted)
 Doing subband 71 of 178 (not plotted)
 Doing subband 72 of 178 (not plotted)
 Doing subband 73 of 178 (not plotted)
 Doing subband 74 of 178 (not plotted)
 Doing subband 75 of 178 (not plotted)
 Doing subband 76 of 178 (not plotted)

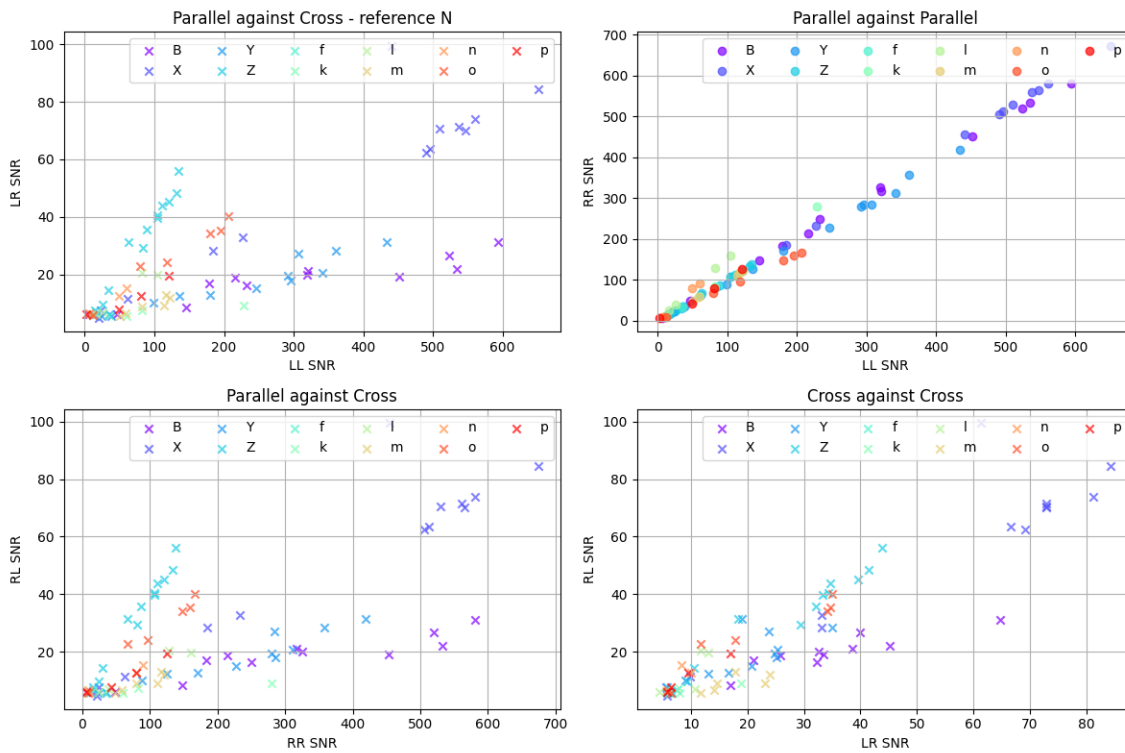
Corresponding DiFX frequency entries (0..N-1):

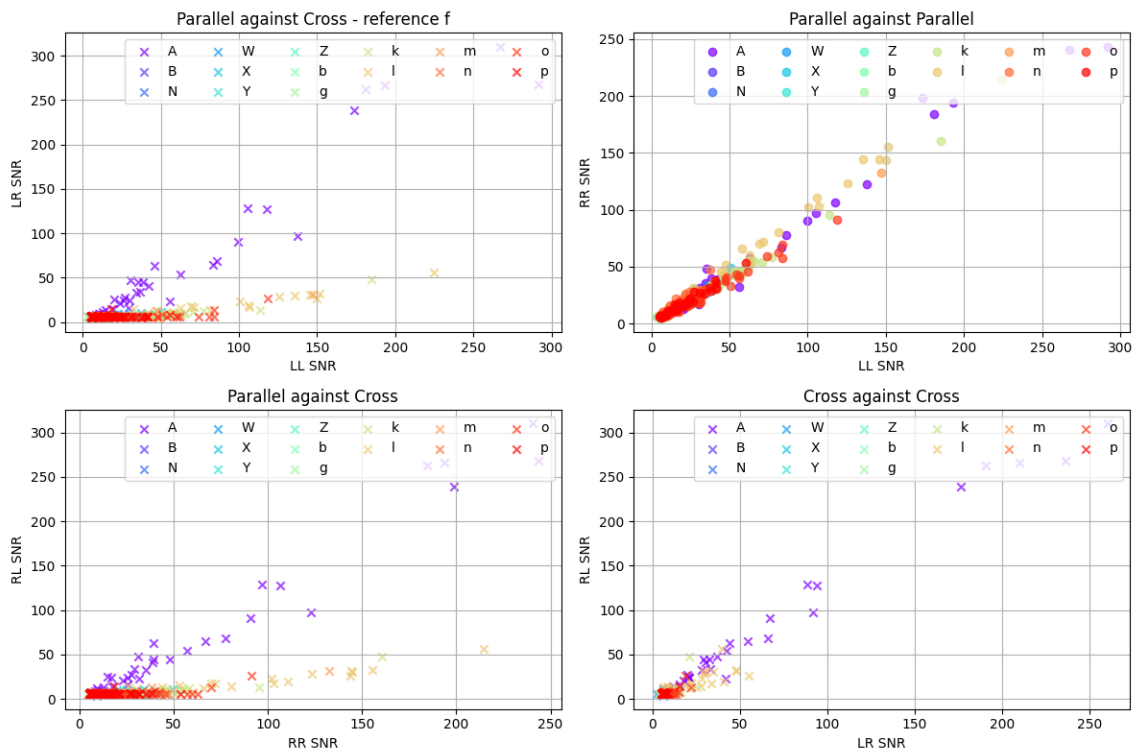
fq 32 : 64.000000 MHz USB [4096-ch/32-avg] @ 86012.000000 MHz
 fq 33 : 64.000000 MHz USB [4096-ch/32-avg] @ 86076.000000 MHz
 fq 38 : 64.000000 MHz USB [4096-ch/32-avg] @ 86204.000000 MHz
 fq 39 : 64.000000 MHz USB [4096-ch/32-avg] @ 86332.000000 MHz
 fq 40 : 64.000000 MHz USB [4096-ch/32-avg] @ 86460.000000 MHz
 fq 49 : 64.000000 MHz USB [4096-ch/32-avg] @ 86268.000000 MHz
 fq 50 : 64.000000 MHz USB [4096-ch/32-avg] @ 86396.000000 MHz
 fq 51 : 64.000000 MHz USB [4096-ch/32-avg] @ 86524.000000 MHz
 fq 52 : 64.000000 MHz USB [4096-ch/32-avg] @ 86588.000000 MHz
 fq 53 : 64.000000 MHz USB [4096-ch/32-avg] @ 86652.000000 MHz
 fq 54 : 64.000000 MHz USB [4096-ch/32-avg] @ 86716.000000 MHz
 fq 55 : 64.000000 MHz USB [4096-ch/32-avg] @ 86780.000000 MHz
 fq 56 : 64.000000 MHz USB [4096-ch/32-avg] @ 86844.000000 MHz
 fq 57 : 64.000000 MHz USB [4096-ch/32-avg] @ 86908.000000 MHz
 fq 58 : 64.000000 MHz USB [4096-ch/32-avg] @ 86972.000000 MHz

- fq 59 : 64.000000 MHz USB [4096-ch/32-avg] @ 87036.000000 MHz
- fq 60 : 64.000000 MHz USB [4096-ch/32-avg] @ 87100.000000 MHz
- fq 65 : 64.000000 MHz USB [4096-ch/32-avg] @ 85372.000000 MHz
- fq 66 : 64.000000 MHz USB [4096-ch/32-avg] @ 85436.000000 MHz
- fq 67 : 64.000000 MHz USB [4096-ch/32-avg] @ 85500.000000 MHz
- fq 68 : 64.000000 MHz USB [4096-ch/32-avg] @ 85564.000000 MHz
- fq 69 : 64.000000 MHz USB [4096-ch/32-avg] @ 85628.000000 MHz
- fq 70 : 64.000000 MHz USB [4096-ch/32-avg] @ 85692.000000 MHz
- fq 71 : 64.000000 MHz USB [4096-ch/32-avg] @ 85756.000000 MHz
- fq 72 : 64.000000 MHz USB [4096-ch/32-avg] @ 85820.000000 MHz
- fq 73 : 64.000000 MHz USB [4096-ch/32-avg] @ 85884.000000 MHz
- fq 74 : 64.000000 MHz USB [4096-ch/32-avg] @ 85948.000000 MHz
- fq 75 : 64.000000 MHz USB [4096-ch/32-avg] @ 86140.000000 MHz

Post-Correlation checks

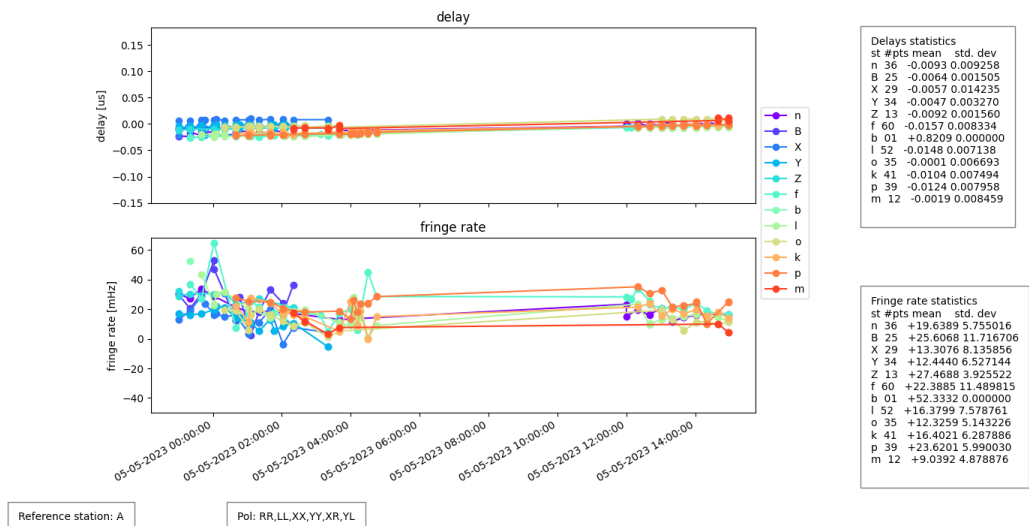
Polarizations

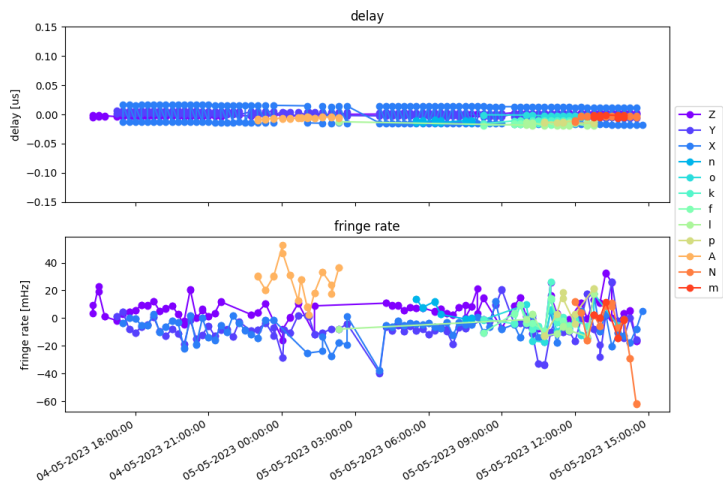




Polarization relative to NOEMA and prior to PolConvert, i.e., ALMA (A) and Mopra (W, not shown) still linear.

Residuals





Delays statistics

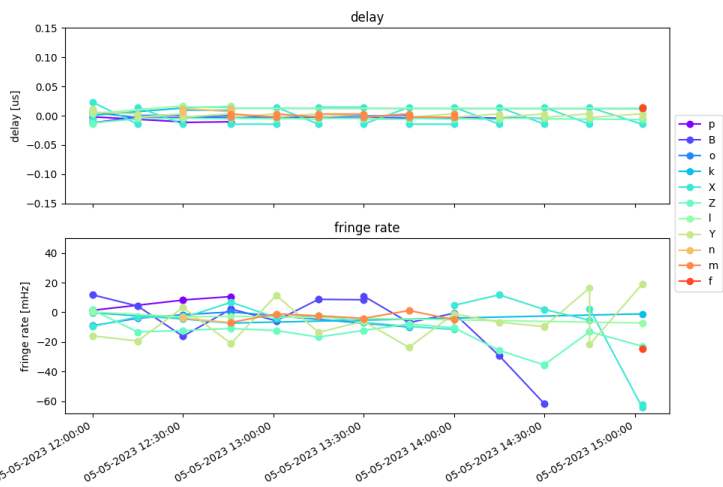
st	#pts	mean	std. dev
Z	130	-0.0004	0.002170
Y	152	+0.0004	0.003582
X	145	-0.0005	0.014780
n	12	-0.0120	0.001987
o	23	-0.0034	0.001316
k	22	-0.0135	0.002689
f	19	-0.0165	0.001159
l	17	-0.0164	0.002660
p	09	-0.0137	0.001023
A	25	-0.0064	0.001505
N	22	-0.0039	0.002561
m	09	-0.0031	0.002057

Fringe rate statistics

st	#pts	mean	std. dev
Z	130	+5.5645	8.341572
Y	152	-7.3471	10.117053
X	145	-7.1695	8.903945
n	12	+5.8468	5.581475
o	23	-5.2668	9.072469
k	22	-1.4818	8.589714
f	19	-0.1086	7.221874
l	17	+4.3627	9.594621
p	09	+5.7162	13.074490
A	25	+25.6068	11.716706
N	22	-7.6314	20.731882
m	09	-1.5446	7.739399

Reference station: B

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



Delays statistics

st	#pts	mean	std. dev
p	06	-0.0082	0.004072
B	22	-0.0039	0.002561
o	10	+0.0004	0.003937
k	07	+0.0087	0.004425
X	26	+0.0006	0.014642
Z	26	-0.0058	0.002229
l	08	+0.0113	0.004753
Y	26	+0.0009	0.003816
n	04	+0.0095	0.002682
m	12	+0.0002	0.002721
f	02	+0.0131	0.000651

Fringe rate statistics

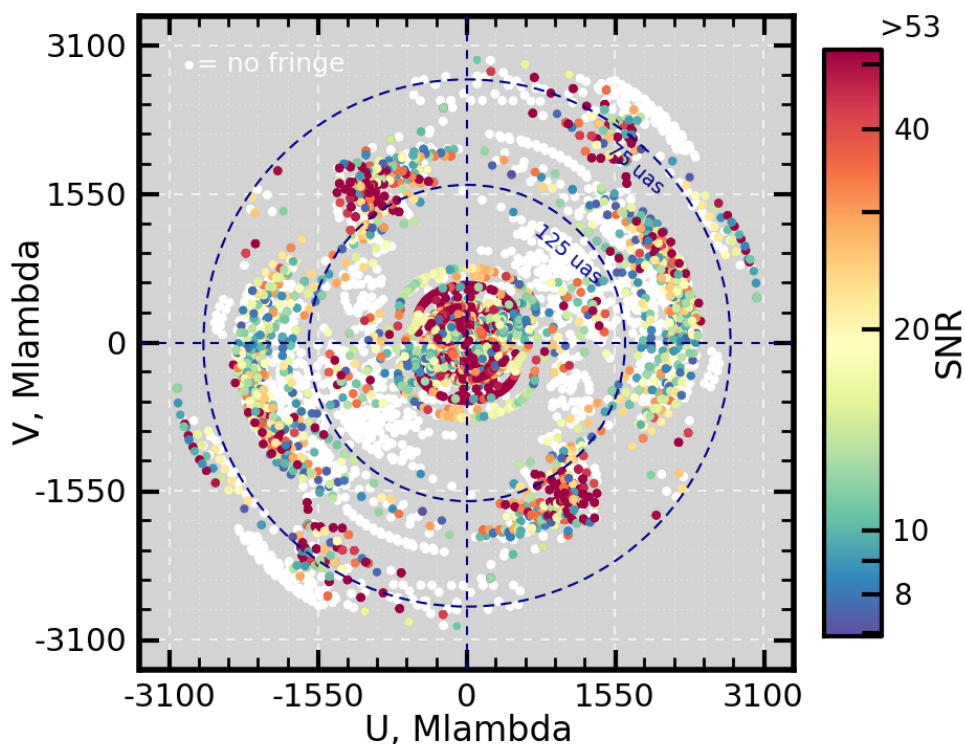
st	#pts	mean	std. dev
p	06	+6.7566	3.943396
B	22	-7.6314	20.731882
o	10	-4.8797	4.018313
k	07	-3.5791	2.855077
X	26	-6.6459	17.504658
Z	26	-14.7721	8.735036
l	08	-3.1884	2.619890
Y	26	-6.5980	13.334790
n	04	-5.4686	1.539367
m	12	-3.0111	2.633832
f	02	-24.8092	0.006590

Reference station: N

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

Detections 3mm

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



FITS completeness (pclist)

				EF	ON	OD	YS	MH	KY	KU	KT	AA	GL	NL	FD	OV				
PT	BR	KP	LA	LM	MK	MM	AT	MP	NN											
c231a_001	No0001					1156+295	86ghz	o	o	x	o	o	o	x	.	.	.	.
.		
c231a_002	No0002					1156+295	86ghz	o	o	x	o	o	o	x	.	.	.	.
.		
c231a_003	No0003					1156+295	86ghz	o	o	x	o	o	o	x	.	.	.	.
.		
c231a_004	No0004					1156+295	86ghz	o	o	x	o	o	o	x	.	.	.	.
.		
c231a_005	No0005					3C273	86ghz	o	o	x	o	o	70	66	x	.	.	.		
.		
c231a_006	No0006					3C273	86ghz	o	o	x	o	o	x	x	x	.	.	.		
.		
c231a_007	No0007					3C273	86ghz	o	o	x	o	o	x	x	x	.	.	.		
.		
c231a_008	No0008					3C273	86ghz	o	o	x	o	o	x	x	x	.	.	.		
.		
c231a_009	No0009					3C273	86ghz	o	o	x	o	o	x	x	x	.	.	.		
.		

c231a_010	No0010	3C273	86ghz	o	o	x	o	o	x	x	x	.	.	.	.	.
c231a_011	No0011	1156+295	86ghz	o	o	x	o	o	x	x	x	.	.	.	.	.
c231a_012	No0012	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_013	No0013	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_014	No0014	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_015	No0015	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_016	No0016	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_017	No0017	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_018	No0018	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_019	No0019	1156+295	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_020	No0020	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_021	No0021	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_022	No0022	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_023	No0023	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_024	No0024	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_025	No0025	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_026	No0026	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_027	No0027	3C273	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_028	No0028	1156+295	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
c231a_029	No0029	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	.	.
c231a_030	No0030	NGC4278	86ghz	o	o	x	94	o	.	.	.	o	o	o	.	.
	No0031	1156+295	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	.
c231a_031	No0032	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o o o o																
c231a_032	No0033	NGC4278	86ghz	o	o	x	94	o	.	.	.	o	o	o	o	o
o o o o																
	No0034	1156+295	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.

c231a_033	No0035	3C273	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0036	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_034	No0037	NGC4374	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0038	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_035	No0039	3C273	86ghz	o	22	x	o	o	.	.	.	o	o	o	o	.
o	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_036	No0040	NGC4261	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	33	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0041	3C273	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_037	No0042	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_038	No0043	NGC4278	86ghz	o	72	x	94	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0044	1156+295	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_039	No0045	3C273	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0046	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_040	No0047	NGC4374	86ghz	o	93	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0048	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_041	No0049	3C273	86ghz	o	o	x	o	.	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_042	No0050	NGC4261	86ghz	o	o	x	94	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0051	3C273	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_043	No0052	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_044	No0053	NGC4278	86ghz	o	o	x	94	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0054	1156+295	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_045	No0055	3C273	86ghz	o	o	x	o	.	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0056	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_046	No0057	NGC4374	86ghz	o	26	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
	No0058	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_047	No0059	3C273	86ghz	o	o	x	o	.	.	.	.	o	o	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.

c231a_048	No0060	NGC4261	86ghz	o	38	x	94	.	.	.	.	o	o	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
	No0061	3C273	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_049	No0062	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0063	NGC4278	86ghz	x	x	x	x	x	.	.	.	x	x	x	x	x
x	x	x	x	x	x	.	.	.	.	.	.	.	.	.	.	.
	No0064	1156+295	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_051	No0065	3C273	86ghz	.	.	.	.	.	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0066	NGC4261	86ghz	.	.	.	.	.	.	.	.	x	x	x	x	x
x	x	x	x	x	x	.	.	.	.	.	.	.	.	.	.	.
	No0067	3C273	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_053	No0068	0954+658	86ghz	o	44	x	o	o	.	.	.	.	.	.	.	.
.
c231a_054	No0069	NGC3998	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
.
c231a_055	No0070	3C273	86ghz	.	.	.	.	.	.	.	.	88	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0071	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_056	No0072	NGC4374	86ghz	.	.	.	.	.	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0073	M87	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_057	No0074	0954+658	86ghz	o	44	x	o	o	.	.	.	.	.	.	.	.
.
c231a_058	No0075	NGC3998	86ghz	o	16	x	o	o	.	.	.	.	.	.	.	.
.
c231a_059	No0076	1156+295	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
c231a_060	No0077	NGC4278	86ghz	o	o	x	o	o	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0078	1156+295	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_061	No0079	3C273	86ghz	.	.	.	.	.	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
c231a_062	No0080	NGC4261	86ghz	.	.	.	.	.	.	.	.	o	o	o	o	o
o	x	o	o	x	o	.	.	.	.	.	.	.	.	.	.	.
	No0081	3C273	86ghz	.	.	.	.	.	.	.	.	x	.	.	.	.
.
c231a_063	No0082	0954+658	86ghz	o	55	x	o	o	.	.	.	.	.	.	.	.
.
c231a_064	No0083	NGC3998	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.
.
c231a_065	No0084	BLLAC	86ghz	o	75	x	o	o	.	.	.	.	x	.	.	.
.

c231a_066	No0085	3C279	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_067	No0086	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_068	No0087	3C273	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_069	No0088	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	.	.	.	.
.
c231a_070	No0089	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_071	No0090	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	x	o	.	o
.	x	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c231a_072	No0091	BLLAC	86ghz	o	12	x	o	o	.	.	.	.	.	.	.	.	.
.
c231a_073	No0092	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_074	No0093	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	x	o	.	o
.	x	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c231a_075	No0094	BLLAC	86ghz	o	95	x	o	o	.	.	.	.	.	.	.	.	.
.
c231a_076	No0095	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	o	.	.	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_077	No0096	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	x	o	.	o
.	x	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c231a_078	No0097	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	x	.	.	.
.
c231a_079	No0098	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_080	No0099	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	.	o	.	o
.	x	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c231a_081	No0100	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	x	.	.	.
.
c231a_082	No0101	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	.	x	.	.	.	.	.	.	.	.	.	.	.
c231a_083	No0102	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	.	x	.	.	.	.	.	.	.	.	.	.	.
c231a_084	No0103	3C273	86ghz	.	.	.	.	.	.	.	.	.	.	.	o	.	o
.	x	.	.	.	o	.	.	.	.	.	.	.	.	.	.	.	.
c231a_085	No0104	BLLAC	86ghz	o	95	x	o	o	.	.	.	.	.	x	o	.	.
.
c231a_086	No0105	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	o	x	.	.	.	.	.	.	.	.	.	.	o
c231a_087	No0106	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	x	o	.	.
.
c231a_088	No0107	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	o	x	x	o	.	.	.	.	.	.	.	.	o
c231a_089	No0108	3C454.3	86ghz	o	o	x	o	o	.	.	.	.	.	x	.	.	.
.
c231a_090	No0109	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.	o

c231a_091	No0110	BLLAC	86ghz	16	o	x	o	o	.	.	.	.	x	o	.	.
.
c231a_092	No0111	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_093	No0112	3C273	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	.	.	.	.	.	.	.	.	.	.
c231a_094	No0113	BLLAC	86ghz	o	33	x	o	o	.	.	.	.	x	o	.	.
.
c231a_095	No0114	3C279	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	.	.	.	.	.	.	.	.	.	.
c231a_096	No0115	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_097	No0116	3C454.3	86ghz	o	76	x	o	o	.	.	.	.	x	.	.	.
.
c231a_098	No0117	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_099	No0118	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_100	No0119	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_101	No0120	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_102	No0121	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_103	No0122	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_104	No0123	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_105	No0124	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_106	No0125	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	o
o	.	o	o	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_107	No0126	3C454.3	86ghz	o	52	x	o	o	.	.	.	.	x	o	.	.
.
c231a_108	No0127	BLLAC	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	o o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_109	No0128	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_110	No0129	BLLAC	86ghz	o	70	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_111	No0130	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_112	No0131	BLLAC	86ghz	o	33	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_113	No0132	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_114	No0133	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_115	No0134	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.

c231a_116	No0135	BLLAC	86ghz	o	70	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c231a_117	No0136	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	x	o	x	o	o	.	.	.	.	.	.	.	.
c231a_118	No0137	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_119	No0138	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_120	No0139	BLLAC	86ghz	o	95	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_121	No0140	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_122	No0141	BLLAC	86ghz	o	42	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_123	No0142	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_124	No0143	3C454.3	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_125	No0144	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_126	No0145	BLLAC	86ghz	o	08	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_127	No0146	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_128	No0147	BLLAC	86ghz	o	70	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_129	No0148	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_130	No0149	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_131	No0150	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_132	No0151	3C454.3	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_133	No0152	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	o	.	.	.	.	.	.	.	.
c231a_134	No0153	BLLAC	86ghz	o	70	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_135	No0154	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	25	.	.	.	.	.	.	.	.
c231a_136	No0155	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_137	No0156	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	o	x	o	18	.	.	.	.	.	.	.	.
c231a_138	No0157	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	x	o	o	o
o	x	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.
c231a_139	No0158	CEN-A	86ghz
.	o	x	o	o
c231a_140	No0159	3C454.3	86ghz	o	o	x	o	o	x	.	.	o
o	x	o	o

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c231a_141 No0160      CEN-A 86ghz . . . . . . . . . . . . . . . .
. . . . . o x o o .
c231a_142 No0161 J2348-1631 86ghz . . . . . . . . . o . o o .
. . . . . x . . . . .
c231a_143 No0162 J2258-2758 86ghz . . . . . . . . . o . o o .
. . . . . x . . . . .
c231a_144 No0163      BLLAC 86ghz o 45 x o o . . . . x . . o
. x . . . . . . . . o
c231a_145 No0164      CEN-A 86ghz . . . . . . . . . . . . . . . .
. . . . . o x o o .
c231a_146 No0165 J2348-1631 86ghz . . . . . . . . . o . o o .
o . o o x . . . . .
      No0166 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_147 No0167      IC1459 86ghz . . . . . . . . . o . . o .
. . . . . x . . . . .
      No0168 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_148 No0169      BLLAC 86ghz o 42 x o o . . . . x o . o
o x o o . . . . . o
c231a_149 No0170      3C279 86ghz . . . . . x x x . . . . .
. . . . . o x o o .
c231a_150 No0171 J2258-2758 86ghz . . . . . . . . . o . o o .
o . o o x . . . . .
      No0172 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_151 No0173      IC1459 86ghz . . . . . . . . . o . . o .
. . . . . x . . . . .
      No0174 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_152 No0175      BLLAC 86ghz o 88 x o o . . . . x o . o
o x o o . o . . . . o
c231a_153 No0176      3C454.3 86ghz . o x o o . . . . x o o o
o x o o . o . . . .
c231a_154 No0177      CEN-A 86ghz . . . . . x x x . . . . .
. . . . . x o o .
c231a_155 No0178      BLLAC 86ghz o o x o o . . . . x . . .
. x . . . . o . . . o
c231a_156 No0179      CEN-A 86ghz . . . . . x x x . . . . .
. . . . . o o .
c231a_157 No0180 J2348-1631 86ghz . . . . . . . . . o . o o o
o . o o x . . . . .
      No0181 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_158 No0182      IC1459 86ghz . . . . . . . . . o . o o .
o . o o x . . . . .
      No0183 J2248-3235 86ghz . . . . . . . . . x . . . . .
. . . . . . . . . . . . . . . .
c231a_159 No0184      BLLAC 86ghz o 50 x o o . . . . x . . .
. x . . . . o . . . o

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c231a_160	No0185	CEN-A	86ghz	x	x	x
.
.
c231a_161	No0186	J2258-2758	86ghz	o	.	o	o	o
o	.	o	o	x
.
.
c231a_162	No0188	IC1459	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_163	No0190	BLLAC	86ghz	o	66	x	o	o	.	.	.	.	.	.	x	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c231a_164	No0191	CEN-A	86ghz	.	.	.	.	.	.	x	x	x	.	.	.	.	.
.
.
c231a_165	No0192	J2348-1631	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_166	No0194	IC1459	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	.
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_167	No0196	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	.	x	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c231a_168	No0197	CEN-A	86ghz	.	.	.	.	.	.	x	x	x	.	.	.	.	.
.
.
c231a_169	No0198	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	.	x	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c231a_170	No0199	3C279	86ghz	.	.	.	.	.	.	x	x	x	.	.	.	.	.
.
.
c231a_171	No0200	CEN-A	86ghz	.	.	.	.	.	.	x	x	x	.	.	.	.	.
.
.
c231a_172	No0201	J2258-2758	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_173	No0203	IC1459	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_174	No0205	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	.	x	.	.
.	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c231a_175	No0206	CEN-A	86ghz	.	.	.	.	.	.	x	x	x	.	.	.	.	.
.
.
c231a_176	No0207	J2348-1631	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.
.
c231a_177	No0209	IC1459	86ghz	.	.	.	.	.	.	.	.	.	o	.	o	o	o
o	.	o	o	x	.	.	.	.	.	.	.	.	.	.	.	.	.
.

	No0210	J2248-3235	86ghz	.	.	.	.	.	.	.	.	.	x	.	.	.	.
c231a_178	No0211	BLLAC	86ghz	o	o	x	o	o	.	.	.	.	.	x	.	.	.
c231a_179	No0212	CEN-A	86ghz	.	.	.	.	.	x	x	x	.	.	.	.	.	.
c231a_180	No0213	J2258-2758	86ghz	.	.	.	.	.	.	.	.	.	.	o	.	o	o
	No0214	J2248-3235	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	.
c231a_181	No0215	IC1459	86ghz	.	.	.	.	.	.	.	.	.	.	o	.	o	o
	No0216	J2248-3235	86ghz	.	.	.	.	.	.	.	.	.	.	x	.	.	.
c231a_182	No0217	J2348-1631	86ghz	.	.	.	.	.	.	.	.	.	.	o	.	o	o
c231a_183	No0218	BLLAC	86ghz	o	04	x	o	o	.	.	.	.	.	x	.	.	.
c231a_184	No0219	CEN-A	86ghz	.	.	.	.	.	x	x	x	.	.	.	.	.	.
c231a_185	No0220	BLLAC	86ghz	o	11	x	o	o	.	.	.	.	.	x	o	o	o
c231a_186	No0221	CEN-A	86ghz	.	.	.	.	.	x	x	x	.	.	.	.	.	.
c231a_187	No0222	3C454.3	86ghz	.	.	.	.	.	.	.	.	.	.	x	o	o	o
c231a_188	No0223	3C279	86ghz	.	.	.	.	.	x	x	x	.	.	.	.	.	.