

C221C 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/apr22/feedback_apr22.asc
- ALMA and LMT did not observe

Status

what	date
Modules from NOEMA now, and fringes Nn-Ef-Ys	28 Jun 2022
Array tie EVN-KVN-VLBA 86 GHz done, now still missing ATCA+MP	20 Jun 2022
All data transferred and modules available	
Correlation of 7mm finished	13 Dec 2022
Correlation of 3mm started	19 Dec 2022
Correlation of 3mm finished	21 Dec 2022
Packaging of v2 MJ002 finished with Mopra converted to linear	06 Feb 2023
Released to PIs	07 Feb 2023
Partial recorrelation (v2) of 3mm of scans with GLT (they had a YIG tuning error)	24 May 2023
Releaser v2 to PIs	30 May 2023

Fringes

Station	Code	Fringes	Plots	Comments
VLBA 7mm		yes	No0183 Kp Sc La No0193 Br Fd Hn Nl Kp Ov Pt No0212 Kp Mk	
Ef		yes		
Mh		yes		
On		yes - No0029		
Ys		yes - HOPS 1011	No0267 Nn Pv Ef Ys Mh On,	
NOEMA		yes - HOPS 1011	No0267 Nn Pv Ef Ys Mh On,	

Station	Code	Fringes	Plots	Comments
Pico		yes - HOPS 1011	No0267 Nn Pv Ef Ys Mh On,	
GLT		yes		No fringes within + 256 usec Tuning error at GLT and 63 MHz off (found 03/2023)
KVN Kt Ku Ky		yes - No0066 all stations		
ATCA- KVN		yes	No0205 At Mp Ky	
Mopra		yes		
EVN-KVN		yes - HOPS 1009	No0066 EVN-KVN	
VLBA- EVN		yes - HOPS 1008	No0243 VLBA-EVN	
GBT		yes 3mm		No 43G data At 86G missed many scans

Notes

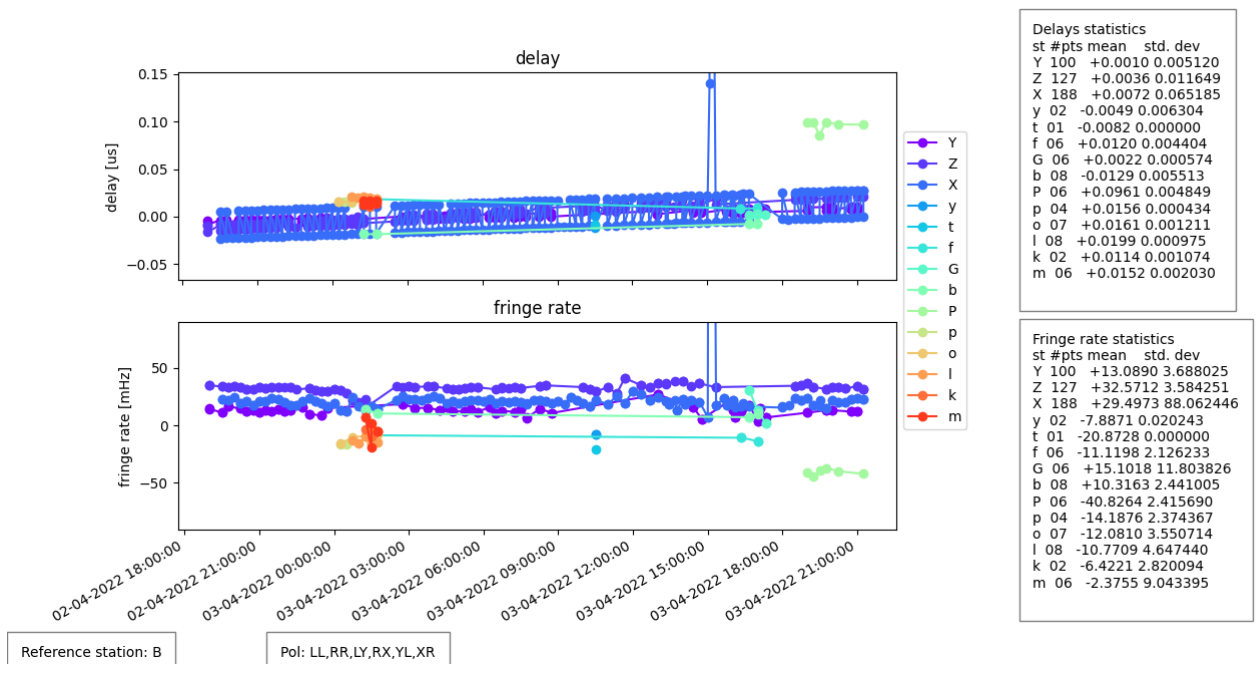
- NN scans 093-1915 to 093-2045 have no Mark6 data (only one 20-byte header) in either polarization, log says NN good starting from time 093-2030 which is before scan No0290
- GBT recorded 42 of 85 scheduled 86 GHz scans, no usable scans till 093-1900 ie No0277 inclusive per [AGMVA21A 233 03 log.txt](#), similarly it would appear for rest of track from 094-0000 system setup faulty as well per [AGMVA21B 162 01 log.txt](#) but [manual GBT log](#) says no issues in this part of the track
- GLT no fringes, with the same settings that yielded GLT fringes in C221A, nor within +/-256 us nor 1 sec offsets of that. The observing log on EHT 2022 wiki notes no particular issues and shows good Tsys of 180K-300K throughout the track with elevations of 15deg-34deg. Other technical issue?
- GLT update: Tuning error at GLT found 03/2023, they were unknowingly 63 MHz off after C221A

Post-Correlation checks

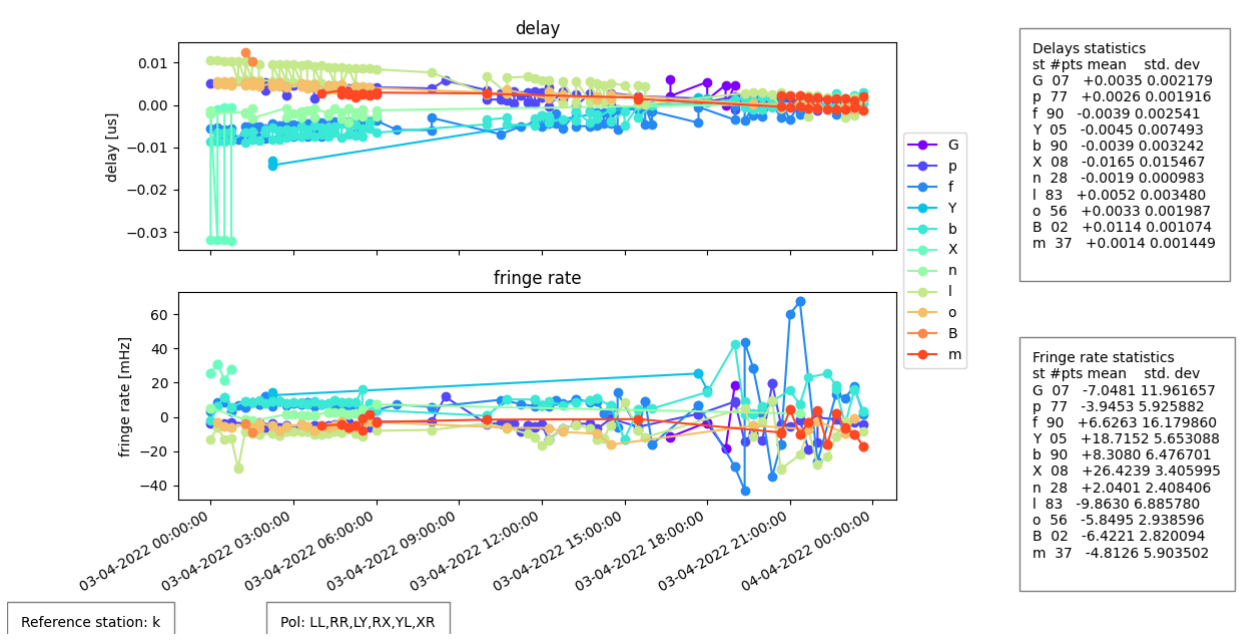
Residuals

3mm

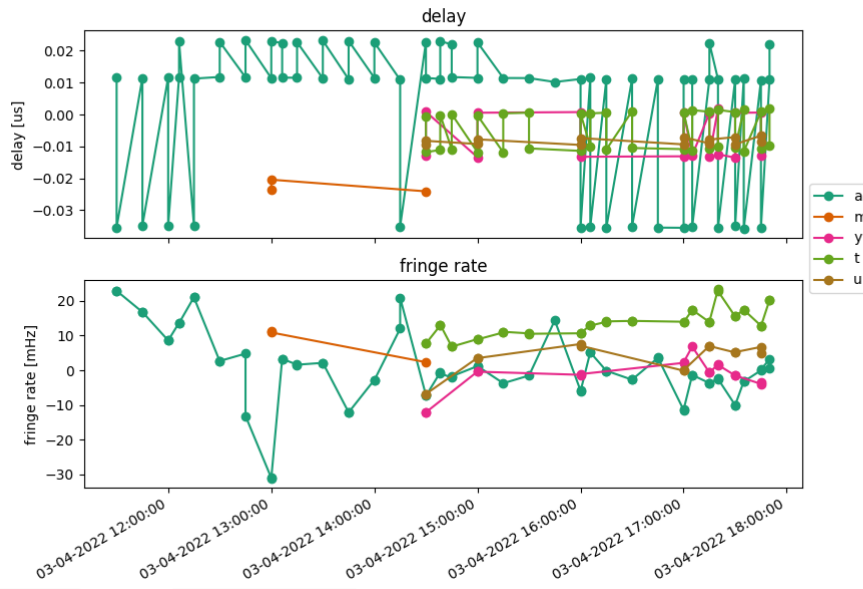
Residuals to Effelsberg



Residuals to Kitt Peak



Residuals to Mopra



Delays statistics

st	#pts	mean	std. dev
a	65	+0.0025	0.022061
m	03	-0.0227	0.001621
y	17	-0.0065	0.006919
t	36	-0.0051	0.005808
u	14	-0.0083	0.000990

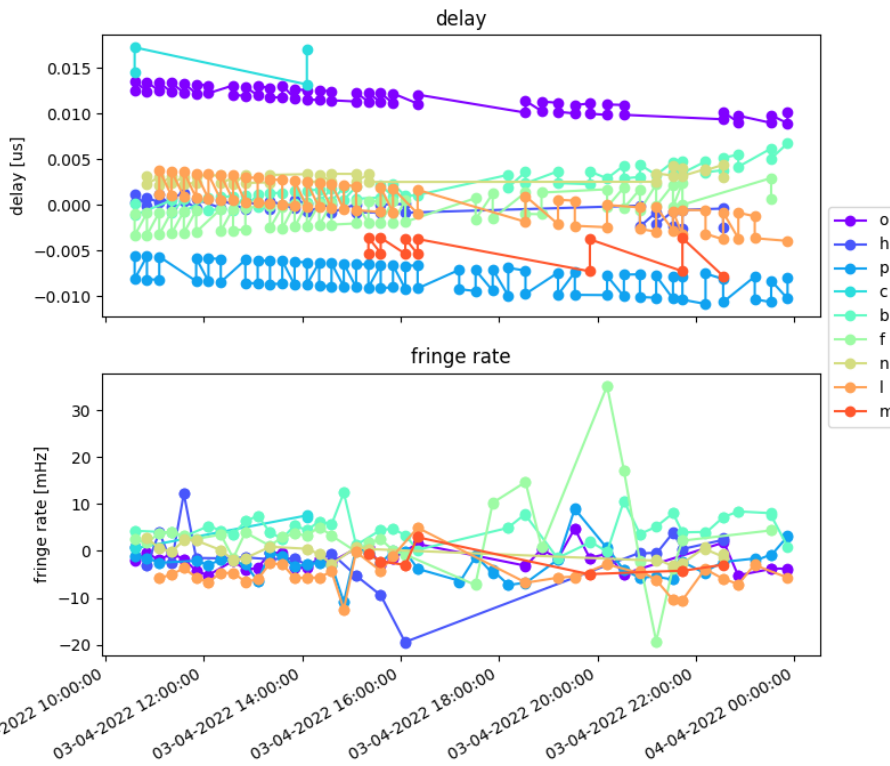
Fringe rate statistics

st	#pts	mean	std. dev
a	65	+0.7569	10.450100
m	03	+8.1683	4.122995
y	17	-1.4517	4.587642
t	36	+13.5907	4.060114
u	14	+3.1473	4.722575

Reference station: L

Pol: LL,RR,LY,RX,YL,XR

7mm



Delays statistics

st	#pts	mean	std. dev
o	64	+0.0116	0.001232
h	40	-0.0003	0.000975
p	78	-0.0081	0.001472
c	04	+0.0155	0.001712
b	65	+0.0020	0.001894
f	62	-0.0007	0.001618
n	38	+0.0030	0.000574
l	65	+0.0002	0.002116
m	13	-0.0050	0.001498

Fringe rate statistics

st	#pts	mean	std. dev
o	64	-1.7973	2.243644
h	40	-1.4052	5.846340
p	78	-2.5837	3.221630
c	04	+4.0289	3.342473
b	65	+4.9621	2.832164
f	62	+3.2007	8.376340
n	38	-0.2340	1.719003
l	65	-5.0421	3.020586
m	13	-2.0874	2.529551

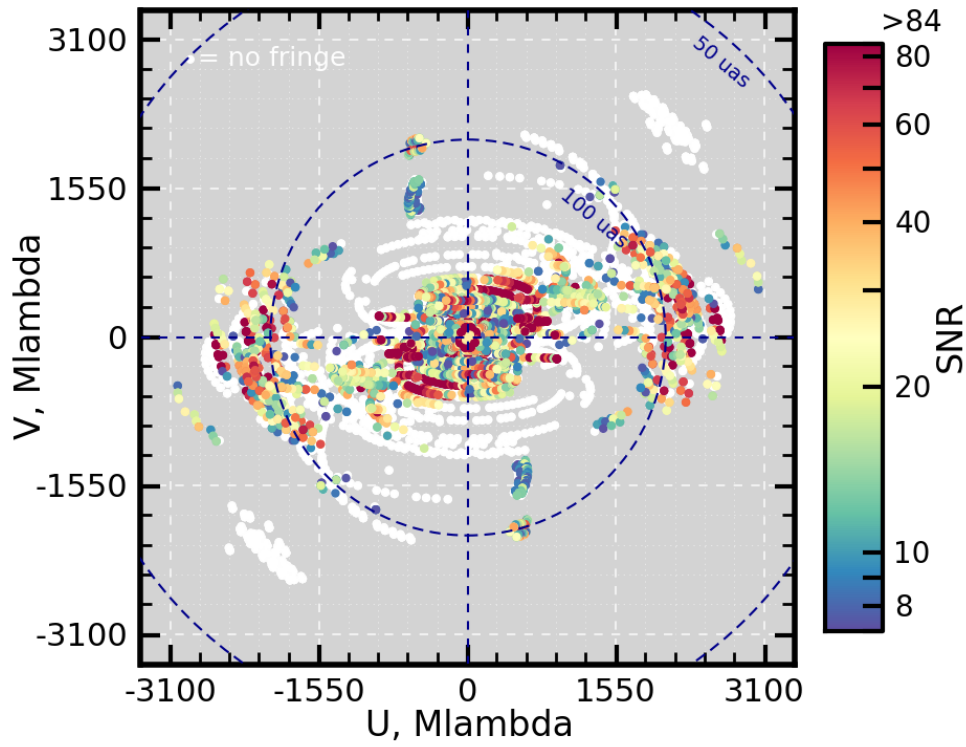
Reference station: k

Pol: LL,RR

Detections

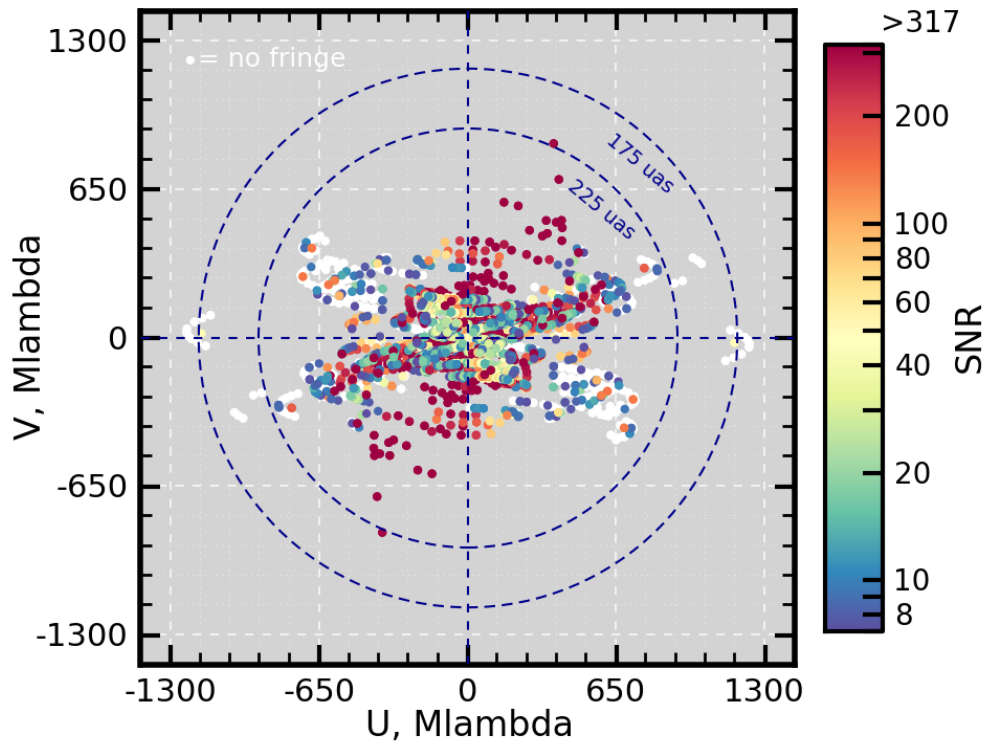
3mm

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



7mm

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



FITS completeness (pclist)

3mm

								EF	ON	YS	MH	GL	NL	FD	PT	LA	KP	OV	BR	GB			
MK	KY	KU	KT	AT	MP	PV	NN																
c221c_1000	No0001						OJ287	86ghz	o	x	19	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1001	No0002						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1002	No0003						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1003	No0004						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1004	No0005	1055+018					86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1005	No0006						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1006	No0007						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1007	No0008						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1008	No0009	1055+018					86ghz	o	o	85	o	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1009	No0010						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1010	No0011						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1011	No0012						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1012	No0013	1055+018					86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1013	No0014						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1014	No0015						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1015	No0016						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1016	No0017	1055+018					86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1017	No0018						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1018	No0019						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1019	No0020						OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1020	No0021						OJ287	86ghz	o	o	o	o	o	o	o	o	o	o	o	o	o	o	.
.
c221c_1021	No0023						OJ287	86ghz	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x
.
c221c_1022	No0024						OJ287	86ghz	o	o	o	o	o	o	o	o	o	o	o	o	o	o	x
.

c221c_1023	No0025	OJ287	86ghz	o	o	o	o	o	o	o	o	o	o	o	o	x
.
c221c_1024	No0027	1055+018	86ghz	o	o	o	o	o	o	o	o	o	o	.	.	x
.
c221c_1025	No0029	OJ287	86ghz	o	o	o	o	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1026	No0030	OJ287	86ghz	o	o	o	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1027	No0032	OJ287	86ghz	o	o	o	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1028	No0033	1055+018	86ghz	.	.	o	.	o	o	o	o	o	o	o	o	x
.
c221c_1029	No0034	OJ287	86ghz	.	.	o	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1030	No0036	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1032	No0038	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1033	No0039	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1034	No0040	1055+018	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
.
c221c_1035	No0041	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1036	No0043	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1037	No0044	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1038	No0045	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1039	No0046	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1040	No0047	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1041	No0048	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1042	No0049	1055+018	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1043	No0050	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1044	No0052	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1045	No0053	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1046	No0054	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1047	No0055	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.
.
c221c_1048	No0056	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	x
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

c221c_1049	No0057	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1050	No0058	1055+018	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	o	x
c221c_1051	No0059	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1052	No0061	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	o	x
c221c_1053	No0062	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1054	No0063	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	o	x
c221c_1055	No0064	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1056	No0065	OJ287	86ghz	.	.	.	.	o	o	o	o	o	o	o	o	o	x
c221c_1057	No0066	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1058	No0067	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1059	No0068	3C279	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	x
c221c_1060	No0070	OJ287	86ghz	.	.	.	.	o	o	.	.	.	.	o	o	o	x
c221c_1061	No0071	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1062	No0072	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	.	.	.	.
c221c_1063	No0073	OJ287	86ghz	.	.	.	.	o	o	.	.	.	.	o	o	o	x
c221c_1064	No0074	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1065	No0075	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	.	.	.	.
c221c_1066	No0076	OJ287	86ghz	.	.	.	.	o	o	.	.	.	.	o	o	o	x
c221c_1067	No0077	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1068	No0078	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	.	.	.	.
c221c_1069	No0079	OJ287	86ghz	.	.	.	.	o	o	.	.	.	.	o	o	o	.
c221c_1070	No0080	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1071	No0081	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	.	.	.	.
c221c_1072	No0082	OJ287	86ghz	.	.	.	.	o	o	.	.	.	.	o	o	o	.
c221c_1073	No0083	BLLAC	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.

c221c_1074	No0084	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1075	No0085	OJ287 86ghz	.	.	.	.	.	o	o	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1076	No0086	BLLAC 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1077	No0087	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1078	No0088	OJ287 86ghz	.	.	.	.	.	o	o	.	.	.	.	o	o	.
.	95	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1079	No0089	BLLAC 86ghz	09	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1080	No0090	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1081	No0091	OJ287 86ghz	.	.	.	.	.	o	o	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1082	No0092	BLLAC 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1083	No0093	3C279 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1084	No0094	OJ287 86ghz	.	.	.	.	.	o	o	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1085	No0095	3C84 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1086	No0096	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1087	No0097	OJ287 86ghz	.	.	.	.	.	o	.	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1088	No0098	3C84 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1089	No0099	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
x	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.
c221c_1090	No0100	OJ287 86ghz	.	.	.	.	.	.	.	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1091	No0101	3C84 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1092	No0102	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.
c221c_1093	No0103	OJ287 86ghz	.	.	.	.	.	.	.	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1094	No0104	3C84 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1095	No0105	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.
c221c_1096	No0106	OJ287 86ghz	.	.	.	.	.	.	.	.	.	.	.	o	o	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1097	No0107	3C84 86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1098	No0108	CEN-A 86ghz	.	.	.	.	.	.	.	o	o	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.

c221c_1099	No0109	3C84	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1100	No0110	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1101	No0111	3C84	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1102	No0112	CEN-A	86ghz	.	.	.	.	.	.	o	o	o	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1103	No0113	0235+164	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1104	No0114	1334-127	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1105	No0115	0235+164	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1106	No0116	CEN-A	86ghz	.	.	.	.	.	.	o	o	.	o	o	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1107	No0117	1510-089	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
.
c221c_1108	No0119	0235+164	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1109	No0120	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1110	No0121	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1111	No0122	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1112	No0123	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
.
c221c_1113	No0125	1510-089	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
.
c221c_1114	No0127	3C120	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1115	No0128	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1116	No0129	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1117	No0130	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1118	No0131	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
.
c221c_1119	No0133	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1120	No0134	3C120	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1121	No0135	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1122	No0136	1510-089	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
.
c221c_1123	No0138	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.

c221c_1124	No0139	3C120	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1125	No0140	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1126	No0141	1741-038	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1127	No0143	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1128	No0144	1510-089	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1129	No0146	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1130	No0147	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1131	No0148	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1132	No0149	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1133	No0150	1741-038	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1134	No0152	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1135	No0153	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1136	No0154	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1137	No0155	1510-089	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1138	No0157	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1139	No0158	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1140	No0159	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1141	No0160	1741-038	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1142	No0162	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1143	No0163	1510-089	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.
c221c_1144	No0165	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1145	No0166	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.
c221c_1146	No0167	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1147	No0168	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1148	No0169	1741-038	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
.

c221c_1149	No0171	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1150	No0172	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1151	No0173	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1152	No0174	1510-089	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1153	No0176	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1154	No0177	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1155	No0178	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1156	No0179	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1157	No0181	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1158	No0182	3C345	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1159	No0184	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1160	No0185	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1161	No0186	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1162	No0187	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1163	No0189	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1164	No0190	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1165	No0191	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1166	No0192	3C345	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1167	No0194	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1168	No0195	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1169	No0196	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1170	No0197	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1171	No0198	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.
c221c_1172	No0200	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1173	No0201	3C345	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.
.

c221c_1174	No0203	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1175	No0204	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1176	No0205	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1177	No0206	1741-038	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
c221c_1178	No0208	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1179	No0209	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1180	No0210	NGC1052	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1181	No0211	3C345	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	.
c221c_1182	No0213	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1183	No0214	0420-014	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1184	No0215	NGC1052	86ghz	o	o	o	o	.	o	.	.	.	.	.	.	.	.
c221c_1185	No0216	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
c221c_1186	No0218	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1187	No0219	3C345	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
c221c_1188	No0221	0217+017	86ghz	o	o	o	.	.	o	.	.	.	.	.	.	.	.
c221c_1189	No0222	NGC1052	86ghz	o	o	o	.	.	o	.	.	.	.	.	.	.	.
c221c_1190	No0223	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1191	No0224	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1192	No0225	1741-038	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	.
c221c_1193	No0227	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1194	No0228	0217+017	86ghz	o	o	o	.	.	o	o	.	.	.	.	.	.	.
c221c_1195	No0229	NGC1052	86ghz	o	o	o	.	.	o	o	.	.	.	.	.	.	.
c221c_1196	No0230	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1197	No0232	0217+017	86ghz	o	o	o	.	.	o	o	o	o	o	o	o	o	o
c221c_1198	No0233	NGC1052	86ghz	o	o	o	.	.	o	o	o	o	o	o	o	o	.

c221c_1199	No0235	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1200	No0236	0217+017	86ghz	o	.	88	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1201	No0237	NGC1052	86ghz	o	.	o	.	.	o	o	o	o	o	o	o	o	.	o	.	
.
c221c_1202	No0239	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1203	No0240	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1204	No0241	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1205	No0242	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1206	No0243	0217+017	86ghz	o	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1207	No0244	NGC1052	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	.	o	.	
.
c221c_1208	No0246	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1209	No0247	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1210	No0249	0217+017	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1211	No0250	NGC1052	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1212	No0252	3C279	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1213	No0253	CEN-A	86ghz	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1215	No0255	0217+017	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1216	No0256	NGC1052	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1218	No0260	0420-014	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	.	o	.	.	
.
c221c_1219	No0261	NGC1052	86ghz	.	.	o	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1220	No0263	OJ287	86ghz	o	o	.	o	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1221	No0264	0420-014	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1222	No0265	NGC1052	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	
.
c221c_1223	No0267	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1224	No0268	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.	.	.
.
c221c_1225	No0269	0420-014	86ghz	.	.	.	.	.	o	o	o	o	o	o	o	o	o	o	o	
.

c221c_1226	No0270	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
.
c221c_1227	No0272	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1228	No0274	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
.
c221c_1229	No0275	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1230	No0277	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1231	No0278	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
.
c221c_1232	No0279	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
x	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1233	No0281	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1234	No0282	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1235	No0283	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
.
c221c_1236	No0284	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1237	No0286	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1238	No0288	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1239	No0289	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1240	No0291	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1241	No0292	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1242	No0293	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1243	No0295	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.
c221c_1244	No0296	OJ287	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1245	No0297	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1246	No0298	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1247	No0300	3C279	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1248	No0302	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1249	No0303	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1250	No0305	3C279	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.

c221c_1251	No0306	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1252	No0308	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1253	No0309	3C279	86ghz	o	o	o	o	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	o	o	.	.	.	.	.	.	.	.	.	.
c221c_1254	No0310	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1255	No0311	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1256	No0314	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1257	No0315	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1258	No0317	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1259	No0318	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1260	No0320	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1261	No0321	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1262	No0323	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1263	No0324	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1264	No0326	0420-014	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
c221c_1265	No0327	NGC1052	86ghz	.	.	.	.	.	.	o	o	o	o	o	o	o	o
o	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

7mm

				NL	FD	PT	LA	KP	OV	BR	GB	MK	HN	SC
c221c_1000	No0118	1510-089	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1001	No0124	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1002	No0126	1510-089	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1003	No0132	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1004	No0137	1510-089	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1005	No0142	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1006	No0145	1510-089	43ghz	o	o	o	o	o	o	o	.	.	.	.
c221c_1007	No0151	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1008	No0156	1510-089	43ghz	o	o	o	o	o	o	o	.	.	.	.
c221c_1009	No0161	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1010	No0164	1510-089	43ghz	o	o	o	o	o	o	o	.	.	.	.
c221c_1011	No0170	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1012	No0175	1510-089	43ghz	.	o	o	o	o	o	o	.	.	.	.
c221c_1013	No0180	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1014	No0183	3C345	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1015	No0188	1741-038	43ghz	o	o	o	o	o	o	o	.	.	o	o

c221c_1016	No0193	3C345	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1017	No0199	1741-038	43ghz	o	o	o	o	o	o	o	.	.	.	.
c221c_1018	No0202	3C345	43ghz	o	o	o	o	o	o	o	.	.	o	.
c221c_1019	No0207	1741-038	43ghz	o	o	o	o	o	o	o	.	o	.	.
c221c_1020	No0212	3C345	43ghz	o	o	o	o	o	o	o	.	o	o	.
c221c_1021	No0217	1741-038	43ghz	.	o	o	o	o	o	o	.	o	.	.
c221c_1022	No0220	3C345	43ghz	.	o	o	o	o	o	o	.	o	o	.
c221c_1023	No0226	1741-038	43ghz	.	.	o	o	o	o	o	.	o	.	.
c221c_1024	No0234	NGC1052	43ghz	o	o	o	o	o	o	.	.	.	o	o
c221c_1025	No0238	NGC1052	43ghz	o	o	o	o	o	o	.	.	.	o	o
c221c_1026	No0245	NGC1052	43ghz	o	o	o	o	o	o	.	.	.	o	o
c221c_1027	No0251	NGC1052	43ghz	o	o	o	o	o	o	o	.	.	o	o
c221c_1028	No0257	NGC1052	43ghz	o	o	o	o	o	o	o	.	.	x	o
c221c_1029	No0262	NGC1052	43ghz	o	o	o	o	o	o	o	.	.	x	o
c221c_1030	No0266	NGC1052	43ghz	o	o	o	o	o	o	o	.	.	x	o
c221c_1031	No0271	NGC1052	43ghz	o	o	o	o	o	o	o	.	.	x	o
c221c_1032	No0276	NGC1052	43ghz	o	o	o	o	o	o	o	.	x	x	o
c221c_1033	No0280	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1034	No0285	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1035	No0290	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1036	No0294	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1037	No0299	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1038	No0304	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1039	No0307	0420-014	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1040	No0312	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1041	No0316	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1042	No0319	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	o	o
c221c_1043	No0322	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	.	.
c221c_1044	No0325	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	.	.
c221c_1045	No0328	NGC1052	43ghz	o	o	o	o	o	o	o	.	o	.	.