C211A Correlation Report

General Information

- Includes 3 science projects: MB016A, MB018A, and MS004.
- Includes 3mm and 7mm parts
- Session info: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/
- Station feedback: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/sessions/apr21/feedback_apr21.asc
- Text files with detailed antenna statistics, scroll down to get to the cumulative statistics for the whole experiment:
  c211a_3mm_ALL.antrep

  c211a_7mm_ALL.antrep

Current Status

Correlation finished, data **released to PI** on 25.11.2021.

The second release was prepared in February 2022, v3, fixing NOEMA site position in the 3mm part. The 7mm is unaffected and those FITS files should be taken from the first release, v1.

Found July 2023: output of the 7mm correlation contains all autocorrelation records twice. This leads to artificially low weights in AIPS task ACCOR or equivalent, and/or to lower than expected flux densities.

Suggested fix (communicated to PIs): Antenna based scaling by a factor of $2^{0.5}$ or baseline based scaling by a factor of 2.

Fringes

Station	Code	Fringes	Plots	Comments
Ef	B	**yes**	Fringe overview of all baselines including this antenna in LL(left for each baseline) and RR (right for each baseline). Legend: white box - scheduled, but no data (or sometimes fourfit had trouble with the particular baseline/pol, so no data in alist), blue - no fringe, shades of green and brown -- fringes of varying quality, with bright green designating the best and brownish-red the worst. c211a_3mm_FRINGE_RfAnt_Ef_LLRR_AllSrc.pdf Examples of fourfit fringe plots can be found in (all fringe plots with baselines including the given antenna): No0029_B.pdf, No0245_B.pdf Antenna statistics: c211a_3mm_Ef.antrep **Same for all antennas below unless otherwise noted.**	Mostly clear sky Participated in 99% scans (3mm only), fringes in 53% baselines*||pols, mean SNR 333.

Station	Code	Fringes	Plots	Comments
On	X	**yes**	c211a_3mm_FRINGE_RfAnt_On_LLRR_AllSrc.pdf No0029_X.pdf, No0231_X.pdf c211a_3mm_On.antrep	Mostly clear sky. The 4mm receiver was used. Participated in 100% scans (3mm only), fringes in 51% baselines*||pols, mean SNR 211.
Ys	Y	**yes**	c211a_3mm_FRINGE_RfAnt_Ys_LLRR_AllSrc.pdf No0007_Y.pdf c211a_3mm_Ys.antrep	**Took part only in a few scans due to the blind repairs, and fringes found only for one scan.** Participated in 8% scans (3mm only), fringes in 10% baselines*||pols, mean SNR 88.
Mh	Z	**yes**	c211a_3mm_FRINGE_RfAnt_Mh_LLRR_AllSrc.pdf No0103_Z.pdf c211a_3mm_Mh.antrep	**Bad weather** for most of the observations (rain or wet snow, heavy clouds). Participated in 96% scans (3mm only), fringes in 33% baselines*||pols, mean SNR 44.
Pv	P	**yes**	c211a_3mm_FRINGE_RfAnt_Pv_LLRR_AllSrc.pdf No0143_P.pdf c211a_3mm_Pv.antrep	**Bad weather.** "Participated" in 100% scans (3mm only), **This represents the number of recorded scans, but for more than a half of those the antenna was stowed due to the weather. See the fringe overview for the good and bad scans.** fringes in 23% baselines*||pols, mean SNR 317.
NOEMA: Nn	N	**yes**	c211a_3mm_FRINGE_RfAnt_Nn_LLRR_AllSrc.pdf No0156_N.pdf, No0160_N.pdf, No0245_N.pdf c211a_3mm_Nn.antrep	Participated in 100% scans (3mm only), fringes in 56% baselines*||pols, mean SNR 526. (there was a large clock drift in the first production correlation, but it was fixed in the second release by using a better phase center)
GLT: Gl	g	**yes**	c211a_3mm_FRINGE_RfAnt_Gl_LLRR_AllSrc.pdf	Storm and high wind for part of the observations.

Station	Code	Fringes	Plots	Comments
			No0182_g.pdf, No0245_g.pdf c211a_3mm_Gl.antrep	Participated in 100% scans (3mm only), fringes in 36% baselines*||pols, mean SNR 45.
GBT: Gb	G	yes	c211a_3mm_FRINGE_RfAnt_Gb_LLRR_AllSrc.pdf No0029_G.pdf, No0108_G.pdf c211a_3mm_Gb.antrep	**Pointing problems**, for some scans was not on source. Participated in 100% scans (3mm only), fringes in 14% baselines*||pols, mean SNR 61.
VLBA: Br	b	yes	c211a_3mm_FRINGE_RfAnt_Br_LLRR_AllSrc.pdf No0213_b.pdf c211a_3mm_Br.antrep c211a_7mm_FRINGE_RfAnt_Br_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Br.antrep	3mm: Participated in 99% scans, fringes in 44% baselines*||pols, mean SNR 48. 7mm: Participated in 99% scans, fringes in 84% baselines*||pols, mean SNR 179.
VLBA: Fd	f	yes	c211a_3mm_FRINGE_RfAnt_Fd_LLRR_AllSrc.pdf No0245_f.pdf c211a_3mm_Fd.antrep c211a_7mm_FRINGE_RfAnt_Fd_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Fd.antrep	**Constant LCP problems.** 3mm: Participated in 98% scans, fringes in 41% baselines*||pols, mean SNR 50. 7mm: Participated in 98% scans, fringes in 91% baselines*||pols, mean SNR 173.
VLBA: Kp	k	yes	c211a_3mm_FRINGE_RfAnt_Kp_LLRR_AllSrc.pdf No0155_k.pdf c211a_3mm_Kp.antrep c211a_7mm_FRINGE_RfAnt_Kp_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Kp.antrep	3mm: Participated in 100% scans, fringes in 46% baselines*||pols, mean SNR 53. 7mm: Participated in 100% scans, fringes in 94% baselines*||pols, mean SNR 221.

Station	Code	Fringes	Plots	Comments
VLBA: La	l	**yes**	c211a_3mm_FRINGE_RfAnt_La_LLRR_AllSrc.pdf No0237_l.pdf c211a_3mm_La.antrep c211a_7mm_FRINGE_RfAnt_La_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_La.antrep	3mm: Participated in 100% scans, fringes in 45% baselines*||pols, mean SNR 58. 7mm: Participated in 100% scans, fringes in 90% baselines*||pols, mean SNR 174.
VLBA: Mk	m	**yes**	c211a_3mm_FRINGE_RfAnt_Mk_LLRR_AllSrc.pdf No0237_m.pdf c211a_3mm_Mk.antrep c211a_7mm_FRINGE_RfAnt_Mk_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Mk.antrep	3mm: Participated in 87% scans, fringes in 37% baselines*||pols, mean SNR 28. 7mm: Participated in 90% scans, fringes in 85% baselines*||pols, mean SNR 199. **dropped out for a few scans due to USNO observations**
VLBA: Nl	n	**yes**	c211a_3mm_FRINGE_RfAnt_Nl_LLRR_AllSrc.pdf No0155_n.pdf c211a_3mm_Nl.antrep c211a_7mm_FRINGE_RfAnt_Nl_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Nl.antrep	3mm: Participated in 100% scans, fringes in 26% baselines*||pols, mean SNR 22. 7mm: Participated in 98% scans, fringes in 89% baselines*||pols, mean SNR 138.
VLBA: Ov	o	**yes**	c211a_3mm_FRINGE_RfAnt_Ov_LLRR_AllSrc.pdf No0152_o.pdf c211a_3mm_Ov.antrep c211a_7mm_FRINGE_RfAnt_Ov_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Ov.antrep	. 3mm: Participated in 100% scans, fringes in 43% baselines*||pols, mean SNR 44. 7mm: Participated in 100% scans, fringes in 80% baselines*||pols, mean SNR 149.

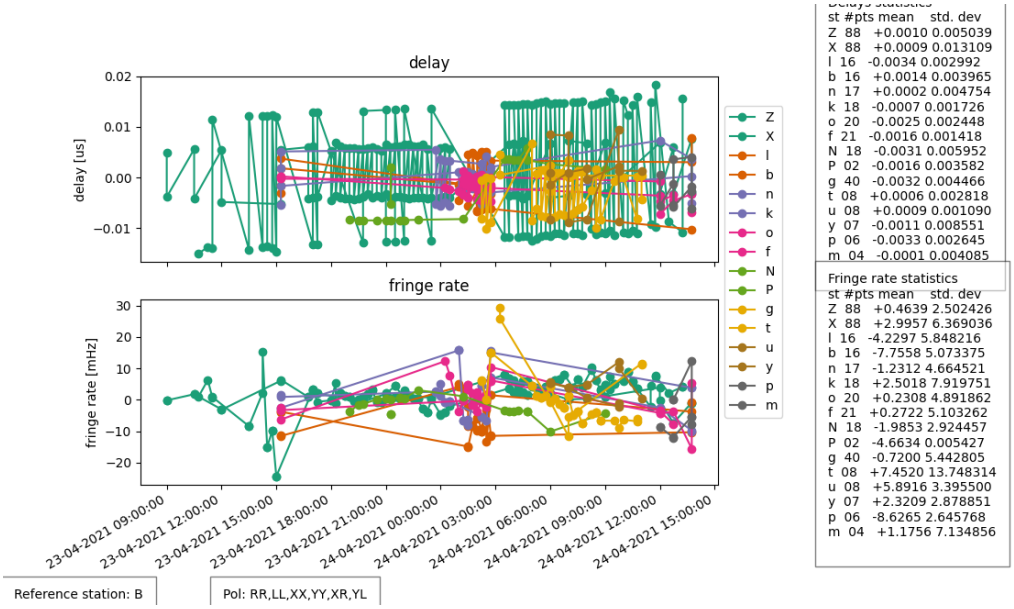
Station	Code	Fringes	Plots	Comments
VLBA: Pt	p	yes	c211a_3mm_FRINGE_RfAnt_Pt_LLRR_AllSrc.pdf No0173_p.pdf c211a_3mm_Pt.antrep c211a_7mm_FRINGE_RfAnt_Pt_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Pt.antrep	3mm: Participated in 95% scans, fringes in 34% baselines*||pols, mean SNR 30. 7mm: Participated in 92% scans, fringes in 84% baselines*||pols, mean SNR 160. **dropped out for a few scans due to USNO observations**
VLBA: Hn	h	yes	c211a_7mm_FRINGE_RfAnt_Hn_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Hn.antrep	Participated in 100% scans (7mm only), fringes in 75% baselines*||pols, mean SNR 89.
VLBA: Sc	c	yes	c211a_7mm_FRINGE_RfAnt_Sc_LLRR_AllSrc.pdf No0082_all.pdf, No0121_all.pdf c211a_7mm_Sc.antrep	Participated in 90% scans (7mm only), fringes in 72% baselines*||pols, mean SNR 85.
KVN: Kt	t	yes	c211a_3mm_FRINGE_RfAnt_Kt_LLRR_AllSrc.pdf No0170_t.pdf, No0213_t.pdf c211a_3mm_Kt.antrep	Some bad weather. Participated in 100% scans (3mm only), fringes in 49% baselines*||pols, mean SNR 125.
KVN: Ku	u	yes	c211a_3mm_FRINGE_RfAnt_Ku_LLRR_AllSrc.pdf No0164_u.pdf, No0212_u.pdf c211a_3mm_Ku.antrep	Some bad weather. Participated in 100% scans (3mm only), fringes in 51% baselines*||pols, mean SNR 156.
KVN: Ky	y	yes	c211a_3mm_FRINGE_RfAnt_Ky_LLRR_AllSrc.pdf No0166_y.pdf, No0212_y.pdf c211a_3mm_Ky.antrep ----------	Some bad weather. Participated in 100% scans (3mm only), fringes in 51% baselines*||pols, mean SNR 154.

Notes

Post-Correlation checks

Residuals

c211a 3mm, Ef as reference:



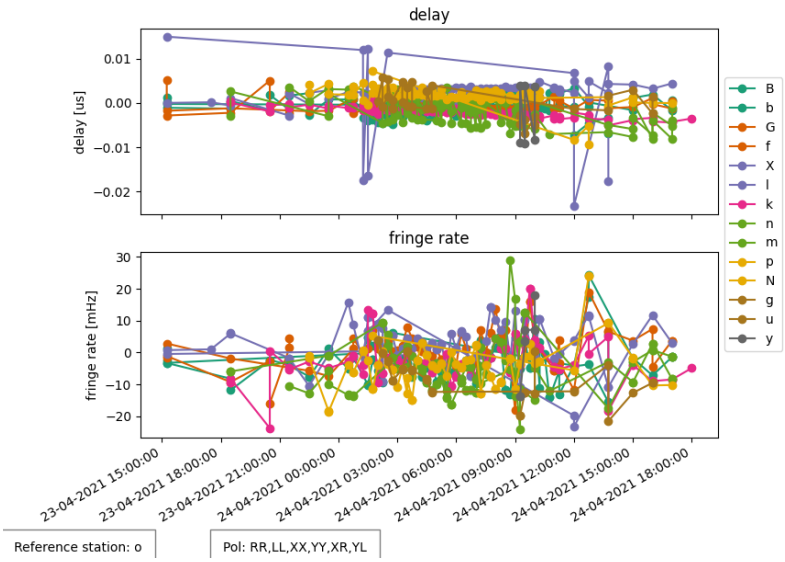
Delays statistics

st	#pts	mean	std. dev
Z	88	+0.0010	0.005039
X	88	+0.0009	0.013109
l	16	-0.0034	0.002992
b	16	+0.0014	0.003965
n	17	+0.0002	0.004754
k	18	-0.0007	0.001726
o	20	-0.0025	0.002448
f	21	-0.0016	0.001418
N	18	-0.0031	0.005952
P	02	-0.0016	0.003582
g	40	-0.0032	0.004466
t	08	+0.0006	0.002818
u	08	+0.0009	0.001090
y	07	-0.0011	0.008551
p	06	-0.0033	0.002645
m	04	-0.0001	0.004085

Fringe rate statistics

st	#pts	mean	std. dev
Z	88	+0.4639	2.502426
X	88	+2.9957	6.369036
l	16	-4.2297	5.848216
b	16	-7.7558	5.073375
n	17	-1.2312	4.664521
k	18	+2.5018	7.919751
o	20	+0.2308	4.891862
f	21	+0.2722	5.103262
N	18	-1.9853	2.924457
P	02	-4.6634	0.005427
g	40	-0.7200	5.442805
t	08	+7.4520	13.748314
u	08	+5.8916	3.395500
y	07	+2.3209	2.878851
p	06	-8.6265	2.645768
m	04	+1.1756	7.134856

c211a 3mm, Ov as reference:



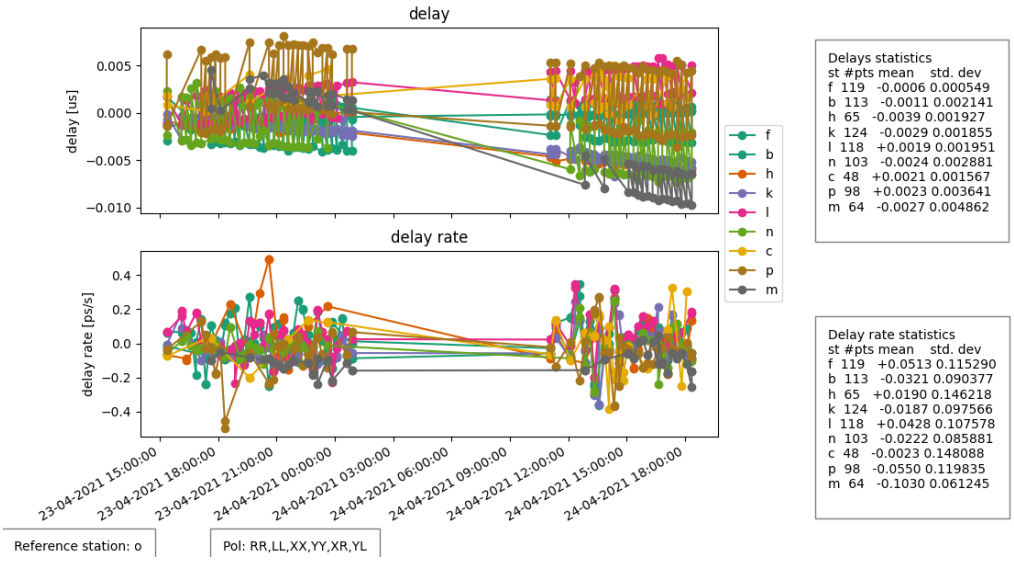
Delays statistics

st	#pts	mean	std. dev
B	20	-0.0025	0.002448
b	80	+0.0001	0.001775
G	07	+0.0005	0.003311
f	68	-0.0007	0.000975
X	10	-0.0009	0.014727
l	76	+0.0025	0.001349
k	103	-0.0021	0.000993
n	55	-0.0020	0.003000
m	51	-0.0012	0.003084
p	73	+0.0019	0.001111
N	04	-0.0039	0.006573
g	23	+0.0012	0.002491
u	06	-0.0044	0.001392
y	06	-0.0025	0.006310

Fringe rate statistics

st	#pts	mean	std. dev
B	20	+0.2308	4.891862
b	80	-3.5828	6.386088
G	07	-3.5160	6.415865
f	68	+1.5909	5.983639
X	10	-2.3946	10.846425
l	76	+2.7285	6.579684
k	103	-2.3873	6.082024
n	55	-1.2230	7.444094
m	51	-9.3038	5.045502
p	73	-4.6263	5.440673
N	04	+11.9328	12.717023
g	23	-6.5873	5.599552
u	06	-12.8623	6.718034
y	06	+1.3673	11.570975

c211a 7mm, Ov as reference:



FITS completeness (pclist)

legend:

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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
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c211a.3mm.fits:

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                                EF ON MH YS GB NL FD PT LA OV BR KP PV NN MK GL KY KU KT
c211a_001 No0001 0106+013 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_002 No0002  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_003 No0003  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_004 No0004  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_005 No0005  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_006 No0006  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_007 No0007 0106+013 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_008 No0008  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_009 No0009  NGC1052 86ghz o  o  o  57 .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_010 No0010  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_011 No0011  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_012 No0012  NGC1052 86ghz o  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_013 No0013 0106+013 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_014 No0014  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_015 No0015  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_016 No0016  NGC1052 86ghz o  o  90 x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_017 No0017  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_018 No0018  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_019 No0019  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .
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c211a_020 No0020  NGC1052 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_021 No0022 0106+013 86ghz o  o  o  x  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_022 No0023  NGC1052 86ghz o  o  o  x  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_023 No0024  NGC1052 86ghz o  o  o  x  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_024 No0026  NGC1052 86ghz o  o  .  x  o  o  o  .  .  .  .  .  .  .  .  .  .  .  .  .
c211a_025 No0027  NGC1052 86ghz o  o  .  x  o  o  o  o  o  .  .  .  .  .  .  .  .  .  .  .
c211a_026 No0029 0234+285 86ghz o  o  o  x  o  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .
c211a_027 No0032  NGC1052 86ghz o  o  .  x  o  o  o  o  o  .  .  o  .  .  .  .  .  .  .  .
c211a_028 No0034  NGC1052 86ghz o  .  .  x  o  o  o  o  o  .  .  o  .  .  .  .  .  .  .  .
c211a_029 No0036  NGC1052 86ghz o  .  .  x  o  o  o  o  o  o  .  o  .  .  .  .  .  .  .  .
c211a_030 No0039  NGC1052 86ghz o  .  .  x  94 o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_031 No0041  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_032 No0043    OJ287 86ghz .  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_033 No0044  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_034 No0047    OJ287 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_035 No0048  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_036 No0050    OJ287 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_037 No0051  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_038 No0053    OJ287 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_039 No0055 0106+013 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  x  .  .  .  .  .
c211a_040 No0057    OJ287 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_041 No0058  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_042 No0060    OJ287 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_043 No0061  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_044 No0063    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_045 No0064  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_046 No0066    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_047 No0068 0420-014 86ghz .  .  .  .  o  o  o  x  o  o  o  o  .  .  .  .  .  .  .  .
c211a_048 No0070    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_049 No0071  NGC1052 86ghz .  .  .  .  o  o  o  x  o  o  o  o  .  .  x  .  .  .  .  .
c211a_050 No0073    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_051 No0074  NGC1052 86ghz .  .  .  .  o  o  o  x  o  o  o  o  .  .  x  .  .  .  .  .
c211a_052 No0076    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_053 No0077  NGC1052 86ghz .  .  .  .  o  o  o  x  o  o  o  o  .  .  x  .  .  .  .  .
c211a_054 No0079    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_055 No0081 0106+013 86ghz .  .  .  .  o  o  o  x  o  o  o  o  .  .  x  .  .  .  .  .
c211a_056 No0083    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_057 No0084  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_058 No0086    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_059 No0088  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_060 No0090    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_061 No0091  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_062 No0093    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_063 No0095 0106+013 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_064 No0097    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_065 No0098  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_066 No0100    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_067 No0101  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
c211a_068 No0103    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .  .
c211a_069 No0104  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .  .
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c211a_070 No0106    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_071 No0108 0420-014 86ghz .  .  .  .  o  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_072 No0110    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_073 No0111  NGC1052 86ghz .  .  .  .  o  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_074 No0113    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_075 No0114  NGC1052 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_076 No0116    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_077 No0117  NGC1052 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_078 No0119    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_079 No0120 0420-014 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_080 No0122    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_081 No0123  NGC1052 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_082 No0125    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_083 No0126  NGC1052 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_084 No0128    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_085 No0129  NGC1052 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_086 No0131    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_087 No0132 0420-014 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_088 No0134    3C273 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_089 No0135  NGC1052 86ghz .  .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_090 No0137    3C273 86ghz o  o  o  x  .  o  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_091 No0138  NGC1052 86ghz .  .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_092 No0140    3C273 86ghz o  o  o  x  .  o  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_093 No0141  NGC1052 86ghz .  .  .  .  .  .  .  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_094 No0143    3C273 86ghz o  o  o  x  .  o  o  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_095 No0144 0420-014 86ghz .  .  .  .  .  .  .  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_096 No0146    3C273 86ghz o  o  o  x  .  o  o  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_097 No0147 0420-014 86ghz .  .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_098 No0149    3C273 86ghz o  o  o  x  .  o  .  .  .  .  .  .  .  o  o  .  .  .  .  .
c211a_099 No0150    3C273 86ghz o  o  o  x  .  o  o  o  o  .  .  o  o  o  o  .  .  .  .  .
c211a_100 No0151    3C273 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  o  .  .  .  .  .
c211a_101 No0152    3C273 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  o  .  .  .  .  .
c211a_102 No0153    3C273 86ghz o  o  .  x  .  o  o  o  o  o  o  o  o  o  o  .  .  .  .  .
c211a_103 No0154    3C273 86ghz o  o  .  x  .  o  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_104 No0155    3C273 86ghz o  o  .  x  .  o  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_105 No0156    3C273 86ghz o  o  .  x  .  o  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_106 No0157    3C273 86ghz o  .  .  x  .  o  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_107 No0158    3C279 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  .  .  .  .
c211a_108 No0159    3C273 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  .  o  .  .  .
c211a_109 No0160    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
c211a_110 No0161    3C273 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_111 No0162    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
c211a_112 No0163    3C273 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_113 No0164    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
c211a_114 No0165    3C279 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_115 No0166    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
c211a_116 No0167    3C273 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_117 No0168    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
c211a_118 No0169    3C273 86ghz .  .  .  .  .  o  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_119 No0170    BLLAC 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  .  o  o  o
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c211a_120 No0171    3C273 86ghz . . . . . o o o o o o o . . o o . . .
c211a_121 No0172    BLLAC 86ghz o o o x . . . . . o o . . o o o
c211a_122 No0173    3C279 86ghz . . . . . o o o o o o o . . o . . . .
c211a_123 No0174  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_124 No0175    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_125 No0176  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_126 No0177    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_127 No0178  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_128 No0179    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_129 No0180  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_130 No0181    3C279 86ghz . . . . . o o o o o o o . . o . . . .
c211a_131 No0182     3C84 86ghz o o o . . . . . o . o o o o
c211a_132 No0183    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_133 No0184  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_134 No0185    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_135 No0186  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_136 No0187    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_137 No0188  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_138 No0189    3C279 86ghz . . . . . o o o o o o o . . o . . . .
c211a_139 No0190     3C84 86ghz o o o x . . . . . o o . o o o o
c211a_140 No0191    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_141 No0192  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_142 No0193    3C273 86ghz . . . . . o o o o o o o . . 14 . . . .
c211a_143 No0194  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_144 No0195    3C273 86ghz . . . . . o o o o o o o . . x . . . .
c211a_145 No0196  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_146 No0197    3C279 86ghz . . . . . o o o o o o o . . x . . . .
c211a_147 No0198     3C84 86ghz o o o x . . . . . o o . o o o o
c211a_148 No0199    3C273 86ghz . . . . . o o o o o o o . . x . . . .
c211a_149 No0200  NGC0315 86ghz 33 o o x . . . . . o o . o o o o
c211a_150 No0201    3C273 86ghz . . . . . o o o o o o o . . x . . . .
c211a_151 No0202  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_152 No0203    3C273 86ghz . . . . . o o o o o o o . . o . . . .
c211a_153 No0204  NGC0315 86ghz o o o x . . . . . o o . o o o o
c211a_154 No0205    3C279 86ghz . . . . . o o o o o o o . . o . . . .
c211a_155 No0206     3C84 86ghz o o o x . . . . . o o . o o o o
c211a_156 No0207    3C273 86ghz . . . . . o o o o o o o . . o . o o o
c211a_157 No0208  NGC0315 86ghz o o o x . . . . . 61 o . o . . .
c211a_158 No0209    3C273 86ghz . . . . . o o o o o o o . . o . o o o
c211a_159 No0210  NGC0315 86ghz o o o x . . . . . o o . o . . .
c211a_160 No0211    3C273 86ghz . . . . . o o o o o o . . o . . . .
c211a_161 No0212     3C84 86ghz o o o x . . . . . o o . o o o o
c211a_162 No0213    3C279 86ghz . . . . . o o o o o o . . o . o o o
c211a_163 No0214  NGC0315 86ghz o o o x . . . . . o o . o . . .
c211a_164 No0215    3C273 86ghz . . . . . o o o o o o . . o . o o o
c211a_165 No0216  NGC0315 86ghz o o o x . . . . . o o . o . . .
c211a_166 No0217    3C273 86ghz . . . . . o o o o o o . . o . o o o
c211a_167 No0218  NGC0315 86ghz o o o x . . . . . o o . o . . .
c211a_168 No0219    3C273 86ghz . . . . . o . o o o . . o . o o o
c211a_169 No0220  NGC0315 86ghz o o o x . o . . . . . o o . o . . .
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c211a_170 No0221     3C84 86ghz o  o  o  x  .  .  .  .  .  .  .  .  .  o  o  .  o  o  o  o
c211a_171 No0222    BLLAC 86ghz .  .  .  .  .  .  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_172 No0224  NGC0315 86ghz o  o  o  x  .  o  .  .  .  .  .  .  .  o  o  .  o  .  .  .
c211a_173 No0225    BLLAC 86ghz .  .  .  .  .  .  o  o  o  o  o  o  .  .  .  .  .  .  .  .
c211a_174 No0227  NGC0315 86ghz o  o  o  x  .  o  o  o  o  .  .  .  o  o  .  o  .  .  .
c211a_175 No0229  NGC0315 86ghz o  o  o  x  .  o  o  o  o  .  o  .  o  o  .  o  .  .  .
c211a_176 No0231    BLLAC 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_177 No0233  NGC0315 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_178 No0235  NGC0315 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_179 No0237    BLLAC 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  o 94  .  .  .
c211a_180 No0239  NGC0315 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_181 No0241  NGC0315 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_182 No0243  NGC0315 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  .  o  .  .  .
c211a_183 No0245    BLLAC 86ghz o  o  o  x  .  o  o  o  o  o  o  o  o  o  o  o  .  .  .
c211a_184 No0247  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  .  o  .  .  .
c211a_185 No0249  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  .  o  .  .  .
c211a_186 No0251  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  .  o  .  .  .
c211a_187 No0253  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  .  o  .  .  .
c211a_188 No0255    BLLAC 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_189 No0257  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_190 No0259  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_191 No0261  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_192 No0263    BLLAC 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_193 No0265  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_194 No0267  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_195 No0269  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  o  .  .  .
c211a_196 No0271    BLLAC 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_197 No0273  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_198 No0275  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_199 No0277  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_200 No0279    BLLAC 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
c211a_201 No0281  NGC0315 86ghz .  .  .  .  .  o  o  o  o  o  o  o  .  .  o  .  .  .  .
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c211a.7mm.fits:

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                             NL FD PT LA HN SC OV BR KP MK
c211a_01 No0028  NGC1052 43ghz o  o  o  o  o  o  .  .  .  .
c211a_02 No0030 0234+285 43ghz o  o  o  o  o  o  o  o  o  .
c211a_03 No0033  NGC1052 43ghz o  o  o  o  o  o  .  .  o  .
c211a_04 No0035  NGC1052 43ghz o  o  o  o  o  o  .  .  o  .
c211a_05 No0037  NGC1052 43ghz o  o  o  o  o  o  o  .  o  .
c211a_06 No0040  NGC1052 43ghz o  o  o  o  o  o  o  o  o  .
c211a_07 No0042  NGC1052 43ghz o  o  o  o  o  o  o  o  o  .
c211a_08 No0045  NGC1052 43ghz o  o  o  o  o  o  o  o  o  .
c211a_09 No0049  NGC1052 43ghz o  o  o  o  o  o  o  o  o  .
c211a_10 No0052  NGC1052 43ghz o  o  o  o  o  o  o  o  o  .
c211a_11 No0056 0106+013 43ghz o  o  o  o  o  o  o  o  o  o
c211a_12 No0059  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_13 No0062  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
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c211a_14 No0065  NGC1052 43ghz o  o  25 o  o  25 o  o  o  41
c211a_15 No0069 0420-014 43ghz o  o  x  o  o  x  o  o  o  .
c211a_16 No0072  NGC1052 43ghz o  o  x  o  o  x  o  o  o  x
c211a_17 No0075  NGC1052 43ghz o  o  x  o  o  x  o  o  o  x
c211a_18 No0078  NGC1052 43ghz o  o  x  o  o  x  o  o  o  x
c211a_19 No0082 0106+013 43ghz o  o  o  o  o  o  o  o  o  o
c211a_20 No0085  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_21 No0089  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_22 No0092  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_23 No0096 0106+013 43ghz o  o  o  o  o  o  o  o  o  o
c211a_24 No0099  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_25 No0102  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_26 No0105  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_27 No0109 0420-014 43ghz o  o  o  o  o  o  o  o  o  o
c211a_28 No0112  NGC1052 43ghz o  o  o  o  o  o  o  o  o  o
c211a_29 No0115  NGC1052 43ghz o  o  o  o  .  .  o  o  o  o
c211a_30 No0118  NGC1052 43ghz o  o  o  o  .  .  o  o  o  o
c211a_31 No0121 0420-014 43ghz o  o  o  o  o  o  o  o  o  o
c211a_32 No0124  NGC1052 43ghz o  o  o  o  .  .  o  o  o  o
c211a_33 No0127  NGC1052 43ghz o  o  o  o  .  .  o  o  o  o
c211a_34 No0130  NGC1052 43ghz o  o  o  o  .  .  o  o  o  o
c211a_35 No0133 0420-014 43ghz o  o  o  o  o  o  o  o  o  o
c211a_36 No0136  NGC1052 43ghz .  o  o  o  .  .  o  o  o  o
c211a_37 No0139  NGC1052 43ghz .  o  o  o  .  .  o  o  o  o
c211a_38 No0142  NGC1052 43ghz .  .  o  o  .  .  o  o  o  o
c211a_39 No0145 0420-014 43ghz .  .  o  o  .  .  o  o  o  o
c211a_40 No0148 0420-014 43ghz .  o  o  o  .  .  o  o  o  o
c211a_41 No0223    BLLAC 43ghz .  o  o  o  o  o  o  o  o  .
c211a_42 No0226    BLLAC 43ghz .  o  o  o  o  o  o  o  o  .
c211a_43 No0228  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_44 No0230  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_45 No0232    BLLAC 43ghz o  o  o  o  o  o  o  o  o  .
c211a_46 No0234  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_47 No0236  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_48 No0238    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_49 No0240  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_50 No0242  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_51 No0244  NGC0315 43ghz 08 o  o  o  o  o  o  o  o  .
c211a_52 No0246    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_53 No0248  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_54 No0250  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_55 No0252  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_56 No0254  NGC0315 43ghz o  o  o  o  o  o  o  o  o  .
c211a_57 No0256    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_58 No0258  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_59 No0260  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_60 No0262  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_61 No0264    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_62 No0266  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_63 No0268  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
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c211a_64 No0270  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_65 No0272    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_66 No0274  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_67 No0276  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_68 No0278  NGC0315 43ghz o  o  o  o  o  o  o  o  o  o
c211a_69 No0280    BLLAC 43ghz o  o  o  o  o  o  o  o  o  o
c211a_70 No0282  NGC0315 43ghz o  o  25 o  o  25 o  o  o  41
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