General

- Session info: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/
- The experiment consist of 3mm GMVA and a 7mm VLBA-only part (without Gb in that case)

Status

What	Date
Correlation 2nd round finished	27.7.2017
Conversion to HOPS (note that the KVN setup leads to problems on other baselines)	1.8.2017
Fourfit fringe fitting	2.8.2017
FITS export	8.8.2017
PCList check	7.8.2017
Read into AIPS and spot checking	

Fringe search

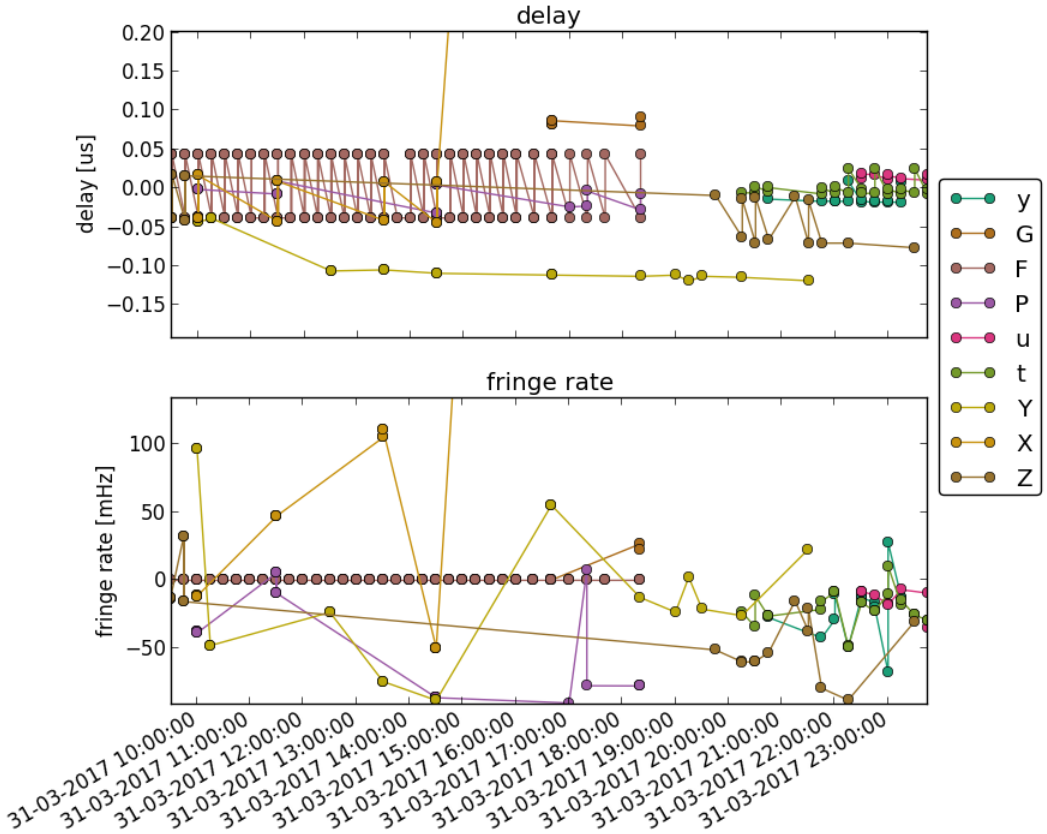
Station	Code	Fringes 3mm	Fringes 7mm	Comment
Ef	F	yes No0263_F.pdf		Effelsberg DBBC2
Eb	B	yes No0263_B.pdf		Effelsberg RDBE
On	X	yes EbOn-LL , EbOn-RR MhOn-LL , MhOn-RR		
Mh	Z	yes EbMh-LL , EbMh-RR		
Pv	P	yes No0263_P.pdf		
Ys	Y	yes EbYs-LL , EbYs-RR		LCP only
Gb	G	yes No0136_G.pdf		
Mk	m	yes No0232_m.pdf	yes No0205_b.pdf	
Pt	p	yes No0144_l.pdf	yes No0205_b.pdf	Weak 3mm fringes only to LA (3C84 scans only)
Nl	n	yes No0210_n.pdf	yes No0205_b.pdf	Weak 3mm fringes only to FD&GB (No0210,No0190)
La	l	yes No0144_l.pdf	yes No0205_b.pdf	
Kp	k	yes No0144_l.pdf	yes No0205_b.pdf	
Ov	o	yes No0144_l.pdf	yes No0205_b.pdf	
Br	b	yes No0144_l.pdf	yes No0205_b.pdf	
Fd	f	yes No0144_l.pdf	yes No0205_b.pdf	
Kt	t	yes No0263_t.pdf		
Ky	y	yes KtKy-LL		
Ku	u	yes KtKu-LL		

Notes

Post-correlation checks

Residuals

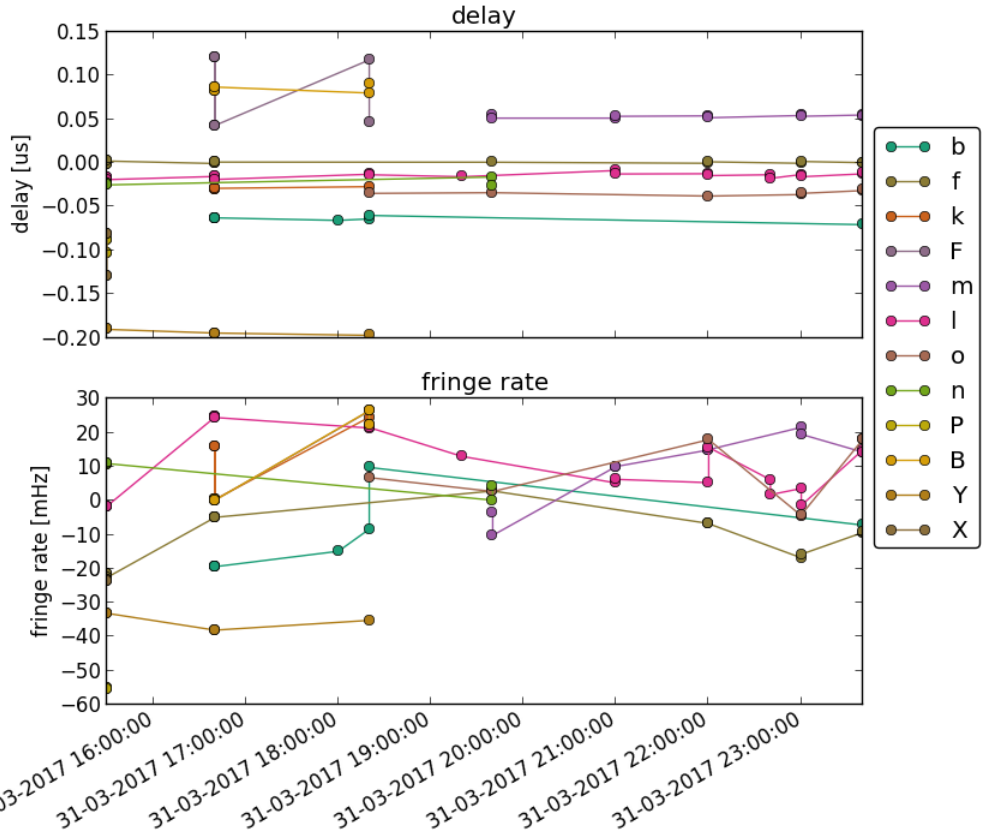
3mm, reference: B (Effelsberg RDBE):




```
Delays statistics
st #pts mean     std. dev
y  14   -0.0132 0.009000
G  06   +0.0850 0.003690
F  122   +0.0021 0.040703
P  17   -0.0124 0.015870
u  08   +0.0146 0.002948
t  23   +0.0001 0.010280
Y  18   -0.0952 0.029413
X  18   +0.0647 0.228203
Z  20   -0.0319 0.032976
```

```
Fringe rate statistics
st #pts mean     std. dev
y  14   -23.7985 22.244618
G  06   +8.3632 11.453378
F  122   -0.0005 0.002112
P  17   -48.1849 36.169198
u  08   -14.2742 8.723899
t  23   -21.4133 12.429818
Y  18   -12.3513 55.876355
X  18   +66.0063 133.068163
Z  20   -31.5756 31.501559
```

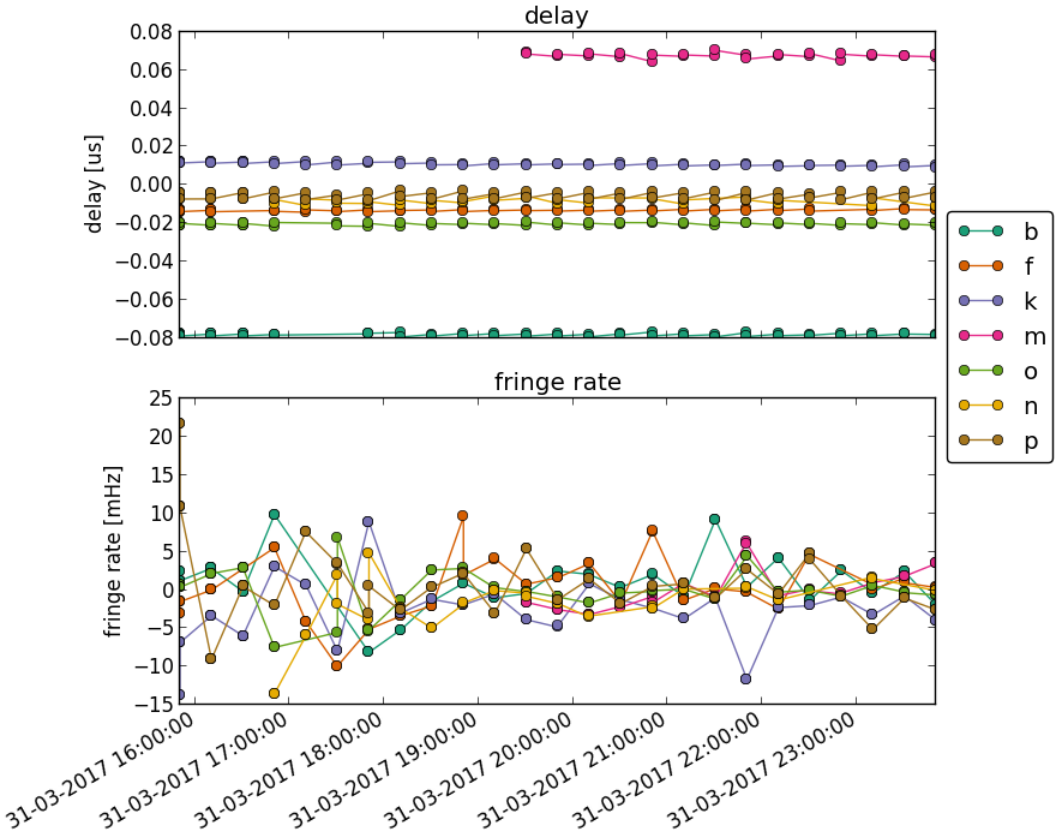
3mm. reference: G (GBT):




```
Delays statistics
st #pts mean    std. dev
b  08   -0.0641 0.002838
f  15   +0.0006 0.001061
k  05   -0.0289 0.001102
F  06   +0.0821 0.037869
m  10   +0.0534 0.001231
l  21   -0.0147 0.002735
o  07   -0.0341 0.002344
n  06   -0.0230 0.003369
P  04   -0.0957 0.007839
B  06   +0.0850 0.003690
Y  05   -0.1933 0.002662
X  04   -0.1049 0.024460
```

```
Fringe rate statistics
st #pts mean    std. dev
b  08   -12.2432 9.631449
f  15   -11.2734 7.897718
k  05   +11.5469 9.582572
F  06   +8.3234 11.433662
m  10   +10.6776 9.500301
l  21   +10.5154 9.872851
o  07   +7.9547 9.523438
n  06   +8.0192 4.265171
P  04   -55.1254 0.220777
B  06   +8.3632 11.453378
Y  05   -35.4692 2.223422
X  04   -23.3724 0.121974
```

7mm, reference l (La):



Delays statistics

st	#pts	mean	std. dev
b	56	-0.0784	0.000626
f	54	-0.0134	0.000453
k	60	+0.0110	0.000841
m	28	+0.0677	0.001194
o	58	-0.0205	0.000637
n	34	-0.0084	0.001511
p	60	-0.0057	0.001733

Fringe rate statistics

st	#pts	mean	std. dev
b	56	+0.9761	3.443800
f	54	-0.0767	3.753107
k	60	-3.1950	4.158442
m	28	+0.0381	2.438371
o	58	+0.1092	2.588368
n	34	-2.0823	3.659154
p	60	+1.4460	6.147949

FITS completeness (pclist):

Legend:

o: station is included in the FITS-file (data is complete)

x: expected station is missing in the FITS-file

number: percentage of job time in the FITS-file compared to expected time.

3mm

				EB	EF	ON	YS	PV	MH	GB	FD	NL	PT	LA	OV	BR	KP	KY	KU	KT	MK
c171b_01	No0108	3C84	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_02	No0109	3C84	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_03	No0110	0224+069	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_04	No0111	0224+069	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_05	No0112	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_06	No0113	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_07	No0114	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_08	No0115	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_09	No0116	0224+069	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_10	No0117	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_11	No0118	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.
c171b_12	No0119	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.	.

c171b_13	No0120	0224+069	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c171b_14	No0121	NGC1052	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c171b_15	No0122	NGC1052	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c171b_16	No0123	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_17	No0124	0224+069	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_18	No0125	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_19	No0126	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_20	No0127	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_21	No0128	0224+069	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_22	No0129	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_23	No0131	NGC1052	3mm_RDBE	o	o	o	o	o	95	.	.	.	.	.	.	.	.	.	.	.
c171b_24	No0132	NGC1052	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	.	.	.
c171b_25	No0136	0224+069	3mm_RDBE	o	o	o	o	o	91	o	o	o	o	o	.	.	.	.	.	.
c171b_26	No0139	NGC1052	3mm_RDBE	o	o	o	o	o	.	o	.	o	.	.	.	.	.	.	.	.
c171b_27	No0144	3C84	3mm_RDBE	.	.	.	.	.	o	.	o	.	o	o	o	o	o	.	.	.
c171b_28	No0148	NGC1052	3mm_RDBE	o	o	o	o	o	.	o	.	o	.	.	.	.	.	.	.	.
c171b_29	No0153	3C84	3mm_RDBE	.	.	.	.	.	o	.	o	.	o	o	o	o	o	.	.	.
c171b_30	No0157	NGC1052	3mm_RDBE	o	o	o	o	o	.	o	o	o	.	.	.	.	.	.	.	.
c171b_31	No0162	3C84	3mm_RDBE	.	.	.	.	.	o	.	.	.	o	o	o	o	o	.	.	.
c171b_32	No0169	0224+069	3mm_RDBE	o	o	o	o	o	.	o	o	o	o	o	o	o	o	.	.	.
c171b_33	No0172	NGC1052	3mm_RDBE	o	o	o	o	o	.	o	o	o	o	o	.	.	o	.	.	.
c171b_34	No0177	NGC1052	3mm_RDBE	o	o	.	o	o	.	o	o	o	o	o	o	.	o	.	.	.
c171b_35	No0181	NGC1052	3mm_RDBE	o	o	.	o	73	.	o	o	o	o	o	o	o	o	.	.	.
c171b_36	No0185	NGC1052	3mm_RDBE	.	.	.	o	o	.	o	o	o	o	o	o	o	o	.	.	.
c171b_37	No0190	0224+069	3mm_RDBE	o	o	.	o	o	.	o	o	o	o	o	o	o	o	.	.	.
c171b_38	No0194	NGC1052	3mm_RDBE	.	.	.	o	o	.	o	o	o	o	o	o	o	o	.	.	.
c171b_39	No0198	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.
c171b_40	No0200	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_41	No0201	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	x	o	.
c171b_42	No0204	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_43	No0206	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	22	o	.
c171b_44	No0210	0224+069	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_45	No0212	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_46	No0215	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_47	No0217	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_48	No0218	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_49	No0221	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_50	No0223	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_51	No0226	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_52	No0228	1803+784	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_53	No0232	0224+069	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_54	No0234	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_55	No0235	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_56	No0238	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_57	No0240	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_58	No0243	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_59	No0245	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_60	No0249	0224+069	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_61	No0251	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_62	No0252	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.

c171b_63	No0255	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_64	No0257	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_65	No0261	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_66	No0263	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_67	No0267	0224+069	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_68	No0269	3C345	3mm_RDBE	o	o	o	o	45	o	.	.	.	.	.	.	.	.	90	o	o	.
c171b_69	No0270	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	o	o	o	.
c171b_70	No0273	NGC1052	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_71	No0275	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	x	o	o	.
c171b_72	No0279	0224+069	3mm_RDBE	.	.	.	.	.	.	o	o	o	o	o	o	o	o	.	.	.	o
c171b_73	No0281	3C345	3mm_RDBE	o	o	o	o	o	o	.	.	.	.	.	.	.	.	x	o	o	.

7mm

			EB	EF	ON	YS	PV	MH	GB	FD	NL	PT	LA	OV	BR	KP	KY	KU	KT	MK
No0145	3C84	7mm_RDBE	.	.	.	.	.	.	.	o	.	o	o	o	o	o	.	.	.	.
No0154	3C84	7mm_RDBE	.	.	.	.	.	.	.	o	.	o	o	o	o	o	.	.	.	.
No0163	3C84	7mm_RDBE	.	.	.	.	.	.	.	.	.	o	o	o	o	o	.	.	.	.
No0170	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0173	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	.	.	o	.	.	.	.
No0178	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	.	o	.	.	.	.
No0182	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0186	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0191	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0195	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0199	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	.
No0205	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0211	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0216	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0222	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0227	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0233	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0239	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0244	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0250	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0256	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0262	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0268	0224+069	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0274	NGC1052	7mm_RDBE	.	.	.	.	.	.	.	o	o	o	o	o	o	o	.	.	.	o
No0280	0224+069	7mm_RDBE	.	.	.	.	.	.	.	42	42	42	42	42	42	42	.	.	.	42