

C241B Correlation Report

General information

- Session info: http://www3.mpifr-bonn.mpg.de/div/vlbi/globalmm/
- Station feedback: Ef rainy (had to stop observing from 2h15 UT until 4h20 UT due to snow), Mh snowing, Ys good weather, lost scans 0068-->0155, Gl good weather, using circular feed, Gb cloudy, JCMT late due to some trouble, missed scan 732, windy, PV worked well but rain/snow stopped the observations at some point until scan No1242, wind was an issue at Nn, Aa good, no KT

Status

what	date
Contacted Ef (finished), KVN to start transfer (finished)	02.05.2024
Fringes between Mk, Fd, Gb, and Ky, started e-transfer from Pv (finished) to connect VLBA to Eu	06.05.2024
Fringe to NN (arrived 28.05.2024)	30.05.2024
At transferred	25.06.2024
Fringe to Aa detected	06.07.2024
Mh finished	08.07.2024
Started Ys transfer	24.07.2024
Started On transfer	25.07.2024

Fringes

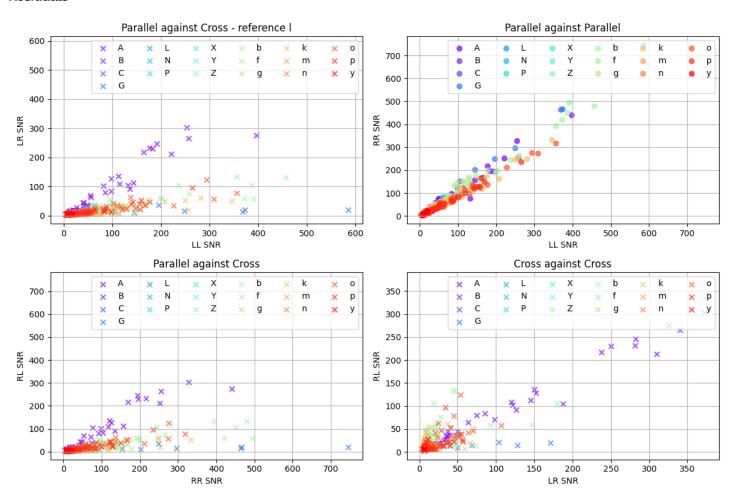
Station	Fringes	Plots	Comments
VLBA(8)	у	No0707 b.pdf, No0707 f.pdf, No0707 k.pdf, No0707 m.pdf, No0707 n.pdf, No0707 o.pdf, No0707 p.pdf, No0707 la.pdf	
Gb	у	No0627_G.pdf	
Ef	у	No0618_B.pdf	
On	у	No0618 X.pdf	
Ys	у	No0446_Y.pdf	
Pv	y	No0694_P.pdf	
Nn	у	No1205 N.pdf	
Mh	у	No0816_Z.pdf	

Station	Fringes	Plots	Comments
KVN(3)	у	No0446 C.pdf, No0446 u.pdf, No0446 ky.pdf	
Gl	у	No0517_g.pdf	
Aa	у	No0618_A.pdf	
At	n	-	No fringes found, applied clocks from 7mm experiments, absence of common visibility with KVN detrimental
Мр	n	-	No fringes found, applied clocks from 7mm experiments, absence of common visibility with KVN detrimental
Mm	у	No0707_L.pdf	

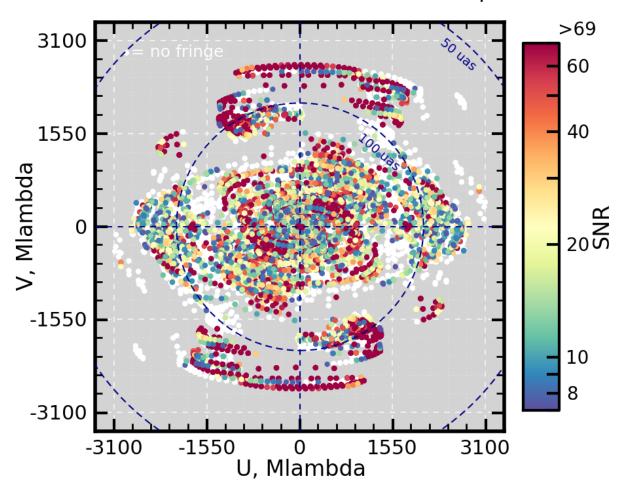
Notes

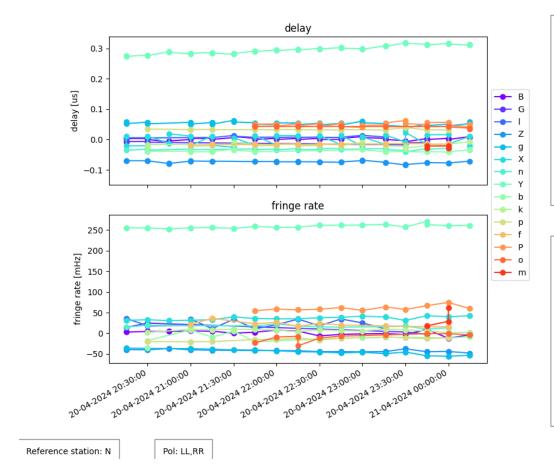
Post-Correlation checks

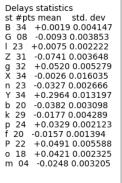
Residuals



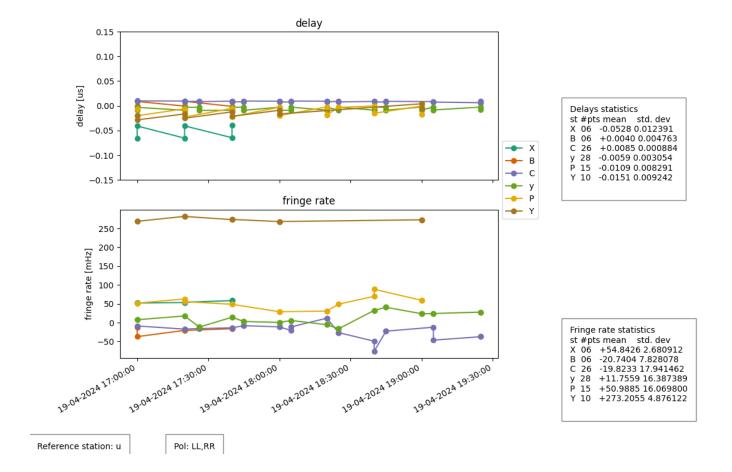
UV cov.: all sources, all antennas, all pols.

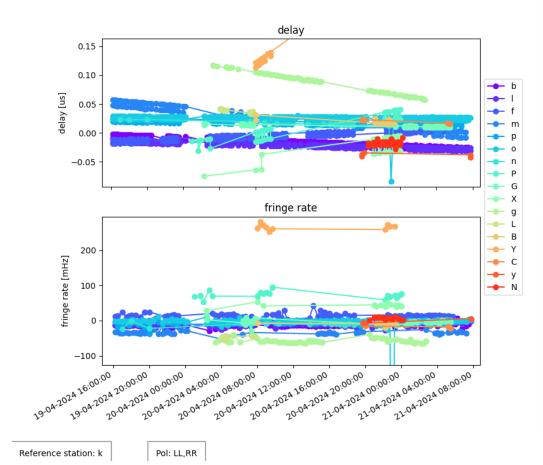






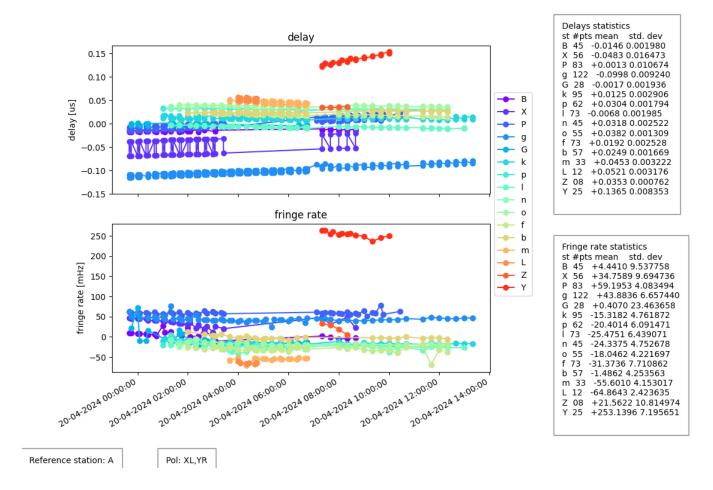
Fringe rate statistics
st #pts mean std. dev
B 34 +1.2338 5.239571
G 08 +9.9937 10.371949
I 23 +23.4494 9.652580
Z 31 -41.9635 2.783032
g 32 -44.4994 6.104517
X 34 +36.3971 4.093099
n 23 +16.6376 3.122895
Y 34 +258.5534 3.880326
b 20 -9.2006 10.167935
k 29 +6.7911 2.726583
p 24 +14.4849 3.873317
f 20 +21.8212 5.917327
P 22 +60.8068 5.658214
o 18 -8.7692 8.357378
m 04 +31.5903 17.636539





Delays statistics st #pts mean std. dev b 237 -0.0161 0.007298 I 214 -0.0213 0.005098 f 161 -0.0039 0.007416 m 112 +0.0292 0.020342 +0.0172 0.003710 0 261 +0.0251 0.007301 n 33 P 33 +0.0152 0.003411 +0.0079 0.021556 G 55 X 23 +0.0120 0.002076 -0.0274 0.019864 g 99 L 16 +0.0853 0.017577 +0.0373 0.003084 B 11 Y 19 C 08 +0.0197 0.005084 +0.1928 0.077913 +0.0196 0.003168 -0.0382 0.002711 -0.0177 0.004289 y 05 N 29

Fringe rate statistics st #pts mean std. dev b 237 -13.4429 4.091878 l 214 -9.8264 6.709742 f 161 +14.7838 5.569344 m 112 -33.6705 5.871388 p 186 -6.5065 4.256884 o 261 -4.3474 47.067530 n 33 -10.3452 3.954983 P 33 +72.9228 8.772647 G 55 -3.6611 7.757248 X 23 +43.3195 5.035867 g 99 -57.7874 5.573390 L 16 -45.8049 3.609417 B 11 -9.4180 4.034304 Y 19 +266.3271 6.513084 C 08 -16.4953 4.620086 y 05 -1.7119 6.145394 N 29 +6.7911 2.726583



FITS completeness (pclist)

3mm

```
NL FD
PT LA KP OV BR MK HS EF ON YS PV NN MH KY KU KT KC GL GB AA MM AT MP
c241b.vex.pclist:c241b 001 No0437
                                        3C454.3
                                                                   86ghz
         0
            0
                0
                   Х
c241b.vex.pclist:c241b 002 No0442
                                          BLLAC
                                                                   86ghz
                                                                            0
             0
                0
                   Х
c241b.vex.pclist:c241b 003 No0445
                                        3C454.3
                                                                   86ghz o
                                                                            0
         0
            0
                0
                   Х
c241b.vex.pclist:c241b 004
                             No0446
                                       1156+295
                                                                   86ghz
                             0
                                0
                                          0
                                              0
                      0
c241b.vex.pclist:c241b 005 No0451
                                          BLLAC
                                                                   86ghz
                                                                        0
                                                                            0
c241b.vex.pclist:c241b 006 No0454
                                        3C454.3
                                                                   86ghz o
                                                                            0
            0
                0
                   Х
c241b.vex.pclist:c241b 007
                                       1156+295
                             No0455
                                                                   86ghz
                       0
                                    Х
                                              0
                                                                   86ghz
c241b.vex.pclist:c241b 008 No0456
                                            M87
                          0
                             0
                                 0
                                    Χ
                                       0
                                          0
                                              0
                                                 Х
                                                    0
c241b.vex.pclist:c241b 009 No0461
                                                                   86ghz o
                                          BLLAC
                                                                            0
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o o o o o o x c241b.vex.pclist:c241b_010	 No0462	· 11		•	•	•	•	•	 86ghz		
o o c241b.vex.pclist:c241b 011	0 0 X	0	o o M87	X	0			•		•	
	0 0 X	0	0 0	Х	0					•	•
c241b.vex.pclist:c241b_012 o o o o o o x	No0467	•	C454.3	•					86ghz	•	0
c241b.vex.pclist:c241b_013	No0468	0	3C273	X	0				86ghz	•	•
c241b.vex.pclist:c241b_014	No0469		M87			•	•	•	86ghz	•	•
o o c241b.vex.pclist:c241b_015	o o x No0474	0	o o BLLAC	Х	0	•	•	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_016	 No0478	•	C454.3	•	•	•	•	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b 017	 No0479	•	3C273	•	•	•	•	•	 86ghz		
	0 0 X	0	0 0	Х	0		•			•	
c241b.vex.pclist:c241b_018			M87	**	0				86ghz	•	•
o o c241b.vex.pclist:c241b_019	o o x No0485	0	o o BLLAC	Х	0	•	•	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_020		•	3C273	•	•	•	•	•	 86ghz	•	•
o o c241b.vex.pclist:c241b 021	88 o x No0487	0	o o M87	Х	0	•	•	•	 86ghz		
	0 0 X	0	0 0	Х	0					•	
c241b.vex.pclist:c241b_022 o o o o o o x	No0491	•	C454.3	•					86ghz	•	0
c241b.vex.pclist:c241b_023	No0492	0	3C273	X	0				86ghz	•	•
c241b.vex.pclist:c241b_024	No0493		M87		O	•	•	•	 86ghz	•	
o o c241b.vex.pclist:c241b_025	o o x No0498	0	o o BLLAC	Х	0	0	•	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b 026	 No0502	•	C454.3	•	•	•	•	•	 86ghz	•	0
0 0 0 0 0 0 x		•		•			•	•		•	
c241b.vex.pclist:c241b_027	No0503	0	3C279						86ghz	•	•
c241b.vex.pclist:c241b_028	No0504		M87				•		86ghz	•	
o o c241b.vex.pclist:c241b_029	o o x No0509	0	o o BLLAC	Х	0	0	•	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b 030		•	3C273	•	•	•	•	•	 86ghz	•	•
o o c241b.vex.pclist:c241b 031	0 0 X	0	м87	•	•	•	•	•	 86ghz	•	
-	0 0 X	0		Х	0	0	•			•	•
c241b.vex.pclist:c241b_032 o o o o o o x	No0515	3	C454.3				_		86ghz	0	0
c241b.vex.pclist:c241b_033		_	3C273	-	•	•	•	j	86ghz	•	•
o o c241b.vex.pclist:c241b_034	o o x No0517	0	• • М87	•	•	•	•	•	 86ghz	•	

o o c241b.vex.pclist:c241b_035	o o x No0522	o BLLAC		0		 86ghz		0
o o o o o o x c241b.vex.pclist:c241b_036	 No0526	3C454.3		•		 86ghz	•	0
o o o o o o c241b.vex.pclist:c241b_037	No0527	3C279		٠	•	 86ghz		•
o o c241b.vex.pclist:c241b_038		o M87		•	•	 86ghz	•	
o o c241b.vex.pclist:c241b_039		o BLLAC		0	• •	· · 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_040	No0534	3C273		•	•	 86ghz	•	
c241b.vex.pclist:c241b_041		o M87	•	•	•	 86ghz	•	
c241b.vex.pclist:c241b_042	o o x No0540	o 3C454.3	•	O	•	 86ghz	•	0
c241b.vex.pclist:c241b_043	No0541	3C273	•	•	•	86ghz	•	•
c241b.vex.pclist:c241b_044		M87		•	•	86ghz	•	
c241b.vex.pclist:c241b_045		BLLAC		O	•	86ghz	•	0
c241b.vex.pclist:c241b_046	No0552	3C454.3		•	• •	86ghz	•	0
c241b.vex.pclist:c241b_047	No0553	3C279		•		86ghz	•	•
c241b.vex.pclist:c241b_048		M87				86ghz	•	•
c241b.vex.pclist:c241b_049		BLLAC				86ghz	0	0
c241b.vex.pclist:c241b_050	No0560 77 o x	3C273		•		86ghz	•	•
c241b.vex.pclist:c241b_051		M87				86ghz	•	•
c241b.vex.pclist:c241b_052	No0564	0420-014				86ghz	•	0
c241b.vex.pclist:c241b_053		3C273				86ghz	•	•
c241b.vex.pclist:c241b_054		M87		•		86ghz	•	
c241b.vex.pclist:c241b_055		0420-014				86ghz	0	0
c241b.vex.pclist:c241b_056	No0576	0420-014				86ghz	• •	0
c241b.vex.pclist:c241b_057		3C279				86ghz	•	
c241b.vex.pclist:c241b_058		M87		0		86ghz		
c241b.vex.pclist:c241b_059		0420-014	•	J	•	86ghz	0	0

o o o o o o x c241b.vex.pclist:c241b 060	 No0584	3C273		•		•	 86ghz		•
o o o c241b.vex.pclist:c241b 061	o o x No0585	o M87	•	•		•	 86ghz		
o o c241b.vex.pclist:c241b_062	o o x No0590	o 0420-014	•	. (•	86ghz		0
o o o o o o x c241b.vex.pclist:	 No0591	· · · · · 1156+295	•	•		•	 86ghz		
	 No0594	· · · · · 1156+295	•	•	. X	•	 86ghz	•	
o o c241b.vex.pclist:c241b_064	o o x No0595	o M87	•	. (0	•	 86ghz		
o o c241b.vex.pclist:c241b_065	o o x No0600	o 0420-014	•	. (0	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_066	No0605	0420-014	•	•	•	•	 86ghz		0
o o o o o o c241b.vex.pclist:c241b_067		3C279	•	•		•	 86ghz	•	
x o o c241b.vex.pclist:c241b_068		o M87	•	•		•	 86ghz	•	
x o o c241b.vex.pclist:c241b_069	x o x No0614	0420-014	•	• (0	•	 86ghz		0
o o o o o o	No0615	3C273	•	•		•	 86ghz	•	
c241b.vex.pclist:c241b_070		3C273	•	•	. X	•	 86ghz	•	
c241b.vex.pclist:c241b_071		o M87	•	• (0	 86ghz	•	•
c241b.vex.pclist:c241b_072	x o x No0624	0420-014	•	•) 0	O	 86ghz	•	0
c241b.vex.pclist:c241b_073	No0627		•	•		•	86ghz	•	
c241b.vex.pclist:c241b_074	No0628	M87	•			0	86ghz	•	0
c241b.vex.pclist:c241b_075	No0633	0420-014	•	• `			86ghz	•	•
c241b.vex.pclist:c241b_076	No0638	0420-014	•	•		•	86ghz	•	•
c241b.vex.pclist:c241b_077		3C279			. 0	0	86ghz		•
c241b.vex.pclist:c241b_078 o o x o o		M87	•	. (0	0	86ghz	0	0
c241b.vex.pclist:c241b_079		3C273		. (0	0	86ghz	0	0
c241b.vex.pclist:c241b_080 o o o o x o o	No0647	M87		. (0	0	86ghz		0
c241b.vex.pclist:	No0648	3C273	•	•	. X		86ghz		•
c241b.vex.pclist:c241b_081	No0651	3C273					86ghz	0	0

o o o x o o c241b.vex.pclist:c241b_082	o o x No0652	0	м87	•	•	0	0	0	 86ghz o	0
o o o x o o c241b.vex.pclist:c241b_083	o o x No0655	0	 3C279	•	•	0	0	0	 86ghz o	0
o o o x o o c241b.vex.pclist:c241b_084	o o x No0658	0	м87	•	•	0	0	0	 86ghz o	0
o o o o o o . x o o c241b.vex.pclist:c241b_085	o o x No0662	0	3C273	•	•	0	0	0	 86ghz o	0
o o o o o . x o o c241b.vex.pclist:c241b_086	o o x No0663	0	м87	•	•	0	0	0	· · · · 86ghz o	0
o o o o o . x o o c241b.vex.pclist:	o o x No0664	0	3C273	•	•	0	0	0	 86ghz .	•
c241b.vex.pclist:c241b_087		•	 3C273	•	•	•	X	•	· · · · 86ghz o	0
o o o o o o . x o o c241b.vex.pclist:c241b_088		0	м87	•	•	0	0	0	· · · · 86ghz o	0
o o o o o . x o o c241b.vex.pclist:c241b_089		0	 3C279	•	•	0	0	0	· · · · 86ghz o	0
o o o o x o o c241b.vex.pclist:c241b_090		•	М87	•	•	0	0	0	· · · · 86ghz o	0
o o o o o . x o o c241b.vex.pclist:c241b_091 o o o o o . x o o		0	3C273	•	•	0	0	0	 86ghz o	0
o o o o o . x o o c241b.vex.pclist:c241b_092 o o o o o . x o o		•	М87	•	•	0	0	0	86ghz o	0
c241b.vex.pclist:	No0683	O	3C273	•	•	O	~	O	86ghz .	
c241b.vex.pclist:c241b_093	No0688	•	3C273	•	•	•	Λ 0		86ghz o	0
c241b.vex.pclist:c241b_094		•	м87	•	•	0	0	0	86ghz o	0
c241b.vex.pclist:c241b_095	No0694		3C279	•	•	0	0	0	86ghz o	0
c241b.vex.pclist:c241b_096	No0695		M87		•	0	0	0	86ghz o	0
c241b.vex.pclist:c241b_097 o o o o o o x	No0699		3C273			0	0	0	86ghz o	0
c241b.vex.pclist:c241b_098			M87			0	0	0	86ghz o	0
c241b.vex.pclist:c241b_099 o o		17 0	49+096						86ghz .	•
c241b.vex.pclist:c241b_100 o o	No0702 o o x	0	SS433 • •						86ghz .	•
c241b.vex.pclist:	No0703		3C273				X		86ghz .	•
c241b.vex.pclist:c241b_101 o o o o o o x			3C273			0	0	0	86ghz o	0
c241b.vex.pclist:c241b_102 o o o o o o x			M87			0	0	0	86ghz o	0
c241b.vex.pclist:c241b_103	No0709	17	49+096						86ghz .	•

o o c241b.vex.pclist:c241b 104	o o x No0710	o SS433		•	•	•	 86ghz	•	
o o c241b.vex.pclist:c241b 105	0 0 X	o 3C279				•		•	•
0 0 0 0 0 0 x				. 0	0	0	o .	•	0
c241b.vex.pclist:c241b_106 o o o o o o x		M87		. 0	0	0	86ghz	•	0
c241b.vex.pclist:c241b_107	No0717	1749+096				•	86ghz		•
c241b.vex.pclist:c241b_108	No0718	SS433					86ghz		
c241b.vex.pclist:c241b_109		3C273	•	_	•	•	86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_110	No0724	м87		. 0	0	0	o . 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_111	No0725	 1749+096		. 0	0	0	o . 86ghz		•
o o c241b.vex.pclist:c241b 112	o o x No0726	o SS433			•	•	 86ghz		•
o o c241b.vex.pclist:	o o x No0727	o 3C273		•	•	•		•	
c241b.vex.pclist:c241b 113					Х	•	• •	•	•
0 0 0 0 0 0 x		3C273		. 0	0	0	86ghz	•	0
c241b.vex.pclist:c241b_114 o o o o o o o x	No0733	M87		. 0	0	0	86ghz	•	0
c241b.vex.pclist:c241b_115 o o	No0734	1749+096				•	86ghz		•
c241b.vex.pclist:c241b_116	No0735	SS433					86ghz	•	•
c241b.vex.pclist:c241b_117		3C279	•	•	•	•	86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_118		м87		. 0	0	0	o . 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_119		 1749+096		. 0	0	0	o . 86ghz		
o o c241b.vex.pclist:c241b 120	o o x No0743	o SS433		•	•	•	 86ghz		
o o c241b.vex.pclist:c241b 121	0 0 X	o 3C273				•		•	0
0 0 0 0 0 0 x				. 0	0	0	0.	•	
		M87		. 0	0	0	86ghz	•	0
c241b.vex.pclist:c241b_123 o o		1749+096				•	86ghz		•
c241b.vex.pclist:c241b_124 o o	No0751	SS433				•	86ghz		•
	No0752	3C273			Х		86ghz		•
c241b.vex.pclist:c241b_125		3C273		•		٠	86ghz		0
o o o o o o x c241b.vex.pclist:c241b_126		м87		. 0	0	0	o . 86ghz		0

o o o o o o x c241b.vex.pclist:c241b_127	 No0759	· · · 1749+0	 96	•	0	0	0	o . 86ghz		•
o o c241b.vex.pclist:c241b_128	o o x No0760	o . SS4:	 33	•	•	•	•	· · 86ghz		•
o o c241b.vex.pclist:c241b_129	o o x No0765	o . 3C2	 79	•	•	•	•	 86ghz		0
o o o o o o x c241b.vex.pclist:c241b_130	No0766	 M	• • 87	•	•	0	0	o . 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_131		· · · 1749+0	• • 96	•	0	0	0	o. 86ghz		
o o c241b.vex.pclist:c241b_132		o . SS4	33	•	•	•	•	· · 86ghz	•	•
o o c241b.vex.pclist:	o o x No0769	o . 3C2	73	•	•	•	•	 86ghz	•	•
c241b.vex.pclist:c241b_133	No0774	3C2	73	•	•	X	•	86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_134	No0775	 M	• • 87	•	0	0	0	86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_135	No0776	1749+0 0	96	•	O	O	O	86ghz	•	•
c241b.vex.pclist:c241b_136		SS4.	33	•	•	•	•	 86ghz	•	•
c241b.vex.pclist:c241b_137		3C2	73	•	•	•	•	86ghz		0
c241b.vex.pclist:c241b_138	No0783	м	87	•	•	0	•	86ghz	0	0
c241b.vex.pclist:c241b_139	No0784 88 o x	1749+0	96		0		X	86ghz	•	
c241b.vex.pclist:	No0785 J		35				X	86ghz	•	•
c241b.vex.pclist:c241b_140		SS4.			0		0	86ghz		•
c241b.vex.pclist:	No0787 J						Х	86ghz		•
c241b.vex.pclist:	No0788	3C2	79			X		86ghz		•
c241b.vex.pclist:c241b_141 o o o o o o 33 x		3C2	79 • •	•	•	0		86ghz		0
c241b.vex.pclist:c241b_142 o o o o o x x	No0794	M				0		86ghz		0
c241b.vex.pclist:c241b_143 o o					0	•	0	86ghz		•
c241b.vex.pclist:	No0796 J	1851+00	35	•			Х	86ghz		•
c241b.vex.pclist:c241b_144 o o				•	0		0	86ghz		•
c241b.vex.pclist:						•	Х	86ghz		•
c241b.vex.pclist:c241b_145	No0803	3C2	73					86ghz	0	0

o o o o o x x c241b.vex.pclist:c241b_146			•	0	•	o 86ghz o	0
o o o o o x x c241b.vex.pclist:c241b_147	No0805 1749+096		•	0	•	o 86ghz .	
o o c241b.vex.pclist:	o o x o No0806 J1851+0035		0	•	0	 86ghz .	
	No0807 SS433		•	•	Х	 86ghz .	
o o c241b.vex.pclist:	o o x o No0808 J1851+0035		0	•	0	 86ghz .	•
c241b.vex.pclist:			•	•	Х	 86ghz .	
	No0812 3C273		•	X	•	 86ghz .	
o o x x c241b.vex.pclist:c241b_150	No0813		•	0	•	o 66 x 86ghz .	
o o x x c241b.vex.pclist:c241b_151	No0816 1749+096		•	0	•	o o x 86ghz o	0
o o o o o c241b.vex.pclist:	o o x o No0817 J1851+0035		0	٠	0	 86ghz .	
c241b.vex.pclist:c241b_152	No0819 SS433		•	•	Х	 86ghz o	0
o o o o o c241b.vex.pclist:	o o x o No0820 J1851+0035		0	•	0	 86ghz .	•
	No0822 1749+096		•	•	X	 86ghz o	0
o o o o o c241b.vex.pclist:	o o x o No0823 J1851+0035		0	•	0	 86ghz .	
			•		Х		0
o o o o o c241b.vex.pclist:	o o x o		0	•	0	86ghz .	
c241b.vex.pclist:c241b 155			•		Х	86ghz .	•
-				0	•	0 0 X	•
o o x x	x x	X X		0		86ghz . o o x	•
c241b.vex.pclist:c241b_157 o o o o o o	o o x		0		0	86ghz o	0
c241b.vex.pclist:				•	Х	86ghz .	•
c241b.vex.pclist:c241b_158 o o o o o o			0		0	86ghz o	0
c241b.vex.pclist:	No0839 J1851+0035				X	86ghz .	•
c241b.vex.pclist:	No0840 3C273			Х		86ghz .	•
c241b.vex.pclist:c241b_159				0		86ghz . o o o	•
c241b.vex.pclist:c241b_160			-	-	-	86ghz .	•

o o c241b.vex.pclist:c241b_161	x No0849 1749+		x x		0	•	o o o 86ghz o	0
o o o o		035		0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_162	No0853 SS	• 433		•	•	X	· · · 86ghz o	0
o o o o o o c241b.vex.pclist:	o o x No0854 J1851+0	• 035	•	0	•	0	 86ghz .	
c241b.vex.pclist:c241b_163		· 273		•	•	X	86ghz .	•
c241b.vex.pclist:c241b_164		М87	x x	•	0	•	o o o 86ghz.	•
c241b.vex.pclist:c241b_165			х х	•	O	•	o o o 86ghz o	0
	No0862 J1851+0	• 035		O	•	X	86ghz .	•
c241b.vex.pclist:c241b_166		• 433		•	•	0	86ghz o	0
c241b.vex.pclist:	No0866 J1851+0	035			•	x	86ghz	•
c241b.vex.pclist:c241b_167			 x x	•	0	2.	86ghz .	•
c241b.vex.pclist:c241b_168	No0872 1749+			0		0	86ghz o	0
c241b.vex.pclist:	No0873 J1851+0	035				Х	86ghz .	•
c241b.vex.pclist:c241b_169 o o o o o o o	No0876 SS	433		0	•	0	86ghz o	0
	No0877 J1851+0	035				X	86ghz .	•
c241b.vex.pclist:c241b_170	No0880 3C		хх				86ghz . o o o	•
c241b.vex.pclist:c241b_171	No0881 x		х х			•	86ghz . o o o	•
c241b.vex.pclist:c241b_172 o o o o o		096		0		0	86ghz o	0
c241b.vex.pclist:	No0887 J1851+0	035			•	X	86ghz .	٠
c241b.vex.pclist:c241b_173 o o o o o		433		0	•	0	86ghz o	0
c241b.vex.pclist:	No0891 J1851+0					Х	86ghz .	•
c241b.vex.pclist:c241b_174	No0894 3C2		х х				86ghz . o o o	•
	x	Х	х х			•	86ghz . o o o	•
c241b.vex.pclist:c241b_176 o o o o o		•		0	•	0	86ghz o	0
c241b.vex.pclist:	No0899 J1851+0	035					86ghz .	•

		s433	•		•	Х	· · · 86ghz o	0
o o o o o c241b.vex.pclist:	o o No0903 J1851+	0035	•	. 0	•	0	 86ghz .	
c241b.vex.pclist:c241b_178	No0905 3	C279	•	•	•	Х	 86ghz .	
o c241b.vex.pclist:c241b_179	No0906	x M87		х.	•	•	o o o 86ghz .	
c241b.vex.pclist:c241b_180		x 3C84	X :	х.	•	•	o o o 86ghz .	
o o c241b.vex.pclist:c241b_181	x o . No0910 1749	+096	•	•	•	•	 86ghz o	0
o o o o o c241b.vex.pclist:	No0911 J1851+	0035	•	. 0	•	0	 86ghz .	
c241b.vex.pclist:c241b_182	No0914 S	S433	•	•	•	Х	 86ghz o	0
o o o o o c241b.vex.pclist:	No0915 J1851+	0035	•	. 0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_183	No0918 3	C273	•		•	Х	 86ghz .	
o c241b.vex.pclist:c241b_184		x M87	X	х.	•	•	o o o 86ghz .	
o c241b.vex.pclist:c241b_185	No0920	x 3C84	X	х.	•	•	o o o 86ghz .	
o o c241b.vex.pclist:c241b_186	$95 \circ x \circ .$ $N00925 1749$	+096	•	• •	•	•	 86ghz o	0
o o o o o c241b.vex.pclist:	No0926 J1851+	0035	•	. 0	•	0	 86ghz .	
c241b.vex.pclist:c241b_187	No0929 S	S433	•	• •	•	Х	 86ghz o	0
o o o o o c241b.vex.pclist:	No0930 J1851+	0035	•	. 0	•	Х	 86ghz .	
c241b.vex.pclist:c241b_188		3C84	•	• •	•	Х	 86ghz .	
o o c241b.vex.pclist:c241b_189	No0934 3	C273	•	•	•	•	 86ghz .	
o c241b.vex.pclist:c241b_190	No0935			х.	•	•	o o o 86ghz .	•
c241b.vex.pclist:c241b_191			X :	х.	•	•	o o o 86ghz .	•
o o c241b.vex.pclist:c241b_192	No0939 1749	+096	•		•	•	3	0
o o o o o		0035	•	. 0	•	0	86ghz .	
c241b.vex.pclist:c241b_193		S433	•	• •	•	Х	· · · · 86ghz o	0
o o o o o		0035	•	. 0	•	0	86ghz .	•
c241b.vex.pclist:c241b_194	No0946 3	C279	•	• •	•	Х	86ghz .	•

o c241b.vex.pclist:c241b_195	x x No0947 M87	X	Х	•	•	•	o o o 86ghz .	
o c241b.vex.pclist:c241b_196	No0948 0420-014	X	Х	•	•	•	o o 44 86ghz .	
o o c241b.vex.pclist:c241b_197	o o x o No0951 1749+096	•	•	•	•	•	 86ghz o	0
o o o o o c241b.vex.pclist:		•	•	0	•	0	 86ghz .	•
	No0955 SS433	•	•	•	•	X	 86ghz o	0
o o o o o c241b.vex.pclist:	No0956 J1851+0035	•	•	0	•	0	 86ghz .	
	No0959 3C273	•	•	•	•	X	 86ghz .	
o c241b.vex.pclist:c241b_200	x x No0960 M87	X	Х	•	•	•	o o o 86ghz .	
o c241b.vex.pclist:c241b_201	No0961 0420-014	X	Х	•	•	٠	o o o 86ghz .	•
o o c241b.vex.pclist:c241b_202	o o x o No0966 1749+096	•	•	•	•	•	· · · · 86ghz o	0
o o o o o	No0967 J1851+0035	•	•	0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_203	No0970 SS433		•	•	•	X	· · · · 86ghz o	0
o o o o o c241b.vex.pclist:	No0971 J1851+0035	•	•	0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_204	No0972 0420-014		•	•	•	X	 86ghz .	•
o o c241b.vex.pclist:c241b_205	o o x o No0975 3C273		•	•	•	•	 86ghz .	•
o c241b.vex.pclist:c241b_206			Х	•	•	•	o o o 86ghz .	•
c241b.vex.pclist:c241b_207			Х	•	•	•	o o o 86ghz .	•
o o c241b.vex.pclist:c241b_208		•	•	•	•	•	· · · · 86ghz o	0
o o o o o	No0981 J1851+0035	•	•	0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_209	No0984 SS433	•	•	•	•	X	· · · 86ghz o	0
o o o o o		•	•	0	•	0	 86ghz .	•
c241b.vex.pclist:c241b_210			•	•	•	X	86ghz .	•
c241b.vex.pclist:c241b_211	No0989 M87		X	•	•	•	o o o 86ghz.	•
c241b.vex.pclist:c241b_212			Х	•	•	•	o o o 86ghz .	•
o o c241b.vex.pclist:c241b_213	o o x o No0993 1922+155	•	•	•	•	•	86ghz o	0

o o o o o c241b.vex.pclist:		•	•	0	•	0	 86ghz .	
c241b.vex.pclist:c241b_214	No0997 SS433	•	•	•	•	X	 86ghz o	0
o o o o o c241b.vex.pclist:	No0998 J1851+0035	•	•	0	•	0	 86ghz .	
c241b.vex.pclist:c241b_215	No1001 3C273	•	•	•	•	X	· · · 86ghz .	
o c241b.vex.pclist:c241b_216	No1002 x x x	X	Х	•	•	٠	o o o 86ghz .	
o c241b.vex.pclist:c241b_217	x x No1003 0420-014	X	Х	•	•	•	o o o 86ghz .	
o o c241b.vex.pclist:c241b_218	o o x o No1006 1922+155	•	•	•	•	•	· · · · 86ghz o	0
o o o o o c241b.vex.pclist:	No1007 J1851+0035	•	•	0	•	0	 86ghz .	
	No1010 SS433	•	•	•	•	X	 86ghz o	0
o o o o o c241b.vex.pclist:	No1011 J1851+0035	•	•	0	•	0	 86ghz .	
	No1012 0420-014		•	•	•	Х	 86ghz .	
o o c241b.vex.pclist:c241b 221	o o x o No1015 3C273	•	•	•	•	•	 86ghz .	
	x x No1016 M87	X	Х	•	•	•	o o o 86ghz .	
	x x No1017 0420-014	X	Х	•	•	•	o o o 86ghz .	
o o o c241b.vex.pclist:c241b_224	o o x o	•	•	•	•	•	 86ghz o	0
o o o o o		•	•	0	•	0	 86ghz .	
		•	•	•	•	X	 86ghz o	0
0 0 0 0 0	No1025 J1851+0035		•	0	•	0		
c241b.vex.pclist:c241b 226		•	•	•	•	X		
	x x	Х	Х	•	•		o o o 86ghz.	
o	x x	Х	Х	•	•		o o o 86ghz.	
o o c241b.vex.pclist:c241b_229	o o x o	•	•	•	•			0
o o o o o o o x c241b.vex.pclist:c241b 230		•	•	0	•			Ü
_	x x	Х	Х	•	•		0 0 0 86ghz.	•
-	x x	Х	Х	•	•	•	0 0 0	•
CZ4ID.AEV.bCII2C:CZ4ID_Z2Z	1101030 0020						86ghz .	•

	0 0 X	0			•	•	•	•		
c241b.vex.pclist:c241b_233 o o o o o . x	No1039		BLLAC			0			86ghz o	0
c241b.vex.pclist:c241b_234	No1040	4C	39.25	•	•	O	•	•	 86ghz .	•
0	o 47 x	0		•	•	•	•	•		
c241b.vex.pclist:c241b_235	No1043	3C	454.3		_	0	_	_	86ghz o	0
c241b.vex.pclist:c241b_236	No1045	·	3C273	•	•	Ū	•	•	86ghz .	
		•	x x M87	X	Х	•	•	•	0 0 0	
c241b.vex.pclist:c241b_237			X X	Х	Х				86ghz .	•
c241b.vex.pclist:c241b_238	No1047		OJ287						86ghz .	•
o o c241b.vex.pclist:c241b 239	0 0 X No1052	0	BLLAC	•	•	•	•	•	 86ghz o	0
0 0 0 0 0 . x					•	0	•			O
c241b.vex.pclist:c241b_240	No1054		3C279						86ghz .	•
c241b.vex.pclist:c241b 241	No1055	-	x x M87	Χ	Х	•	•	•	o o o 86ghz .	
			х х	X	Х	•	•	•	0 0 0	
c241b.vex.pclist:c241b_242			OJ287						86ghz .	•
c241b.vex.pclist:c241b 243	o o x No1060	o 3C	454.3	•	•	•	•	•	 86ghz o	0
0 0 0 0 0 . x		•			•	0	•	•		
c241b.vex.pclist:c241b_244	No1061		3C273 x x	Х	Х				86ghz . . o o	•
c241b.vex.pclist:c241b_245	No1062	·	M87			•	•	•	86ghz .	
20415 14-4 2415 246	· · · ·	-	X X	X	Х	•	•	•	. 0 0	
c241b.vex.pclist:c241b_246	NO1063	0	OJ287						86ghz .	•
c241b.vex.pclist:c241b_247	No1067		BLLAC						86ghz o	0
o o o o o o x c241b.vex.pclist:c241b 248	No1068	•	 ∩.T287	•	•	0	•	•	 86ghz .	
					•		•	•		•
c241b.vex.pclist:c241b_249		3C	454.3			_			86ghz o	0
o o o o o o x c241b.vex.pclist:c241b_250	No1073	•	3C273	•	•	O	•	•	 86ghz .	
		•	х х	Х	Х	•	•	•	. 0 0	
c241b.vex.pclist:c241b_251	No1074		M87 x x	v	Х				86ghz . . o o	•
c241b.vex.pclist:c241b_252			OJ287	Λ	Λ	•	•	•	86ghz .	•
		0			•	•	•	•	• • •	
c241b.vex.pclist:c241b_253 o o o o o o x			BLLAC		•	0	•		86ghz o	0
c241b.vex.pclist:c241b_254			3C279						86ghz .	•
c241b.vex.pclist:c241b_255	No1081	•	x x M87	X	Х	•	•	•	. o o 86ghz .	
			X X	Х	Х			•	. 0 0	•
c241b.vex.pclist:c241b_256			39.25			_			86ghz .	•
o o c241b.vex.pclist:c241b 257	o o x No1085		454.3		•	0	•	•	· · · · 86ghz o	0
- –									_	

o o o o o o x c241b.vex.pclist:c241b_258	 No1086	3C273 86ghz	
	 No1087	. x x x x o o M87 86ghz	
	 No1088	. x x x x o o OJ287 86ghz	
o o c241b.vex.pclist:c241b_261	90 o x No1092	o o)
o o o o o o x c241b.vex.pclist:c241b_262	 No1093	OJ287 86ghz	,
o o c241b.vex.pclist:c241b_263	o o x No1096	oo86ghzoo)
o o o o o o x c241b.vex.pclist:c241b_264	 No1097	3C273 86ghz	,
c241b.vex.pclist:c241b_265	 No1098	. x x x x 0 0 M87 86ghz	,
c241b.vex.pclist:c241b_266		. x x x x o o O S6ghz	
o o c241b.vex.pclist:c241b_267	o 42 x No1104	O O)
o o o o o o x c241b.vex.pclist:c241b_268	 No1105	3C279 86ghz.	
c241b.vex.pclist:c241b_269	No1106	. x x x x o o M87 86ghz	,
c241b.vex.pclist:c241b_270	No1107	. x x x x o o O S6ghz	
o o c241b.vex.pclist:c241b_271	o o x No1110	3C454.3 86ghz o o)
o o o o o o x c241b.vex.pclist:c241b_272	No1111	3C273 86ghz.	
c241b.vex.pclist:c241b_273	No1112	. x x x x 0 0 M87 86ghz	
c241b.vex.pclist:c241b_274		. x x x x o o OJ287 86ghz	
c241b.vex.pclist:c241b_275		BLLAC 86ghz o o)
o o o o o o x c241b.vex.pclist:c241b_276	No1119	4C39.25 86ghz	,
c241b.vex.pclist:c241b_277		3C454.3 86ghz o o)
c241b.vex.pclist:c241b_278		OJ287 86ghz	
c241b.vex.pclist:c241b_279		BLLAC 86ghz o o)
c241b.vex.pclist:c241b_280	No1129	OJ287 86ghz	
c241b.vex.pclist:c241b_281		3C454.3 86ghz o o)
c241b.vex.pclist:c241b_282		1055+018 86ghz	

o o c241b.vex.pclist:c241b_283	o o x No1138	o BLLAC	•	•	•	•	•	 86ghz		0
o o o o o x x c241b.vex.pclist:c241b_284	 No1139	. х х ОJ287	X	Х	•	٠	•	 86ghz		•
o o c241b.vex.pclist:c241b_285	o o x No1143	o 3C454.3	•	•	0	•	•	 86ghz	•	0
o o o o o x x c241b.vex.pclist:c241b_286		ој287	•	•	•	•	•	 86ghz		•
o o c241b.vex.pclist:c241b_287		o BLLAC		•	0	•	•	 86ghz	•	0
o o o o o x x c241b.vex.pclist:	No1150	. x x 3C120	X	Х	•	•	•	 86ghz		
c241b.vex.pclist:c241b_288	No1151	4C39.25	•	•	•	X	•	 86ghz	•	•
c241b.vex.pclist:c241b_289		3C454.3	•	•	O	O	•	86ghz	•	0
	No1156	ој287	•	•	•	·	•	86ghz	•	•
c241b.vex.pclist:c241b_290	No1157	о ОJ287		•	0	0		86ghz		
c241b.vex.pclist:c241b_291 o o o o o x x	No1162	BLLAC . x x	X	Х	•	•	•	86ghz	0	0
c241b.vex.pclist:	No1163	ОJ287 • • •		•	•	X		86ghz		•
c241b.vex.pclist:c241b_292 o o	No1165	OJ287		•	0	0	•	86ghz	·	
c241b.vex.pclist:c241b_293 o o o o o o x	No1169	3C454.3	X	0	•	•		86ghz		0
c241b.vex.pclist:c241b_294	No1172	OJ287			0	0		86ghz	·	•
c241b.vex.pclist:c241b_295 o o	No1173 o o x				•			86ghz		•
c241b.vex.pclist:c241b_296 o o o o o o		3C454.3	X	0	•		•	86ghz		0
c241b.vex.pclist:	No1178 · · ·	OJ287 • • •			•	Х		86ghz		•
	0 0 X		•	•	0	0		86ghz	•	٠
c241b.vex.pclist:c241b_298 o o o o o o		. x x	Х	0				86ghz	•	0
	0 0 09	o			0	0		86ghz	•	٠
		. O X	X	0	•	•	•	86ghz	•	0
	0 0 X	o	•	•	0	0		86ghz	•	•
c241b.vex.pclist:c241b_302 o o o o o o			Х	0		•		86ghz	•	0
c241b.vex.pclist:	No1203	00287						86ghz	•	•

	 No1205	•	 OJ287	•	٠	•	X	•	 86ghz		0
o o x o o c241b.vex.pclist:c241b_304	o o o No1210	o 3C	 454.3	•	•	0	0	•	 86ghz		•
o o o o c241b.vex.pclist:c241b_305	No1214		o x OJ287	Х	0	•	•	•	 86ghz	•	0
o o o . o . x o o c241b.vex.pclist:	o o o No1215	0	· · · OJ287	•	•	0	95	•	 86ghz	•	
c241b.vex.pclist:c241b_306		•	· · · OJ287	•	•	•	X	•	 86ghz	•	0
o o o o o o . x c241b.vex.pclist:c241b_307	No1221		· · · 5+018	•	•	O	X	•	 86ghz	•	•
c241b.vex.pclist:c241b_308	o o o No1226	0	 ОЈ287	•	•	•	Х	•	 86ghz	•	0
c241b.vex.pclist:c241b_309	No1231		ој287	•	•	0	X	•	86ghz	•	0
c241b.vex.pclist:c241b_310			39.25	•	•	0	X		86ghz	•	0
c241b.vex.pclist:	No1237		ој287 • •	•			X		86ghz		•
c241b.vex.pclist:c241b_311 o o o o o . x o o	No1242	0	OJ287			0	0		86ghz	·	0
c241b.vex.pclist:c241b_312 o o o o o . x o o		0	OJ287 • •	•	•	0	0		86ghz	0	0
c241b.vex.pclist:c241b_313 o o o o o . x o o	No1252	0	OJ287 • •	•	•	0	0		86ghz	·	0
c241b.vex.pclist:	No1253 · · ·	•	OJ287 • •				Х		86ghz		•
c241b.vex.pclist:c241b_314 o o o o o . x o o	No1258	0	OJ287 • •			0	0		86ghz	·	0
c241b.vex.pclist:c241b_315 o o o o o . x o o			OJ287 • •			0	0		86ghz	•	0
c241b.vex.pclist:c241b_316 o o o o o . x o o			39.25	•		0	0		86ghz	·	0
c241b.vex.pclist:	No1269 · · ·	•	OJ287 • •				Х		86ghz		•
c241b.vex.pclist:c241b_317 o o o o o . x o o	0 0 0	0	OJ287 • •	•		0	0		86ghz		0
c241b.vex.pclist:c241b_318 o o o x o o	0 0 0	0	5+018			0	0		86ghz		0
c241b.vex.pclist:c241b_319 o o o o o o x o o	0 0 0	0	OJ287		•	57	0		86ghz		0
	No1283	•	OJ287 • •				X		86ghz		•
c241b.vex.pclist:c241b_320 o o o o o o x o o	0 0 0	0	OJ287 • •			0	0		86ghz		0
c241b.vex.pclist:c241b_321 o o o o o o x o o	0 0 0	0	39.25	•		0	0		86ghz		0
c241b.vex.pclist:c241b_322	NO1788	(UUZ8/						86ghz	0	0

o o o o o o x c241b.vex.pclist:	 No1299	OJ287	•	•	0	0	•	 86ghz		
c241b.vex.pclist:c241b_323	No1304	OJ287	•	•	•	X	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_324	 No1309	· · · · · 1055+018	•	•	0	0	•	 86ghz	•	0
o o o o o o . x c241b.vex.pclist:c241b_325	No1314	OJ287	•	•	0	0	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:	No1315	OJ287	•	•	0	0	•	· · 86ghz	•	
c241b.vex.pclist:c241b_326	No1320	OJ287	•	•	•	X	•	 86ghz	•	0
c241b.vex.pclist:c241b_327	No1325	ој287	•	•	0	0	•	 86ghz	•	0
o o o o o o x c241b.vex.pclist:c241b_328	No1330	4C39.25	•	•	0	0	•	 86ghz	•	0
	No1331	ој287	•	•	O	·	•	 86ghz	•	
c241b.vex.pclist:c241b_329	No1336	OJ287	•	•	•	^	•	 86ghz	•	0
c241b.vex.pclist:c241b_330	No1341	ој287	•	•	0	0	•	86ghz	•	0
c241b.vex.pclist:c241b_331	No1345	1055+018	•	•	0	0	•	86ghz	•	0
c241b.vex.pclist:	No1346	OJ287	•			×	•	86ghz	•	
c241b.vex.pclist:c241b_332	No1351	OJ287	•		0	0	•	86ghz	0	0
c241b.vex.pclist:c241b_333	No1356	OJ287	•		0	0	•	86ghz	•	0
c241b.vex.pclist:c241b_334	No1361	4C39.25	•			0	•	86ghz	•	0
c241b.vex.pclist:	No1362	OJ287	•			x	•	86ghz	•	
c241b.vex.pclist:c241b_335		OJ287				0		86ghz	0	0
c241b.vex.pclist:c241b_336	No1372	OJ287				0		86ghz	0	0
c241b.vex.pclist:c241b_337		1055+018				0		86ghz	0	0
c241b.vex.pclist:	No1378	0Ј287				X		86ghz	•	
c241b.vex.pclist:c241b_338		OJ287 . o x	x	X		0		86ghz	•	0
c241b.vex.pclist:c241b_339		ОЈ287		x	•	0	•	86ghz	°	0
c241b.vex.pclist:c241b_340	No1393			53		0	•	86ghz	0	0
	No1394	OJ287			•	<u> </u>	•	86ghz	•	

c241b.vex.pclist:c241b_341	 No1399	ој287	•	•	•	Х	•		0	0
o o o o o o x c241b.vex.pclist:c241b 342		. o x	X	0	•	0	•	 86ghz d	<u> </u>	0
0 0 0 0 0 0 x		. 0 x	X	0	•	0		• • •	O	O
c241b.vex.pclist:c241b_343 o o o o o o x		OJ287 . o x	X	90		0		86ghz d	0	0
c241b.vex.pclist:c241b_344		1055+018			·		·	86ghz	0	0
o o o o o o x c241b.vex.pclist:c241b_345	No1418	OJ287	•	•	•	•	•		0	0
o o o o o o c241b.vex.pclist:c241b 346	No1423	. o x OJ287	X	0	•	•	•	 86ghz d	0	0
0 0 0 0 0 0		. o x	Х	0	•					
c241b.vex.pclist:c241b_347 o o o o o o	NO1428	OJ287 . o x	Х	0				86ghz (0	0
c241b.vex.pclist:c241b_348 o o o o o o x	No1433	4C39.25	Х	0				86ghz	0	0
c241b.vex.pclist:c241b_349	No1438	ОЈ287			•	·	·	86ghz	0	0
o o o o o 90 c241b.vex.pclist:c241b_350	No1443	. o x OJ287	X	0	•	•	•	86ghz		0
o o o o o x c241b.vex.pclist:c241b 351	 No1448	. o x OJ287	X	0	•	٠	•	 86ghz .	_	0
0 0 0 0 0 x		. o x	Х	0	•	•				
c241b.vex.pclist:c241b_352 x	No1451	1055+018 . o x	X	0	•			86ghz .	•	•
c241b.vex.pclist:c241b_353	No1454	OJ287 . o x	Х	\circ				86ghz .	•	•
c241b.vex.pclist:c241b_354	No1457	OJ287	21	O	•	•	•	86ghz		
c241b.vex.pclist:c241b 355	 No1460	. o x OJ287	Х	0	•	•	•	 86ghz .		
	No.1463	. o x 4C39.25	X	0	•	•	•	 86ghz .		
		. o x		0	•	•				•
c241b.vex.pclist:c241b_357				0	•			86ghz .	•	•
c241b.vex.pclist:c241b_358		OJ287 . o x	v	0				86ghz		
c241b.vex.pclist:c241b_359	No1472	OJ287		0	•	•	•	86ghz		
o c241b.vex.pclist:c241b_360		. o x OJ287		0	•	•	•	 86ghz .		
		. o x 1055+018		0	•	•	•	 86ghz .		
		. o x	Х	0	•					•
c241b.vex.pclist:c241b_362		OJ287 . o x		0				86ghz .	•	•
c241b.vex.pclist:c241b_363		OJ287		0				86ghz	•	•
			2 2	$\overline{}$	•	•	•			