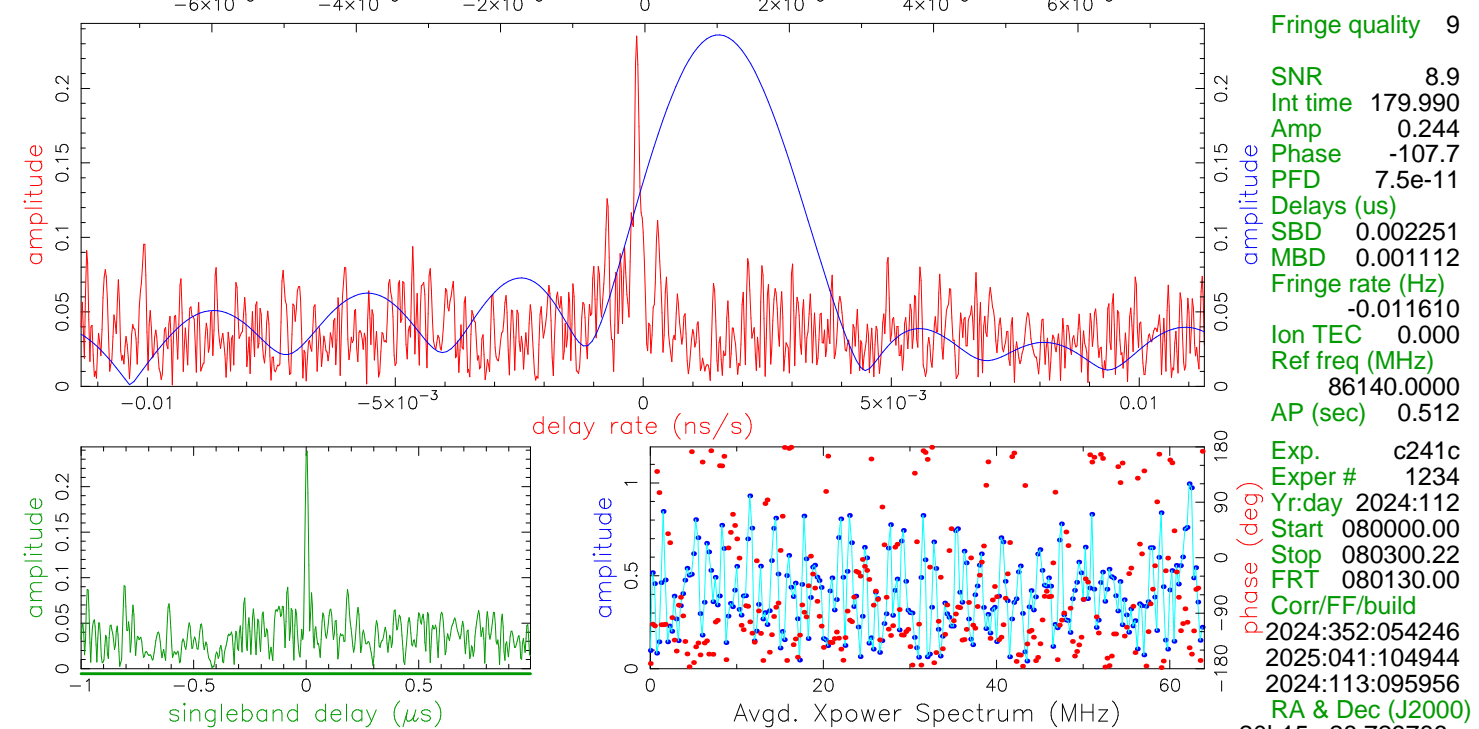


Mk4/DiFX fourfit 3.25 rev 0

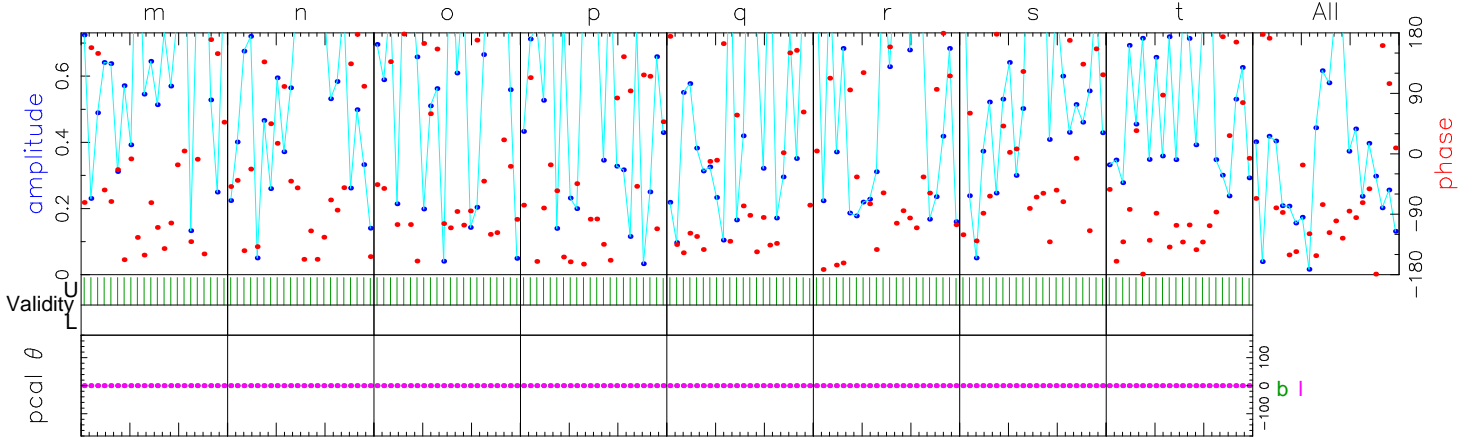
aux01

2013+370.3MP1N1, No0280, bl

VLBA_BR - VLBA_LA, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.2	-103.3	-106.8	-119.1	-122.3	-109.2	-81.7	-123.5	Phase	-107.7
	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	425.9	155.7	359.4	258.6	257.5	223.0	472.8	258.3	Sbd box	257.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-9.97546223467E+02	Apriori delay (usec)	-9.97547335544E+02	Resid mbdelay (usec)	1.11208E-03	+/-	1.2E-04
Sband delay (usec)	-9.97545084544E+02	Apriori clock (usec)	1.2943375E+01	Resid sbdelay (usec)	2.25100E-03	+/-	9.6E-04
Phase delay (usec)	-9.97547339018E+02	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-3.47395E-06	+/-	4.1E-07
Delay rate (us/s)	-1.64121581749E-01	Apriori rate (us/s)	-1.64121446969E-01	Resid rate (us/s)	-1.34780E-07	+/-	4.0E-09
Total phase (deg)	-281.9	Apriori accel (us/s/s)	1.62997323760E-05	Resid phase (deg)	-107.7	+/-	12.8

ph/seg (deg)	61.6	Theor.	30.1	Amplitude	0.244 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	94.2	Search (1024X32)	0.235	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.5	Inc. seg. avg.	0.302	Inc. frq. avg.	0.231	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	10.6	Inc. frq. avg.	0.231			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 60.8 el 24.5 pa -47.2 l: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 1196.401 2094.166 simultaneous interpolator

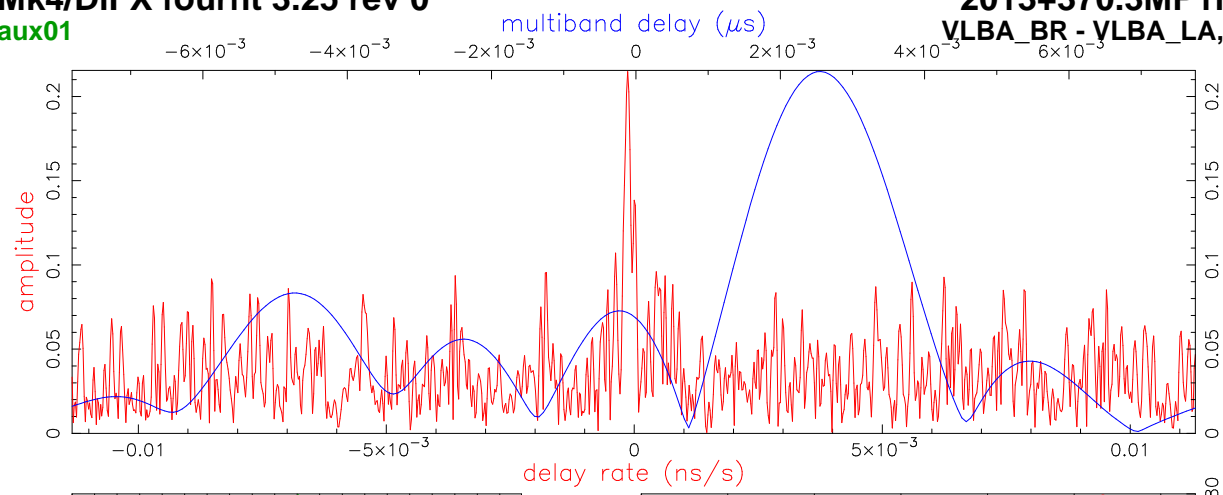
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/bl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/bl.W.15.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

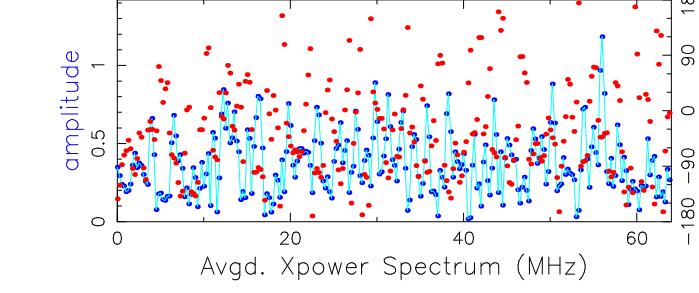
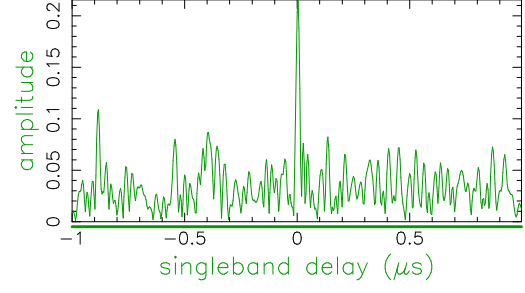
aux01

2013+370.3MP1N1, No0280, bl

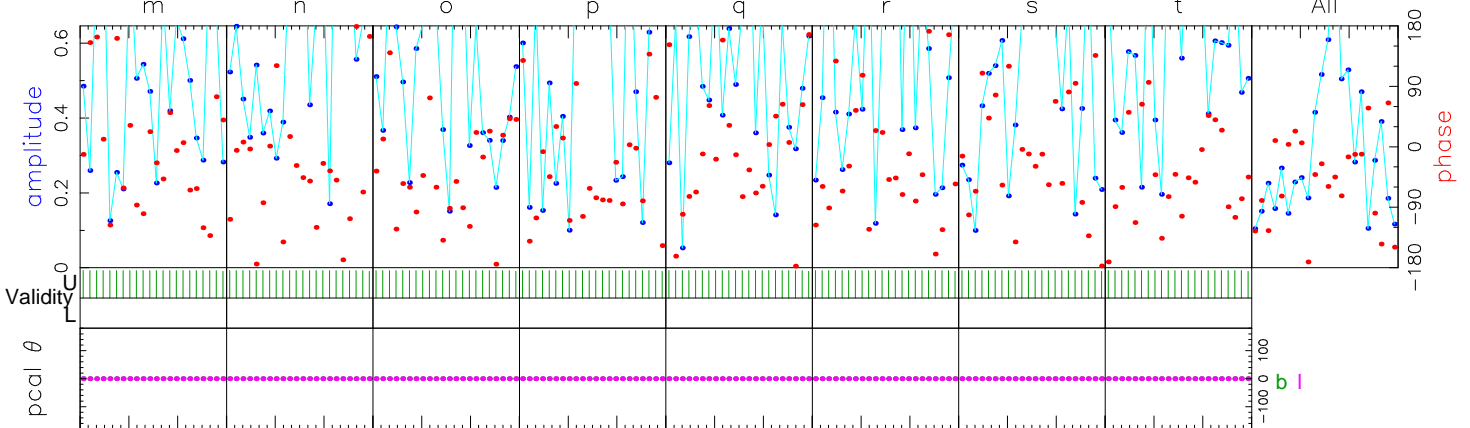
VLBA_BR - VLBA_LA, fgroup W, pol RR



Fringe quality 9
 SNR 7.9
 Int time 179.990
 Amp 0.215
 Phase -45.0
 PFD 4.5e-07
 Delays (us)
 SBD 0.003164
 MBD 0.002521
 Fringe rate (Hz) -0.011273
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:104946
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.4	-66.0	-43.2	-59.3	-28.2	-58.2	-12.3	-50.4	Phase	-45.0
	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	Ampl.	0.2
	256.4	362.3	291.5	126.5	166.6	323.6	415.6	258.1	Sbd box	257.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-9.97544814998E+02	Apriori delay (usec)	-9.97547335544E+02	Resid mbdelay (usec)	2.52055E-03	+/-	1.4E-04
Sband delay (usec)	-9.97544171294E+02	Apriori clock (usec)	1.2943375E+01	Resid sbdelay (usec)	3.16425E-03	+/-	1.1E-03
Phase delay (usec)	-9.97547336994E+02	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-1.45020E-06	+/-	4.7E-07
Delay rate (us/s)	-1.64121577841E-01	Apriori rate (us/s)	-1.64121446969E-01	Resid rate (us/s)	-1.30872E-07	+/-	4.5E-09
Total phase (deg)	-219.1	Apriori accel (us/s/s)	1.62997323760E-05	Resid phase (deg)	-45.0	+/-	14.5

ph/seg (deg) 65.4 34.0 Amplitude 0.215 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 108.7 59.3 Search (1024X32) 0.213 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.6 20.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.2 35.8 Inc. seg. avg. 0.275 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.212 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 60.8 el 24.5 pa -47.2 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 1196.401 2094.166 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/bl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/bl.W.22.3MP1N1

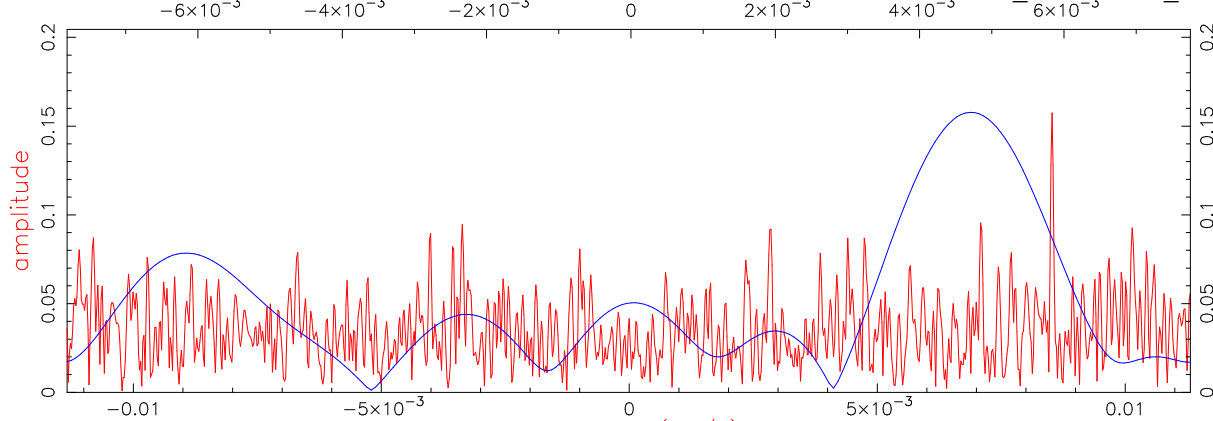
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, bl

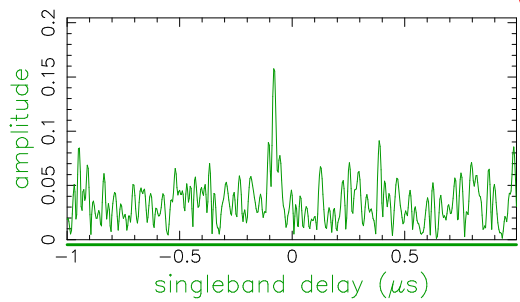
VLBA_BR - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

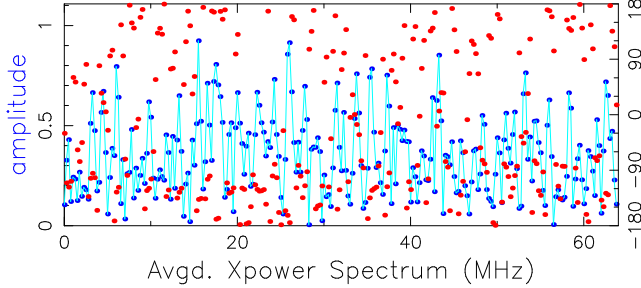


Fringe quality 0

SNR 5.9
 Int time 179.990
 Amp 0.204
 Phase -46.3
 PFD 4.3e-01
 Delays (us)
 SBD -0.080397
 MBD 0.004781
 Fringe rate (Hz)
 0.736028
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

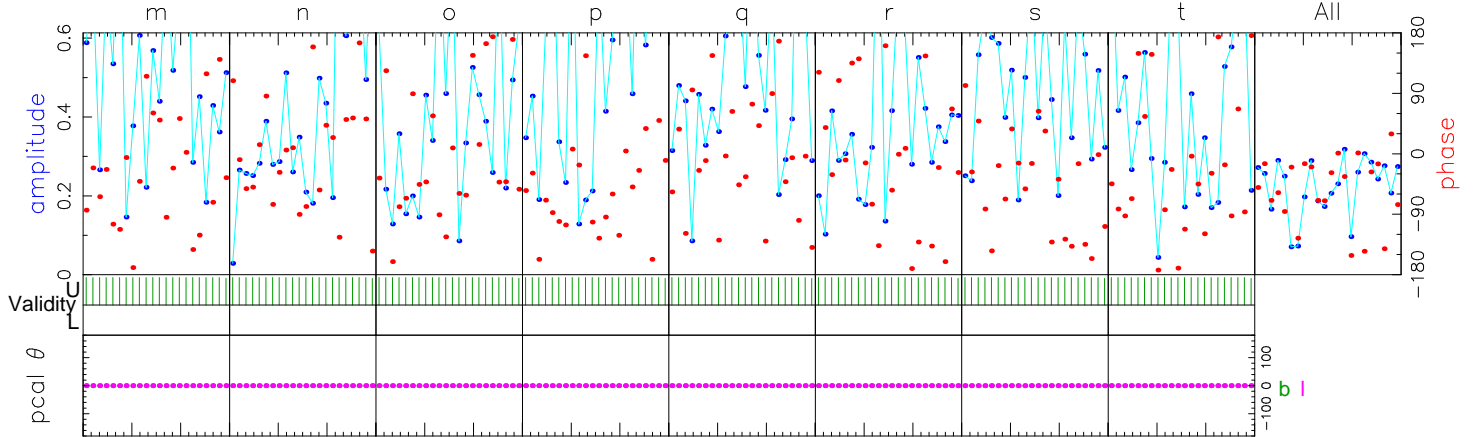


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:104948
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-9.97620679348E+02	Apriori delay (usec)	-9.97547335544E+02	Resid mbdelay (usec)	4.78120E-03	+/-	1.8E-04
Sband delay (usec)	-9.97627732044E+02	Apriori clock (usec)	1.2943375E+01	Resid sbdelay (usec)	-8.03965E-02	+/-	1.5E-03
Phase delay (usec)	-9.97547337038E+02	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-1.49409E-06	+/-	6.3E-07
Delay rate (us/s)	-1.64112902419E-01	Apriori rate (us/s)	-1.64121446969E-01	Resid rate (us/s)	8.54455E-06	+/-	6.1E-09
Total phase (deg)	-220.5	Apriori accel (us/s/s)	1.62997323760E-05	Resid phase (deg)	-46.3	+/-	19.5

ph/seg (deg) 50.3 45.8 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.8 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.9 27.6 Inc. seg. avg. 0.217 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.0 48.2 Inc. frq. avg. 0.188 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 b: az 60.8 el 24.5 pa -47.2 l: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 1196.401 2094.166 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/bl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/bl.W.27.3MP1N1

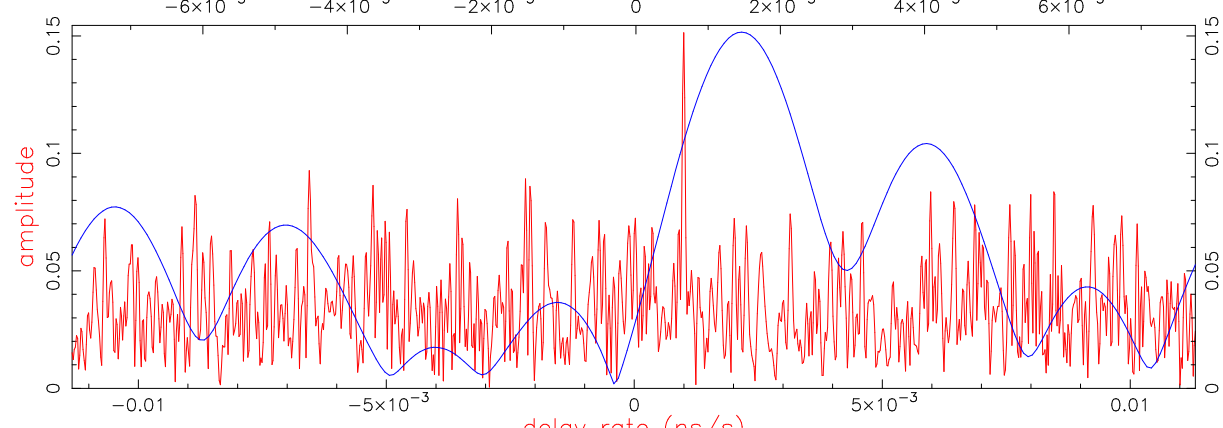
Mk4/DiFX fourfit 3.25 rev 0

aux01

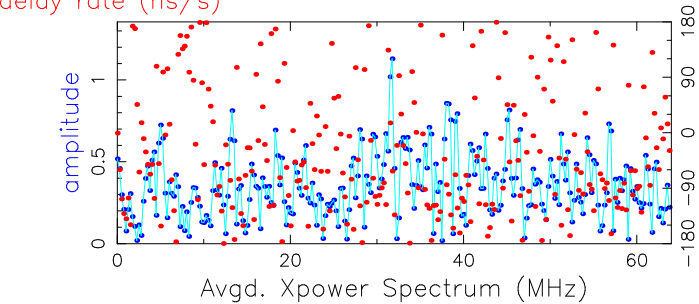
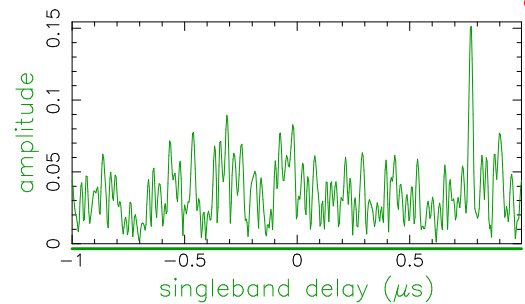
2013+370.3MP1N1, No0280, bl

VLBA_BR - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

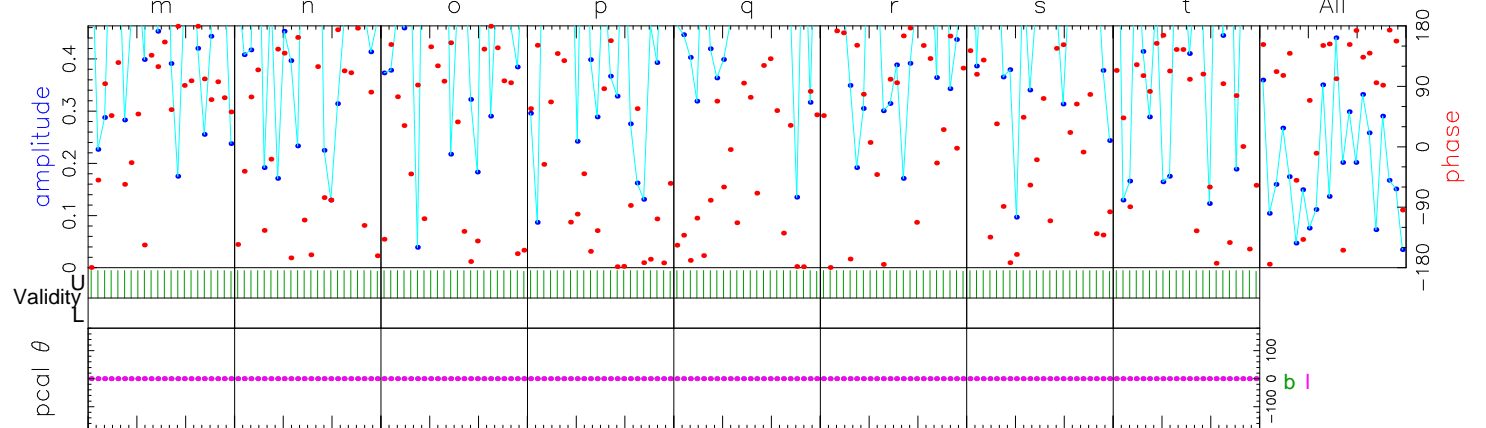


Fringe quality 0
 SNR 5.6
 Int time 179.990
 Amp 0.154
 Phase 139.7
 PFD 8.6e-01
 Delays (us)
 SBD 0.771629
 MBD 0.001404
 Fringe rate (Hz) 0.085119
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:104952
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec) (SBD)	-9.96780306810E+02				-9.97547335544E+02				1.40373E-03	+/- 1.9E-04
Sband delay (usec)	-9.96775706294E+02				1.2943375E+01				7.71629E-01	+/- 1.5E-03
Phase delay (usec)	-9.97547331040E+02				8.1044199E-07				4.50429E-06	+/- 6.5E-07
Delay rate (us/s)	-1.64120458827E-01				-1.64121446969E-01				9.88142E-07	+/- 6.3E-09
Total phase (deg)			-34.5		1.62997323760E-05				139.7	+/- 20.3
ph/seg (deg)	66.1	47.6			0.154 +/- 0.027				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	76.5	83.0			0.148				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	36.1	28.7			0.000				Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	51.0	50.1			0.149				SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
b: az 60.8 el 24.5 pa -47.2					0.152				Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
l: az 62.2 el 27.5 pa -64.5									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
u, v (fr/asec) 1196.401 2094.166										simultaneous interpolator
Control file: cf_1234_gmva										Input file: /Exps/c241c/v2/3mm/1234/No0280/bl..3MP1N1
										Output file: /Exps/c241c/v2/3mm/1234/No0280/bl.W.36.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

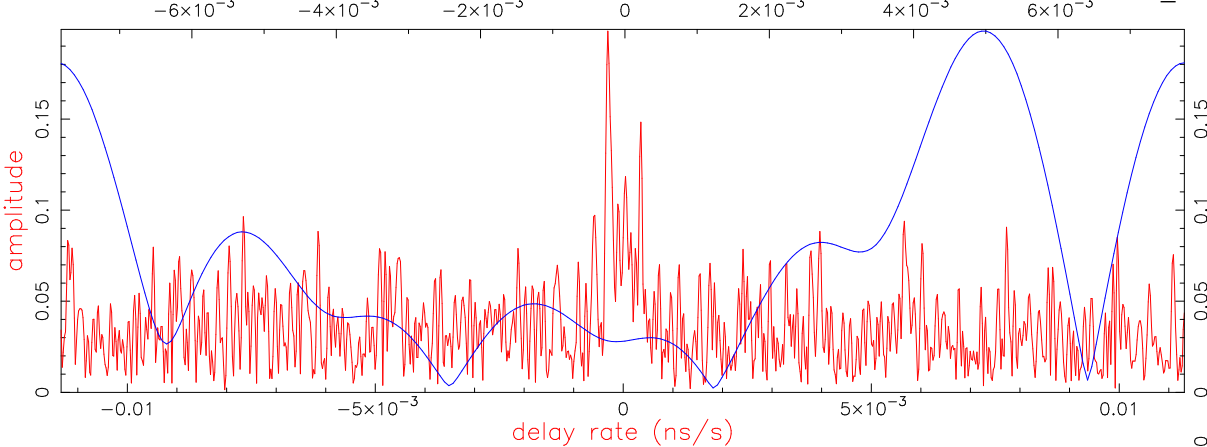
aux01

2013+370.3MP1N1, No0280, BI

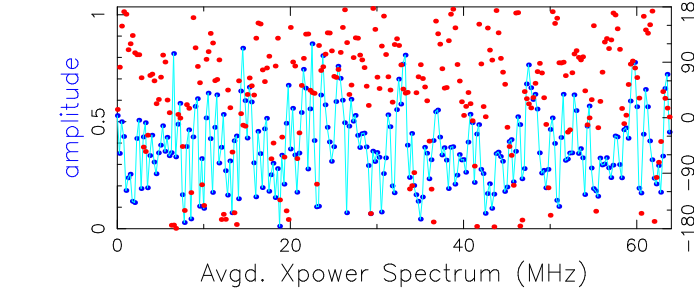
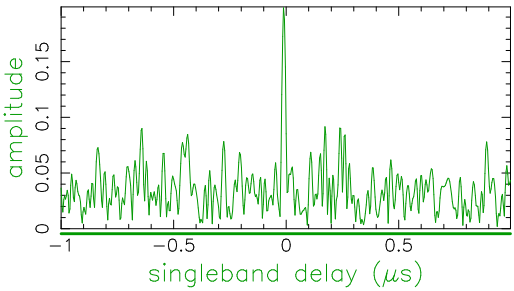
EFLSBERG - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 9

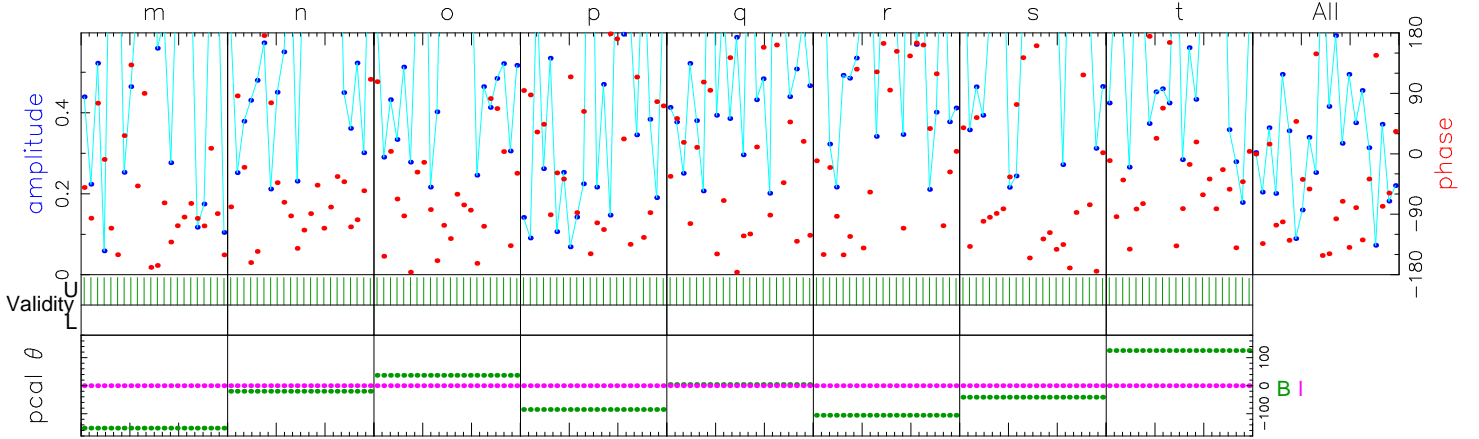


SNR 7.3
 Int time 179.967
 Amp 0.199
 Phase -100.2
 PFD 4.3e-05
 Delays (us)
 SBD -0.010868
 MBD 0.004999
 Fringe rate (Hz)
 -0.027614
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105000
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	0	0	0	0	0	0	0	0		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	9.04962264079E+03	Apriori delay (usec)	9.04963326663E+03	Resid mbdelay (usec)	4.99916E-03	+/-	1.5E-04
Sband delay (usec)	9.04962239813E+03	Apriori clock (usec)	-2.7092819E+01	Resid sbdelay (usec)	-1.08685E-02	+/-	1.2E-03
Phase delay (usec)	9.04963326340E+03	Apriori clockrate (us/s)	4.4462047E-08	Resid phdelay (usec)	-3.23122E-06	+/-	5.1E-07
Delay rate (us/s)	-1.41741402848E+00	Apriori rate (us/s)	-1.41741370791E+00	Resid rate (us/s)	-3.20570E-07	+/-	4.9E-09
Total phase (deg)	111.4	Apriori accel (us/s/s)	-3.54747051924E-05	Resid phase (deg)	-100.2	+/-	15.7

ph/seg (deg)	RMS 70.9	Theor. 36.8	Amplitude Search (1024X32)	0.193	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	108.2	64.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	45.3	22.2	Inc. seg. avg.	0.279	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	56.7	38.7	Inc. frq. avg.	0.224	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 252.9 el 63.3 pa 49.7 I: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 10172.443 -863.614 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/BI..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/BI.W.61.3MP1N1

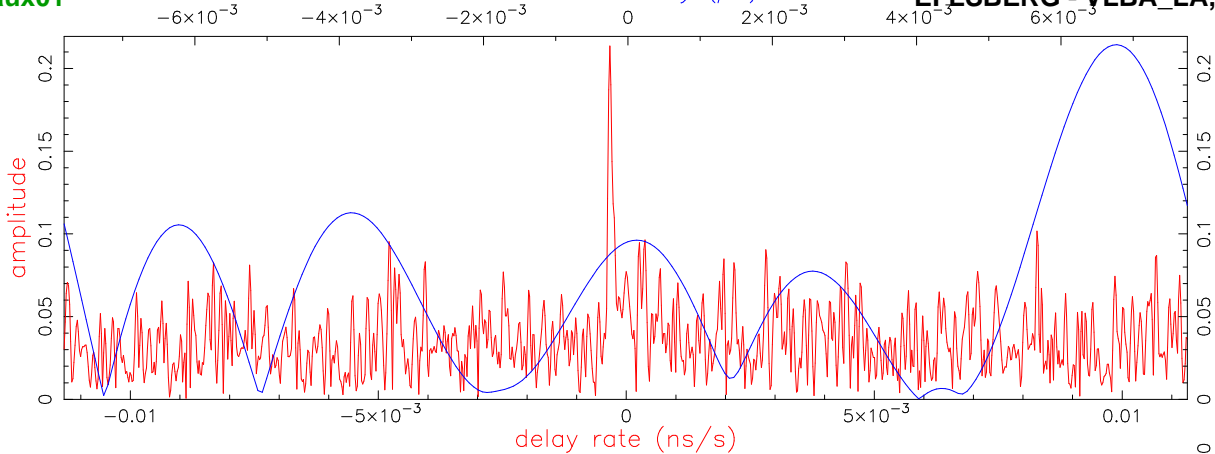
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, BI

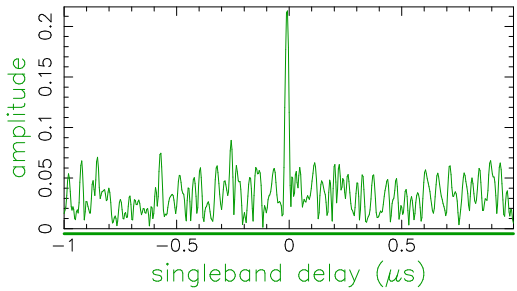
EFLSBERG - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

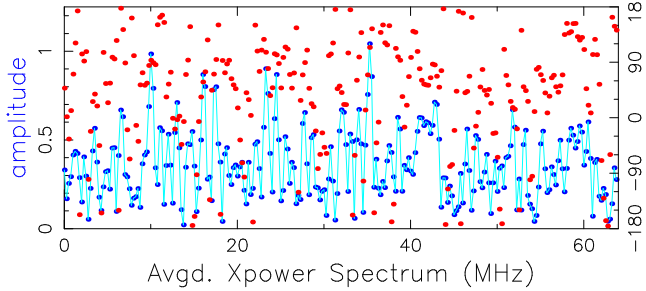


Fringe quality 9

SNR 8.0
 Int time 179.967
 Amp 0.219
 Phase -111.0
 PFD 1.5e-07
 Delays (us)
 SBD -0.009571
 MBD 0.006852
 Fringe rate (Hz)
 -0.028427
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

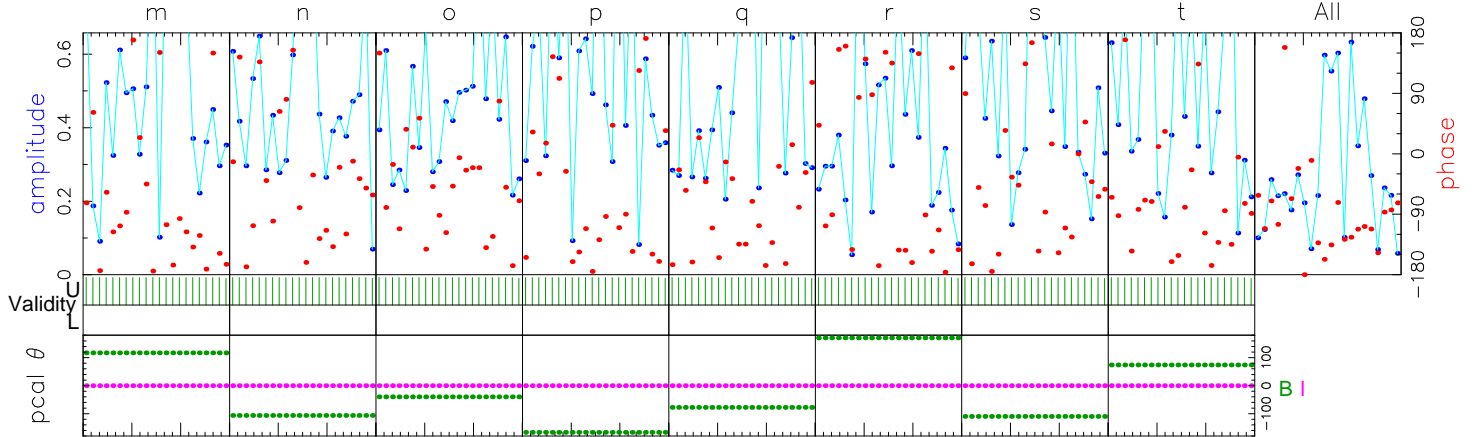


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105002
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.2	-87.7	-58.5	-128.5	-92.4	-177.4	-123.3	-104.0	Phase	-111.0
	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	255.1	174.7	240.4	255.4	254.7	345.6	191.1	253.1	Sbd box	254.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
I	0	0	0	0	0	0	0	0	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.04962449389E+03	Apriori delay (usec)	9.04963326663E+03	Resid mbdelay (usec)	6.85226E-03	+/-	1.3E-04
Sband delay (usec)	9.04962369588E+03	Apriori clock (usec)	-2.7092819E+01	Resid sbdelay (usec)	-9.57075E-03	+/-	1.1E-03
Phase delay (usec)	9.04963326305E+03	Apriori clockrate (us/s)	4.4462047E-08	Resid phdelay (usec)	-3.58067E-06	+/-	4.6E-07
Delay rate (us/s)	-1.41741403792E+00	Apriori rate (us/s)	-1.41741370791E+00	Resid rate (us/s)	-3.30005E-07	+/-	4.4E-09
Total phase (deg)	100.5	Apriori accel (us/s/s)	-3.54747051924E-05	Resid phase (deg)	-111.0	+/-	14.2

ph/seg (deg)	46.0	Theor.	33.4	Amplitude	0.219 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.6	Search (1024X32)	0.213	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	38.1	Inc. seg. avg.	0.234	Inc. frq. avg.	0.233	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.4	Inc. frq. avg.	0.233	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
									ion window (TEC)	0.00 0.00

B: az 252.9 el 63.3 pa 49.7 I: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 10172.443 -863.614 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/BI..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/BI.W.72.3MP1N1

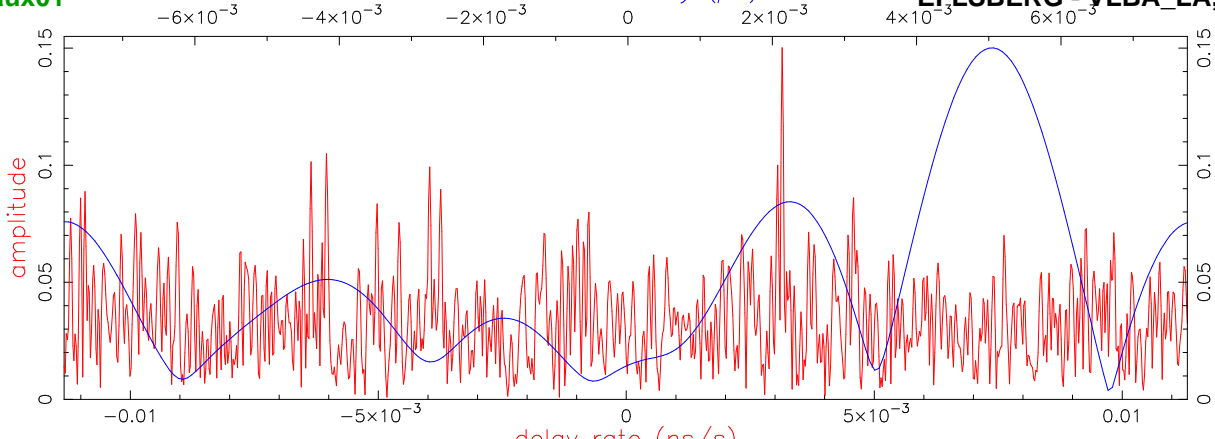
Mk4/DiFX fourfit 3.25 rev 0

aux01

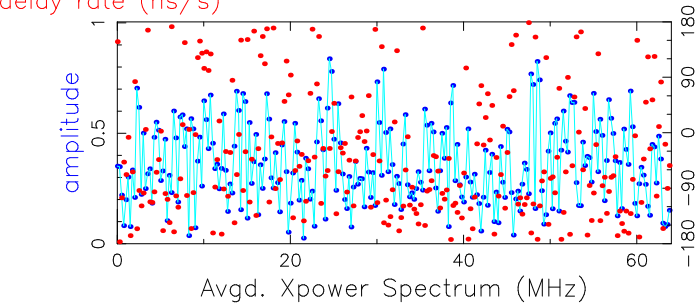
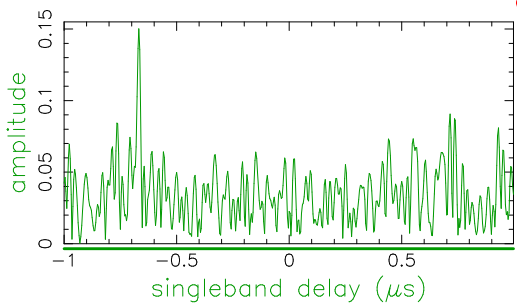
2013+370.3MP1N1, No0280, BI

EFLSBERG - VLBA_LA, fgroup W, pol LR

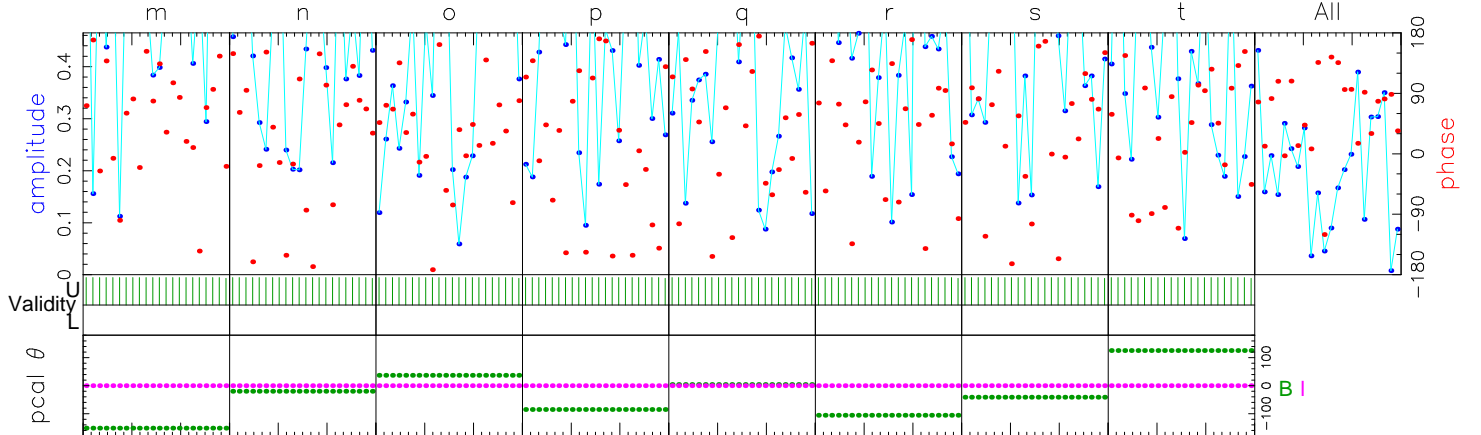
multiband delay (μ s)



Fringe quality 0
 SNR 5.5
 Int time 179.967
 Amp 0.155
 Phase 65.9
 PFD 9.9e-01
 Delays (us)
 SBD -0.667957
 MBD 0.005042
 Fringe rate (Hz) 0.271256
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105004
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



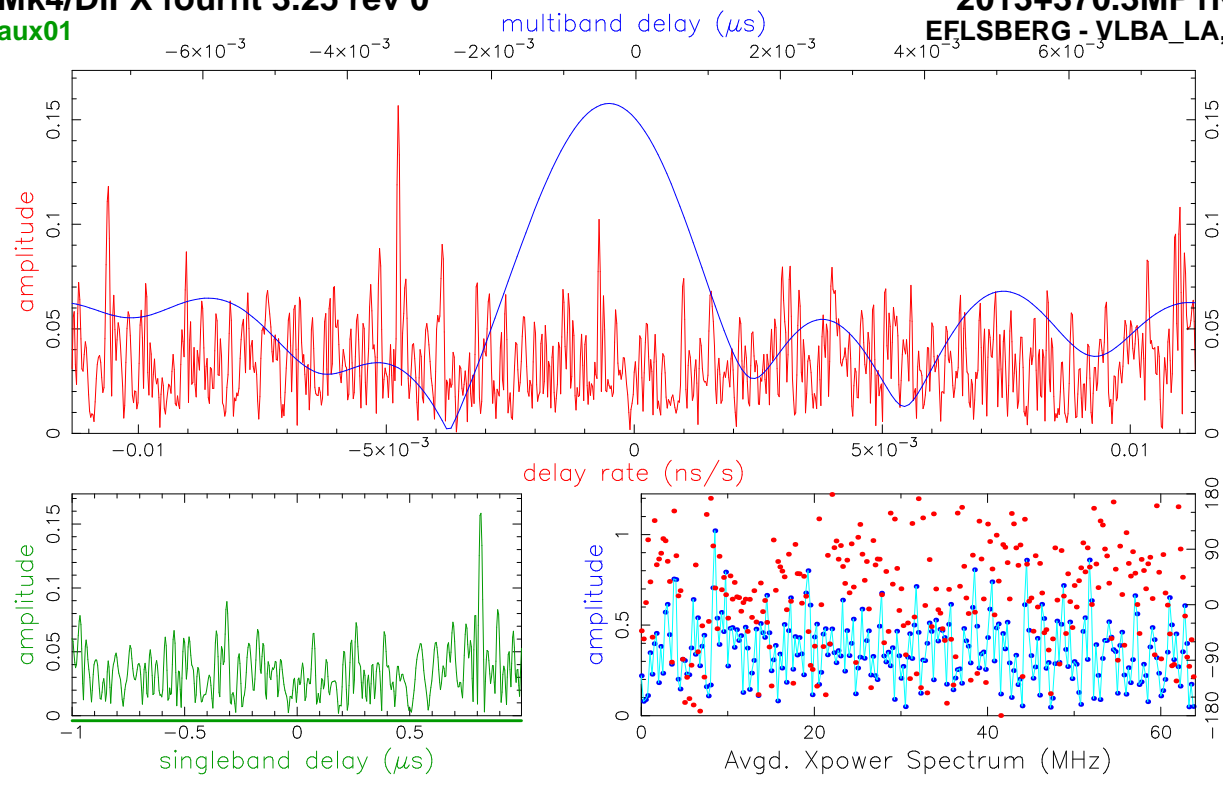
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	0	0	0	0	0	0	0	0		
I	0	0	0	0	0	0	0	0		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:I	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

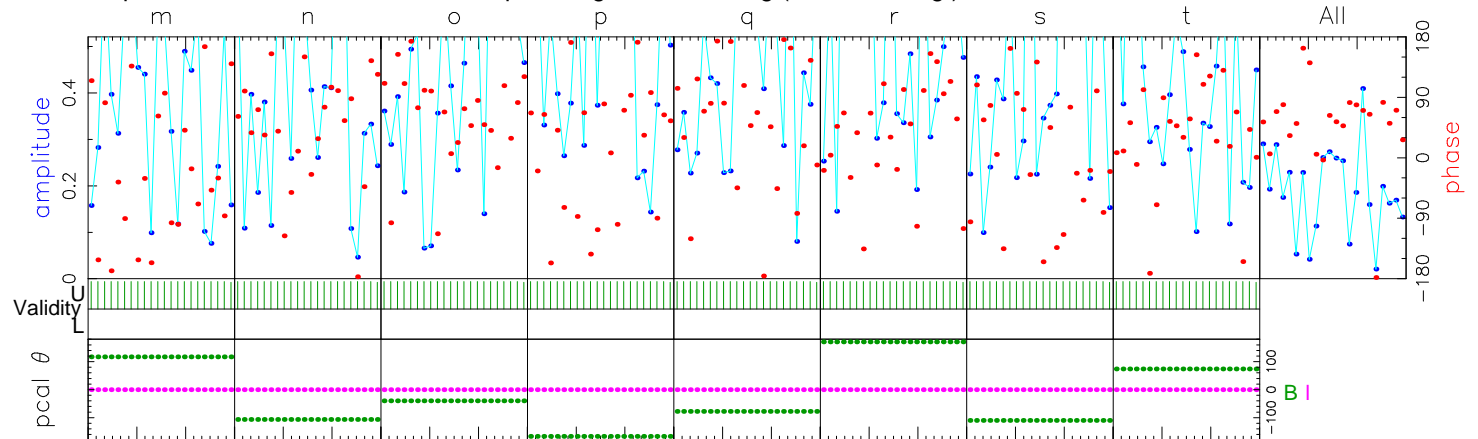
Group delay (usec) (SBD)	9.04896643393E+03	Apriori delay (usec)		9.04963326663E+03	Resid mbdelay (usec)		5.04230E-03	+/- 2.0E-04	
Sband delay (usec)	9.04896530988E+03	Apriori clock (usec)		-2.7092819E+01	Resid sbdelay (usec)		-6.67957E-01	+/- 1.6E-03	
Phase delay (usec)	9.04963326876E+03	Apriori clockrate (us/s)		4.4462047E-08	Resid phdelay (usec)		2.12593E-06	+/- 6.7E-07	
Delay rate (us/s)	-1.41741055890E+00	Apriori rate (us/s)		-1.41741370791E+00	Resid rate (us/s)		3.14901E-06	+/- 6.4E-09	
Total phase (deg)	277.5		Apriori accel (us/s/s)		-3.54747051924E-05	Resid phase (deg)		65.9	+/- 20.8

ph/seg (deg) 57.5 48.8 Search (1024X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.1 85.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.5 29.4 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.5 51.4 Inc. frq. avg. 0.141 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 252.9 el 63.3 pa 49.7 I: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 10172.443 -863.614 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/BI..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/BI.W.82.3MP1N1



Fringe quality 0
SNR 5.9
Int time 179.967
Amp 0.174
Phase 57.9
PFD 3.4e-01
Delays (us)
SBD 0.814650
MBD -0.000232
Fringe rate (Hz)
-0.409949
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080000.00
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105008
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-60.3	61.3	70.3	57.7	80.4	57.1	-43.2	48.8	Phase	57.9		
	0.0	0.2	0.3	0.1	0.2	0.3	0.1	0.3	Ampl.	0.2		
	412.1	176.6	326.5	165.3	135.8	464.5	247.9	128.7	Sbd box	465.6		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
B	0	0	0	0	0	0	0	0	PC freqs			
I	0	0	0	0	0	0	0	0	PC freqs			
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
B:I	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	ManI PC			
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
I	1000	1000	1000	1000	1000	1000	1000	1000				
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec) (SBD)	9.05044553436E+03		Apriori delay (usec)		9.04963326663E+03		Resid mbdelay (usec)		-2.32268E-04	+/- 1.8E-04		
Sband delay (usec)	9.05044791613E+03		Apriori clock (usec)		-2.7092819E+01		Resid sbdelay (usec)		8.14650E-01	+/- 1.5E-03		
Phase delay (usec)	9.04963326850E+03		Apriori clockrate (us/s)		4.4462047E-08		Resid phdelay (usec)		1.86641E-06	+/- 6.2E-07		
Delay rate (us/s)	-1.41741846701E+00		Apriori rate (us/s)		-1.41741370791E+00		Resid rate (us/s)		-4.75910E-06	+/- 6.0E-09		
Total phase (deg)			Apriori accel (us/s/s)		-3.54747051924E-05		Resid phase (deg)		57.9	+/- 19.4		
RMS	46.2	45.4	Amplitude		0.174 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	59.7	79.3	Search (1024X32)		0.156		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	58.3	47.8	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	64.5	27.4	Inc. seg. avg.		0.156		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011		
amp/frq (%)	58.3	47.8	Inc. frq. avg.		0.167		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 252.9 el 63.3 pa 49.7		I: az 62.2 el 27.5 pa -64.5		u,v (fr/asec)		10172.443 -863.614		simultaneous interpolator				
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/BI..3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/BI.W.98.3MP1N1								

Mk4/DiFX fourfit 3.25 rev 0

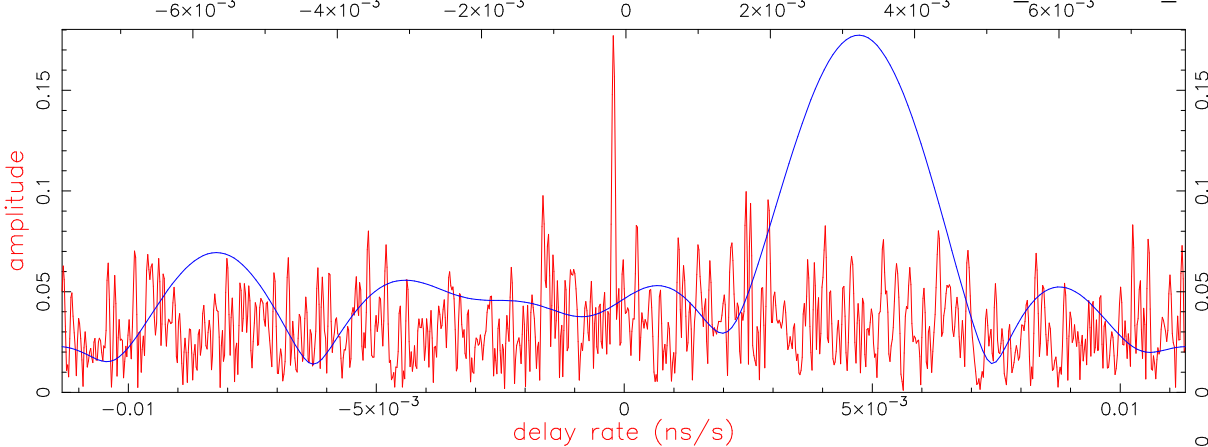
aux01

2013+370.3MP1N1, No0280, fl

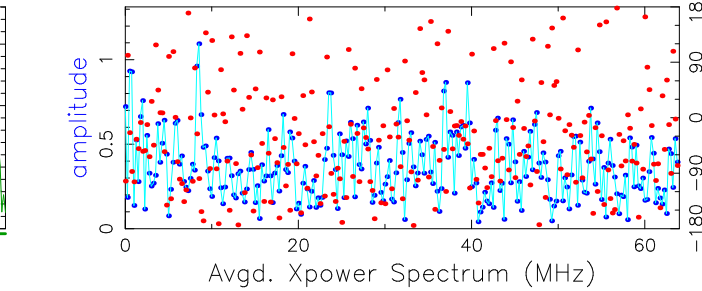
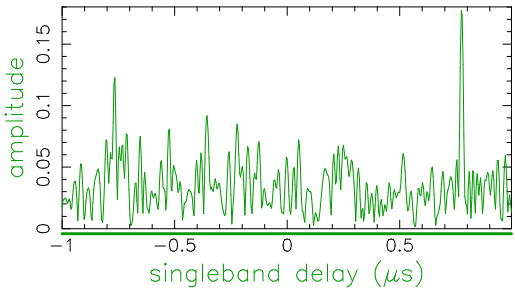
VLBA_FD - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 0

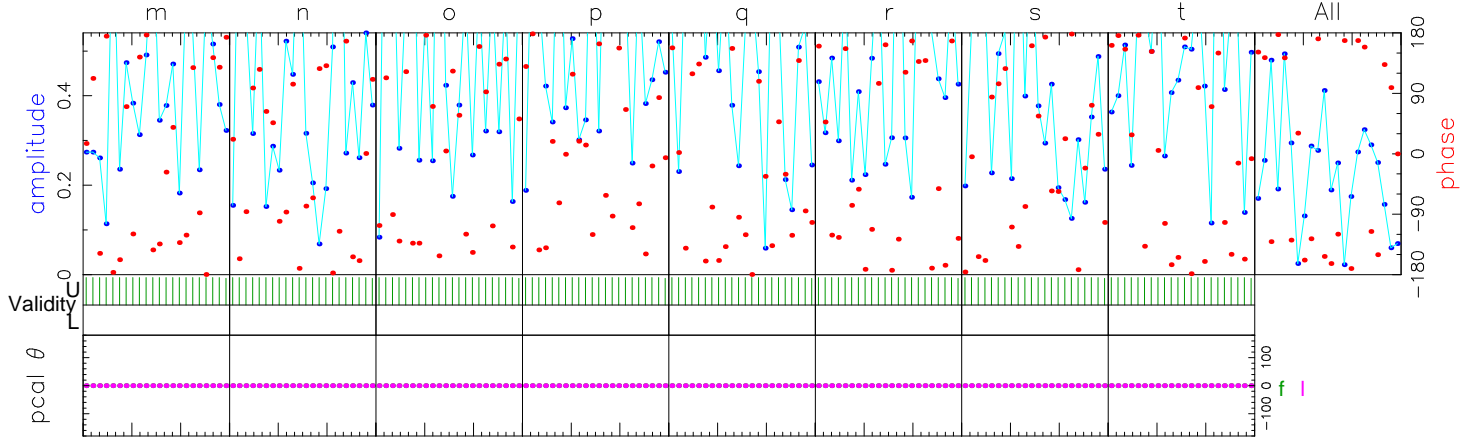


SNR 6.6
 Int time 179.990
 Amp 0.180
 Phase -168.2
 PFD 5.4e-03
 Delays (us)
 SBD 0.774979
 MBD 0.003286
 Fringe rate (Hz)
 -0.018945
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105009
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.1	-155.5	179.0	-96.4	-164.2	-176.5	-172.2	177.9	Phase	-168.2
	0.2	0.2	0.2	0.1	0.2	0.3	0.1	0.2	Ampl.	0.2
	456.6	149.0	229.8	488.3	221.4	44.0	402.0	60.9	Sbd box	455.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.36772740316E+02	Apriori delay (usec)	-2.37541651226E+02	Resid mbdelay (usec)	3.28591E-03	+/-	1.6E-04
Sband delay (usec)	-2.36766672726E+02	Apriori clock (usec)	8.3645821E+00	Resid sbdelay (usec)	7.74979E-01	+/-	1.3E-03
Phase delay (usec)	-2.37541656649E+02	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-5.42360E-06	+/-	5.6E-07
Delay rate (us/s)	5.12784870455E-02	Apriori rate (us/s)	5.12787069804E-02	Resid rate (us/s)	-2.19935E-07	+/-	5.4E-09
Total phase (deg)	-109.4	Apriori accel (us/s/s)	-3.81556393017E-06	Resid phase (deg)	-168.2	+/-	17.3

ph/seg (deg)	62.3	Theor.	40.6	Amplitude	0.180 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	75.9		70.9	Search (1024X32)	0.174	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008	
ph/frq (deg)	31.4		24.5	Inc. seg. avg.	0.185	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.6		42.8	Inc. frq. avg.	0.176	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 60.7 el 26.7 pa -70.6 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) -373.231 -754.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/fl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/fl.W.106.3MP1N1

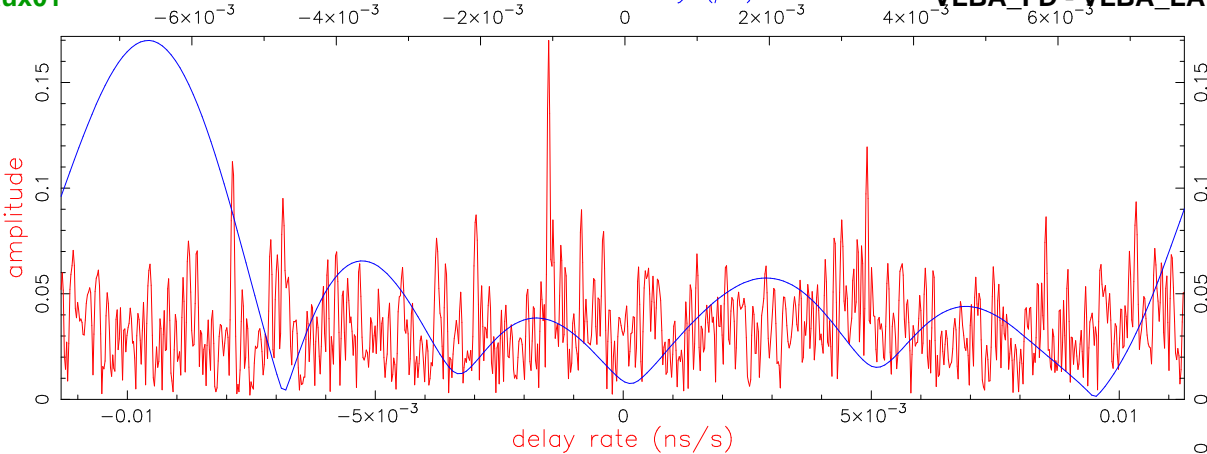
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, fl

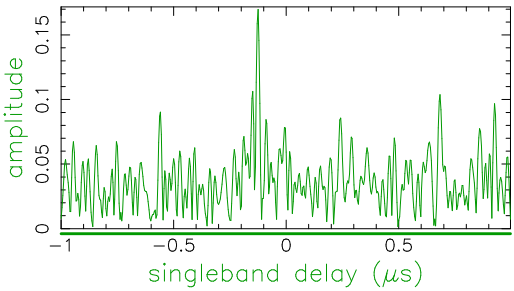
VLBA_FD - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

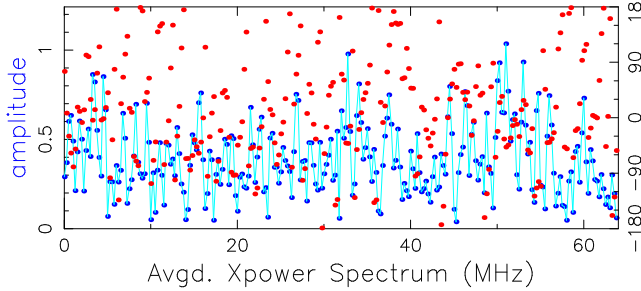


Fringe quality 0

SNR 6.3
 Int time 179.990
 Amp 0.172
 Phase 66.9
 PFD 5.2e-02
 Delays (us)
 SBD -0.125759
 MBD -0.006614
 Fringe rate (Hz)
 -0.129641
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

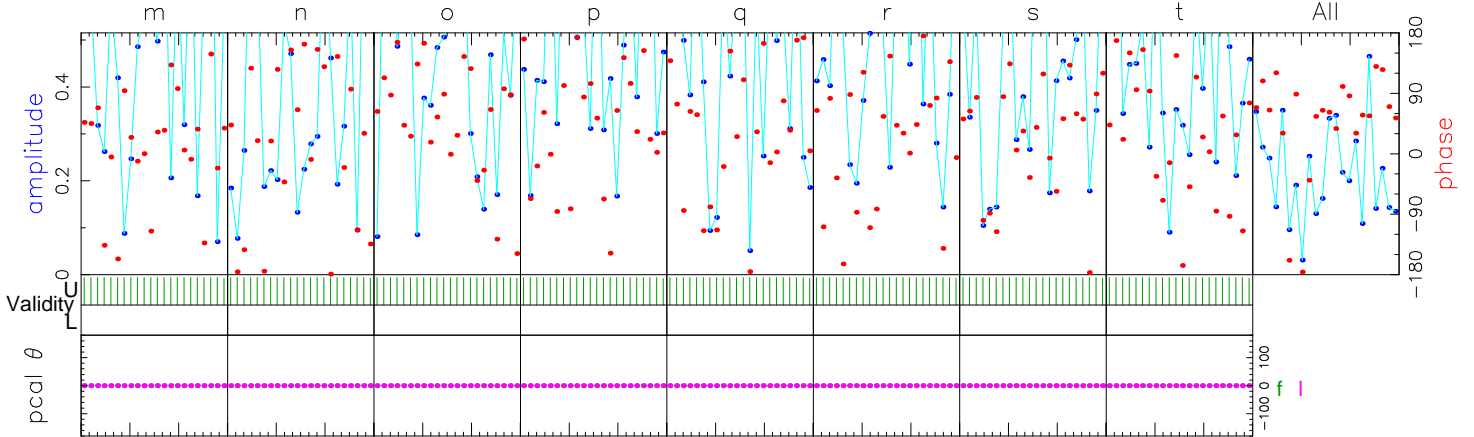


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105011
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-2.37673265446E+02									
Sband delay (usec)	-2.37667409976E+02									
Phase delay (usec)	-2.37541649068E+02									
Delay rate (us/s)	5.12772019728E-02									
Total phase (deg)			-234.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

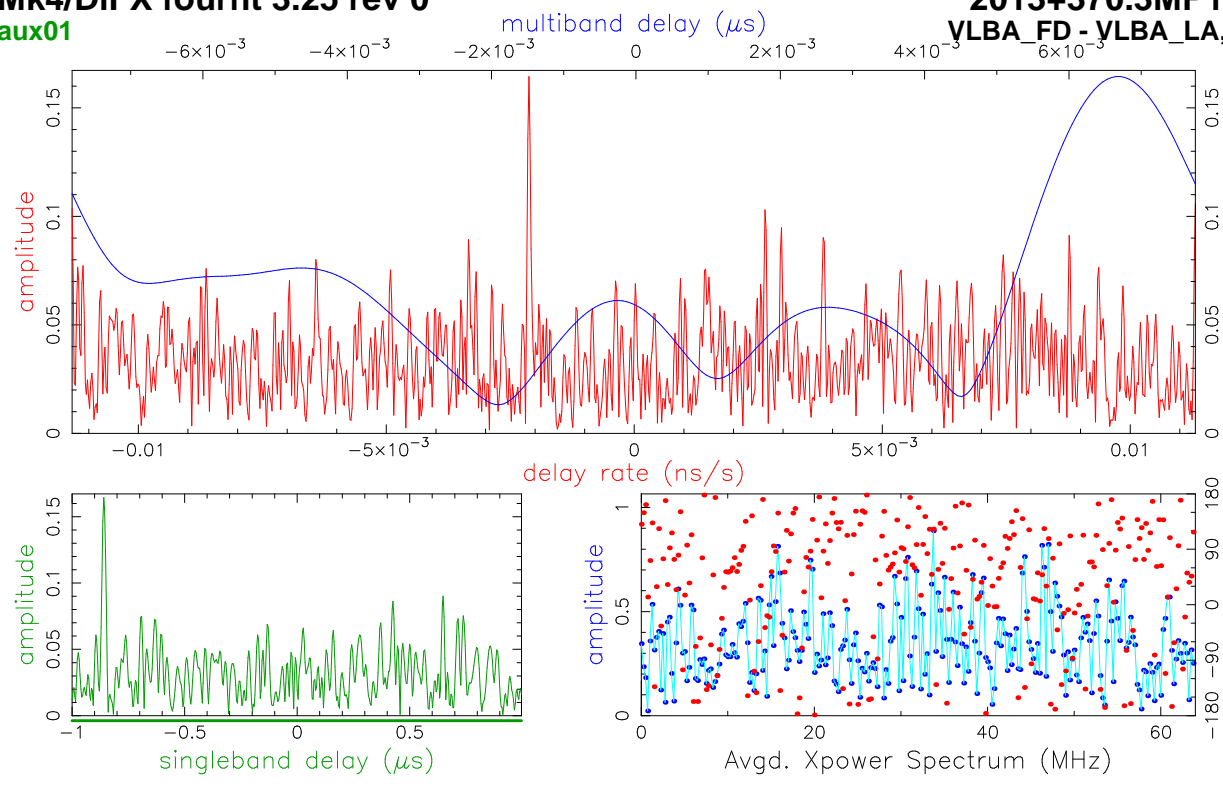
ph/seg (deg) 52.7 43.0 Search (1024X32) 0.168 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.5 75.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.4 25.9 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.9 45.2 Inc. frq. avg. 0.166 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 f: az 60.7 el 26.7 pa -70.6 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) -373.231 -754.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/fl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/fl.W.114.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

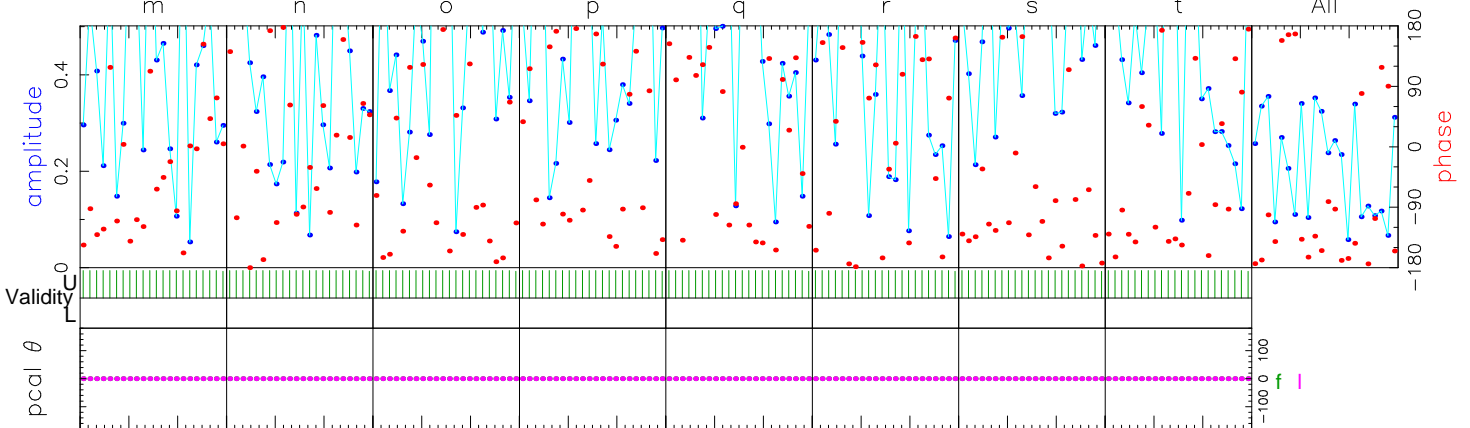
2013+370.3MP1N1, No0280, fl

VLBA_FD - VLBA_LA, fgroup W, pol LR



Fringe quality 0
 SNR 6.0
 Int time 179.990
 Amp 0.167
 Phase -151.6
 PFD 1.7e-01
 Delays (us)
 SBD -0.858682
 MBD 0.006714
 Fringe rate (Hz)
 -0.183882
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105015
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-125.3	13.0	-143.0	-137.9	169.4	162.0	-124.0	-140.4	Phase	-151.6
	0.1	0.0	0.3	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	195.4	103.5	36.1	83.8	23.2	36.3	37.8	283.9	Sbd box	37.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -2.38394312680E+02 Apriori delay (usec) -2.37541651226E+02 Resid mbdelay (usec) 6.71355E-03 +/- 1.8E-04
 Sband delay (usec) -2.38400333226E+02 Apriori clock (usec) 8.3645821E+00 Resid sbdelay (usec) -8.58682E-01 +/- 1.4E-03
 Phase delay (usec) -2.37541656114E+02 Apriori clockrate (us/s) 2.8422100E-07 Resid phdelay (usec) -4.88788E-06 +/- 6.1E-07
 Delay rate (us/s) 5.12765722975E-02 Apriori rate (us/s) 5.12787069804E-02 Resid rate (us/s) -2.13468E-06 +/- 5.9E-09
 Total phase (deg) -92.7 Apriori accel (us/s/s) -3.81556393017E-06 Resid phase (deg) -151.6 +/- 18.9

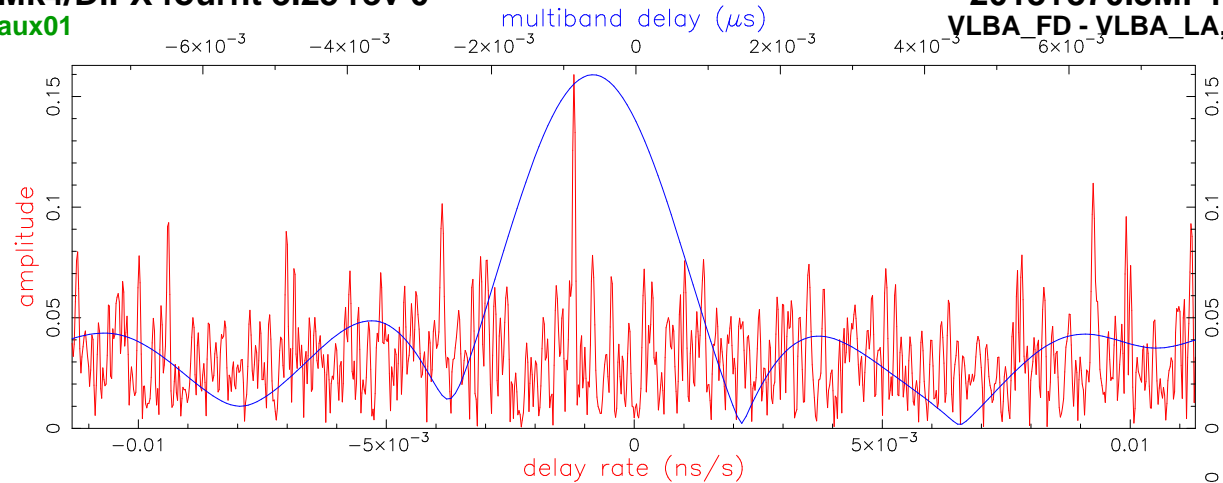
ph/seg (deg) RMS Theor. Amplitude 0.167 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.4 44.4 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 70.0 77.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 73.7 26.8 Inc. seg. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.0 46.8 Inc. frq. avg. 0.177 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 f: az 60.7 el 26.7 pa -70.6 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) -373.231 -754.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/fl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/fl.W.123.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

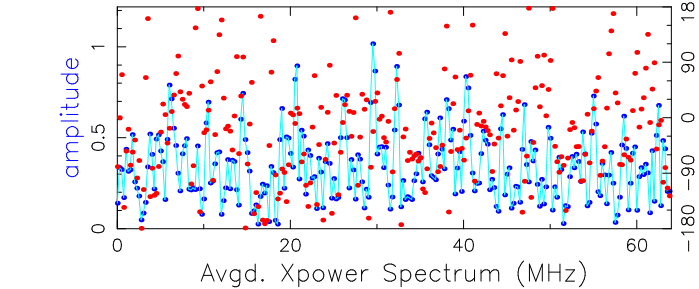
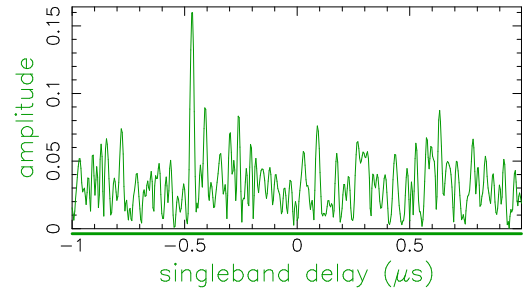
aux01

2013+370.3MP1N1, No0280, fl

VLBA_FD - VLBA_LA, fgroup W, pol RL

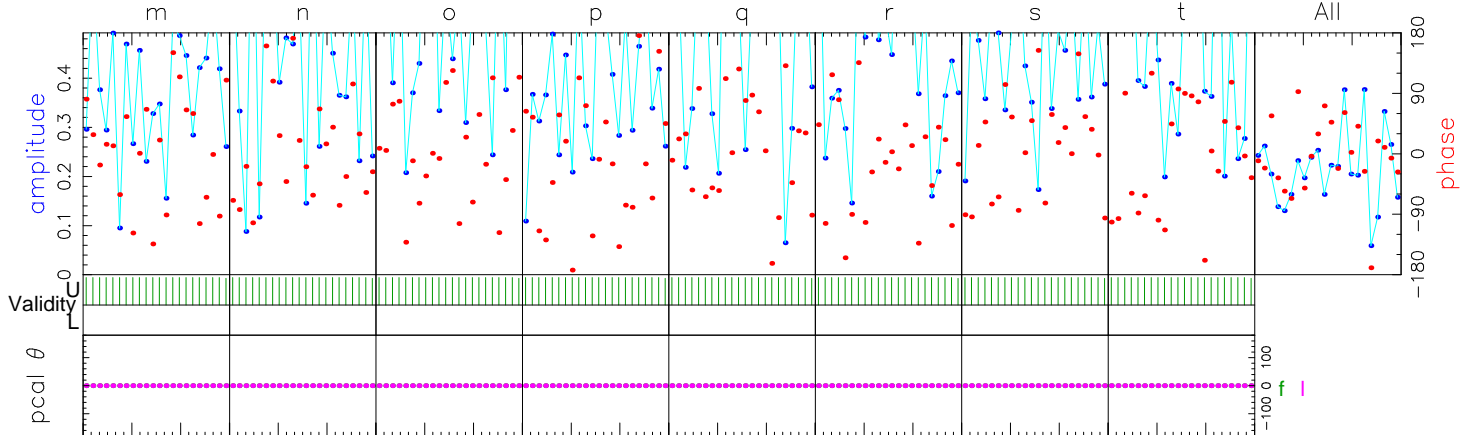


Fringe quality 0
 SNR 6.0
 Int time 179.990
 Amp 0.164
 Phase 6.6
 PFD 2.4e-01
 Delays (us)
 SBD -0.466751
 MBD -0.000631
 Fringe rate (Hz)
 -0.105590
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105017
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec) (SBD)	-2.38011032425E+02				-2.37541651226E+02				-6.31200E-04	+/- 1.8E-04
Sband delay (usec)	-2.38008402226E+02				8.3645821E+00				-4.66751E-01	+/- 1.4E-03
Phase delay (usec)	-2.37541651012E+02				2.8422100E-07				2.13838E-07	+/- 6.2E-07
Delay rate (us/s)	5.12774811870E-02				5.12787069804E-02				-1.22579E-06	+/- 5.9E-09
Total phase (deg)			-294.5		-3.81556393017E-06				6.6	+/- 19.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
simultaneous interpolator										

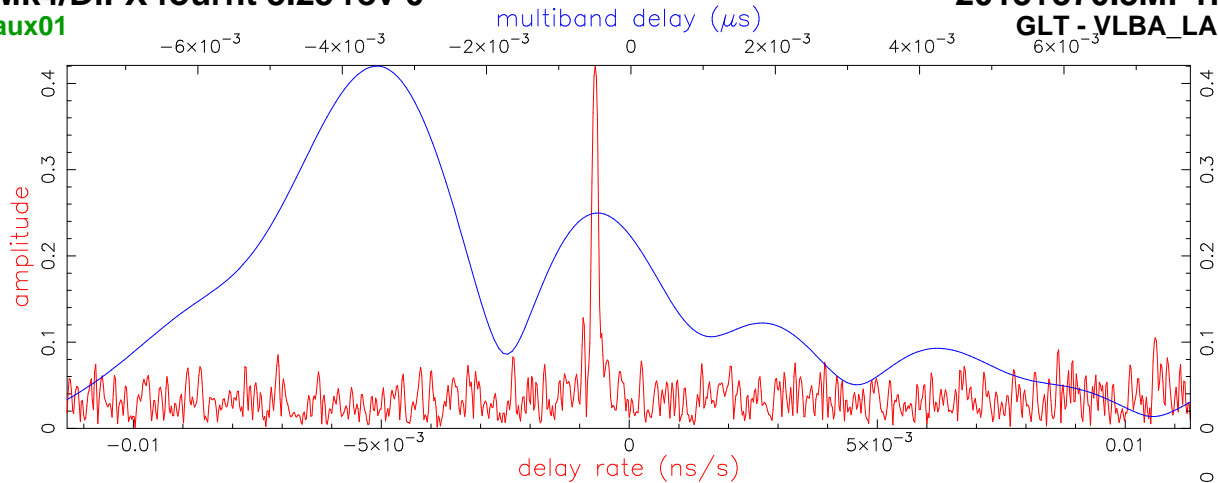
ph/seg (deg) 56.5 44.9 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.3 78.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.1 27.0 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.2 47.2 Inc. frq. avg. 0.151 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 f: az 60.7 el 26.7 pa -70.6 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) -373.231 -754.526 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/fl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/fl.W.134.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

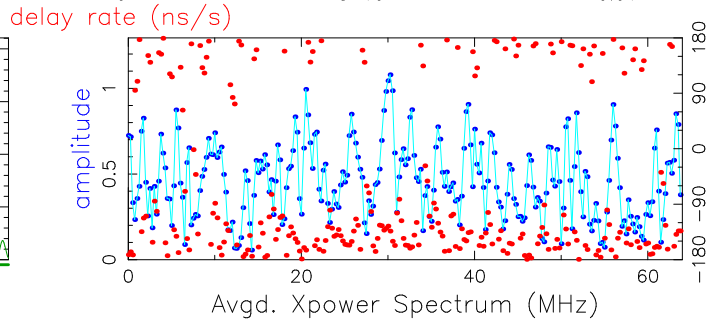
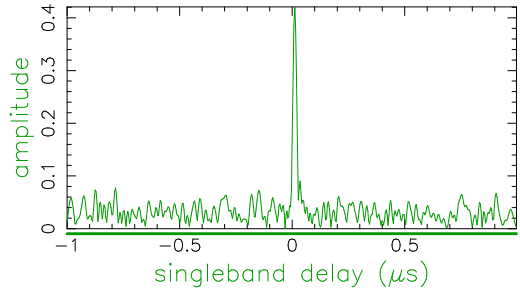
2013+370.3MP1N1, No0280, gl

GLT - VLBA_LA, fgroup W, pol LL



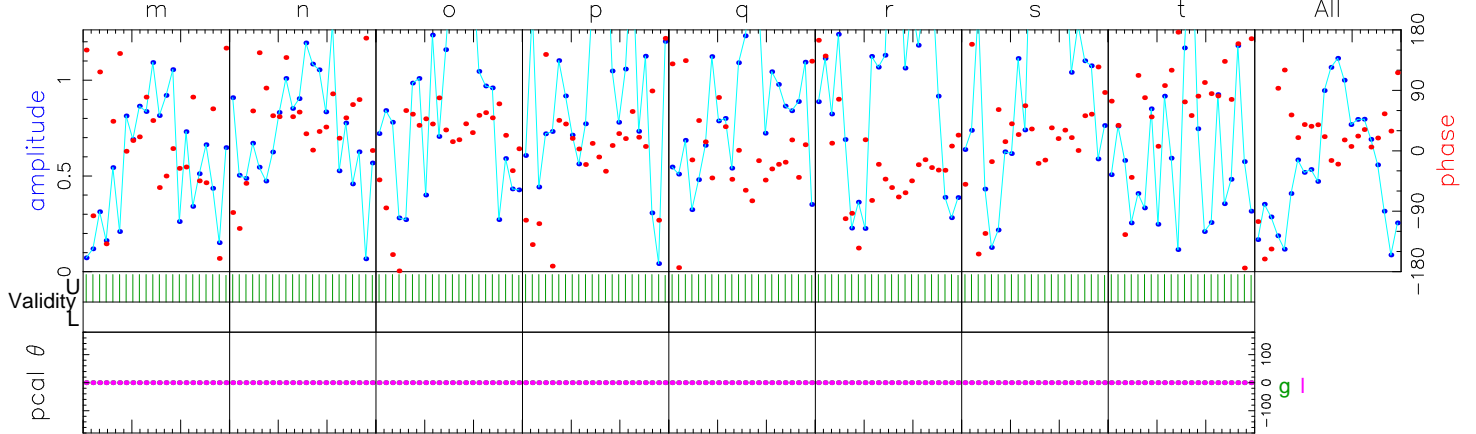
Fringe quality 8

SNR 15.4
 Int time 179.985
 Amp 0.421
 Phase 18.0
 PFD 4.2e-45
 Delays (us)
 SBD 0.011507
 MBD -0.003529
 Fringe rate (Hz)
 -0.058628
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105017
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 5.54431004275E+03 Apriori delay (usec) 5.54429794648E+03 Resid mbdelay (usec) -3.52873E-03 +/- 7.0E-05
 Sband delay (usec) 5.54430945348E+03 Apriori clock (usec) 8.7485123E+00 Resid sbdelay (usec) 1.15070E-02 +/- 5.6E-04
 Phase delay (usec) 5.54429794706E+03 Apriori clockrate (us/s) 1.0183620E-06 Resid phdelay (usec) 5.81748E-07 +/- 2.4E-07
 Delay rate (us/s) -7.93395710942E-01 Apriori rate (us/s) -7.93395030327E-01 Resid rate (us/s) -6.80615E-07 +/- 2.3E-09
 Total phase (deg) 57.6 Apriori accel (us/s/s) -2.89560193357E-06 Resid phase (deg) 18.0 +/- 7.4

ph/seg (deg) 69.6 17.4 Search (1024X32) 0.416 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.3 30.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.3 10.5 Inc. seg. avg. 0.523 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.4 18.3 Inc. frq. avg. 0.500 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 128.2 el 46.4 pa -13.2 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 5712.368 2530.817 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/gl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/gl.W.129.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

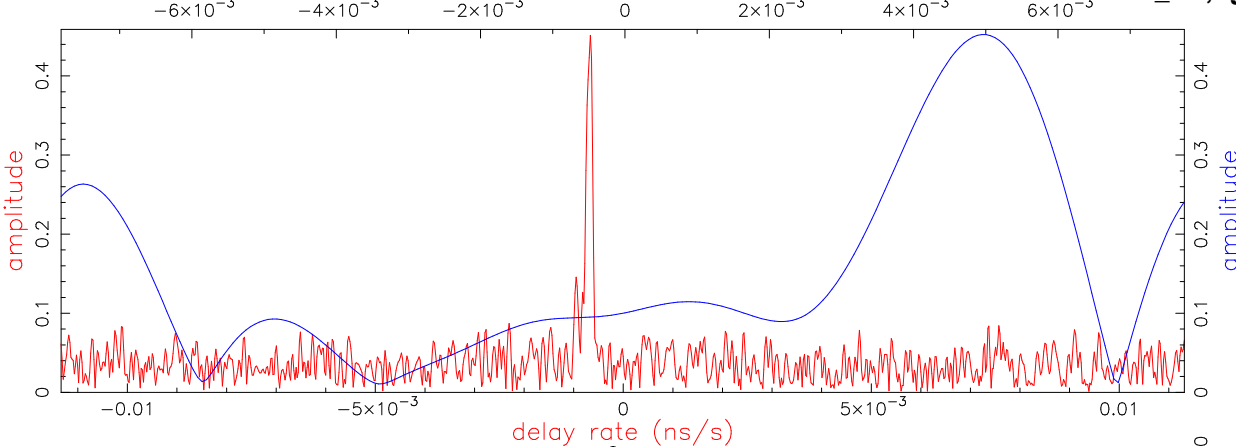
aux01

2013+370.3MP1N1, No0280, gl

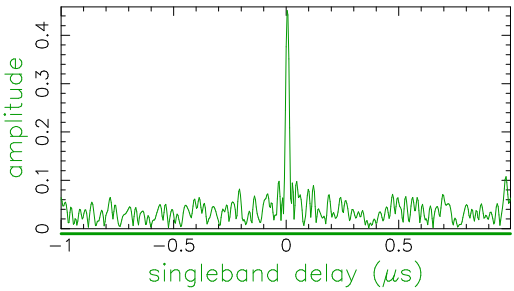
GLT - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

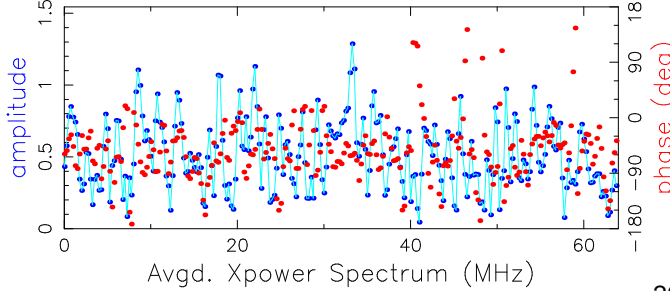
Fringe quality 8



SNR 16.8
 Int time 179.985
 Amp 0.459
 Phase -53.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.005458
 MBD 0.005055
 Fringe rate (Hz)
 -0.056373
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

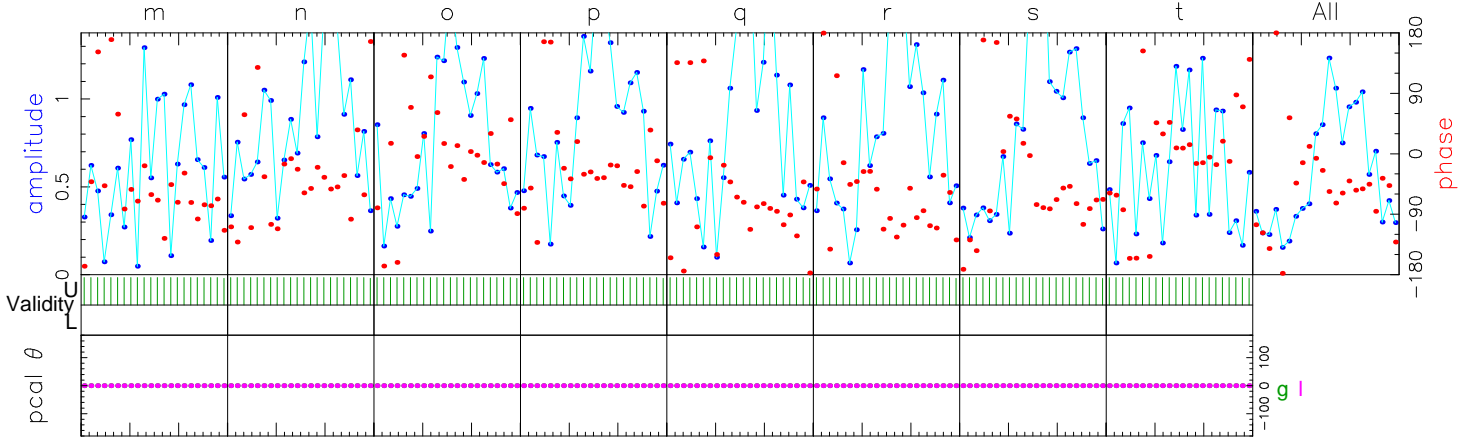


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105019
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.7	-51.5	0.7	-35.4	-88.8	-89.2	-62.3	3.6	Phase	-53.5
	0.4	0.6	0.5	0.7	0.6	0.6	0.6	0.3	Ampl.	0.5
	260.0	258.4	258.2	257.9	258.0	258.4	258.4	260.7	Sbd box	258.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.54430300170E+03	Apriori delay (usec)	5.54429794648E+03	Resid mbdelay (usec)	5.05522E-03	+/-	6.5E-05
Sband delay (usec)	5.54430340473E+03	Apriori clock (usec)	8.7485123E+00	Resid sbdelay (usec)	5.45825E-03	+/-	5.1E-04
Phase delay (usec)	5.54429794475E+03	Apriori clockrate (us/s)	1.0183620E-06	Resid phdelay (usec)	-1.72629E-06	+/-	2.2E-07
Delay rate (us/s)	-7.93395684764E-01	Apriori rate (us/s)	-7.93395030327E-01	Resid rate (us/s)	-6.54437E-07	+/-	2.1E-09
Total phase (deg)	-14.0	Apriori accel (us/s/s)	-2.89560193357E-06	Resid phase (deg)	-53.5	+/-	6.8

ph/seg (deg)	58.1	Theor.	16.0	Amplitude	0.459 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.3	Search (1024X32)	0.440	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.5	Inc. seg. avg.	0.554	Inc. frq. avg.	0.522	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.6	Inc. frq. avg.	0.522	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
g: az 128.2 el 46.4 pa -13.2		l: az 62.2 el 27.5 pa -64.5		u, v (fr/asec)	5712.368 2530.817	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/gl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/gl.W.146.3MP1N1

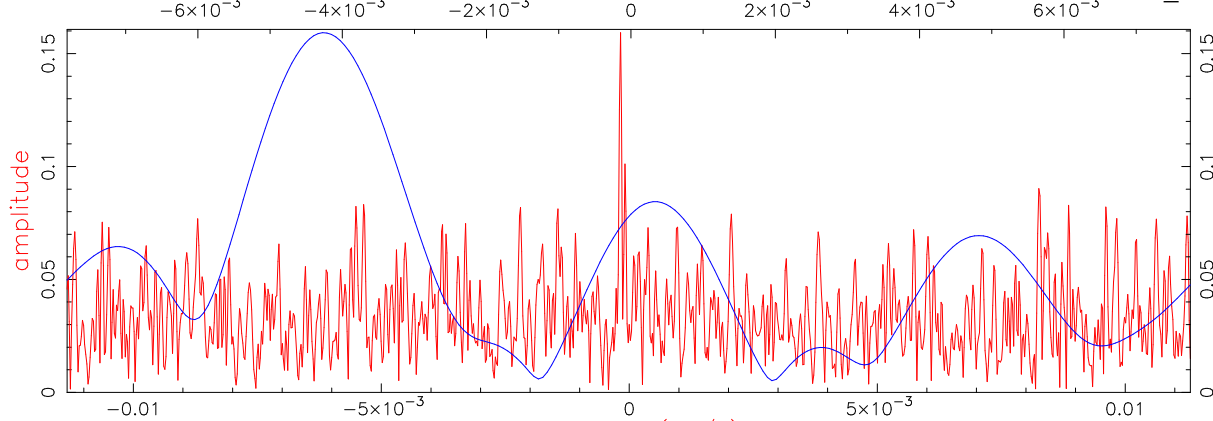
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, gl

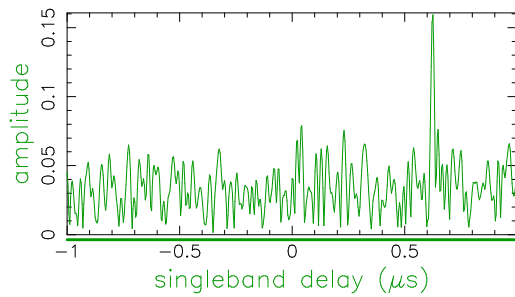
GLT - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

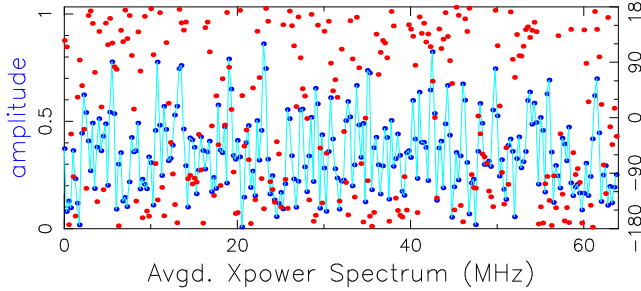


Fringe quality 0

SNR 5.9
 Int time 179.985
 Amp 0.161
 Phase -152.2
 PFD 3.8e-01
 Delays (us)
 SBD 0.623800
 MBD -0.004236
 Fringe rate (Hz)
 -0.015535
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

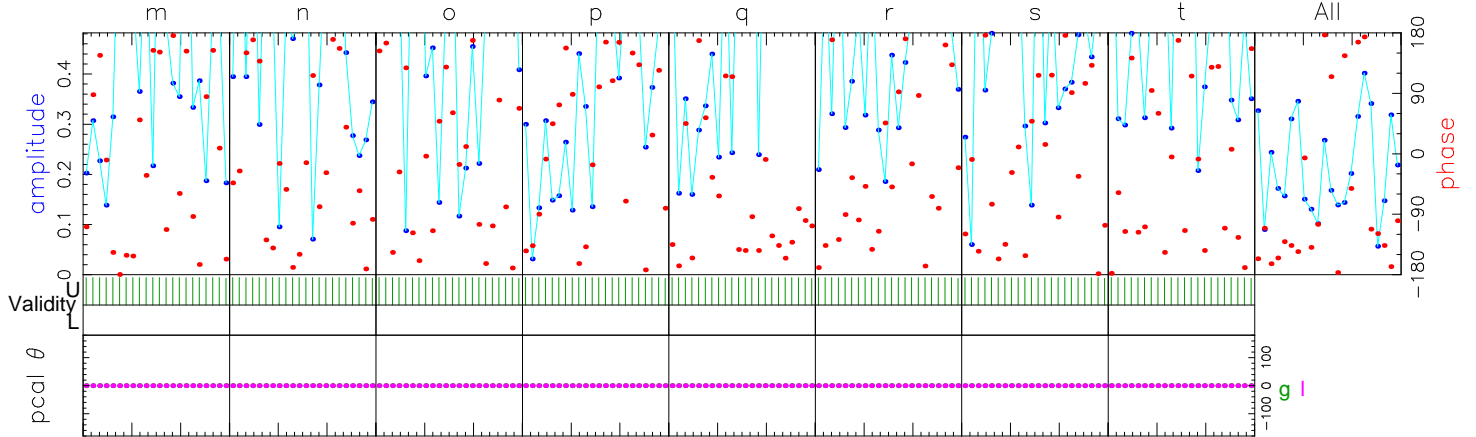


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105021
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	5.54491871027E+03	Apriori delay (usec)	5.54429794648E+03	Resid mbdelay (usec)	-4.23621E-03	+/-	1.8E-04
Sband delay (usec)	5.54492174648E+03	Apriori clock (usec)	8.7485123E+00	Resid sbdelay (usec)	6.23800E-01	+/-	1.5E-03
Phase delay (usec)	5.54429794157E+03	Apriori clockrate (us/s)	1.0183620E-06	Resid phdelay (usec)	-4.90919E-06	+/-	6.3E-07
Delay rate (us/s)	-7.93395210678E-01	Apriori rate (us/s)	-7.93395030327E-01	Resid rate (us/s)	-1.80351E-07	+/-	6.0E-09
Total phase (deg)	-112.7	Apriori accel (us/s/s)	-2.89560193357E-06	Resid phase (deg)	-152.2	+/-	19.4

ph/seg (deg) 52.0 45.6 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.8 79.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.7 27.5 Inc. seg. avg. 0.164 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.3 48.0 Inc. frq. avg. 0.166 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 128.2 el 46.4 pa -13.2 l: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 5712.368 2530.817 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/gl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/gl.W.151.3MP1N1

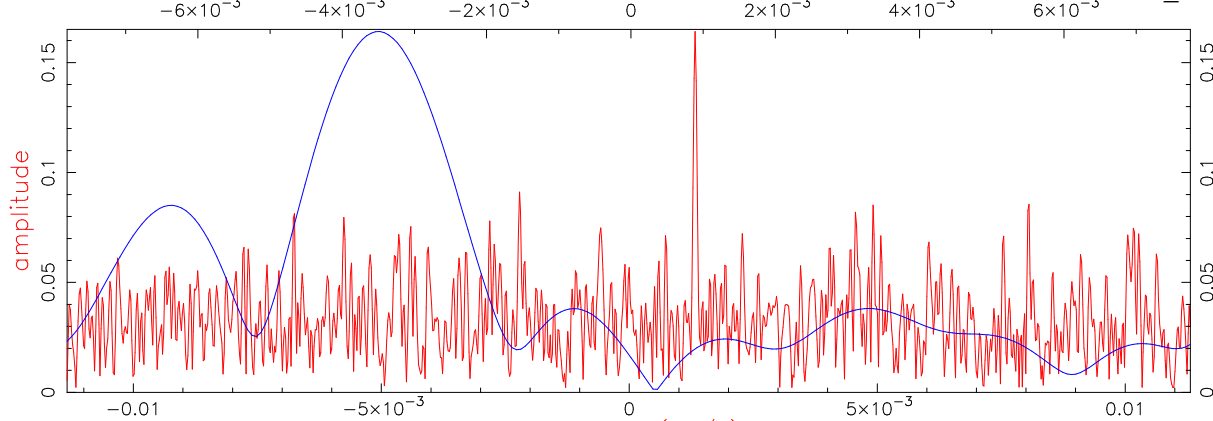
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, gl

GLT - VLBA_LA, fgroup W, pol RL

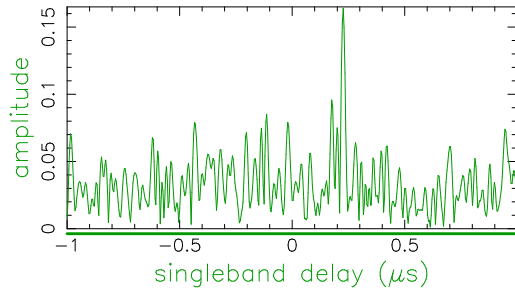
multiband delay (μ s)



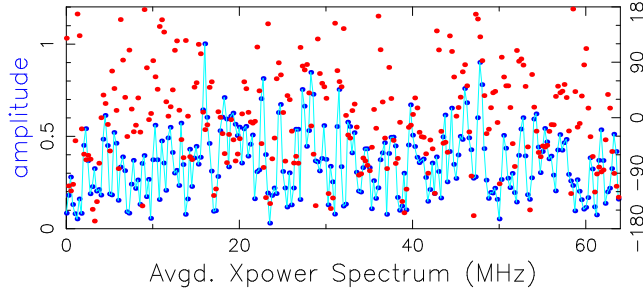
Fringe quality 0

SNR 6.0
Int time 179.985
Amp 0.165
Phase 131.6
PFD 2.0e-01
Delays (us)
SBD 0.226313
MBD -0.003516
Fringe rate (Hz)
0.114280
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

delay rate (ns/s)

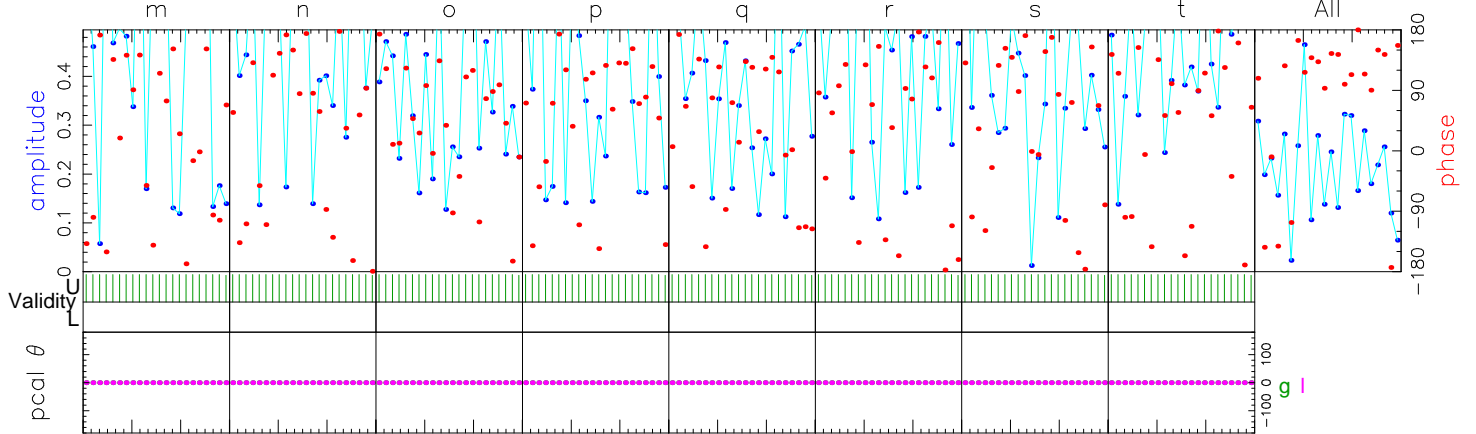


singleband delay (μ s)



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080000.00
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105024
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.54452880590E+03	Apriori delay (usec)	5.54429794648E+03	Resid mbdelay (usec)	-3.51558E-03	+/-	1.8E-04
Sband delay (usec)	5.54452425923E+03	Apriori clock (usec)	8.7485123E+00	Resid sbdelay (usec)	2.26313E-01	+/-	1.4E-03
Phase delay (usec)	5.54429795072E+03	Apriori clockrate (us/s)	1.0183620E-06	Resid phdelay (usec)	4.24402E-06	+/-	6.1E-07
Delay rate (us/s)	-7.93393703652E-01	Apriori rate (us/s)	-7.93395030327E-01	Resid rate (us/s)	1.32667E-06	+/-	5.9E-09
Total phase (deg)	171.1	Apriori accel (us/s/s)	-2.89560193357E-06	Resid phase (deg)	131.6	+/-	19.0

ph/seg (deg) 53.5 44.6 Amplitude 0.165 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.8 77.9 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 26.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.3 47.0 Inc. seg. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 128.2 el 46.4 pa -13.2 l: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 5712.368 2530.817 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/gl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/gl.W.164.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

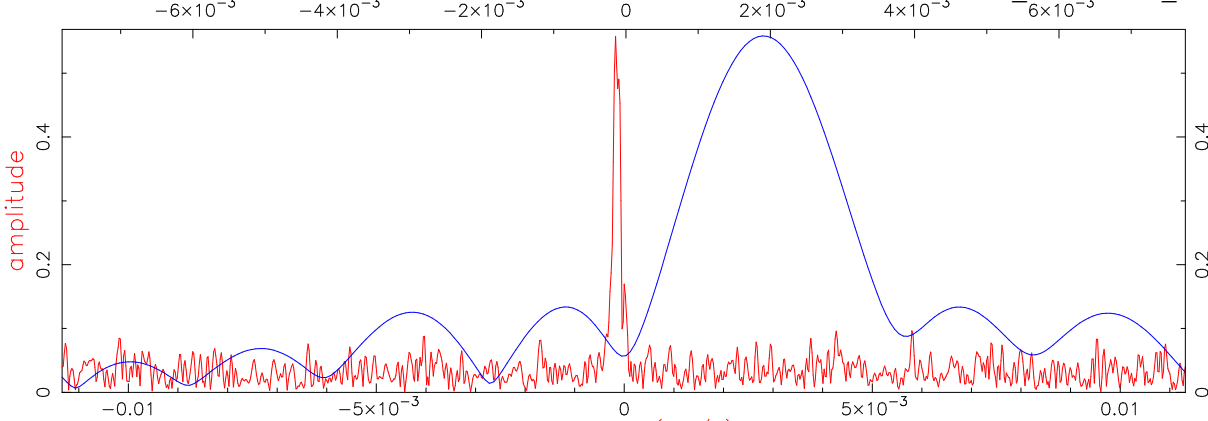
aux01

2013+370.3MP1N1, No0280, kl

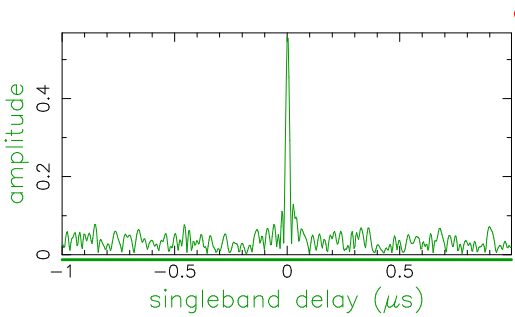
VLBA_KP - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

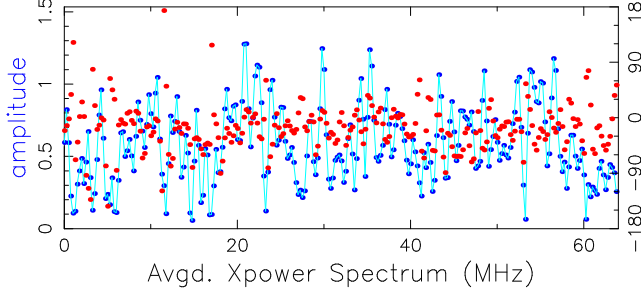
Fringe quality 9



SNR 20.9
 Int time 179.990
 Amp 0.569
 Phase -19.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.001799
 MBD 0.001953
 Fringe rate (Hz)
 -0.015034
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

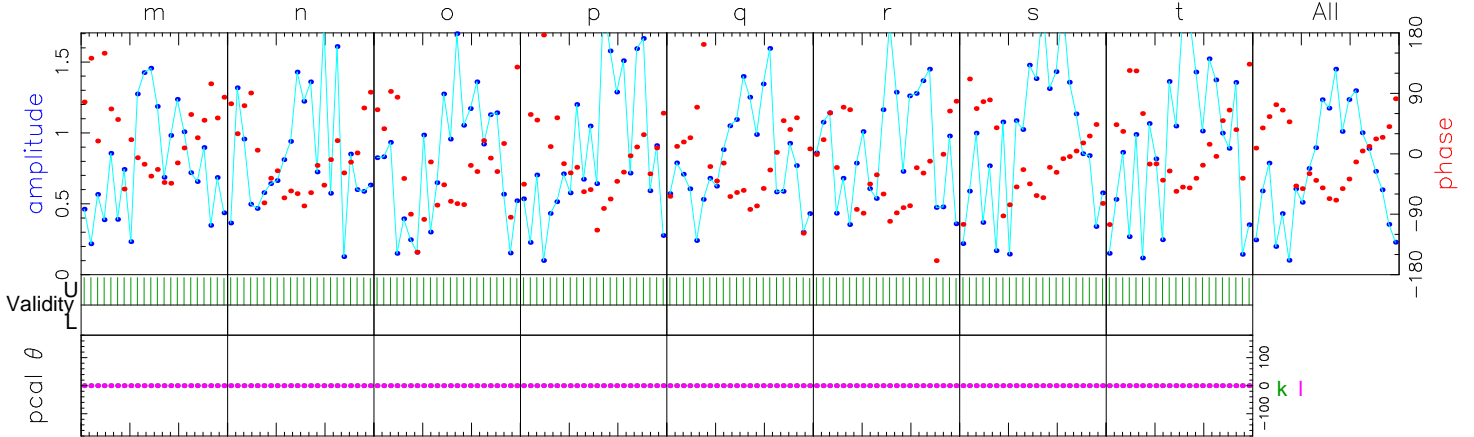


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105025
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	6.7	-18.9	-30.4	-23.9	-28.5	-35.6	-20.5	-5.8		-19.4
	0.5	0.6	0.5	0.7	0.6	0.5	0.7	0.6		0.6
	257.9	257.4	257.5	257.3	257.7	257.6	257.4	257.6		257.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC freqs
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
k	1000	1000	1000	1000	1000	1000	1000	1000		Manl PC
l	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-1.93015632815E+03	Apriori delay (usec)	-1.93015828150E+03	Resid mbdelay (usec)	1.95335E-03	+/-	5.2E-05
Sband delay (usec)	-1.93015648275E+03	Apriori clock (usec)	8.4598198E+07	Resid sbdelay (usec)	1.79875E-03	+/-	4.1E-04
Phase delay (usec)	-1.93015828212E+03	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-6.25892E-07	+/-	1.8E-07
Delay rate (us/s)	5.73933368445E-02	Apriori rate (us/s)	5.73935113694E-02	Resid rate (us/s)	-1.74525E-07	+/-	1.7E-09
Total phase (deg)	-152.0	Apriori accel (us/s/s)	6.53115503860E-06	Resid phase (deg)	-19.4	+/-	5.5

ph/seg (deg)	51.4	12.9	Search (1024X32)	0.556	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.1	22.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	15.0	7.8	Inc. seg. avg.	0.725	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	10.8	13.6	Inc. frq. avg.	0.566	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

k: az 58.7 el 21.7 pa -65.8 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) -408.704 2.692 simultaneous interpolator

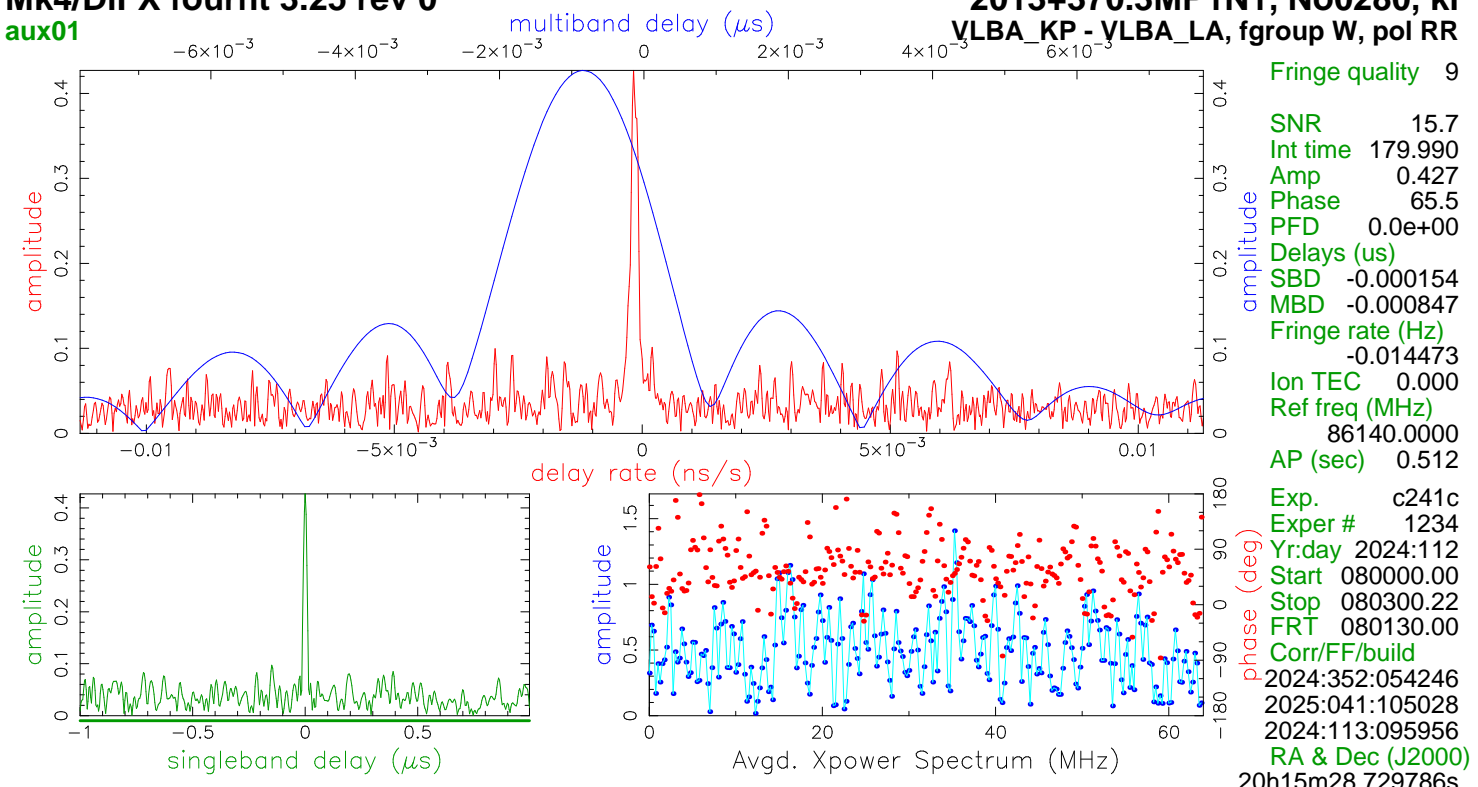
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/kl..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/kl.W.169.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

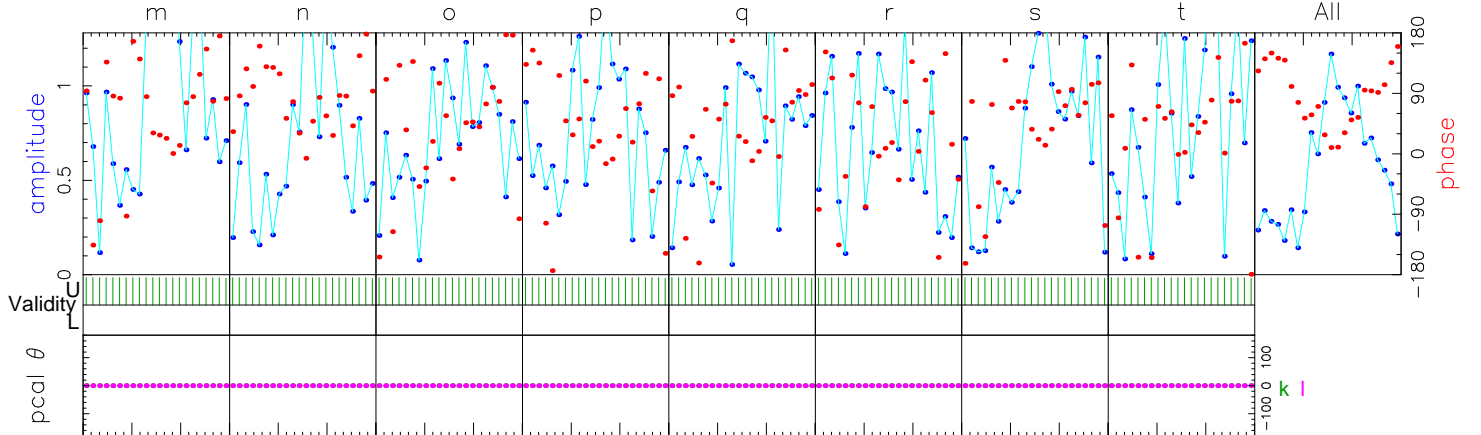
aux01

2013+370.3MP1N1, No0280, kl

VLBA_KP - VLBA_LA, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.93015912852E+03								Resid mbdelay (usec)	-8.47022E-04 +/- 6.9E-05
Sband delay (usec)	-1.93015843600E+03								Resid sbdelay (usec)	-1.54500E-04 +/- 5.5E-04
Phase delay (usec)	-1.93015827939E+03								Resid phdelay (usec)	-2.1172E-06 +/- 2.4E-07
Delay rate (us/s)	5.73933433576E-02								Resid rate (us/s)	-1.68012E-07 +/- 2.3E-09
Total phase (deg)			-67.1						Resid phase (deg)	65.5 +/- 7.3
	RMS	Theor.	Amplitude	0.427 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.2	17.2	Search (1024X32)	0.414					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	79.5	29.9	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	8.9	10.3	Inc. seg. avg.	0.552					SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
amp/frq (%)	18.1	18.1	Inc. frq. avg.	0.424					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
k: az 58.7 el 21.7 pa -65.8			l: az 62.2 el 27.5 pa -64.5						u,v (fr/asec) -408.704 2.692	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0280/kl...3MP1N1						Output file: /Exps/c241c/v2/3mm/1234/No0280/kl.W.181.3MP1N1	

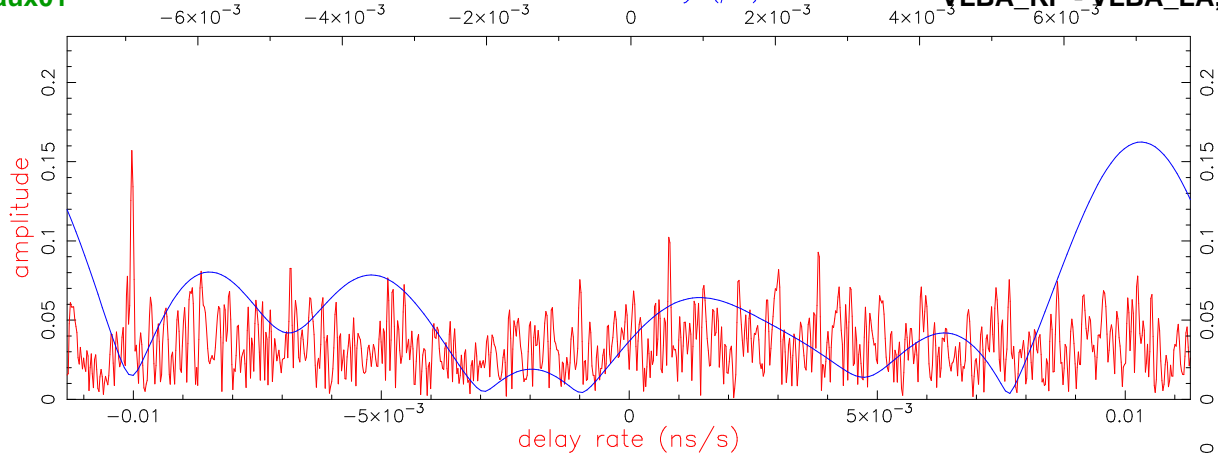
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, kl

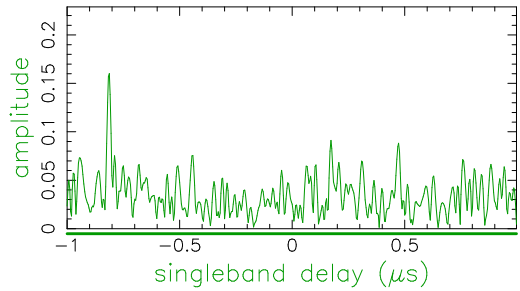
VLBA_KP - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

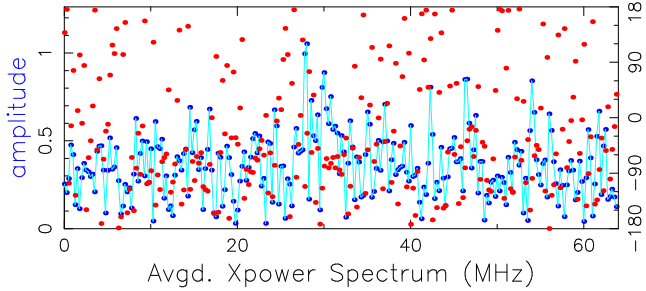


Fringe quality 0

SNR 5.9
Int time 179.990
Amp 0.229
Phase -0.9
PFD 3.0e-01
Delays (us)
SBD -0.813960
MBD -0.008301
Fringe rate (Hz)
-0.864596
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

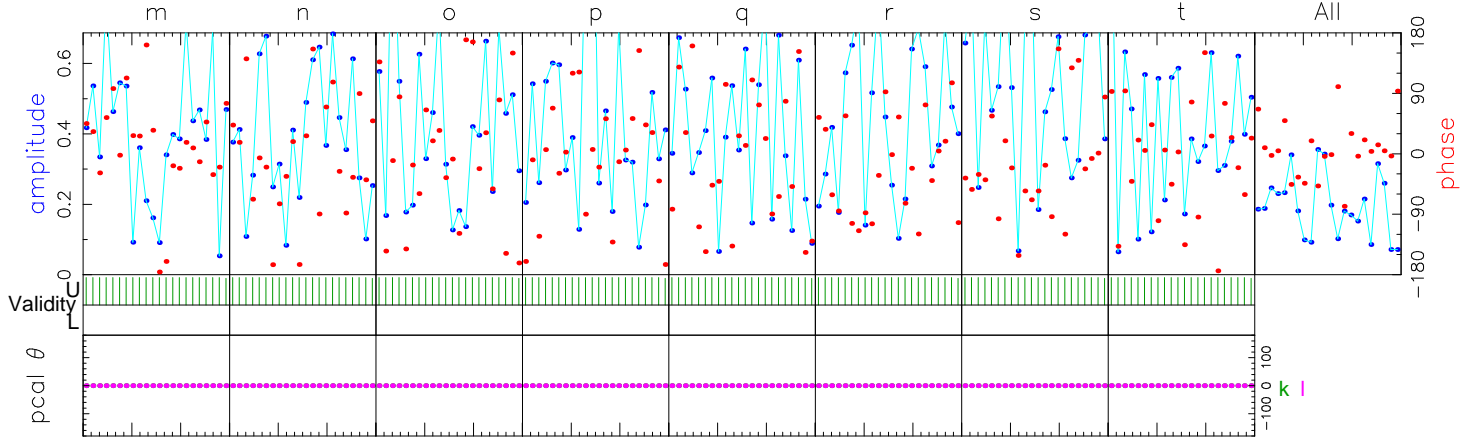


delay rate (ns/s)



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080000.00
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105030
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.93097908228E+03	Apriori delay (usec)	-1.93015828150E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.8E-04
Sband delay (usec)	-1.93097224200E+03	Apriori clock (usec)	8.4598198E+00	Resid sbdelay (usec)	-8.13960E-01	+/-	1.4E-03
Phase delay (usec)	-1.93015828153E+03	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-2.88561E-08	+/-	6.2E-07
Delay rate (us/s)	5.73834742624E-02	Apriori rate (us/s)	5.73935113694E-02	Resid rate (us/s)	-1.00371E-05	+/-	6.0E-09
Total phase (deg)	-133.5	Apriori accel (us/s/s)	6.53115503860E-06	Resid phase (deg)	-0.9	+/-	19.3

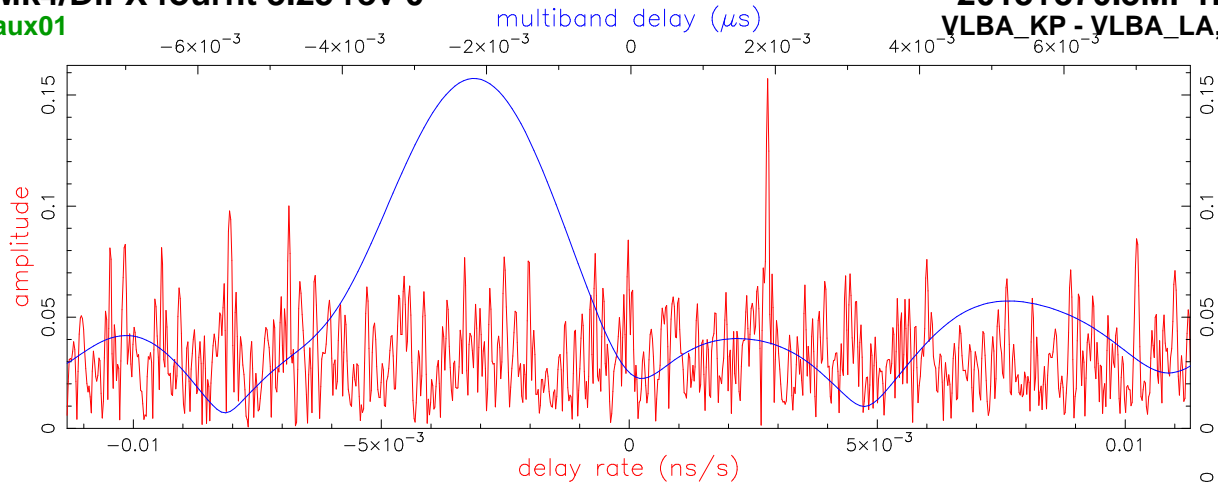
ph/seg (deg)	43.3	Theor.	45.2	Amplitude	0.229 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	57.8	Search (1024X32)	0.159	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	29.0	Inc. seg. avg.	0.212	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	48.2	Inc. frq. avg.	0.220	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
k: az 58.7 el 21.7 pa -65.8		l: az 62.2 el 27.5 pa -64.5		Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/kl..3MP1N1		u,v (fr/asec)	-408.704 2.692	simultaneous interpolator				
				Output file: /Exps/c241c/v2/3mm/1234/No0280/kl.W.192.3MP1N1						

Mk4/DiFX fourfit 3.25 rev 0

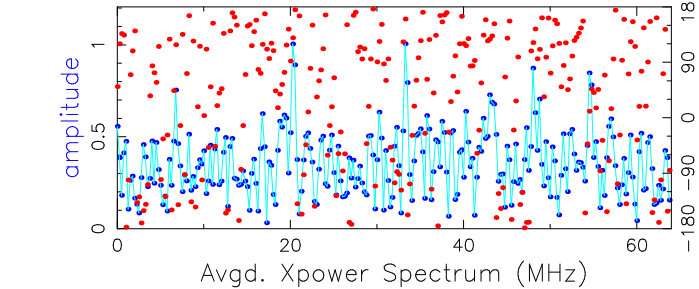
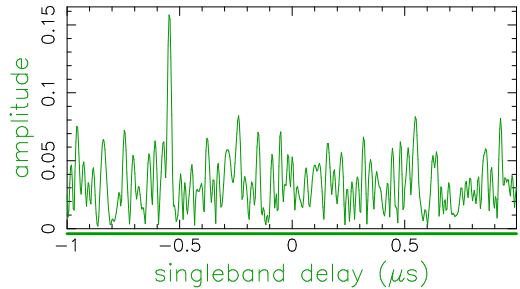
aux01

2013+370.3MP1N1, No0280, kl

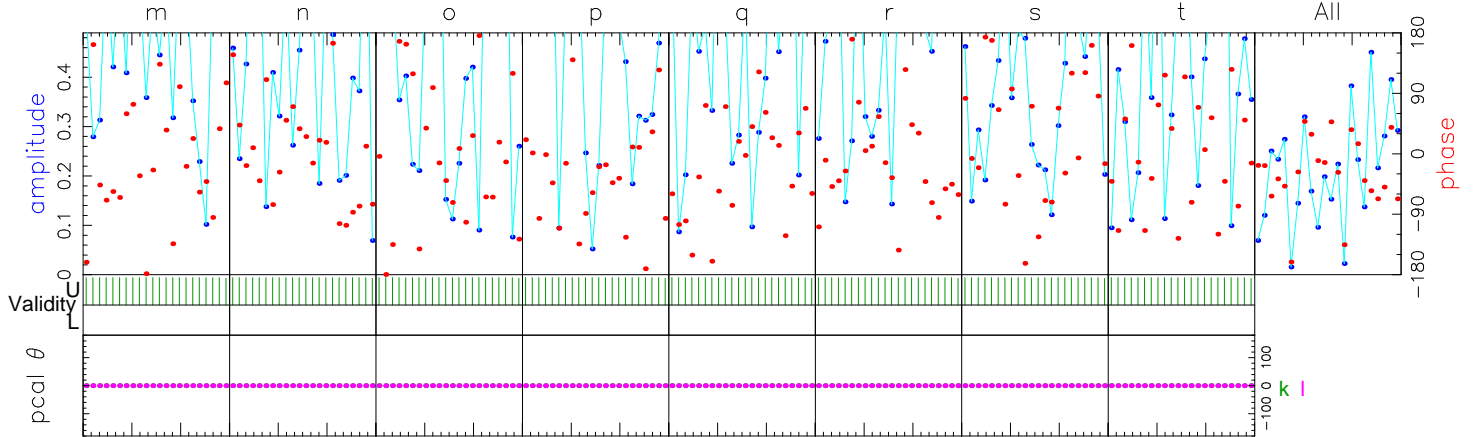
VLBA_KP - VLBA_LA, fgroup W, pol RL



Fringe quality 0
 SNR 5.8
 Int time 179.990
 Amp 0.163
 Phase -17.6
 PFD 4.8e-01
 Delays (us)
 SBD -0.545398
 MBD -0.002124
 Fringe rate (Hz) 0.240661
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105032
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



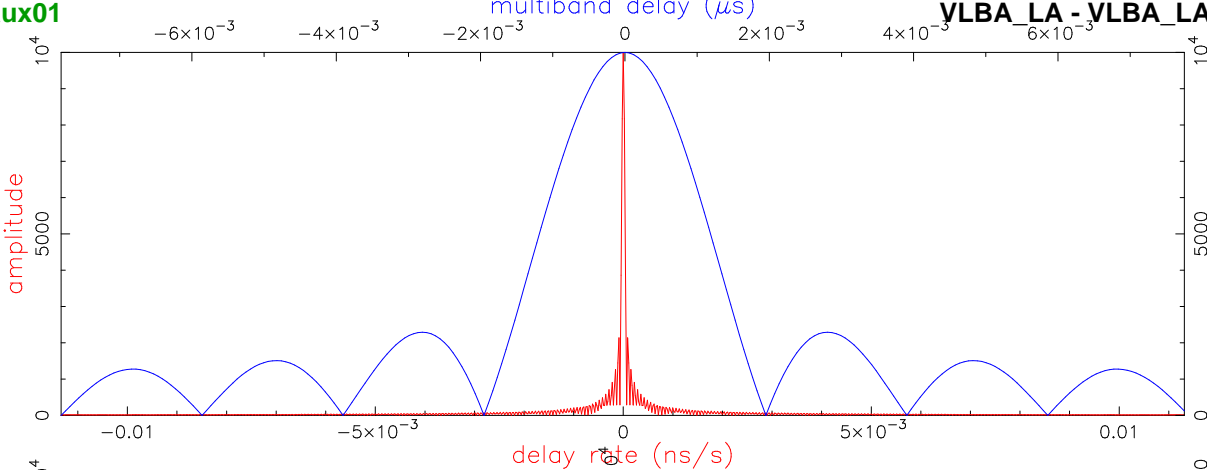
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All					
	-2.8	0.0	-31.8	-35.1	-20.9	-32.8	81.0	-15.5	Phase	-17.6					
	0.1	0.2	0.1	0.3	0.2	0.3	0.1	0.1	Ampl.	0.2					
	142.0	346.8	177.3	117.0	288.4	484.9	412.7	288.9	Sbd box	117.4					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used						
k	0	0	0	0	0	0	0	0	PC freqs						
l	0	0	0	0	0	0	0	0	PC freqs						
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC						
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
l	1000	1000	1000	1000	1000	1000	1000	1000							
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids						
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks						
									Tracks						
Group delay (usec) (SBD)	-1.93070728002E+03								Apriori delay (usec)	-1.93015828150E+03	Resid mbdelay (usec)	-2.12353E-03	+/-	1.9E-04	
Sband delay (usec)	-1.93070367950E+03								Apriori clock (usec)	8.4598198E+00	Resid sbdelay (usec)	-5.45398E-01	+/-	1.5E-03	
Phase delay (usec)	-1.93015828206E+03								Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-5.66344E-07	+/-	6.3E-07	
Delay rate (us/s)	5.73963052036E-02								Apriori rate (us/s)	5.73935113694E-02	Resid rate (us/s)	2.79383E-06	+/-	6.1E-09	
Total phase (deg)			-150.1						Apriori accel (us/s/s)	6.53115503860E-06	Resid phase (deg)	-17.6	+/-	19.6	
	RMS	Theor.	Amplitude	0.163 +/- 0.028					Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5			
ph/seg (deg)	53.9	46.0	Search (1024X32)	0.156					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	78.5	80.3	Interp.	0.000					Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	42.8	27.7	Inc. seg. avg.	0.165					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	43.8	48.4	Inc. frq. avg.	0.160					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
k: az 58.7 el 21.7 pa -65.8			l: az 62.2 el 27.5 pa -64.5						u, v (fr/asec) -408.704 2.692						simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0280/kl..3MP1N1						Output file: /Exps/c241c/v2/3mm/1234/No0280/kl.W.204.3MP1N1						

Mk4/DiFX fourfit 3.25 rev 0

aux01

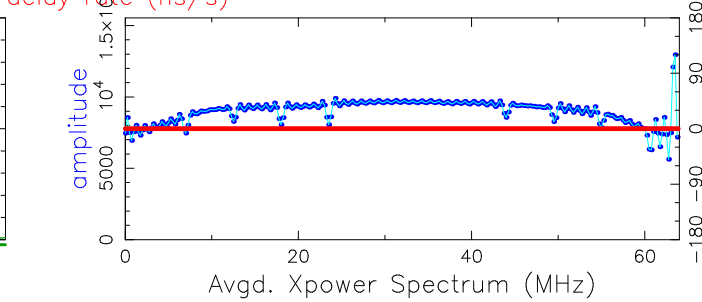
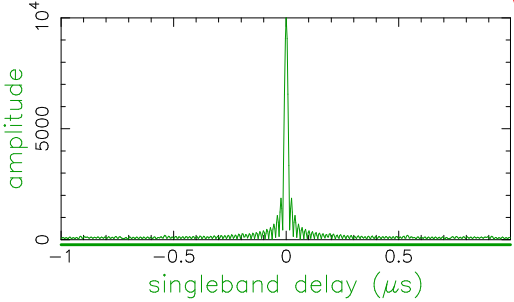
2013+370.3MP1N1, No0280, II

VLBA_LA - VLBA_LA, fgroup W, pol LL



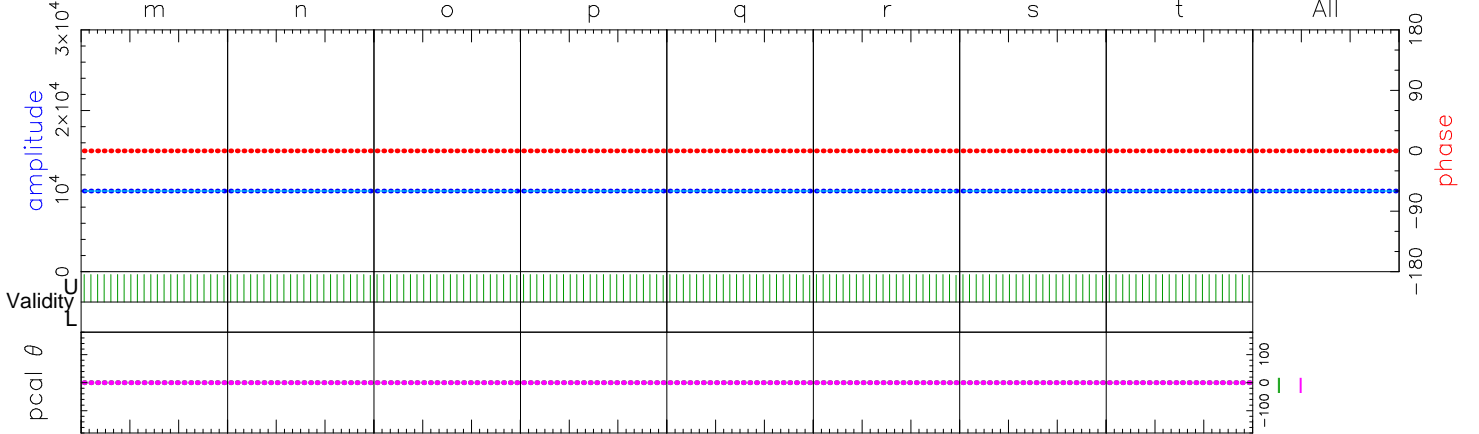
Fringe quality 9

SNR 366878.3
 Int time 179.990
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Yr:day 1234
 Start 2024:112
 Stop 2024:080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105031
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Ampl.	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
Phase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sbd box	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0
APs used	0	0	0	0	0	0	0	0		
PC freqs	0	0	0	0	0	0	0	0		
PC phase	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Mani PC	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
PC amp	1000	1000	1000	1000	1000	1000	1000	1000		
Chan ids	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Tracks	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

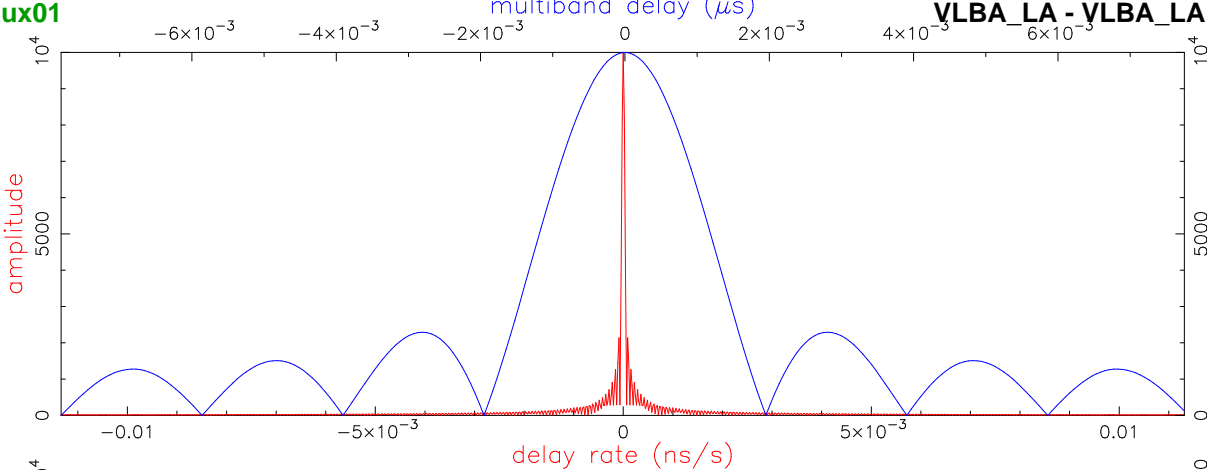
l: az 62.2 el 27.5 pa -64.5 u, vr (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/II..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/II.W.195.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

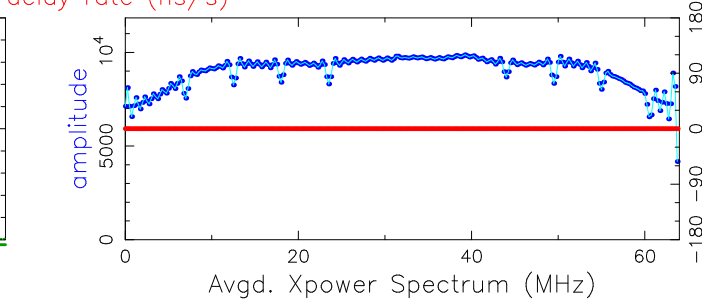
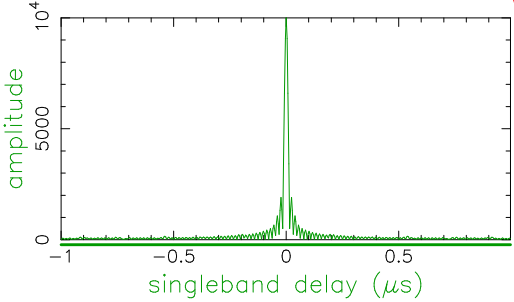
2013+370.3MP1N1, No0280, II

VLBA_LA - VLBA_LA, fgroup W, pol RR



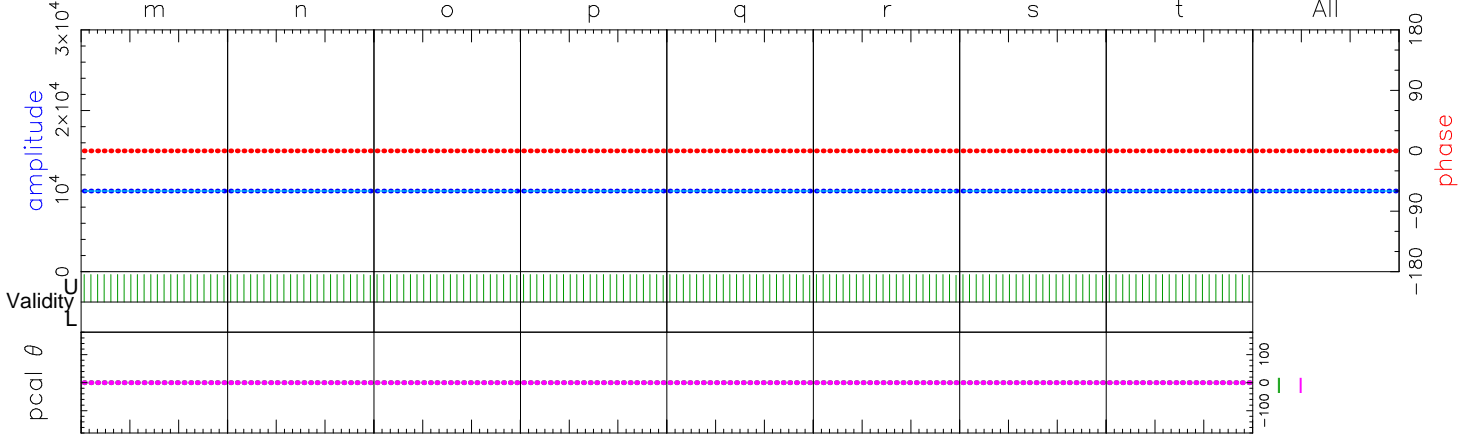
Fringe quality 9

SNR 366878.3
 Int time 179.990
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105033
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Validity	1	1	1	1	1	1	1	1		
pcal θ	0	0	0	0	0	0	0	0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Ampl.	10000.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Phase	0.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
	0	0	0	0	0	0	0	0	APs used	
	0	0	0	0	0	0	0	0	PC freqs	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.3E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 I: az 62.2 el 27.5 pa -64.5 I: az 62.2 el 27.5 pa -64.5 u, v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

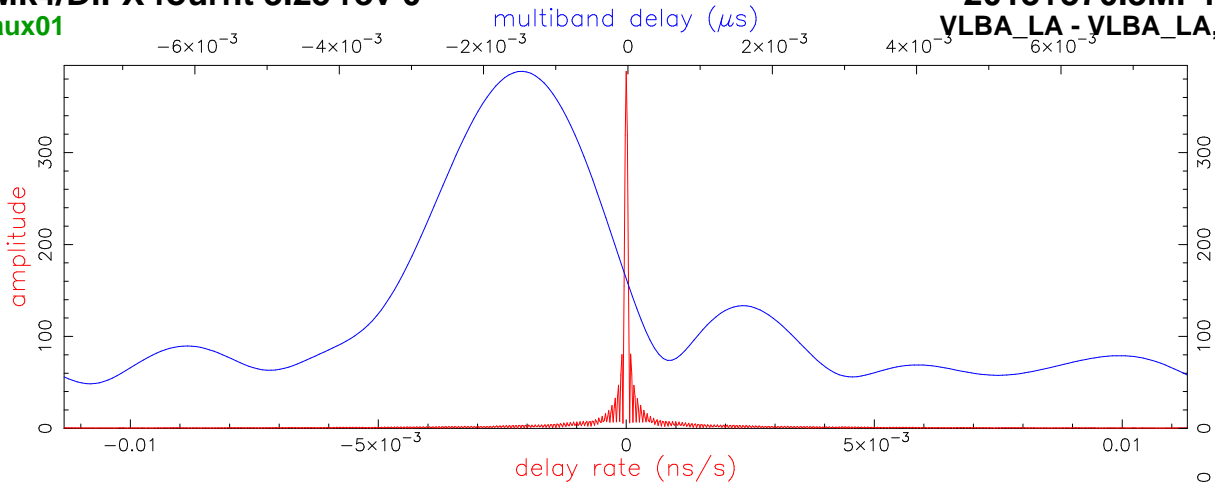
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/II..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/II.W.208.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

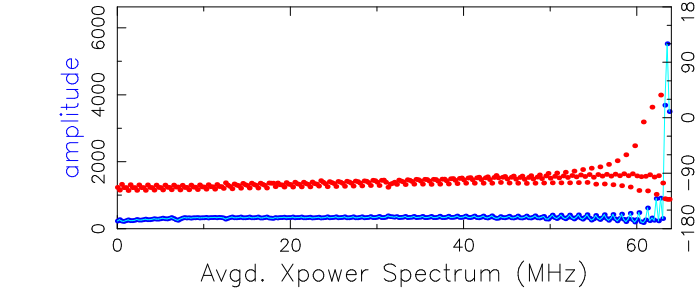
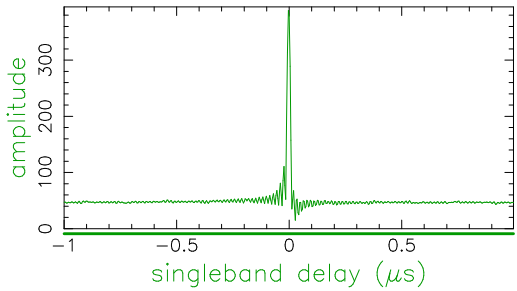
aux01

2013+370.3MP1N1, No0280, II

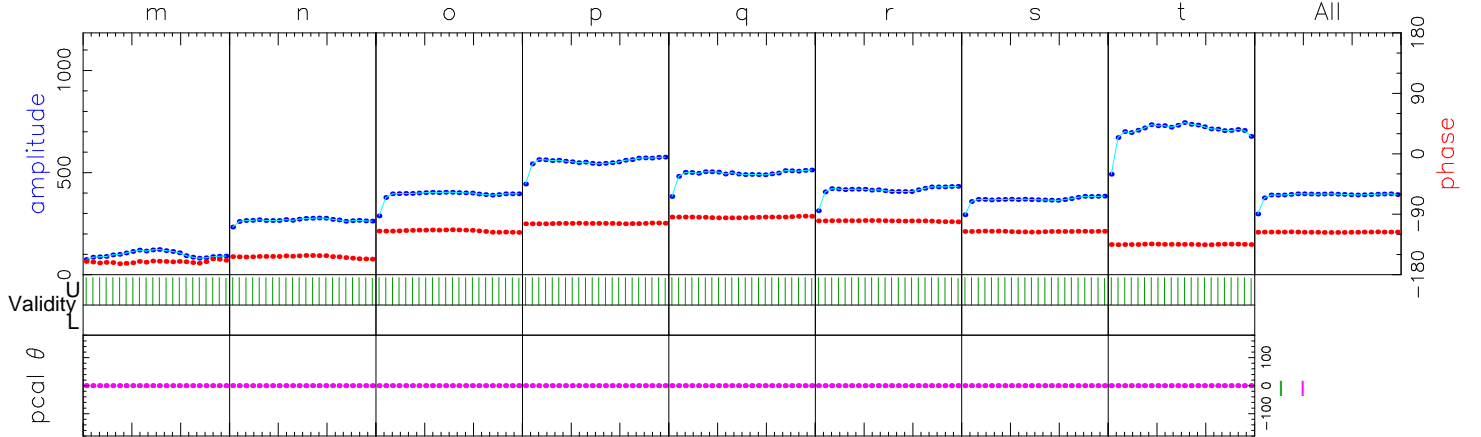
VLBA_LA - VLBA_LA, fgroup W, pol LR



Fringe quality 5
 Error code G
 SNR 14486.0
 Int time 179.990
 Amp 394.844
 Phase -116.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002421
 MBD -0.001488
 Fringe rate (Hz)
 0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105037
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Ampl.	257.4	256.5	256.9	256.9	256.6	256.5	256.4	256.3		411.5
Phase	-160.7	-153.2	-114.6	-103.7	-94.3	-99.9	-115.6	-134.8		-116.6
PC freqs	0	0	0	0	0	0	0	0		
PC phase	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ManI PC	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
PC amp	1000	1000	1000	1000	1000	1000	1000	1000		
Chan ids	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Tracks	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -1.48775000000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.48775E-03 +/- 7.5E-08
 Sband delay (usec) -2.42075000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.42075E-03 +/- 5.9E-07
 Phase delay (usec) -3.75943522007E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.75944E-06 +/- 2.6E-10
 Delay rate (us/s) 5.95188400451E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 5.95188E-11 +/- 2.5E-12
 Total phase (deg) -116.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -116.6 +/- 0.0

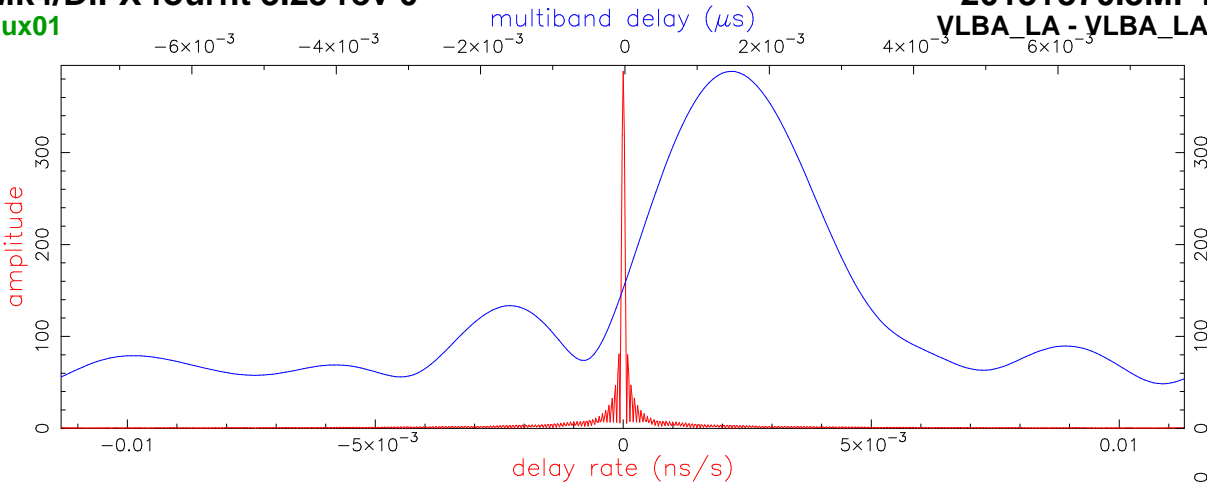
RMS Theor. Amplitude 394.844 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.3 0.0 Search (1024X32) 388.427 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 5.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 27.6 0.0 Inc. seg. avg. 388.413 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 43.5 0.0 Inc. frq. avg. 411.459 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 I: az 62.2 el 27.5 pa -64.5 I: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/II..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/II.W.217.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

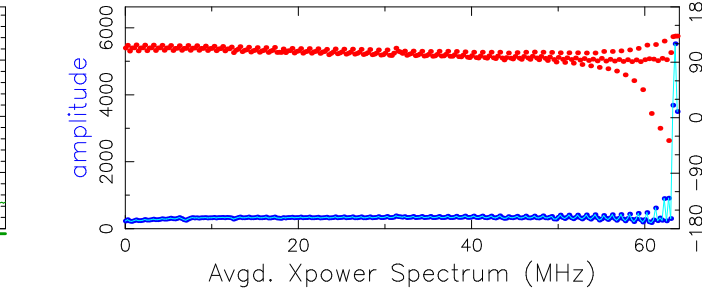
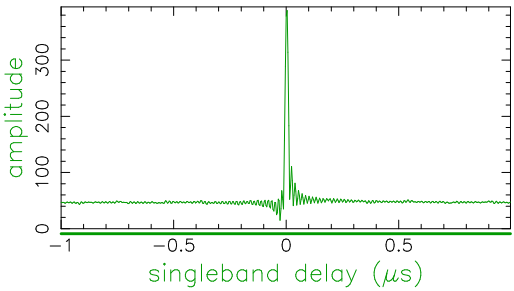
aux01

2013+370.3MP1N1, No0280, II

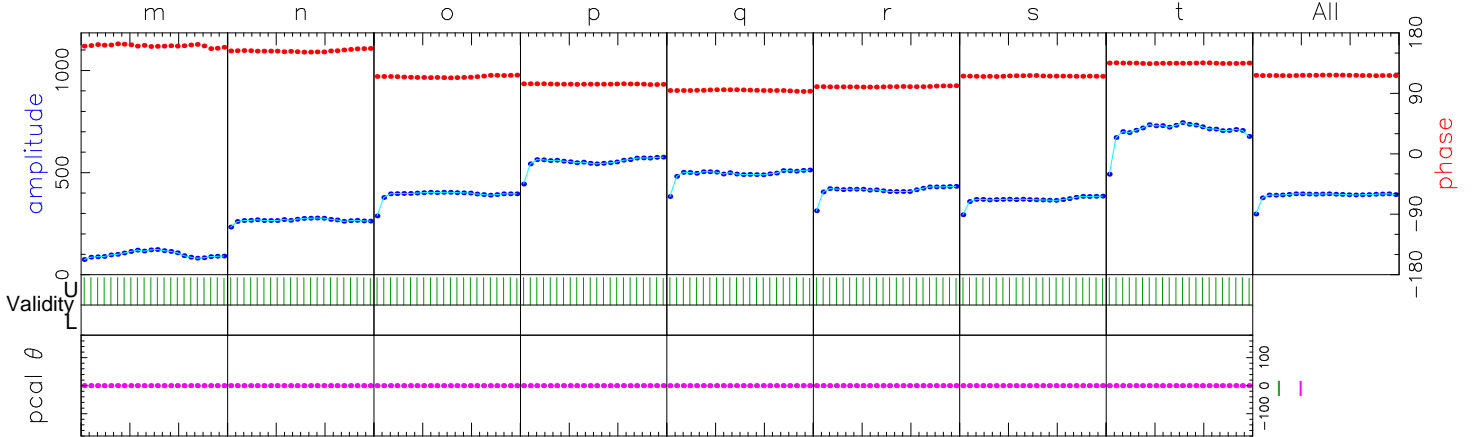
VLBA_LA - VLBA_LA, fgroup W, pol RL



Fringe quality 5
 Error code G
 SNR 14486.0
 Int time 179.990
 Amp 394.844
 Phase 116.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002421
 MBD 0.001488
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105043
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

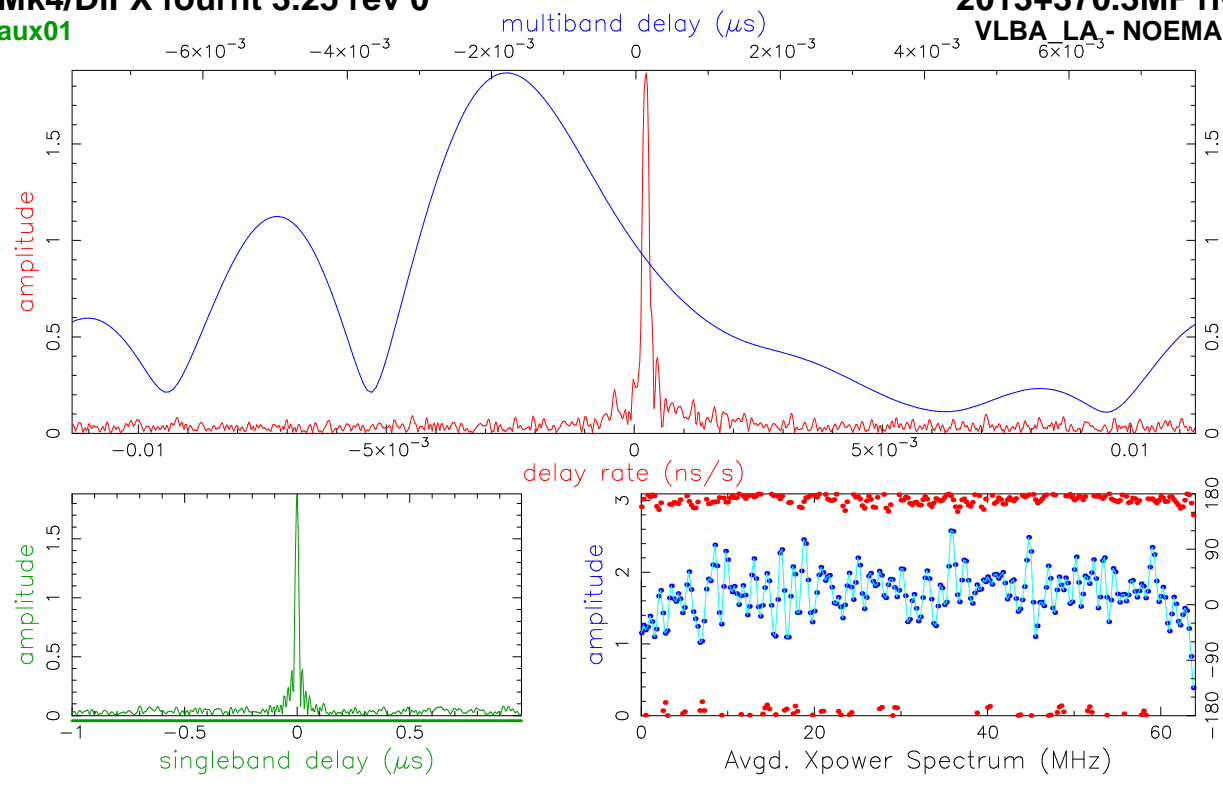


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
	0	0	0	0	0	0	0	0	APs used	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.48775000000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.48775E-03 +/- 7.5E-08
 Sband delay (usec) 2.42075000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 2.42075E-03 +/- 5.9E-07
 Phase delay (usec) 3.75943522005E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.75944E-06 +/- 2.6E-10
 Delay rate (us/s) -5.95188400451E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -5.95188E-11 +/- 2.5E-12
 Total phase (deg) 116.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 116.6 +/- 0.0

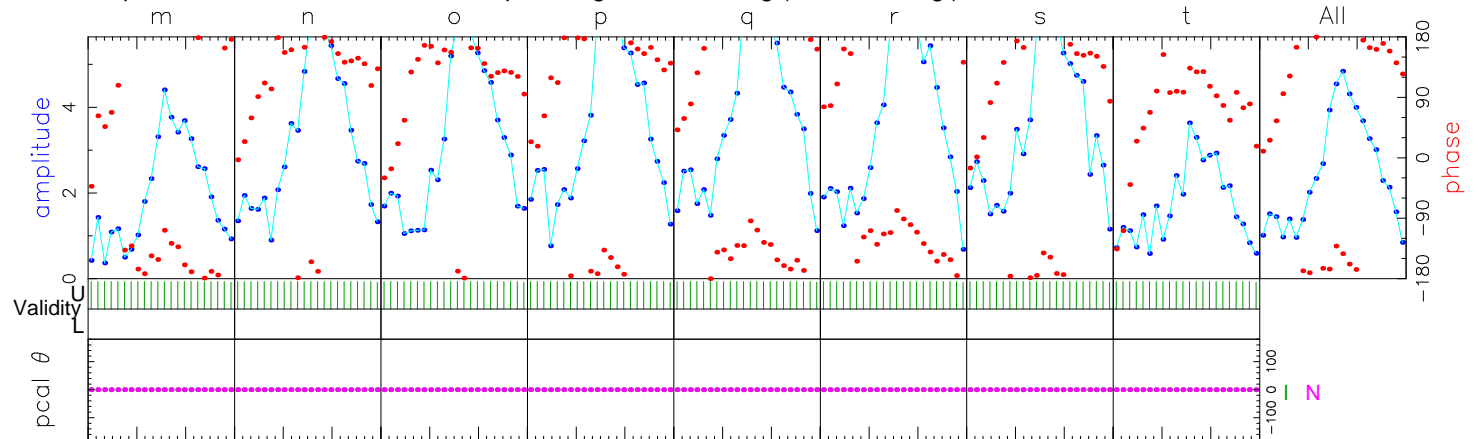
RMS Theor. Amplitude 394.844 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.3 0.0 Search (1024X32) 388.427 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 5.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 27.6 0.0 Inc. seg. avg. 388.413 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 43.5 0.0 Inc. frq. avg. 411.459 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 l: az 62.2 el 27.5 pa -64.5 l: az 62.2 el 27.5 pa -64.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/II..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/II.W.225.3MP1N1



Fringe quality 2
SNR 69.0
Int time 179.981
Amp 1.881
Phase -177.6
PFD 0.0e+00
Delays (us)
SBD -0.001083
MBD -0.001849
Fringe rate (Hz) 0.020285
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080000.00
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105037
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-157.4	159.6	149.0	176.9	-143.1	-124.5	173.0	99.3	Phase	-177.6	
	1.5	2.5	2.4	2.7	2.8	2.7	2.5	1.3	Ampl.	2.3	
	254.7	256.6	256.8	257.1	256.9	256.7	256.0	254.0	Sbd box	256.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
I	0	0	0	0	0	0	0	0	PC freqs		
N	0	0	0	0	0	0	0	0	PC freqs		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
N	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-9.37298796612E+03		Apriori delay (usec)		-9.37298611754E+03		Resid mbdelay (usec)		-1.84858E-03	+/- 1.6E-05	
Sband delay (usec)	-9.37298720104E+03		Apriori clock (usec)		5.0483322E+00		Resid sbdelay (usec)		-1.08350E-03	+/- 1.2E-04	
Phase delay (usec)	-9.37298612327E+03		Apriori clockrate (us/s)		-2.4830008E-07		Resid phdelay (usec)		-5.72822E-06	+/- 5.4E-08	
Delay rate (us/s)	1.45595838219E+00		Apriori rate (us/s)		1.45595814670E+00		Resid rate (us/s)		2.35491E-07	+/- 5.1E-10	
Total phase (deg)			Apriori accel (us/s/s)		4.18016185314E-05		Resid phase (deg)		-177.6	+/- 1.7	
	RMS	Theor.	Amplitude	1.881 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	65.0	3.9	Search (1024X32)	1.844	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	73.8	6.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	46.7	2.3	Inc. seg. avg.	2.459	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	36.1	4.1	Inc. frq. avg.	2.294	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
I: az 62.2 el 27.5 pa -64.5		N: az 263.8 el 65.1 pa 62.6		u,v (fr/asec) -10443.536 1731.157				simultaneous interpolator			
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/IN..3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/IN.W.218.3MP1N1							

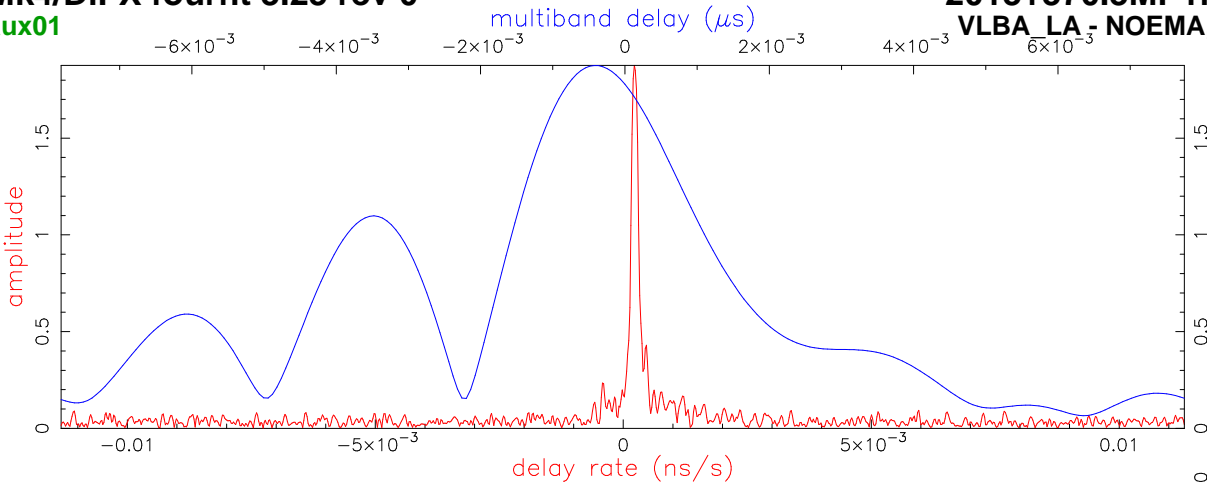
Mk4/DiFX fourfit 3.25 rev 0

aux01

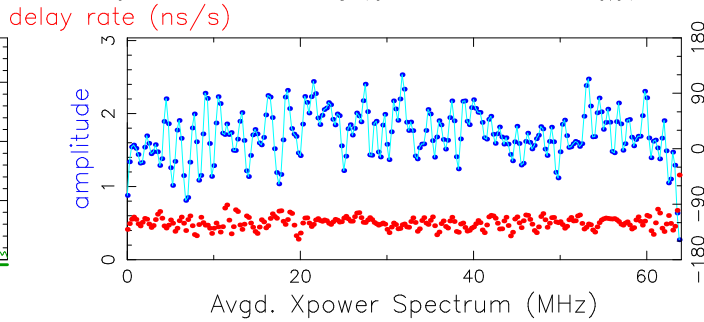
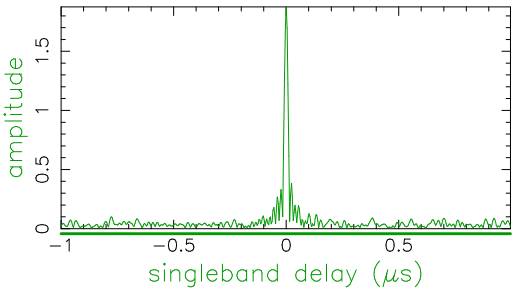
2013+370.3MP1N1, No0280, IN

VLBA_LA - NOEMA, fgroup W, pol RR

Fringe quality 2

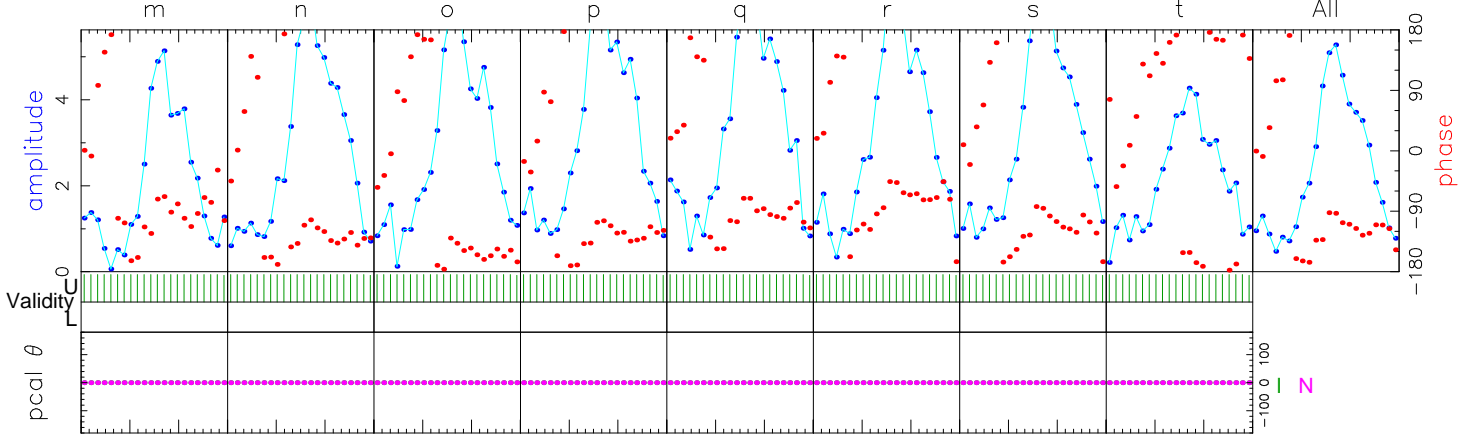


SNR 68.8
 Int time 179.981
 Amp 1.876
 Phase -116.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000071
 MBD -0.000411
 Fringe rate (Hz)
 0.018228
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105043
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-91.2	-129.9	-155.0	-124.3	-91.8	-69.5	-110.5	175.5	Phase	-116.4
	1.6	2.3	2.3	2.5	2.5	2.5	2.5	1.6	Ampl.	2.2
	255.0	257.0	257.4	257.2	257.2	257.2	256.7	254.9	Sbd box	257.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-9.37298652842E+03	Apriori delay (usec)	-9.37298611754E+03	Resid mbdelay (usec)	-4.10879E-04	+/-	1.6E-05
Sband delay (usec)	-9.37298618879E+03	Apriori clock (usec)	5.0483322E+00	Resid sbdelay (usec)	-7.12500E-05	+/-	1.3E-04
Phase delay (usec)	-9.37298612129E+03	Apriori clockrate (us/s)	-2.4830008E-07	Resid phdelay (usec)	-3.75434E-06	+/-	5.4E-08
Delay rate (us/s)	1.45595835831E+00	Apriori rate (us/s)	1.45595814670E+00	Resid rate (us/s)	2.11608E-07	+/-	5.2E-10
Total phase (deg)	-175.8	Apriori accel (us/s/s)	4.18016185314E-05	Resid phase (deg)	-116.4	+/-	1.7

ph/seg (deg)	67.8	Theor.	3.9	Amplitude	1.876 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.8		6.8	Search (1024X32)	1.861	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.5		2.4	Inc. seg. avg.	2.348	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.3		4.1	Inc. frq. avg.	2.220	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 62.2 el 27.5 pa -64.5 N: az 263.8 el 65.1 pa 62.6 u,v (fr/asec) -10443.536 1731.157 simultaneous interpolator

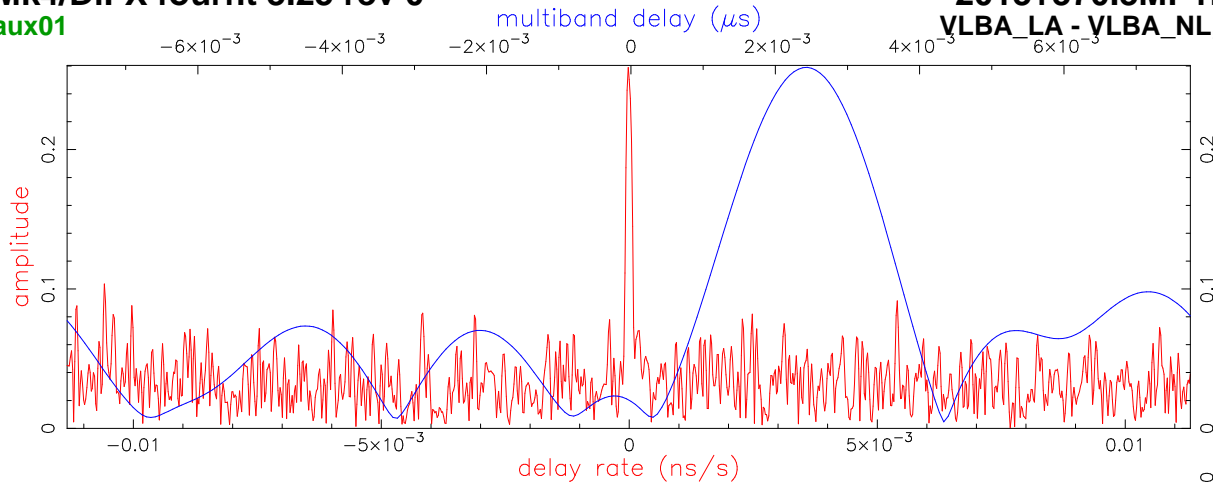
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280//IN..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280//IN.W.229.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

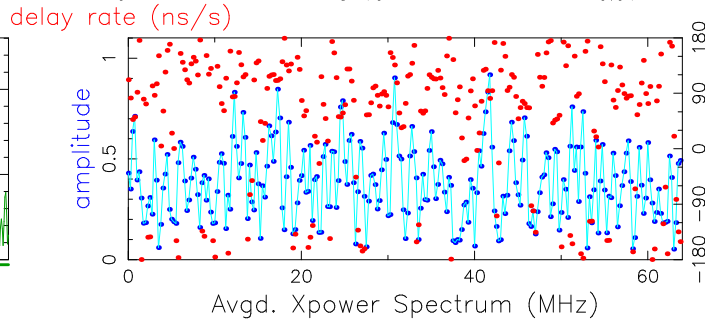
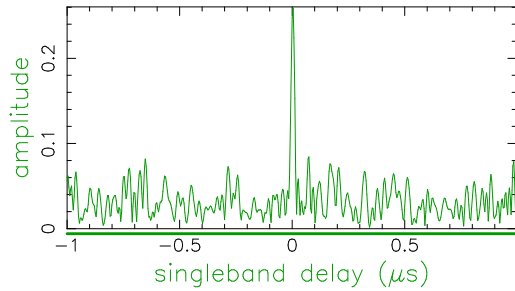
2013+370.3MP1N1, No0280, In

VLBA_LA - VLBA_NL, fgroup W, pol RR



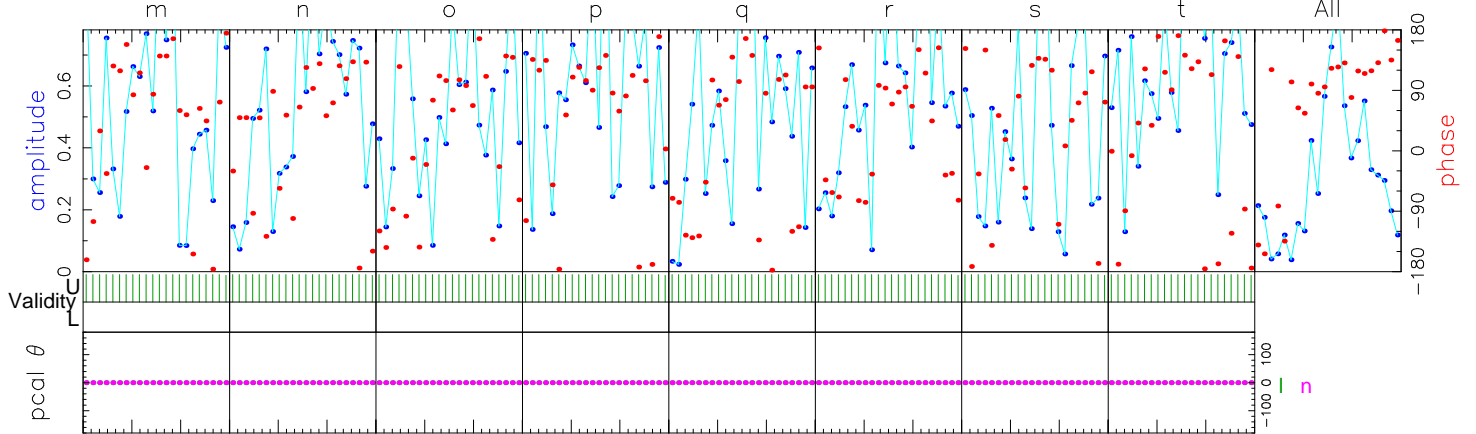
Fringe quality 9

SNR 9.6
 Int time 179.986
 Amp 0.260
 Phase 120.8
 PFD 2.5e-13
 Delays (us)
 SBD 0.002912
 MBD 0.002398
 Fringe rate (Hz)
 -0.002090
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105046
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-3.94682412851E+03	Apriori delay (usec)	-3.94682652608E+03	Resid mbdelay (usec)	2.39758E-03	+/-	1.1E-04
Sband delay (usec)	-3.94682361383E+03	Apriori clock (usec)	-8.0263596E+00	Resid sbdelay (usec)	2.91225E-03	+/-	9.0E-04
Phase delay (usec)	-3.94682652219E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	3.89448E-06	+/-	3.9E-07
Delay rate (us/s)	1.49625279364E-01	Apriori rate (us/s)	1.49625303628E-01	Resid rate (us/s)	-2.42638E-08	+/-	3.7E-09
Total phase (deg)	-223.6	Apriori accel (us/s/s)	1.53856790401E-05	Resid phase (deg)	120.8	+/-	12.0

ph/seg (deg)	56.6	28.1	Search (1024X32)	0.259	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	88.5	49.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.2	17.0	Inc. seg. avg.	0.281	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.6	29.6	Inc. frq. avg.	0.261	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 62.2 el 27.5 pa -64.5 n: az 72.1 el 40.3 pa -63.2 u,v (fr/asec) -1065.714 351.805 simultaneous interpolator

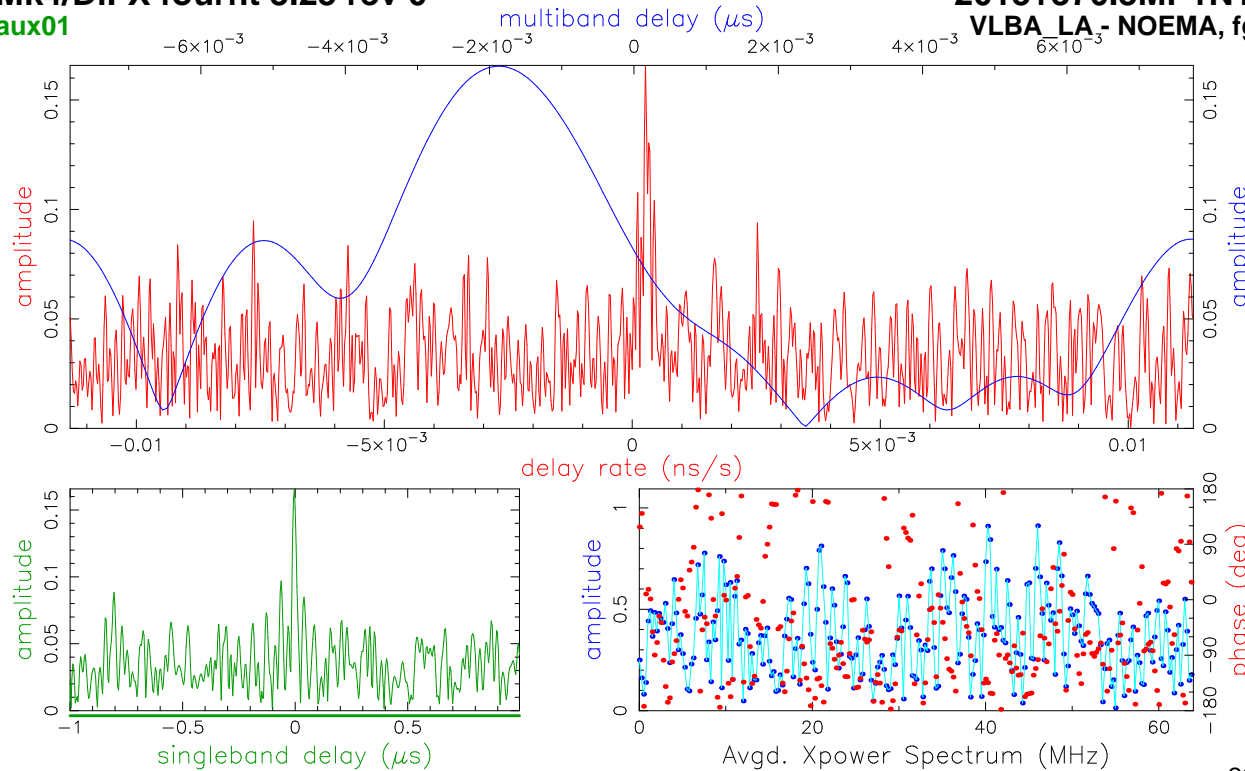
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/In..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/In.W.236.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

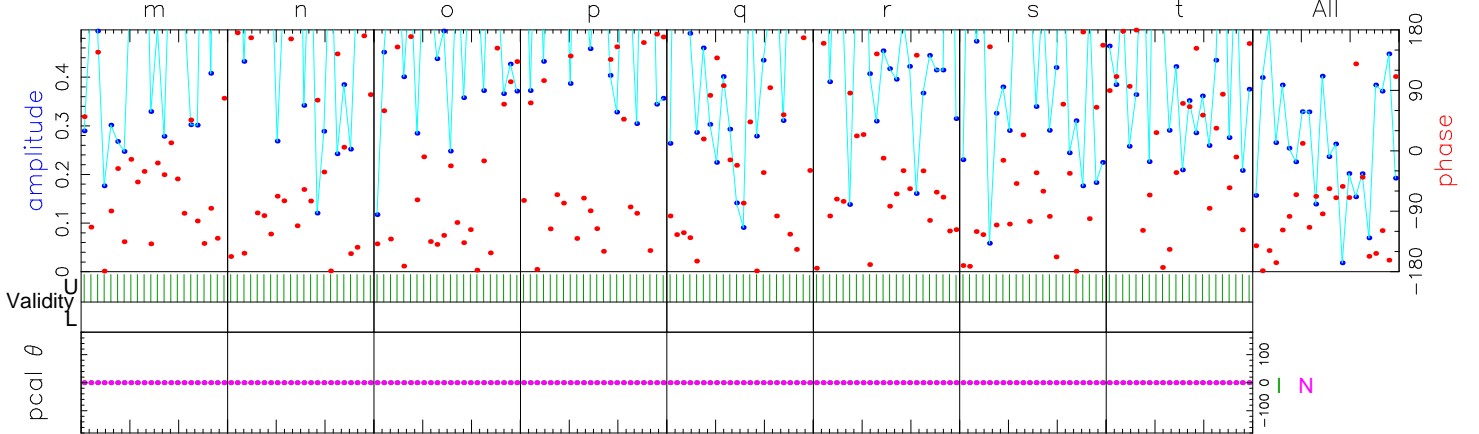
2013+370.3MP1N1, No0280, IN

VLBA LA- NOEMA, fgroup W, pol LR



Fringe quality 0
 SNR 6.1
 Int time 179.981
 Amp 0.166
 Phase -120.2
 PFD 1.5e-01
 Delays (us)
 SBD -0.004582
 MBD -0.001899
 Fringe rate (Hz) 0.022416
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105046
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-68.6	-135.5	-155.5	-134.5	-131.9	-80.0	-103.8	82.5	Phase	-120.2	
	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.1	Ampl.	0.2	
	136.1	255.9	152.5	255.7	13.6	50.8	215.8	464.0	Sbd box	255.8	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
I	0	0	0	0	0	0	0	0	PC freqs		
N	0	0	0	0	0	0	0	0	PC freqs		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
N	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-9.37298801654E+03		Apriori delay (usec)		-9.37298611754E+03		Resid mbdelay (usec)		-1.89900E-03	+/- 1.8E-04	
Sband delay (usec)	-9.37299069929E+03		Apriori clock (usec)		5.0483322E+00		Resid sbdelay (usec)		-4.58175E-03	+/- 1.4E-03	
Phase delay (usec)	-9.37298612142E+03		Apriori clockrate (us/s)		-2.4830008E-07		Resid phdelay (usec)		-3.87657E-06	+/- 6.1E-07	
Delay rate (us/s)	1.45595840693E+00		Apriori rate (us/s)		1.45595814670E+00		Resid rate (us/s)		2.60229E-07	+/- 5.8E-09	
Total phase (deg)			Apriori accel (us/s/s)		4.18016185314E-05		Resid phase (deg)		-120.2	+/- 18.8	
	RMS	Theor.	Amplitude	0.166 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	61.8	44.2	Search (1024X32)	0.163		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	96.9	77.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	72.0	26.6	Inc. seg. avg.	0.208		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	51.8	46.5	Inc. frq. avg.	0.189		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
I: az 62.2 el 27.5 pa -64.5		N: az 263.8 el 65.1 pa 62.6		u,v (fr/asec) -10443.536 1731.157						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/IN..3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/IN.W.237.3MP1N1							

Mk4/DiFX fourfit 3.25 rev 0

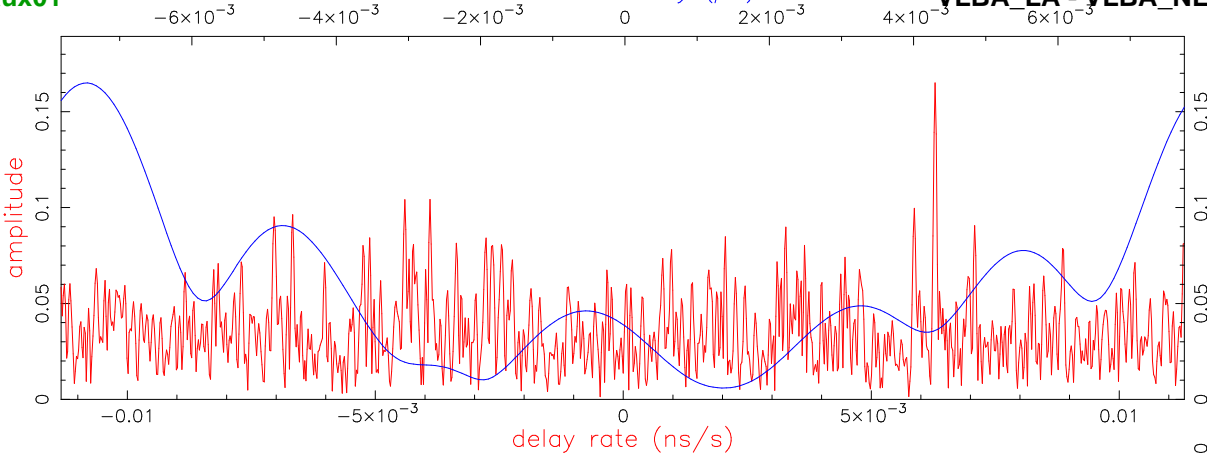
aux01

2013+370.3MP1N1, No0280, In

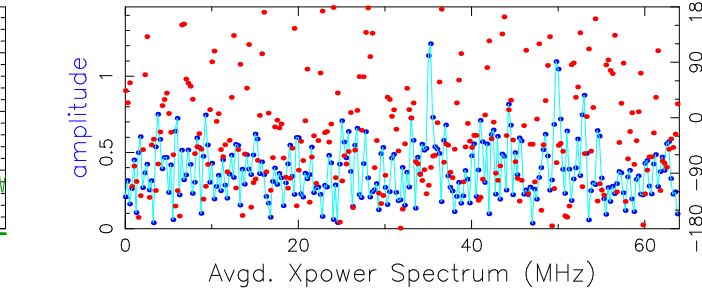
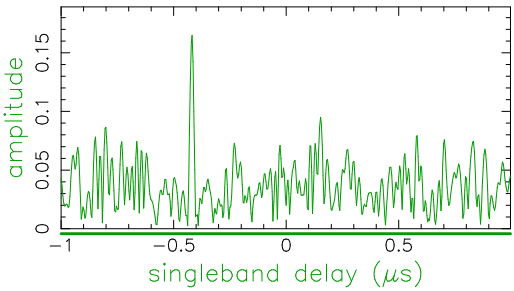
VLBA_LA - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

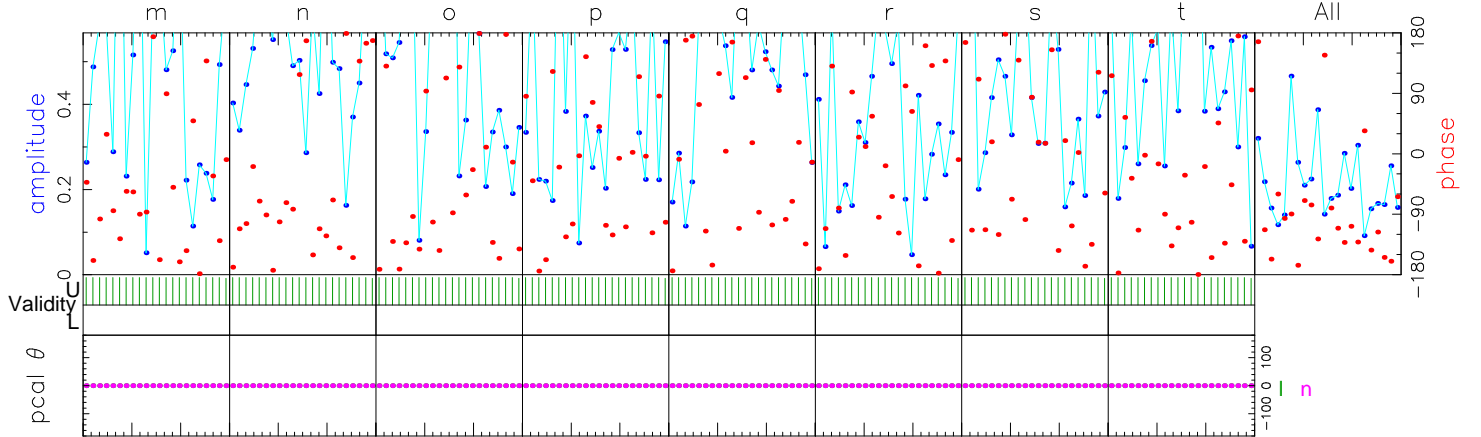


SNR 6.1
 Int time 179.986
 Amp 0.189
 Phase -121.8
 PFD 1.3e-01
 Delays (us)
 SBD -0.419085
 MBD -0.007485
 Fringe rate (Hz) 0.542117
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105048
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-113.0	-129.7	-136.4	-68.7	-131.2	-129.1	-142.7	-105.8	Phase	-121.8
	0.3	0.4	0.3	0.2	0.1	0.0	0.2	0.2	Ampl.	0.2
	169.9	149.6	121.5	269.6	400.7	485.4	27.1	276.9	Sbd box	149.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.94724026082E+03		Apriori delay (usec)		-3.94682652608E+03		Resid mbdelay (usec)		-7.48474E-03	+/- 1.8E-04
Sband delay (usec)	-3.94724561108E+03		Apriori clock (usec)		-8.0263596E+00		Resid sbdelay (usec)		-4.19085E-01	+/- 1.4E-03
Phase delay (usec)	-3.94682653001E+03		Apriori clockrate (us/s)		-5.3126102E-07		Resid phdelay (usec)		-3.92632E-06	+/- 6.1E-07
Delay rate (us/s)	1.49631597064E-01		Apriori rate (us/s)		1.49625303628E-01		Resid rate (us/s)		6.29344E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.53856790401E-05		Resid phase (deg)		-121.8	+/- 18.8

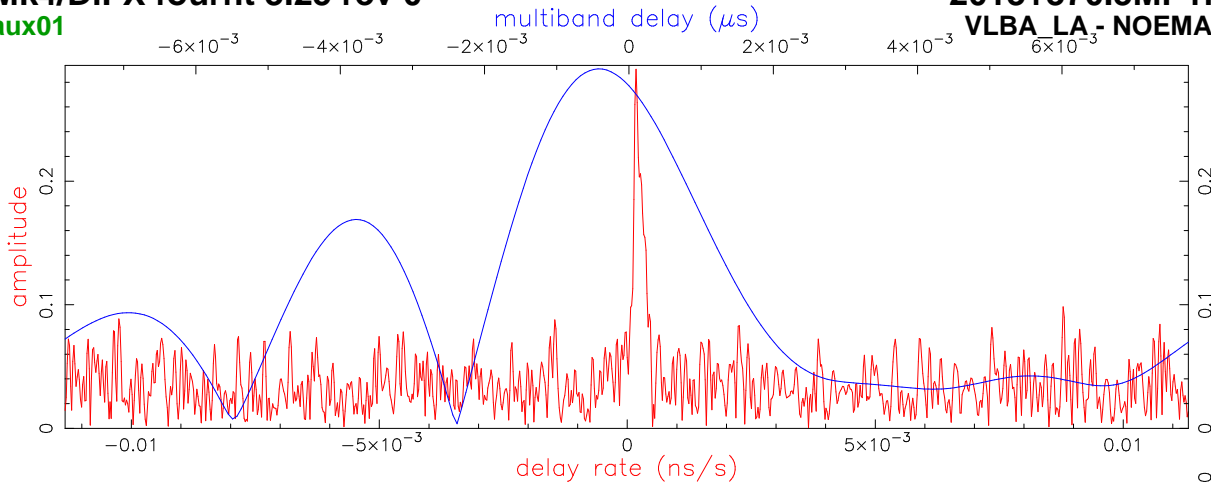
ph/seg (deg) 52.2 44.1 Search (1024X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.9 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.8 26.6 Inc. seg. avg. 0.192 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.2 46.4 Inc. frq. avg. 0.181 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 l: az 62.2 el 27.5 pa -64.5 n: az 72.1 el 40.3 pa -63.2 u,v (fr/asec) -1065.714 351.805 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/ln..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/ln.W.245.3MP1N1 simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

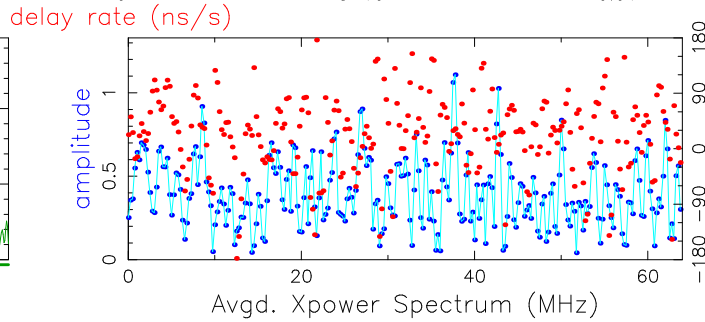
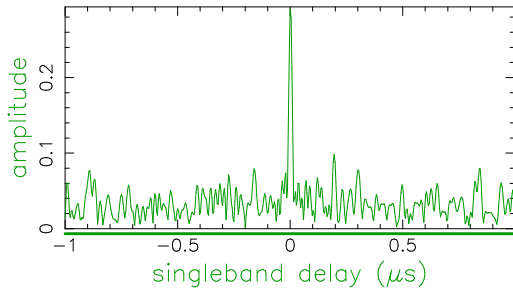
2013+370.3MP1N1, No0280, IN

VLBA LA- NOEMA, fgroup W, pol RL



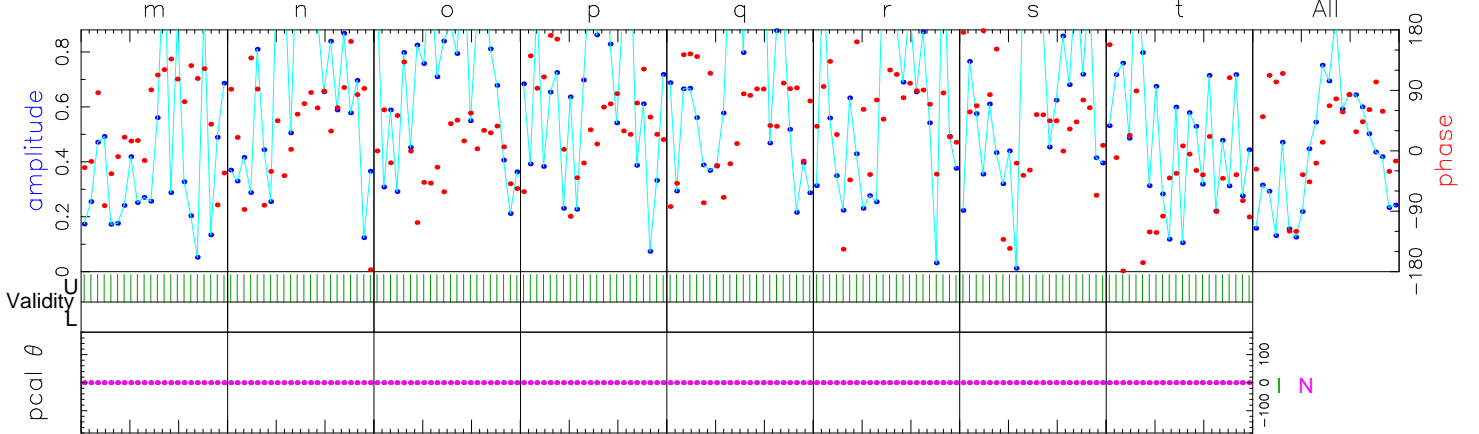
Fringe quality 9

SNR 10.8
 Int time 179.981
 Amp 0.294
 Phase 48.1
 PFD 1.1e-18
 Delays (us)
 SBD 0.001215
 MBD -0.000353
 Fringe rate (Hz) 0.015735
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105049
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0		
N	0	0	0	0	0	0	0	0		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-9.37298647049E+03	Apriori delay (usec)	-9.37298611754E+03	Resid mbdelay (usec)	-3.52947E-04	+/-	1.0E-04
Sband delay (usec)	-9.37298490204E+03	Apriori clock (usec)	5.0483322E+00	Resid sbdelay (usec)	1.21550E-03	+/-	8.0E-04
Phase delay (usec)	-9.37298611599E+03	Apriori clockrate (us/s)	-2.4830008E-07	Resid phdelay (usec)	1.55070E-06	+/-	3.4E-07
Delay rate (us/s)	1.45595832937E+00	Apriori rate (us/s)	1.45595814670E+00	Resid rate (us/s)	1.82666E-07	+/-	3.3E-09
Total phase (deg)	-11.3	Apriori accel (us/s/s)	4.18016185314E-05	Resid phase (deg)	48.1	+/-	10.6

ph/seg (deg)	71.2	Theor.	Amplitude	0.294 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.4	24.9	Search (1024X32)	0.288	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.6	15.0	Inc. seg. avg.	0.397	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.7	26.3	Inc. frq. avg.	0.328	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
					Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

I: az 62.2 el 27.5 pa -64.5 N: az 263.8 el 65.1 pa 62.6 u, v (fr/asec) -10443.536 1731.157 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IN..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IN.W.250.3MP1N1

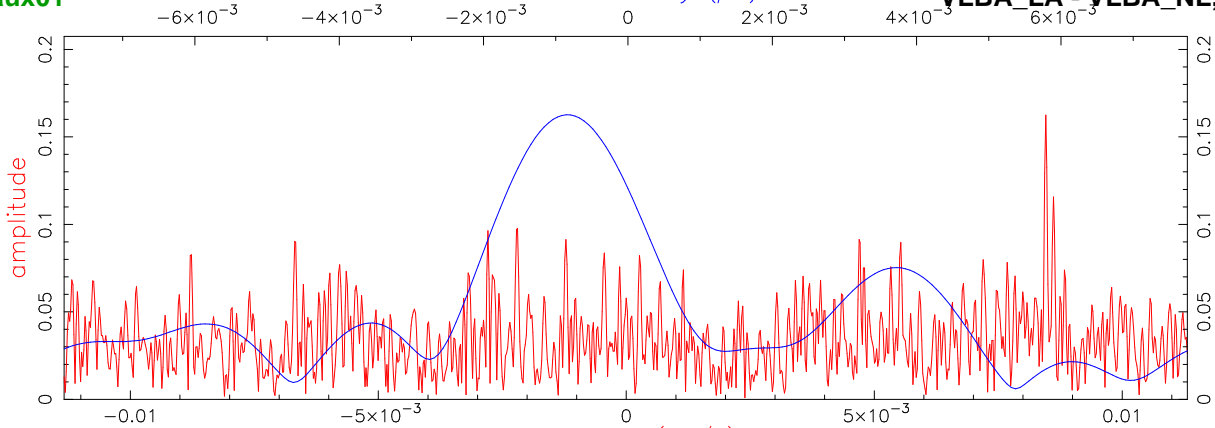
Mk4/DiFX fourfit 3.25 rev 0

aux01

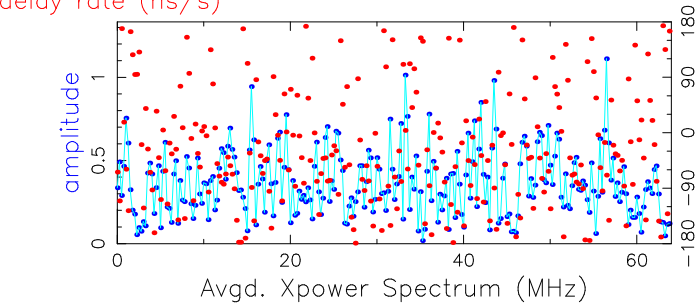
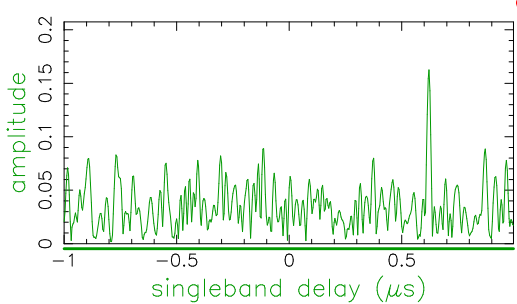
2013+370.3MP1N1, No0280, In

VLBA_LA - VLBA_NL, fgroup W, pol RL

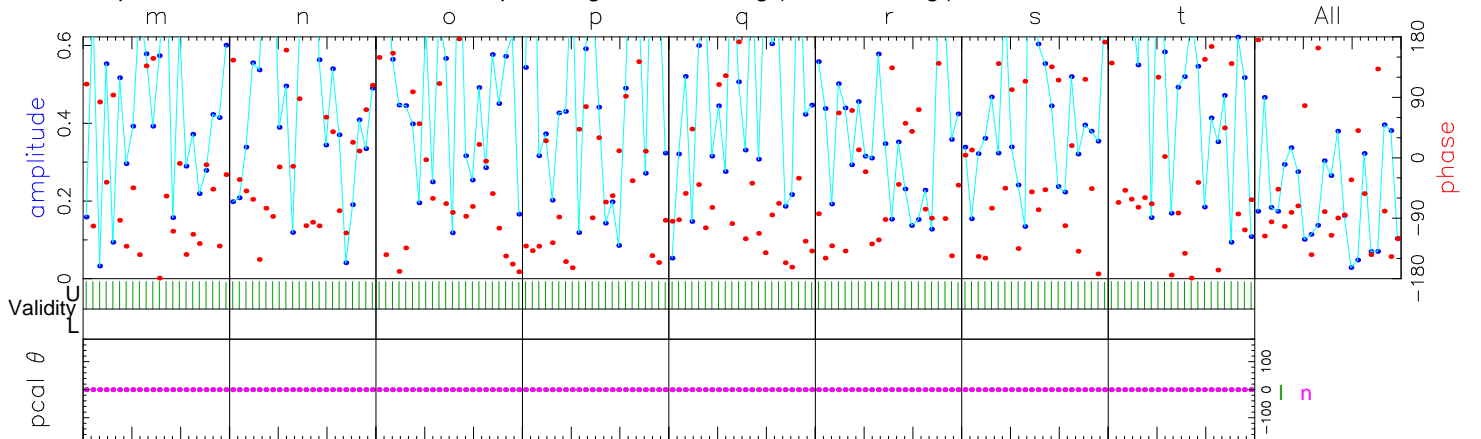
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 179.986
 Amp 0.207
 Phase -99.7
 PFD 2.5e-01
 Delays (us)
 SBD 0.620282
 MBD -0.000894
 Fringe rate (Hz) 0.729085
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105052
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-93.1	-72.5	-146.9	-128.0	-92.5	-95.8	-82.4	-91.0	Phase	-99.7
	0.2	0.2	0.2	0.2	0.4	0.1	0.2	0.2	Ampl.	0.2
	116.7	329.4	281.9	112.1	414.9	247.8	391.2	330.5	Sbd box	415.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -3.94620242018E+03 Apriori delay (usec) -3.94682652608E+03 Resid mbdelay (usec) -8.94096E-04 +/- 1.8E-04
 Sband delay (usec) -3.94620624358E+03 Apriori clock (usec) -8.0263596E+00 Resid sbdelay (usec) 6.20282E-01 +/- 1.4E-03
 Phase delay (usec) -3.94682652929E+03 Apriori clockrate (us/s) -5.3126102E-07 Resid phdelay (usec) -3.21375E-06 +/- 6.2E-07
 Delay rate (us/s) 1.49633767580E-01 Apriori rate (us/s) 1.49625303628E-01 Resid rate (us/s) 8.46395E-06 +/- 5.9E-09
 Total phase (deg) -84.0 Apriori accel (us/s/s) 1.53856790401E-05 Resid phase (deg) -99.7 +/- 19.2

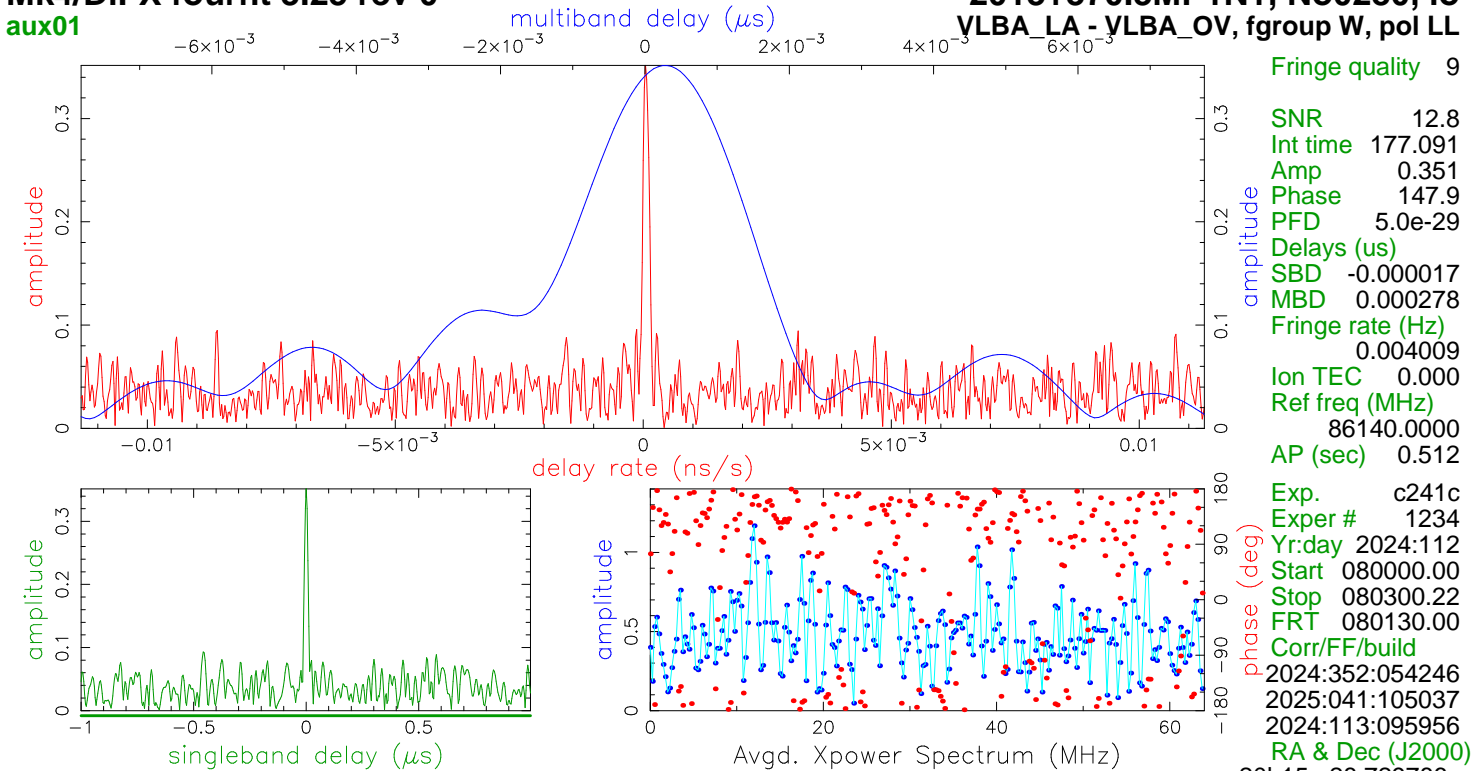
ph/seg (deg) 68.4 44.9 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.3 78.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.6 27.1 Inc. seg. avg. 0.212 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.3 47.3 Inc. frq. avg. 0.201 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 l: az 62.2 el 27.5 pa -64.5 n: az 72.1 el 40.3 pa -63.2 u,v (fr/asec) -1065.714 351.805 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/ln..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/ln.W.260.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

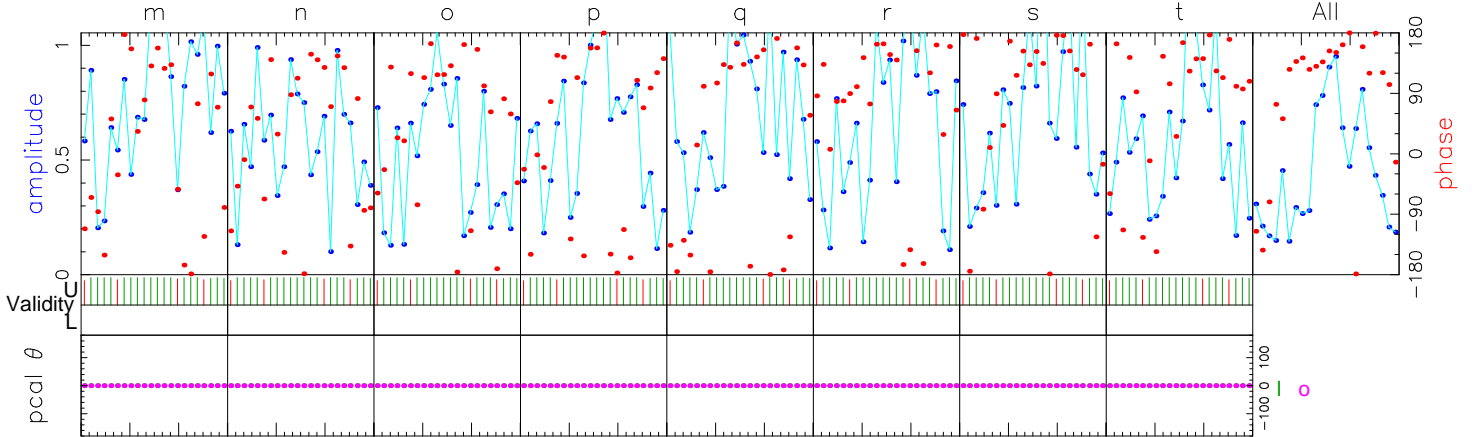
aux01

2013+370.3MP1N1, No0280, lo

VLBA_LA - VLBA_OV, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	2.57302750042E+03	Apriori delay (usec)	2.57302722232E+03	Resid mbdelay (usec)	2.78099E-04	+/-	8.5E-05
Sband delay (usec)	2.57302720532E+03	Apriori clock (usec)	-3.3371552E+01	Resid sbdelay (usec)	-1.70000E-05	+/-	6.7E-04
Phase delay (usec)	2.57302722708E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	4.76800E-06	+/-	2.9E-07
Delay rate (us/s)	4.39259827419E-03	Apriori rate (us/s)	4.39255172904E-03	Resid rate (us/s)	4.65451E-08	+/-	2.8E-09
Total phase (deg)	122.8	Apriori accel (us/s/s)	-1.52493327421E-05	Resid phase (deg)	147.9	+/-	9.0

ph/seg (deg)	61.2	RMS	20.9	Theor.	Amplitude	0.351 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.5		36.5		Search (1024X32)	0.345	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	16.3		12.7		Inc. seg. avg.	0.426	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.3		22.1		Inc. frq. avg.	0.352	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011		
							Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 62.2 el 27.5 pa -64.5 o: az 57.7 el 19.8 pa -57.9 u, v (fr/asec) -44.011 -1054.112 simultaneous interpolator

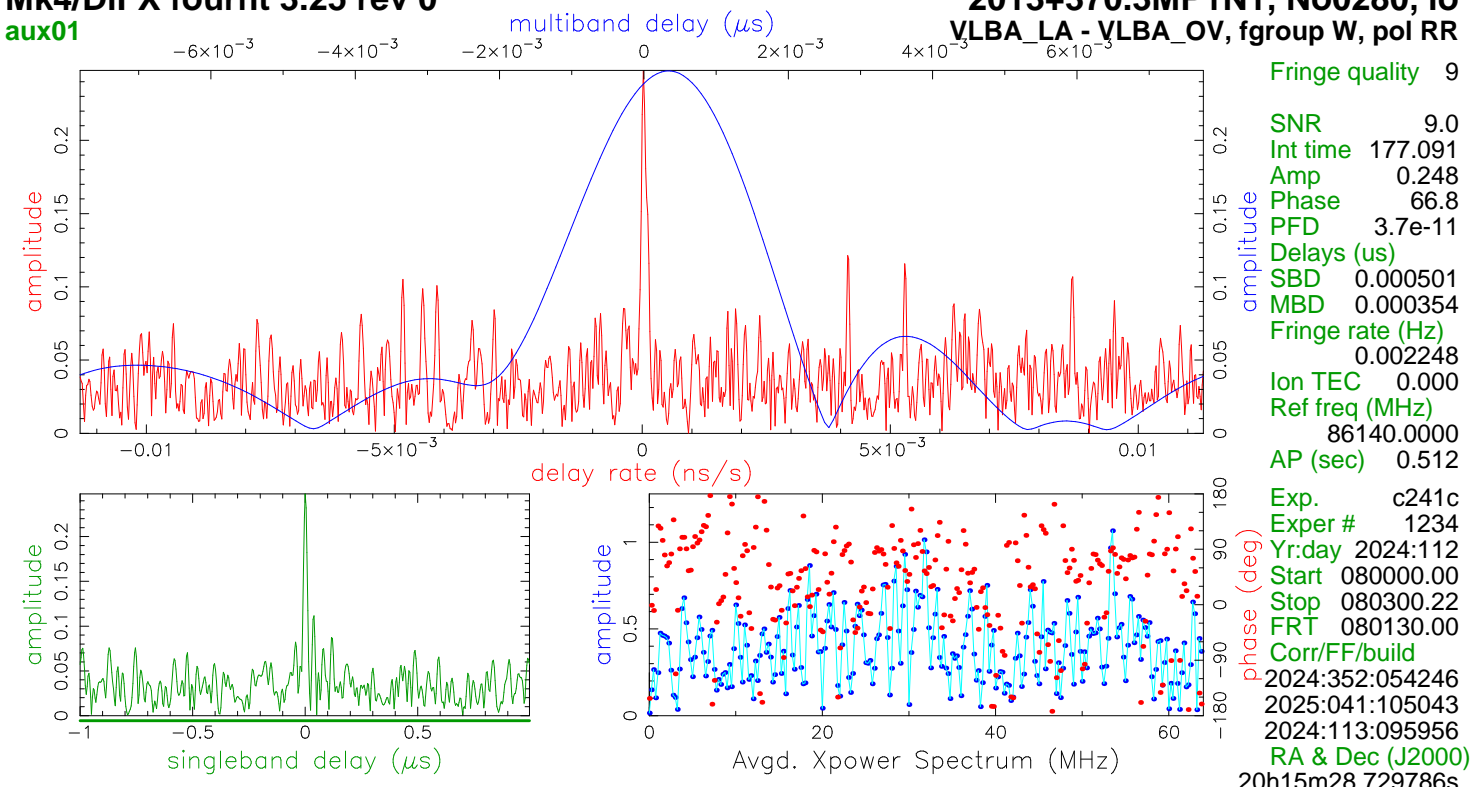
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lo..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lo.W.220.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

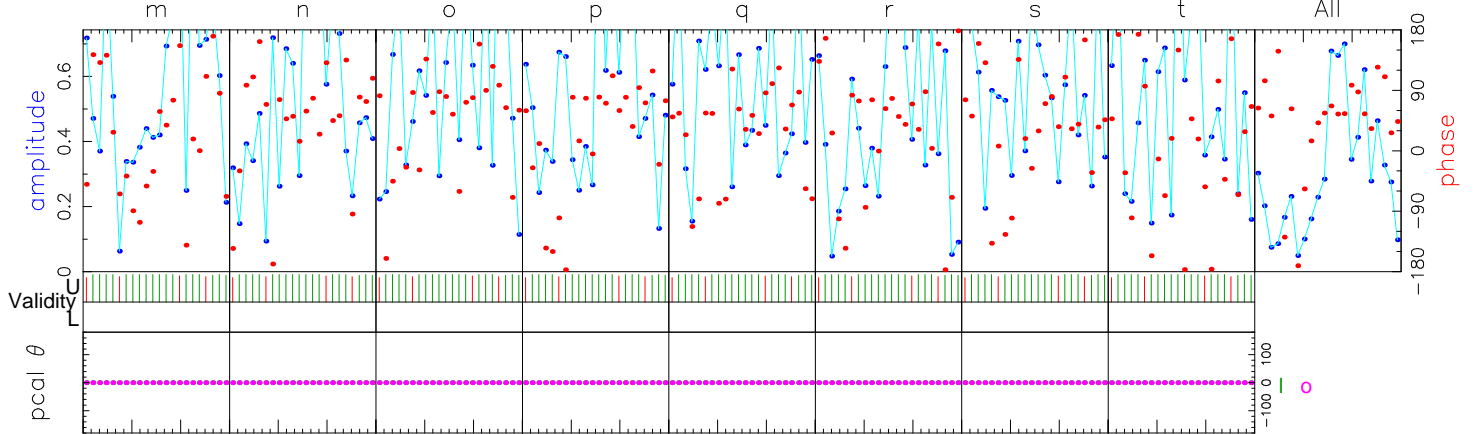
aux01

2013+370.3MP1N1, No0280, lo

VLBA_LA - VLBA_OV, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	70.4	74.0	63.8	75.1	40.7	70.2	56.2	113.7	Phase	66.8
	0.1	0.4	0.3	0.3	0.3	0.3	0.2	0.1	Ampl.	0.2
	246.8	257.2	257.6	442.2	256.8	295.4	164.7	287.2	Sbd box	257.1
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	2.57302757593E+03					2.57302722232E+03			Resid mbdelay (usec)	3.53612E-04 +/- 1.2E-04
Sband delay (usec)	2.57302772382E+03					-3.3371552E+01			Resid sbdelay (usec)	5.01500E-04 +/- 9.6E-04
Phase delay (usec)	2.57302722447E+03					-7.1527311E-07			Resid phdelay (usec)	2.15352E-06 +/- 4.1E-07
Delay rate (us/s)	4.39257782663E-03					4.39255172904E-03			Resid rate (us/s)	2.60976E-08 +/- 4.0E-09
Total phase (deg)			41.7			-1.52493327421E-05			Resid phase (deg)	66.8 +/- 12.7
	RMS	Theor.	Amplitude	0.248 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.4	29.7	Search (1024X32)	0.244					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	84.5	51.8	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	22.9	18.0	Inc. seg. avg.	0.270					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	35.8	31.4	Inc. frq. avg.	0.244					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
l: az 62.2 el 27.5 pa -64.5			o: az 57.7 el 19.8 pa -57.9			u, v (fr/asec) -44.011 -1054.112			nlags: 256 t_cohere infinite	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0280/lo..3MP1N1			Output file: /Exps/c241c/v2/3mm/1234/No0280/lo.W.226.3MP1N1				

Mk4/DiFX fourfit 3.25 rev 0

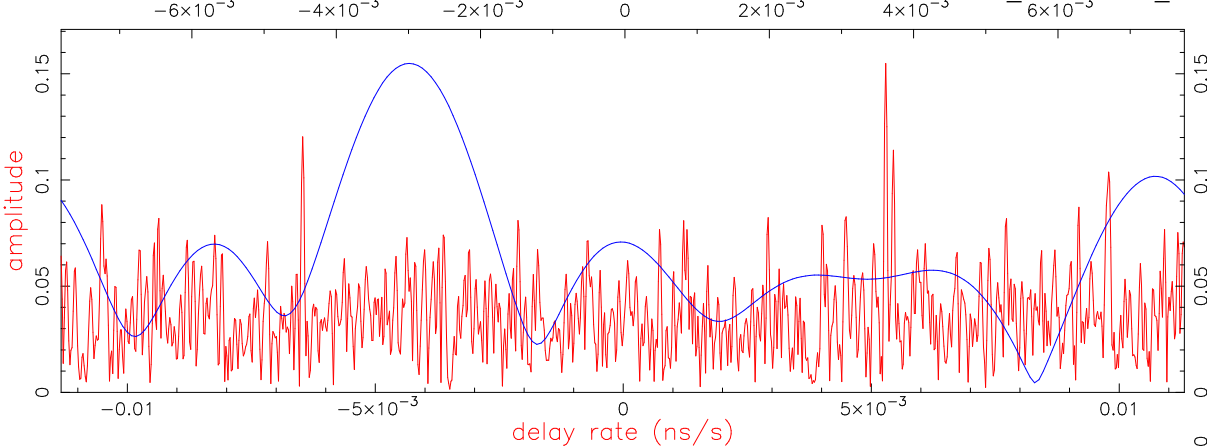
aux01

2013+370.3MP1N1, No0280, lo

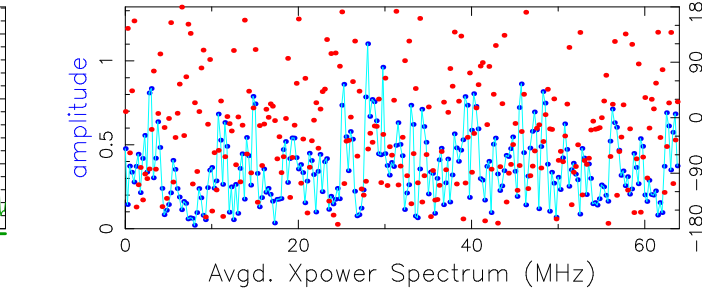
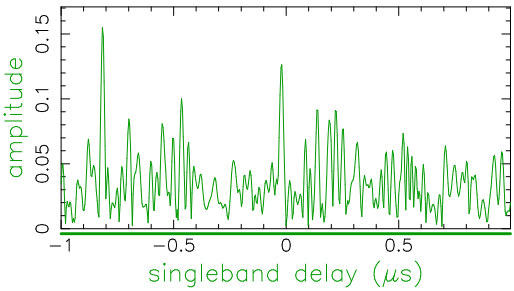
VLBA_LA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

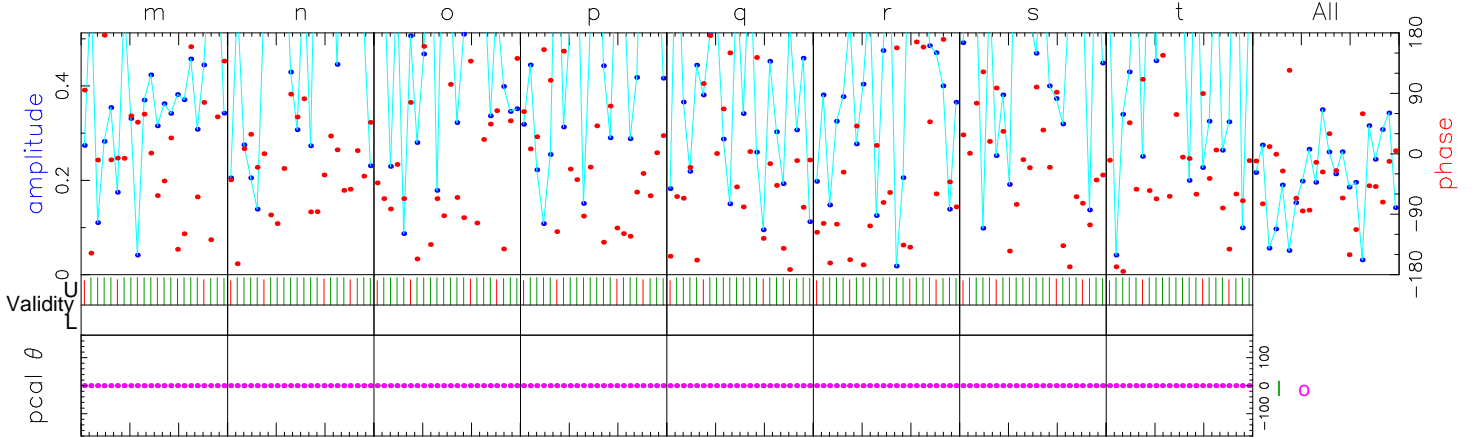


SNR 5.7
 Int time 177.091
 Amp 0.171
 Phase -43.9
 PFD 8.2e-01
 Delays (us)
 SBD -0.815356
 MBD -0.002983
 Fringe rate (Hz)
 0.456316
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105046
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	330.8	47.5	278.5	291.9	272.3	306.4	49.1	267.9		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	2.57221173934E+03	Apriori delay (usec)	2.57302722232E+03	Resid mbdelay (usec)	-2.98298E-03	+/-	1.9E-04
Sband delay (usec)	2.57221186582E+03	Apriori clock (usec)	-3.3371552E+01	Resid sbdelay (usec)	-8.15356E-01	+/-	1.5E-03
Phase delay (usec)	2.57302722090E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-1.41523E-06	+/-	6.5E-07
Delay rate (us/s)	4.39784910703E-03	Apriori rate (us/s)	4.39255172904E-03	Resid rate (us/s)	5.29738E-06	+/-	6.3E-09
Total phase (deg)	291.0	Apriori accel (us/s/s)	-1.52493327421E-05	Resid phase (deg)	-43.9	+/-	20.2

ph/seg (deg)	58.8	Theor.	47.2	Amplitude	0.171 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	65.9		82.3	Search (1024X32)	0.151	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.6		28.6	Inc. seg. avg.	0.169	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	57.7		49.8	Inc. frq. avg.	0.182	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 62.2 el 27.5 pa -64.5 o: az 57.7 el 19.8 pa -57.9 u,v (fr/asec) -44.011 -1054.112 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lo..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lo.W.235.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

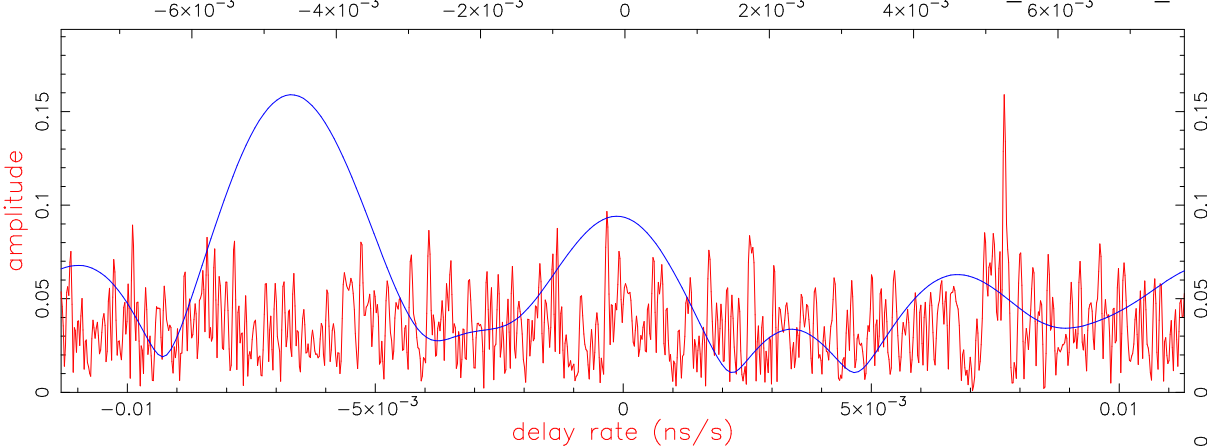
aux01

2013+370.3MP1N1, No0280, lo

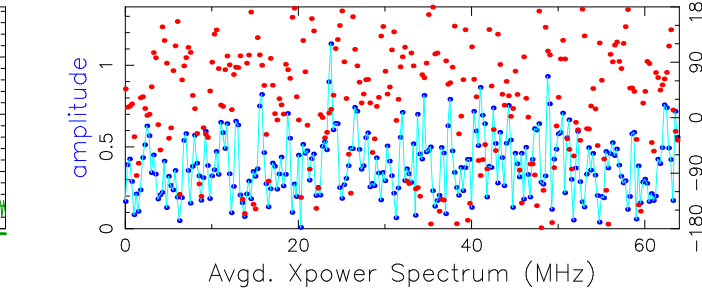
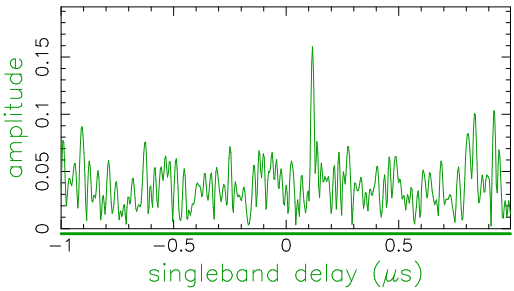
VLBA_LA - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

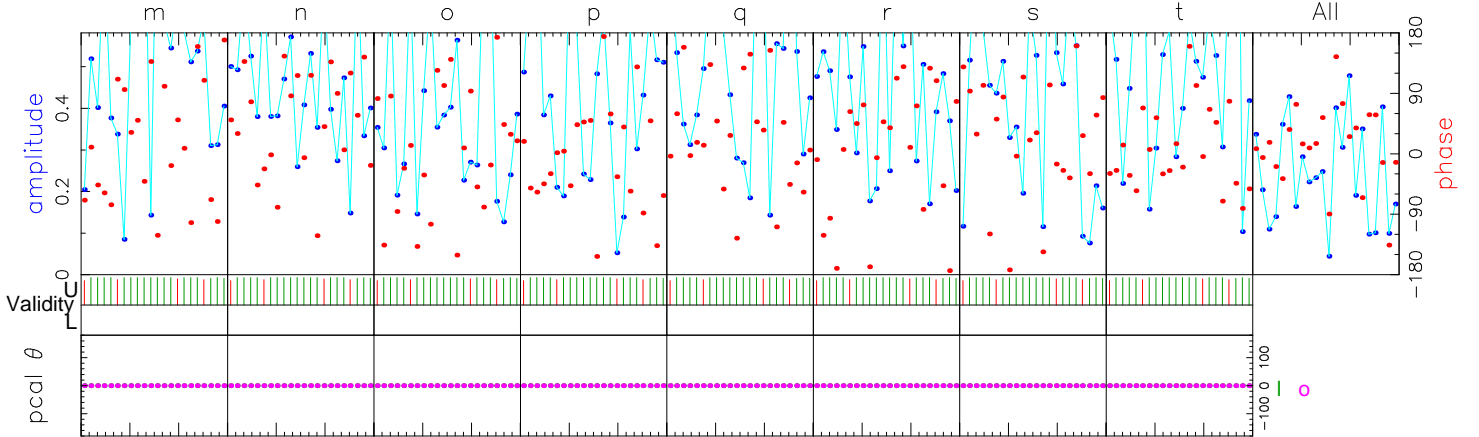


SNR 5.8
 Int time 177.091
 Amp 0.194
 Phase 16.8
 PFD 5.9e-01
 Delays (us)
 SBD 0.116842
 MBD -0.004639
 Fringe rate (Hz)
 0.663682
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105049
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-7.1	58.9	-8.7	-33.7	19.1	49.3	52.8	-2.2	Phase	16.8
	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.4	Ampl.	0.2
	415.6	464.7	191.5	261.0	82.7	373.2	470.1	286.2	Sbd box	286.9
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.57314758300E+03	Apriori delay (usec)	2.57302722232E+03	Resid mbdelay (usec)	-4.63932E-03	+/-	1.9E-04
Sband delay (usec)	2.57314406407E+03	Apriori clock (usec)	-3.3371552E+01	Resid sbdelay (usec)	1.16842E-01	+/-	1.5E-03
Phase delay (usec)	2.57302722286E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	5.41692E-07	+/-	6.4E-07
Delay rate (us/s)	4.40025642304E-03	Apriori rate (us/s)	4.39255172904E-03	Resid rate (us/s)	7.70469E-06	+/-	6.2E-09
Total phase (deg)	351.7	Apriori accel (us/s/s)	-1.52493327421E-05	Resid phase (deg)	16.8	+/-	19.8

ph/seg (deg)	59.4	RMS	46.2	Theor.	0.194 +/- 0.033	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	92.7	Search (1024X32)	0.158	Amplitude	0.158	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.1	Inc. seg. avg.	0.223	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.9	Inc. frq. avg.	0.202	Inc. seg. avg.	0.223	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.202	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

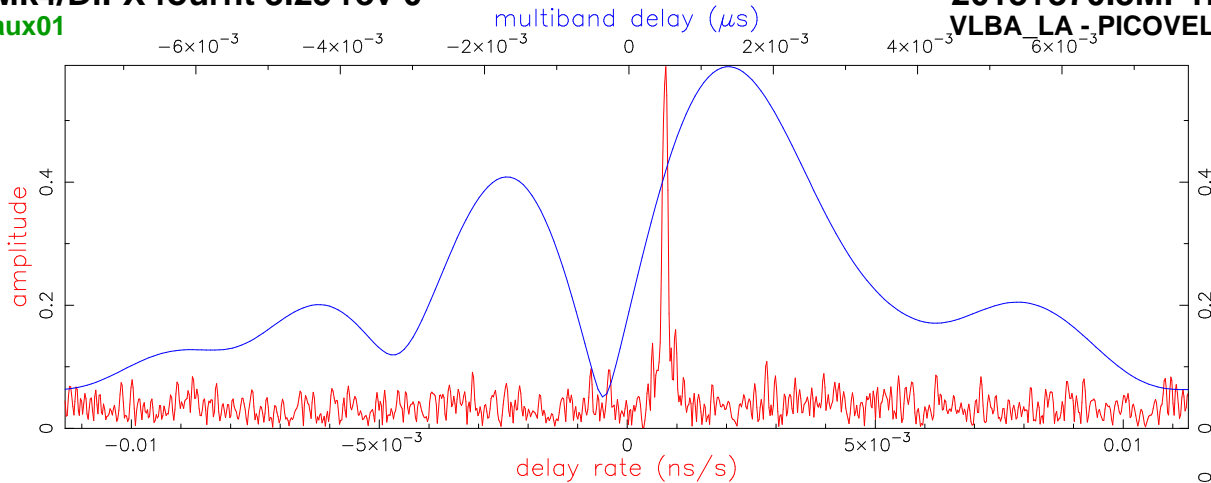
l: az 62.2 el 27.5 pa -64.5 o: az 57.7 el 19.8 pa -57.9 u,v (fr/asec) -44.011 -1054.112 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lo..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lo.W.246.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

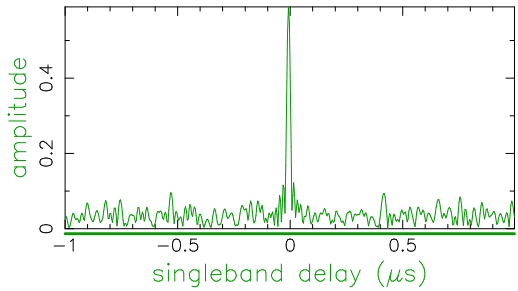
2013+370.3MP1N1, No0280, IP

VLBA_LA - PICOVEL, fgroup W, pol LL

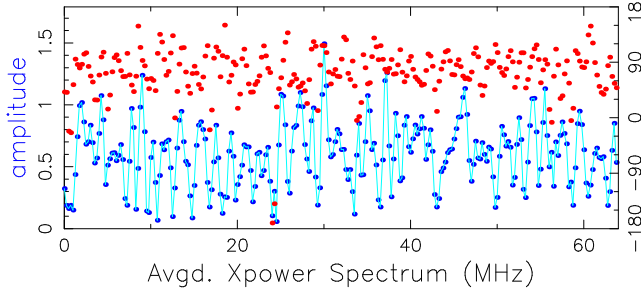


Fringe quality 8

SNR 21.6
 Int time 179.980
 Amp 0.590
 Phase -21.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.007286
 MBD 0.001402
 Fringe rate (Hz)
 0.066082
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

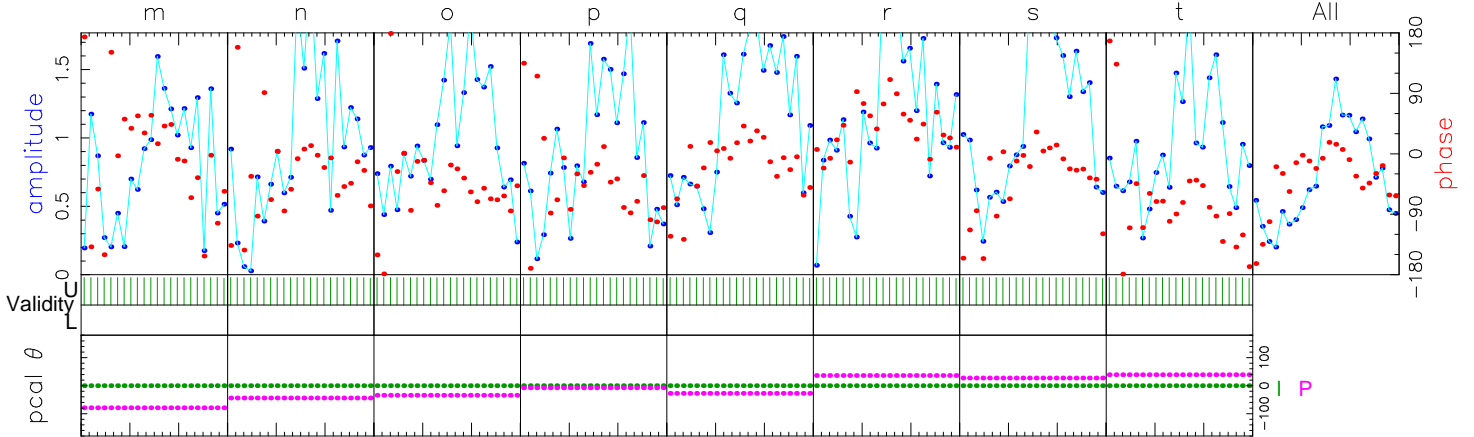


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105045
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03503358379E+04	Apriori delay (usec)	-1.03503216148E+04	Resid mbdelay (usec)	1.40186E-03	+/-	5.0E-05
Sband delay (usec)	-1.03503289005E+04	Apriori clock (usec)	-7.4075031E+00	Resid sbdelay (usec)	-7.28575E-03	+/-	4.0E-04
Phase delay (usec)	-1.03503216155E+04	Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-6.96697E-07	+/-	1.7E-07
Delay rate (us/s)	1.37045224206E+00	Apriori rate (us/s)	1.37045147492E+00	Resid rate (us/s)	7.67141E-07	+/-	1.6E-09
Total phase (deg)	-344.6	Apriori accel (us/s/s)	5.37540135001E-05	Resid phase (deg)	-21.6	+/-	5.3

ph/seg (deg)	47.6	Theor.	12.4	Amplitude	0.590 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.5	Search (1024X32)	0.573	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.8	Inc. seg. avg.	0.706	Inc. frq. avg.	0.747	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.0	Inc. frq. avg.	0.747	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
I: az 62.2 el 27.5 pa -64.5		P: az 277.4 el 72.2 pa 83.5		u, v (fr/asec)	-9817.204 3145.448	ion window (TEC)	0.00 0.00	simultaneous interpolator		

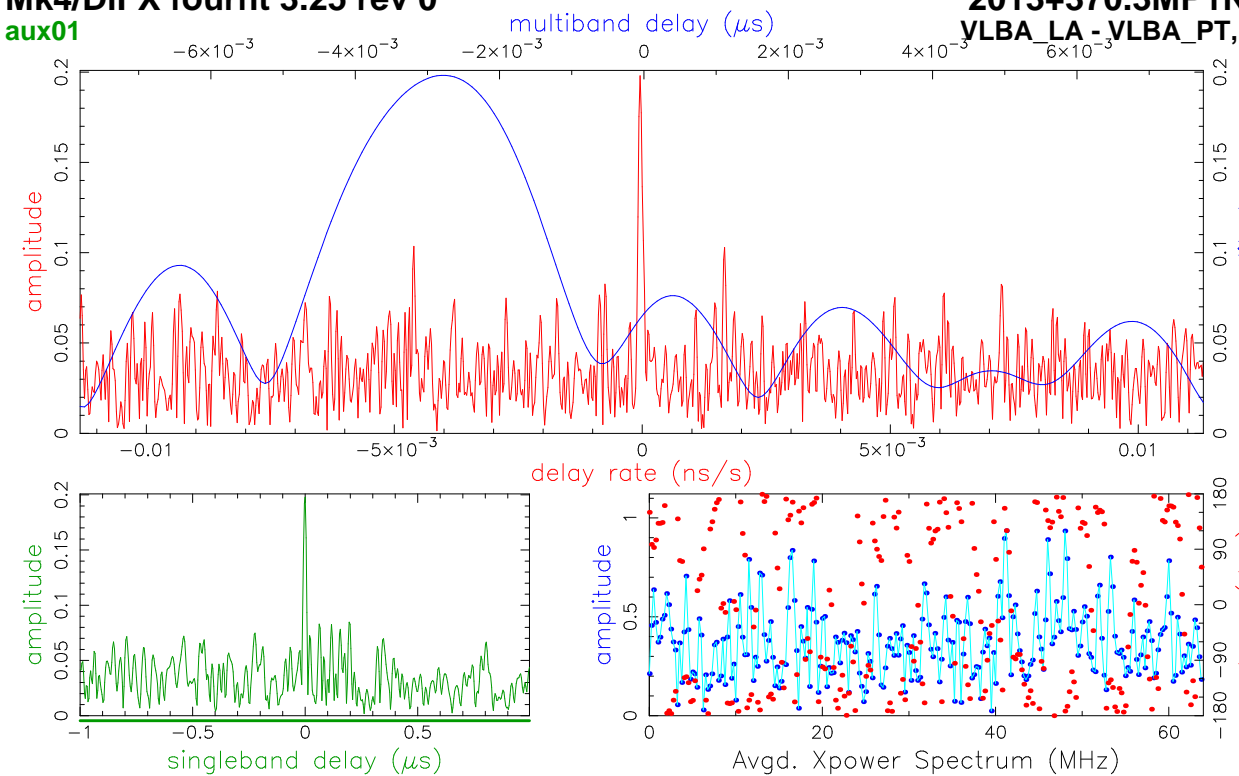
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IP..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IP.W.234.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

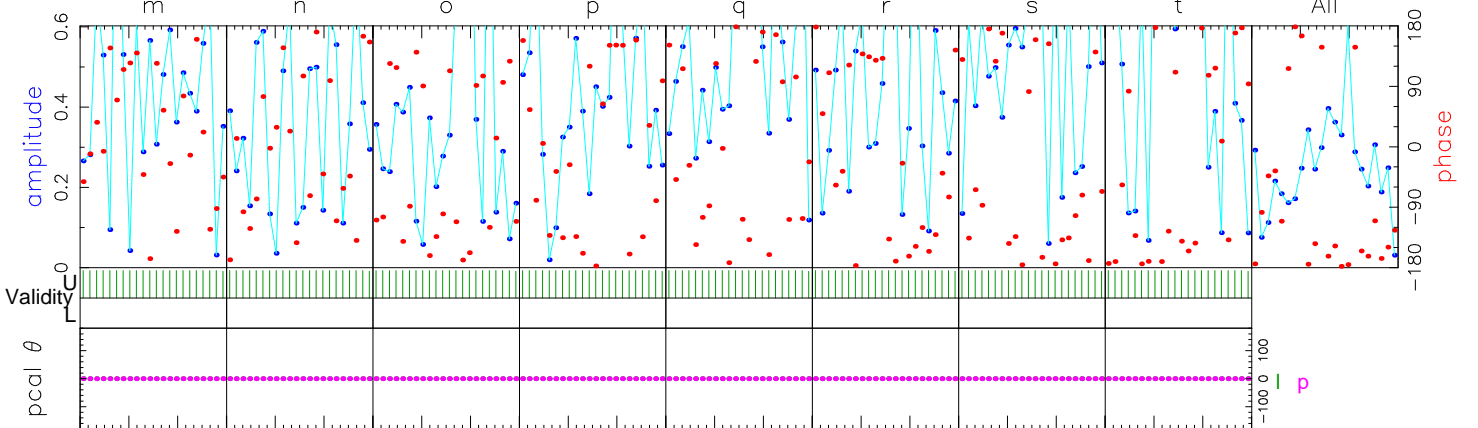
2013+370.3MP1N1, No0280, lp

VLBA_LA - VLBA_PT, fgroup W, pol LL



Fringe quality 9
 SNR 7.4
 Int time 179.990
 Amp 0.201
 Phase -164.6
 PFD 2.7e-05
 Delays (us)
 SBD -0.001440
 MBD -0.002868
 Fringe rate (Hz)
 -0.004132
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105046
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	44.1	-146.2	-151.0	-176.9	-168.2	-160.9	-163.0	-164.0	Phase	-164.6
	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.5	Ampl.	0.2
	244.4	239.5	152.9	263.2	382.8	211.8	256.0	256.9	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 6.65312802947E+02 Apriori delay (usec) 6.65315670484E+02 Resid mbdelay (usec) -2.86754E-03 +/- 1.5E-04
 Sband delay (usec) 6.65314230734E+02 Apriori clock (usec) 0.196 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Phase delay (usec) 6.65315665176E+02 Apriori clockrate (us/s) -6.1269804E-07 Resid sbdelay (usec) -1.43975E-03 +/- 1.2E-03
 Delay rate (us/s) -2.31939189616E-02 Apriori rate (us/s) -2.31938709979E-02 Resid phdelay (usec) -5.30756E-06 +/- 5.0E-07
 Total phase (deg) 143.4 Apriori accel (us/s/s) -2.17666134063E-06 Resid rate (us/s) -4.79637E-08 +/- 4.8E-09
 Resid phase (deg) -164.6 +/- 15.5

ph/seg (deg) 50.8 36.5 Amplitude 0.201 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 63.6 Search (1024X32) 0.196 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.7 22.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 61.4 38.4 Inc. seg. avg. 0.211 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 l: az 62.2 el 27.5 pa -64.5 p: az 60.8 el 25.4 pa -65.1 u, v (fr/asec) 165.506 17.175 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lp..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lp.W.239.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

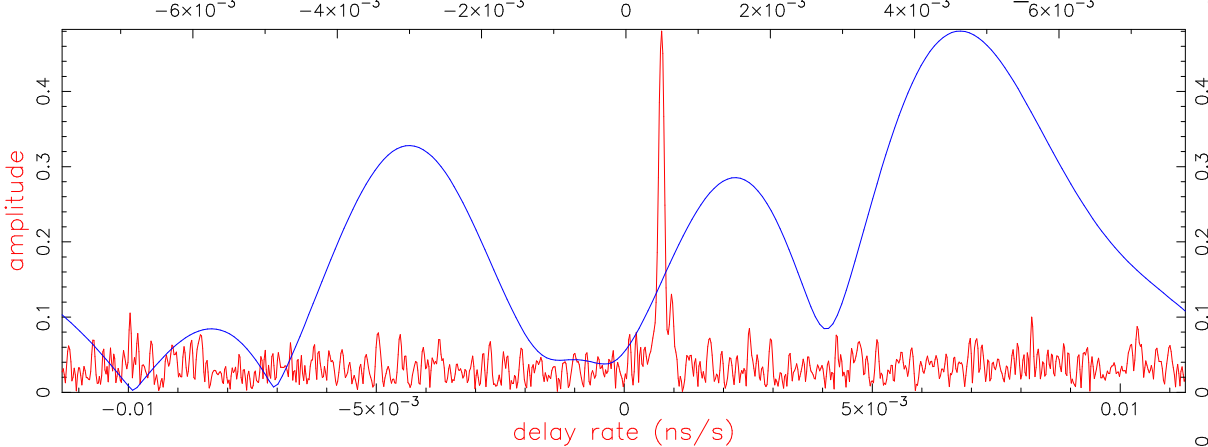
aux01

2013+370.3MP1N1, No0280, IP

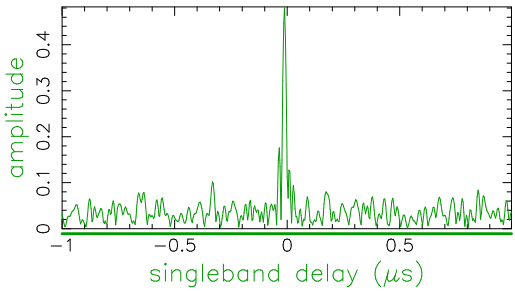
VLBA_LA - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

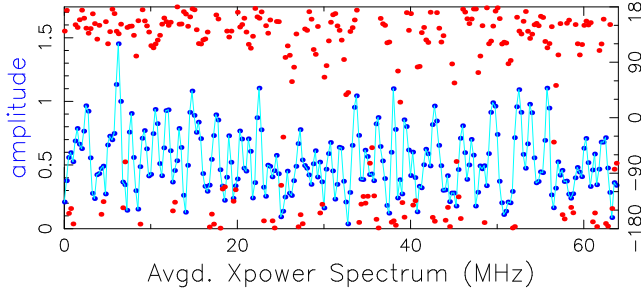
Fringe quality 7



SNR 17.7
 Int time 179.980
 Amp 0.482
 Phase -37.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.012357
 MBD 0.004608
 Fringe rate (Hz)
 0.065533
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

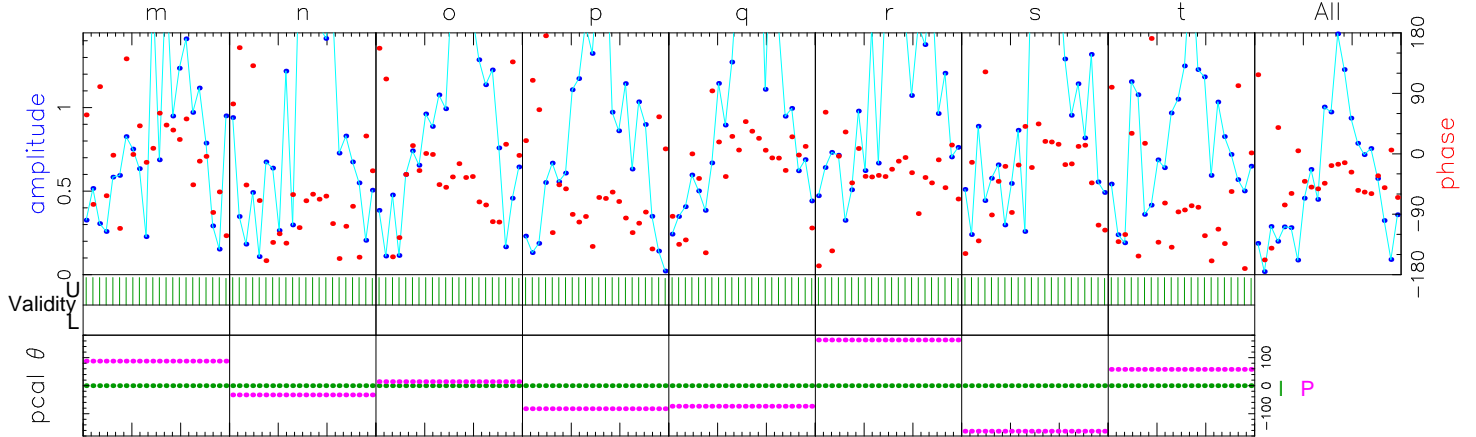


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105049
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.03503326313E+04	Apriori delay (usec)	-1.03503216148E+04	Resid mbdelay (usec)	4.60844E-03	+/-	6.1E-05
Sband delay (usec)	-1.03503339713E+04	Apriori clock (usec)	-7.4075031E+00	Resid sbdelay (usec)	-1.23565E-02	+/-	4.9E-04
Phase delay (usec)	-1.03503216160E+04	Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-1.20309E-06	+/-	2.1E-07
Delay rate (us/s)	1.37045223569E+00	Apriori rate (us/s)	1.37045147492E+00	Resid rate (us/s)	7.60768E-07	+/-	2.0E-09
Total phase (deg)	-0.3	Apriori accel (us/s/s)	5.37540135001E-05	Resid phase (deg)	-37.3	+/-	6.5

ph/seg (deg)	54.2	Theor.	15.2	Amplitude	0.482 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.4	Search (1024X32)	0.469	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	51.5	Inc. seg. avg.	0.532	Inc. frq. avg.	0.636	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.0	Inc. frq. avg.	0.636			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
I: az 62.2 el 27.5 pa -64.5		P: az 277.4 el 72.2 pa 83.5		u,v (fr/asec)	-9817.204 3145.448	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

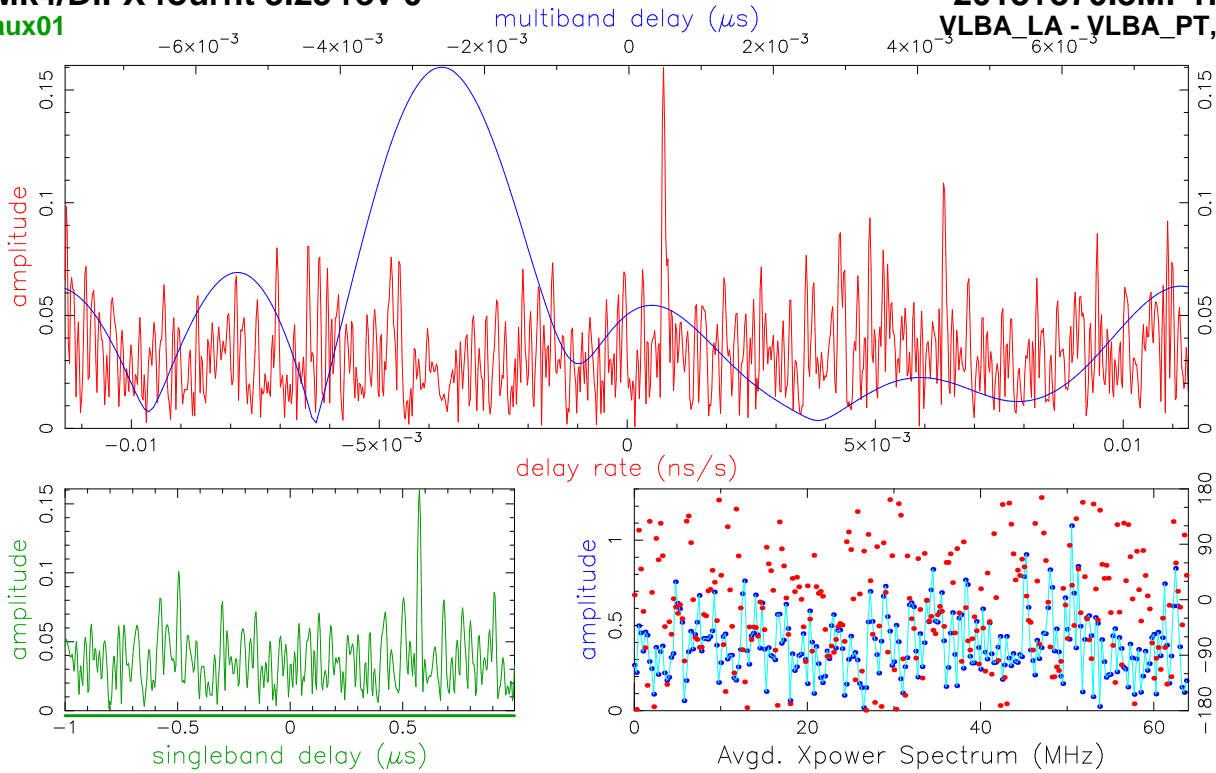
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IP..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IP.W.251.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, lp

VLBA_LA - VLBA_PT, fgroup W, pol RR

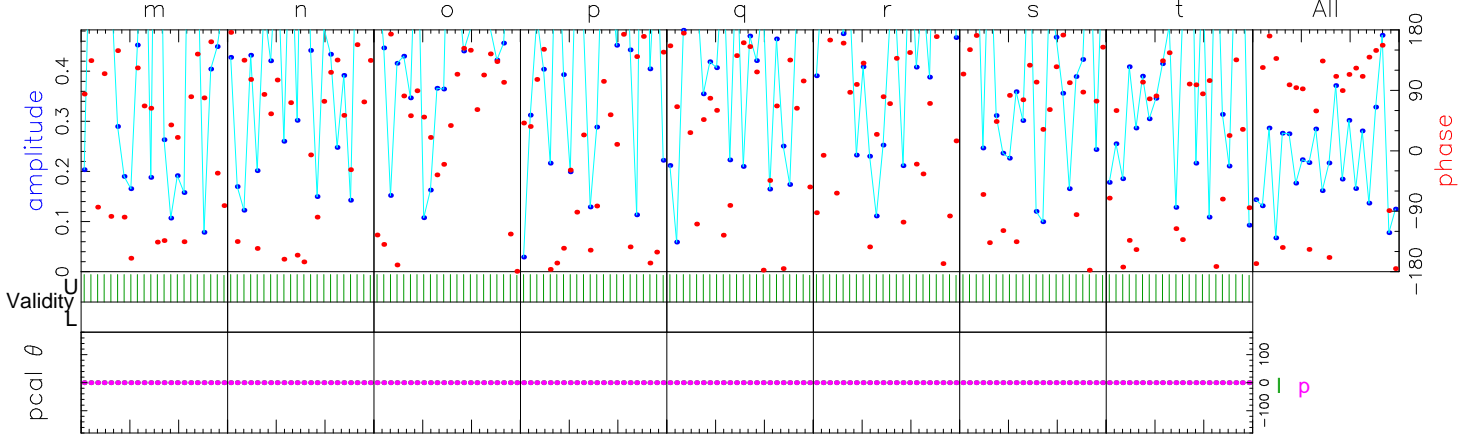


Fringe quality 0

SNR 5.9
 Int time 179.990
 Amp 0.161
 Phase 136.8
 PFD 3.8e-01
 Delays (us)
 SBD 0.573396
 MBD -0.002642
 Fringe rate (Hz)
 0.062535
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105049
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	0	0	0	0	0	0	0	0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	6.65891153809E+02					6.65315670484E+02			Resid mbdelay (usec)	-2.64167E-03 +/- 1.8E-04
Sband delay (usec)	6.65889066484E+02					-1.4016365E+01			Resid sbdelay (usec)	5.73396E-01 +/- 1.5E-03
Phase delay (usec)	6.65315674894E+02					-6.1269804E-07			Resid phdelay (usec)	4.41045E-06 +/- 6.3E-07
Delay rate (us/s)	-2.31931450338E-02					-2.31938709979E-02			Resid rate (us/s)	7.25964E-07 +/- 6.0E-09
Total phase (deg)			84.7			-2.17666134063E-06			Resid phase (deg)	136.8 +/- 19.4
	RMS	Theor.	Amplitude	0.161 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.0	45.6	Search (1024X32)	0.154					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.7	79.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	24.5	27.5	Inc. seg. avg.	0.170					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	32.4	48.0	Inc. frq. avg.	0.153					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
l: az 62.2 el 27.5 pa -64.5			p: az 60.8 el 25.4 pa -65.1			u, v (fr/asec) 165.506 17.175				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0280/lp..3MP1N1			Output file: /Exps/c241c/v2/3mm/1234/No0280/lp.W.253.3MP1N1				

Mk4/DiFX fourfit 3.25 rev 0

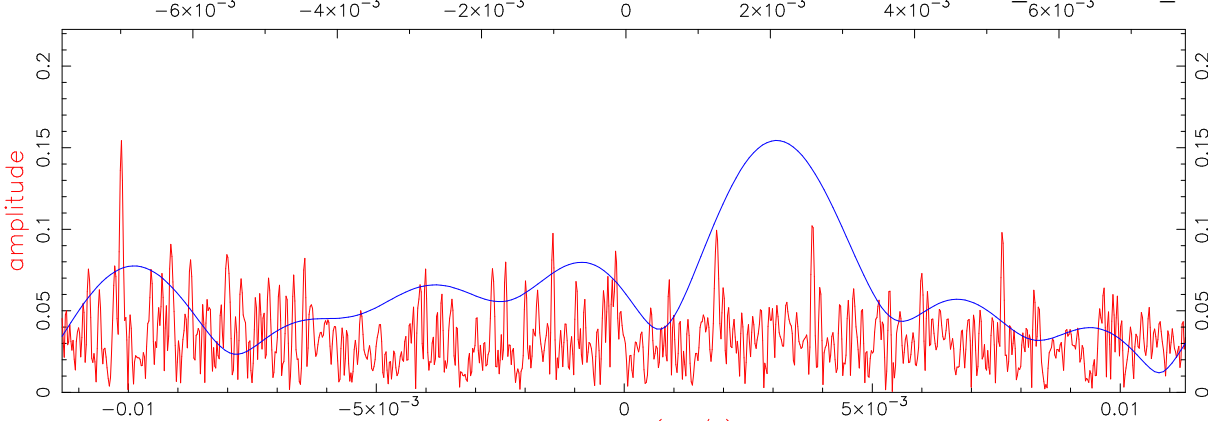
aux01

2013+370.3MP1N1, No0280, lp

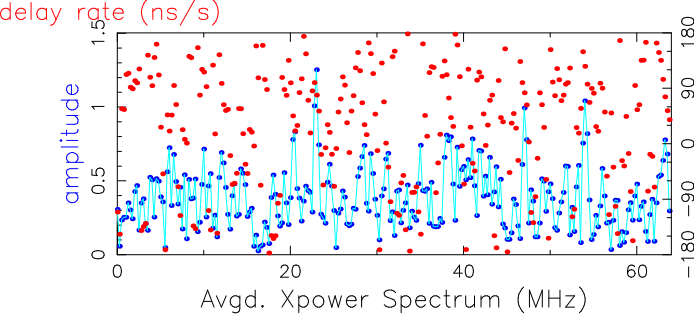
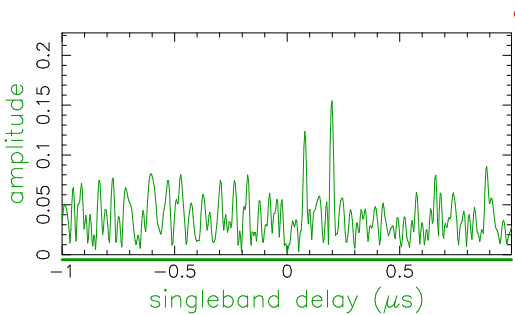
VLBA_LA - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

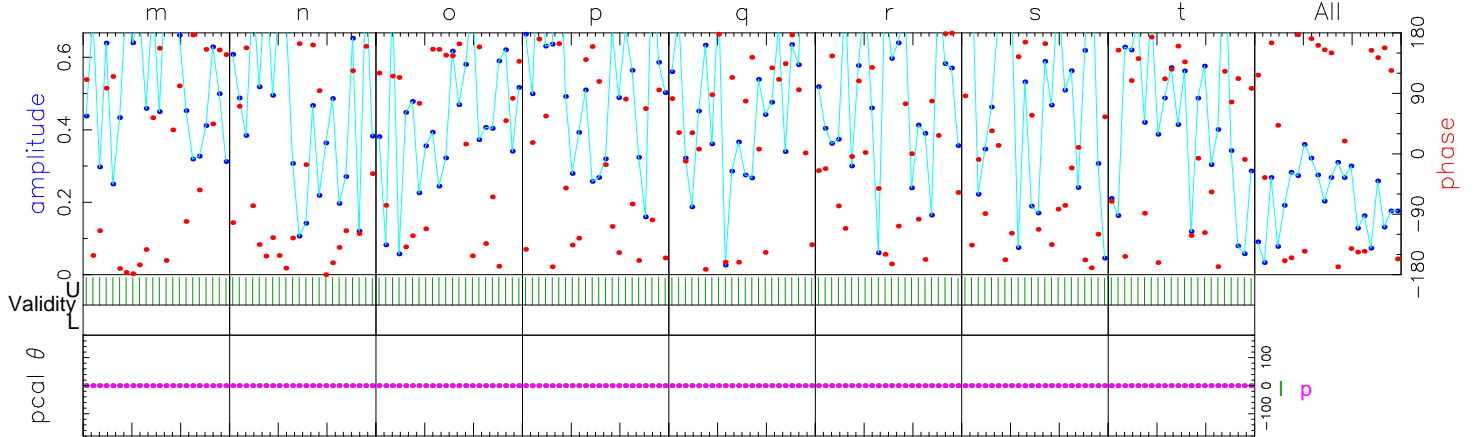


SNR 5.7
 Int time 179.990
 Amp 0.223
 Phase 177.6
 PFD 7.3e-01
 Delays (us)
 SBD 0.197983
 MBD 0.002049
 Fringe rate (Hz)
 -0.875728
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105051
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	157.3	-157.3	161.2	-165.9	113.8	-118.9	-130.3	154.3	Phase	177.6
	0.3	0.4	0.3	0.3	0.2	0.1	0.2	0.3	Ampl.	0.2
	164.4	307.5	448.0	235.7	469.7	70.6	143.6	307.1	Sbd box	307.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.65520844413E+02	Apriori delay (usec)	6.65315670484E+02	Resid mbdelay (usec)	2.04893E-03	+/-	1.9E-04
Sband delay (usec)	6.65513653234E+02	Apriori clock (usec)	-1.4016365E+01	Resid sbdelay (usec)	1.97983E-01	+/-	1.5E-03
Phase delay (usec)	6.65315676209E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	5.72552E-06	+/-	6.5E-07
Delay rate (us/s)	-2.32040373273E-02	Apriori rate (us/s)	-2.31938709979E-02	Resid rate (us/s)	-1.01663E-05	+/-	6.2E-09
Total phase (deg)	125.5	Apriori accel (us/s/s)	-2.17666134063E-06	Resid phase (deg)	177.6	+/-	20.0

ph/seg (deg)	61.6	Theor.	47.0	Amplitude	0.223 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.6	Search (1024X32)	0.152	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.4	Inc. seg. avg.	0.225	Inc. frq. avg.	0.237	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.3	Inc. frq. avg.	0.237			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

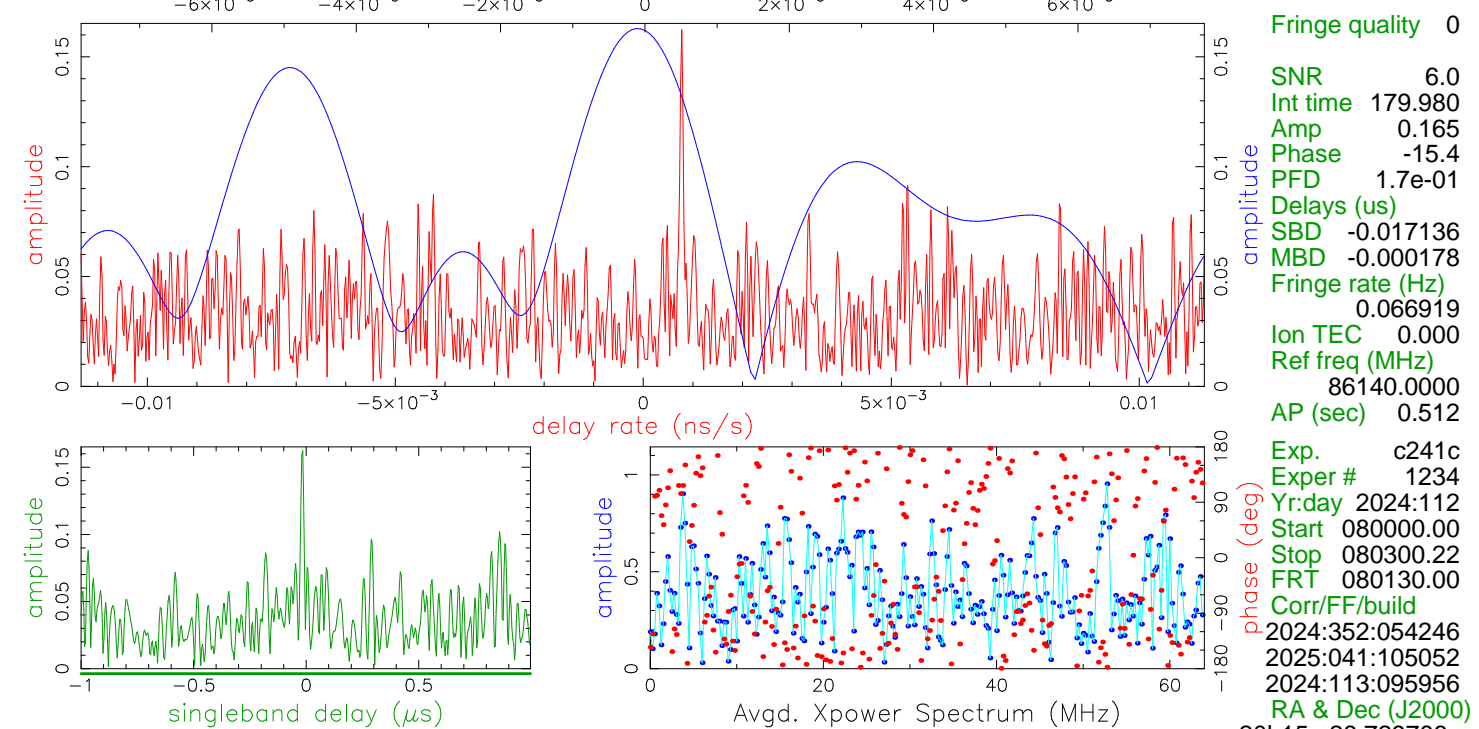
l: az 62.2 el 27.5 pa -64.5 p: az 60.8 el 25.4 pa -65.1 u,v (fr/asec) 165.506 17.175 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lp..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lp.W.256.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

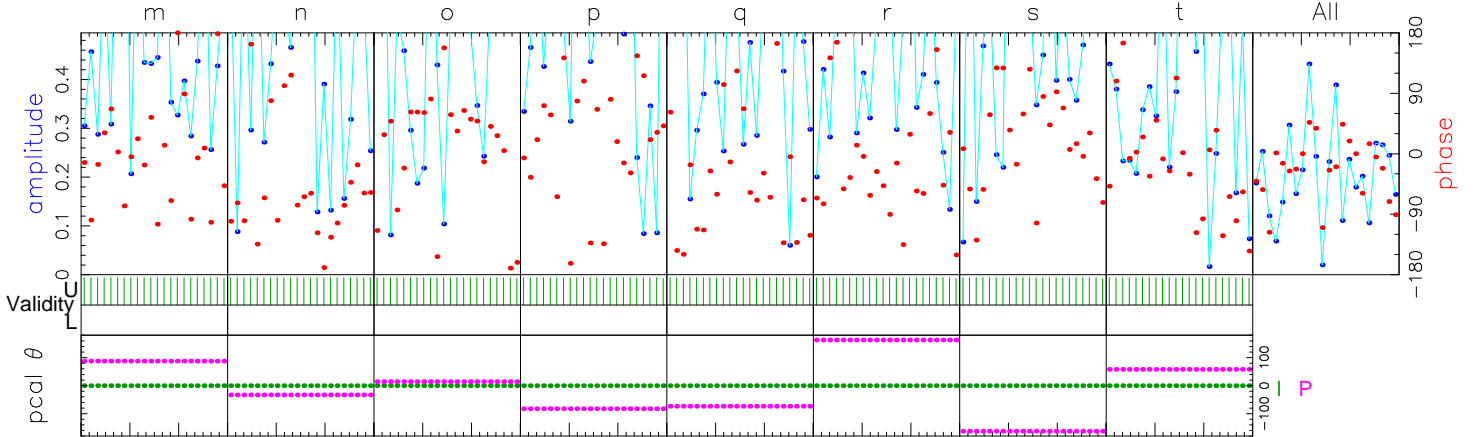
aux01

2013+370.3MP1N1, No0280, IP

VLBA_LA - PICOVEL, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All					
	-14.4	-86.9	40.7	40.5	-89.2	-42.2	23.5	-34.0	Phase	-15.4					
	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2					
	251.2	253.8	134.0	251.9	240.8	251.7	252.9	249.5	Sbd box	252.6					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used						
I	0	0	0	0	0	0	0	0	PC freqs						
P	0	0	0	0	0	0	0	0	PC freqs						
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
I:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	ManI PC						
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
P	1000	1000	1000	1000	1000	1000	1000	1000							
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids						
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks						
									Chan ids						
									Tracks						
Group delay (usec) (SBD)	-1.03503374181E+04								Apriori delay (usec)	-1.03503216148E+04	Resid mbdelay (usec)	-1.78356E-04	+/-	1.8E-04	
Sband delay (usec)	-1.03503387503E+04								Apriori clock (usec)	-7.4075031E+00	Resid sbdelay (usec)	-1.71355E-02	+/-	1.4E-03	
Phase delay (usec)	-1.03503216153E+04								Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-4.96686E-07	+/-	6.1E-07	
Delay rate (us/s)	1.37045225178E+00								Apriori rate (us/s)	1.37045147492E+00	Resid rate (us/s)	7.76864E-07	+/-	5.9E-09	
Total phase (deg)		-338.4							Apriori accel (us/s/s)	5.37540135001E-05	Resid phase (deg)	-15.4	+/-	18.9	
	RMS	Theor.	Amplitude	0.165 +/- 0.027					PCal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	45.4	44.4	Search (1024X32)	0.159					PCal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	62.8	77.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	56.9	26.8	Inc. seg. avg.	0.160					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	51.6	46.8	Inc. frq. avg.	0.215					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00	
I: az 62.2 el 27.5 pa -64.5			P: az 277.4 el 72.2 pa 83.5						u,v (fr/asec) -9817.204 3145.448						simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0280/IP..3MP1N1						Output file: /Exps/c241c/v2/3mm/1234/No0280/IP.W.263.3MP1N1						

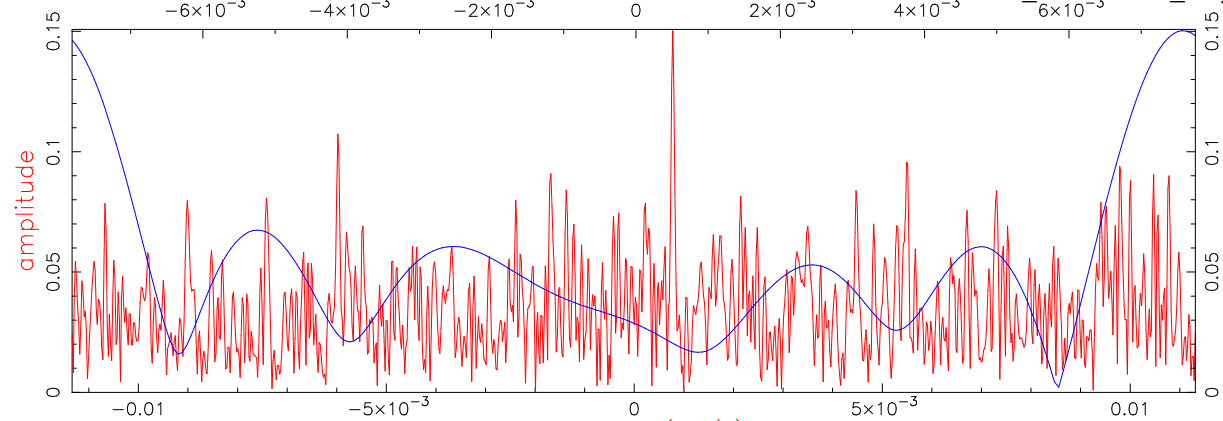
Mk4/DiFX fourfit 3.25 rev 0

aux01

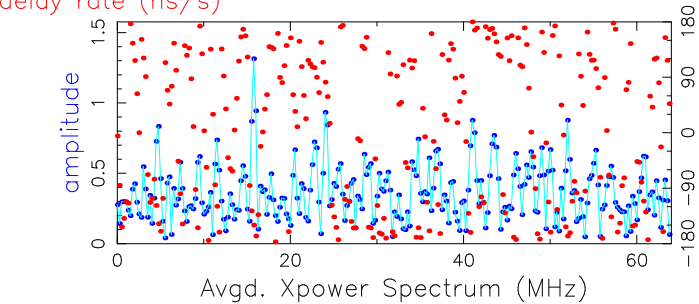
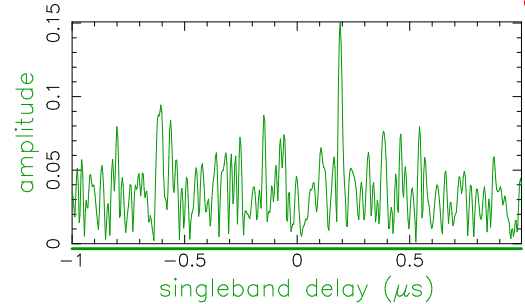
2013+370.3MP1N1, No0280, lp

VLBA_LA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

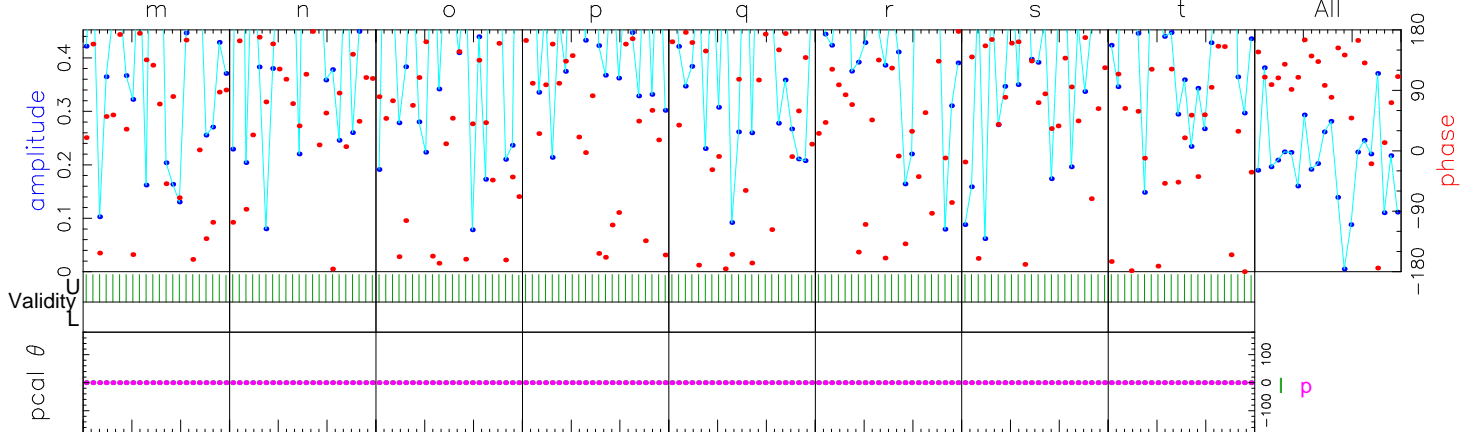


Fringe quality 0
 SNR 5.5
 Int time 179.990
 Amp 0.151
 Phase 119.0
 PFD 9.8e-01
 Delays (us)
 SBD 0.190777
 MBD 0.007551
 Fringe rate (Hz) 0.066617
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105054
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s
 +37°10'59.514736"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	0	0	0	0	0	0	0	0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec) (SBD)	6.65510721659E+02								7.55118E-03	+/- 2.0E-04
Sband delay (usec)	6.65506447984E+02								1.90777E-01	+/- 1.6E-03
Phase delay (usec)	6.65315674320E+02								3.83632E-06	+/- 6.7E-07
Delay rate (us/s)	-2.31930976384E-02								7.73359E-07	+/- 6.4E-09
Total phase (deg)			66.9						119.0	+/- 20.7
Apriori delay (usec)					6.65315670484E+02					
Apriori clock (usec)					-1.4016365E+01					
Apriori clockrate (us/s)					-6.1269804E-07					
Apriori rate (us/s)					-2.31938709979E-02					
Apriori accel (us/s/s)					-2.17666134063E-06					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
simultaneous interpolator										

ph/seg (deg) 49.3 48.7 Search (1024X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.4 84.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.8 29.3 Inc. seg. avg. 0.152 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.6 51.2 Inc. frq. avg. 0.142 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 l: az 62.2 el 27.5 pa -64.5 p: az 60.8 el 25.4 pa -65.1 u,v (fr/asec) 165.506 17.175 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/lp..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/lp.W.270.3MP1N1

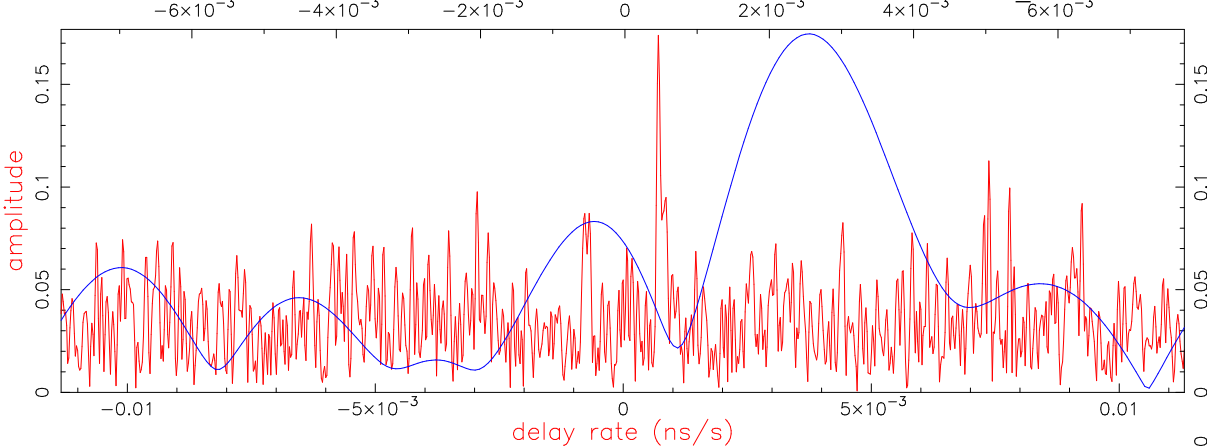
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IP

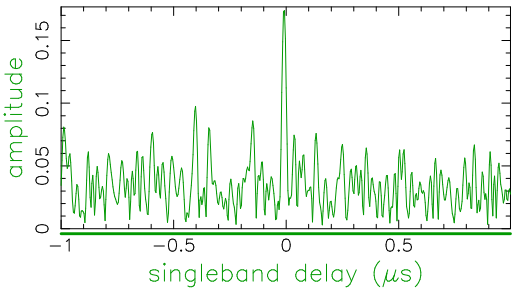
VLBA_LA - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

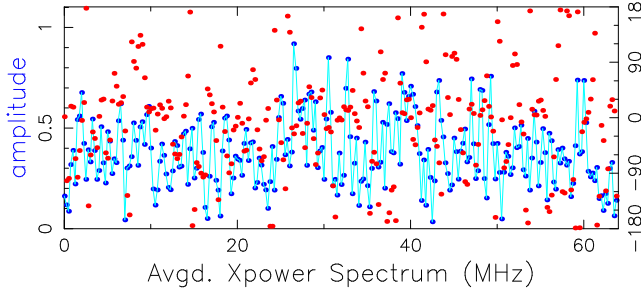


Fringe quality 0

SNR 6.5
 Int time 179.980
 Amp 0.177
 Phase -144.4
 PFD 1.3e-02
 Delays (us)
 SBD -0.009627
 MBD 0.002442
 Fringe rate (Hz)
 0.061127
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

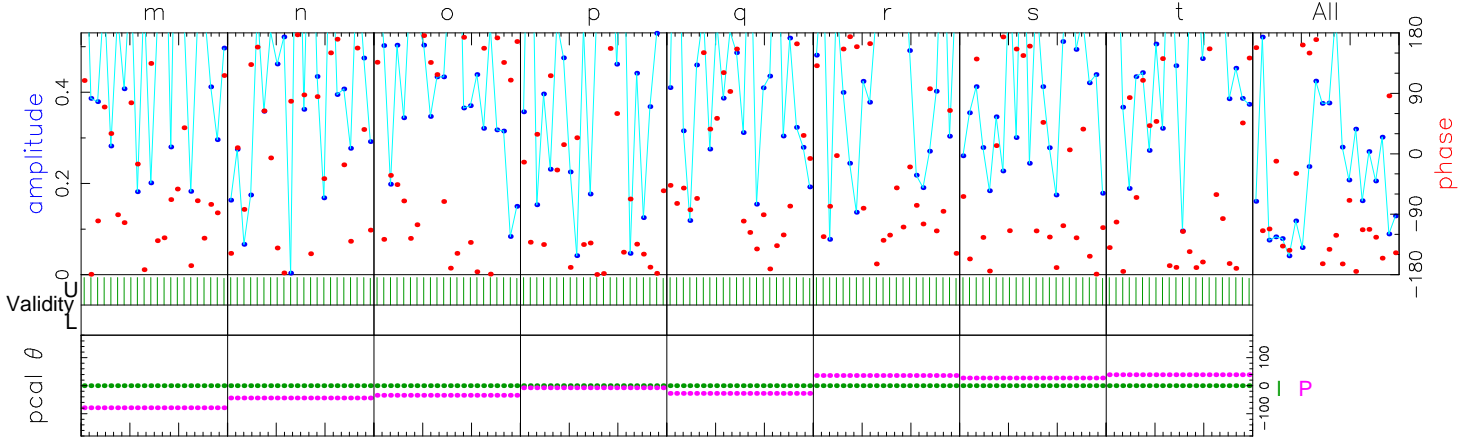


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105055
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.0	166.4	-161.5	-148.3	-112.1	-109.1	-150.2	-157.1	Phase	-144.4
	0.1	0.2	0.3	0.2	0.1	0.3	0.1	0.2	Ampl.	0.2
	54.8	251.6	254.2	273.9	483.9	256.0	448.7	391.5	Sbd box	254.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03503347973E+04	Apriori delay (usec)	-1.03503216148E+04	Resid mbdelay (usec)	2.44246E-03	+/-	1.7E-04
Sband delay (usec)	-1.03503312418E+04	Apriori clock (usec)	-7.4075031E+00	Resid sbdelay (usec)	-9.62700E-03	+/-	1.3E-03
Phase delay (usec)	-1.03503216194E+04	Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-4.65571E-06	+/-	5.7E-07
Delay rate (us/s)	1.37045218454E+00	Apriori rate (us/s)	1.37045147492E+00	Resid rate (us/s)	7.09628E-07	+/-	5.5E-09
Total phase (deg)	-107.3	Apriori accel (us/s/s)	5.37540135001E-05	Resid phase (deg)	-144.4	+/-	17.7

ph/seg (deg)	57.6	Theor.	41.5	Amplitude	0.177 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.8		72.4	Search (1024X32)	0.173	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.3		25.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.9		43.7	Inc. seg. avg.	0.184	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.178	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

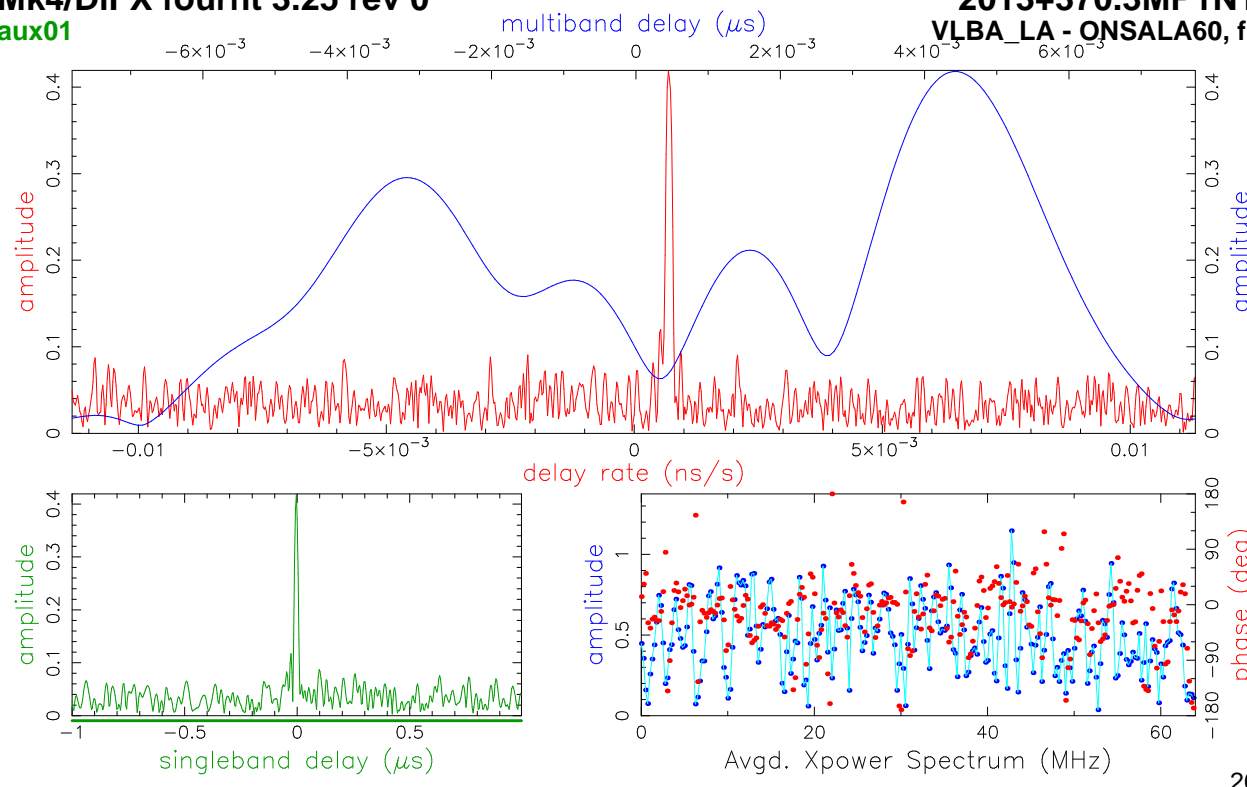
I: az 62.2 el 27.5 pa -64.5 P: az 277.4 el 72.2 pa 83.5 u,v (fr/asec) -9817.204 3145.448 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IP..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IP.W.273.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IX

VLBA_LA - ONSALA60, fgroup W, pol LL

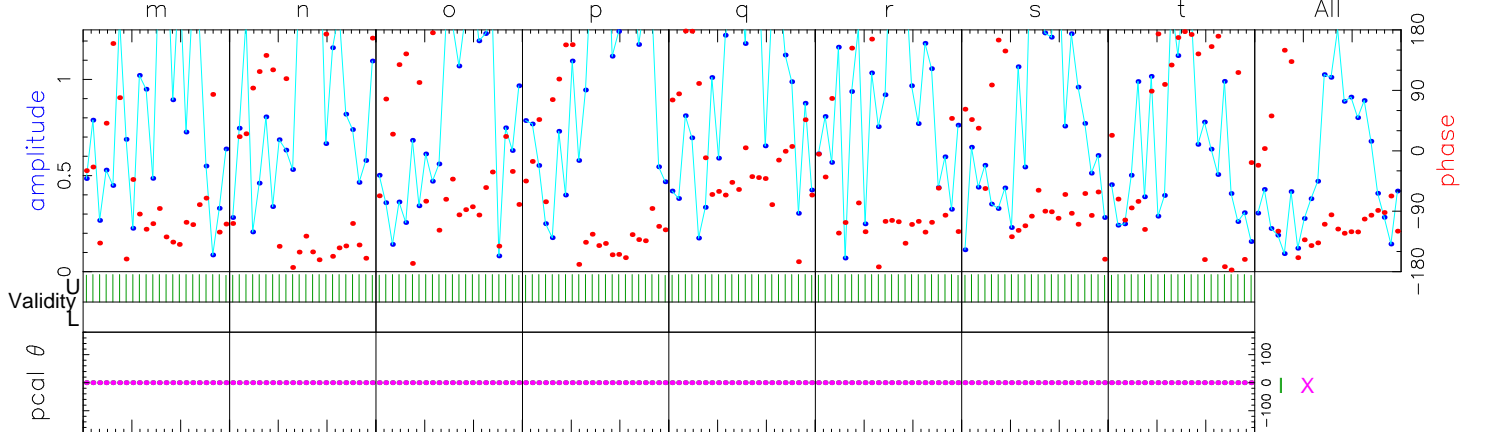


Fringe quality 7

SNR 15.4
 Int time 179.812
 Amp 0.419
 Phase -111.0
 PFD 1.1e-44
 Delays (us)
 SBD -0.004381
 MBD 0.004408
 Fringe rate (Hz)
 0.058710
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105043
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



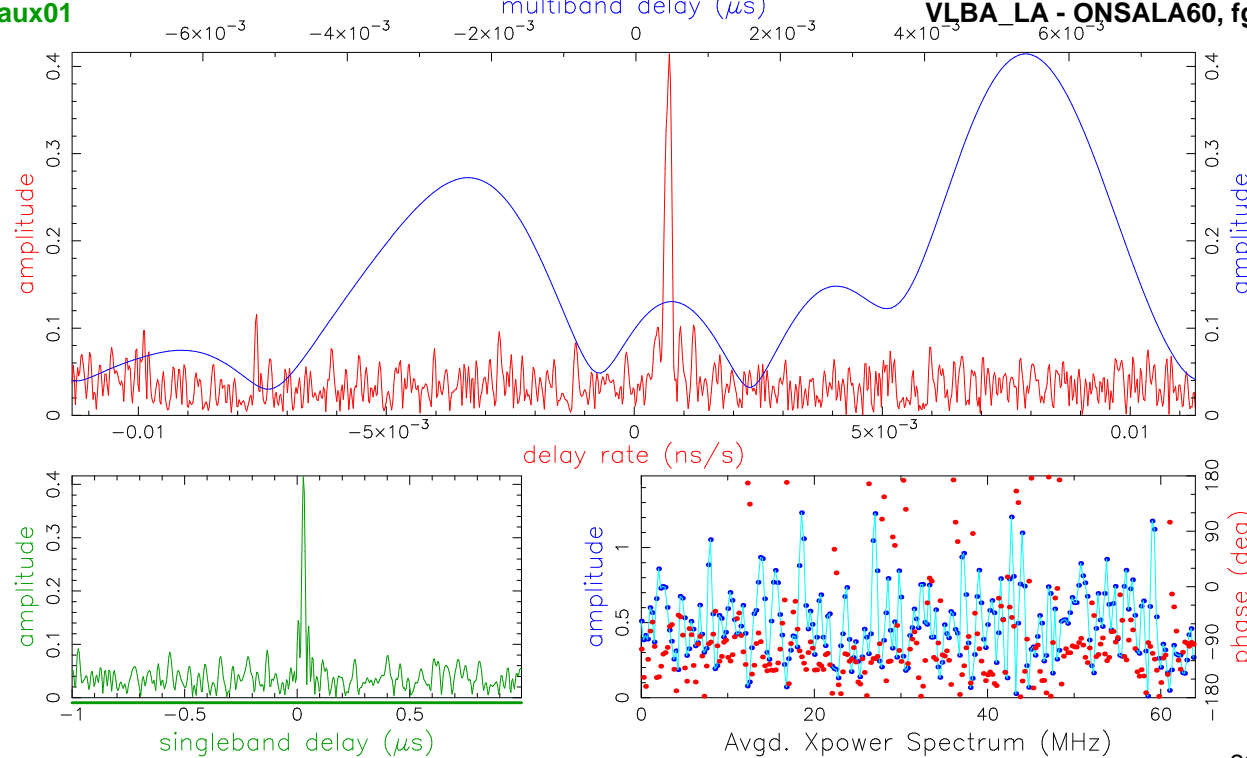
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-107.5	-161.6	-72.8	-136.9	-37.0	-113.5	-88.6	171.1	Phase	-111.0	
	0.5	0.6	0.5	0.7	0.6	0.6	0.6	0.4	Ampl.	0.6	
	255.9	255.9	255.5	255.5	255.1	255.0	254.9	253.7	Sbd box	255.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
I	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-8.26122687432E+03		Apriori delay (usec)		-8.26121565720E+03		Resid mbdelay (usec)		4.40788E-03	+/- 7.1E-05	
Sband delay (usec)	-8.26122003845E+03		Apriori clock (usec)		-1.2120037E+02		Resid sbdelay (usec)		-4.38125E-03	+/- 5.6E-04	
Phase delay (usec)	-8.26121566078E+03		Apriori clockrate (us/s)		-1.4506241E-06		Resid phdelay (usec)		-3.57965E-06	+/- 2.4E-07	
Delay rate (us/s)	1.39985739052E+00		Apriori rate (us/s)		1.39985670895E+00		Resid rate (us/s)		6.81567E-07	+/- 2.3E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.56687012859E-05		Resid phase (deg)		-111.0	+/- 7.5	
	RMS	Theor.	Amplitude	0.419 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	60.0	17.5	Search (1024X32)	0.414		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	84.3	30.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	52.8	10.6	Inc. seg. avg.	0.506		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	41.7	18.4	Inc. frq. avg.	0.558		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
I: az 62.2 el 27.5 pa -64.5		X: az 247.2 el 58.1 pa 38.6		u, v (fr/asec) -10055.121 -221.093						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/IX..3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/IX.W.227.3MP1N1							

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IX

VLBA_LA - ONSALA60, fgroup W, pol RR

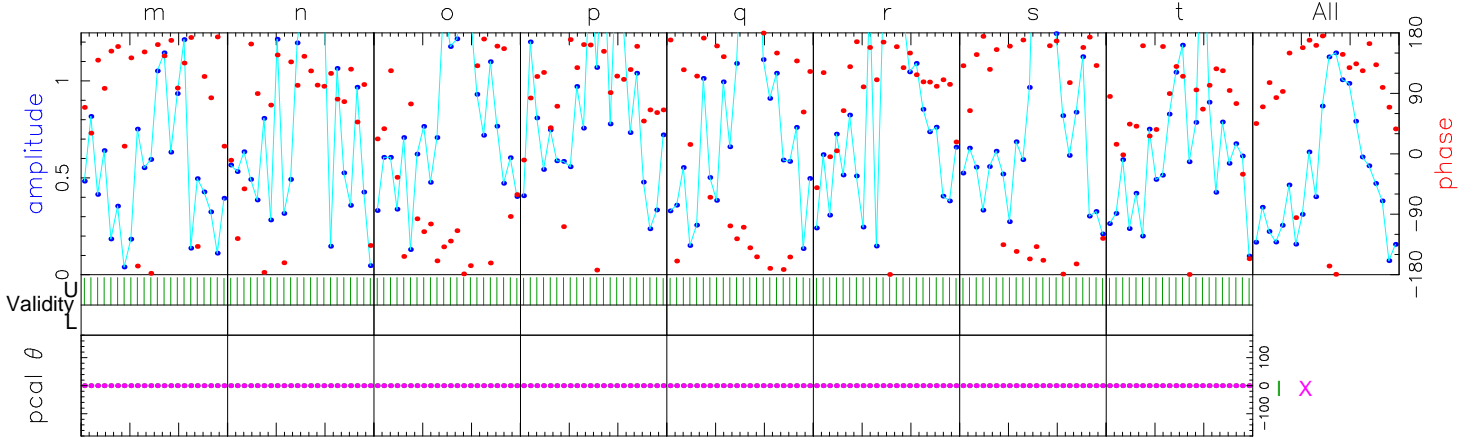


Fringe quality 8

SNR 15.2
 Int time 179.812
 Amp 0.416
 Phase 148.4
 PFD 7.0e-44
 Delays (us)
 SBD 0.027946
 MBD 0.005420
 Fringe rate (Hz) 0.061746
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build 2024:352:054246
 2025:041:105045
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	-8.26119461252E+03	Apriori delay (usec)	-8.26121565720E+03	Resid mbdelay (usec)	5.41968E-03	+/-	7.1E-05
Sband delay (usec)	-8.26118771095E+03	Apriori clock (usec)	-1.2120037E+02	Resid sbdelay (usec)	2.79463E-02	+/-	5.7E-04
Phase delay (usec)	-8.26121565242E+03	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	4.78654E-06	+/-	2.4E-07
Delay rate (us/s)	1.39985742576E+00	Apriori rate (us/s)	1.39985670895E+00	Resid rate (us/s)	7.16805E-07	+/-	2.3E-09
Total phase (deg)	-107.7	Apriori accel (us/s/s)	2.56687012859E-05	Resid phase (deg)	148.4	+/-	7.5

	RMS	Theor.	Amplitude	0.416 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.9	17.6	Search (1024X32)	0.407	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	83.2	30.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	45.3	10.6	Inc. seg. avg.	0.492	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	33.8	18.6	Inc. frq. avg.	0.519	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite

I: az 62.2 el 27.5 pa -64.5 X: az 247.2 el 58.1 pa 38.6 u,v (fr/asec) -10055.121 -221.093 simultaneous interpolator

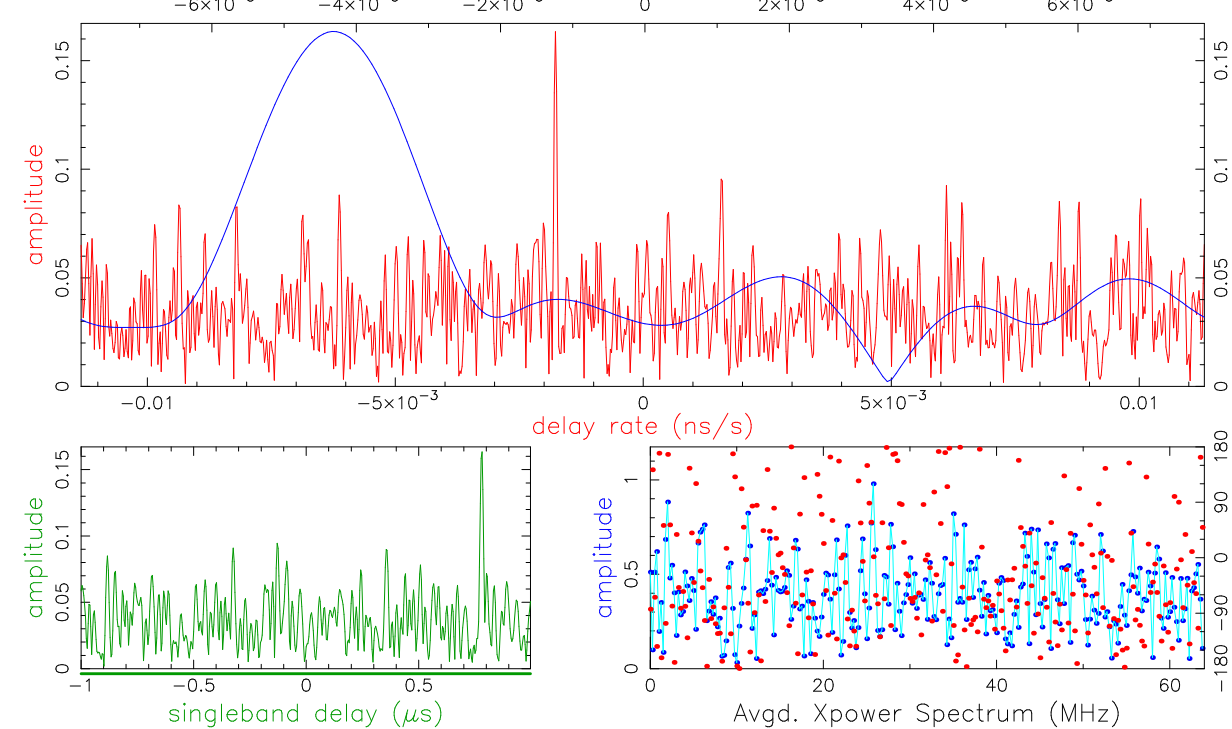
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IX..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IX.W.233.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

aux01

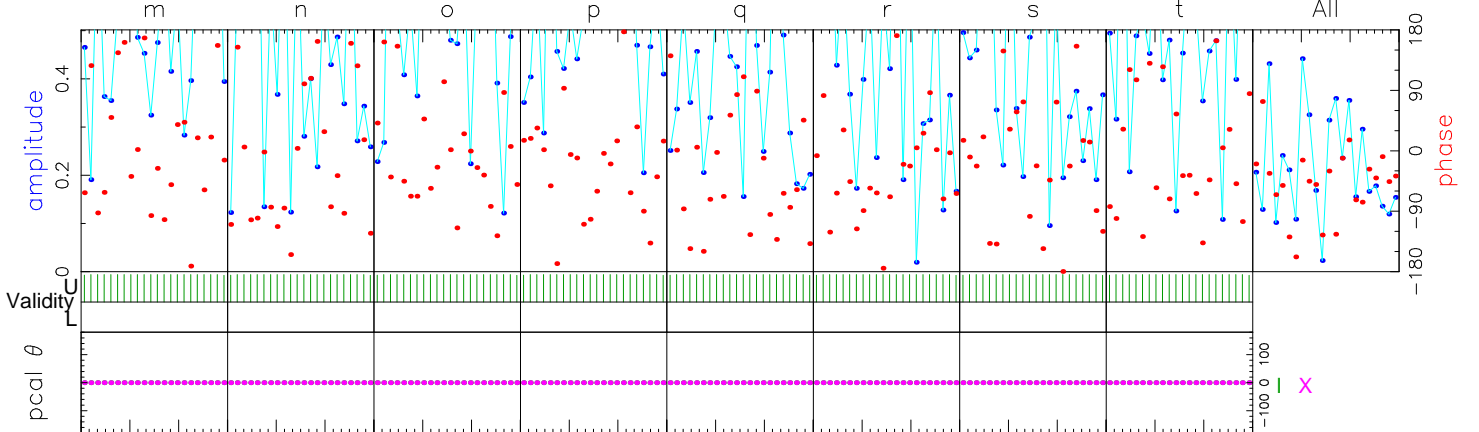
2013+370.3MP1N1, No0280, IX

VLBA_LA - ONSALA60, fgroup W, pol LR



Fringe quality 0
 SNR 6.1
 Int time 179.812
 Amp 0.167
 Phase -41.7
 PFD 1.6e-01
 Delays (us)
 SBD 0.779877
 MBD -0.004360
 Fringe rate (Hz)
 -0.153682
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105048
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-38.8	-82.1	-30.8	-29.4	-77.8	-39.6	-20.2	-42.8	Phase	-41.7	
	0.2	0.1	0.3	0.3	0.1	0.2	0.1	0.1	Ampl.	0.2	
	483.3	323.3	456.7	456.5	375.7	16.0	62.2	369.6	Sbd box	456.6	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
I	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-8.26043876673E+03		Apriori delay (usec)		-8.26121565720E+03		Resid mbdelay (usec)		-4.35952E-03	+/- 1.8E-04	
Sband delay (usec)	-8.26043578045E+03		Apriori clock (usec)		-1.2120037E+02		Resid sbdelay (usec)		7.79877E-01	+/- 1.4E-03	
Phase delay (usec)	-8.26121565855E+03		Apriori clockrate (us/s)		-1.4506241E-06		Resid phdelay (usec)		-1.34400E-06	+/- 6.1E-07	
Delay rate (us/s)	1.39985492486E+00		Apriori rate (us/s)		1.39985670895E+00		Resid rate (us/s)		-1.78409E-06	+/- 5.9E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.56687012859E-05		Resid phase (deg)		-41.7	+/- 18.9	
	RMS	Theor.	Amplitude	0.167 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	51.4	44.3	Search (1024X32)	0.155		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	74.3	77.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	24.8	26.7	Inc. seg. avg.	0.172		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	45.9	46.6	Inc. frq. avg.	0.158		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
I: az 62.2 el 27.5 pa -64.5		X: az 247.2 el 58.1 pa 38.6		u, v (fr/asec)		-10055.121 -221.093		simultaneous interpolator			
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0280/IX..3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/IX.W.244.3MP1N1							

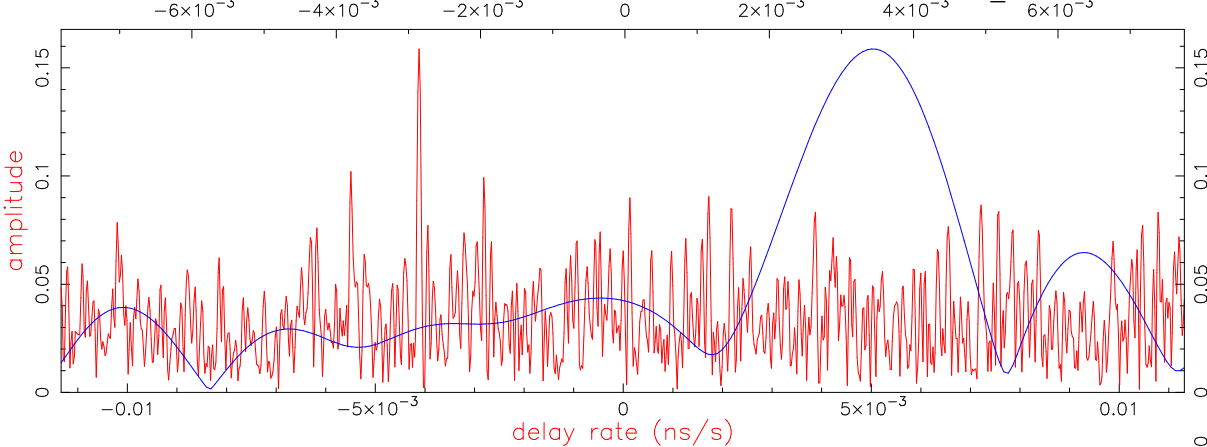
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IX

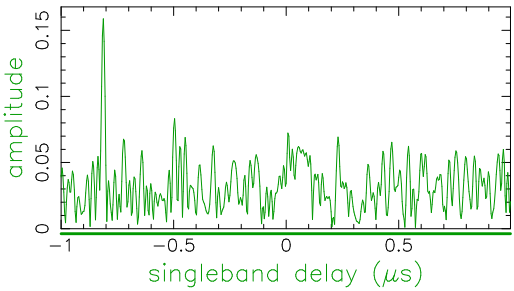
VLBA_LA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

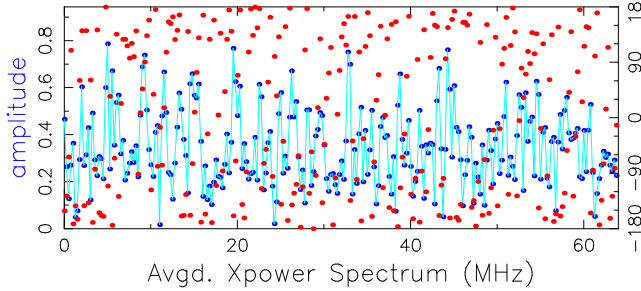


Fringe quality 0

SNR 5.8
 Int time 179.812
 Amp 0.168
 Phase 136.1
 PFD 5.2e-01
 Delays (us)
 SBD -0.812765
 MBD 0.003432
 Fringe rate (Hz)
 -0.355056
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

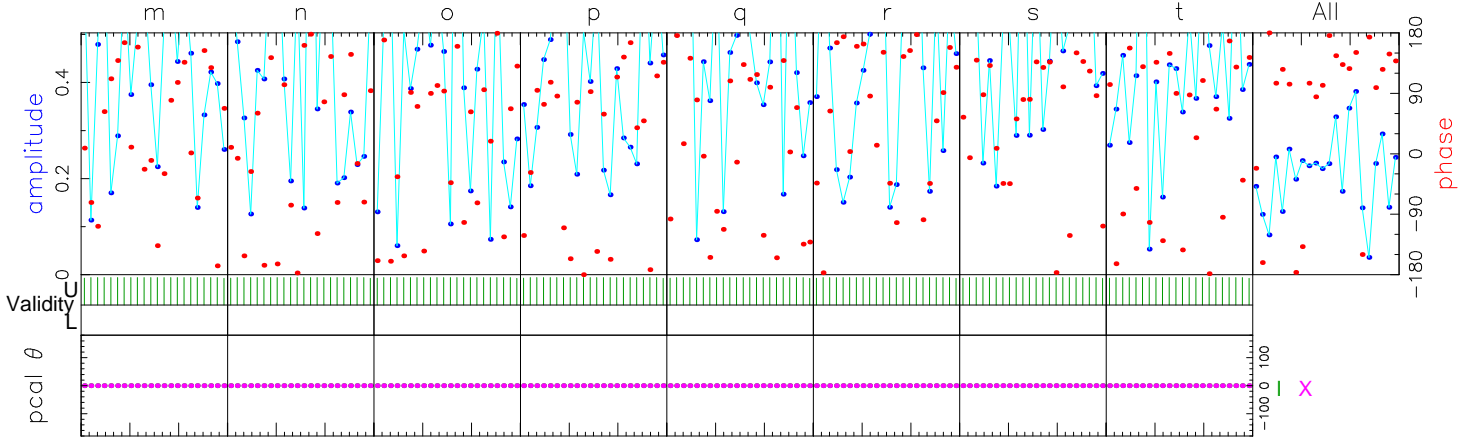


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105052
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	83.2	149.1	153.5	128.5	169.9	144.2	114.2	139.9	Phase	136.1
	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	119.6	284.6	11.9	277.0	41.5	159.5	140.7	399.2	Sbd box	48.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-8.26202472488E+03	Apriori delay (usec)	-8.26121565720E+03	Resid mbdelay (usec)	3.43233E-03	+/-	1.9E-04
Sband delay (usec)	-8.26202842220E+03	Apriori clock (usec)	-1.2120037E+02	Resid sbdelay (usec)	-8.12765E-01	+/-	1.5E-03
Phase delay (usec)	-8.26121565282E+03	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	4.38931E-06	+/-	6.3E-07
Delay rate (us/s)	1.39985258710E+00	Apriori rate (us/s)	1.39985670895E+00	Resid rate (us/s)	-4.12185E-06	+/-	6.1E-09
Total phase (deg)	-120.1	Apriori accel (us/s/s)	2.56687012859E-05	Resid phase (deg)	136.1	+/-	19.7

ph/seg (deg)	RMS 51.0	Theor. 46.1	Amplitude Search (1024X32)	0.168 +/- 0.029	0.156	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	62.1	80.5	Interp.	0.000	0.170	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	28.9	27.8	Inc. seg. avg.	0.170	0.160	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	30.0	48.6	Inc. frq. avg.	0.160		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

I: az 62.2 el 27.5 pa -64.5 X: az 247.2 el 58.1 pa 38.6 u, v (fr/asec) -10055.121 -221.093 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IX..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IX.W.258.3MP1N1

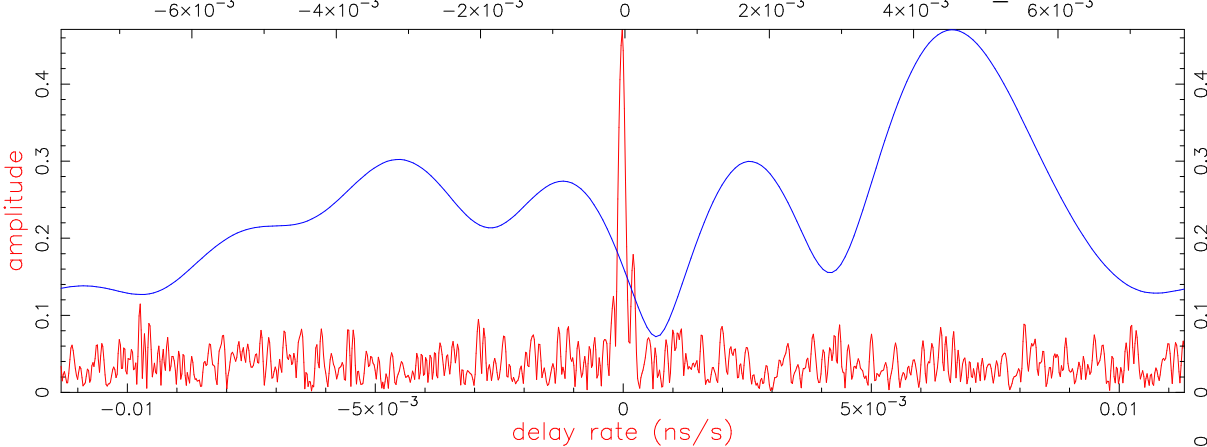
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IY

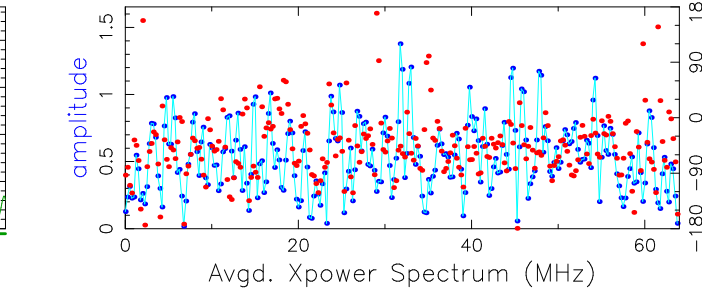
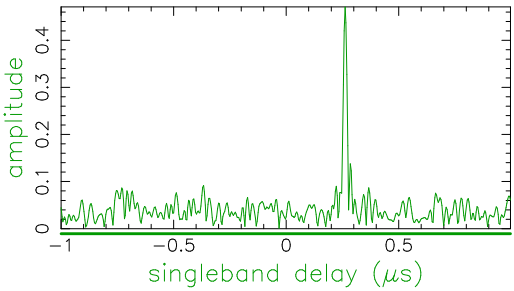
VLBA_LA - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



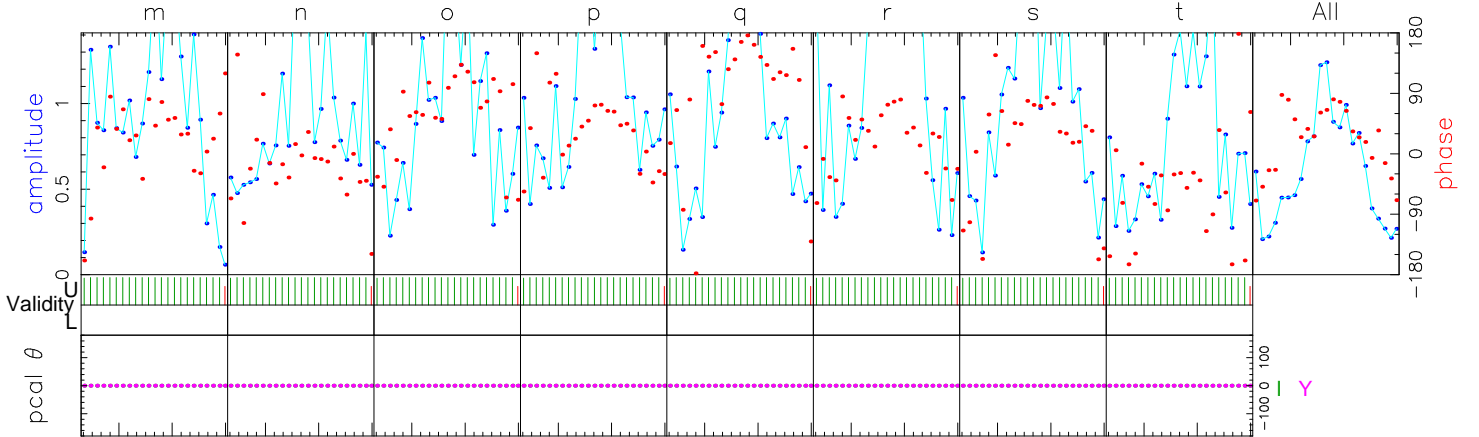
Fringe quality 7

SNR 16.4
 Int time 162.316
 Amp 0.471
 Phase 40.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.262155
 MBD 0.004536
 Fringe rate (Hz)
 -0.001183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080017.41
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105118
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



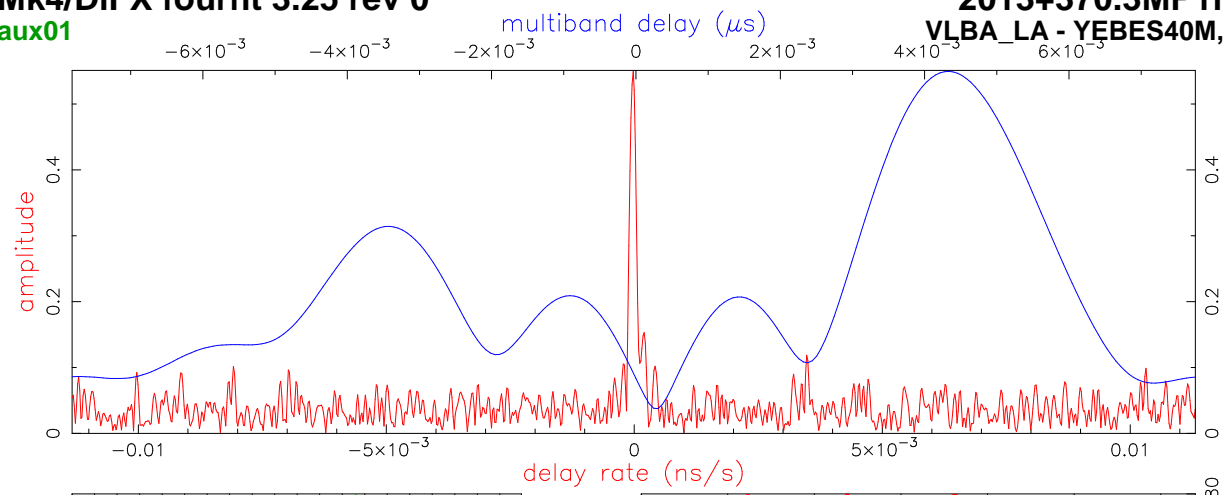
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
I	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.02226934240E+04	Apriori delay (usec)	-1.02229479605E+04	Resid mbdelay (usec)	4.53649E-03	+/-	6.6E-05
Sband delay (usec)	-1.02226858058E+04	Apriori clock (usec)	1.0233904E+02	Resid sbdelay (usec)	2.62155E-01	+/-	5.2E-04
Phase delay (usec)	-1.02229479592E+04	Apriori clockrate (us/s)	1.2217679E-02	Resid phdelay (usec)	1.30974E-06	+/-	2.3E-07
Delay rate (us/s)	1.35692768930E+00	Apriori rate (us/s)	1.35692770303E+00	Resid rate (us/s)	-1.37290E-08	+/-	2.4E-09
Total phase (deg)	-74.7	Apriori accel (us/s/s)	5.04599810678E-05	Resid phase (deg)	40.6	+/-	7.0

ph/seg (deg)	RMS 50.3	Theor. 16.7	Amplitude Search (1024X32)	0.471 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.3	29.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	65.2	9.9	Inc. seg. avg.	0.578	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.1	17.2	Inc. frq. avg.	0.698	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 62.2 el 27.5 pa -64.5 Y: az 266.8 el 72.1 pa 72.3 u,v (fr/asec) -9723.316 2617.614 simultaneous interpolator

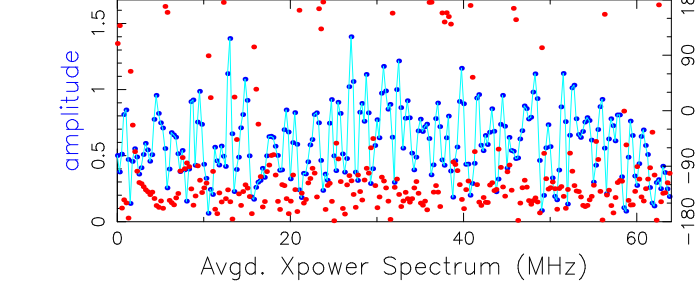
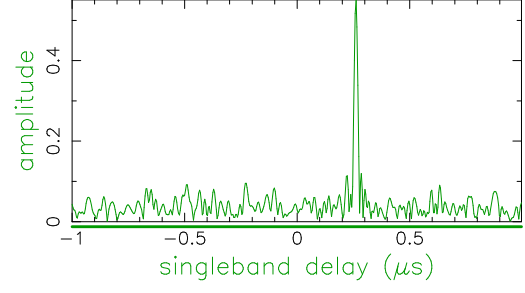
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IY...3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IY.W.373.3MP1N1



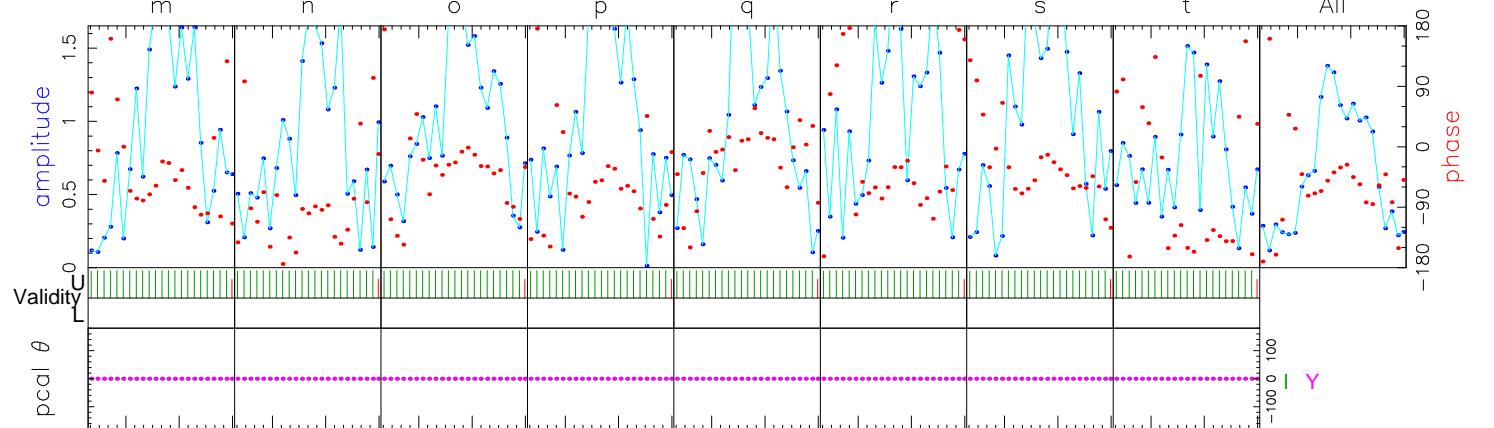
Fringe quality 8

SNR 19.2
Int time 162.316
Amp 0.551
Phase -57.1
PFD 0.0e+00
Delays (us)
SBD 0.261033
MBD 0.004312
Fringe rate (Hz)
-0.001788
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080017.41
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105120
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-56.6	-107.0	-30.3	-66.5	-4.8	-72.4	-42.0	-158.2	Phase	-57.1		
	0.7	0.7	0.8	0.8	0.7	0.6	0.9	0.4	Ampl.	0.7		
	324.2	323.2	323.7	323.7	323.1	322.8	323.4	321.5	Sbd box	323.8		
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used			
I	0	0	0	0	0	0	0	0	PC freqs			
Y	0	0	0	0	0	0	0	0	PC freqs			
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC			
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
Y	1000	1000	1000	1000	1000	1000	1000	1000				
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	-1.02226936487E+04		Apriori delay (usec)		-1.02229479605E+04		Resid mbdelay (usec)		4.31180E-03	+/- 5.7E-05		
Sband delay (usec)	-1.02226869278E+04		Apriori clock (usec)		1.0233904E+02		Resid sbdelay (usec)		2.61033E-01	+/- 4.5E-04		
Phase delay (usec)	-1.02229479624E+04		Apriori clockrate (us/s)		1.2217679E-02		Resid phdelay (usec)		-1.84103E-06	+/- 1.9E-07		
Delay rate (us/s)	1.35692768228E+00		Apriori rate (us/s)		1.35692770303E+00		Resid rate (us/s)		-2.07537E-08	+/- 2.0E-09		
Total phase (deg)			Apriori accel (us/s/s)		5.04599810678E-05		Resid phase (deg)		-57.1	+/- 6.0		
	RMS	Theor.	Amplitude	0.551 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	58.8	14.3	Search (1024X32)	0.549		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	76.5	25.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	52.8	8.4	Inc. seg. avg.	0.640		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	35.9	14.7	Inc. frq. avg.	0.682		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
I: az 62.2 el 27.5 pa -64.5	Y: az 266.8 el 72.1 pa 72.3		u, v (fr/asec) -9723.316 2617.614						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0280/IY...3MP1N1		Output file: /Exps/c241c/v2/3mm/1234/No0280/IY.W.383.3MP1N1									

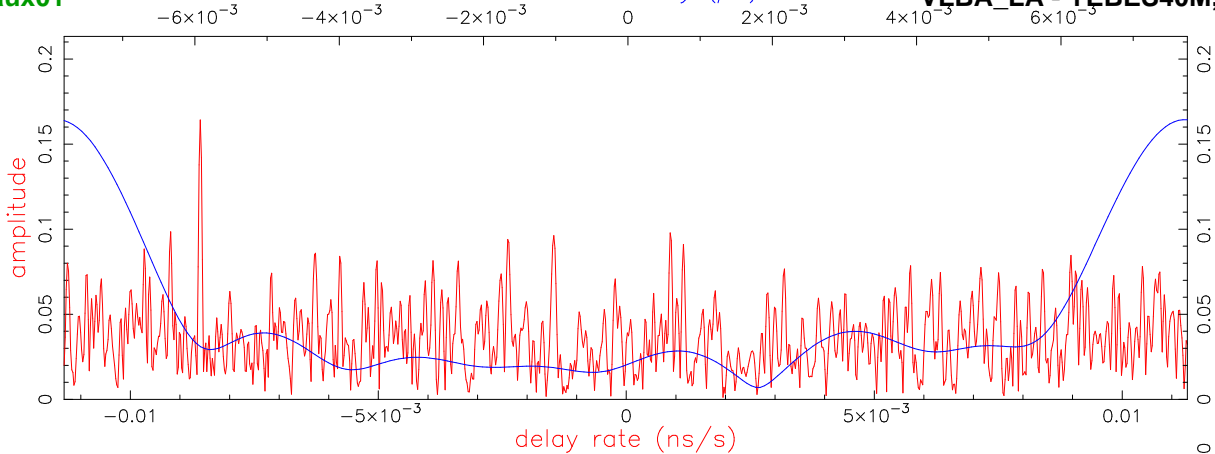
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IY

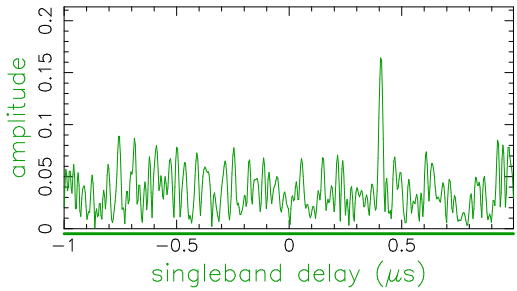
VLBA_LA - YEBES40M, fgroup W, pol LR

multiband delay (μ s)

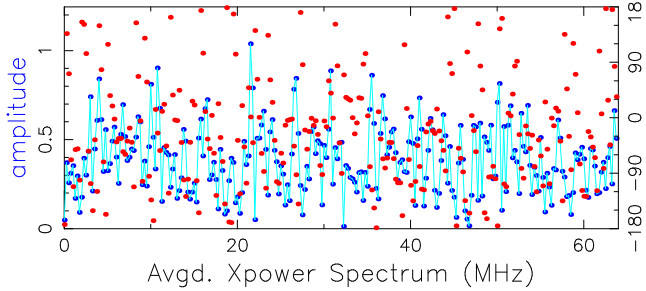


Fringe quality 0

SNR 5.8
 Int time 162.316
 Amp 0.213
 Phase 61.6
 PFD 5.8e-01
 Delays (us)
 SBD 0.407854
 MBD -0.007857
 Fringe rate (Hz)
 -0.740304
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

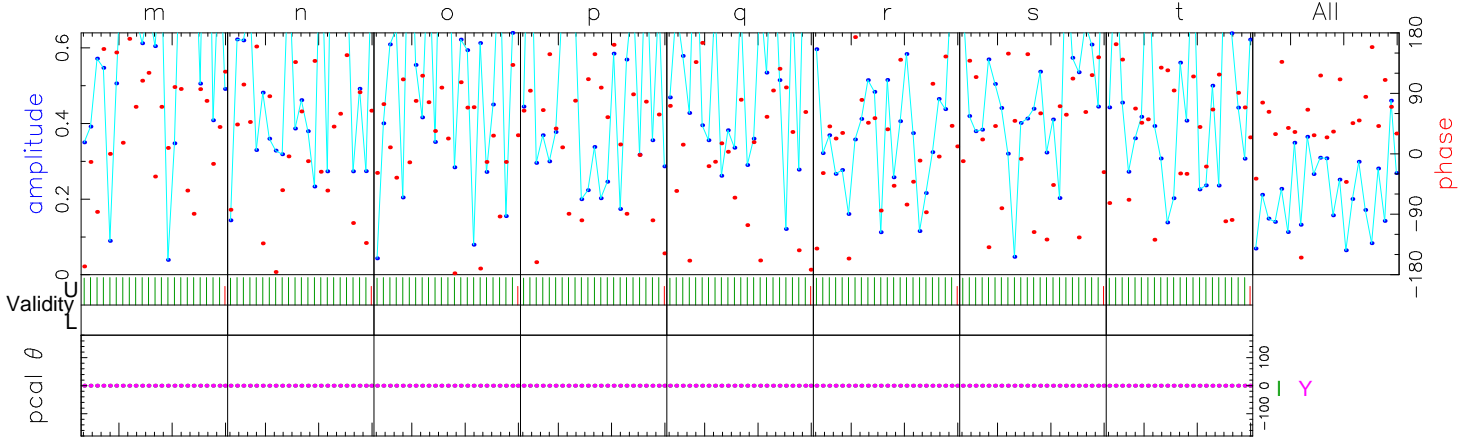


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080017.41
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105125
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
I	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.02225339430E+04	Apriori delay (usec)	-1.02229479605E+04	Resid mbdelay (usec)	-7.85750E-03	+/-	1.9E-04
Sband delay (usec)	-1.02225401063E+04	Apriori clock (usec)	1.0233904E+02	Resid sbdelay (usec)	4.07854E-01	+/-	1.5E-03
Phase delay (usec)	-1.02229479585E+04	Apriori clockrate (us/s)	1.2217679E-02	Resid phdelay (usec)	1.98718E-06	+/-	6.4E-07
Delay rate (us/s)	1.35691910884E+00	Apriori rate (us/s)	1.35692770303E+00	Resid rate (us/s)	-8.59419E-06	+/-	6.8E-09
Total phase (deg)		Apriori accel (us/s/s)	5.04599810678E-05	Resid phase (deg)	61.6	+/-	19.8

ph/seg (deg)	56.3	Theor.	47.4	Amplitude	0.213 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.5		82.8	Search (1024X32)	0.163	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.5		28.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.4		48.8	Inc. seg. avg.	0.208	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.194	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 62.2 el 27.5 pa -64.5 Y: az 266.8 el 72.1 pa 72.3 u, v (fr/asec) -9723.316 2617.614 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IY..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IY.W.390.3MP1N1

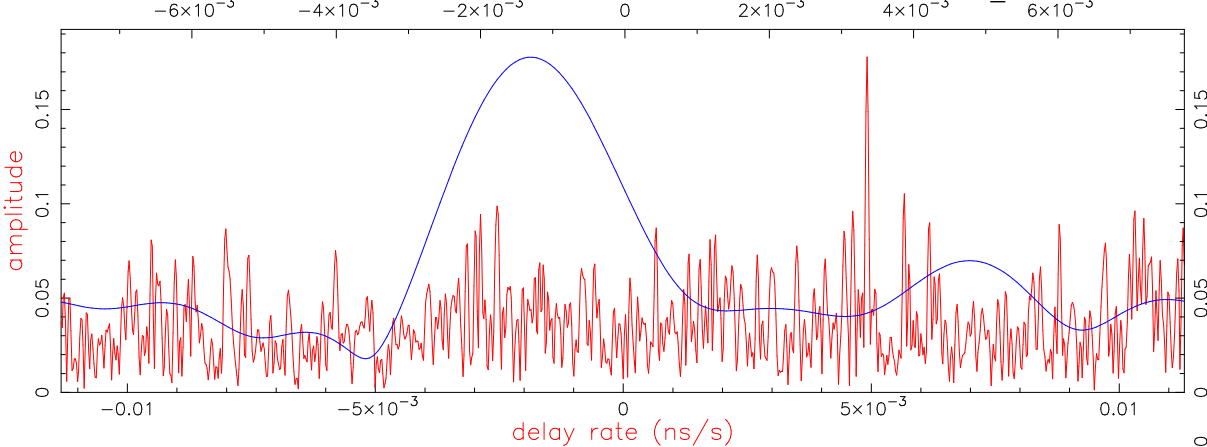
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IY

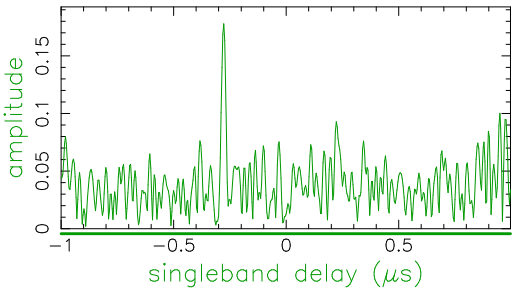
VLBA_LA - YEBES40M, fgroup W, pol RL

multiband delay (μ s)

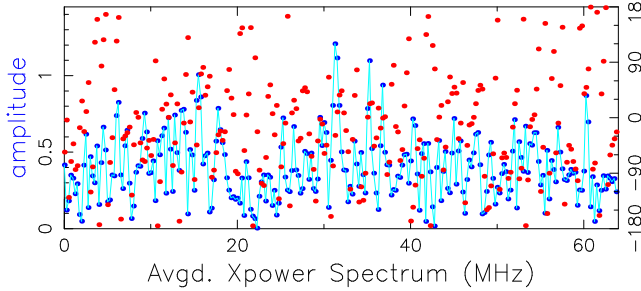


Fringe quality 0

SNR 6.2
Int time 162.316
Amp 0.192
Phase 36.2
PFD 7.4e-02
Delays (us)
SBD -0.277756
MBD -0.001310
Fringe rate (Hz)
0.423903
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

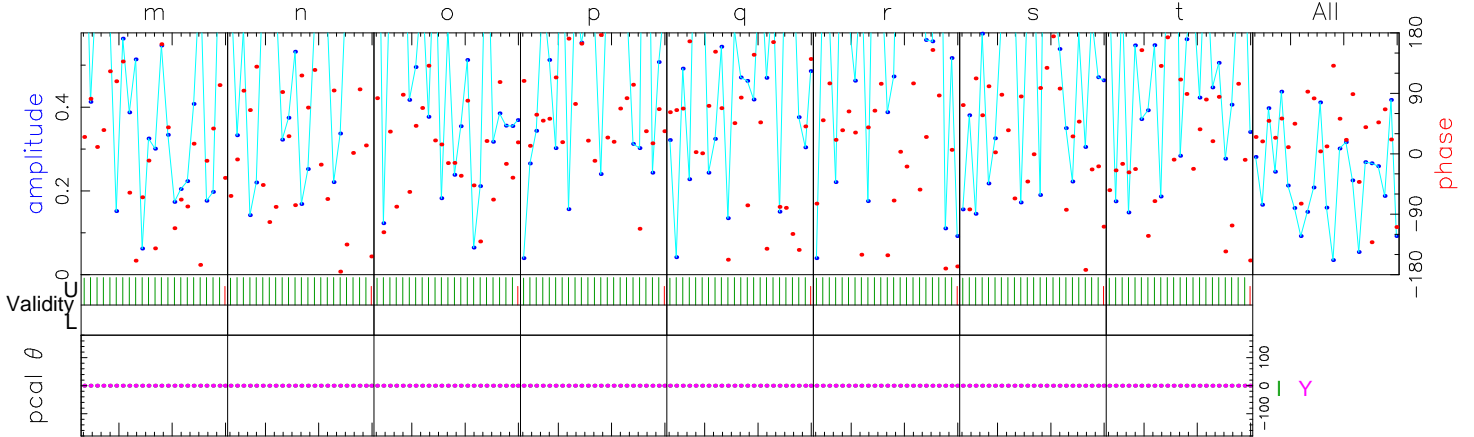


delay rate (ns/s)



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080017.41
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105128
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
I	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.02232305204E+04	Apriori delay (usec)	-1.02229479605E+04	Resid mbdelay (usec)	-1.30989E-03	+/-	1.8E-04
Sband delay (usec)	-1.02232257165E+04	Apriori clock (usec)	1.0233904E+02	Resid sbdelay (usec)	-2.77756E-01	+/-	1.4E-03
Phase delay (usec)	-1.02229479594E+04	Apriori clockrate (us/s)	1.2217679E-02	Resid phdelay (usec)	1.16602E-06	+/-	6.0E-07
Delay rate (us/s)	1.35693262413E+00	Apriori rate (us/s)	1.35692770303E+00	Resid rate (us/s)	4.92110E-06	+/-	6.3E-09
Total phase (deg)	-79.2	Apriori accel (us/s/s)	5.04599810678E-05	Resid phase (deg)	36.2	+/-	18.5

ph/seg (deg)	60.5	Theor.	44.3	Amplitude	0.192 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	70.2	Search (1024X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	30.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	58.2	Inc. seg. avg.	0.195	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.187	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 62.2 el 27.5 pa -64.5 Y: az 266.8 el 72.1 pa 72.3 u,v (fr/asec) -9723.316 2617.614 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IY...3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IY.W.395.3MP1N1

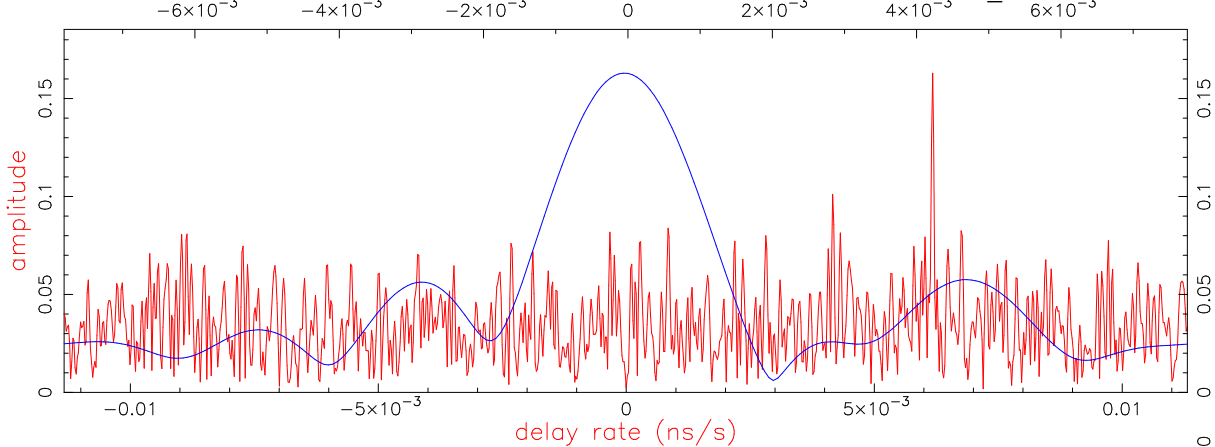
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IZ

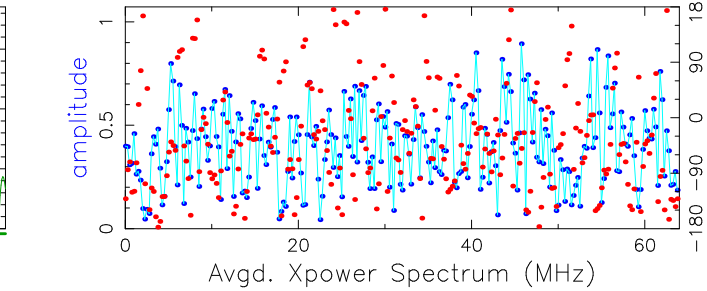
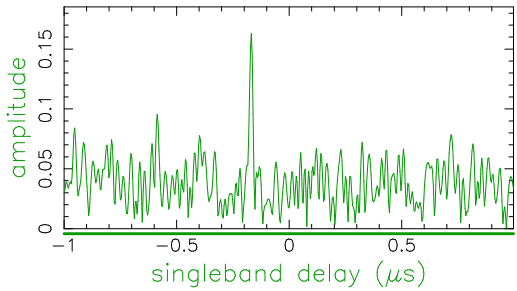
VLBA_LA - METSAHOV, fgroup W, pol LL

multiband delay (μ s)



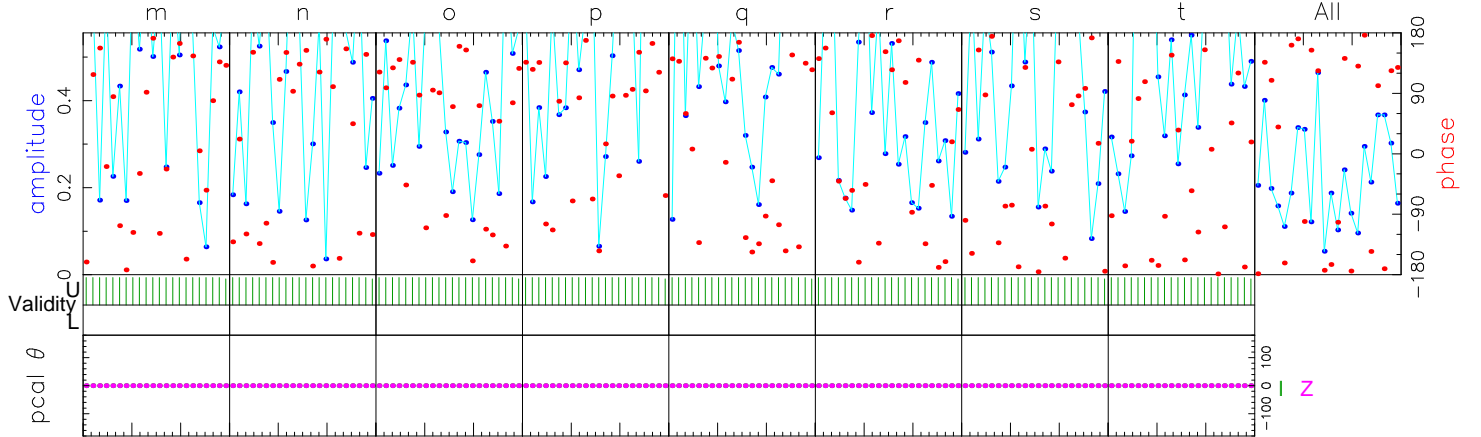
Fringe quality 0

SNR 6.0
 Int time 179.774
 Amp 0.185
 Phase 157.4
 PFD 2.4e-01
 Delays (us)
 SBD -0.168618
 MBD -0.000057
 Fringe rate (Hz)
 0.532961
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105032
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.63600005894E+03	Apriori delay (usec)	-6.63582812730E+03	Resid mbdelay (usec)	-5.66477E-05	+/-	1.8E-04
Sband delay (usec)	-6.63599674505E+03	Apriori clock (usec)	-8.5305023E-07	Resid sbdelay (usec)	-1.68618E-01	+/-	1.4E-03
Phase delay (usec)	-6.63582812222E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	5.07431E-06	+/-	6.2E-07
Delay rate (us/s)	1.46327275147E+00	Apriori rate (us/s)	1.46326656432E+00	Resid rate (us/s)	6.18715E-06	+/-	5.9E-09
Total phase (deg)	-161.4	Apriori accel (us/s/s)	1.58768300766E-05	Resid phase (deg)	157.4	+/-	19.1

ph/seg (deg)	49.8	RMS	44.9	Theor.	49.8	Amplitude	0.185 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	78.8		78.3		78.8	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	19.9		27.0		19.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	30.1		47.2		30.1	Inc. seg. avg.	0.199	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
						Inc. frq. avg.	0.173	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 62.2 el 27.5 pa -64.5 Z: az 257.0 el 51.1 pa 37.4 u,v (fr/asec) -10519.478 -983.448 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IZ._3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IZ.W.203.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

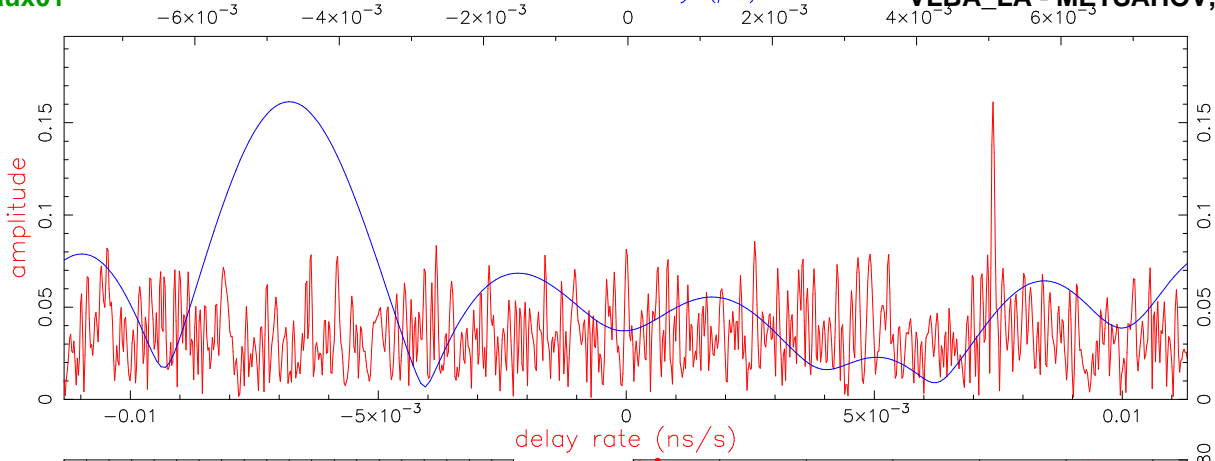
aux01

2013+370.3MP1N1, No0280, IZ

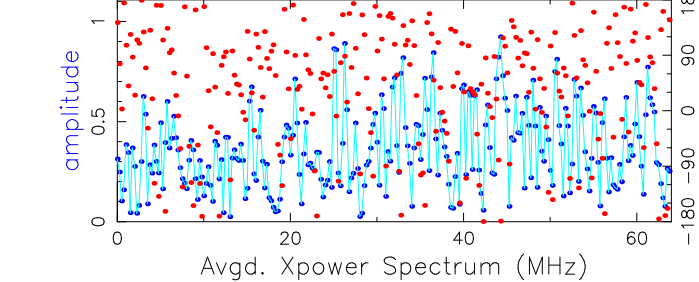
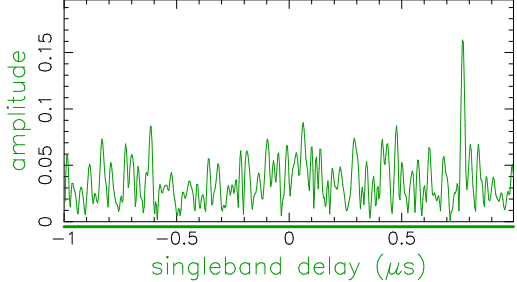
VLBA_LA - METSAHOV, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

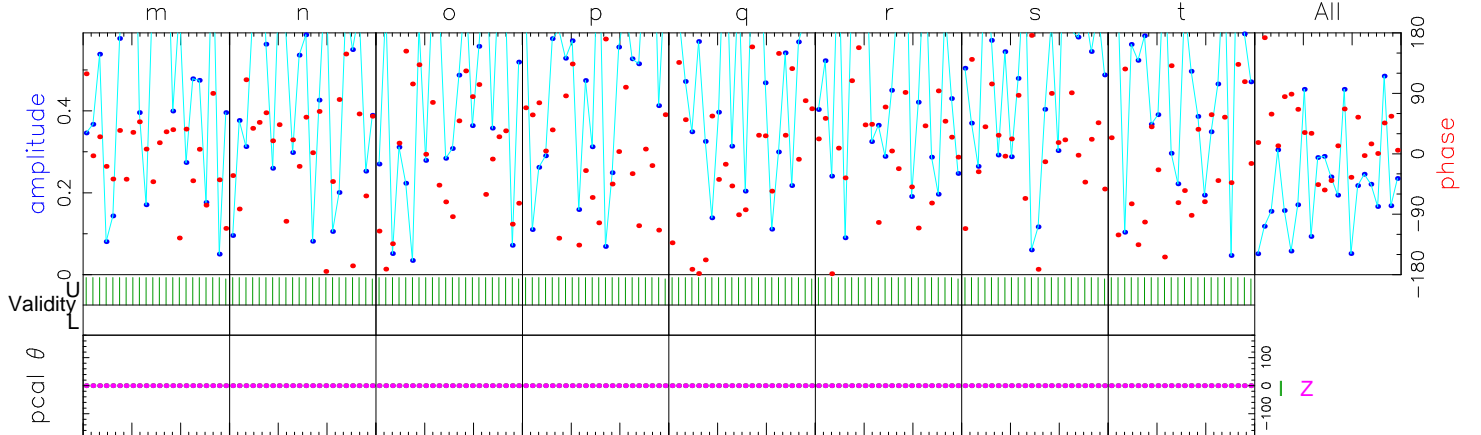


SNR 6.0
 Int time 179.774
 Amp 0.197
 Phase 24.1
 PFD 2.1e-01
 Delays (us)
 SBD 0.771196
 MBD -0.004644
 Fringe rate (Hz)
 0.638363
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105037
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	12.3	52.3	32.6	1.5	40.4	42.5	21.2	-50.7	Phase	24.1
	0.4	0.2	0.1	0.2	0.1	0.3	0.3	0.1	Ampl.	0.2
	454.5	356.9	498.8	179.0	26.6	455.0	453.7	270.3	Sbd box	454.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-6.63505152095E+03	Apriori delay (usec)	-6.63582812730E+03	Resid mbdelay (usec)	-4.64365E-03	+/-	1.8E-04
Sband delay (usec)	-6.63505693130E+03	Apriori clock (usec)	-8.5305023E-07	Resid sbdelay (usec)	7.71196E-01	+/-	1.4E-03
Phase delay (usec)	-6.63582812652E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	7.77907E-07	+/-	6.1E-07
Delay rate (us/s)	1.46327397508E+00	Apriori rate (us/s)	1.46326656432E+00	Resid rate (us/s)	7.41076E-06	+/-	5.9E-09
Total phase (deg)	-294.6	Apriori accel (us/s/s)	1.58768300766E-05	Resid phase (deg)	24.1	+/-	19.1

ph/seg (deg) 51.4 44.7 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.0 78.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.9 26.9 Inc. seg. avg. 0.201 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.0 47.0 Inc. frq. avg. 0.189 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 I: az 62.2 el 27.5 pa -64.5 Z: az 257.0 el 51.1 pa 37.4 u,v (fr/asec) -10519.478 -983.448 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IZ..3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IZ.W.219.3MP1N1

Mk4/DiFX fourfit 3.25 rev 0

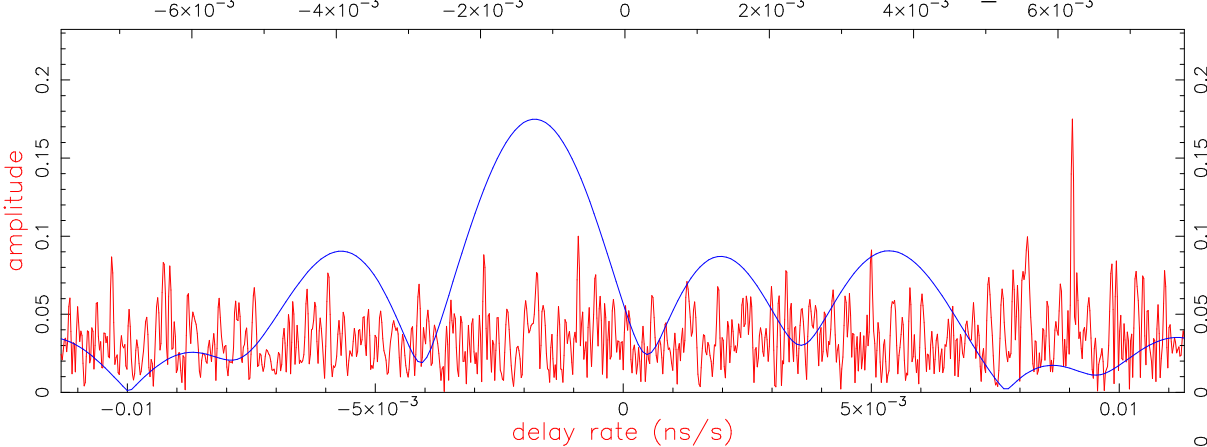
aux01

2013+370.3MP1N1, No0280, IZ

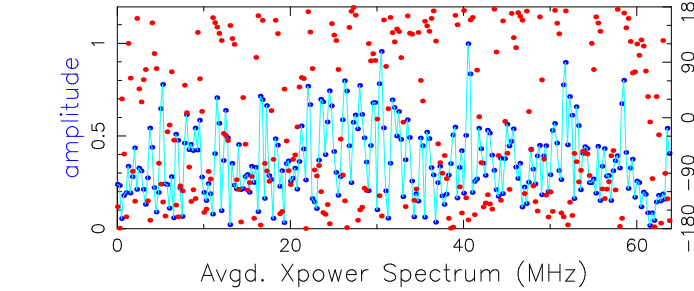
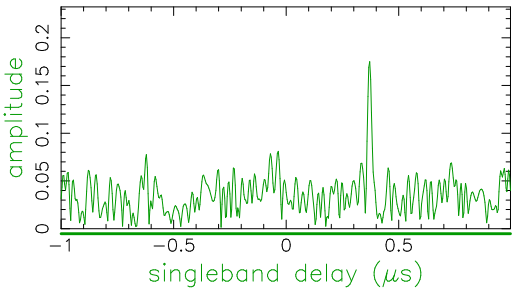
VLBA_LA - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

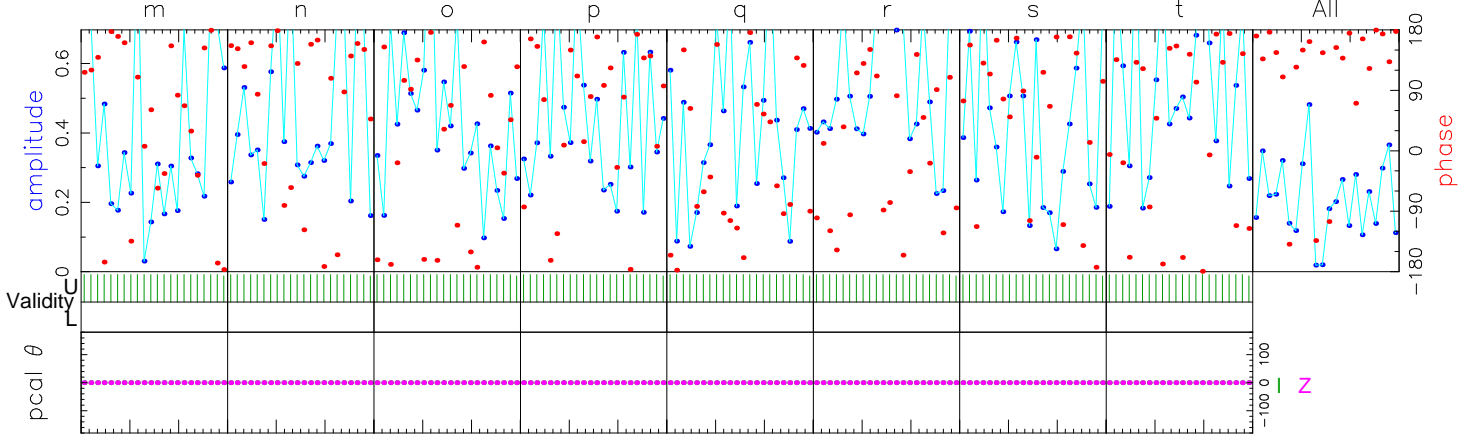


SNR 6.4
 Int time 179.774
 Amp 0.232
 Phase 150.2
 PFD 1.6e-02
 Delays (us)
 SBD 0.370034
 MBD -0.001271
 Fringe rate (Hz)
 0.781306
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 080000.00
 Stop 080300.22
 FRT 080130.00
 Corr/FF/build
 2024:352:054246
 2025:041:105043
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	0	0	0	0	0	0	0	0		
Z	0	0	0	0	0	0	0	0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-6.63545439791E+03	Apriori delay (usec)	-6.63582812730E+03	Resid mbdelay (usec)	-1.27061E-03	+/-	1.7E-04
Sband delay (usec)	-6.63545809330E+03	Apriori clock (usec)	-8.5305023E+00	Resid sbdelay (usec)	3.70034E-01	+/-	1.3E-03
Phase delay (usec)	-6.63582812245E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	4.84482E-06	+/-	5.7E-07
Delay rate (us/s)	1.46327563450E+00	Apriori rate (us/s)	1.46326656432E+00	Resid rate (us/s)	9.07019E-06	+/-	5.5E-09
Total phase (deg)	-168.5	Apriori accel (us/s/s)	1.58768300766E-05	Resid phase (deg)	150.2	+/-	17.8

ph/seg (deg)	40.6	Theor.	41.7	Amplitude	0.232 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.2	Search (1024X32)	0.166	Search	0.166	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.0	Inc. seg. avg.	0.222	Inc. seg. avg.	0.222	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.4	Inc. frq. avg.	0.224	Inc. frq. avg.	0.224	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
I: az 62.2 el 27.5 pa -64.5		Z: az 257.0 el 51.1 pa 37.4		u, v (fr/asec)	-10519.478 -983.448	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0280/IZ._3MP1N1 Output file: /Exps/c241c/v2/3mm/1234/No0280/IZ.W.222.3MP1N1

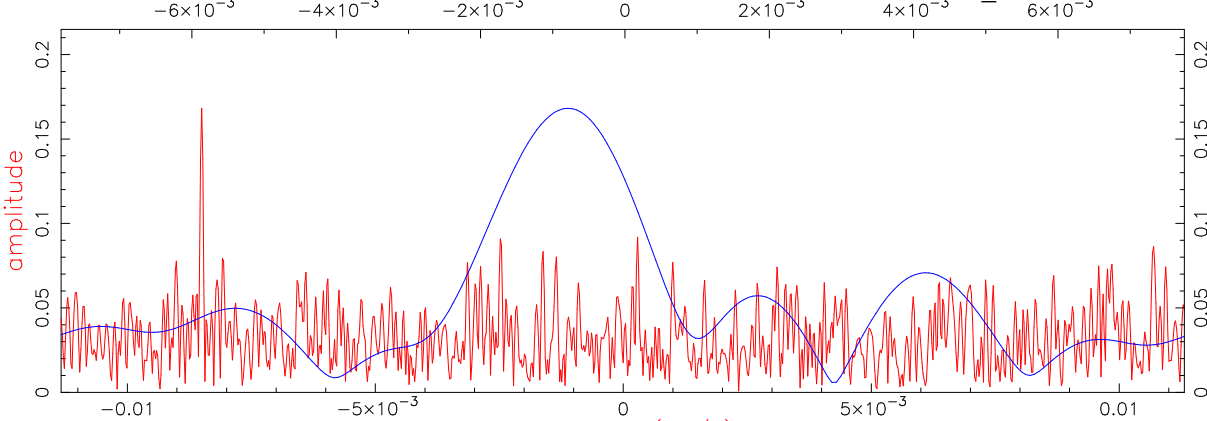
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1N1, No0280, IZ

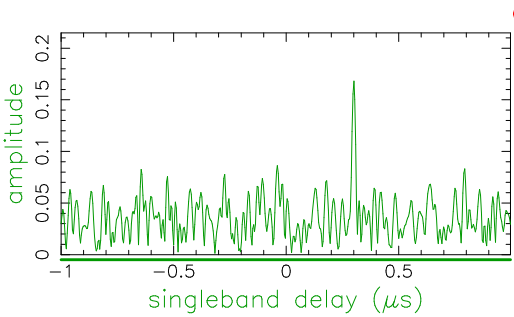
VLBA_LA - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

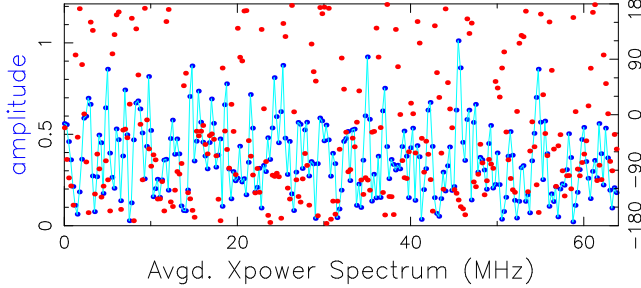


Fringe quality 0

SNR 6.2
Int time 179.774
Amp 0.215
Phase 123.9
PFD 8.7e-02
Delays (us)
SBD 0.300483
MBD -0.000797
Fringe rate (Hz)
-0.734349
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

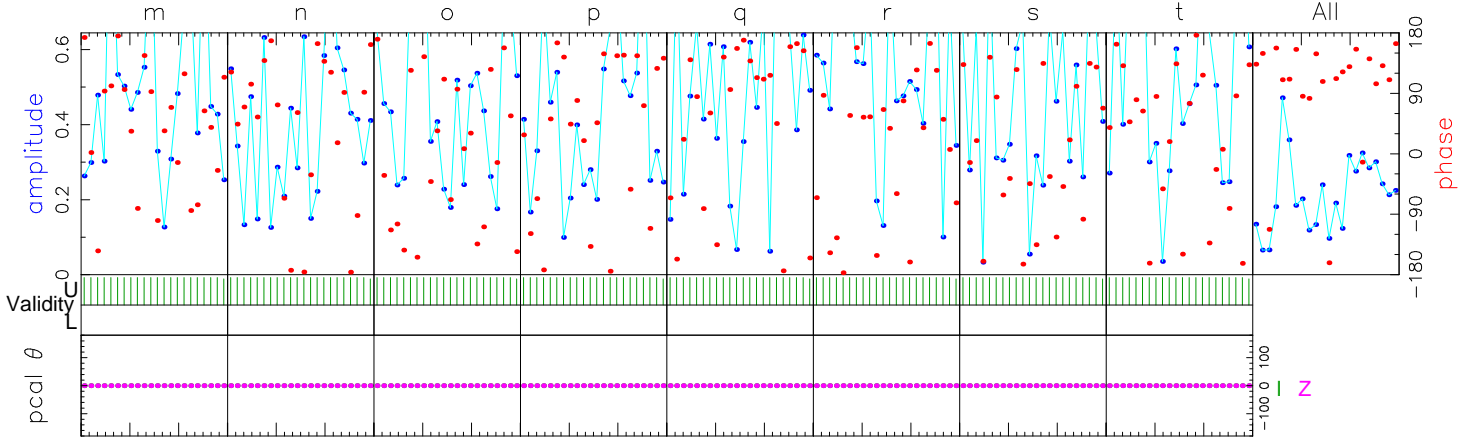


delay rate (ns/s)



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 080000.00
Stop 080300.22
FRT 080130.00
Corr/FF/build
2024:352:054246
2025:041:105045
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	84.8	123.7	162.5	134.8	140.9	105.1	121.5	113.6	Phase	123.9
	0.2	0.3	0.2	0.2	0.3	0.2	0.1	0.3	Ampl.	0.2
	147.6	224.4	357.5	497.8	334.8	407.5	290.4	93.9	Sbd box	333.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.63553204910E+03	Apriori delay (usec)	-6.63582812730E+03	Resid mbdelay (usec)	-7.96803E-04	+/-	1.8E-04
Sband delay (usec)	-6.63552764405E+03	Apriori clock (usec)	-8.5305023E+00	Resid sbdelay (usec)	3.00483E-01	+/-	1.4E-03
Phase delay (usec)	-6.63582812330E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	3.99393E-06	+/-	6.0E-07
Delay rate (us/s)	1.46325803926E+00	Apriori rate (us/s)	1.46326656432E+00	Resid rate (us/s)	-8.52506E-06	+/-	5.8E-09
Total phase (deg)	-194.9	Apriori accel (us/s/s)	1.58768300766E-05	Resid phase (deg)	123.9	+/-	18.6

ph/seg (deg)	47.9	RMS	43.6	Theor.	43.6	Amplitude	0.215 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	65.7	Search (1024X32)	0.167	Search	0.167	Search	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	25.5	Inc. seg. avg.	0.214	Inc. seg. avg.	0.214	Inc. seg. avg.	0.214	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	35.2	Inc. frq. avg.	0.207	Inc. frq. avg.	0.207	Inc. frq. avg.	0.207	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
I: az 62.2 el 27.5 pa -64.5	Z: az 257.0 el 51.1 pa 37.4	u, v (fr/asec)	-10519.478 -983.448	simultaneous interpolator				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0280/IZ..3MP1N1	Output file: /Exps/c241c/v2/3mm/1234/No0280/IZ.W.232.3MP1N1						ion window (TEC) 0.00 0.00	