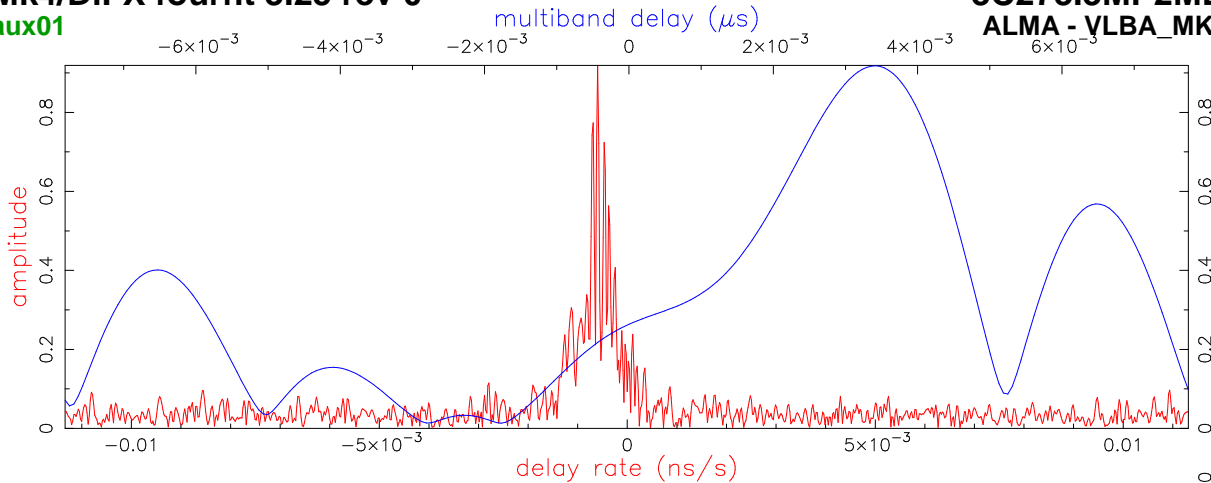


Mk4/DiFX fourfit 3.25 rev 0

aux01

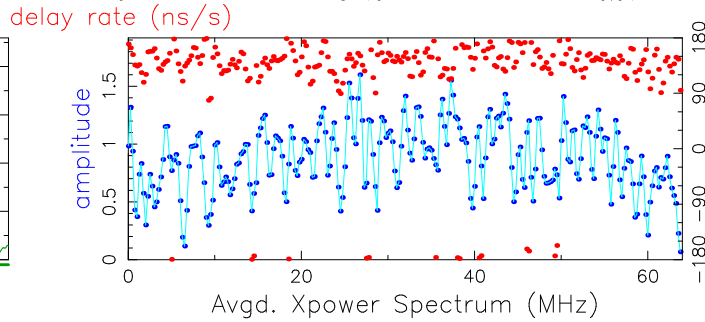
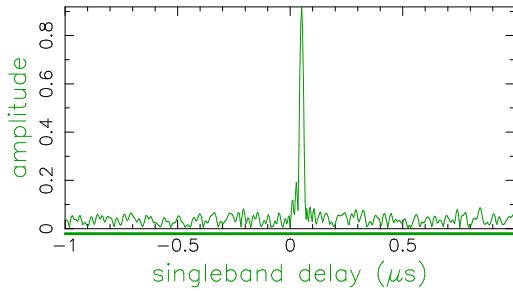
3C273.3MP2MB, No0707, Am

ALMA - VLBA_MK, fgroup W, pol XL



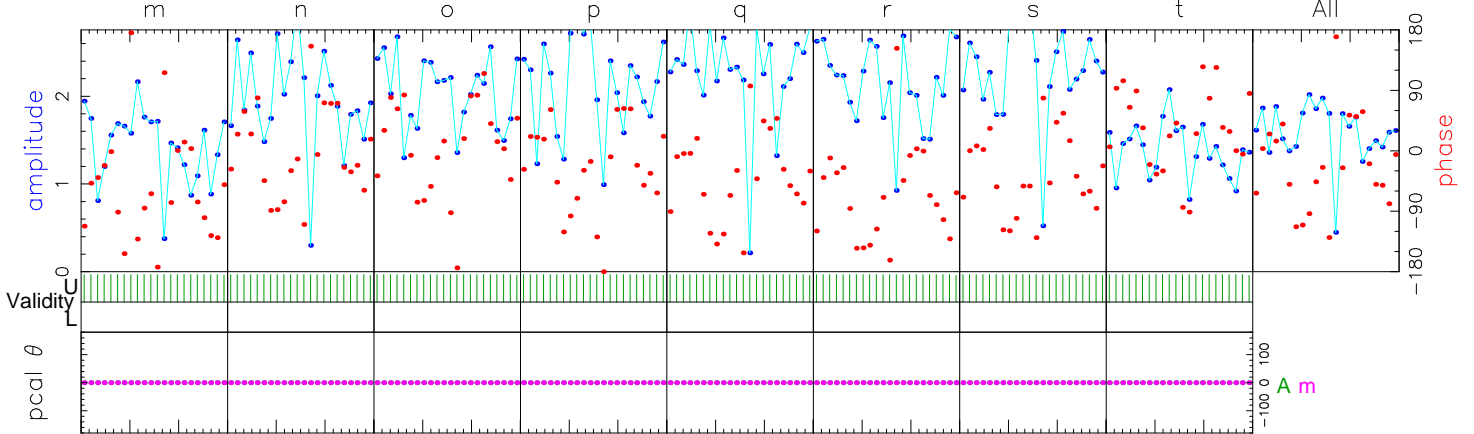
Fringe quality 4

SNR 33.7
 Int time 179.983
 Amp 0.919
 Phase -30.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.050588
 MBD 0.003396
 Fringe rate (Hz)
 -0.051989
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175907
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-84.5	-7.8	16.8	-16.7	-44.7	-78.5	-42.2	37.5	Phase	-30.8
	0.8	1.1	1.1	1.2	1.4	1.3	1.4	0.8	Ampl.	1.1
	272.0	270.0	269.5	269.5	269.7	269.9	270.2	272.1	Sbd box	270.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.08655311814E+04	Apriori delay (usec)	1.08654809103E+04	Resid mbdelay (usec)	3.39603E-03	+/-	3.2E-05
Sband delay (usec)	1.08655314988E+04	Apriori clock (usec)	-2.1079565E+03	Resid sbdelay (usec)	5.05885E-02	+/-	2.6E-04
Phase delay (usec)	1.08654809093E+04	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	-9.91772E-07	+/-	1.1E-07
Delay rate (us/s)	-1.74325459634E+00	Apriori rate (us/s)	-1.74325399279E+00	Resid rate (us/s)	-6.03544E-07	+/-	1.1E-09
Total phase (deg)	191.3	Apriori accel (us/s/s)	-7.17308688741E-05	Resid phase (deg)	-30.8	+/-	3.4

ph/seg (deg)	64.3	RMS	Theor.	Amplitude	0.919 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.3	64.3	8.0	Search (1024X32)	0.897	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.8	81.3	13.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.8	46.8	4.8	Inc. seg. avg.	1.576	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		34.8	8.4	Inc. frq. avg.	1.141	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 330.6 el 61.8 pa 152.8 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 9950.916 -6639.866 simultaneous interpolator

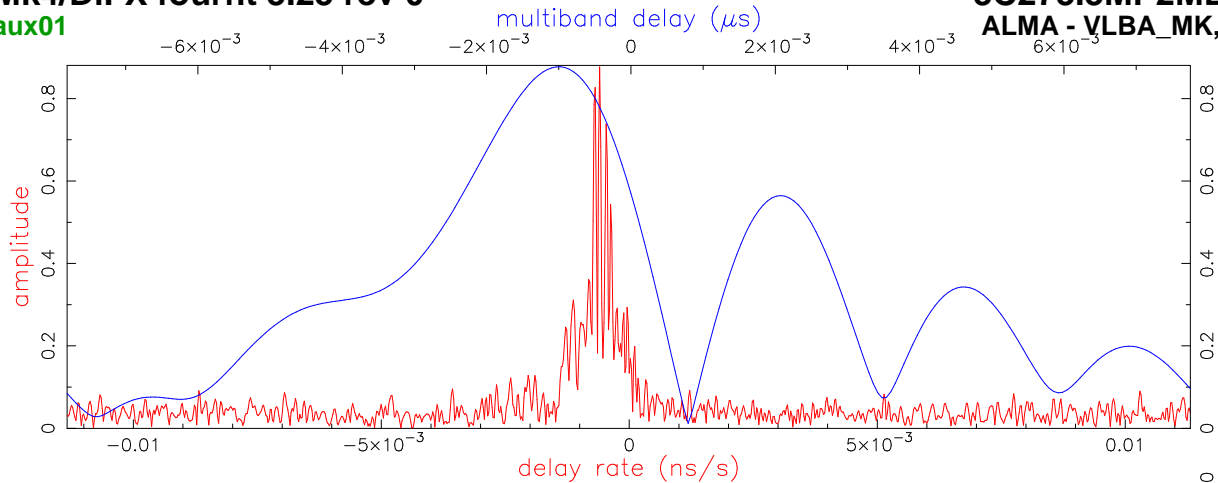
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Am...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Am.W.17.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

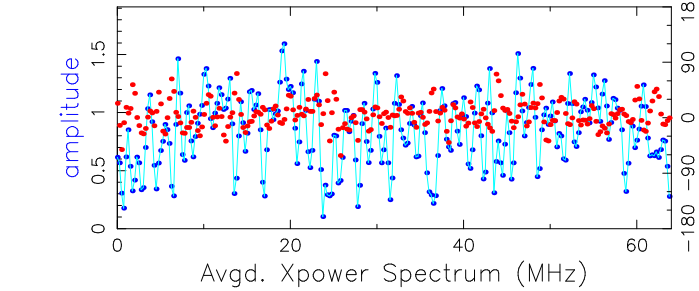
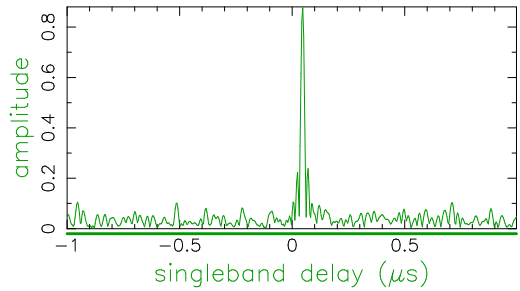
3C273.3MP2MB, No0707, Am

ALMA - VLBA_MK, fgroup W, pol YR



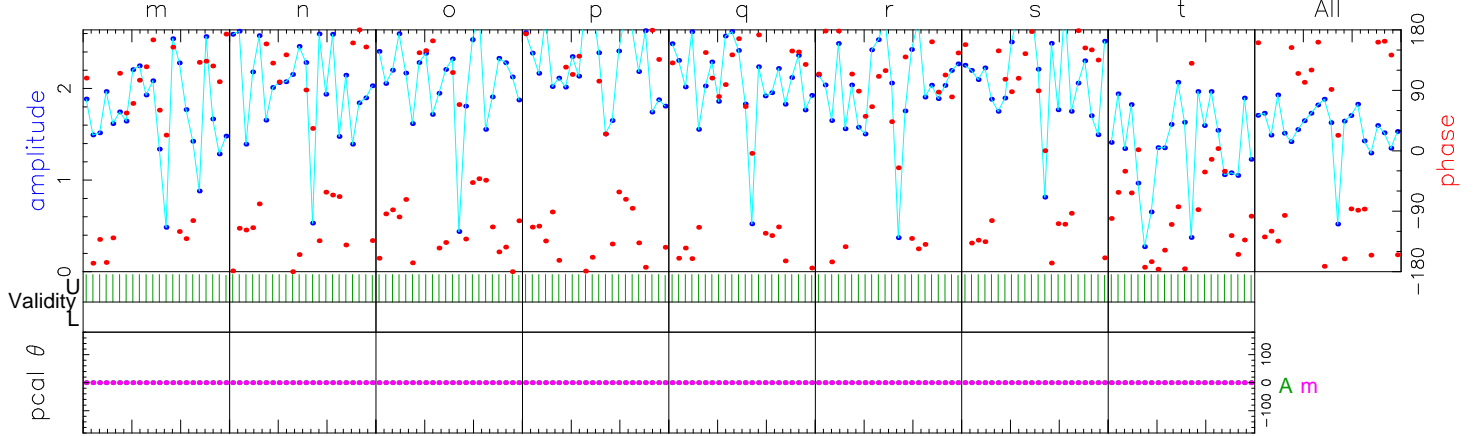
Fringe quality 4

SNR 32.3
 Int time 179.983
 Amp 0.880
 Phase -172.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.046193
 MBD -0.001041
 Fringe rate (Hz)
 -0.051929
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175909
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
A	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	148.1	-154.1	-130.6	-154.9	165.5	135.5	176.2	-87.2		
Sband delay (usec)	0.9	1.1	1.2	1.2	1.3	1.2	1.3	0.8		
Phase delay (usec)	270.5	268.4	268.6	268.8	268.6	268.6	269.3	271.5		
Delay rate (us/s)		-1.74325459564E+00								
Total phase (deg)			49.7							
Apriori delay (usec)					1.08654809103E+04					
Apriori clock (usec)					-2.1079565E+03					
Apriori clockrate (us/s)					3.6680728E-09					
Apriori rate (us/s)					-1.74325399279E+00					
Apriori accel (us/s/s)					-7.17308688741E-05					
Resid mbdelay (usec)									-1.04122E-03	+/- 3.4E-05
Resid sbdelay (usec)									4.61928E-02	+/- 2.7E-04
Resid phdelay (usec)									-5.55588E-06	+/- 1.1E-07
Resid rate (us/s)									-6.02848E-07	+/- 1.1E-09
Resid phase (deg)									-172.3	+/- 3.6
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
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							

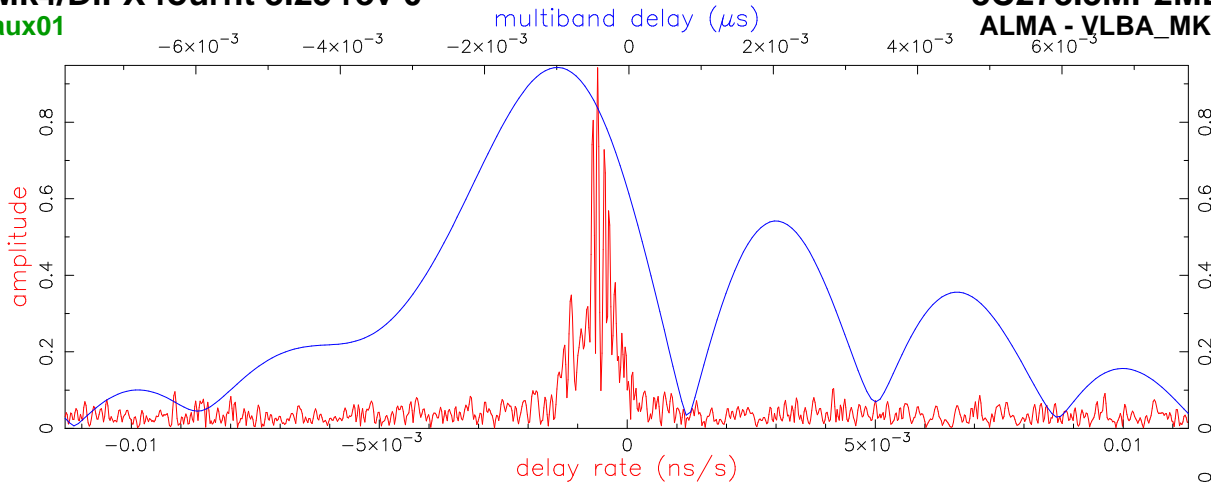
ph/seg (deg) 65.4 8.3 Search (1024X32) 0.860 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.5 14.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.2 5.0 Inc. seg. avg. 1.552 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.8 8.8 Inc. frq. avg. 1.114 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 A: az 330.6 el 61.8 pa 152.8 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 9950.916 -6639.866 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Am...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Am.W.27.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

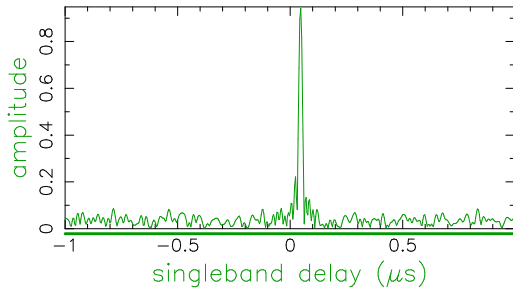
3C273.3MP2MB, No0707, Am

ALMA - VLBA_MK, fgroup W, pol XR

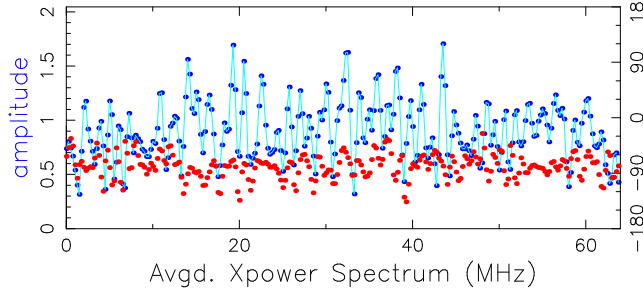


Fringe quality 4

SNR 34.8
 Int time 179.983
 Amp 0.948
 Phase 103.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.045957
 MBD -0.001040
 Fringe rate (Hz)
 -0.052102
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

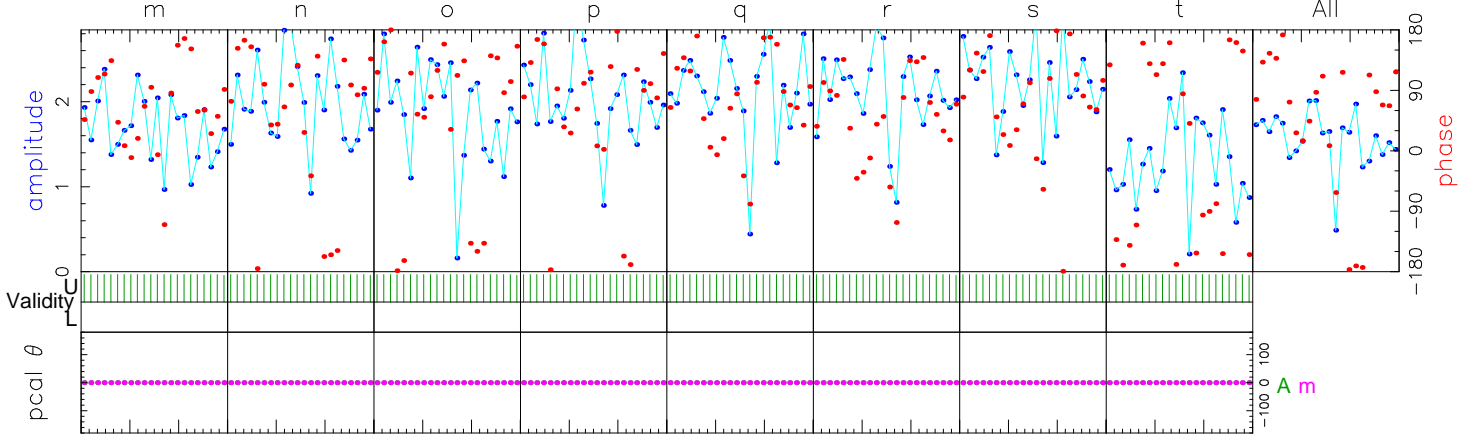


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175911
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	71.3	123.8	137.0	112.2	85.6	60.4	94.0	-177.3	Phase	103.4
	1.0	1.2	1.1	1.3	1.2	1.3	1.2	0.8	Ampl.	1.1
	270.3	268.4	268.4	268.6	268.5	268.7	269.2	271.3	Sbd box	268.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.08655267451E+04	Apriori delay (usec)	1.08654809103E+04	Resid mbdelay (usec)	-1.04022E-03	+/-	3.1E-05
Sband delay (usec)	1.08655268673E+04	Apriori clock (usec)	-2.1079565E+03	Resid sbdelay (usec)	4.59570E-02	+/-	2.5E-04
Phase delay (usec)	1.08654809137E+04	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	3.33336E-06	+/-	1.1E-07
Delay rate (us/s)	-1.74325459764E+00	Apriori rate (us/s)	-1.74325399279E+00	Resid rate (us/s)	-6.04847E-07	+/-	1.0E-09
Total phase (deg)	325.4	Apriori accel (us/s/s)	-7.17308688741E-05	Resid phase (deg)	103.4	+/-	3.3

ph/seg (deg)	63.3	RMS	Theor.	Amplitude	0.948 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.1	63.3	7.7	Search (1024X32)	0.915	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	43.2	74.1	13.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	24.9	43.2	4.7	Inc. seg. avg.	1.560	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
		24.9	8.1	Inc. frq. avg.	1.124	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

A: az 330.6 el 61.8 pa 152.8 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 9950.916 -6639.866 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Am...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Am.W.37.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

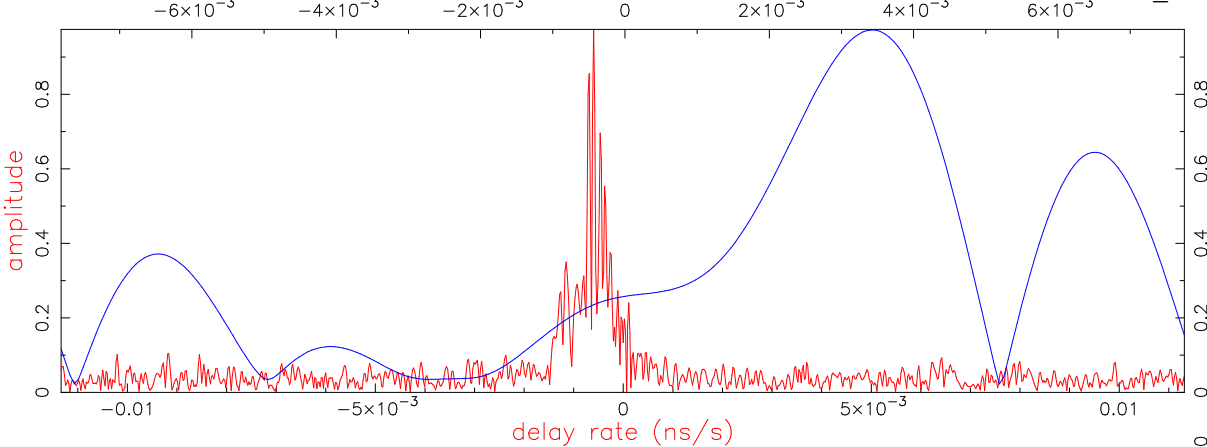
aux01

3C273.3MP2MB, No0707, Am

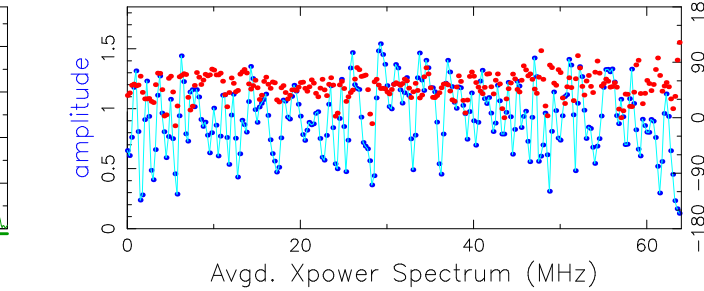
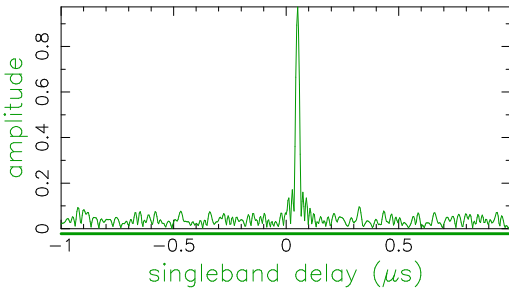
ALMA - VLBA_MK, fgroup W, pol YL

multiband delay (μ s)

Fringe quality 4

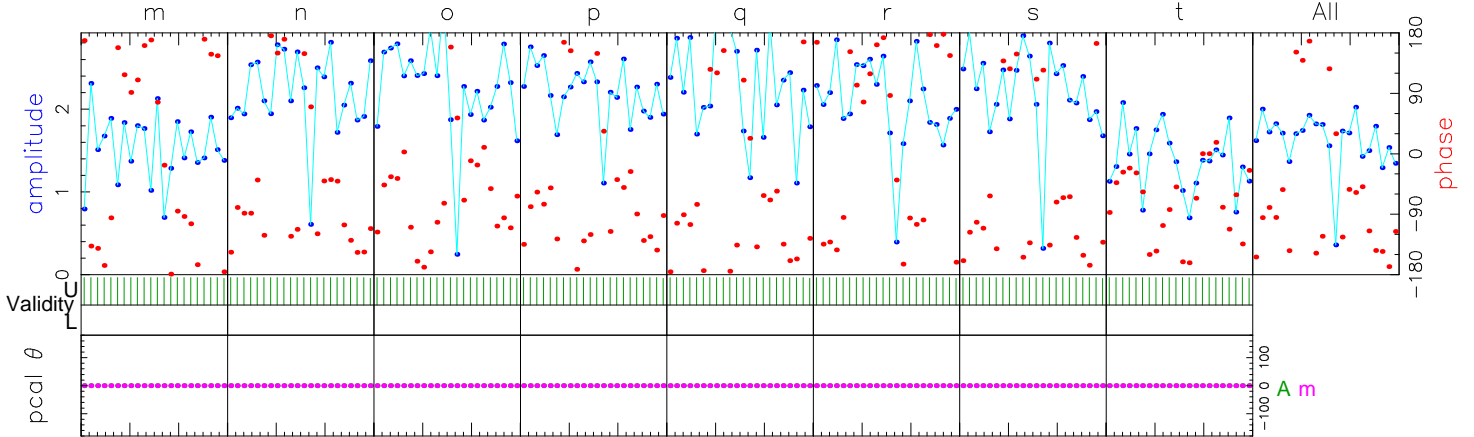


SNR 35.7
 Int time 179.983
 Amp 0.974
 Phase -125.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.050560
 MBD 0.003413
 Fringe rate (Hz)
 -0.052100
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175913
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-179.2	-116.5	-79.0	-108.3	-145.8	-176.0	-139.7	-68.1	Phase	-125.8
	0.8	1.3	1.4	1.3	1.3	1.2	1.4	0.9	Ampl.	1.2
	272.1	270.0	269.6	269.5	269.8	269.8	270.2	272.0	Sbd box	269.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.0865531984E+04	Apriori delay (usec)	1.08654809103E+04	Resid mbdelay (usec)	3.41303E-03	+/-	3.0E-05
Sband delay (usec)	1.08655314706E+04	Apriori clock (usec)	-2.1079565E+03	Resid sbdelay (usec)	5.05603E-02	+/-	2.4E-04
Phase delay (usec)	1.08654809063E+04	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	-4.05614E-06	+/-	1.0E-07
Delay rate (us/s)	-1.74325459763E+00	Apriori rate (us/s)	-1.74325399279E+00	Resid rate (us/s)	-6.04835E-07	+/-	9.9E-10
Total phase (deg)		Apriori accel (us/s/s)	-7.17308688741E-05	Resid phase (deg)	-125.8	+/-	3.2

ph/seg (deg)	RMS 62.5	Theor. 7.5	Amplitude Search (1024X32)	0.974 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.7	13.1	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)	44.5	4.5	Inc. seg. avg.	1.604	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.9	7.9	Inc. frq. avg.	1.194	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

A: az 330.6 el 61.8 pa 152.8 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 9950.916 -6639.866 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Am...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Am.W.45.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

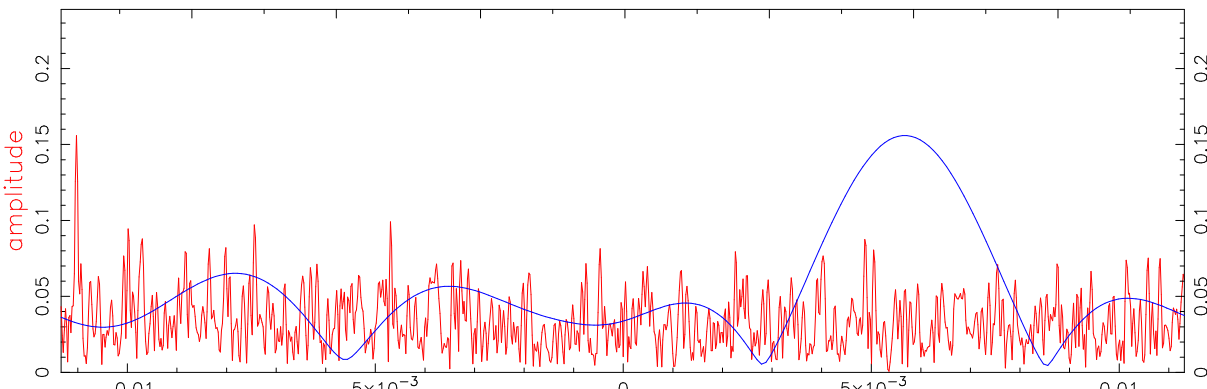
aux01

3C273.3MP2MB, No0707, bm

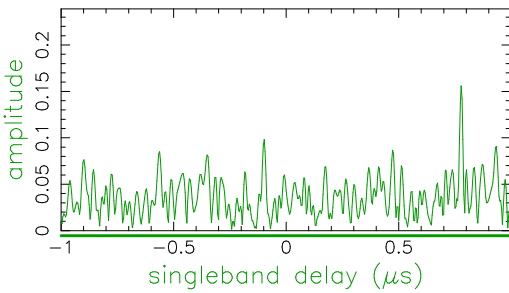
VLBA_BR - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

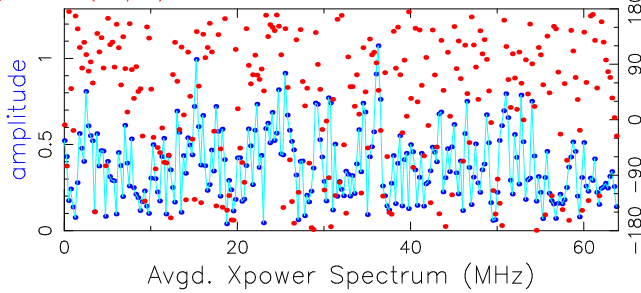
Fringe quality 0



SNR 5.7
 Int time 179.970
 Amp 0.239
 Phase 20.1
 PFD 7.2e-01
 Delays (us)
 SBD 0.777707
 MBD 0.003901
 Fringe rate (Hz) -0.951203
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

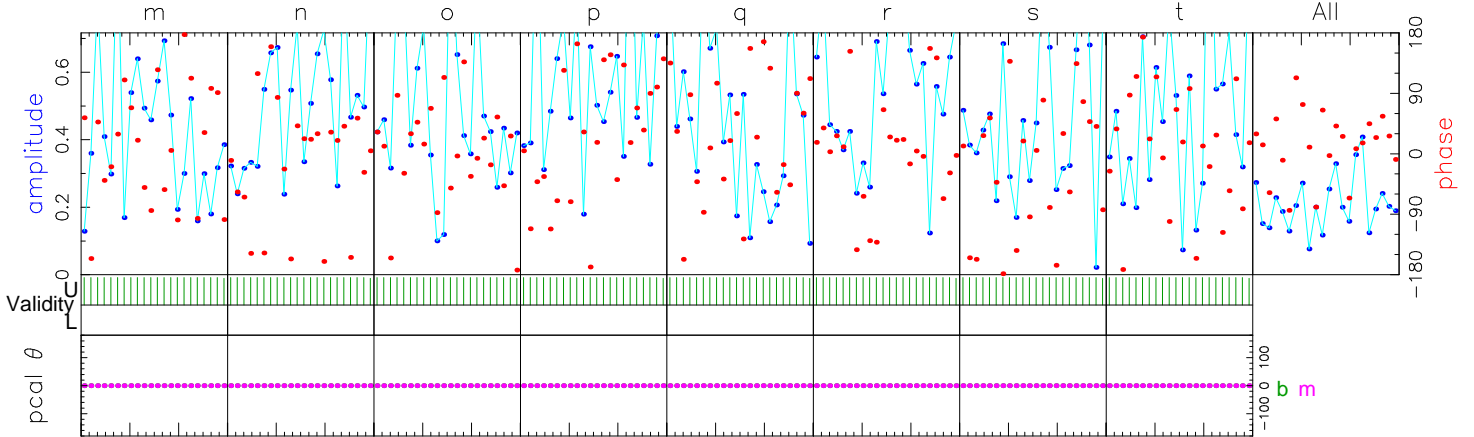


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175916
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	20.1	33.2	8.8	56.1	28.7	7.7	51.2	12.9	Phase	20.1
	0.2	0.2	0.4	0.1	0.1	0.5	0.1	0.2	Ampl.	0.2
	78.7	506.7	455.4	124.9	363.8	456.3	303.1	479.0	Sbd box	456.1
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	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.93044352517E+03	Apriori delay (usec)	5.92965837429E+03	Resid mbdelay (usec)	3.90088E-03	+/-	1.9E-04
Sband delay (usec)	5.93043608129E+03	Apriori clock (usec)	4.0793896E+00	Resid sbdelay (usec)	7.77707E-01	+/-	1.5E-03
Phase delay (usec)	5.92965837493E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	6.49436E-07	+/-	6.5E-07
Delay rate (us/s)	-7.62608105537E-01	Apriori rate (us/s)	-7.62597063018E-01	Resid rate (us/s)	-1.10425E-05	+/-	6.2E-09
Total phase (deg)	150.1	Apriori accel (us/s/s)	-2.99776787933E-05	Resid phase (deg)	20.1	+/-	20.0

ph/seg (deg)	RMS 49.5	Theor. 46.9	Amplitude Search (1024X32)	0.239 +/- 0.042	0.151	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.8	81.9	Interp.	0.000	0.242	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.7	28.3	Inc. seg. avg.	0.242	0.221	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.6	49.4	Inc. frq. avg.	0.221		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 132.0 el 33.1 pa -29.7 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4355.450 3509.075 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//bm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//bm.W.53.3MP2MB

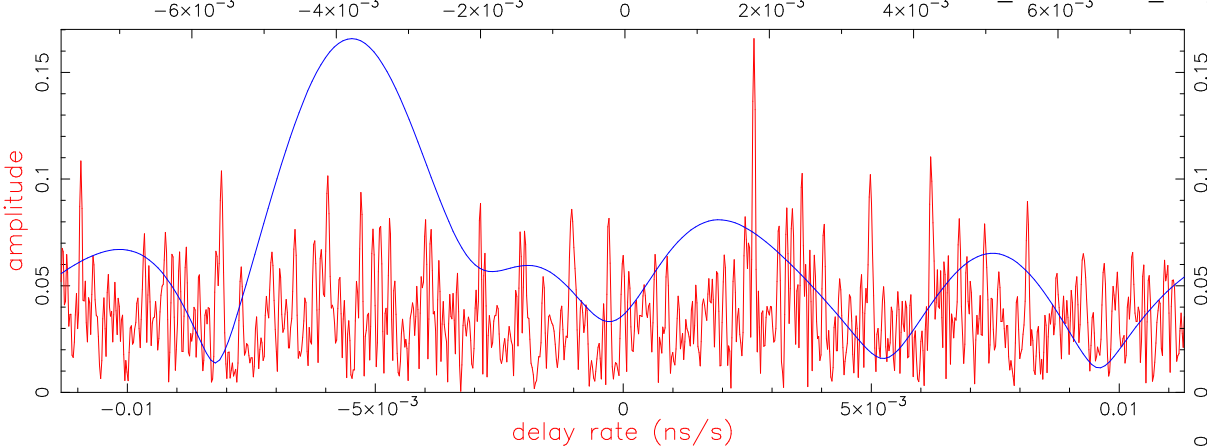
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bm

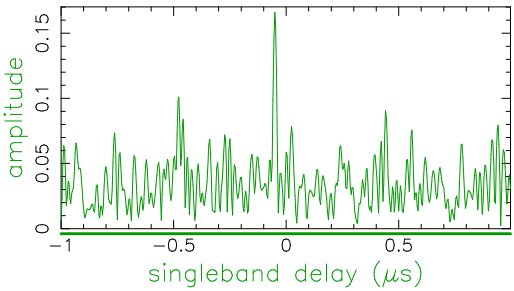
VLBA_BR - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

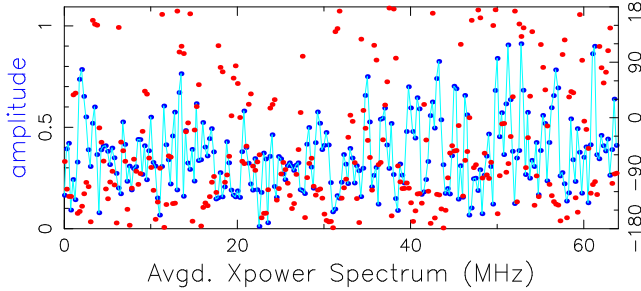


Fringe quality 0

SNR 6.1
 Int time 179.970
 Amp 0.170
 Phase 72.4
 PFD 1.3e-01
 Delays (us)
 SBD -0.050046
 MBD -0.003773
 Fringe rate (Hz)
 0.226370
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

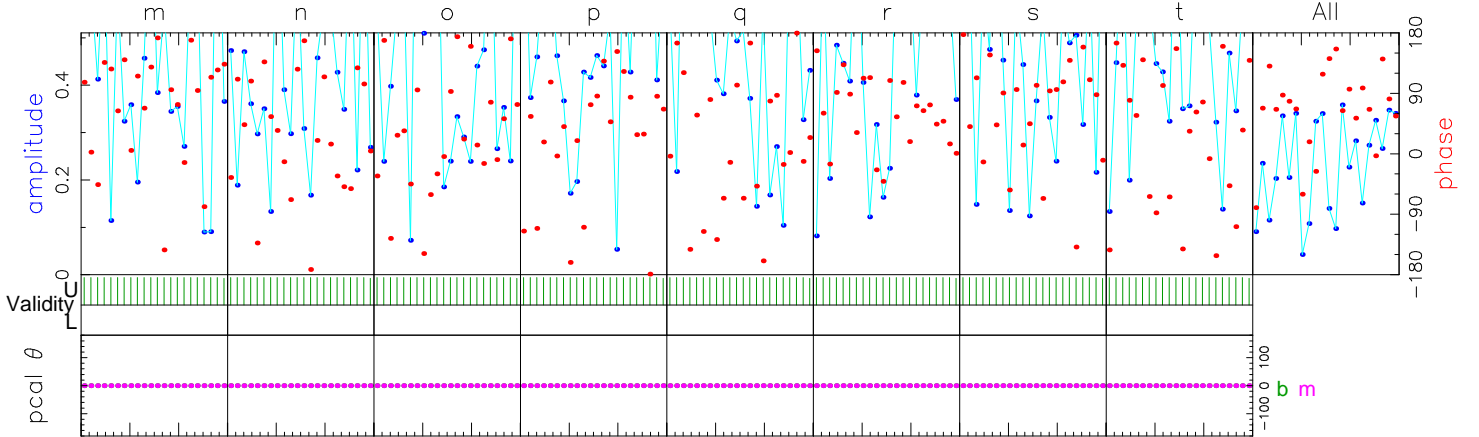


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175918
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	110.7	43.8	32.3	76.3	62.5	57.9	80.7	112.5	Phase	72.4
	0.3	0.1	0.2	0.2	0.0	0.4	0.2	0.1	Ampl.	0.2
	504.8	41.3	338.4	193.9	202.9	244.3	256.6	400.2	Sbd box	244.2
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	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.92960772594E+03	Apriori delay (usec)	5.92965837429E+03	Resid mbdelay (usec)	-3.77334E-03	+/-	1.8E-04
Sband delay (usec)	5.92960832804E+03	Apriori clock (usec)	4.0793896E+00	Resid sbdelay (usec)	-5.00463E-02	+/-	1.4E-03
Phase delay (usec)	5.92965837662E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	2.33311E-06	+/-	6.1E-07
Delay rate (us/s)	-7.62594435089E-01	Apriori rate (us/s)	-7.62597063018E-01	Resid rate (us/s)	2.62793E-06	+/-	5.8E-09
Total phase (deg)	202.3	Apriori accel (us/s/s)	-2.99776787933E-05	Resid phase (deg)	72.4	+/-	18.8

ph/seg (deg)	61.7	Theor.	44.0	Amplitude	0.170 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.2	Search (1024X32)	0.160	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.3	Inc. seg. avg.	0.185	Inc. frq. avg.	0.171	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	57.0	Inc. frq. avg.	0.171			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 132.0 el 33.1 pa -29.7 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4355.450 3509.075 simultaneous interpolator

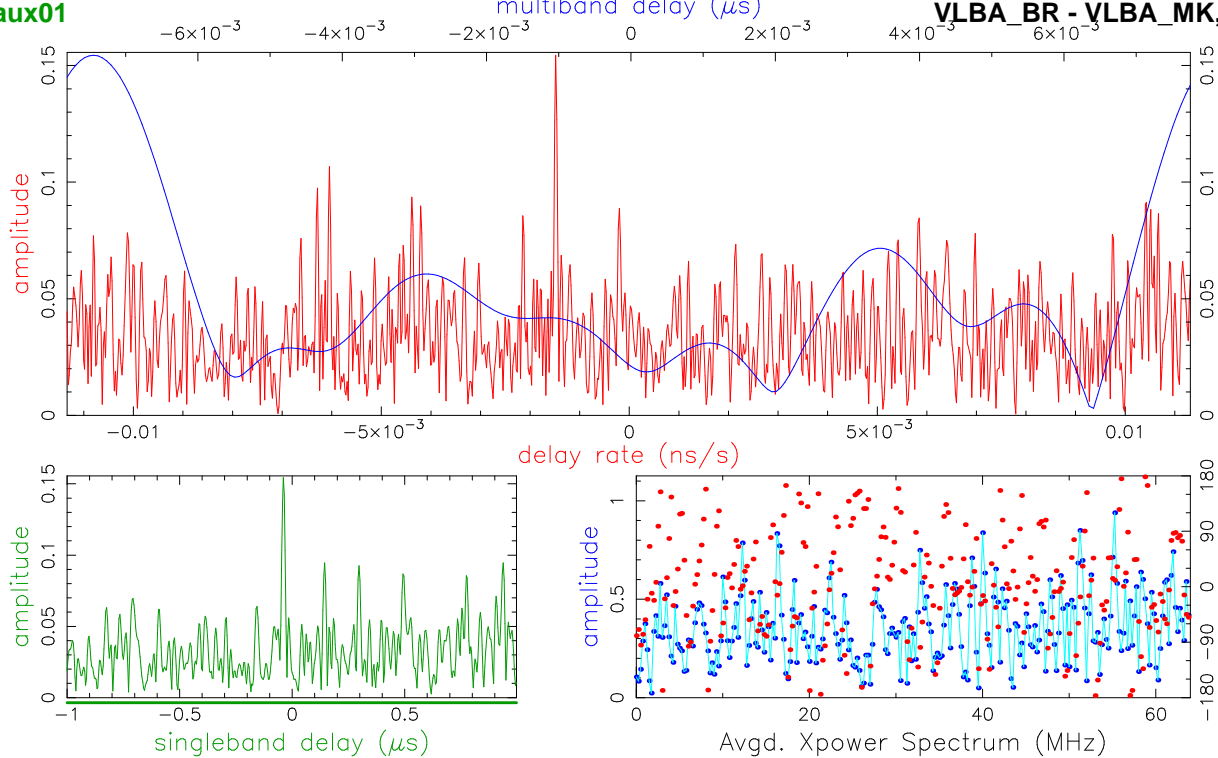
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bm.W.61.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

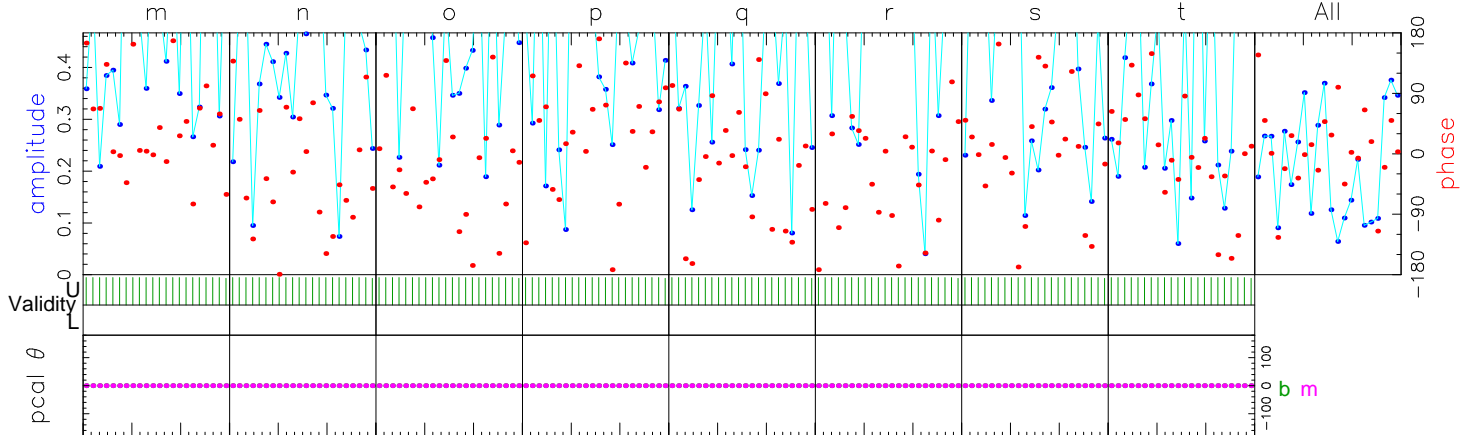
3C273.3MP2MB, No0707, bm

VLBA_BR - VLBA_MK, fgroup W, pol LR



Fringe quality 0
 SNR 5.7
 Int time 179.970
 Amp 0.156
 Phase 7.9
 PFD 8.3e-01
 Delays (us)
 SBD -0.038704
 MBD -0.007441
 Fringe rate (Hz)
 -0.127692
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175920
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
	33.6	-29.9	-32.1	45.9	14.4	-26.9	19.5	15.9	Phase	7.9		
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2		
	158.6	503.4	294.7	237.6	339.9	152.4	494.2	72.8	Sbd box	247.1		
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			
m	0	0	0	0	0	0	0	0	PC freqs			
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
b:m	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			
m	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	5.92961968371E+03		Apriori delay (usec)		5.92965837429E+03		Resid mbdelay (usec)		-7.44058E-03	+/- 1.9E-04		
Sband delay (usec)	5.92961966979E+03		Apriori clock (usec)		4.0793896E+00		Resid sbdelay (usec)		-3.87045E-02	+/- 1.5E-03		
Phase delay (usec)	5.92965837454E+03		Apriori clockrate (us/s)		5.9094092E-07		Resid phdelay (usec)		2.54830E-07	+/- 6.5E-07		
Delay rate (us/s)	-7.62598545392E-01		Apriori rate (us/s)		-7.62597063018E-01		Resid rate (us/s)		-1.48237E-06	+/- 6.3E-09		
Total phase (deg)	137.8		Apriori accel (us/s/s)		-2.99776787933E-05		Resid phase (deg)		7.9	+/- 20.2		
	RMS	Theor.	Amplitude	0.156 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	59.4	47.4	Search (1024X32)	0.153		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	76.2	82.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	33.1	28.6	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 (%)	23.4	49.9	Inc. frq. avg.	0.157		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
b: az 132.0 el 33.1 pa -29.7	m: az 93.6 el 15.4 pa -70.0		u,v (fr/asec) 4355.450 3509.075						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//bm..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//bm.W.65.3MP2MB									

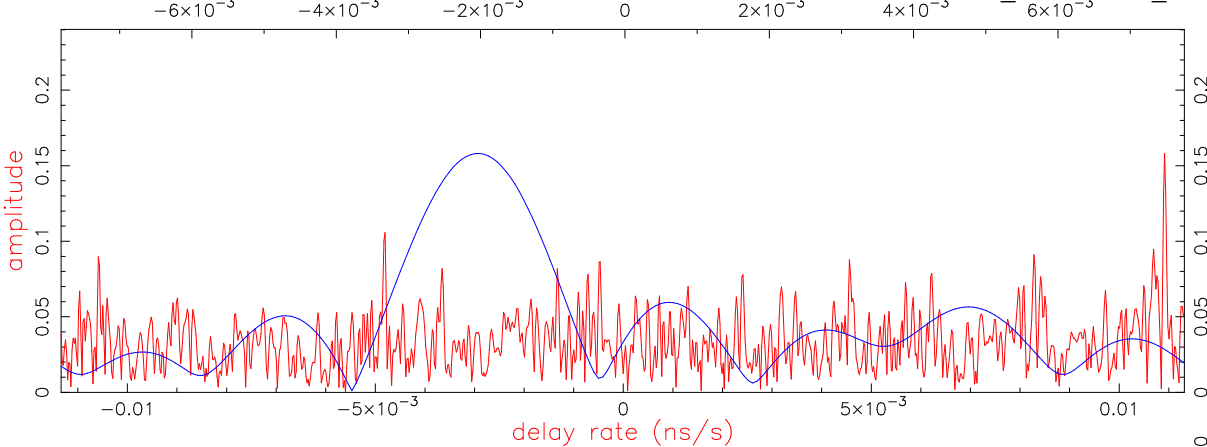
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bm

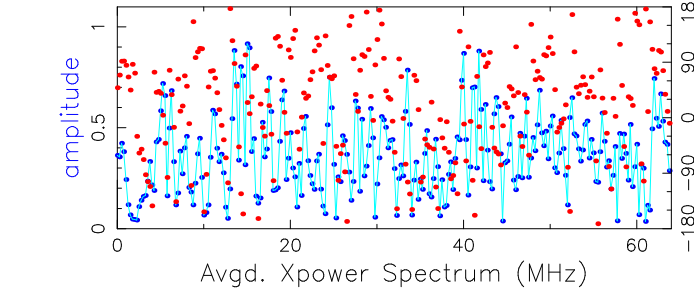
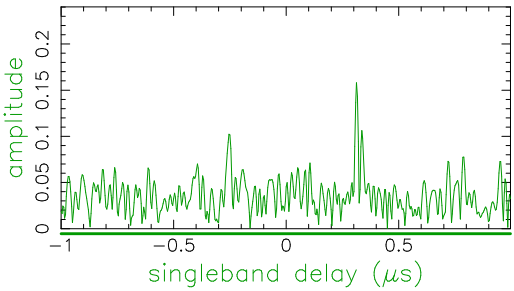
VLBA_BR - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)



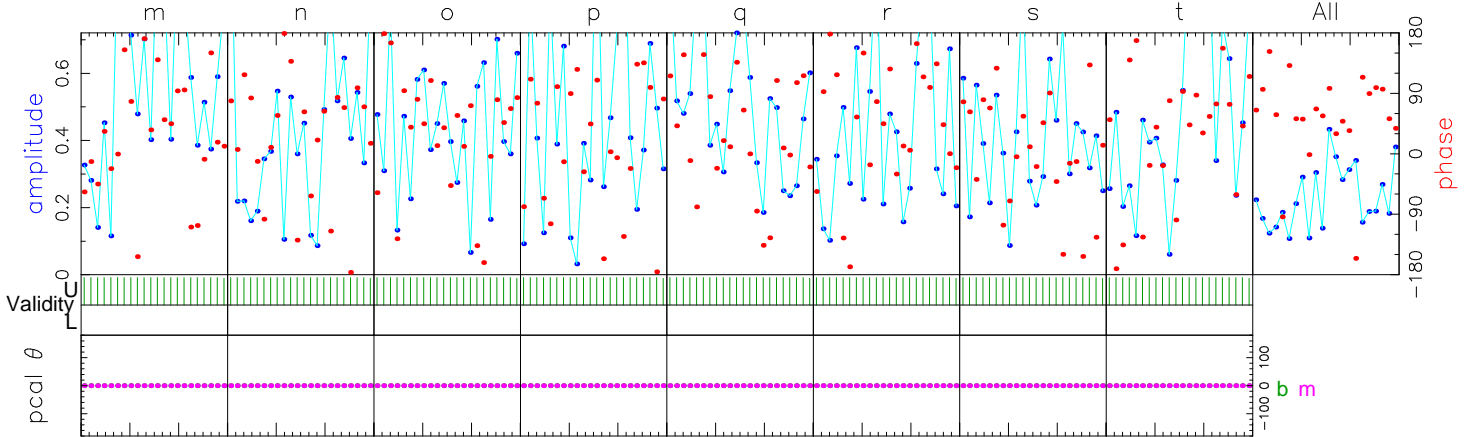
Fringe quality 0

SNR 5.8
 Int time 179.970
 Amp 0.240
 Phase 69.0
 PFD 5.5e-01
 Delays (us)
 SBD 0.312917
 MBD -0.002018
 Fringe rate (Hz)
 0.941911
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175922
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	66.4	70.4	71.7	85.4	62.3	80.3	37.1	71.6	Phase	69.0
	0.3	0.3	0.3	0.1	0.2	0.3	0.2	0.4	Ampl.	0.2
	447.9	239.6	161.4	222.4	61.8	187.0	31.5	36.9	Sbd box	337.1
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	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.92996885591E+03	Apriori delay (usec)	5.92965837429E+03	Resid mbdelay (usec)	-2.01838E-03	+/-	1.9E-04
Sband delay (usec)	5.92997129154E+03	Apriori clock (usec)	4.0793896E+00	Resid sbdelay (usec)	3.12917E-01	+/-	1.5E-03
Phase delay (usec)	5.92965837651E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	2.22388E-06	+/-	6.4E-07
Delay rate (us/s)	-7.62586128362E-01	Apriori rate (us/s)	-7.62597063018E-01	Resid rate (us/s)	1.09347E-05	+/-	6.1E-09
Total phase (deg)	198.9	Apriori accel (us/s/s)	-2.99776787933E-05	Resid phase (deg)	69.0	+/-	19.7

ph/seg (deg)	57.0	Theor.	46.3	Amplitude	0.240 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	74.1		80.8	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.7		27.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	31.3		48.7	Inc. seg. avg.	0.265	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	0.219	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

b: az 132.0 el 33.1 pa -29.7 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4355.450 3509.075 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bm.W.75.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

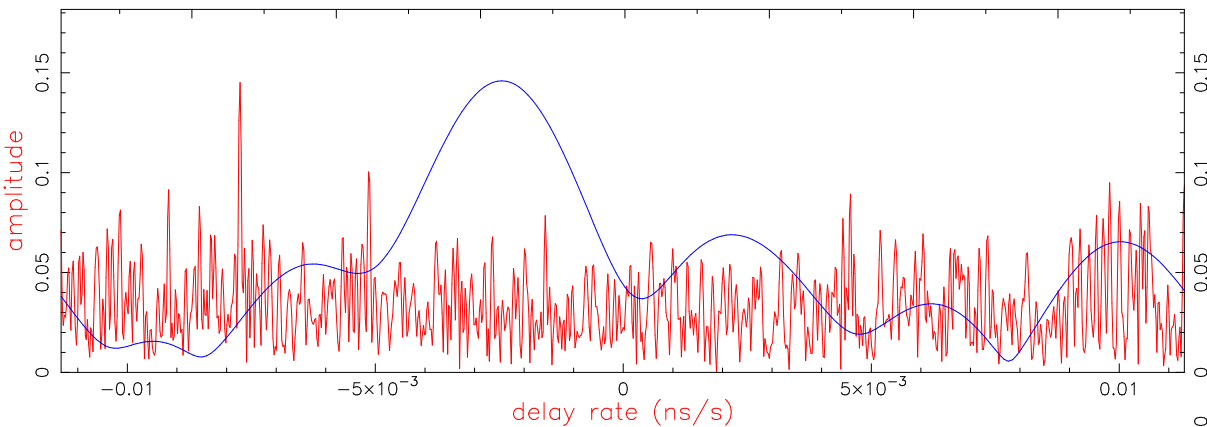
aux01

3C273.3MP2MB, No0707, fm

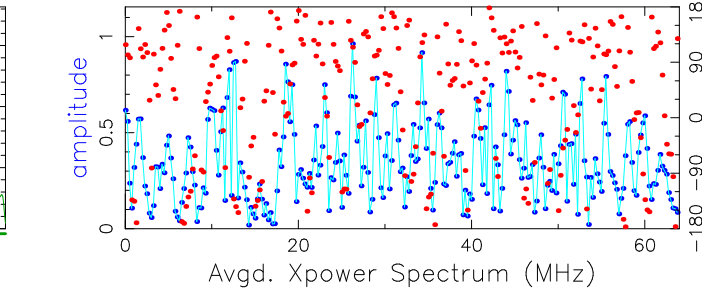
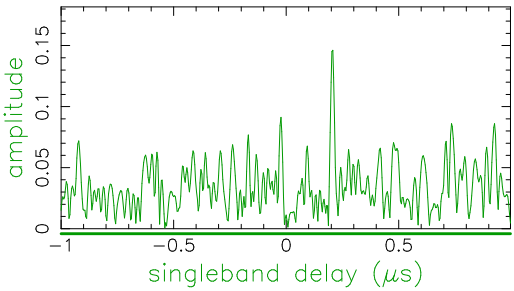
VLBA_FD - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

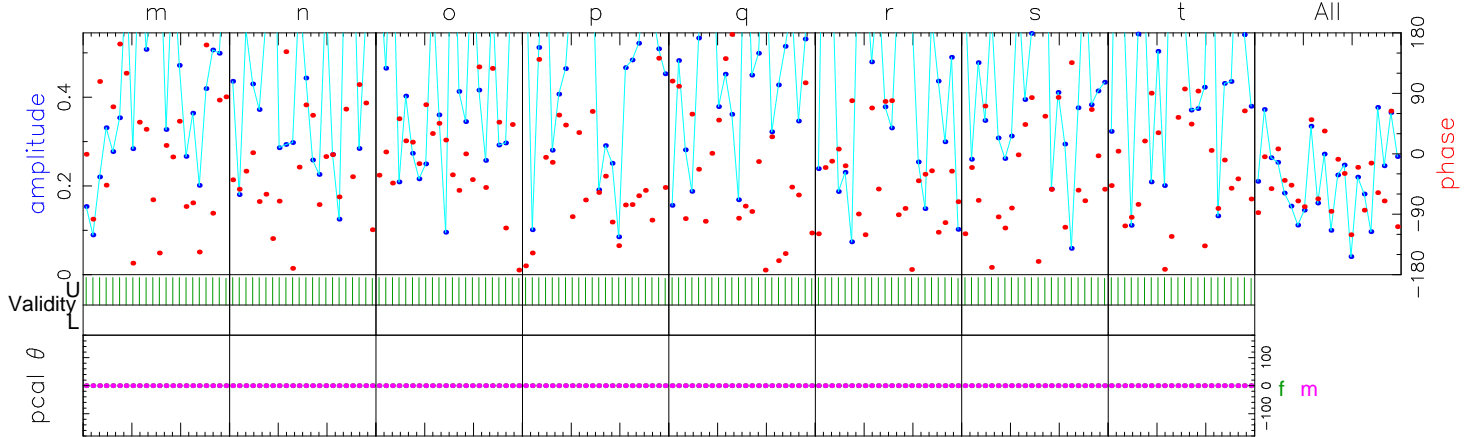


SNR 5.5
 Int time 179.983
 Amp 0.182
 Phase -31.5
 PFD 1.0e+00
 Delays (us)
 SBD 0.205231
 MBD -0.001580
 Fringe rate (Hz)
 -0.667354
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175929
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	46.7	-33.4	-0.6	-49.6	-90.2	-54.5	-34.6	-8.1	Phase	-31.5
	0.1	0.2	0.3	0.2	0.2	0.3	0.1	0.3	Ampl.	0.2
	322.5	446.0	307.1	31.3	149.3	98.6	199.9	309.9	Sbd box	309.5
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	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.15101229730E+04	Apriori delay (usec)	1.15099214281E+04	Resid mbdelay (usec)	-1.58016E-03	+/-	2.0E-04
Sband delay (usec)	1.15101266591E+04	Apriori clock (usec)	-4.8618507E-01	Resid sbdelay (usec)	2.05231E-01	+/-	1.6E-03
Phase delay (usec)	1.15099214271E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-1.01498E-06	+/-	6.8E-07
Delay rate (us/s)	-8.93772323236E-01	Apriori rate (us/s)	-8.93764575915E-01	Resid rate (us/s)	-7.74732E-06	+/-	6.5E-09
Total phase (deg)	262.9	Apriori accel (us/s/s)	-6.05615868343E-05	Resid phase (deg)	-31.5	+/-	21.0

ph/seg (deg)	RMS 49.5	Theor. 49.2	Amplitude Search (1024X32)	0.182 +/- 0.033	0.146	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.3	85.9	Interp.	0.000	0.146	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	44.6	29.7	Inc. seg. avg.	0.196	0.183	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.5	51.8	Inc. frq. avg.	0.183	0.183	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 138.7 el 54.1 pa -34.5 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 5090.863 1346.947 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fm.W.107.3MP2MB

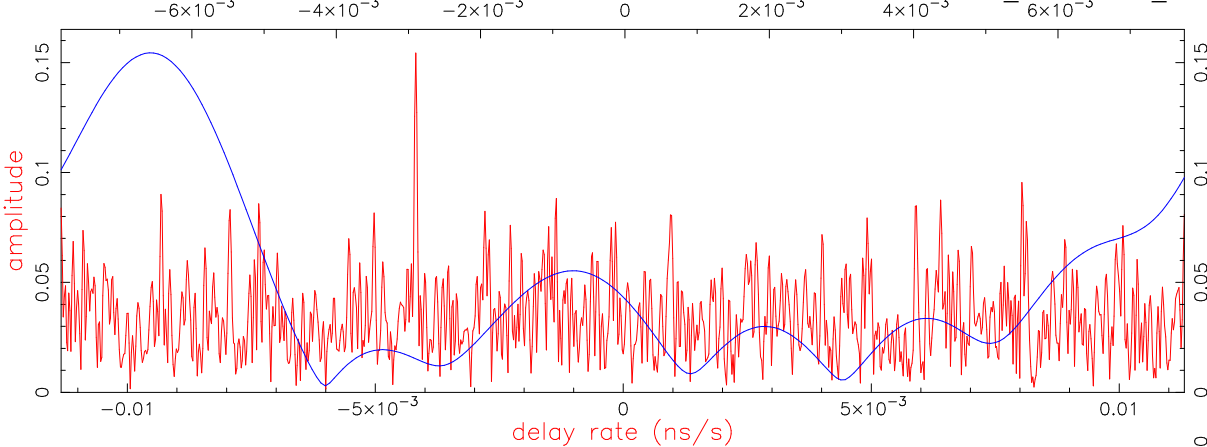
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fm

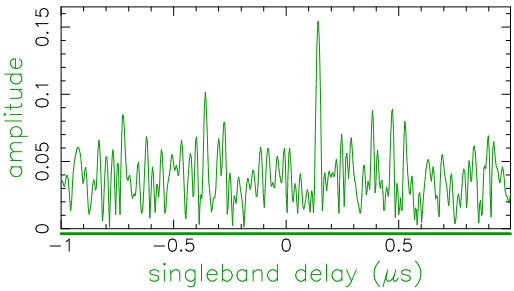
VLBA_FD - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

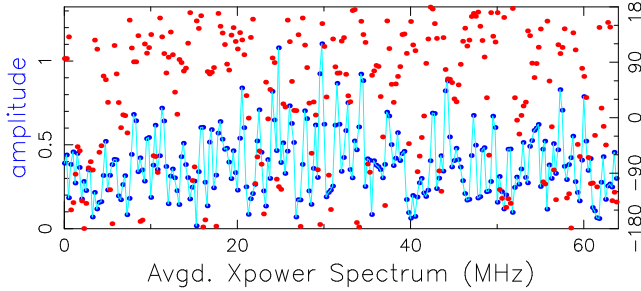


Fringe quality 0

SNR 5.7
 Int time 179.983
 Amp 0.165
 Phase 28.7
 PFD 7.3e-01
 Delays (us)
 SBD 0.142219
 MBD -0.006538
 Fringe rate (Hz)
 -0.360367
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

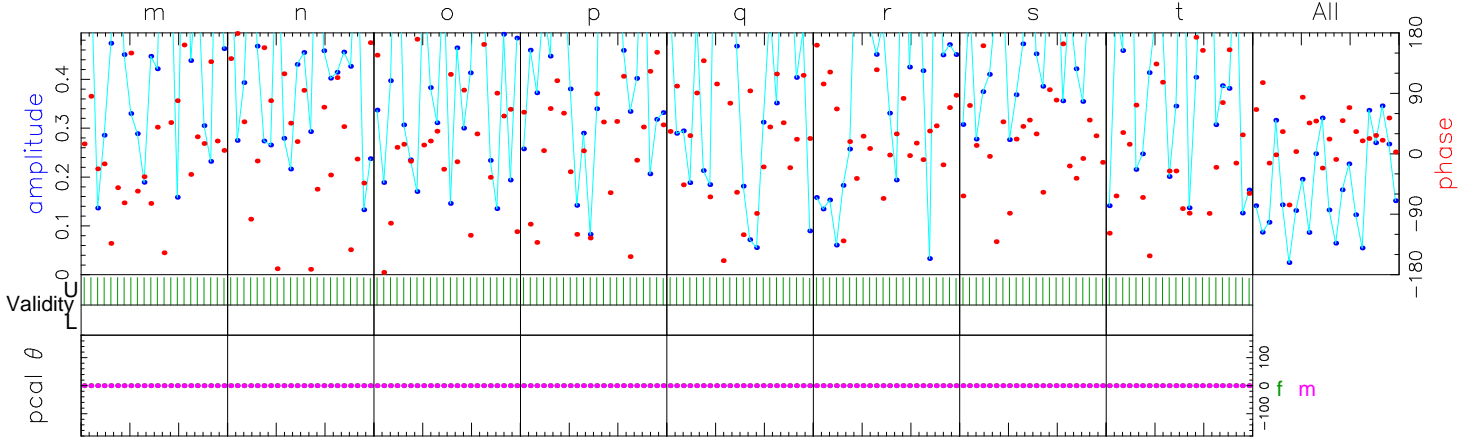


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175931
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-0.3	66.8	16.0	49.1	57.5	26.3	28.0	-36.7		Phase 28.7
	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.1		Ampl. 0.2
	95.6	124.7	471.4	266.1	235.4	293.6	22.1	234.7		Sbd box 293.4
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
m	0	0	0	0	0	0	0	0		PC freqs
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
f:m	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
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	1.15100711400E+04	Apriori delay (usec)	1.15099214281E+04	Resid mbdelay (usec)	-6.53810E-03	+/-	1.9E-04
Sband delay (usec)	1.15100636469E+04	Apriori clock (usec)	-4.8618507E-01	Resid sbdelay (usec)	1.42219E-01	+/-	1.5E-03
Phase delay (usec)	1.15099214290E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	9.25526E-07	+/-	6.5E-07
Delay rate (us/s)	-8.93768759424E-01	Apriori rate (us/s)	-8.93764575915E-01	Resid rate (us/s)	-4.18351E-06	+/-	6.2E-09
Total phase (deg)	323.1	Apriori accel (us/s/s)	-6.05615868343E-05	Resid phase (deg)	28.7	+/-	20.0

ph/seg (deg)	RMS 38.7	Theor. 47.0	Amplitude Search (1024X32)	0.165 +/- 0.029	0.152	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.1	82.0	Interp.	0.000	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	36.5	28.3	Inc. seg. avg.	0.142	0.152	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.9	49.4	Inc. frq. avg.	0.159	0.159	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 138.7 el 54.1 pa -34.5 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 5090.863 1346.947 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fm.W.117.3MP2MB

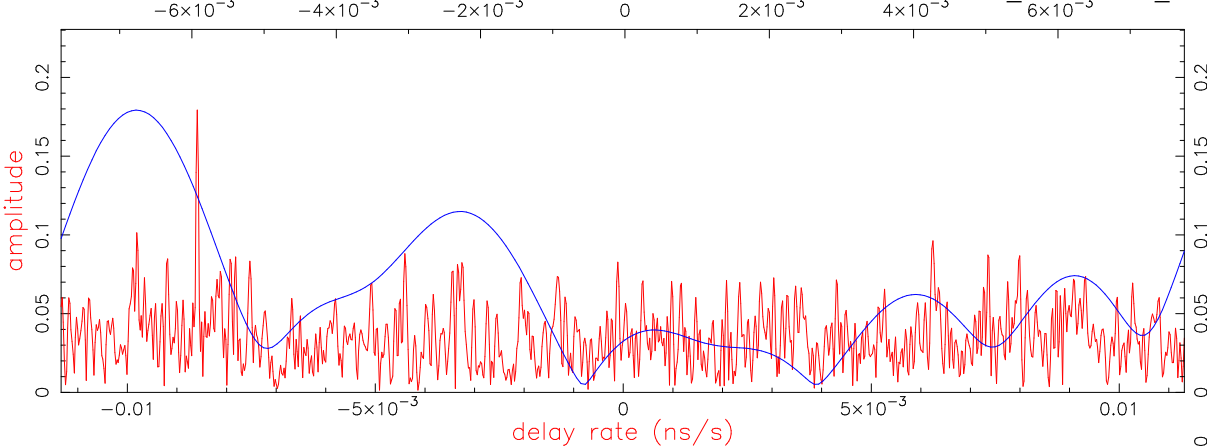
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fm

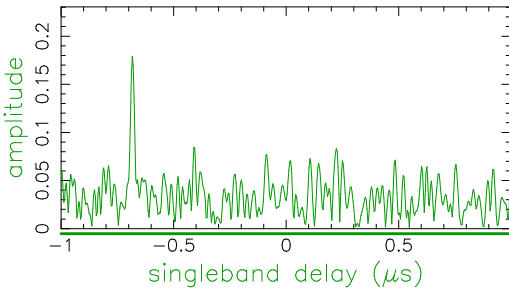
VLBA_FD - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

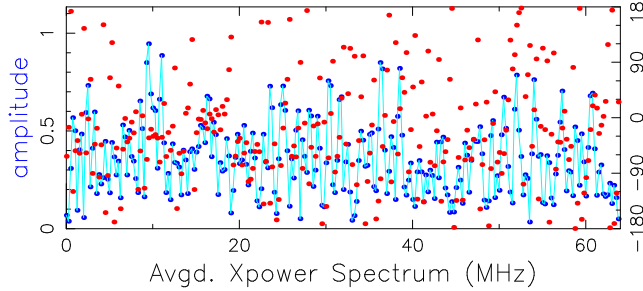


Fringe quality 0

SNR 6.6
 Int time 179.983
 Amp 0.230
 Phase 92.8
 PFD 6.1e-03
 Delays (us)
 SBD -0.682872
 MBD -0.006762
 Fringe rate (Hz)
 -0.740726
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

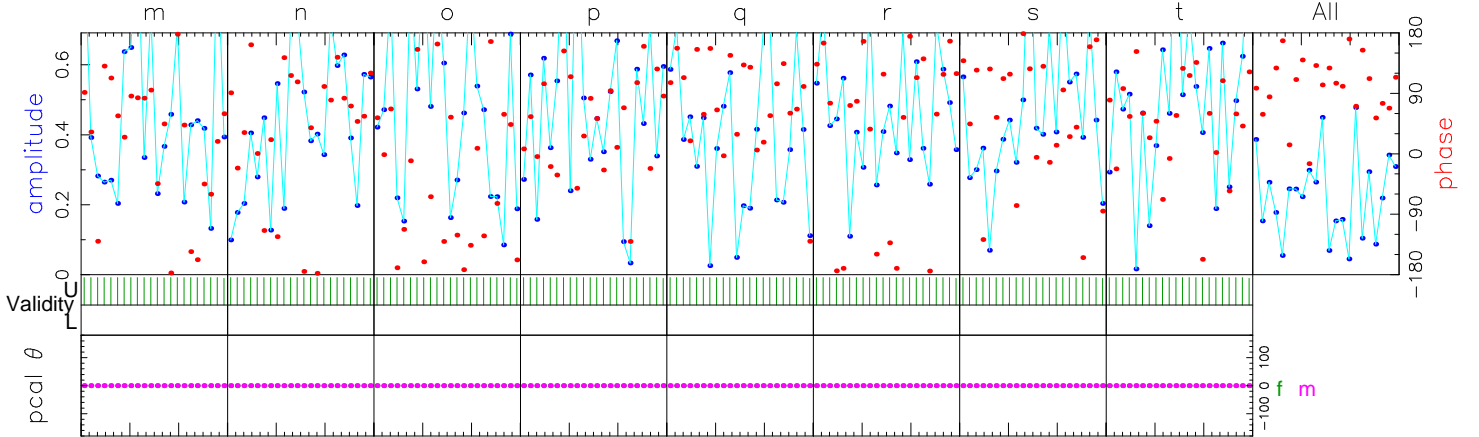


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175924
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	79.9	107.7	-151.7	50.3	80.0	129.8	108.6	72.0	Phase	92.8
	0.3	0.3	0.1	0.2	0.3	0.4	0.2	0.4	Ampl.	0.2
	359.5	292.6	159.1	261.5	83.3	81.1	167.8	445.7	Sbd box	82.2
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	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.15092427908E+04	Apriori delay (usec)	1.15099214281E+04	Resid mbdelay (usec)	-6.76233E-03	+/-	1.6E-04
Sband delay (usec)	1.15092385559E+04	Apriori clock (usec)	-4.8618507E-01	Resid sbdelay (usec)	-6.82872E-01	+/-	1.3E-03
Phase delay (usec)	1.15099214311E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	2.99315E-06	+/-	5.6E-07
Delay rate (us/s)	-8.93773175006E-01	Apriori rate (us/s)	-8.93764575915E-01	Resid rate (us/s)	-8.59909E-06	+/-	5.4E-09
Total phase (deg)	27.2	Apriori accel (us/s/s)	-6.05615868343E-05	Resid phase (deg)	92.8	+/-	17.4

ph/seg (deg)	RMS 45.3	Theor. 40.8	Amplitude Search (1024X32)	0.230 +/- 0.035	0.170	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	71.5	71.1	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)	54.4	24.6	Inc. seg. avg.	0.234	0.234	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	39.2	42.9	Inc. frq. avg.	0.248	0.248	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

f: az 138.7 el 54.1 pa -34.5 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 5090.863 1346.947 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fm.W.86.3MP2MB

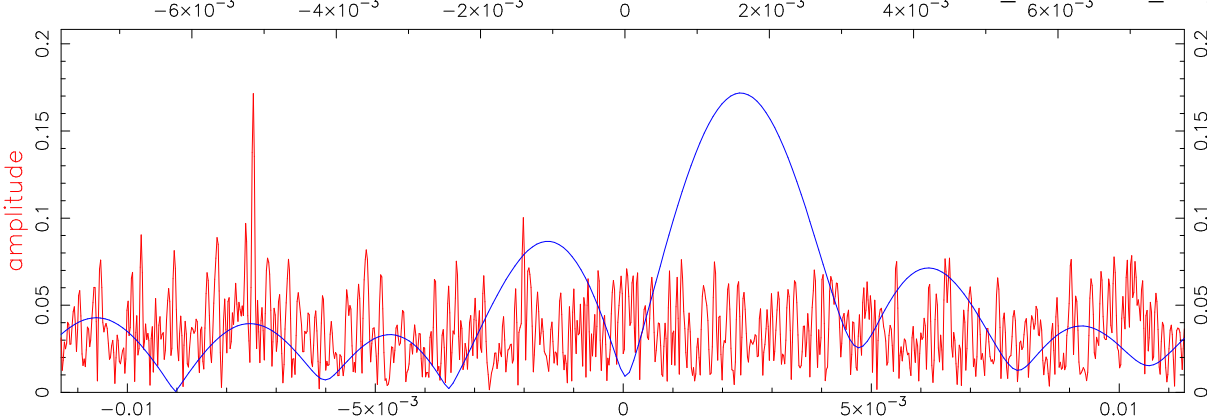
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fm

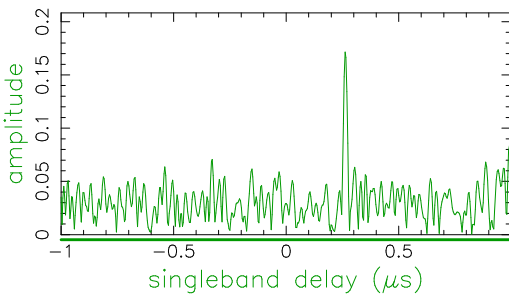
VLBA_FD - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

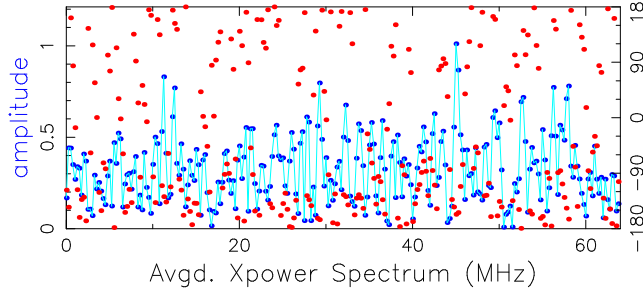


Fringe quality 0

SNR 6.3
 Int time 179.983
 Amp 0.208
 Phase -23.4
 PFD 2.9e-02
 Delays (us)
 SBD 0.262978
 MBD 0.001659
 Fringe rate (Hz)
 -0.643625
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

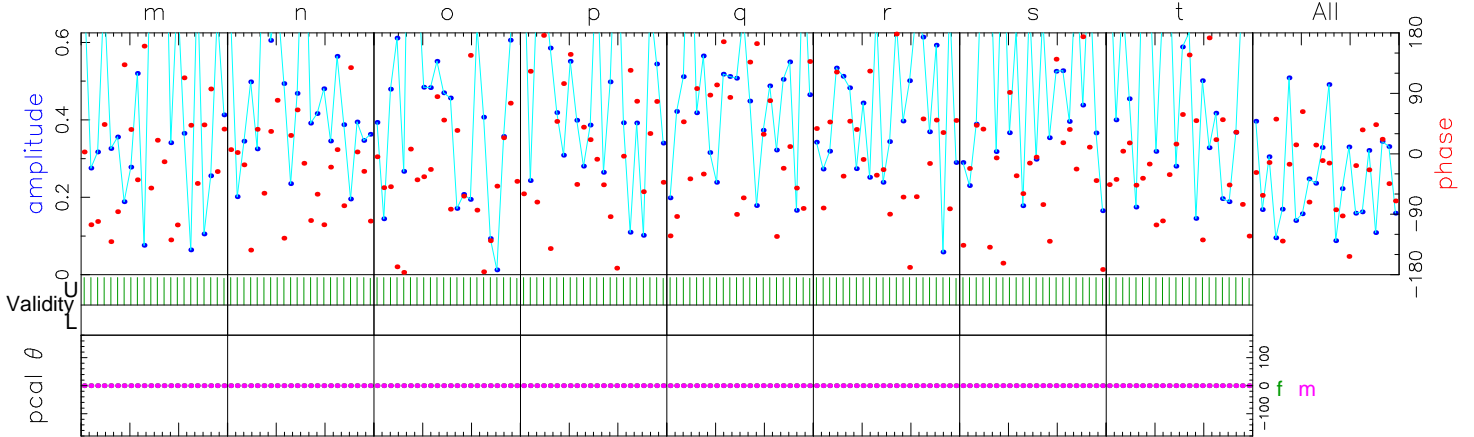


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175927
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-21.9	-22.1	-21.5	-23.5	-19.4	-8.1	-24.1	-37.7	Phase	-23.4
	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.3	Ampl.	0.2
	324.3	324.9	329.0	460.9	286.4	302.9	229.8	4.3	Sbd box	324.3
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	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.15101887124E+04	Apriori delay (usec)	1.15099214281E+04	Resid mbdelay (usec)	1.65933E-03	+/-	1.7E-04
Sband delay (usec)	1.15101844066E+04	Apriori clock (usec)	-4.8618507E-01	Resid sbdelay (usec)	2.62978E-01	+/-	1.4E-03
Phase delay (usec)	1.15099214274E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-7.55722E-07	+/-	5.8E-07
Delay rate (us/s)	-8.93772047763E-01	Apriori rate (us/s)	-8.93764575915E-01	Resid rate (us/s)	-7.47185E-06	+/-	5.6E-09
Total phase (deg)	270.9	Apriori accel (us/s/s)	-6.05615868343E-05	Resid phase (deg)	-23.4	+/-	18.1

ph/seg (deg)	RMS 56.0	Theor. 42.3	Amplitude Search (1024X32)	0.208 +/- 0.033	0.162	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.5	73.9	Interp.	0.000	0.235	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	8.8	25.5	Inc. seg. avg.	0.235	0.190	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.5	44.6	Inc. frq. avg.	0.190		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

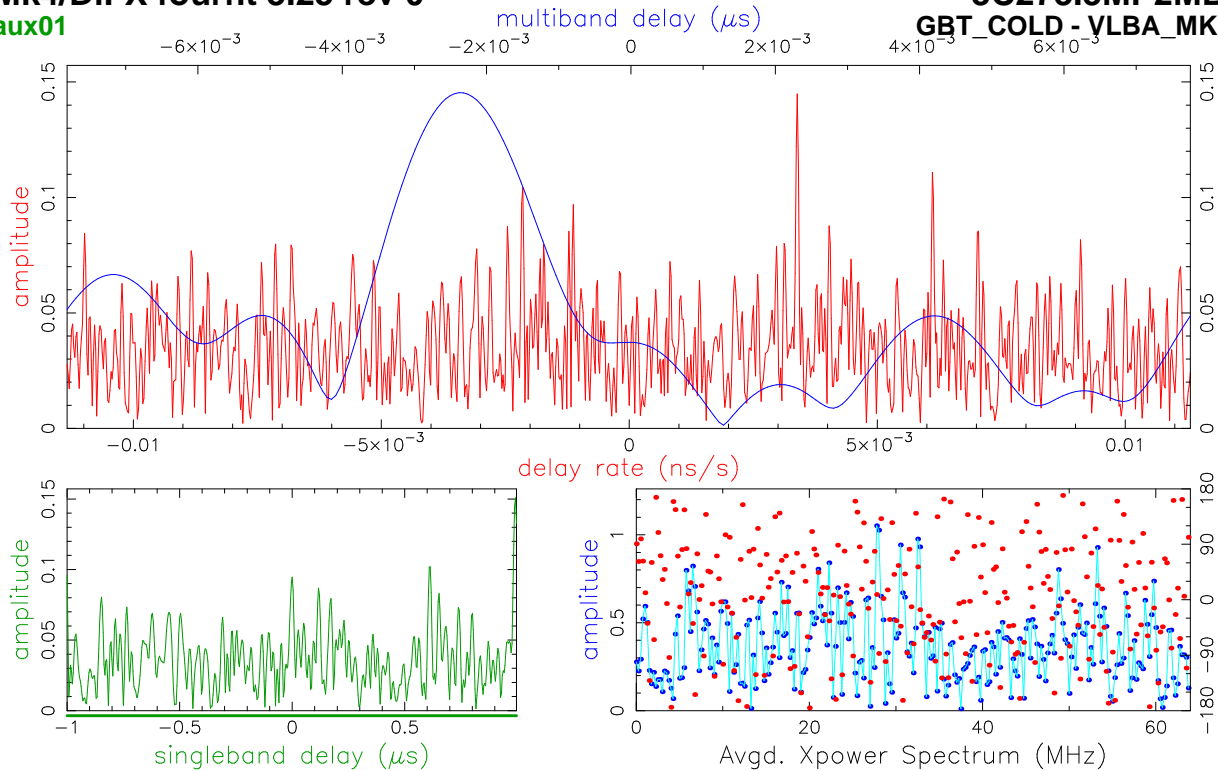
f: az 138.7 el 54.1 pa -34.5 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 5090.863 1346.947 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fm.W.96.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

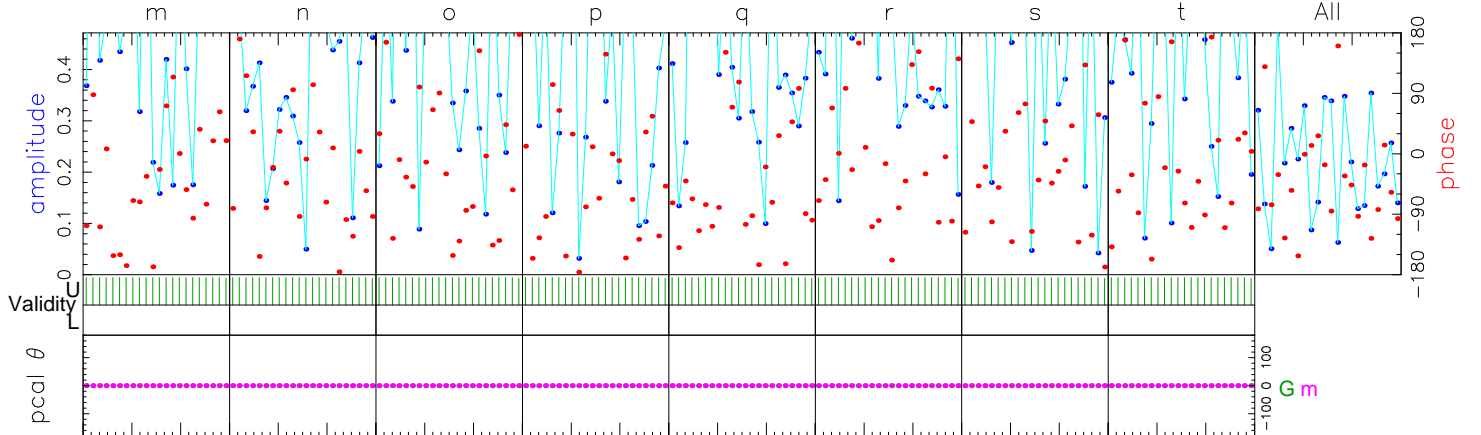
3C273.3MP2MB, No0707, Gm

GBT_COLD - VLBA_MK, fgroup W, pol LL



Fringe quality 0
 SNR 5.6
 Int time 179.983
 Amp 0.157
 Phase -56.3
 PFD 9.6e-01
 Delays (us)
 SBD 0.991199
 MBD -0.002268
 Fringe rate (Hz) 0.291466
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175930
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-23.7	-53.6	-58.9	-54.8	-92.5	-42.9	-36.3	-61.2	Phase	-56.3
	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	53.6	255.5	116.0	496.7	511.6	70.9	389.6	332.6	Sbd box	510.7
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	
M	0	0	0	0	0	0	0	0	PC freqs	
G:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.13173394001E+04	Apriori delay (usec)	1.13163416683E+04	Resid mbdelay (usec)	-2.26815E-03	+/-	2.0E-04
Sband delay (usec)	1.13173328678E+04	Apriori clock (usec)	-1.5168424E+01	Resid sbdelay (usec)	9.91199E-01	+/-	1.5E-03
Phase delay (usec)	1.13163416665E+04	Apriori clockrate (us/s)	8.4883055E-08	Resid phdelay (usec)	-1.81516E-06	+/-	6.6E-07
Delay rate (us/s)	-1.43892810306E+00	Apriori rate (us/s)	-1.43893148669E+00	Resid rate (us/s)	3.38363E-06	+/-	6.4E-09
Total phase (deg)	53.7	Apriori accel (us/s/s)	-5.91882560580E-05	Resid phase (deg)	-56.3	+/-	20.6

ph/seg (deg) 67.1 48.4 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.7 84.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.4 29.2 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.9 50.9 Inc. frq. avg. 0.143 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 182.2 el 53.5 pa 2.1 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8215.788 2340.067 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gm.W.113.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

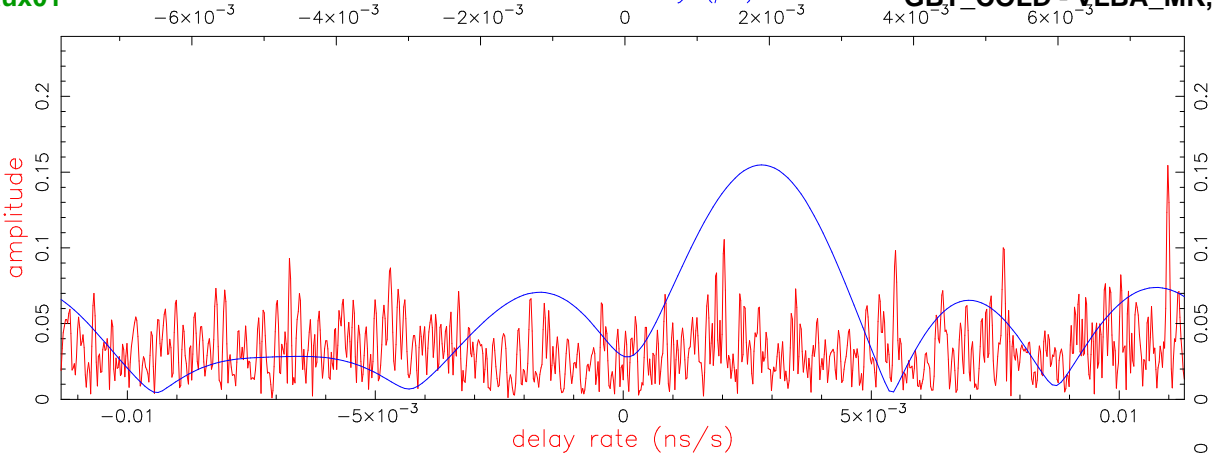
aux01

3C273.3MP2MB, No0707, Gm

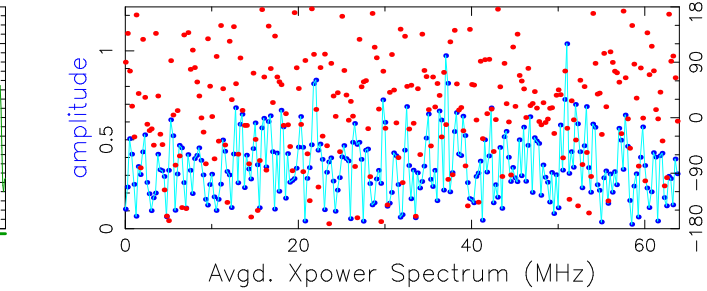
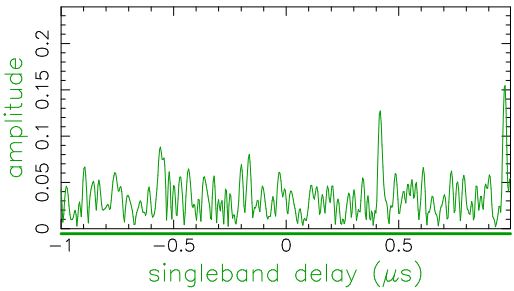
GBT_COLD - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

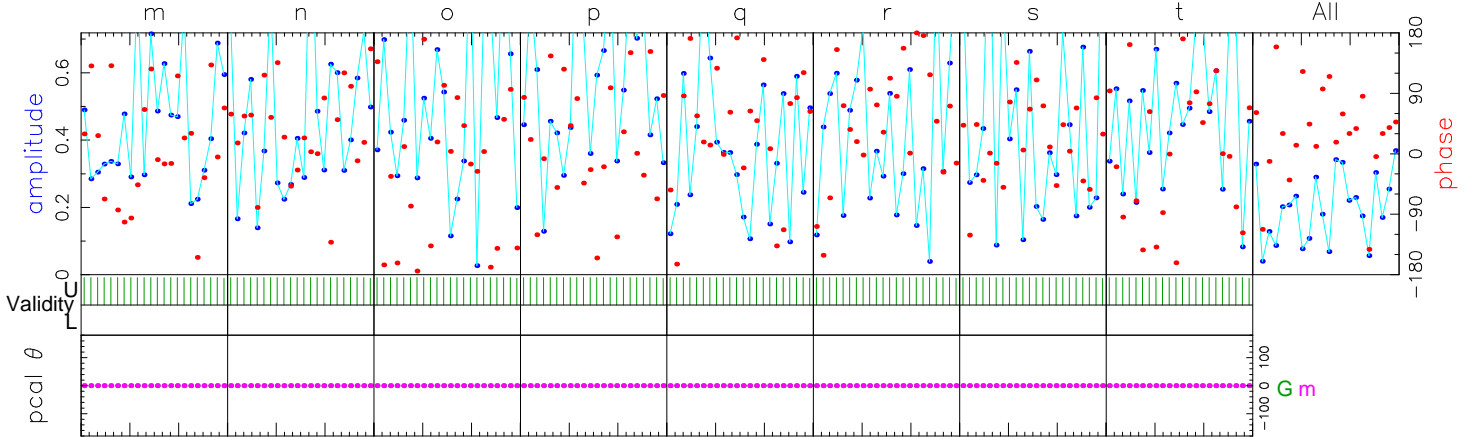


SNR 5.8
 Int time 179.983
 Amp 0.240
 Phase 35.7
 PFD 6.5e-01
 Delays (us)
 SBD 0.970983
 MBD 0.001827
 Fringe rate (Hz)
 0.947516
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175933
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
m	0	0	0	0	0	0	0	0		
G:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.13173122453E+04	Apriori delay (usec)	1.13163416683E+04	Resid mbdelay (usec)	1.82705E-03	+/-	1.9E-04
Sband delay (usec)	1.13173126515E+04	Apriori clock (usec)	-1.5168424E+01	Resid sbdelay (usec)	9.70983E-01	+/-	1.5E-03
Phase delay (usec)	1.13163416694E+04	Apriori clockrate (us/s)	8.4883055E-08	Resid phdelay (usec)	1.15248E-06	+/-	6.4E-07
Delay rate (us/s)	-1.43892048697E+00	Apriori rate (us/s)	-1.43893148669E+00	Resid rate (us/s)	1.09997E-05	+/-	6.2E-09
Total phase (deg)	145.8	Apriori accel (us/s/s)	-5.91882560580E-05	Resid phase (deg)	35.7	+/-	19.9

ph/seg (deg)	67.8	Theor.	46.6	Amplitude	0.240 +/- 0.042	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.5	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)	23.4	Inc. seg. avg.	0.229	Inc. frq. avg.	0.222	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.0	Inc. frq. avg.	0.222			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 182.2 el 53.5 pa 2.1 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8215.788 2340.067 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gm...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gm.W.124.3MP2MB

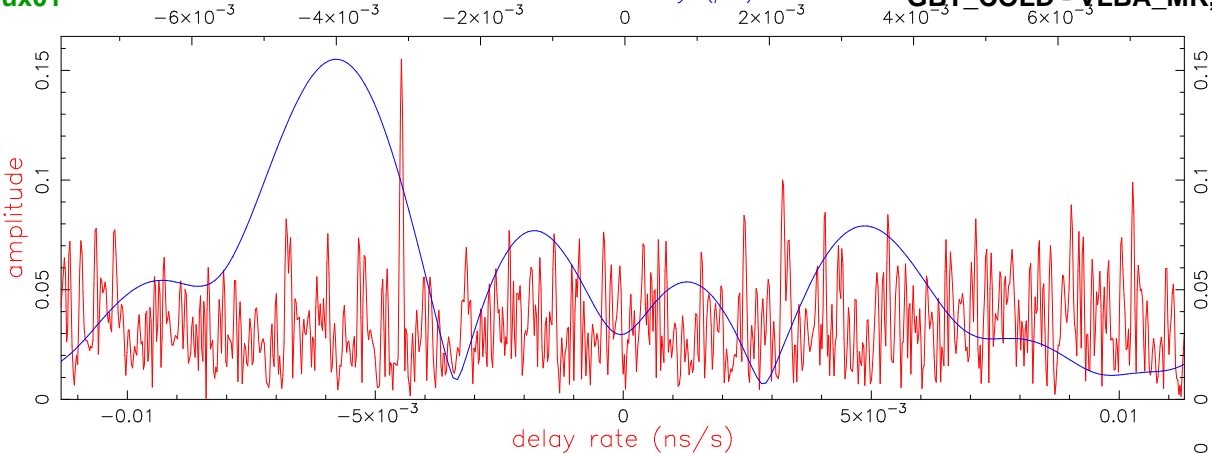
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gm

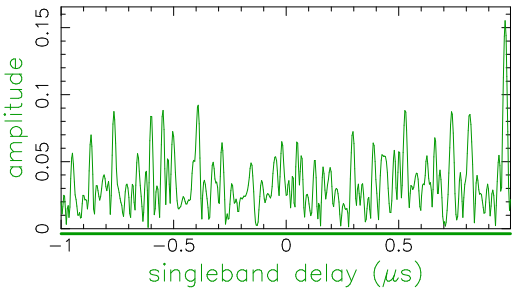
GBT_COLD - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

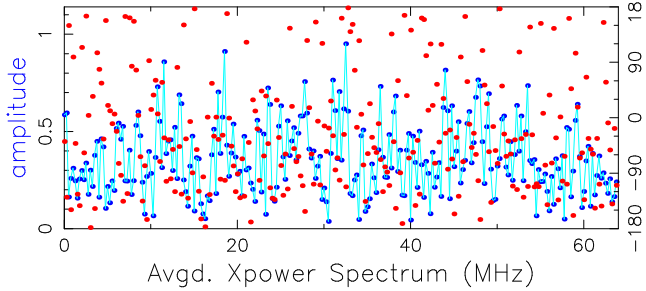


Fringe quality 0

SNR 5.7
 Int time 179.983
 Amp 0.165
 Phase 23.4
 PFD 7.9e-01
 Delays (us)
 SBD 0.972700
 MBD -0.004000
 Fringe rate (Hz)
 -0.385490
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

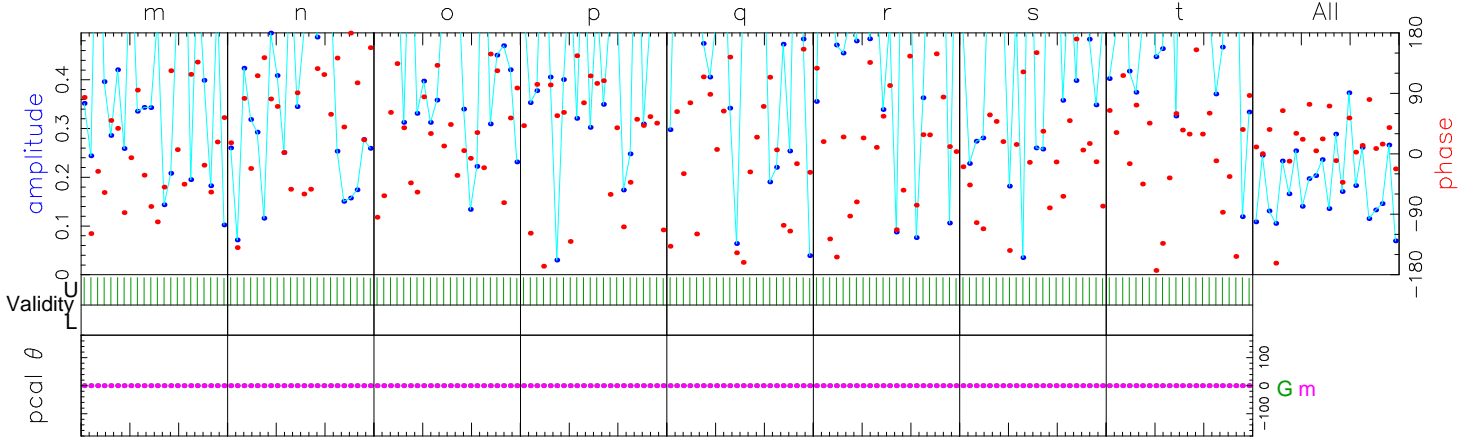


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175935
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-14.9	66.3	4.2	77.6	44.7	35.7	-7.2	26.7	Phase	23.4
	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	321.3	354.6	474.7	35.8	115.3	103.6	506.5	122.8	Sbd box	506.0
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	
M	0	0	0	0	0	0	0	0	PC freqs	
G:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.13173220436E+04	Apriori delay (usec)	1.13163416683E+04	Resid mbdelay (usec)	-3.99972E-03	+/-	1.9E-04
Sband delay (usec)	1.13173143680E+04	Apriori clock (usec)	-1.5168424E+01	Resid sbdelay (usec)	9.72700E-01	+/-	1.5E-03
Phase delay (usec)	1.13163416690E+04	Apriori clockrate (us/s)	8.4883055E-08	Resid phdelay (usec)	7.54262E-07	+/-	6.5E-07
Delay rate (us/s)	-1.43893596185E+00	Apriori rate (us/s)	-1.43893148669E+00	Resid rate (us/s)	-4.47516E-06	+/-	6.2E-09
Total phase (deg)	133.4	Apriori accel (us/s/s)	-5.91882560580E-05	Resid phase (deg)	23.4	+/-	20.1

ph/seg (deg)	48.6	RMS	47.2	Theor.	47.2	Amplitude	0.165 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	51.5	48.6	47.2	Search (1024X32)	0.151	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	36.9	51.5	47.2	Inc. seg. avg.	0.151	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.2	36.9	47.2	Inc. frq. avg.	0.172	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

G: az 182.2 el 53.5 pa 2.1 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8215.788 2340.067 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gm...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gm.W.133.3MP2MB

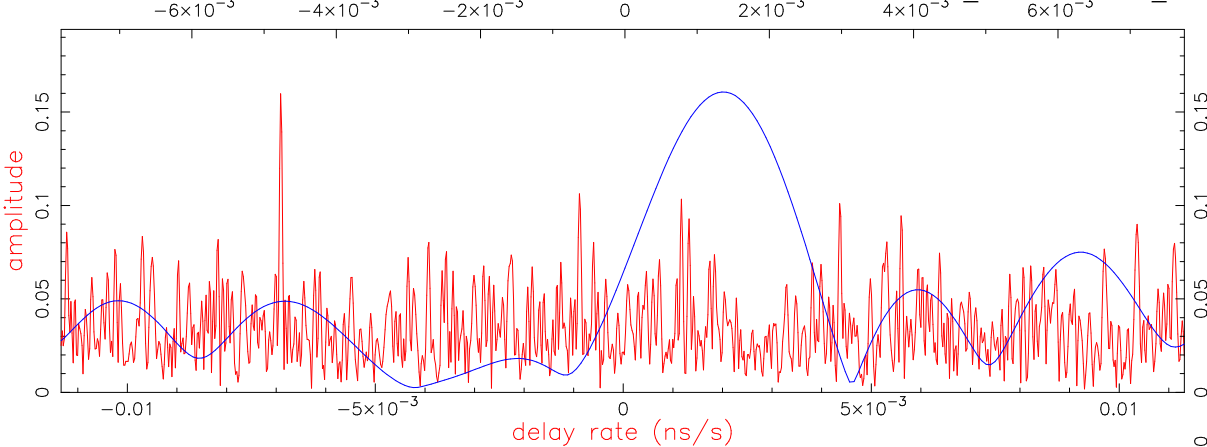
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gm

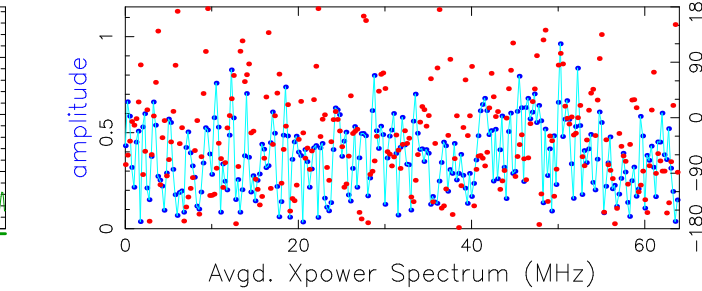
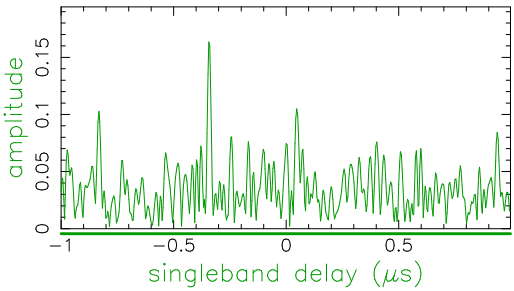
GBT_COLD - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)



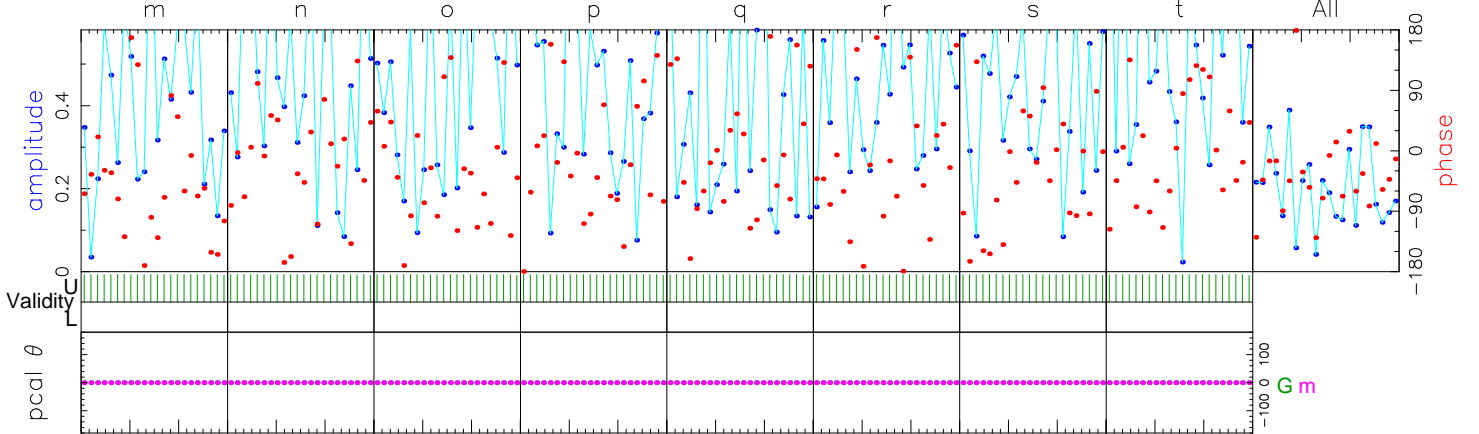
Fringe quality 0

SNR 6.1
 Int time 179.983
 Amp 0.194
 Phase -39.7
 PFD 1.4e-01
 Delays (us)
 SBD -0.342245
 MBD 0.001247
 Fringe rate (Hz)
 -0.595576
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175937
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-75.9	1.2	-59.4	-40.6	-20.3	-64.7	-55.3	-12.6		Phase -39.7
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		Ampl. 0.2
	377.3	404.9	67.1	155.4	31.2	425.8	301.4	411.7		Sbd box 169.4
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
m	0	0	0	0	0	0	0	0		PC freqs
G:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
G:m	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
m	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	1.13159991648E+04	Apriori delay (usec)	1.13163416683E+04	Resid mbdelay (usec)	1.24654E-03	+/-	1.8E-04
Sband delay (usec)	1.13159994230E+04	Apriori clock (usec)	-1.5168424E+01	Resid sbdelay (usec)	-3.42245E-01	+/-	1.4E-03
Phase delay (usec)	1.13163416670E+04	Apriori clockrate (us/s)	8.4883055E-08	Resid phdelay (usec)	-1.28033E-06	+/-	6.1E-07
Delay rate (us/s)	-1.43893840073E+00	Apriori rate (us/s)	-1.43893148669E+00	Resid rate (us/s)	-6.91404E-06	+/-	5.8E-09
Total phase (deg)	70.3	Apriori accel (us/s/s)	-5.91882560580E-05	Resid phase (deg)	-39.7	+/-	18.8

ph/seg (deg)	50.5	Theor.	44.2	Amplitude	0.194 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	61.5		77.1	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	29.9		26.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	15.0		46.5	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.	0.188	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

G: az 182.2 el 53.5 pa 2.1 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8215.788 2340.067 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gm...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gm.W.139.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

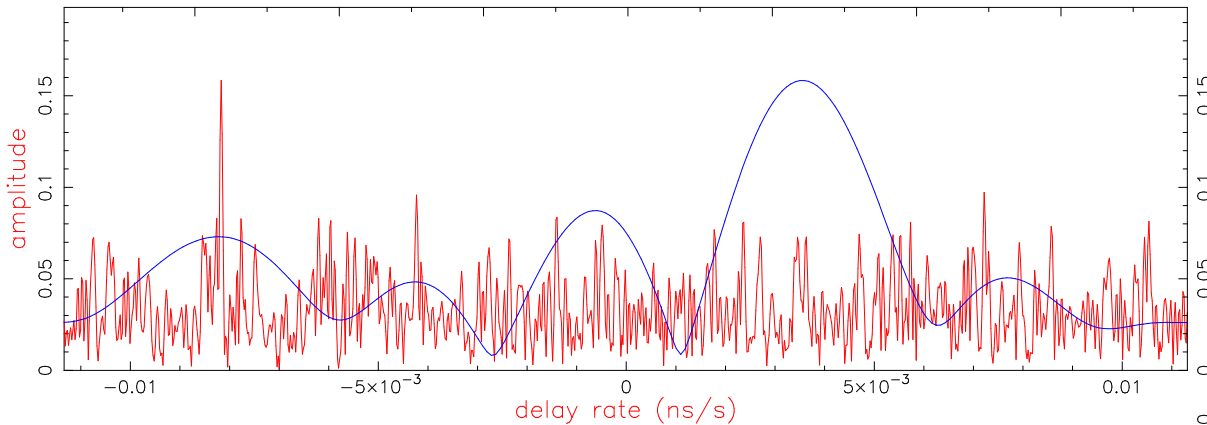
aux01

3C273.3MP2MB, No0707, gm

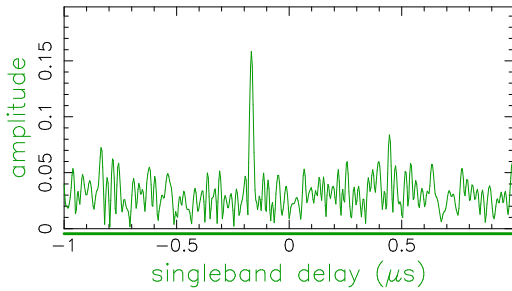
GLT - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

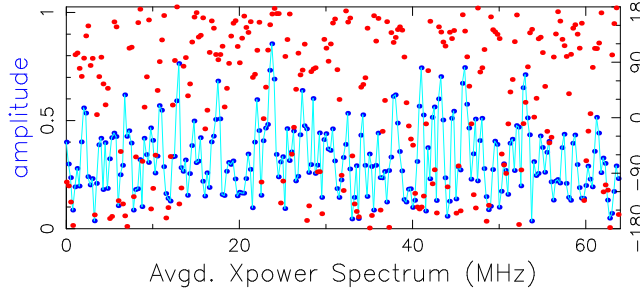
Fringe quality 0



SNR 5.8
 Int time 179.993
 Amp 0.198
 Phase -26.1
 PFD 5.4e-01
 Delays (us)
 SBD -0.167915
 MBD 0.002420
 Fringe rate (Hz)
 -0.705539
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

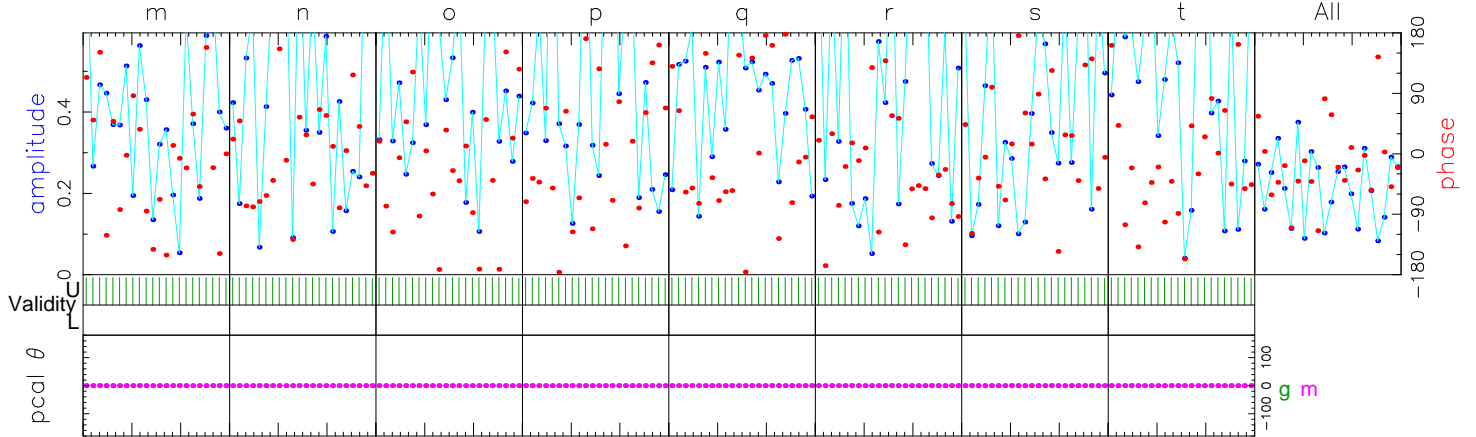


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175938
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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	Ampl.	0.2
m	0	0	0	0	0	0	0	0	Sbd box	214.0
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	

Group delay (usec) (SBD)	-2.49277656874E+02	Apriori delay (usec)	-2.49108201785E+02	Resid mbdelay (usec)	2.41991E-03	+/-	1.9E-04
Sband delay (usec)	-2.49276117285E+02	Apriori clock (usec)	-2.0569229E-01	Resid sbdelay (usec)	-1.67915E-01	+/-	1.5E-03
Phase delay (usec)	-2.49108202628E+02	Apriori clockrate (us/s)	7.9882195E-07	Resid phdelay (usec)	-8.42431E-07	+/-	6.4E-07
Delay rate (us/s)	-1.48372597956E+00	Apriori rate (us/s)	-1.48371778895E+00	Resid rate (us/s)	-8.19061E-06	+/-	6.1E-09
Total phase (deg)	-206.8	Apriori accel (us/s/s)	3.71750746965E-06	Resid phase (deg)	-26.1	+/-	19.7

ph/seg (deg) 59.0 46.3 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.4 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.5 27.9 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.4 48.7 Inc. frq. avg. 0.194 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 192.9 el 15.1 pa 3.0 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8505.468 5620.424 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gm.W.147.3MP2MB

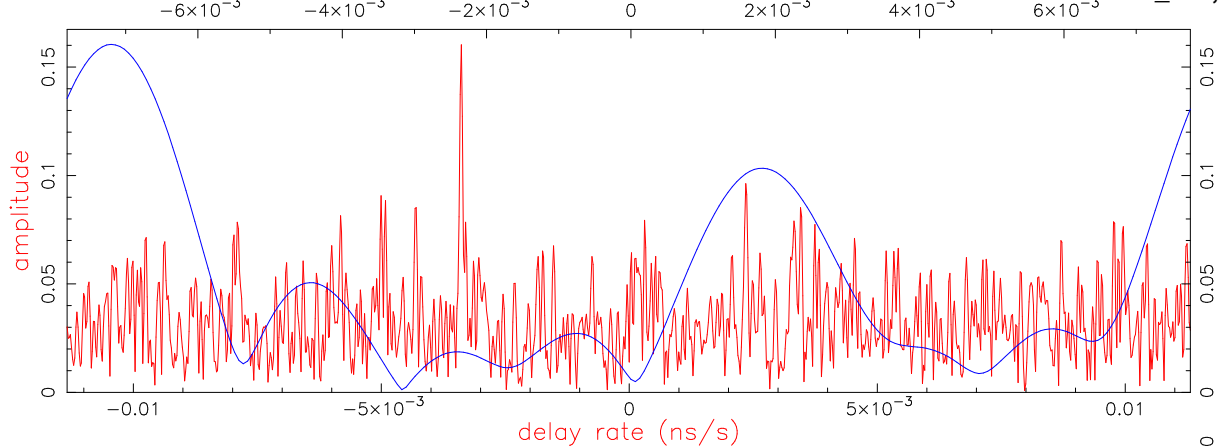
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gm

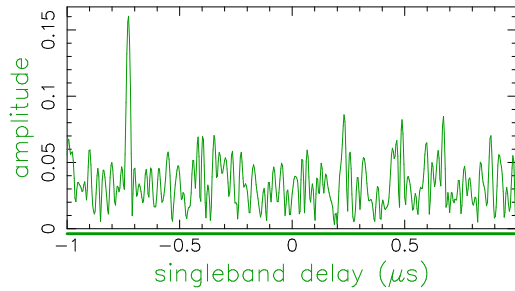
GLT - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

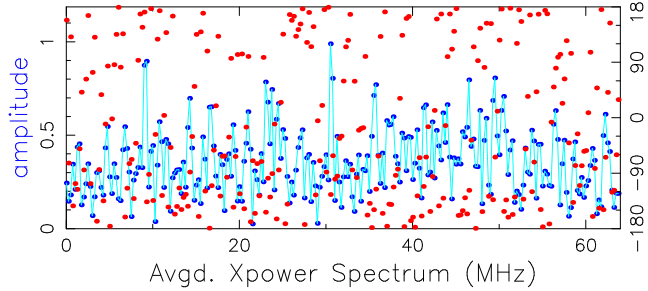


Fringe quality 0

SNR 5.9
Int time 179.994
Amp 0.167
Phase -170.0
PFD 3.4e-01
Delays (us)
SBD -0.727752
MBD -0.007252
Fringe rate (Hz)
-0.291389
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

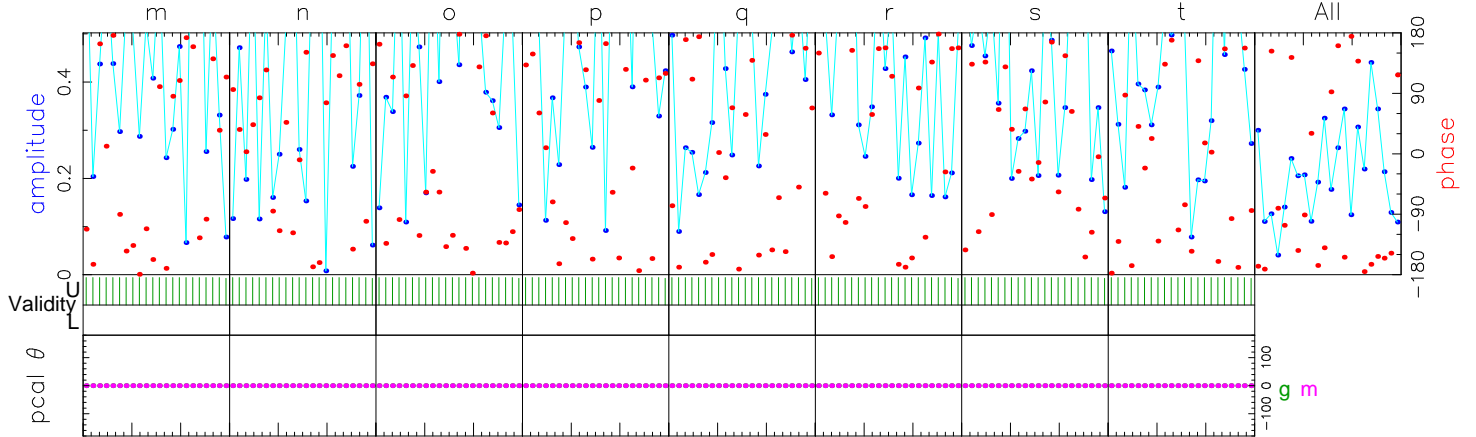


delay rate (ns/s)



Exp. c241b
Exper # 1234
Yr:day 2024:111
Start 040000.00
Stop 040300.22
FRT 040130.00
Corr/FF/build
2024:361:053129
2025:041:175941
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

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



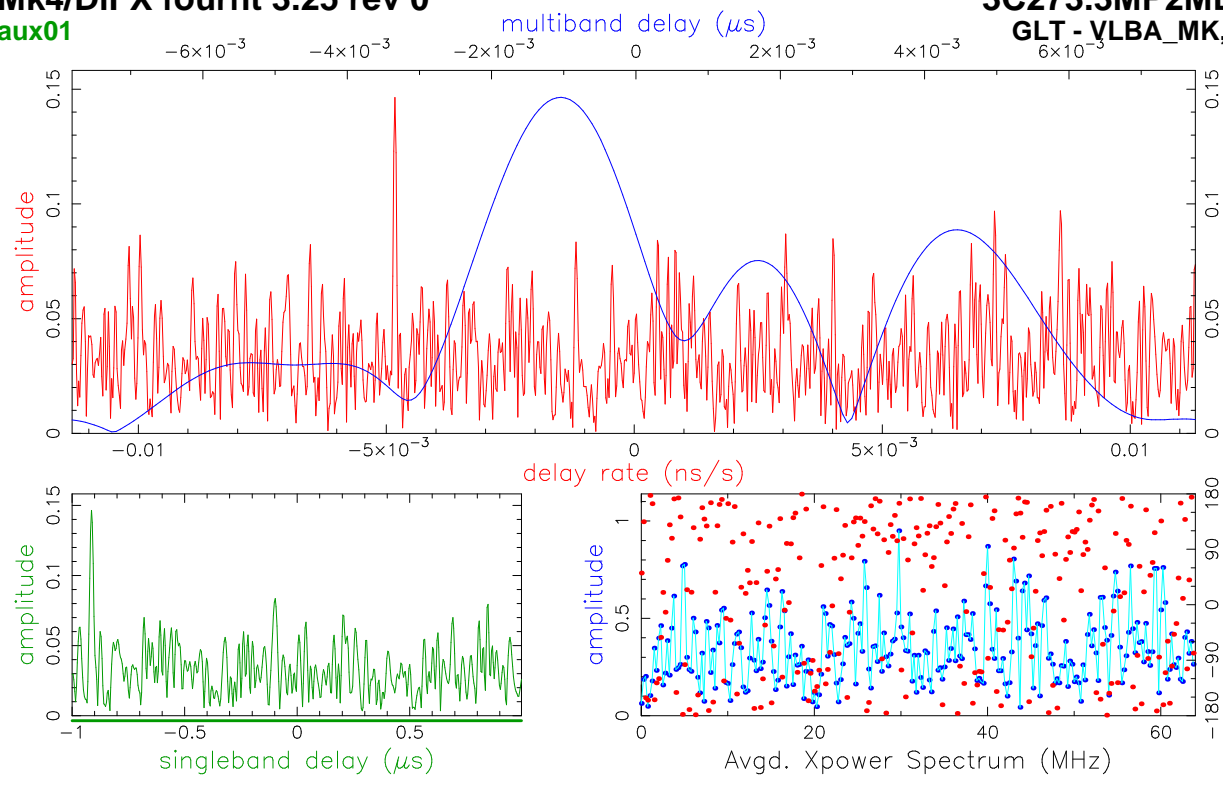
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-170.9	162.1	-140.6	162.2	-140.8	-175.0	164.9	-151.9	Phase	-170.0	
	0.2	0.1	0.3	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2	
	292.6	25.1	71.9	43.0	2.6	316.4	134.3	98.7	Sbd box	70.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
g	0	0	0	0	0	0	0	0	PC freqs		
m	0	0	0	0	0	0	0	0	PC freqs		
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000			
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-2.49834203632E+02		Apriori delay (usec)		-2.49108201785E+02		Resid mbdelay (usec)		-7.25185E-03	+/- 1.8E-04	
Sband delay (usec)	-2.49835954035E+02		Apriori clock (usec)		-2.0569229E-01		Resid sbdelay (usec)		-7.27752E-01	+/- 1.5E-03	
Phase delay (usec)	-2.49108207268E+02		Apriori clockrate (us/s)		7.9882195E-07		Resid phdelay (usec)		-5.48234E-06	+/- 6.2E-07	
Delay rate (us/s)	-1.48372117168E+00		Apriori rate (us/s)		-1.48371778895E+00		Resid rate (us/s)		-3.38273E-06	+/- 6.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		3.71750746965E-06		Resid phase (deg)		-170.0	+/- 19.4	
	RMS	Theor.	Amplitude	0.167 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	55.9	45.4	Search (1024X32)	0.158		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	68.3	79.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	26.6	27.4	Inc. seg. avg.	0.168		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	45.3	47.8	Inc. frq. avg.	0.161		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
g: az 192.9 el 15.1 pa 3.0	m: az 93.6 el 15.4 pa -70.0		u,v (fr/asec) 8505.468 5620.424						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//gm..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//gm.W.156.3MP2MB								

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gm

GLT - VLBA_MK, fgroup W, pol LR

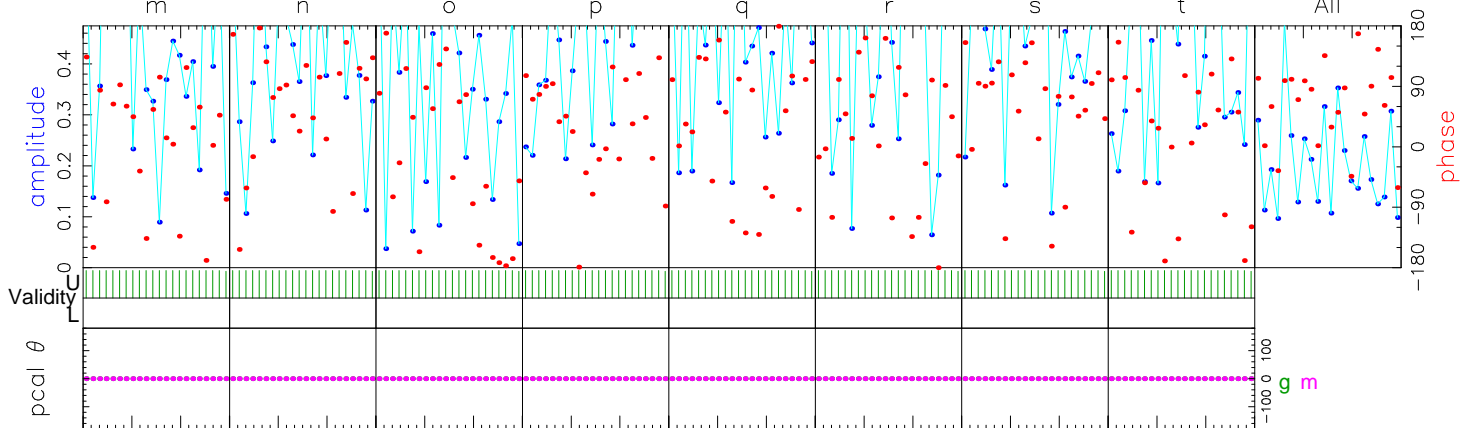


Fringe quality 0

SNR 5.4
 Int time 179.993
 Amp 0.158
 Phase 82.1
 PFD 1.0e+00
 Delays (us)
 SBD -0.913526
 MBD -0.001030
 Fringe rate (Hz)
 -0.415822
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175943
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
	53.7	113.2	155.7	49.6	93.8	53.6	81.5	98.4	Phase	82.1		
	0.1	0.2	0.1	0.2	0.1	0.3	0.3	0.2	Ampl.	0.2		
	138.9	118.8	411.5	382.3	232.6	193.3	23.1	115.9	Sbd box	23.1		
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			
m	0	0	0	0	0	0	0	0	PC freqs			
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
m	1000	1000	1000	1000	1000	1000	1000	1000				
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	-2.50015481703E+02		Apriori delay (usec)		-2.49108201785E+02		Resid mbdelay (usec)		-1.02992E-03	+/- 2.0E-04		
Sband delay (usec)	-2.50021727785E+02		Apriori clock (usec)		-2.05692229E-01		Resid sbdelay (usec)		-9.13526E-01	+/- 1.6E-03		
Phase delay (usec)	-2.49108199138E+02		Apriori clockrate (us/s)		7.9882195E-07		Resid phdelay (usec)		2.64692E-06	+/- 6.9E-07		
Delay rate (us/s)	-1.48372261623E+00		Apriori rate (us/s)		-1.48371778895E+00		Resid rate (us/s)		-4.82728E-06	+/- 6.6E-09		
Total phase (deg)			Apriori accel (us/s/s)		3.71750746965E-06		Resid phase (deg)		82.1	+/- 21.3		
	RMS	Theor.	Amplitude	0.158 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	62.0	49.9	Search (1024X32)	0.144		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	78.4	87.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	39.7	30.1	Inc. seg. avg.	0.163		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	48.8	52.6	Inc. frq. avg.	0.157		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
g: az 192.9 el 15.1 pa 3.0	m: az 93.6 el 15.4 pa -70.0		u,v (fr/asec) 8505.468 5620.424						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//gm..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//gm.W.167.3MP2MB									

Mk4/DiFX fourfit 3.25 rev 0

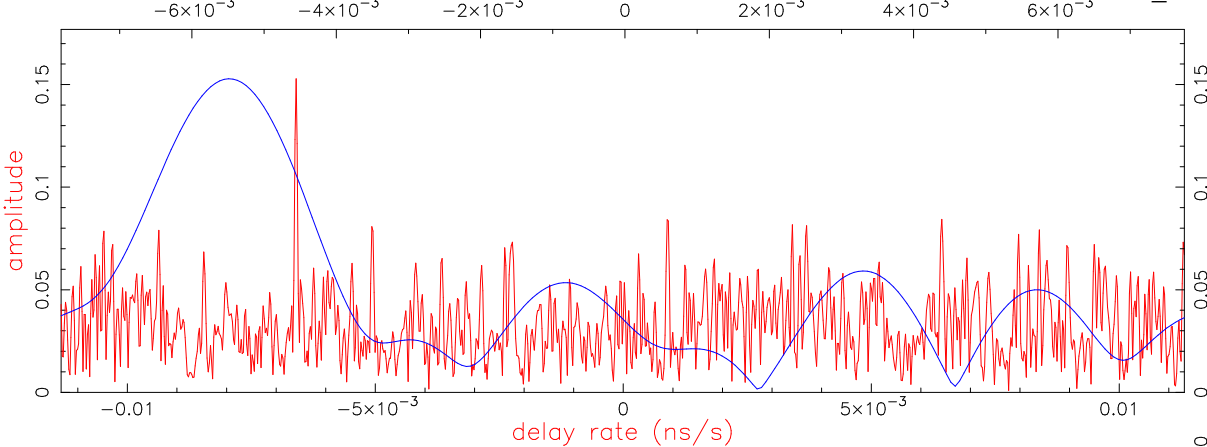
aux01

3C273.3MP2MB, No0707, gm

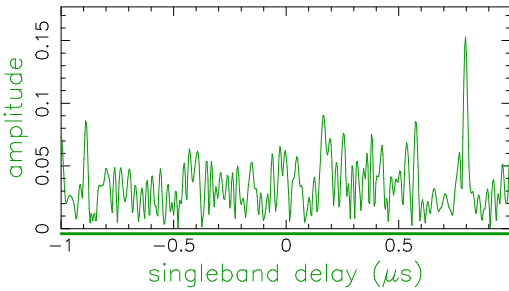
GLT - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

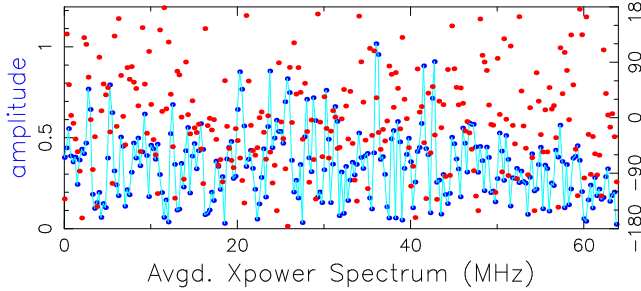
Fringe quality 0



SNR 5.6
 Int time 179.994
 Amp 0.177
 Phase -138.7
 PFD 9.0e-01
 Delays (us)
 SBD 0.796134
 MBD -0.005502
 Fringe rate (Hz)
 -0.568838
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

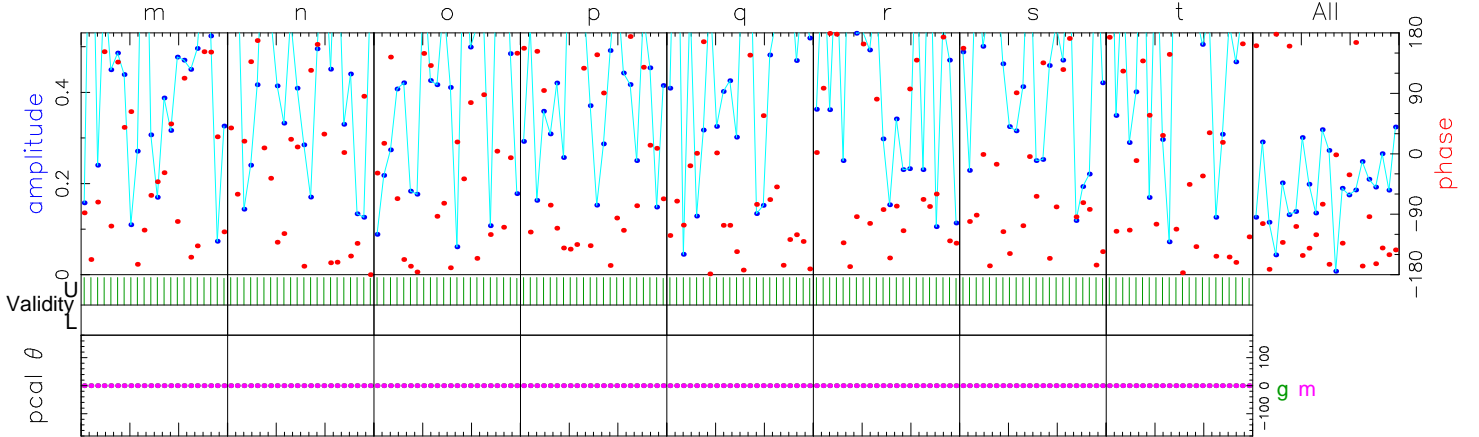


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175945
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-152.1	-74.9	-116.1	-146.1	-123.7	-157.0	-124.4	-146.0	Phase	-138.7
	0.2	0.0	0.1	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	364.7	322.2	395.1	199.2	195.1	478.1	310.1	322.6	Sbd box	460.8
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	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.48316828768E+02	Apriori delay (usec)	-2.49108201785E+02	Resid mbdelay (usec)	-5.50198E-03	+/-	1.9E-04
Sband delay (usec)	-2.48312068285E+02	Apriori clock (usec)	-2.0569229E-01	Resid sbdelay (usec)	7.96134E-01	+/-	1.5E-03
Phase delay (usec)	-2.49108206258E+02	Apriori clockrate (us/s)	7.9882195E-07	Resid phdelay (usec)	-4.47281E-06	+/-	6.6E-07
Delay rate (us/s)	-1.48372439259E+00	Apriori rate (us/s)	-1.48371778895E+00	Resid rate (us/s)	-6.60364E-06	+/-	6.3E-09
Total phase (deg)	-319.3	Apriori accel (us/s/s)	3.71750746965E-06	Resid phase (deg)	-138.7	+/-	20.4

ph/seg (deg)	50.0	Theor.	47.8	Amplitude	0.177 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.4		83.4	Search (1024X32)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.6		28.8	Inc. seg. avg.	0.166	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.8		50.3	Inc. frq. avg.	0.163	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 192.9 el 15.1 pa 3.0 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 8505.468 5620.424 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gm..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gm.W.179.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

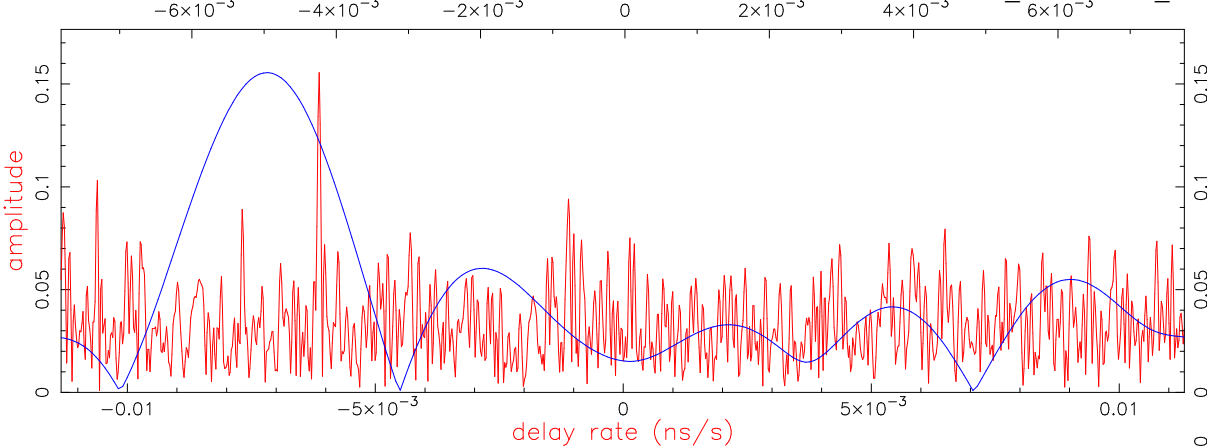
aux01

3C273.3MP2MB, No0707, km

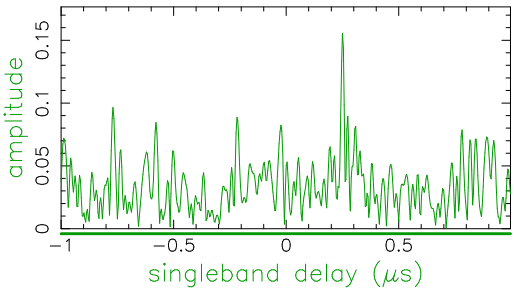
VLBA_KP - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

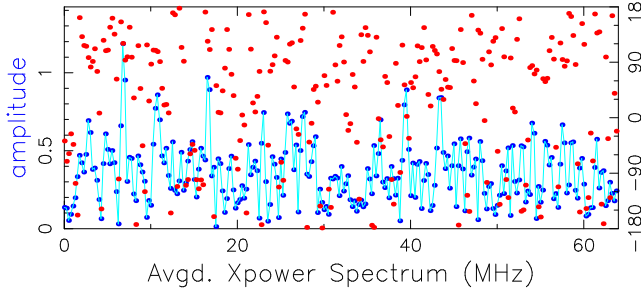
Fringe quality 0



SNR 5.7
 Int time 179.984
 Amp 0.177
 Phase 169.4
 PFD 7.3e-01
 Delays (us)
 SBD 0.250641
 MBD -0.004938
 Fringe rate (Hz)
 -0.529635
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

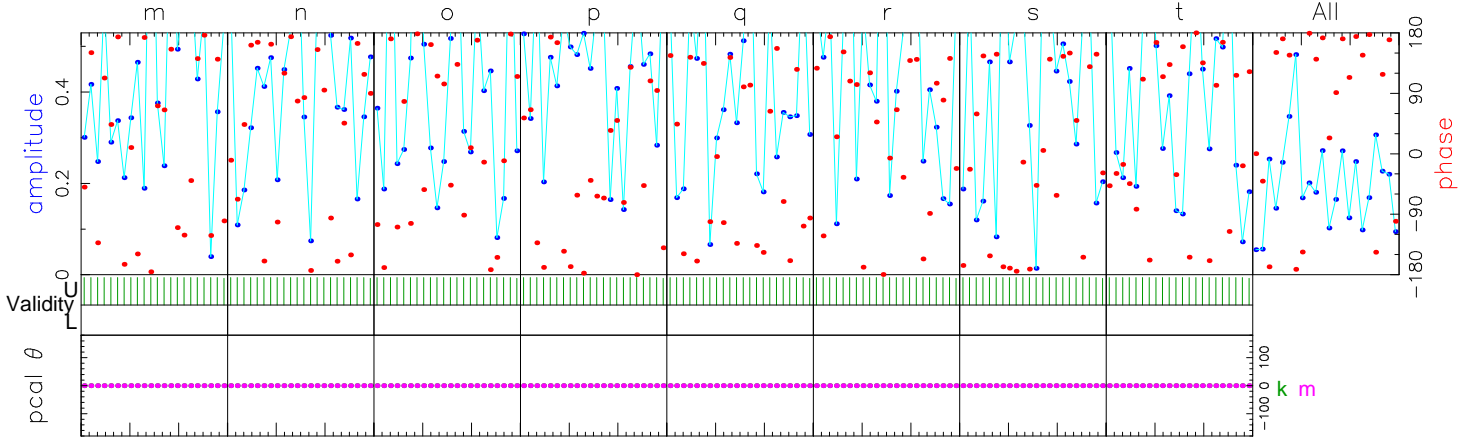


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175941
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-176.3	137.8	-173.6	-151.1	160.4	142.7	174.8	-179.0	Phase	169.4
	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	343.4	393.2	45.4	462.7	460.2	456.4	99.1	493.1	Sbd box	321.2
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	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.02217939067E+04	Apriori delay (usec)	1.02215488446E+04	Resid mbdelay (usec)	-4.93799E-03	+/-	1.9E-04
Sband delay (usec)	1.02217994856E+04	Apriori clock (usec)	-3.9350891E-01	Resid sbdelay (usec)	2.50641E-01	+/-	1.5E-03
Phase delay (usec)	1.02215488501E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	5.46267E-06	+/-	6.5E-07
Delay rate (us/s)	-7.42841184355E-01	Apriori rate (us/s)	-7.42835035818E-01	Resid rate (us/s)	-6.14854E-06	+/-	6.2E-09
Total phase (deg)	341.3	Apriori accel (us/s/s)	-5.36358088624E-05	Resid phase (deg)	169.4	+/-	20.0

ph/seg (deg)	67.2	Theor.	47.0	Amplitude	0.177 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.9		82.0	Search (1024X32)	0.153	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.9		28.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	20.3		49.4	Inc. seg. avg.	0.171	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.169	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 130.2 el 48.5 pa -40.3 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.588 1540.133 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/km..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/km.W.159.3MP2MB

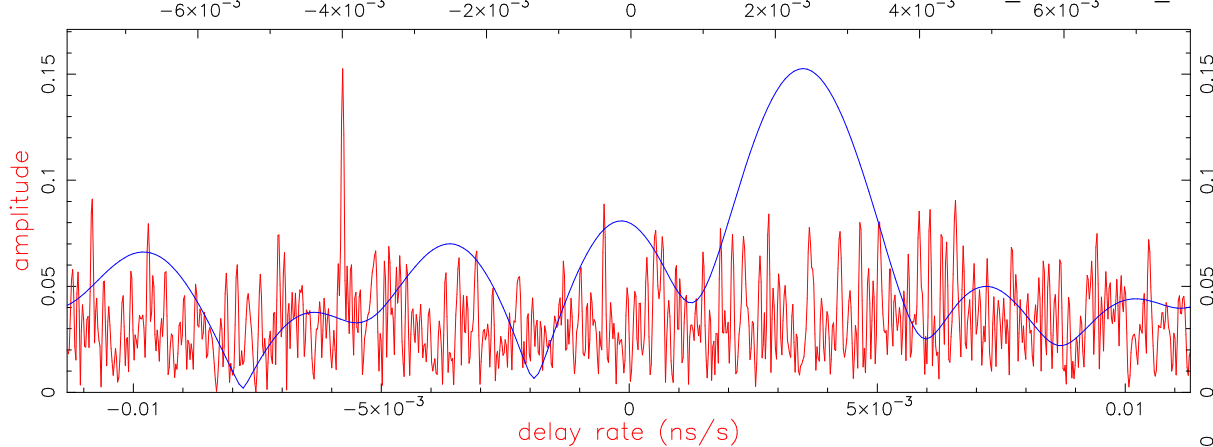
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, km

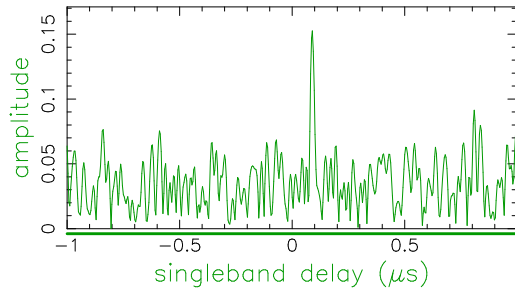
VLBA_KP - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

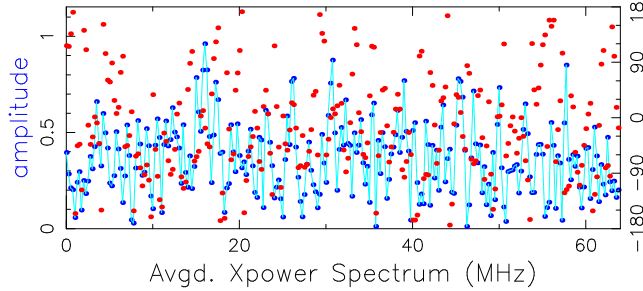


Fringe quality 0

SNR 5.6
 Int time 179.984
 Amp 0.171
 Phase -111.7
 PFD 9.0e-01
 Delays (us)
 SBD 0.088816
 MBD 0.002351
 Fringe rate (Hz)
 -0.499320
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

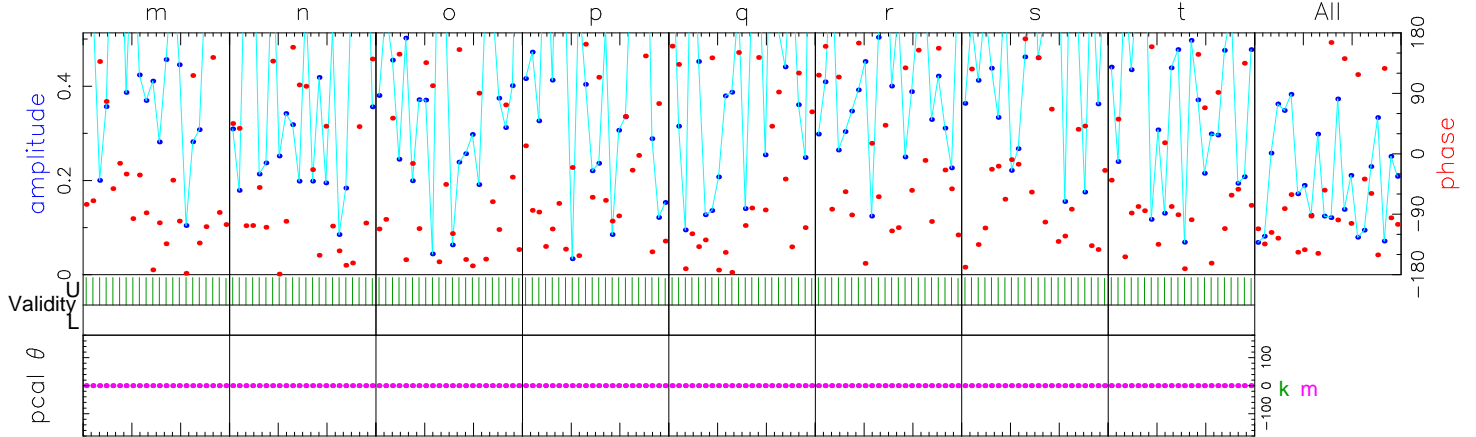


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175943
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-84.3	-143.9	-133.9	-103.3	175.2	-108.2	-91.0	-95.8	Phase	-111.7
	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	281.5	384.0	402.9	470.9	7.2	183.2	108.5	165.3	Sbd box	279.7
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	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.02216449453E+04	Apriori delay (usec)	1.02215488446E+04	Resid mbdelay (usec)	2.35065E-03	+/-	1.9E-04
Sband delay (usec)	1.02216376606E+04	Apriori clock (usec)	-3.9350891E-01	Resid sbdelay (usec)	8.88160E-02	+/-	1.5E-03
Phase delay (usec)	1.02215488410E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-3.60045E-06	+/-	6.6E-07
Delay rate (us/s)	-7.42840832430E-01	Apriori rate (us/s)	-7.42835035818E-01	Resid rate (us/s)	-5.79661E-06	+/-	6.3E-09
Total phase (deg)	60.2	Apriori accel (us/s/s)	-5.36358088624E-05	Resid phase (deg)	-111.7	+/-	20.4

ph/seg (deg)	57.1	Theor.	47.8	Amplitude	0.171 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.4		83.4	Search (1024X32)	0.151	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.4		28.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.1		50.3	Inc. seg. avg.	0.170	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.175	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 130.2 el 48.5 pa -40.3 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.588 1540.133 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//km..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//km.W.171.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

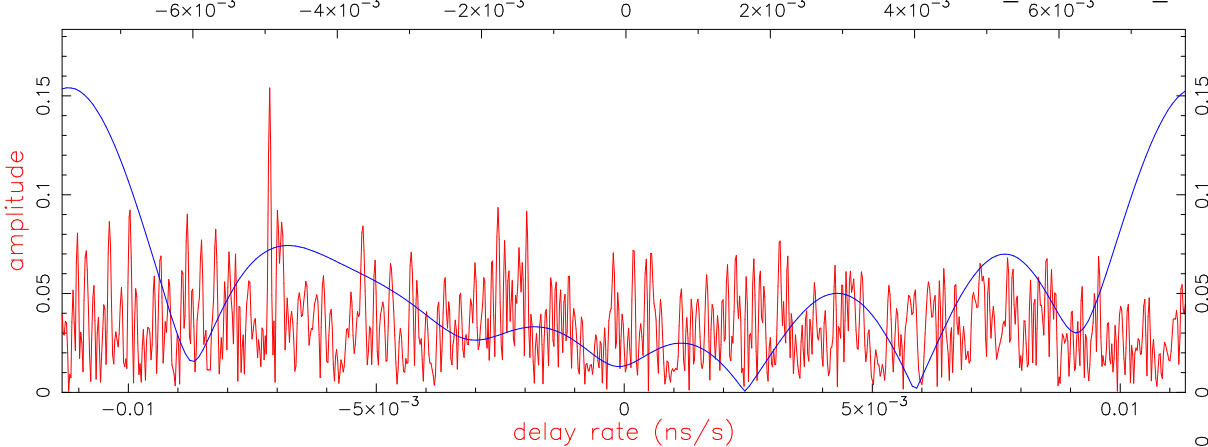
aux01

3C273.3MP2MB, No0707, km

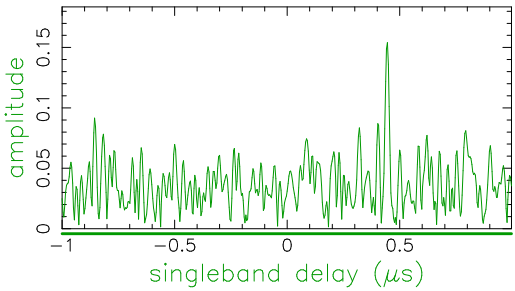
VLBA_KP - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

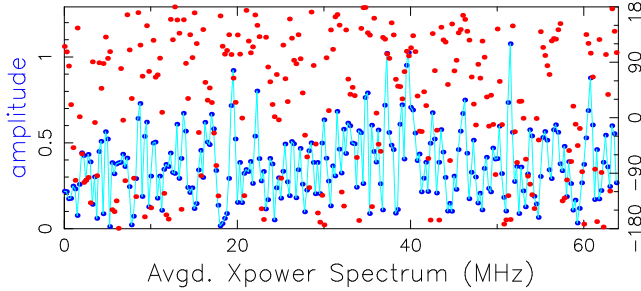
Fringe quality 0



SNR 5.7
 Int time 179.984
 Amp 0.184
 Phase -68.4
 PFD 8.0e-01
 Delays (us)
 SBD 0.444221
 MBD -0.007756
 Fringe rate (Hz)
 -0.616493
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

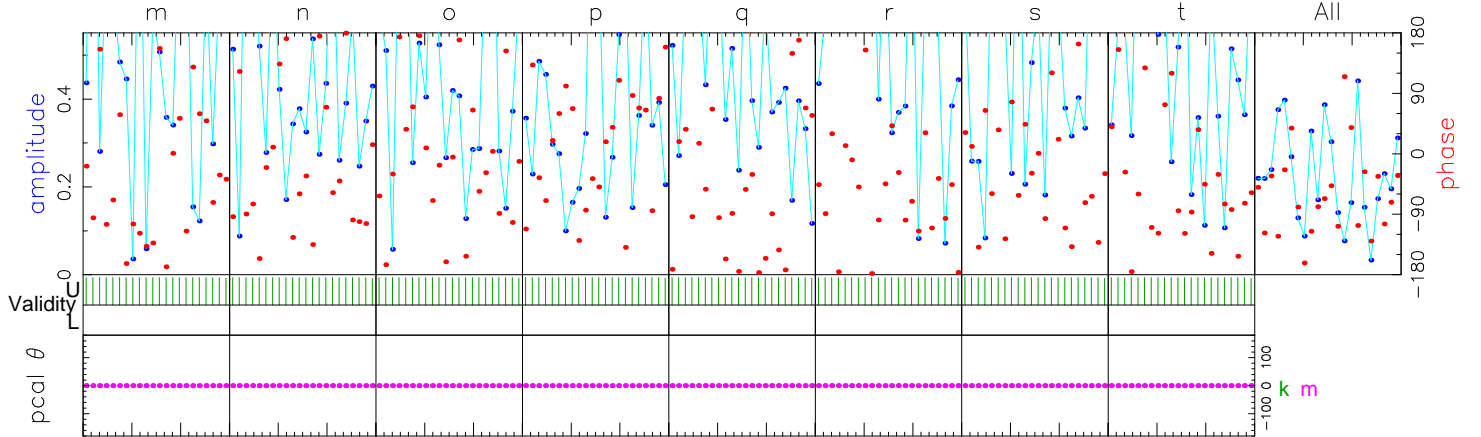


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175945
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-85.5	-84.7	-34.0	-12.6	-96.6	-60.3	-45.1	-98.9	Phase	-68.4
	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2	Ampl.	0.2
	160.9	148.9	91.2	168.9	142.1	460.2	477.2	48.8	Sbd box	370.7
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	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.02219942137E+04	Apriori delay (usec)	1.02215488446E+04	Resid mbdelay (usec)	-7.75597E-03	+/-	1.9E-04
Sband delay (usec)	1.02219930659E+04	Apriori clock (usec)	-3.9350891E-01	Resid sbdelay (usec)	4.44221E-01	+/-	1.5E-03
Phase delay (usec)	1.02215488424E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-2.20497E-06	+/-	6.5E-07
Delay rate (us/s)	-7.42842192693E-01	Apriori rate (us/s)	-7.42835035818E-01	Resid rate (us/s)	-7.15688E-06	+/-	6.2E-09
Total phase (deg)	103.5	Apriori accel (us/s/s)	-5.36358088624E-05	Resid phase (deg)	-68.4	+/-	20.2

ph/seg (deg)	63.0	Theor.	47.3	Amplitude	0.184 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.0		82.5	Search (1024X32)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.6		28.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.3		49.7	Inc. seg. avg.	0.203	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.181	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 130.2 el 48.5 pa -40.3 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.588 1540.133 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//km..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//km.W.182.3MP2MB

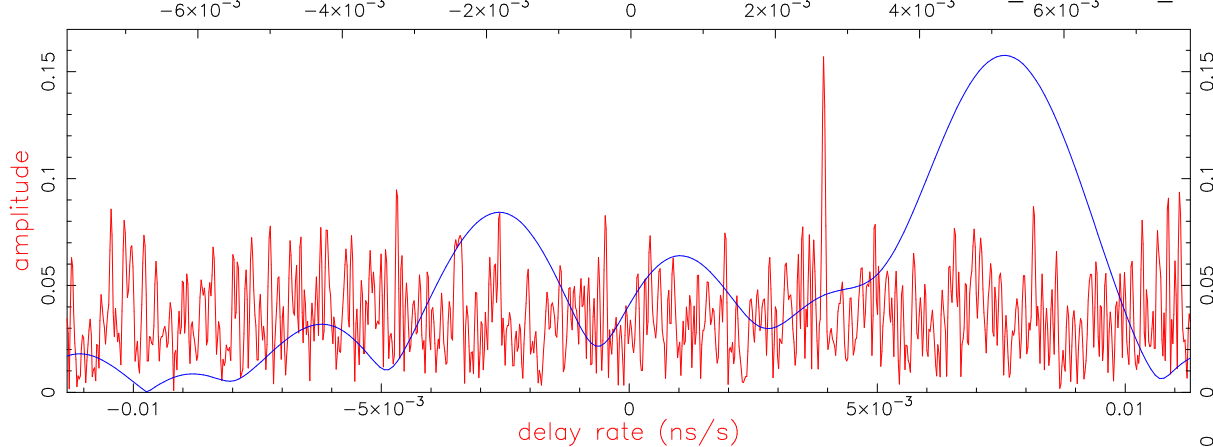
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, km

VLBA_KP - VLBA_MK, fgroup W, pol RL

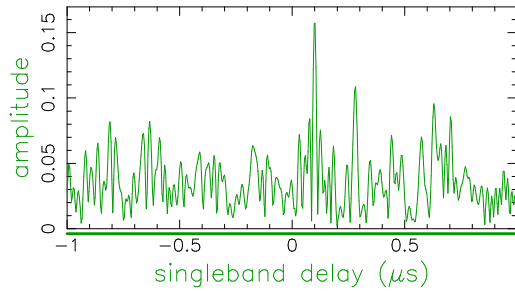
multiband delay (μ s)



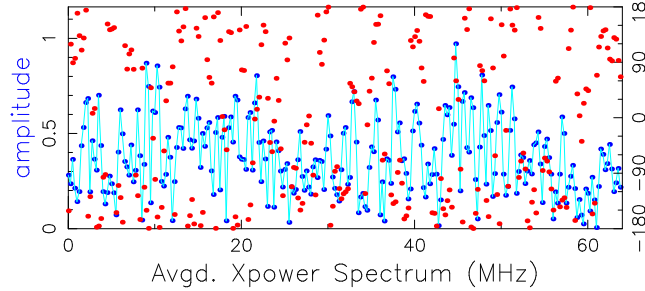
Fringe quality 0

SNR 5.9
 Int time 179.984
 Amp 0.170
 Phase -176.7
 PFD 3.3e-01
 Delays (us)
 SBD 0.099589
 MBD 0.005070
 Fringe rate (Hz)
 0.337818
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175948
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

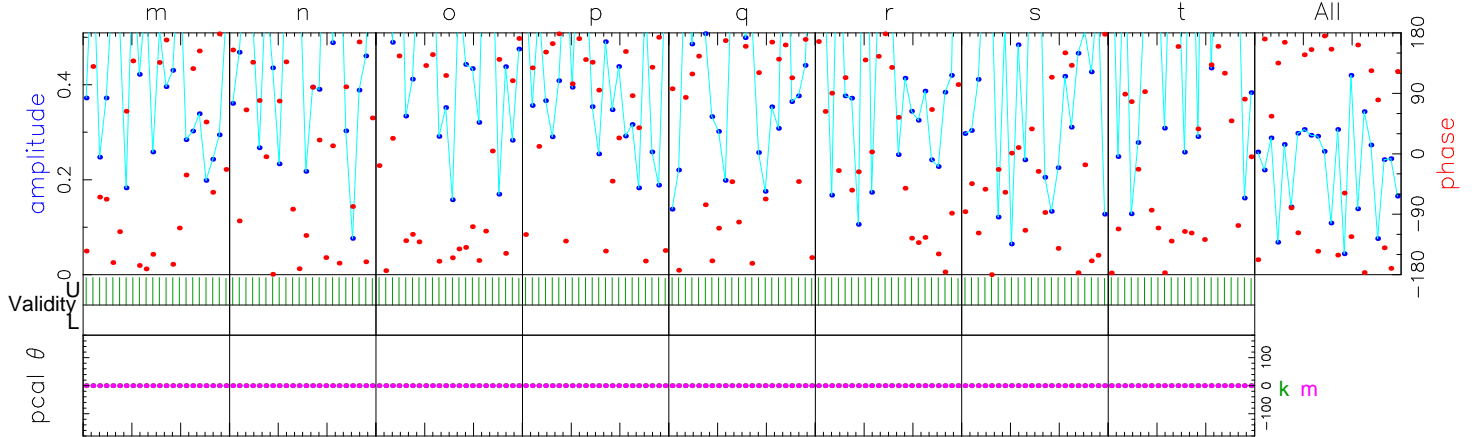


delay rate (ns/s)



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
	-166.8	151.2	-164.3	167.9	-179.7	142.2	-83.6	-165.3	Phase	-176.7
	0.2	0.1	0.3	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	327.4	276.9	282.4	430.8	264.0	20.3	305.1	213.2	Sbd box	282.5
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	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.02216476643E+04	Apriori delay (usec)	1.02215488446E+04	Resid mbdelay (usec)	5.06966E-03	+/-	1.8E-04
Sband delay (usec)	1.02216484334E+04	Apriori clock (usec)	-3.9350891E-01	Resid sbdelay (usec)	9.95888E-02	+/-	1.5E-03
Phase delay (usec)	1.02215488389E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-5.69751E-06	+/-	6.2E-07
Delay rate (us/s)	-7.42831114080E-01	Apriori rate (us/s)	-7.42835035818E-01	Resid rate (us/s)	3.92174E-06	+/-	6.0E-09
Total phase (deg)	-4.8	Apriori accel (us/s/s)	-5.36358088624E-05	Resid phase (deg)	-176.7	+/-	19.3

ph/seg (deg)	57.8	Theor.	45.3	Amplitude	0.170 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.9		79.1	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	44.7		27.3	Inc. seg. avg.	0.184	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.9		47.7	Inc. frq. avg.	0.171	Data rate (Mb/s):	2048	t_cohere	infinite	ion window (TEC)	0.00	0.00

k: az 130.2 el 48.5 pa -40.3 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.588 1540.133 simultaneous interpolator

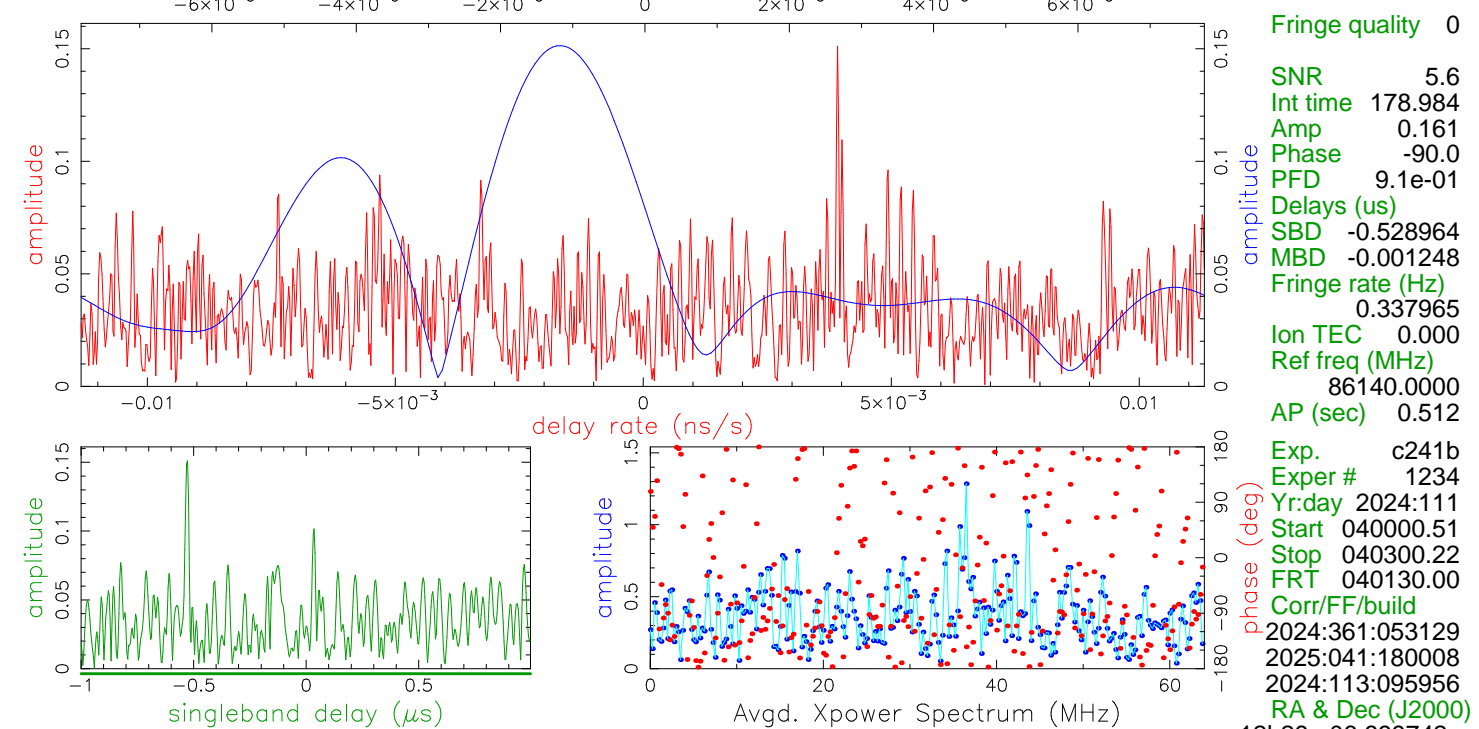
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/km..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/km.W.192.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

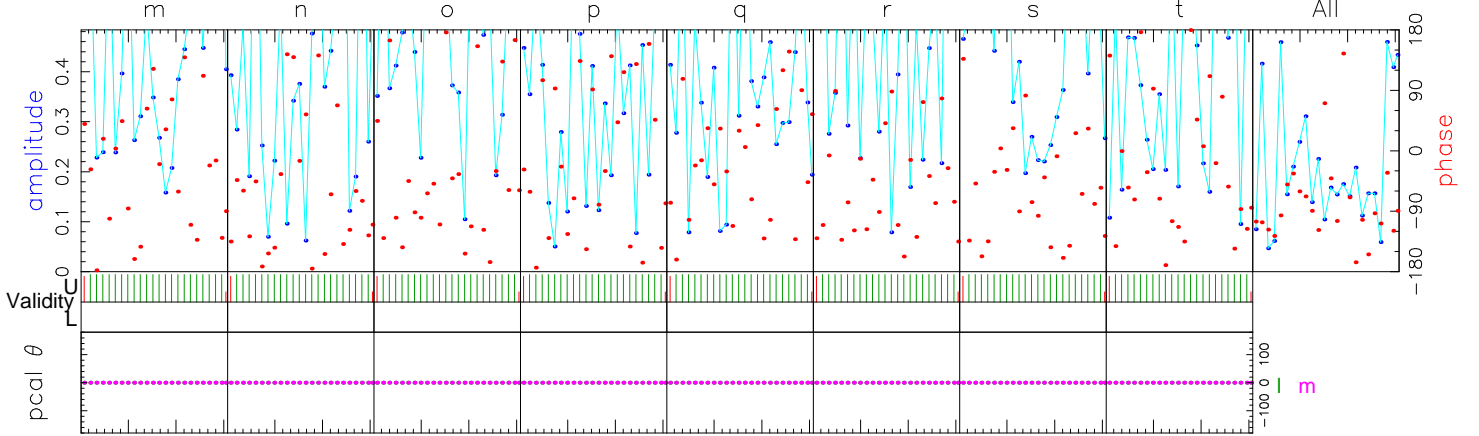
aux01

3C273.3MP2MB, No0707, Im

VLBA_LA - VLBA_MK, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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
	-62.4	-103.0	-111.3	-156.7	-34.5	-91.3	-64.9	-104.1	Phase	-90.0
	0.1	0.2	0.3	0.0	0.1	0.3	0.2	0.2	Ampl.	0.2
	263.2	382.0	214.2	366.6	246.3	121.8	408.2	169.4	Sbd box	121.6
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.03156840361E+04	Apriori delay (usec)	1.03162165340E+04	Resid mbdelay (usec)	-1.24784E-03	+/-	1.9E-04
Sband delay (usec)	1.03156875700E+04	Apriori clock (usec)	-8.8436279E+00	Resid sbdelay (usec)	-5.28964E-01	+/-	1.5E-03
Phase delay (usec)	1.03162165311E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-2.90248E-06	+/-	6.6E-07
Delay rate (us/s)	-8.76319961347E-01	Apriori rate (us/s)	-8.76323884788E-01	Resid rate (us/s)	3.92344E-06	+/-	6.3E-09
Total phase (deg)	-5.5	Apriori accel (us/s/s)	-5.39754611465E-05	Resid phase (deg)	-90.0	+/-	20.4

ph/seg (deg)	54.2	Theor.	50.0	Amplitude	0.161 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.1	Search (1024X32)	0.149	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.3	Inc. seg. avg.	0.158	Inc. frq. avg.	0.155	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.8	Inc. frq. avg.	0.155			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 139.8 el 48.9 pa -31.4 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4994.468 2028.679 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/Im..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/Im.W.277.3MP2MB

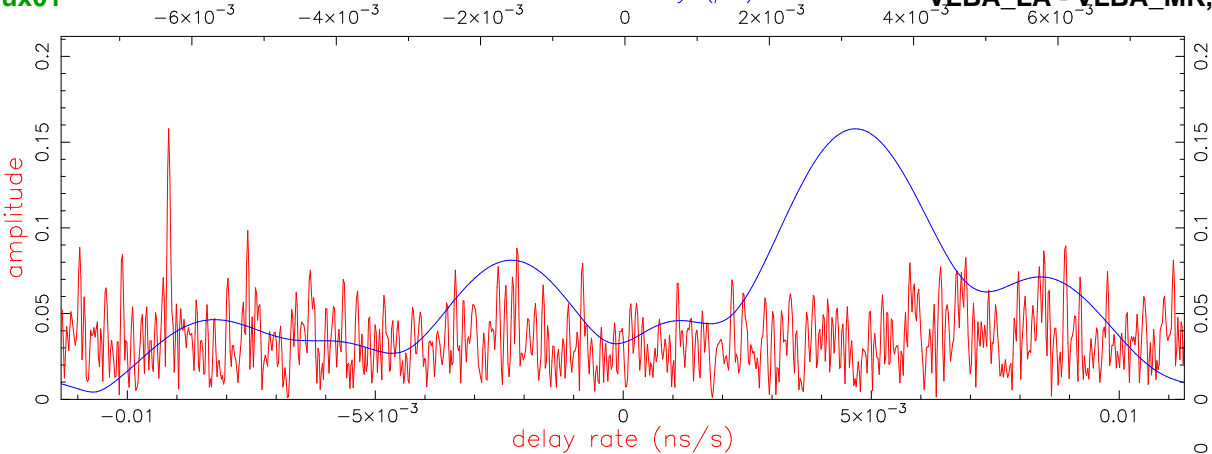
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Im

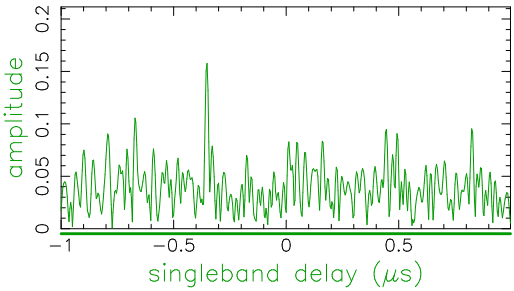
VLBA_LA - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

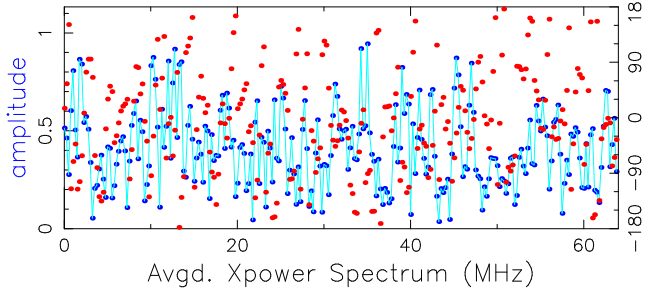


Fringe quality 0

SNR 5.8
 Int time 178.984
 Amp 0.212
 Phase -156.4
 PFD 5.2e-01
 Delays (us)
 SBD -0.352674
 MBD 0.003155
 Fringe rate (Hz)
 -0.790147
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

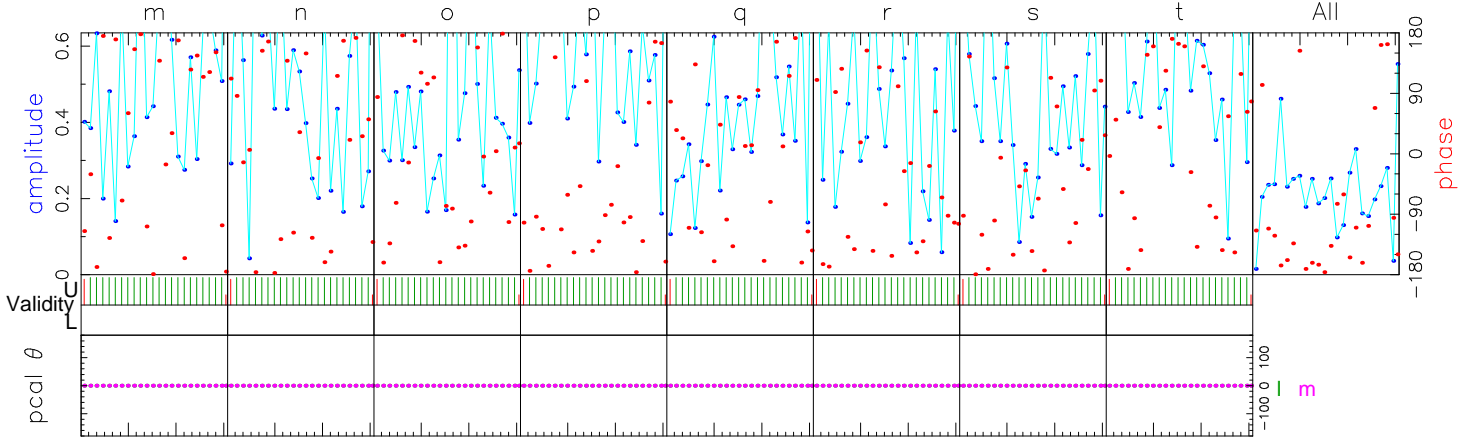


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.51
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:180013
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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	175.0	168.0	-109.1	-124.7	-154.3	-162.9	-147.6	172.4	Phase	-156.4
l	0.3	0.3	0.2	0.5	0.1	0.2	0.2	0.2	Ampl.	0.2
m	474.0	341.6	67.3	167.1	489.0	461.6	428.4	40.1	Sbd box	166.7
l	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.03158603143E+04	Apriori delay (usec)	1.03162165340E+04	Resid mbdelay (usec)	3.15536E-03	+/-	1.9E-04
Sband delay (usec)	1.03158638602E+04	Apriori clock (usec)	-8.8436279E+00	Resid sbdelay (usec)	-3.52674E-01	+/-	1.5E-03
Phase delay (usec)	1.03162165289E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-5.04344E-06	+/-	6.3E-07
Delay rate (us/s)	-8.76333057606E-01	Apriori rate (us/s)	-8.76323884788E-01	Resid rate (us/s)	-9.17282E-06	+/-	6.1E-09
Total phase (deg)	-71.9	Apriori accel (us/s/s)	-5.39754611465E-05	Resid phase (deg)	-156.4	+/-	19.7

ph/seg (deg)	53.0	RMS	48.2	Theor.	0.212 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.3	Search (1024X32)	0.154	Amplitude	0.212 +/- 0.036	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.7	Inc. seg. avg.	0.213	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.3	Inc. frq. avg.	0.216	Inc. seg. avg.	0.213	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.216	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 139.8 el 48.9 pa -31.4 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4994.468 2028.679 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Im..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Im.W.291.3MP2MB

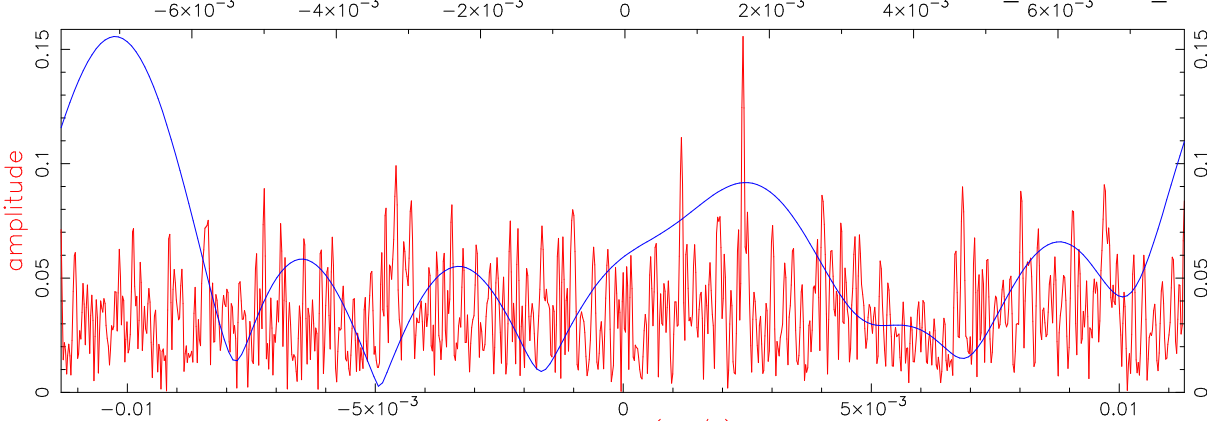
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Im

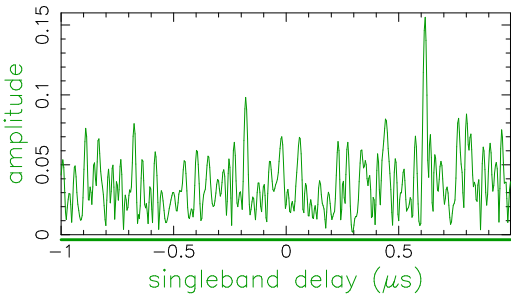
VLBA_LA - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

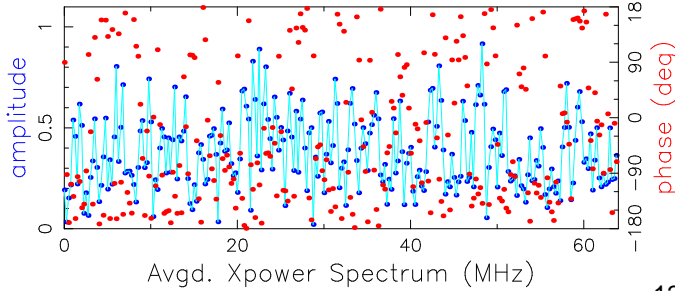


Fringe quality 0

SNR 5.7
 Int time 178.984
 Amp 0.159
 Phase -144.5
 PFD 7.7e-01
 Delays (us)
 SBD 0.616695
 MBD -0.007085
 Fringe rate (Hz) 0.207803
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

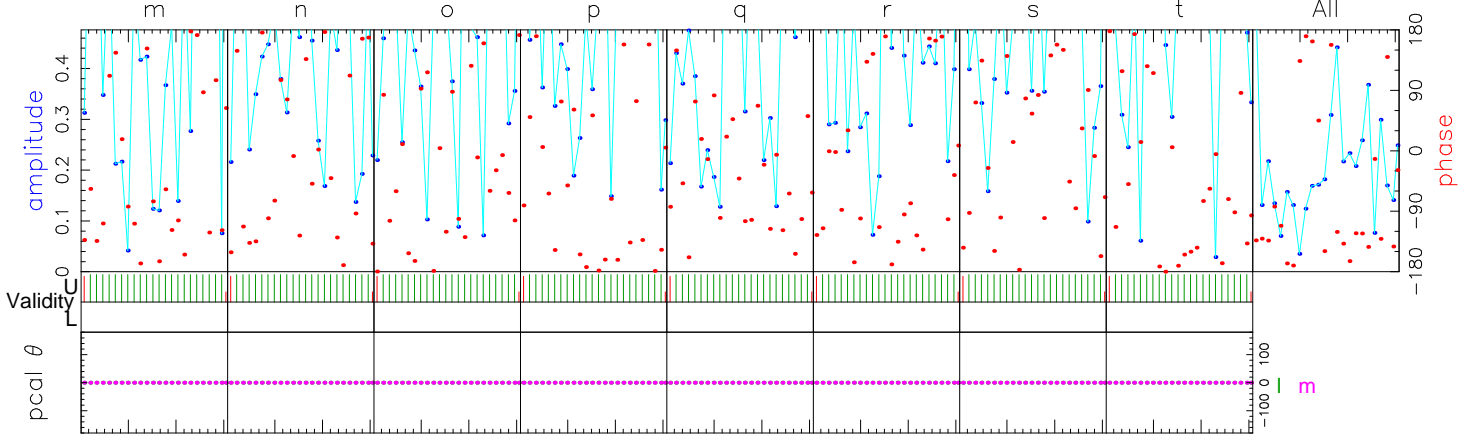


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.51
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:180015
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.03168344492E+04	Apriori delay (usec)	1.03162165340E+04	Resid mbdelay (usec)	-7.08473E-03	+/-	1.9E-04
Sband delay (usec)	1.03168332290E+04	Apriori clock (usec)	-8.8436279E+00	Resid sbdelay (usec)	6.16695E-01	+/-	1.5E-03
Phase delay (usec)	1.03162165293E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-4.65871E-06	+/-	6.5E-07
Delay rate (us/s)	-8.76321472398E-01	Apriori rate (us/s)	-8.76323884788E-01	Resid rate (us/s)	2.41239E-06	+/-	6.2E-09
Total phase (deg)	-59.9	Apriori accel (us/s/s)	-5.39754611465E-05	Resid phase (deg)	-144.5	+/-	20.1

ph/seg (deg)	58.9	RMS	49.2	Theor.	0.159 +/- 0.028	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.9	Search (1024X32)	0.154	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.0	Inc. seg. avg.	0.155	Inc. frq. avg.	0.166	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.7	Inc. frq. avg.	0.166			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 139.8 el 48.9 pa -31.4 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4994.468 2028.679 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Im..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Im.W.299.3MP2MB

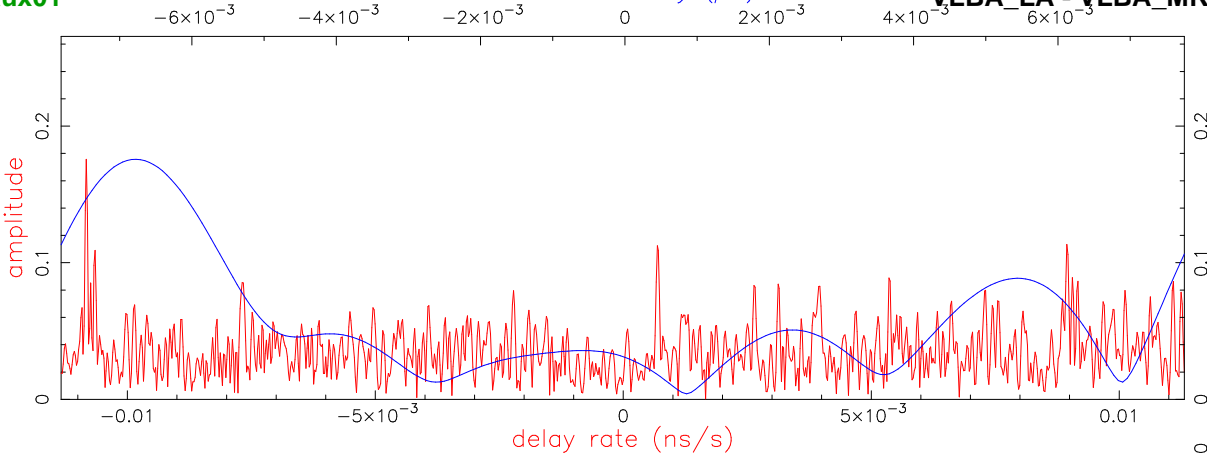
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Im

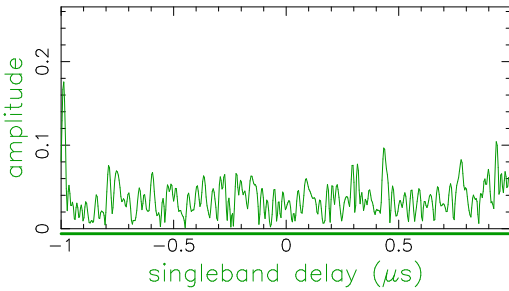
VLBA_LA - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

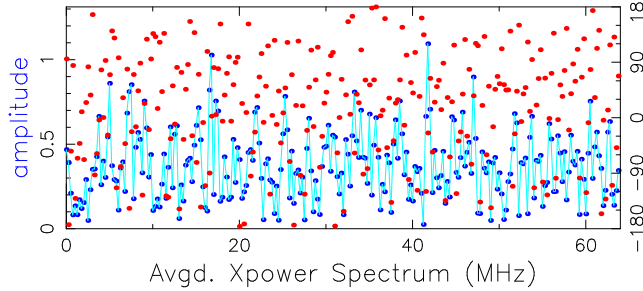


Fringe quality 0

SNR 6.5
 Int time 178.984
 Amp 0.266
 Phase -113.2
 PFD 1.5e-02
 Delays (us)
 SBD -0.989132
 MBD -0.006801
 Fringe rate (Hz)
 -0.933699
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

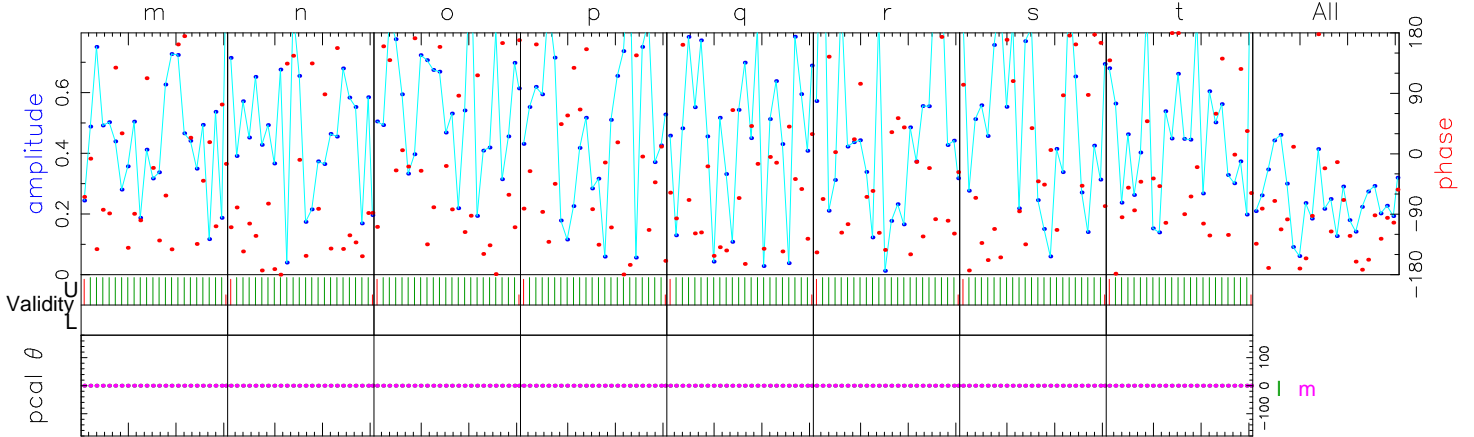


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.51
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:180017
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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
	-103.6	-136.5	-115.9	-104.7	-72.1	-98.7	-167.9	-93.1	Phase	-113.2
	0.2	0.4	0.3	0.2	0.3	0.4	0.3	0.1	Ampl.	0.3
	330.9	473.5	483.4	184.0	497.3	350.9	281.4	187.7	Sbd box	3.8
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.03152253578E+04	Apriori delay (usec)	1.03162165340E+04	Resid mbdelay (usec)	-6.80115E-03	+/-	1.7E-04
Sband delay (usec)	1.03152274020E+04	Apriori clock (usec)	-8.8436279E+00	Resid sbdelay (usec)	-9.89132E-01	+/-	1.3E-03
Phase delay (usec)	1.03162165303E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-3.65044E-06	+/-	5.7E-07
Delay rate (us/s)	-8.76334724108E-01	Apriori rate (us/s)	-8.76323884788E-01	Resid rate (us/s)	-1.08393E-05	+/-	5.5E-09
Total phase (deg)	-28.7	Apriori accel (us/s/s)	-5.39754611465E-05	Resid phase (deg)	-113.2	+/-	17.7

ph/seg (deg)	52.0	Theor.	43.5	Amplitude	0.266 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.9	Search (1024X32)	0.166	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)	31.7	Inc. seg. avg.	0.288	Inc. frq. avg.	0.273	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 (%)	35.0	Inc. frq. avg.	0.273			Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

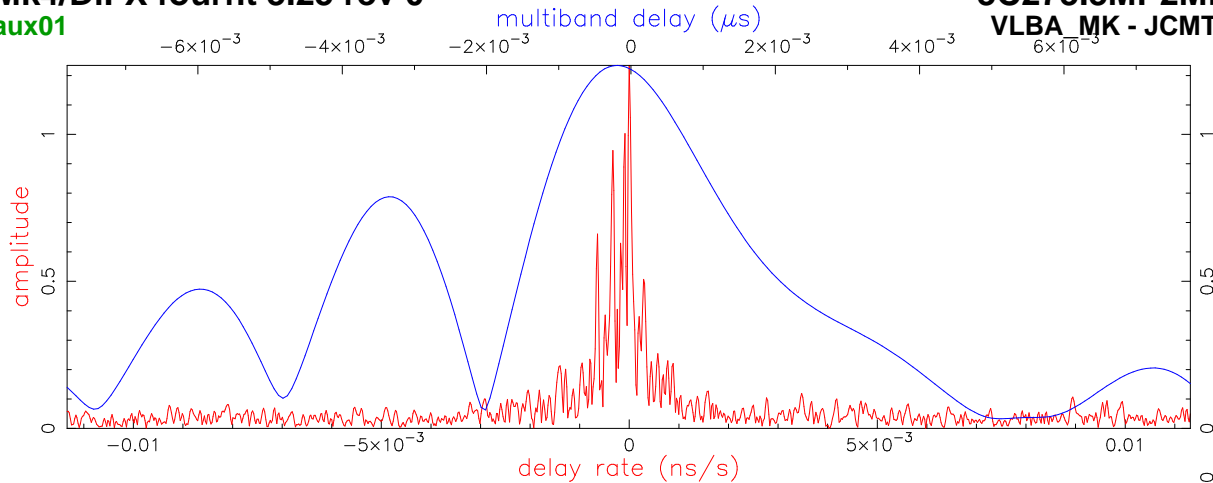
l: az 139.8 el 48.9 pa -31.4 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4994.468 2028.679 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Im..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Im.W.306.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

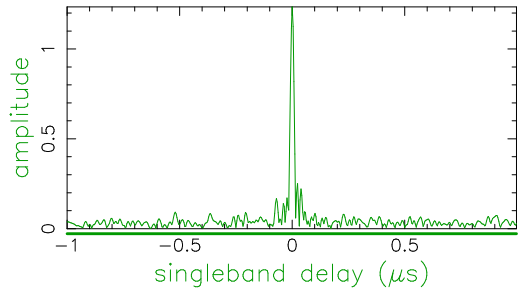
3C273.3MP2MB, No0707, mL

VLBA_MK - JCMT, fgroup W, pol LL

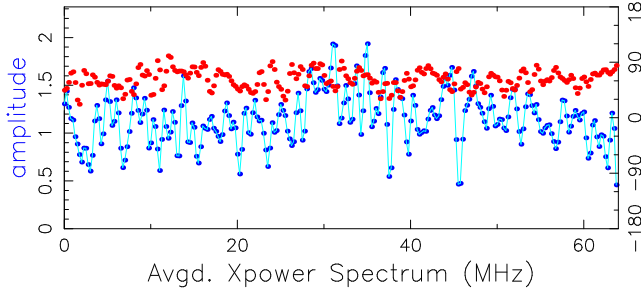


Fringe quality 4

SNR 45.3
 Int time 179.994
 Amp 1.235
 Phase 65.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.000116
 MBD -0.000184
 Fringe rate (Hz) 0.000183
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

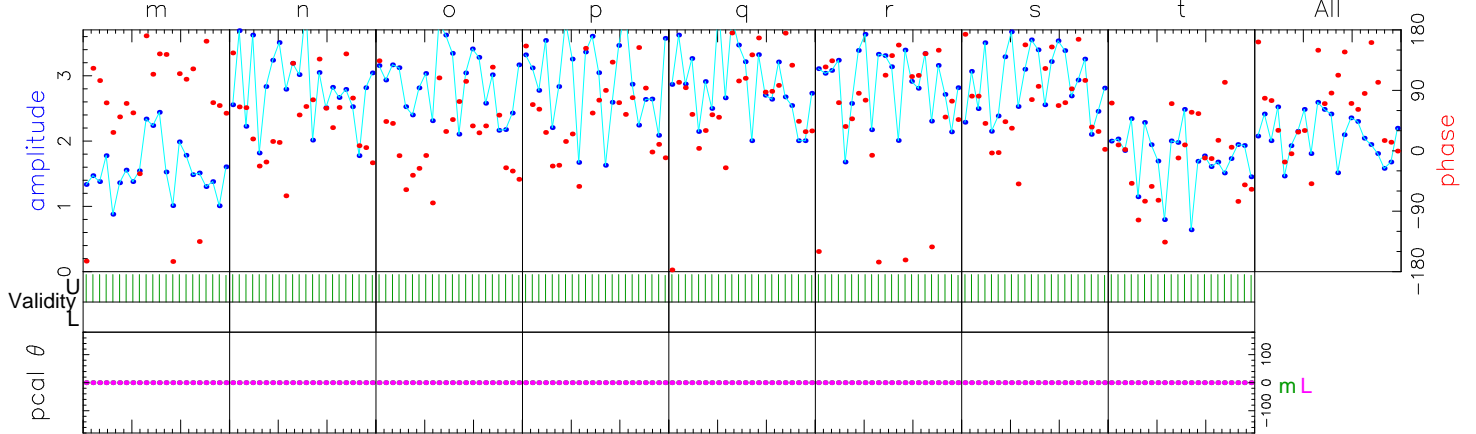


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175950
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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	47.2	26.7	53.6	90.3	116.0	72.9	-14.5	Phase	65.1
	0.9	1.7	1.7	1.8	1.7	1.7	1.8	1.1	Ampl.	1.5
	254.7	256.5	257.4	257.3	257.2	257.3	256.5	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	
m	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Tracks	

Group delay (usec) (SBD)	8.16248846040E+00	Apriori delay (usec)	8.16267296040E+00	Resid mbdelay (usec)	-1.84500E-04	+/-	2.4E-05
Sband delay (usec)	8.16278896040E+00	Apriori clock (usec)	7.6229286E-01	Resid sbdelay (usec)	1.16000E-04	+/-	1.9E-04
Phase delay (usec)	8.16267506029E+00	Apriori clockrate (us/s)	3.2158694E-07	Resid phdelay (usec)	2.09990E-06	+/-	8.2E-08
Delay rate (us/s)	-4.15688773129E-05	Apriori rate (us/s)	-4.15710029857E-05	Resid rate (us/s)	2.12567E-09	+/-	7.8E-10
Total phase (deg)	298.7	Apriori accel (us/s/s)	-4.08344246647E-08	Resid phase (deg)	65.1	+/-	2.5

ph/seg (deg)	58.4	Theor.	5.9	Search (1024X32)	1.219	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	74.1	Amplitude	1.235 +/- 0.027	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	47.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	35.5	Inc. seg. avg.	2.075	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	1.538	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 93.6 el 15.4 pa -70.0 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 0.219 -3.388 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mL.W.200.3MP2MB

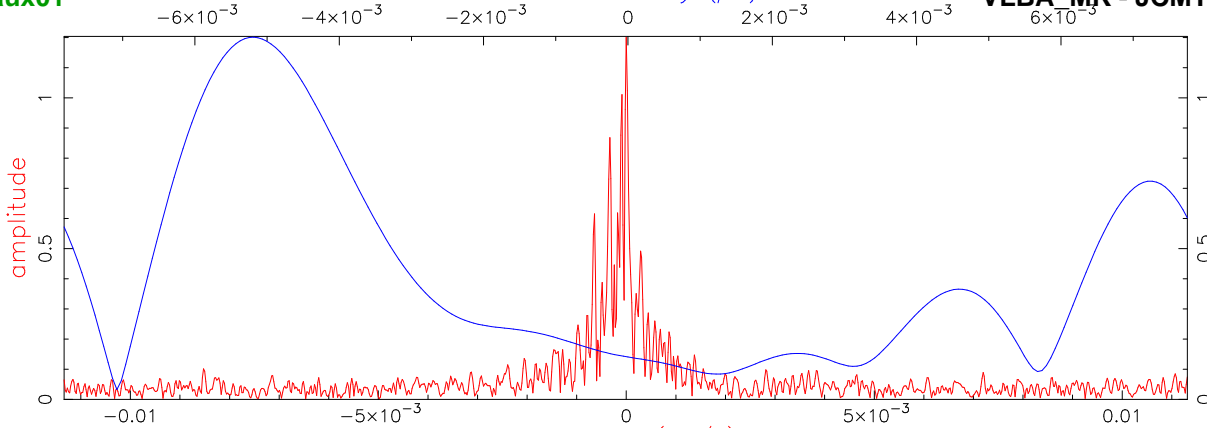
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mL

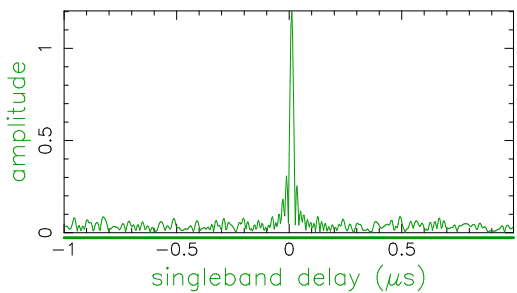
VLBA_MK - JCMT, fgroup W, pol RR

multiband delay (μ s)

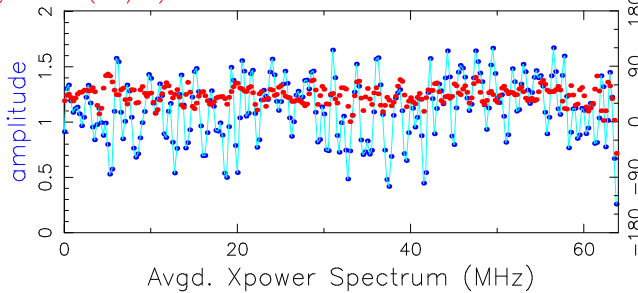


Fringe quality 4

SNR 44.2
Int time 179.994
Amp 1.204
Phase -128.9
PFD 0.0e+00
Delays (us)
SBD 0.011087
MBD -0.005232
Fringe rate (Hz) 0.000215
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

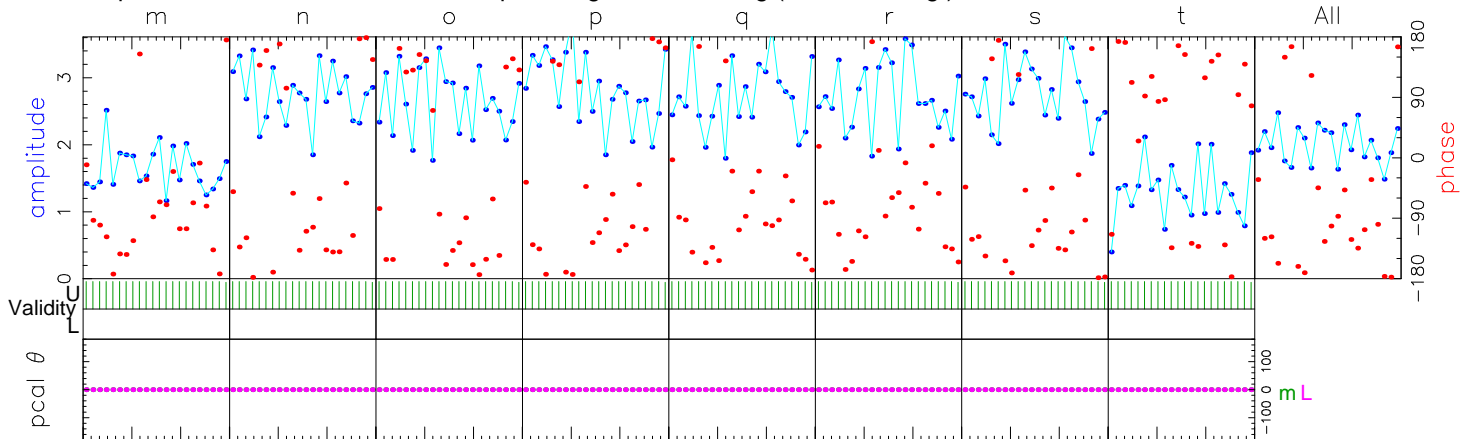


delay rate (ns/s)



Exp. c241b
Exper # 1234
Yr:day 2024:111
Start 040000.00
Stop 040300.22
FRT 040130.00
Corr/FF/build
2024:361:053129
2025:041:175952
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

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
	-102.4	-141.3	-167.5	-141.1	-101.8	-81.6	-127.7	146.1	Phase	-128.9
	1.0	1.6	1.6	1.6	1.7	1.6	1.7	0.7	Ampl.	1.4
	257.8	259.7	260.1	260.1	260.0	260.1	259.1	257.1	Sbd box	259.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Tracks	

Group delay (usec) (SBD)	8.17306549165E+00	Apriori delay (usec)	8.16267296040E+00	Resid mbdelay (usec)	-5.23247E-03	+/-	2.5E-05
Sband delay (usec)	8.17376046040E+00	Apriori clock (usec)	7.6229286E-01	Resid sbdelay (usec)	1.10875E-02	+/-	2.0E-04
Phase delay (usec)	8.16266880449E+00	Apriori clockrate (us/s)	3.2158694E-07	Resid phdelay (usec)	-4.15591E-06	+/-	8.4E-08
Delay rate (us/s)	-4.15685031944E-05	Apriori rate (us/s)	-4.15710029857E-05	Resid rate (us/s)	2.49979E-09	+/-	8.0E-10
Total phase (deg)	104.7	Apriori accel (us/s/s)	-4.08344246647E-08	Resid phase (deg)	-128.9	+/-	2.6

ph/seg (deg) 57.1 6.1 Search (1024X32) 1.186 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.0 10.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.0 3.7 Inc. seg. avg. 2.002 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 33.4 6.4 Inc. frq. avg. 1.434 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
m: az 93.6 el 15.4 pa -70.0 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 0.219 -3.388 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mL.W.209.3MP2MB

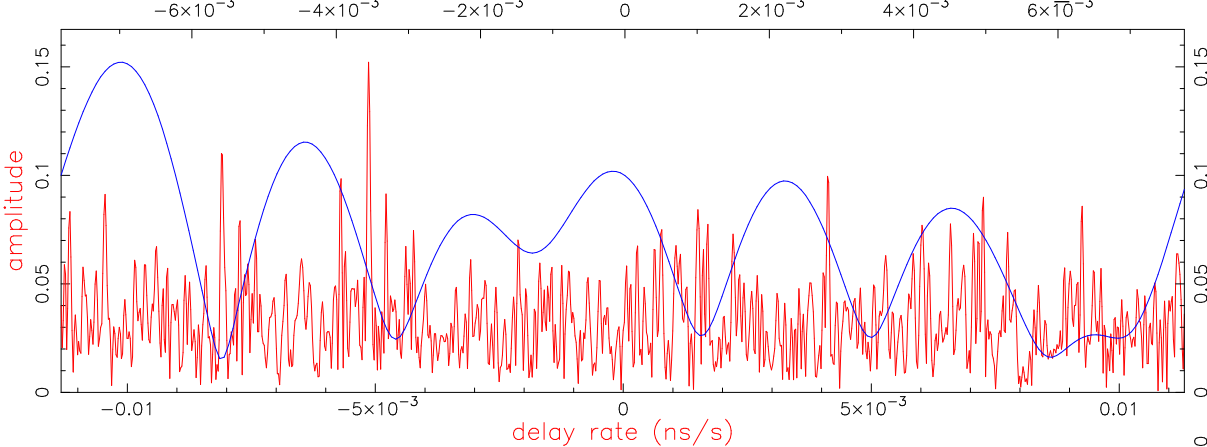
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mL

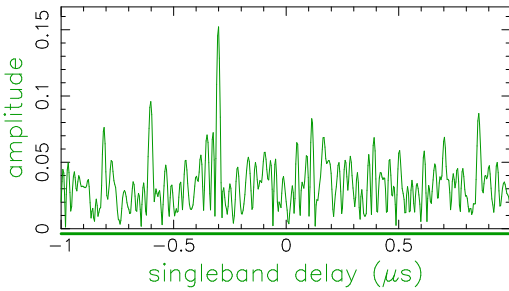
VLBA_MK - JCMT, fgroup W, pol LR

multiband delay (μ s)

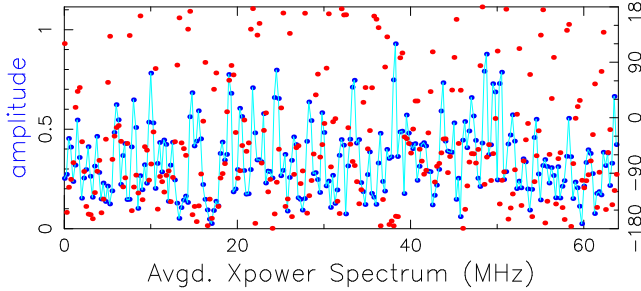


Fringe quality 0

SNR 5.6
 Int time 179.994
 Amp 0.167
 Phase 106.2
 PFD 8.9e-01
 Delays (us)
 SBD -0.301908
 MBD -0.007012
 Fringe rate (Hz)
 -0.443581
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

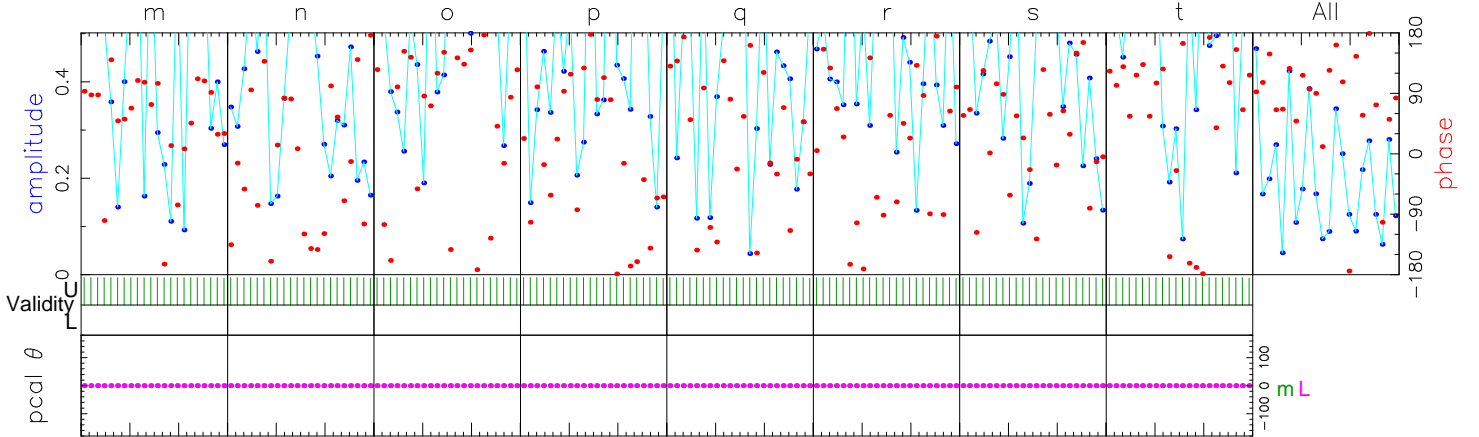


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175954
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
	81.8	-117.6	147.4	97.7	86.9	103.6	61.8	120.1	Phase	106.2		
	0.3	0.0	0.3	0.1	0.2	0.0	0.2	0.5	Ampl.	0.2		
	179.5	210.9	180.8	499.3	287.0	29.9	52.6	179.4	Sbd box	179.7		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
m	0	0	0	0	0	0	0	0	PC freqs			
L	0	0	0	0	0	0	0	0	PC freqs			
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
L	1000	1000	1000	1000	1000	1000	1000	1000				
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec) (SBD)	7.85878579823E+00		Apriori delay (usec)		8.16267296040E+00		Resid mbdelay (usec)		-7.01216E-03	+/- 1.9E-04		
Sband delay (usec)	7.86076446040E+00		Apriori clock (usec)		7.6229286E-01		Resid sbdelay (usec)		-3.01908E-01	+/- 1.5E-03		
Phase delay (usec)	8.16267638425E+00		Apriori clockrate (us/s)		3.2158694E-07		Resid phdelay (usec)		3.42385E-06	+/- 6.6E-07		
Delay rate (us/s)	-4.67205333472E-05		Apriori rate (us/s)		-4.15710029857E-05		Resid rate (us/s)		-5.14953E-06	+/- 6.3E-09		
Total phase (deg)	339.7		Apriori accel (us/s/s)		-4.08344246647E-08		Resid phase (deg)		106.2	+/- 20.4		
	RMS	Theor.	Amplitude	0.167 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	54.5	47.8	Search (1024X32)	0.142		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	83.8	83.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	62.5	28.8	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 (%)	87.7	50.3	Inc. frq. avg.	0.172		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
m: az 93.6 el 15.4 pa -70.0	L: az 93.6 el 15.4 pa -70.0		u,v (fr/asec) 0.219		-3.388		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//mL..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//mL.W.217.3MP2MB									

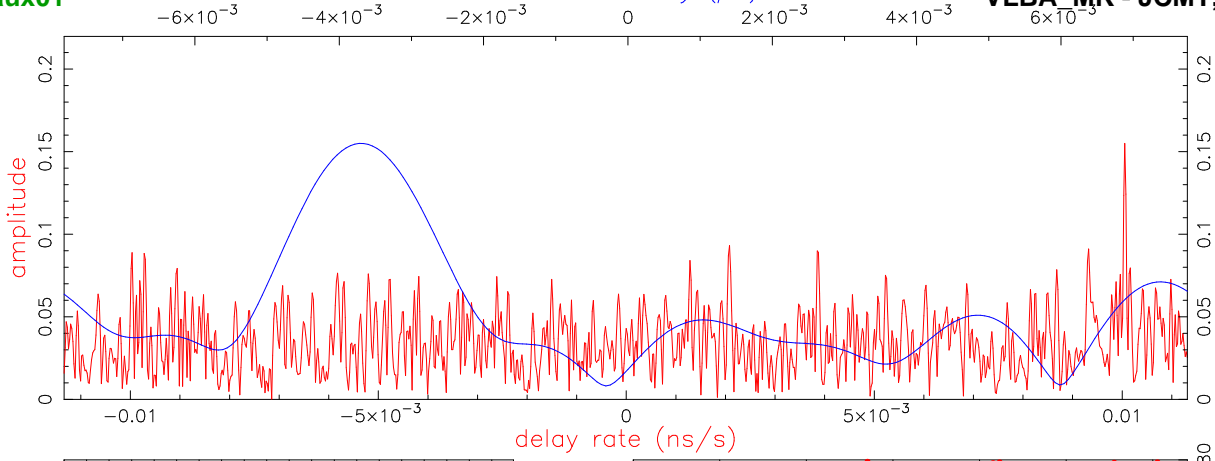
Mk4/DiFX fourfit 3.25 rev 0

aux01

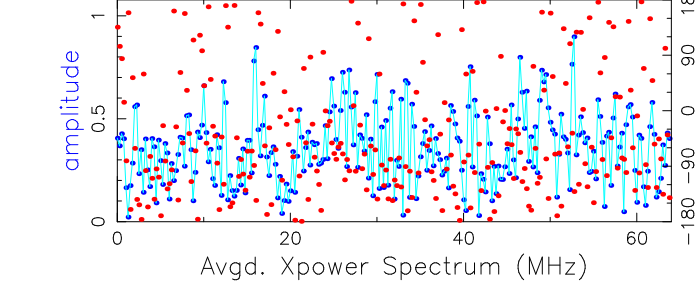
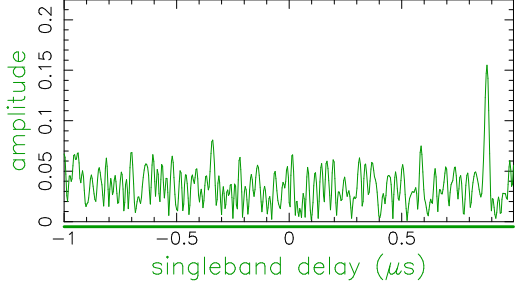
3C273.3MP2MB, No0707, mL

VLBA_MK - JCMT, fgroup W, pol RL

multiband delay (μ s)

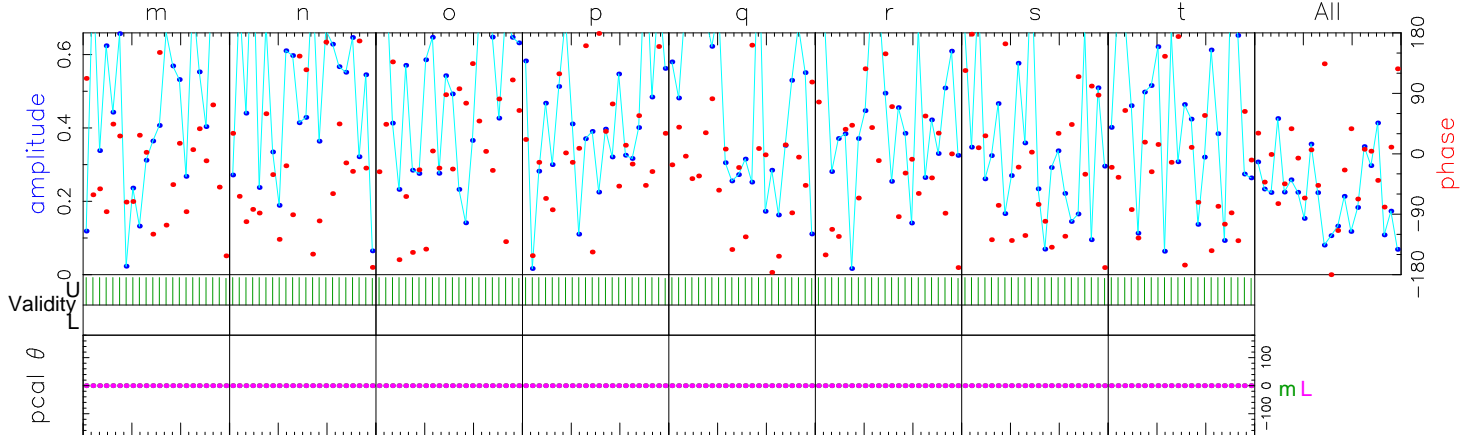


Fringe quality 0
 SNR 5.7
 Int time 179.994
 Amp 0.220
 Phase -20.2
 PFD 7.9e-01
 Delays (us)
 SBD 0.878497
 MBD -0.003711
 Fringe rate (Hz) 0.867534
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build 2024:361:053129
 2025:041:175956
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"



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



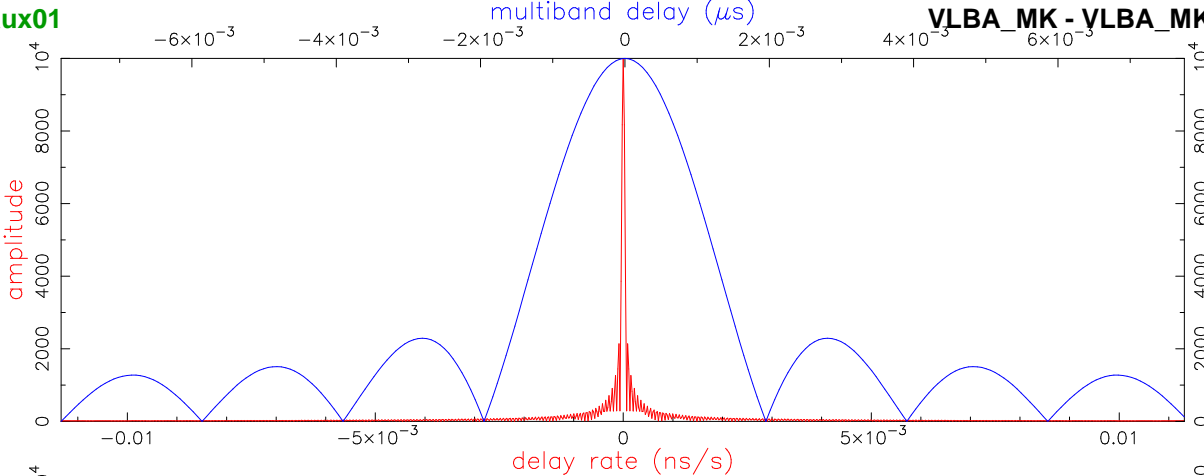
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-29.5	-63.4	25.1	-2.7	-14.9	-14.1	-22.7	-39.6		-20.2		
	0.3	0.2	0.2	0.2	0.4	0.2	0.1	0.2		0.2		
	231.3	13.2	286.5	479.2	482.4	508.7	469.5	125.2		481.9		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0				
m	0	0	0	0	0	0	0	0				
L	0	0	0	0	0	0	0	0				
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
m:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
m	1000	1000	1000	1000	1000	1000	1000	1000				
L	1000	1000	1000	1000	1000	1000	1000	1000				
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL				
Group delay (usec) (SBD)	9.03396151982E+00		Apriori delay (usec)		8.16267296040E+00		Resid mbdelay (usec)		-3.71144E-03	+/- 1.9E-04		
Sband delay (usec)	9.04117046040E+00		Apriori clock (usec)		7.6229286E-01		Resid sbdelay (usec)		8.78497E-01	+/- 1.5E-03		
Phase delay (usec)	8.16267230759E+00		Apriori clockrate (us/s)		3.2158694E-07		Resid phdelay (usec)		-6.52807E-07	+/- 6.5E-07		
Delay rate (us/s)	-3.14997931365E-05		Apriori rate (us/s)		-4.15710029857E-05		Resid rate (us/s)		1.00712E-05	+/- 6.2E-09		
Total phase (deg)	213.3		Apriori accel (us/s/s)		-4.08344246647E-08		Resid phase (deg)		-20.2	+/- 20.1		
ph/seg (deg)	RMS 69.0	Theor. 47.2	Amplitude Search (1024X32)		0.220 +/- 0.039		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	78.0	82.4	Interp.		0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	28.2	28.5	Inc. seg. avg.		0.235		Bits/sample: 2x2		mb window (us)	-0.008 0.008		
amp/frq (%)	40.5	49.7	Inc. frq. avg.		0.214		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011		
m: az 93.6 el 15.4 pa -70.0	L: az 93.6 el 15.4 pa -70.0		u,v (fr/asec)		0.219 -3.388		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/c241b/v2/3mm/1234/No0707//mL..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//mL.W.229.3MP2MB									

Mk4/DiFX fourfit 3.25 rev 0

aux01

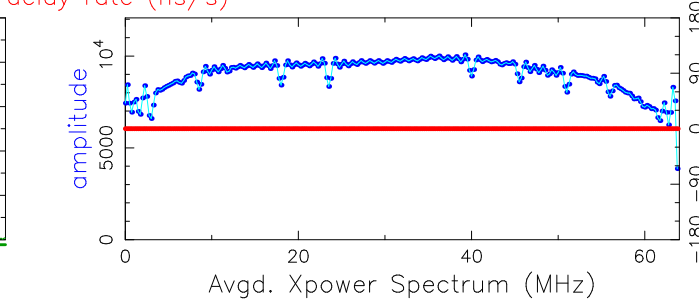
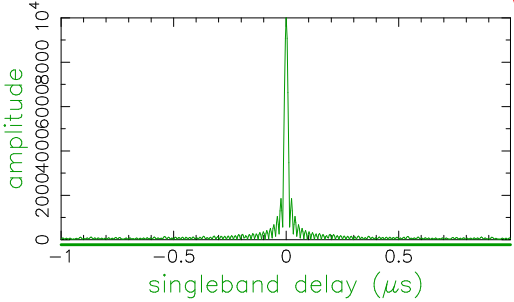
3C273.3MP2MB, No0707, mm

VLBA_MK - VLBA_MK, fgroup W, pol LL



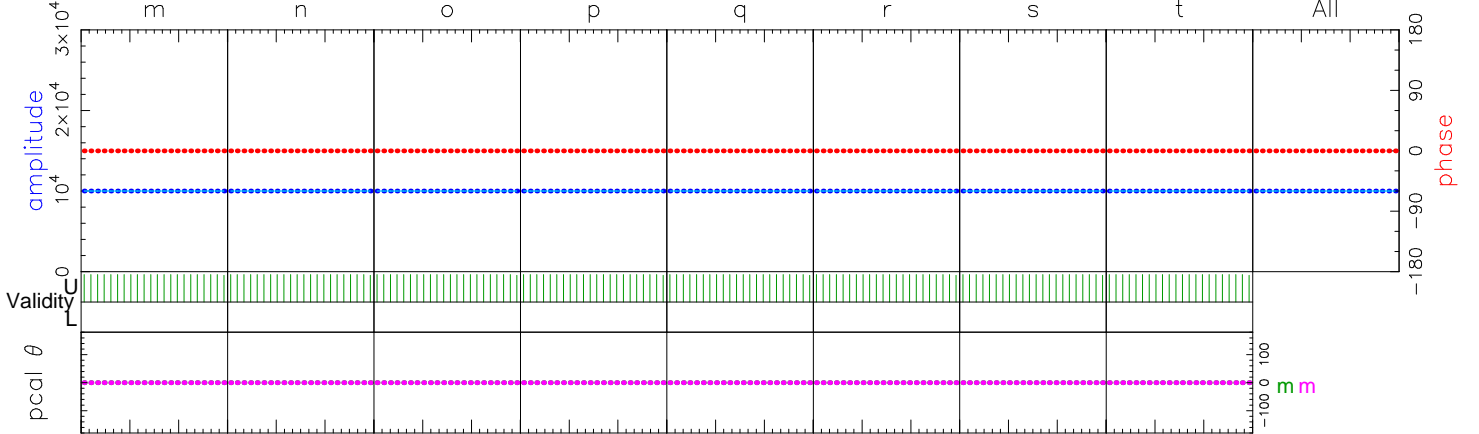
Fringe quality 9

SNR 366882.5
 Int time 179.994
 Amp 10000.000
 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. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175947
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
m	0	0	0	0	0	0	0	0		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0
 amp/seg (%) 0.0 0.0
 ph/frq (deg) 0.0 0.0
 amp/frq (%) 0.0 0.0
 m: az 93.6 el 15.4 pa -70.0
 Control file: cf_1234_gmva

Amplitude 10000.000 +/- 0.027
 Search (1024X32) 10000.000
 Interp. 0.000
 Inc. seg. avg. 10000.000
 Inc. frq. avg. 10000.000
 m: az 93.6 el 15.4 pa -70.0
 Input file: /Exps/c241b/v2/3mm/1234/No0707/mm..3MP2MB

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
 PC period (AP's) 5, 5
 sb window (us) -1.000 1.000
 SampCntNorm: enabled
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00
 simultaneous interpolator

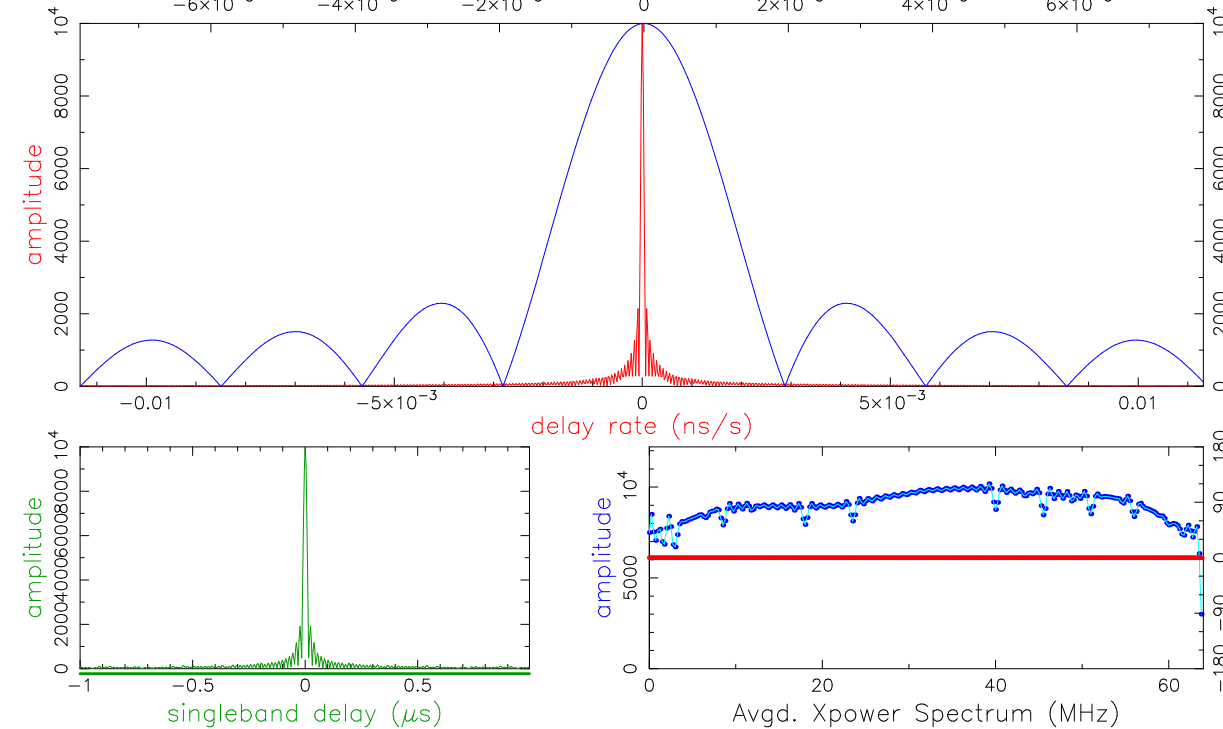
Output file: /Exps/c241b/v2/3mm/1234/No0707/mm.W.190.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mm

VLBA_MK - VLBA_MK, fgroup W, pol RR

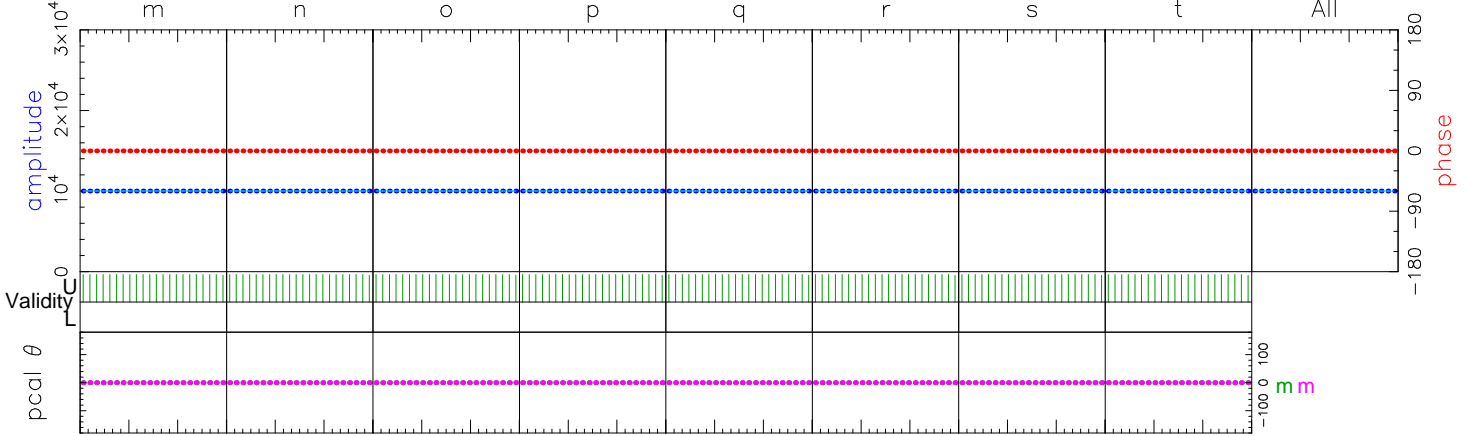


Fringe quality 9

SNR 366882.5
 Int time 179.994
 Amp 10000.000
 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. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175949
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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	10000.0	10000.0
m	0	0	0	0	0	0	0	0	Ampl.	10000.0
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC freqs	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	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

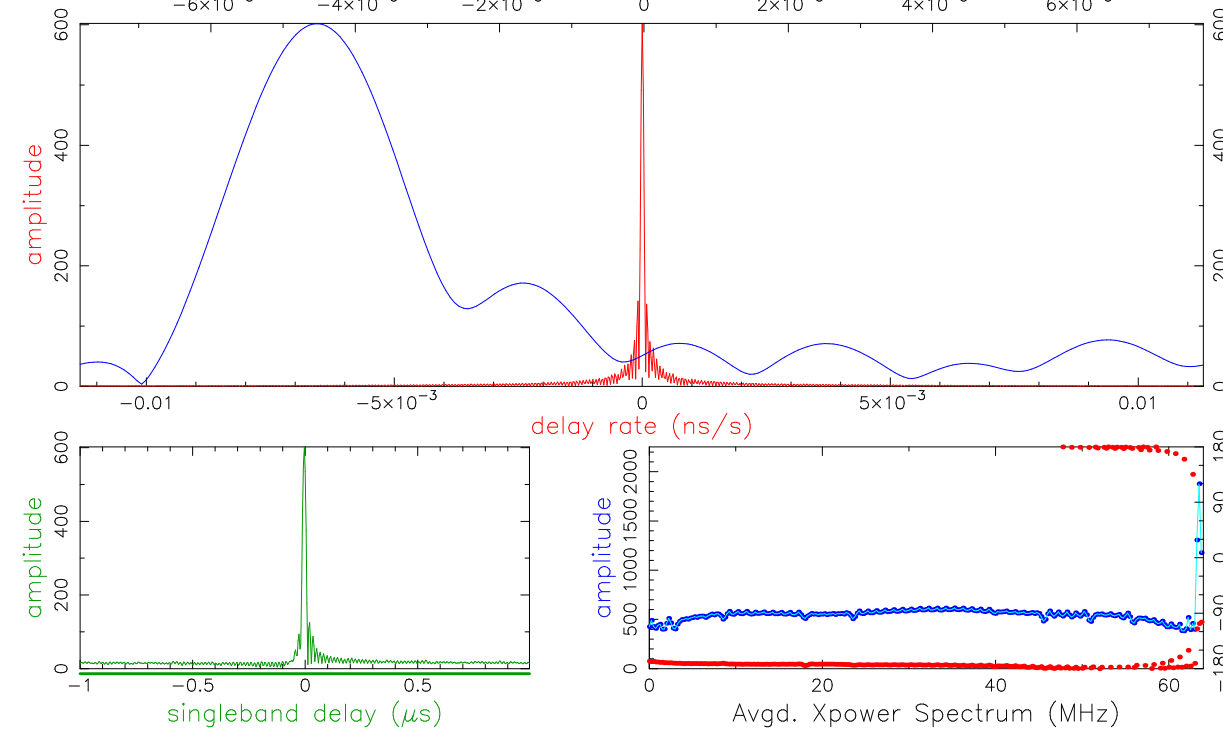
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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
 m: az 93.6 el 15.4 pa -70.0 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 0.000 0.000 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/c241b/v2/3mm/1234/No0707//mm...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mm.W.197.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mm

VLBA_MK - VLBA_MK, fgroup W, pol LR

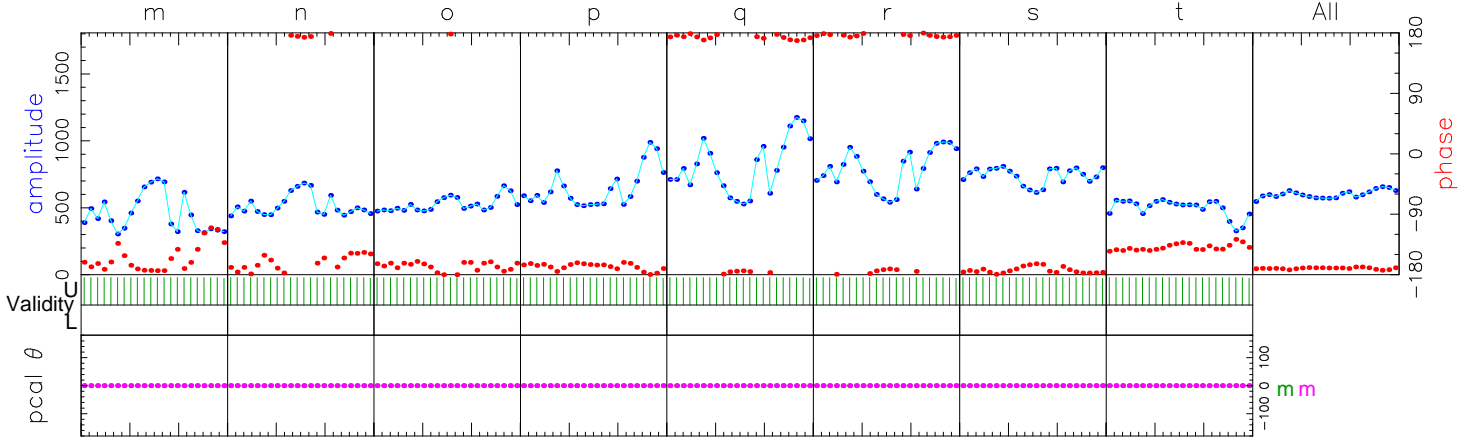


Fringe quality 7

SNR 22101.2
 Int time 179.994
 Amp 602.406
 Phase -170.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.004284
 MBD -0.004542
 Fringe rate (Hz)
 -0.000054
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175951
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



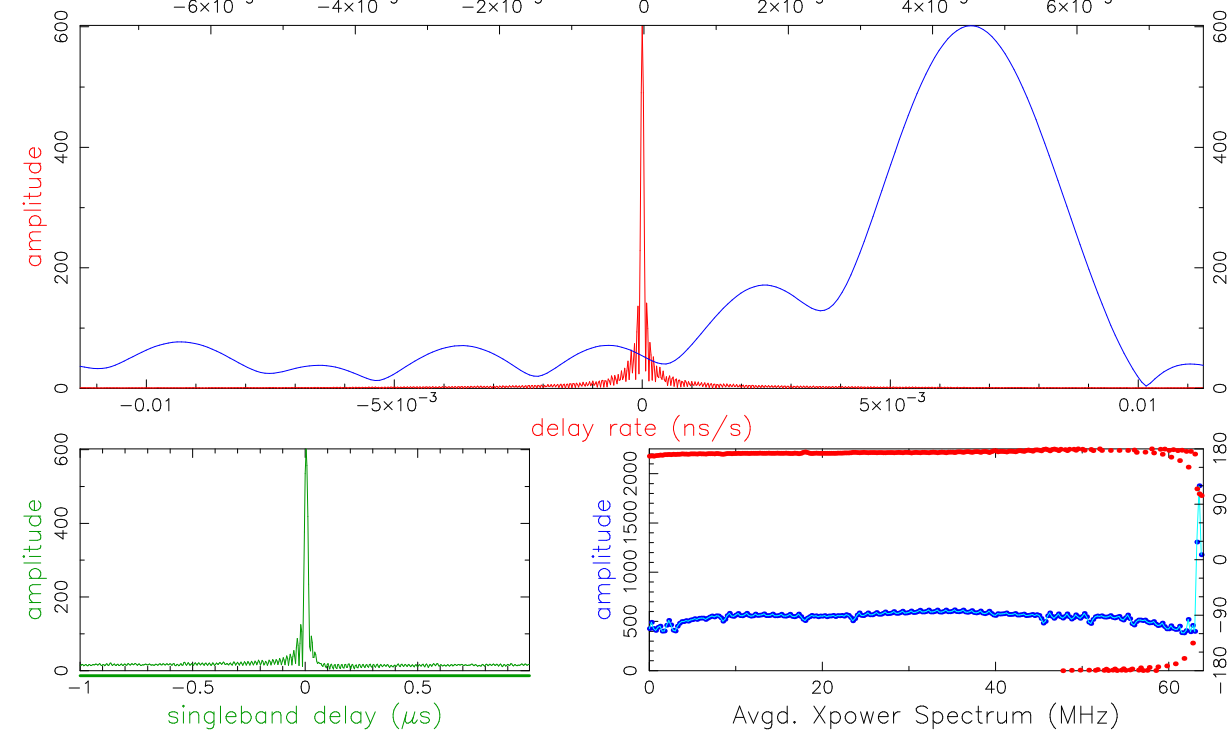
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-159.2	-168.5	-168.6	-169.0	175.0	178.3	-173.5	-139.4	Phase	-170.5	
	434.0	502.8	524.1	645.4	809.2	786.7	737.8	497.4	Ampl.	617.2	
	255.7	255.2	255.9	255.8	255.6	256.0	256.1	256.7	Sbd box	255.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
m	0	0	0	0	0	0	0	0	PC freqs		
m	0	0	0	0	0	0	0	0	PC freqs		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
m	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-4.54187500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-4.54187E-03	+/- 4.9E-08	
Sband delay (usec)	-4.28425000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.28425E-03	+/- 3.9E-07	
Phase delay (usec)	-5.49791424256E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.49791E-06	+/- 1.7E-10	
Delay rate (us/s)	-6.32033396669E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-6.32033E-10	+/- 1.6E-12	
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-170.5	+/- 0.0	
	RMS	Theor.	Amplitude	602.406 +/- 0.027		Pccal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	1.3	0.0	Search (1024X32)	597.835		Pccal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	4.6	0.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	15.5	0.0	Inc. seg. avg.	602.016		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	22.9	0.0	Inc. frq. avg.	617.190		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
m: az 93.6 el 15.4 pa -70.0		m: az 93.6 el 15.4 pa -70.0		u,v (fr/asec) 0.000 0.000						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//mm...3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//mm.W.203.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mm

VLBA_MK - VLBA_MK, fgroup W, pol RL

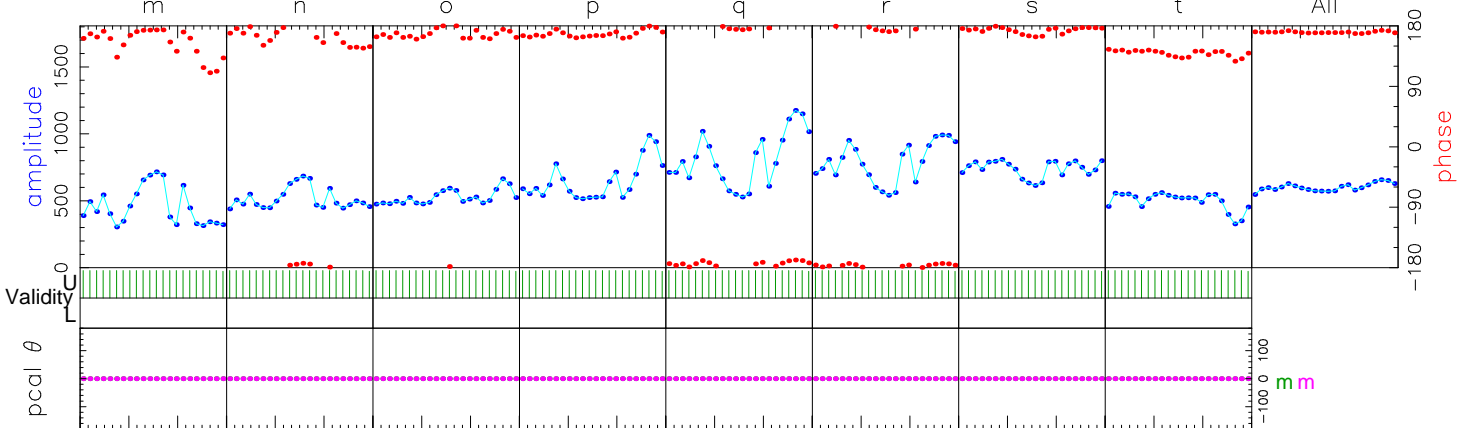


Fringe quality 7

SNR 22101.2
 Int time 179.994
 Amp 602.406
 Phase 170.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.004284
 MBD 0.004542
 Fringe rate (Hz) 0.000054
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175953
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
m	0	0	0	0	0	0	0	0	APs used	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	

Group delay (usec) (SBD) 4.54187500000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 4.54187E-03 +/- 4.9E-08
 Sband delay (usec) 4.28425000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 4.28425E-03 +/- 3.9E-07
 Phase delay (usec) 5.49791424259E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.49791E-06 +/- 1.7E-10
 Delay rate (us/s) 6.32033396669E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 6.32033E-10 +/- 1.6E-12
 Total phase (deg) 170.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 170.5 +/- 0.0

ph/seg (deg) 1.3 0.0 Theor. Amplitude 602.406 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.6 0.0 Search (1024X32) 597.835 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.9 0.0 Inc. seg. avg. 602.016 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 m: az 93.6 el 15.4 pa -70.0 m: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 0.000 0.000 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/c241b/v2/3mm/1234/No0707//mm...3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mm.W.212.3MP2MB simultaneous interpolator

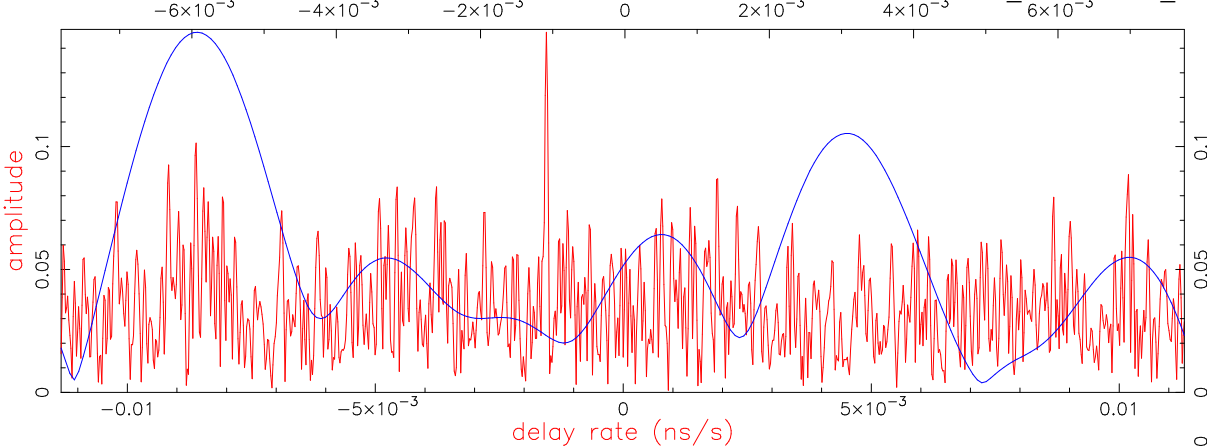
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

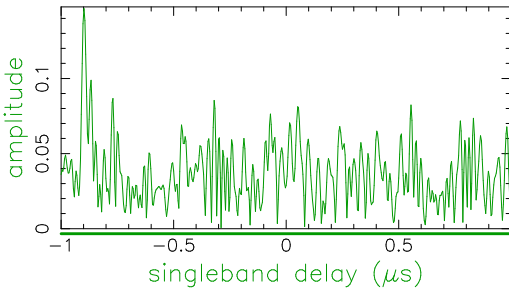
VLBA_MK - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

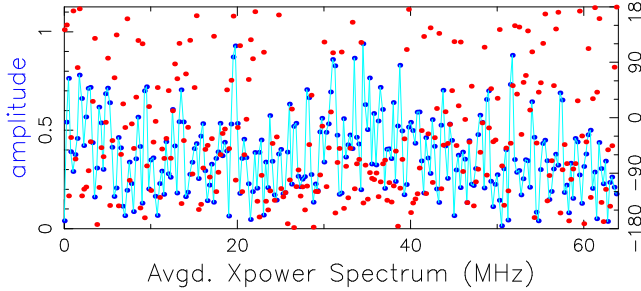


Fringe quality 0

SNR 5.4
 Int time 178.864
 Amp 0.148
 Phase 60.6
 PFD 1.0e+00
 Delays (us)
 SBD -0.898259
 MBD -0.005922
 Fringe rate (Hz)
 -0.133491
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

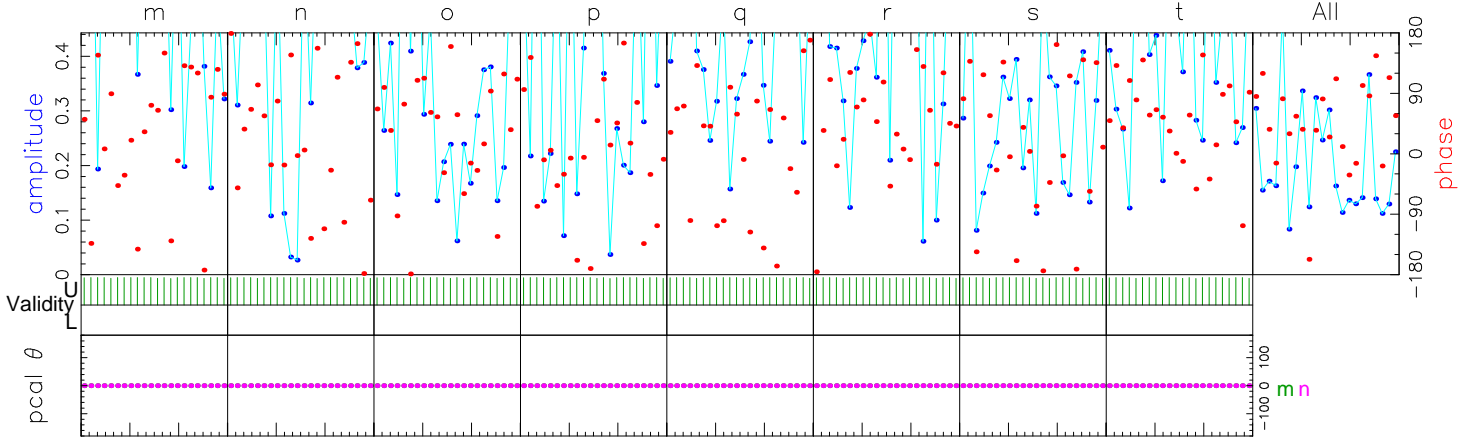


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175951
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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		
m	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.03289559712E+04	Apriori delay (usec)	-1.03280594238E+04	Resid mbdelay (usec)	-5.92244E-03	+/-	2.0E-04
Sband delay (usec)	-1.03289576830E+04	Apriori clock (usec)	8.3061409E-01	Resid sbdelay (usec)	-8.98259E-01	+/-	1.6E-03
Phase delay (usec)	-1.03280594218E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	1.95453E-06	+/-	6.9E-07
Delay rate (us/s)	1.20107485742E+00	Apriori rate (us/s)	1.20107640712E+00	Resid rate (us/s)	-1.54970E-06	+/-	6.6E-09
Total phase (deg)	-214.4	Apriori accel (us/s/s)	5.36887771296E-05	Resid phase (deg)	60.6	+/-	21.4

ph/seg (deg)	57.5	Theor.	50.1	Amplitude	0.148 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.1		87.5	Search (1024X32)	0.145	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.0		30.2	Inc. seg. avg.	0.150	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	58.5		52.8	Inc. frq. avg.	0.146	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

m: az 93.6 el 15.4 pa -70.0 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -6855.730 -2749.377 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mn.W.202.3MP2MB

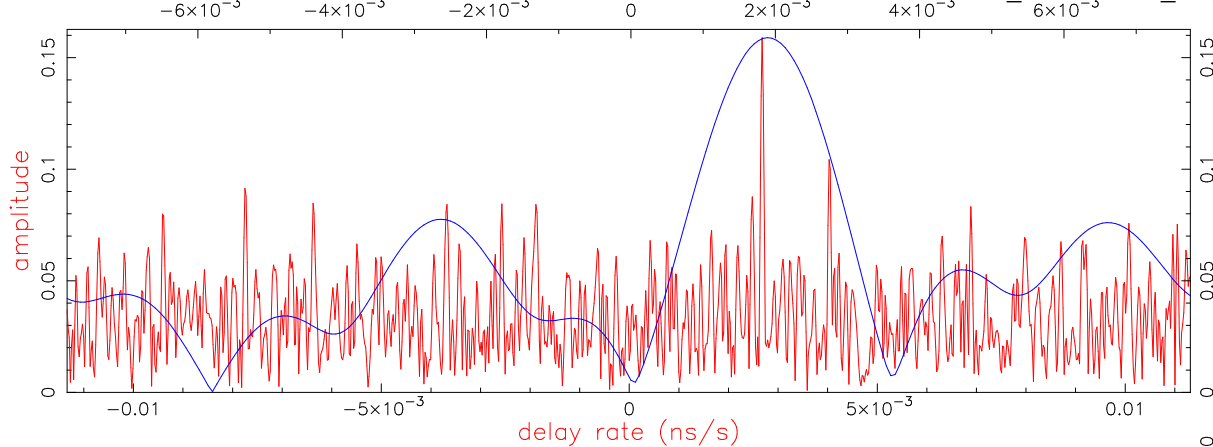
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

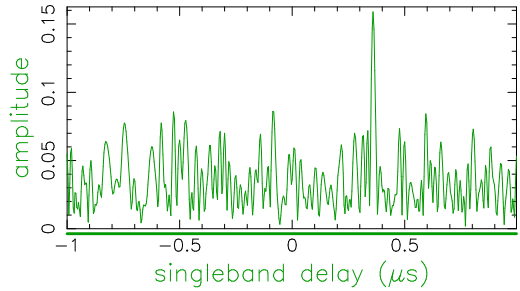
VLBA_MK - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

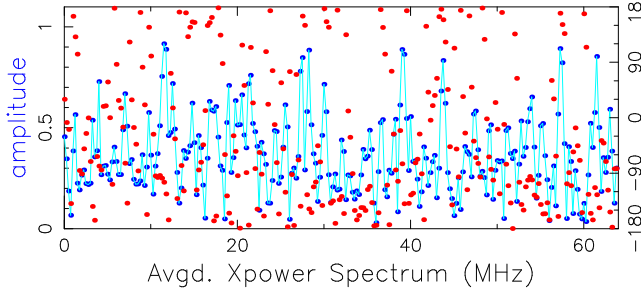


Fringe quality 0

SNR 5.8
 Int time 178.864
 Amp 0.163
 Phase 22.2
 PFD 5.4e-01
 Delays (us)
 SBD 0.359194
 MBD 0.001891
 Fringe rate (Hz) 0.230541
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

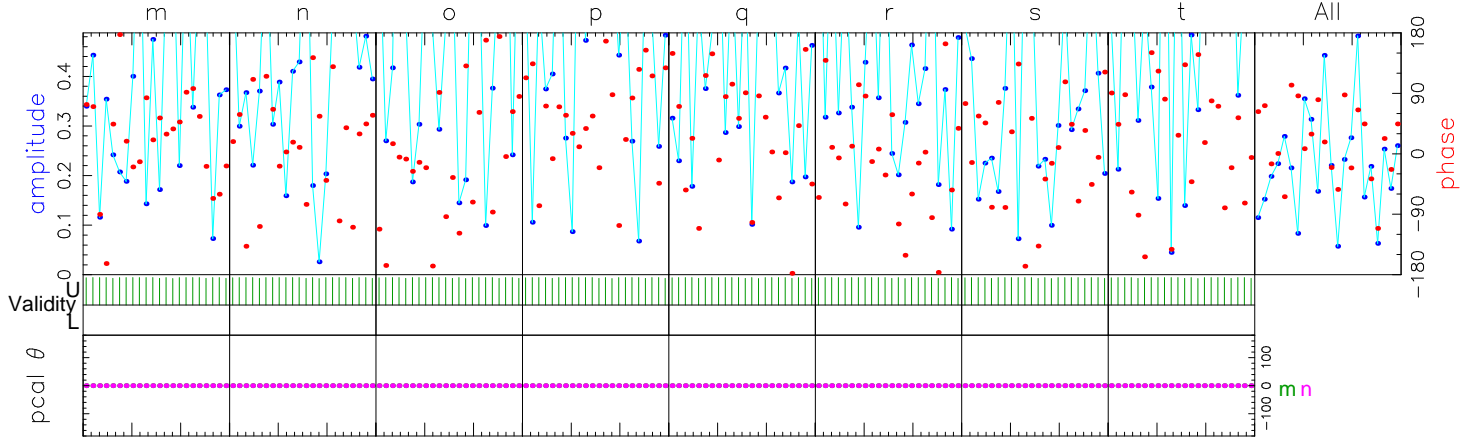


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build 2024:361:053129
 2025:041:175953
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"

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
	31.7	19.0	-22.8	58.7	44.8	-28.4	20.3	40.8	Phase	22.2
	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
	169.4	35.6	425.8	77.3	251.2	229.2	375.0	374.4	Sbd box	349.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.03276981575E+04	Apriori delay (usec)	-1.03280594238E+04	Resid mbdelay (usec)	1.89123E-03	+/-	1.9E-04
Sband delay (usec)	-1.03277002298E+04	Apriori clock (usec)	8.3061409E-01	Resid sbdelay (usec)	3.59194E-01	+/-	1.5E-03
Phase delay (usec)	-1.03280594231E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	7.17460E-07	+/-	6.4E-07
Delay rate (us/s)	1.20107908347E+00	Apriori rate (us/s)	1.20107640712E+00	Resid rate (us/s)	2.67635E-06	+/-	6.1E-09
Total phase (deg)	-252.8	Apriori accel (us/s/s)	5.36887771296E-05	Resid phase (deg)	22.2	+/-	19.7

ph/seg (deg) 55.1 46.2 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.7 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.9 27.9 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.5 48.7 Inc. frq. avg. 0.168 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 m: az 93.6 el 15.4 pa -70.0 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -6855.730 -2749.377 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mn.W.211.3MP2MB

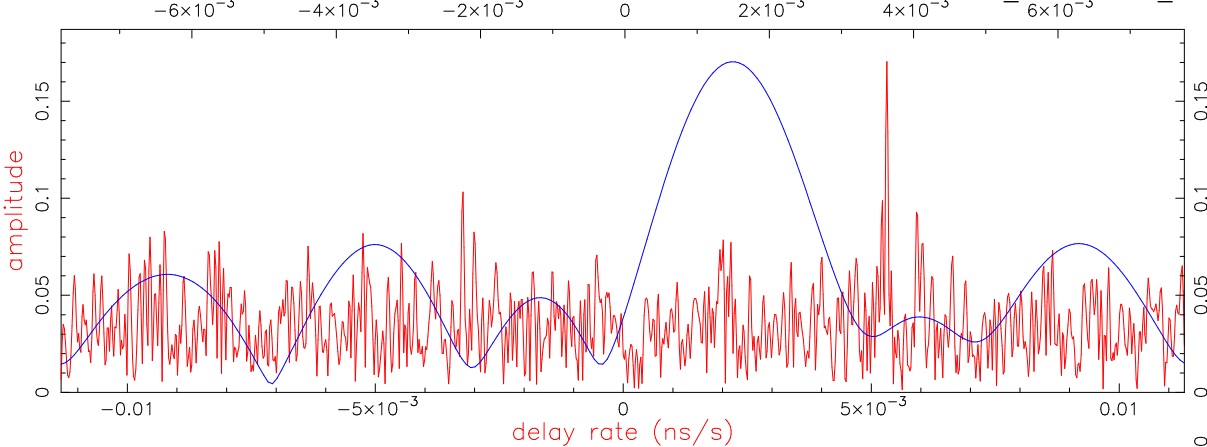
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

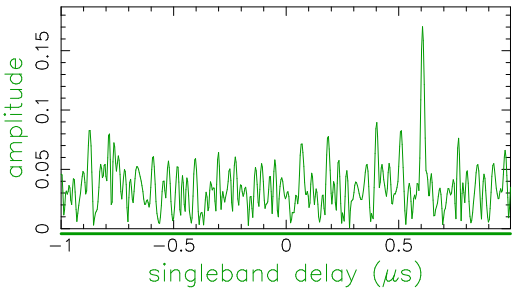
VLBA_MK - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

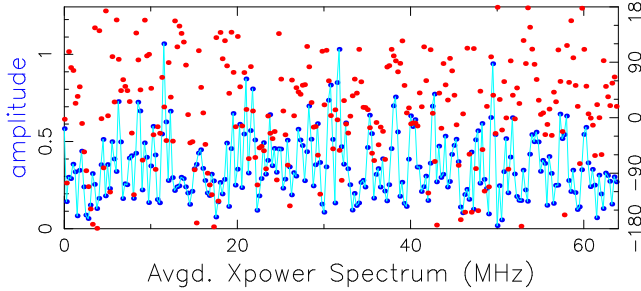


Fringe quality 0

SNR 6.2
 Int time 178.864
 Amp 0.187
 Phase 152.3
 PFD 5.8e-02
 Delays (us)
 SBD 0.605920
 MBD 0.001503
 Fringe rate (Hz)
 0.457650
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

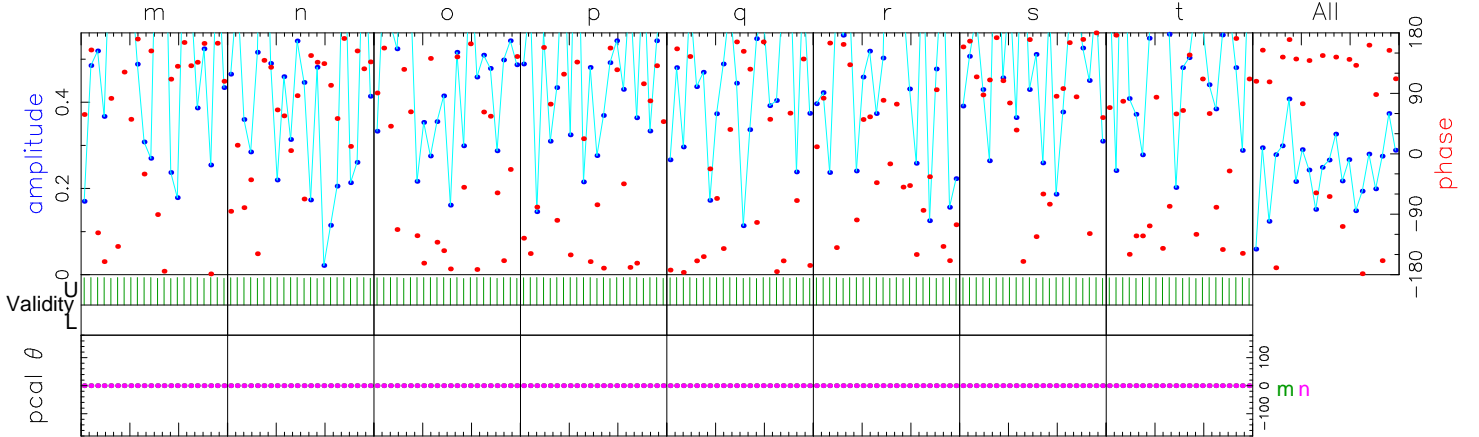


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175956
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	160.3	124.8	149.5	156.0	172.0	11.5	149.8	147.1	Phase	152.3
	0.3	0.2	0.2	0.3	0.2	0.0	0.3	0.1	Ampl.	0.2
	413.3	33.3	118.4	412.0	263.6	57.4	410.6	107.1	Sbd box	412.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03274485453E+04	Apriori delay (usec)	-1.03280594238E+04	Resid mbdelay (usec)	1.50345E-03	+/-	1.7E-04
Sband delay (usec)	-1.03274535040E+04	Apriori clock (usec)	8.3061409E-01	Resid sbdelay (usec)	6.05920E-01	+/-	1.4E-03
Phase delay (usec)	-1.03280594189E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	4.91241E-06	+/-	5.9E-07
Delay rate (us/s)	1.20108171998E+00	Apriori rate (us/s)	1.20107640712E+00	Resid rate (us/s)	5.31287E-06	+/-	5.7E-09
Total phase (deg)	-122.7	Apriori accel (us/s/s)	5.36887771296E-05	Resid phase (deg)	152.3	+/-	18.4

ph/seg (deg)	58.2	Theor.	43.1	Amplitude	0.187 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	64.7		75.2	Search (1024X32)	0.168	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	59.3		26.0	Inc. seg. avg.	0.212	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.9		45.3	Inc. frq. avg.	0.182	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 93.6 el 15.4 pa -70.0 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -6855.730 -2749.377 simultaneous interpolator

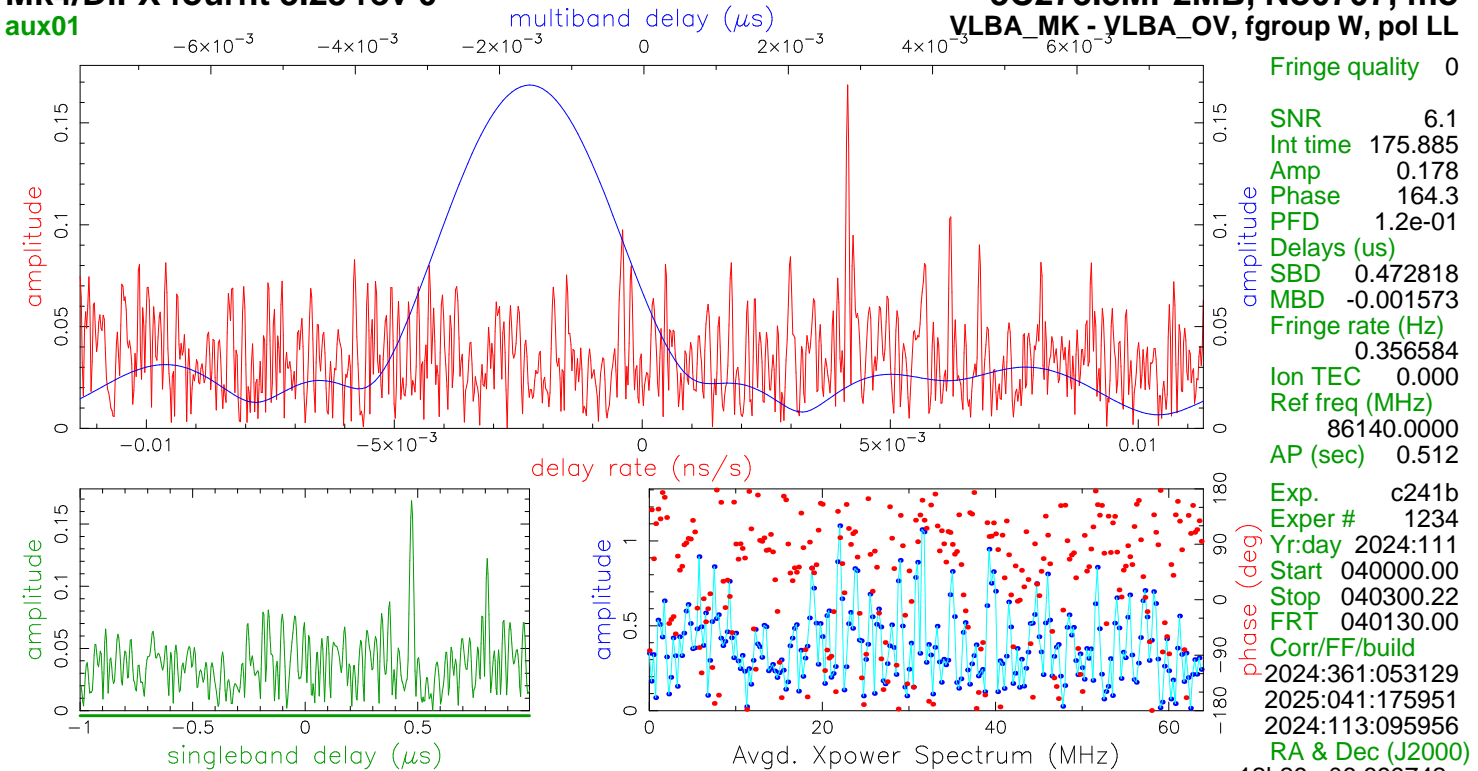
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mn.W.228.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

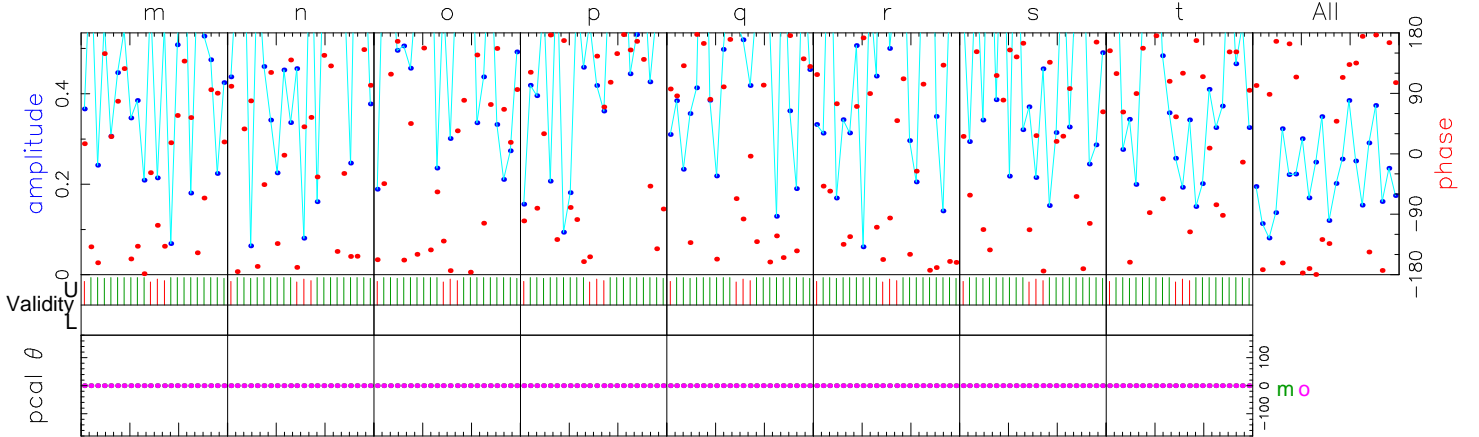
aux01

3C273.3MP2MB, No0707, mo

VLBA_MK - 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
	156.7	155.7	156.5	-174.2	164.7	-179.7	145.8	153.6	Phase	164.3
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	352.6	177.5	464.4	344.3	376.4	476.2	130.1	244.5	Sbd box	378.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-8.25404925821E+03					-8.25451643477E+03			Resid mbdelay (usec)	-1.57343E-03 +/- 1.8E-04
Sband delay (usec)	-8.25404361727E+03					-2.4509958E+01			Resid sbdelay (usec)	4.72818E-01 +/- 1.4E-03
Phase delay (usec)	-8.25451642948E+03					-4.9577204E-07			Resid phdelay (usec)	5.29779E-06 +/- 6.0E-07
Delay rate (us/s)	6.63451101378E-01					6.634446961786E-01			Resid rate (us/s)	4.13959E-06 +/- 5.9E-09
Total phase (deg)			-84.7			4.27582500379E-05			Resid phase (deg)	164.3 +/- 18.7
	RMS	Theor.	Amplitude	0.178 +/- 0.029					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	45.7	43.7	Search (1024X32)	0.167					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.0	76.3	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	15.1	26.5	Inc. seg. avg.	0.184					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	30.2	46.2	Inc. frq. avg.	0.165					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
m: az 93.6 el 15.4 pa -70.0			o: az 127.0 el 40.9 pa -39.4			u, v (fr/asec) -3780.421 -2239.076				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB			Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.204.3MP2MB				

Mk4/DiFX fourfit 3.25 rev 0

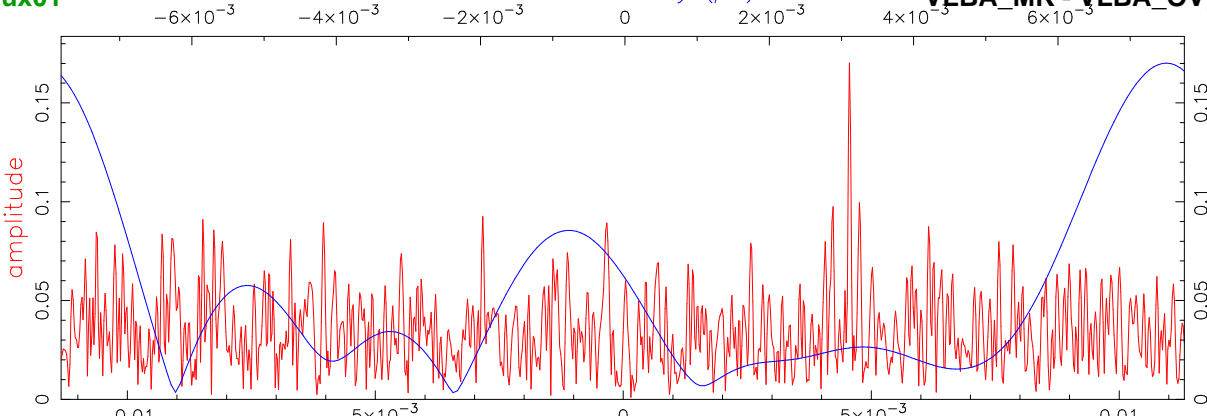
aux01

3C273.3MP2MB, No0707, mo

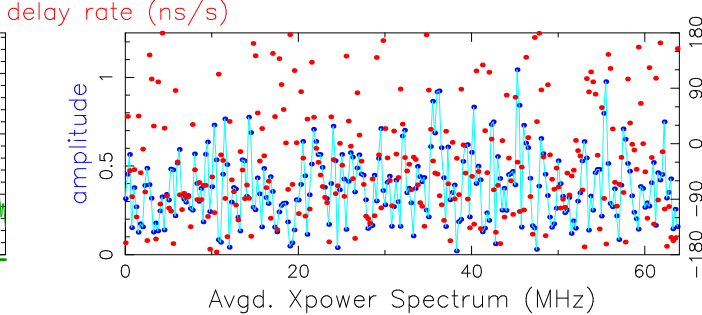
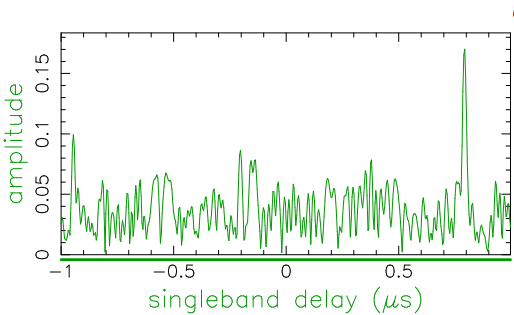
VLBA_MK - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

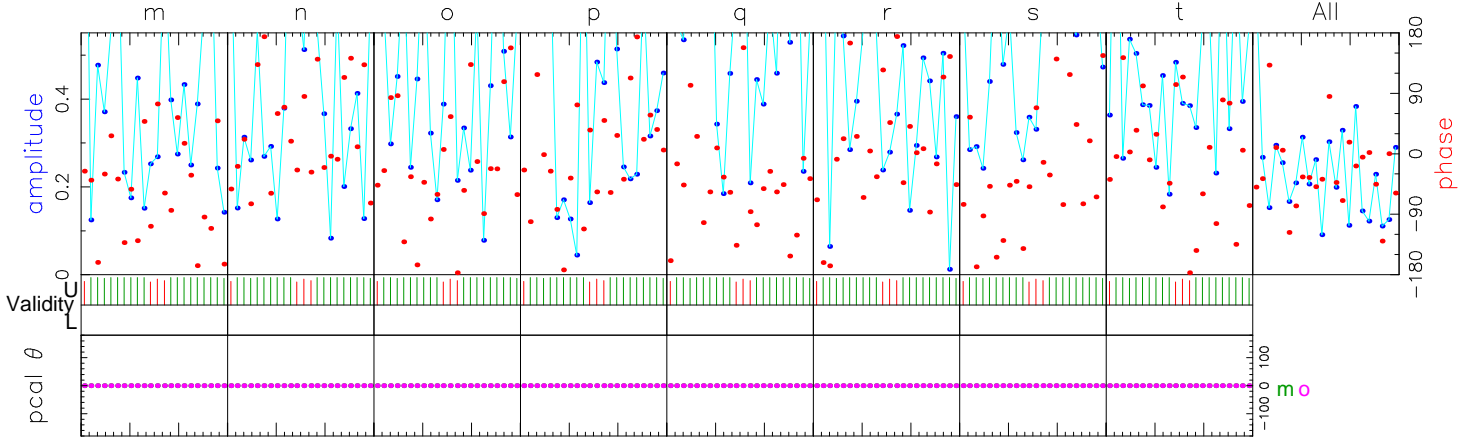


SNR 6.2
 Int time 175.885
 Amp 0.184
 Phase -34.0
 PFD 6.3e-02
 Delays (us)
 SBD 0.791667
 MBD 0.007478
 Fringe rate (Hz)
 0.394069
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175953
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-57.5	4.0	-28.7	-15.2	-70.0	-18.4	-63.1	1.9		-34.0
	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2		0.2
	506.9	490.2	122.6	104.4	460.0	118.9	11.4	53.9		459.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
m	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-8.25372770722E+03	Apriori delay (usec)	-8.25451643477E+03	Resid mbdelay (usec)	7.47756E-03	+/-	1.7E-04
Sband delay (usec)	-8.25372476802E+03	Apriori clock (usec)	-2.4509958E+01	Resid sbdelay (usec)	7.91667E-01	+/-	1.4E-03
Phase delay (usec)	-8.25451643587E+03	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	-1.09741E-06	+/-	5.9E-07
Delay rate (us/s)	6.63451536539E-01	Apriori rate (us/s)	6.63446961786E-01	Resid rate (us/s)	4.57475E-06	+/-	5.8E-09
Total phase (deg)	-283.0	Apriori accel (us/s/s)	4.27582500379E-05	Resid phase (deg)	-34.0	+/-	18.4

ph/seg (deg)	57.5	Theor.	42.9	Amplitude	0.184 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.2		74.9	Search (1024X32)	0.160	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	31.8		26.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	24.2		45.4	Inc. seg. avg.	0.197	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.186	Data rate(Mb/s):	2048	t_cohere	infinite			
m:	az 93.6 el 15.4 pa -70.0	o:	az 127.0 el 40.9 pa -39.4	u,v (fr/asec)	-3780.421 -2239.076					simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.213.3MP2MB

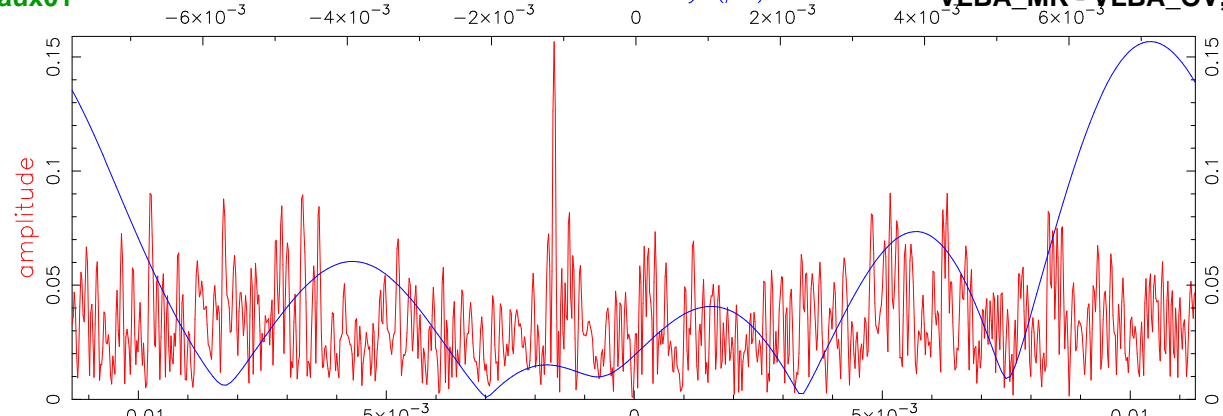
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mo

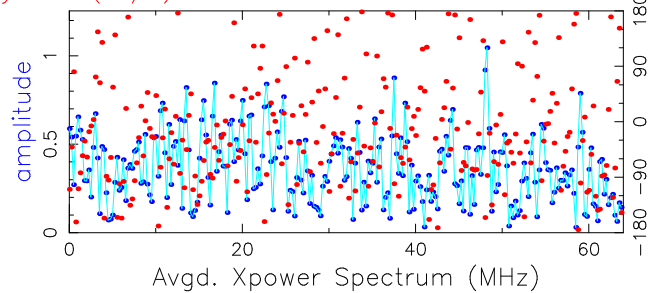
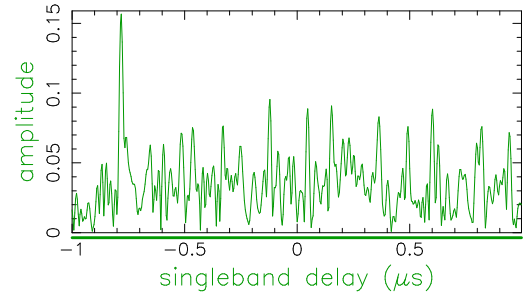
VLBA_MK - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

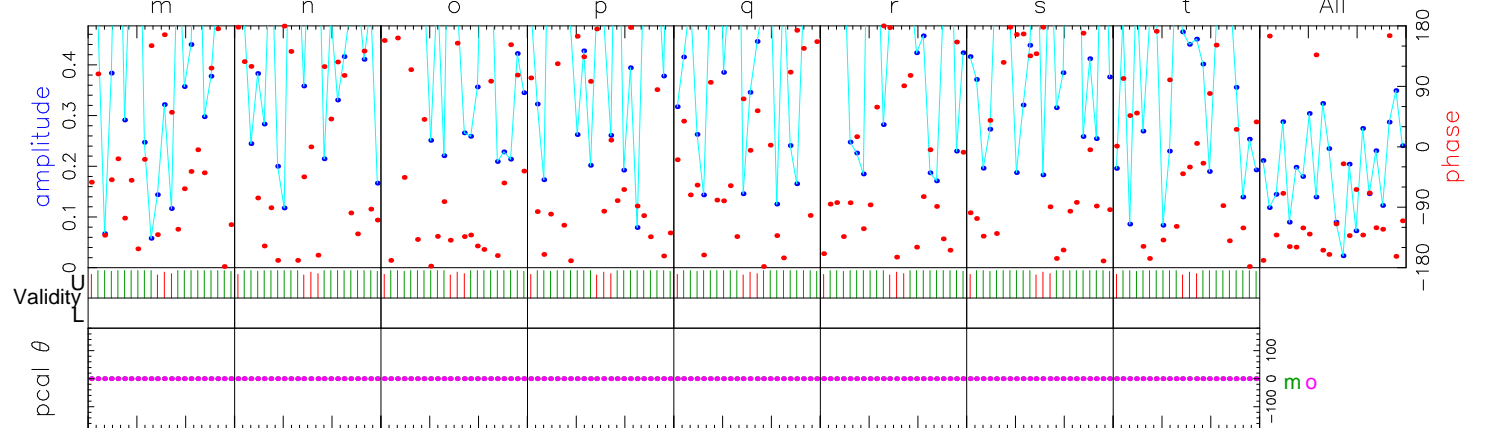


Fringe quality 0
 SNR 5.7
 Int time 175.885
 Amp 0.159
 Phase -138.7
 PFD 7.4e-01
 Delays (us)
 SBD -0.782321
 MBD 0.007077
 Fringe rate (Hz)
 -0.138992
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175955
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

delay rate (ns/s)



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
	-87.6	-167.5	-171.3	-141.5	-110.4	-129.9	-139.1	-113.3	Phase	-138.7
	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.0	Ampl.	0.2
	220.9	169.6	176.5	332.3	411.5	90.2	62.2	316.9	Sbd box	56.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -8.25530623262E+03 Apriori delay (usec) -8.25451643477E+03 Resid mbdelay (usec) 7.07716E-03 +/- 1.9E-04
 Sband delay (usec) -8.25529875602E+03 Apriori clock (usec) -2.4509958E+01 Resid sbdelay (usec) -7.82321E-01 +/- 1.5E-03
 Phase delay (usec) -8.25451643925E+03 Apriori clockrate (us/s) -4.9577204E-07 Resid phdelay (usec) -4.47145E-06 +/- 6.5E-07
 Delay rate (us/s) 6.63445348224E-01 Apriori rate (us/s) 6.63446961786E-01 Resid rate (us/s) -1.61356E-06 +/- 6.3E-09
 Total phase (deg) -27.6 Apriori accel (us/s/s) 4.27582500379E-05 Resid phase (deg) -138.7 +/- 20.0

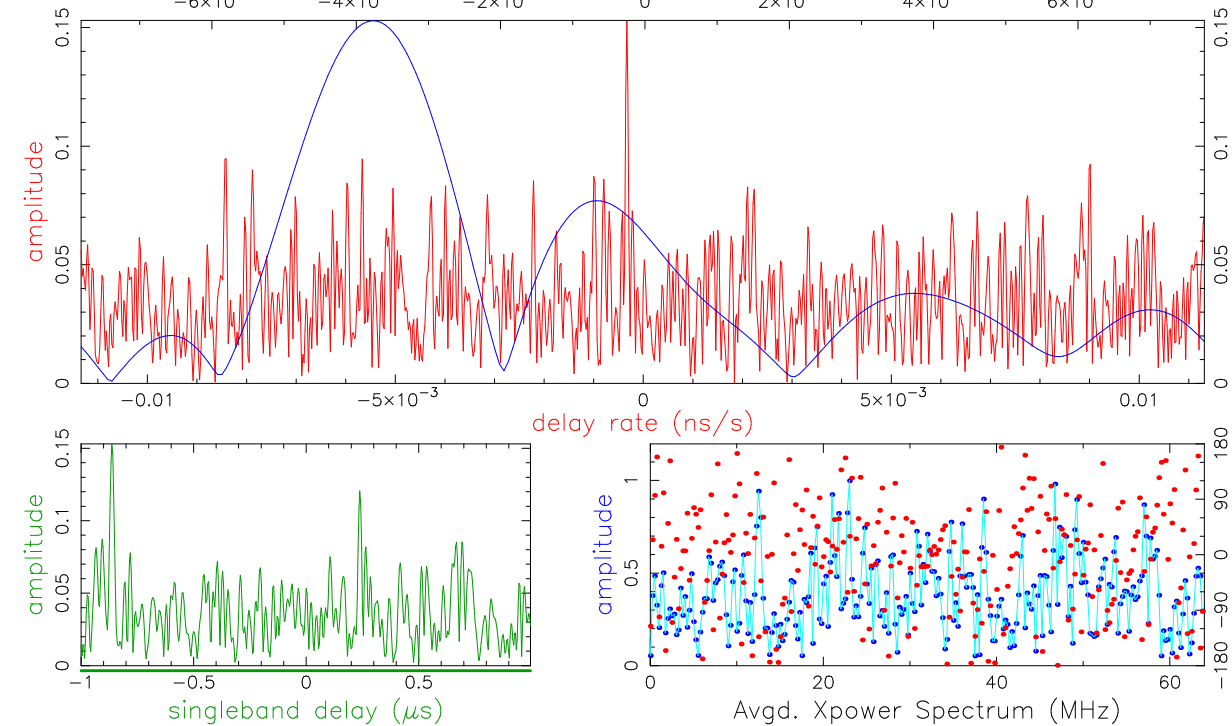
ph/seg (deg) 45.7 46.7 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.0 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.7 28.3 Inc. seg. avg. 0.147 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.9 49.5 Inc. frq. avg. 0.156 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 m: az 93.6 el 15.4 pa -70.0 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) -3780.421 -2239.076 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.221.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mo

VLBA_MK - VLBA_OV, fgroup W, pol RL

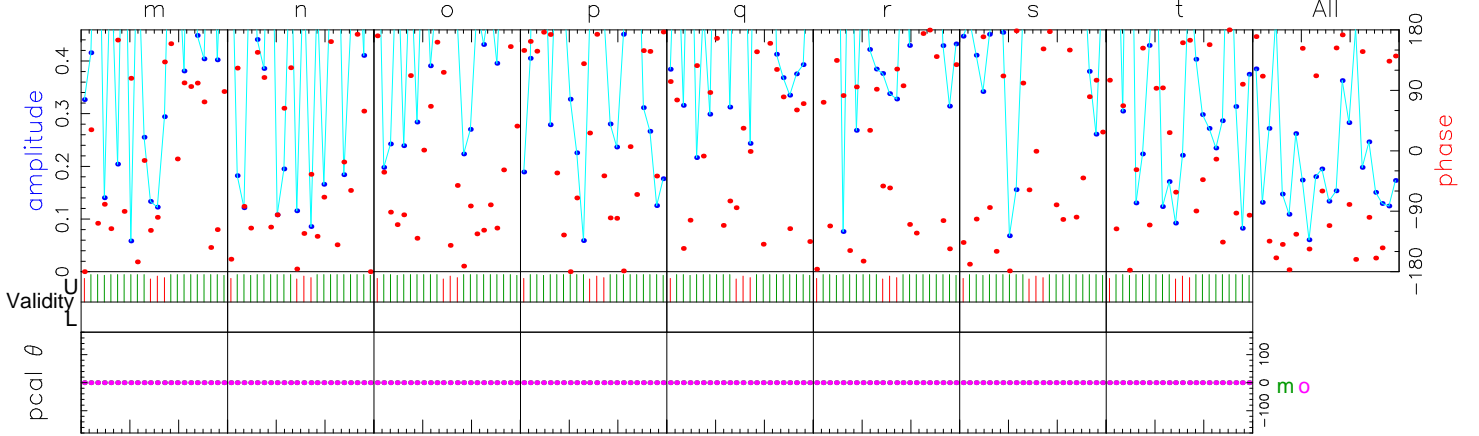


Fringe quality 0

SNR 5.5
 Int time 175.885
 Amp 0.153
 Phase -163.6
 PFD 9.7e-01
 Delays (us)
 SBD -0.862742
 MBD -0.003731
 Fringe rate (Hz)
 -0.028937
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175957
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-179.9	-159.8	-127.5	-155.2	170.3	176.5	-137.6	-166.1	Phase	-163.6
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	282.6	35.3	248.1	297.6	319.4	284.0	489.3	370.1	Sbd box	36.1
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -8.25537954099E+03 Apriori delay (usec) -8.25451643477E+03 Resid mbdelay (usec) -3.73121E-03 +/- 2.0E-04
 Sband delay (usec) -8.25537917727E+03 Apriori clock (usec) -2.4509958E+01 Resid sbdelay (usec) -8.62742E-01 +/- 1.6E-03
 Phase delay (usec) -8.25451644005E+03 Apriori clockrate (us/s) -4.9577204E-07 Resid phdelay (usec) -5.27502E-06 +/- 6.7E-07
 Delay rate (us/s) 6.63446625851E-01 Apriori rate (us/s) 6.63446961786E-01 Resid rate (us/s) -3.35936E-07 +/- 6.5E-09
 Total phase (deg) -52.5 Apriori accel (us/s/s) 4.27582500379E-05 Resid phase (deg) -163.6 +/- 20.7

RMS Theor. Amplitude 0.153 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.7 48.2 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 85.0 84.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 23.9 29.2 Inc. seg. avg. 0.161 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 32.8 51.0 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 93.6 el 15.4 pa -70.0 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) -3780.421 -2239.076 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.230.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

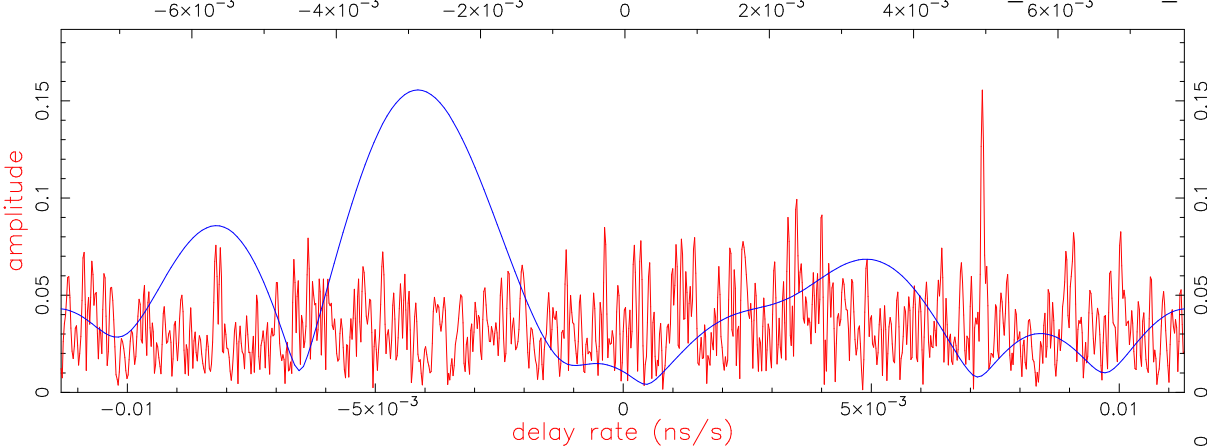
aux01

3C273.3MP2MB, No0707, mp

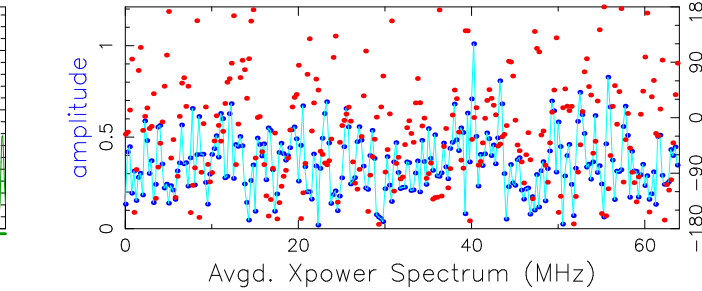
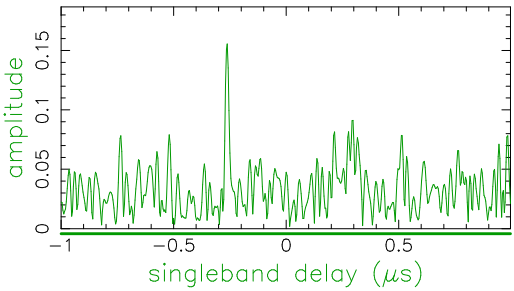
VLBA_MK - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 0

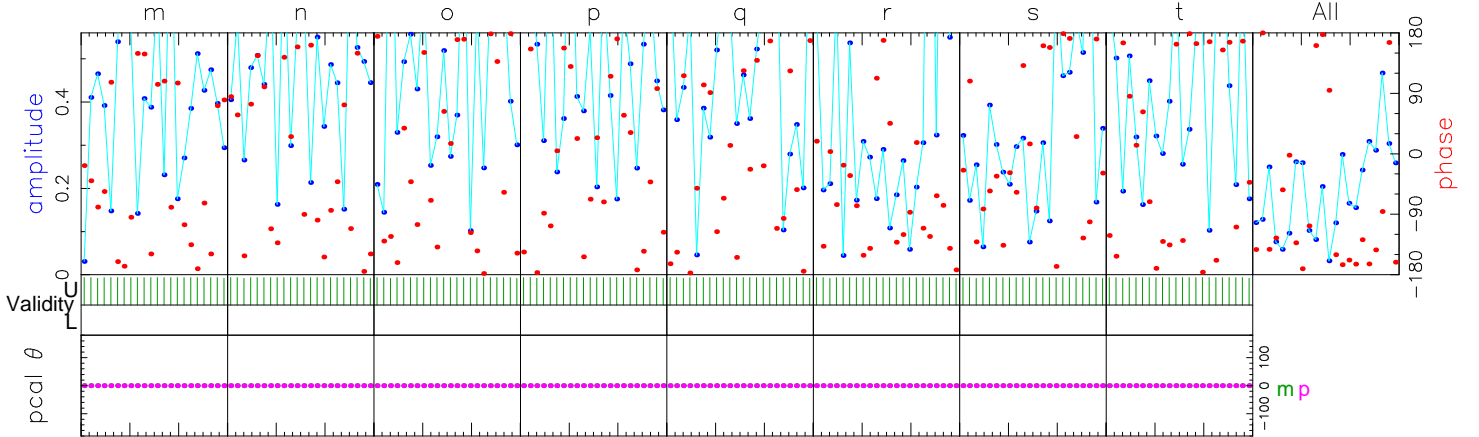


SNR 5.8
Int time 179.764
Amp 0.187
Phase -149.1
PFD 6.6e-01
Delays (us)
SBD -0.262990
MBD -0.002897
Fringe rate (Hz) 0.623877
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c241b
Exper # 1234
Yr:day 2024:111
Start 040000.00
Stop 040300.22
FRT 040130.00
Corr/FF/build
2024:361:053129
2025:041:175951
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

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
	-139.3	-167.7	-158.9	-157.1	-166.4	-103.3	-118.2	-173.1	Phase	-149.1
	0.2	0.2	0.2	0.1	0.2	0.3	0.1	0.3	Ampl.	0.2
	59.2	350.9	485.4	231.3	109.4	189.3	240.1	189.8	Sbd box	189.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03518800951E+04	Apriori delay (usec)	-1.03516115733E+04	Resid mbdelay (usec)	-2.89680E-03	+/-	1.9E-04
Sband delay (usec)	-1.03518745633E+04	Apriori clock (usec)	-5.1573467E+00	Resid sbdelay (usec)	-2.62990E-01	+/-	1.5E-03
Phase delay (usec)	-1.03516115781E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-4.80753E-06	+/-	6.4E-07
Delay rate (us/s)	8.28940516933E-01	Apriori rate (us/s)	8.28933274337E-01	Resid rate (us/s)	7.24260E-06	+/-	6.2E-09
Total phase (deg)	-122.9	Apriori accel (us/s/s)	5.41685310542E-05	Resid phase (deg)	-149.1	+/-	19.9

ph/seg (deg)	52.1	Theor.	46.7	Amplitude	0.187 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	70.7	Search (1024X32)	0.154	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.5	Inc. seg. avg.	0.173	Inc. frq. avg.	0.183	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.8	Inc. frq. avg.	0.183			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

m: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.762 -1842.134 simultaneous interpolator

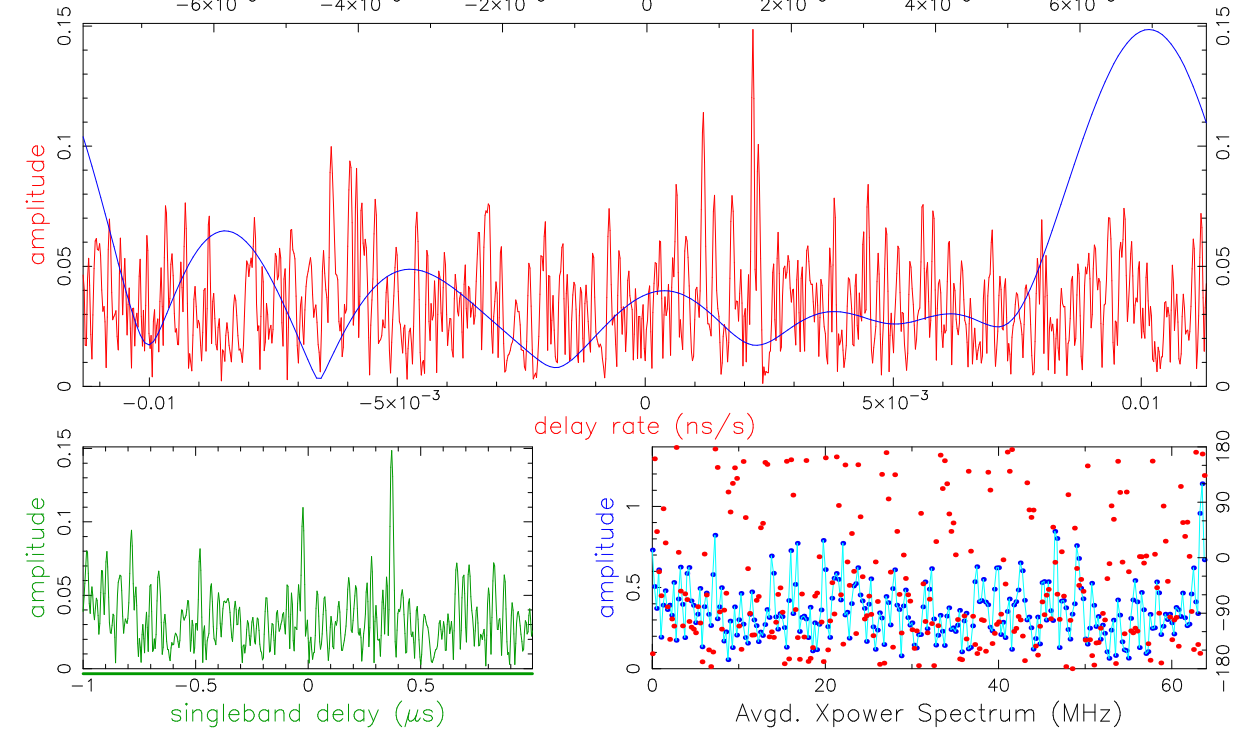
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.201.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

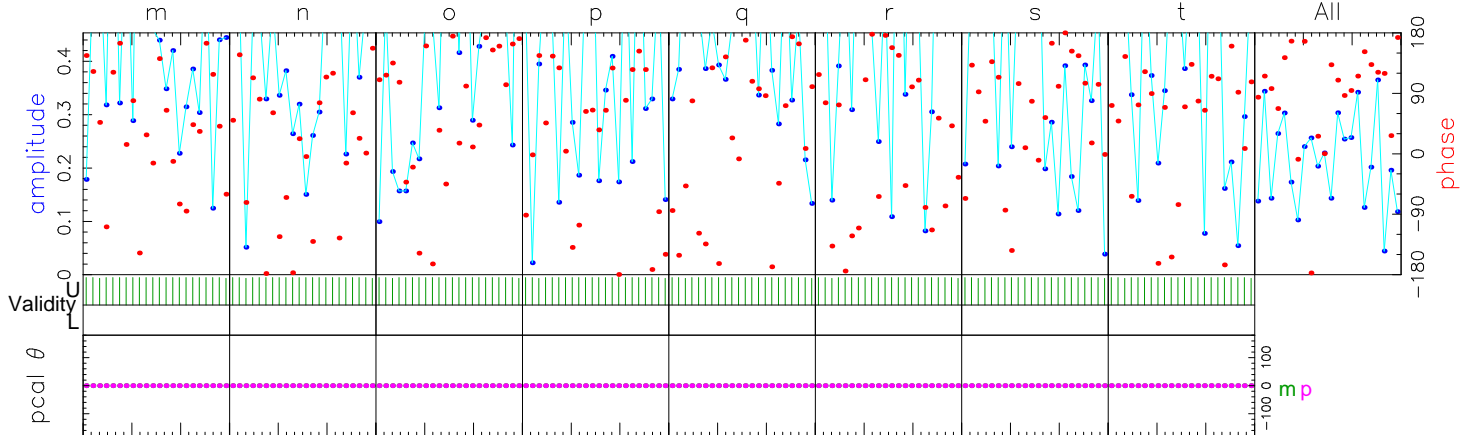
3C273.3MP2MB, No0707, mp

VLBA_MK - VLBA_PT, fgroup W, pol RR



Fringe quality 0
 SNR 5.5
 Int time 179.764
 Amp 0.151
 Phase 111.4
 PFD 1.0e+00
 Delays (us)
 SBD 0.370571
 MBD 0.006940
 Fringe rate (Hz)
 0.187712
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175952
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	78.2	90.0	143.1	107.3	128.4	129.2	88.5	108.3	Phase	111.4
	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	413.4	279.6	441.0	227.5	334.6	31.4	350.2	346.1	Sbd box	351.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.03512452581E+04								Resid mbdelay (usec)	6.94024E-03 +/- 2.0E-04
Sband delay (usec)	-1.03512410018E+04								Resid sbdelay (usec)	3.70571E-01 +/- 1.6E-03
Phase delay (usec)	-1.03516115697E+04								Resid phdelay (usec)	3.59114E-06 +/- 6.8E-07
Delay rate (us/s)	8.28935453492E-01								Resid rate (us/s)	2.17915E-06 +/- 6.5E-09
Total phase (deg)			-222.5						Resid phase (deg)	111.4 +/- 21.0
	RMS	Theor.	Amplitude	0.151 +/- 0.028					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.9	49.2	Search (1024X32)	0.142					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.5	85.9	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	24.9	29.7	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 (%)	29.8	51.8	Inc. frq. avg.	0.143					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
m: az 93.6 el 15.4 pa -70.0			p: az 136.3 el 49.0 pa -34.7						u,v (fr/asec) -4722.762 -1842.134	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB						Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.210.3MP2MB	

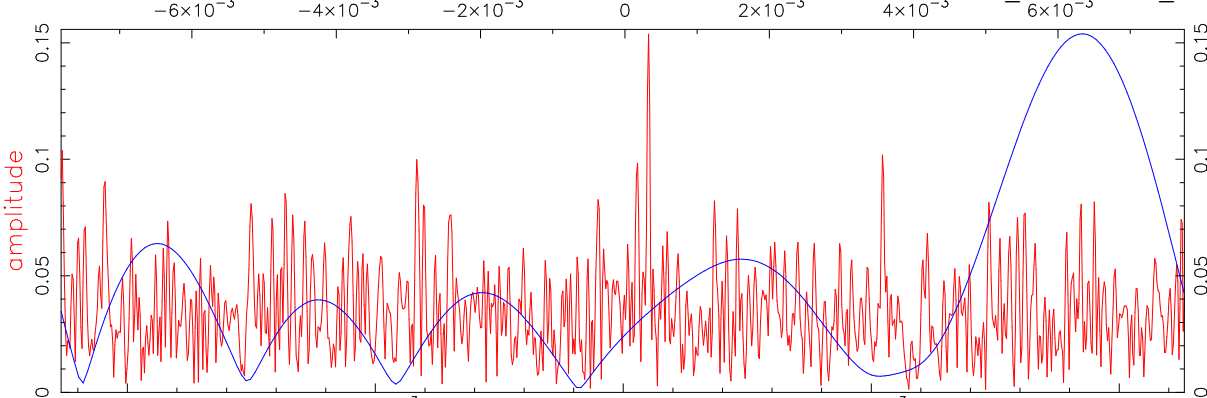
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mp

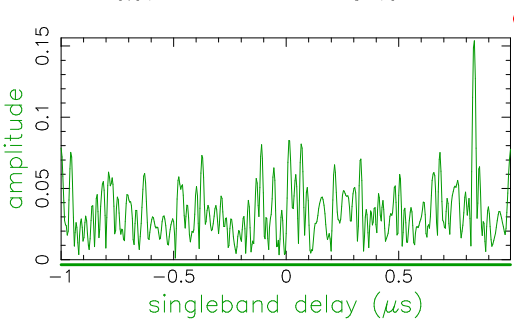
VLBA_MK - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

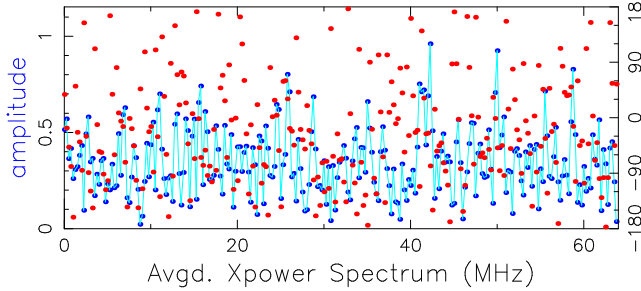


Fringe quality 0

SNR 5.7
 Int time 179.764
 Amp 0.156
 Phase 137.1
 PFD 7.6e-01
 Delays (us)
 SBD 0.834585
 MBD 0.006281
 Fringe rate (Hz)
 0.043874
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

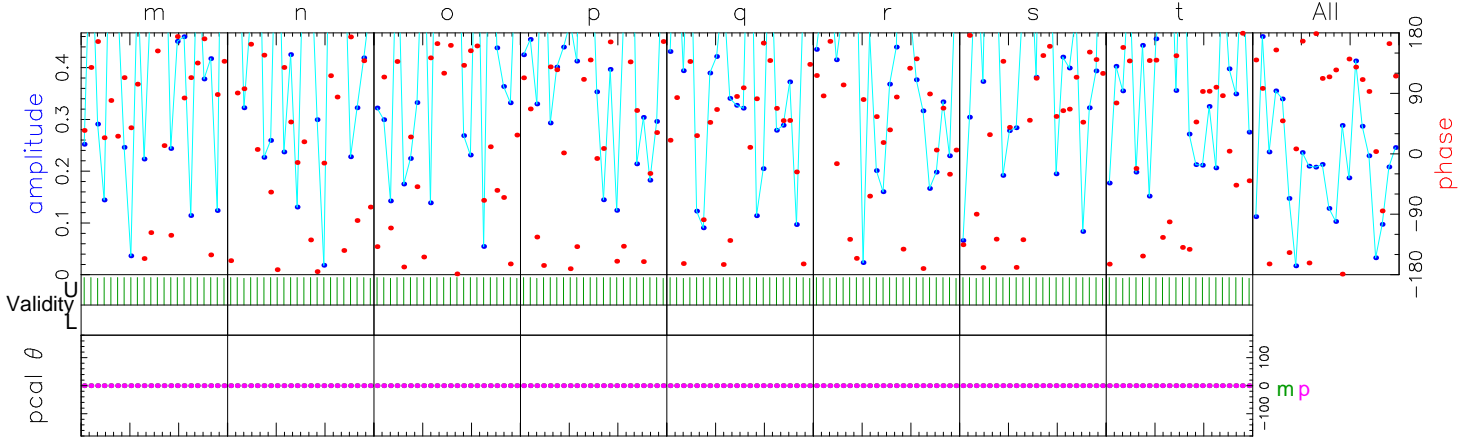


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175954
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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	142.9	163.2	147.4	100.7	130.1	129.3	171.5	Phase	137.1
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	467.0	274.9	367.3	469.7	312.4	452.2	477.8	135.5	Sbd box	470.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.03507771671E+04	Apriori delay (usec)	-1.03516115733E+04	Resid mbdelay (usec)	6.28127E-03	+/-	1.9E-04
Sband delay (usec)	-1.03507769883E+04	Apriori clock (usec)	-5.1573467E+00	Resid sbdelay (usec)	8.34585E-01	+/-	1.5E-03
Phase delay (usec)	-1.03516115689E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	4.41997E-06	+/-	6.5E-07
Delay rate (us/s)	8.28933783668E-01	Apriori rate (us/s)	8.28933274337E-01	Resid rate (us/s)	5.09331E-07	+/-	6.2E-09
Total phase (deg)	-196.8	Apriori accel (us/s/s)	5.41685310542E-05	Resid phase (deg)	137.1	+/-	20.1

ph/seg (deg)	RMS 62.6	Theor. 47.1	Amplitude Search (1024X32)	0.153	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.1	82.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	24.6	28.4	Inc. seg. avg.	0.162	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.4	49.6	Inc. frq. avg.	0.147	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.762 -1842.134 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.218.3MP2MB

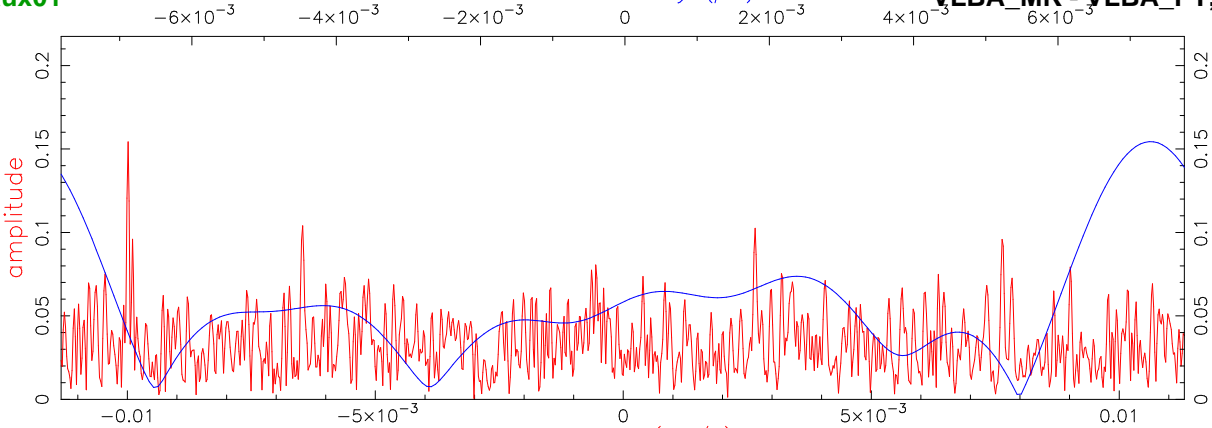
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mp

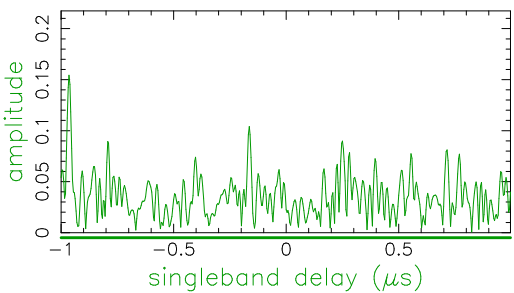
VLBA_MK - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

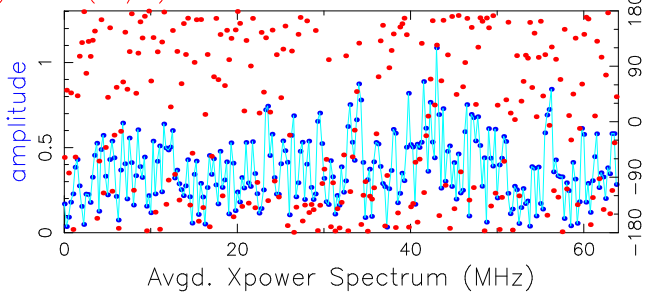


Fringe quality 0

SNR 5.7
 Int time 179.764
 Amp 0.217
 Phase -49.6
 PFD 8.5e-01
 Delays (us)
 SBD -0.964566
 MBD -0.008301
 Fringe rate (Hz)
 -0.860733
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

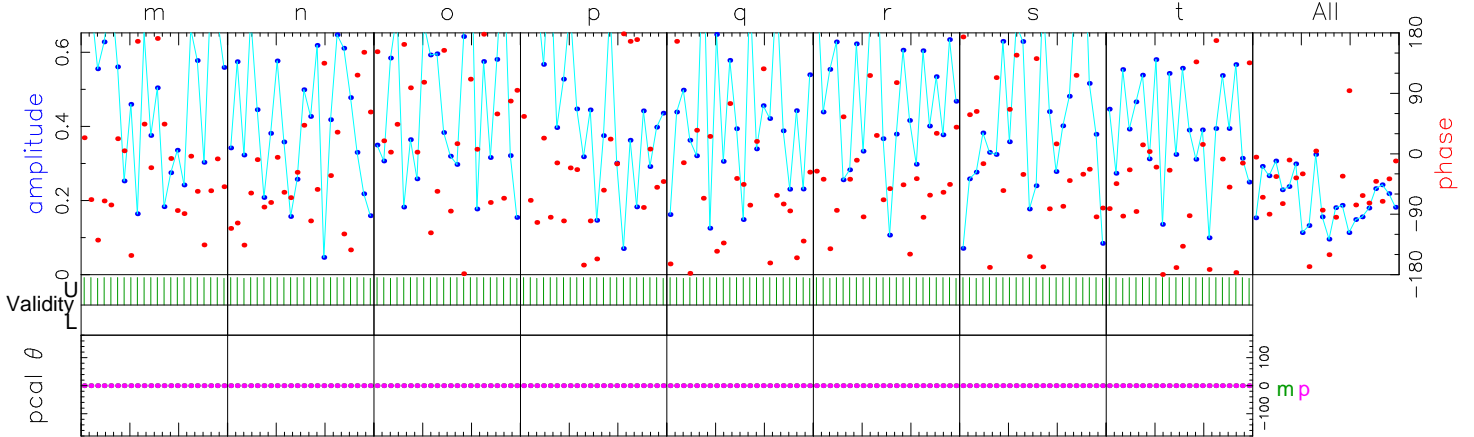


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175956
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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
	-43.7	-59.7	78.7	-51.1	-84.3	-35.4	-41.9	-60.0	Phase	-49.6
	0.4	0.3	0.1	0.3	0.2	0.3	0.1	0.2	Ampl.	0.2
	9.9	508.7	251.7	304.2	30.4	14.0	301.9	204.3	Sbd box	10.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03525729991E+04	Apriori delay (usec)	-1.03516115733E+04	Resid mbdelay (usec)	-8.30078E-03	+/-	1.9E-04
Sband delay (usec)	-1.03525761391E+04	Apriori clock (usec)	-5.1573467E+00	Resid sbdelay (usec)	-9.64566E-01	+/-	1.5E-03
Phase delay (usec)	-1.03516115749E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-1.59815E-06	+/-	6.5E-07
Delay rate (us/s)	8.28923282079E-01	Apriori rate (us/s)	8.28933274337E-01	Resid rate (us/s)	-9.99226E-06	+/-	6.3E-09
Total phase (deg)	-23.4	Apriori accel (us/s/s)	5.41685310542E-05	Resid phase (deg)	-49.6	+/-	20.2

ph/seg (deg)	RMS 52.9	Theor. 47.5	Amplitude Search (1024X32)	0.217 +/- 0.038	0.149	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	52.7	82.9	Interp.	0.000	0.212	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	55.0	28.6	Inc. seg. avg.	0.212	0.219	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.5	50.0	Inc. frq. avg.	0.219		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.762 -1842.134 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mp.W.227.3MP2MB