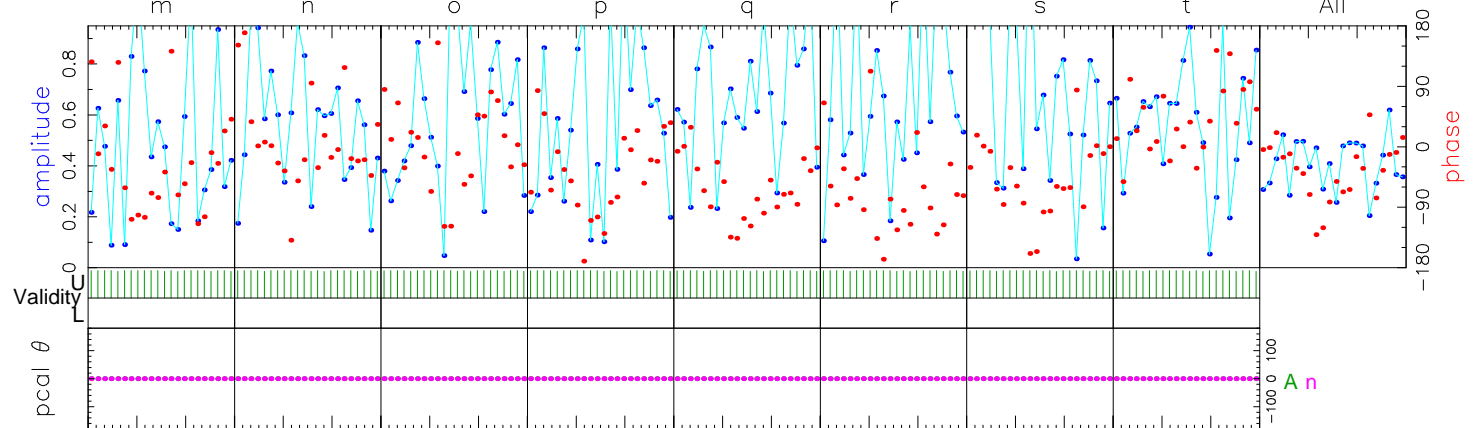


Fringe quality 9  
SNR 11.6  
Int time 178.863  
Amp 0.317  
Phase -35.3  
PFD 1.3e-22  
Delays (us)  
SBD 0.031086  
MBD -0.000564  
Fringe rate (Hz)  
-0.026519  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.00  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:175908  
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



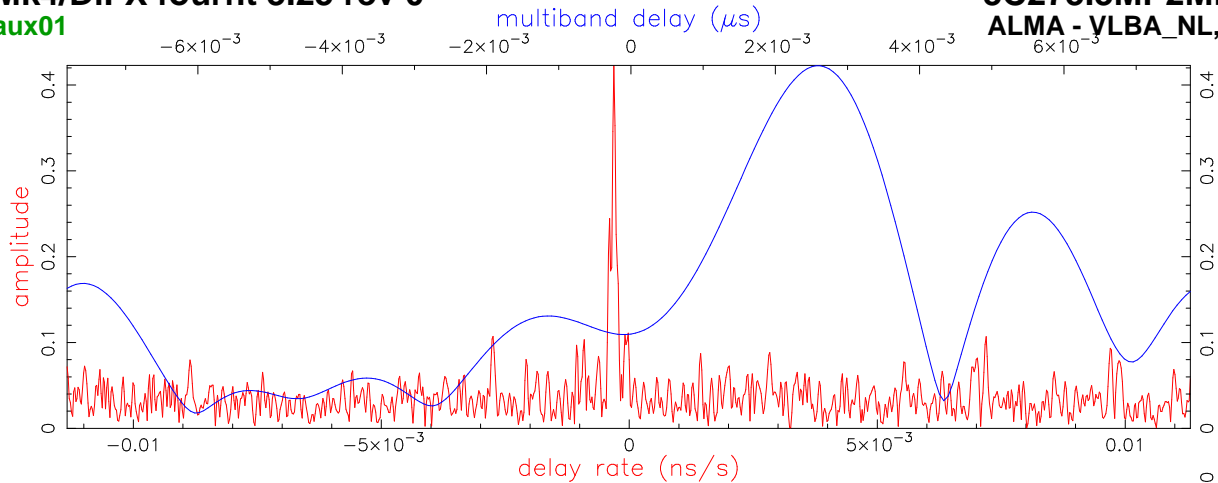
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-52.8	-8.1	-1.1	-28.6	-65.3	-87.9	-44.1	36.3	Phase	-35.3
	0.3	0.4	0.3	0.3	0.5	0.5	0.5	0.4	Ampl.	0.4
	266.9	264.7	264.4	264.8	264.3	265.3	264.8	267.3	Sbd box	265.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
A:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	5.37452172684E+02					5.37421486567E+02			Resid mbdelay (usec)	-5.63883E-04 +/- 9.4E-05
Sband delay (usec)	5.37452572067E+02					-2.1071260E+03			Resid sbdelay (usec)	3.10855E-02 +/- 7.4E-04
Phase delay (usec)	5.37421485428E+02					-3.0809188E-07			Resid phdelay (usec)	-1.13900E-06 +/- 3.2E-07
Delay rate (us/s)	-5.42177893539E-01					-5.42177585675E-01			Resid rate (us/s)	-3.07864E-07 +/- 3.1E-09
Total phase (deg)			271.7			-1.80420917445E-05			Resid phase (deg)	-35.3 +/- 9.9
	RMS	Theor.	Amplitude	0.317 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.2	23.2	Search (1024X32)	0.314					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	42.7	40.5	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	43.1	14.0	Inc. seg. avg.	0.377					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	36.9	24.4	Inc. frq. avg.	0.388					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			n: az 164.0 el 49.1 pa -11.6			u, v (fr/asec) 3095.186 -9389.244				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//An..3MP2MB			Output file: /Exps/c241b/v2/3mm/1234/No0707//An.W.18.3MP2MB				

Mk4/DiFX fourfit 3.25 rev 0

aux01

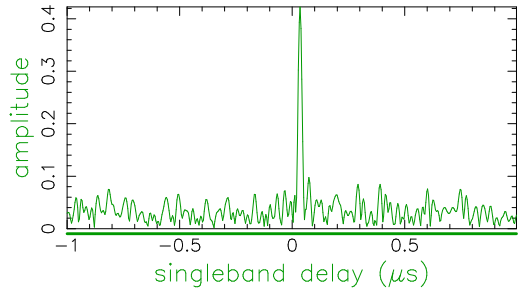
3C273.3MP2MB, No0707, An

ALMA - VLBA\_NL, fgroup W, pol YR

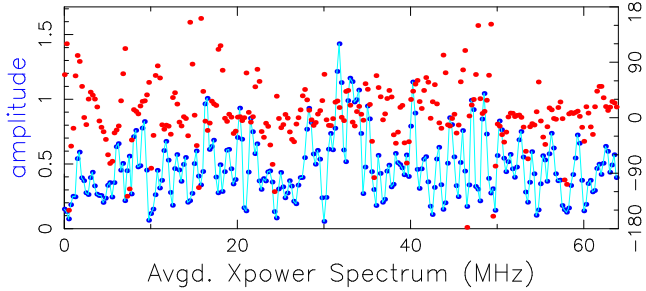


Fringe quality 8

SNR 15.5  
 Int time 178.863  
 Amp 0.423  
 Phase 20.7  
 PFD 1.4e-45  
 Delays (us)  
 SBD 0.034805  
 MBD 0.002575  
 Fringe rate (Hz)  
 -0.026260  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

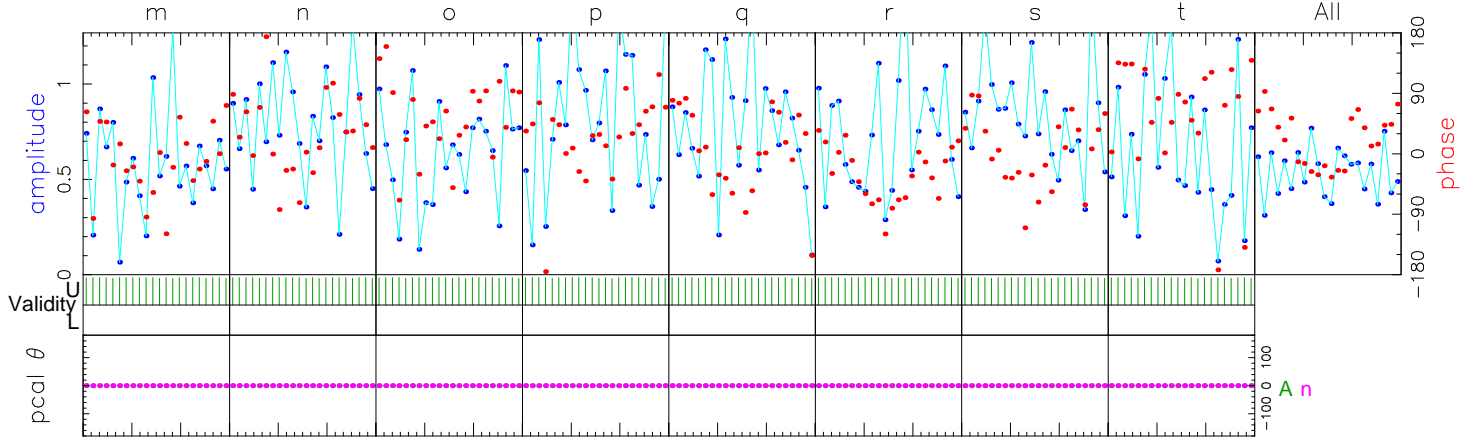


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175910  
 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



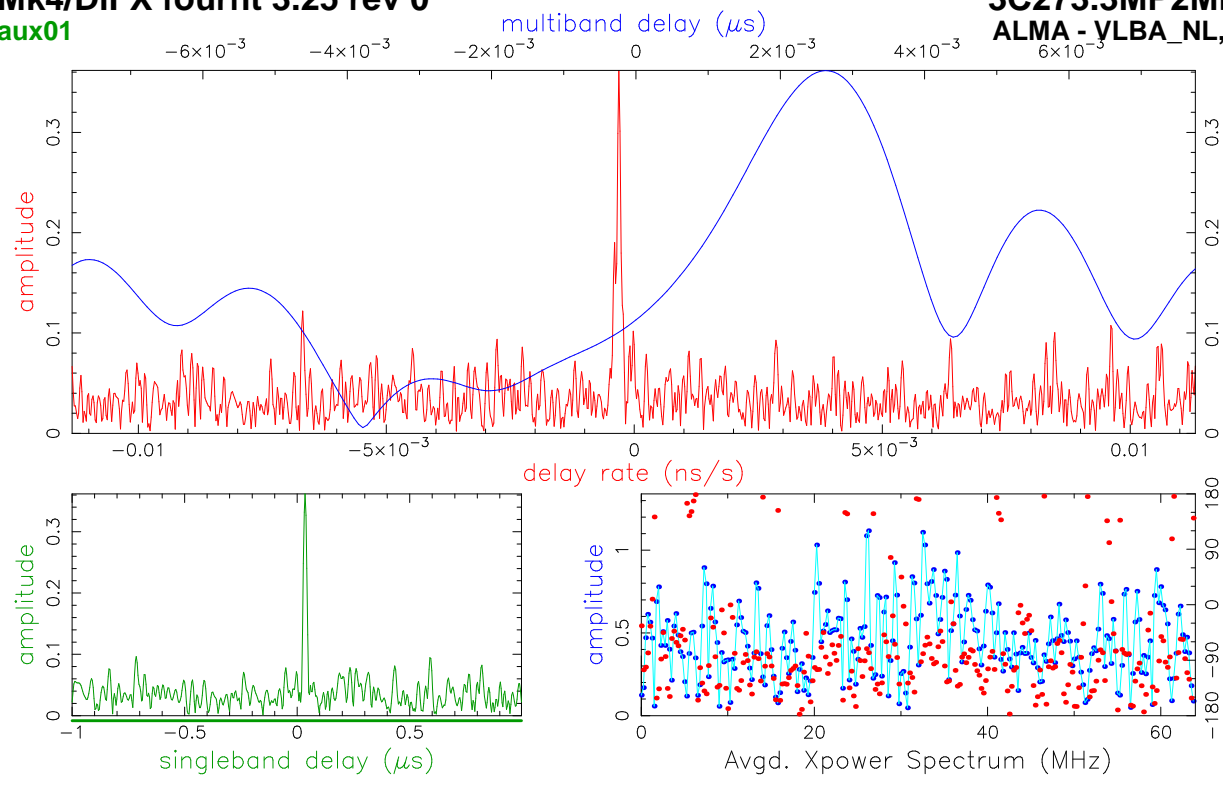
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-3.7	30.0	65.0	34.7	4.2	-31.1	3.9	82.4	Phase	20.7
	0.4	0.5	0.4	0.6	0.5	0.6	0.6	0.5	Ampl.	0.5
	268.0	265.7	265.3	265.8	265.7	266.6	266.1	267.9	Sbd box	265.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
A:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.37455311341E+02	Apriori delay (usec)	5.37421486567E+02	Resid mbdelay (usec)	2.57477E-03	+/-	7.0E-05
Sband delay (usec)	5.37456291817E+02	Apriori clock (usec)	-2.1071260E+03	Resid sbdelay (usec)	3.48052E-02	+/-	5.6E-04
Phase delay (usec)	5.37421487234E+02	Apriori clockrate (us/s)	-3.0809188E-07	Resid phdelay (usec)	6.67055E-07	+/-	2.4E-07
Delay rate (us/s)	-5.42177890526E-01	Apriori rate (us/s)	-5.42177585675E-01	Resid rate (us/s)	-3.04851E-07	+/-	2.3E-09
Total phase (deg)	327.7	Apriori accel (us/s/s)	-1.80420917445E-05	Resid phase (deg)	20.7	+/-	7.4

	RMS	Theor.	Amplitude	0.423 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	39.2	17.4	Search (1024X32)	0.413	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	39.8	30.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	40.6	10.5	Inc. seg. avg.	0.515	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	28.4	18.3	Inc. frq. avg.	0.502	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

A: az 330.6 el 61.8 pa 152.8      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) 3095.186 -9389.244      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//An..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//An.W.28.3MP2MB

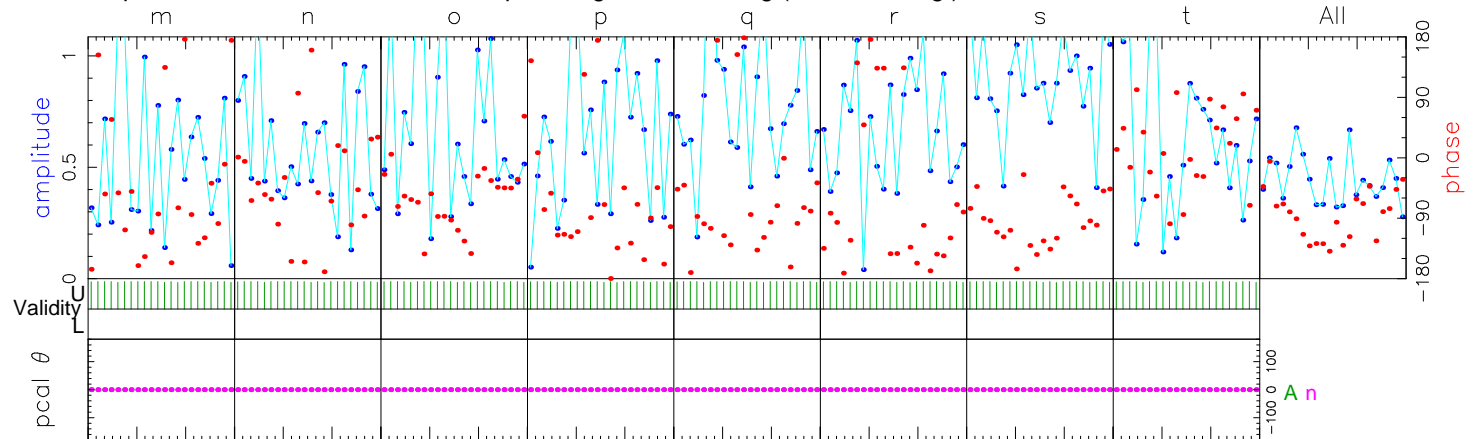


Fringe quality 9

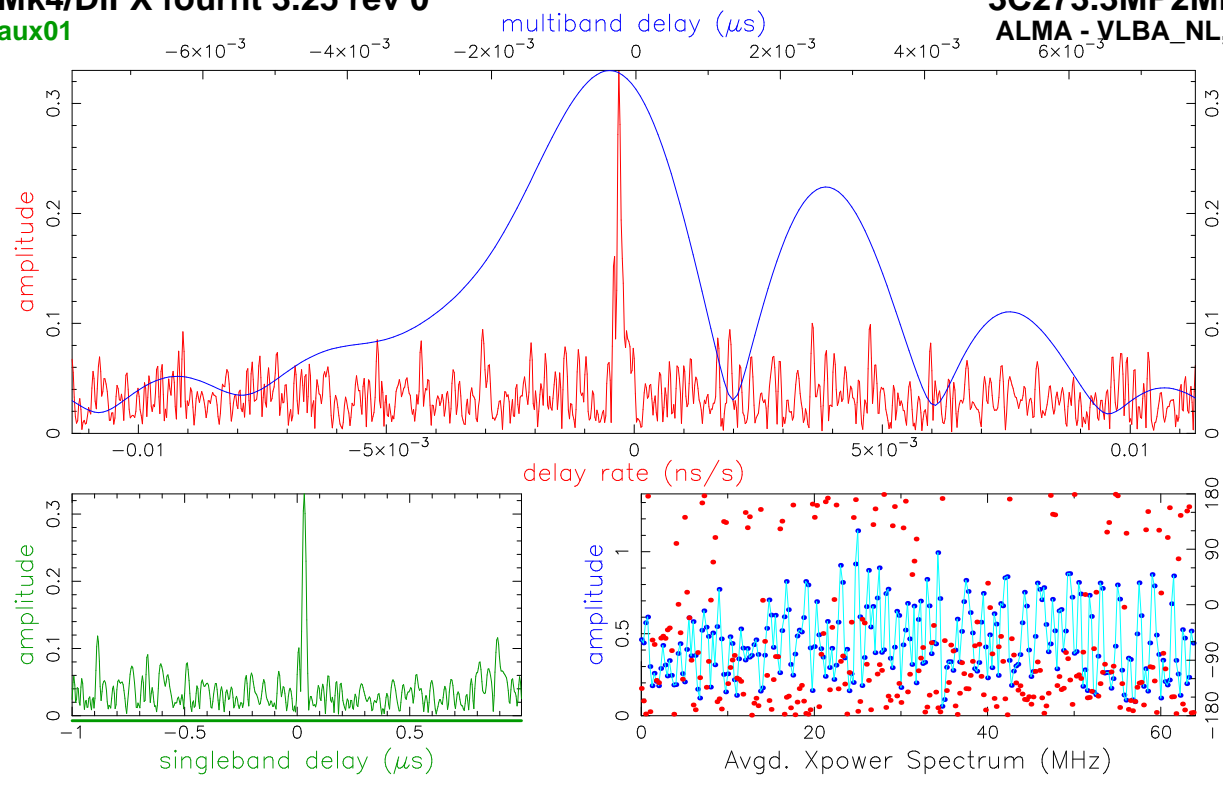
SNR 13.2  
Int time 178.863  
Amp 0.362  
Phase -86.3  
PFD 1.7e-31  
Delays (us)  
SBD 0.034994  
MBD 0.002626  
Fringe rate (Hz)  
-0.026499  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.00  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:175911  
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

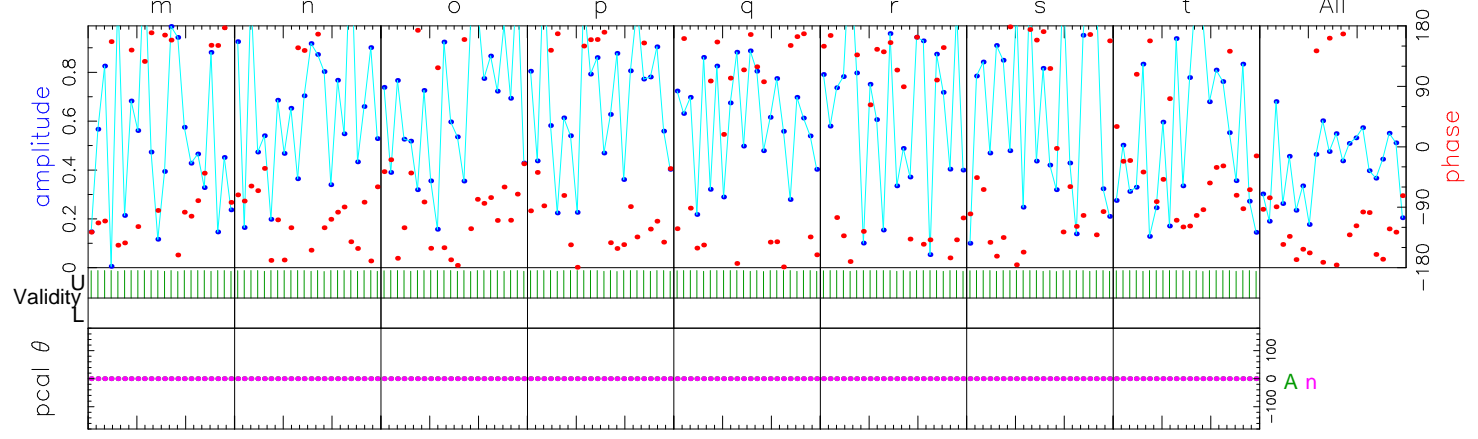


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-98.4	-47.4	-58.1	-96.6	-109.5	-148.5	-90.5	5.8	Phase	-86.3	
	0.3	0.3	0.5	0.5	0.5	0.5	0.7	0.4	Ampl.	0.5	
	267.8	265.5	265.3	265.9	265.7	266.5	266.4	268.1	Sbd box	266.0	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
A	0	0	0	0	0	0	0	0	PC freqs		
n	0	0	0	0	0	0	0	0	PC freqs		
A:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
A:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000			
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	5.37455362622E+02		Apriori delay (usec)		5.37421486567E+02		Resid mbdelay (usec)		2.62605E-03	+/- 8.2E-05	
Sband delay (usec)	5.37456480567E+02		Apriori clock (usec)		-2.1071260E+03		Resid sbdelay (usec)		3.49940E-02	+/- 6.5E-04	
Phase delay (usec)	5.37421483783E+02		Apriori clockrate (us/s)		-3.0809188E-07		Resid phdelay (usec)		-2.78367E-06	+/- 2.8E-07	
Delay rate (us/s)	-5.42177893304E-01		Apriori rate (us/s)		-5.42177585675E-01		Resid rate (us/s)		-3.07629E-07	+/- 2.7E-09	
Total phase (deg)			Apriori accel (us/s/s)		-1.80420917445E-05		Resid phase (deg)		-86.3	+/- 8.7	
	RMS	Theor.	Amplitude	0.362 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	36.9	20.3	Search (1024X32)	0.354		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	37.7	35.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	50.8	12.3	Inc. seg. avg.	0.420		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	44.9	21.4	Inc. frq. avg.	0.459		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		n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) 3095.186 -9389.244				simultaneous interpolator			
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//An..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//An.W.38.3MP2MB							



Fringe quality 9  
SNR 12.1  
Int time 178.863  
Amp 0.330  
Phase -140.4  
PFD 3.9e-25  
Delays (us)  
SBD 0.031061  
MBD -0.000370  
Fringe rate (Hz)  
-0.026040  
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  
2025:041:175914  
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
	-160.9	-119.9	-100.0	-142.4	176.7	171.6	-146.5	-71.3	Phase	-140.4
	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.3	Ampl.	0.4
	267.4	264.4	264.9	264.6	264.9	265.0	265.6	266.3	Sbd box	265.0
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	
n	0	0	0	0	0	0	0	0	PC freqs	
A:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	5.37452366497E+02		Apriori delay (usec)		5.37421486567E+02		Resid mbdelay (usec)		-3.70070E-04	+/- 9.0E-05
Sband delay (usec)	5.37452547317E+02		Apriori clock (usec)		-2.1071260E+03		Resid sbdelay (usec)		3.10607E-02	+/- 7.1E-04
Phase delay (usec)	5.37421482040E+02		Apriori clockrate (us/s)		-3.0809188E-07		Resid phdelay (usec)		-4.52681E-06	+/- 3.1E-07
Delay rate (us/s)	-5.42177887978E-01		Apriori rate (us/s)		-5.42177585675E-01		Resid rate (us/s)		-3.02303E-07	+/- 2.9E-09
Total phase (deg)	166.7		Apriori accel (us/s/s)		-1.80420917445E-05		Resid phase (deg)		-140.4	+/- 9.5
ph/seg (deg)	RMS 39.9	Theor. 22.3	Amplitude 0.330 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	50.7	38.9	Search (1024X32) 0.318	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000				
ph/frq (deg)	43.6	13.4	Interp. 0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us) -0.008 0.008		
amp/frq (%)	26.6	23.4	Inc. seg. avg. 0.391	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.011 0.011				
			Inc. frq. avg. 0.398	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	n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) 3095.186 -9389.244				simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//An..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//An.W.46.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

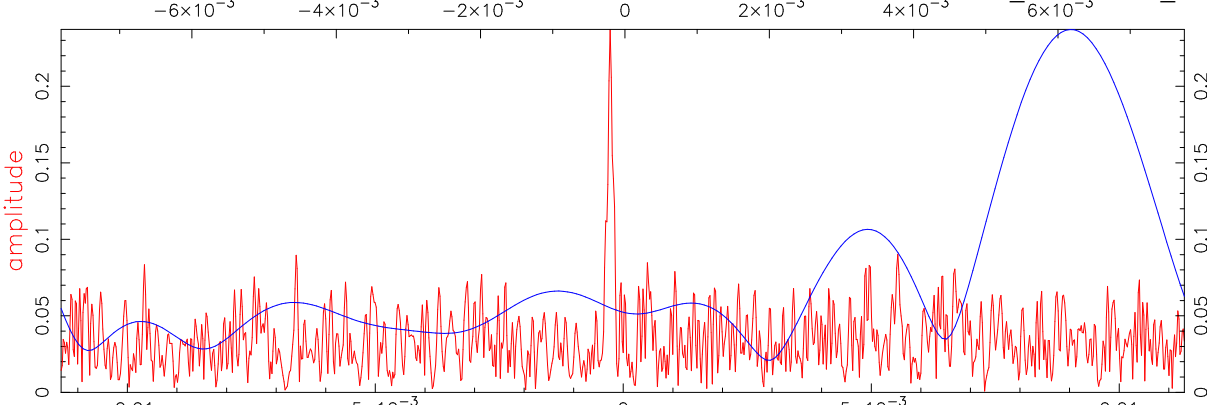
aux01

3C273.3MP2MB, No0707, bn

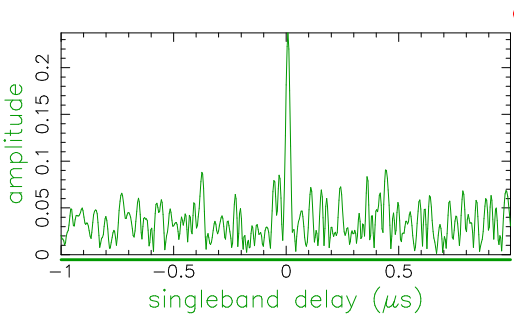
VLBA\_BR - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

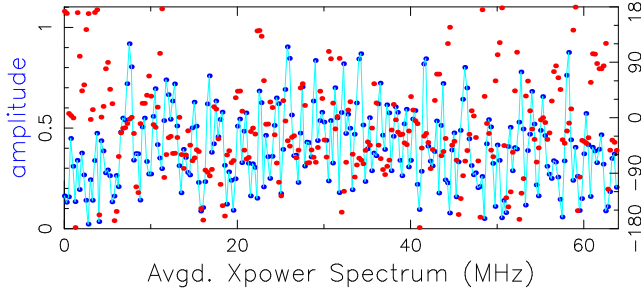
Fringe quality 9



SNR 8.7  
 Int time 178.845  
 Amp 0.237  
 Phase -14.1  
 PFD 7.7e-10  
 Delays (us)  
 SBD 0.007651  
 MBD 0.006180  
 Fringe rate (Hz) -0.023366  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

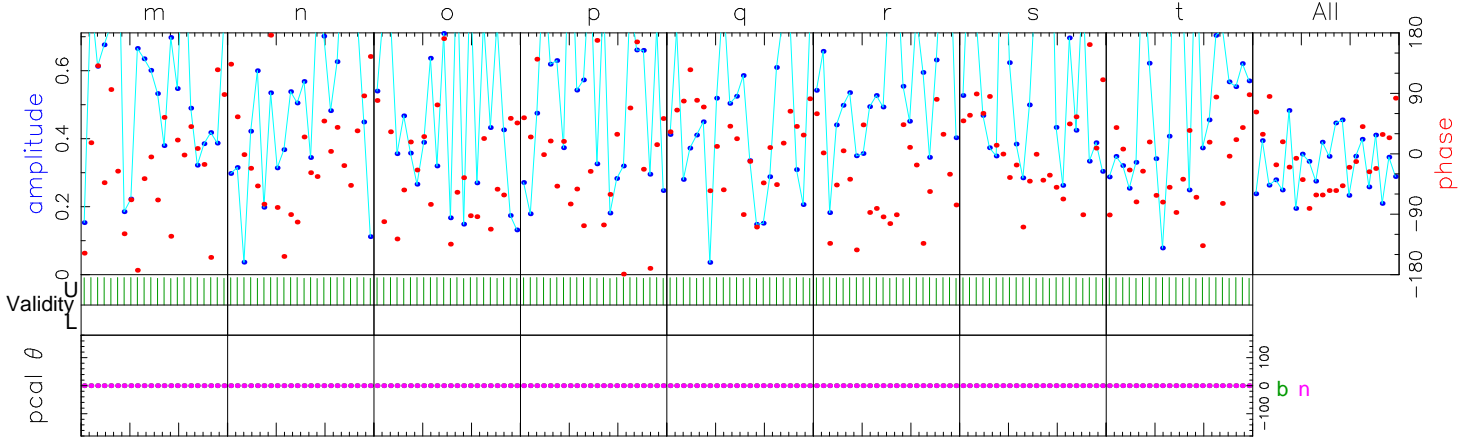


delay rate (ns/s)



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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-4.39839486993E+03	Apriori delay (usec)	-4.39840104949E+03	Resid mbdelay (usec)	6.17956E-03	+/-	1.3E-04
Sband delay (usec)	-4.39839339824E+03	Apriori clock (usec)	4.9100037E+00	Resid sbdelay (usec)	7.65125E-03	+/-	9.9E-04
Phase delay (usec)	-4.39840104994E+03	Apriori clockrate (us/s)	2.7918098E-07	Resid phdelay (usec)	-4.55773E-07	+/-	4.3E-07
Delay rate (us/s)	4.38479072843E-01	Apriori rate (us/s)	4.38479344100E-01	Resid rate (us/s)	-2.71257E-07	+/-	4.1E-09
Total phase (deg)	-159.2	Apriori accel (us/s/s)	2.37110983363E-05	Resid phase (deg)	-14.1	+/-	13.2

ph/seg (deg)	46.9	Theor.	31.0	Amplitude	0.237 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	51.3	Search (1024X32)	0.232	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	26.8	Inc. seg. avg.	0.286	Inc. frq. avg.	0.245	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	24.9	Inc. frq. avg.	0.245	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011

b: az 132.0 el 33.1 pa -29.7 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2500.280 759.698 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bn.W.60.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

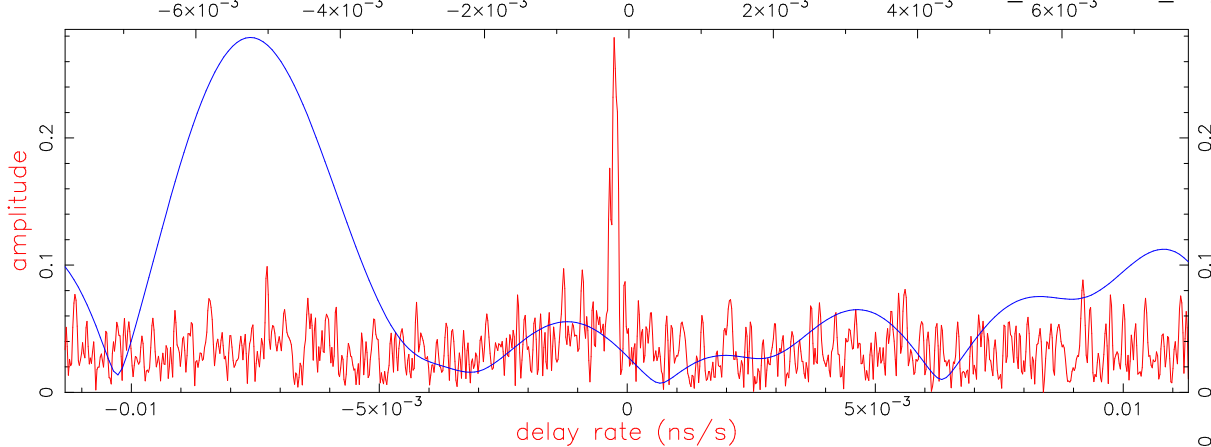
aux01

3C273.3MP2MB, No0707, bn

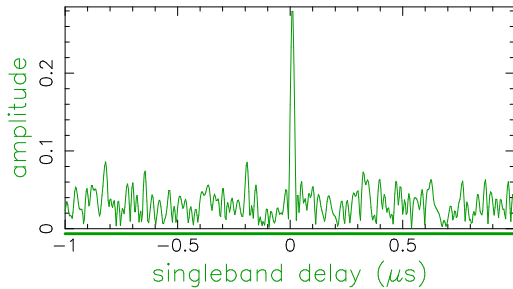
VLBA\_BR - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

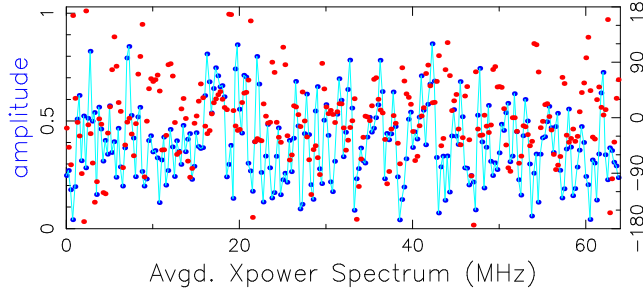
Fringe quality 9



SNR 10.4  
 Int time 178.845  
 Amp 0.285  
 Phase 171.3  
 PFD 3.9e-17  
 Delays (us)  
 SBD 0.009834  
 MBD -0.005204  
 Fringe rate (Hz)  
 -0.023047  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

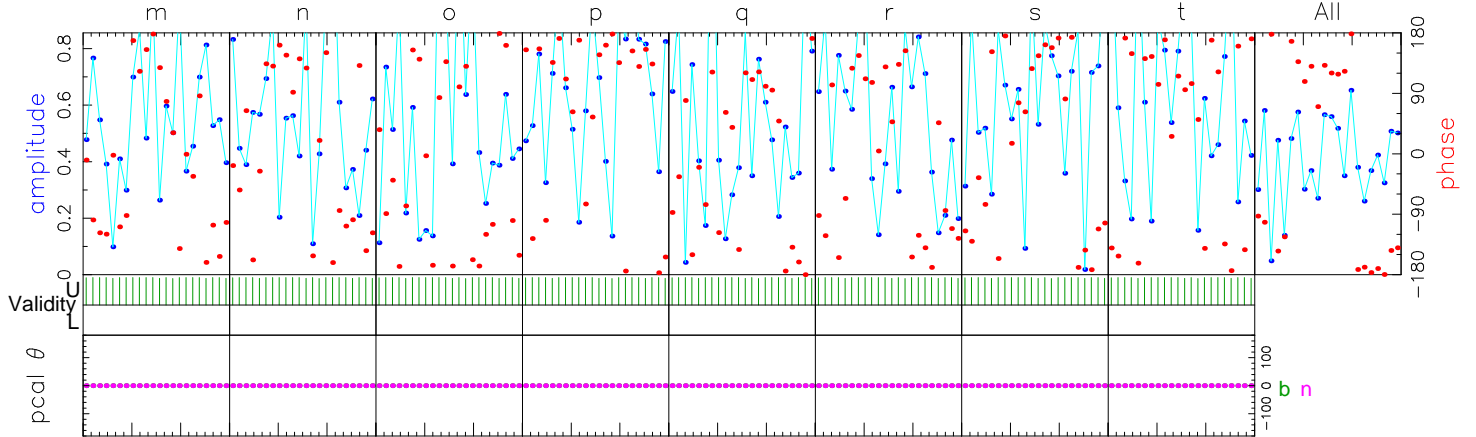


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175920  
 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
	-155.0	170.6	169.6	153.7	156.7	-174.2	-172.9	164.0	Phase	171.3
	0.2	0.2	0.3	0.5	0.2	0.3	0.3	0.4	Ampl.	0.3
	256.7	206.8	258.7	259.7	260.4	260.2	260.5	259.0	Sbd box	259.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -4.39839062846E+03 Apriori delay (usec) -4.39840104949E+03 Resid mbdelay (usec) -5.20397E-03 +/- 1.0E-04  
 Sband delay (usec) -4.39839121574E+03 Apriori clock (usec) 4.9100037E+00 Resid sbdelay (usec) 9.83375E-03 +/- 8.3E-04  
 Phase delay (usec) -4.39840104396E+03 Apriori clockrate (us/s) 2.7918098E-07 Resid phdelay (usec) 5.52490E-06 +/- 3.5E-07  
 Delay rate (us/s) 4.38479076547E-01 Apriori rate (us/s) 4.38479344100E-01 Resid rate (us/s) -2.67553E-07 +/- 3.4E-09  
 Total phase (deg) 26.3 Apriori accel (us/s/s) 2.37110983363E-05 Resid phase (deg) 171.3 +/- 11.0

RMS Theor. Amplitude 0.285 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 50.0 25.8 Search (1024X32) 0.275 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 67.4 45.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 19.0 15.5 Inc. seg. avg. 0.370 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 32.8 27.1 Inc. frq. avg. 0.279 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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2500.280 759.698 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bn.W.67.3MP2MB

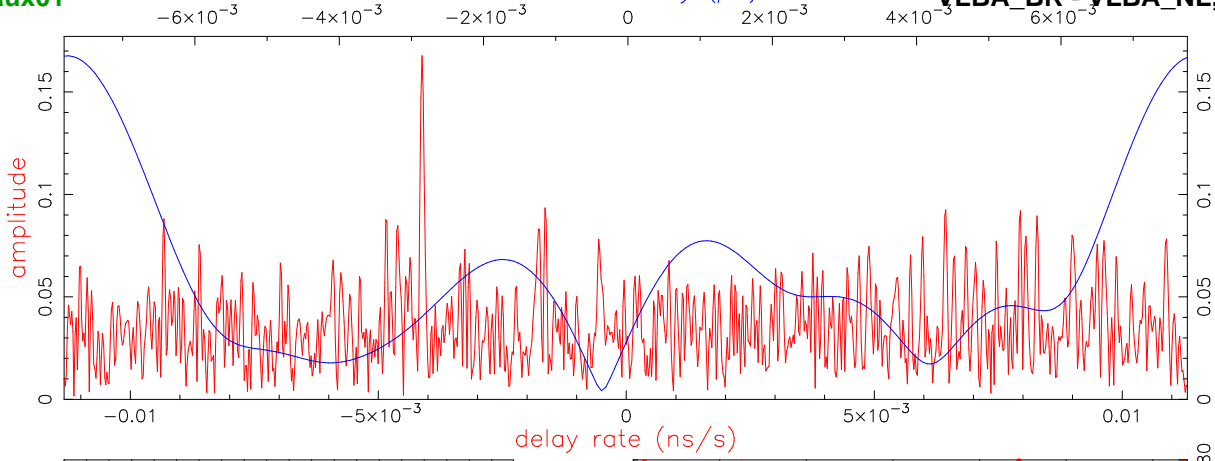
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bn

VLBA\_BR - VLBA\_NL, fgroup W, pol LR

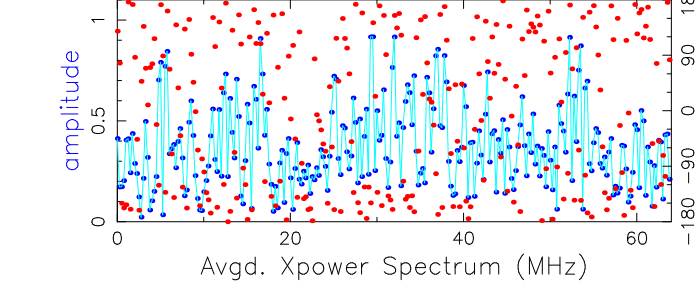
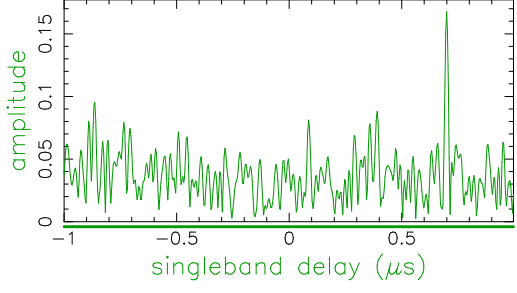
multiband delay ( $\mu$ s)



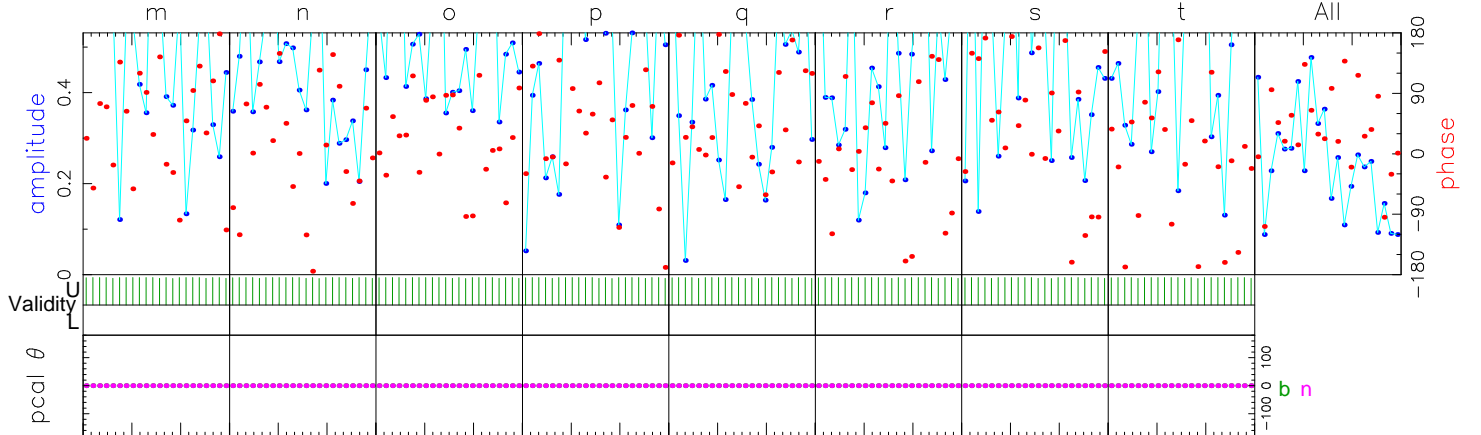
Fringe quality 0

SNR 6.1  
 Int time 178.845  
 Amp 0.177  
 Phase 38.5  
 PFD 1.1e-01  
 Delays (us)  
 SBD 0.699343  
 MBD -0.007760  
 Fringe rate (Hz)  
 -0.355274  
 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  
 2025:041:175923  
 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



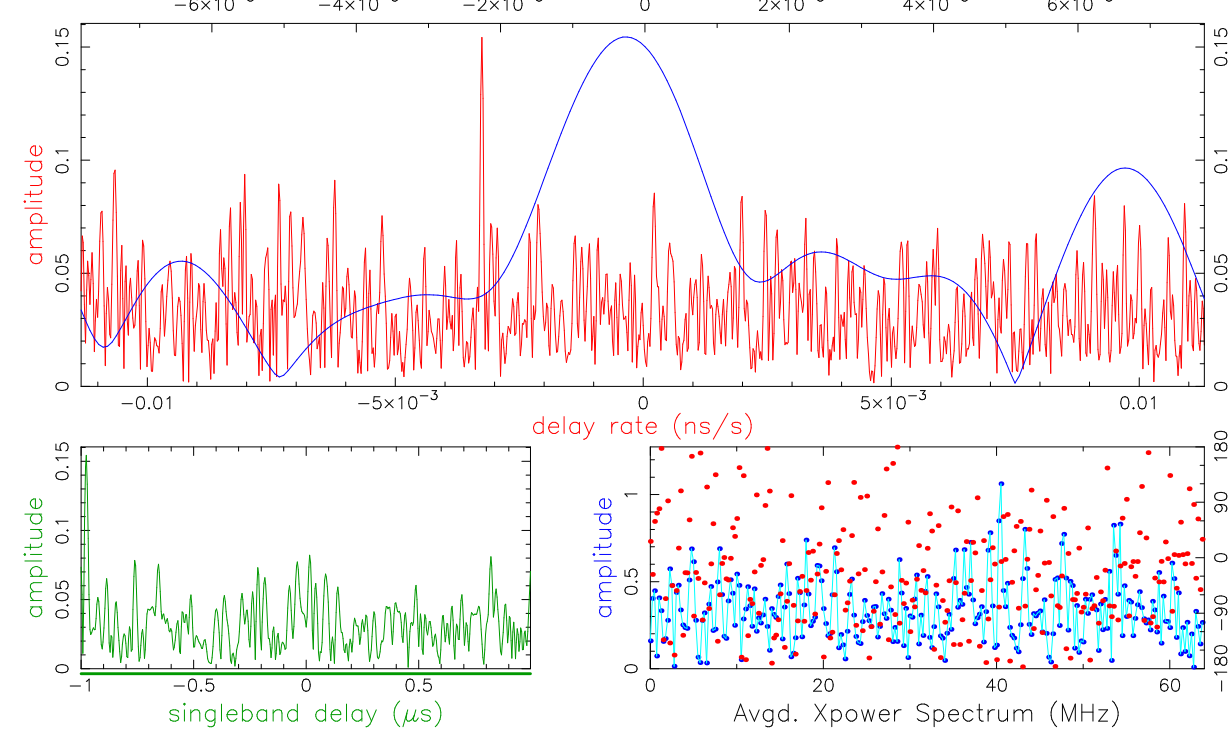
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-4.39770568450E+03									
Sband delay (usec)	-4.39770170649E+03									
Phase delay (usec)	-4.39840104825E+03									
Delay rate (us/s)	4.38475219719E-01									
Total phase (deg)			-106.6							
Apriori delay (usec)					-4.39840104949E+03					
Apriori clock (usec)					4.9100037E+00					
Apriori clockrate (us/s)					2.7918098E-07					
Apriori rate (us/s)					4.38479344100E-01					
Apriori accel (us/s/s)					2.37110983363E-05					
Resid mbdelay (usec)									-7.76002E-03	+/- 1.8E-04
Resid sbdelay (usec)									6.99343E-01	+/- 1.4E-03
Resid phdelay (usec)									1.24091E-06	+/- 6.0E-07
Resid rate (us/s)									-4.12438E-06	+/- 5.8E-09
Resid phase (deg)									38.5	+/- 18.7
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							
b: az 132.0 el 33.1 pa -29.7	n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) -2500.280 759.698						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//bn..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//bn.W.79.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

aux01

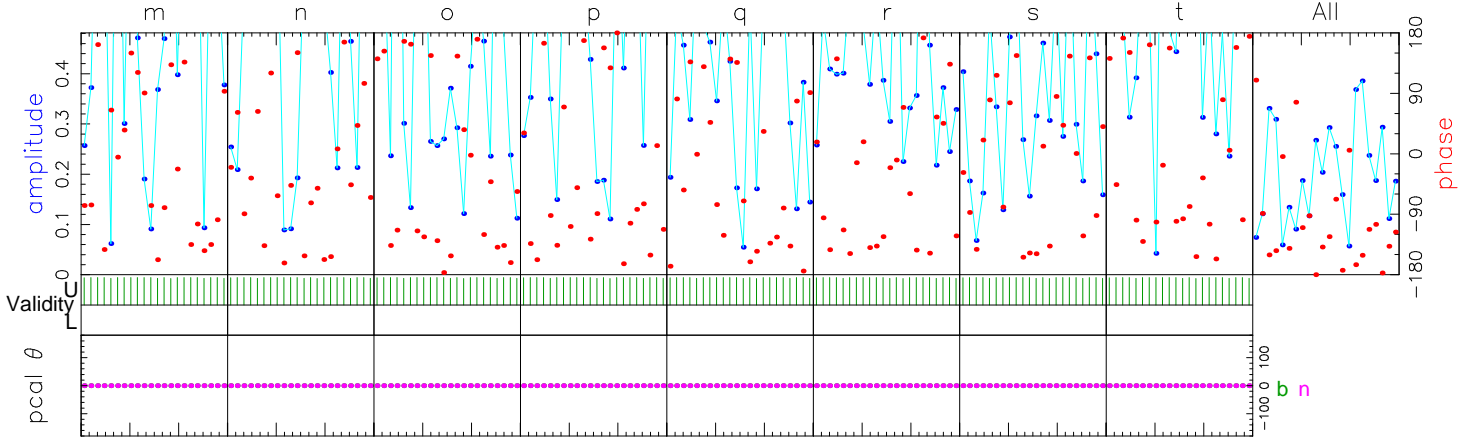
3C273.3MP2MB, No0707, bn

VLBA\_BR - VLBA\_NL, fgroup W, pol RL



Fringe quality 0  
 SNR 5.7  
 Int time 178.845  
 Amp 0.160  
 Phase -138.3  
 PFD 8.2e-01  
 Delays (us)  
 SBD -0.977466  
 MBD -0.000326  
 Fringe rate (Hz)  
 -0.280302  
 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  
 2025:041:175924  
 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
	-160.2	-100.1	-148.7	-126.0	-148.5	-120.9	118.8	-123.1	Phase	-138.3
	0.2	0.1	0.3	0.3	0.1	0.1	0.1	0.2	Ampl.	0.2
	475.7	130.7	7.0	6.6	386.8	64.3	498.7	6.1	Sbd box	6.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-4.39938575038E+03								Resid mbdelay (usec)	-3.25892E-04 +/- 1.9E-04
Sband delay (usec)	-4.39937851549E+03								Resid sbdelay (usec)	-9.77466E-01 +/- 1.5E-03
Phase delay (usec)	-4.39840105395E+03								Resid phdelay (usec)	-4.45957E-06 +/- 6.5E-07
Delay rate (us/s)	4.38476090066E-01								Resid rate (us/s)	-3.25403E-06 +/- 6.3E-09
Total phase (deg)			-283.4						Resid phase (deg)	-138.3 +/- 20.2
	RMS	Theor.	Amplitude	0.160 +/- 0.028					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	64.2	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 (%)	70.3	82.7	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	47.3	28.6	Inc. seg. avg.	0.155					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	56.5	49.9	Inc. frq. avg.	0.162					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			n: az 164.0 el 49.1 pa -11.6						u,v (fr/asec) -2500.280 759.698	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//bn..3MP2MB						Output file: /Exps/c241b/v2/3mm/1234/No0707//bn.W.89.3MP2MB	



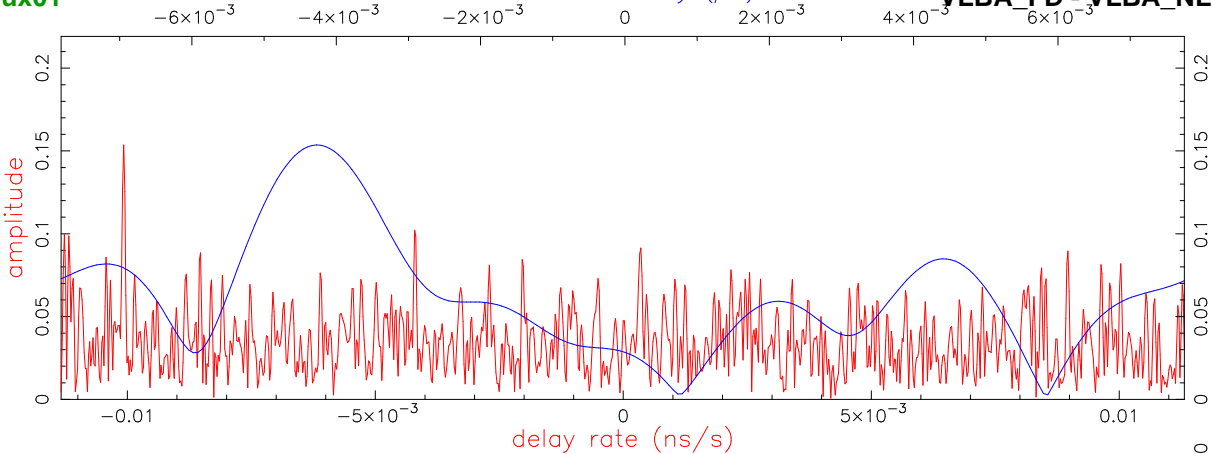
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fn

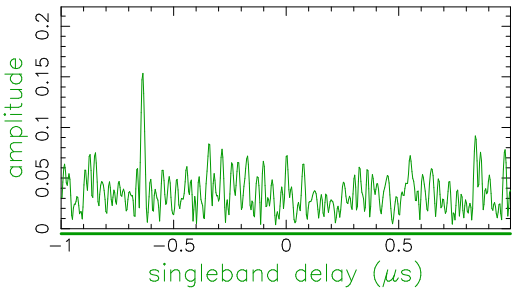
VLBA\_FD - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

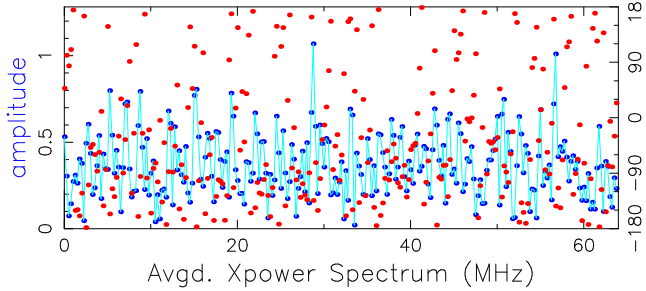


Fringe quality 0

SNR 5.7  
 Int time 178.863  
 Amp 0.219  
 Phase 152.5  
 PFD 8.6e-01  
 Delays (us)  
 SBD -0.637752  
 MBD -0.004307  
 Fringe rate (Hz)  
 -0.868758  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

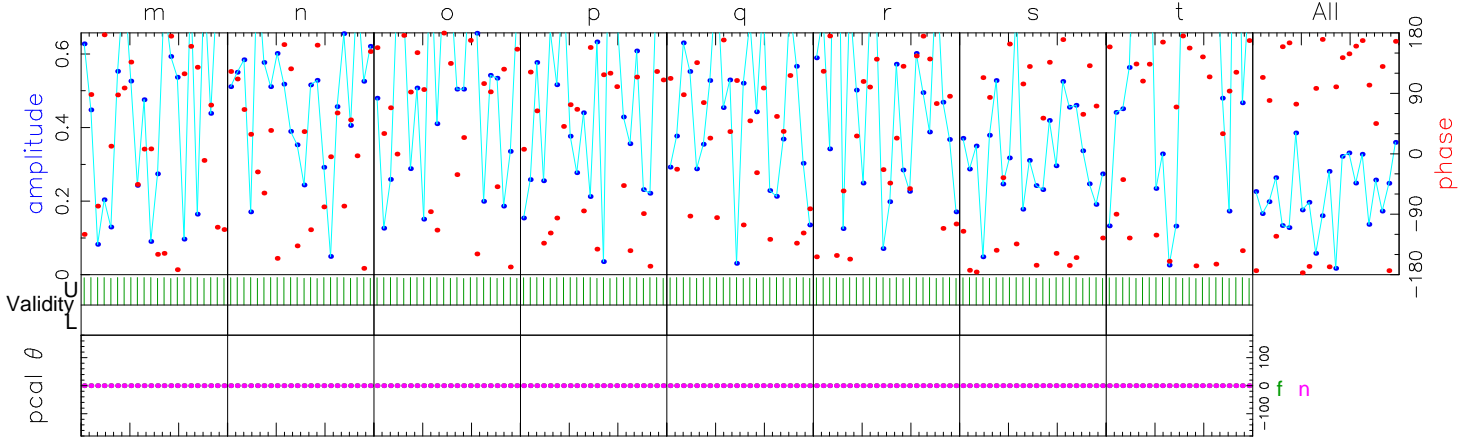


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175928  
 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		
f	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	1.18121707250E+03	Apriori delay (usec)	1.18186200434E+03	Resid mbdelay (usec)	-4.30684E-03	+/-	1.9E-04
Sband delay (usec)	1.18122425209E+03	Apriori clock (usec)	3.4442902E-01	Resid sbdelay (usec)	-6.37752E-01	+/-	1.5E-03
Phase delay (usec)	1.18186200926E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	4.91763E-06	+/-	6.5E-07
Delay rate (us/s)	3.07301745779E-01	Apriori rate (us/s)	3.07311831203E-01	Resid rate (us/s)	-1.00854E-05	+/-	6.3E-09
Total phase (deg)	171.9	Apriori accel (us/s/s)	-6.87280970472E-06	Resid phase (deg)	152.5	+/-	20.3

ph/seg (deg)	46.8	Theor.	47.6	Amplitude	0.219 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.9	Search (1024X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.1	Inc. seg. avg.	0.230	Inc. frq. avg.	0.213	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	70.3	Inc. frq. avg.	0.213			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	

f: az 138.7 el 54.1 pa -34.5      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -1764.867 -1402.430      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/fn..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/fn.W.100.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

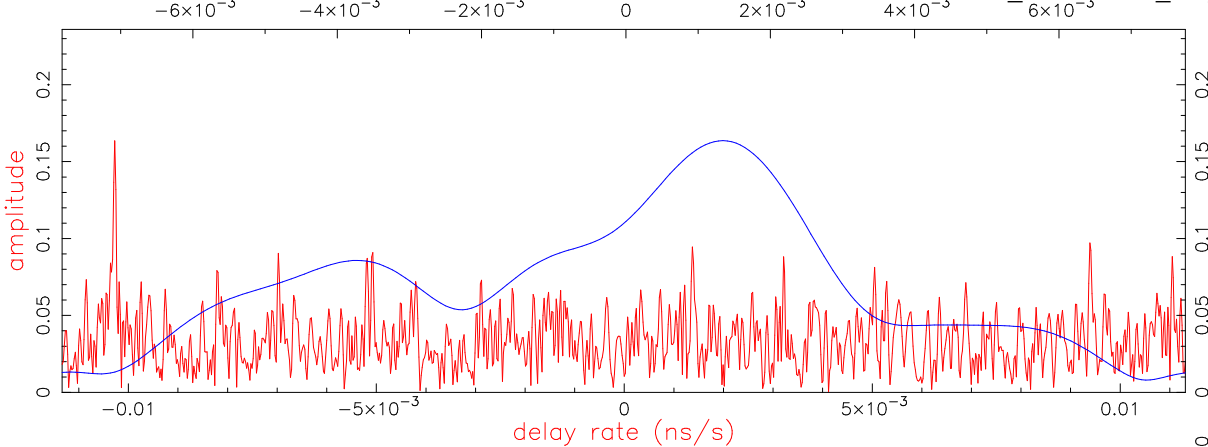
aux01

3C273.3MP2MB, No0707, fn

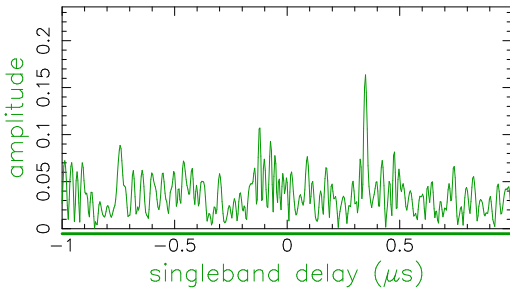
VLBA\_FD - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

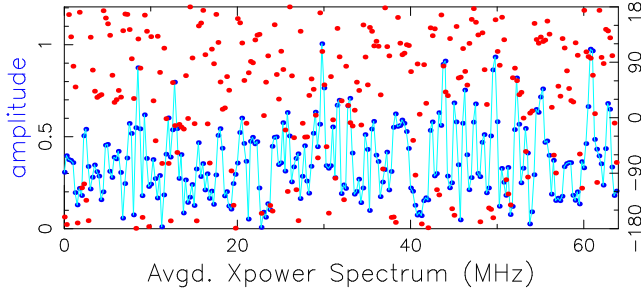
Fringe quality 0



SNR 6.0  
 Int time 178.863  
 Amp 0.236  
 Phase 137.1  
 PFD 2.4e-01  
 Delays (us)  
 SBD 0.347213  
 MBD 0.001315  
 Fringe rate (Hz)  
 -0.886061  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

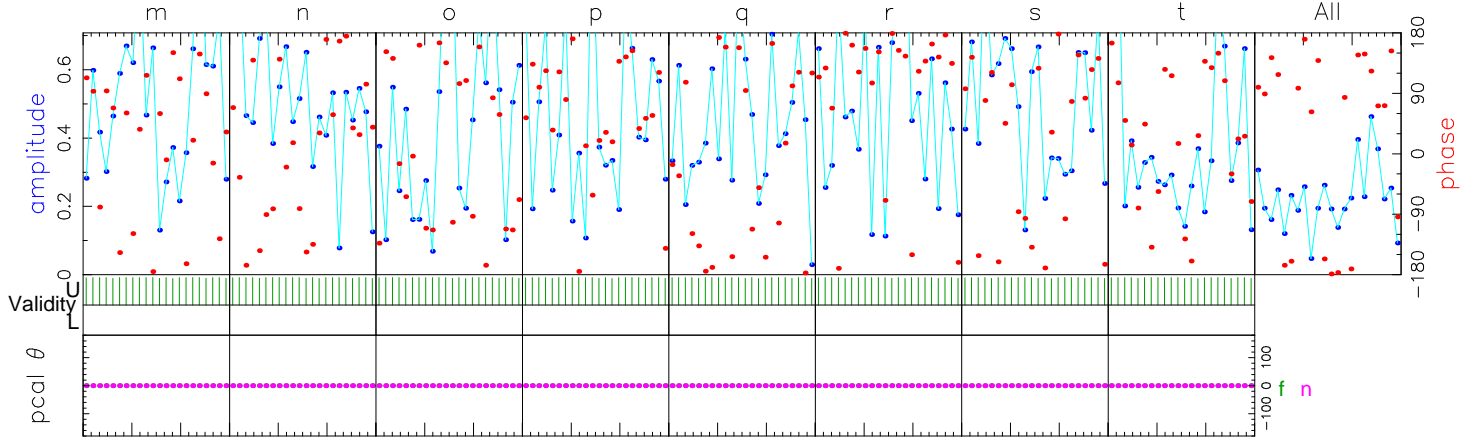


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175930  
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	1.18220706885E+03					1.18186200434E+03			1.31451E-03	+/- 1.8E-04
Sband delay (usec)	1.18220921734E+03					3.4442902E-01			3.47213E-01	+/- 1.4E-03
Phase delay (usec)	1.18186200876E+03					-2.4704002E-07			4.42091E-06	+/- 6.2E-07
Delay rate (us/s)	3.07301544912E-01					3.07311831203E-01			-1.02863E-05	+/- 5.9E-09
Total phase (deg)			156.5			-6.87280970472E-06			137.1	+/- 19.1
ph/seg (deg)	51.9	44.9								
amp/seg (%)	68.9	78.3								
ph/frq (deg)	77.1	27.0								
amp/frq (%)	71.8	47.2								
f: az 138.7 el 54.1 pa -34.5										
n: az 164.0 el 49.1 pa -11.6										
u,v (fr/asec) -1764.867 -1402.430										

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/fn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/fn.W.112.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

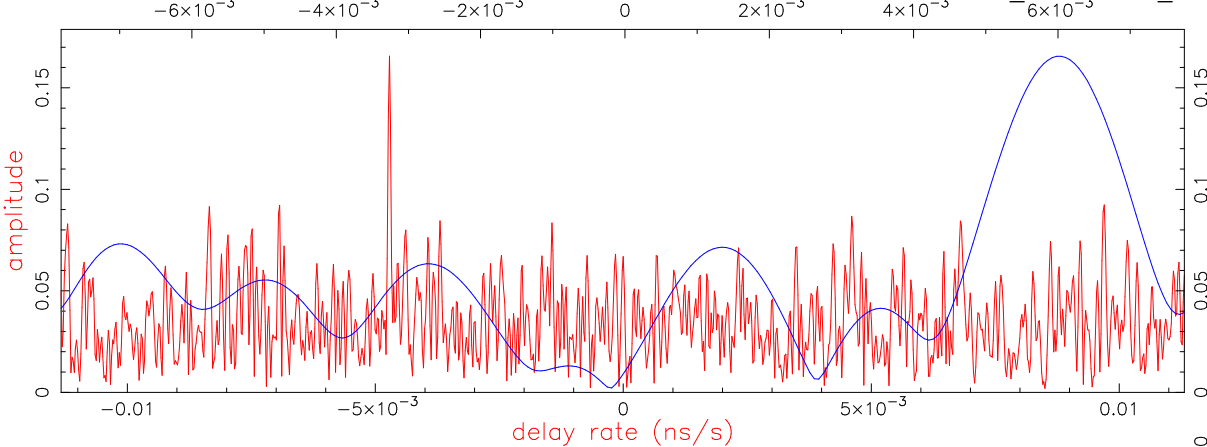
aux01

3C273.3MP2MB, No0707, fn

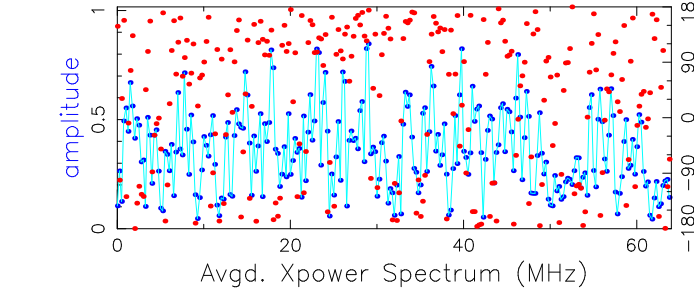
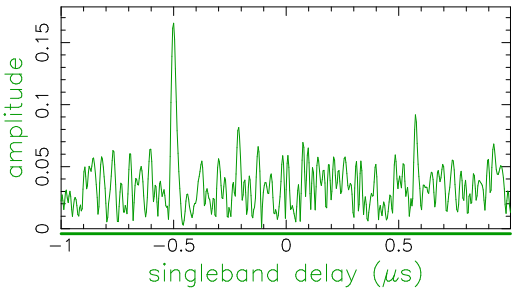
VLBA\_FD - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

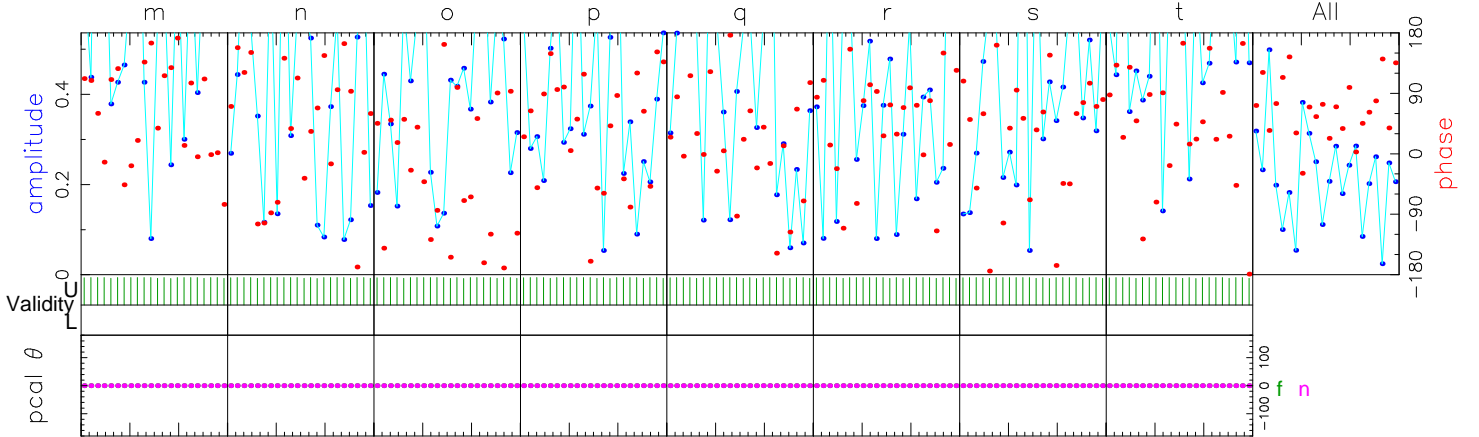


SNR 6.1  
 Int time 178.863  
 Amp 0.179  
 Phase 59.7  
 PFD 1.4e-01  
 Delays (us)  
 SBD -0.501131  
 MBD 0.006024  
 Fringe rate (Hz)  
 -0.406015  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175932  
 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		
f	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.18136802836E+03	Apriori delay (usec)		1.18186200434E+03	Resid mbdelay (usec)		6.02402E-03	+/-	1.8E-04	
Sband delay (usec)	1.18136087334E+03	Apriori clock (usec)		3.4442902E-01	Resid sbdelay (usec)		-5.01131E-01	+/-	1.4E-03	
Phase delay (usec)	1.18186200626E+03	Apriori clockrate (us/s)		-2.4704002E-07	Resid phdelay (usec)		1.92518E-06	+/-	6.1E-07	
Delay rate (us/s)	3.07307117768E-01	Apriori rate (us/s)		3.07311831203E-01	Resid rate (us/s)		-4.71343E-06	+/-	5.8E-09	
Total phase (deg)	79.1		Apriori accel (us/s/s)		-6.87280970472E-06	Resid phase (deg)		59.7	+/-	18.8

ph/seg (deg)	44.7	Theor.	44.2	Amplitude	0.179 +/- 0.029	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	72.2	Search (1024X32)	0.163	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	37.7	Inc. seg. avg.	0.184	Inc. frq. avg.	0.170	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	45.9	Inc. frq. avg.	0.170			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      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -1764.867 -1402.430      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/fn..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/fn.W.123.3MP2MB

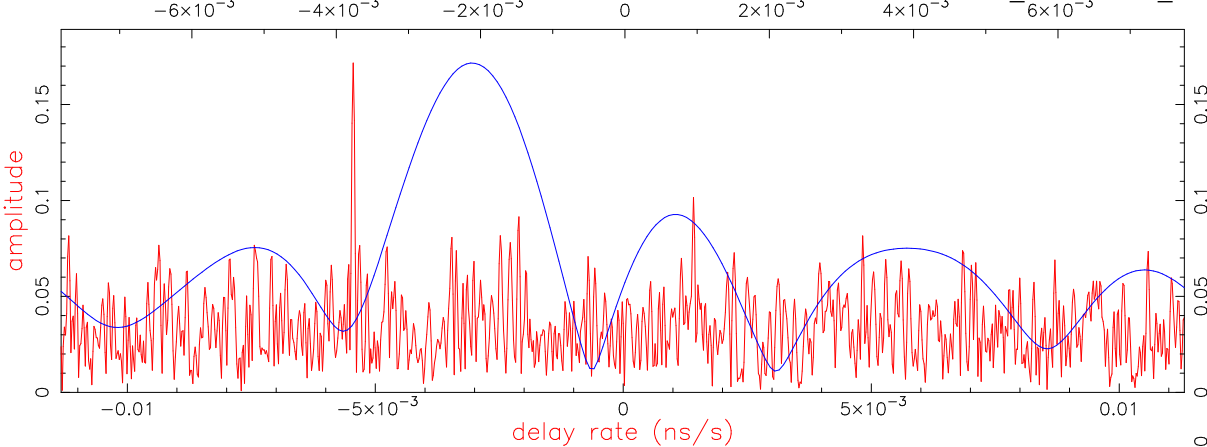
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fn

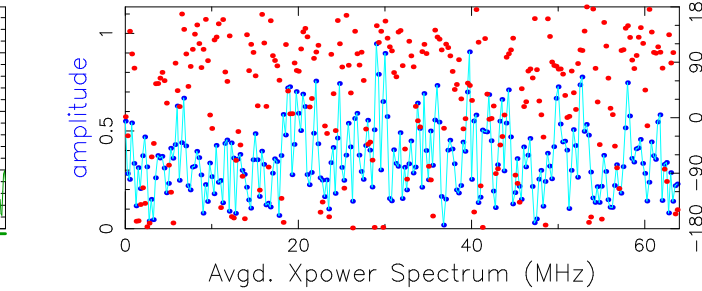
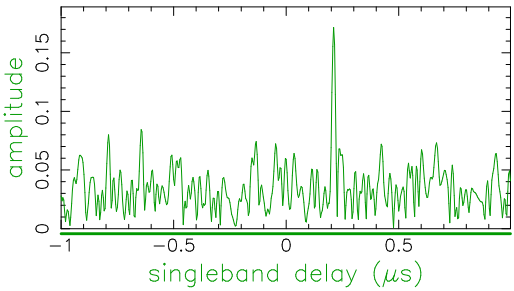
VLBA\_FD - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)



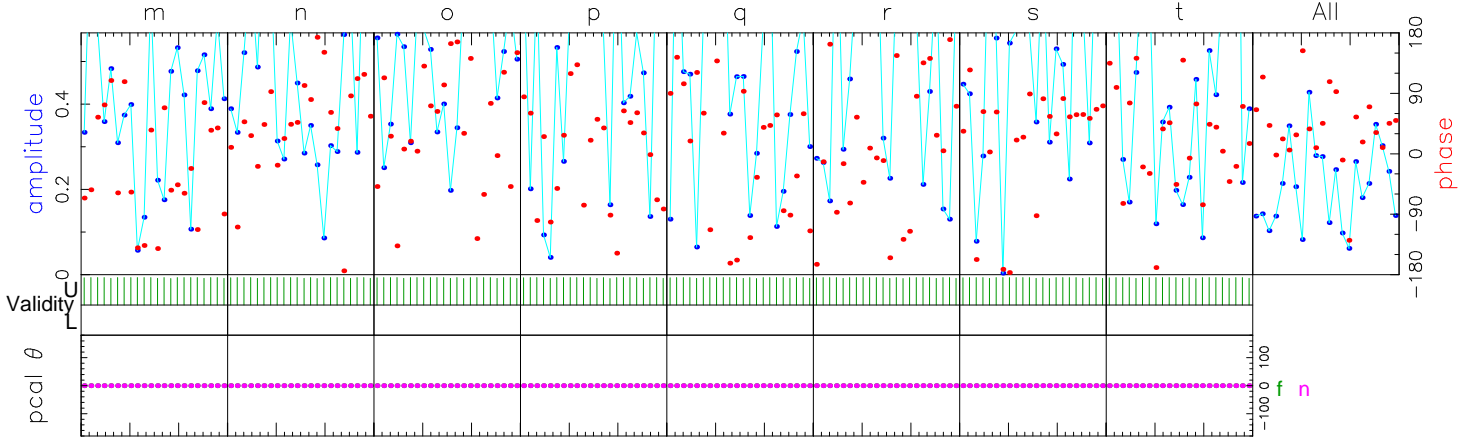
Fringe quality 0

SNR 6.3  
 Int time 178.863  
 Amp 0.189  
 Phase 38.5  
 PFD 4.5e-02  
 Delays (us)  
 SBD 0.211102  
 MBD -0.002118  
 Fringe rate (Hz)  
 -0.470028  
 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  
 2025:041:175934  
 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
	-10.8	62.0	56.6	17.6	67.5	-4.1	57.0	19.7	Phase	38.5
	0.2	0.3	0.1	0.1	0.1	0.1	0.4	0.3	Ampl.	0.2
	366.8	310.5	264.4	177.7	9.2	410.7	310.5	143.3	Sbd box	311.0
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	
n	0	0	0	0	0	0	0	0	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.18207863650E+03	Apriori delay (usec)	1.18186200434E+03	Resid mbdelay (usec)	-2.11784E-03	+/-	1.7E-04
Sband delay (usec)	1.18207310634E+03	Apriori clock (usec)	3.4442902E-01	Resid sbdelay (usec)	2.11102E-01	+/-	1.4E-03
Phase delay (usec)	1.18186200558E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	1.24277E-06	+/-	5.9E-07
Delay rate (us/s)	3.07306374649E-01	Apriori rate (us/s)	3.07311831203E-01	Resid rate (us/s)	-5.45655E-06	+/-	5.7E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.87280970472E-06	Resid phase (deg)	38.5	+/-	18.3

ph/seg (deg)	54.2	Theor.	42.8	Amplitude	0.189 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.8	Search (1024X32)	0.161	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.4	Inc. seg. avg.	0.180	Inc. frq. avg.	0.193	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	56.4	Inc. frq. avg.	0.193			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	

f: az 138.7 el 54.1 pa -34.5      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -1764.867 -1402.430      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/fn..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/fn.W.131.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

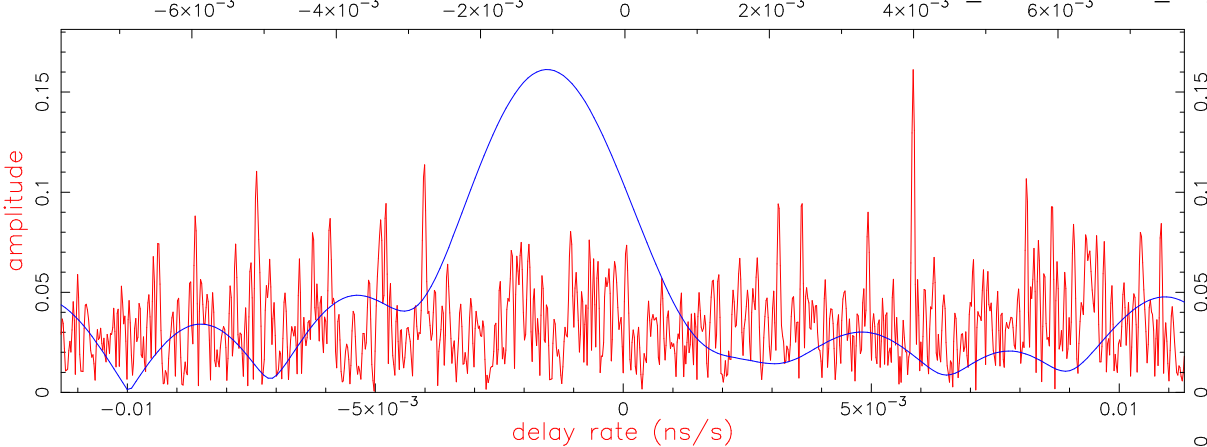
aux01

3C273.3MP2MB, No0707, Gn

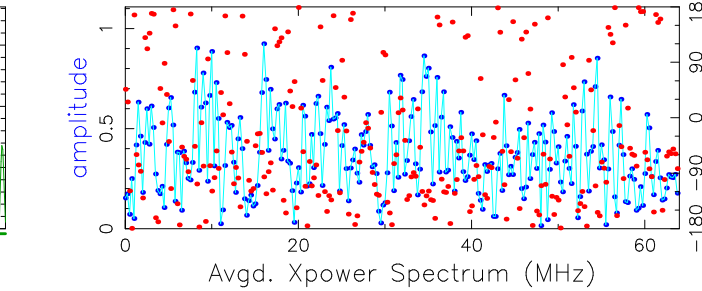
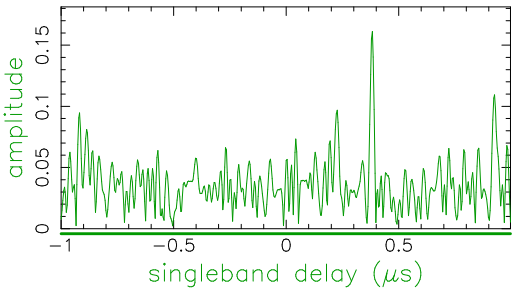
GBT\_COLD - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

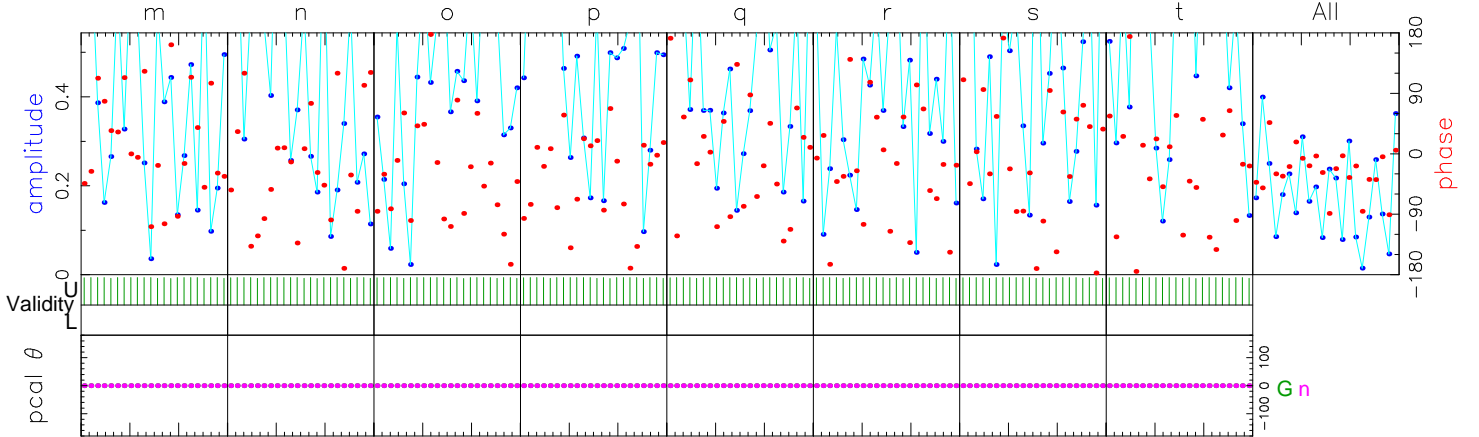


SNR 5.9  
 Int time 178.863  
 Amp 0.181  
 Phase -22.4  
 PFD 3.2e-01  
 Delays (us)  
 SBD 0.381770  
 MBD -0.001123  
 Fringe rate (Hz)  
 0.503368  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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
	-4.5	-36.0	-34.7	-32.8	-4.7	-26.2	14.0	-22.4	Phase	-22.4
	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	Ampl.	0.2
	306.9	198.3	353.8	354.7	412.4	83.1	21.1	290.0	Sbd box	354.7
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	
n	0	0	0	0	0	0	0	0	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.88671746801E+02	Apriori delay (usec)	9.88282244506E+02	Resid mbdelay (usec)	-1.12270E-03	+/-	1.8E-04
Sband delay (usec)	9.88664014756E+02	Apriori clock (usec)	-1.4337810E+01	Resid sbdelay (usec)	3.81770E-01	+/-	1.5E-03
Phase delay (usec)	9.88282243784E+02	Apriori clockrate (us/s)	-2.2687689E-07	Resid phdelay (usec)	-7.22565E-07	+/-	6.2E-07
Delay rate (us/s)	-2.37849235973E-01	Apriori rate (us/s)	-2.37855079574E-01	Resid rate (us/s)	5.84360E-06	+/-	6.0E-09
Total phase (deg)	172.6	Apriori accel (us/s/s)	-5.49947892841E-06	Resid phase (deg)	-22.4	+/-	19.3

ph/seg (deg)	RMS 32.7	Theor. 45.3	Amplitude Search (1024X32)	0.181 +/- 0.031	0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	63.2	79.1	Interp.	0.000	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	20.1	27.3	Inc. seg. avg.	0.158	0.158	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	32.7	47.7	Inc. frq. avg.	0.167	0.167	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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 1360.058 -409.310 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gn.W.143.3MP2MB

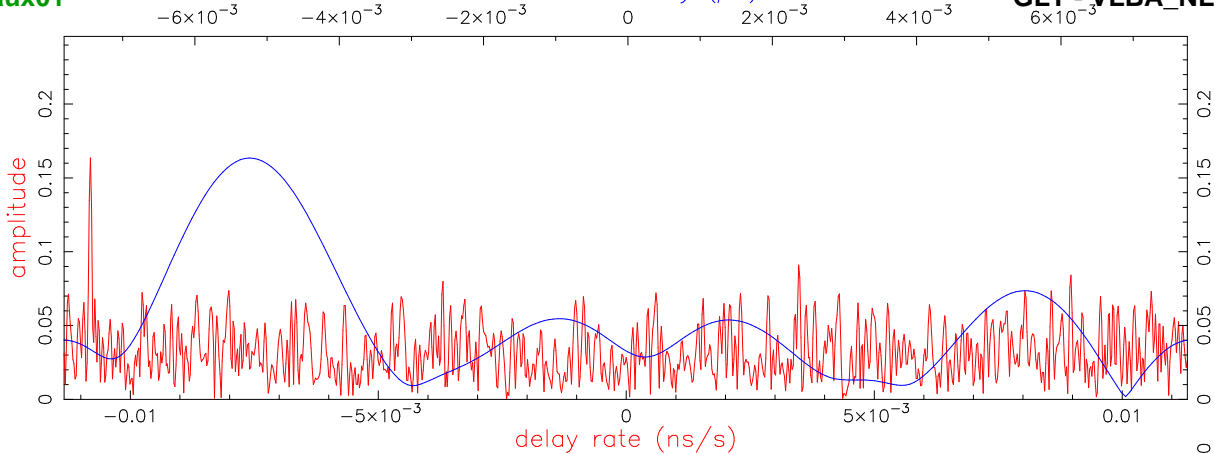
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gn

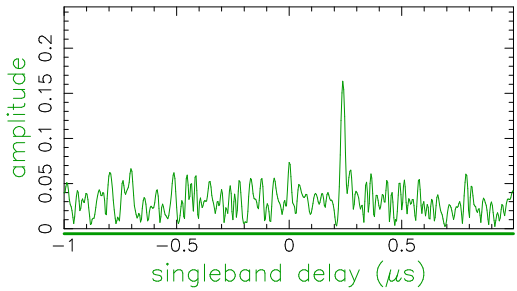
GLT - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

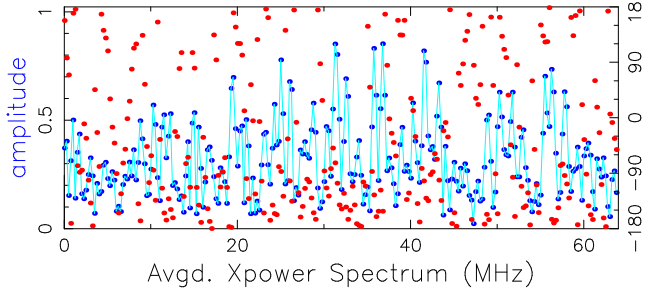


Fringe quality 0

SNR 6.0  
 Int time 178.862  
 Amp 0.246  
 Phase 147.7  
 PFD 2.5e-01  
 Delays (us)  
 SBD 0.238621  
 MBD -0.005237  
 Fringe rate (Hz)  
 -0.932235  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

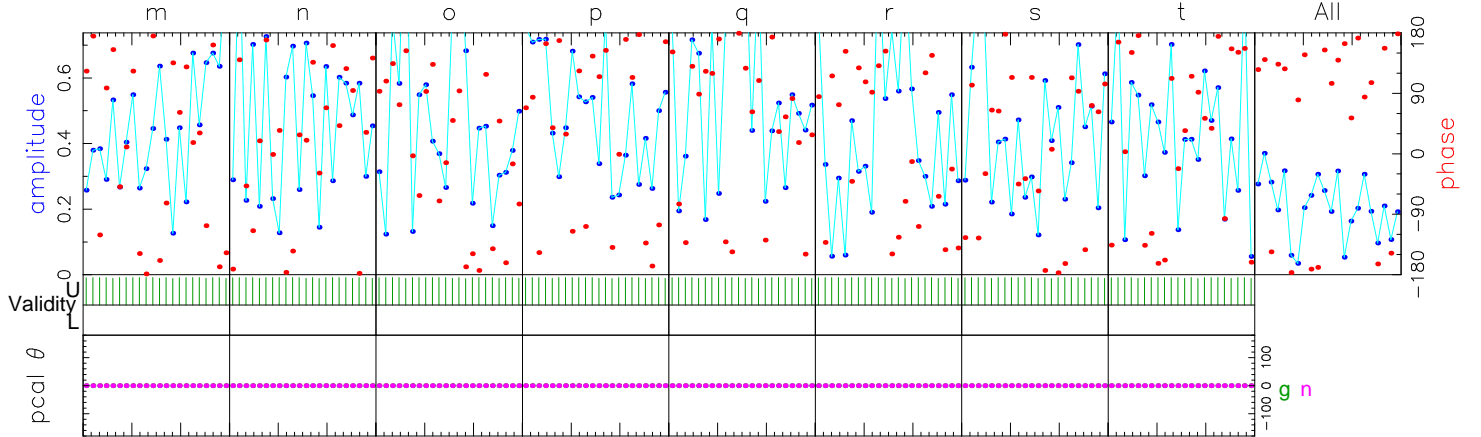


delay rate (ns/s)



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
	178.7	133.6	118.3	158.6	137.1	-165.6	127.6	155.7	Phase	147.7
	0.2	0.3	0.3	0.3	0.4	0.1	0.1	0.4	Ampl.	0.2
	125.2	101.8	183.4	368.2	318.8	52.7	269.2	316.1	Sbd box	318.1
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	
n	0	0	0	0	0	0	0	0	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -1.05769228629E+04 Apriori delay (usec) -1.05771676256E+04 Resid mbdelay (usec) -5.23731E-03 +/- 1.8E-04  
 Sband delay (usec) -1.05769290051E+04 Apriori clock (usec) 6.2492180E-01 Resid sbdelay (usec) 2.38621E-01 +/- 1.4E-03  
 Phase delay (usec) -1.05771676208E+04 Apriori clockrate (us/s) 4.8706200E-07 Resid phdelay (usec) 4.76325E-06 +/- 6.2E-07  
 Delay rate (us/s) -2.82652204156E-01 Apriori rate (us/s) -2.82641381830E-01 Resid rate (us/s) -1.08223E-05 +/- 5.9E-09  
 Total phase (deg) 52.1 Apriori accel (us/s/s) 5.74062845992E-05 Resid phase (deg) 147.7 +/- 19.2

RMS Theor. Amplitude 0.246 +/- 0.041 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 42.7 44.9 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 62.3 78.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 28.6 27.1 Inc. seg. avg. 0.240 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 40.1 47.3 Inc. frq. avg. 0.236 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

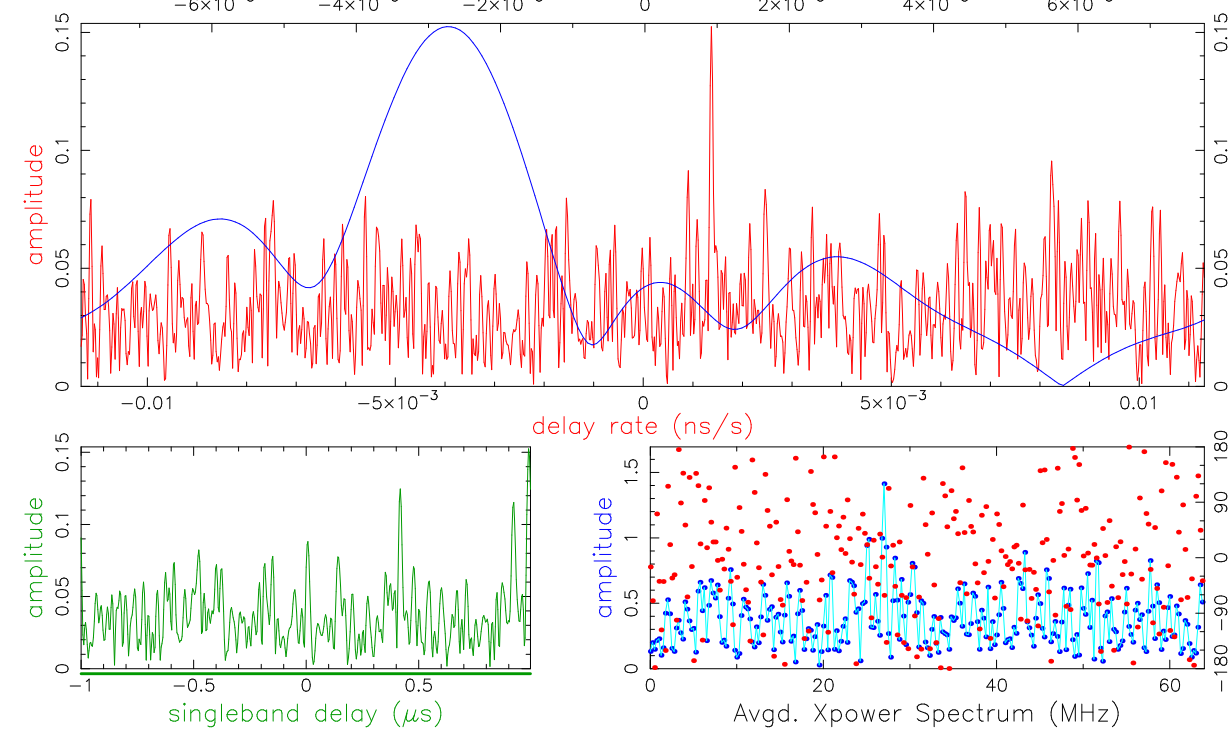
g: az 192.9 el 15.1 pa 3.0 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 1649.738 2871.047 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/gn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/gn.W.146.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

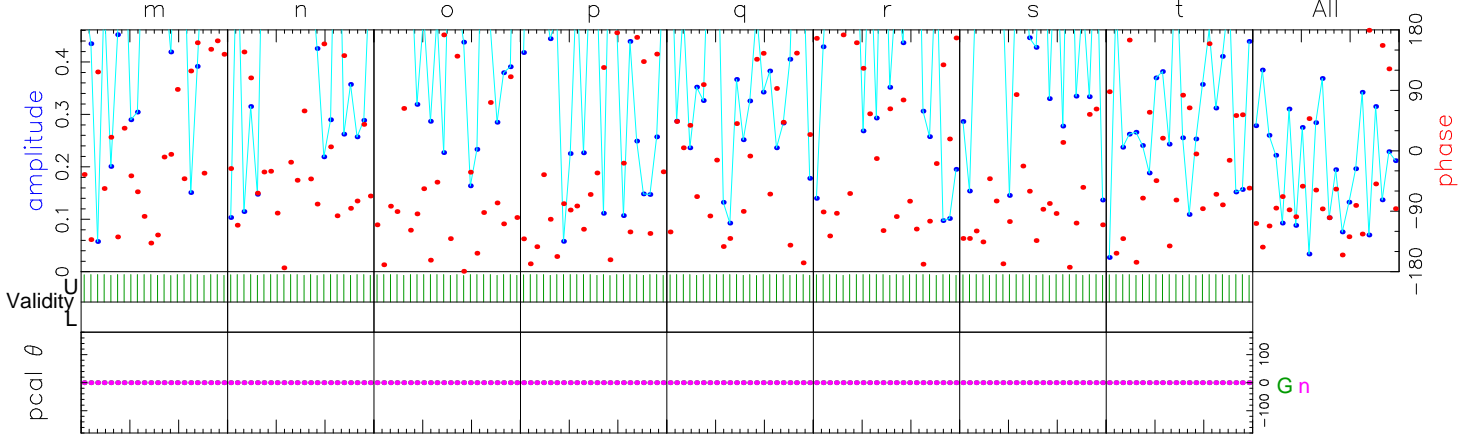
3C273.3MP2MB, No0707, Gn

GBT\_COLD - VLBA\_NL, fgroup W, pol LR



Fringe quality 0  
 SNR 5.6  
 Int time 178.863  
 Amp 0.154  
 Phase -96.9  
 PFD 9.4e-01  
 Delays (us)  
 SBD 0.989134  
 MBD -0.002696  
 Fringe rate (Hz)  
 0.117922  
 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  
 2025:041:175940  
 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
	-91.9	-59.6	-115.1	-120.8	-78.1	-112.4	-91.6	-71.1	Phase	-96.9
	0.1	0.2	0.2	0.2	0.0	0.2	0.2	0.1	Ampl.	0.1
	107.3	508.7	510.6	301.2	192.5	376.8	216.9	63.1	Sbd box	510.2
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	
n	0	0	0	0	0	0	0	0	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.89263923147E+02	Apriori delay (usec)	9.88282244506E+02	Resid mbdelay (usec)	-2.69636E-03	+/-	1.9E-04
Sband delay (usec)	9.89271379006E+02	Apriori clock (usec)	-1.4337810E+01	Resid sbdelay (usec)	9.89134E-01	+/-	1.5E-03
Phase delay (usec)	9.88282241380E+02	Apriori clockrate (us/s)	-2.2687689E-07	Resid phdelay (usec)	-3.12568E-06	+/-	6.6E-07
Delay rate (us/s)	-2.37853710615E-01	Apriori rate (us/s)	-2.37855079574E-01	Resid rate (us/s)	1.36896E-06	+/-	6.4E-09
Total phase (deg)	98.1	Apriori accel (us/s/s)	-5.49947892841E-06	Resid phase (deg)	-96.9	+/-	20.5

ph/seg (deg)	58.8	RMS	48.1	Theor.	48.1	Amplitude	0.154 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.8	Search (1024X32)	0.151	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
ph/frq (deg)	24.5	Inc. seg. avg.	0.156	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
amp/frq (%)	49.0	Inc. frq. avg.	0.147									

G: az 182.2 el 53.5 pa 2.1      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) 1360.058 -409.310      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//Gn..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//Gn.W.151.3MP2MB



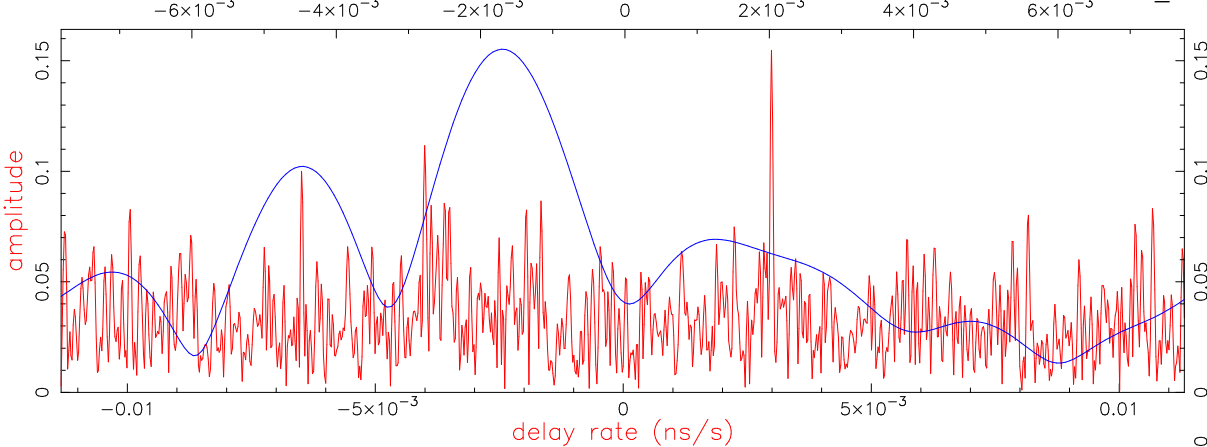
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gn

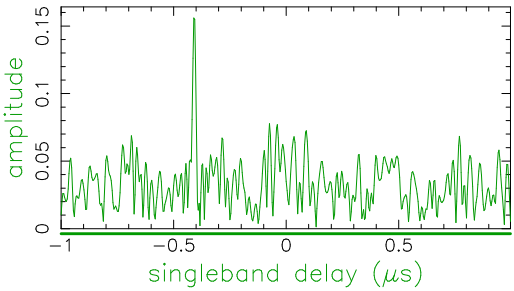
GLT - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

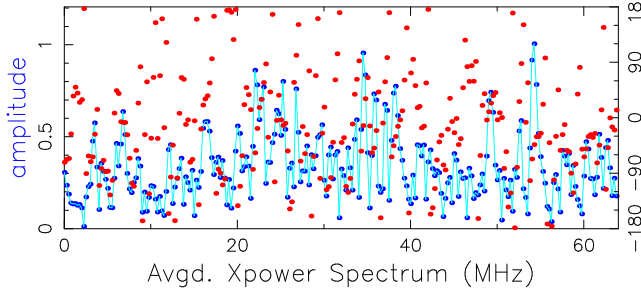


Fringe quality 0

SNR 5.8  
 Int time 178.864  
 Amp 0.164  
 Phase -24.8  
 PFD 4.9e-01  
 Delays (us)  
 SBD -0.408336  
 MBD -0.001782  
 Fringe rate (Hz)  
 0.258139  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

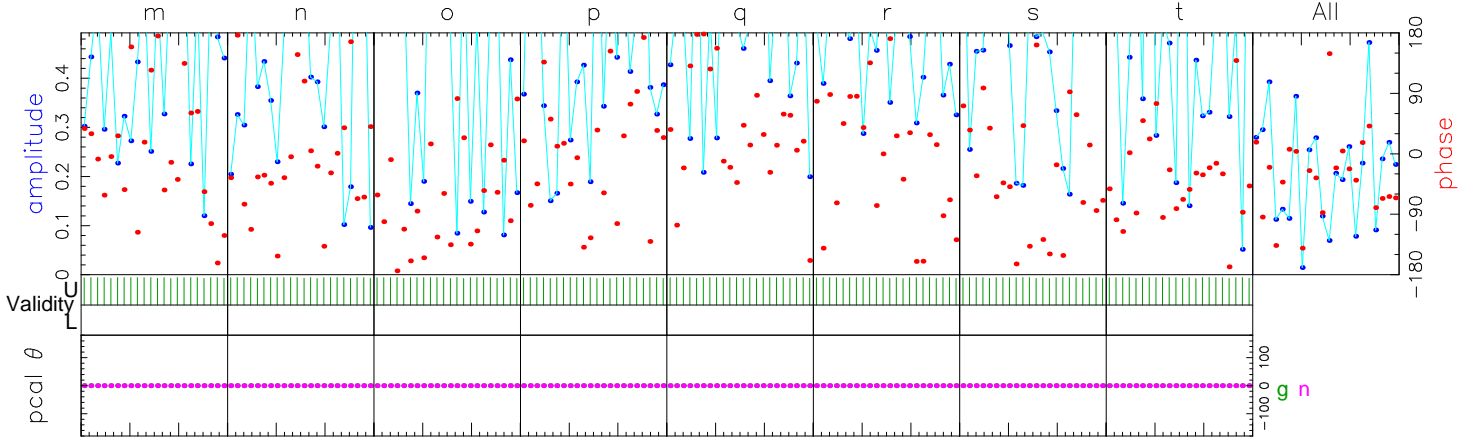


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175940  
 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
	-21.1	-47.0	-67.7	0.8	23.2	24.1	-33.0	-40.4	Phase	-24.8
	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.3	Ampl.	0.2
	169.0	44.4	154.4	273.6	502.8	263.8	197.6	153.2	Sbd box	152.5
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	
n	0	0	0	0	0	0	0	0	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.05775756574E+04	Apriori delay (usec)	-1.05771676256E+04	Resid mbdelay (usec)	-1.78186E-03	+/-	1.9E-04
Sband delay (usec)	-1.05775759613E+04	Apriori clock (usec)	6.2492180E-01	Resid sbdelay (usec)	-4.08336E-01	+/-	1.5E-03
Phase delay (usec)	-1.05771676264E+04	Apriori clockrate (us/s)	4.8706200E-07	Resid phdelay (usec)	-8.00034E-07	+/-	6.3E-07
Delay rate (us/s)	-2.82638385096E-01	Apriori rate (us/s)	-2.82641381830E-01	Resid rate (us/s)	2.99673E-06	+/-	6.1E-09
Total phase (deg)	-120.5	Apriori accel (us/s/s)	5.74062845992E-05	Resid phase (deg)	-24.8	+/-	19.6

ph/seg (deg)	61.6	Theor.	46.1	Amplitude	0.164 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	77.9		80.4	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	36.5		27.8	Inc. seg. avg.	0.166	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	46.0		48.5	Inc. frq. avg.	0.168	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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 1649.738 2871.047 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/gn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/gn.W.154.3MP2MB

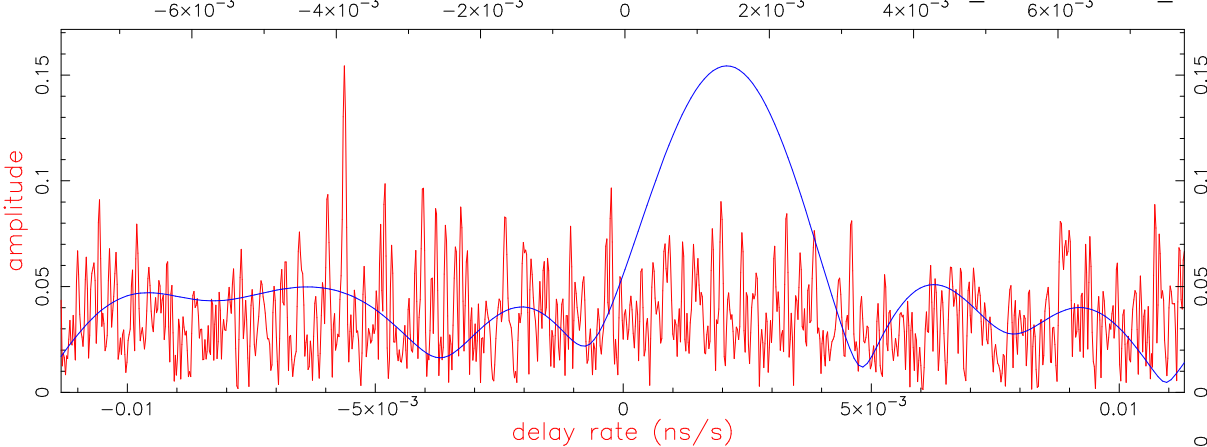
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gn

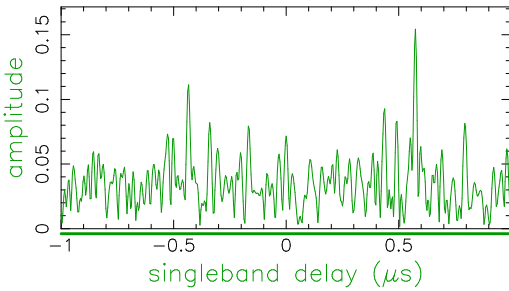
GBT\_COLD - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)

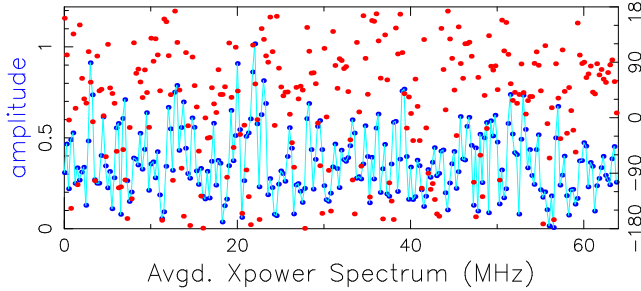


Fringe quality 0

SNR 5.7  
 Int time 178.863  
 Amp 0.172  
 Phase -174.5  
 PFD 8.5e-01  
 Delays (us)  
 SBD 0.573653  
 MBD 0.001403  
 Fringe rate (Hz)  
 -0.485071  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

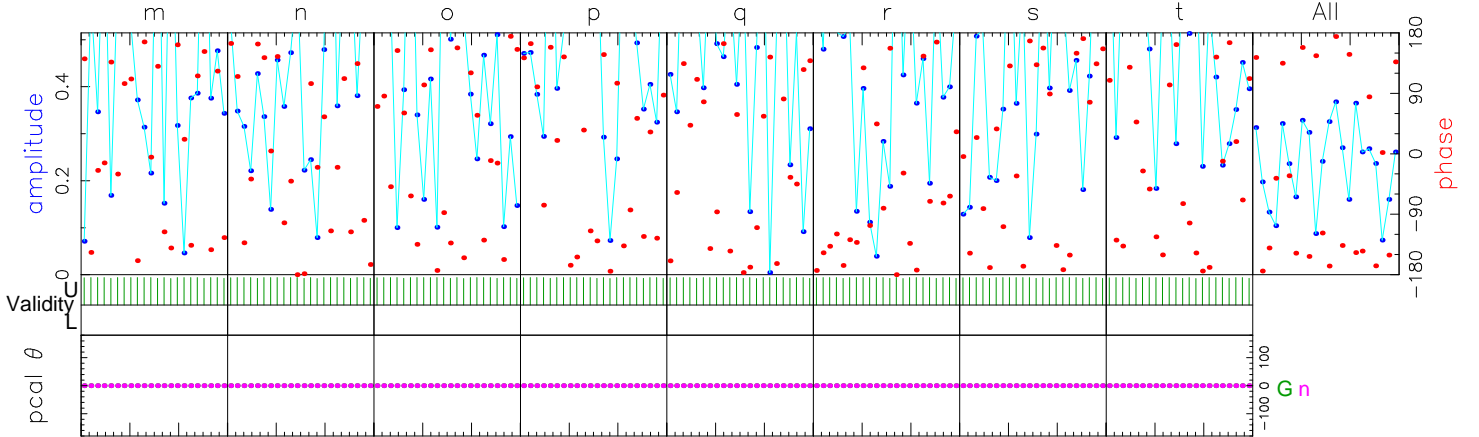


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175942  
 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
	168.7	-164.1	-138.5	-176.5	152.3	-149.2	164.5	-168.0	Phase	-174.5
	0.2	0.2	0.1	0.2	0.1	0.3	0.2	0.1	Ampl.	0.2
	62.6	368.6	319.9	308.6	337.5	422.7	154.0	128.1	Sbd box	403.9
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	
n	0	0	0	0	0	0	0	0	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.88861772520E+02	Apriori delay (usec)	9.88282244506E+02	Resid mbdelay (usec)	1.40301E-03	+/-	1.9E-04
Sband delay (usec)	9.88855897256E+02	Apriori clock (usec)	-1.4337810E+01	Resid sbdelay (usec)	5.73653E-01	+/-	1.5E-03
Phase delay (usec)	9.88282238878E+02	Apriori clockrate (us/s)	-2.2687689E-07	Resid phdelay (usec)	-5.62804E-06	+/-	6.5E-07
Delay rate (us/s)	-2.37860710764E-01	Apriori rate (us/s)	-2.37855079574E-01	Resid rate (us/s)	-5.63119E-06	+/-	6.3E-09
Total phase (deg)	20.5	Apriori accel (us/s/s)	-5.49947892841E-06	Resid phase (deg)	-174.5	+/-	20.3

ph/seg (deg)	67.7	Theor.	47.5	Amplitude	0.172 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.7	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)	25.6	Inc. seg. avg.	0.194	Inc. frq. avg.	0.162	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.4	Inc. frq. avg.	0.162			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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 1360.058 -409.310 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gn.W.163.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

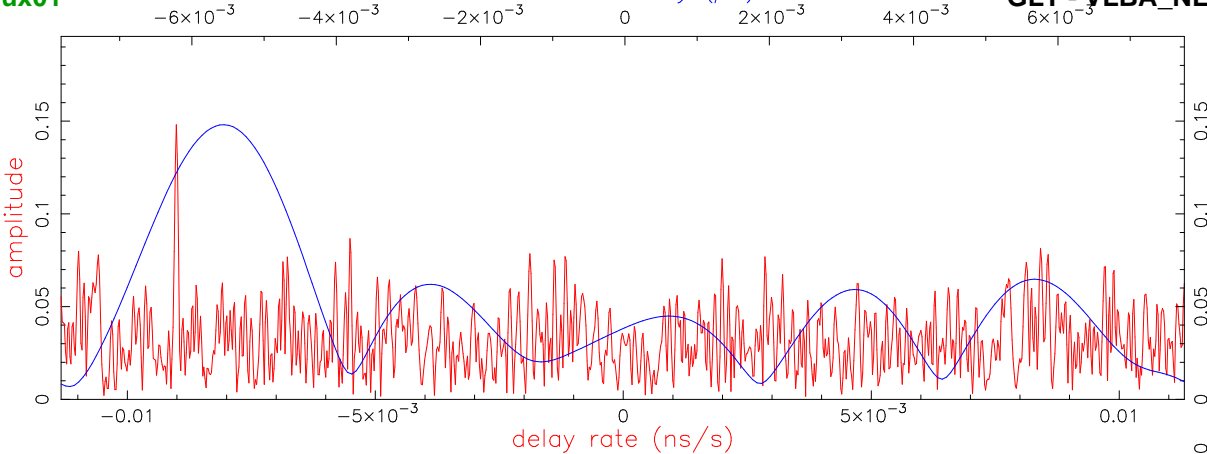
aux01

3C273.3MP2MB, No0707, gn

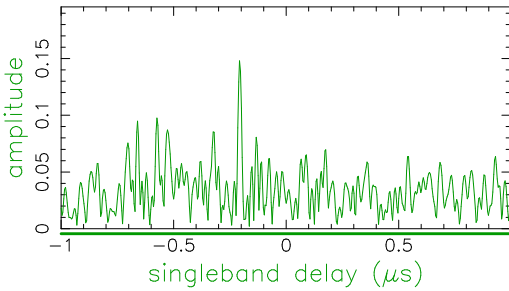
GLT - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

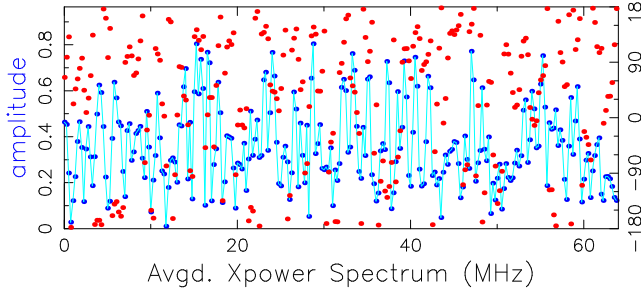
Fringe quality 0



SNR 5.4  
 Int time 178.863  
 Amp 0.196  
 Phase -40.6  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.206365  
 MBD -0.005539  
 Fringe rate (Hz)  
 -0.777841  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

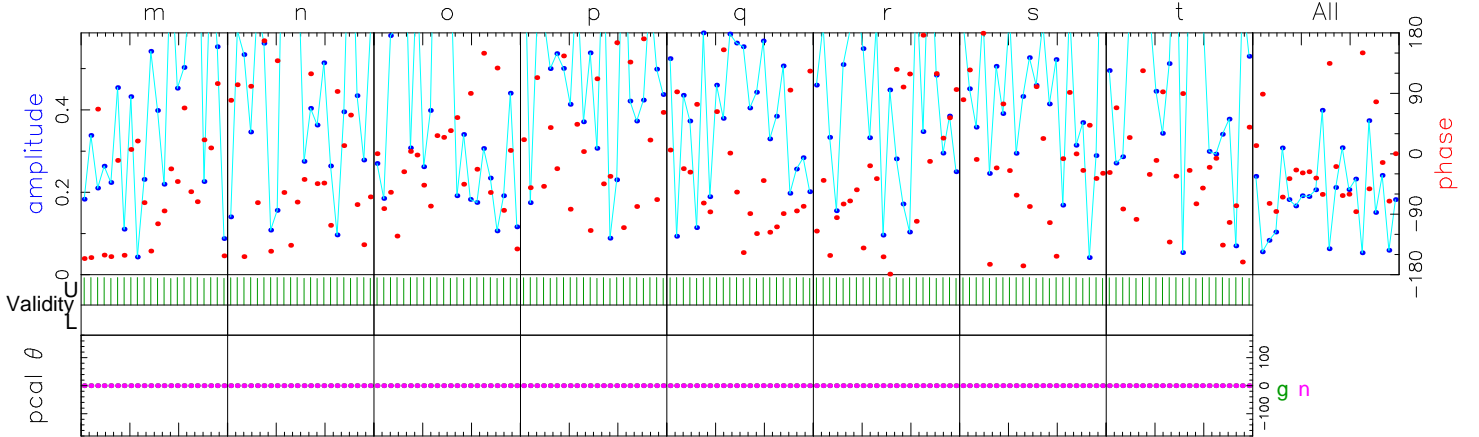


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175942  
 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

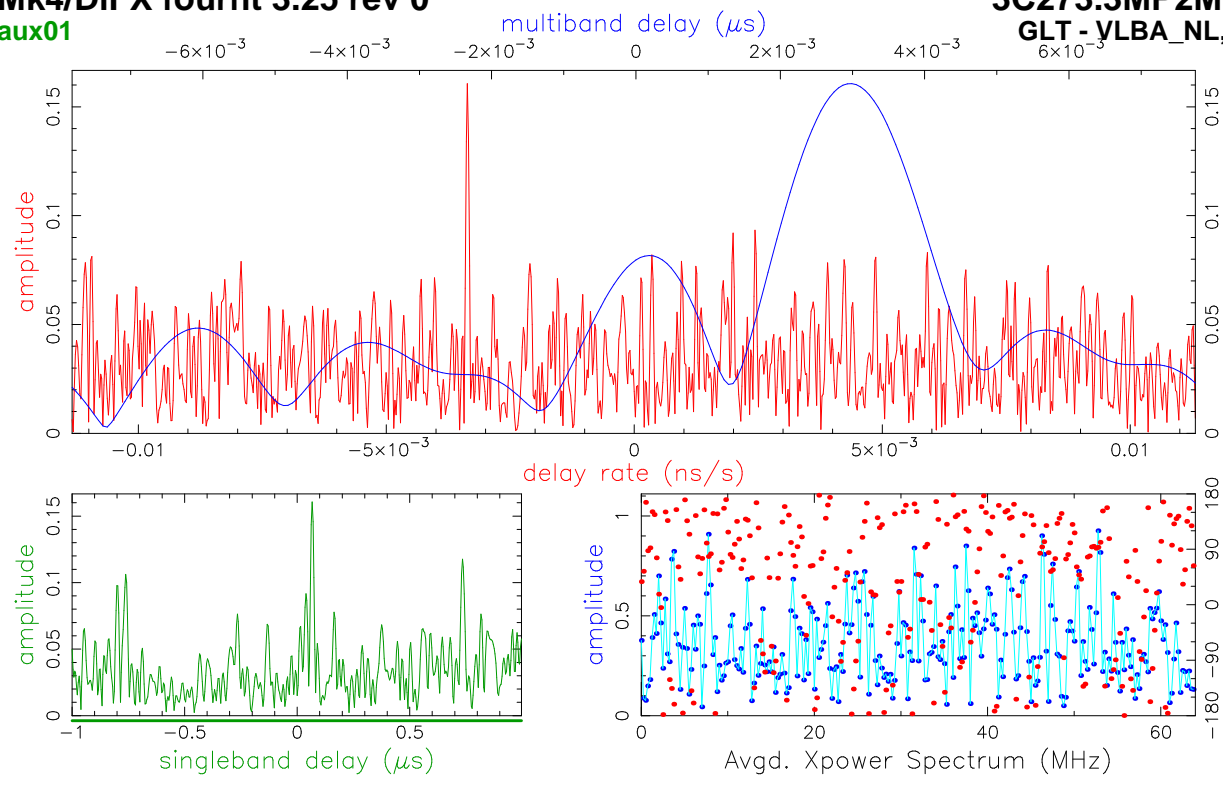


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-47.3	-73.6	-9.9	-15.0	-64.2	-71.9	-4.8	-45.8	Phase	-40.6
	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.3	Ampl.	0.2
	110.4	494.4	204.8	121.9	420.1	344.5	228.2	296.3	Sbd box	204.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.05773762898E+04 Apriori delay (usec) -1.05771676256E+04 Resid mbdelay (usec) -5.53923E-03 +/- 2.0E-04  
 Sband delay (usec) -1.05773739911E+04 Apriori clock (usec) 6.2492180E-01 Resid sbdelay (usec) -2.06365E-01 +/- 1.6E-03  
 Phase delay (usec) -1.05771676269E+04 Apriori clockrate (us/s) 4.8706200E-07 Resid phdelay (usec) -1.31036E-06 +/- 6.8E-07  
 Delay rate (us/s) -2.82650411791E-01 Apriori rate (us/s) -2.82641381830E-01 Resid rate (us/s) -9.02996E-06 +/- 6.5E-09  
 Total phase (deg) -136.3 Apriori accel (us/s/s) 5.74062845992E-05 Resid phase (deg) -40.6 +/- 21.1

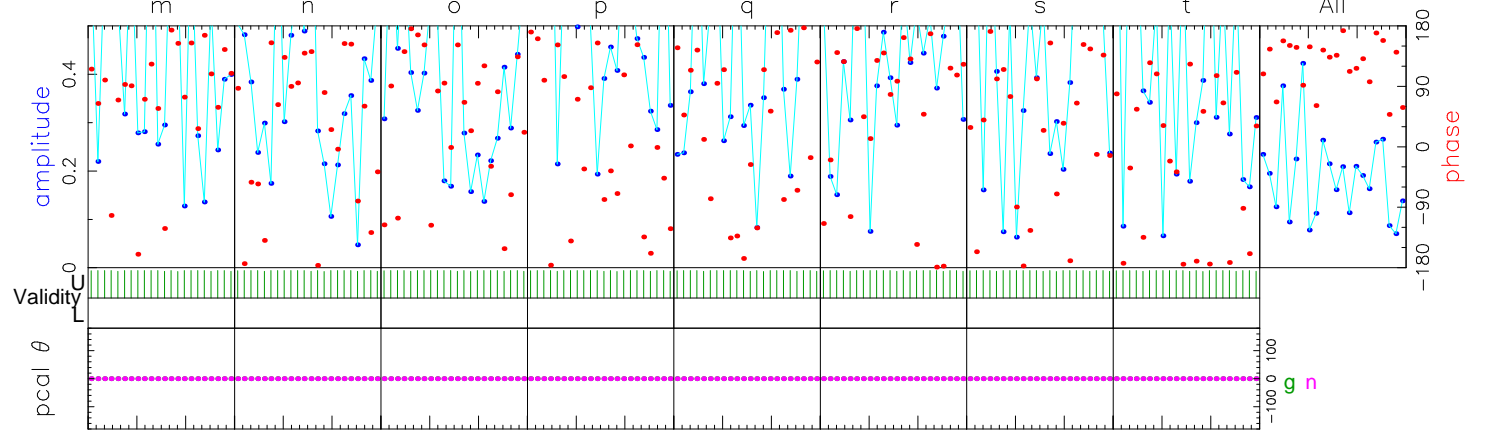
RMS Theor. Amplitude 0.196 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 68.6 49.5 Search (1024X32) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 70.9 86.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 30.5 29.8 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 (%) 35.8 52.1 Inc. frq. avg. 0.190 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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 1649.738 2871.047 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/gn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/gn.W.166.3MP2MB



Fringe quality 0  
SNR 5.9  
Int time 178.864  
Amp 0.167  
Phase 129.0  
PFD 4.1e-01  
Delays (us)  
SBD 0.066544  
MBD 0.002976  
Fringe rate (Hz)  
-0.291165  
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  
2025:041:175944  
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



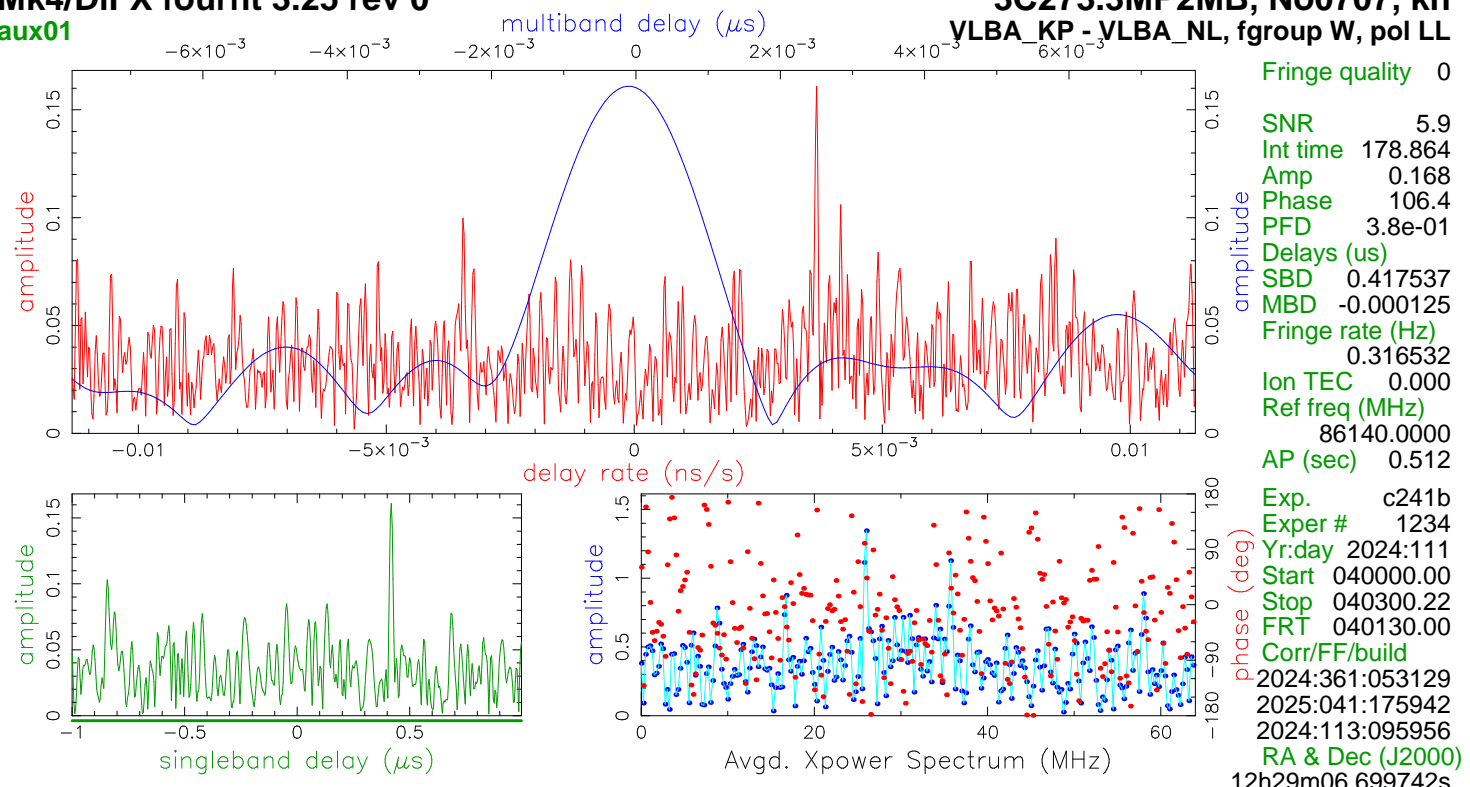
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	120.6	118.4	135.6	157.9	151.6	141.2	117.7	100.3	Phase	129.0
	0.3	0.2	0.2	0.1	0.1	0.3	0.1	0.1	Ampl.	0.2
	274.4	149.3	400.6	114.7	385.2	274.4	408.2	61.6	Sbd box	274.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.05771021491E+04		Apriori delay (usec)		-1.05771676256E+04		Resid mbdelay (usec)		2.97650E-03	+/- 1.8E-04
Sband delay (usec)	-1.05771010816E+04		Apriori clock (usec)		6.2492180E-01		Resid sbdelay (usec)		6.65440E-02	+/- 1.5E-03
Phase delay (usec)	-1.05771676214E+04		Apriori clockrate (us/s)		4.8706200E-07		Resid phdelay (usec)		4.16093E-06	+/- 6.3E-07
Delay rate (us/s)	-2.82644761971E-01		Apriori rate (us/s)		-2.82641381830E-01		Resid rate (us/s)		-3.38014E-06	+/- 6.0E-09
Total phase (deg)			33.4		5.74062845992E-05		Resid phase (deg)		129.0	+/- 19.5
ph/seg (deg)	RMS 37.2	Theor. 45.7	Amplitude 0.167 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	59.0	79.8	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)	21.1	27.6	Inc. seg. avg. 0.151		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 (%)	39.9	48.1	Inc. frq. avg. 0.156		Data rate(Mb/s): 2048		ion window (TEC)		0.00 0.00	
g: az 192.9 el 15.1 pa 3.0	n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) 1649.738 2871.047						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//gn..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//gn.W.176.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

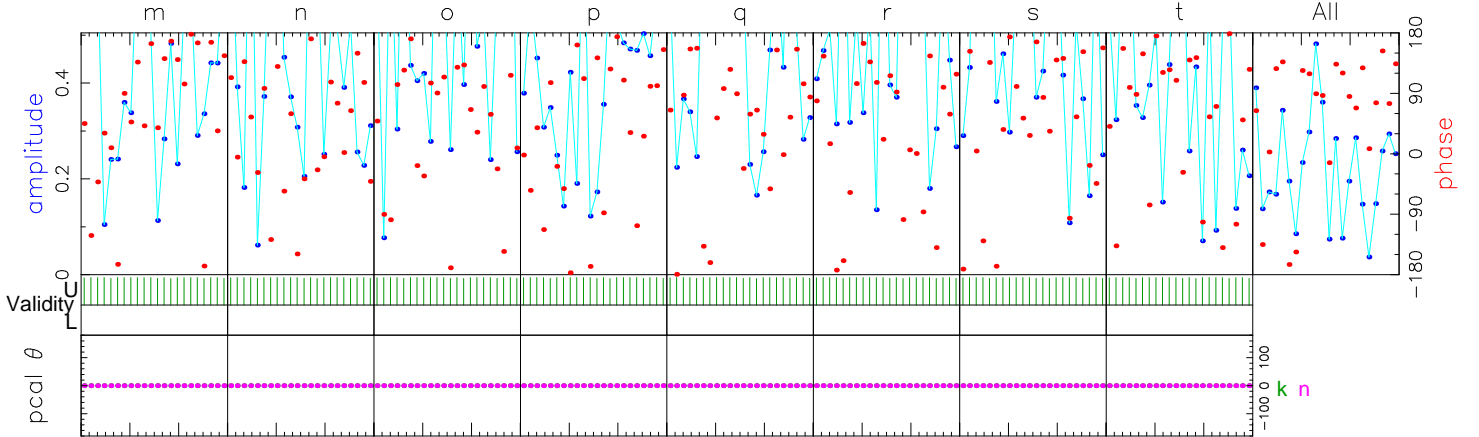
aux01

3C273.3MP2MB, No0707, kn

VLBA\_KP - VLBA\_NL, fgroup W, pol LL



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



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

Group delay (usec) (SBD)	-1.06088828671E+02	Apriori delay (usec)	-1.06510579132E+02	Resid mbdelay (usec)	-1.24539E-04	+/-	1.8E-04
Sband delay (usec)	-1.06093041882E+02	Apriori clock (usec)	4.3710518E-01	Resid sbdelay (usec)	4.17537E-01	+/-	1.5E-03
Phase delay (usec)	-1.06510575702E+02	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	3.42995E-06	+/-	6.3E-07
Delay rate (us/s)	4.58245045924E-01	Apriori rate (us/s)	4.58241371301E-01	Resid rate (us/s)	3.67462E-06	+/-	6.0E-09
Total phase (deg)	3.3	Apriori accel (us/s/s)	5.29682671469E-08	Resid phase (deg)	106.4	+/-	19.4

ph/seg (deg) 60.6 45.6 Amplitude 0.168 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 79.2 79.6 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 17.6 27.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 25.4 48.0 Inc. seg. avg. 0.178 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011

k: az 130.2 el 48.5 pa -40.3 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2626.142 -1209.244 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//kn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.165.3MP2MB simultaneous interpolator

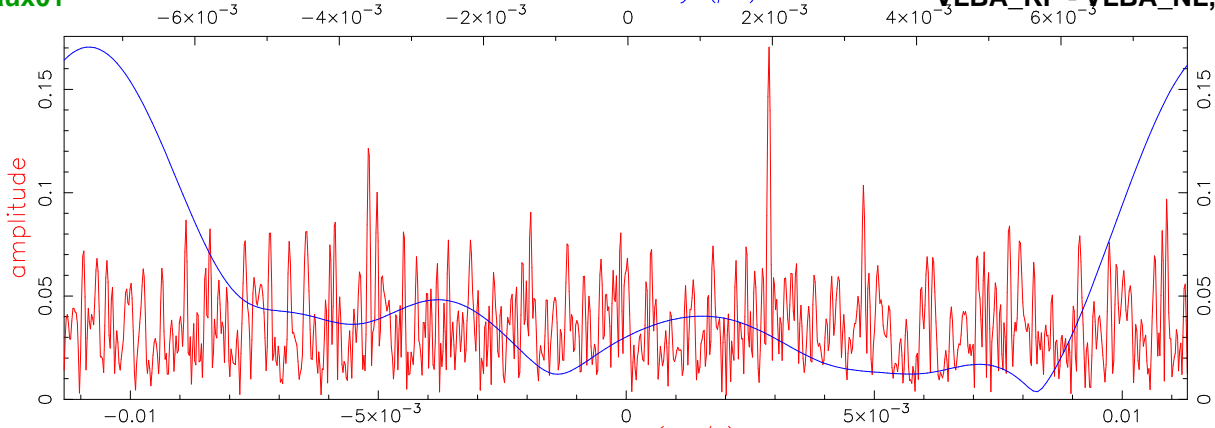
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kn

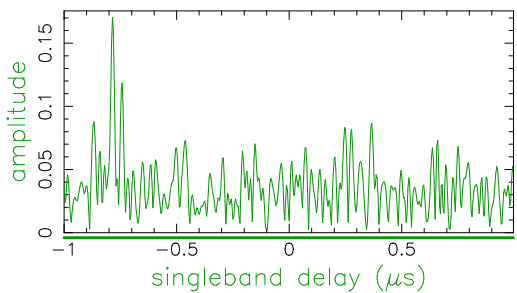
VLBA\_KP - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

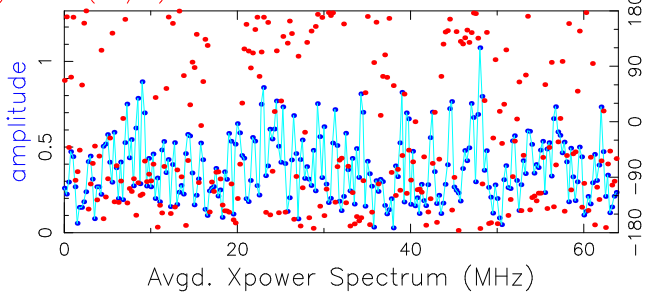


Fringe quality 0

SNR 6.3  
 Int time 178.864  
 Amp 0.176  
 Phase -89.0  
 PFD 5.2e-02  
 Delays (us)  
 SBD -0.784405  
 MBD -0.007434  
 Fringe rate (Hz)  
 0.247794  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

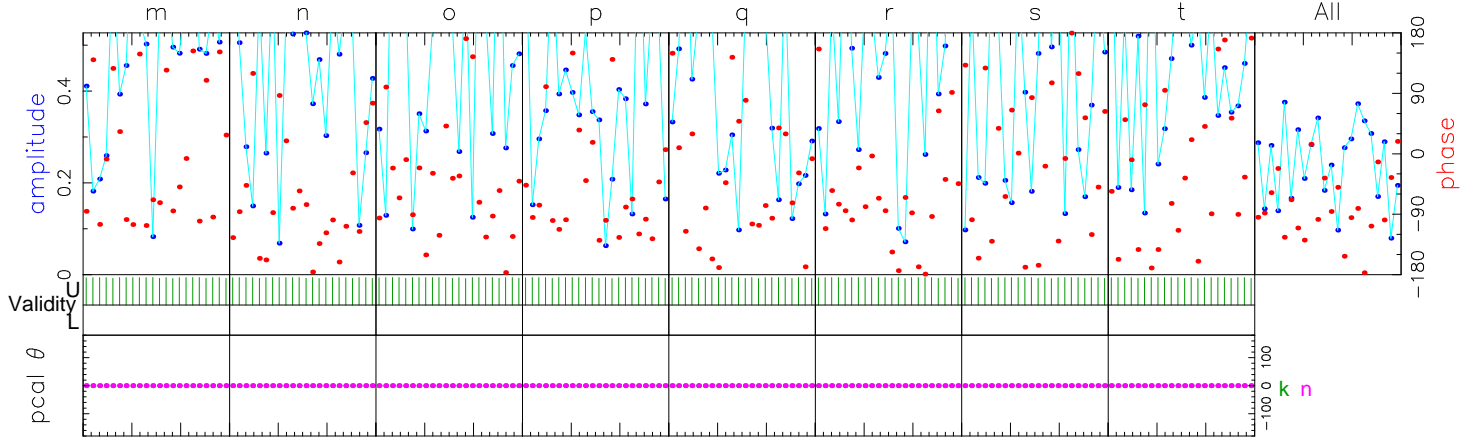


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175944  
 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
	-116.8	-99.0	-64.2	-88.3	-90.0	-80.9	-108.0	-112.3	Phase	-89.0
	0.1	0.3	0.3	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
	60.1	81.0	55.9	55.3	97.0	450.9	350.0	349.9	Sbd box	56.2
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	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.07299263084E+02	Apriori delay (usec)	-1.06510579132E+02	Resid mbdelay (usec)	-7.43395E-03	+/-	1.7E-04
Sband delay (usec)	-1.07294983632E+02	Apriori clock (usec)	4.3710518E-01	Resid sbdelay (usec)	-7.84405E-01	+/-	1.4E-03
Phase delay (usec)	-1.06510582002E+02	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	-2.86985E-06	+/-	5.9E-07
Delay rate (us/s)	4.58244247944E-01	Apriori rate (us/s)	4.58241371301E-01	Resid rate (us/s)	2.87664E-06	+/-	5.7E-09
Total phase (deg)	-192.1	Apriori accel (us/s/s)	5.29682671469E-08	Resid phase (deg)	-89.0	+/-	18.3

ph/seg (deg)	50.8	Theor.	43.0	Amplitude	0.176 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	65.9	Search (1024X32)	0.169	Search	0.169	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.2	Inc. seg. avg.	0.196	Inc. seg. avg.	0.196	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.6	Inc. frq. avg.	0.165	Inc. frq. avg.	0.165	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

k: az 130.2 el 48.5 pa -40.3      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -2626.142 -1209.244      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.177.3MP2MB

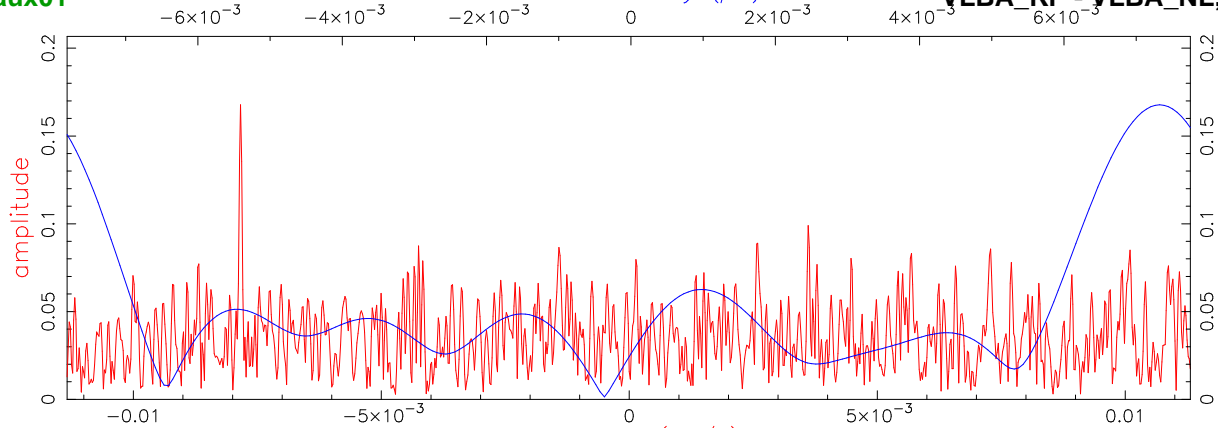
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kn

VLBA\_KP - VLBA\_NL, fgroup W, pol LR

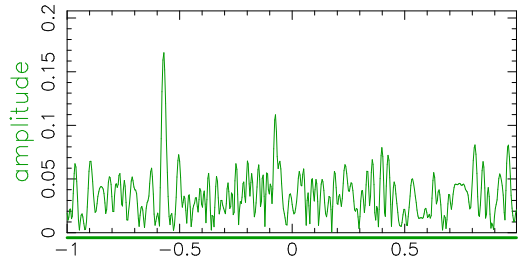
multiband delay ( $\mu$ s)



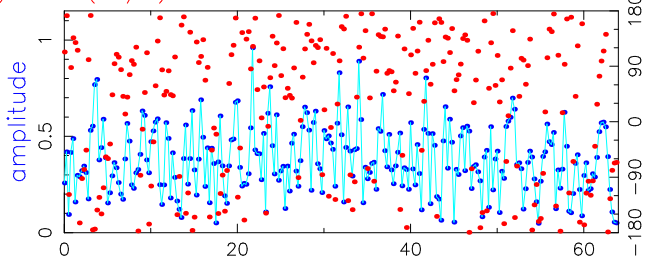
Fringe quality 0

SNR 6.2  
 Int time 178.864  
 Amp 0.207  
 Phase 120.2  
 PFD 9.5e-02  
 Delays (us)  
 SBD -0.571160  
 MBD -0.008301  
 Fringe rate (Hz)  
 -0.676406  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

delay rate (ns/s)

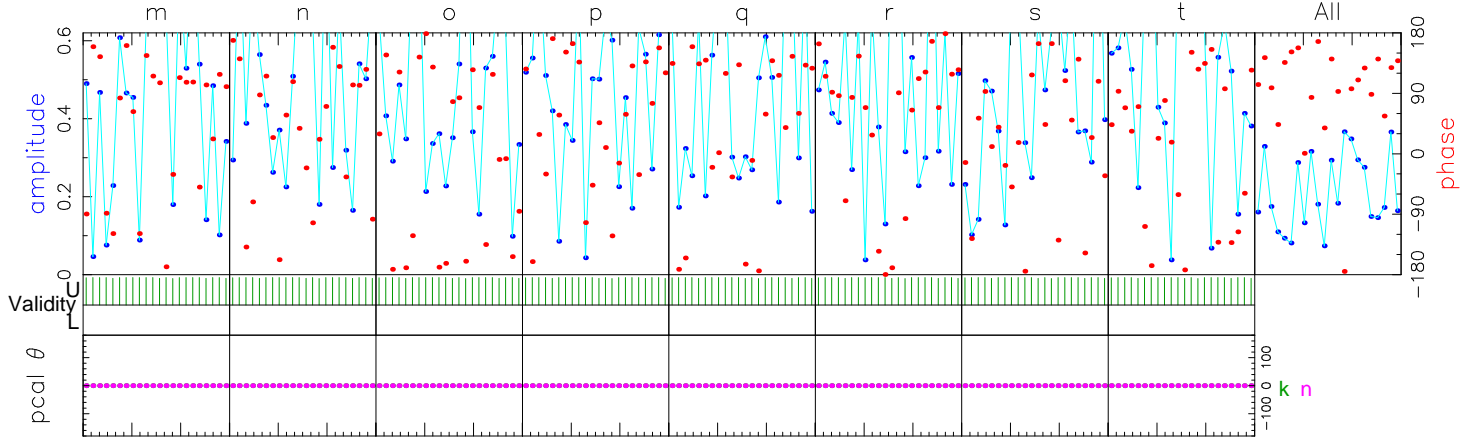


singleband delay ( $\mu$ s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175946  
 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		
k	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.07081379913E+02 Apriori delay (usec) -1.06510579132E+02 Resid mbdelay (usec) -8.30078E-03 +/- 1.8E-04  
 Sband delay (usec) -1.07081739382E+02 Apriori clock (usec) 4.3710518E-01 Resid sbdelay (usec) -5.71160E-01 +/- 1.4E-03  
 Phase delay (usec) -1.06510575254E+02 Apriori clockrate (us/s) -1.4505389E-07 Resid phdelay (usec) 3.87766E-06 +/- 6.0E-07  
 Delay rate (us/s) 4.58233518892E-01 Apriori rate (us/s) 4.58241371301E-01 Resid rate (us/s) -7.85241E-06 +/- 5.8E-09  
 Total phase (deg) 17.1 Apriori accel (us/s/s) 5.29682671469E-08 Resid phase (deg) 120.2 +/- 18.6

RMS Theor. Amplitude 0.207 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 46.0 43.7 Search (1024X32) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 62.5 76.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 25.3 26.3 Inc. seg. avg. 0.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 31.2 46.0 Inc. frq. avg. 0.198 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

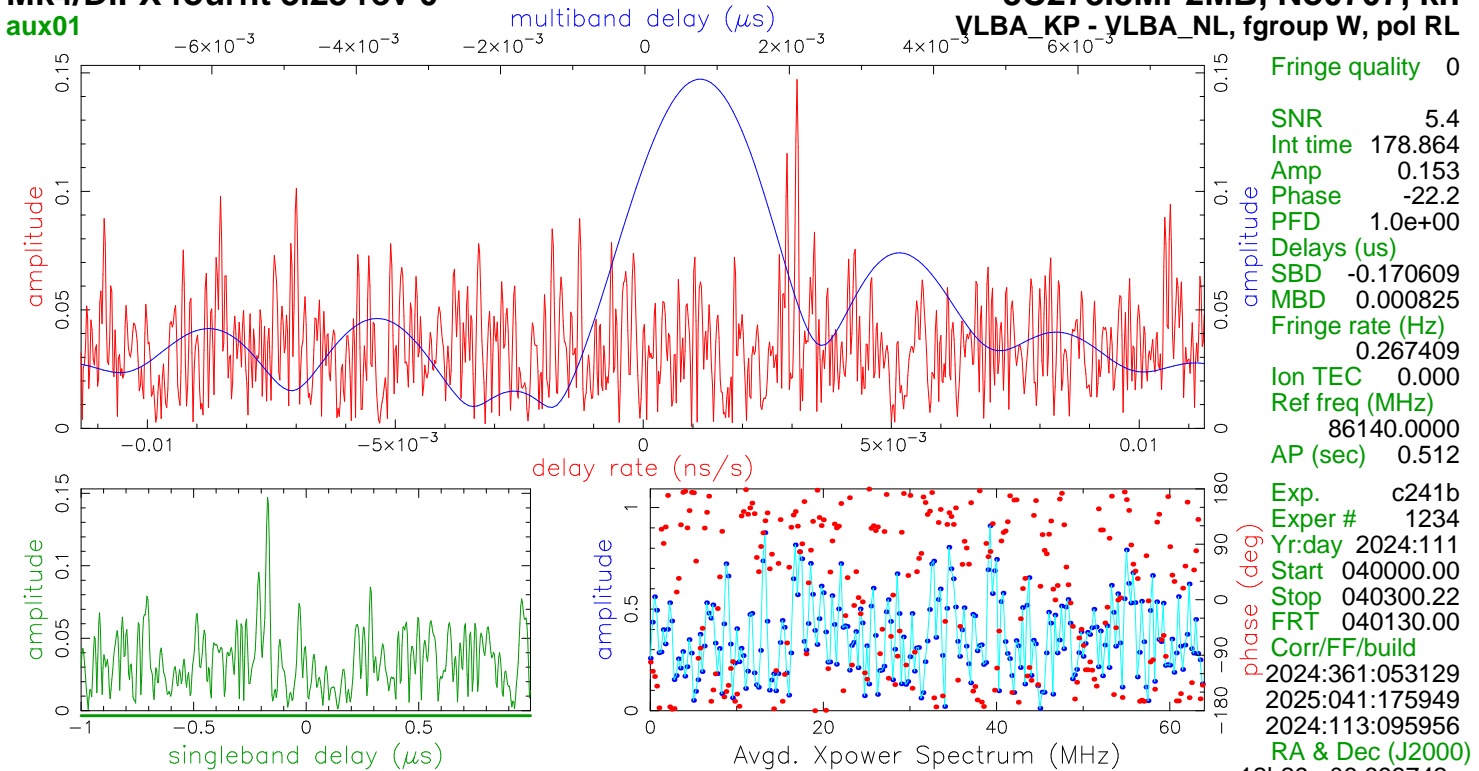
k: az 130.2 el 48.5 pa -40.3 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2626.142 -1209.244 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.186.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

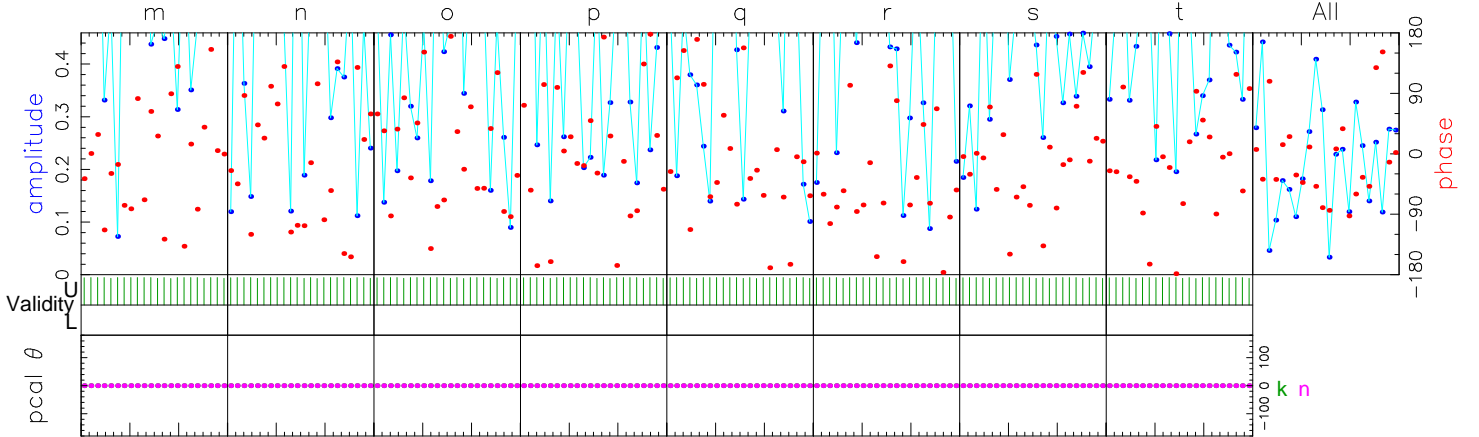
aux01

3C273.3MP2MB, No0707, kn

VLBA\_KP - VLBA\_NL, fgroup W, pol RL



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	
	-22.1	11.7	-14.4	7.3	-44.1	-66.8	-12.1	-13.6		Phase	
	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2		Ampl.	
	466.2	131.9	133.6	204.0	52.6	17.0	214.3	242.0		Sbd box	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		213.3	
k	0	0	0	0	0	0	0	0		APs used	
n	0	0	0	0	0	0	0	0		PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Tracks	
Group delay (usec) (SBD)	-1.06681629368E+02		Apriori delay (usec)		-1.06510579132E+02		Resid mbdelay (usec)		8.24763E-04	+/- 2.0E-04	
Sband delay (usec)	-1.06681188132E+02		Apriori clock (usec)		4.3710518E-01		Resid sbdelay (usec)		-1.70609E-01	+/- 1.6E-03	
Phase delay (usec)	-1.06510579847E+02		Apriori clockrate (us/s)		-1.4505389E-07		Resid phdelay (usec)		-7.15509E-07	+/- 6.8E-07	
Delay rate (us/s)	4.58244475655E-01		Apriori rate (us/s)		4.58241371301E-01		Resid rate (us/s)		3.10435E-06	+/- 6.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		5.29682671469E-08		Resid phase (deg)		-22.2	+/- 21.1	
	RMS	Theor.	Amplitude	0.153 +/- 0.028	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	66.1	49.5	Search (1024X32)	0.145	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	84.3	86.4	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	28.1	29.8	Inc. seg. avg.	0.162	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	35.1	52.1	Inc. frq. avg.	0.145	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		n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) -2626.142 -1209.244						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.196.3MP2MB							



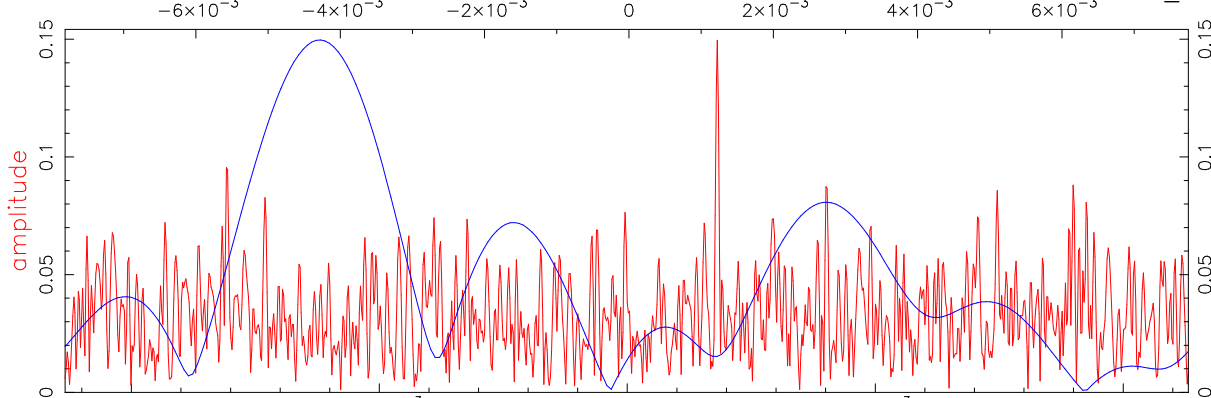
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ln

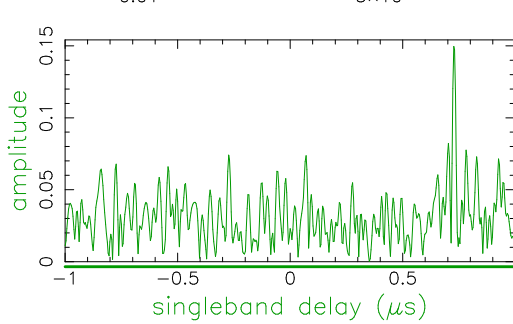
JCMT - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

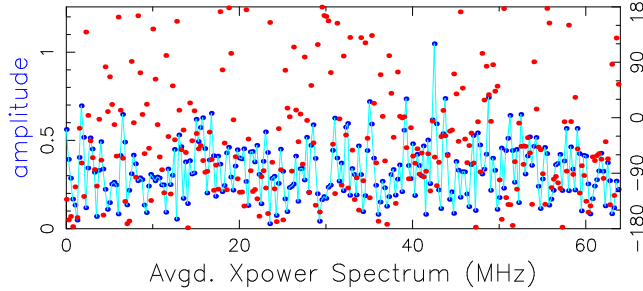


Fringe quality 0

SNR 5.6  
 Int time 178.864  
 Amp 0.154  
 Phase 86.7  
 PFD 9.5e-01  
 Delays (us)  
 SBD 0.728225  
 MBD -0.004248  
 Fringe rate (Hz)  
 0.156746  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

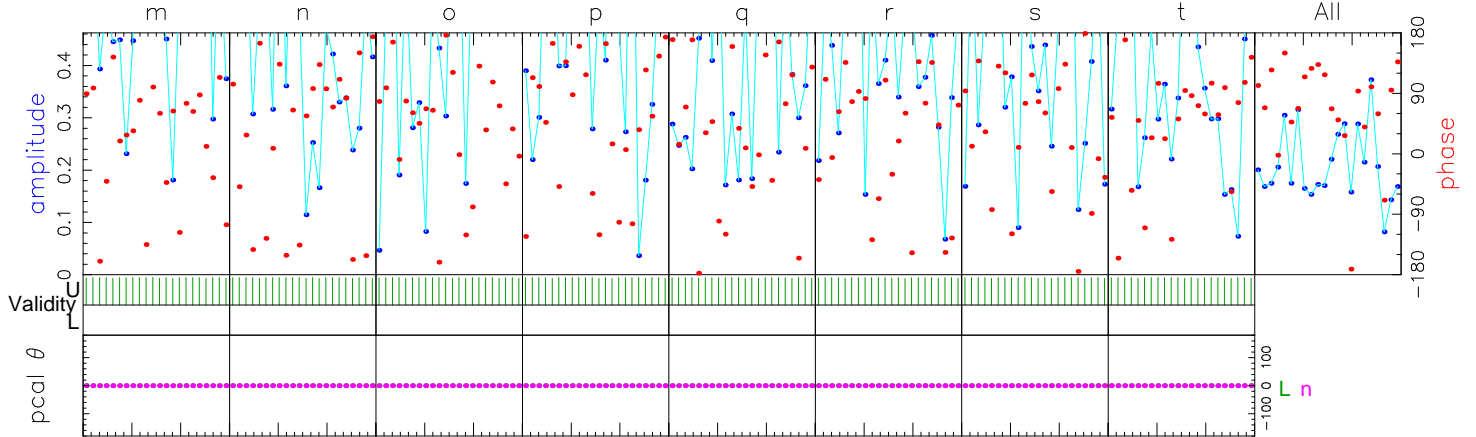


delay rate (ns/s)



Exp. c241b  
 Yr:day 1234  
 Start 2024:111  
 Stop 2024:040300.22  
 FRT 2024:040130.00  
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
L	0	0	0	0	0	0	0	0	Phase	86.7
n	0	0	0	0	0	0	0	0	Ampl.	0.1
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	443.4
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	PC phase	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	-1.03354919694E+04	Apriori delay (usec)	-1.03362220967E+04	Resid mbdelay (usec)	-4.24771E-03	+/-	1.9E-04
Sband delay (usec)	-1.03354938722E+04	Apriori clock (usec)	6.8321228E-02	Resid sbdelay (usec)	7.28225E-01	+/-	1.5E-03
Phase delay (usec)	-1.03362220939E+04	Apriori clockrate (us/s)	-6.3334689E-07	Resid phdelay (usec)	2.79616E-06	+/-	6.6E-07
Delay rate (us/s)	1.20111979779E+00	Apriori rate (us/s)	1.20111797812E+00	Resid rate (us/s)	1.81967E-06	+/-	6.4E-09
Total phase (deg)		Apriori accel (us/s/s)	5.37296115542E-05	Resid phase (deg)	86.7	+/-	20.5

	RMS	Theor.	Amplitude	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	55.2	48.2	Search (1024X32)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	58.1	84.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	32.1	29.0	Inc. seg. avg.	0.157	Data rate(Mb/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.9	50.7	Inc. frq. avg.	0.148	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 93.6 el 15.4 pa -70.0      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -6855.949 -2745.989      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Ln..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Ln.W.206.3MP2MB

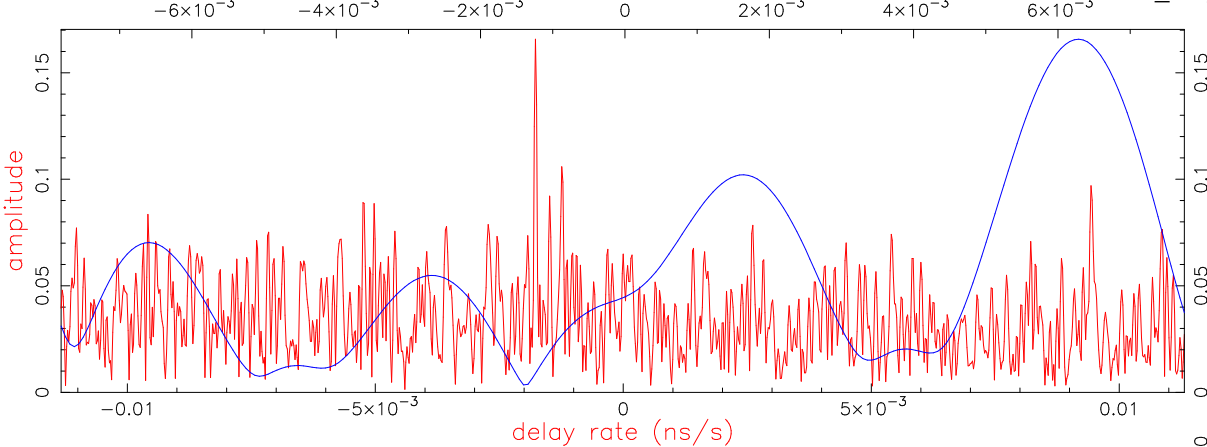
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ln

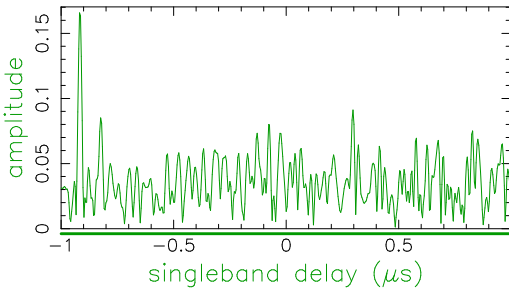
JCMT - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

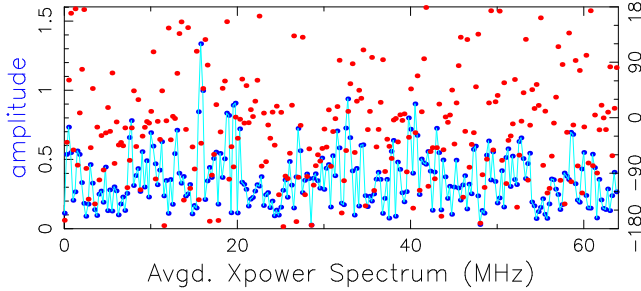


Fringe quality 0

SNR 6.2  
 Int time 178.864  
 Amp 0.170  
 Phase 150.3  
 PFD 8.8e-02  
 Delays (us)  
 SBD -0.916285  
 MBD 0.006292  
 Fringe rate (Hz)  
 -0.152308  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

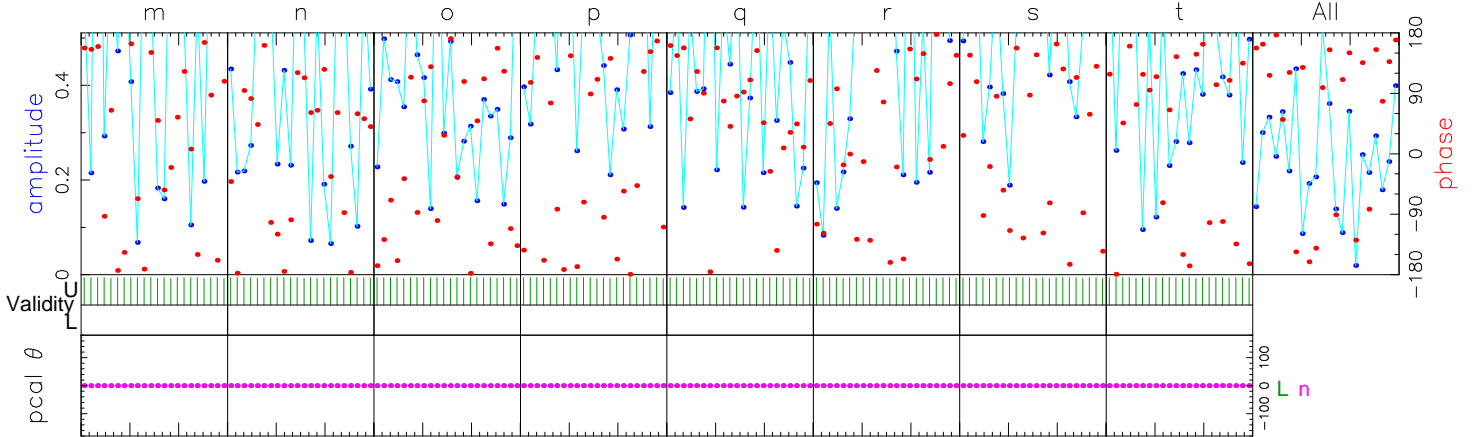


delay rate (ns/s)



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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
L	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.03371376794E+04	Apriori delay (usec)	-1.03362220967E+04	Resid mbdelay (usec)	6.29234E-03	+/-	1.8E-04
Sband delay (usec)	-1.03371383812E+04	Apriori clock (usec)	6.8321228E-02	Resid sbdelay (usec)	-9.16285E-01	+/-	1.4E-03
Phase delay (usec)	-1.03362220919E+04	Apriori clockrate (us/s)	-6.3334689E-07	Resid phdelay (usec)	4.84675E-06	+/-	6.0E-07
Delay rate (us/s)	1.20111620997E+00	Apriori rate (us/s)	1.20111797812E+00	Resid rate (us/s)	-1.76815E-06	+/-	5.8E-09
Total phase (deg)	1.7	Apriori accel (us/s/s)	5.37296115542E-05	Resid phase (deg)	150.3	+/-	18.6

ph/seg (deg)	57.2	Theor.	43.6	Amplitude	0.170 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	86.9	Search (1024X32)	0.162	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.7	Inc. seg. avg.	0.198	Inc. frq. avg.	0.176	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.3	Inc. frq. avg.	0.176			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

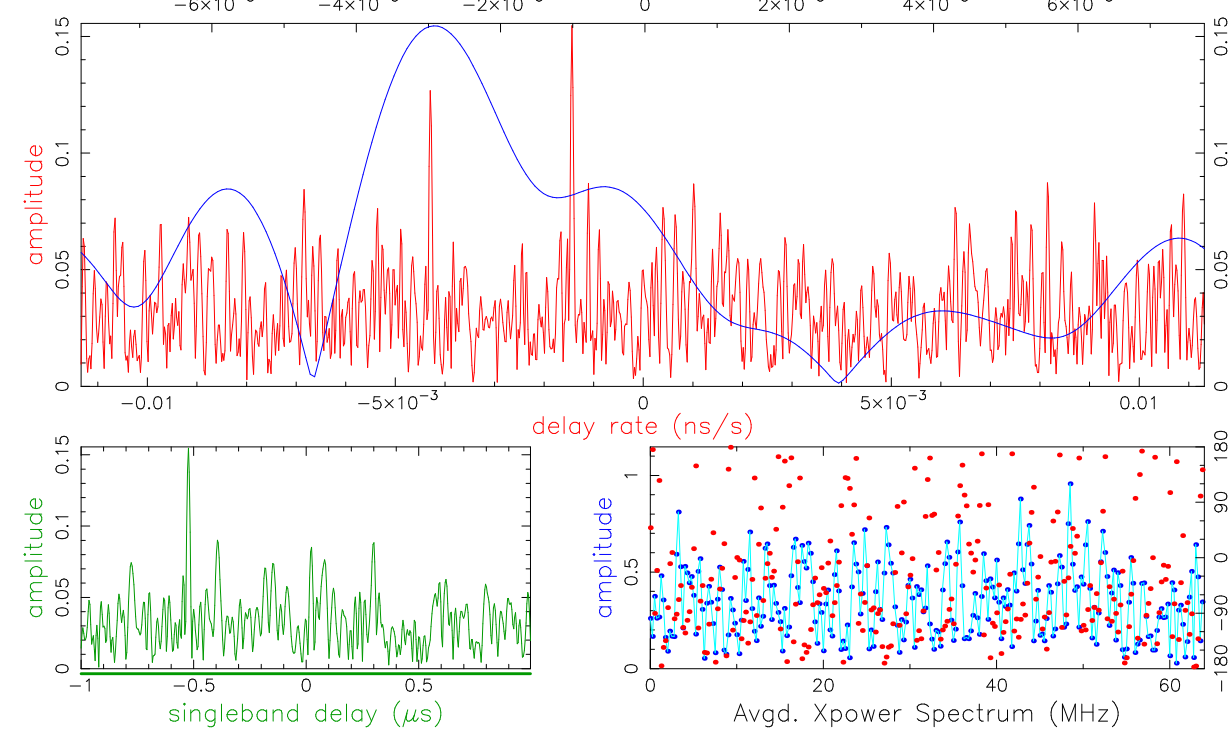
L: az 93.6 el 15.4 pa -70.0 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -6855.949 -2745.989 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/Ln..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/Ln.W.215.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

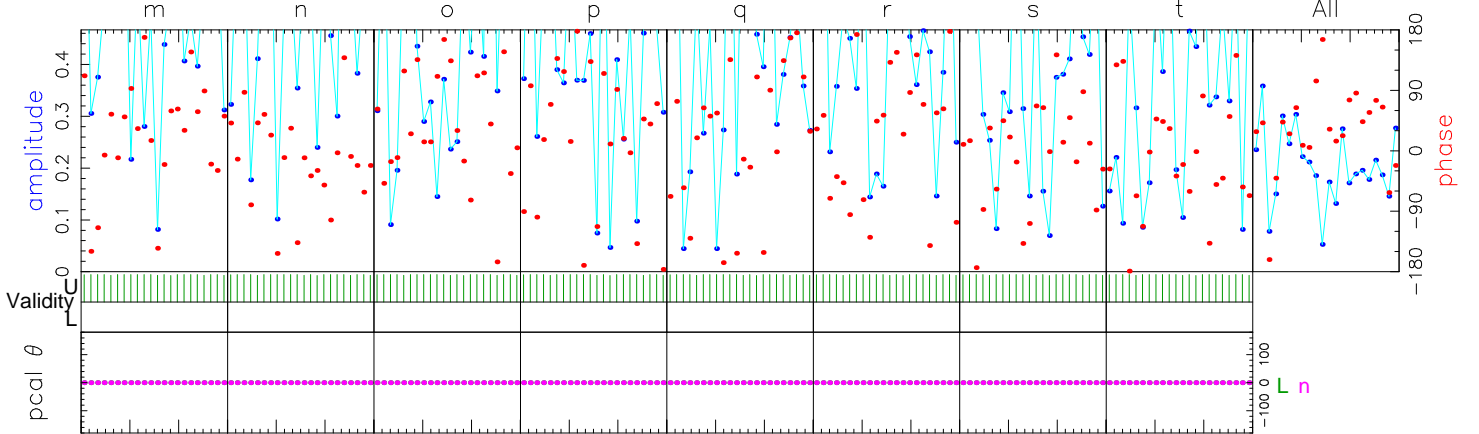
3C273.3MP2MB, No0707, Ln

JCMT - VLBA\_NL, fgroup W, pol LR



Fringe quality 0  
 SNR 5.7  
 Int time 178.864  
 Amp 0.156  
 Phase 37.4  
 PFD 8.5e-01  
 Delays (us)  
 SBD -0.523483  
 MBD -0.002921  
 Fringe rate (Hz)  
 -0.123715  
 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"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
L	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.03367406423E+04	Apriori delay (usec)	-1.03362220967E+04	Resid mbdelay (usec)	-2.92057E-03	+/-	1.9E-04
Sband delay (usec)	-1.03367455795E+04	Apriori clock (usec)	6.8321228E-02	Resid sbdelay (usec)	-5.23483E-01	+/-	1.5E-03
Phase delay (usec)	-1.03362220955E+04	Apriori clockrate (us/s)	-6.3334689E-07	Resid phdelay (usec)	1.20572E-06	+/-	6.5E-07
Delay rate (us/s)	1.20111654191E+00	Apriori rate (us/s)	1.20111797812E+00	Resid rate (us/s)	-1.43621E-06	+/-	6.3E-09
Total phase (deg)	-111.2	Apriori accel (us/s/s)	5.37296115542E-05	Resid phase (deg)	37.4	+/-	20.3

ph/seg (deg)	59.1	Theor.	47.5	Amplitude	0.156 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	55.8	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	38.9	Inc. seg. avg.	0.152	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.4	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

L: az 93.6 el 15.4 pa -70.0      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -6855.949 -2745.989      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Ln..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Ln.W.224.3MP2MB

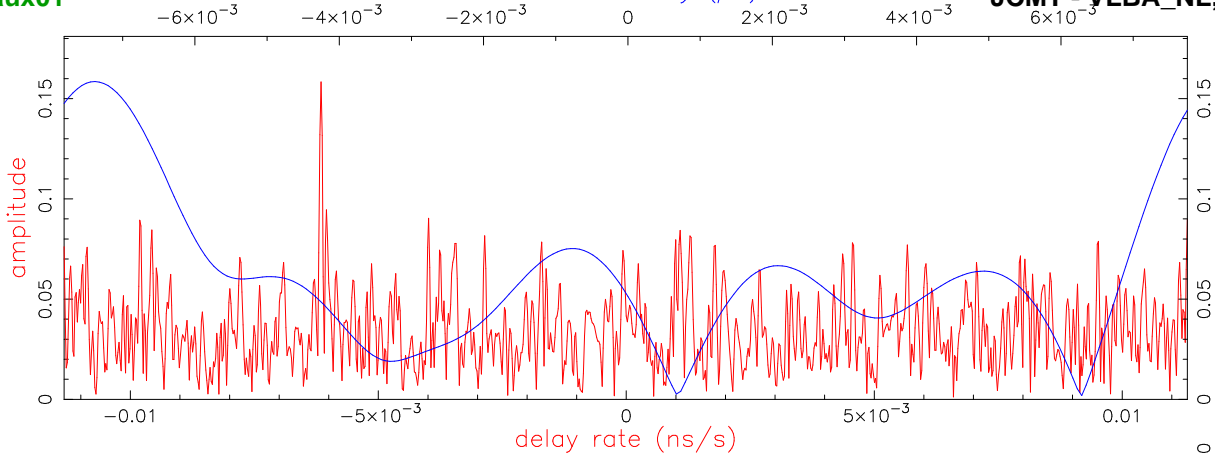
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ln

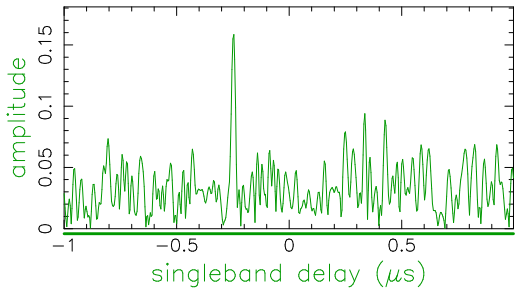
JCMT - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)

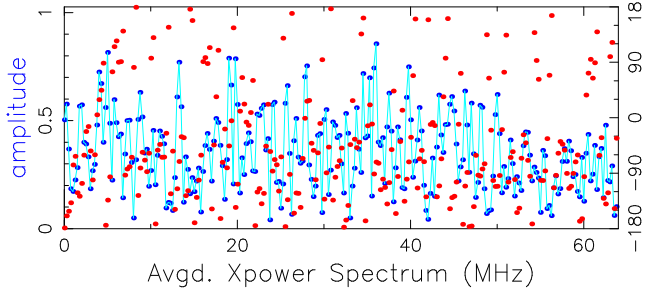


Fringe quality 0

SNR 5.8  
 Int time 178.864  
 Amp 0.181  
 Phase 22.5  
 PFD 4.7e-01  
 Delays (us)  
 SBD -0.247451  
 MBD -0.007435  
 Fringe rate (Hz)  
 -0.530544  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

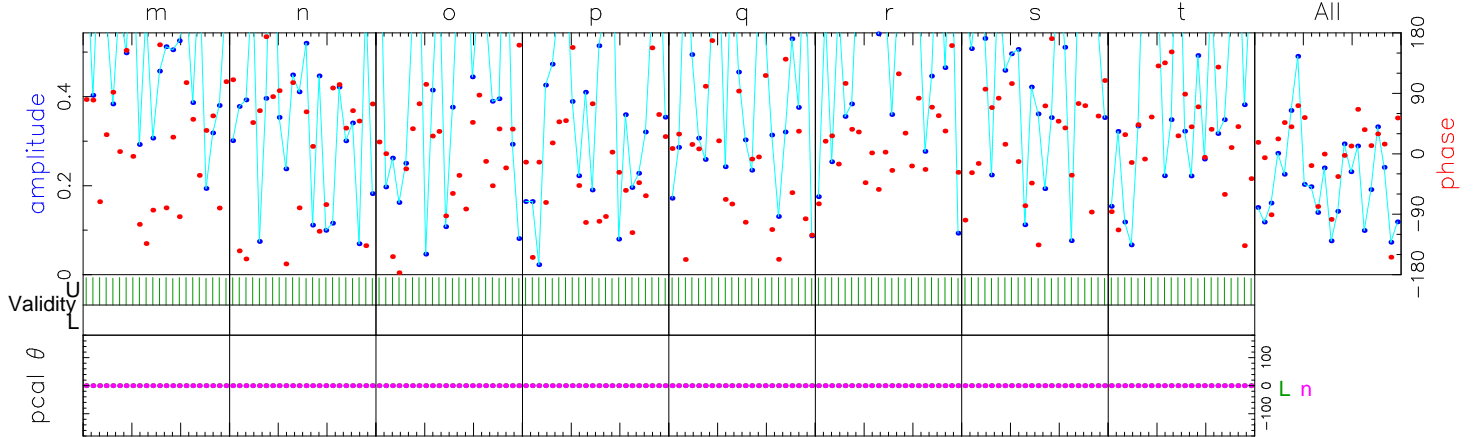


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175957  
 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
	16.0	107.5	8.1	-11.2	-35.0	22.1	37.6	33.7	Phase	22.5
	0.1	0.1	0.3	0.1	0.1	0.4	0.2	0.3	Ampl.	0.2
	15.1	2.4	193.6	418.6	117.3	194.0	204.1	191.8	Sbd box	193.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03364639063E+04	Apriori delay (usec)	-1.03362220967E+04	Resid mbdelay (usec)	-7.43455E-03	+/-	1.9E-04
Sband delay (usec)	-1.03364695477E+04	Apriori clock (usec)	6.8321228E-02	Resid sbdelay (usec)	-2.47451E-01	+/-	1.5E-03
Phase delay (usec)	-1.03362220960E+04	Apriori clockrate (us/s)	-6.3334689E-07	Resid phdelay (usec)	7.26006E-07	+/-	6.3E-07
Delay rate (us/s)	1.20111181903E+00	Apriori rate (us/s)	1.20111797812E+00	Resid rate (us/s)	-6.15909E-06	+/-	6.1E-09
Total phase (deg)	-126.1	Apriori accel (us/s/s)	5.37296115542E-05	Resid phase (deg)	22.5	+/-	19.6

ph/seg (deg)	61.5	Theor.	46.0	Amplitude	0.181 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.5		80.2	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	45.2		27.7	Inc. seg. avg.	0.181	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.6		48.4	Inc. frq. avg.	0.184	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 93.6 el 15.4 pa -70.0      n: az 164.0 el 49.1 pa -11.6      u,v (fr/asec) -6855.949 -2745.989      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Ln..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Ln.W.234.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

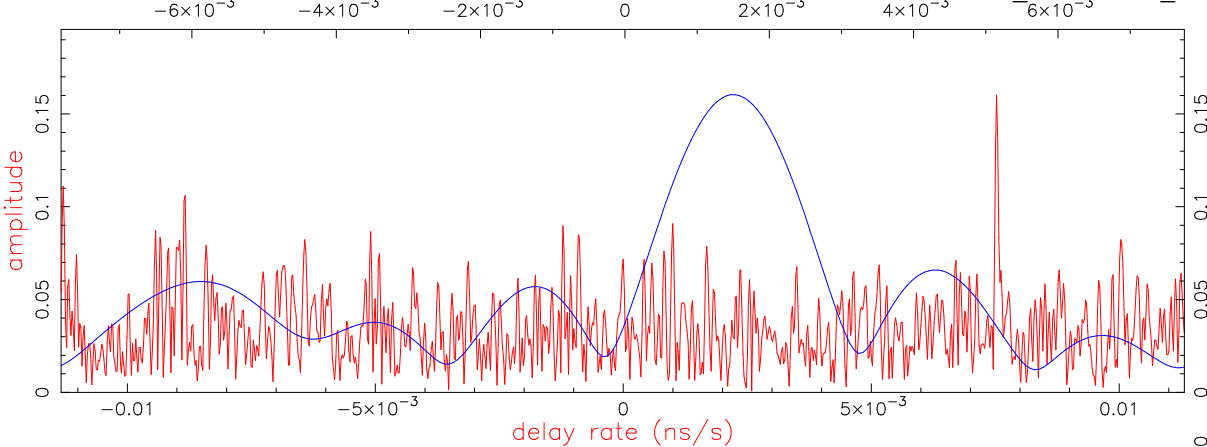
aux01

3C273.3MP2MB, No0707, In

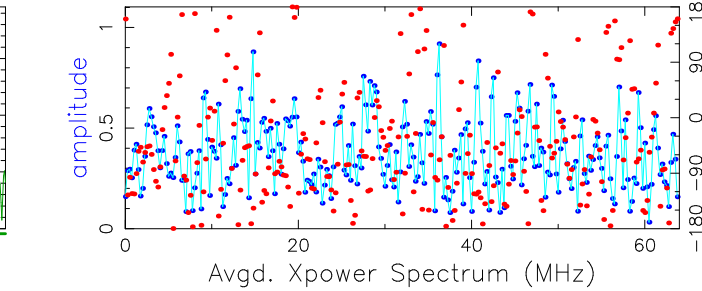
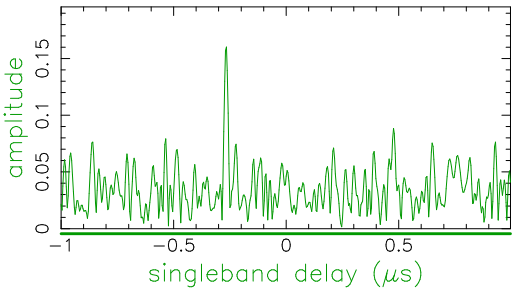
VLBA\_LA - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

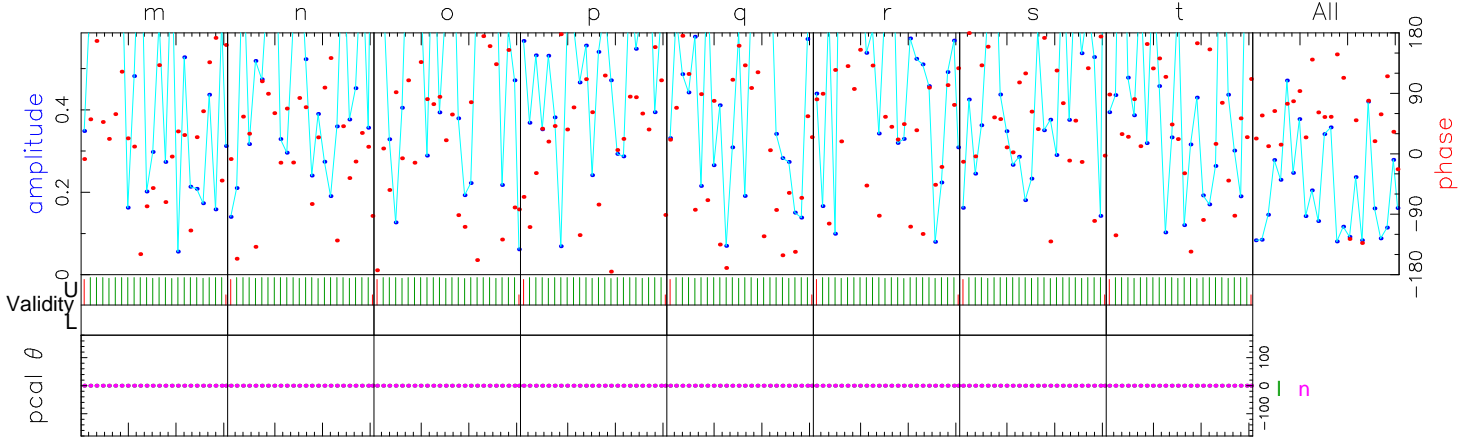


SNR 5.9  
 Int time 177.864  
 Amp 0.196  
 Phase 63.9  
 PFD 3.7e-01  
 Delays (us)  
 SBD -0.267103  
 MBD 0.001432  
 Fringe rate (Hz) 0.649857  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.51  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180012  
 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	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -1.21070827237E+01 Apriori delay (usec) -1.18428898197E+01 Resid mbdelay (usec) 1.43210E-03 +/- 1.8E-04  
 Sband delay (usec) -1.21099928197E+01 Apriori clock (usec) -8.0130138E+00 Resid sbdelay (usec) -2.67103E-01 +/- 1.5E-03  
 Phase delay (usec) -1.18428877585E+01 Apriori clockrate (us/s) -5.3126102E-07 Resid phdelay (usec) 2.06117E-06 +/- 6.3E-07  
 Delay rate (us/s) 3.24760066531E-01 Apriori rate (us/s) 3.24752522331E-01 Resid rate (us/s) 7.54420E-06 +/- 6.0E-09  
 Total phase (deg) -126.5 Apriori accel (us/s/s) -2.86684016913E-07 Resid phase (deg) 63.9 +/- 19.4

RMS Theor. Amplitude 0.196 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 62.0 47.6 Search (1024X32) 0.156 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 77.5 83.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 29.8 27.5 Inc. seg. avg. 0.186 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 33.3 47.9 Inc. frq. avg. 0.186 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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -1861.262 -720.698 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//In..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//In.W.284.3MP2MB



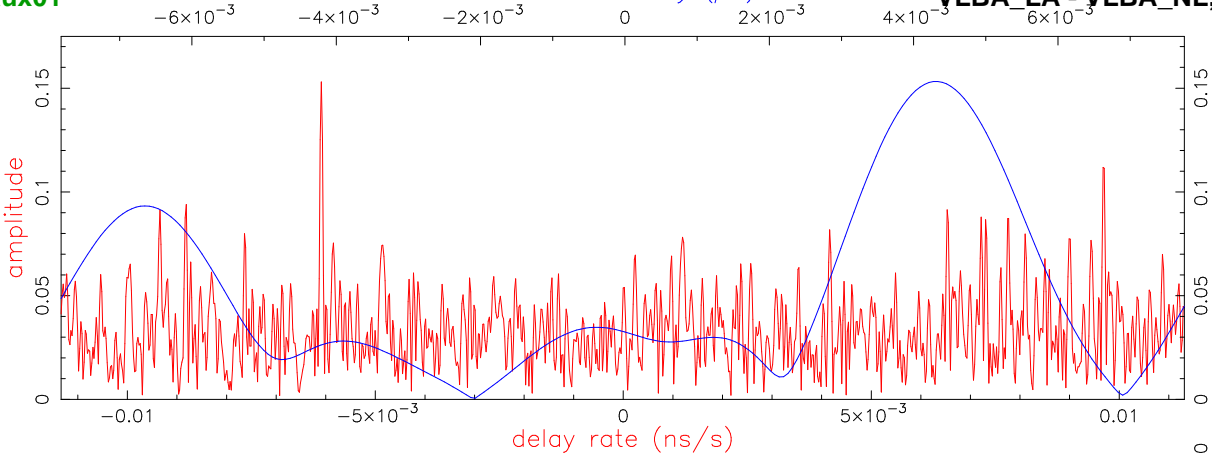
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, In

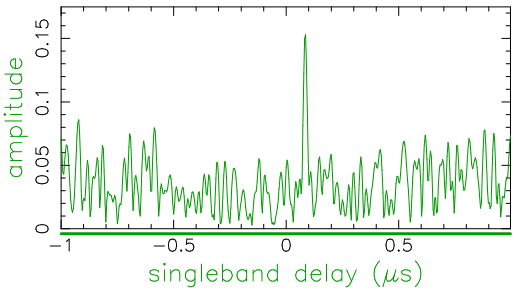
VLBA\_LA - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

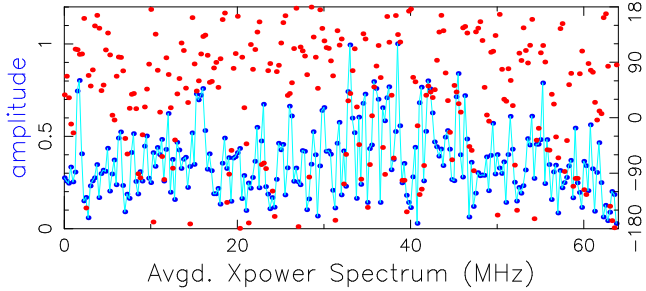


Fringe quality 0

SNR 5.6  
 Int time 177.864  
 Amp 0.175  
 Phase -63.8  
 PFD 8.6e-01  
 Delays (us)  
 SBD 0.084436  
 MBD 0.004246  
 Fringe rate (Hz)  
 -0.525075  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

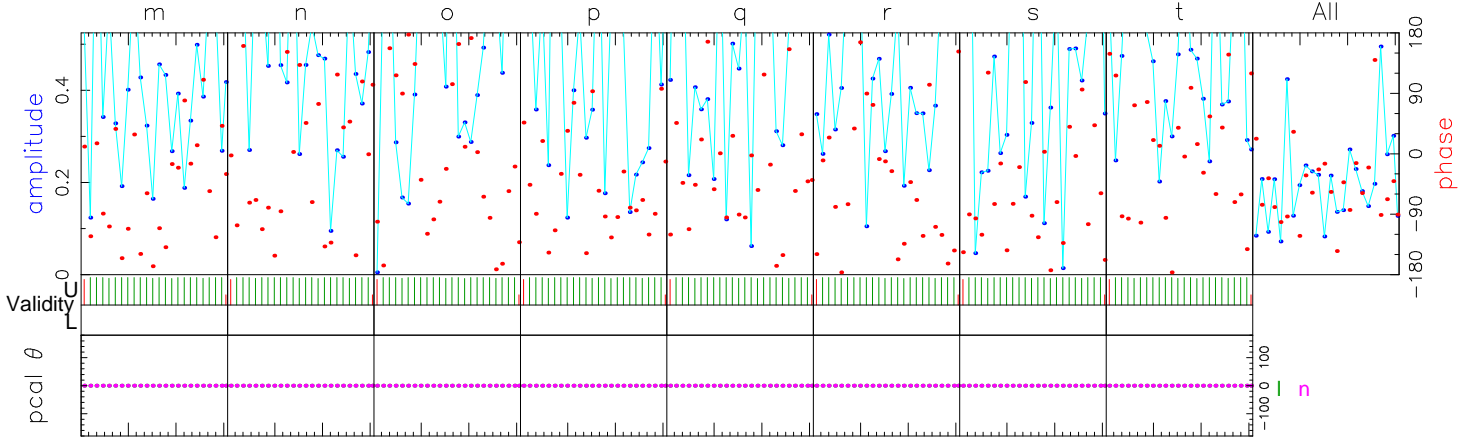


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.51  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180016  
 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		
n	0	0	0	0	0	0	0	0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.17605187620E+01	Apriori delay (usec)	-1.18428898197E+01	Resid mbdelay (usec)	4.24606E-03	+/-	1.9E-04
Sband delay (usec)	-1.17584533197E+01	Apriori clock (usec)	-8.0130138E+00	Resid sbdelay (usec)	8.44365E-02	+/-	1.5E-03
Phase delay (usec)	-1.18428918757E+01	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-2.05605E-06	+/-	6.5E-07
Delay rate (us/s)	3.24746426726E-01	Apriori rate (us/s)	3.2475252331E-01	Resid rate (us/s)	-6.09560E-06	+/-	6.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.86684016913E-07	Resid phase (deg)	-63.8	+/-	20.3

ph/seg (deg)	53.0	Theor.	49.7	Amplitude	0.175 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.3	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)	34.2	Inc. seg. avg.	0.169	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.7	Inc. frq. avg.	0.172			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 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -1861.262 -720.698 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//ln..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//ln.W.302.3MP2MB

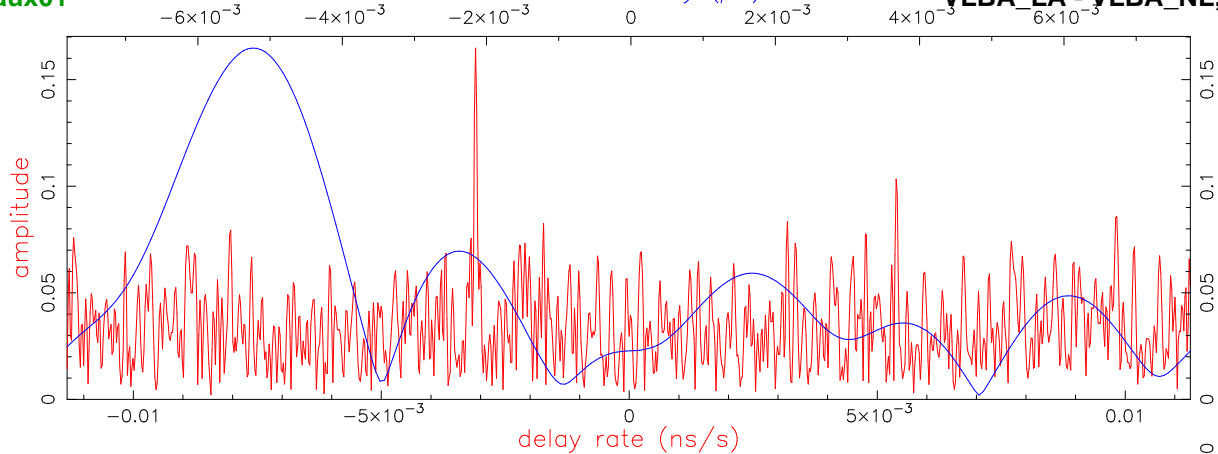
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, In

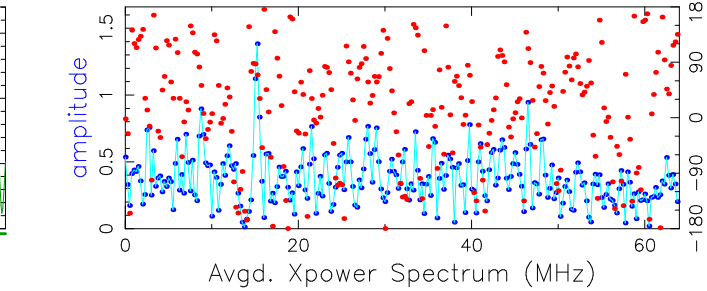
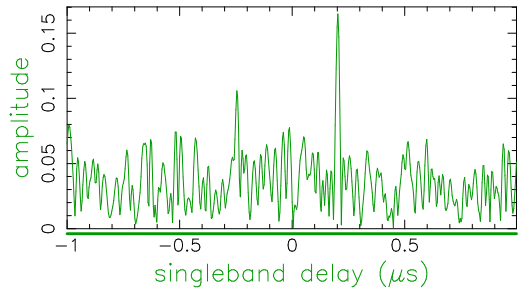
VLBA\_LA - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)



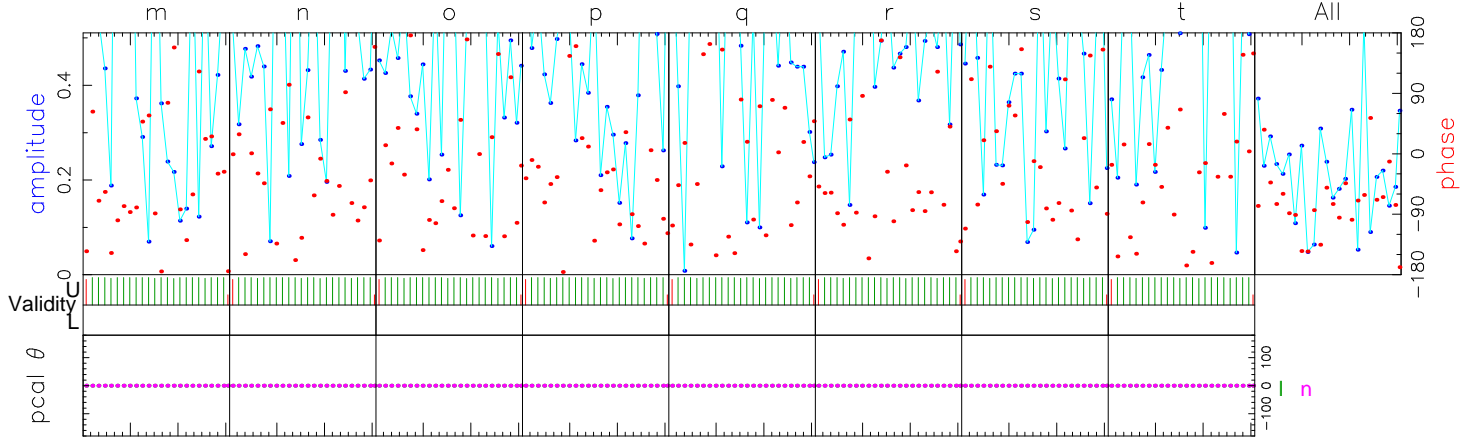
Fringe quality 0

SNR 6.0  
 Int time 177.864  
 Amp 0.170  
 Phase -74.9  
 PFD 2.0e-01  
 Delays (us)  
 SBD 0.202630  
 MBD -0.005245  
 Fringe rate (Hz)  
 -0.268154  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.51  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180018  
 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
	-74.5	-65.5	-81.0	-59.1	-116.3	-92.0	-80.2	-40.6	Phase	-74.9
	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2
	309.2	86.4	451.3	194.5	49.5	307.0	220.5	205.1	Sbd box	308.9
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	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.16450097843E+01	Apriori delay (usec)	-1.18428898197E+01	Resid mbdelay (usec)	-5.24496E-03	+/-	1.8E-04
Sband delay (usec)	-1.16402600697E+01	Apriori clock (usec)	-8.0130138E+00	Resid sbdelay (usec)	2.02630E-01	+/-	1.4E-03
Phase delay (usec)	-1.18428922362E+01	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-2.41647E-06	+/-	6.1E-07
Delay rate (us/s)	3.24749409328E-01	Apriori rate (us/s)	3.2475252331E-01	Resid rate (us/s)	-3.11300E-06	+/-	5.9E-09
Total phase (deg)	-265.4	Apriori accel (us/s/s)	-2.86684016913E-07	Resid phase (deg)	-74.9	+/-	19.0

ph/seg (deg)	48.3	Theor.	46.6	Amplitude	0.170 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	73.7		81.4	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	24.5		26.9	Inc. seg. avg.	0.168	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.9		47.0	Inc. frq. avg.	0.163	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
l: az 139.8 el 48.9 pa -31.4		n: az 164.0 el 49.1 pa -11.6		u, v (fr/asec)	-1861.262 -720.698	Data rate(Mb/s): 2048	t_cohere infinite			

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//In..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//In.W.308.3MP2MB simultaneous interpolator



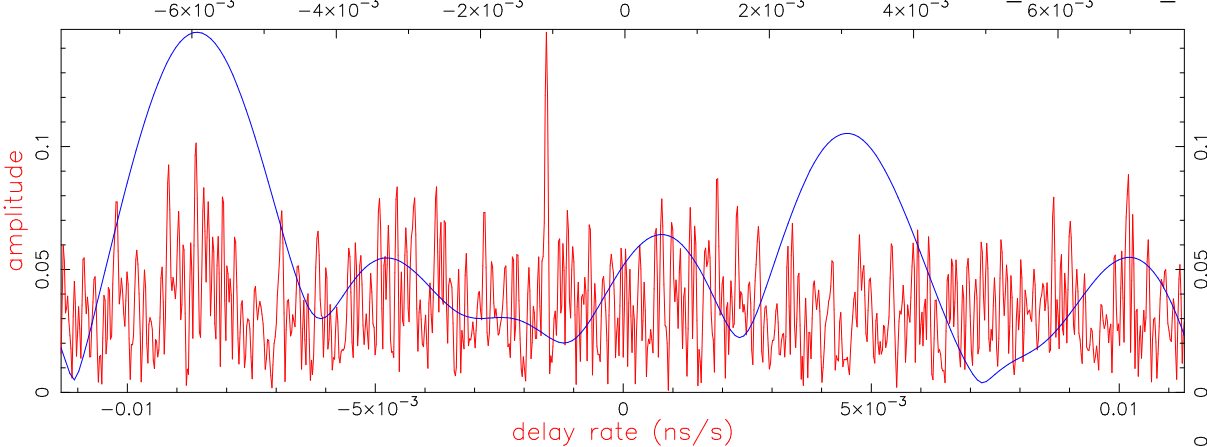
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

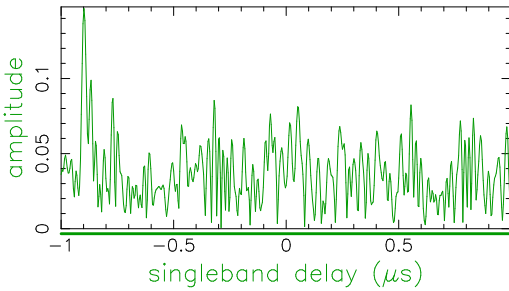
VLBA\_MK - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

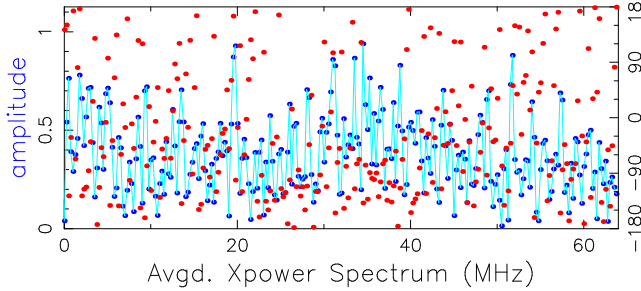


Fringe quality 0

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

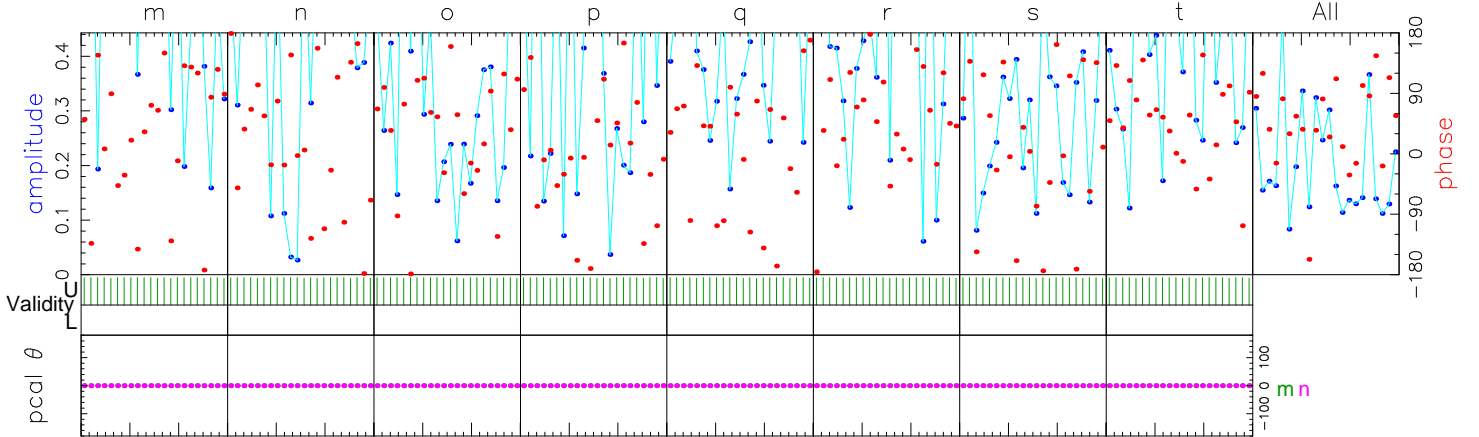


delay rate (ns/s)



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	Search (1024X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.0	Inc. seg. avg.	0.150	Inc. frq. avg.	0.146	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	58.5	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

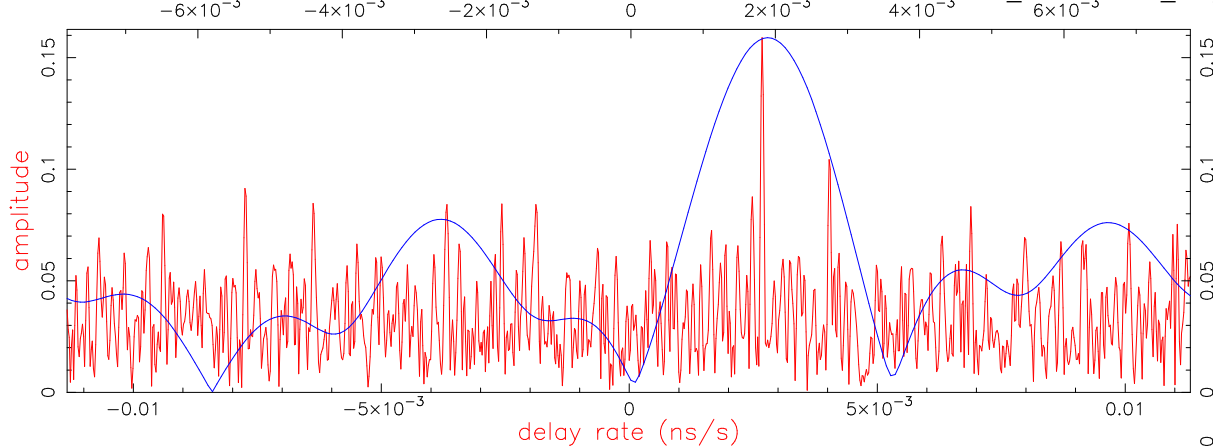
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

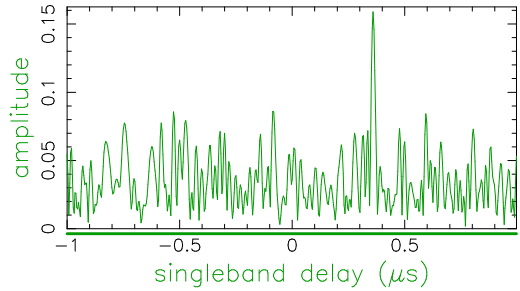
VLBA\_MK - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

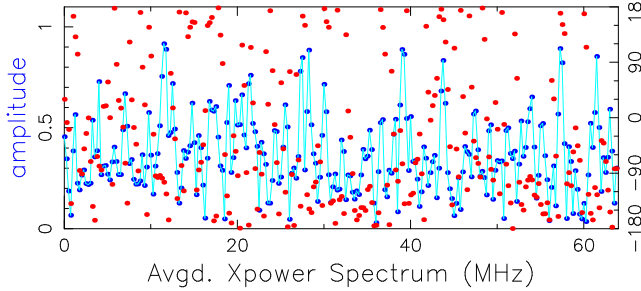


Fringe quality 0

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

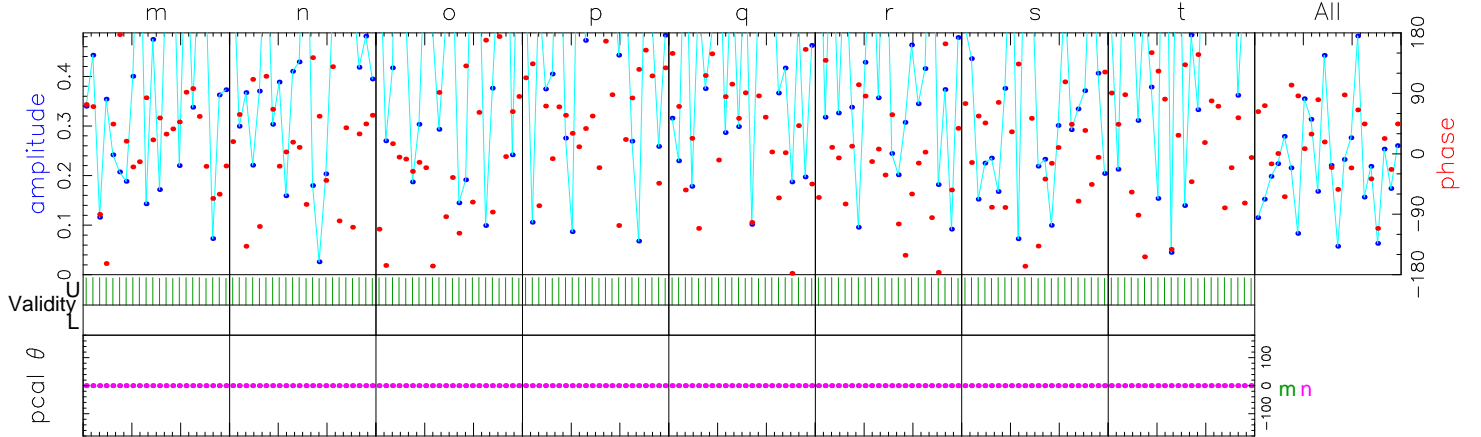


delay rate (ns/s)



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)		Apriori accel (us/s/s)	5.36887771296E-05	Resid phase (deg)	22.2	+/-	19.7

ph/seg (deg)	55.1	Theor.	46.2	Amplitude	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	78.7	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	33.9	Inc. seg. avg.	0.174	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.5	Inc. frq. avg.	0.168	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.211.3MP2MB



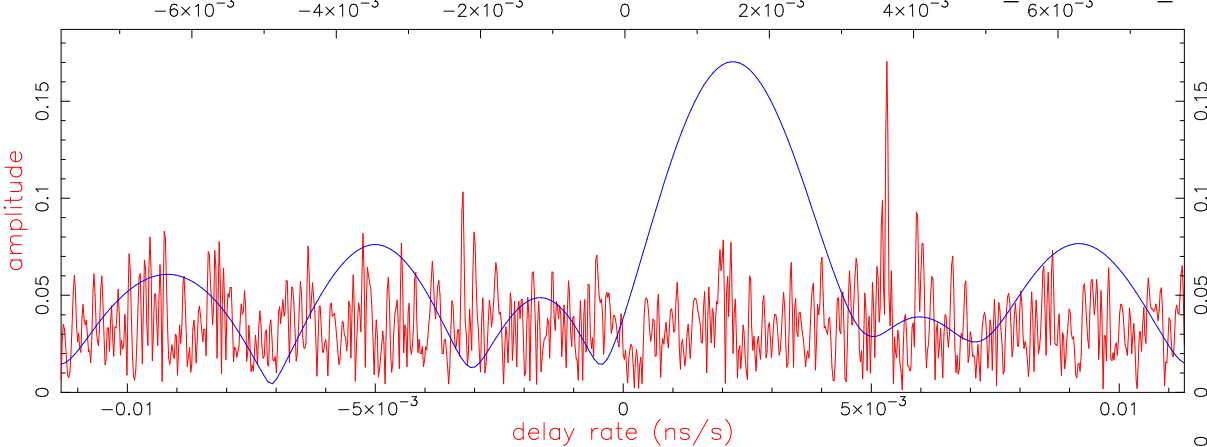
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mn

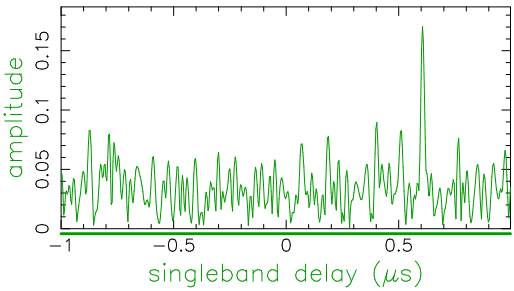
VLBA\_MK - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)

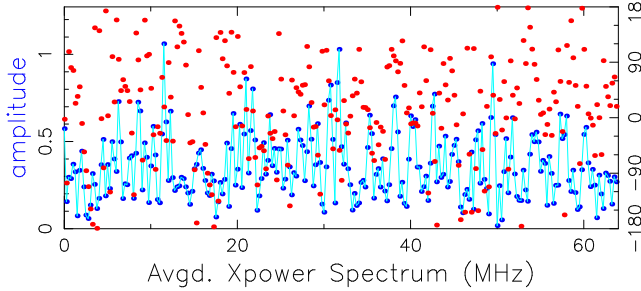


Fringe quality 0

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

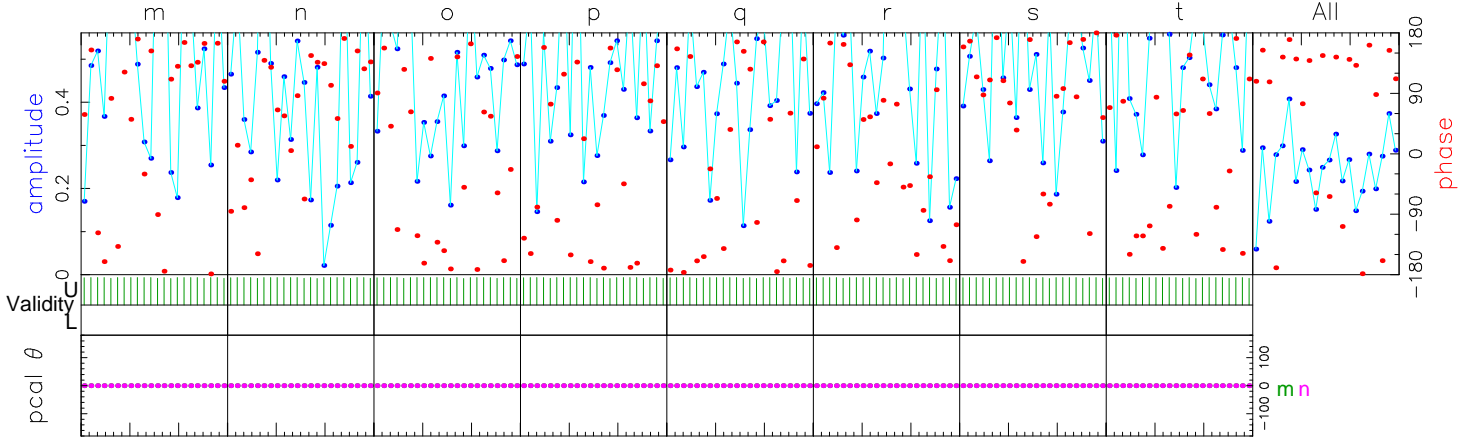


delay rate (ns/s)



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

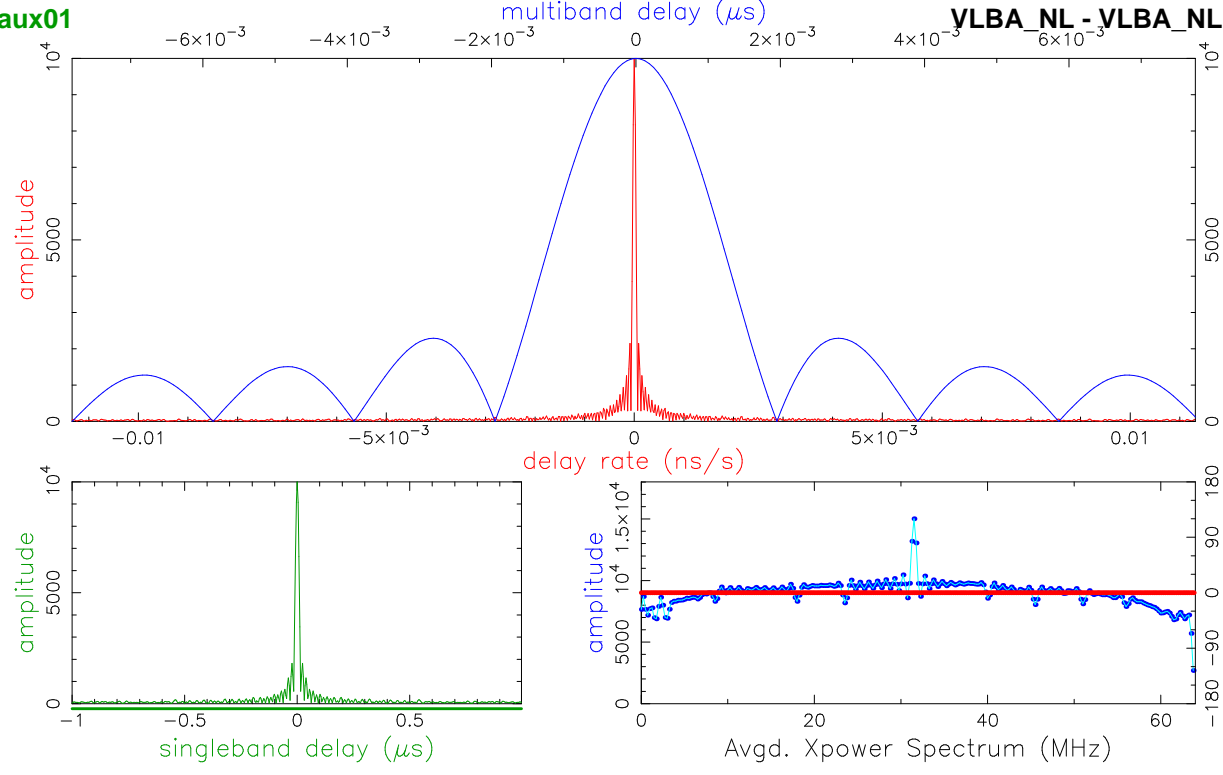
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mn.W228.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, nn

VLBA\_NL - VLBA\_NL, fgroup W, pol LL

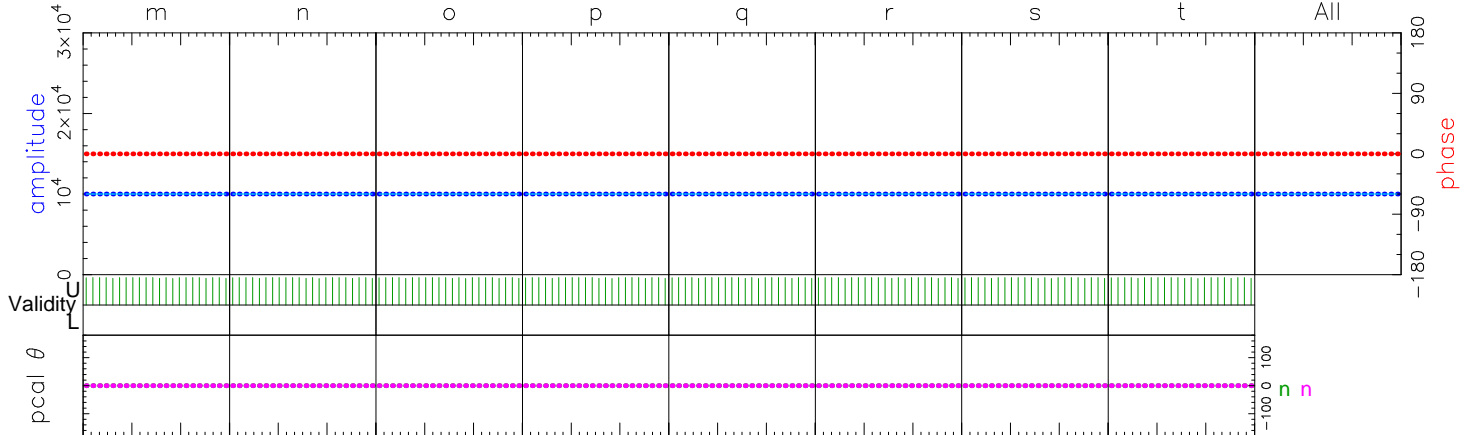


Fringe quality 9

SNR 365728.4  
 Int time 178.864  
 Amp 10000.002  
 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  
 2025:041:175955  
 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		
n	0	0	0	0	0	0	0	0		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	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 +/- 2.4E-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

RMS Theor. Amplitude 10000.002 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.003 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

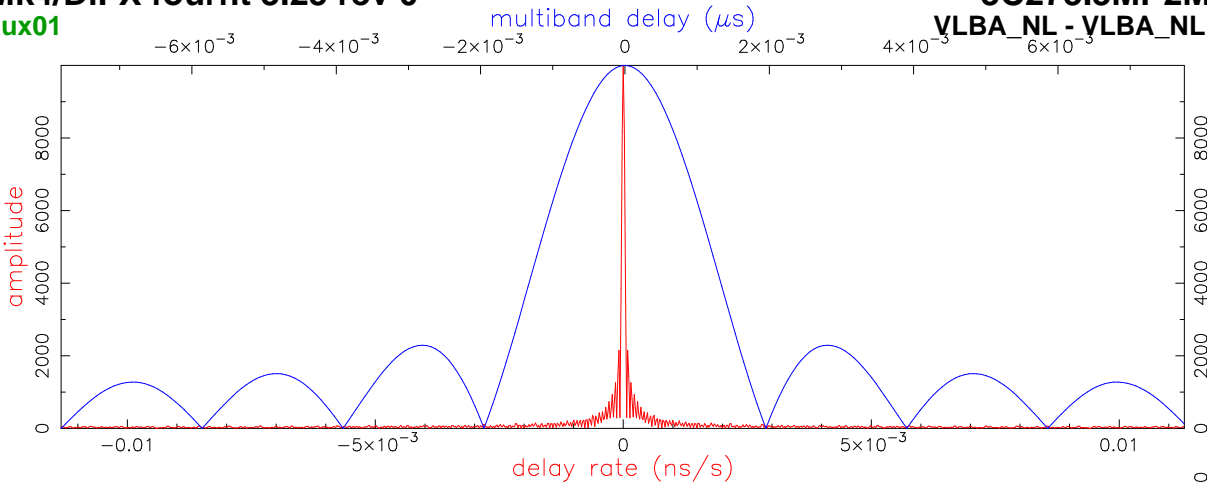
n: az 164.0 el 49.1 pa -11.6 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//nn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//nn.W.222.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

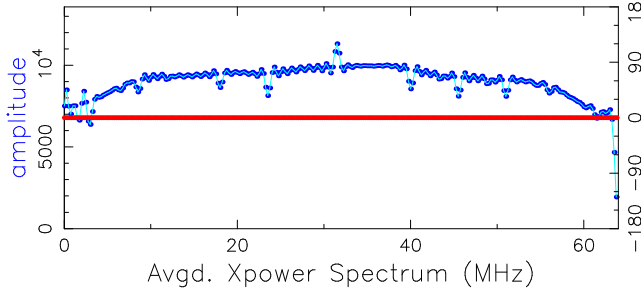
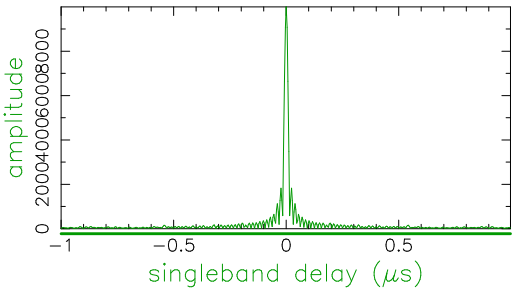
3C273.3MP2MB, No0707, nn

VLBA\_NL - VLBA\_NL, fgroup W, pol RR



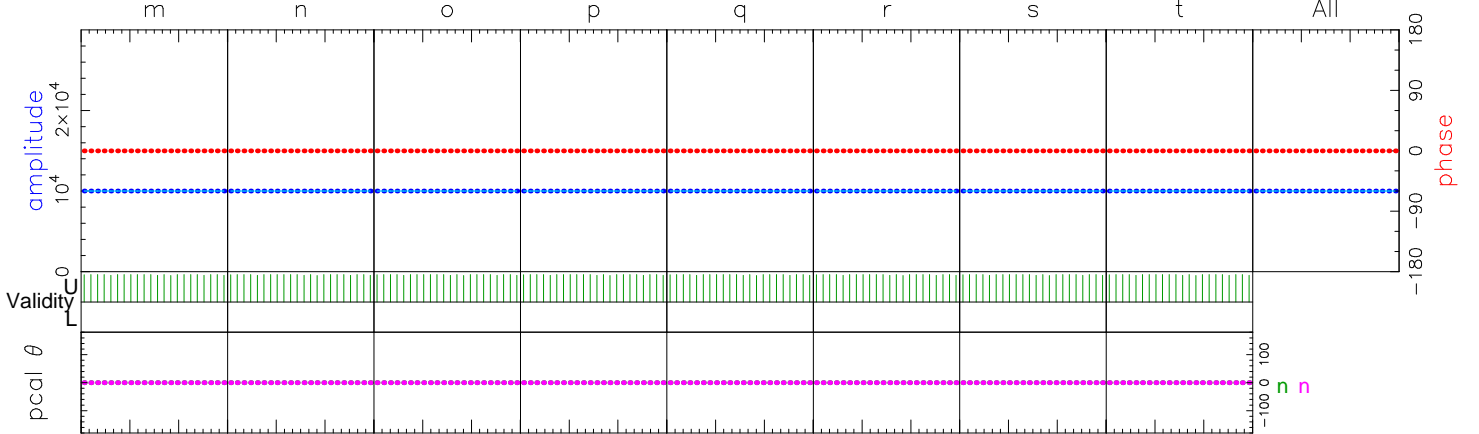
Fringe quality 9

SNR 365728.4  
 Int time 178.864  
 Amp 9999.999  
 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  
 2025:041:175957  
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	0	0	0	0	0	0	0	0	Ampl.	10000.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC freqs	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	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 +/- 2.4E-08  
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 164.0 el 49.1 pa -11.6 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//nn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//nn.W.232.3MP2MB

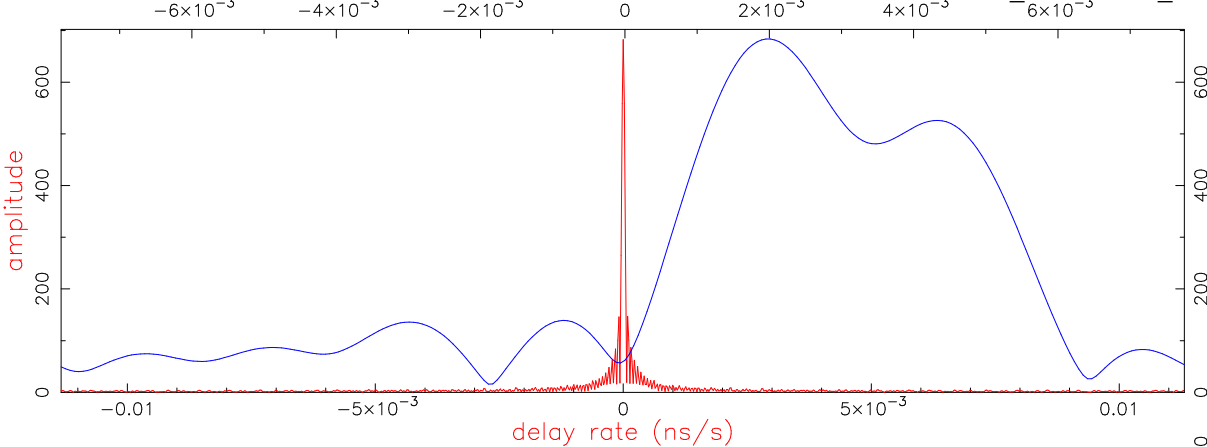
Mk4/DiFX fourfit 3.25 rev 0

aux01

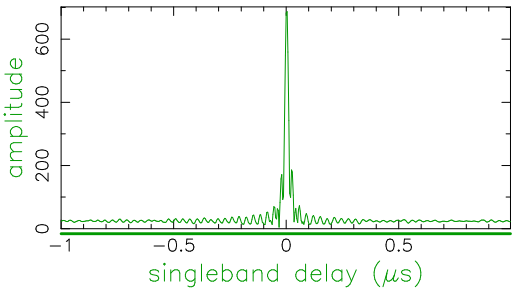
3C273.3MP2MB, No0707, nn

VLBA\_NL - VLBA\_NL, fgroup W, pol LR

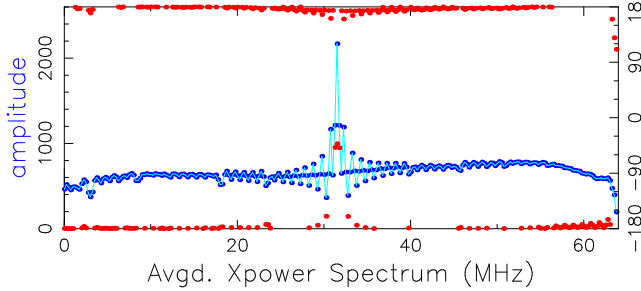
multiband delay ( $\mu$ s)



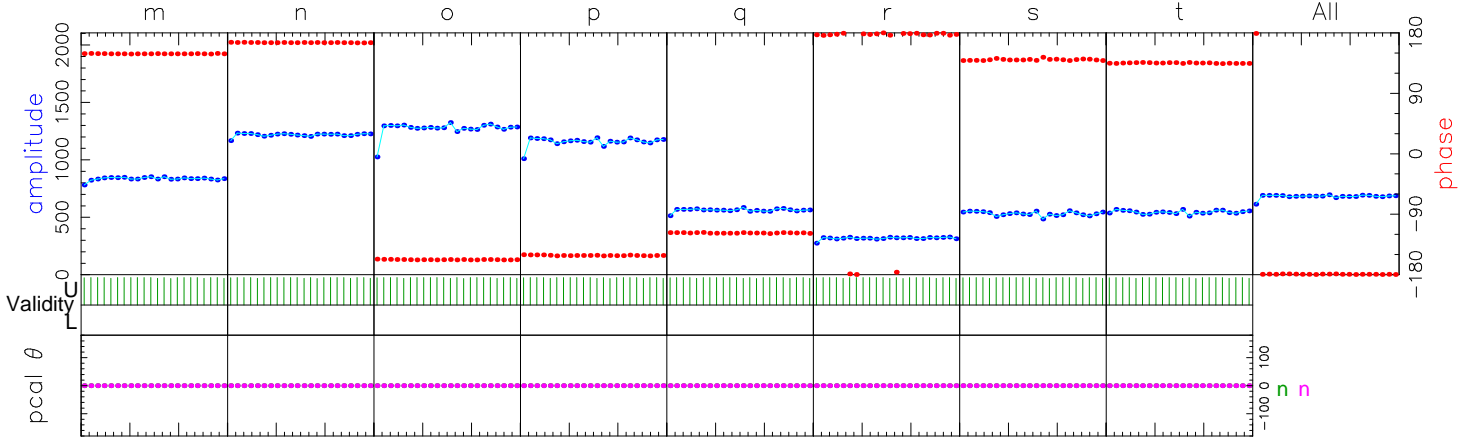
Fringe quality 5  
 Error code G  
 SNR 25677.3  
 Int time 178.863  
 Amp 702.086  
 Phase -179.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002076  
 MBD 0.002052  
 Fringe rate (Hz)  
 0.000001  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2025:041:175959  
 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
	148.8	165.4	-157.5	-151.2	-117.8	178.5	139.9	135.0	Phase	-179.3
	836.0	1218.5	1273.2	1159.0	562.6	317.5	532.1	545.1	Ampl.	805.5
	258.1	257.6	257.7	257.6	258.1	256.9	257.5	257.3	Sbd box	257.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.05165625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.05166E-03	+/-	4.2E-08
Sband delay (usec)	2.07575000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.07575E-03	+/-	3.4E-07
Phase delay (usec)	-5.78195285539E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.78195E-06	+/-	1.4E-10
Delay rate (us/s)	7.08557619584E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.08558E-12	+/-	1.4E-12
Total phase (deg)	-179.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-179.3	+/-	0.0

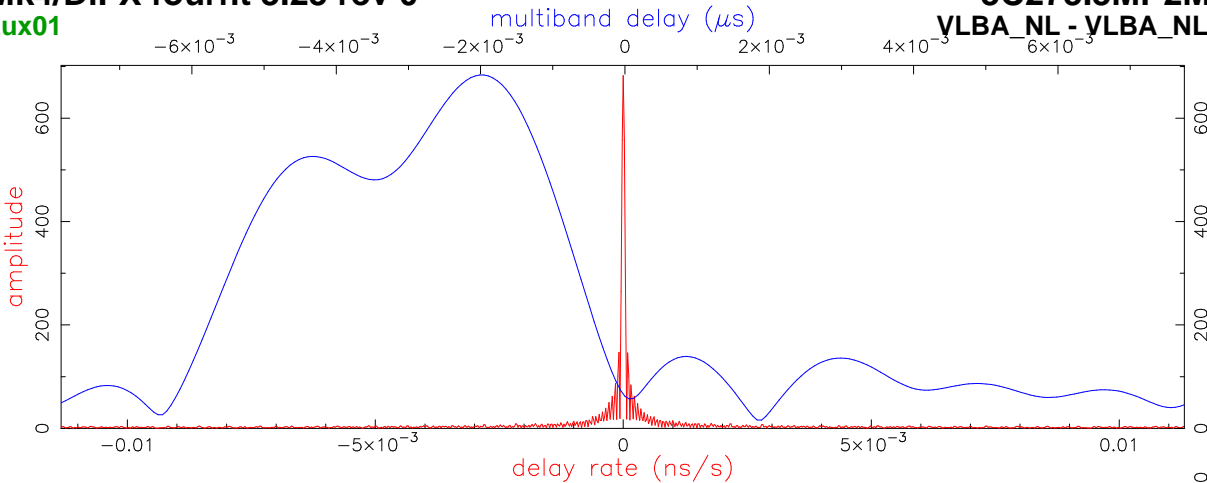
ph/seg (deg) 0.4 0.0 Theor. Amplitude 702.086 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 3.6 0.0 Search (1024X32) 683.317 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 40.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.4 0.0 Inc. seg. avg. 682.452 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 n: az 164.0 el 49.1 pa -11.6 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/nn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/nn.W.238.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

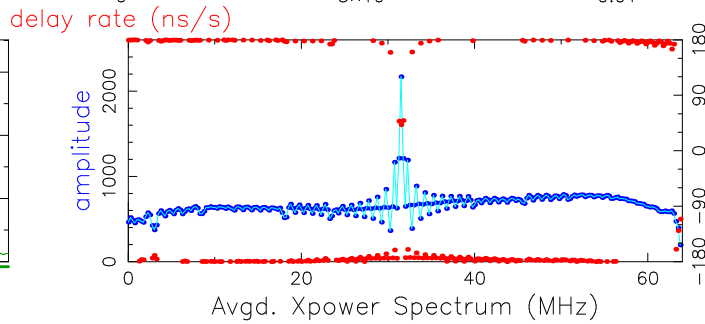
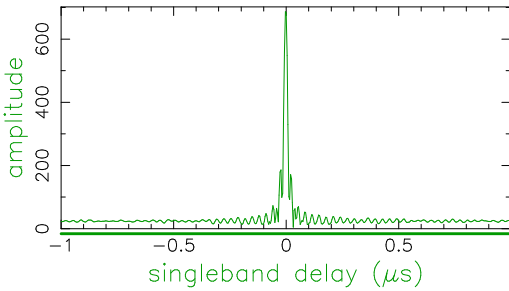
aux01

3C273.3MP2MB, No0707, nn

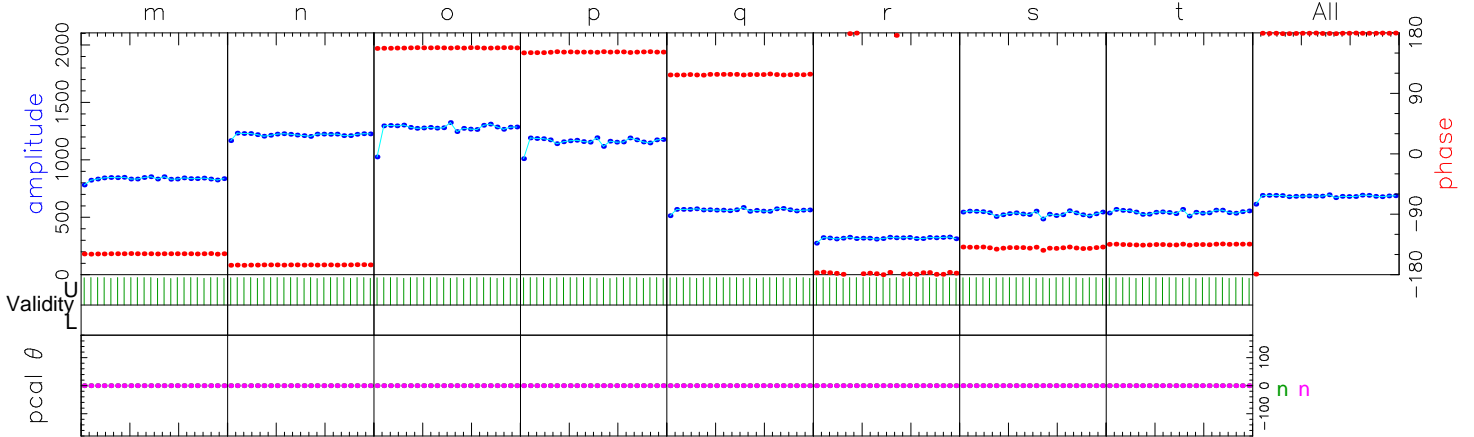
VLBA\_NL - VLBA\_NL, fgroup W, pol RL



Fringe quality 5  
 Error code G  
 SNR 25677.3  
 Int time 178.863  
 Amp 702.086  
 Phase 179.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.002076  
 MBD -0.002052  
 Fringe rate (Hz)  
 -0.000001  
 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  
 2025:041:180001  
 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
	-148.8	-165.4	157.5	151.2	117.8	-178.5	-139.9	-135.0	Phase	179.3
	836.0	1218.5	1273.2	1159.0	562.6	317.5	532.1	545.1	Ampl.	805.5
	255.9	256.4	256.3	256.4	255.9	257.1	256.5	256.7	Sbd box	256.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -2.05165625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -2.05166E-03 +/- 4.2E-08  
 Sband delay (usec) -2.07575000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.07575E-03 +/- 3.4E-07  
 Phase delay (usec) 5.78195285542E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.78195E-06 +/- 1.4E-10  
 Delay rate (us/s) -7.08557619584E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -7.08558E-12 +/- 1.4E-12  
 Total phase (deg) 179.3 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 179.3 +/- 0.0

RMS Theor. Amplitude 702.086 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.4 0.0 Search (1024X32) 683.317 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 3.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 40.9 0.0 Inc. seg. avg. 682.452 Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 51.4 0.0 Inc. frq. avg. 805.507 Data rate (Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 164.0 el 49.1 pa -11.6 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/nn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/nn.W.248.3MP2MB



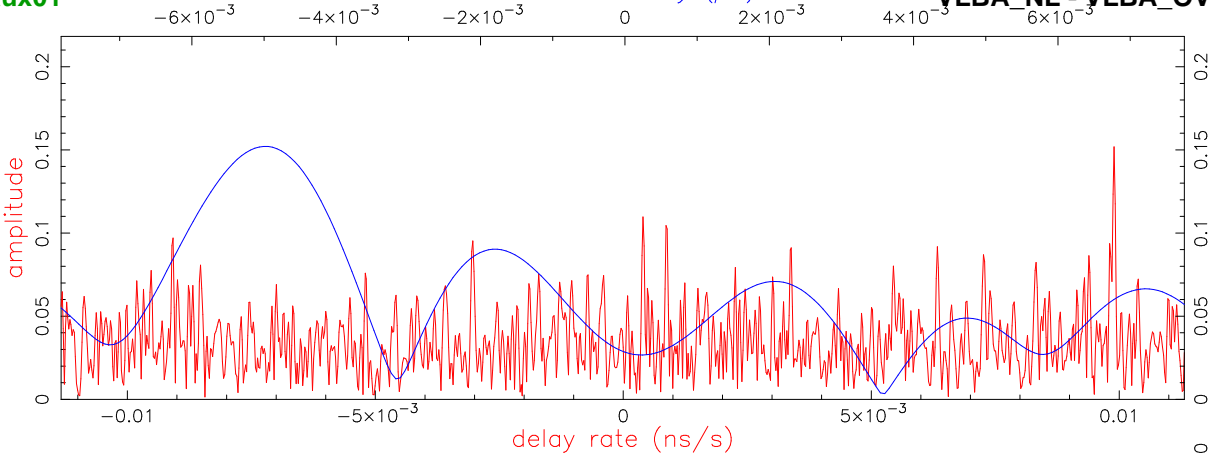
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

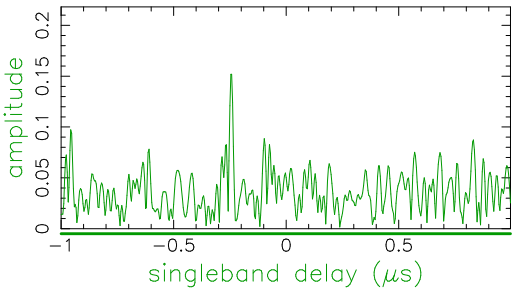
VLBA\_NL - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

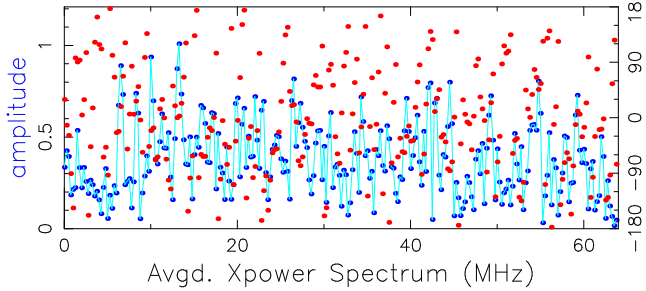


Fringe quality 0

SNR 5.6  
 Int time 174.763  
 Amp 0.218  
 Phase 120.2  
 PFD 8.9e-01  
 Delays (us)  
 SBD -0.244177  
 MBD -0.005063  
 Fringe rate (Hz)  
 0.854478  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

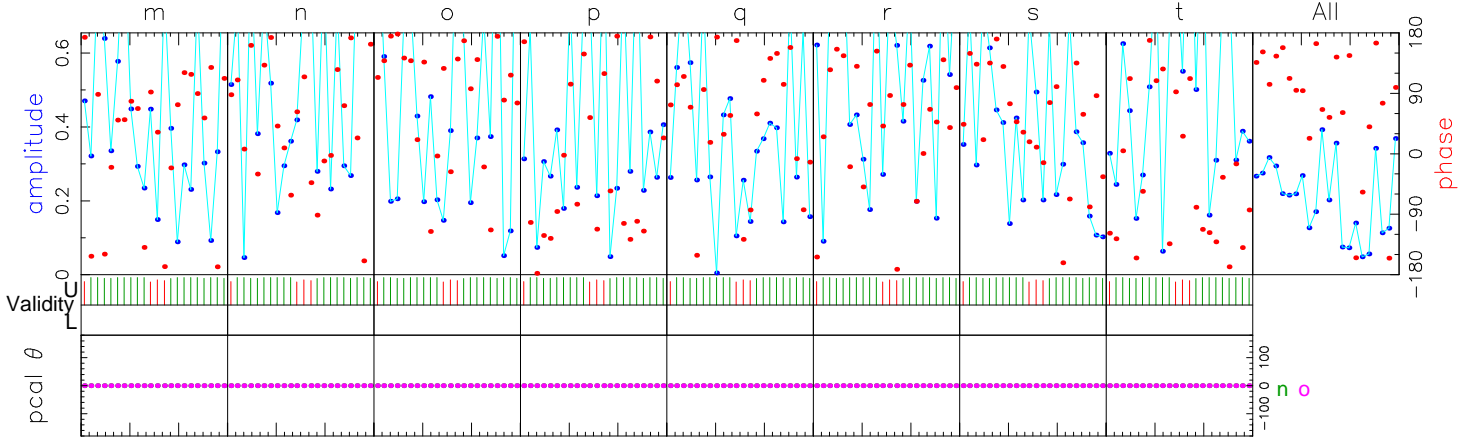


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175957  
 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
	101.3	108.0	135.3	-152.9	100.1	118.4	77.1	-154.7	Phase	120.2
	0.3	0.2	0.4	0.2	0.3	0.4	0.2	0.1	Ampl.	0.2
	450.5	272.0	194.7	91.8	94.6	195.6	188.3	391.8	Sbd box	194.5
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.07330355084E+03 Apriori delay (usec) 2.07354298900E+03 Resid mbdelay (usec) -5.06316E-03 +/- 1.9E-04  
 Sband delay (usec) 2.07329881175E+03 Apriori clock (usec) -2.5340572E+01 Resid sbdelay (usec) -2.44177E-01 +/- 1.5E-03  
 Phase delay (usec) 2.07354299288E+03 Apriori clockrate (us/s) -1.8401209E-07 Resid phdelay (usec) 3.87761E-06 +/- 6.6E-07  
 Delay rate (us/s) -5.37619525684E-01 Apriori rate (us/s) -5.37629445332E-01 Resid rate (us/s) 9.91965E-06 +/- 6.4E-09  
 Total phase (deg) 146.3 Apriori accel (us/s/s) -1.09305270916E-05 Resid phase (deg) 120.2 +/- 20.4

RMS Theor. Amplitude 0.218 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 62.6 47.5 Search (1024X32) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 75.5 82.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 54.5 28.8 Inc. seg. avg. 0.218 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 48.8 50.2 Inc. frq. avg. 0.232 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 164.0 el 49.1 pa -11.6 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 3075.309 510.301 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.233.3MP2MB

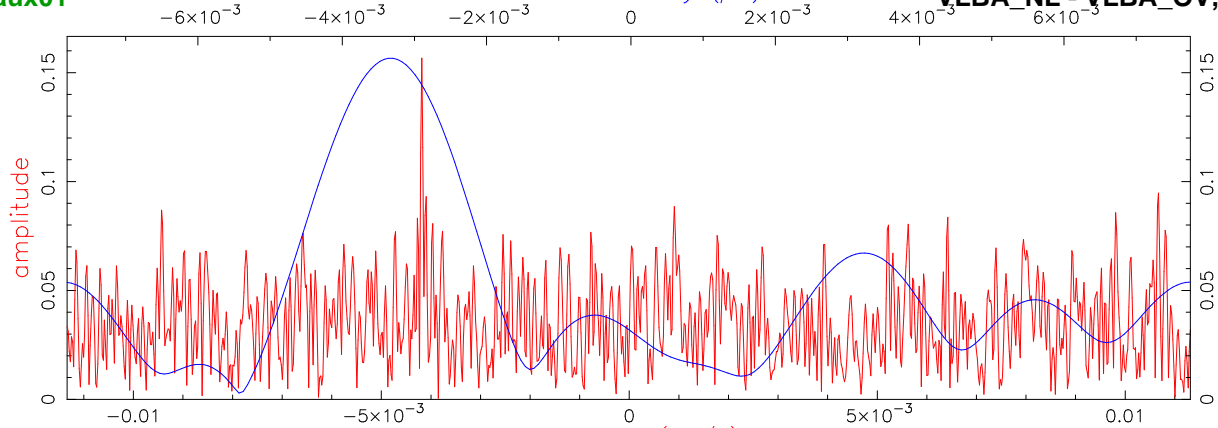
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

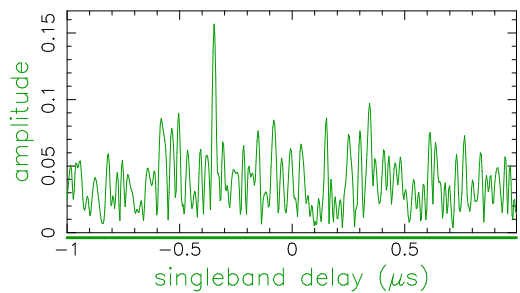
VLBA\_NL - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

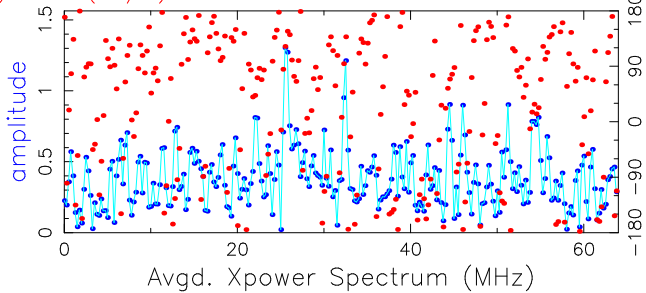


Fringe quality 0

SNR 5.7  
 Int time 174.763  
 Amp 0.167  
 Phase 122.7  
 PFD 7.9e-01  
 Delays (us)  
 SBD -0.346727  
 MBD -0.003329  
 Fringe rate (Hz)  
 -0.360408  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

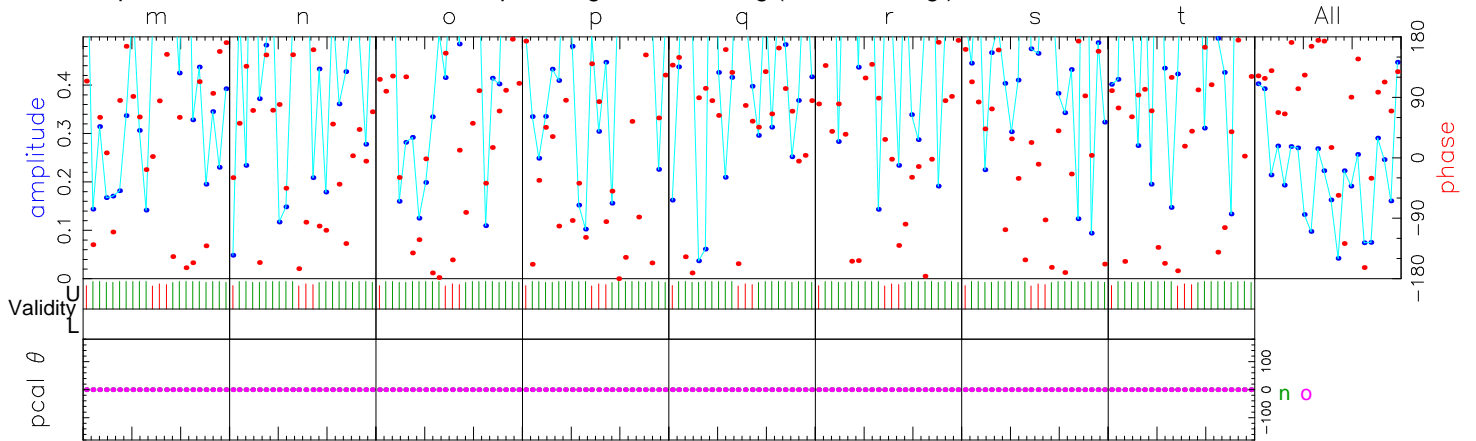


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175959  
 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
	133.9	89.0	118.1	170.1	110.3	103.4	131.1	131.7	Phase	122.7
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	42.8	293.0	301.0	283.3	92.8	468.7	264.5	29.9	Sbd box	168.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	2.07319591021E+03		Apriori delay (usec)		2.07354298900E+03		Resid mbdelay (usec)		-3.32879E-03	+/- 1.9E-04
Sband delay (usec)	2.07319626225E+03		Apriori clock (usec)		-2.5340572E+01		Resid sbdelay (usec)		-3.46727E-01	+/- 1.5E-03
Phase delay (usec)	2.07354299295E+03		Apriori clockrate (us/s)		-1.8401209E-07		Resid phdelay (usec)		3.95585E-06	+/- 6.5E-07
Delay rate (us/s)	-5.37633629312E-01		Apriori rate (us/s)		-5.37629445332E-01		Resid rate (us/s)		-4.18398E-06	+/- 6.3E-09
Total phase (deg)	148.7		Apriori accel (us/s/s)		-1.09305270916E-05		Resid phase (deg)		122.7	+/- 20.1

ph/seg (deg) 68.6 46.9 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 77.6 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.5 28.5 Inc. seg. avg. 0.176 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.4 49.7 Inc. frq. avg. 0.157 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 n: az 164.0 el 49.1 pa -11.6 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 3075.309 510.301 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.239.3MP2MB

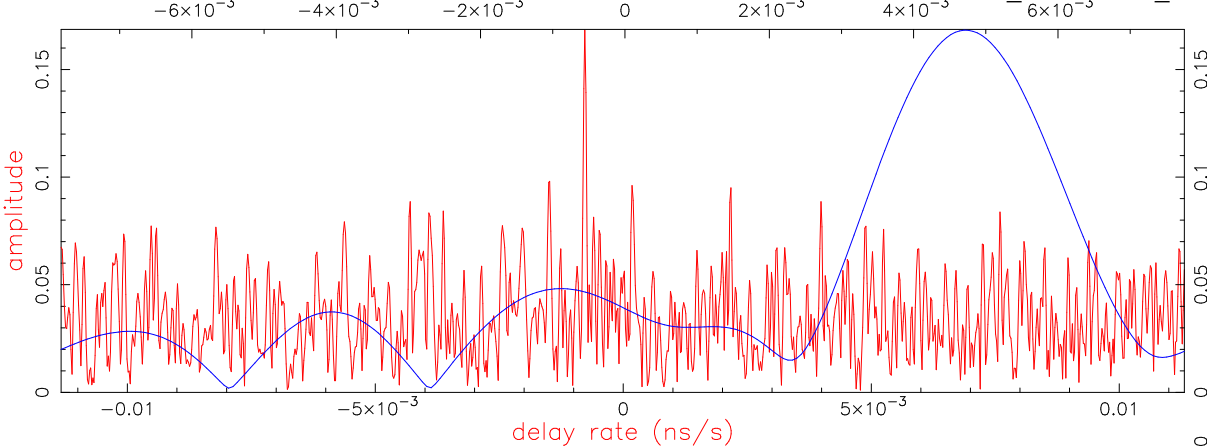
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

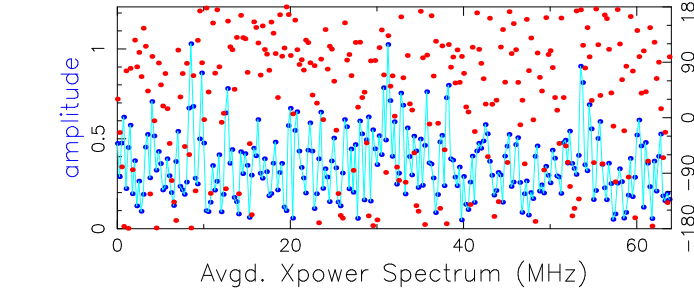
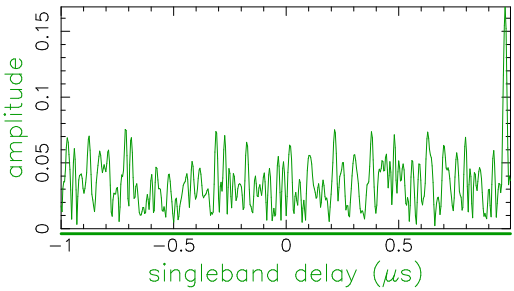
VLBA\_NL - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)



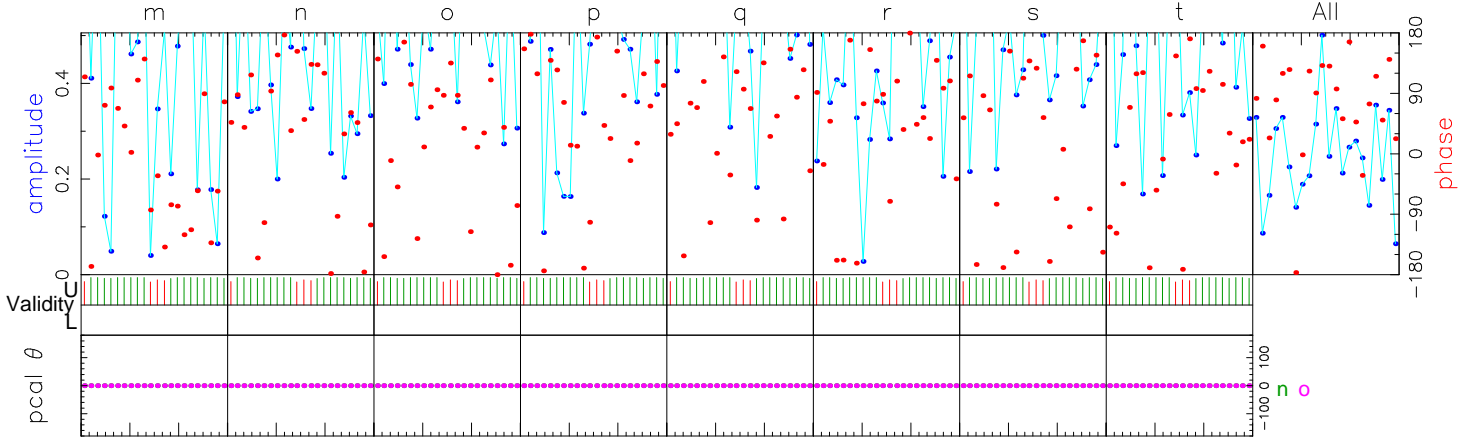
Fringe quality 0

SNR 6.1  
 Int time 174.763  
 Amp 0.169  
 Phase 99.3  
 PFD 1.4e-01  
 Delays (us)  
 SBD 0.972528  
 MBD 0.004717  
 Fringe rate (Hz)  
 -0.067769  
 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  
 2025:041:180001  
 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
	74.8	117.2	89.7	102.4	83.1	101.5	140.2	69.7	Phase	99.3
	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	Ampl.	0.2
	161.2	389.4	19.2	506.3	505.2	503.8	212.5	373.7	Sbd box	506.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.07451645621E+03 Apriori delay (usec) 2.07354298900E+03 Resid mbdelay (usec) 4.71721E-03 +/- 1.8E-04  
 Sband delay (usec) 2.07451551675E+03 Apriori clock (usec) -2.5340572E+01 Resid sbdelay (usec) 9.72528E-01 +/- 1.4E-03  
 Phase delay (usec) 2.07354299220E+03 Apriori clockrate (us/s) -1.8401209E-07 Resid phdelay (usec) 3.20128E-06 +/- 6.1E-07  
 Delay rate (us/s) -5.37630232063E-01 Apriori rate (us/s) -5.37629445332E-01 Resid rate (us/s) -7.86731E-07 +/- 5.9E-09  
 Total phase (deg) 125.3 Apriori accel (us/s/s) -1.09305270916E-05 Resid phase (deg) 99.3 +/- 18.8

RMS Theor. Amplitude 0.169 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 56.5 43.9 Search (1024X32) 0.161 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 74.2 76.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 25.3 26.6 Inc. seg. avg. 0.191 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 39.0 46.5 Inc. frq. avg. 0.162 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 164.0 el 49.1 pa -11.6 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 3075.309 510.301 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.249.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

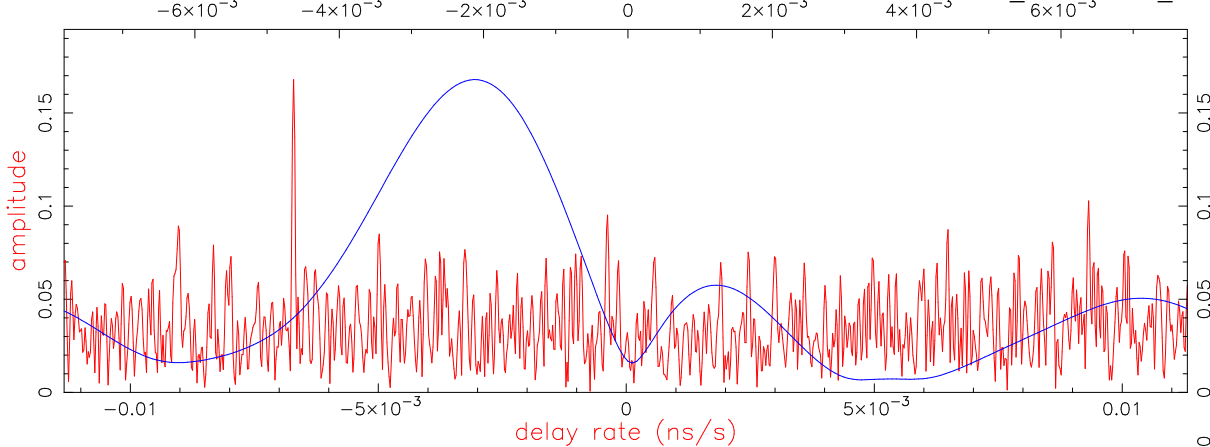
aux01

3C273.3MP2MB, No0707, no

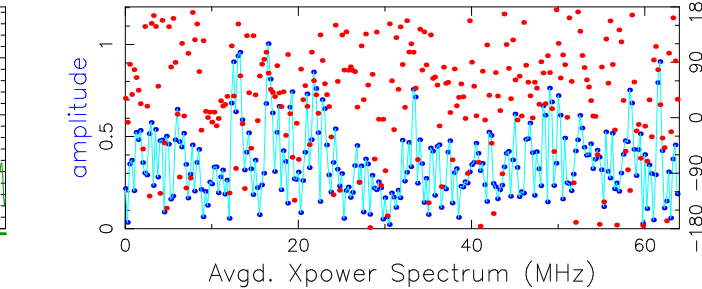
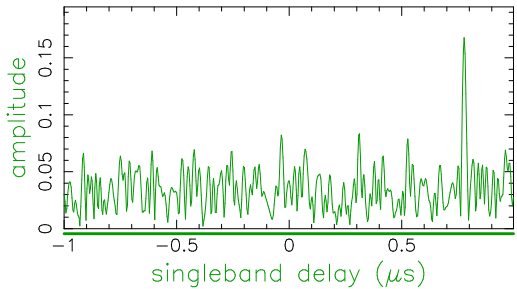
VLBA\_NL - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

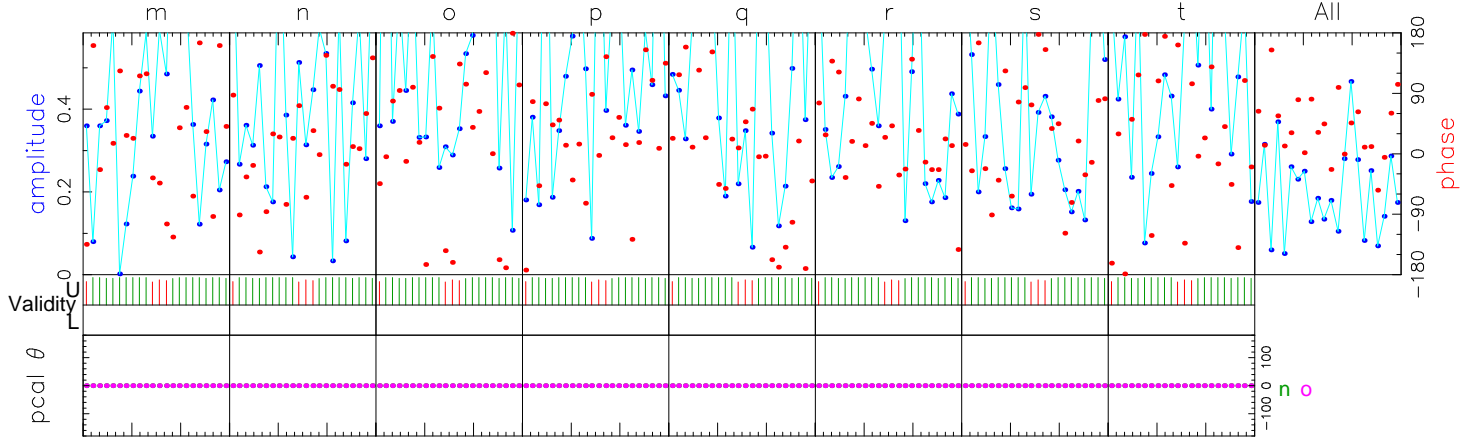


SNR 6.1  
 Int time 174.763  
 Amp 0.195  
 Phase 38.4  
 PFD 1.5e-01  
 Delays (us)  
 SBD 0.777227  
 MBD -0.002128  
 Fringe rate (Hz)  
 -0.578685  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180003  
 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	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		456.0
n	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
n:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	2.07432211108E+03	Apriori delay (usec)	2.07354298900E+03	Resid mbdelay (usec)	-2.12792E-03	+/-	1.8E-04
Sband delay (usec)	2.07432021600E+03	Apriori clock (usec)	-2.5340572E+01	Resid sbdelay (usec)	7.77227E-01	+/-	1.4E-03
Phase delay (usec)	2.07354299024E+03	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	1.23765E-06	+/-	6.1E-07
Delay rate (us/s)	-5.37636163287E-01	Apriori rate (us/s)	-5.37629445332E-01	Resid rate (us/s)	-6.71796E-06	+/-	5.9E-09
Total phase (deg)	64.4	Apriori accel (us/s/s)	-1.09305270916E-05	Resid phase (deg)	38.4	+/-	18.9

ph/seg (deg)	46.4	Theor.	44.0	Amplitude	0.195 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	66.3	Search (1024X32)	0.161	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	28.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.8	Inc. seg. avg.	0.183	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.190	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

n: az 164.0 el 49.1 pa -11.6      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) 3075.309 510.301      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.260.3MP2MB

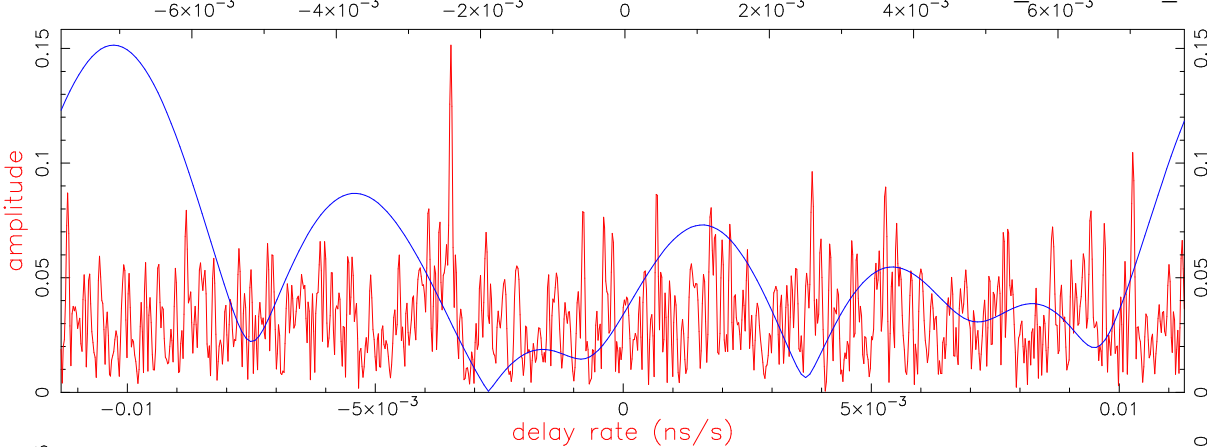
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, np

VLBA\_NL - VLBA\_PT, fgroup W, pol LL

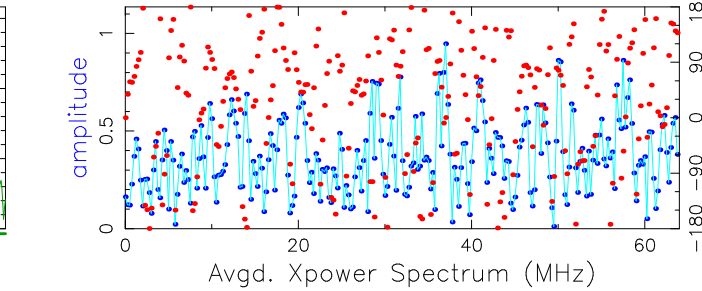
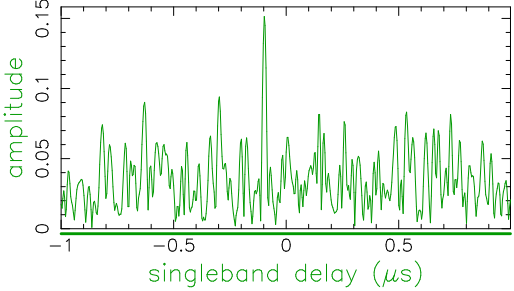
multiband delay ( $\mu$ s)



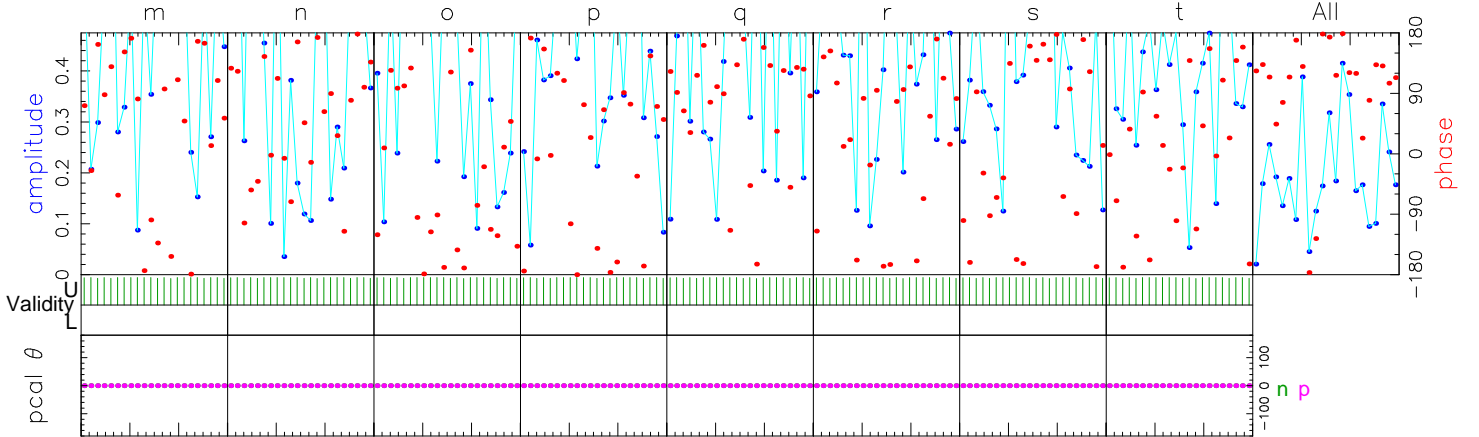
Fringe quality 0

SNR 5.6  
 Int time 178.644  
 Amp 0.158  
 Phase 129.0  
 PFD 9.6e-01  
 Delays (us)  
 SBD -0.096660  
 MBD -0.007071  
 Fringe rate (Hz)  
 -0.299151  
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-2.36529703270E+01	Apriori delay (usec)	-2.35521495632E+01	Resid mbdelay (usec)	-7.07076E-03	+/-	2.0E-04
Sband delay (usec)	-2.36488098132E+01	Apriori clock (usec)	-5.9879608E+00	Resid sbdelay (usec)	-9.66602E-02	+/-	1.5E-03
Phase delay (usec)	-2.35521454020E+01	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	4.16120E-06	+/-	6.6E-07
Delay rate (us/s)	-3.72146605630E-01	Apriori rate (us/s)	-3.72143132781E-01	Resid rate (us/s)	-3.47285E-06	+/-	6.4E-09
Total phase (deg)	70.2	Apriori accel (us/s/s)	4.79753924669E-07	Resid phase (deg)	129.0	+/-	20.6

ph/seg (deg)	RMS 46.6	Theor. 48.3	Amplitude Search (1024X32)	0.158 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.1	84.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	45.7	29.1	Inc. seg. avg.	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 (%)	49.2	50.8	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 164.0 el 49.1 pa -11.6      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 2132.968 907.244      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//np..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//np.W.231.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

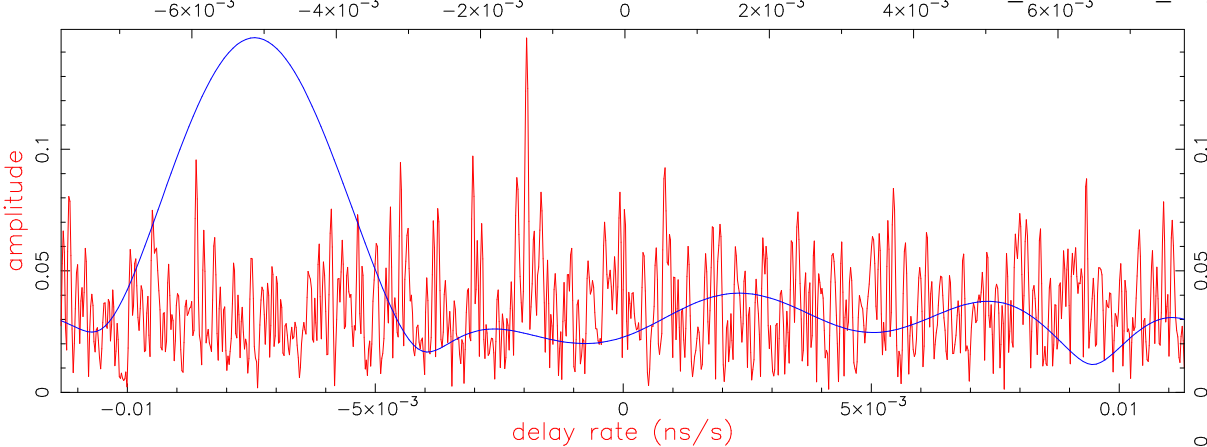
aux01

3C273.3MP2MB, No0707, np

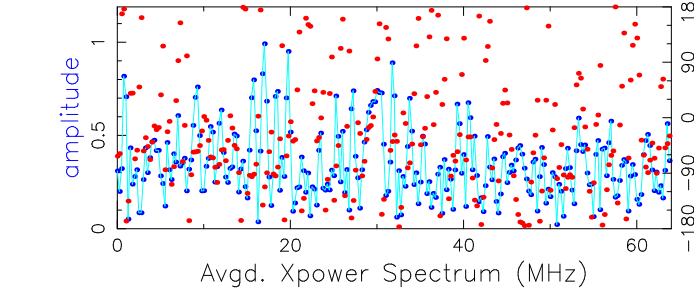
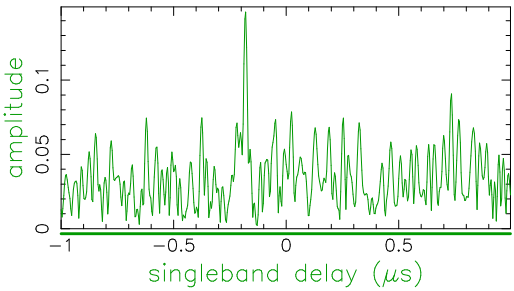
VLBA\_NL - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

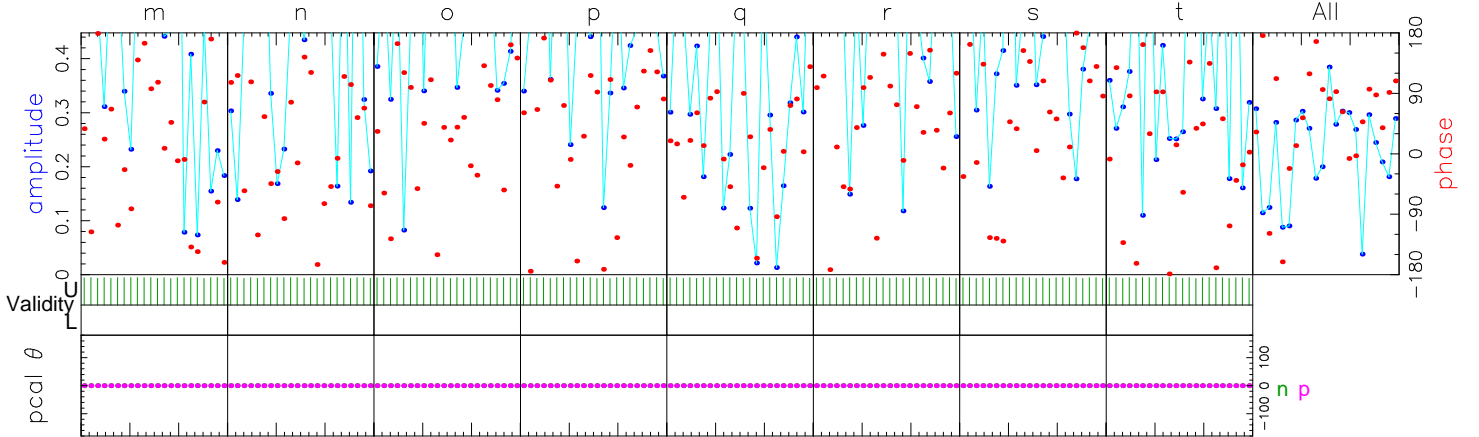


SNR 5.4  
 Int time 178.645  
 Amp 0.149  
 Phase 72.9  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.181027  
 MBD -0.005183  
 Fringe rate (Hz)  
 -0.167846  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175959  
 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
	74.7	65.7	47.1	103.0	40.6	85.9	81.6	62.7	Phase	72.9
	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	284.1	72.7	15.9	40.4	251.2	212.4	175.5	485.7	Sbd box	210.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.37292076824E+01	Apriori delay (usec)	-2.35521495632E+01	Resid mbdelay (usec)	-5.18312E-03	+/-	2.0E-04
Sband delay (usec)	-2.37331765632E+01	Apriori clock (usec)	-5.9879608E+00	Resid sbdelay (usec)	-1.81027E-01	+/-	1.6E-03
Phase delay (usec)	-2.35521472115E+01	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	2.35173E-06	+/-	6.9E-07
Delay rate (us/s)	-3.72145081304E-01	Apriori rate (us/s)	-3.72143132781E-01	Resid rate (us/s)	-1.94852E-06	+/-	6.6E-09
Total phase (deg)		Apriori accel (us/s/s)	4.79753924669E-07	Resid phase (deg)	72.9	+/-	21.3

ph/seg (deg)	67.2	Theor.	49.8	Amplitude	0.149 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.5		87.0	Search (1024X32)	0.144	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	22.4		30.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.6		52.5	Inc. seg. avg.	0.168	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.138	Data rate(Mb/s): 2048	t_cohere infinite			

n: az 164.0 el 49.1 pa -11.6      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 2132.968 907.244      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//np..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//np.W.237.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

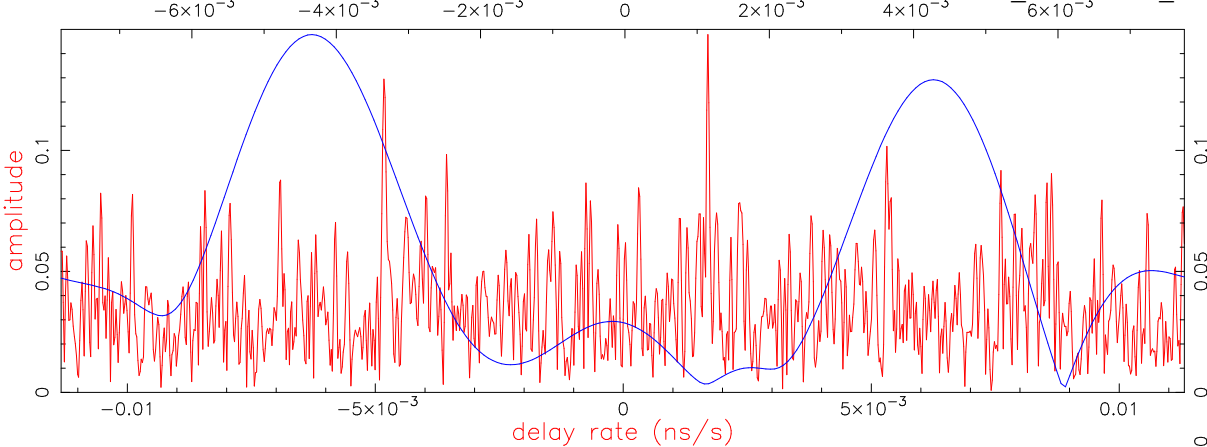
aux01

3C273.3MP2MB, No0707, np

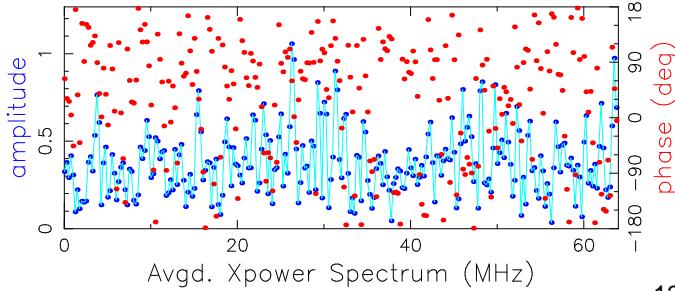
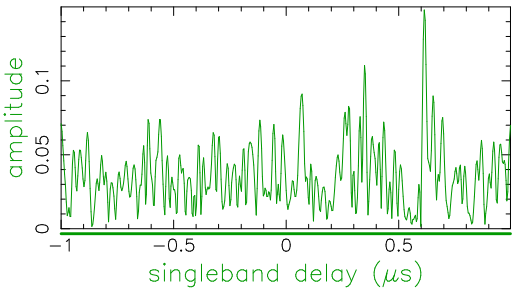
VLBA\_NL - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

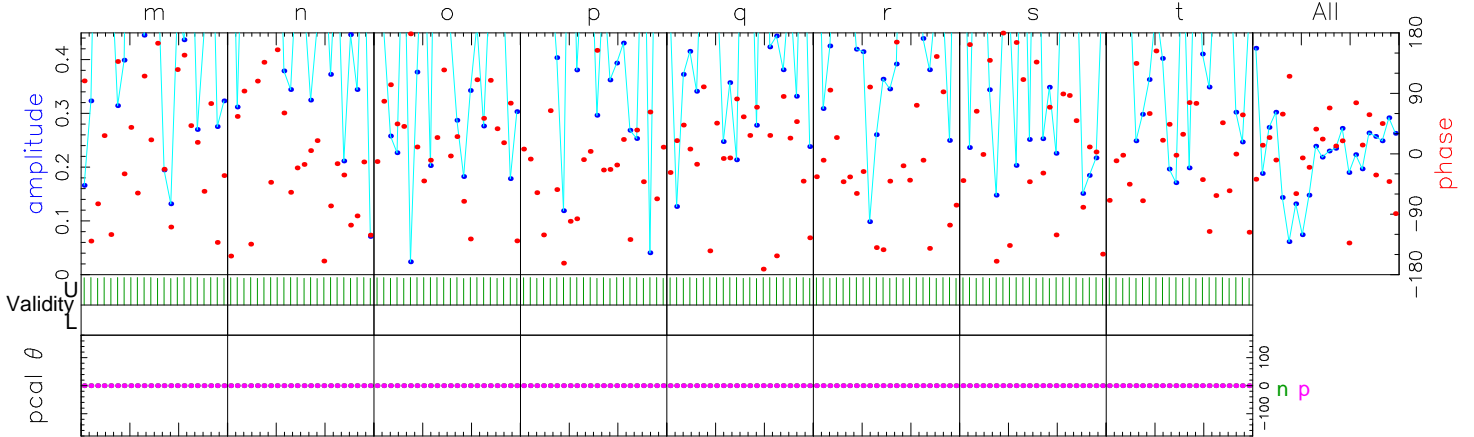


SNR 5.4  
 Int time 178.644  
 Amp 0.150  
 Phase 6.3  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.614210  
 MBD -0.004320  
 Fringe rate (Hz)  
 0.146905  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180001  
 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	-45.4	36.4	-32.2	32.8	-26.6	93.3	-5.9		6.3
	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2		0.2
	329.5	363.7	196.5	414.4	22.7	141.0	226.6	174.8		414.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-2.29314693964E+01		Apriori delay (usec)		-2.35521495632E+01		Resid mbdelay (usec)		-4.31983E-03	+/- 2.0E-04
Sband delay (usec)	-2.29379393132E+01		Apriori clock (usec)		-5.9879608E+00		Resid sbdelay (usec)		6.14210E-01	+/- 1.6E-03
Phase delay (usec)	-2.35521493587E+01		Apriori clockrate (us/s)		-8.1437027E-08		Resid phdelay (usec)		2.04540E-07	+/- 6.8E-07
Delay rate (us/s)	-3.72141427362E-01		Apriori rate (us/s)		-3.72143132781E-01		Resid rate (us/s)		1.70542E-06	+/- 6.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.79753924669E-07		Resid phase (deg)		6.3	+/- 21.1

ph/seg (deg) 55.9 49.5 Search (1024X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.6 86.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 49.6 29.8 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 56.6 52.1 Inc. frq. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 n: az 164.0 el 49.1 pa -11.6 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 2132.968 907.244 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//np..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//np.W.247.3MP2MB

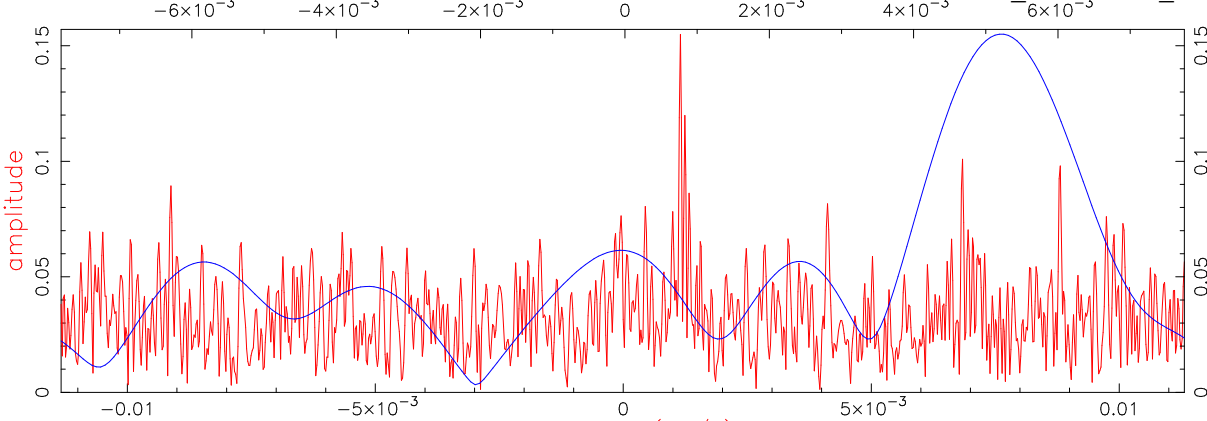
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, np

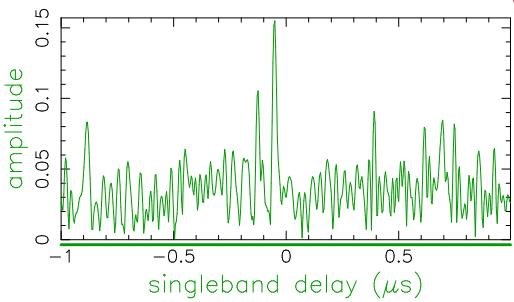
VLBA\_NL - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

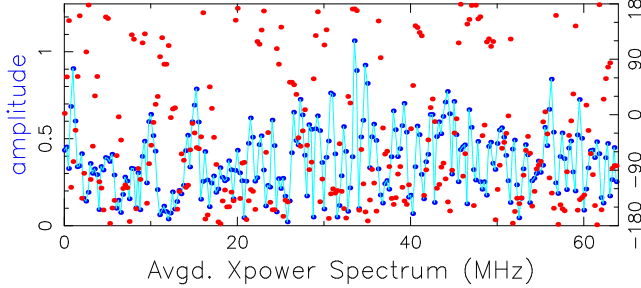


Fringe quality 0

SNR 5.7  
 Int time 178.644  
 Amp 0.157  
 Phase -65.3  
 PFD 7.4e-01  
 Delays (us)  
 SBD -0.052176  
 MBD 0.005162  
 Fringe rate (Hz)  
 0.098599  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

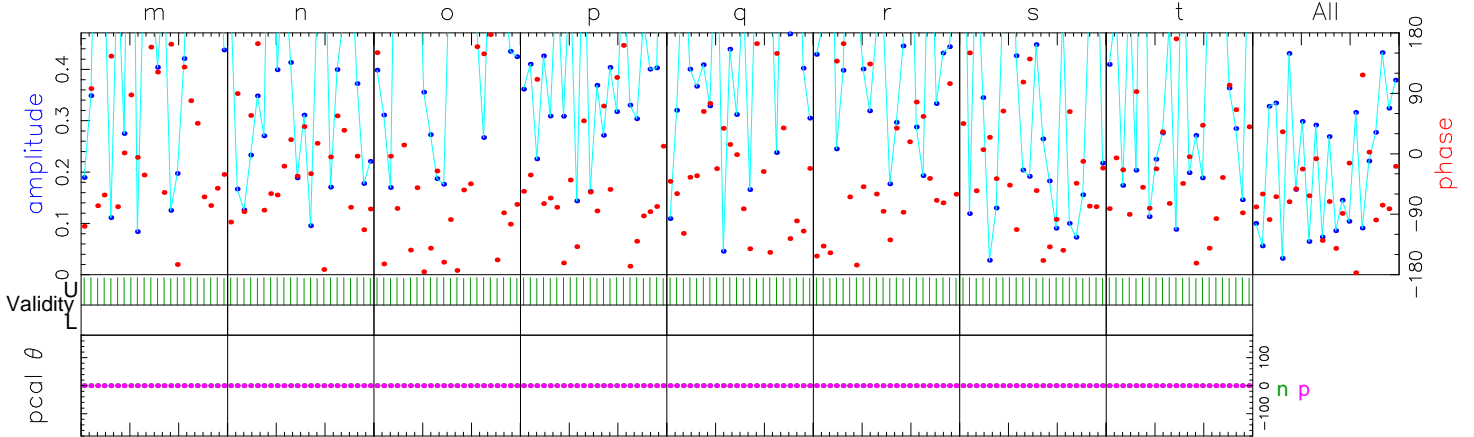


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180003  
 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
	-36.7	-35.1	-117.2	-62.0	-60.0	-86.1	-48.9	-48.1	Phase	-65.3
	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
	331.7	330.6	243.7	367.4	403.9	133.3	369.9	180.0	Sbd box	243.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.36094879814E+01	Apriori delay (usec)	-2.35521495632E+01	Resid mbdelay (usec)	5.16158E-03	+/-	1.9E-04
Sband delay (usec)	-2.36043253132E+01	Apriori clock (usec)	-5.9879608E+00	Resid sbdelay (usec)	-5.21757E-02	+/-	1.5E-03
Phase delay (usec)	-2.35521516697E+01	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	-2.10654E-06	+/-	6.5E-07
Delay rate (us/s)	-3.72141988150E-01	Apriori rate (us/s)	-3.72143132781E-01	Resid rate (us/s)	1.14463E-06	+/-	6.2E-09
Total phase (deg)	-124.1	Apriori accel (us/s/s)	4.79753924669E-07	Resid phase (deg)	-65.3	+/-	20.0

ph/seg (deg)	60.9	Theor.	47.0	Amplitude	0.157 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	90.7		82.0	Search (1024X32)	0.147	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.2		28.3	Inc. seg. avg.	0.165	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.1		49.5	Inc. frq. avg.	0.157	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 164.0 el 49.1 pa -11.6      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 2132.968 907.244      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//np..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//np.W.259.3MP2MB