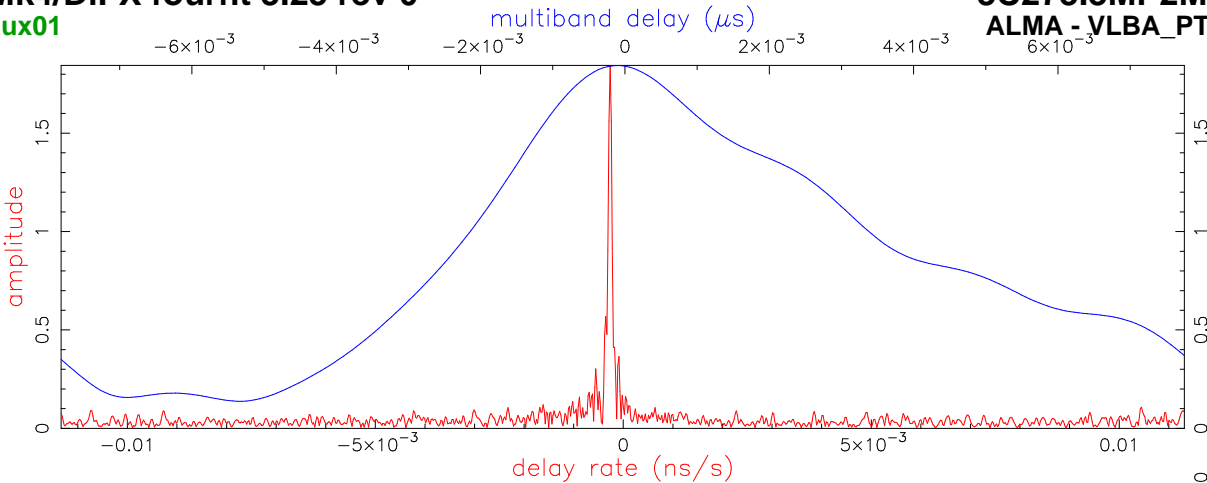


Mk4/DiFX fourfit 3.25 rev 0

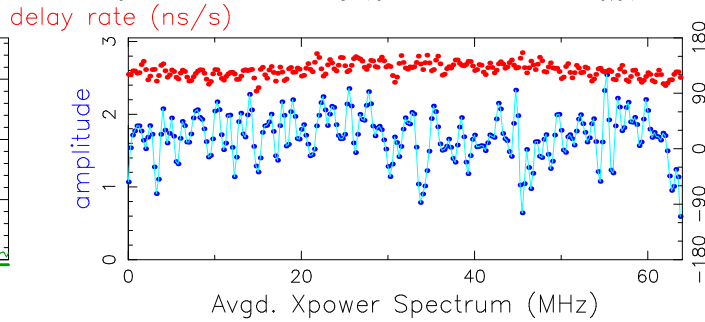
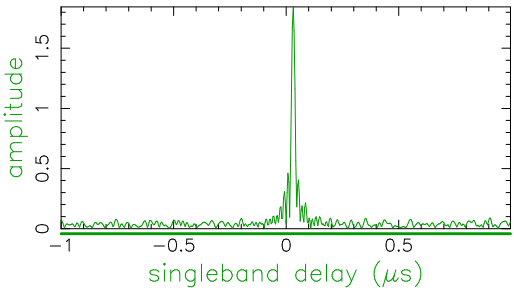
aux01

3C273.3MP2MB, No0707, Ap

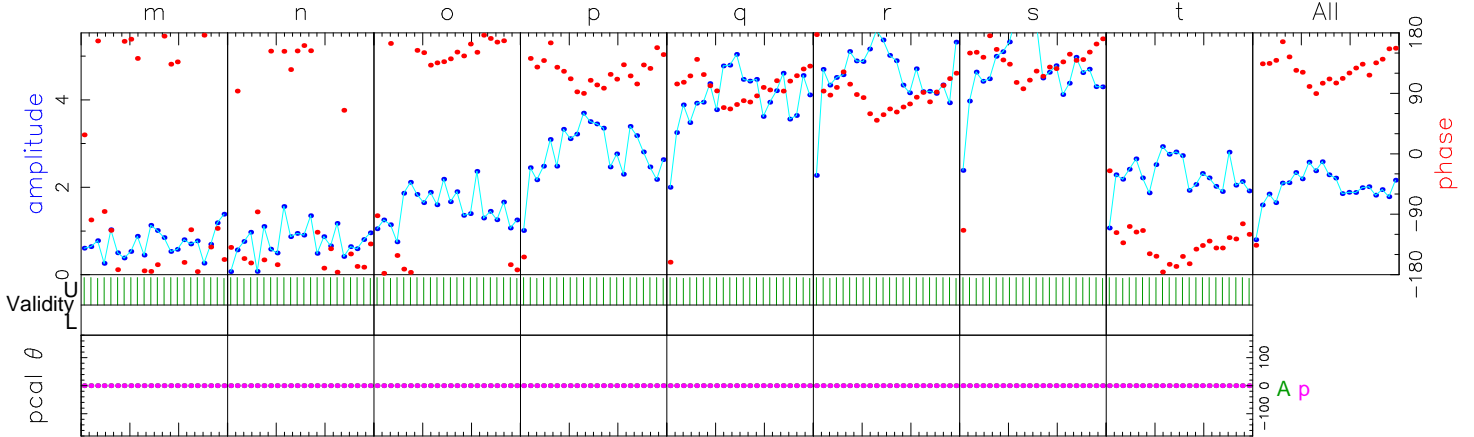
ALMA - VLBA\_PT, fgroup W, pol XL



Fringe quality 2  
 Error code G  
 SNR 67.6  
 Int time 179.764  
 Amp 1.845  
 Phase 127.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.031074  
 MBD -0.000117  
 Fringe rate (Hz)  
 -0.023697  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175907  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.5	178.5	163.2	121.3	100.3	86.1	137.9	-136.7	Phase	127.0
	0.5	0.6	1.4	2.6	3.7	4.2	4.3	2.1	Ampl.	2.4
	266.5	264.4	264.8	265.0	265.1	265.1	265.3	267.8	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	
p	0	0	0	0	0	0	0	0	PC freqs	
A:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.13900470158E+02	Apriori delay (usec)	5.13869337004E+02	Resid mbdelay (usec)	-1.16846E-04	+/-	1.6E-05
Sband delay (usec)	5.13900411254E+02	Apriori clock (usec)	-2.1131138E+03	Resid sbdelay (usec)	3.10743E-02	+/-	1.3E-04
Phase delay (usec)	5.13869341100E+02	Apriori clockrate (us/s)	-3.8952890E-07	Resid phdelay (usec)	4.09605E-06	+/-	5.5E-08
Delay rate (us/s)	-9.14320993558E-01	Apriori rate (us/s)	-9.14320718456E-01	Resid rate (us/s)	-2.75102E-07	+/-	5.3E-10
Total phase (deg)	15.2	Apriori accel (us/s/s)	-1.75623378198E-05	Resid phase (deg)	127.0	+/-	1.7

ph/seg (deg)	28.0	Theor.	4.0	Amplitude	1.845 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	21.8		6.9	Search (1024X32)	1.781	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	58.6		2.4	Inc. seg. avg.	1.996	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	83.6		4.2	Inc. frq. avg.	2.423	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

A: az 330.6 el 61.8 pa 152.8      p: az 136.3 el 49.0 pa -34.7      u, v (fr/asec) 5228.154 -8482.000      simultaneous interpolator

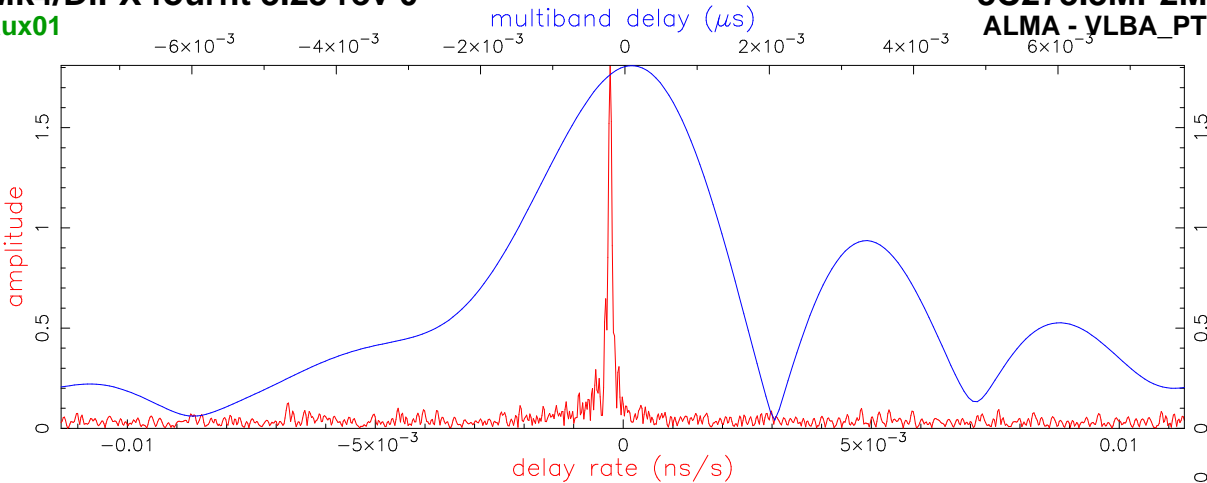
Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//Ap..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//Ap.W.15.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

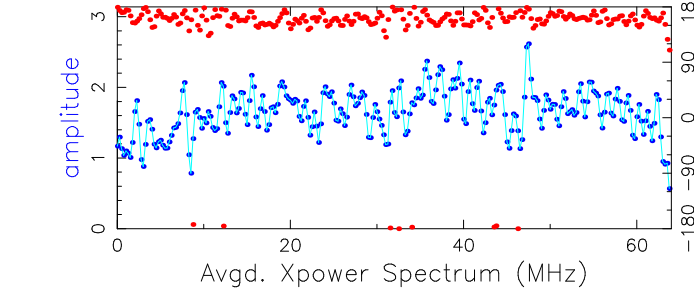
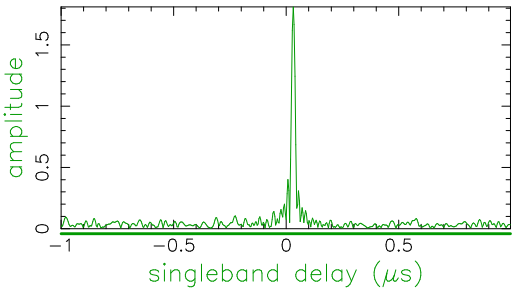
aux01

3C273.3MP2MB, No0707, Ap

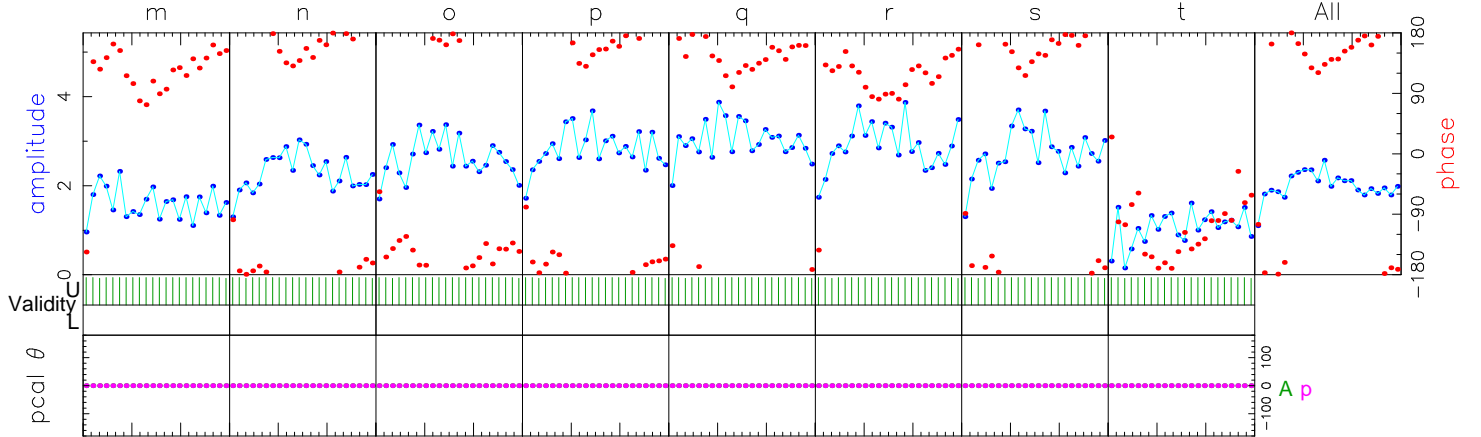
ALMA - VLBA\_PT, fgroup W, pol YR



Fringe quality 4  
 Error code G  
 SNR 66.4  
 Int time 179.764  
 Amp 1.811  
 Phase 163.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.031526  
 MBD 0.000107  
 Fringe rate (Hz)  
 -0.023683  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175909  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	128.7	171.2	-158.4	178.3	150.4	118.0	166.9	-114.6	Phase	163.6
	1.4	2.1	2.3	2.5	2.7	2.6	2.4	0.8	Ampl.	2.1
	266.8	265.0	264.9	265.0	265.0	264.9	265.4	267.9	Sbd box	265.1
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	
p	0	0	0	0	0	0	0	0	PC freqs	
A:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.13900694127E+02	Apriori delay (usec)	5.13869337004E+02	Resid mbdelay (usec)	1.07123E-04	+/-	1.6E-05
Sband delay (usec)	5.13900862754E+02	Apriori clock (usec)	-2.1131138E+03	Resid sbdelay (usec)	3.15257E-02	+/-	1.3E-04
Phase delay (usec)	5.13869342279E+02	Apriori clockrate (us/s)	-3.8952890E-07	Resid phdelay (usec)	5.27549E-06	+/-	5.6E-08
Delay rate (us/s)	-9.14320993389E-01	Apriori rate (us/s)	-9.14320718456E-01	Resid rate (us/s)	-2.74933E-07	+/-	5.4E-10
Total phase (deg)	51.8	Apriori accel (us/s/s)	-1.75623378198E-05	Resid phase (deg)	163.6	+/-	1.7

ph/seg (deg)	28.6	RMS	4.0	Theor.	4.0	Amplitude	1.811 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	19.0	Search (1024X32)	1.745	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	44.5	Inc. seg. avg.	1.991	Inc. frq. avg.	2.108	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	38.1	Inc. frq. avg.	2.108	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

A: az 330.6 el 61.8 pa 152.8 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) 5228.154 -8482.000 simultaneous interpolator

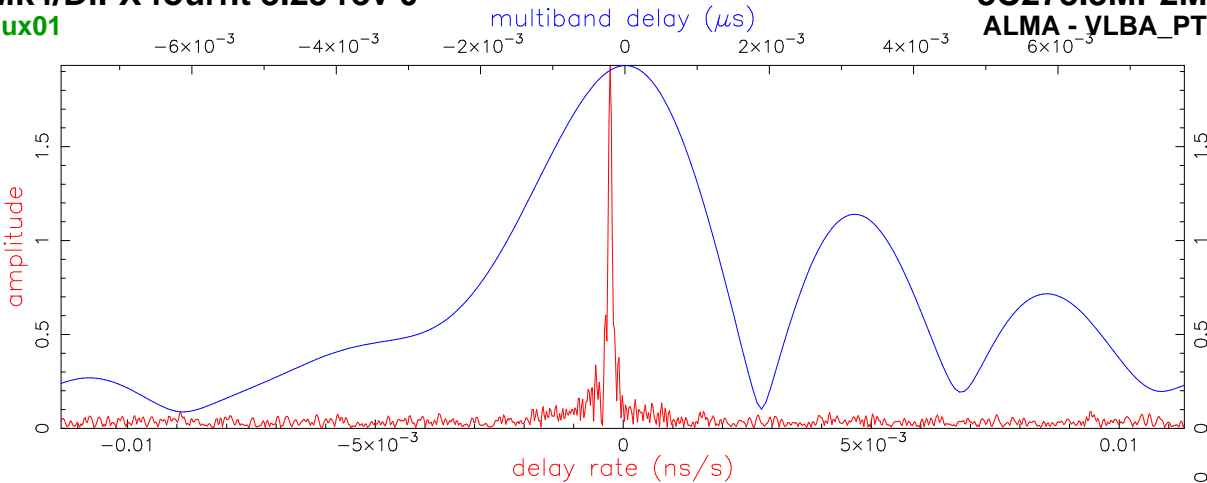
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ap..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ap.W.24.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

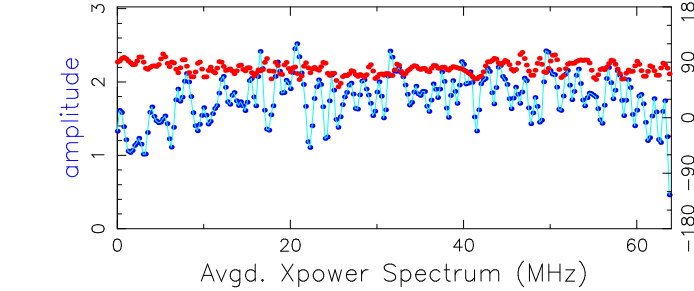
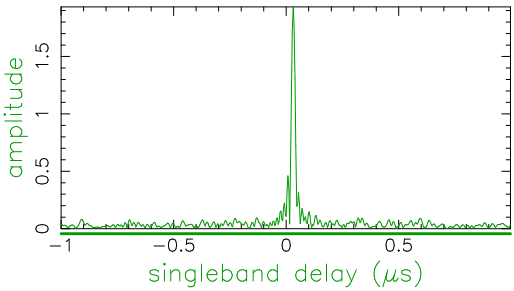
aux01

3C273.3MP2MB, No0707, Ap

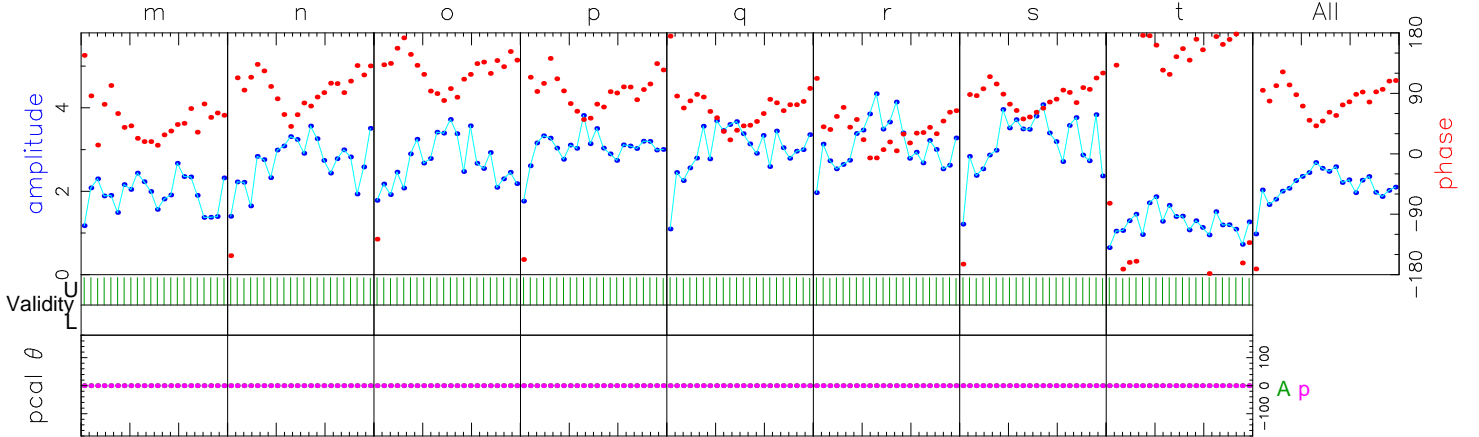
ALMA - VLBA\_PT, fgroup W, pol XR



Fringe quality 3  
 Error code G  
 SNR 70.9  
 Int time 179.764  
 Amp 1.933  
 Phase 81.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.031401  
 MBD 0.000013  
 Fringe rate (Hz)  
 -0.023550  
 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
	47.3	95.9	123.3	94.4	63.8	31.6	85.0	168.4	Phase	81.7
	1.7	2.4	2.3	2.7	2.7	2.8	2.9	1.1	Ampl.	2.3
	266.9	265.0	264.8	264.9	264.9	265.1	265.5	267.7	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	
p	0	0	0	0	0	0	0	0	PC freqs	
A:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	5.13900600095E+02	Apriori delay (usec)	5.13869337004E+02	Resid mbdelay (usec)	1.30917E-05	+/-	1.5E-05
Sband delay (usec)	5.13900737504E+02	Apriori clock (usec)	-2.1131138E+03	Resid sbdelay (usec)	3.14005E-02	+/-	1.2E-04
Phase delay (usec)	5.13869339637E+02	Apriori clockrate (us/s)	-3.8952890E-07	Resid phdelay (usec)	2.63310E-06	+/-	5.2E-08
Delay rate (us/s)	-9.14320991848E-01	Apriori rate (us/s)	-9.14320718456E-01	Resid rate (us/s)	-2.73393E-07	+/-	5.0E-10
Total phase (deg)	329.9	Apriori accel (us/s/s)	-1.75623378198E-05	Resid phase (deg)	81.7	+/-	1.6

ph/seg (deg)	RMS 30.9	Theor. 3.8	Amplitude Search (1024X32)	1.889	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	21.5	6.6	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)	47.7	2.3	Inc. seg. avg.	2.133	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 (%)	37.0	4.0	Inc. frq. avg.	2.329	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

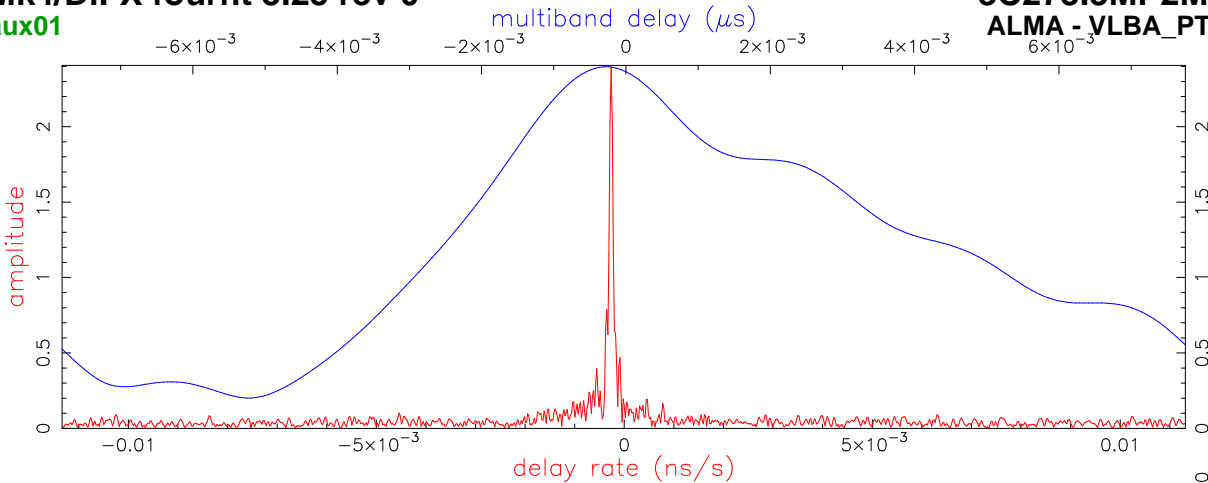
A: az 330.6 el 61.8 pa 152.8 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) 5228.154 -8482.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ap..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ap.W.35.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

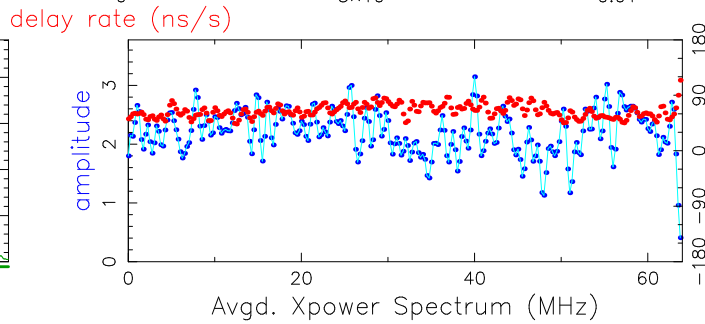
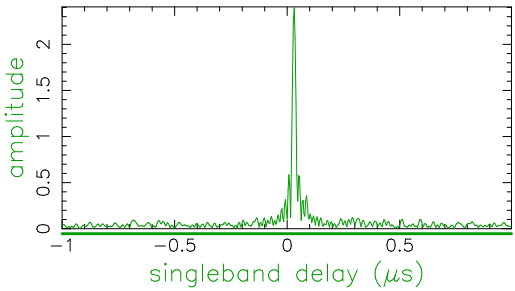
aux01

3C273.3MP2MB, No0707, Ap

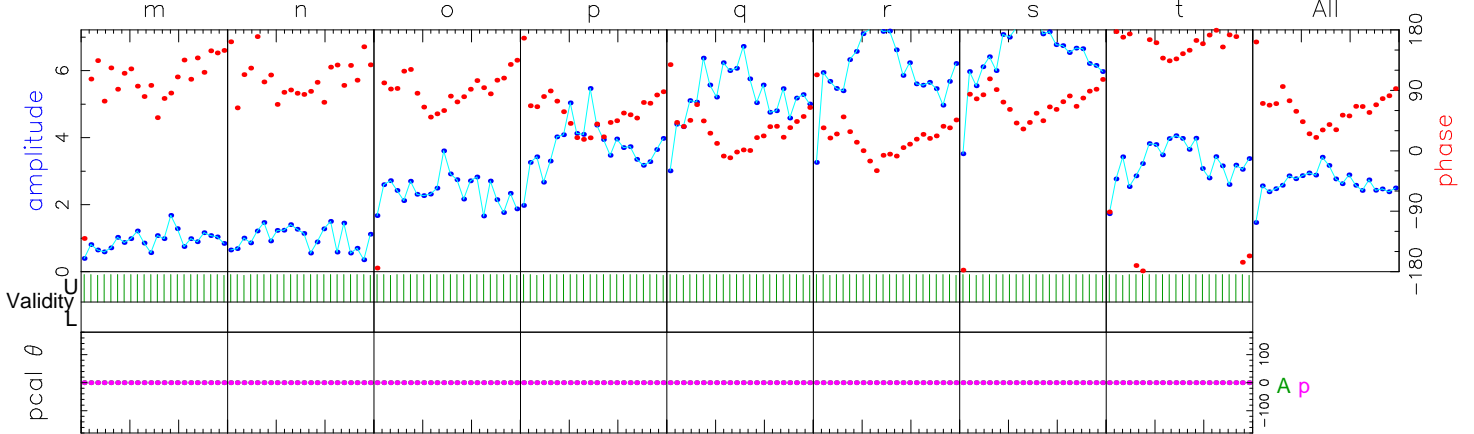
ALMA - VLBA\_PT, fgroup W, pol YL



Fringe quality 3  
 Error code G  
 SNR 88.2  
 Int time 179.764  
 Amp 2.407  
 Phase 59.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.030487  
 MBD -0.000326  
 Fringe rate (Hz)  
 -0.023726  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175913  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	109.8	104.7	92.1	53.9	27.8	14.9	71.4	166.0	Phase	59.2
	0.8	0.9	2.2	3.3	4.7	5.5	6.0	3.0	Ampl.	3.3
	266.7	264.1	264.6	264.9	265.0	265.1	265.2	267.8	Sbd box	264.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
A:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	5.13900260752E+02		Apriori delay (usec)		5.13869337004E+02		Resid mbdelay (usec)		-3.26252E-04	+/- 1.2E-05
Sband delay (usec)	5.13899824004E+02		Apriori clock (usec)		-2.1131138E+03		Resid sbdelay (usec)		3.04870E-02	+/- 9.8E-05
Phase delay (usec)	5.13869338913E+02		Apriori clockrate (us/s)		-3.8952890E-07		Resid phdelay (usec)		1.90961E-06	+/- 4.2E-08
Delay rate (us/s)	-9.14320993892E-01		Apriori rate (us/s)		-9.14320718456E-01		Resid rate (us/s)		-2.75436E-07	+/- 4.0E-10
Total phase (deg)	307.4		Apriori accel (us/s/s)		-1.75623378198E-05		Resid phase (deg)		59.2	+/- 1.3

RMS Theor. Amplitude 2.407 +/- 0.027  
 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  
 A: az 330.6 el 61.8 pa 152.8 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 5228.154 -8482.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ap..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ap.W.43.3MP2MB

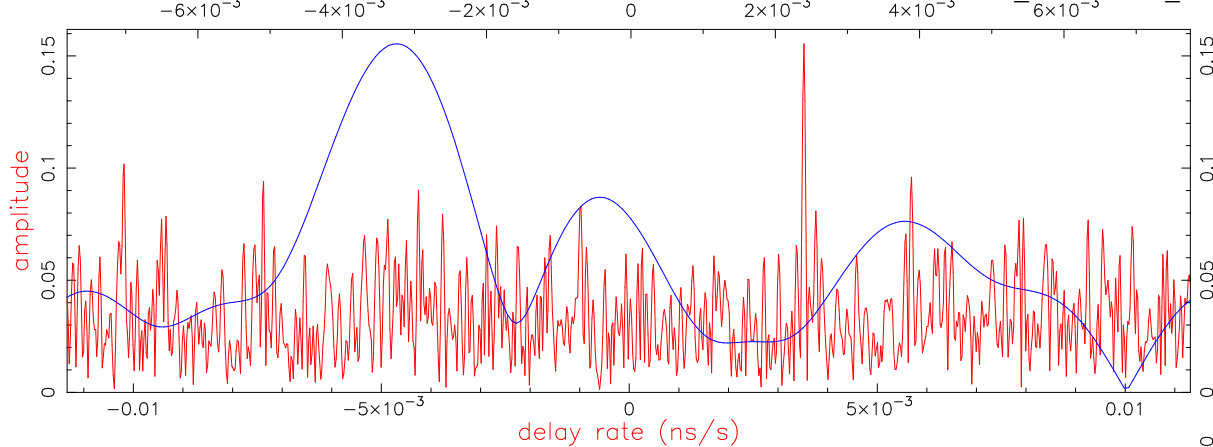
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bp

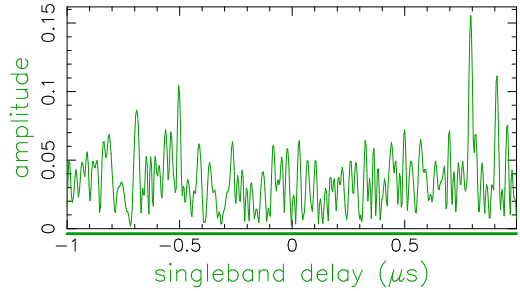
VLBA\_BR - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

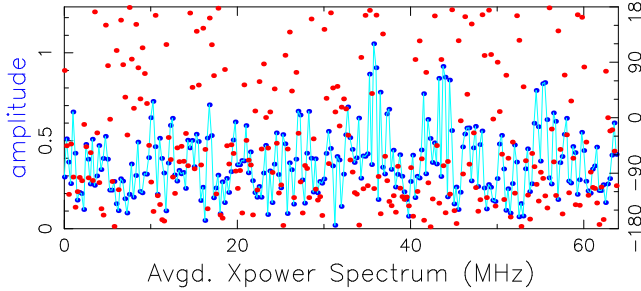


Fringe quality 0

SNR 5.7  
 Int time 179.746  
 Amp 0.162  
 Phase 55.9  
 PFD 7.7e-01  
 Delays (us)  
 SBD 0.792996  
 MBD -0.003246  
 Fringe rate (Hz)  
 0.304440  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

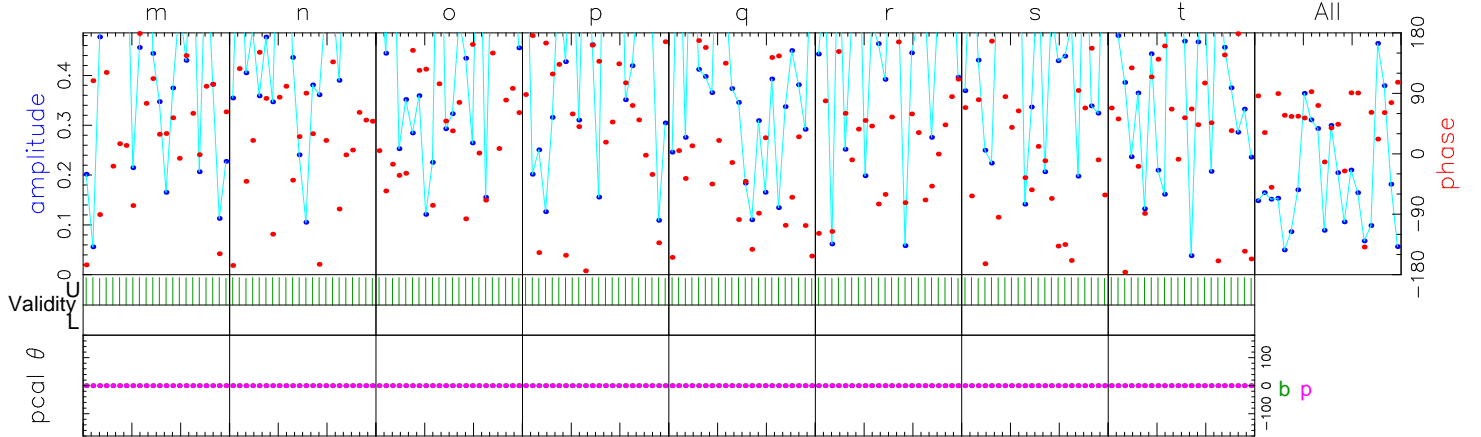


delay rate (ns/s)



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

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



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

Group delay (usec) (SBD)	-4.42115957039E+03	Apriori delay (usec)	-4.42195319905E+03	Resid mbdelay (usec)	-3.24634E-03	+/-	1.9E-04
Sband delay (usec)	-4.42116020305E+03	Apriori clock (usec)	-1.0779572E+00	Resid sbdelay (usec)	7.92996E-01	+/-	1.5E-03
Phase delay (usec)	-4.42195319725E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	1.80310E-06	+/-	6.5E-07
Delay rate (us/s)	6.63397455676E-02	Apriori rate (us/s)	6.63362113190E-02	Resid rate (us/s)	3.53425E-06	+/-	6.2E-09
Total phase (deg)	-148.0	Apriori accel (us/s/s)	2.41908522609E-05	Resid phase (deg)	55.9	+/-	20.1

ph/seg (deg)	52.6	Theor.	47.2	Amplitude	0.162 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.5	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)	50.0	Inc. seg. avg.	0.149	Inc. frq. avg.	0.169	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.9	Inc. frq. avg.	0.169			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 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -367.312 1666.942 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bp.W.106.3MP2MB

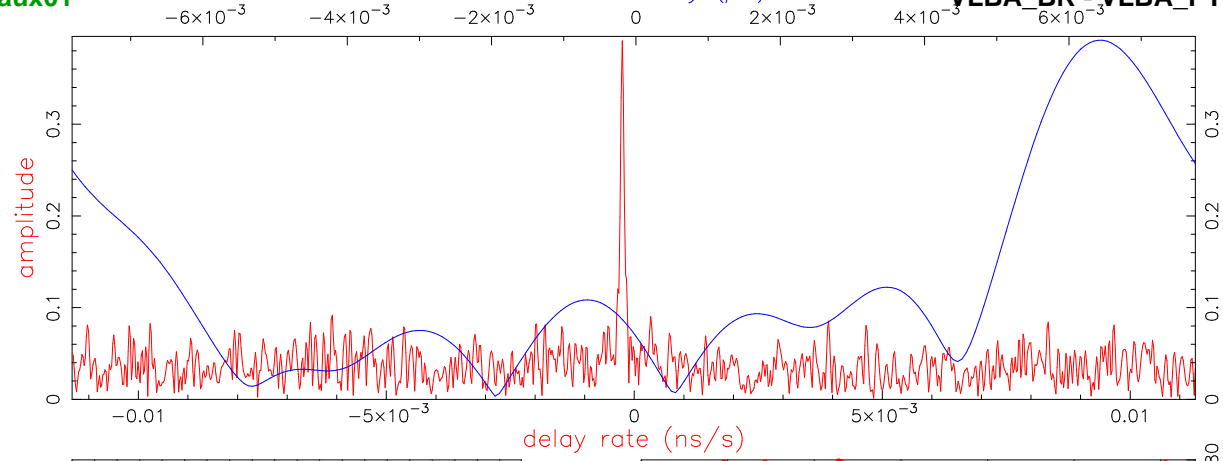
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bp

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

multiband delay ( $\mu$ s)

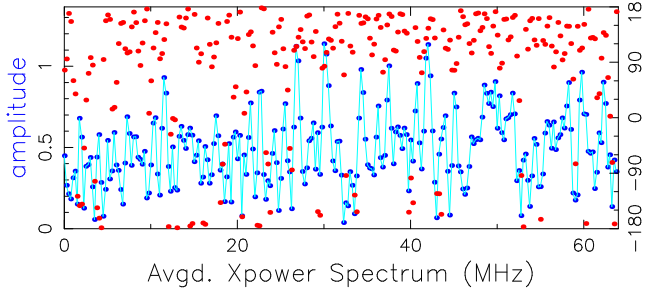
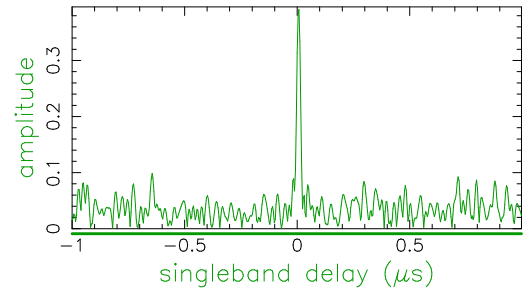


Fringe quality 7

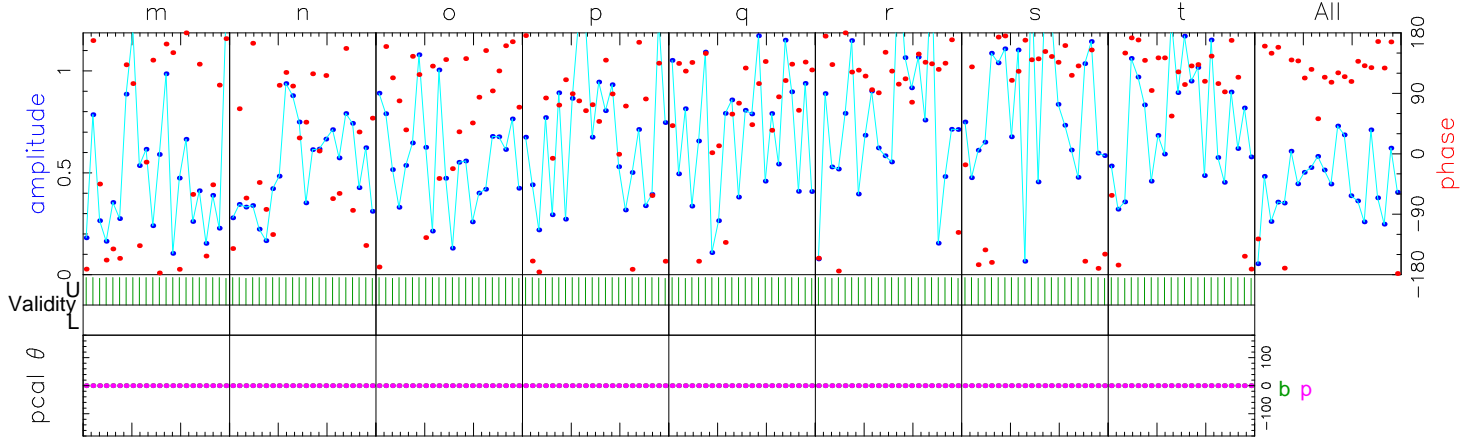
SNR 14.5  
 Int time 179.746  
 Amp 0.396  
 Phase 132.8  
 PFD 3.4e-39  
 Delays (us)  
 SBD 0.006328  
 MBD 0.006351  
 Fringe rate (Hz) -0.020397  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

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

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
	167.6	93.1	127.3	100.3	107.3	132.1	159.1	136.7	Phase	132.8
	0.3	0.1	0.3	0.4	0.5	0.6	0.7	0.6	Ampl.	0.4
	257.3	62.2	260.3	258.3	257.9	259.0	258.4	259.1	Sbd box	258.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.42194684769E+03	Apriori delay (usec)	-4.42195319905E+03	Resid mbdelay (usec)	6.35136E-03	+/-	7.5E-05
Sband delay (usec)	-4.42194687080E+03	Apriori clock (usec)	-1.0779572E+00	Resid sbdelay (usec)	6.32825E-03	+/-	5.9E-04
Phase delay (usec)	-4.42195319477E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	4.28254E-06	+/-	2.5E-07
Delay rate (us/s)	6.63359745290E-02	Apriori rate (us/s)	6.63362113190E-02	Resid rate (us/s)	-2.36790E-07	+/-	2.4E-09
Total phase (deg)	-71.1	Apriori accel (us/s/s)	2.41908522609E-05	Resid phase (deg)	132.8	+/-	7.9

ph/seg (deg)	RMS 36.3	Theor. 18.5	Amplitude Search (1024X32)	0.396 +/- 0.027	0.382	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	43.8	32.3	Interp.	0.000	0.000E+00	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.5	11.2	Inc. seg. avg.	0.429	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 (%)	46.7	19.5	Inc. frq. avg.	0.414	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00

b: az 132.0 el 33.1 pa -29.7      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -367.312 1666.942      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//bp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//bp.W.77.3MP2MB



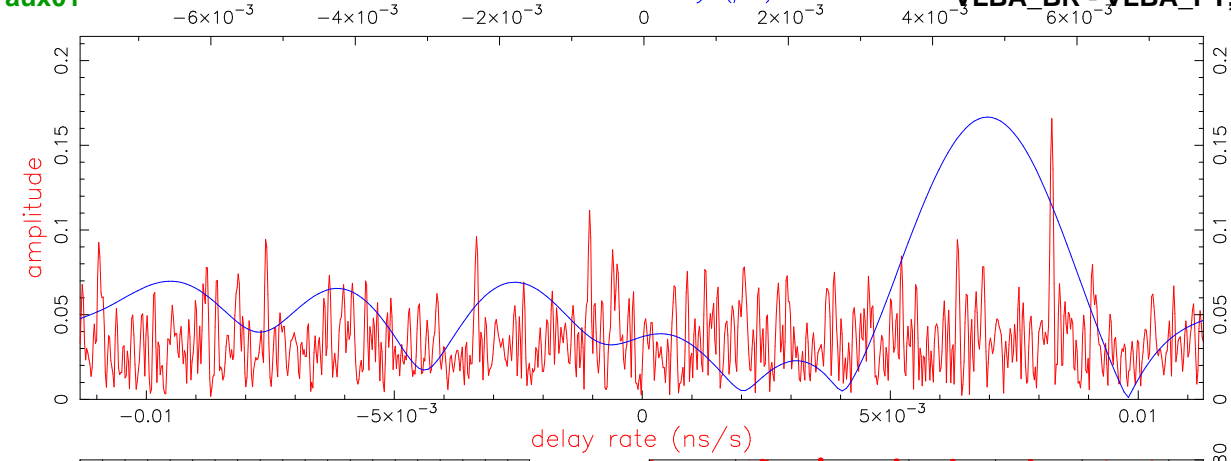
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bp

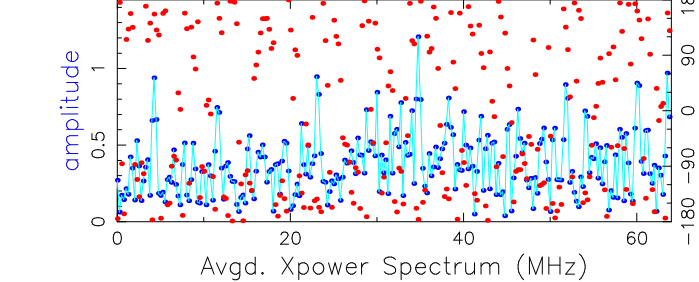
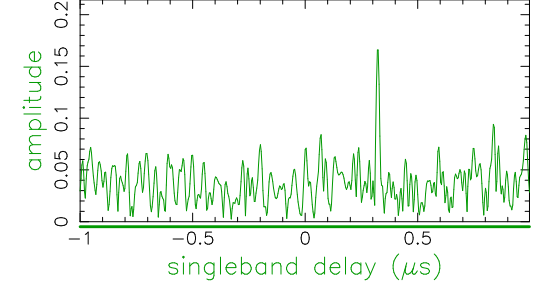
VLBA\_BR - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)



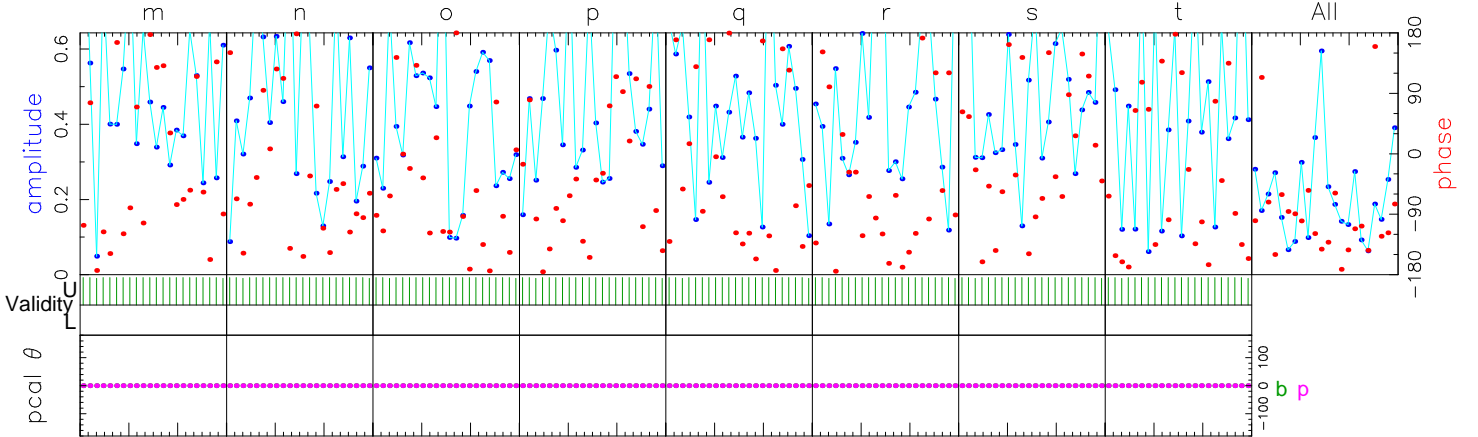
Fringe quality 0

SNR 6.2  
 Int time 179.746  
 Amp 0.214  
 Phase -116.1  
 PFD 5.5e-02  
 Delays (us)  
 SBD 0.322251  
 MBD 0.004870  
 Fringe rate (Hz) 0.712748  
 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  
 2025:041:175927  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.2	-94.8	-98.7	-119.9	-128.3	-120.4	-25.3	-138.8	Phase	-116.1
	0.3	0.2	0.2	0.1	0.3	0.3	0.1	0.3	Ampl.	0.2
	438.0	47.4	102.5	77.6	107.2	339.6	109.7	477.1	Sbd box	339.5
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	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-4.42163582930E+03	Apriori delay (usec)	-4.42195319905E+03	Resid mbdelay (usec)	4.86976E-03	+/-	1.7E-04
Sband delay (usec)	-4.42163094755E+03	Apriori clock (usec)	-1.0779572E+00	Resid sbdelay (usec)	3.22251E-01	+/-	1.4E-03
Phase delay (usec)	-4.42195320279E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	-3.74271E-06	+/-	5.9E-07
Delay rate (us/s)	6.63444856183E-02	Apriori rate (us/s)	6.63362113190E-02	Resid rate (us/s)	8.27430E-06	+/-	5.7E-09
Total phase (deg)		Apriori accel (us/s/s)	2.41908522609E-05	Resid phase (deg)	-116.1	+/-	18.3

	RMS	Theor.	Amplitude	0.214 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	46.2	43.0	Search (1024X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	76.3	75.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	40.3	25.9	Inc. seg. avg.	0.210	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	41.1	45.3	Inc. frq. avg.	0.207	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      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -367.312 1666.942      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//bp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//bp.W.94.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

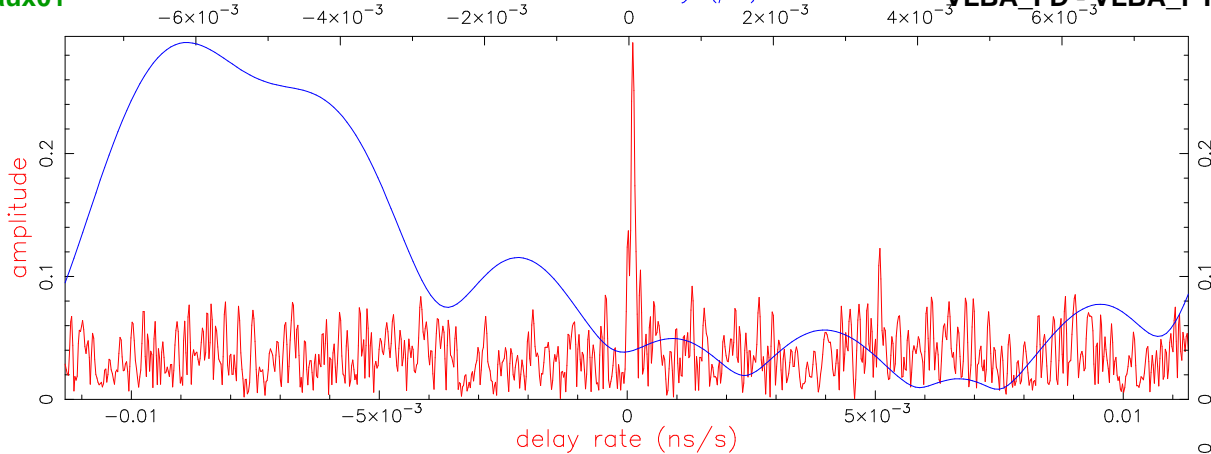
aux01

3C273.3MP2MB, No0707, fp

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

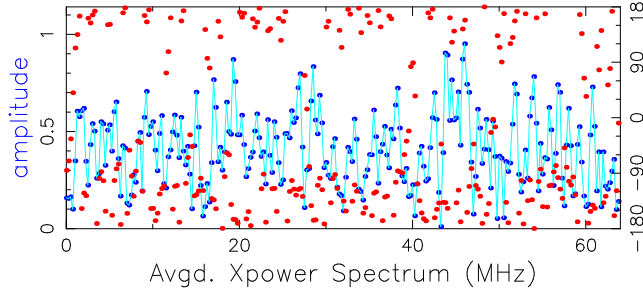
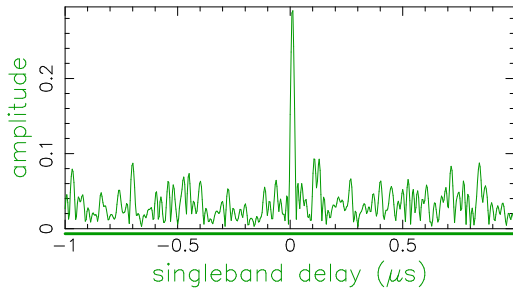
multiband delay ( $\mu$ s)

Fringe quality 9



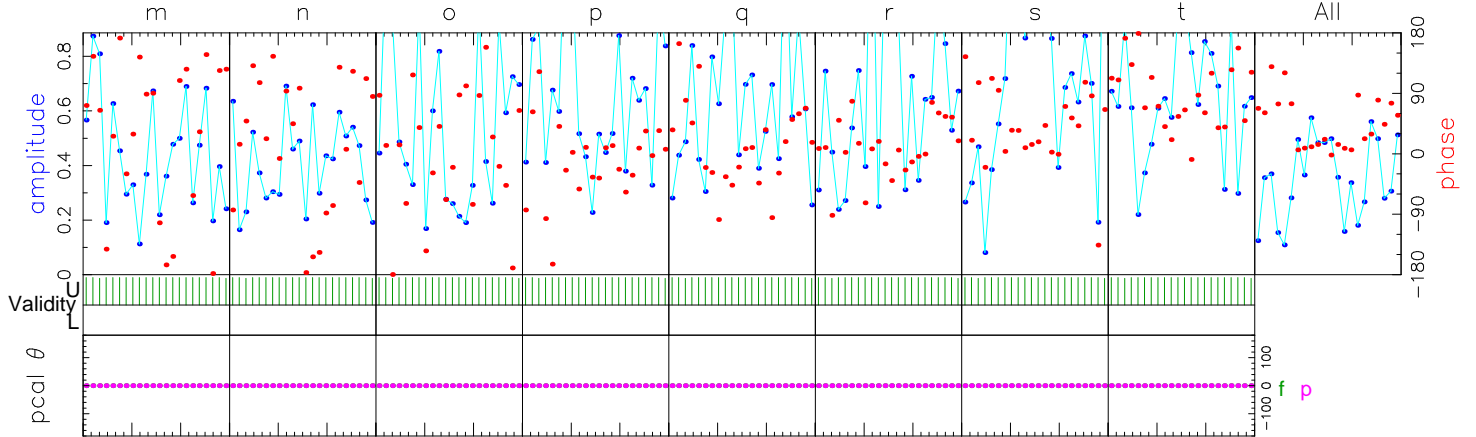
SNR 10.8  
 Int time 179.763  
 Amp 0.295  
 Phase 36.6  
 PFD 5.7e-19  
 Delays (us)  
 SBD 0.010003  
 MBD -0.006169  
 Fringe rate (Hz)  
 0.009007  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

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
	111.5	100.3	31.2	-0.6	5.4	10.0	43.8	84.1	Phase	36.6
	0.2	0.1	0.2	0.4	0.4	0.5	0.6	0.5	Ampl.	0.3
	160.4	361.5	471.1	259.7	259.1	259.4	259.4	260.2	Sbd box	259.6
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	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.15831931081E+03	Apriori delay (usec)	1.15830985478E+03	Resid mbdelay (usec)	-6.16897E-03	+/-	1.0E-04
Sband delay (usec)	1.15831985803E+03	Apriori clock (usec)	-5.6435318E+00	Resid sbdelay (usec)	1.00033E-02	+/-	8.0E-04
Phase delay (usec)	1.15830985596E+03	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	1.18101E-06	+/-	3.4E-07
Delay rate (us/s)	-6.48311970177E-02	Apriori rate (us/s)	-6.48313015782E-02	Resid rate (us/s)	1.04560E-07	+/-	3.3E-09
Total phase (deg)	357.2	Apriori accel (us/s/s)	-6.39305578006E-06	Resid phase (deg)	36.6	+/-	10.6

ph/seg (deg)	RMS 39.0	Theor. 24.8	Amplitude Search (1024X32)	0.285	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	52.3	43.3	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)	50.1	15.0	Inc. seg. avg.	0.322	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	60.8	26.1	Inc. frq. avg.	0.348	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 138.7 el 54.1 pa -34.5      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 368.101 -495.186      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//fp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//fp.W.103.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

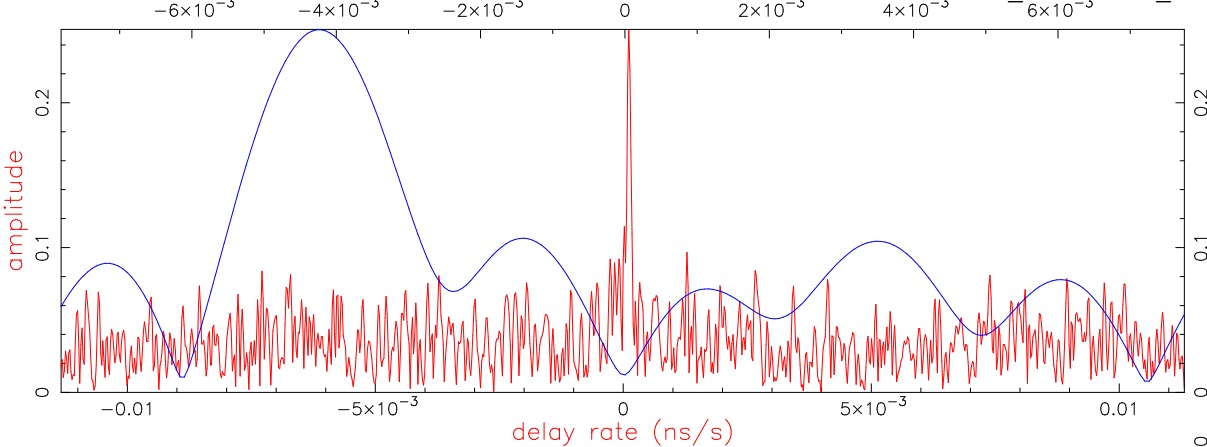
aux01

3C273.3MP2MB, No0707, fp

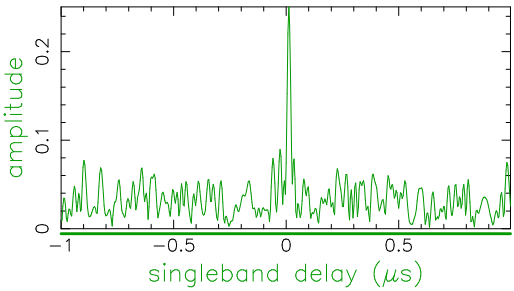
VLBA\_FD - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

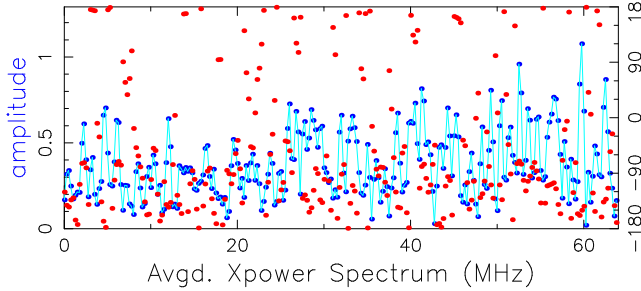
Fringe quality 9



SNR 9.2  
 Int time 179.763  
 Amp 0.251  
 Phase 65.5  
 PFD 7.5e-12  
 Delays (us)  
 SBD 0.012074  
 MBD -0.004224  
 Fringe rate (Hz)  
 0.008810  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

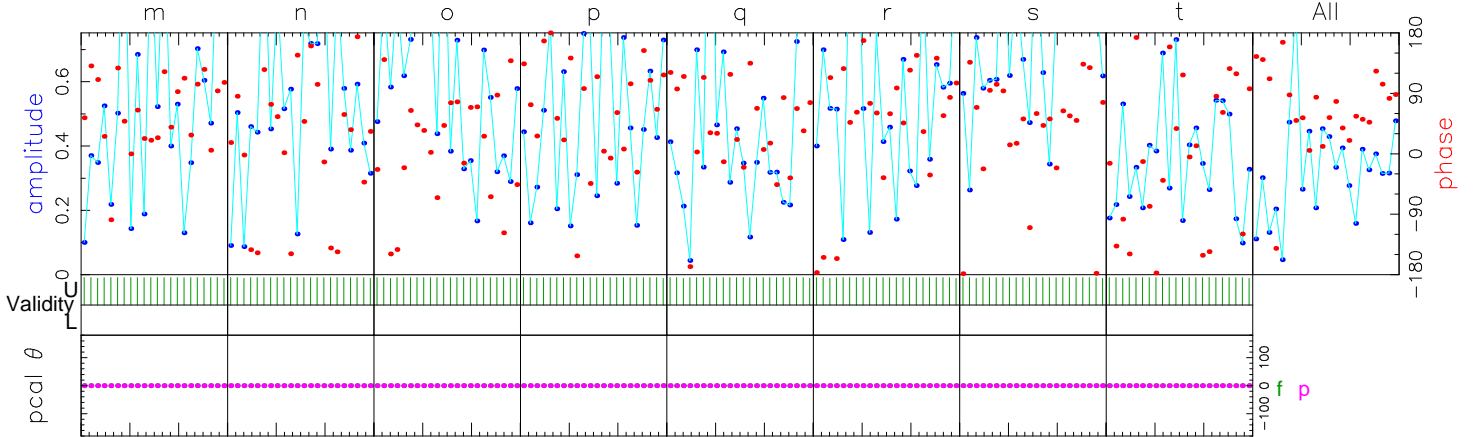


delay rate (ns/s)



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	Ampl.	0.3
p	0	0	0	0	0	0	0	0	Sbd box	260.1
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
p	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	

Group delay (usec) (SBD)	1.15832125590E+03	Apriori delay (usec)		1.15830985478E+03	Resid mbdelay (usec)		-4.22388E-03	+/-	1.2E-04	
Sband delay (usec)	1.15832192878E+03	Apriori clock (usec)		-5.6435318E+00	Resid sbdelay (usec)		1.20740E-02	+/-	9.4E-04	
Phase delay (usec)	1.15830985689E+03	Apriori clockrate (us/s)		-3.2847705E-07	Resid phdelay (usec)		2.11185E-06	+/-	4.0E-07	
Delay rate (us/s)	-6.48311992979E-02	Apriori rate (us/s)		-6.48313015782E-02	Resid rate (us/s)		1.02280E-07	+/-	3.9E-09	
Total phase (deg)	26.0		Apriori accel (us/s/s)		-6.39305578006E-06	Resid phase (deg)		65.5	+/-	12.5

ph/seg (deg)	54.3	29.2	Search (1024X32)	0.245	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	72.1	51.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000			
ph/frq (deg)	23.7	17.6	Inc. seg. avg.	0.293	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	53.9	30.8	Inc. frq. avg.	0.254	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		p: az 136.3 el 49.0 pa -34.7		u,v (fr/asec) 368.101 -495.186		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fp.W.114.3MP2MB

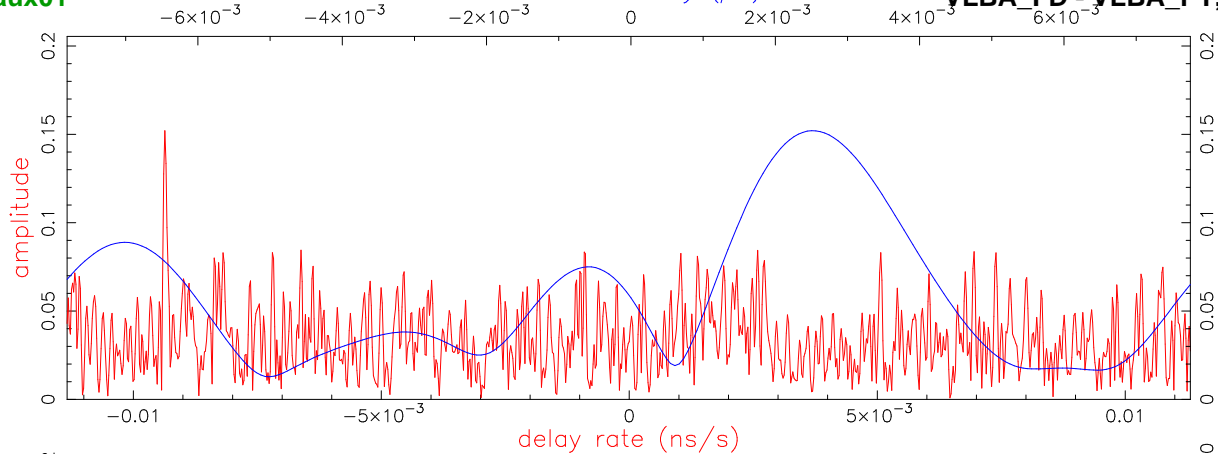
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fp

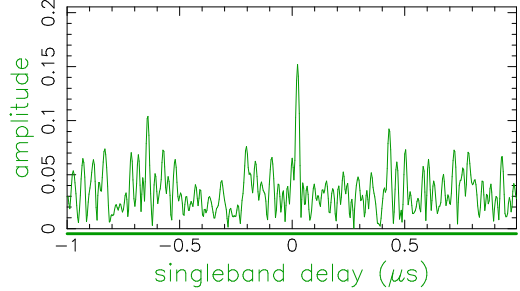
VLBA\_FD - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

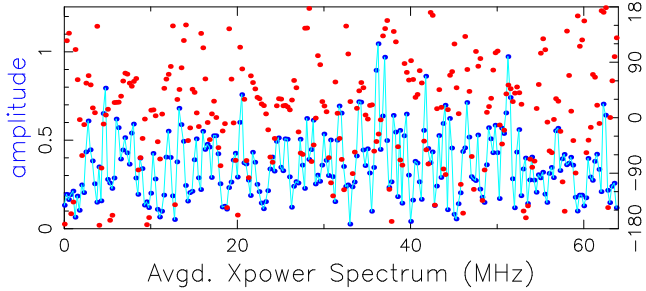


Fringe quality 0

SNR 5.6  
 Int time 179.763  
 Amp 0.205  
 Phase -88.1  
 PFD 9.5e-01  
 Delays (us)  
 SBD 0.023762  
 MBD 0.002521  
 Fringe rate (Hz)  
 -0.808963  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

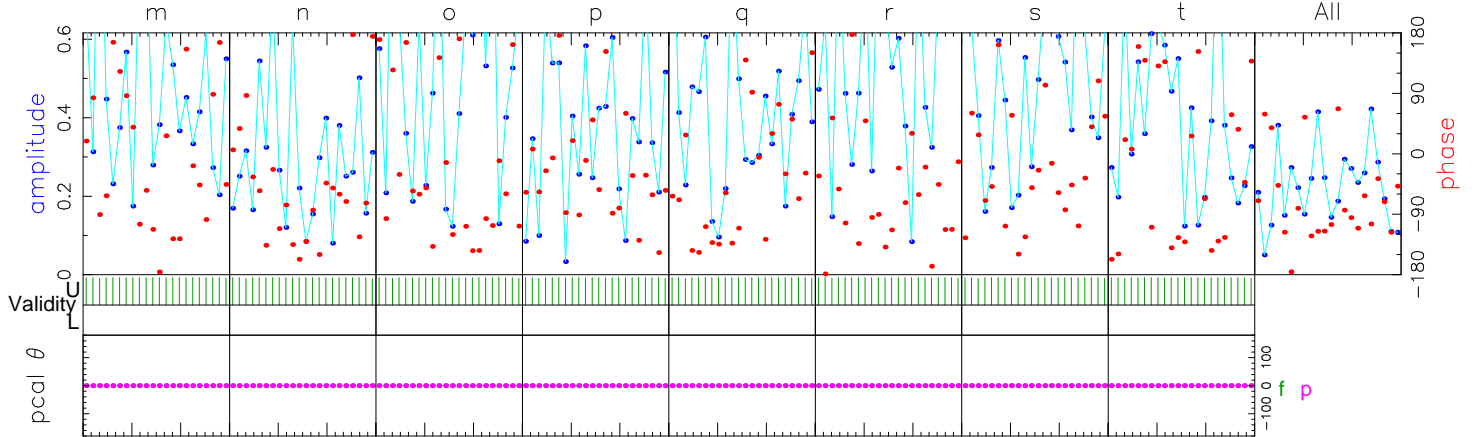


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-76.0	-89.0	-134.5	-43.7	-86.9	-78.2	-47.9	-161.3	Phase	-88.1
	0.2	0.2	0.4	0.3	0.2	0.4	0.2	0.2	Ampl.	0.2
	30.3	29.9	158.3	60.6	205.8	262.4	288.1	326.3	Sbd box	263.1
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	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.15832800113E+03	Apriori delay (usec)	1.15830985478E+03	Resid mbdelay (usec)	2.52135E-03	+/-	1.9E-04
Sband delay (usec)	1.15833361728E+03	Apriori clock (usec)	-5.6435318E+00	Resid sbdelay (usec)	2.37625E-02	+/-	1.5E-03
Phase delay (usec)	1.15830985194E+03	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-2.83954E-06	+/-	6.6E-07
Delay rate (us/s)	-6.48406928320E-02	Apriori rate (us/s)	-6.48313015782E-02	Resid rate (us/s)	-9.39125E-06	+/-	6.4E-09
Total phase (deg)	232.5	Apriori accel (us/s/s)	-6.39305578006E-06	Resid phase (deg)	-88.1	+/-	20.5

ph/seg (deg)	68.1	Theor.	48.2	Amplitude	0.205 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	79.8	Search (1024X32)	0.150	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	43.5	Inc. seg. avg.	0.227	Inc. seg. avg.	0.227	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	45.9	Inc. frq. avg.	0.222	Inc. frq. avg.	0.222	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 138.7 el 54.1 pa -34.5      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 368.101 -495.186      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/fp.3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/fp.W.127.3MP2MB

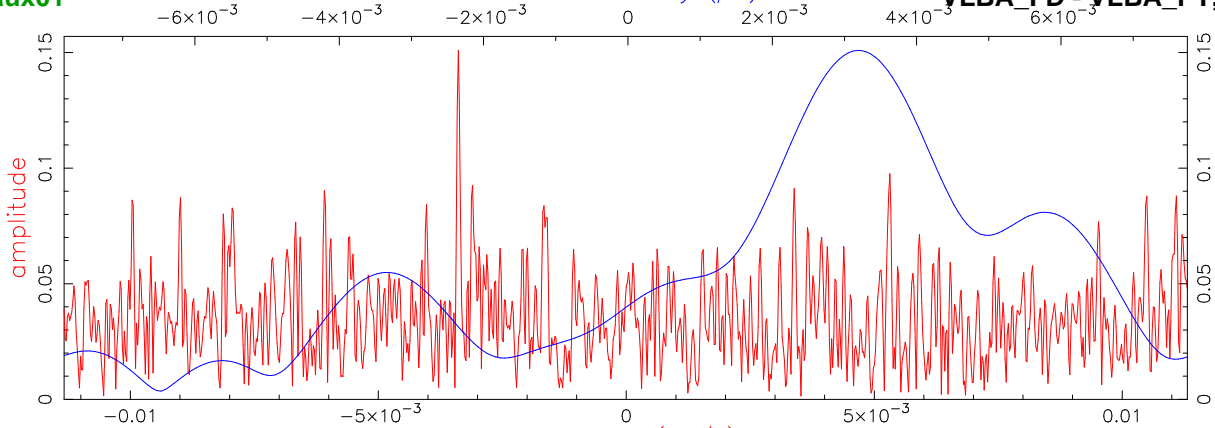
Mk4/DiFX fourfit 3.25 rev 0

aux01

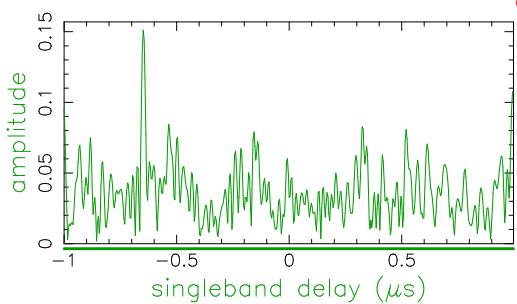
3C273.3MP2MB, No0707, fp

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

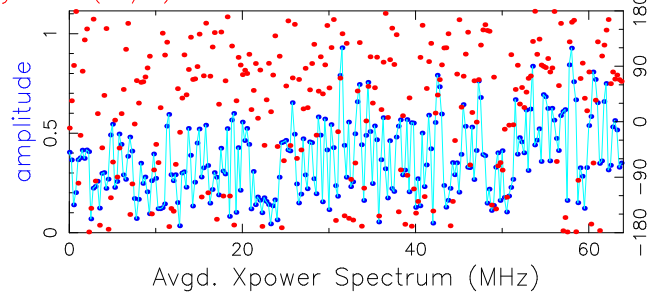
multiband delay ( $\mu$ s)



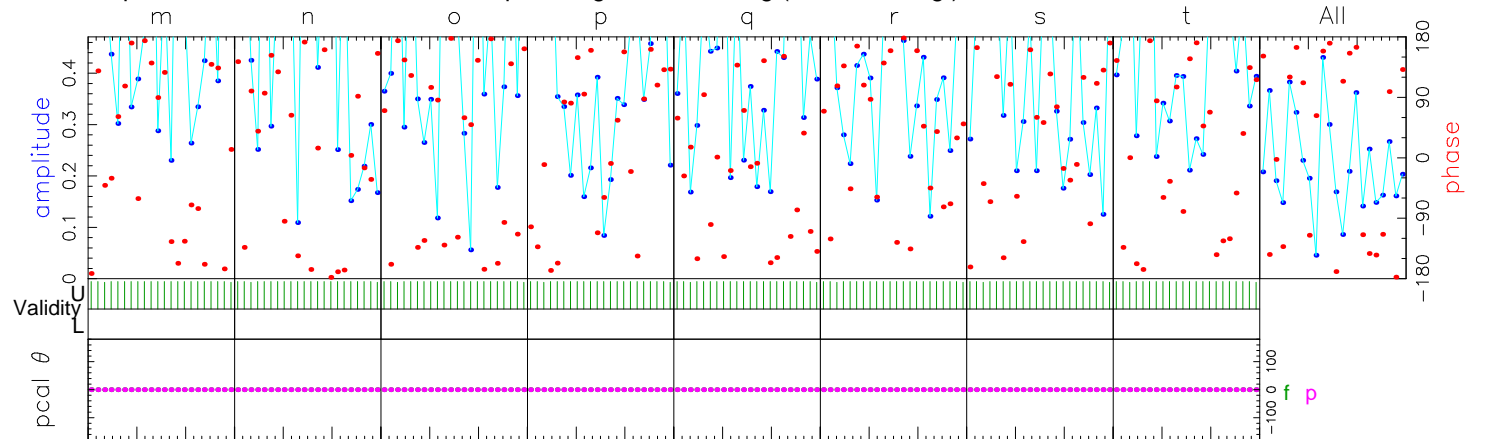
Fringe quality 0  
 SNR 5.5  
 Int time 179.763  
 Amp 0.157  
 Phase 169.8  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.647711  
 MBD 0.003182  
 Fringe rate (Hz) -0.291703  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175936  
 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
	167.9	164.4	173.2	166.7	-119.1	131.5	128.1	-169.4	Phase	169.8
	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	Ampl.	0.2
	145.5	47.5	90.6	217.0	402.1	183.3	308.7	233.3	Sbd box	91.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.15765678712E+03		Apriori delay (usec)		1.15830985478E+03		Resid mbdelay (usec)		3.18234E-03 +/- 2.0E-04	
Sband delay (usec)	1.15766214378E+03		Apriori clock (usec)		-5.6435318E+00		Resid sbdelay (usec)		-6.47711E-01 +/- 1.6E-03	
Phase delay (usec)	1.15830986025E+03		Apriori clockrate (us/s)		-3.2847705E-07		Resid phdelay (usec)		5.47501E-06 +/- 6.7E-07	
Delay rate (us/s)	-6.48346879621E-02		Apriori rate (us/s)		-6.48313015782E-02		Resid rate (us/s)		-3.38638E-06 +/- 6.4E-09	
Total phase (deg)	130.3		Apriori accel (us/s/s)		-6.39305578006E-06		Resid phase (deg)		169.8 +/- 20.7	
ph/seg (deg)	RMS 61.9	Theor. 48.5	Amplitude Search (1024X32)	0.157 +/- 0.028	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	81.4	84.6	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)	38.2	29.2	Inc. seg. avg.	0.173	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		Data rate(MB/s): 2048		dr window (ns/s)	-0.011 0.011
amp/frq (%)	58.1	51.0	Inc. frq. avg.	0.152	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	p: az 136.3 el 49.0 pa -34.7		u, v (fr/asec) 368.101 -495.186		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//fp..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//fp.W.137.3MP2MB							

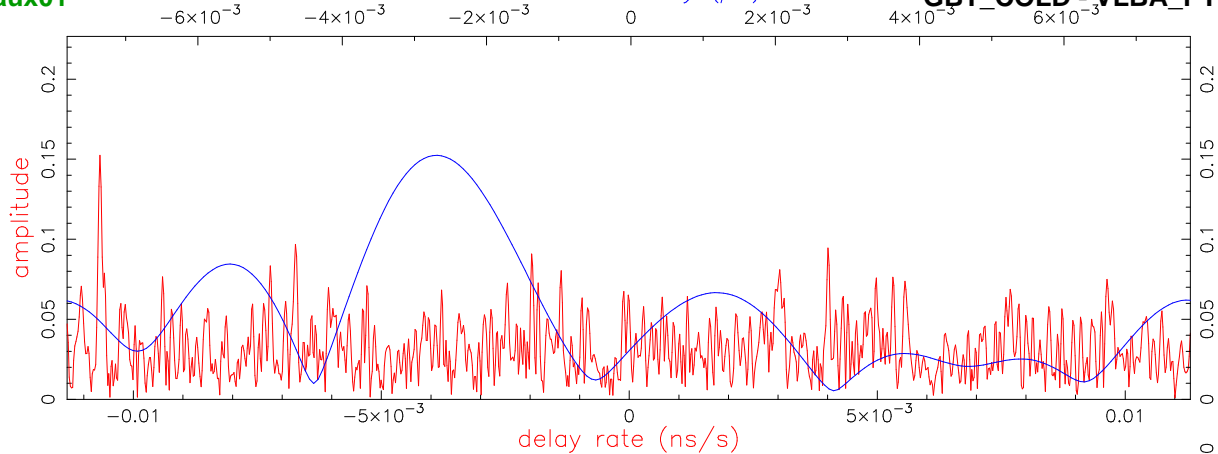
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gp

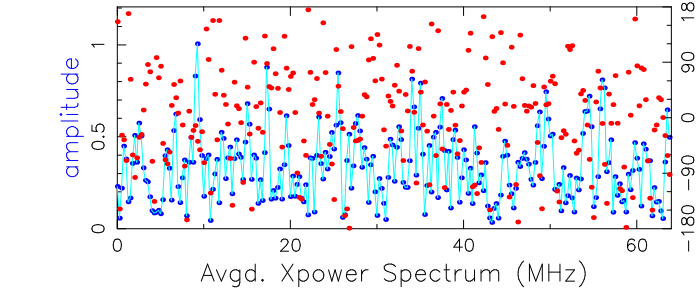
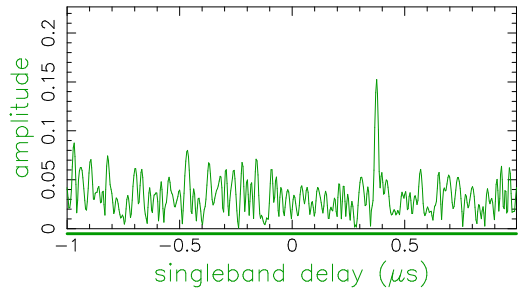
GBT\_COLD - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)



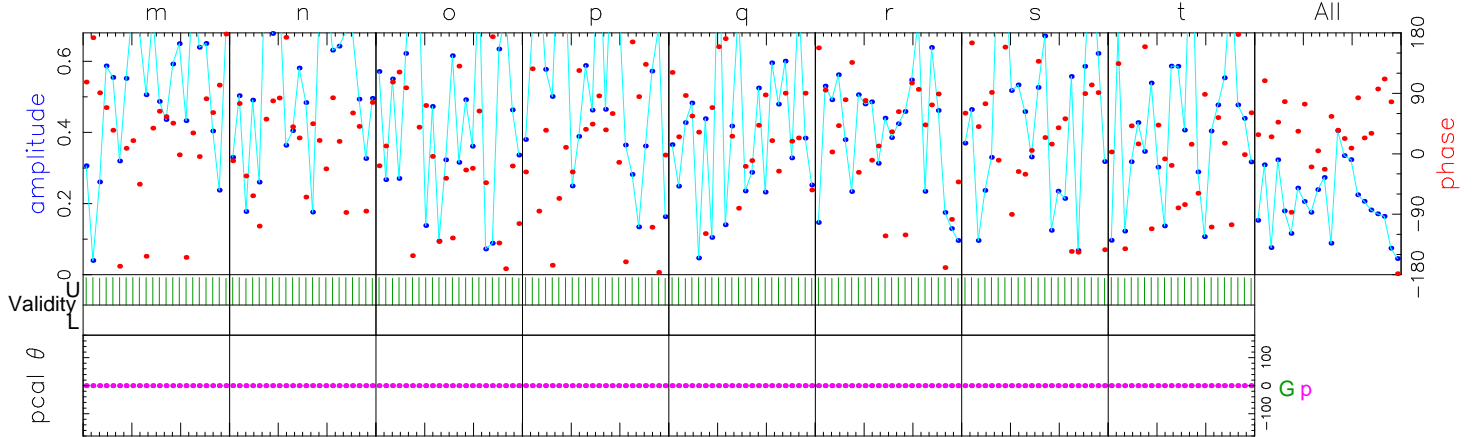
Fringe quality 0

SNR 5.6  
Int time 179.763  
Amp 0.227  
Phase 40.1  
PFD 9.4e-01  
Delays (us)  
SBD 0.374931  
MBD -0.002696  
Fringe rate (Hz)  
-0.921171  
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  
2025:041:175935  
2024:113:095956  
RA & Dec (J2000)  
12h29m06.699742s  
+02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	44.4	30.7	17.3	35.8	42.3	62.1	72.8	-19.2	Phase	40.1
	0.4	0.4	0.0	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	352.3	353.0	115.7	261.8	378.0	329.0	400.8	267.3	Sbd box	353.0
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	
p	0	0	0	0	0	0	0	0	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.65102398868E+02	Apriori delay (usec)	9.64730094943E+02	Resid mbdelay (usec)	-2.69607E-03	+/-	1.9E-04
Sband delay (usec)	9.65105025443E+02	Apriori clock (usec)	-2.0325771E+01	Resid sbdelay (usec)	3.74931E-01	+/-	1.5E-03
Phase delay (usec)	9.64730096235E+02	Apriori clockrate (us/s)	-3.0831392E-07	Resid phdelay (usec)	1.29197E-06	+/-	6.6E-07
Delay rate (us/s)	-6.10008906234E-01	Apriori rate (us/s)	-6.09998212355E-01	Resid rate (us/s)	-1.06939E-05	+/-	6.4E-09
Total phase (deg)	176.3	Apriori accel (us/s/s)	-5.01972500375E-06	Resid phase (deg)	40.1	+/-	20.5

ph/seg (deg)	54.7	Theor.	48.1	Amplitude	0.227 +/- 0.041	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	70.4	Search (1024X32)	0.148	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	30.9	Inc. seg. avg.	0.226	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	52.0	Inc. frq. avg.	0.218	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 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) 3493.026 497.934 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gp.W.134.3MP2MB

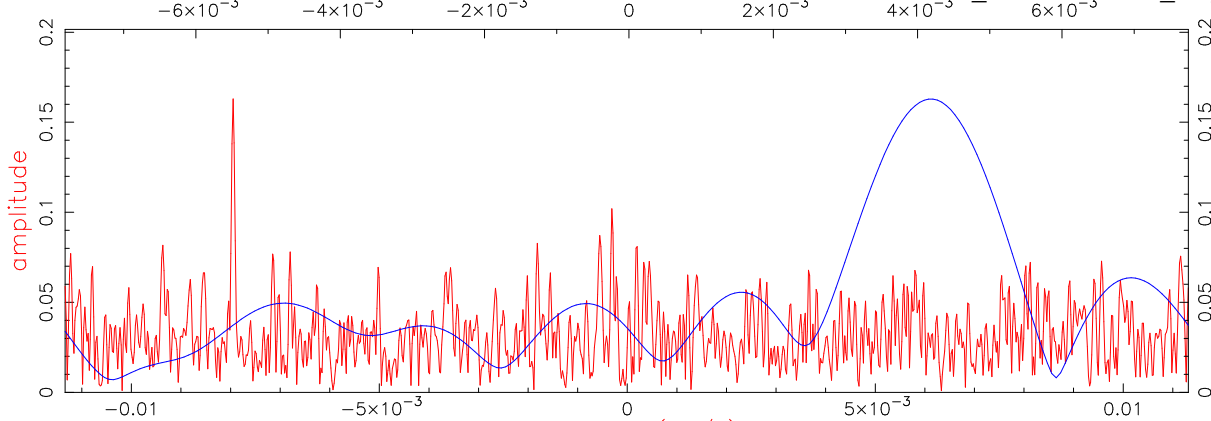
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gp

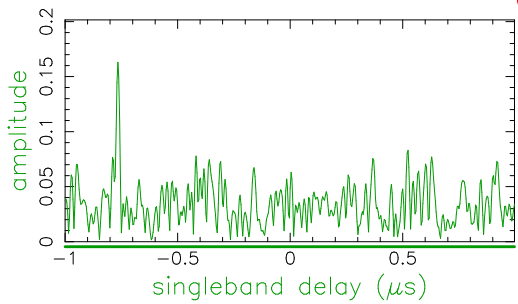
GBT\_COLD - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

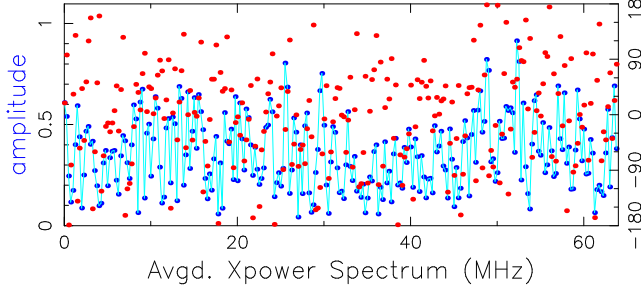


Fringe quality 0

SNR 6.0  
Int time 179.763  
Amp 0.202  
Phase 147.1  
PFD 2.5e-01  
Delays (us)  
SBD -0.765249  
MBD 0.004186  
Fringe rate (Hz)  
-0.686243  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

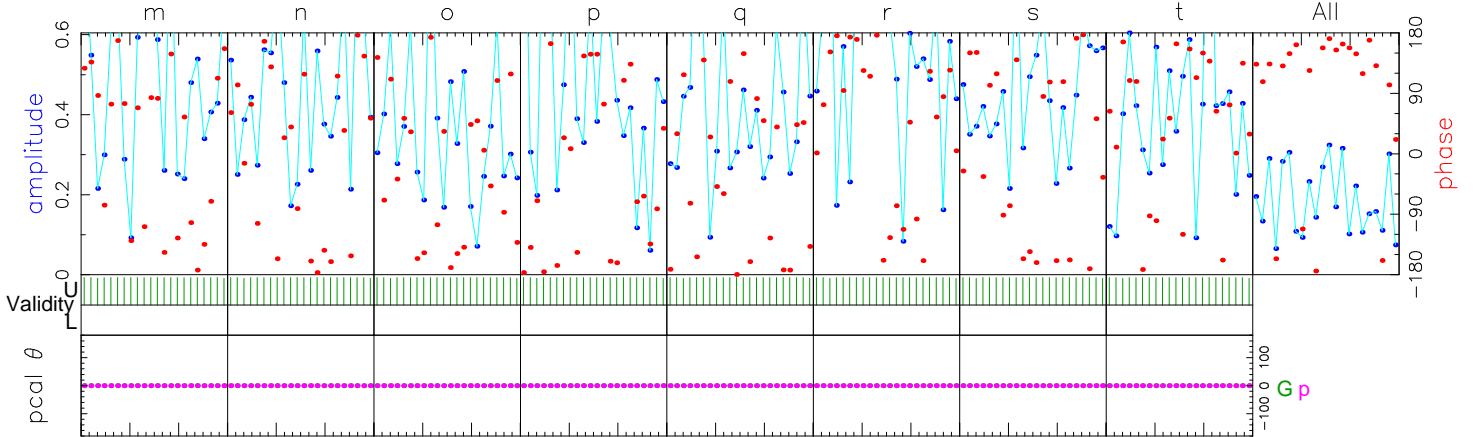


delay rate (ns/s)



Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.00  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:175937  
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
	138.0	138.1	172.1	170.0	154.1	136.9	159.0	133.6	Phase	147.1
	0.3	0.2	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	61.1	5.7	408.2	259.8	110.9	322.3	336.3	347.9	Sbd box	61.1
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	
p	0	0	0	0	0	0	0	0	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.63968656256E+02	Apriori delay (usec)	9.64730094943E+02	Resid mbdelay (usec)	4.18631E-03	+/-	1.8E-04
Sband delay (usec)	9.63964845443E+02	Apriori clock (usec)	-2.0325771E+01	Resid sbdelay (usec)	-7.65249E-01	+/-	1.4E-03
Phase delay (usec)	9.64730099688E+02	Apriori clockrate (us/s)	-3.0831392E-07	Resid phdelay (usec)	4.74496E-06	+/-	6.2E-07
Delay rate (us/s)	-6.10006178959E-01	Apriori rate (us/s)	-6.09998212355E-01	Resid rate (us/s)	-7.96660E-06	+/-	5.9E-09
Total phase (deg)	283.4	Apriori accel (us/s/s)	-5.01972500375E-06	Resid phase (deg)	147.1	+/-	19.2

ph/seg (deg)	43.2	Theor.	45.0	Amplitude	0.202 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.0	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)	17.3	Inc. seg. avg.	0.179	Inc. frq. avg.	0.187	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	35.0	Inc. frq. avg.	0.187	u,v (fr/asec)	3493.026 497.934	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
G: az 182.2 el 53.5 pa 2.1		p: az 136.3 el 49.0 pa -34.7				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//Gp..3MP2MB					ion window (TEC) 0.00 0.00

simultaneous interpolator

Output file: /Exps/c241b/v2/3mm/1234/No0707//Gp.W.144.3MP2MB

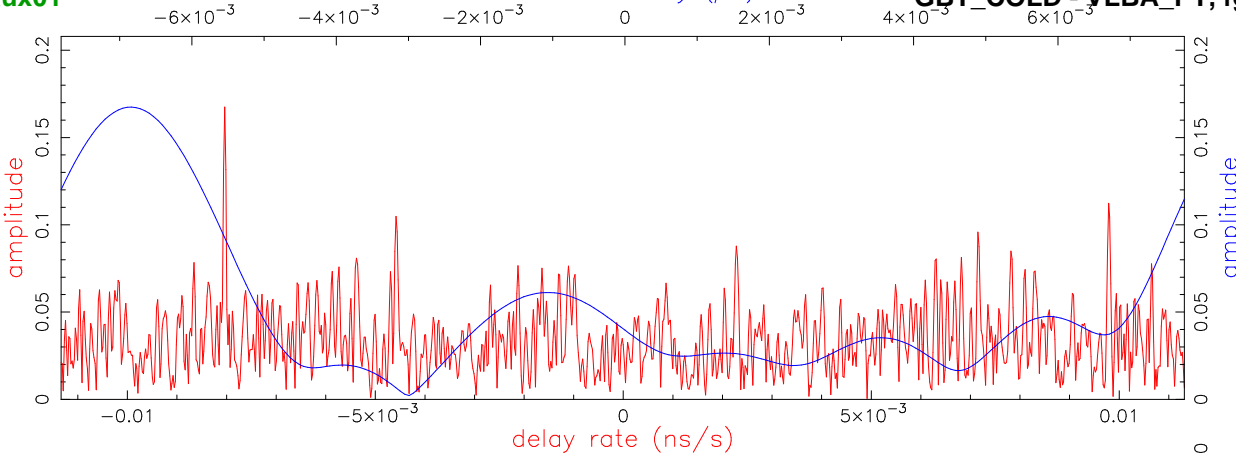
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gp

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

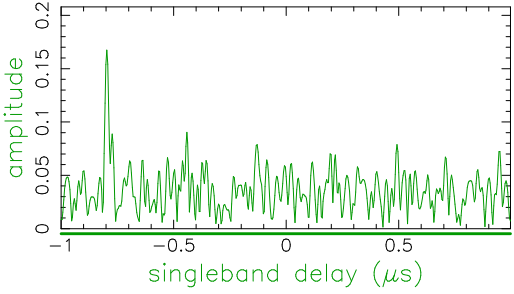
multiband delay ( $\mu$ s)



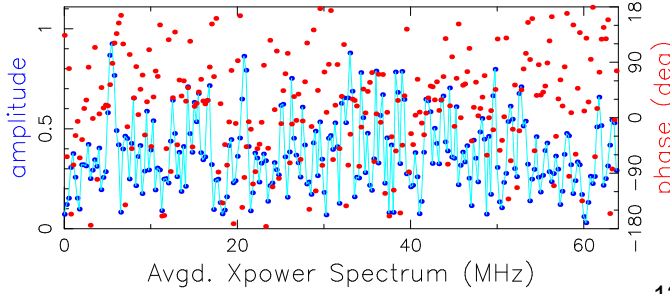
Fringe quality 0

SNR 6.1  
Int time 179.763  
Amp 0.208  
Phase -71.1  
PFD 1.0e-01  
Delays (us)  
SBD -0.796834  
MBD -0.006846  
Fringe rate (Hz)  
-0.693524  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

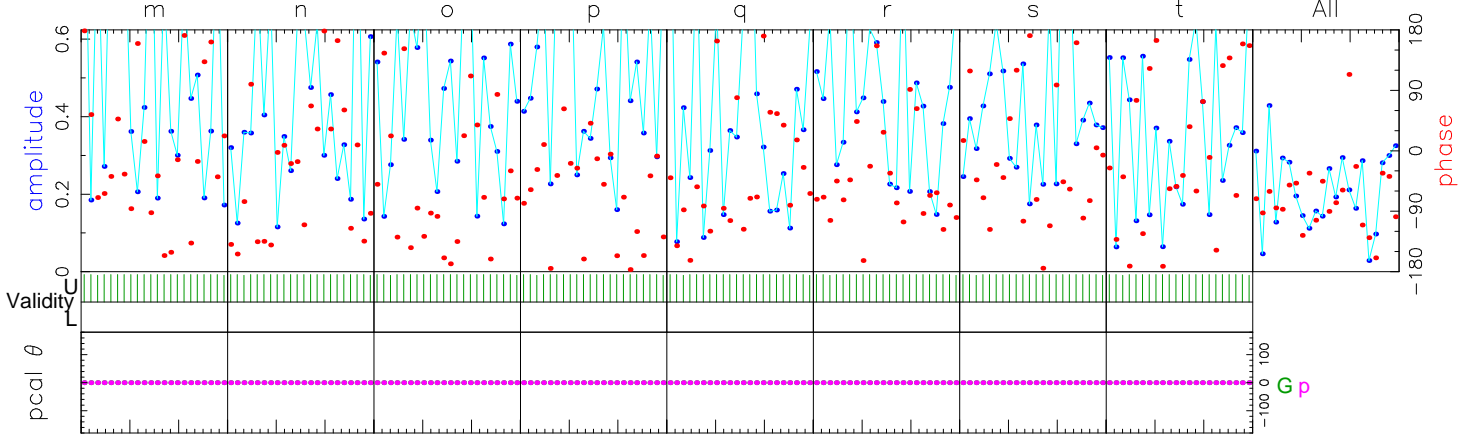
Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.00  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:175940  
2024:113:095956  
RA & Dec (J2000)  
12h29m06.699742s  
+02°03'08.598116"



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
	-73.4	-58.5	-112.7	-46.7	-70.5	-73.3	-62.5	-120.2	Phase	-71.1
	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.1	Ampl.	0.2
	388.1	346.0	287.1	53.6	181.9	52.0	383.6	454.0	Sbd box	53.0
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	
p	0	0	0	0	0	0	0	0	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.63926373620E+02	Apriori delay (usec)		9.64730094943E+02	Resid mbdelay (usec)		-6.84632E-03	+/-	1.8E-04	
Sband delay (usec)	9.63933261193E+02	Apriori clock (usec)		-2.0325771E+01	Resid sbdelay (usec)		-7.96834E-01	+/-	1.4E-03	
Phase delay (usec)	9.64730092650E+02	Apriori clockrate (us/s)		-3.0831392E-07	Resid phdelay (usec)		-2.29266E-06	+/-	6.0E-07	
Delay rate (us/s)	-6.10006263483E-01	Apriori rate (us/s)		-6.09998212355E-01	Resid rate (us/s)		-8.05113E-06	+/-	5.8E-09	
Total phase (deg)	65.1		Apriori accel (us/s/s)		-5.01972500375E-06	Resid phase (deg)		-71.1	+/-	18.7

ph/seg (deg)	51.2	Theor.	43.8	Amplitude	0.208 +/- 0.034	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	64.8	Search (1024X32)	0.158	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	28.8	Inc. seg. avg.	0.204	Inc. frq. avg.	0.200	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	41.7	Inc. frq. avg.	0.200			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      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) 3493.026 497.934      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//Gp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//Gp.W.150.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

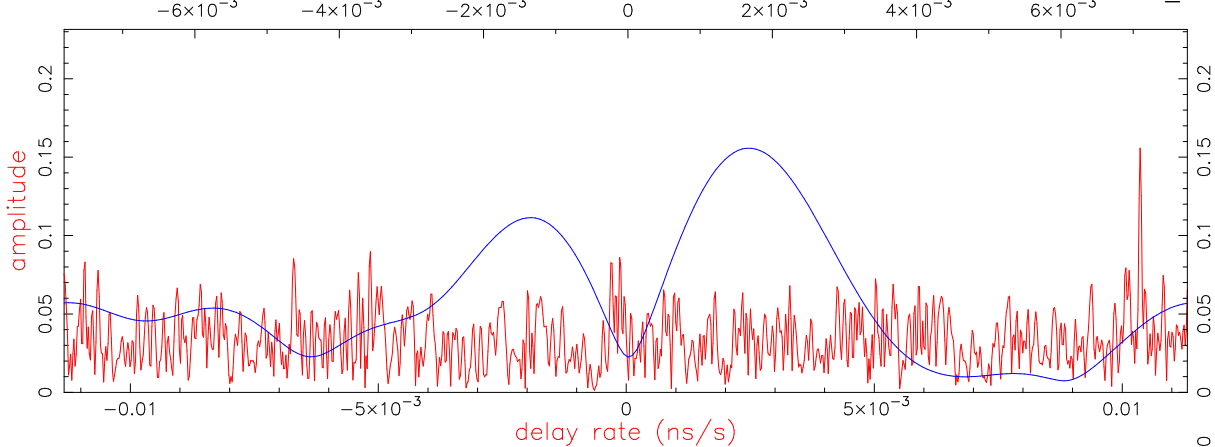
aux01

3C273.3MP2MB, No0707, gp

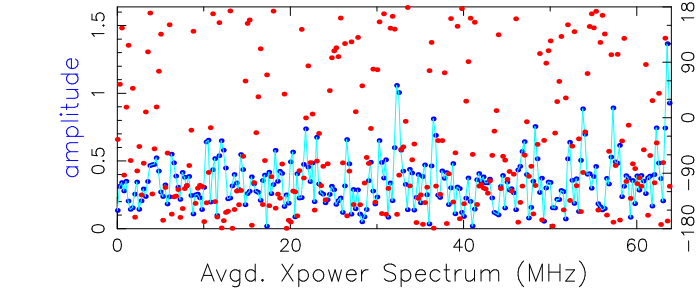
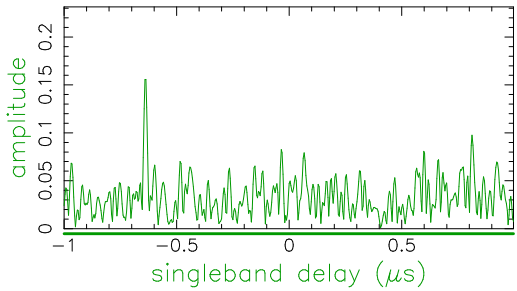
GLT - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

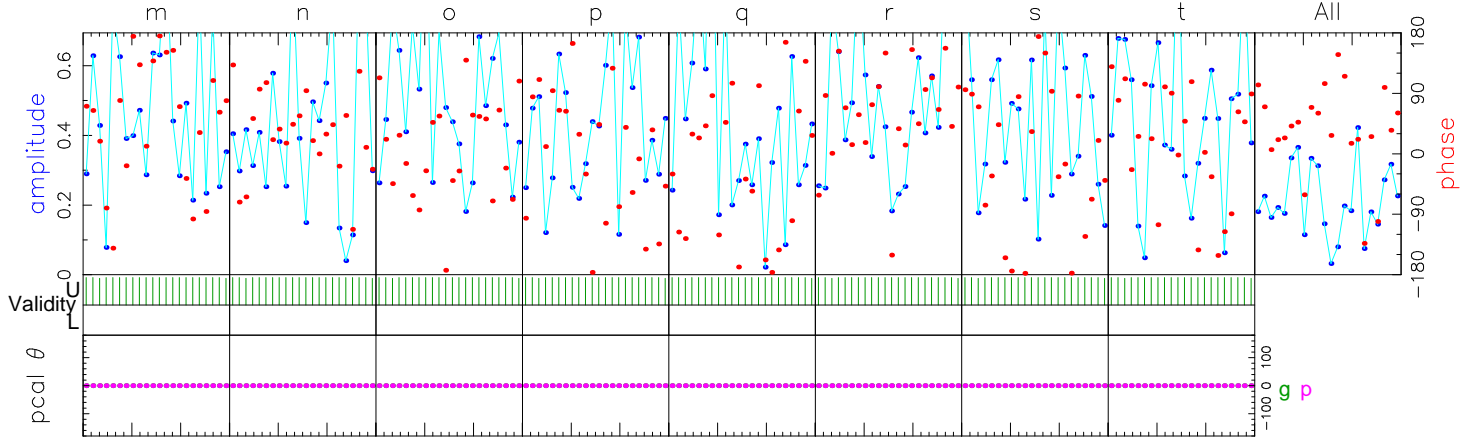


SNR 5.8  
 Int time 179.763  
 Amp 0.232  
 Phase 50.1  
 PFD 4.6e-01  
 Delays (us)  
 SBD -0.638632  
 MBD 0.001658  
 Fringe rate (Hz)  
 0.894392  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175942  
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.06013587419E+04	Apriori delay (usec)	-1.06007197751E+04	Resid mbdelay (usec)	1.65819E-03	+/-	1.9E-04
Sband delay (usec)	-1.06013584074E+04	Apriori clock (usec)	-5.3630390E+00	Resid sbdelay (usec)	-6.38632E-01	+/-	1.5E-03
Phase delay (usec)	-1.06007197735E+04	Apriori clockrate (us/s)	4.0562497E-07	Resid phdelay (usec)	1.61705E-06	+/-	6.3E-07
Delay rate (us/s)	-6.54774131611E-01	Apriori rate (us/s)	-6.54784514611E-01	Resid rate (us/s)	1.03830E-05	+/-	6.1E-09
Total phase (deg)	-104.3	Apriori accel (us/s/s)	5.78860385239E-05	Resid phase (deg)	50.1	+/-	19.6

ph/seg (deg) 66.1 45.9 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.7 80.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.8 27.7 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.9 48.4 Inc. frq. avg. 0.236 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 192.9 el 15.1 pa 3.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 3782.706 3778.291 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//gp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gp.W.161.3MP2MB simultaneous interpolator



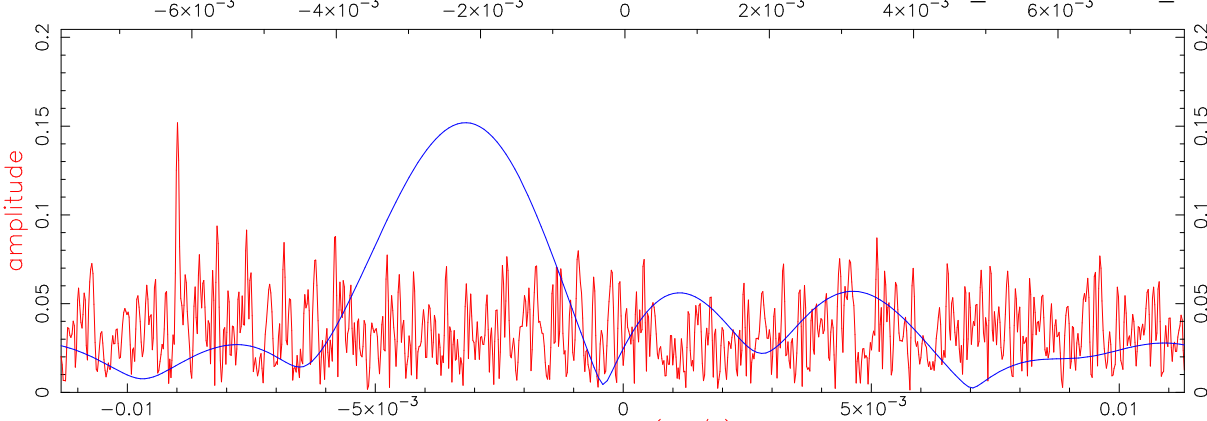
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gp

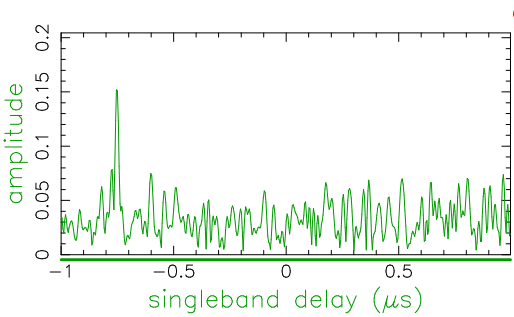
GBT\_COLD - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

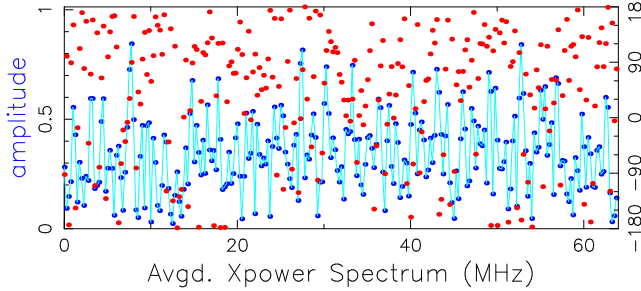


Fringe quality 0

SNR 5.7  
 Int time 179.763  
 Amp 0.204  
 Phase 104.3  
 PFD 7.8e-01  
 Delays (us)  
 SBD -0.752066  
 MBD -0.002213  
 Fringe rate (Hz)  
 -0.776182  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

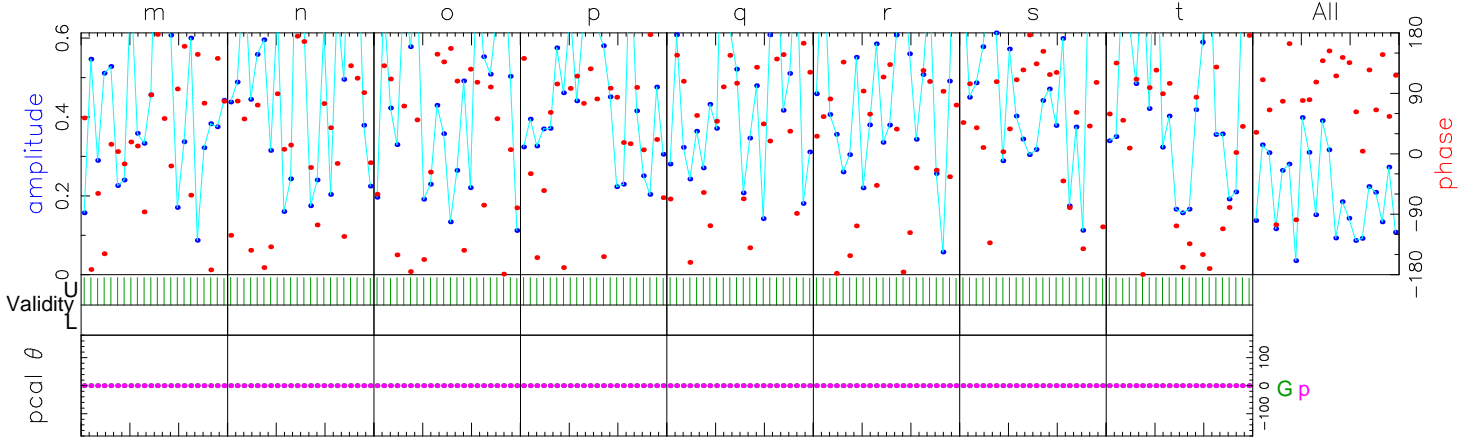


delay rate (ns/s)



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
	61.1	118.9	120.8	87.9	122.0	82.2	81.8	126.1	Phase	104.3
	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.3	Ampl.	0.2
	502.6	204.7	65.9	322.3	261.9	246.3	215.3	388.6	Sbd box	64.5
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	
p	0	0	0	0	0	0	0	0	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.63977881548E+02	Apriori delay (usec)	9.64730094943E+02	Resid mbdelay (usec)	-2.21339E-03	+/-	1.9E-04
Sband delay (usec)	9.63978028943E+02	Apriori clock (usec)	-2.0325771E+01	Resid sbdelay (usec)	-7.52066E-01	+/-	1.5E-03
Phase delay (usec)	9.64730098306E+02	Apriori clockrate (us/s)	-3.0831392E-07	Resid phdelay (usec)	3.36274E-06	+/-	6.5E-07
Delay rate (us/s)	-6.10007223058E-01	Apriori rate (us/s)	-6.09998212355E-01	Resid rate (us/s)	-9.01070E-06	+/-	6.2E-09
Total phase (deg)	240.5	Apriori accel (us/s/s)	-5.01972500375E-06	Resid phase (deg)	104.3	+/-	20.1

ph/seg (deg)	61.8	RMS	Theor.	Amplitude	0.204 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	75.2	61.8	47.2	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	27.1	75.2	82.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	28.4	27.1	28.5	Inc. seg. avg.	0.205	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011	
		28.4	49.7	Inc. frq. avg.	0.190	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 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 3493.026 497.934 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gp.W.162.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

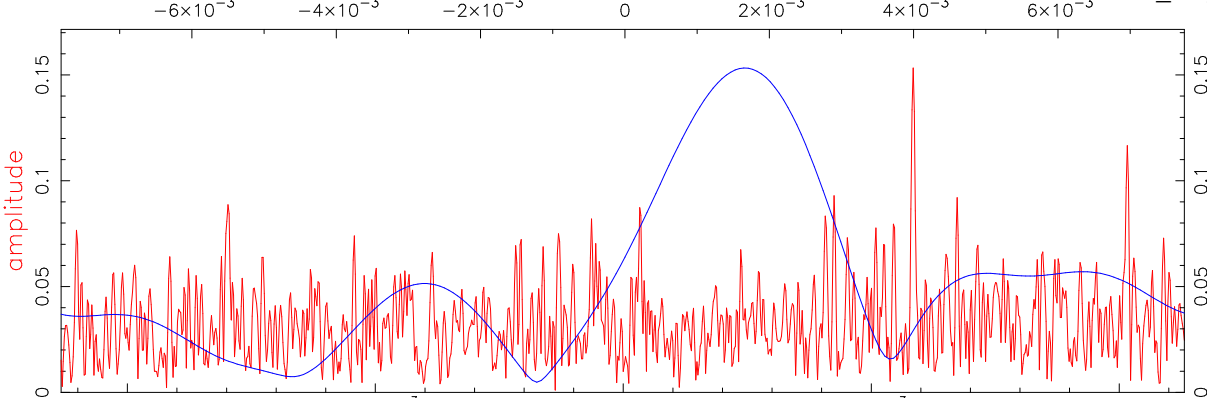
aux01

3C273.3MP2MB, No0707, gp

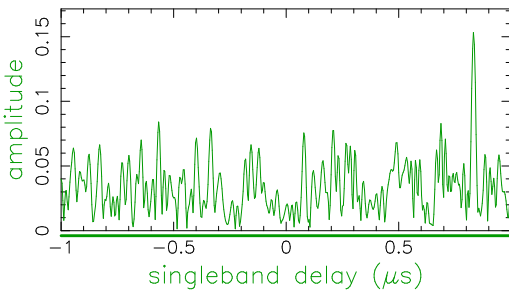
GLT - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

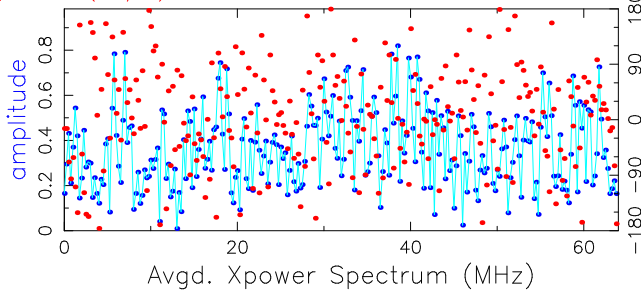
Fringe quality 0



SNR 5.6  
 Int time 179.764  
 Amp 0.172  
 Phase -137.8  
 PFD 9.0e-01  
 Delays (us)  
 SBD 0.832337  
 MBD 0.001671  
 Fringe rate (Hz)  
 0.503869  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

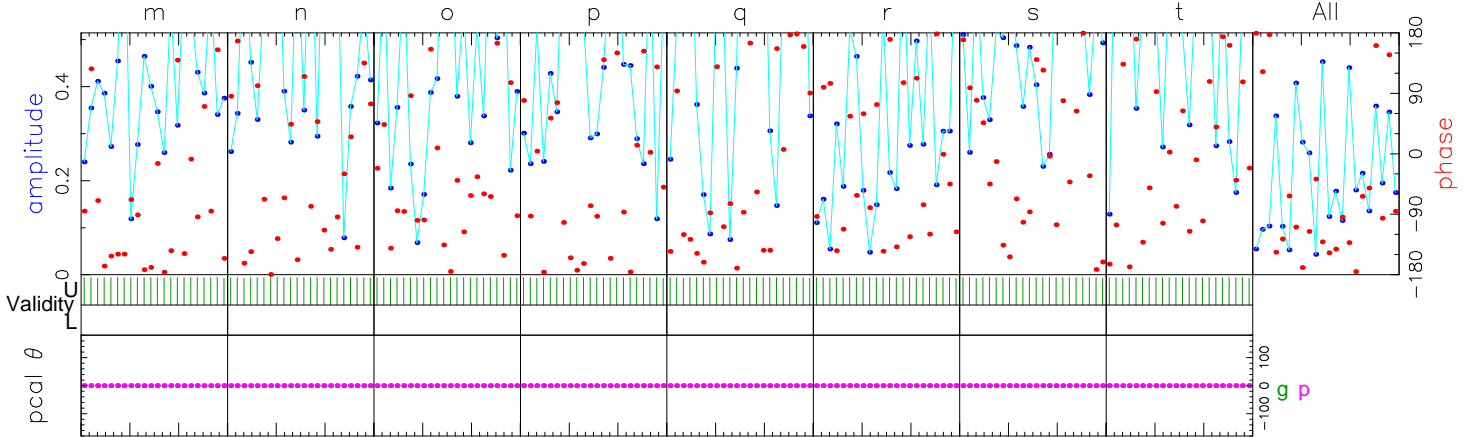


delay rate (ns/s)



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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-1.05998899790E+04	-1.05998874379E+04	-1.06007197796E+04	-1.06007197796E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	1.67117E-03	+/- 1.9E-04
Sband delay (usec)	-1.05998874379E+04	-1.05998874379E+04	-1.06007197796E+04	-1.06007197796E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	8.32337E-01	+/- 1.5E-03
Phase delay (usec)	-1.06007197796E+04	-1.06007197796E+04	-1.06007197796E+04	-1.06007197796E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	-1.06007197751E+04	-4.44412E-06	+/- 6.6E-07
Delay rate (us/s)	-6.54778665185E-01	-6.54778665185E-01	-6.54778665185E-01	-6.54778665185E-01	-6.54784514611E-01	-6.54784514611E-01	-6.54784514611E-01	-6.54784514611E-01	5.84943E-06	+/- 6.3E-09
Total phase (deg)			-292.3		5.78860385239E-05	5.78860385239E-05	5.78860385239E-05	5.78860385239E-05	-137.8	+/- 20.4
ph/seg (deg)	53.3	47.8	47.8	47.8	47.8	47.8	47.8	47.8		
amp/seg (%)	91.1	83.4	83.4	83.4	83.4	83.4	83.4	83.4		
ph/frq (deg)	22.2	28.8	28.8	28.8	28.8	28.8	28.8	28.8		
amp/frq (%)	55.6	50.3	50.3	50.3	50.3	50.3	50.3	50.3		
g: az 192.9 el 15.1 pa 3.0	p: az 136.3 el 49.0 pa -34.7		u, v (fr/asec) 3782.706 3778.291		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0707//gp..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//gp.W.173.3MP2MB		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		ion window (TEC) 0.00 0.00	

Mk4/DiFX fourfit 3.25 rev 0

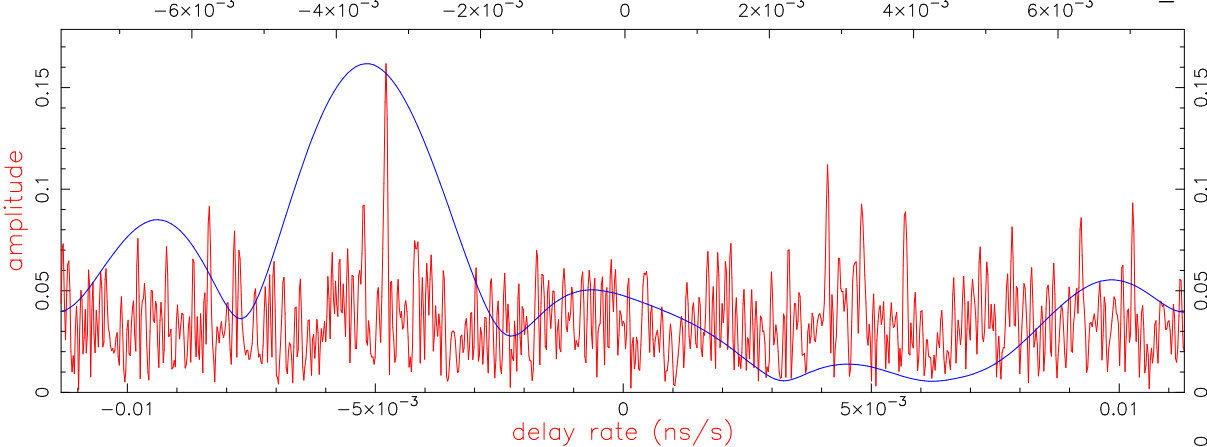
aux01

3C273.3MP2MB, No0707, gp

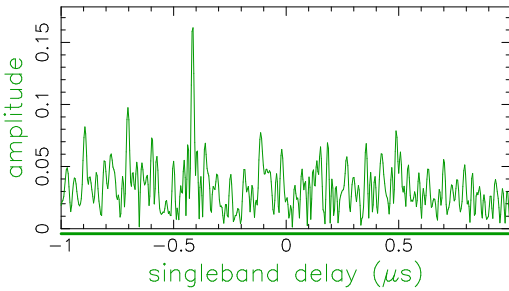
GLT - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

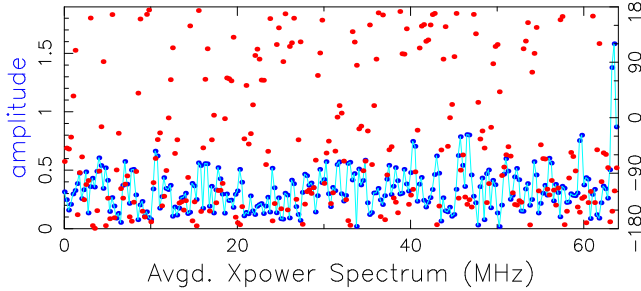
Fringe quality 0



SNR 6.1  
 Int time 179.763  
 Amp 0.179  
 Phase 155.1  
 PFD 1.5e-01  
 Delays (us)  
 SBD -0.415765  
 MBD -0.003542  
 Fringe rate (Hz)  
 -0.413072  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

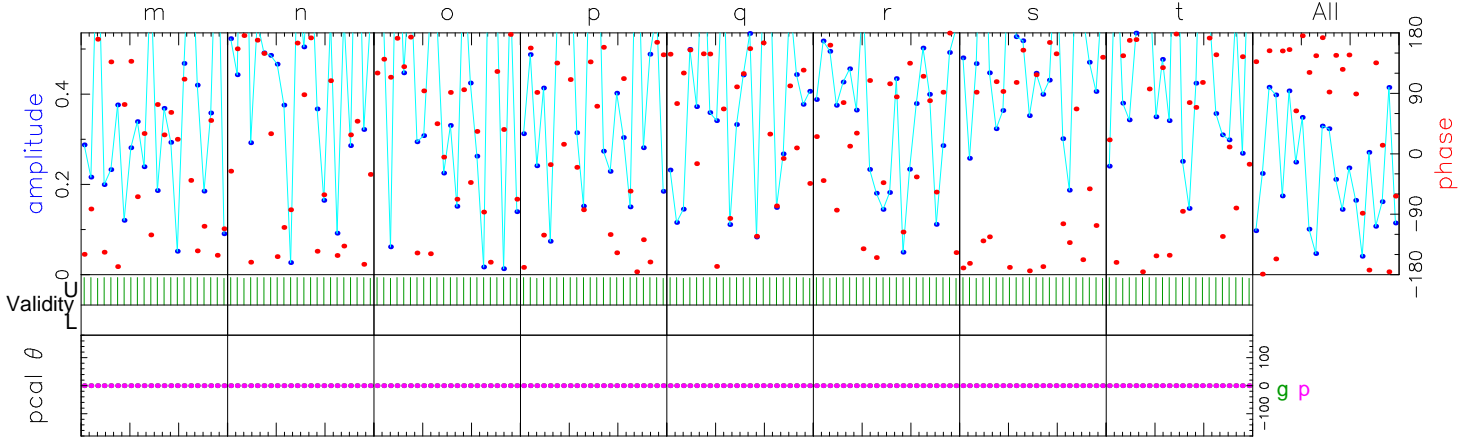


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175946  
 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
	-156.1	164.9	147.3	151.3	113.4	104.9	172.2	161.4	Phase	155.1
	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.2	Ampl.	0.2
	64.9	409.0	437.8	309.8	409.0	400.4	150.7	2.7	Sbd box	150.6
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	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.06011295672E+04	Apriori delay (usec)	-1.06007197751E+04	Resid mbdelay (usec)	-3.54206E-03	+/-	1.8E-04
Sband delay (usec)	-1.06011355404E+04	Apriori clock (usec)	-5.3630390E+00	Resid sbdelay (usec)	-4.15765E-01	+/-	1.4E-03
Phase delay (usec)	-1.06007197701E+04	Apriori clockrate (us/s)	4.0562497E-07	Resid phdelay (usec)	5.00026E-06	+/-	6.1E-07
Delay rate (us/s)	-6.54789309967E-01	Apriori rate (us/s)	-6.54784514611E-01	Resid rate (us/s)	-4.79536E-06	+/-	5.8E-09
Total phase (deg)	0.6	Apriori accel (us/s/s)	5.78860385239E-05	Resid phase (deg)	155.1	+/-	18.9

ph/seg (deg) 59.9 44.2 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.8 77.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.5 26.7 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.5 46.5 Inc. frq. avg. 0.171 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 192.9 el 15.1 pa 3.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 3782.706 3778.291 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gp.W.185.3MP2MB

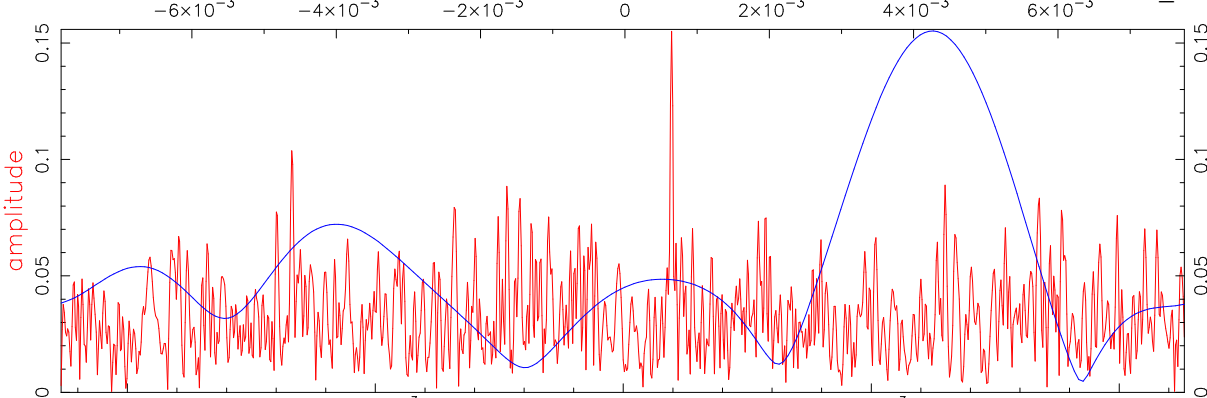
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gp

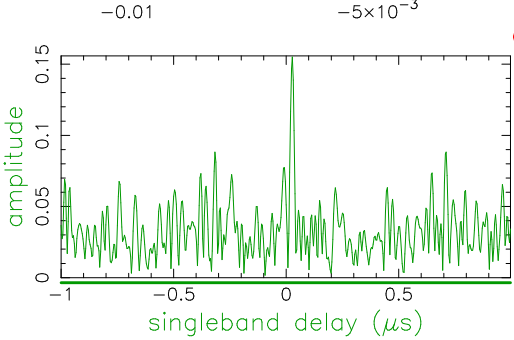
GLT - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu\text{s}$ )

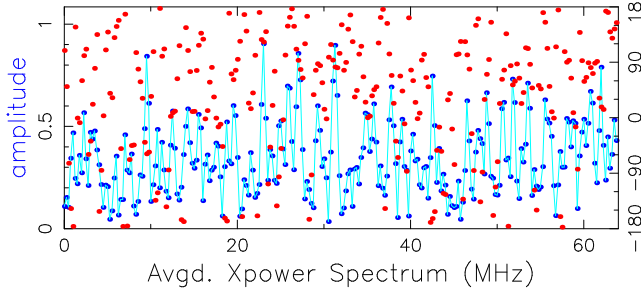


Fringe quality 0

SNR 5.7  
 Int time 179.764  
 Amp 0.156  
 Phase -17.9  
 PFD 7.8e-01  
 Delays (us)  
 SBD 0.026679  
 MBD 0.004211  
 Fringe rate (Hz)  
 0.084351  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

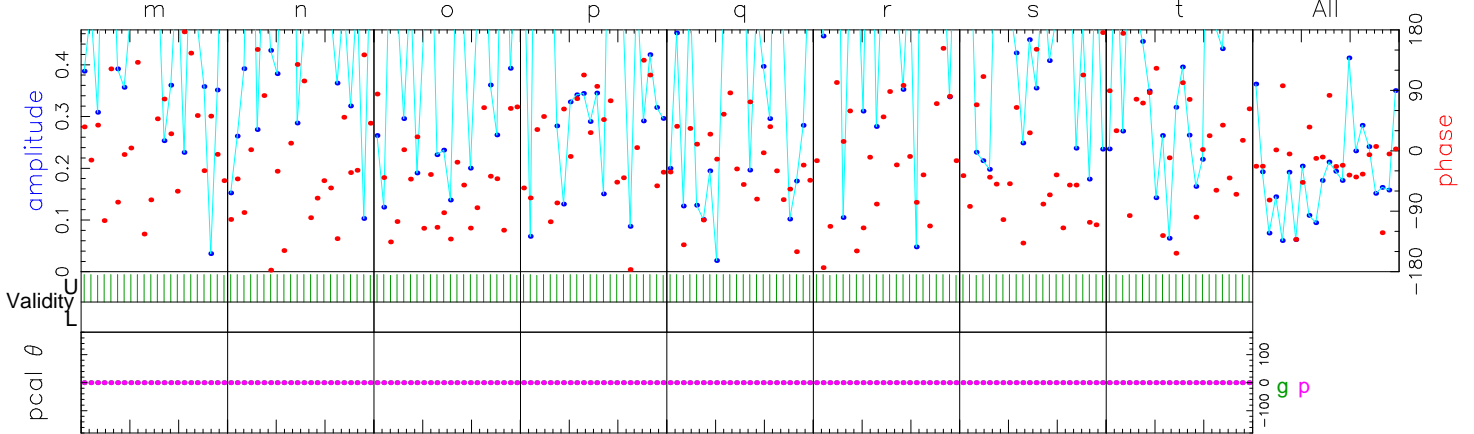


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.06006999389E+04	Apriori delay (usec)	-1.06007197751E+04	Resid mbdelay (usec)	4.21118E-03	+/-	1.9E-04
Sband delay (usec)	-1.06006930959E+04	Apriori clock (usec)	-5.3630390E+00	Resid sbdelay (usec)	2.66792E-02	+/-	1.5E-03
Phase delay (usec)	-1.06007197757E+04	Apriori clockrate (us/s)	4.0562497E-07	Resid phdelay (usec)	-5.76933E-07	+/-	6.5E-07
Delay rate (us/s)	-6.54783535378E-01	Apriori rate (us/s)	-6.54784514611E-01	Resid rate (us/s)	9.79232E-07	+/-	6.2E-09
Total phase (deg)	-172.3	Apriori accel (us/s/s)	5.78860385239E-05	Resid phase (deg)	-17.9	+/-	20.1

ph/seg (deg) 50.9 47.2 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.0 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.5 28.4 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.3 49.6 Inc. frq. avg. 0.161 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 192.9 el 15.1 pa 3.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 3782.706 3778.291 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gp.W.194.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

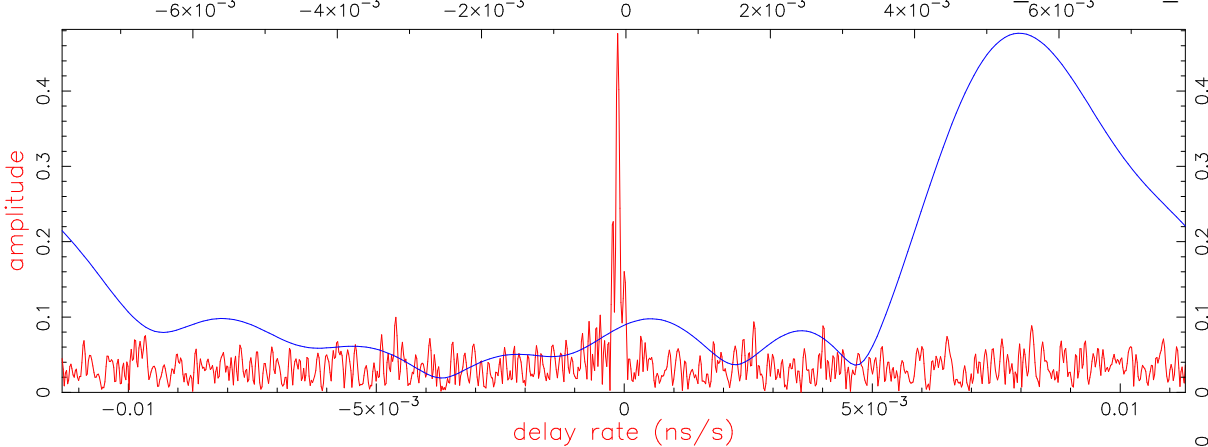
aux01

3C273.3MP2MB, No0707, kp

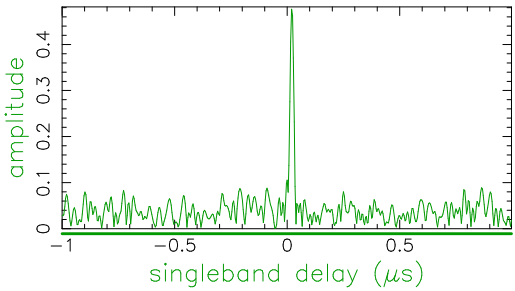
VLBA\_KP - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

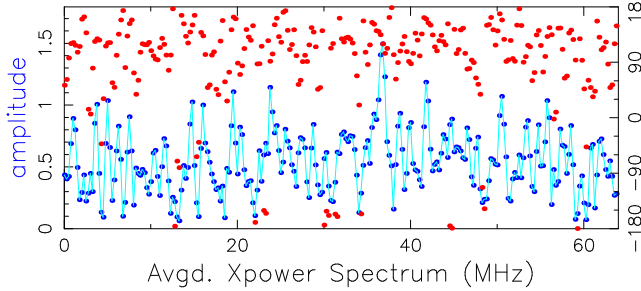
Fringe quality 7



SNR 17.7  
 Int time 179.764  
 Amp 0.482  
 Phase -61.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.020877  
 MBD 0.005495  
 Fringe rate (Hz) -0.010918  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

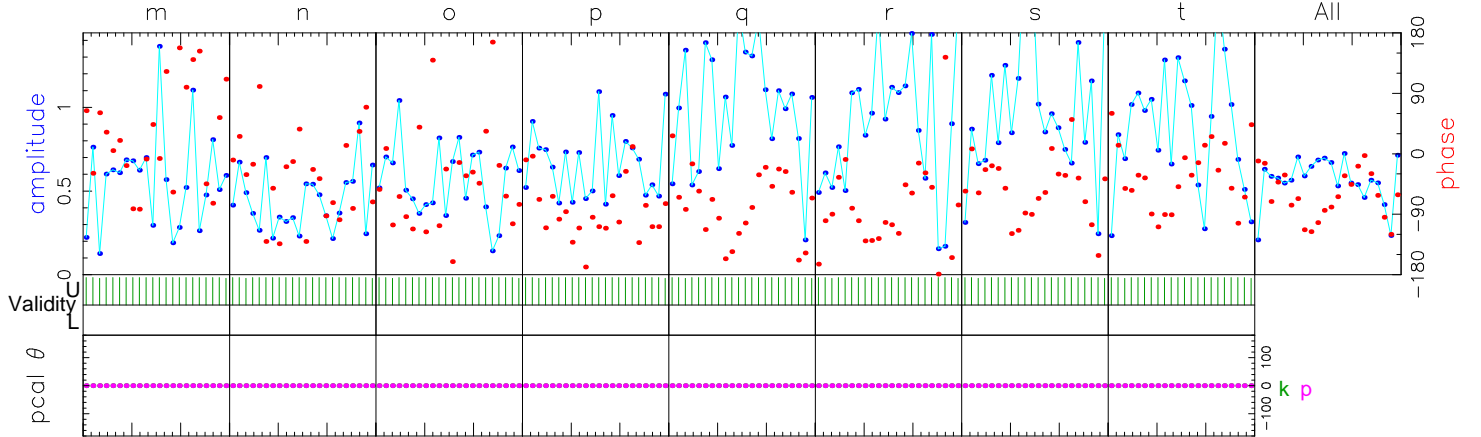


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.0	-35.6	-63.7	-81.6	-74.6	-88.0	-55.5	-38.1	Phase	-61.6
	0.2	0.2	0.3	0.5	0.7	0.7	0.8	0.7	Ampl.	0.5
	285.1	475.9	261.3	262.3	262.4	262.8	262.1	263.1	Sbd box	262.3
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	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.30041608774E+02	Apriori delay (usec)	-1.30062728695E+02	Resid mbdelay (usec)	5.49492E-03	+/-	6.1E-05
Sband delay (usec)	-1.30041851195E+02	Apriori clock (usec)	-5.5508556E+00	Resid sbdelay (usec)	2.08775E-02	+/-	4.9E-04
Phase delay (usec)	-1.30062730681E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-1.98573E-06	+/-	2.1E-07
Delay rate (us/s)	8.60981117730E-02	Apriori rate (us/s)	8.60982385198E-02	Resid rate (us/s)	-1.26747E-07	+/-	2.0E-09
Total phase (deg)	-223.5	Apriori accel (us/s/s)	5.32722191816E-07	Resid phase (deg)	-61.6	+/-	6.5

ph/seg (deg)	RMS 34.7	Theor. 15.2	Amplitude Search (1024X32)	0.468	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	32.5	26.6	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)	34.7	9.2	Inc. seg. avg.	0.544	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 (%)	44.9	16.0	Inc. frq. avg.	0.513	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

k: az 130.2 el 48.5 pa -40.3      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -493.174 -302.000      simultaneous interpolator

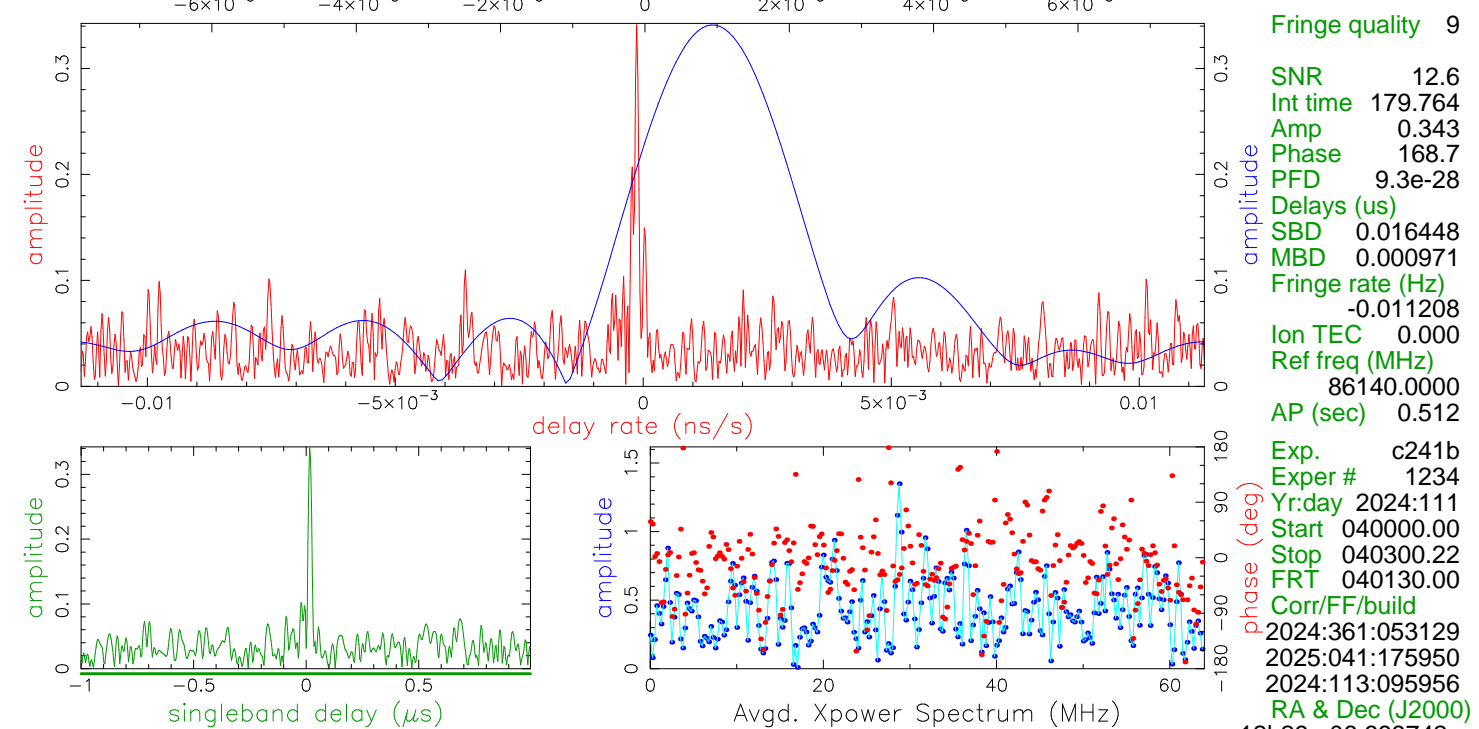
Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.191.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kp

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



Fringe quality 9

SNR 12.6

Int time 179.764

Amp 0.343

Phase 168.7

PFD 9.3e-28

Delays (us)

SBD 0.016448

MBD 0.000971

Fringe rate (Hz)

-0.011208

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

2025:041:175950

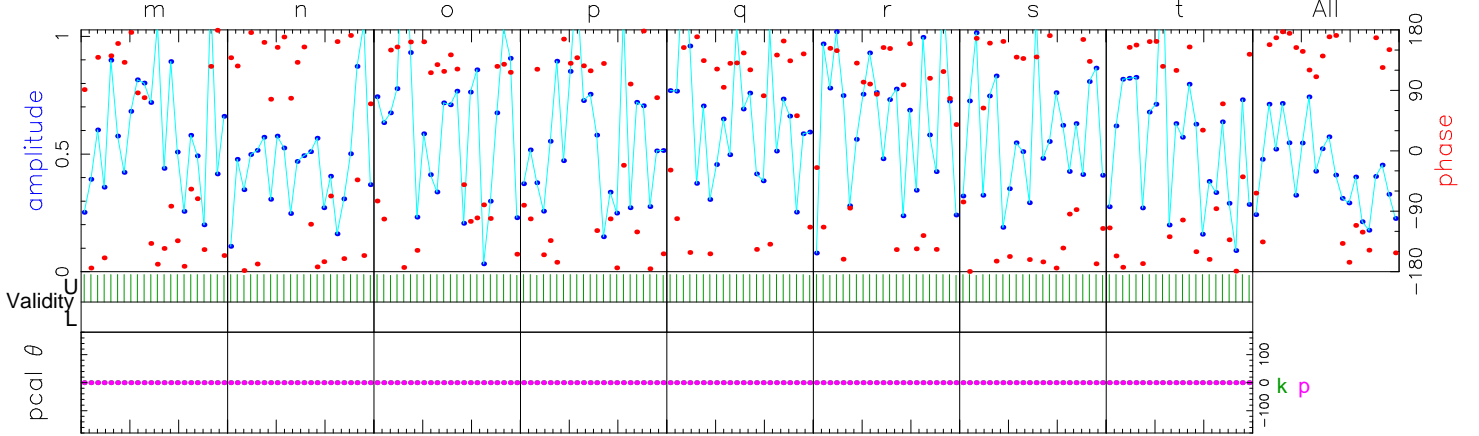
2024:113:095956

RA & Dec (J2000)

12h29m06.699742s

+02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	175.0	176.6	167.1	176.9	158.4	150.0	179.4	170.8	Phase	168.7
	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	Ampl.	0.3
	260.9	260.4	260.5	262.2	260.6	261.2	261.7	261.8	Sbd box	261.2
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	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.30046132774E+02	Apriori delay (usec)	-1.30062728695E+02	Resid mbdelay (usec)	9.70921E-04	+/-	8.6E-05
Sband delay (usec)	-1.30046280695E+02	Apriori clock (usec)	-5.5508556E+00	Resid sbdelay (usec)	1.64480E-02	+/-	6.9E-04
Phase delay (usec)	-1.30062723253E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	5.44171E-06	+/-	2.9E-07
Delay rate (us/s)	8.60981084073E-02	Apriori rate (us/s)	8.60982385198E-02	Resid rate (us/s)	-1.30112E-07	+/-	2.8E-09
Total phase (deg)	6.8	Apriori accel (us/s/s)	5.32722191816E-07	Resid phase (deg)	168.7	+/-	9.1

ph/seg (deg)	RMS 46.5	Theor. 21.4	Amplitude Search (1024X32)	0.343 +/- 0.027	0.340	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	54.1	37.3	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	11.2	12.9	Inc. seg. avg.	0.407	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	Data rate(Mb/s): 2048	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.7	22.5	Inc. frq. avg.	0.338	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 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -493.174 -302.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.198.3MP2MB

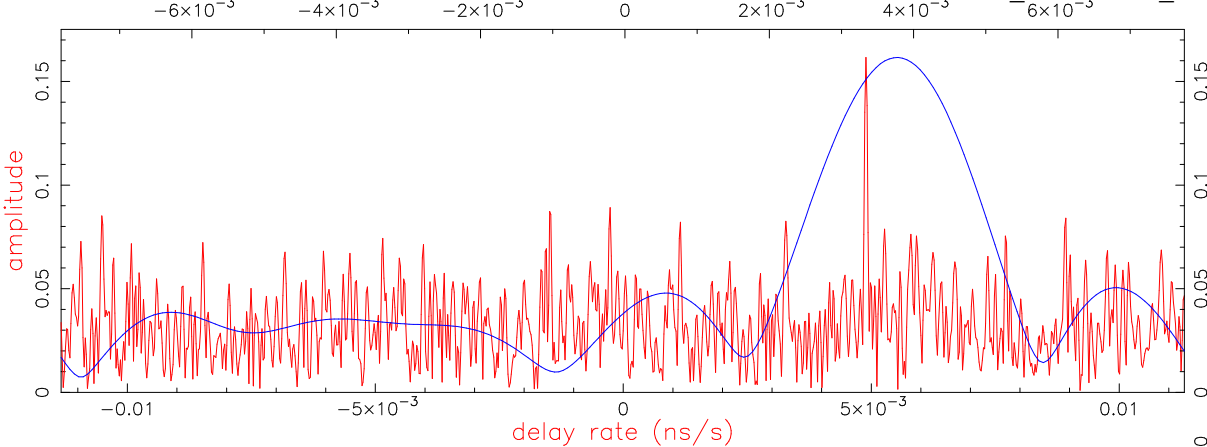
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kp

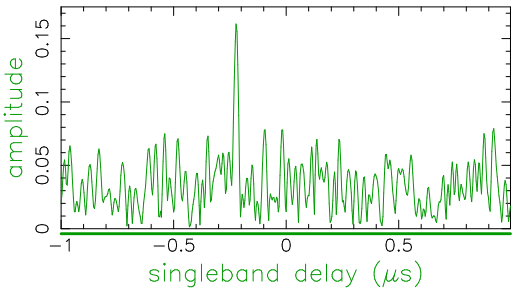
VLBA\_KP - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

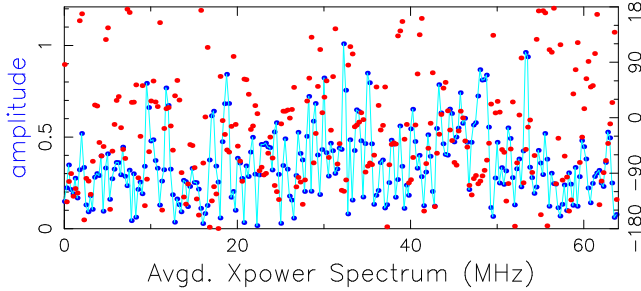


Fringe quality 0

SNR 5.9  
Int time 179.764  
Amp 0.175  
Phase -128.1  
PFD 3.1e-01  
Delays (us)  
SBD -0.221825  
MBD 0.003755  
Fringe rate (Hz) 0.421379  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

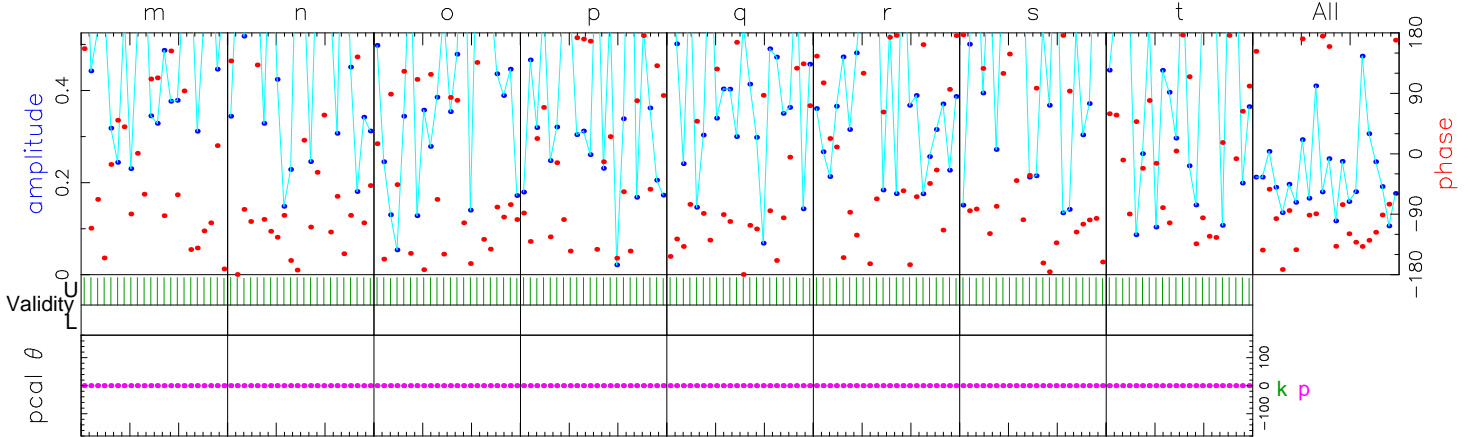


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All				
	-118.6	-120.8	-140.6	-137.0	-133.2	-133.7	-129.6	-72.9	Phase	-128.1				
	0.1	0.3	0.2	0.1	0.2	0.1	0.3	0.1	Ampl.	0.2				
	491.3	199.2	483.0	262.2	11.6	456.7	200.7	321.2	Sbd box	200.2				
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					
p	0	0	0	0	0	0	0	0	PC freqs					
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
kp	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					
p	1000	1000	1000	1000	1000	1000	1000	1000						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.30277724004E+02								Apriori delay (usec)	-1.30062728695E+02	Resid mbdelay (usec)	3.75469E-03	+/-	1.8E-04
Sband delay (usec)	-1.30284554195E+02								Apriori clock (usec)	-5.5508556E+00	Resid sbdelay (usec)	-2.21825E-01	+/-	1.5E-03
Phase delay (usec)	-1.30062732825E+02								Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-4.12987E-06	+/-	6.2E-07
Delay rate (us/s)	8.61031303066E-02								Apriori rate (us/s)	8.60982385198E-02	Resid rate (us/s)	4.89179E-06	+/-	6.0E-09
Total phase (deg)			-290.0						Apriori accel (us/s/s)	5.32722191816E-07	Resid phase (deg)	-128.1	+/-	19.3

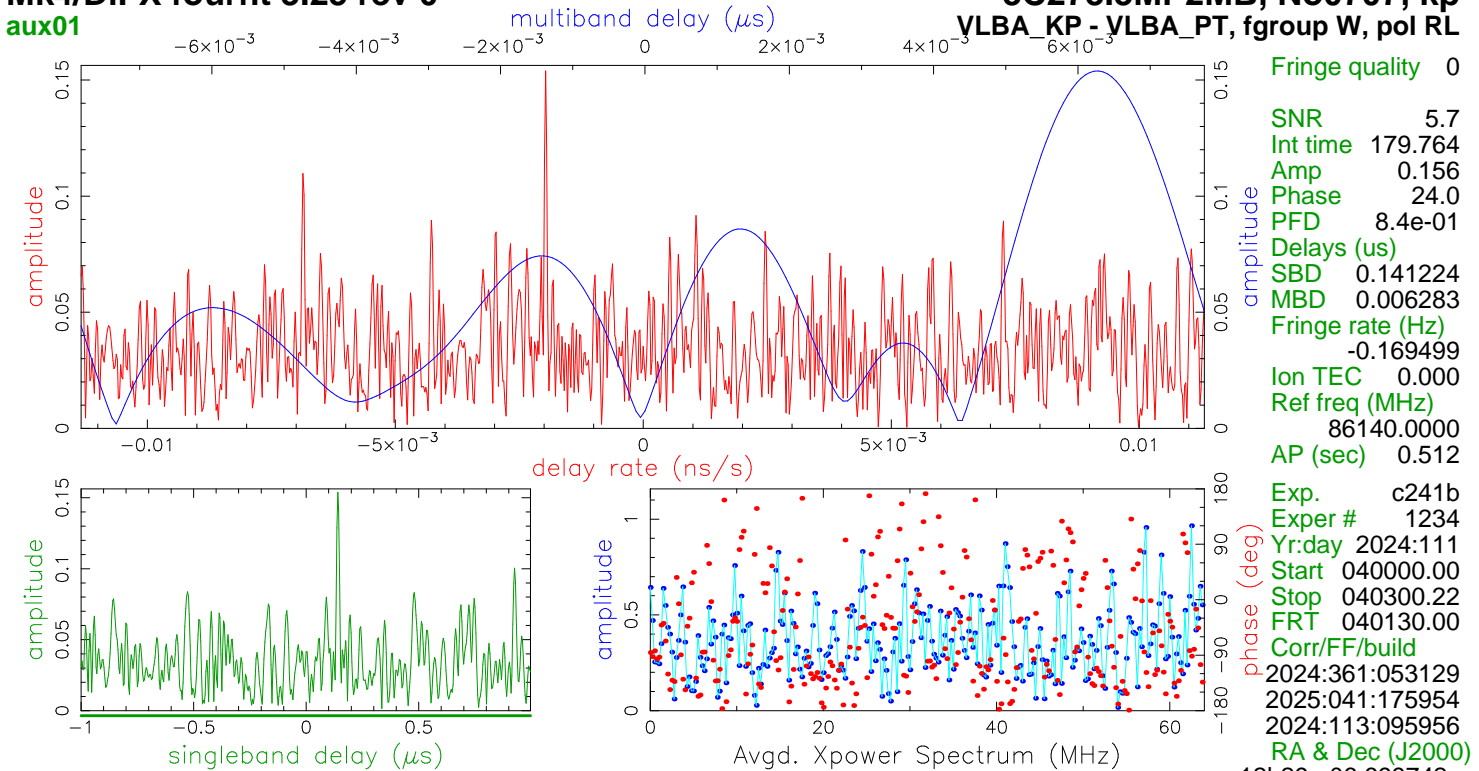
ph/seg (deg) 44.4 45.2 Amplitude 0.175 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 65.2 79.0 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 24.1 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 41.9 47.6 Inc. seg. avg. 0.183 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 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -493.174 -302.000 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//kp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.207.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

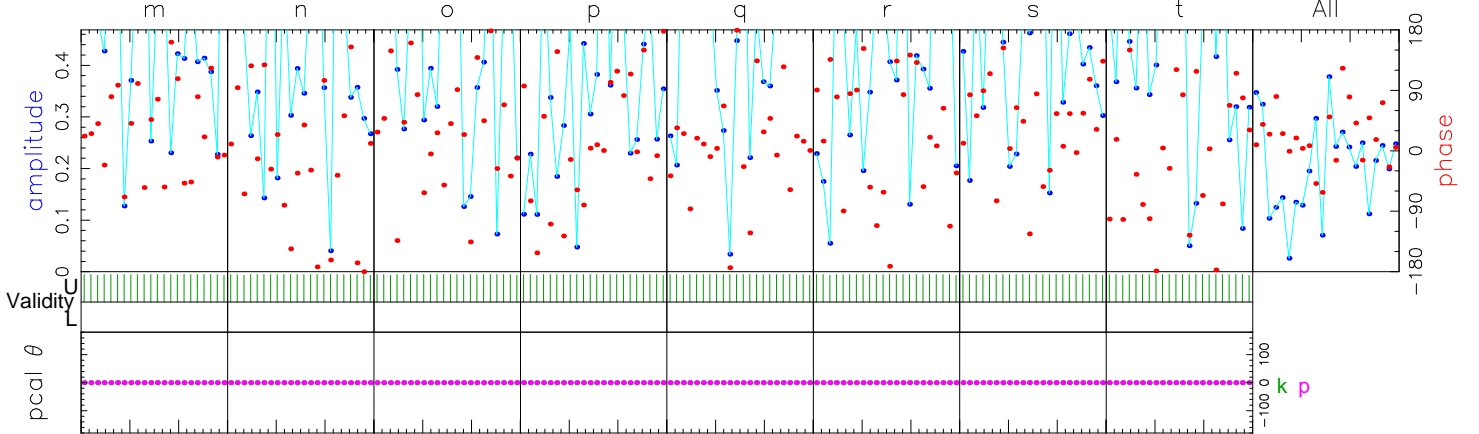
aux01

3C273.3MP2MB, No0707, kp

VLBA\_KP - VLBA\_PT, 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
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	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.29915820614E+02	Apriori delay (usec)	-1.30062728695E+02	Resid mbdelay (usec)	6.28308E-03	+/-	1.9E-04
Sband delay (usec)	-1.29921504695E+02	Apriori clock (usec)	-5.5508556E+00	Resid sbdelay (usec)	1.41224E-01	+/-	1.5E-03
Phase delay (usec)	-1.30062727922E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	7.73437E-07	+/-	6.5E-07
Delay rate (us/s)	8.60962708042E-02	Apriori rate (us/s)	8.60982385198E-02	Resid rate (us/s)	-1.96772E-06	+/-	6.3E-09
Total phase (deg)	-137.9	Apriori accel (us/s/s)	5.32722191816E-07	Resid phase (deg)	24.0	+/-	20.2

ph/seg (deg)	RMS 42.7	Theor. 47.5	Amplitude Search (1024X32)	0.151	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.5	82.9	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)	33.8	28.6	Inc. seg. avg.	0.154	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.5	50.0	Inc. frq. avg.	0.154	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      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -493.174 -302.000      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.216.3MP2MB



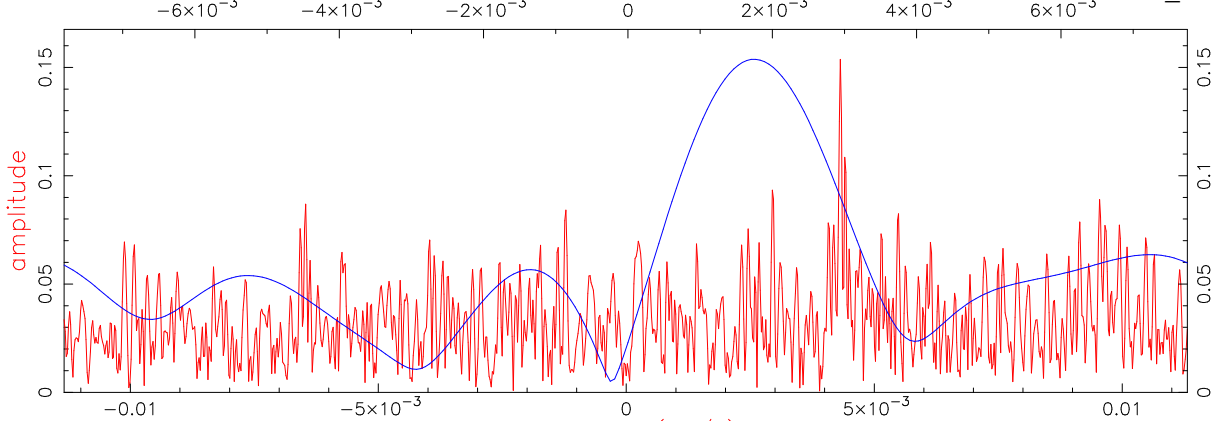
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lp

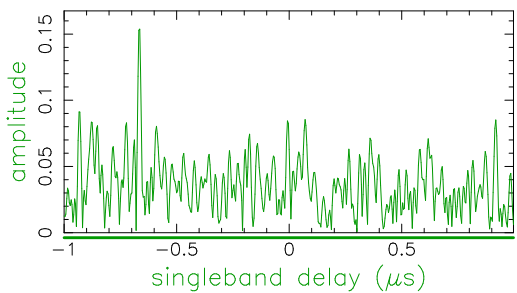
JCMT - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

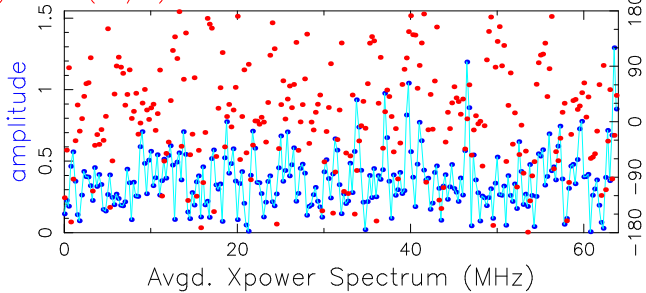


Fringe quality 0

SNR 5.8  
 Int time 179.764  
 Amp 0.168  
 Phase -117.0  
 PFD 6.0e-01  
 Delays (us)  
 SBD -0.665931  
 MBD 0.001735  
 Fringe rate (Hz)  
 0.371569  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

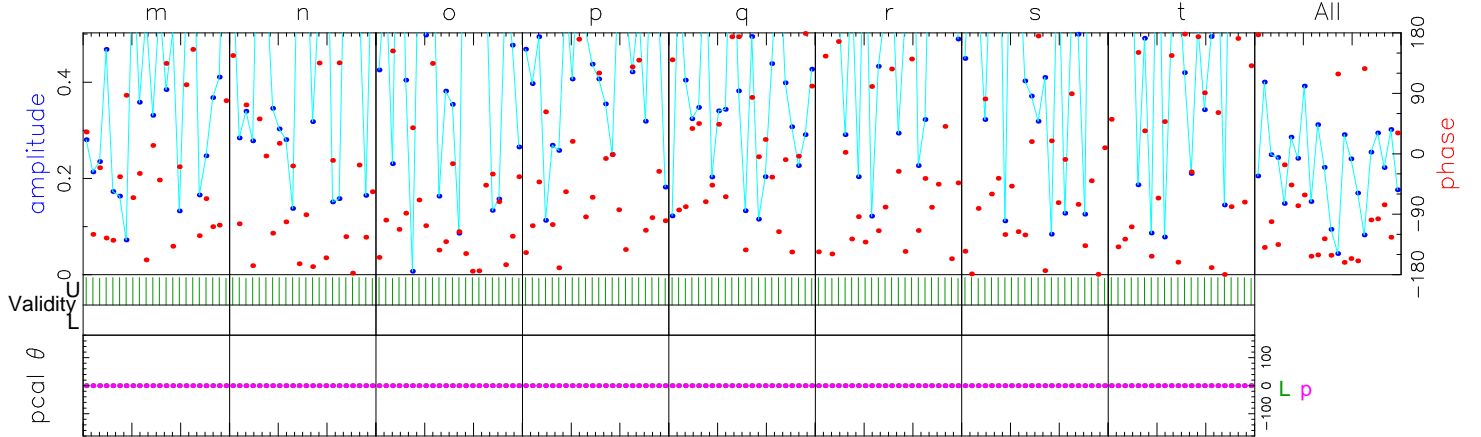


delay rate (ns/s)



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
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		
p	0	0	0	0	0	0	0	0		
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.03604443866E+04	Apriori delay (usec)	-1.03597742463E+04	Resid mbdelay (usec)	1.73474E-03	+/-	1.9E-04
Sband delay (usec)	-1.03604401775E+04	Apriori clock (usec)	-5.9196396E+00	Resid sbdelay (usec)	-6.65931E-01	+/-	1.5E-03
Phase delay (usec)	-1.03597742501E+04	Apriori clockrate (us/s)	-7.1478392E-07	Resid phdelay (usec)	-3.77415E-06	+/-	6.4E-07
Delay rate (us/s)	8.28979158889E-01	Apriori rate (us/s)	8.28974845340E-01	Resid rate (us/s)	4.31355E-06	+/-	6.1E-09
Total phase (deg)	-324.4	Apriori accel (us/s/s)	5.42093654789E-05	Resid phase (deg)	-117.0	+/-	19.8

ph/seg (deg)	62.9	Theor.	46.5	Amplitude	0.168 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	72.1	Search (1024X32)	0.152	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	32.0	Inc. seg. avg.	0.183	Inc. frq. avg.	0.163	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	49.1	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 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) -4722.982 -1838.745 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/Lp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/Lp.W.225.3MP2MB

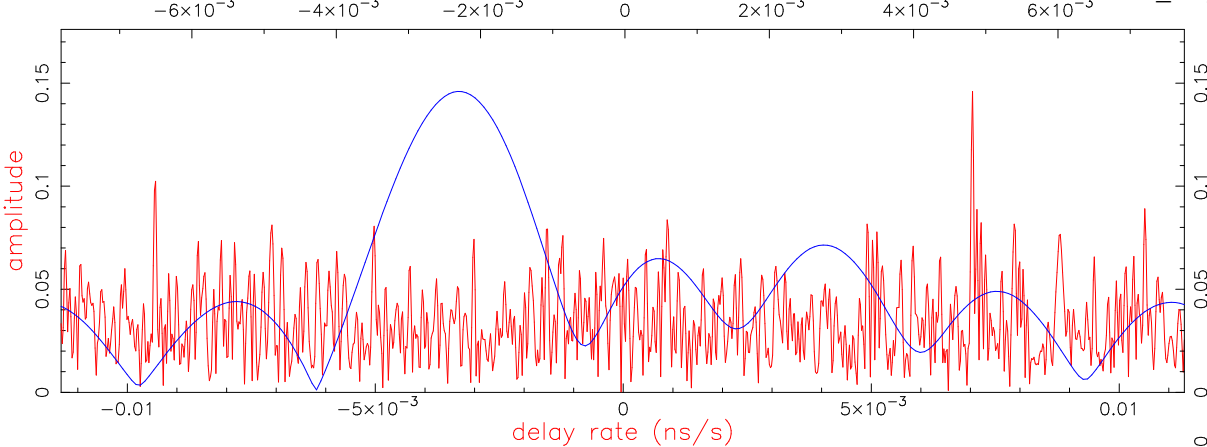
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lp

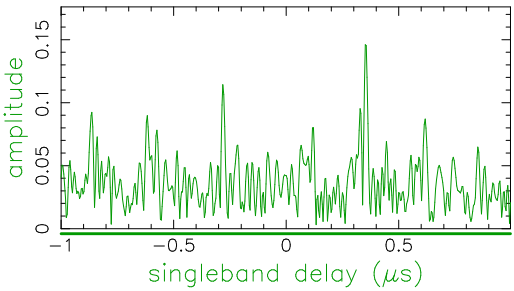
JCMT - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

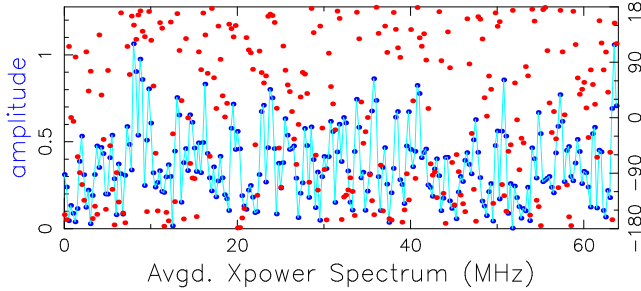


Fringe quality 0

SNR 5.5  
 Int time 179.764  
 Amp 0.176  
 Phase -61.4  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.353394  
 MBD -0.002306  
 Fringe rate (Hz)  
 0.608383  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

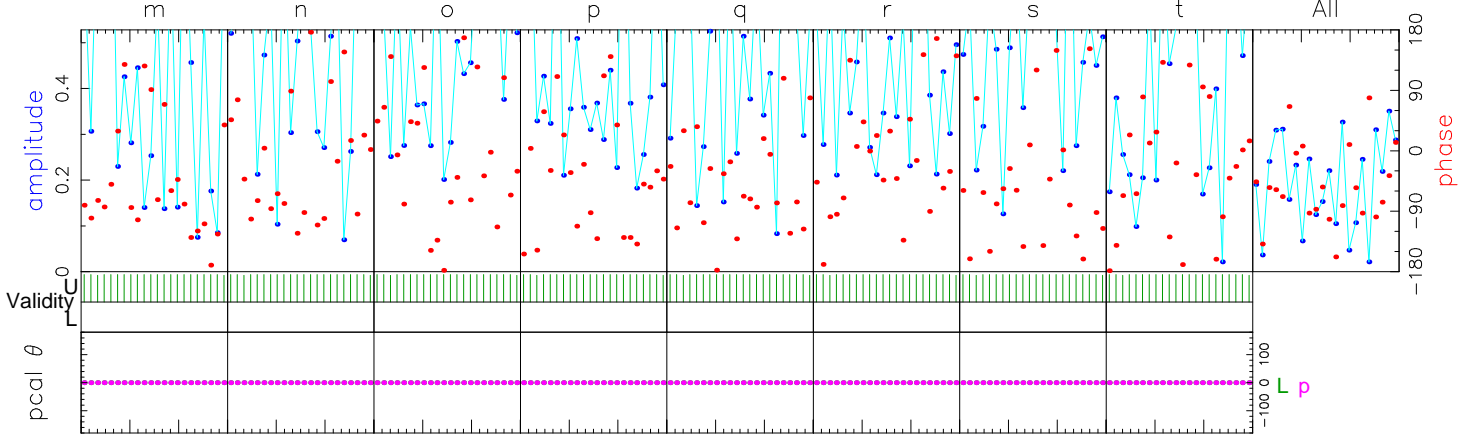


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175958  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.2	-49.7	-29.0	-74.2	-58.9	-37.6	-100.1	-11.1	Phase	-61.4
	0.3	0.2	0.1	0.1	0.2	0.1	0.3	0.1	Ampl.	0.2
	346.0	470.9	499.0	474.2	75.6	286.2	414.4	218.2	Sbd box	347.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.03594171774E+04	Apriori delay (usec)	-1.03597742463E+04	Resid mbdelay (usec)	-2.30607E-03	+/-	2.0E-04
Sband delay (usec)	-1.03594208525E+04	Apriori clock (usec)	-5.9196396E+00	Resid sbdelay (usec)	3.53394E-01	+/-	1.6E-03
Phase delay (usec)	-1.03597742483E+04	Apriori clockrate (us/s)	-7.1478392E-07	Resid phdelay (usec)	-1.98064E-06	+/-	6.8E-07
Delay rate (us/s)	8.28981908063E-01	Apriori rate (us/s)	8.28974845340E-01	Resid rate (us/s)	7.06272E-06	+/-	6.5E-09
Total phase (deg)	-268.8	Apriori accel (us/s/s)	5.42093654789E-05	Resid phase (deg)	-61.4	+/-	20.9

ph/seg (deg)	59.2	Theor.	49.1	Amplitude	0.176 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.5		85.7	Search (1024X32)	0.145	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.0		29.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.8		51.7	Inc. seg. avg.	0.169	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.168	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      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -4722.982 -1838.745      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Lp..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Lp.W.235.3MP2MB

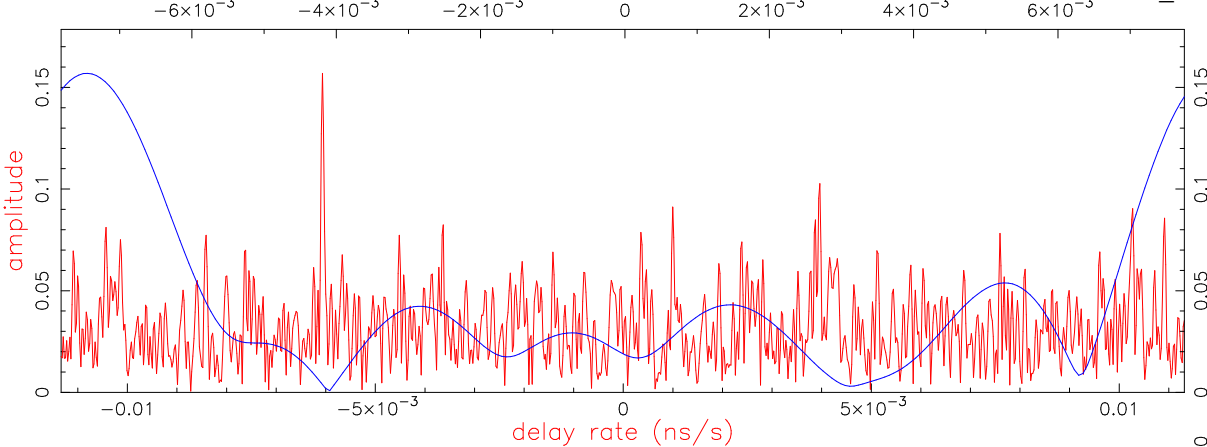
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lp

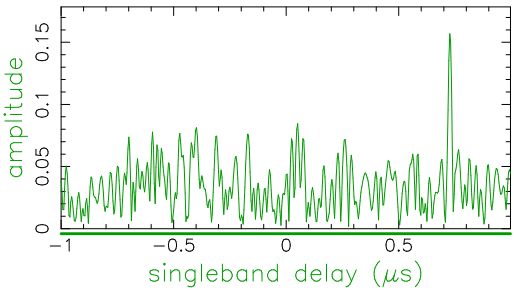
JCMT - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

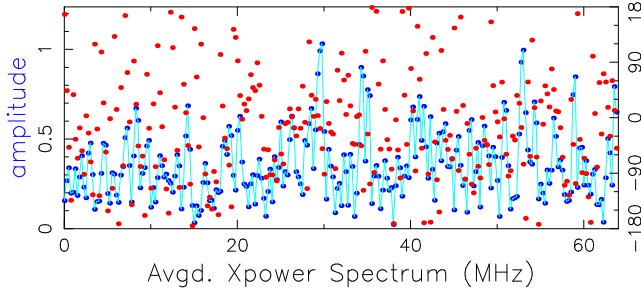


Fringe quality 0

SNR 5.8  
 Int time 179.764  
 Amp 0.179  
 Phase 164.7  
 PFD 5.7e-01  
 Delays (us)  
 SBD 0.727702  
 MBD -0.007433  
 Fringe rate (Hz)  
 -0.523476  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

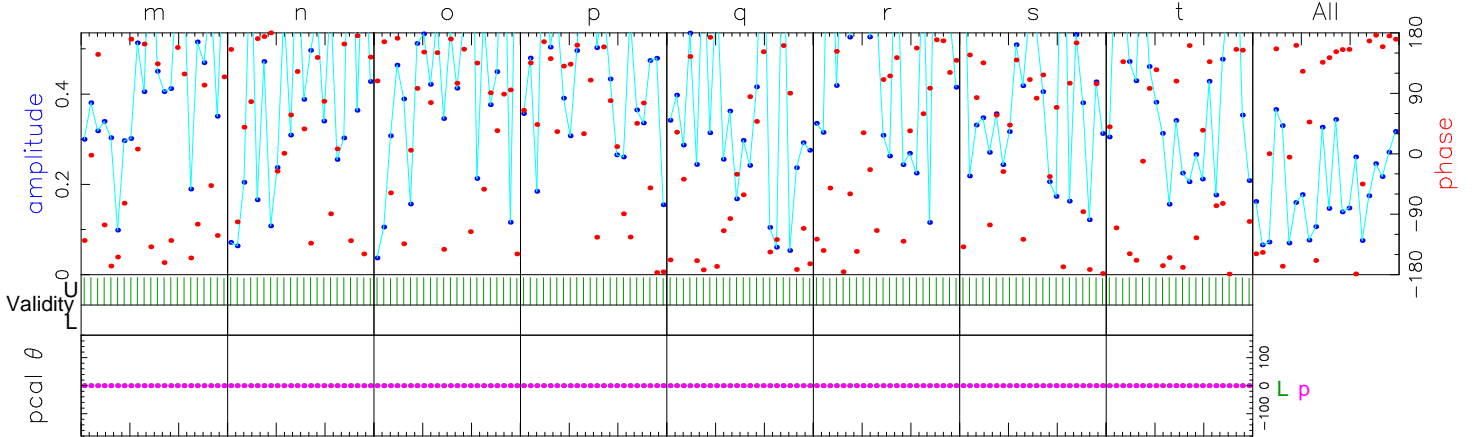


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180000  
 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				
	-169.5	160.7	157.1	124.7	-177.1	171.7	151.9	176.7	Phase	164.7				
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2				
	269.6	142.7	441.2	301.7	161.8	298.2	58.1	201.2	Sbd box	443.3				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
L	0	0	0	0	0	0	0	0	PC freqs					
p	0	0	0	0	0	0	0	0	PC freqs					
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000						
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Chan ids					
									Tracks					
Group delay (usec) (SBD)	-1.03590473047E+04								Apriori delay (usec)	-1.03597742463E+04	Resid mbdelay (usec)	-7.43335E-03	+/-	1.9E-04
Sband delay (usec)	-1.03590465438E+04								Apriori clock (usec)	-5.9196396E+00	Resid sbdelay (usec)	7.27702E-01	+/-	1.5E-03
Phase delay (usec)	-1.03597742410E+04								Apriori clockrate (us/s)	-7.1478392E-07	Resid phdelay (usec)	5.31208E-06	+/-	6.4E-07
Delay rate (us/s)	8.28968768298E-01								Apriori rate (us/s)	8.28974845340E-01	Resid rate (us/s)	-6.07704E-06	+/-	6.1E-09
Total phase (deg)			-42.7						Apriori accel (us/s/s)	5.42093654789E-05	Resid phase (deg)	164.7	+/-	19.8

ph/seg (deg) 68.3 46.3 Amplitude 0.179 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.5 80.9 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.4 27.9 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 13.7 48.8 Inc. frq. avg. 0.168 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 L: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.982 -1838.745 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//Lp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Lp.W.241.3MP2MB simultaneous interpolator

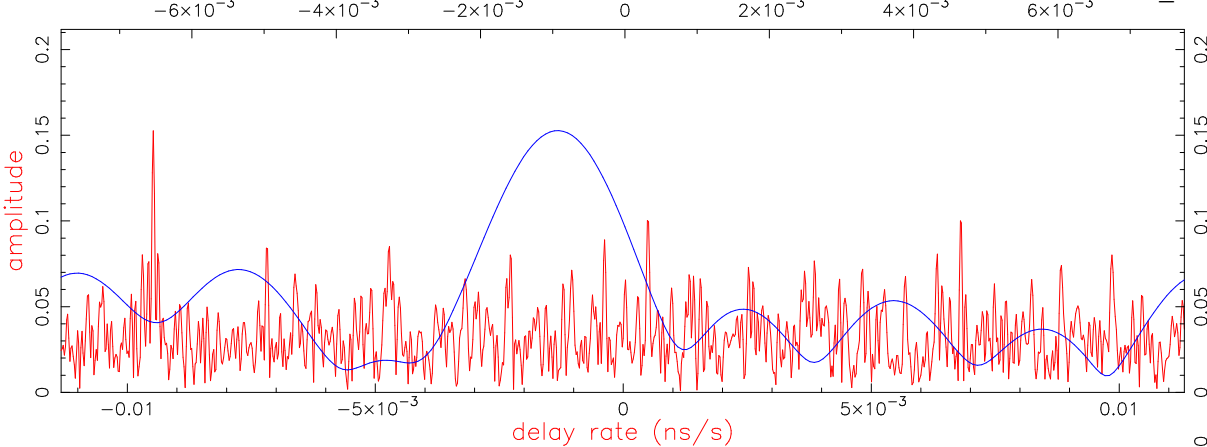
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lp

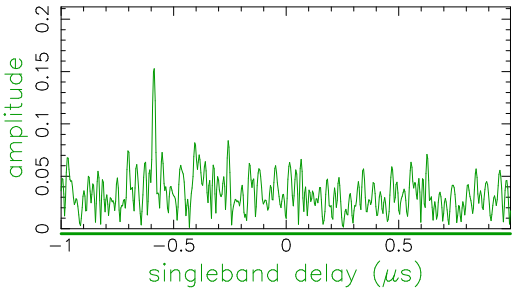
JCMT - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

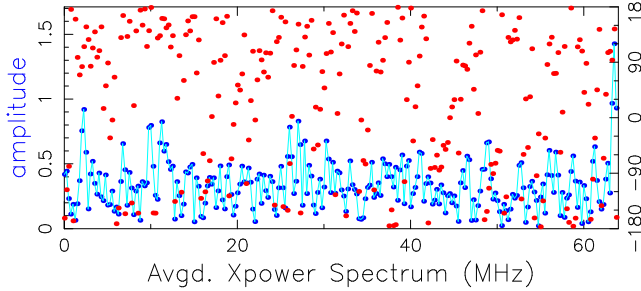


Fringe quality 0

SNR 5.7  
 Int time 179.764  
 Amp 0.212  
 Phase -139.0  
 PFD 7.5e-01  
 Delays (us)  
 SBD -0.587576  
 MBD -0.000970  
 Fringe rate (Hz)  
 -0.817978  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

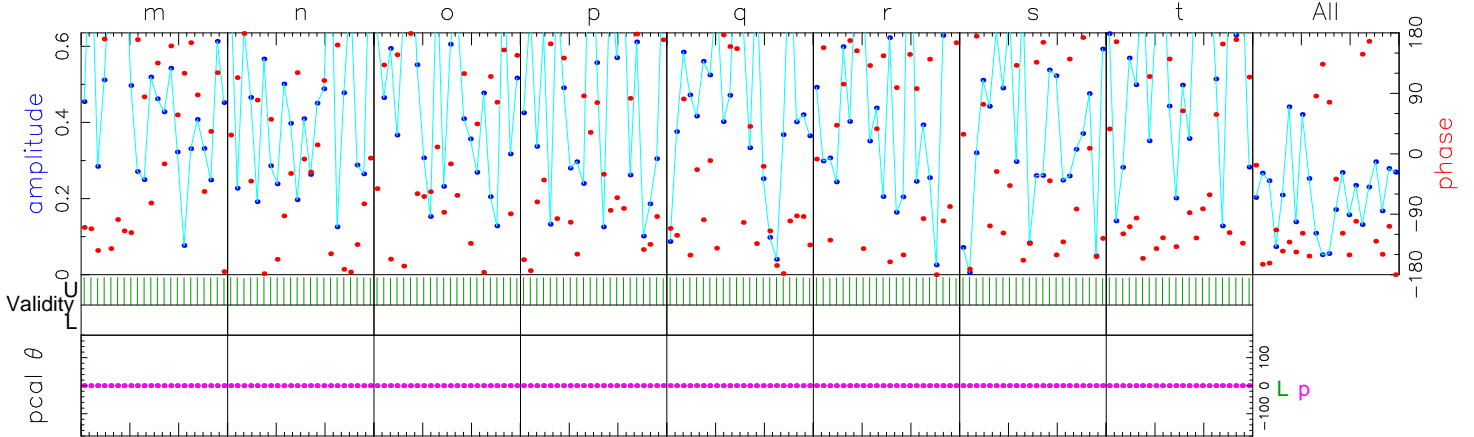


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180002  
 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
	-144.5	-124.9	-149.9	-117.5	-128.4	173.9	-122.5	-128.2	Phase	-139.0
	0.3	0.1	0.1	0.2	0.3	0.3	0.2	0.4	Ampl.	0.2
	14.1	390.1	52.9	395.6	108.0	104.9	378.8	190.7	Sbd box	106.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.03603689661E+04	Apriori delay (usec)	-1.03597742463E+04	Resid mbdelay (usec)	-9.69831E-04	+/-	1.9E-04
Sband delay (usec)	-1.03603618223E+04	Apriori clock (usec)	-5.9196396E+00	Resid sbdelay (usec)	-5.87576E-01	+/-	1.5E-03
Phase delay (usec)	-1.03597742508E+04	Apriori clockrate (us/s)	-7.1478392E-07	Resid phdelay (usec)	-4.48317E-06	+/-	6.5E-07
Delay rate (us/s)	8.28965349428E-01	Apriori rate (us/s)	8.28974845340E-01	Resid rate (us/s)	-9.49591E-06	+/-	6.2E-09
Total phase (deg)	-346.4	Apriori accel (us/s/s)	5.42093654789E-05	Resid phase (deg)	-139.0	+/-	20.1

ph/seg (deg)	63.2	Theor.	47.1	Amplitude	0.212 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	73.7		82.1	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	24.3		28.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	44.9		49.5	Inc. seg. avg.	0.216	SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	0.199	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite

L: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.982 -1838.745 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Lp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Lp.W.253.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

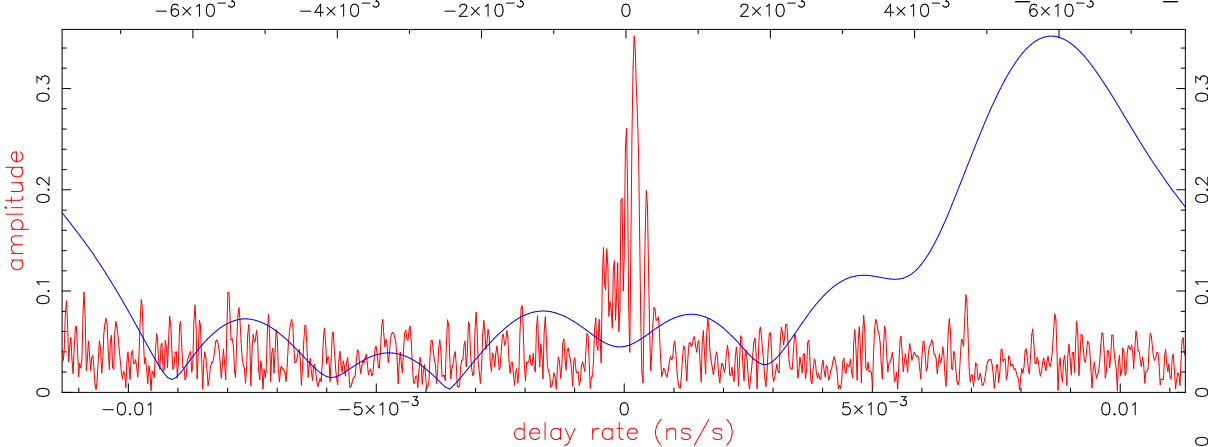
aux01

3C273.3MP2MB, No0707, Ip

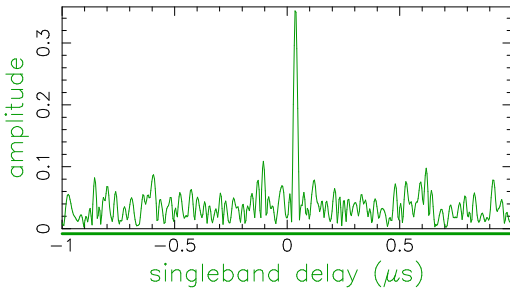
VLBA LA - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

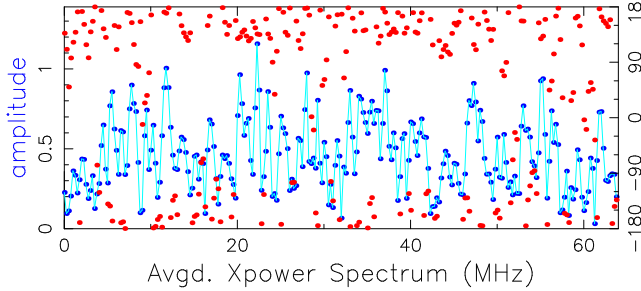
Fringe quality 9



SNR 13.1  
 Int time 178.764  
 Amp 0.358  
 Phase 158.2  
 PFD 8.9e-31  
 Delays (us)  
 SBD 0.036973  
 MBD 0.005915  
 Fringe rate (Hz)  
 0.017135  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

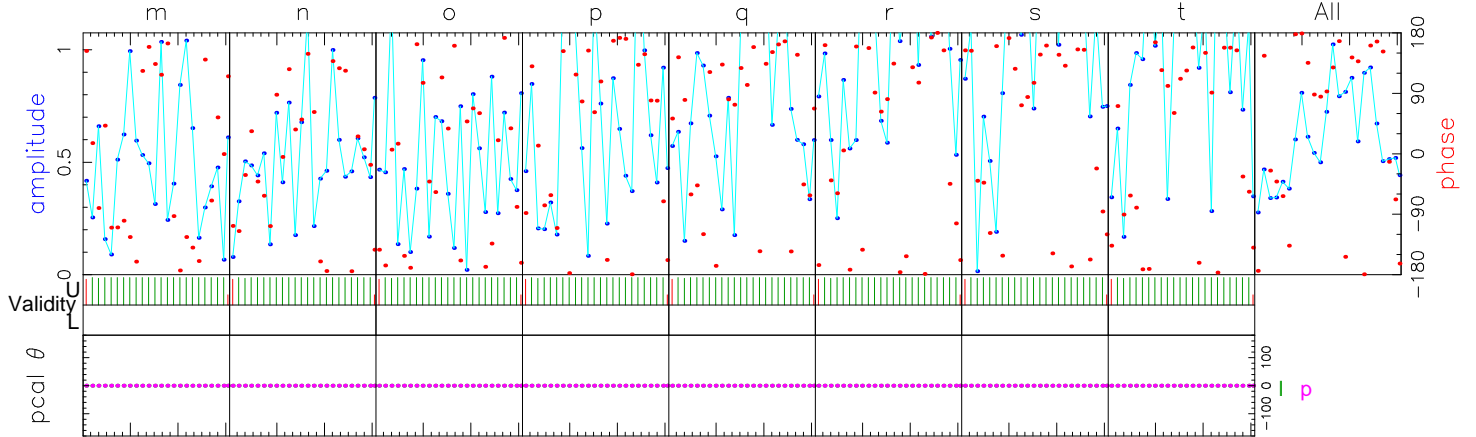


delay rate (ns/s)



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

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-157.0	101.2	145.2	141.7	156.9	164.3	158.2	159.7	Phase	158.2
	0.2	0.1	0.1	0.4	0.4	0.6	0.6	0.5	Ampl.	0.4
	130.1	456.8	59.2	266.8	266.9	266.7	266.4	266.3	Sbd box	266.5
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	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.53578747256E+01	Apriori delay (usec)	-3.53950393829E+01	Resid mbdelay (usec)	5.91466E-03	+/-	8.3E-05
Sband delay (usec)	-3.53580658829E+01	Apriori clock (usec)	-1.4000975E+01	Resid sbdelay (usec)	3.69735E-02	+/-	6.6E-04
Phase delay (usec)	-3.53950342820E+01	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	5.10092E-06	+/-	2.8E-07
Delay rate (us/s)	-4.73904115354E-02	Apriori rate (us/s)	-4.73906104502E-02	Resid rate (us/s)	1.98915E-07	+/-	2.7E-09
Total phase (deg)	-91.1	Apriori accel (us/s/s)	1.93069907757E-07	Resid phase (deg)	158.2	+/-	8.7

ph/seg (deg)	79.9	Theor.	21.4	Amplitude	0.358 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	91.0	Search (1024X32)	0.351	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.9	Inc. seg. avg.	0.573	Inc. frq. avg.	0.361	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.2	Inc. frq. avg.	0.361			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 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) 271.705 186.546 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//lp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//lp.W.289.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

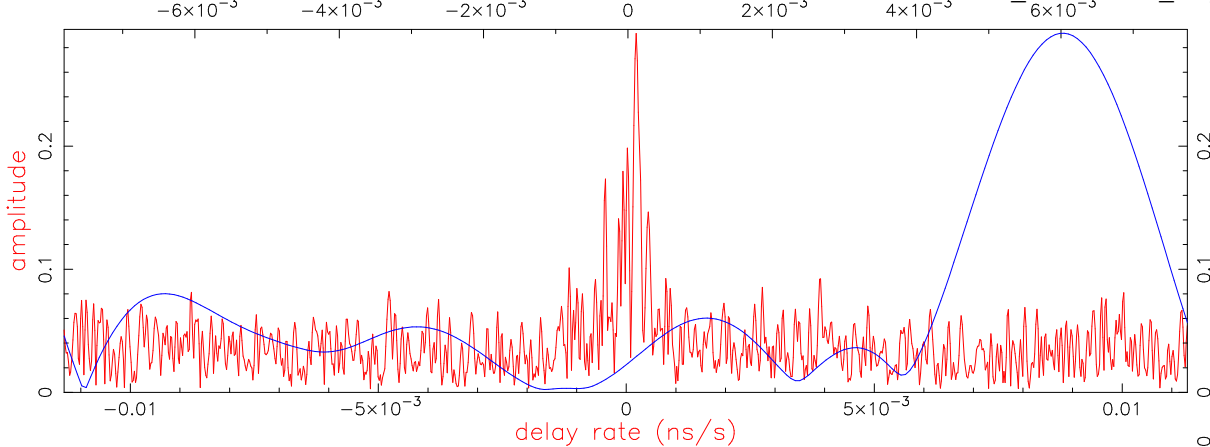
aux01

3C273.3MP2MB, No0707, lp

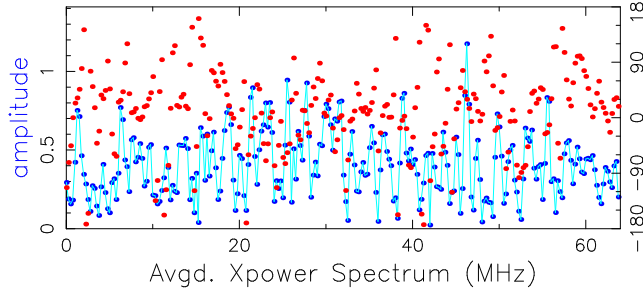
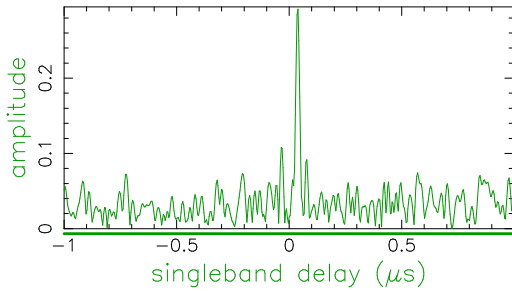
VLBA\_LA - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 9

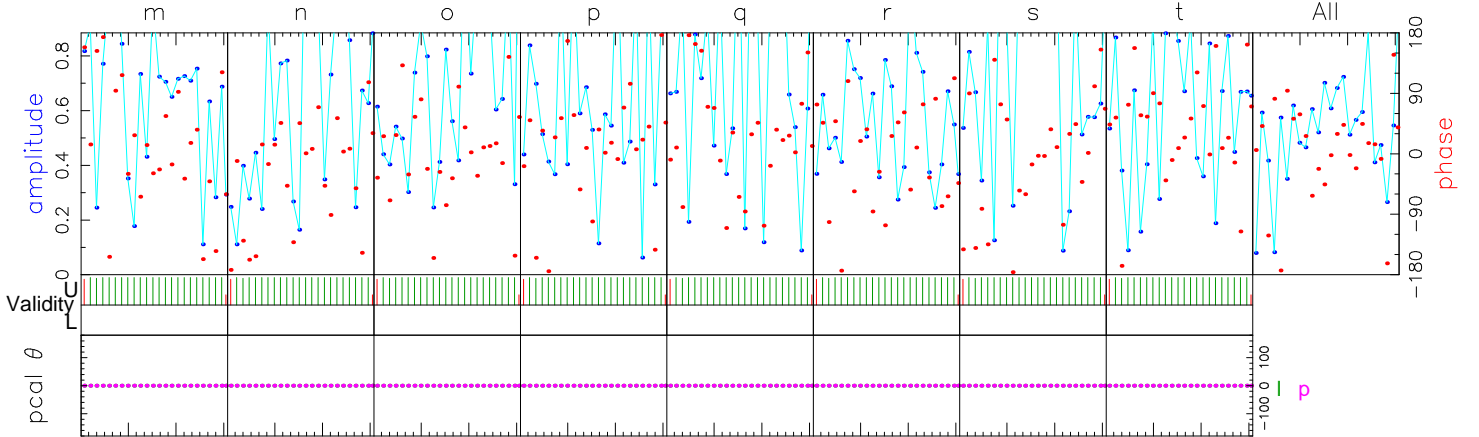


SNR 10.8  
 Int time 178.764  
 Amp 0.295  
 Phase 17.2  
 PFD 1.0e-18  
 Delays (us)  
 SBD 0.037682  
 MBD 0.005989  
 Fringe rate (Hz)  
 0.017875  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.51  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180016  
 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	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec) (SBD)	-3.53578000693E+01								5.98931E-03	+/- 1.0E-04
Sband delay (usec)	-3.53573568829E+01								3.76825E-02	+/- 8.0E-04
Phase delay (usec)	-3.53950388294E+01								5.53443E-07	+/- 3.4E-07
Delay rate (us/s)	-4.73904029349E-02								2.07515E-07	+/- 3.3E-09
Total phase (deg)			-232.1						17.2	+/- 10.6
Apriori delay (usec)					-3.53950393829E+01				Resid mbdelay (usec)	
Apriori clock (usec)					-1.4000975E+01				Resid sbdelay (usec)	
Apriori clockrate (us/s)					-6.1269804E-07				Resid phdelay (usec)	
Apriori rate (us/s)					-4.73906104502E-02				Resid rate (us/s)	
Apriori accel (us/s/s)					1.93069907757E-07				Resid phase (deg)	
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									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									ion window (TEC)	0.00 0.00
nlags: 256 t_cohere infinite										
simultaneous interpolator										

l: az 139.8 el 48.9 pa -31.4  
 Control file: cf\_1234\_gmva

p: az 136.3 el 49.0 pa -34.7  
 Input file: /Exps/c241b/v2/3mm/1234/No0707/lp..3MP2MB

u,v (fr/asec) 271.705 186.546  
 Output file: /Exps/c241b/v2/3mm/1234/No0707/lp.W.301.3MP2MB







Mk4/DiFX fourfit 3.25 rev 0

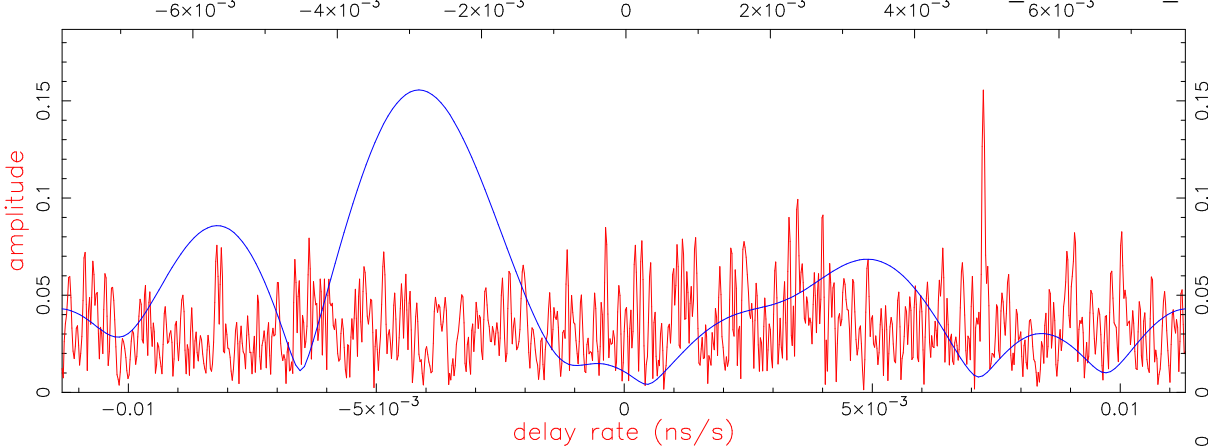
aux01

3C273.3MP2MB, No0707, mp

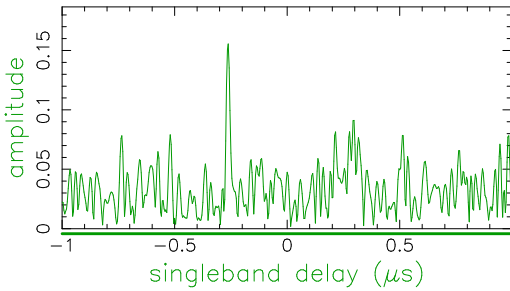
VLBA\_MK - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

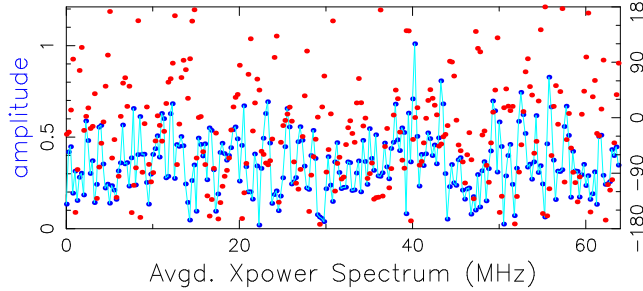
Fringe quality 0



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

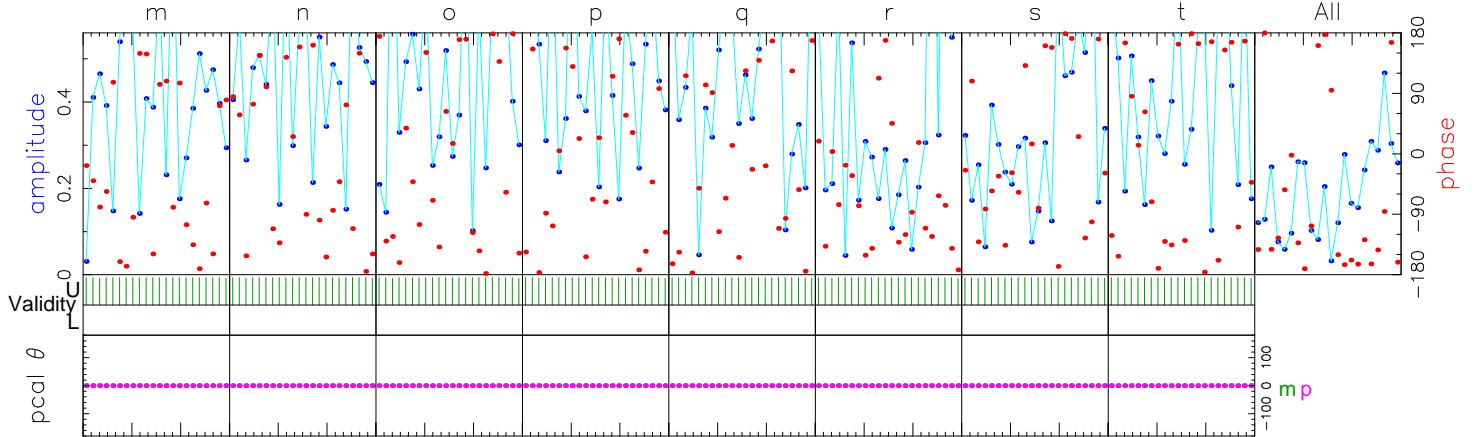


delay rate (ns/s)



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

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

ph/seg (deg)	52.1	Theor.	46.7	Amplitude	0.187 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.7		81.5	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.5		28.2	Inc. seg. avg.	0.173	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.8		49.1	Inc. frq. avg.	0.183	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

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

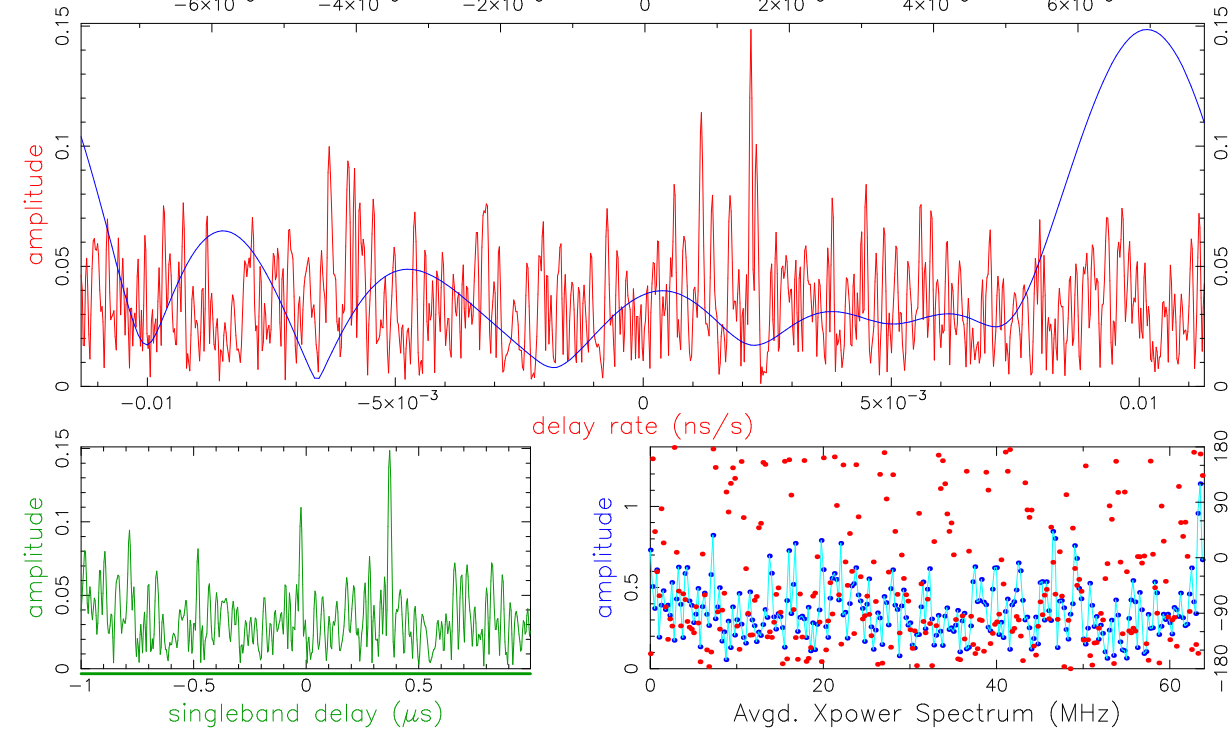
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.201.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

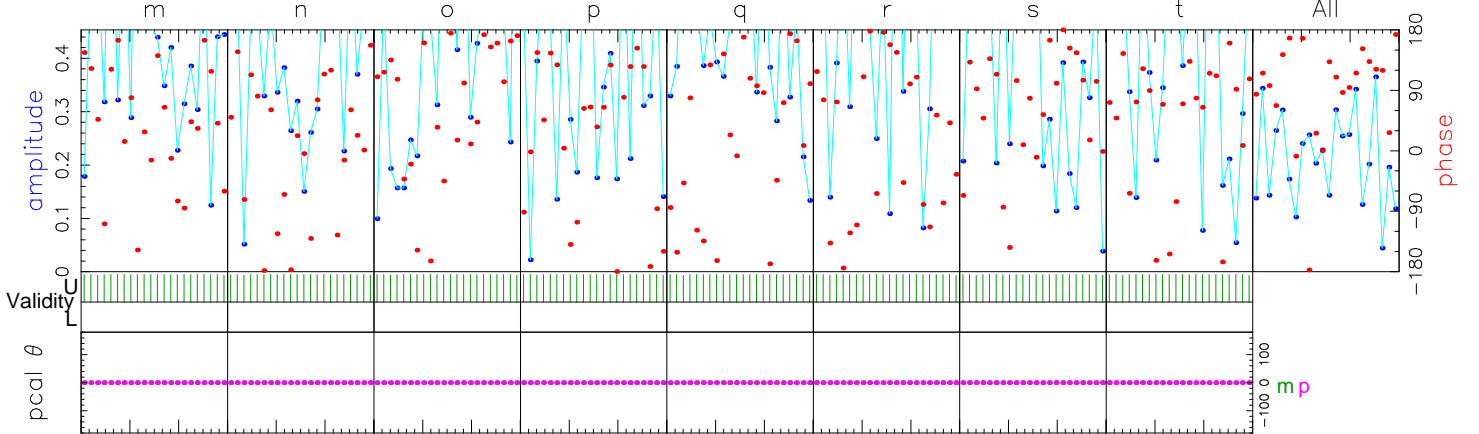
3C273.3MP2MB, No0707, mp

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



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.2	90.0	143.1	107.3	128.4	129.2	88.5	108.3	Phase	111.4
	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	413.4	279.6	441.0	227.5	334.6	31.4	350.2	346.1	Sbd box	351.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.03512452581E+04 Apriori delay (usec) -1.03516115733E+04 Resid mbdelay (usec) 6.94024E-03 +/- 2.0E-04  
 Sband delay (usec) -1.03512410018E+04 Apriori clock (usec) -5.1573467E+00 Resid sbdelay (usec) 3.70571E-01 +/- 1.6E-03  
 Phase delay (usec) -1.03516115697E+04 Apriori clockrate (us/s) -3.9319698E-07 Resid phdelay (usec) 3.59114E-06 +/- 6.8E-07  
 Delay rate (us/s) 8.28935453492E-01 Apriori rate (us/s) 8.28933274337E-01 Resid rate (us/s) 2.17915E-06 +/- 6.5E-09  
 Total phase (deg) -222.5 Apriori accel (us/s/s) 5.41685310542E-05 Resid phase (deg) 111.4 +/- 21.0

RMS Theor. Amplitude 0.151 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 53.9 49.2 Search (1024X32) 0.142 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 72.5 85.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 24.9 29.7 Inc. seg. avg. 0.160 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 29.8 51.8 Inc. frq. avg. 0.143 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

m: az 93.6 el 15.4 pa -70.0 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -4722.762 -1842.134 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.210.3MP2MB

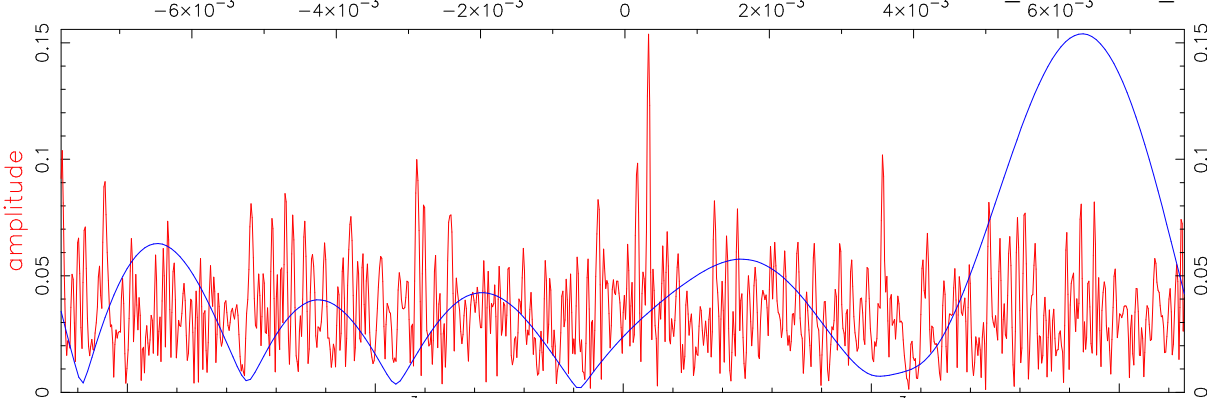
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mp

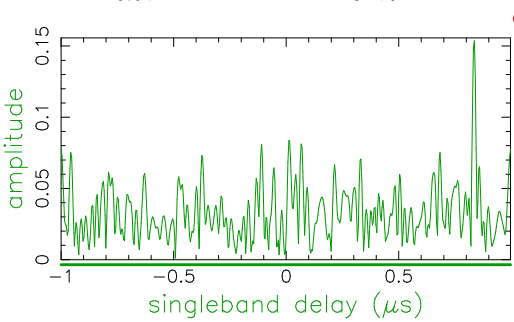
VLBA\_MK - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

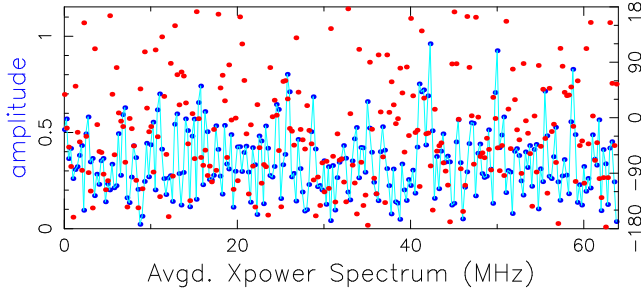


Fringe quality 0

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

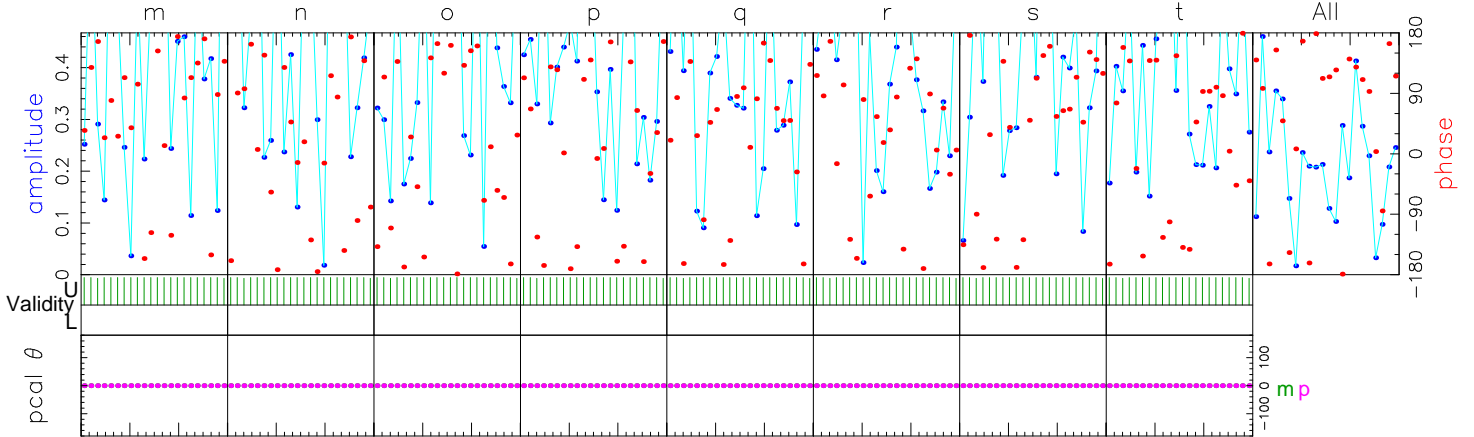


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	123.2	142.9	163.2	147.4	100.7	130.1	129.3	171.5	Phase	137.1
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	467.0	274.9	367.3	469.7	312.4	452.2	477.8	135.5	Sbd box	470.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

ph/seg (deg)	RMS 62.6	Theor. 47.1	Amplitude Search (1024X32)	0.153	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.1	82.2	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	24.6	28.4	Inc. seg. avg.	0.162	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 (%)	31.4	49.6	Inc. frq. avg.	0.147	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

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

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mp.W.218.3MP2MB

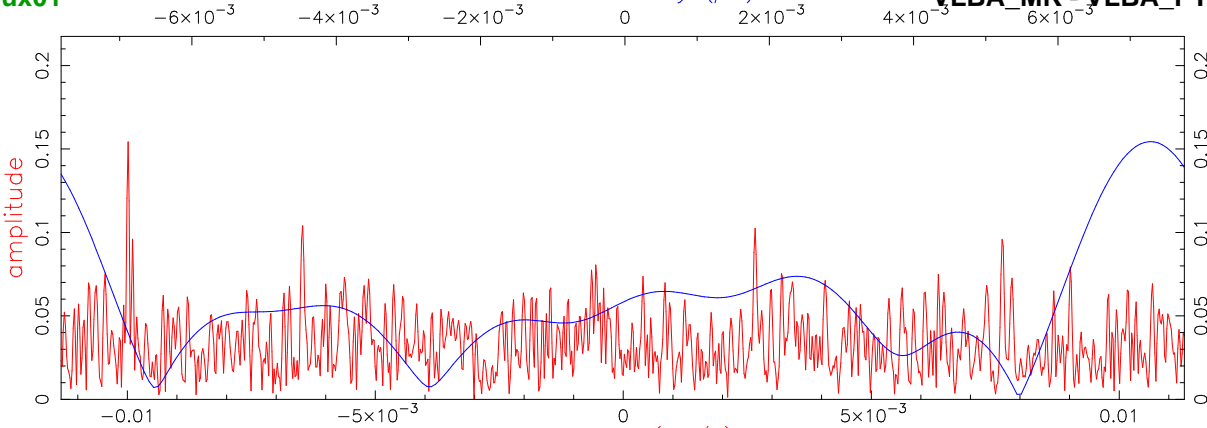
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mp

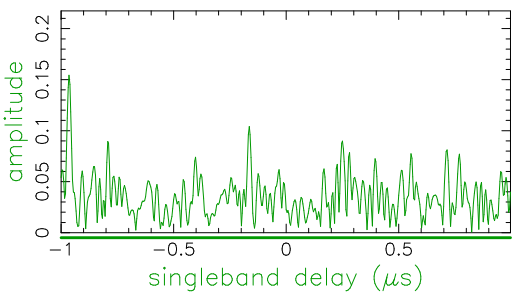
VLBA\_MK - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

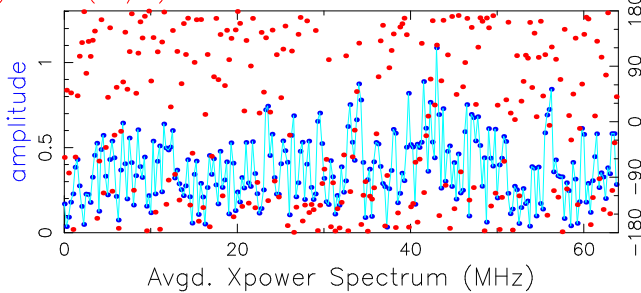


Fringe quality 0

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

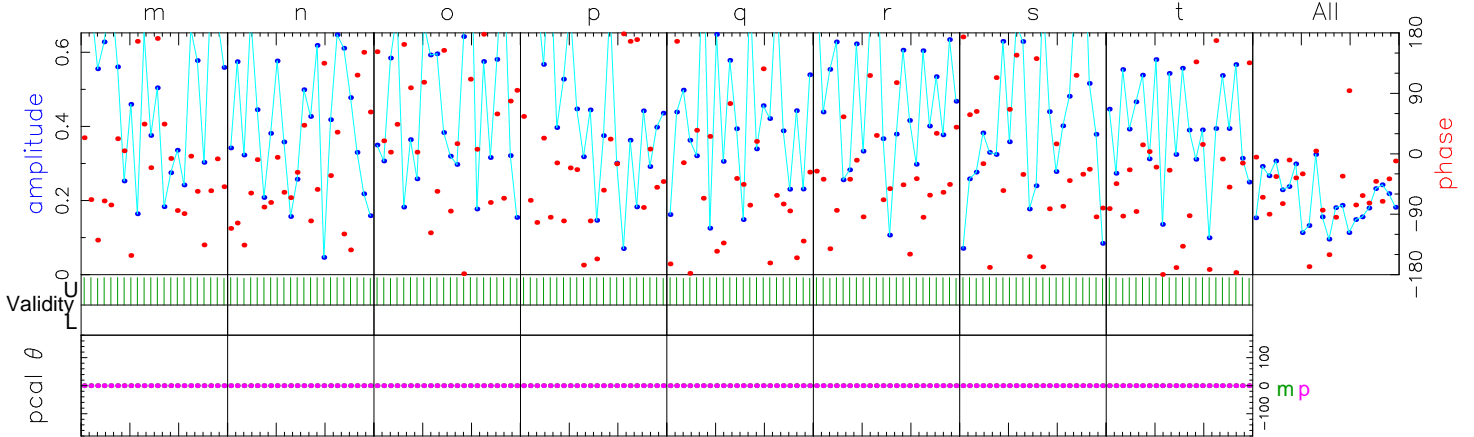


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.7	-59.7	78.7	-51.1	-84.3	-35.4	-41.9	-60.0	Phase	-49.6
	0.4	0.3	0.1	0.3	0.2	0.3	0.1	0.2	Ampl.	0.2
	9.9	508.7	251.7	304.2	30.4	14.0	301.9	204.3	Sbd box	10.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

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

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

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/mp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/mp.W.227.3MP2MB

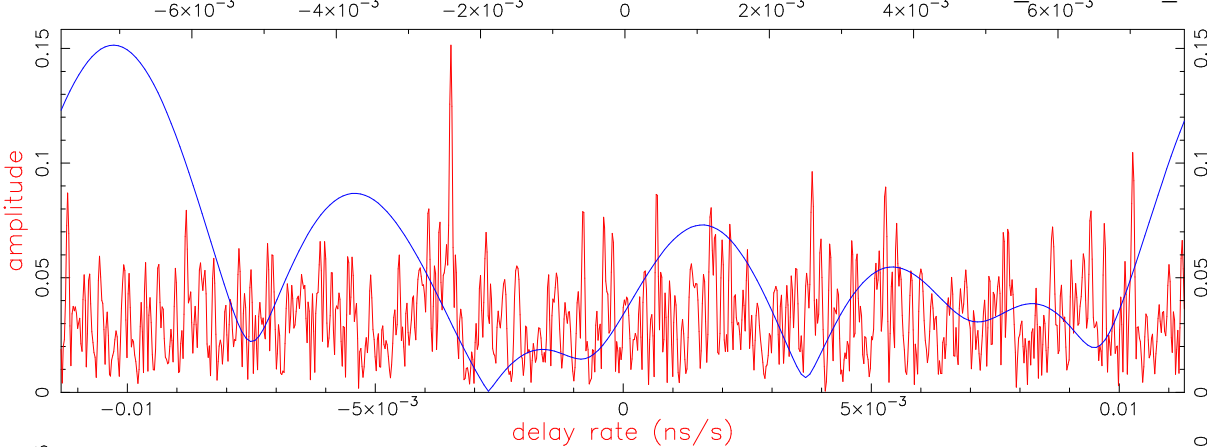
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, np

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

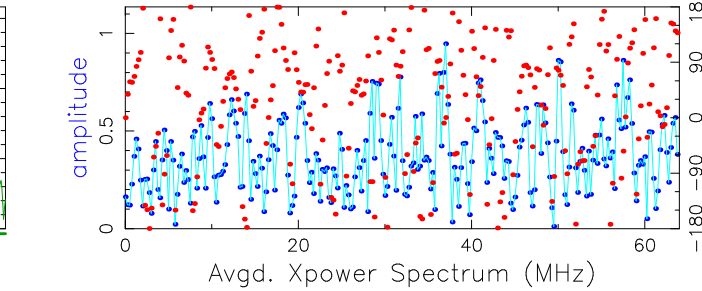
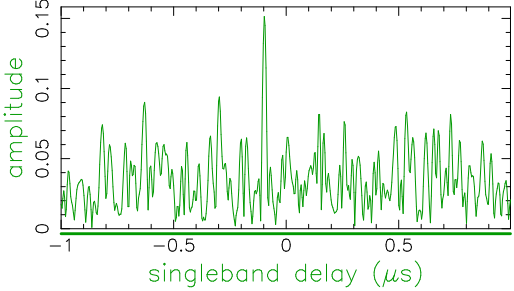
multiband delay ( $\mu$ s)



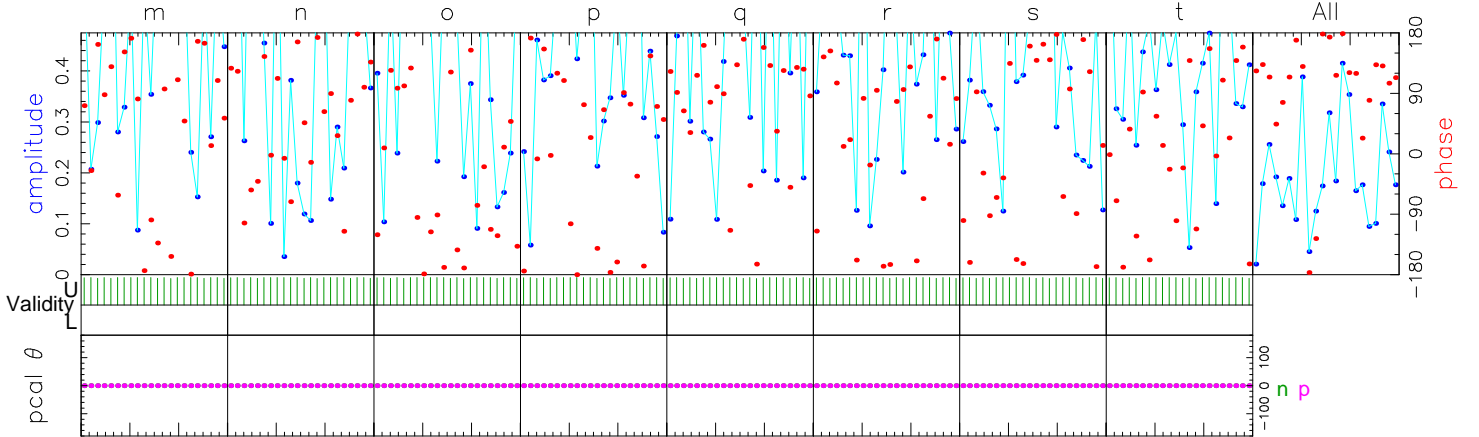
Fringe quality 0

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	0.149	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	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	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 (%)	49.2	50.8	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048		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

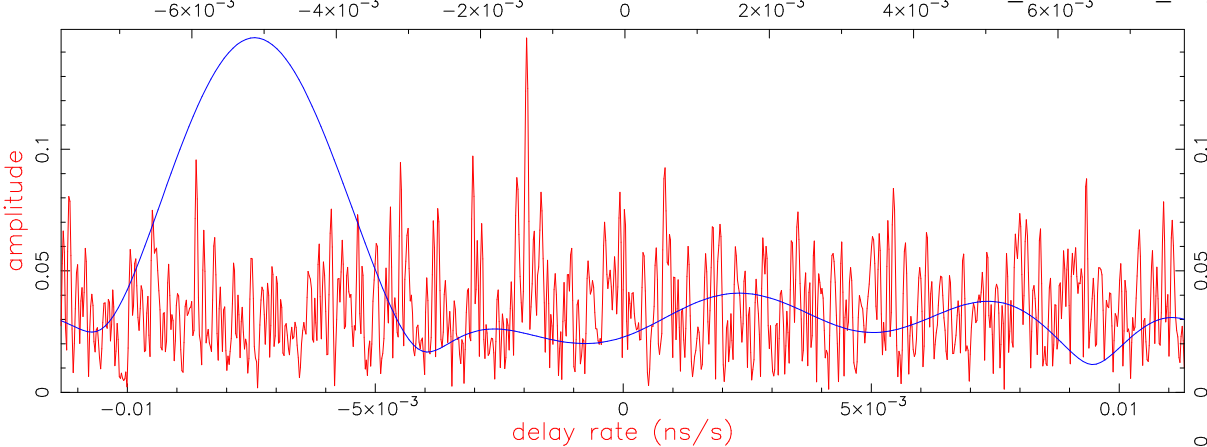
aux01

3C273.3MP2MB, No0707, np

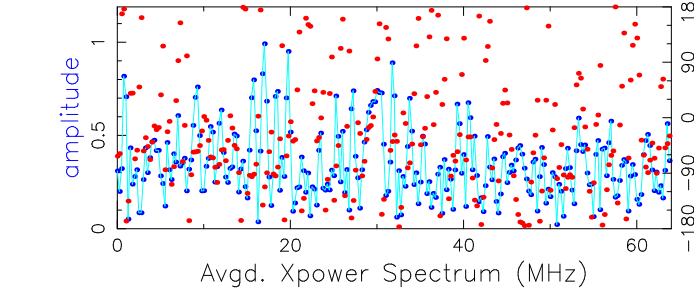
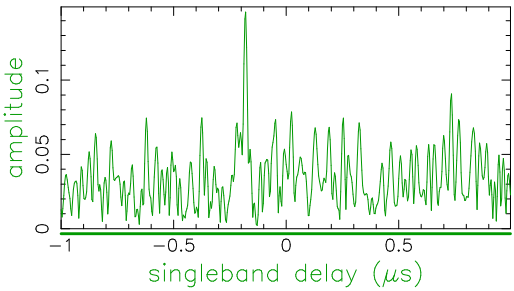
VLBA\_NL - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

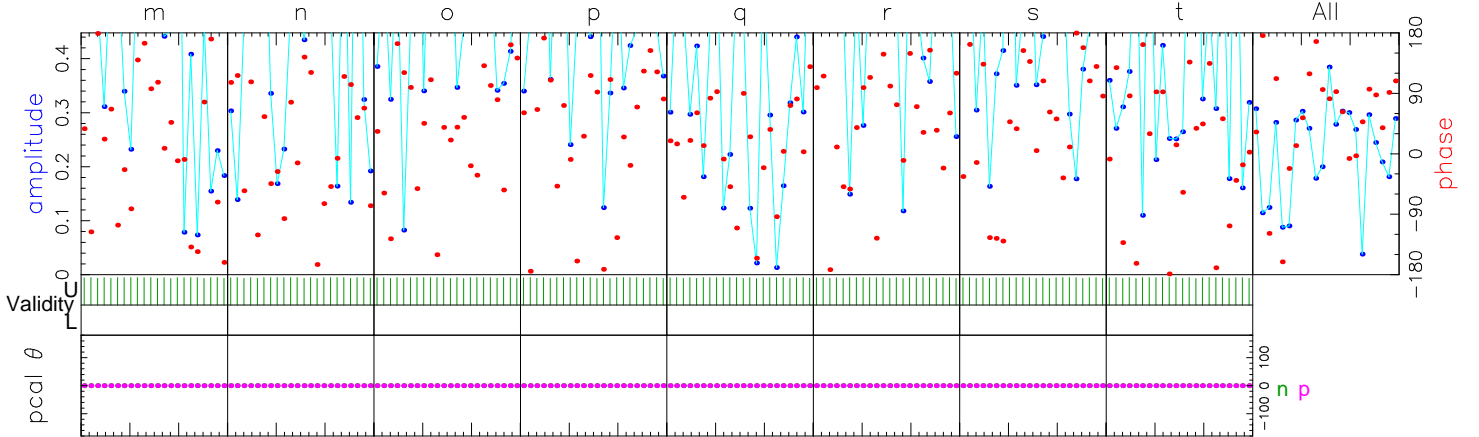


SNR 5.4  
 Int time 178.645  
 Amp 0.149  
 Phase 72.9  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.181027  
 MBD -0.005183  
 Fringe rate (Hz)  
 -0.167846  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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

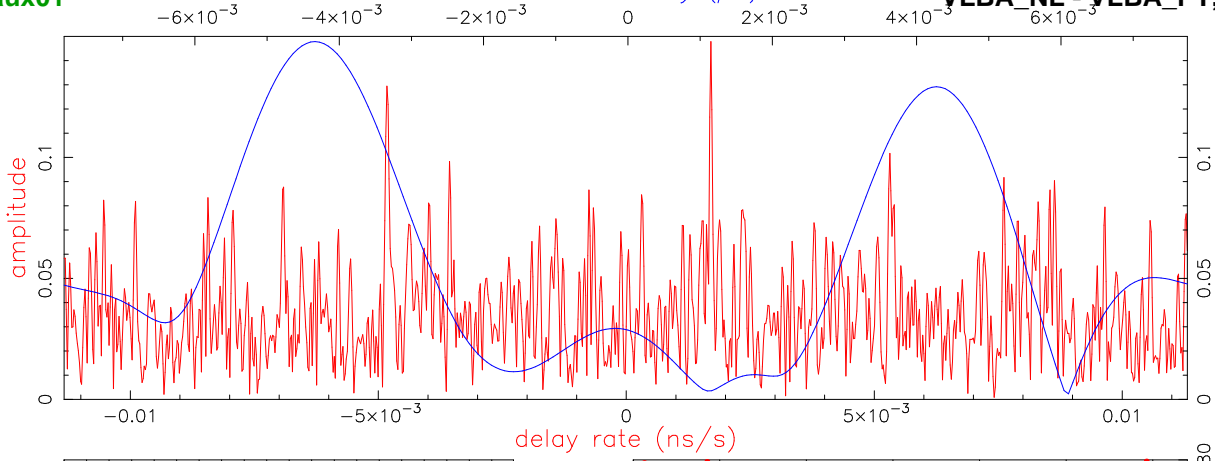
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, np

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

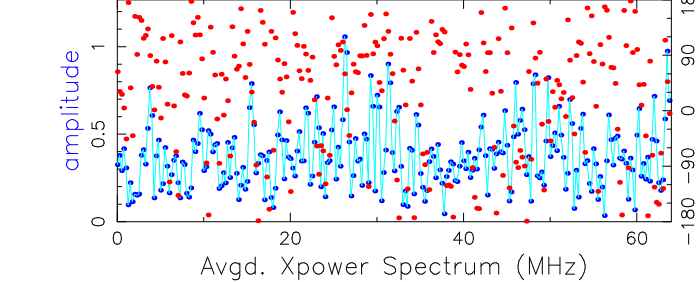
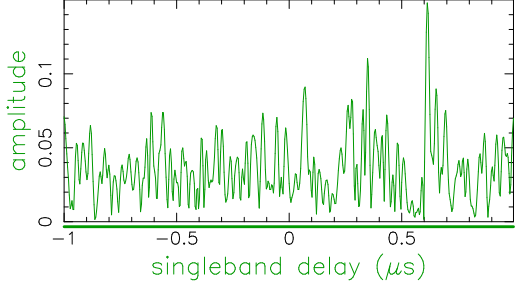
multiband delay ( $\mu$ s)



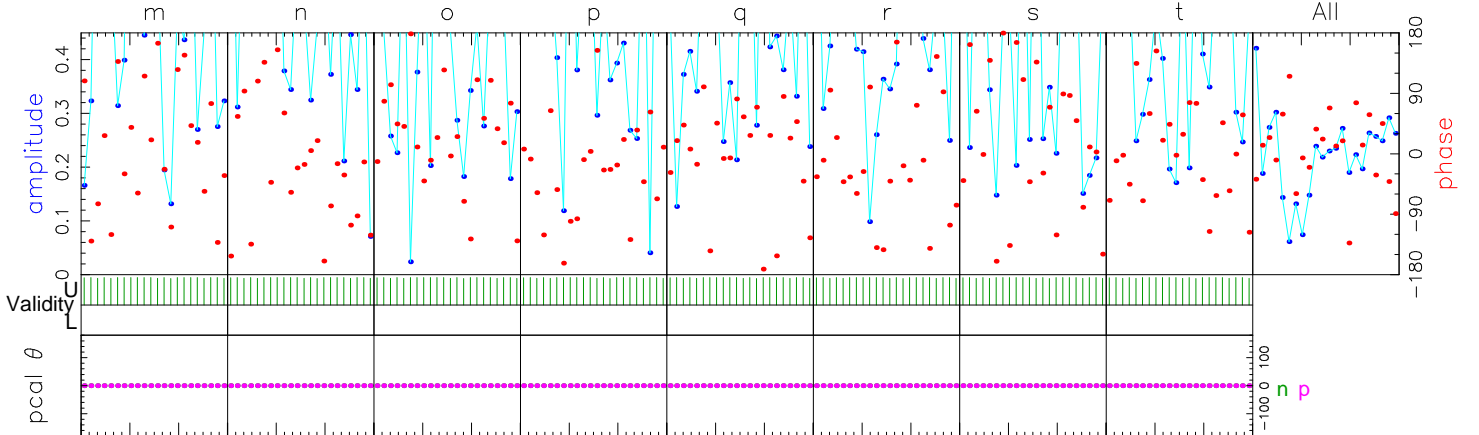
Fringe quality 0

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

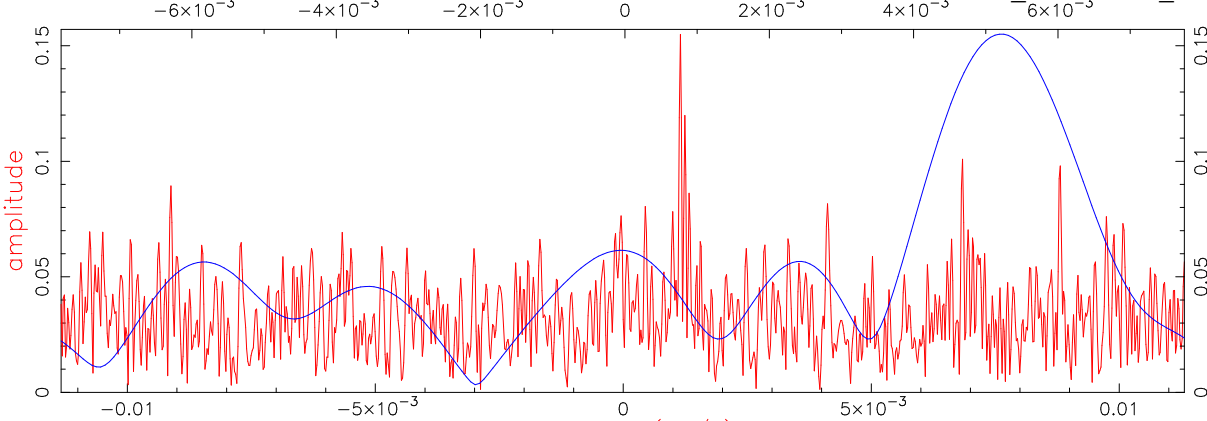
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, np

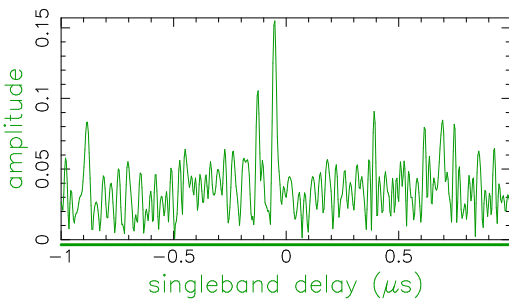
VLBA\_NL - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

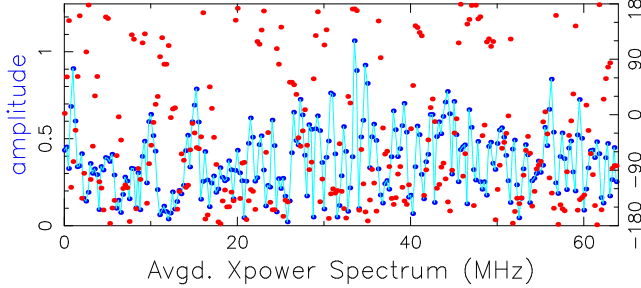


Fringe quality 0

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

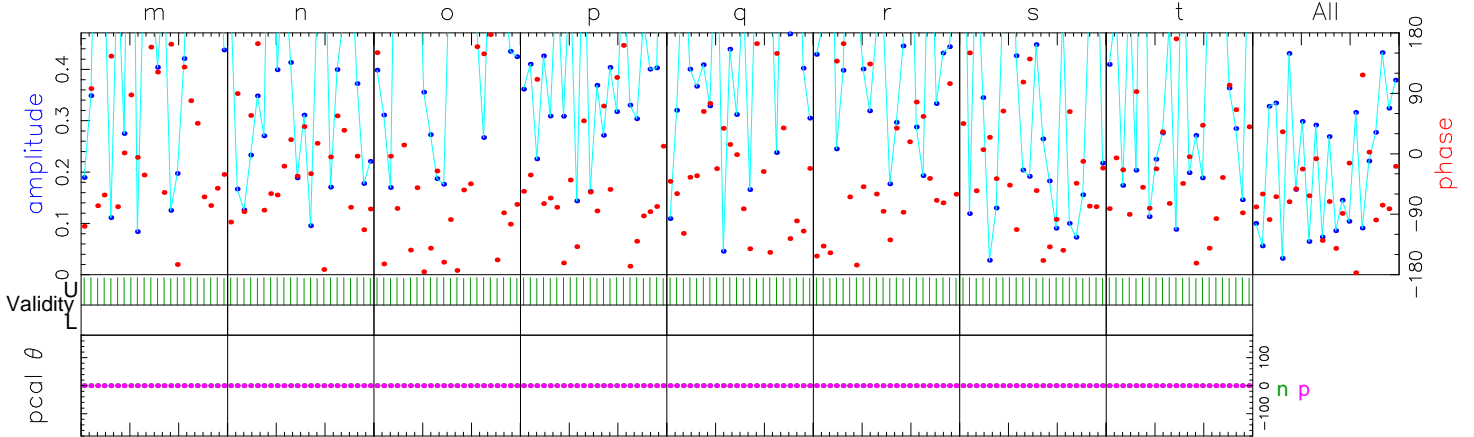


delay rate (ns/s)



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	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



Mk4/DiFX fourfit 3.25 rev 0

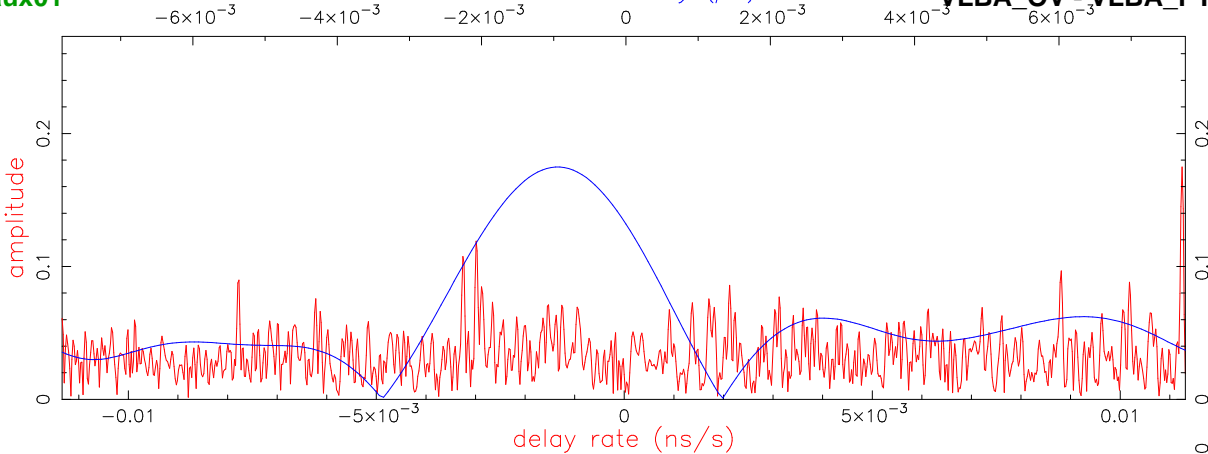
aux01

3C273.3MP2MB, No0707, op

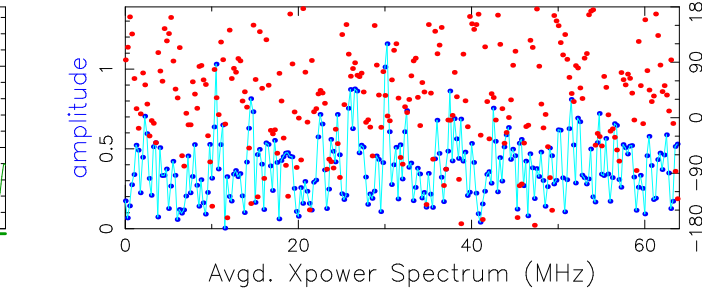
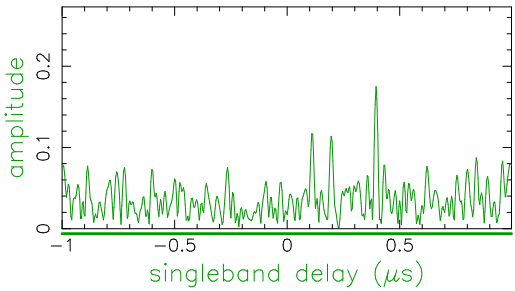
VLBA\_OV - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

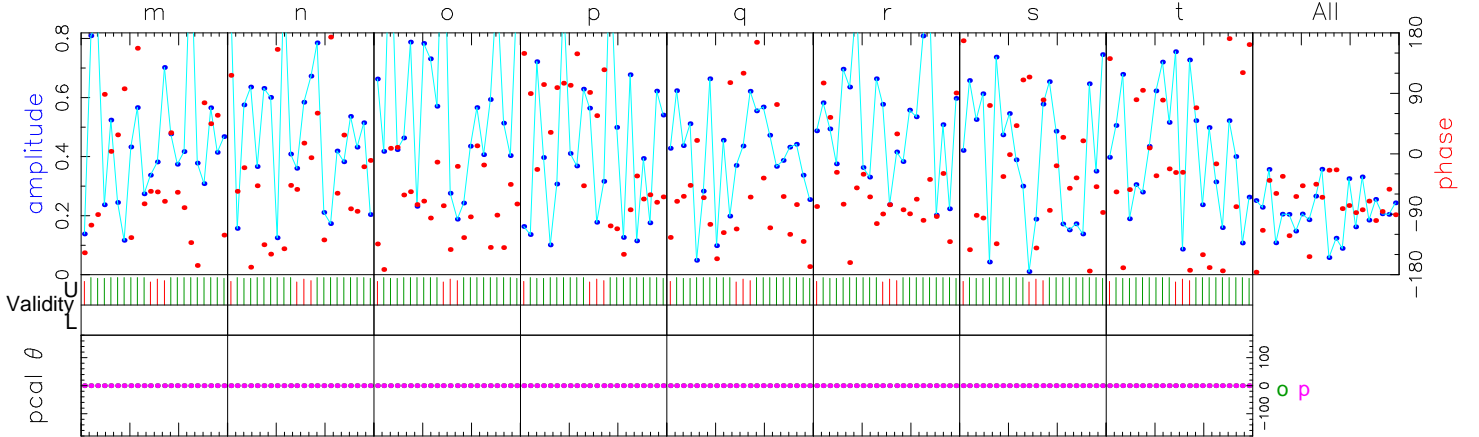


SNR 6.3  
 Int time 175.663  
 Amp 0.273  
 Phase -76.6  
 PFD 3.1e-02  
 Delays (us)  
 SBD 0.394868  
 MBD -0.000922  
 Fringe rate (Hz)  
 0.970443  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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
	-85.2	-67.8	-70.1	-73.2	-95.2	-66.1	-84.6	-144.0	Phase	-76.6
	0.3	0.2	0.6	0.1	0.4	0.5	0.2	0.0	Ampl.	0.3
	327.9	507.8	358.1	305.5	17.9	358.0	188.9	467.7	Sbd box	358.1
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -2.09670543557E+03 Apriori delay (usec) -2.09709513856E+03 Resid mbdelay (usec) -9.22009E-04 +/- 1.7E-04  
 Sband delay (usec) -2.09670027006E+03 Apriori clock (usec) 1.9352612E+01 Resid sbdelay (usec) 3.94868E-01 +/- 1.4E-03  
 Phase delay (usec) -2.09709514103E+03 Apriori clockrate (us/s) 1.0257507E-07 Resid phdelay (usec) -2.47037E-06 +/- 5.8E-07  
 Delay rate (us/s) 1.65497578427E-01 Apriori rate (us/s) 1.65486312551E-01 Resid rate (us/s) 1.12659E-05 +/- 5.7E-09  
 Total phase (deg) -161.5 Apriori accel (us/s/s) 1.14102810163E-05 Resid phase (deg) -76.6 +/- 18.1

RMS Theor. Amplitude 0.273 +/- 0.043 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 37.4 42.1 Search (1024X32) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 50.4 73.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 29.6 25.6 Inc. seg. avg. 0.261 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 66.5 44.6 Inc. frq. avg. 0.253 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

o: az 127.0 el 40.9 pa -39.4 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -942.341 396.943 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//op..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//op.W.246.3MP2MB

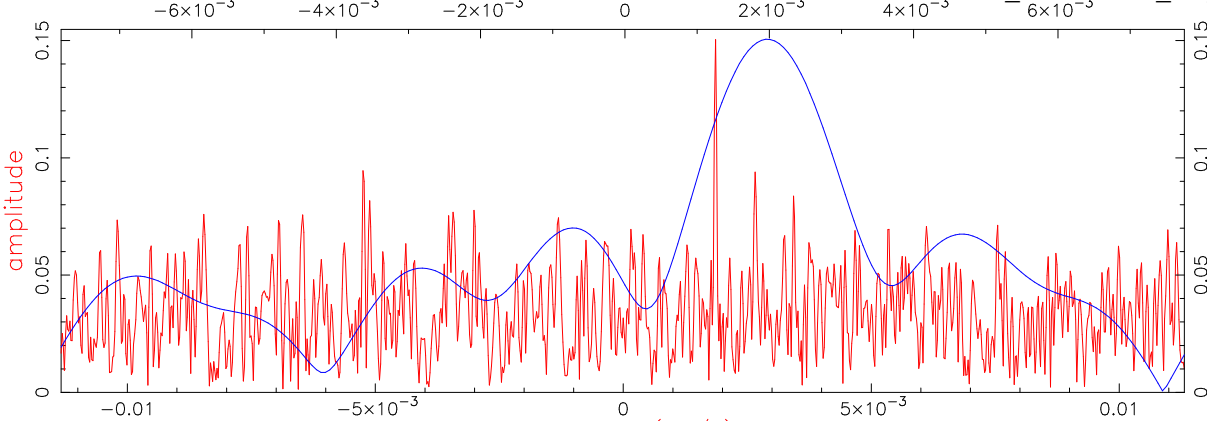
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

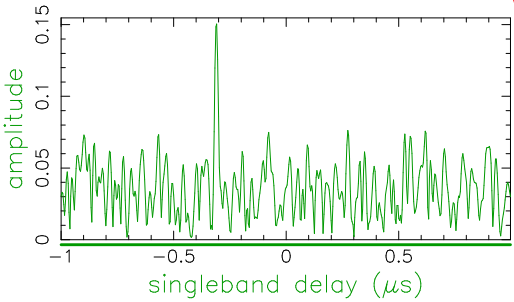
VLBA\_OV - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

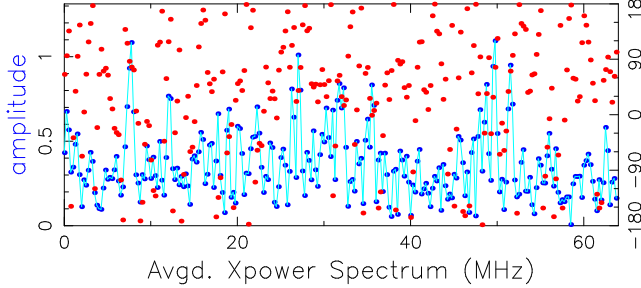


Fringe quality 0

SNR 5.5  
 Int time 175.663  
 Amp 0.155  
 Phase 74.8  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.310277  
 MBD 0.001923  
 Fringe rate (Hz)  
 0.160666  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

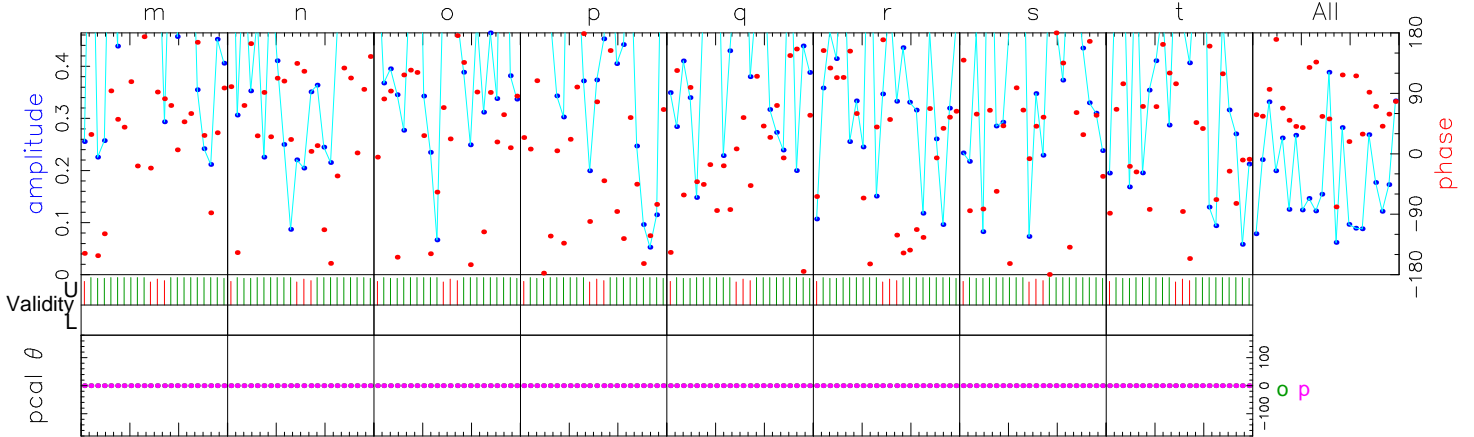


delay rate (ns/s)



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
	59.3	89.2	83.5	67.3	14.6	129.0	90.5	55.0	Phase	74.8
	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.2
	177.8	96.1	179.0	42.1	260.9	55.4	68.2	72.5	Sbd box	177.6
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.09740571555E+03	Apriori delay (usec)	-2.09709513856E+03	Resid mbdelay (usec)	1.92301E-03	+/-	2.0E-04
Sband delay (usec)	-2.09740541531E+03	Apriori clock (usec)	1.9352612E+01	Resid sbdelay (usec)	-3.10277E-01	+/-	1.6E-03
Phase delay (usec)	-2.09709513615E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	2.41242E-06	+/-	6.7E-07
Delay rate (us/s)	1.65488177730E-01	Apriori rate (us/s)	1.65486312551E-01	Resid rate (us/s)	1.86518E-06	+/-	6.5E-09
Total phase (deg)	-10.1	Apriori accel (us/s/s)	1.14102810163E-05	Resid phase (deg)	74.8	+/-	20.7

ph/seg (deg)	49.2	Theor.	48.2	Amplitude	0.155 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.9		84.1	Search (1024X32)	0.146	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	36.0		29.2	Inc. seg. avg.	0.140	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.2		51.0	Inc. frq. avg.	0.150	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00

o: az 127.0 el 40.9 pa -39.4      p: az 136.3 el 49.0 pa -34.7      u,v (fr/asec) -942.341 396.943      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//op..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//op.W.257.3MP2MB

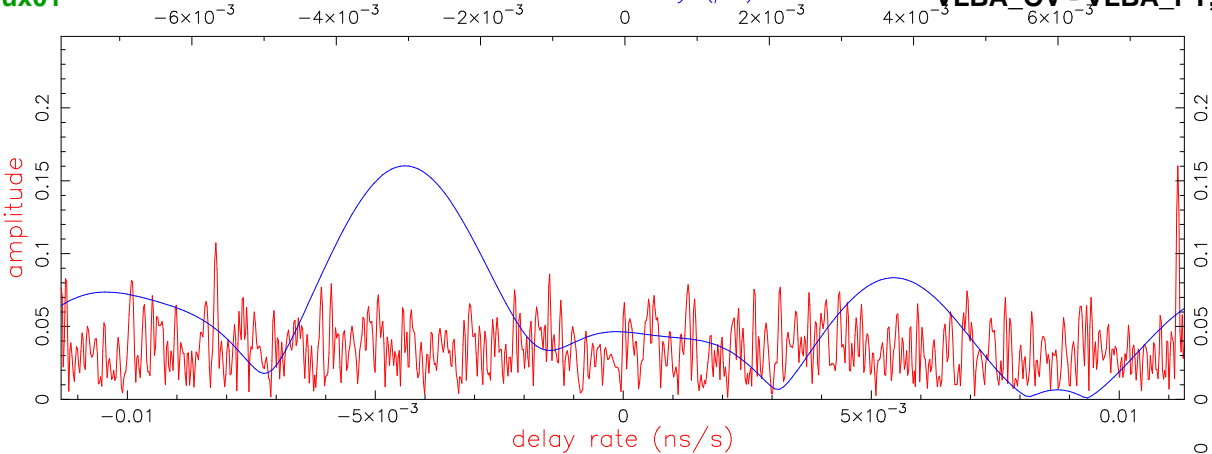
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

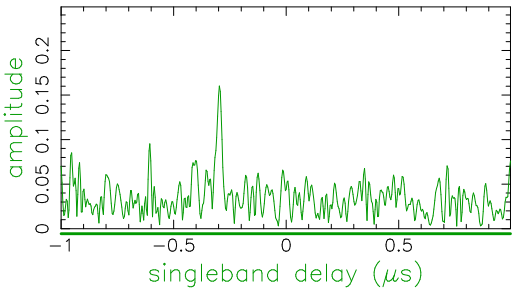
VLBA\_OV - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

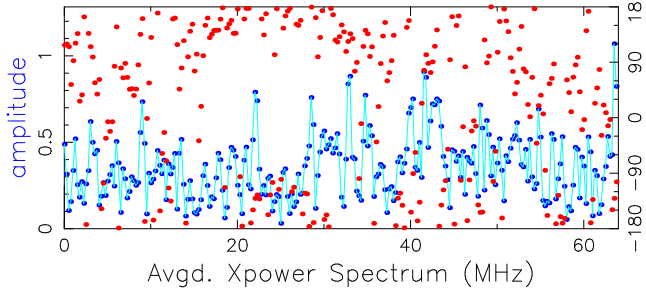


Fringe quality 0

SNR 5.8  
 Int time 175.663  
 Amp 0.249  
 Phase 4.6  
 PFD 5.3e-01  
 Delays (us)  
 SBD -0.296294  
 MBD -0.003021  
 Fringe rate (Hz)  
 0.965158  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

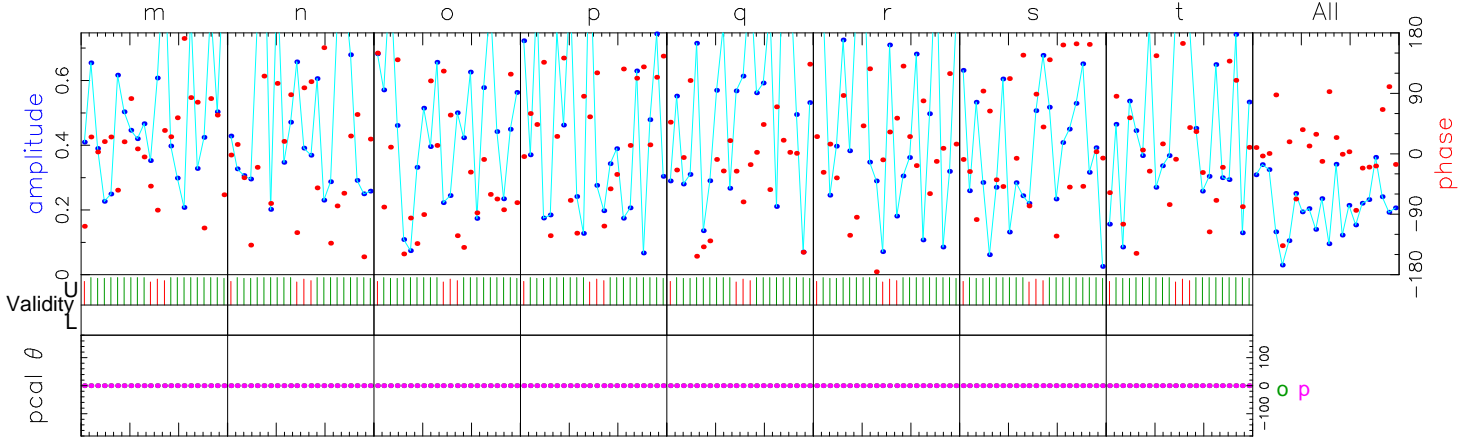


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180005  
 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		
o	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-2.09739503438E+03	Apriori delay (usec)	-2.09709513856E+03	Resid mbdelay (usec)	-3.02081E-03	+/-	1.9E-04
Sband delay (usec)	-2.09739143256E+03	Apriori clock (usec)	1.9352612E+01	Resid sbdelay (usec)	-2.96294E-01	+/-	1.5E-03
Phase delay (usec)	-2.09709513841E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	1.48171E-07	+/-	6.4E-07
Delay rate (us/s)	1.65497517073E-01	Apriori rate (us/s)	1.65486312551E-01	Resid rate (us/s)	1.12045E-05	+/-	6.2E-09
Total phase (deg)	-80.3	Apriori accel (us/s/s)	1.14102810163E-05	Resid phase (deg)	4.6	+/-	19.7

ph/seg (deg)	54.8	Theor.	46.0	Amplitude	0.249 +/- 0.043	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.9		80.2	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.0		27.9	Inc. seg. avg.	0.246	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.8		48.6	Inc. frq. avg.	0.248	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

o: az 127.0 el 40.9 pa -39.4 p: az 136.3 el 49.0 pa -34.7 u, v (fr/asec) -942.341 396.943 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//op..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//op.W.266.3MP2MB

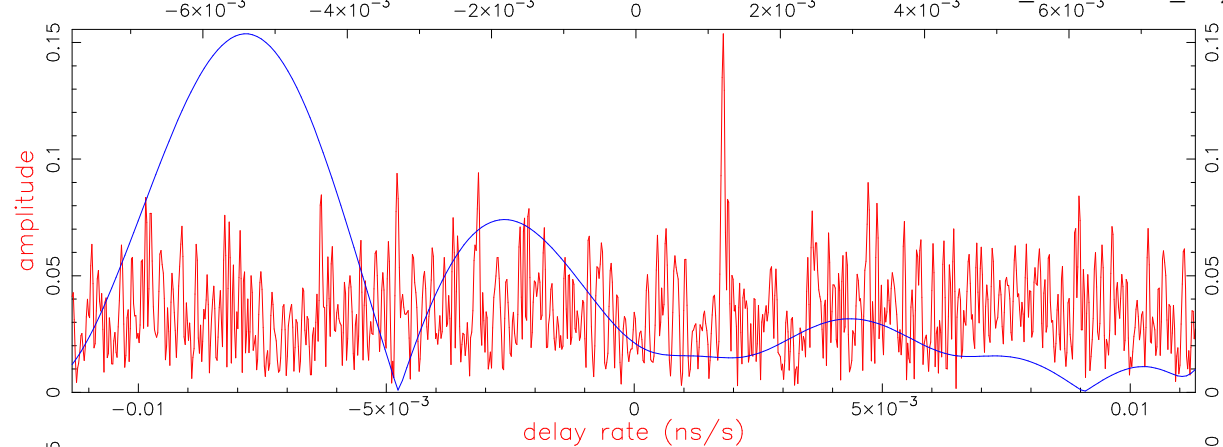
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

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

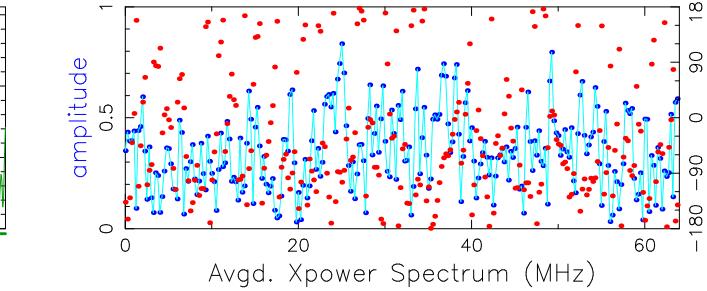
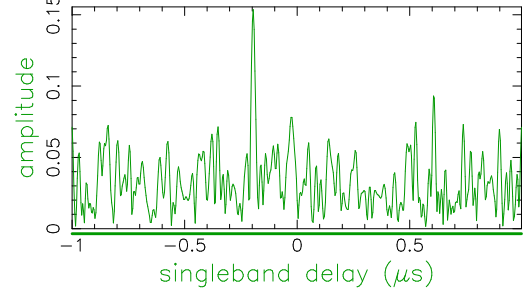
multiband delay ( $\mu$ s)



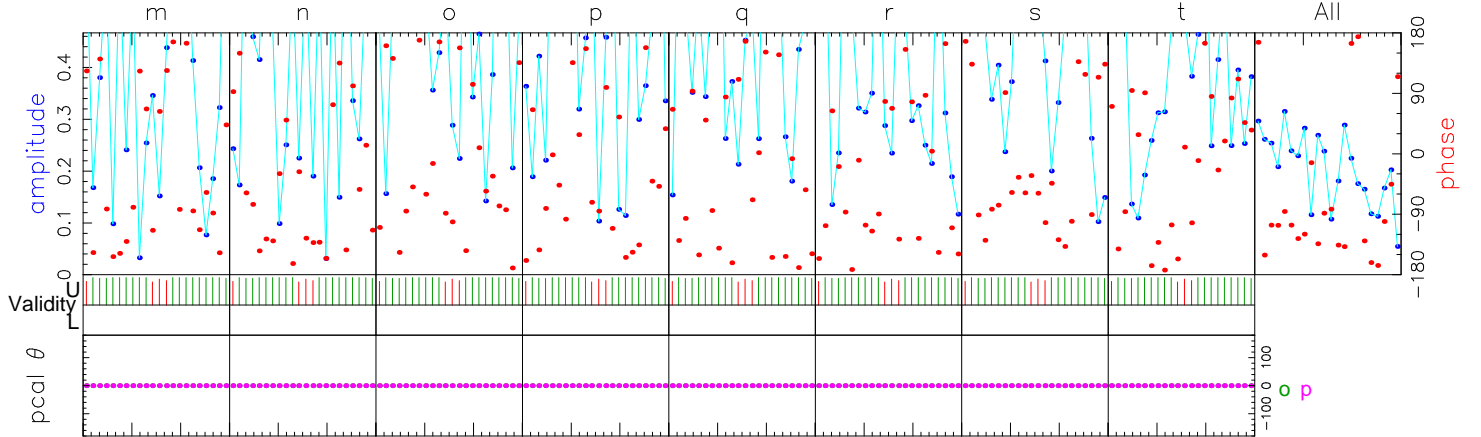
Fringe quality 0

SNR 5.6  
 Int time 175.663  
 Amp 0.156  
 Phase -125.9  
 PFD 9.4e-01  
 Delays (us)  
 SBD -0.195921  
 MBD -0.005413  
 Fringe rate (Hz)  
 0.154657  
 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  
 2025:041:180007  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



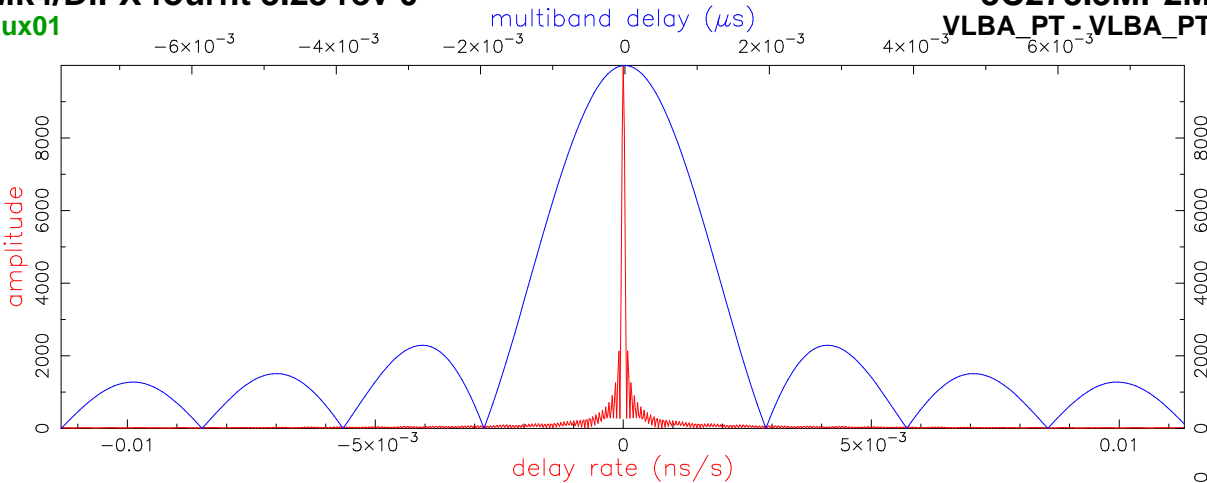
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



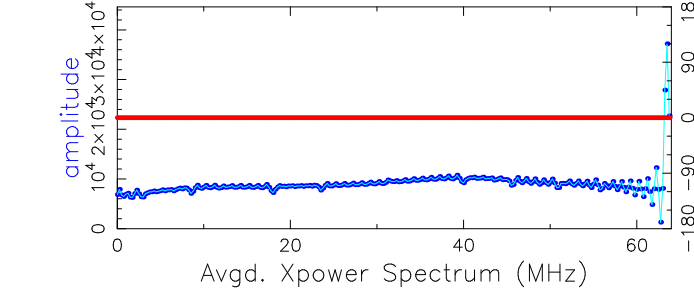
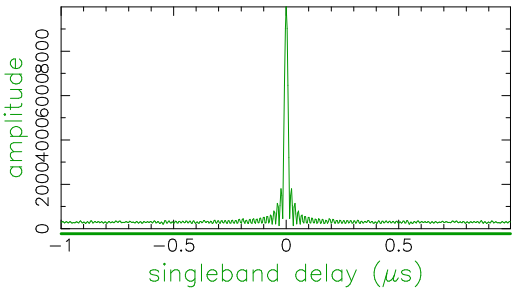
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-150.0	-119.8	-111.9	-93.5	-153.0	-129.7	-106.7	170.6	Phase	-125.9
	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.0	Ampl.	0.1
	142.1	252.8	99.0	318.9	466.2	92.4	98.7	234.1	Sbd box	206.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.09728805126E+03	Apriori delay (usec)	-2.09709513856E+03	Resid mbdelay (usec)	-5.41270E-03	+/-	1.9E-04
Sband delay (usec)	-2.09729105981E+03	Apriori clock (usec)	1.9352612E+01	Resid sbdelay (usec)	-1.95921E-01	+/-	1.5E-03
Phase delay (usec)	-2.09709514262E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	-4.06035E-06	+/-	6.6E-07
Delay rate (us/s)	1.65488107971E-01	Apriori rate (us/s)	1.65486312551E-01	Resid rate (us/s)	1.79542E-06	+/-	6.4E-09
Total phase (deg)	-210.8	Apriori accel (us/s/s)	1.14102810163E-05	Resid phase (deg)	-125.9	+/-	20.5

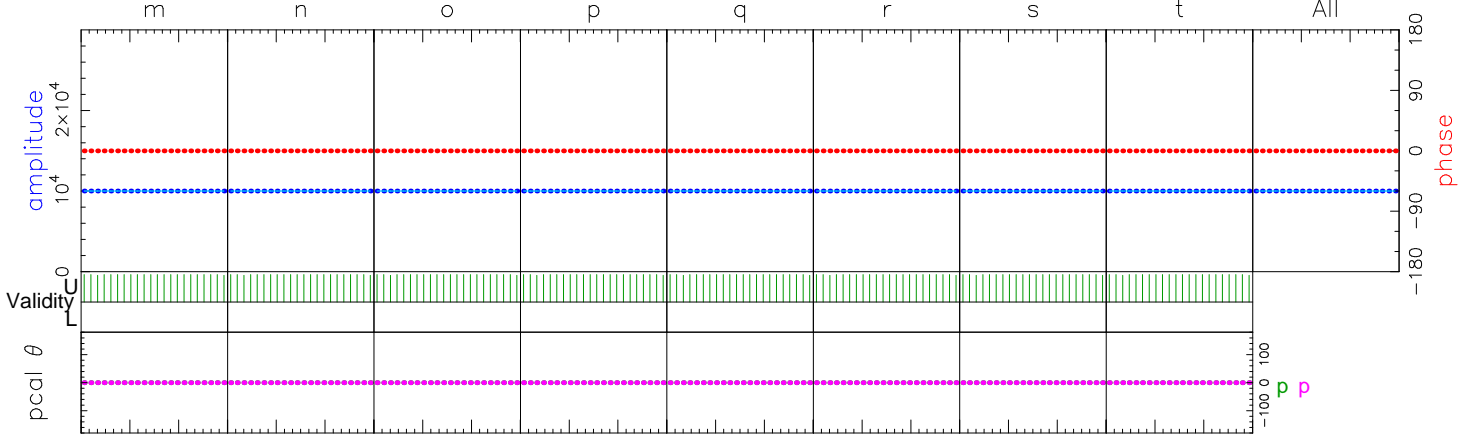
ph/seg (deg) 51.0 47.9 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.0 83.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.2 29.0 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.1 50.7 Inc. frq. avg. 0.147 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 o: az 127.0 el 40.9 pa -39.4 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) -942.341 396.943 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//op..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//op.W.272.3MP2MB



Fringe quality 9  
SNR 366647.9  
Int time 179.764  
Amp 9999.998  
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  
2025:041:180000  
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		
p	0	0	0	0	0	0	0	0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

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

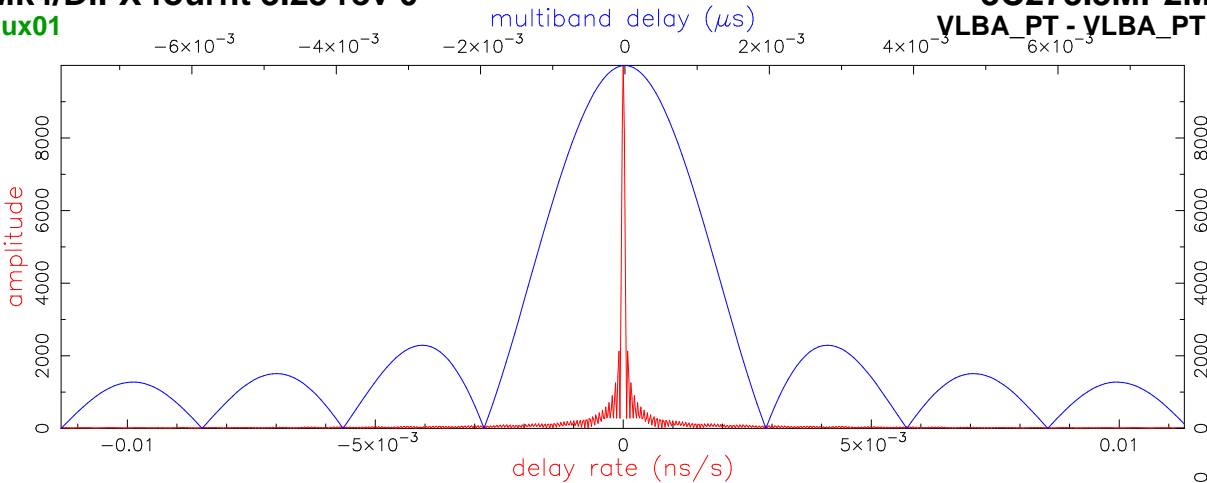
RMS Theor. Amplitude 9999.998 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
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. 9999.998 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
p: az 136.3 el 49.0 pa -34.7 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/pp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/pp.W.243.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

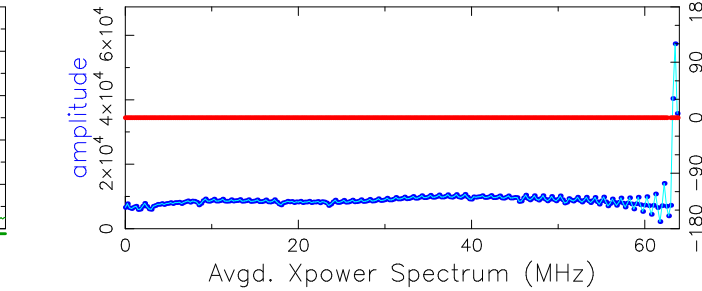
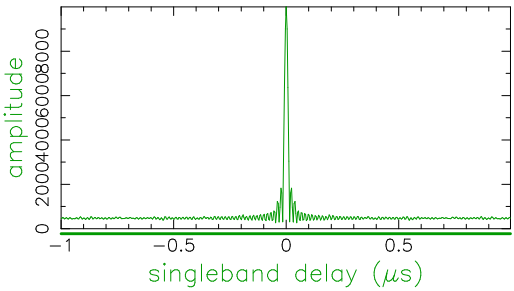
3C273.3MP2MB, No0707, pp

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



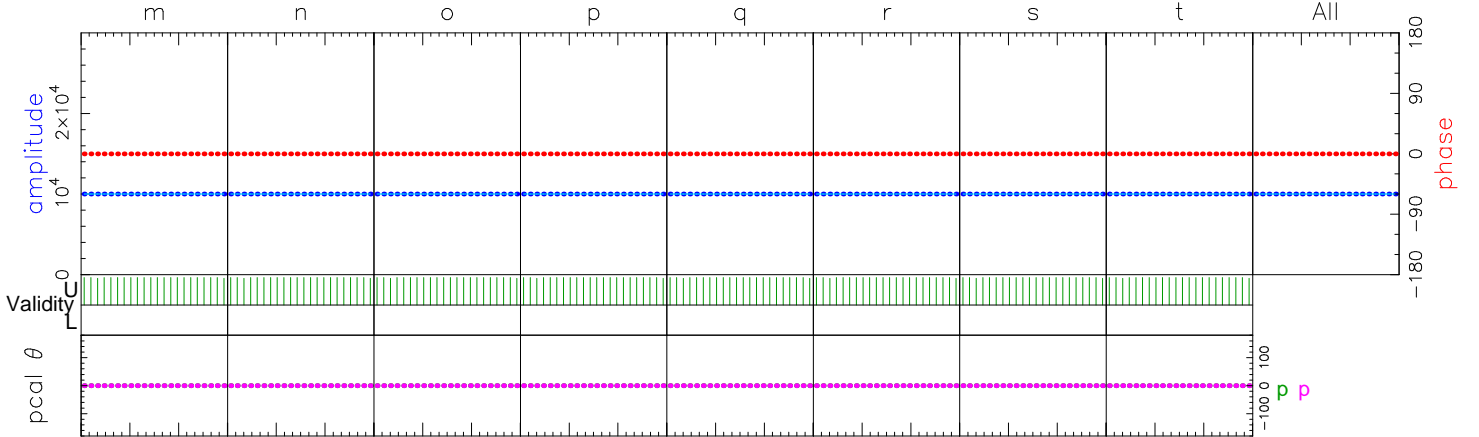
Fringe quality 9

SNR 366648.0  
 Int time 179.764  
 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  
 2025:041:180002  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



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

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

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

p: az 136.3 el 49.0 pa -34.7 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/pp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/pp.W.254.3MP2MB

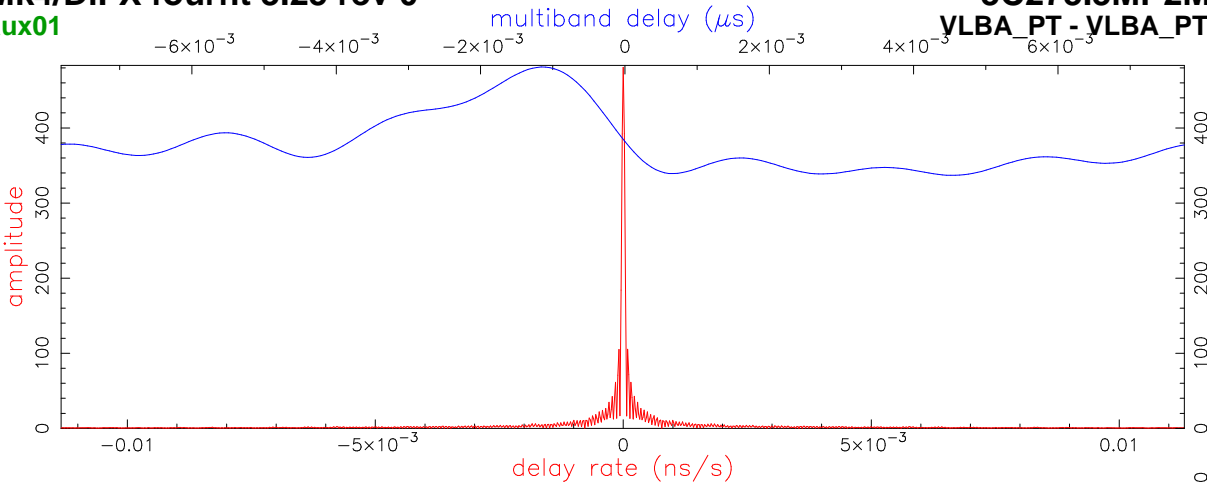


Mk4/DiFX fourfit 3.25 rev 0

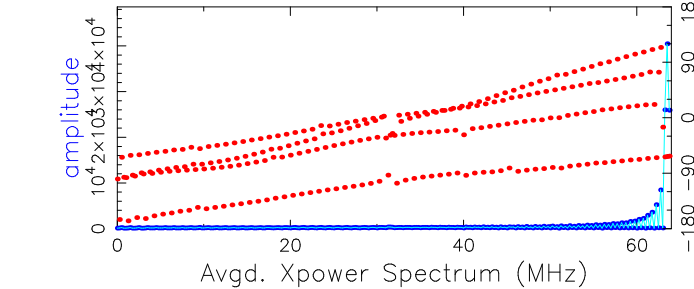
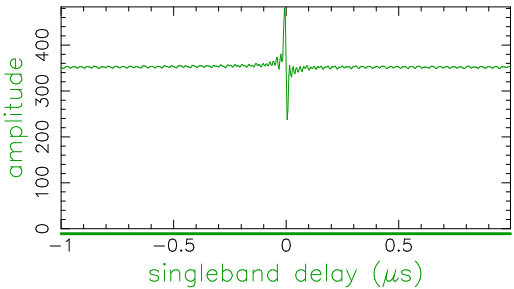
aux01

3C273.3MP2MB, No0707, pp

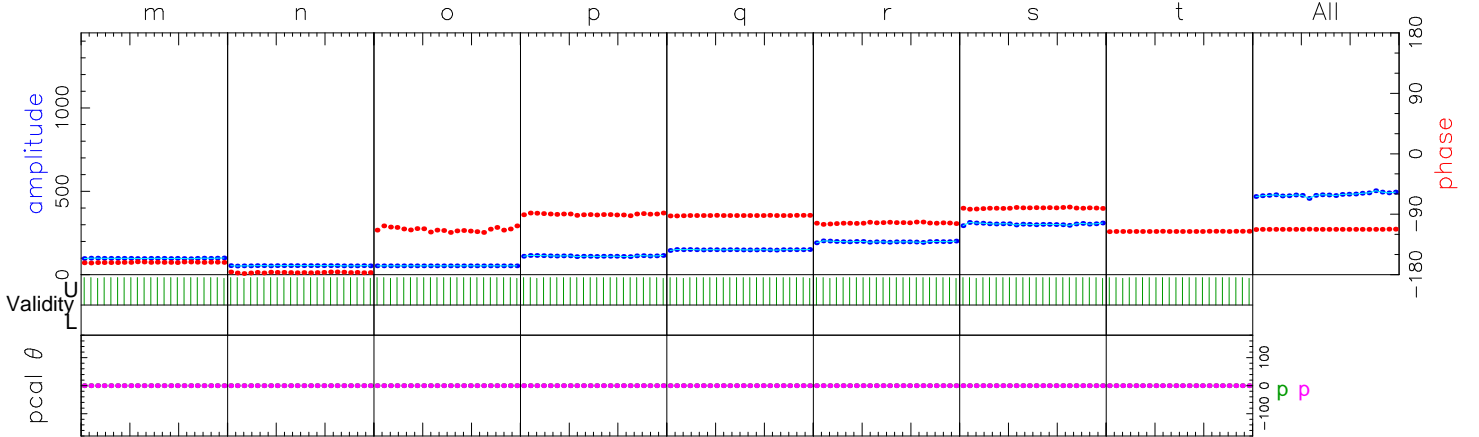
VLBA\_PT - VLBA\_PT, fgroup W, pol RL



Fringe quality 5  
 Error code G  
 SNR 17720.4  
 Int time 179.764  
 Amp 483.307  
 Phase -112.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.006850  
 MBD -0.001219  
 Fringe rate (Hz)  
 -0.000007  
 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  
 2025:041:180006  
 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
	-161.5	-176.7	-112.7	-90.0	-91.9	-103.0	-80.8	-115.5	Phase	-112.4
	98.2	54.2	53.4	112.2	149.6	197.9	303.8	3010.6	Ampl.	497.5
	256.7	256.7	257.4	256.9	256.5	256.8	256.7	254.9	Sbd box	255.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	

Group delay (usec) (SBD) -1.21884375000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.21884E-03 +/- 6.1E-08  
 Sband delay (usec) -6.84975000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -6.84975E-03 +/- 4.9E-07  
 Phase delay (usec) -3.62464437581E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.62464E-06 +/- 2.1E-10  
 Delay rate (us/s) -8.07755686326E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -8.07756E-11 +/- 2.0E-12  
 Total phase (deg) -112.4 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -112.4 +/- 0.0

RMS Theor. Amplitude 483.307 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.1 0.0 Search (1024X32) 478.768 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 2.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 37.8 0.0 Inc. seg. avg. 480.630 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 197.2 0.0 Inc. frq. avg. 497.481 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 p: az 136.3 el 49.0 pa -34.7 p: az 136.3 el 49.0 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/pp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/pp.W.270.3MP2MB