

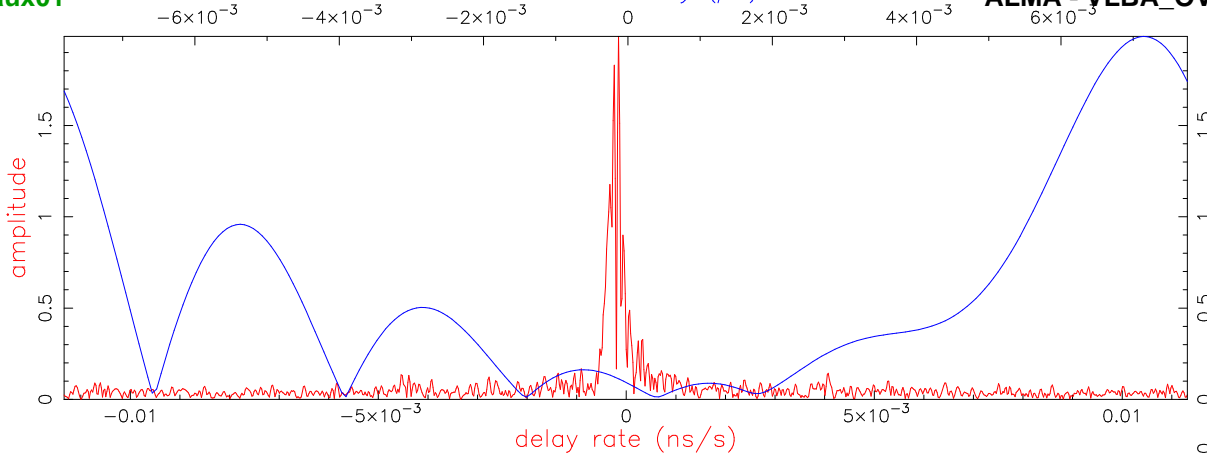
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ao

ALMA - VLBA\_OV, fgroup W, pol XL

multiband delay ( $\mu$ s)

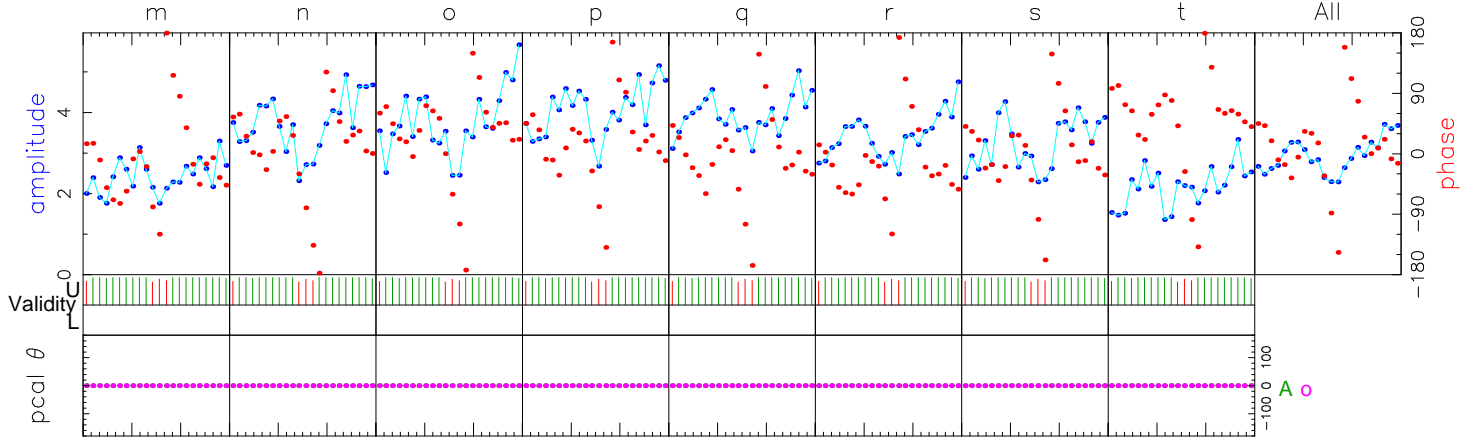


Fringe quality 2

SNR 72.1  
 Int time 175.882  
 Amp 1.988  
 Phase 11.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.039251  
 MBD 0.007159  
 Fringe rate (Hz)  
 -0.013551  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175908  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-23.7	26.0	44.2	19.5	-6.7	-26.1	2.8	62.7	Phase	11.7
	1.5	2.5	2.6	2.7	2.6	2.4	2.2	1.4	Ampl.	2.2
	268.6	266.8	266.5	266.8	267.0	266.9	266.9	268.9	Sbd box	267.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.61100288416E+03	Apriori delay (usec)	2.61096447557E+03	Resid mbdelay (usec)	7.15859E-03	+/-	1.5E-05
Sband delay (usec)	2.61100372657E+03	Apriori clock (usec)	-2.1324666E+03	Resid sbdelay (usec)	3.92510E-02	+/-	1.2E-04
Phase delay (usec)	2.61096447594E+03	Apriori clockrate (us/s)	-4.9210397E-07	Resid phdelay (usec)	3.77568E-07	+/-	5.1E-08
Delay rate (us/s)	-1.07980718832E+00	Apriori rate (us/s)	-1.07980703101E+00	Resid rate (us/s)	-1.57314E-07	+/-	5.0E-10
Total phase (deg)	344.8	Apriori accel (us/s/s)	-2.89726188361E-05	Resid phase (deg)	11.7	+/-	1.6

ph/seg (deg)	60.0	RMS	Theor.	Amplitude	1.988 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	52.7	60.0	3.7	Search (1024X32)	1.961	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.2	52.7	6.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.3	34.2	2.2	Inc. seg. avg.	2.946	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		26.3	3.9	Inc. frq. avg.	2.233	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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 6170.495 -8878.943 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ao..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ao.W.19.3MP2MB

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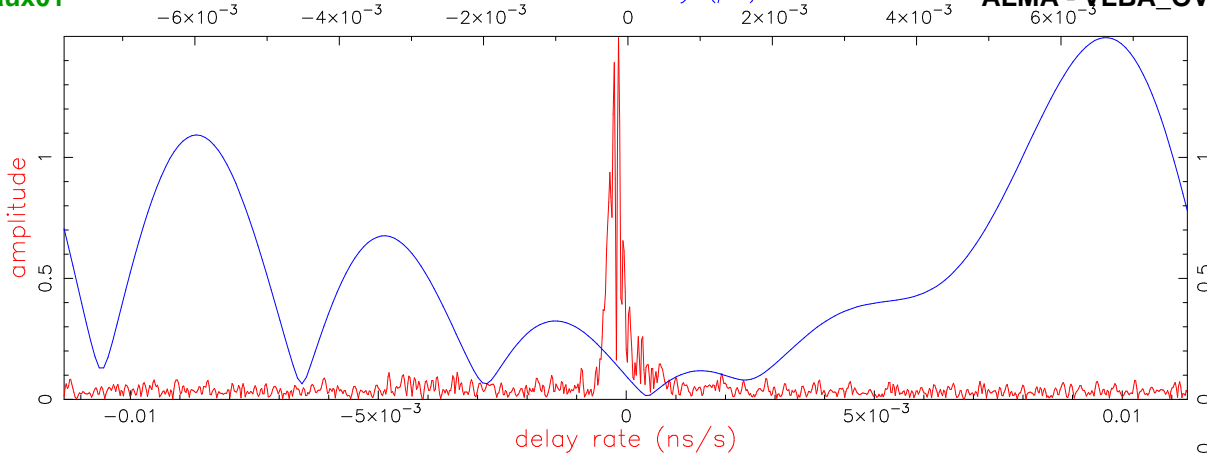
aux01

3C273.3MP2MB, No0707, Ao

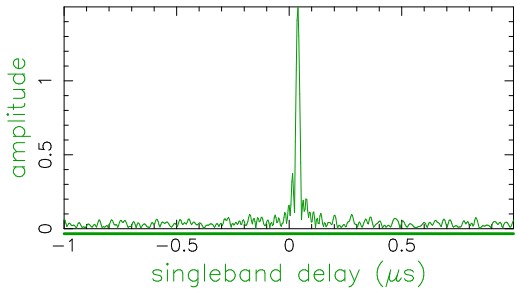
ALMA - VLBA\_OV, fgroup W, pol YR

multiband delay ( $\mu$ s)

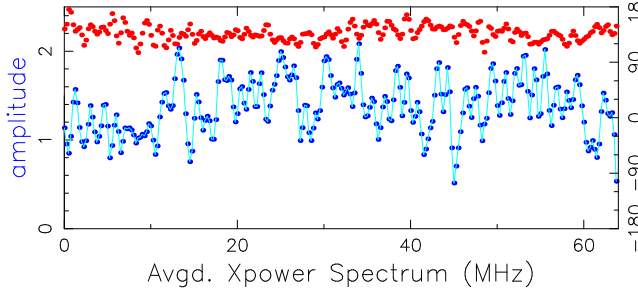
Fringe quality 2



SNR 54.4  
 Int time 175.882  
 Amp 1.500  
 Phase 141.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.038280  
 MBD 0.006581  
 Fringe rate (Hz)  
 -0.013496  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

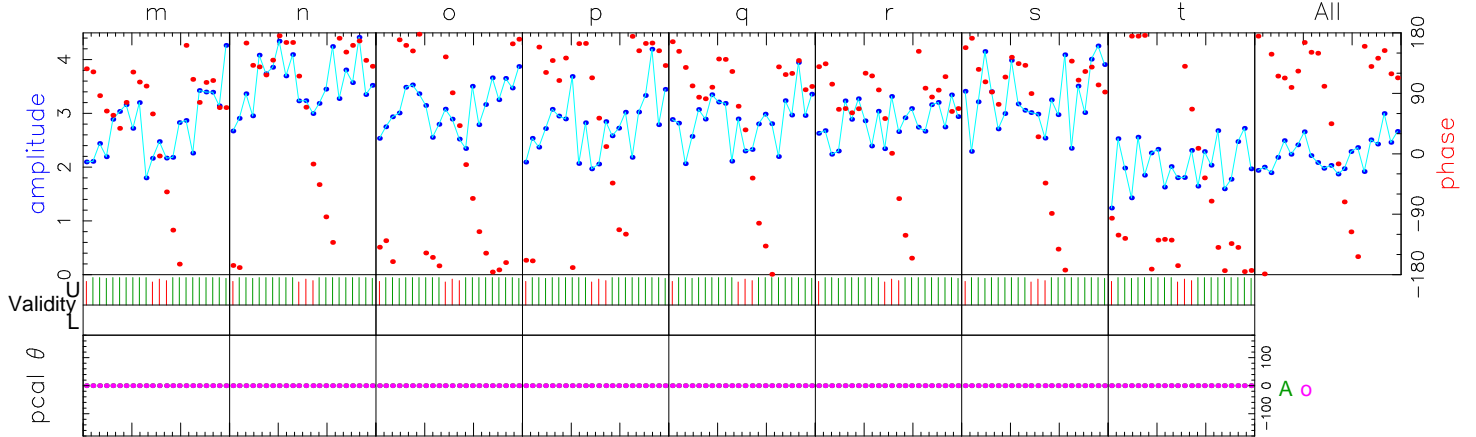


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175910  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	90.7	158.8	-170.9	160.5	122.7	93.1	124.2	-147.4	Phase	141.8
	1.8	2.3	2.1	1.8	1.9	1.8	2.2	1.3	Ampl.	1.9
	268.7	266.8	266.5	266.7	266.7	266.5	267.2	269.1	Sbd box	266.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.61100230662E+03	Apriori delay (usec)	2.61096447557E+03	Resid mbdelay (usec)	6.58106E-03	+/-	2.0E-05
Sband delay (usec)	2.61100275532E+03	Apriori clock (usec)	-2.1324666E+03	Resid sbdelay (usec)	3.82797E-02	+/-	1.6E-04
Phase delay (usec)	2.61096448014E+03	Apriori clockrate (us/s)	-4.9210397E-07	Resid phdelay (usec)	4.57121E-06	+/-	6.8E-08
Delay rate (us/s)	-1.07980718768E+00	Apriori rate (us/s)	-1.07980703101E+00	Resid rate (us/s)	-1.56672E-07	+/-	6.6E-10
Total phase (deg)	114.9	Apriori accel (us/s/s)	-2.89726188361E-05	Resid phase (deg)	141.8	+/-	2.1

ph/seg (deg)	60.0	Theor.	4.9	Amplitude	1.500 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.5	Search (1024X32)	1.468	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.5	Inc. seg. avg.	2.255	Inc. frq. avg.	1.894	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.2	Inc. frq. avg.	1.894	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
A:	az 330.6 el 61.8 pa 152.8	o:	az 127.0 el 40.9 pa -39.4	u,v (fr/asec)	6170.495 -8878.943	ion window (TEC)	0.00 0.00	simultaneous interpolator		

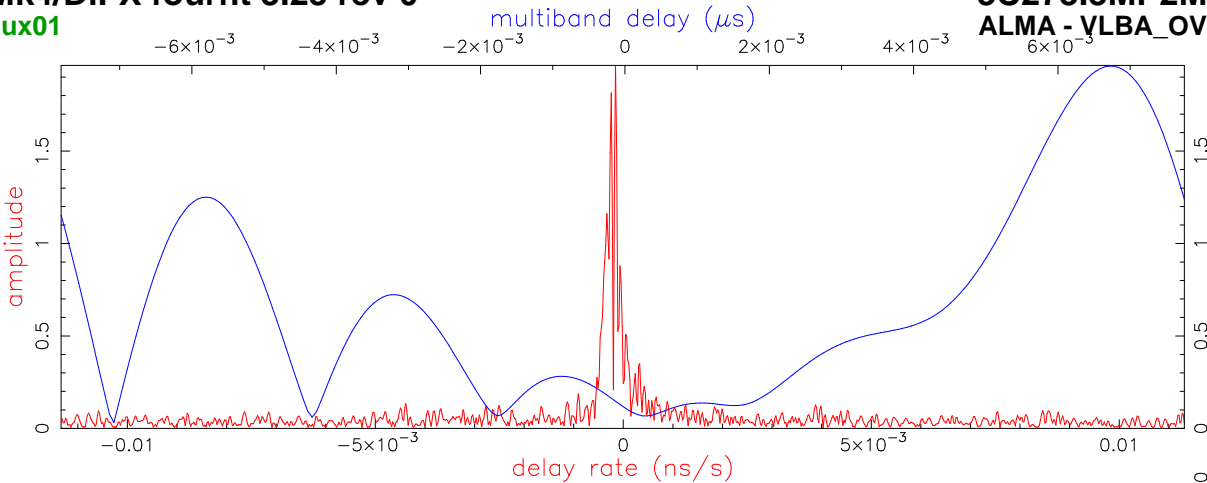
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ao..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ao.W.29.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

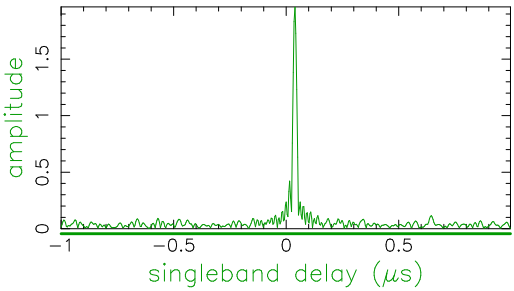
3C273.3MP2MB, No0707, Ao

ALMA - VLBA\_OV, fgroup W, pol XR

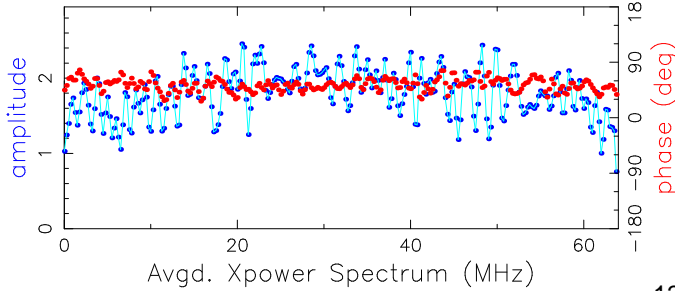


Fringe quality 2

SNR 71.2  
 Int time 175.882  
 Amp 1.964  
 Phase 58.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.038482  
 MBD 0.006702  
 Fringe rate (Hz)  
 -0.013462  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

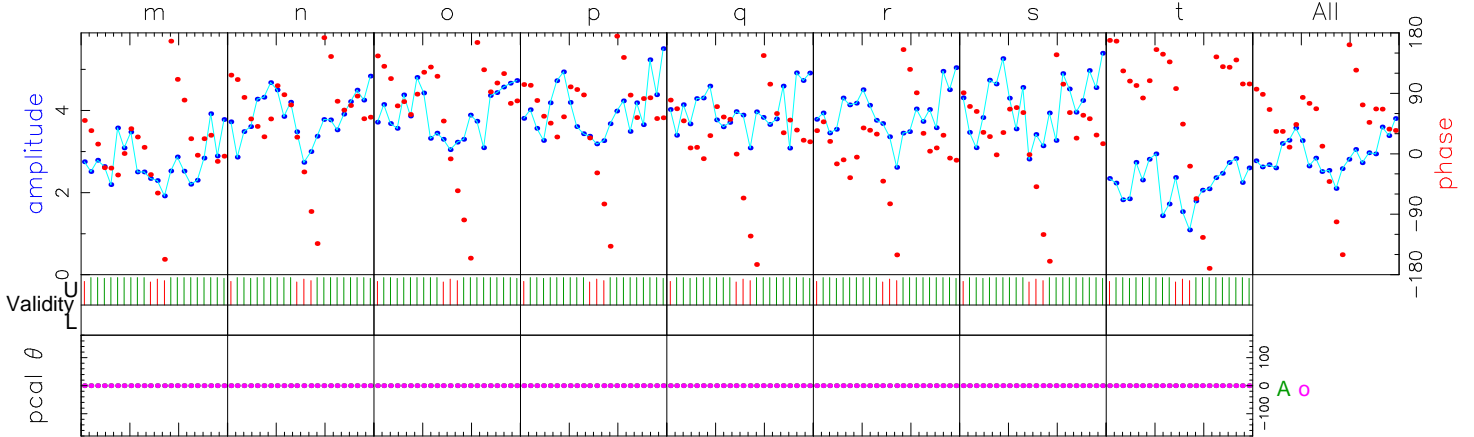


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	12.8	73.1	103.7	74.0	39.1	14.8	48.0	129.5	Phase	58.9
	1.9	2.6	2.5	2.6	2.6	2.6	2.8	1.6	Ampl.	2.4
	268.7	266.8	266.5	266.6	266.8	266.8	267.1	269.2	Sbd box	266.9
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.61100242806E+03 Apriori delay (usec) 2.61096447557E+03 Resid mbdelay (usec) 6.70250E-03 +/- 1.5E-05  
 Sband delay (usec) 2.61100295782E+03 Apriori clock (usec) -2.1324666E+03 Resid sbdelay (usec) 3.84822E-02 +/- 1.2E-04  
 Phase delay (usec) 2.61096447747E+03 Apriori clockrate (us/s) -4.9210397E-07 Resid phdelay (usec) 1.89976E-06 +/- 5.2E-08  
 Delay rate (us/s) -1.07980718729E+00 Apriori rate (us/s) -1.07980703101E+00 Resid rate (us/s) -1.56284E-07 +/- 5.0E-10  
 Total phase (deg) 32.0 Apriori accel (us/s/s) -2.89726188361E-05 Resid phase (deg) 58.9 +/- 1.6

RMS Theor. Amplitude 1.964 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 61.2 3.8 Search (1024X32) 1.949 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 54.0 6.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 44.7 2.3 Inc. seg. avg. 2.935 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 29.9 4.0 Inc. frq. avg. 2.391 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 6170.495 -8878.943 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ao..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ao.W.39.3MP2MB

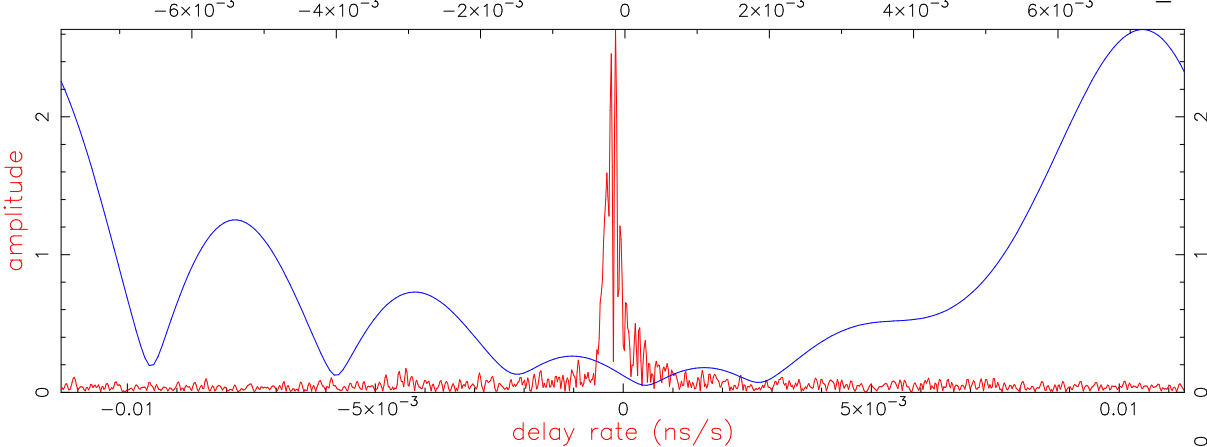
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ao

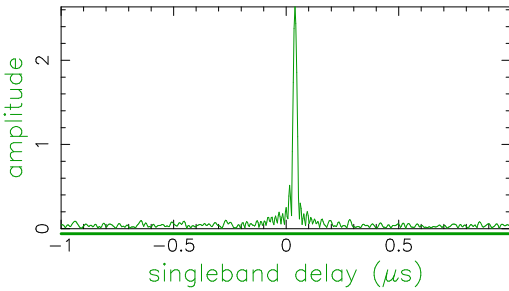
ALMA - VLBA\_OV, fgroup W, pol YL

multiband delay ( $\mu$ s)

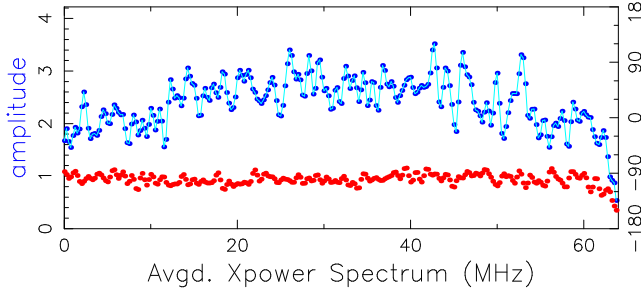


Fringe quality 2

SNR 95.6  
 Int time 175.882  
 Amp 2.635  
 Phase -89.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.039308  
 MBD 0.007184  
 Fringe rate (Hz)  
 -0.013510  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

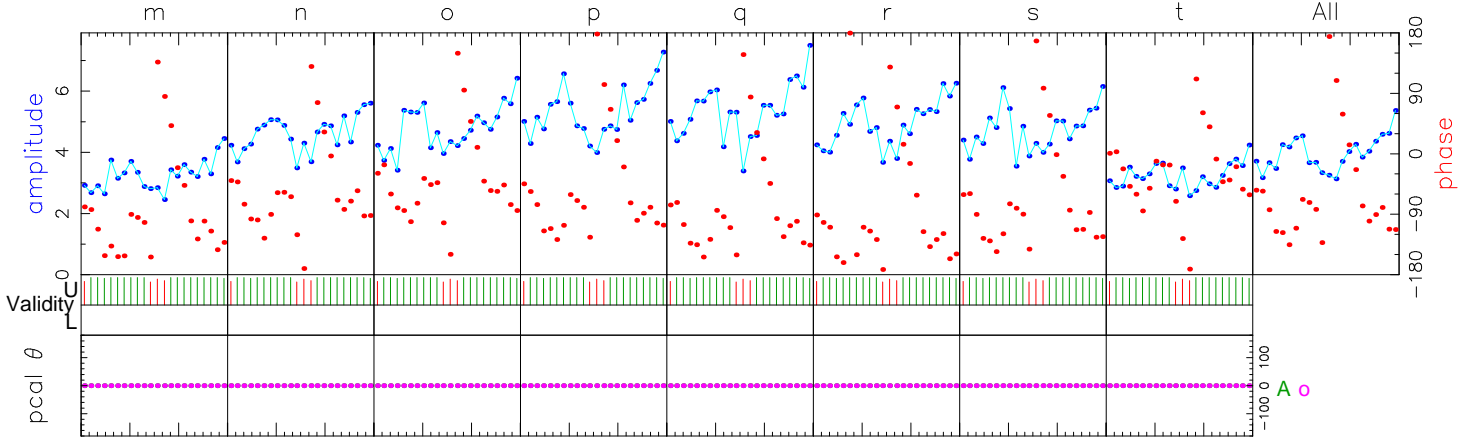


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175915  
 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
	-114.2	-73.1	-56.9	-84.9	-108.9	-129.1	-100.1	-32.3	Phase	-89.6
	2.1	3.0	3.1	3.6	3.6	3.2	3.1	2.2	Ampl.	3.0
	268.5	267.0	266.5	266.8	266.8	266.8	267.1	268.8	Sbd box	267.1
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.61100290925E+03	Apriori delay (usec)	2.61096447557E+03	Resid mbdelay (usec)	7.18368E-03	+/-	1.1E-05
Sband delay (usec)	2.61100378357E+03	Apriori clock (usec)	-2.1324666E+03	Resid sbdelay (usec)	3.93080E-02	+/-	9.0E-05
Phase delay (usec)	2.61096447268E+03	Apriori clockrate (us/s)	-4.9210397E-07	Resid phdelay (usec)	-2.89016E-06	+/-	3.9E-08
Delay rate (us/s)	-1.07980718785E+00	Apriori rate (us/s)	-1.07980703101E+00	Resid rate (us/s)	-1.56842E-07	+/-	3.8E-10
Total phase (deg)	243.5	Apriori accel (us/s/s)	-2.89726188361E-05	Resid phase (deg)	-89.6	+/-	1.2

ph/seg (deg)	RMS 60.6	Theor. 2.8	Amplitude 2.635 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.1	4.9	Search (1024X32) 2.606	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.9	1.7	Inc. seg. avg. 3.976	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	24.1	3.0	Inc. frq. avg. 2.984	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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 6170.495 -8878.943 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ao..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ao.W.51.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

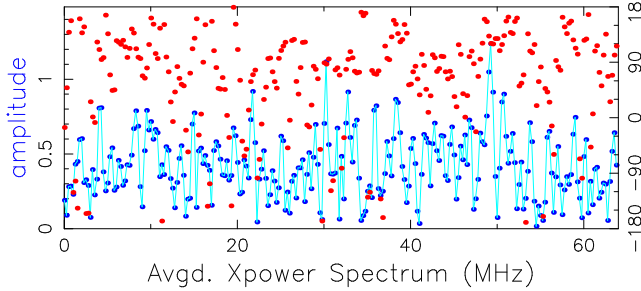
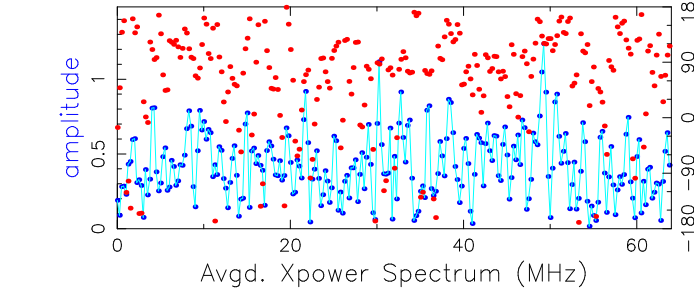
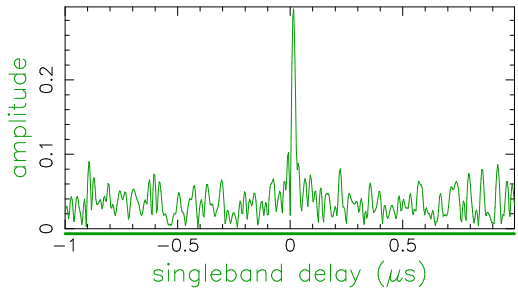
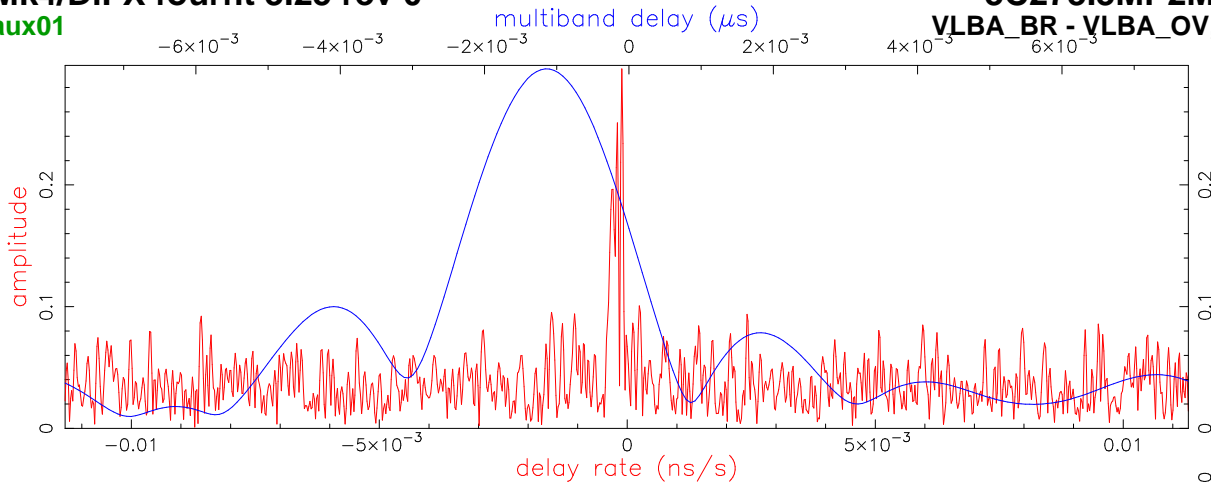
aux01

3C273.3MP2MB, No0707, bo

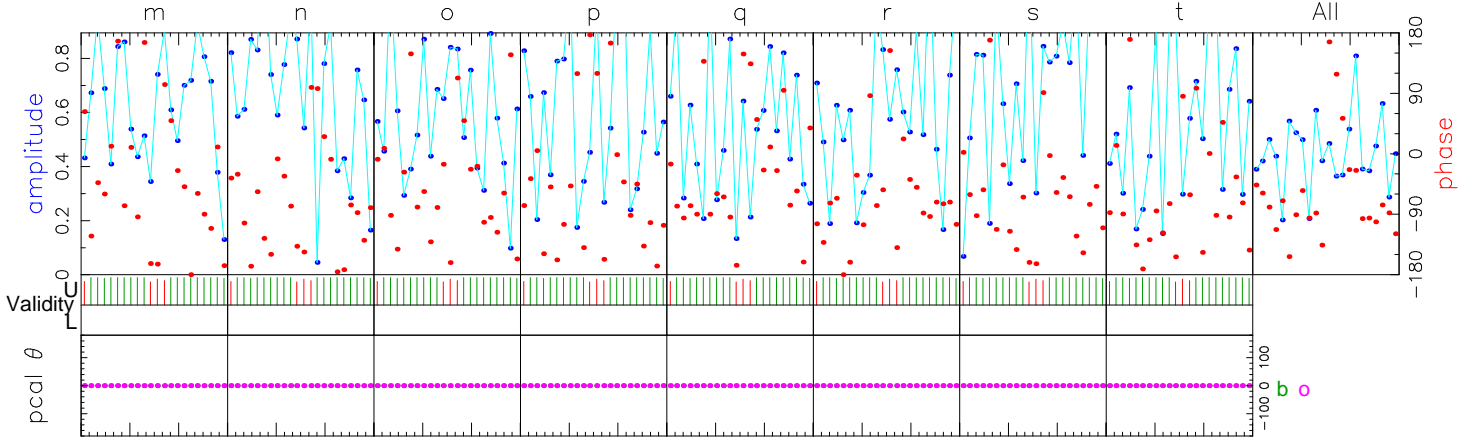
VLBA\_BR - VLBA\_OV, fgroup W, pol RR

Fringe quality 9

SNR 10.8  
 Int time 175.866  
 Amp 0.298  
 Phase -84.6  
 PFD 6.8e-19  
 Delays (us)  
 SBD 0.014379  
 MBD -0.001136  
 Fringe rate (Hz)  
 -0.010313  
 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  
 2025:041:175919  
 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
	-82.7	-90.1	-81.4	-94.7	-58.3	-89.0	-84.2	-90.2	Phase	-84.6
	0.2	0.3	0.3	0.3	0.2	0.4	0.4	0.3	Ampl.	0.3
	178.0	261.2	49.8	177.1	260.9	260.2	260.4	260.1	Sbd box	260.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.32484357199E+03	Apriori delay (usec)	-2.32485806049E+03	Resid mbdelay (usec)	-1.13650E-03	+/-	1.0E-04
Sband delay (usec)	-2.32484368149E+03	Apriori clock (usec)	-2.0430569E+01	Resid sbdelay (usec)	1.43790E-02	+/-	8.0E-04
Phase delay (usec)	-2.32485806322E+03	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	-2.72801E-06	+/-	3.4E-07
Delay rate (us/s)	-9.91502209582E-02	Apriori rate (us/s)	-9.91501012318E-02	Resid rate (us/s)	-1.19726E-07	+/-	3.3E-09
Total phase (deg)	-203.6	Apriori accel (us/s/s)	1.27805712447E-05	Resid phase (deg)	-84.6	+/-	10.6

ph/seg (deg)	57.9	Theor.	24.7	Amplitude	0.298 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	69.3	Search (1024X32)	0.280	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	12.2	Inc. seg. avg.	0.415	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	25.3	Inc. frq. avg.	0.290	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      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) 575.029 1269.999      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/bo..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/bo.W.64.3MP2MB

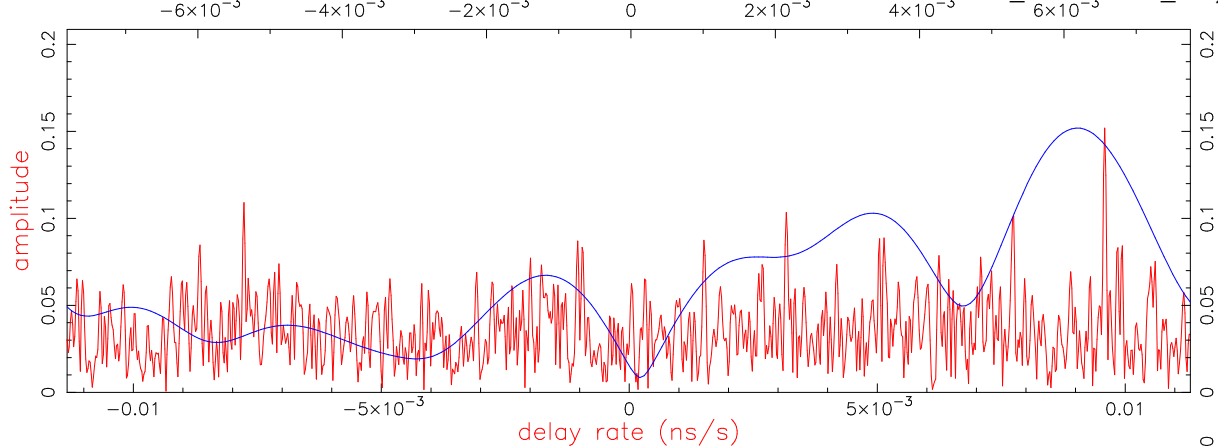
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bo

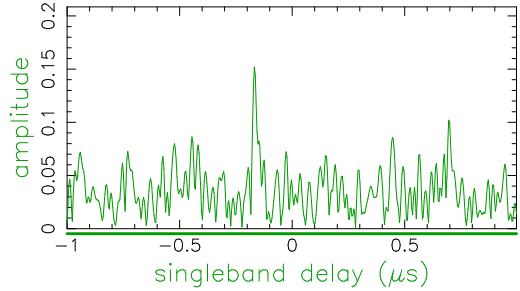
VLBA\_BR - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

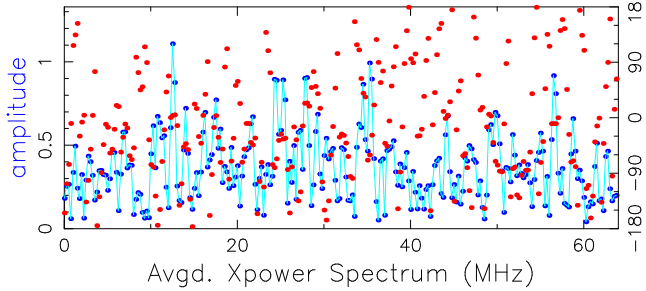


Fringe quality 0

SNR 5.5  
 Int time 175.866  
 Amp 0.209  
 Phase 129.6  
 PFD 9.8e-01  
 Delays (us)  
 SBD -0.167325  
 MBD 0.006209  
 Fringe rate (Hz) 0.827739  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

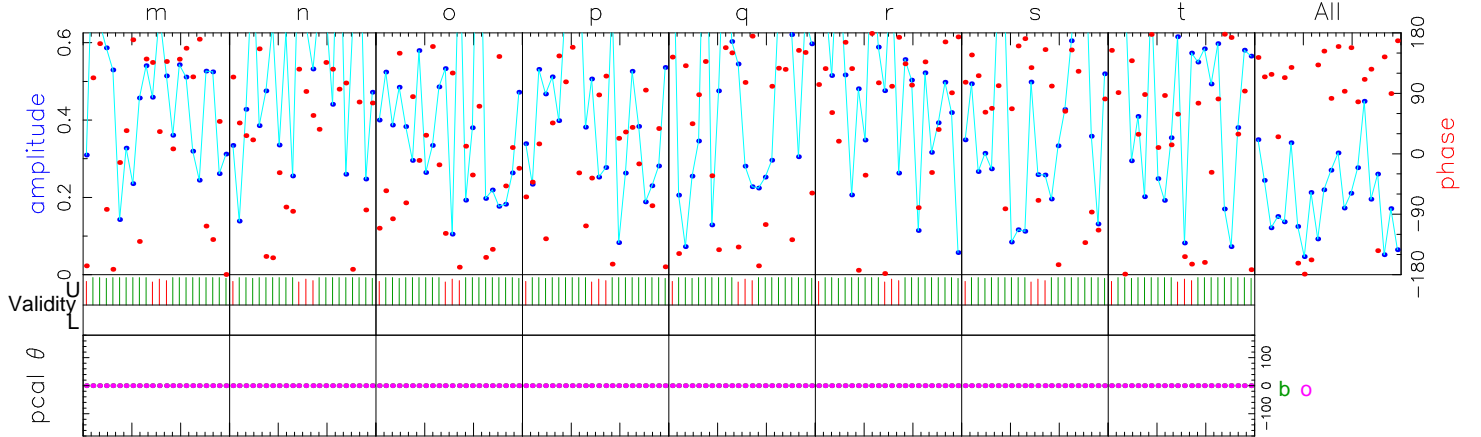


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175921  
 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		
b	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -2.32502372657E+03 Apriori delay (usec) -2.32485806049E+03 Resid mbdelay (usec) 6.20892E-03 +/- 2.0E-04  
 Sband delay (usec) -2.32502538599E+03 Apriori clock (usec) -2.0430569E+01 Resid sbdelay (usec) -1.67325E-01 +/- 1.6E-03  
 Phase delay (usec) -2.32485805631E+03 Apriori clockrate (us/s) 9.5168881E-08 Resid phdelay (usec) 4.18048E-06 +/- 6.7E-07  
 Delay rate (us/s) -9.91404920030E-02 Apriori rate (us/s) -9.91501012318E-02 Resid rate (us/s) 9.60923E-06 +/- 6.5E-09  
 Total phase (deg) 10.6 Apriori accel (us/s/s) 1.27805712447E-05 Resid phase (deg) 129.6 +/- 20.8

ph/seg (deg) 44.8 RMS 44.8 Theor. 48.4 Amplitude 0.209 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.7 84.5 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 79.2 29.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 60.9 51.2 Inc. seg. avg. 0.203 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 575.029 1269.999 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bo.W.69.3MP2MB

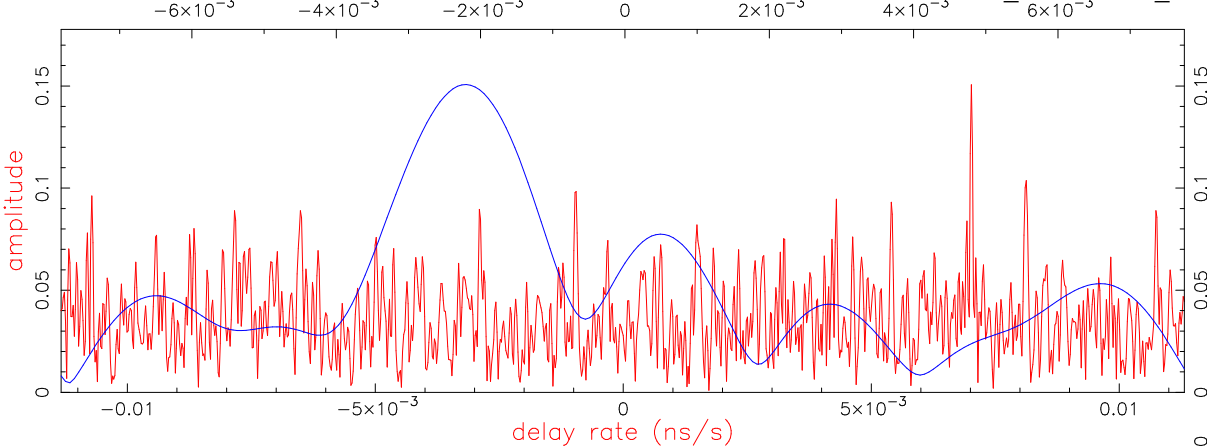
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bo

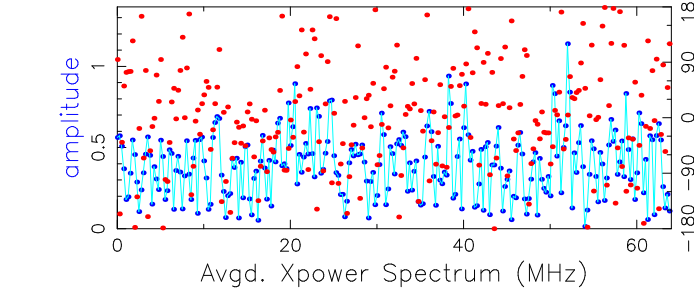
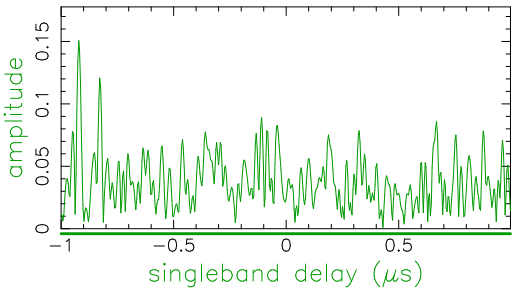
VLBA\_BR - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

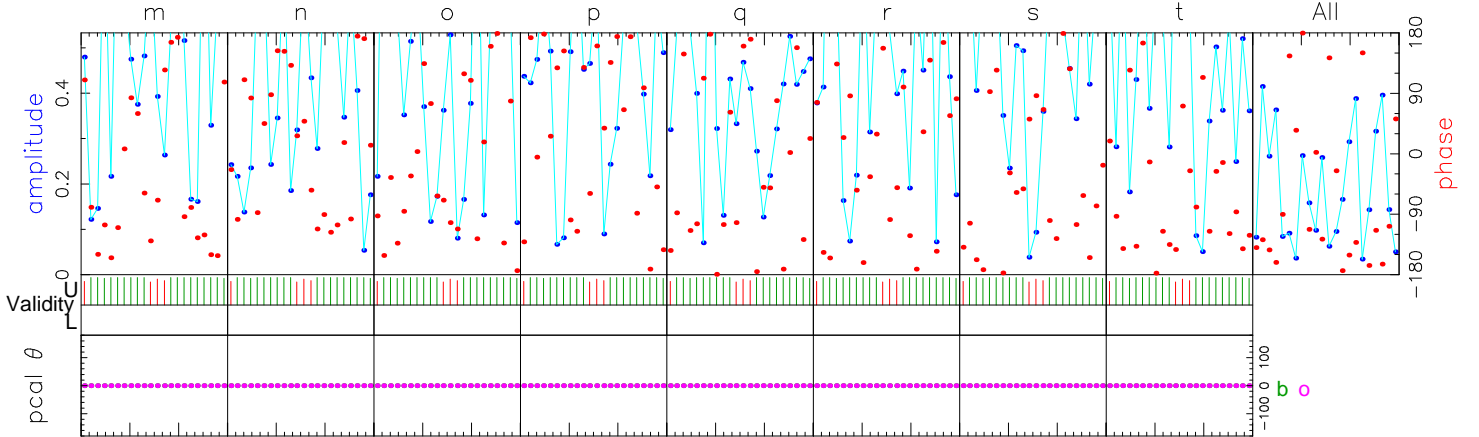


Fringe quality 0

SNR 5.5  
 Int time 175.866  
 Amp 0.178  
 Phase -143.4  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.921211  
 MBD -0.002166  
 Fringe rate (Hz)  
 0.605150  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175923  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.8	-98.4	-125.0	-161.0	-168.7	162.4	-126.4	-121.1	Phase	-143.4
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	52.7	117.3	246.2	340.2	2.9	146.1	156.2	99.1	Sbd box	21.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -2.32578210116E+03 Apriori delay (usec) -2.32485806049E+03 Resid mbdelay (usec) -2.16567E-03 +/- 2.0E-04  
 Sband delay (usec) -2.32577927099E+03 Apriori clock (usec) -2.0430569E+01 Resid sbdelay (usec) -9.21211E-01 +/- 1.6E-03  
 Phase delay (usec) -2.32485806511E+03 Apriori clockrate (us/s) 9.5168881E-08 Resid phdelay (usec) -4.62285E-06 +/- 6.8E-07  
 Delay rate (us/s) -9.91430760375E-02 Apriori rate (us/s) -9.91501012318E-02 Resid rate (us/s) 7.02519E-06 +/- 6.6E-09  
 Total phase (deg) -262.4 Apriori accel (us/s/s) 1.27805712447E-05 Resid phase (deg) -143.4 +/- 20.9

RMS Theor. Amplitude 0.178 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 73.7 48.8 Search (1024X32) 0.148 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 87.3 85.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 34.3 29.6 Inc. seg. avg. 0.165 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 27.8 51.7 Inc. frq. avg. 0.176 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 575.029 1269.999 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//bo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//bo.W.78.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

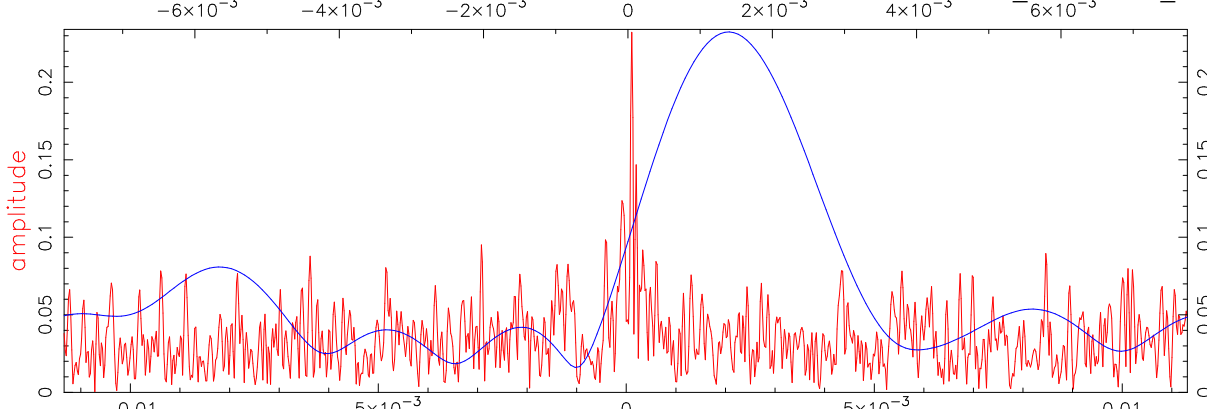
aux01

3C273.3MP2MB, No0707, fo

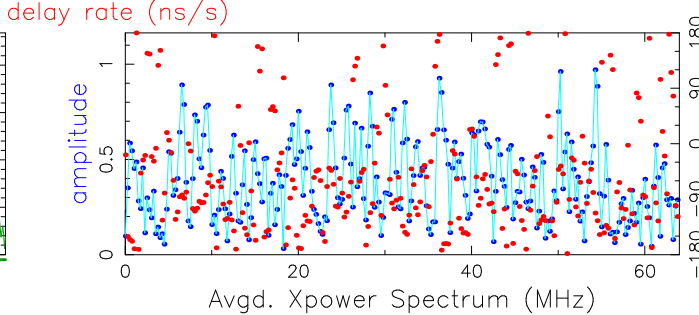
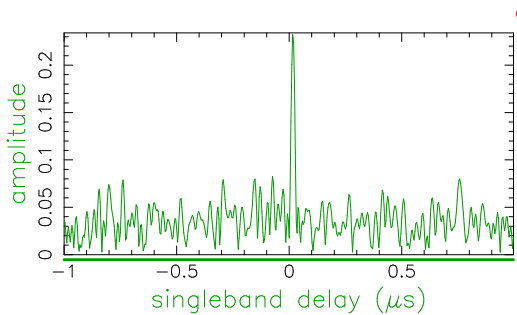
VLBA\_FD - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 9

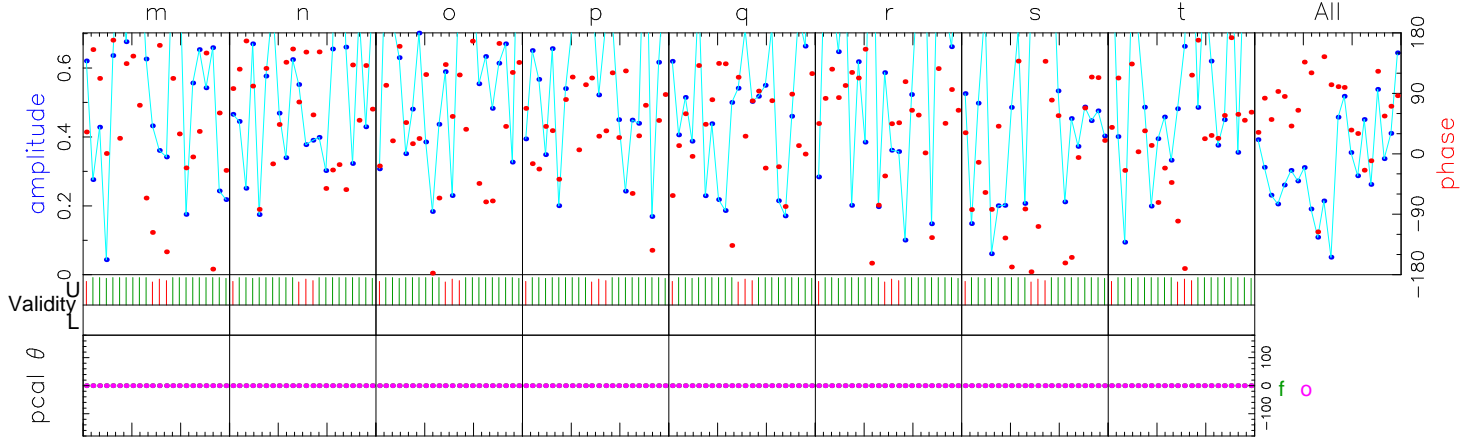


SNR 8.5  
 Int time 175.882  
 Amp 0.234  
 Phase 73.4  
 PFD 3.8e-09  
 Delays (us)  
 SBD 0.016786  
 MBD 0.001441  
 Fringe rate (Hz) 0.010174  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175928  
 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
	92.3	67.9	84.4	56.8	61.9	87.1	110.3	59.0	Phase	73.4
	0.2	0.2	0.2	0.4	0.3	0.4	0.1	0.2	Ampl.	0.2
	76.9	453.7	268.6	261.5	260.8	261.9	502.4	260.7	Sbd box	261.3
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.25542205952E+03	Apriori delay (usec)	3.25540499334E+03	Resid mbdelay (usec)	1.44119E-03	+/-	1.3E-04
Sband delay (usec)	3.25542177934E+03	Apriori clock (usec)	-2.4996143E+01	Resid sbdelay (usec)	1.67860E-02	+/-	1.0E-03
Phase delay (usec)	3.25540499570E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	2.36539E-06	+/-	4.4E-07
Delay rate (us/s)	-2.30317496021E-01	Apriori rate (us/s)	-2.30317614129E-01	Resid rate (us/s)	1.18108E-07	+/-	4.2E-09
Total phase (deg)	118.8	Apriori accel (us/s/s)	-1.78033367963E-05	Resid phase (deg)	73.4	+/-	13.5

ph/seg (deg) 56.3 31.5 Search (1024X32) 0.225 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.1 54.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.1 19.1 Inc. seg. avg. 0.281 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.4 33.3 Inc. frq. avg. 0.229 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 1310.443 -892.129 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fo.W.102.3MP2MB

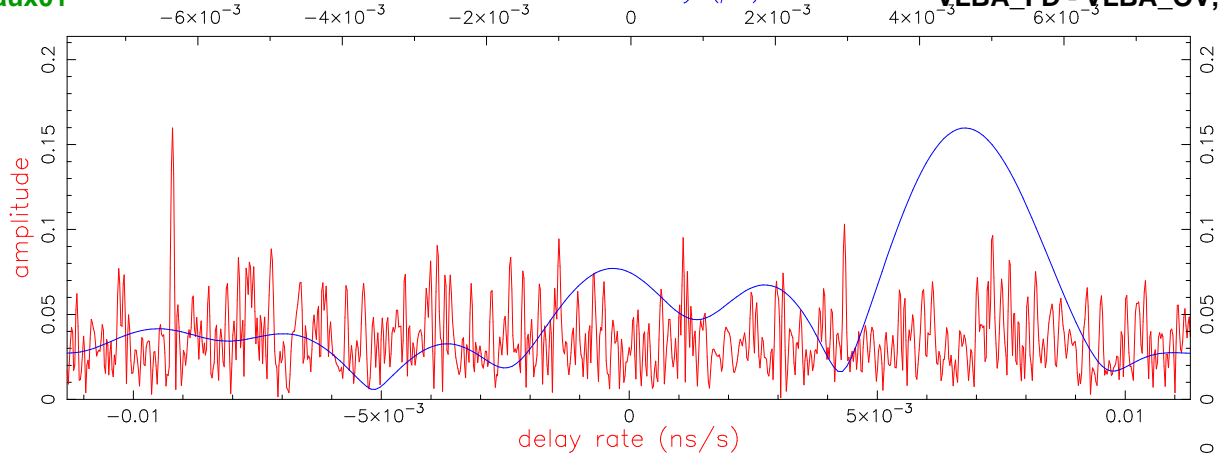
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fo

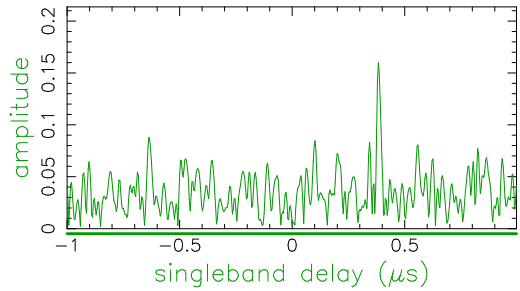
VLBA\_FD - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

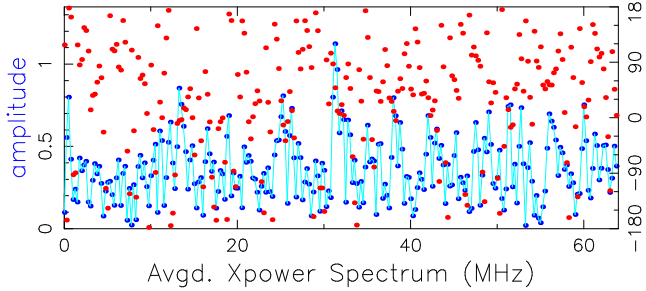


Fringe quality 0

SNR 5.8  
 Int time 175.881  
 Amp 0.214  
 Phase 102.7  
 PFD 5.6e-01  
 Delays (us)  
 SBD 0.383368  
 MBD 0.004634  
 Fringe rate (Hz)  
 -0.794810  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

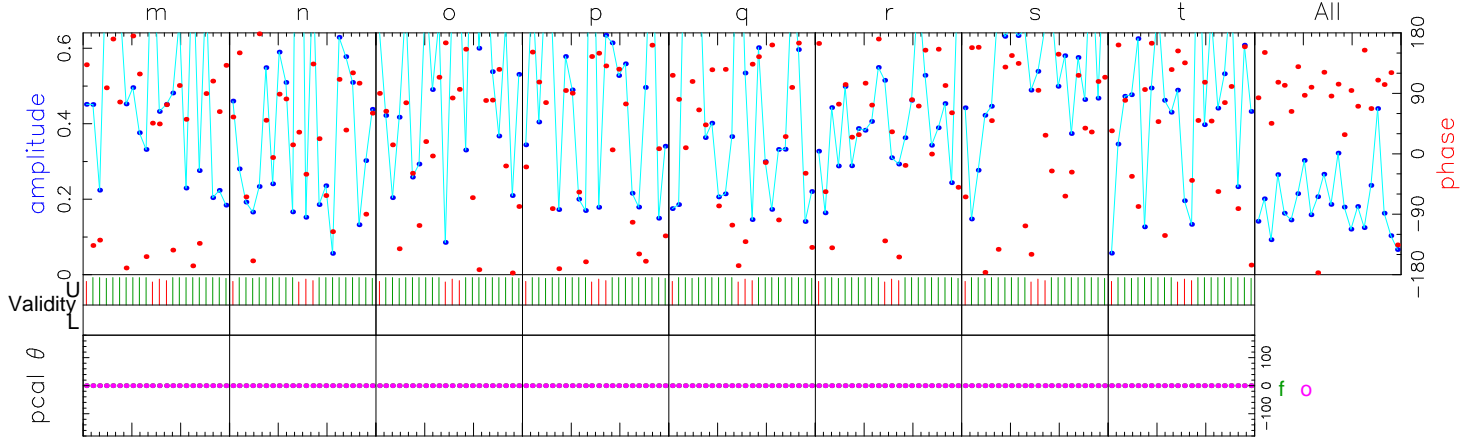


delay rate (ns/s)



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

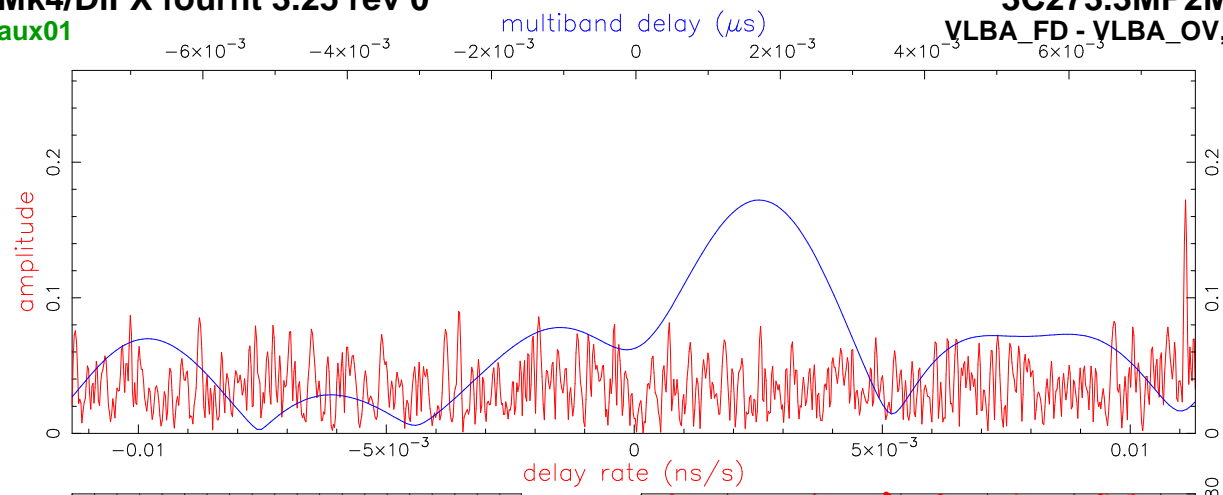


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
f	0	0	0	0	0	0	0	0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

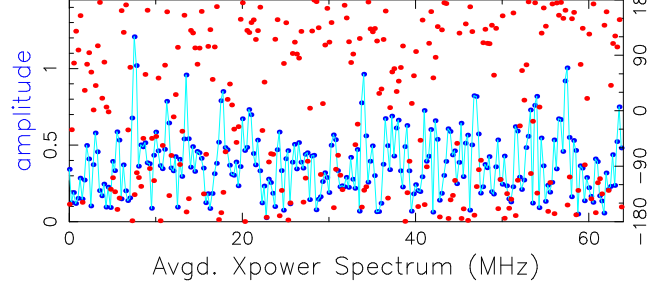
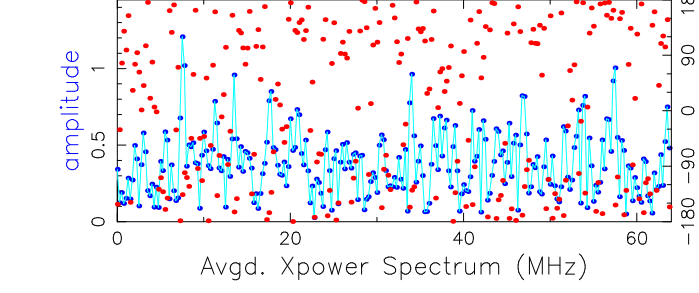
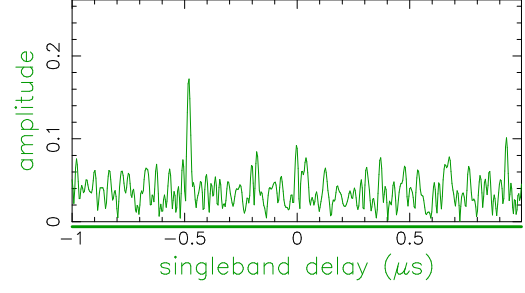
Group delay (usec) (SBD)	3.25578462760E+03	Apriori delay (usec)	3.25540499334E+03	Resid mbdelay (usec)	4.63426E-03	+/-	1.9E-04
Sband delay (usec)	3.25578836184E+03	Apriori clock (usec)	-2.4996143E+01	Resid sbdelay (usec)	3.83368E-01	+/-	1.5E-03
Phase delay (usec)	3.25540499665E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	3.31166E-06	+/-	6.4E-07
Delay rate (us/s)	-2.30326841080E-01	Apriori rate (us/s)	-2.30317614129E-01	Resid rate (us/s)	-9.22695E-06	+/-	6.2E-09
Total phase (deg)	148.1	Apriori accel (us/s/s)	-1.78033367963E-05	Resid phase (deg)	102.7	+/-	19.7

ph/seg (deg)	43.6	Theor.	46.0	Amplitude	0.214 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	56.6	Search (1024X32)	0.156	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	27.9	Inc. seg. avg.	0.195	Inc. frq. avg.	0.212	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	31.1	Inc. frq. avg.	0.212			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		o: az 127.0 el 40.9 pa -39.4		u, v (fr/asec)	1310.443 -892.129	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

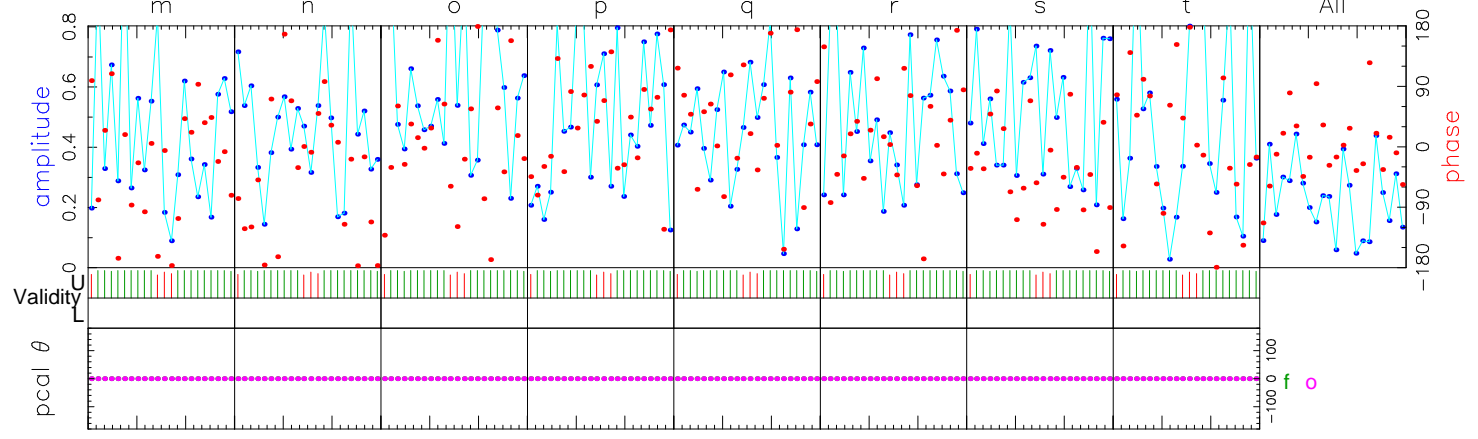
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fo.W.115.3MP2MB



Fringe quality 0  
SNR 6.3  
Int time 175.881  
Amp 0.268  
Phase 1.9  
PFD 4.0e-02  
Delays (us)  
SBD -0.481697  
MBD 0.001672  
Fringe rate (Hz)  
0.958439  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.00  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:175933  
2024:113:095956  
RA & Dec (J2000)  
12h29m06.699742s  
+02°03'08.598116"



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



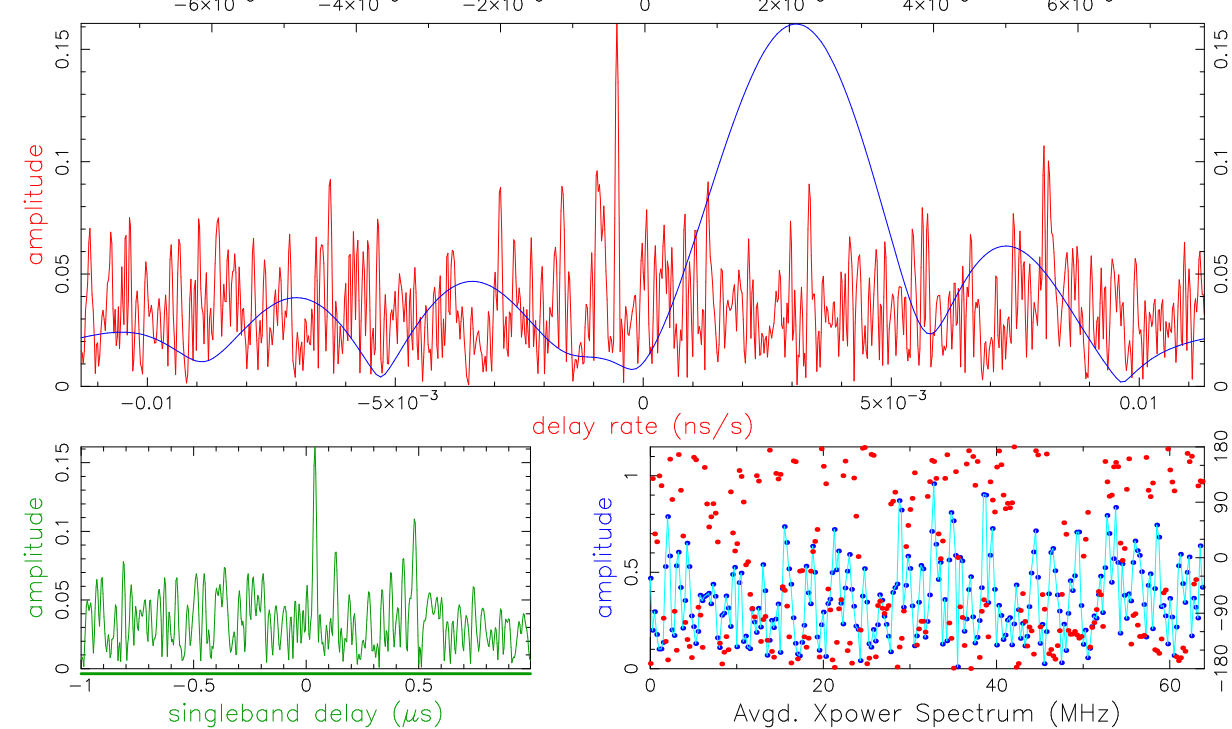
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-10.5	-36.5	-22.8	48.4	44.0	5.2	-32.7	19.4		1.9	
	0.3	0.1	0.3	0.4	0.3	0.3	0.5	0.3		0.3	
	367.3	101.8	454.6	127.4	453.3	259.0	134.3	62.9		133.7	
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0			
f	0	0	0	0	0	0	0	0			
o	0	0	0	0	0	0	0	0			
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
f	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec) (SBD)	3.25492229026E+03		Apriori delay (usec)		3.25540499334E+03		Resid mbdelay (usec)		1.67192E-03	+/- 1.7E-04	
Sband delay (usec)	3.25492329609E+03		Apriori clock (usec)		-2.4996143E+01		Resid sbdelay (usec)		-4.81697E-01	+/- 1.4E-03	
Phase delay (usec)	3.25540499340E+03		Apriori clockrate (us/s)		-4.3105211E-07		Resid phdelay (usec)		6.18860E-08	+/- 5.9E-07	
Delay rate (us/s)	-2.30306487606E-01		Apriori rate (us/s)		-2.30317614129E-01		Resid rate (us/s)		1.11265E-05	+/- 5.7E-09	
Total phase (deg)			Apriori accel (us/s/s)		-1.78033367963E-05		Resid phase (deg)		1.9	+/- 18.2	
	RMS	Theor.	Amplitude		0.268 +/- 0.043		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	52.2	42.4	Search (1024X32)		0.160		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	76.4	74.1	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	35.8	25.7	Inc. seg. avg.		0.278		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	41.3	44.9	Inc. frq. avg.		0.281		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		o: az 127.0 el 40.9 pa -39.4		u,v (fr/asec) 1310.443 -892.129						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//fo..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//fo.W.125.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

aux01

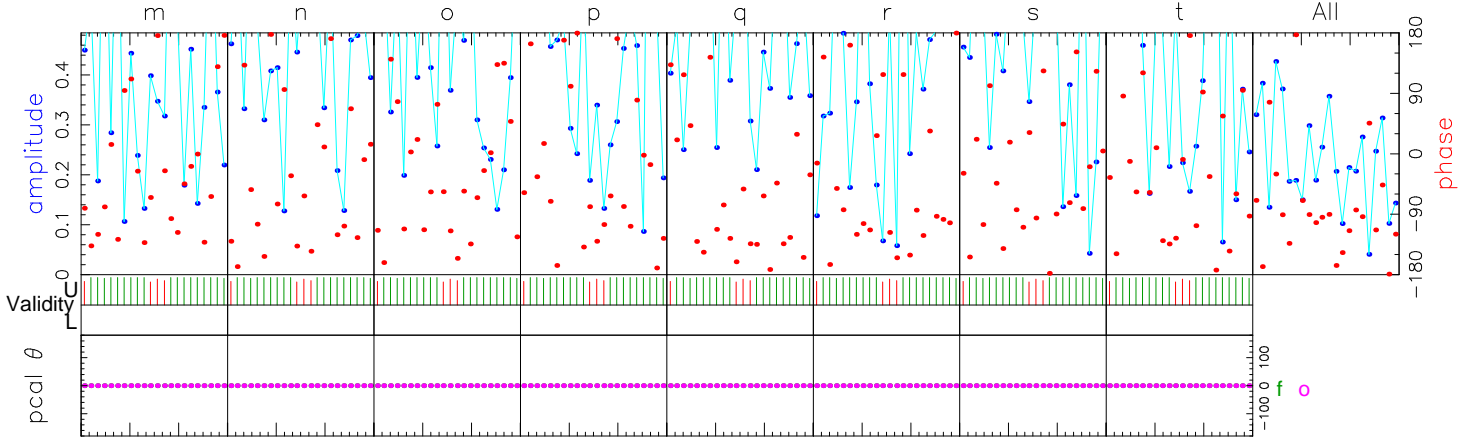
3C273.3MP2MB, No0707, fo

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



Fringe quality 0  
 SNR 5.9  
 Int time 175.882  
 Amp 0.162  
 Phase -99.8  
 PFD 4.6e-01  
 Delays (us)  
 SBD 0.038730  
 MBD 0.002089  
 Fringe rate (Hz) -0.046649  
 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



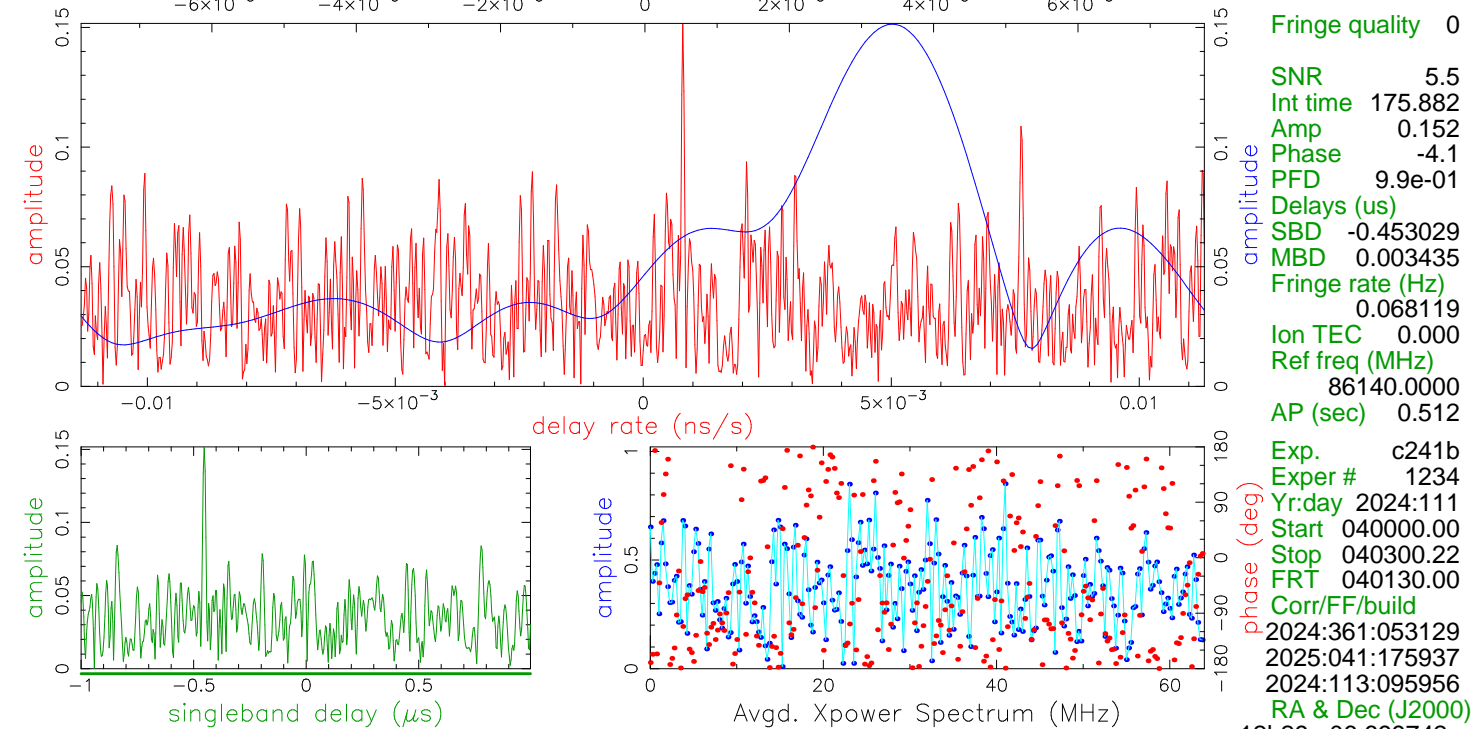
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-94.9	-99.5	-89.7	-97.5	-115.2	-124.0	-71.8	-83.1	Phase	-99.8		
	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	Ampl.	0.2		
	223.7	304.9	108.2	480.8	448.4	267.9	167.0	506.4	Sbd box	266.9		
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used			
f	0	0	0	0	0	0	0	0	PC freqs			
o	0	0	0	0	0	0	0	0	PC freqs			
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:0	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			
o	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec) (SBD)	3.25543833280E+03		Apriori delay (usec)		3.25540499334E+03		Resid mbdelay (usec)		2.08946E-03	+/- 1.9E-04		
Sband delay (usec)	3.25544372284E+03		Apriori clock (usec)		-2.4996143E+01		Resid sbdelay (usec)		3.87295E-02	+/- 1.5E-03		
Phase delay (usec)	3.25540499012E+03		Apriori clockrate (us/s)		-4.3105211E-07		Resid phdelay (usec)		-3.21785E-06	+/- 6.3E-07		
Delay rate (us/s)	-2.30318155680E-01		Apriori rate (us/s)		-2.30317614129E-01		Resid rate (us/s)		-5.41551E-07	+/- 6.1E-09		
Total phase (deg)			Apriori accel (us/s/s)		-1.78033367963E-05		Resid phase (deg)		-99.8	+/- 19.6		
	RMS	Theor.	Amplitude	0.162 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	64.1	45.7	Search (1024X32)	0.154		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	75.9	79.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.3	27.7	Inc. seg. avg.	0.176		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	27.5	48.3	Inc. frq. avg.	0.151		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		o: az 127.0 el 40.9 pa -39.4		u,v (fr/asec) 1310.443 -892.129				simultaneous interpolator				
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//fo..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//fo.W.135.3MP2MB								

Mk4/DiFX fourfit 3.25 rev 0

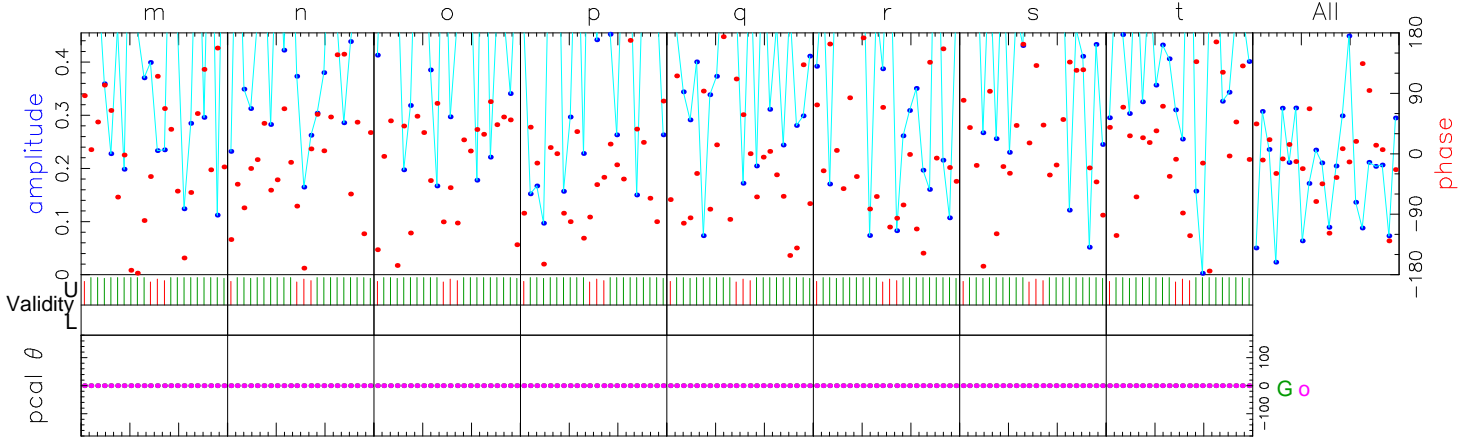
aux01

3C273.3MP2MB, No0707, Go

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



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	16.9	-2.7	17.2	-29.6	-62.9	-34.0	30.5	22.4	Phase	-4.1
	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	Ampl.	0.2
	490.9	240.9	147.2	80.4	66.6	170.0	44.9	420.9	Sbd box	141.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.06137554301E+03	Apriori delay (usec)	3.06182523351E+03	Resid mbdelay (usec)	3.43451E-03	+/-	2.0E-04
Sband delay (usec)	3.06137220426E+03	Apriori clock (usec)	-3.9678383E+01	Resid sbdelay (usec)	-4.53029E-01	+/-	1.6E-03
Phase delay (usec)	3.06182523337E+03	Apriori clockrate (us/s)	-4.1088899E-07	Resid phdelay (usec)	-1.33125E-07	+/-	6.7E-07
Delay rate (us/s)	-7.75483734108E-01	Apriori rate (us/s)	-7.75484524906E-01	Resid rate (us/s)	7.90798E-07	+/-	6.5E-09
Total phase (deg)	217.0	Apriori accel (us/s/s)	-1.64300060200E-05	Resid phase (deg)	-4.1	+/-	20.9

ph/seg (deg)	58.7	Theor.	48.7	Amplitude	0.152 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	76.3		84.9	Search (1024X32)	0.148	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	36.0		29.5	Inc. seg. avg.	0.147	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.0		51.5	Inc. frq. avg.	0.153	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	ion window (TEC)	0.00	0.00

G: az 182.2 el 53.5 pa 2.1      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) 4435.367 100.991      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//Go..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//Go.W.140.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

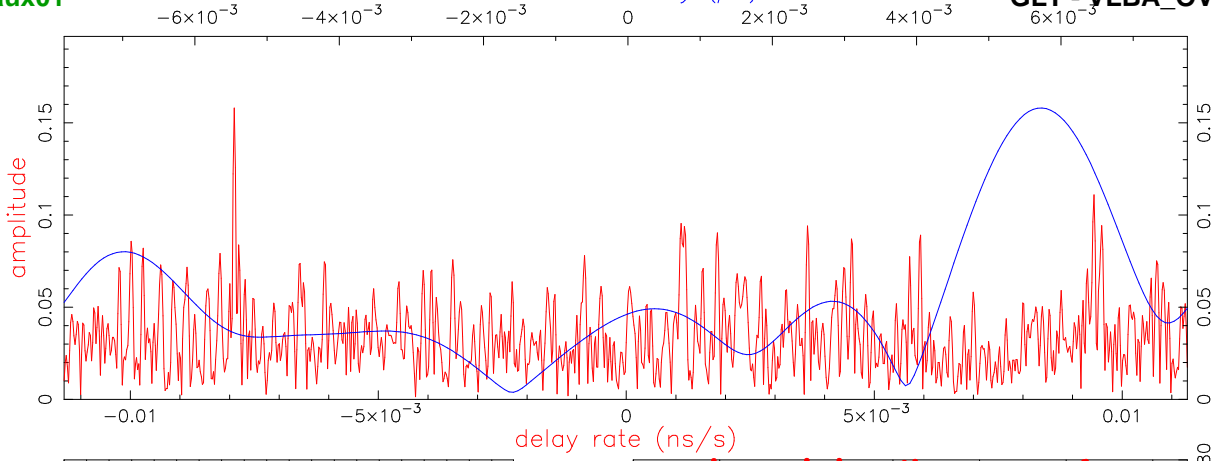
aux01

3C273.3MP2MB, No0707, go

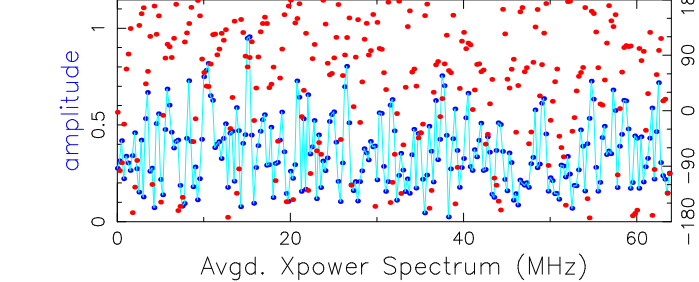
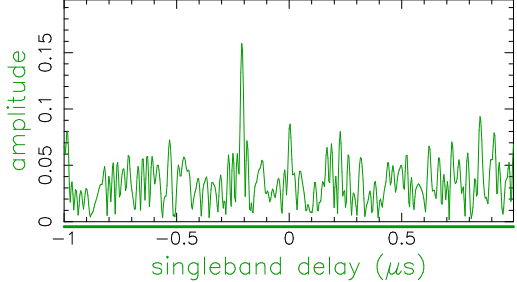
GLT - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

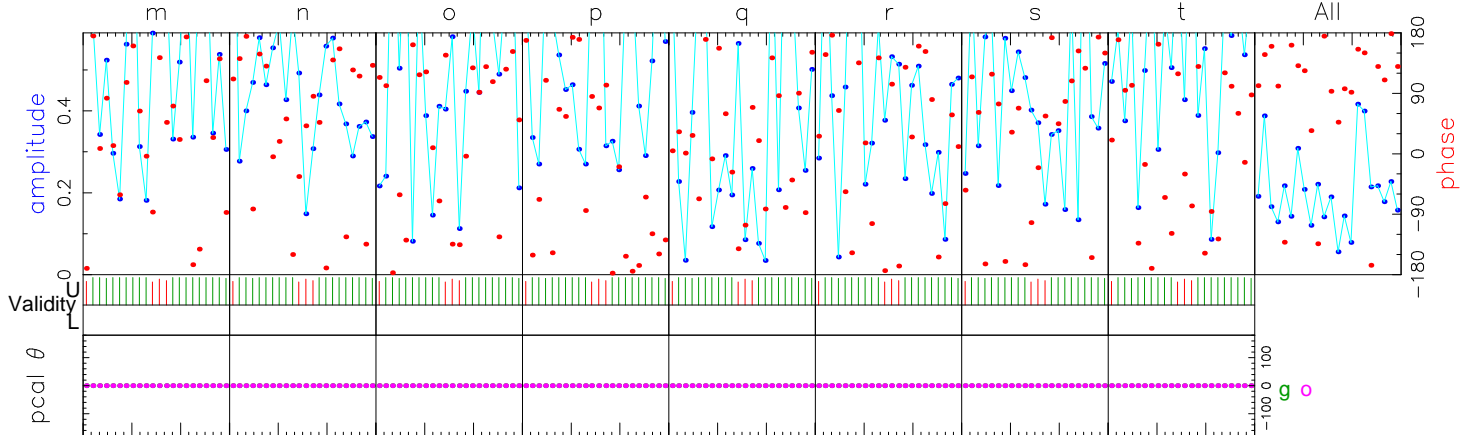


SNR 5.8  
 Int time 175.883  
 Amp 0.197  
 Phase 144.5  
 PFD 5.9e-01  
 Delays (us)  
 SBD -0.209742  
 MBD 0.005737  
 Fringe rate (Hz)  
 -0.682518  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
g	0	0	0	0	0	0	0	0		
g:o	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		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -8.50383764974E+03 Apriori delay (usec) -8.50362463656E+03 Resid mbdelay (usec) 5.73682E-03 +/- 1.9E-04  
 Sband delay (usec) -8.50383437806E+03 Apriori clock (usec) -2.4715651E+01 Resid sbdelay (usec) -2.09742E-01 +/- 1.5E-03  
 Phase delay (usec) -8.50362463190E+03 Apriori clockrate (us/s) 3.0304990E-07 Resid phdelay (usec) 4.66036E-06 +/- 6.4E-07  
 Delay rate (us/s) -8.20278750523E-01 Apriori rate (us/s) -8.20270827161E-01 Resid rate (us/s) -7.92336E-06 +/- 6.2E-09  
 Total phase (deg) 74.9 Apriori accel (us/s/s) 4.64757575076E-05 Resid phase (deg) 144.5 +/- 19.8

ph/seg (deg) 49.5 RMS 46.2 Theor. 46.2 Amplitude 0.197 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.2 80.6 Search (1024X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 70.8 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.3 48.9 Inc. seg. avg. 0.192 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4725.047 3381.348 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/go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/go.W.155.3MP2MB simultaneous interpolator

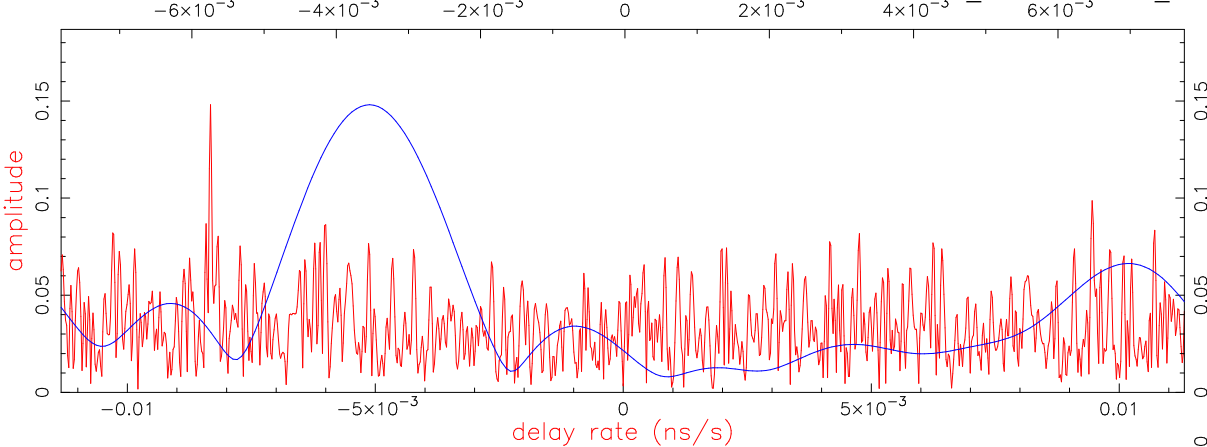
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Go

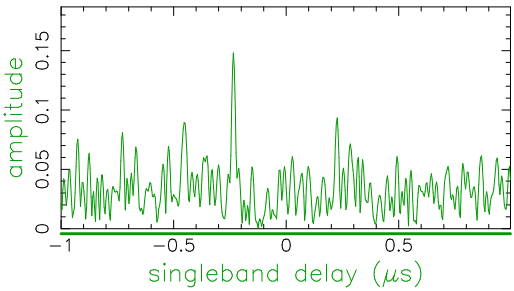
GBT\_COLD - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

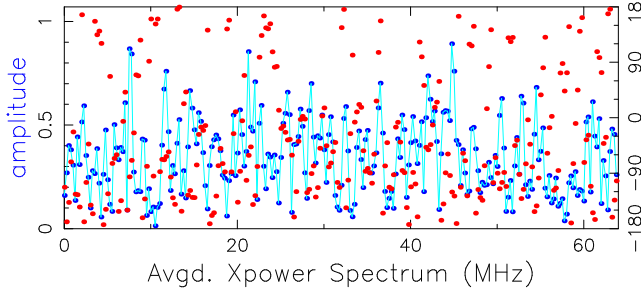


Fringe quality 0

SNR 5.4  
 Int time 175.882  
 Amp 0.187  
 Phase 124.2  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.234416  
 MBD -0.003543  
 Fringe rate (Hz)  
 -0.717547  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

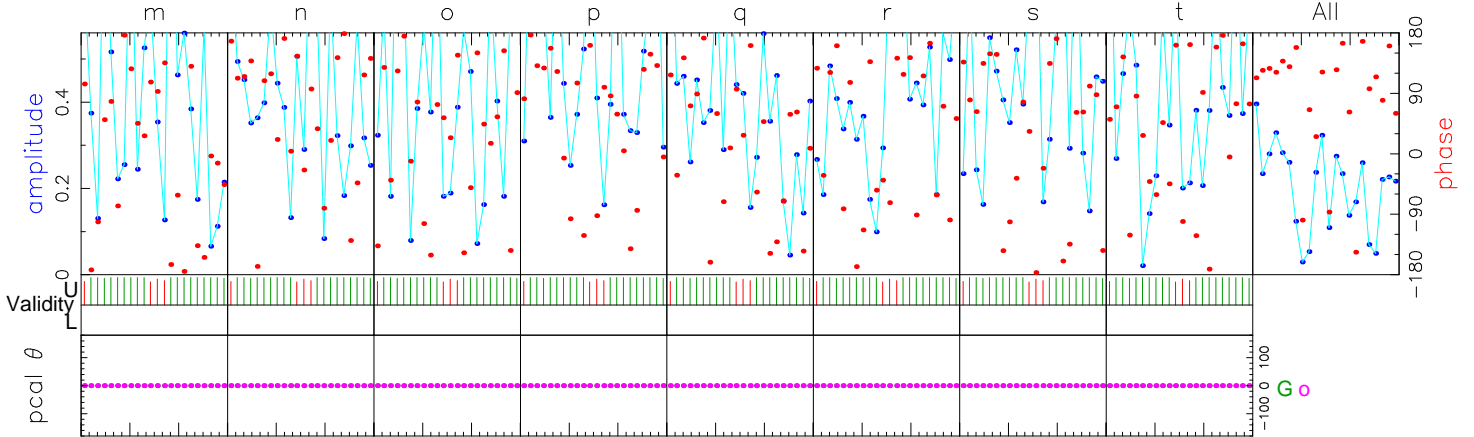


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	134.2	111.5	128.1	132.3	71.0	148.6	135.7	114.2	Phase	124.2
	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	436.9	215.1	281.7	229.9	131.2	310.5	438.4	306.5	Sbd box	197.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.06158731509E+03	Apriori delay (usec)	3.06182523351E+03	Resid mbdelay (usec)	-3.54342E-03	+/-	2.0E-04
Sband delay (usec)	3.06159081776E+03	Apriori clock (usec)	-3.9678383E+01	Resid sbdelay (usec)	-2.34416E-01	+/-	1.6E-03
Phase delay (usec)	3.06182523751E+03	Apriori clockrate (us/s)	-4.1088899E-07	Resid phdelay (usec)	4.00591E-06	+/-	6.9E-07
Delay rate (us/s)	-7.75492854911E-01	Apriori rate (us/s)	-7.75484524906E-01	Resid rate (us/s)	-8.33000E-06	+/-	6.7E-09
Total phase (deg)	345.3	Apriori accel (us/s/s)	-1.64300060200E-05	Resid phase (deg)	124.2	+/-	21.3

ph/seg (deg)	RMS 60.2	Theor. 49.8	Amplitude Search (1024X32)	0.187 +/- 0.035	0.145	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.1	86.9	Interp.	0.000	0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	25.8	30.2	Inc. seg. avg.	0.185	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 (%)	30.9	52.7	Inc. frq. avg.	0.174	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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4435.367 100.991 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Go.W.157.3MP2MB



Mk4/DiFX fourfit 3.25 rev 0

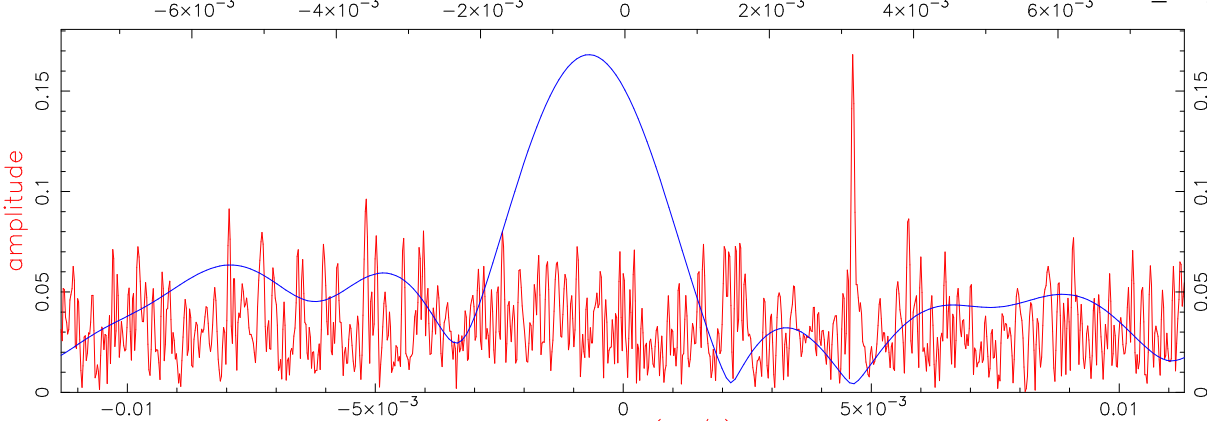
aux01

3C273.3MP2MB, No0707, go

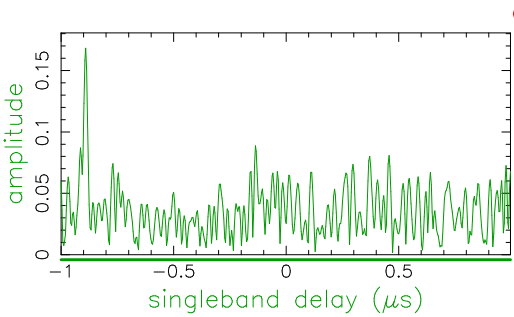
GLT - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

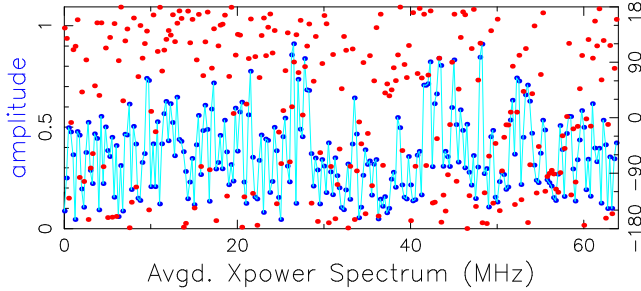
Fringe quality 0



SNR 6.1  
 Int time 175.884  
 Amp 0.181  
 Phase -34.7  
 PFD 1.2e-01  
 Delays (us)  
 SBD -0.891257  
 MBD -0.000502  
 Fringe rate (Hz)  
 0.399782  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

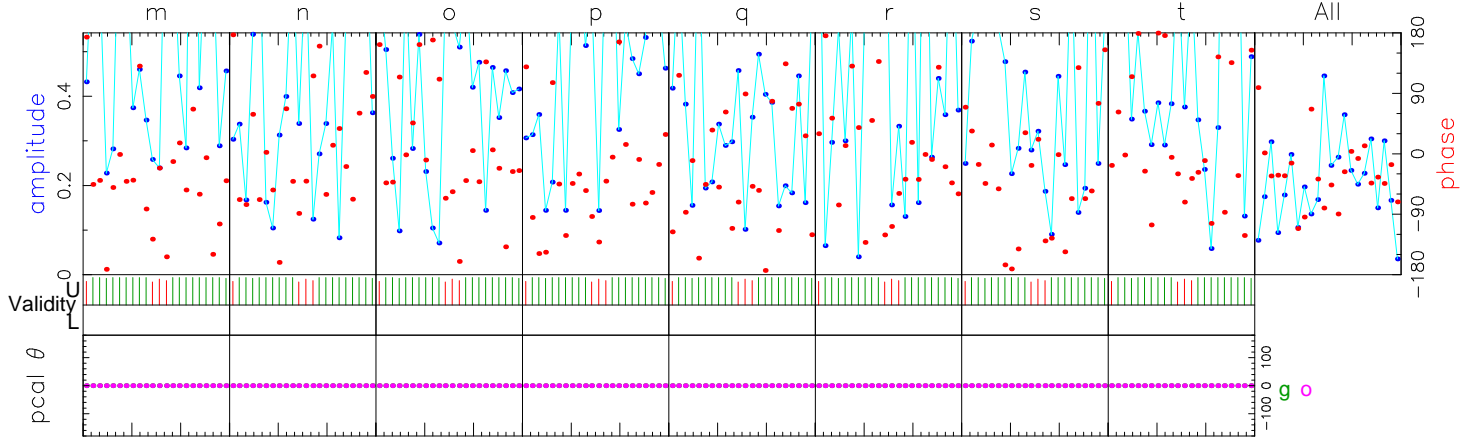


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-35.5	-16.6	-38.5	-44.1	-106.7	-10.2	-28.2	-42.2	Phase	-34.7
	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.1	Ampl.	0.2
	145.5	508.7	487.3	28.7	59.7	511.6	104.0	230.3	Sbd box	28.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-8.50451576376E+03		Apriori delay (usec)		-8.50362463656E+03		Resid mbdelay (usec)		-5.02199E-04	+/- 1.8E-04
Sband delay (usec)	-8.50451589306E+03		Apriori clock (usec)		-2.4715651E+01		Resid sbdelay (usec)		-8.91257E-01	+/- 1.4E-03
Phase delay (usec)	-8.50362463768E+03		Apriori clockrate (us/s)		3.0304990E-07		Resid phdelay (usec)		-1.11790E-06	+/- 6.0E-07
Delay rate (us/s)	-8.20266186086E-01		Apriori rate (us/s)		-8.20270827161E-01		Resid rate (us/s)		4.64108E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		4.64757575076E-05		Resid phase (deg)		-34.7	+/- 18.7

ph/seg (deg) 47.0 43.7 Search (1024X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 60.3 76.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.5 26.5 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.4 46.3 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4725.047 3381.348 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/go.W.168.3MP2MB

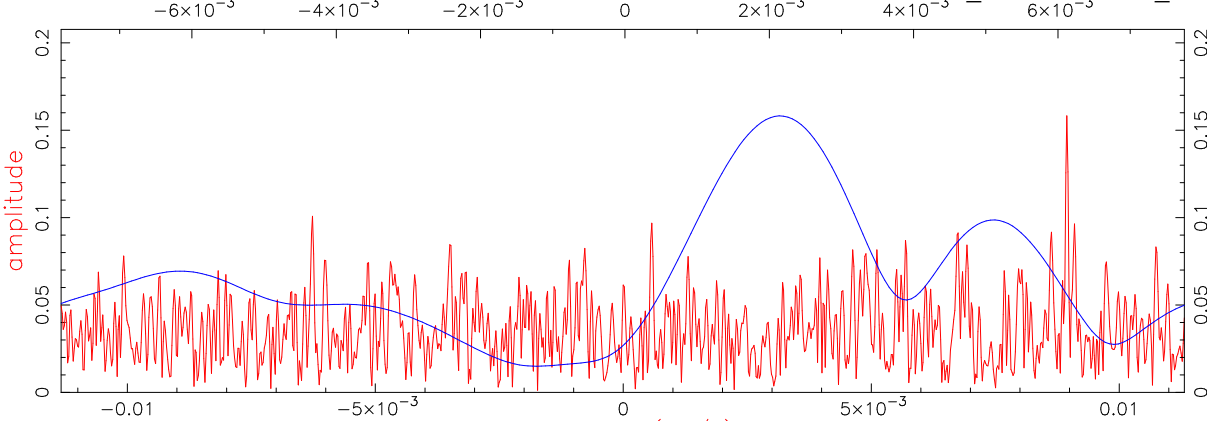
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Go

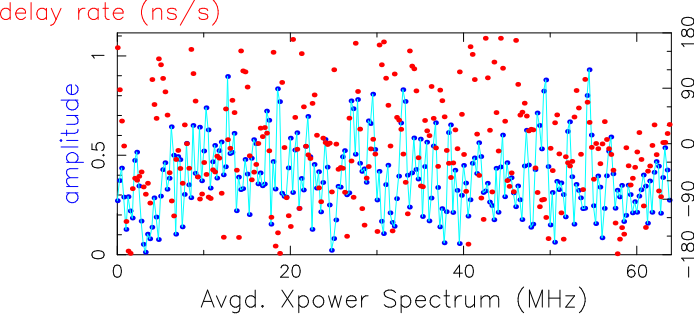
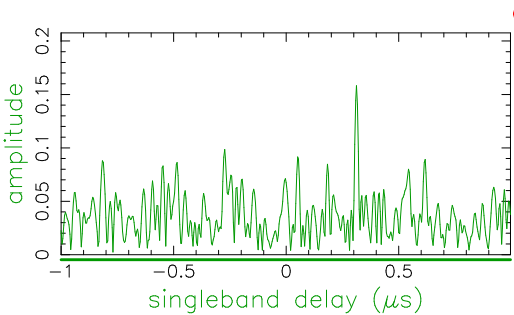
GBT\_COLD - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)



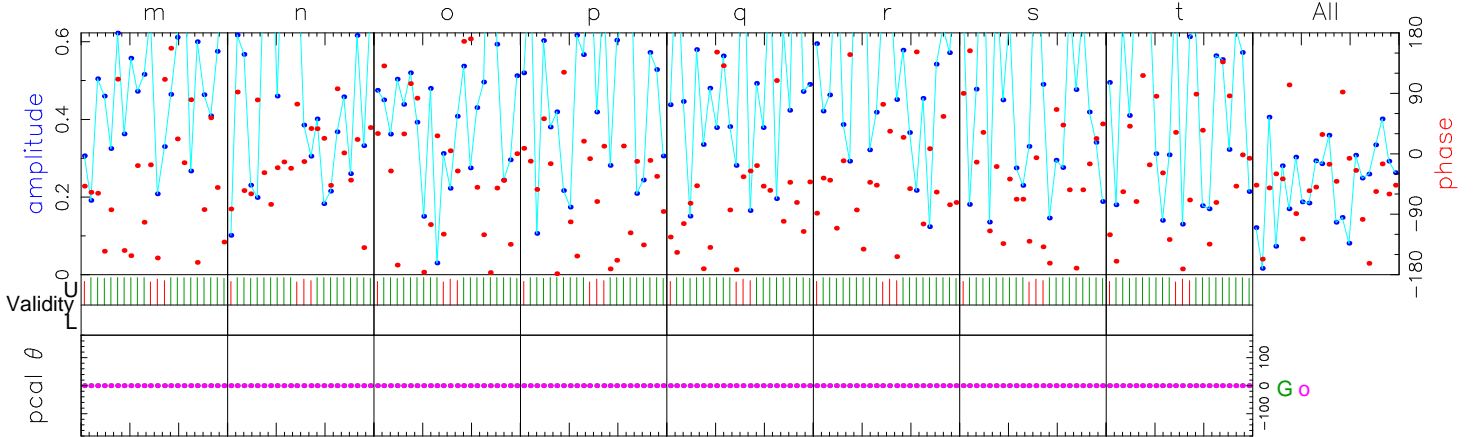
Fringe quality 0

SNR 5.7  
 Int time 175.882  
 Amp 0.208  
 Phase -46.2  
 PFD 6.9e-01  
 Delays (us)  
 SBD 0.312282  
 MBD 0.002145  
 Fringe rate (Hz)  
 0.772347  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-83.3	-3.0	-128.7	-31.7	-85.4	-64.1	-23.2	-17.7	Phase	-46.2
	0.2	0.4	0.1	0.2	0.4	0.3	0.2	0.2	Ampl.	0.2
	27.9	366.5	503.6	306.0	336.6	321.2	171.9	173.8	Sbd box	336.9
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.06213987802E+03	Apriori delay (usec)	3.06182523351E+03	Resid mbdelay (usec)	2.14451E-03	+/-	1.9E-04
Sband delay (usec)	3.06213751551E+03	Apriori clock (usec)	-3.9678383E+01	Resid sbdelay (usec)	3.12282E-01	+/-	1.5E-03
Phase delay (usec)	3.06182523201E+03	Apriori clockrate (us/s)	-4.1088899E-07	Resid phdelay (usec)	-1.49121E-06	+/-	6.4E-07
Delay rate (us/s)	-7.75475558729E-01	Apriori rate (us/s)	-7.75484524906E-01	Resid rate (us/s)	8.96618E-06	+/-	6.3E-09
Total phase (deg)	174.8	Apriori accel (us/s/s)	-1.64300060200E-05	Resid phase (deg)	-46.2	+/-	20.0

ph/seg (deg)	63.8	Theor.	46.6	Amplitude	0.208 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	82.2		81.3	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.4		28.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.4		49.3	Inc. seg. avg.	0.231	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.225	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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4435.367 100.991 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Go.W.169.3MP2MB

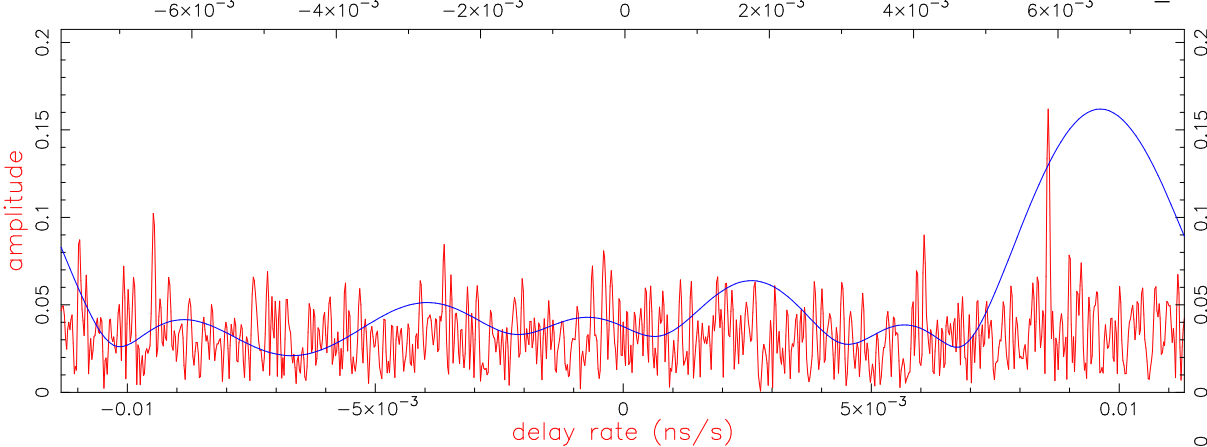
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, go

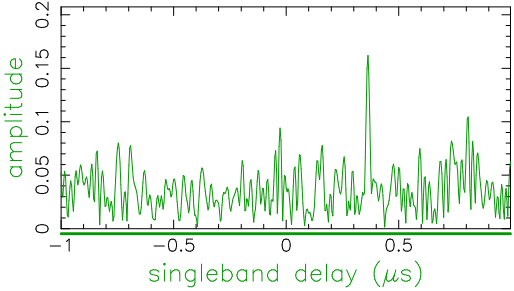
GLT - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

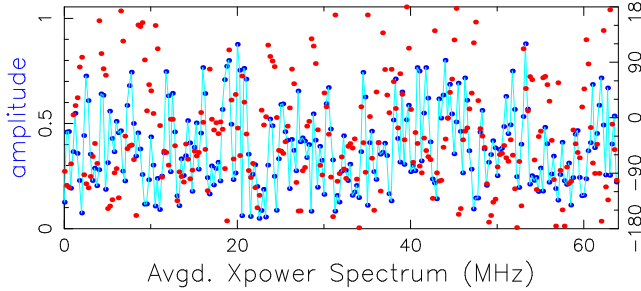


Fringe quality 0

SNR 5.9  
 Int time 175.883  
 Amp 0.207  
 Phase 94.6  
 PFD 4.2e-01  
 Delays (us)  
 SBD 0.362999  
 MBD 0.006582  
 Fringe rate (Hz)  
 0.738416  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

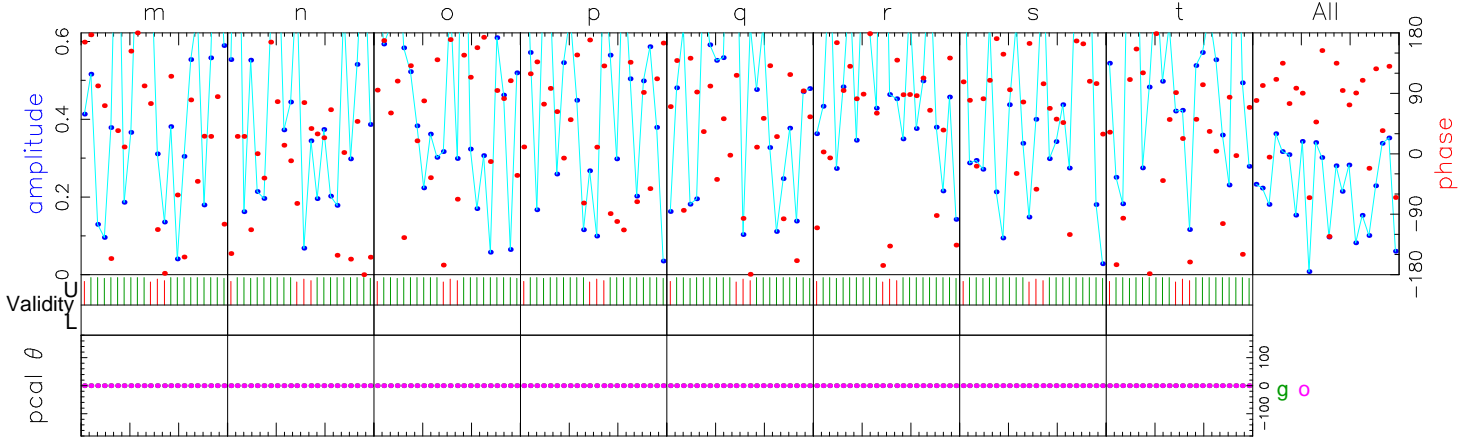


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
g	0	0	0	0	0	0	0	0		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -8.50325867963E+03 Apriori delay (usec) -8.50362463656E+03 Resid mbdelay (usec) 6.58193E-03 +/- 1.8E-04  
 Sband delay (usec) -8.50326163781E+03 Apriori clock (usec) -2.4715651E+01 Resid sbdelay (usec) 3.62999E-01 +/- 1.5E-03  
 Phase delay (usec) -8.50362463351E+03 Apriori clockrate (us/s) 3.0304990E-07 Resid phdelay (usec) 3.05057E-06 +/- 6.3E-07  
 Delay rate (us/s) -8.20262254885E-01 Apriori rate (us/s) -8.20270827161E-01 Resid rate (us/s) 8.57228E-06 +/- 6.1E-09  
 Total phase (deg) 25.0 Apriori accel (us/s/s) 4.64757575076E-05 Resid phase (deg) 94.6 +/- 19.5

ph/seg (deg) 71.1 Theor. 45.5 Amplitude 0.207 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.7 79.4 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.3 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.2 48.1 Inc. seg. avg. 0.218 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4725.047 3381.348 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/go.W.181.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

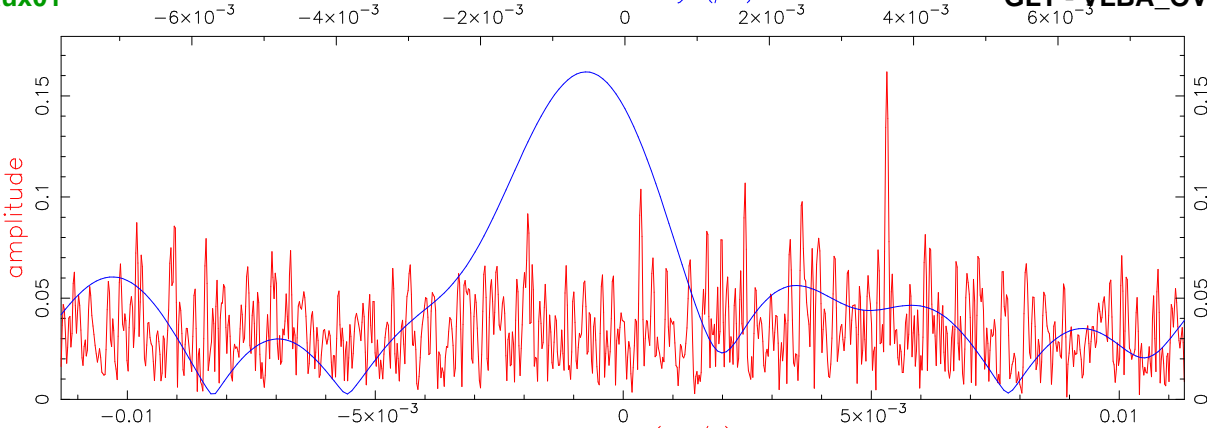
aux01

3C273.3MP2MB, No0707, go

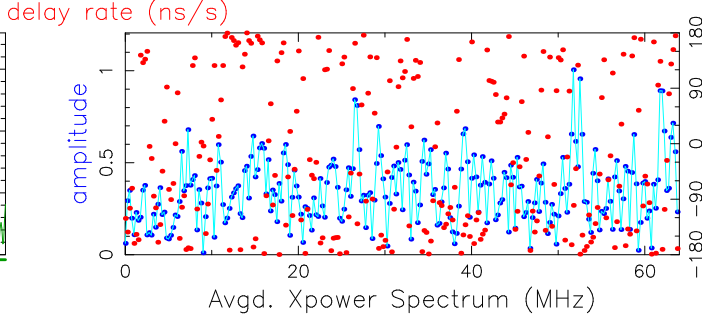
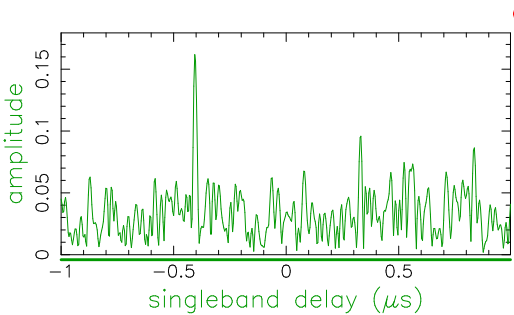
GLT - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

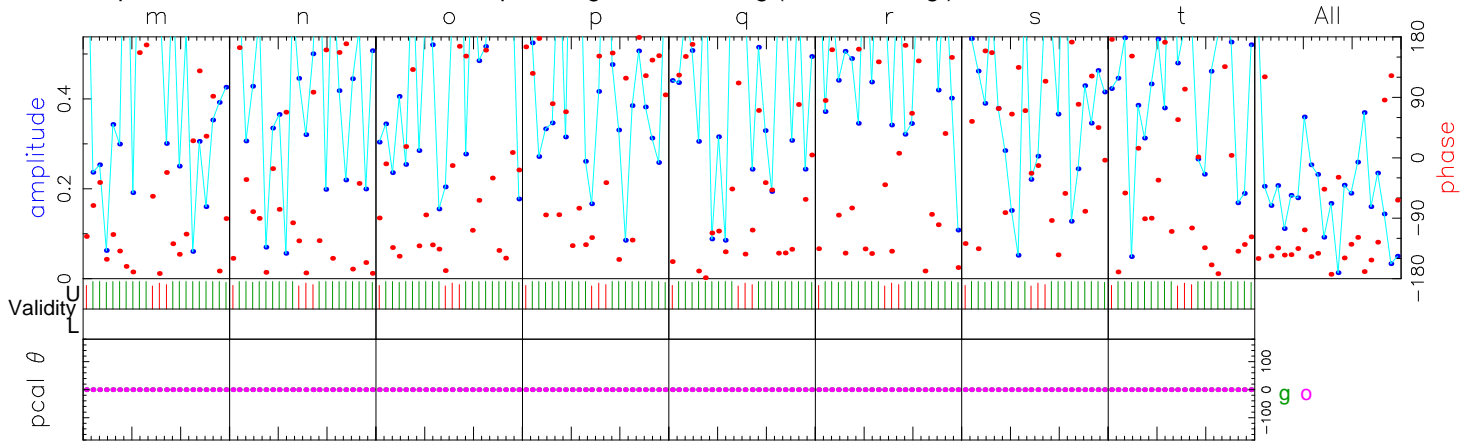


SNR 5.9  
 Int time 175.885  
 Amp 0.179  
 Phase -144.7  
 PFD 3.2e-01  
 Delays (us)  
 SBD -0.404977  
 MBD -0.000520  
 Fringe rate (Hz)  
 0.459186  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
g	0	0	0	0	0	0	0	0		
g:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -8.50403140694E+03 Apriori delay (usec) -8.50362463656E+03 Resid mbdelay (usec) -5.20378E-04 +/- 1.8E-04  
 Sband delay (usec) -8.50402961331E+03 Apriori clock (usec) -2.4715651E+01 Resid sbdelay (usec) -4.04977E-01 +/- 1.5E-03  
 Phase delay (usec) -8.50362464123E+03 Apriori clockrate (us/s) 3.0304990E-07 Resid phdelay (usec) -4.66571E-06 +/- 6.2E-07  
 Delay rate (us/s) -8.20265496467E-01 Apriori rate (us/s) -8.20270827161E-01 Resid rate (us/s) 5.33069E-06 +/- 6.1E-09  
 Total phase (deg) -214.3 Apriori accel (us/s/s) 4.64757575076E-05 Resid phase (deg) -144.7 +/- 19.3

ph/seg (deg) 55.1 45.1 Amplitude 0.179 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 76.1 78.6 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 62.5 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.6 47.7 Inc. seg. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 192.9 el 15.1 pa 3.0 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 4725.047 3381.348 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/go..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/go.W.188.3MP2MB simultaneous interpolator

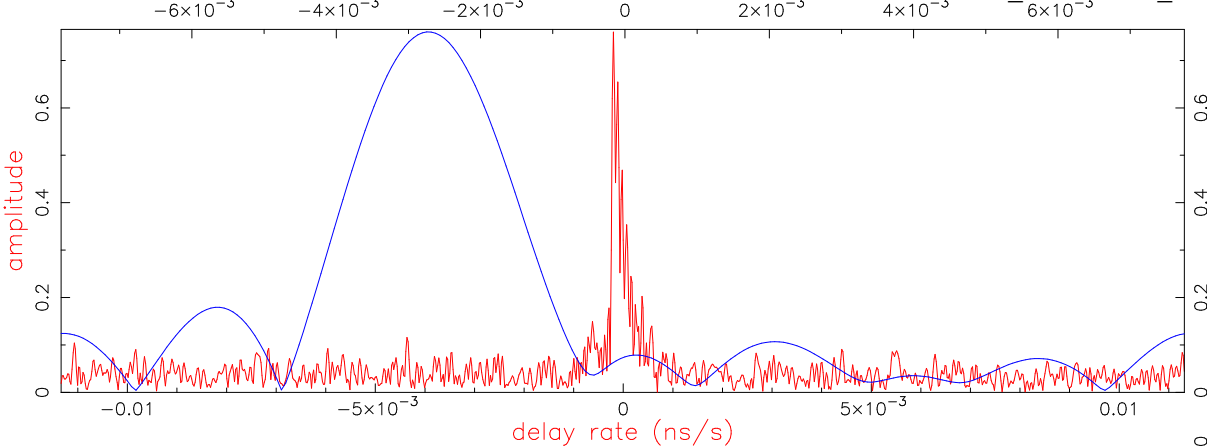
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, ko

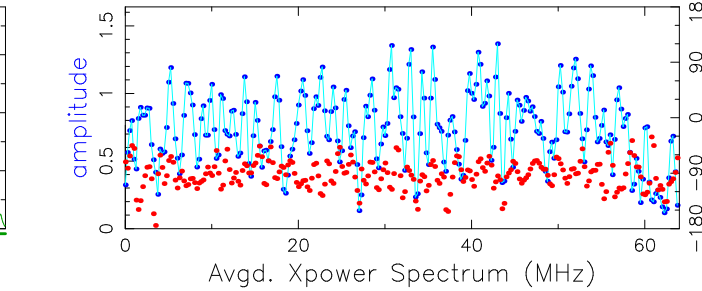
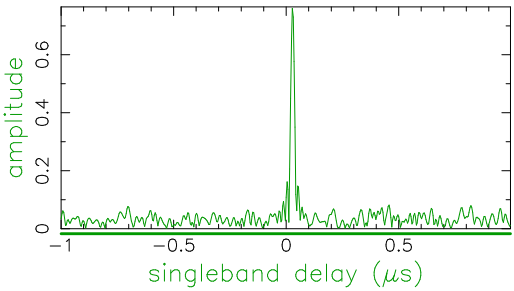
VLBA\_KP - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)



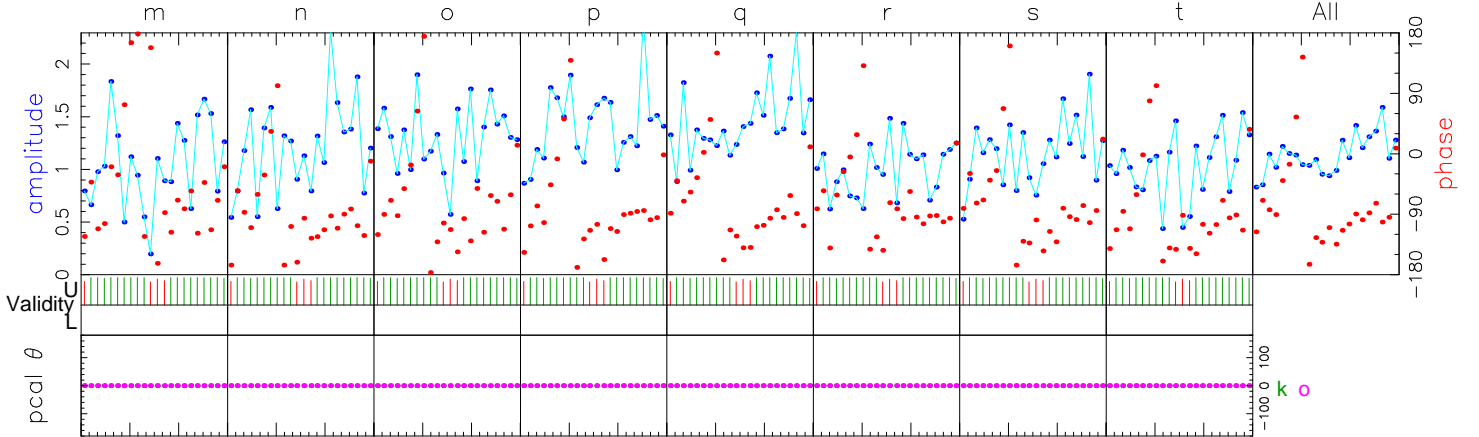
Fringe quality 7

SNR 27.8  
 Int time 175.883  
 Amp 0.766  
 Phase -92.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.028452  
 MBD -0.002685  
 Fringe rate (Hz)  
 -0.016353  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175944  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.5	-96.8	-93.2	-96.8	-88.2	-83.1	-91.9	-108.5	Phase	-92.8
	0.6	0.8	0.8	0.9	0.9	0.7	0.8	0.6	Ampl.	0.8
	264.4	264.3	264.0	264.2	264.4	264.5	264.2	264.1	Sbd box	264.3
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.96706097455E+03	Apriori delay (usec)	1.96703240987E+03	Resid mbdelay (usec)	-2.68532E-03	+/-	3.9E-05
Sband delay (usec)	1.96706086137E+03	Apriori clock (usec)	-2.4903467E+01	Resid sbdelay (usec)	2.84515E-02	+/-	3.1E-04
Phase delay (usec)	1.96703240687E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	-2.99240E-06	+/-	1.3E-07
Delay rate (us/s)	-7.93882638707E-02	Apriori rate (us/s)	-7.93880740311E-02	Resid rate (us/s)	-1.89840E-07	+/-	1.3E-09
Total phase (deg)	190.2	Apriori accel (us/s/s)	-1.08775588245E-05	Resid phase (deg)	-92.8	+/-	4.1

ph/seg (deg)	55.9	Theor.	9.6	Amplitude	0.766 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.8	Search (1024X32)	0.718	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.6	Inc. seg. avg.	1.128	Inc. frq. avg.	0.762	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	14.3	Inc. frq. avg.	0.762			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		o: az 127.0 el 40.9 pa -39.4		u, v (fr/asec)	449.167 -698.943	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/ko..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/ko.W.174.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

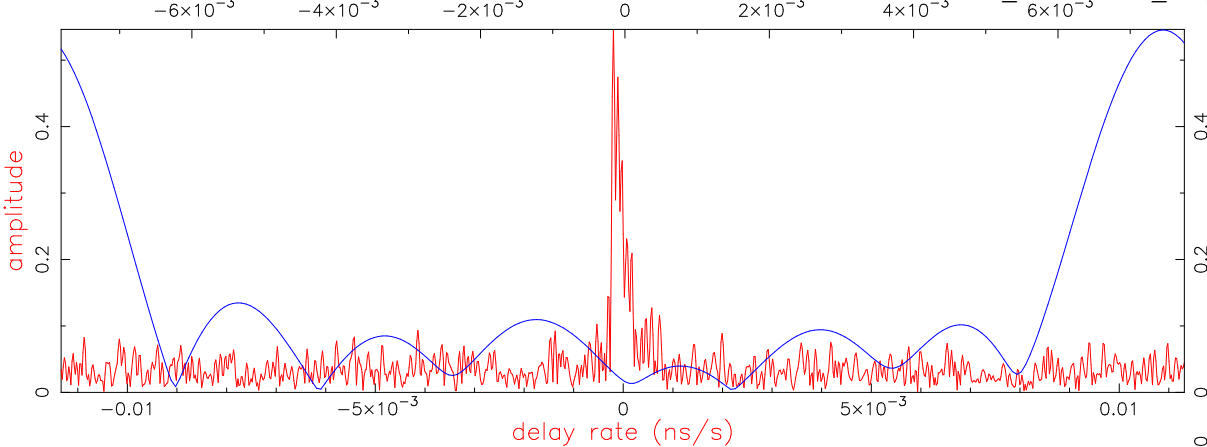
aux01

3C273.3MP2MB, No0707, ko

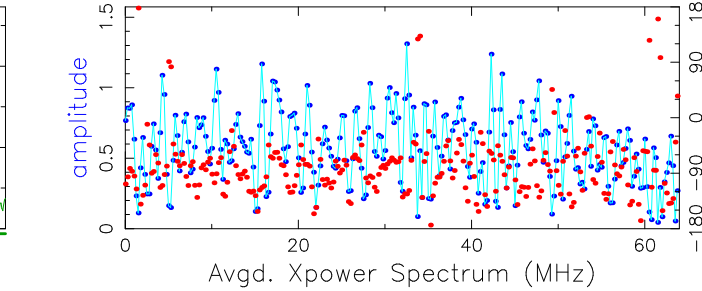
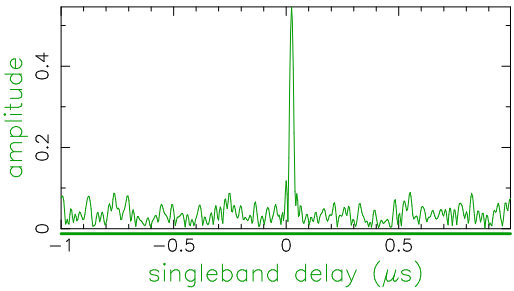
VLBA\_KP - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 9

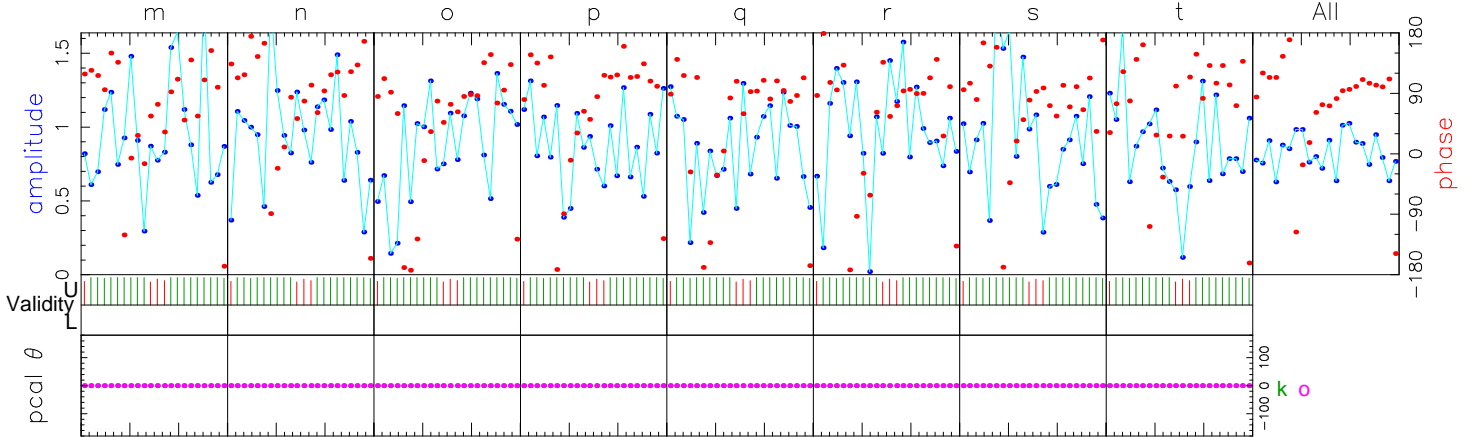


SNR 19.8  
 Int time 175.883  
 Amp 0.546  
 Phase 101.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.023951  
 MBD 0.007466  
 Fringe rate (Hz)  
 -0.016268  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175946  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
k	0	0	0	0	0	0	0	0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 1.96705550080E+03 Apriori delay (usec) 1.96703240987E+03 Resid mbdelay (usec) 7.46593E-03 +/- 5.5E-05  
 Sband delay (usec) 1.96705636037E+03 Apriori clock (usec) -2.4903467E+01 Resid sbdelay (usec) 2.39505E-02 +/- 4.3E-04  
 Phase delay (usec) 1.96703241315E+03 Apriori clockrate (us/s) -3.2906598E-07 Resid phdelay (usec) 3.28047E-06 +/- 1.9E-07  
 Delay rate (us/s) -7.93882628844E-02 Apriori rate (us/s) -7.93880740311E-02 Resid rate (us/s) -1.88853E-07 +/- 1.8E-09  
 Total phase (deg) 24.7 Apriori accel (us/s/s) -1.08775588245E-05 Resid phase (deg) 101.7 +/- 5.8

ph/seg (deg) 54.7 13.5 Search (1024X32) 0.517 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 57.2 23.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 8.1 8.2 Inc. seg. avg. 0.812 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 8.1 14.3 Inc. frq. avg. 0.544 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 130.2 el 48.5 pa -40.3 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 449.167 -698.943 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//ko..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//ko.W.183.3MP2MB

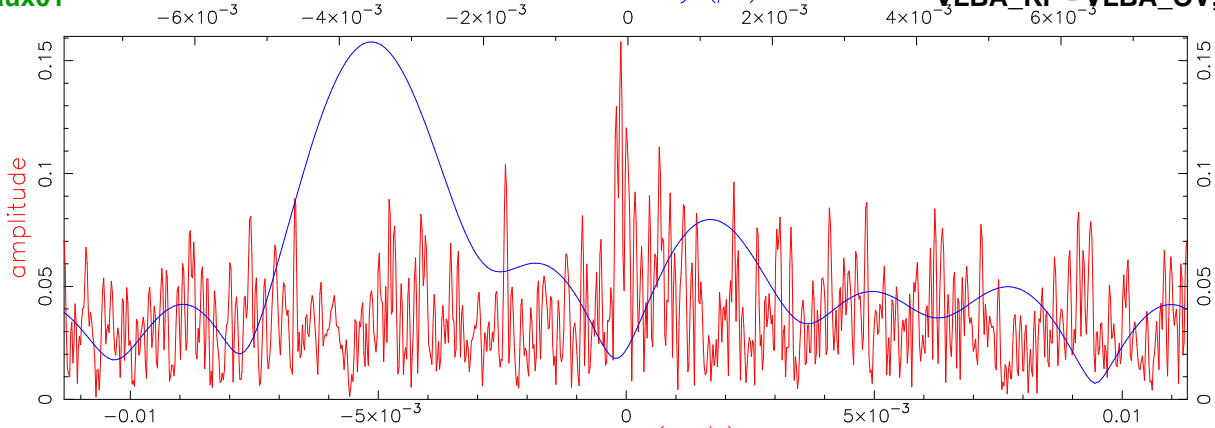
# Mk4/DiFX fourfit 3.25 rev 0

aux01

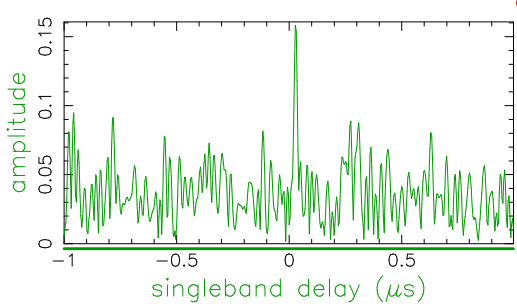
# 3C273.3MP2MB, No0707, ko

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

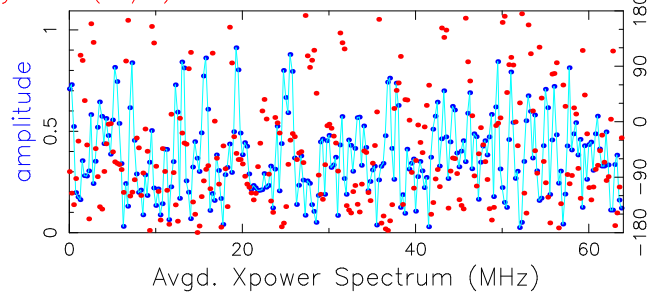
multiband delay ( $\mu$ s)



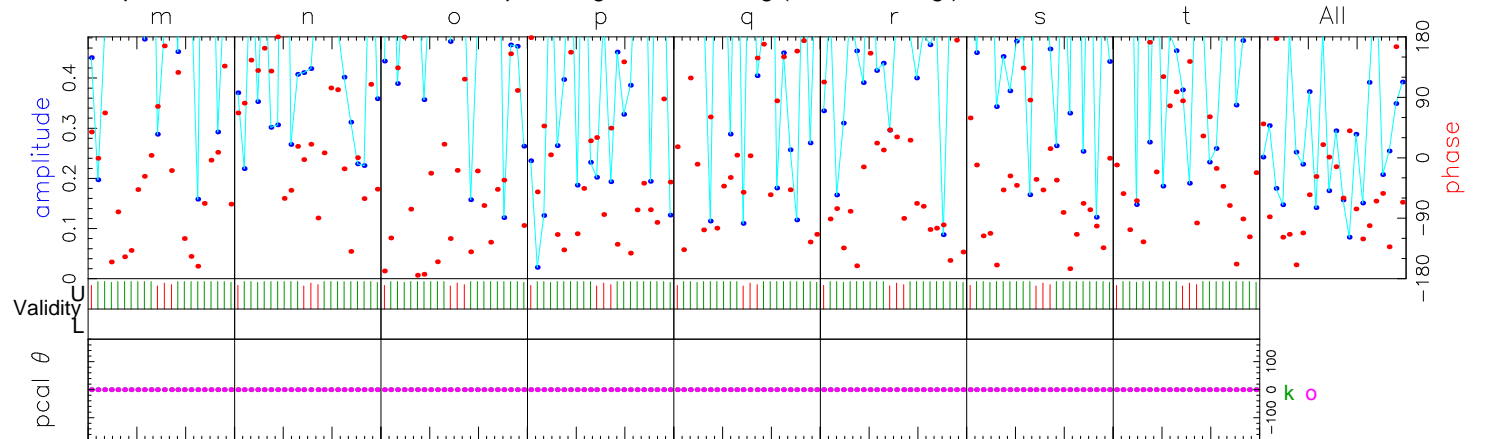
Fringe quality 0  
 SNR 5.8  
 Int time 175.883  
 Amp 0.161  
 Phase -78.3  
 PFD 5.0e-01  
 Delays (us)  
 SBD 0.028816  
 MBD -0.003527  
 Fringe rate (Hz)  
 -0.009104  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175948  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.9	42.2	-107.4	-77.1	-78.8	-106.5	-73.9	-70.6	Phase	-78.3
	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.2	Ampl.	0.2
	424.0	138.7	448.0	293.5	349.8	178.8	264.3	115.5	Sbd box	264.4
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.96706013253E+03		Apriori delay (usec)	1.96703240987E+03	Resid mbdelay (usec)	-3.52734E-03	+/-	1.9E-04		
Sband delay (usec)	1.96706122612E+03		Apriori clock (usec)	-2.4903467E+01	Resid sbdelay (usec)	2.88162E-02	+/-	1.5E-03		
Phase delay (usec)	1.96703240734E+03		Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	-2.52631E-06	+/-	6.3E-07		
Delay rate (us/s)	-7.93881797139E-02		Apriori rate (us/s)	-7.93880740311E-02	Resid rate (us/s)	-1.05683E-07	+/-	6.2E-09		
Total phase (deg)		204.6	Apriori accel (us/s/s)	-1.08775588245E-05	Resid phase (deg)	-78.3	+/-	19.7		
ph/seg (deg)	RMS 65.3	Theor. 45.8	Amplitude	0.161 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	113.7	80.0	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	52.2	27.8	Inc. seg. avg.	0.215	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	t_cohere infinite	ion window (ns/s)	-0.011	0.011
amp/frq (%)	39.9	48.5	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00
k: az 130.2 el 48.5 pa -40.3		o: az 127.0 el 40.9 pa -39.4		u, v (fr/asec) 449.167 -698.943				simultaneous interpolator		
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//ko..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//ko.W.193.3MP2MB						

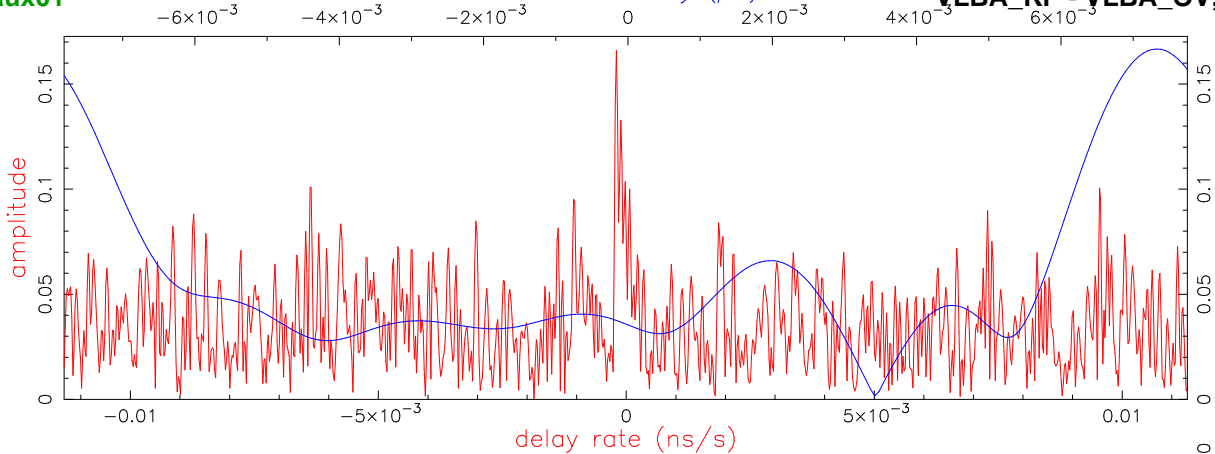
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, ko

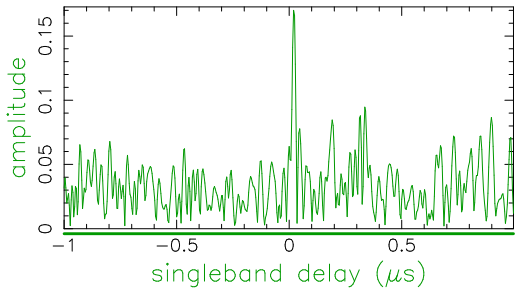
VLBA\_KP - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

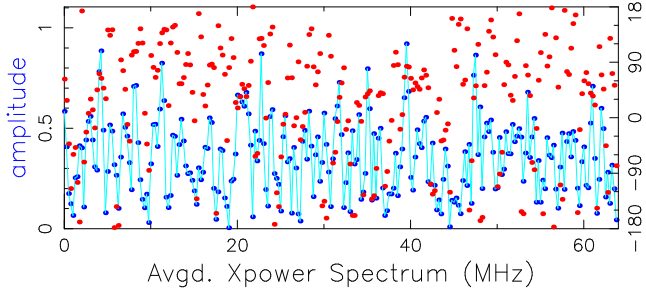


Fringe quality 0

SNR 6.3  
 Int time 175.883  
 Amp 0.173  
 Phase -125.1  
 PFD 5.0e-02  
 Delays (us)  
 SBD 0.021042  
 MBD 0.007213  
 Fringe rate (Hz)  
 -0.016318  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

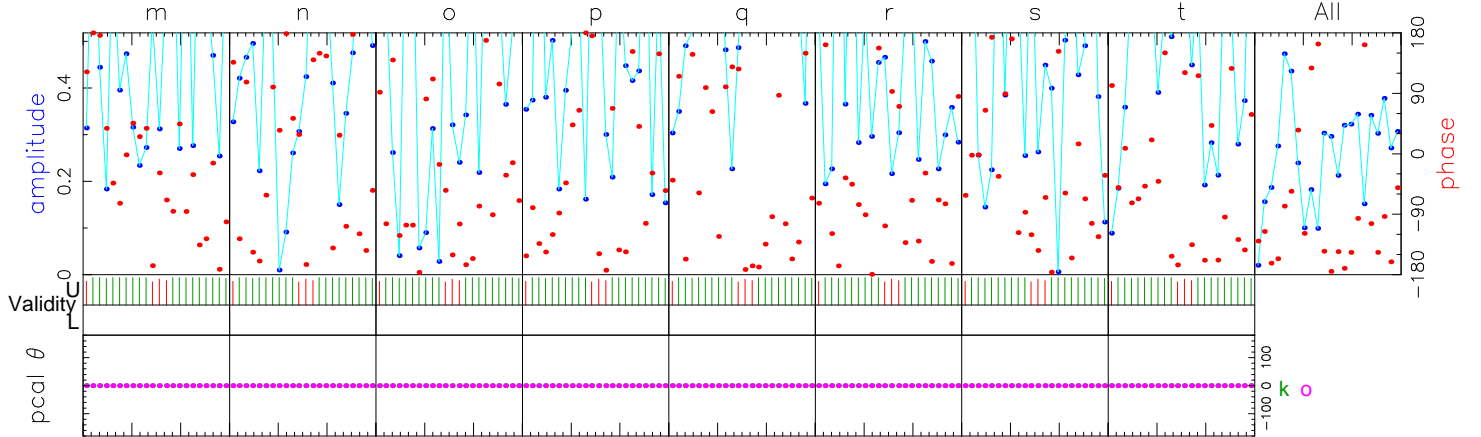


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.1	-170.9	-117.2	-145.0	-156.5	-108.9	-91.2	-118.5	Phase	-125.1
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	102.1	160.5	357.4	261.6	261.7	229.6	493.2	3.4	Sbd box	262.4
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.96705524789E+03	Apriori delay (usec)	1.96703240987E+03	Resid mbdelay (usec)	7.21302E-03	+/-	1.7E-04
Sband delay (usec)	1.96705345237E+03	Apriori clock (usec)	-2.4903467E+01	Resid sbdelay (usec)	2.10425E-02	+/-	1.4E-03
Phase delay (usec)	1.96703240583E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	-4.03304E-06	+/-	5.9E-07
Delay rate (us/s)	-7.93882634697E-02	Apriori rate (us/s)	-7.93880740311E-02	Resid rate (us/s)	-1.89439E-07	+/-	5.7E-09
Total phase (deg)	157.9	Apriori accel (us/s/s)	-1.08775588245E-05	Resid phase (deg)	-125.1	+/-	18.3

ph/seg (deg)	58.0	Theor.	42.7	Amplitude	0.173 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.4		74.5	Search (1024X32)	0.161	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.4		25.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.7		45.2	Inc. seg. avg.	0.204	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.173	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 130.2 el 48.5 pa -40.3      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) 449.167 -698.943      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707//ko..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707//ko.W.199.3MP2MB



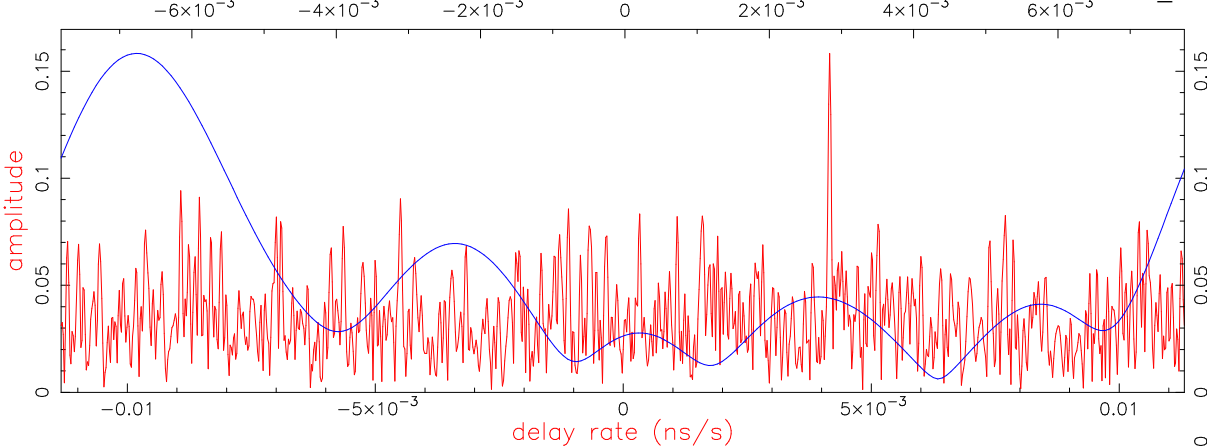
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lo

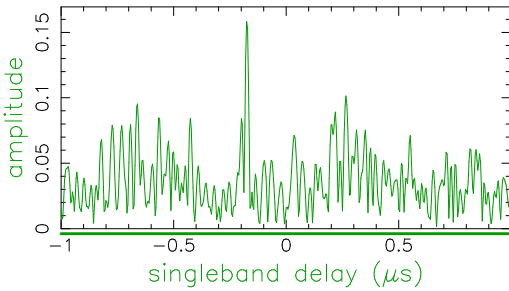
JCMT - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

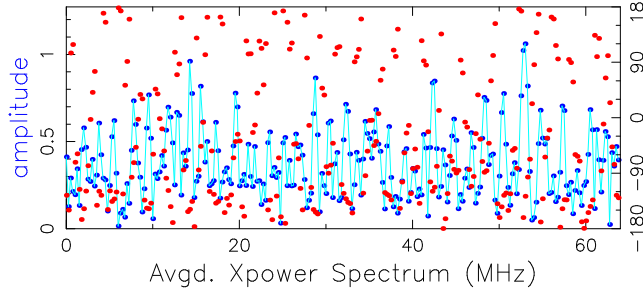


Fringe quality 0

SNR 5.8  
 Int time 175.885  
 Amp 0.170  
 Phase 107.4  
 PFD 5.4e-01  
 Delays (us)  
 SBD -0.174451  
 MBD -0.006746  
 Fringe rate (Hz)  
 0.358359  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

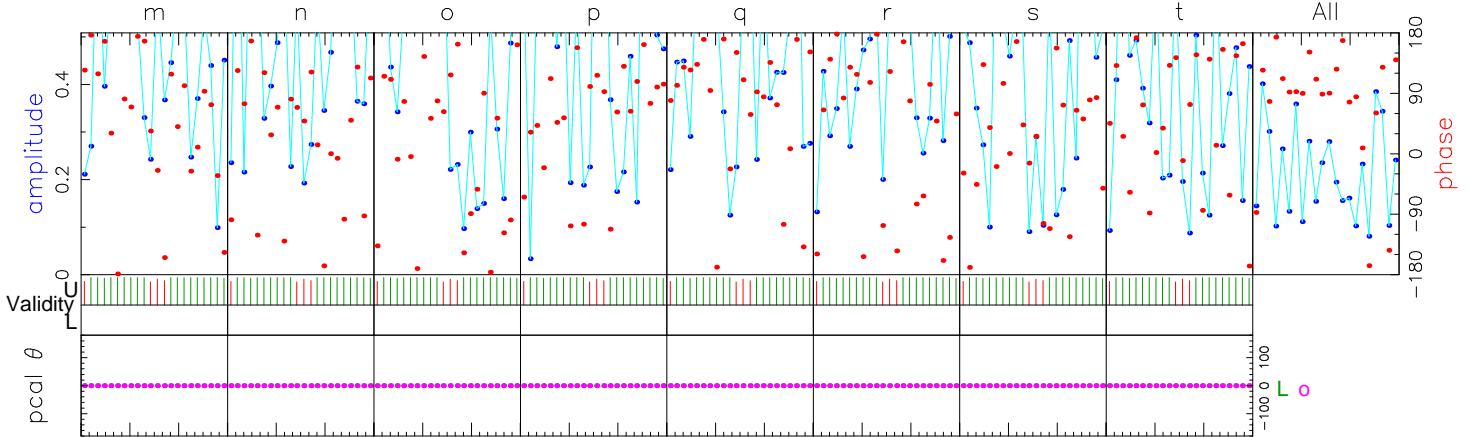


delay rate (ns/s)



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



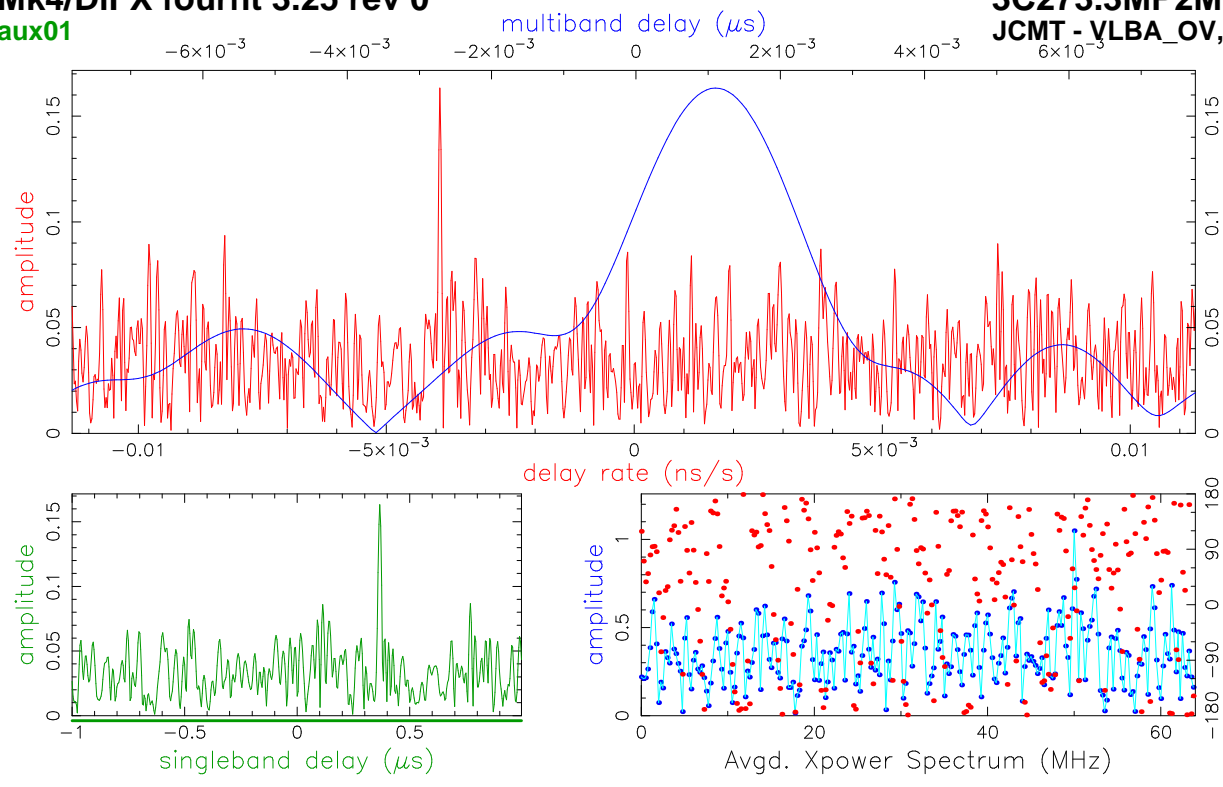
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.9	96.0	117.0	95.3	126.8	135.5	38.1	89.1	Phase	107.4
	0.2	0.1	0.2	0.3	0.3	0.2	0.1	0.1	Ampl.	0.2
	402.8	148.0	201.4	212.8	444.8	213.4	347.4	479.1	Sbd box	212.3
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-8.26285772868E+03	Apriori delay (usec)	-8.26267910774E+03	Resid mbdelay (usec)	-6.74595E-03	+/-	1.9E-04
Sband delay (usec)	-8.26285355899E+03	Apriori clock (usec)	-2.5272251E+01	Resid sbdelay (usec)	-1.74451E-01	+/-	1.5E-03
Phase delay (usec)	-8.26267910427E+03	Apriori clockrate (us/s)	-8.1735898E-07	Resid phdelay (usec)	3.46486E-06	+/-	6.4E-07
Delay rate (us/s)	6.63492692985E-01	Apriori rate (us/s)	6.63488532789E-01	Resid rate (us/s)	4.16020E-06	+/-	6.2E-09
Total phase (deg)	-15.1	Apriori accel (us/s/s)	4.27990844626E-05	Resid phase (deg)	107.4	+/-	19.7

ph/seg (deg)	57.2	Theor.	46.0	Amplitude	0.170 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	70.9	Search (1024X32)	0.155	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	33.4	Inc. seg. avg.	0.173	Inc. frq. avg.	0.165	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.8	Inc. frq. avg.	0.165			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

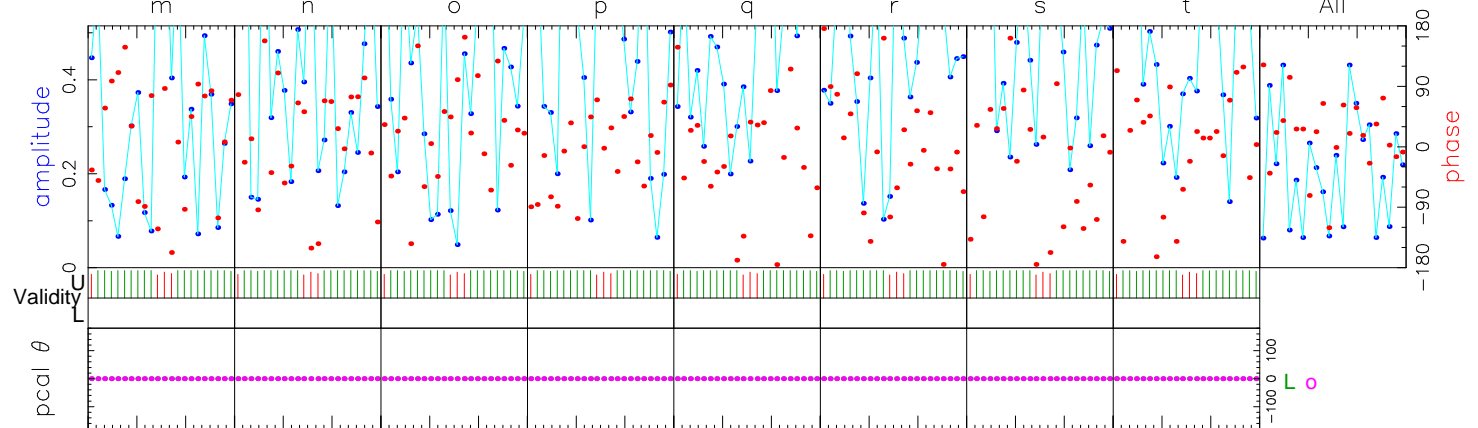
L: az 93.6 el 15.4 pa -70.0      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) -3780.640 -2235.688      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Lo..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Lo.W.205.3MP2MB



Fringe quality 0  
SNR 5.9  
Int time 175.885  
Amp 0.172  
Phase 13.9  
PFD 3.3e-01  
Delays (us)  
SBD 0.367176  
MBD 0.001103  
Fringe rate (Hz)  
-0.337816  
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  
2025:041:175954  
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
	28.2	47.3	21.4	-10.3	0.5	4.5	1.5	41.0	Phase	13.9
	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	Ampl.	0.2
	368.7	405.8	354.8	350.7	106.6	274.8	54.5	507.6	Sbd box	351.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
L: o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L: o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-8.26231862949E+03					-8.26267910774E+03			Resid mbdelay (usec)	1.10324E-03 +/- 1.8E-04
Sband delay (usec)	-8.26231193149E+03					-2.5272251E+01			Resid sbdelay (usec)	3.67176E-01 +/- 1.5E-03
Phase delay (usec)	-8.26267910729E+03					-8.1735898E-07			Resid phdelay (usec)	4.49744E-07 +/- 6.2E-07
Delay rate (us/s)	6.63484611086E-01					6.63488532789E-01			Resid rate (us/s)	-3.92170E-06 +/- 6.1E-09
Total phase (deg)			-108.6			4.27990844626E-05			Resid phase (deg)	13.9 +/- 19.3
	RMS	Theor.	Amplitude	0.172 +/- 0.029					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.0	45.1	Search (1024X32)	0.162					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.6	78.7	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	22.8	27.4	Inc. seg. avg.	0.172					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.9	47.8	Inc. frq. avg.	0.164					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			o: az 127.0 el 40.9 pa -39.4			u,v (fr/asec) -3780.640 -2235.688				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707/Lo..3MP2MB			Output file: /Exps/c241b/v2/3mm/1234/No0707/Lo.W.214.3MP2MB				

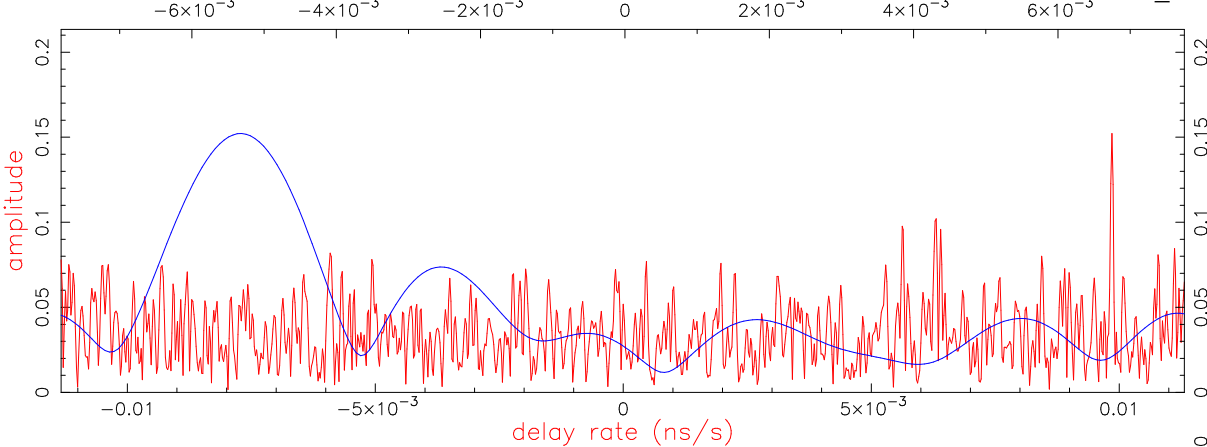
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Lo

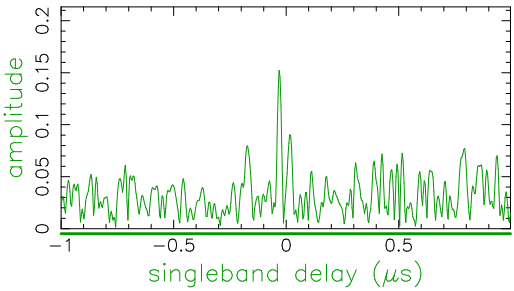
JCMT - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

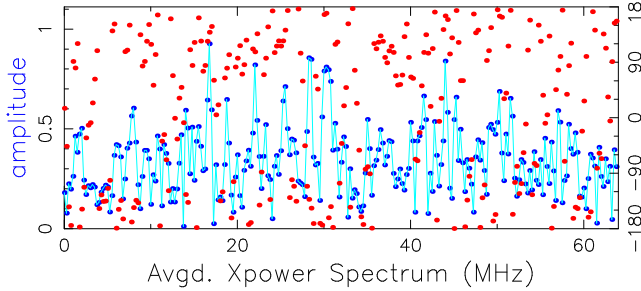


Fringe quality 0

SNR 5.5  
 Int time 175.885  
 Amp 0.213  
 Phase -139.1  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.030386  
 MBD -0.005326  
 Fringe rate (Hz)  
 0.850755  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

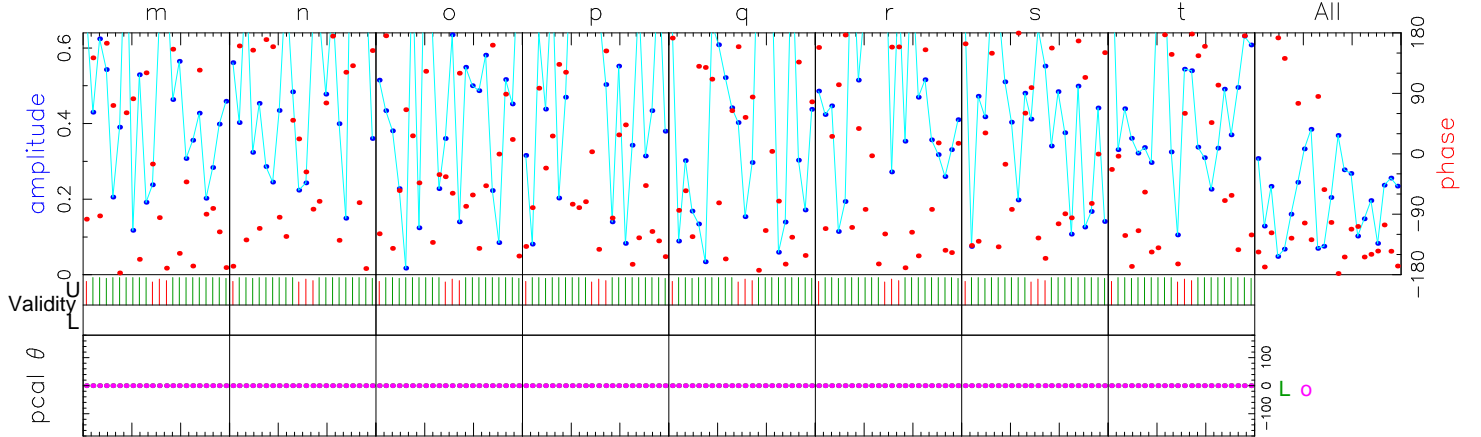


delay rate (ns/s)



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



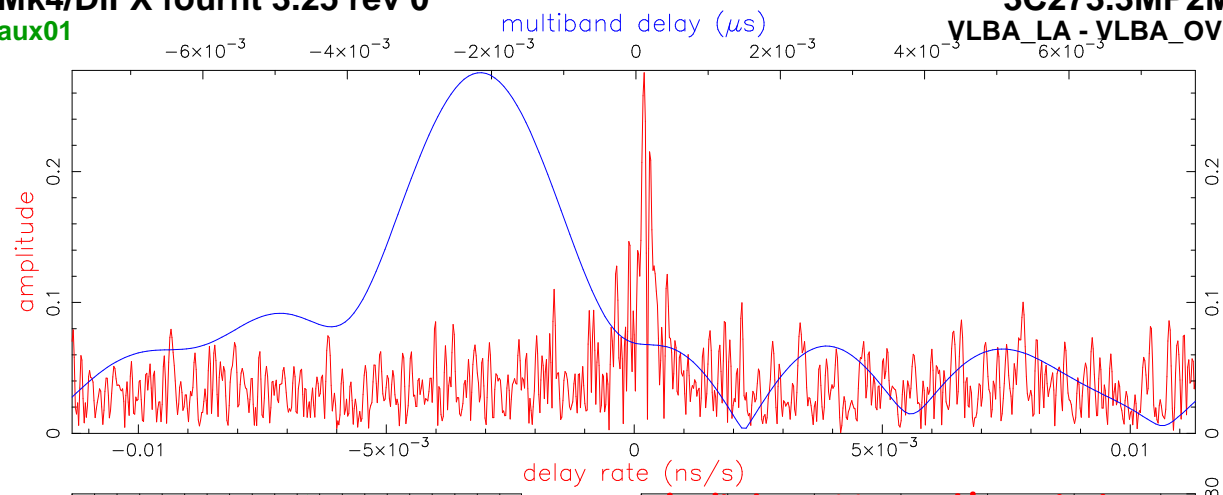
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-158.6	-146.8	-98.8	-96.1	-163.7	-131.5	-153.2	-145.9	Phase	-139.1
	0.3	0.3	0.1	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	241.7	455.9	236.6	376.8	434.5	378.5	19.2	307.6	Sbd box	249.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
L	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-8.26271568365E+03	Apriori delay (usec)	-8.26267910774E+03	Resid mbdelay (usec)	-5.32592E-03	+/-	2.0E-04
Sband delay (usec)	-8.26270949374E+03	Apriori clock (usec)	-2.5272251E+01	Resid sbdelay (usec)	-3.03860E-02	+/-	1.6E-03
Phase delay (usec)	-8.26267911222E+03	Apriori clockrate (us/s)	-8.1735898E-07	Resid phdelay (usec)	-4.48411E-06	+/-	6.7E-07
Delay rate (us/s)	6.63498409215E-01	Apriori rate (us/s)	6.63488532789E-01	Resid rate (us/s)	9.87643E-06	+/-	6.5E-09
Total phase (deg)	-261.6	Apriori accel (us/s/s)	4.27990844626E-05	Resid phase (deg)	-139.1	+/-	20.7

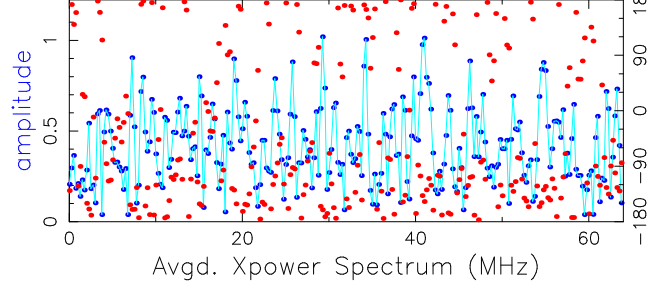
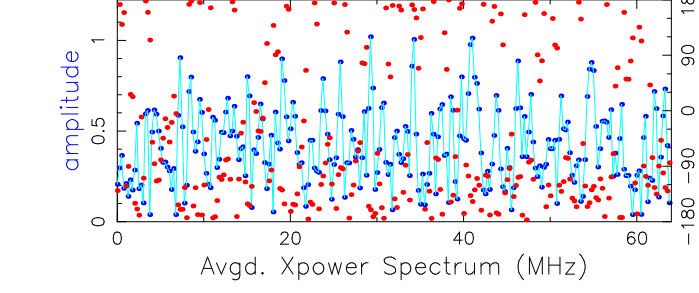
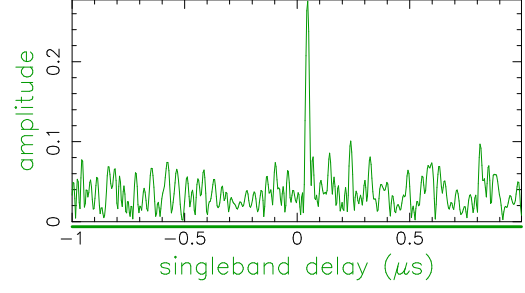
ph/seg (deg)	RMS 54.7	Theor. 48.2	Amplitude Search (1024X32)	0.149	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.8	84.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	28.4	29.3	Inc. seg. avg.	0.207	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	27.4	51.1	Inc. frq. avg.	0.203	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 93.6 el 15.4 pa -70.0      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) -3780.640 -2235.688      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/Lo..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/Lo.W.223.3MP2MB

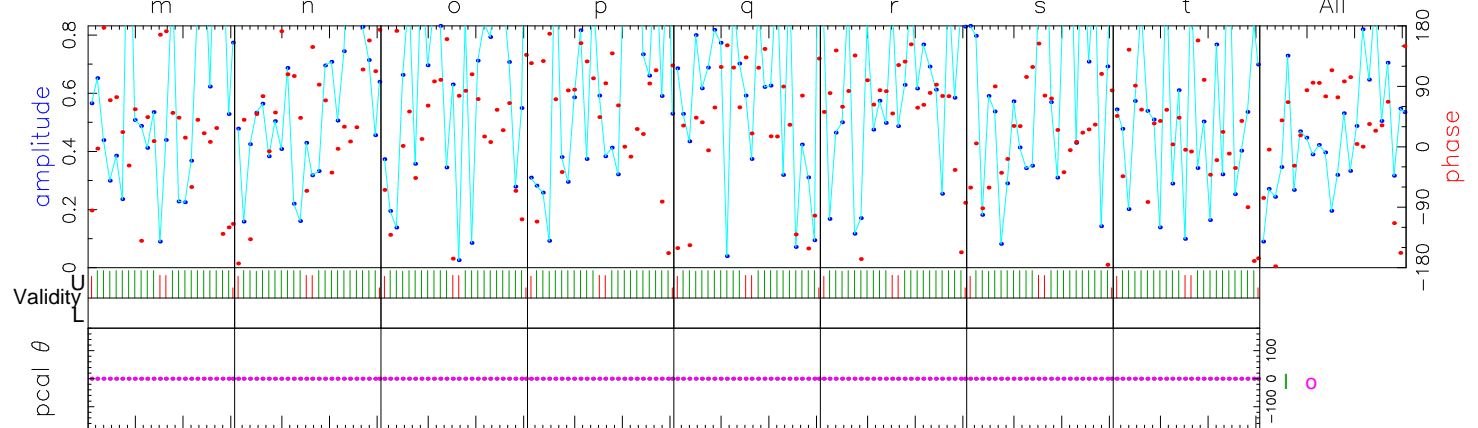




Fringe quality 9  
SNR 10.0  
Int time 174.883  
Amp 0.277  
Phase 52.6  
PFD 2.5e-15  
Delays (us)  
SBD 0.045850  
MBD -0.002187  
Fringe rate (Hz)  
0.016719  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 040000.51  
Stop 040300.22  
FRT 040130.00  
Corr/FF/build  
2024:361:053129  
2025:041:180013  
2024:113:095956  
RA & Dec (J2000)  
12h29m06.699742s  
+02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0		
l	0	0	0	0	0	0	0	0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
l:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.06174478746E+03	Apriori delay (usec)		2.06170009918E+03	Resid mbdelay (usec)	-2.18672E-03	+/-	1.1E-04	
Sband delay (usec)	2.06174594893E+03	Apriori clock (usec)		-3.3353584E+01	Resid sbdelay (usec)	4.58498E-02	+/-	8.6E-04	
Phase delay (usec)	2.06170010087E+03	Apriori clockrate (us/s)		-7.1527311E-07	Resid phdelay (usec)	1.69474E-06	+/-	3.7E-07	
Delay rate (us/s)	-2.12876728916E-01	Apriori rate (us/s)		-2.12876923001E-01	Resid rate (us/s)	1.94085E-07	+/-	3.6E-09	
Total phase (deg)		248.1	Apriori accel (us/s/s)		-1.12172111085E-05	Resid phase (deg)	52.6	+/-	11.4

ph/seg (deg)	71.0	Theor. 27.8	Amplitude	0.277 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	97.7	48.6	Search (1024X32)	0.268	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.3	16.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	21.6	28.2	Inc. seg. avg.	0.412	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.295	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      o: az 127.0 el 40.9 pa -39.4      u,v (fr/asec) 1214.047 -210.397      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/lo..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/lo.W.288.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

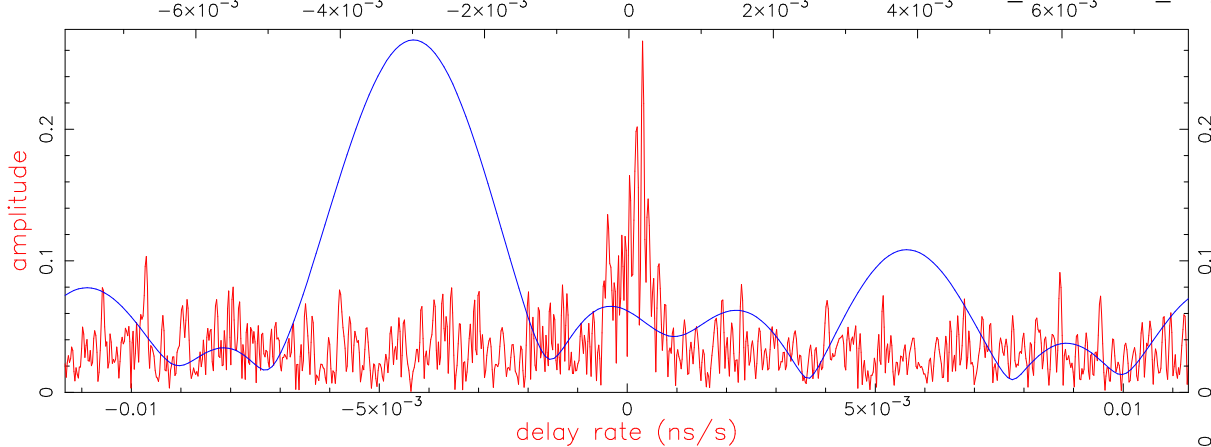
aux01

3C273.3MP2MB, No0707, lo

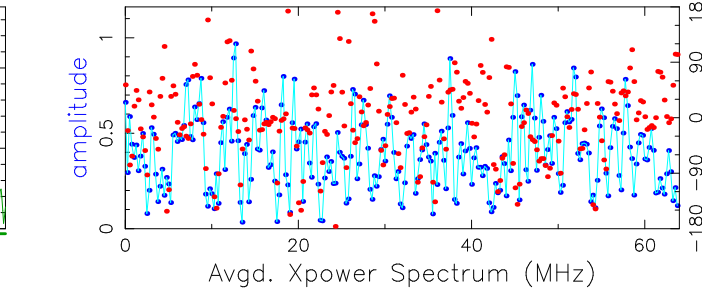
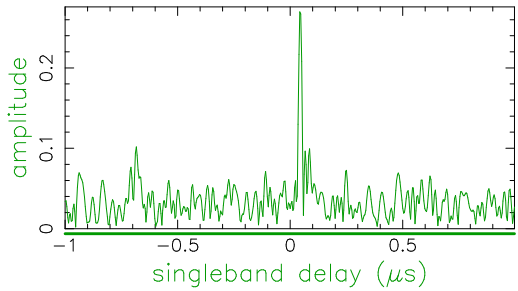
VLBA\_LA - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 9



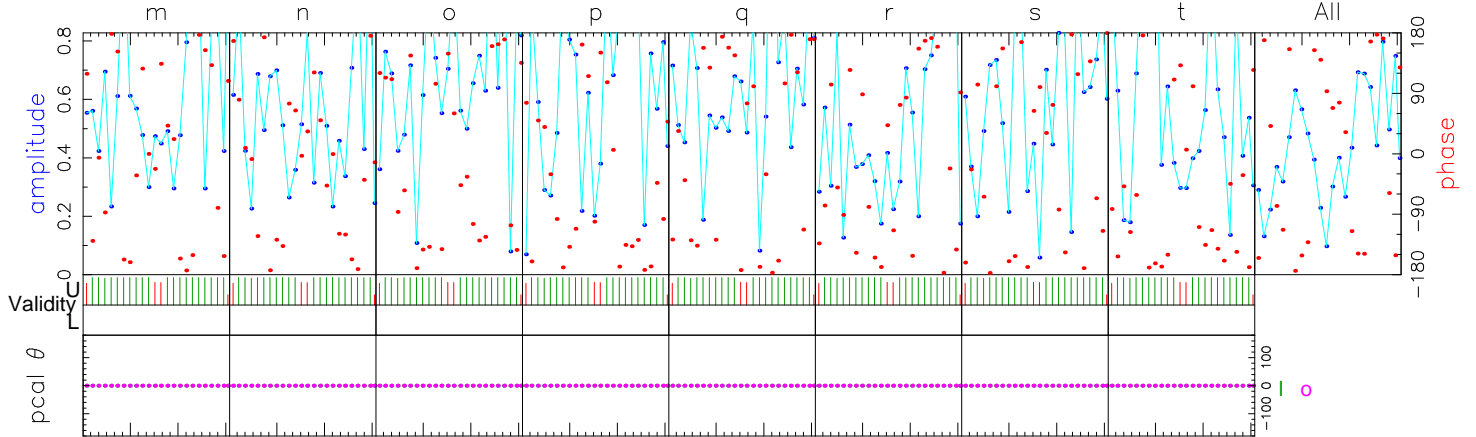
SNR 10.0  
 Int time 174.883  
 Amp 0.276  
 Phase -166.6  
 PFD 4.1e-15  
 Delays (us)  
 SBD 0.044763  
 MBD -0.003069  
 Fringe rate (Hz)  
 0.027673  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



amplitude

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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-166.4	-172.4	-176.2	-148.5	174.0	-171.7	-176.4	-145.3	Phase	-166.6
	0.3	0.1	0.3	0.3	0.4	0.2	0.2	0.4	Ampl.	0.3
	268.2	163.3	268.9	268.5	268.4	129.0	283.6	268.9	Sbd box	268.5
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.06174390497E+03	Apriori delay (usec)	2.06170009918E+03	Resid mbdelay (usec)	-3.06921E-03	+/-	1.1E-04
Sband delay (usec)	2.06174486193E+03	Apriori clock (usec)	-3.3353584E+01	Resid sbdelay (usec)	4.47627E-02	+/-	8.6E-04
Phase delay (usec)	2.06170009381E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-5.37397E-06	+/-	3.7E-07
Delay rate (us/s)	-2.12876601742E-01	Apriori rate (us/s)	-2.12876923001E-01	Resid rate (us/s)	3.21259E-07	+/-	3.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.12172111085E-05	Resid phase (deg)	-166.6	+/-	11.5

ph/seg (deg)	RMS 72.9	Theor. 28.0	Amplitude Search (1024X32)	0.276 +/- 0.028	0.255	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	92.0	48.8	Interp.	0.000	0.000E+00	0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	15.3	16.2	Inc. seg. avg.	0.397	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 (%)	30.2	28.4	Inc. frq. avg.	0.265	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00

l: az 139.8 el 48.9 pa -31.4 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 1214.047 -210.397 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/lo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/lo.W.297.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

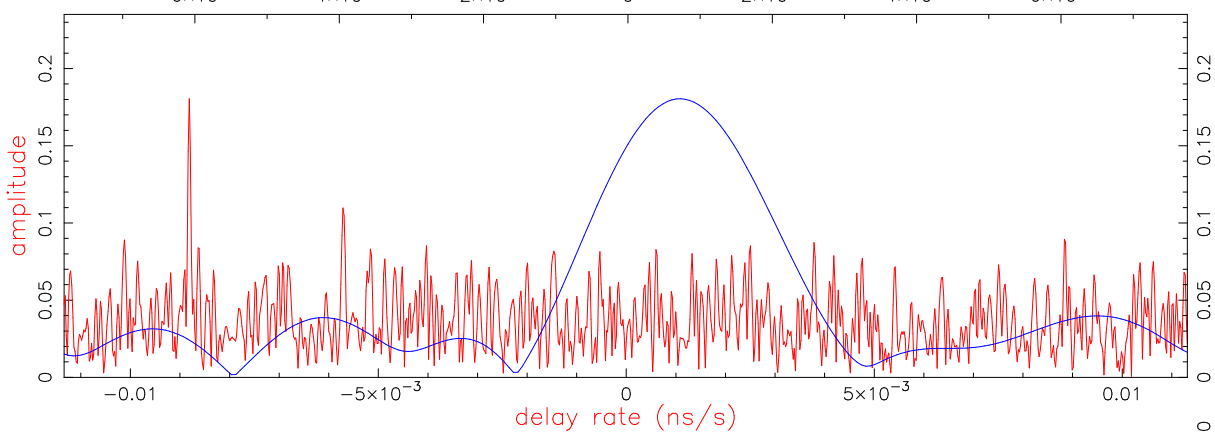
aux01

3C273.3MP2MB, No0707, lo

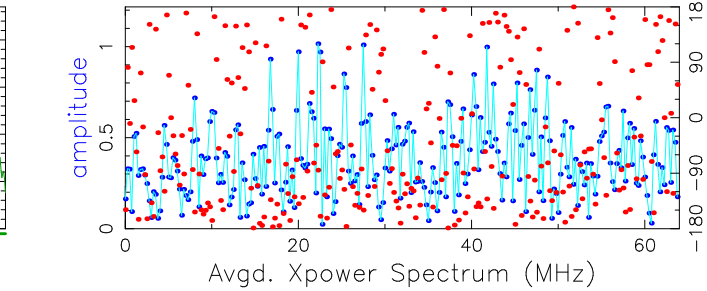
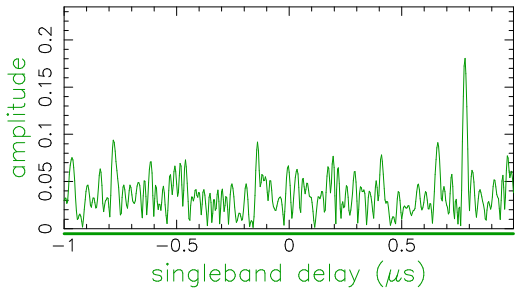
VLBA\_LA - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

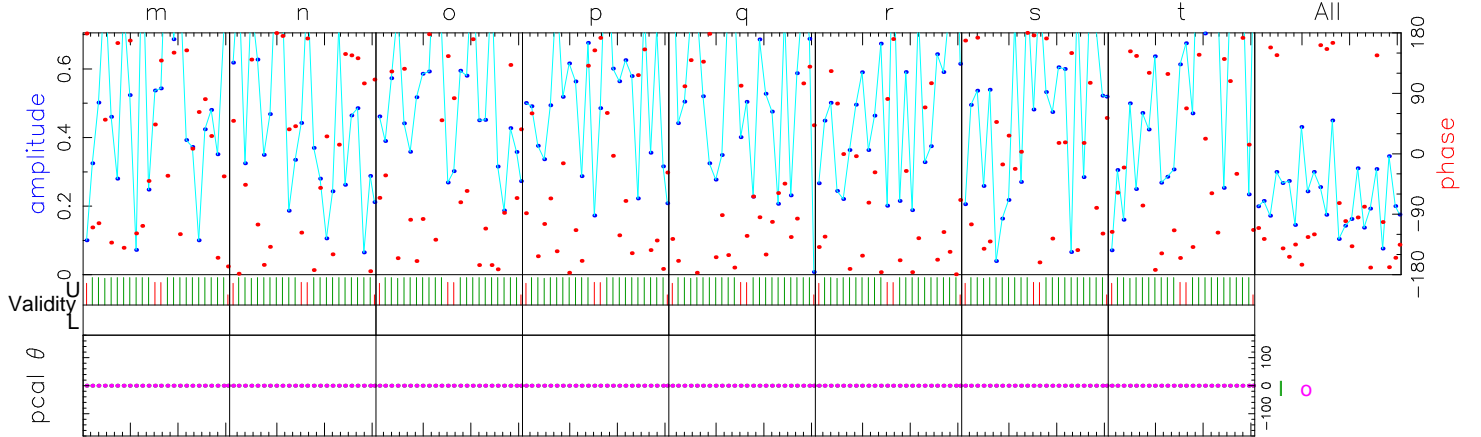


SNR 6.5  
 Int time 174.883  
 Amp 0.235  
 Phase -154.6  
 PFD 8.7e-03  
 Delays (us)  
 SBD 0.780563  
 MBD 0.000714  
 Fringe rate (Hz) -0.759428  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-125.4	175.1	-147.9	-145.7	-158.0	-153.2	-139.5	-166.1	Phase	-154.6
	0.1	0.3	0.3	0.2	0.4	0.3	0.2	0.2	Ampl.	0.2
	511.6	233.2	172.1	478.6	457.2	40.1	59.1	299.7	Sbd box	456.8
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.06248206299E+03	Apriori delay (usec)	2.06170009918E+03	Resid mbdelay (usec)	7.13814E-04	+/-	1.7E-04
Sband delay (usec)	2.06248066243E+03	Apriori clock (usec)	-3.3353584E+01	Resid sbdelay (usec)	7.80563E-01	+/-	1.3E-03
Phase delay (usec)	2.06170009419E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-4.98590E-06	+/-	5.7E-07
Delay rate (us/s)	-2.12885739205E-01	Apriori rate (us/s)	-2.12876923001E-01	Resid rate (us/s)	-8.81620E-06	+/-	5.5E-09
Total phase (deg)	41.0	Apriori accel (us/s/s)	-1.12172111085E-05	Resid phase (deg)	-154.6	+/-	17.5

ph/seg (deg)	43.0	Theor.	42.7	Amplitude	0.235 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.0	Search (1024X32)	0.178	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.4	Inc. seg. avg.	0.237	Inc. frq. avg.	0.223	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.4	Inc. frq. avg.	0.223			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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 1214.047 -210.397 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/lo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/lo.W.304.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

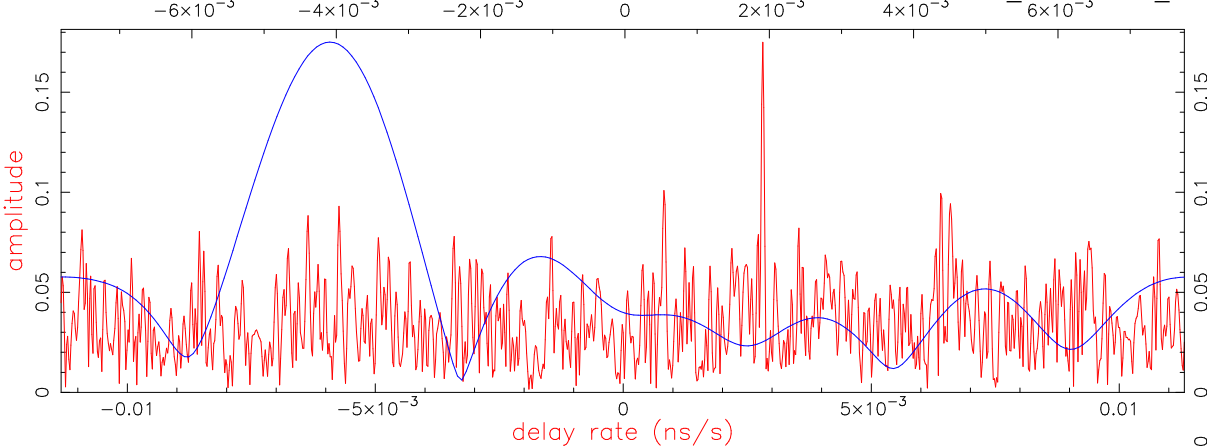
aux01

3C273.3MP2MB, No0707, lo

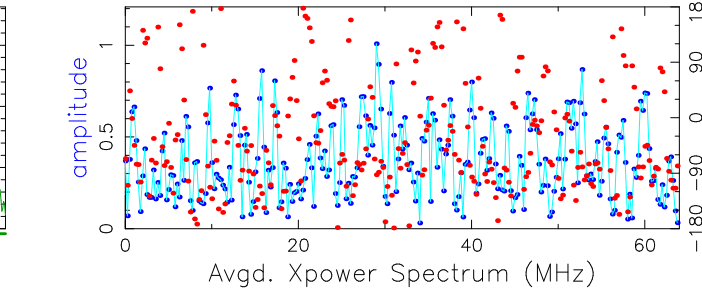
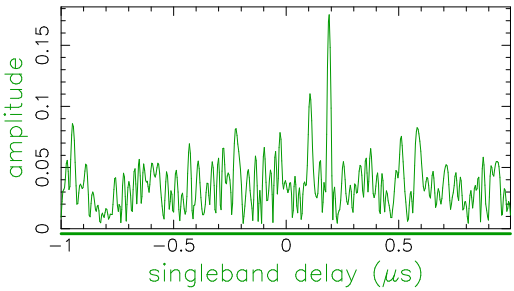
VLBA\_LA - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

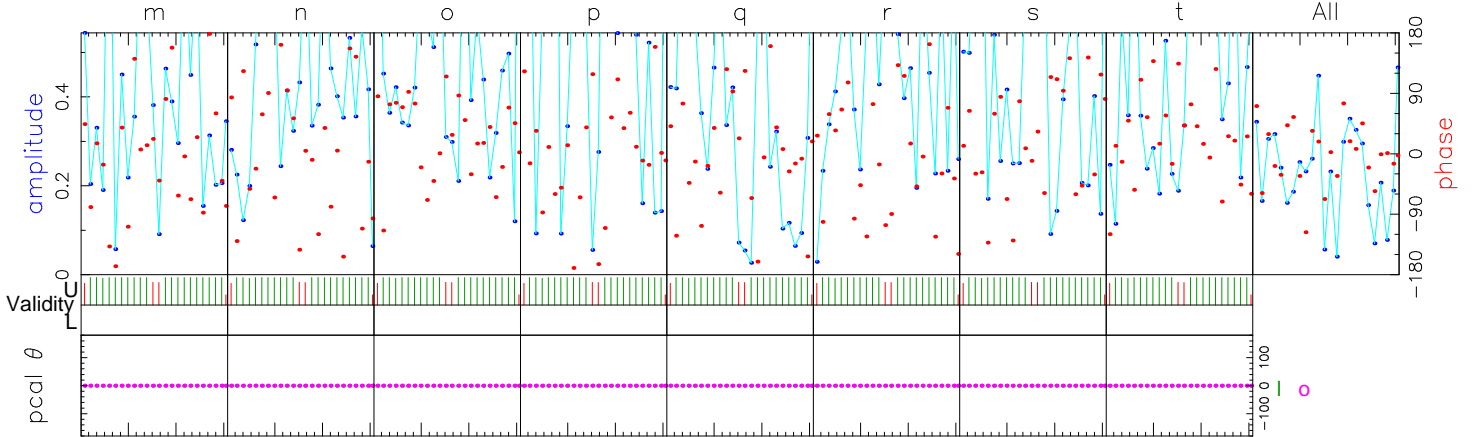


SNR 6.4  
 Int time 174.883  
 Amp 0.181  
 Phase 9.7  
 PFD 2.2e-02  
 Delays (us)  
 SBD 0.190125  
 MBD -0.004121  
 Fringe rate (Hz)  
 0.242558  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.51  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180021  
 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	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	2.06188347773E+03	Apriori delay (usec)	2.06170009918E+03	Resid mbdelay (usec)	-4.12145E-03	+/-	1.7E-04
Sband delay (usec)	2.06189022418E+03	Apriori clock (usec)	-3.3353584E+01	Resid sbdelay (usec)	1.90125E-01	+/-	1.3E-03
Phase delay (usec)	2.06170009949E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	3.12789E-07	+/-	5.8E-07
Delay rate (us/s)	-2.12874107138E-01	Apriori rate (us/s)	-2.12876923001E-01	Resid rate (us/s)	2.81586E-06	+/-	5.6E-09
Total phase (deg)	205.3	Apriori accel (us/s/s)	-1.12172111085E-05	Resid phase (deg)	9.7	+/-	17.9

ph/seg (deg)	47.0	Theor.	43.6	Amplitude	0.181 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.0	Search (1024X32)	0.173	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	14.1	Inc. seg. avg.	0.183	Inc. seg. avg.	0.168	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.9	Inc. frq. avg.	0.168	Inc. frq. avg.	0.168	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 139.8 el 48.9 pa -31.4 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 1214.047 -210.397 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/lo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/lo.W.312.3MP2MB

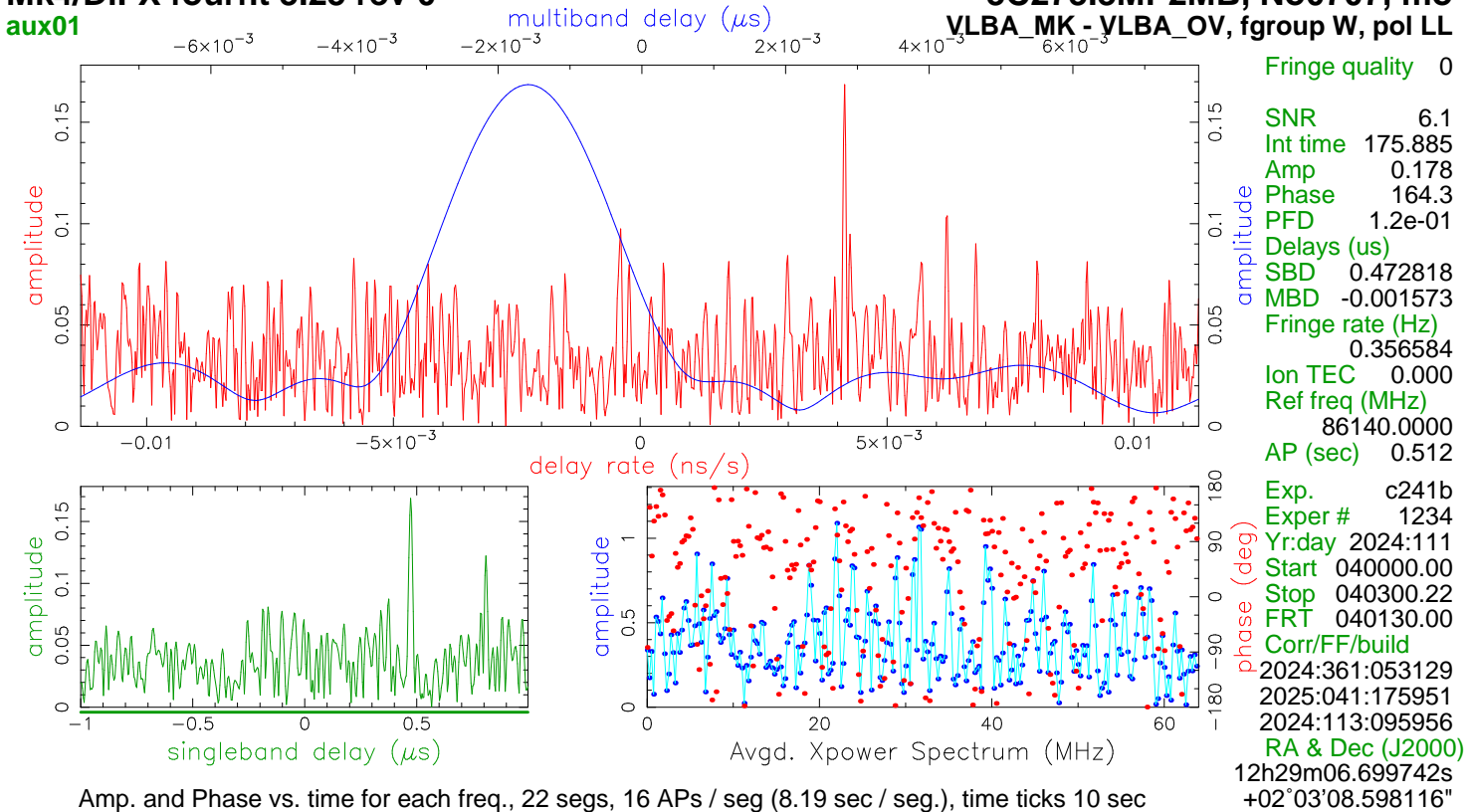


Mk4/DiFX fourfit 3.25 rev 0

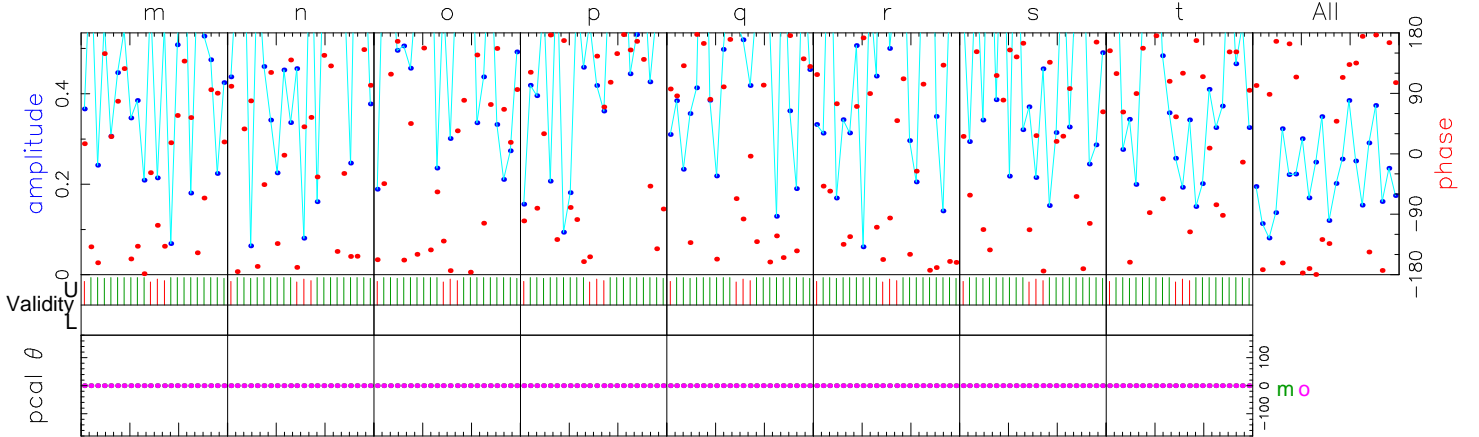
aux01

3C273.3MP2MB, No0707, mo

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



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	156.7	155.7	156.5	-174.2	164.7	-179.7	145.8	153.6	Phase	164.3
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	352.6	177.5	464.4	344.3	376.4	476.2	130.1	244.5	Sbd box	378.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-8.25404925821E+03		Apriori delay (usec)	-8.25451643477E+03	Resid mbdelay (usec)	-1.57343E-03	+/-	1.8E-04		
Sband delay (usec)	-8.25404361727E+03		Apriori clock (usec)	-2.4509958E+01	Resid sbdelay (usec)	4.72818E-01	+/-	1.4E-03		
Phase delay (usec)	-8.25451642948E+03		Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	5.29779E-06	+/-	6.0E-07		
Delay rate (us/s)	6.63451101378E-01		Apriori rate (us/s)	6.63446961786E-01	Resid rate (us/s)	4.13959E-06	+/-	5.9E-09		
Total phase (deg)		-84.7	Apriori accel (us/s/s)	4.27582500379E-05	Resid phase (deg)	164.3	+/-	18.7		
RMS	45.7	43.7	Amplitude	0.178 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	45.7	43.7	Search (1024X32)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	60.0	76.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	15.1	26.5	Inc. seg. avg.	0.184	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	30.2	46.2	Inc. frq. avg.	0.165	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
m: az 93.6 el 15.4 pa -70.0			o: az 127.0 el 40.9 pa -39.4						simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB						Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.204.3MP2MB	

Mk4/DiFX fourfit 3.25 rev 0

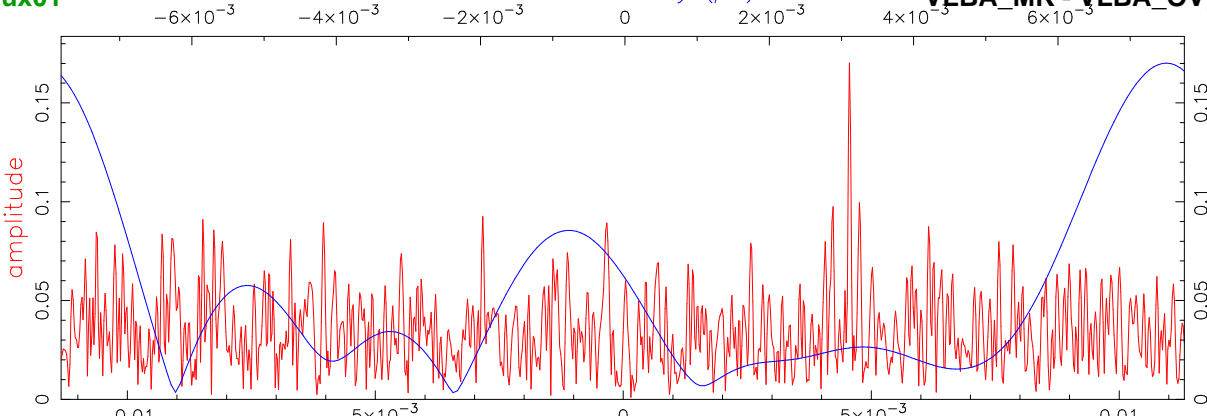
aux01

3C273.3MP2MB, No0707, mo

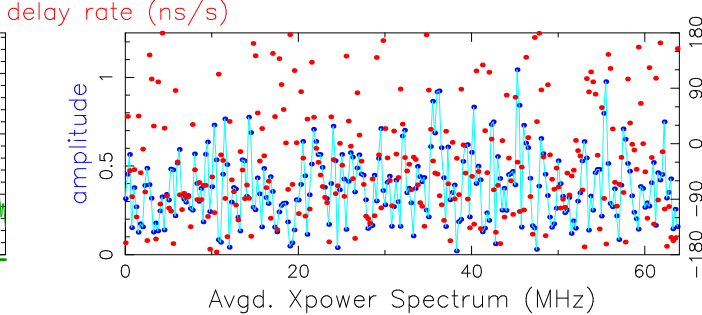
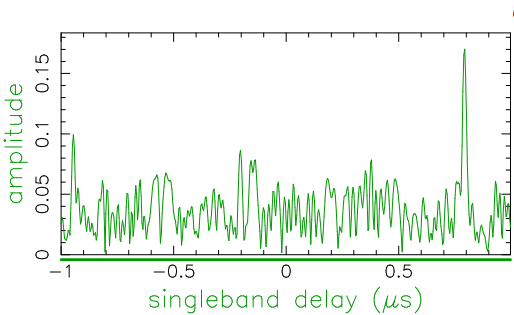
VLBA\_MK - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

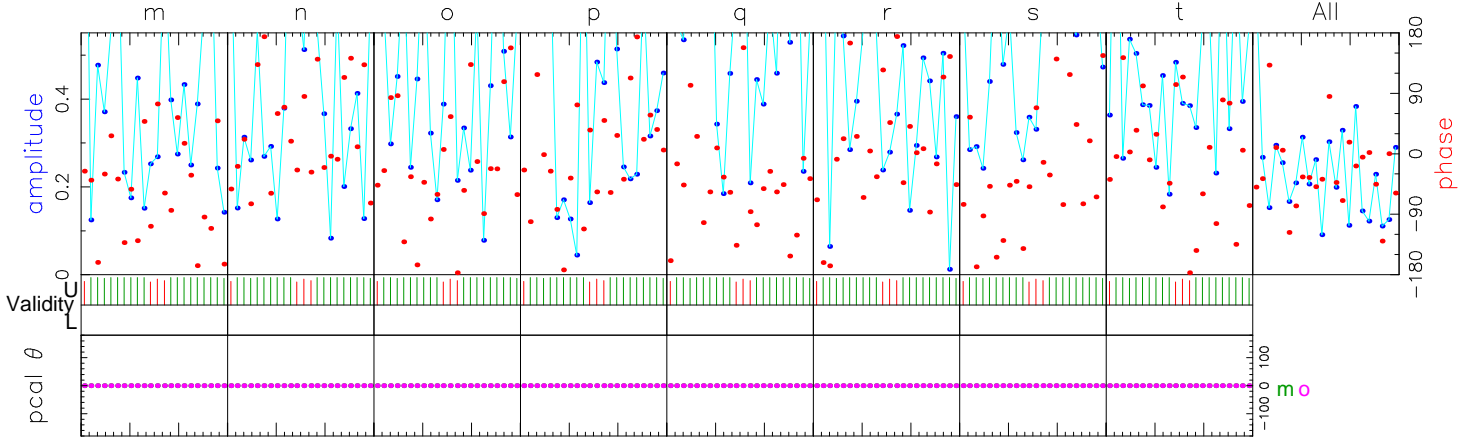


SNR 6.2  
Int time 175.885  
Amp 0.184  
Phase -34.0  
PFD 6.3e-02  
Delays (us)  
SBD 0.791667  
MBD 0.007478  
Fringe rate (Hz) 0.394069  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-57.5	4.0	-28.7	-15.2	-70.0	-18.4	-63.1	1.9		Phase -34.0
	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2		Ampl. 0.2
	506.9	490.2	122.6	104.4	460.0	118.9	11.4	53.9		Sbd box 459.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		APs used
m	0	0	0	0	0	0	0	0		PC freqs
o	0	0	0	0	0	0	0	0		PC freqs
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

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

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

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.213.3MP2MB

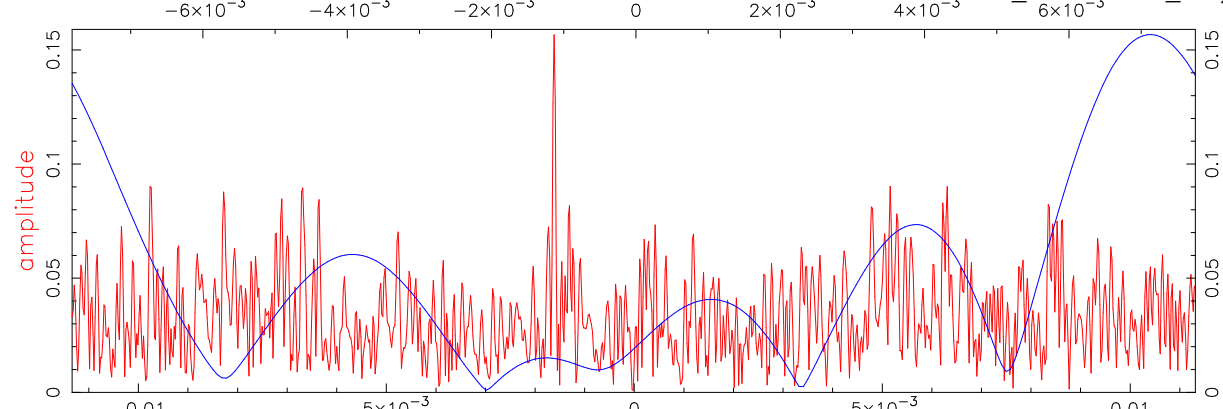
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, mo

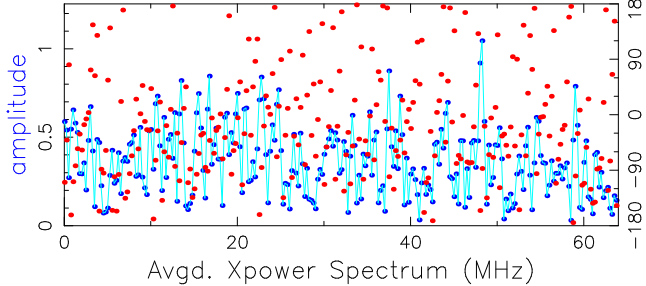
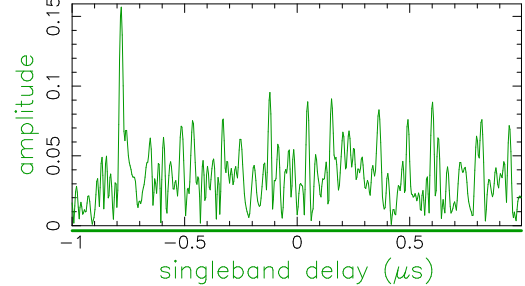
VLBA\_MK - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

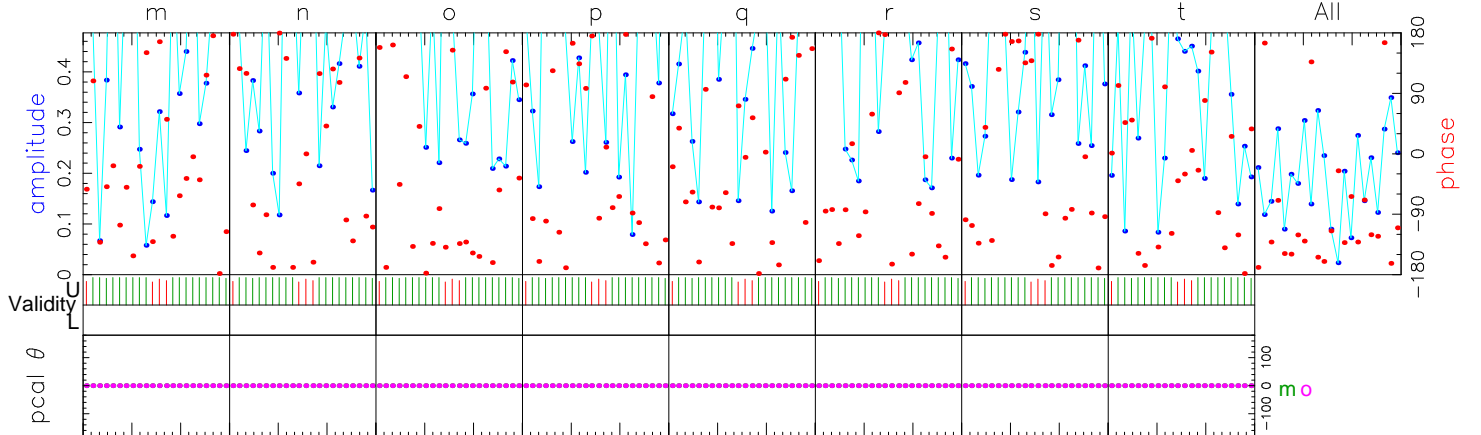


Fringe quality 0  
 SNR 5.7  
 Int time 175.885  
 Amp 0.159  
 Phase -138.7  
 PFD 7.4e-01  
 Delays (us)  
 SBD -0.782321  
 MBD 0.007077  
 Fringe rate (Hz)  
 -0.138992  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00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

delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-87.6	-167.5	-171.3	-141.5	-110.4	-129.9	-139.1	-113.3	Phase	-138.7
	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.0	Ampl.	0.2
	220.9	169.6	176.5	332.3	411.5	90.2	62.2	316.9	Sbd box	56.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

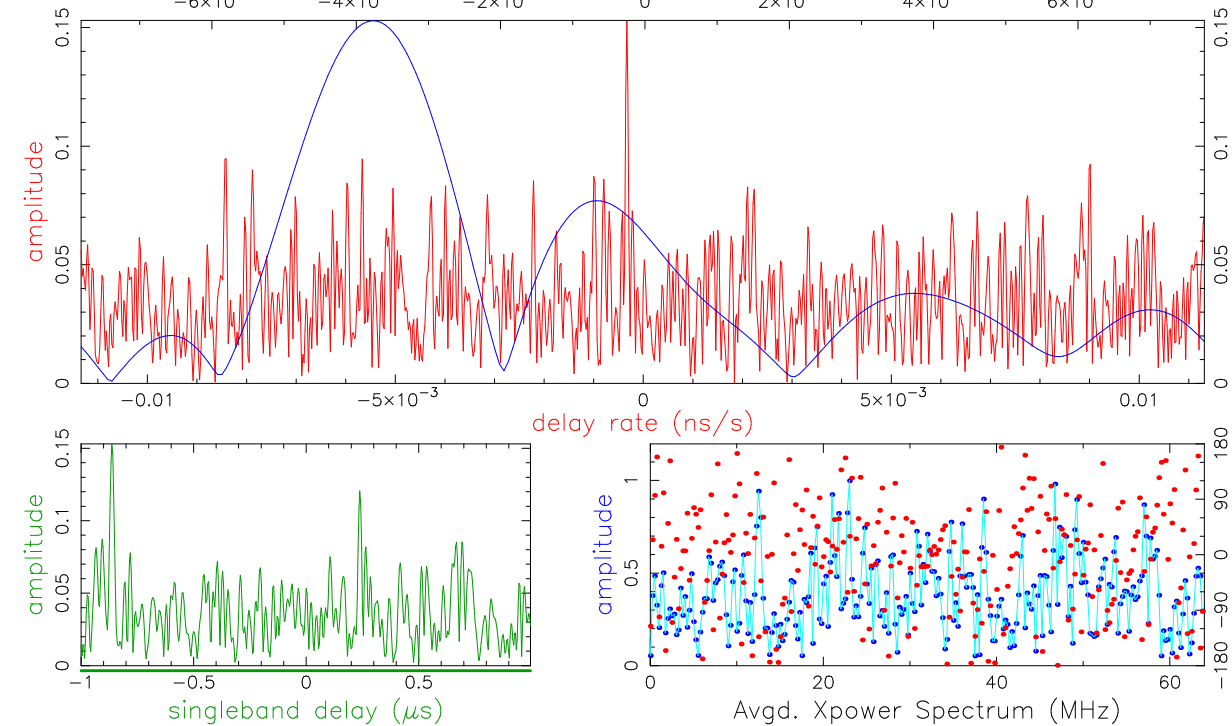
ph/seg (deg) 45.7 46.7 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 60.0 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.7 28.3 Inc. seg. avg. 0.147 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.9 49.5 Inc. frq. avg. 0.156 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 93.6 el 15.4 pa -70.0 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) -3780.421 -2239.076 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.221.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

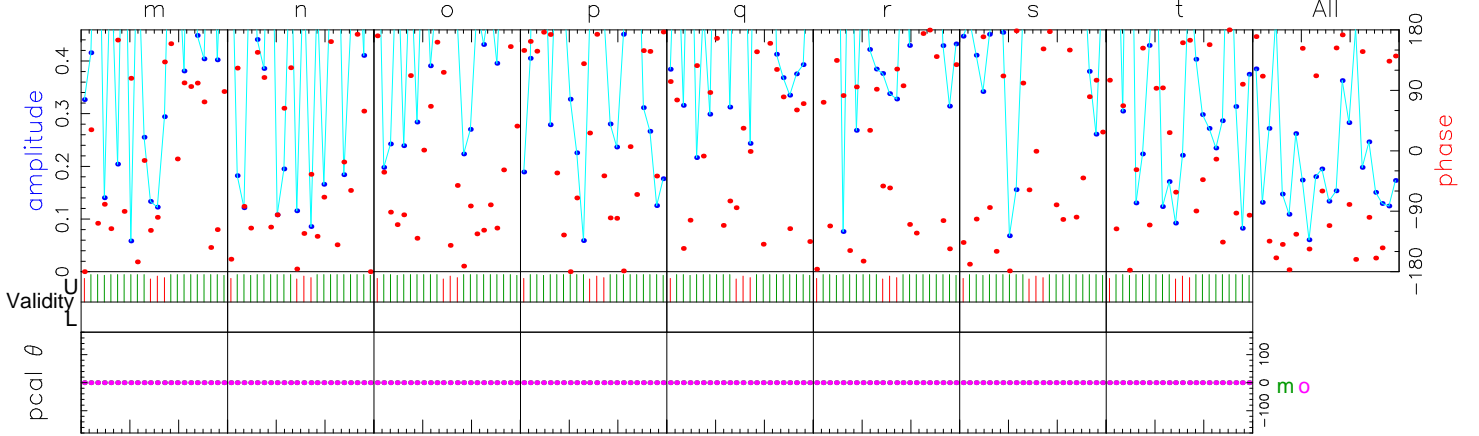
3C273.3MP2MB, No0707, mo

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



Fringe quality 0  
 SNR 5.5  
 Int time 175.885  
 Amp 0.153  
 Phase -163.6  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.862742  
 MBD -0.003731  
 Fringe rate (Hz)  
 -0.028937  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175957  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.9	-159.8	-127.5	-155.2	170.3	176.5	-137.6	-166.1	Phase	-163.6
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	282.6	35.3	248.1	297.6	319.4	284.0	489.3	370.1	Sbd box	36.1
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

RMS Theor. Amplitude 0.153 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 50.7 48.2 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 85.0 84.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 23.9 29.2 Inc. seg. avg. 0.161 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 32.8 51.0 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

m: az 93.6 el 15.4 pa -70.0 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) -3780.421 -2239.076 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//mo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//mo.W.230.3MP2MB

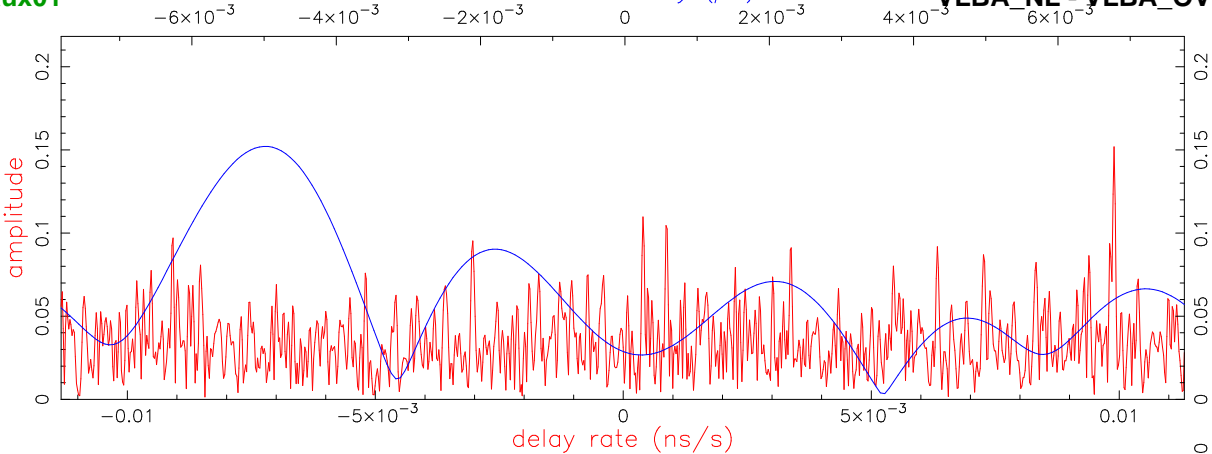
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

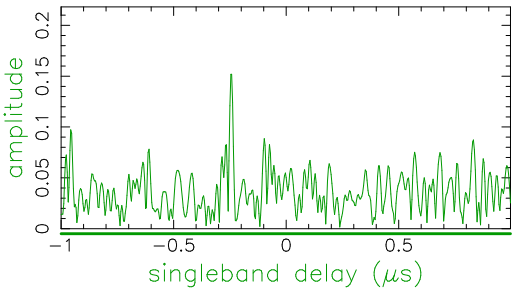
VLBA\_NL - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

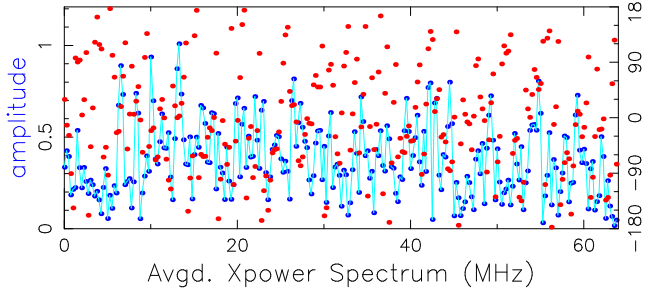


Fringe quality 0

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

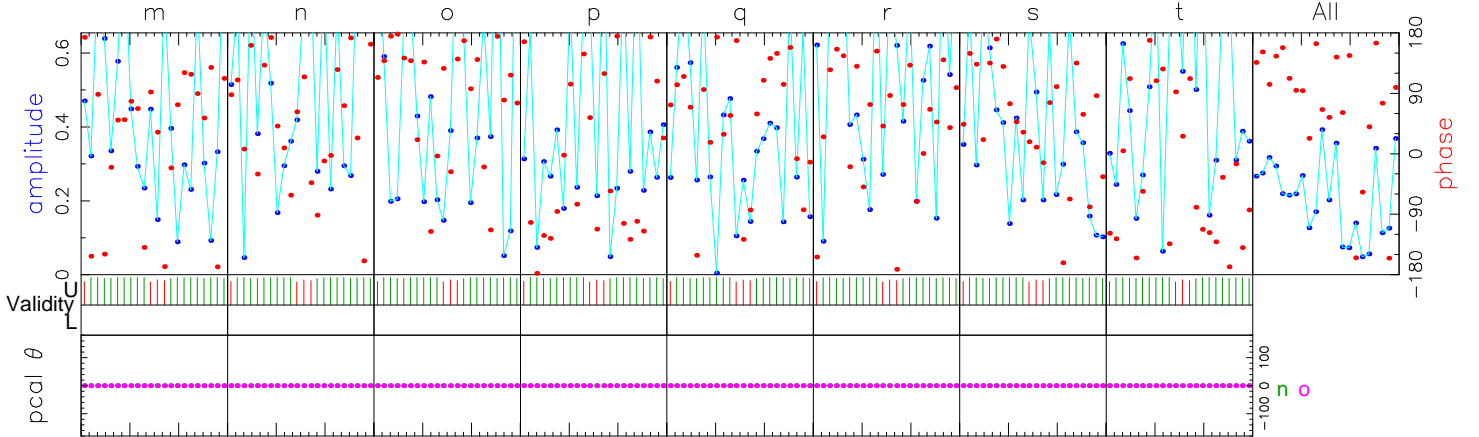


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.3	108.0	135.3	-152.9	100.1	118.4	77.1	-154.7	Phase	120.2
	0.3	0.2	0.4	0.2	0.3	0.4	0.2	0.1	Ampl.	0.2
	450.5	272.0	194.7	91.8	94.6	195.6	188.3	391.8	Sbd box	194.5
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

ph/seg (deg)	62.6	Theor.	47.5	Amplitude	0.218 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	75.5	Search (1024X32)	0.152	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	54.5	Inc. seg. avg.	0.218	Inc. frq. avg.	0.232	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.8	Inc. frq. avg.	0.232	u,v (fr/asec)	3075.309 510.301	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

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

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/./no..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/./no.W.233.3MP2MB

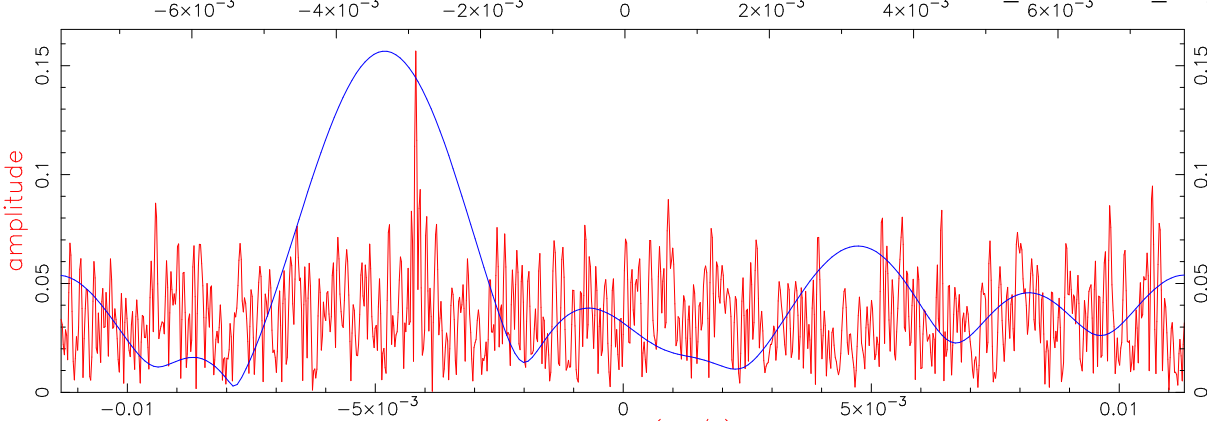
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

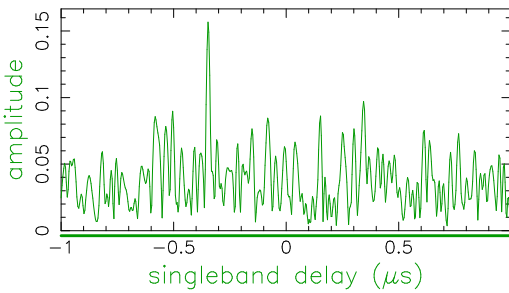
VLBA\_NL - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

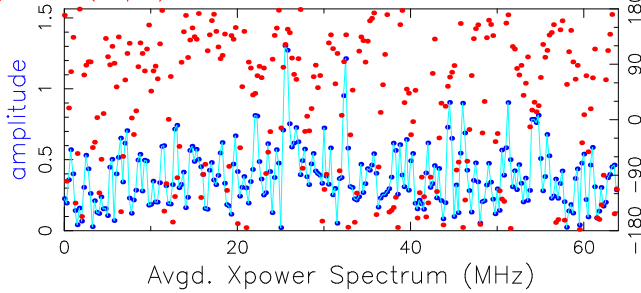


Fringe quality 0

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

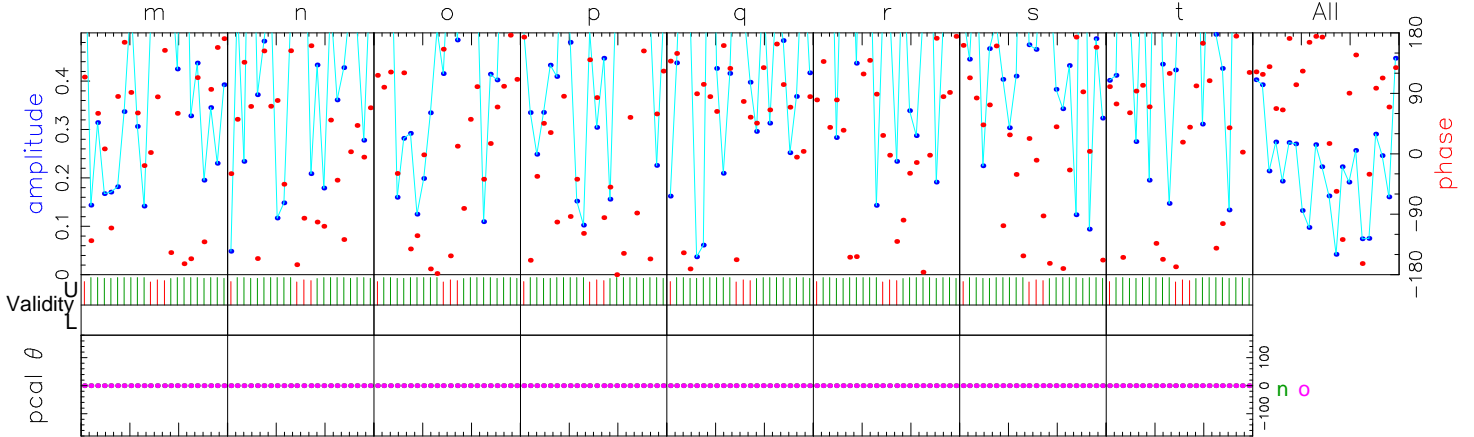


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:175959  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	133.9	89.0	118.1	170.1	110.3	103.4	131.1	131.7	Phase	122.7
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	42.8	293.0	301.0	283.3	92.8	468.7	264.5	29.9	Sbd box	168.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.07319591021E+03	Apriori delay (usec)	2.07354298900E+03	Resid mbdelay (usec)	-3.32879E-03	+/-	1.9E-04
Sband delay (usec)	2.07319626225E+03	Apriori clock (usec)	-2.5340572E+01	Resid sbdelay (usec)	-3.46727E-01	+/-	1.5E-03
Phase delay (usec)	2.07354299295E+03	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	3.95585E-06	+/-	6.5E-07
Delay rate (us/s)	-5.37633629312E-01	Apriori rate (us/s)	-5.37629445332E-01	Resid rate (us/s)	-4.18398E-06	+/-	6.3E-09
Total phase (deg)	148.7	Apriori accel (us/s/s)	-1.09305270916E-05	Resid phase (deg)	122.7	+/-	20.1

ph/seg (deg)	68.6	Theor.	46.9	Amplitude	0.167 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.6	Search (1024X32)	0.155	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	26.5	Inc. seg. avg.	0.176	Inc. frq. avg.	0.157	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.4	Inc. frq. avg.	0.157			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

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

Control file: cf\_1234\_gmva    Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB    Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.239.3MP2MB

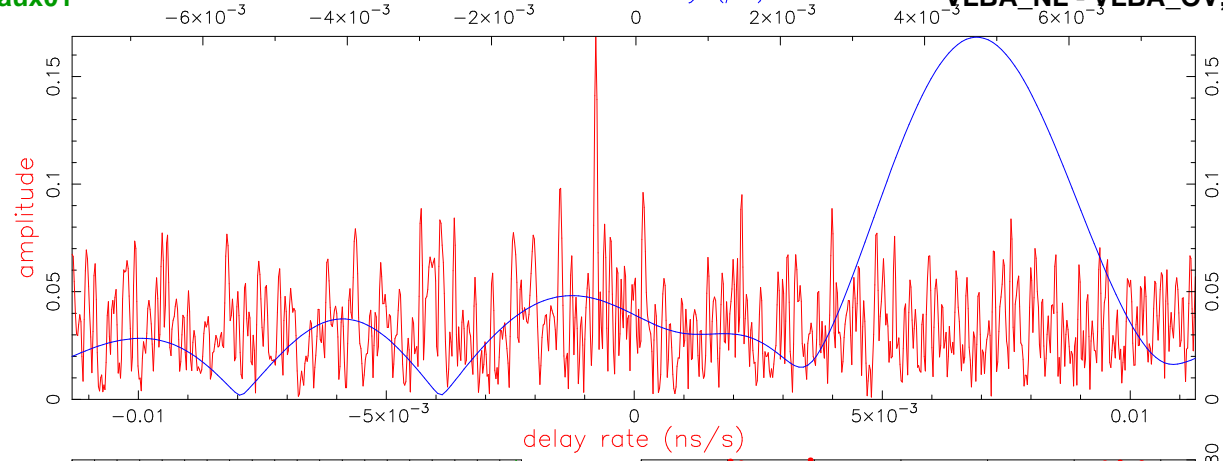
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, no

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

multiband delay ( $\mu$ s)



Fringe quality 0

SNR 6.1

Int time 174.763

Amp 0.169

Phase 99.3

PFD 1.4e-01

Delays (us)

SBD 0.972528

MBD 0.004717

Fringe rate (Hz)

-0.067769

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c241b

Exper # 1234

Yr:day 2024:111

Start 040000.00

Stop 040300.22

FRT 040130.00

Corr/FF/build

2024:361:053129

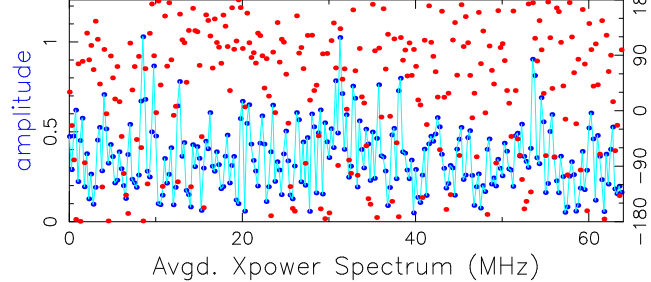
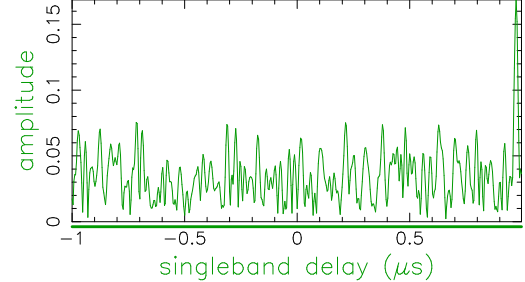
2025:041:180001

2024:113:095956

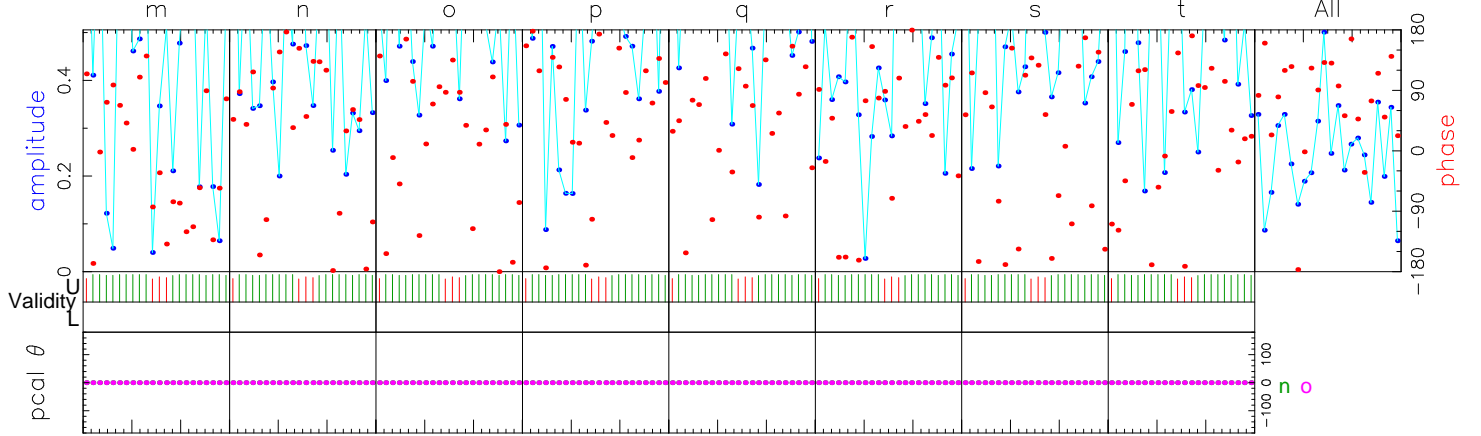
RA & Dec (J2000)

12h29m06.699742s

+02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	74.8	117.2	89.7	102.4	83.1	101.5	140.2	69.7	Phase	99.3
	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	Ampl.	0.2
	161.2	389.4	19.2	506.3	505.2	503.8	212.5	373.7	Sbd box	506.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

ph/seg (deg)	56.5	Theor.	43.9	Amplitude	0.169 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.2	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)	25.3	Inc. seg. avg.	0.191	Inc. frq. avg.	0.162	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.0	Inc. frq. avg.	0.162			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

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

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0707/./no..3MP2MB      Output file: /Exps/c241b/v2/3mm/1234/No0707/./no.W.249.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

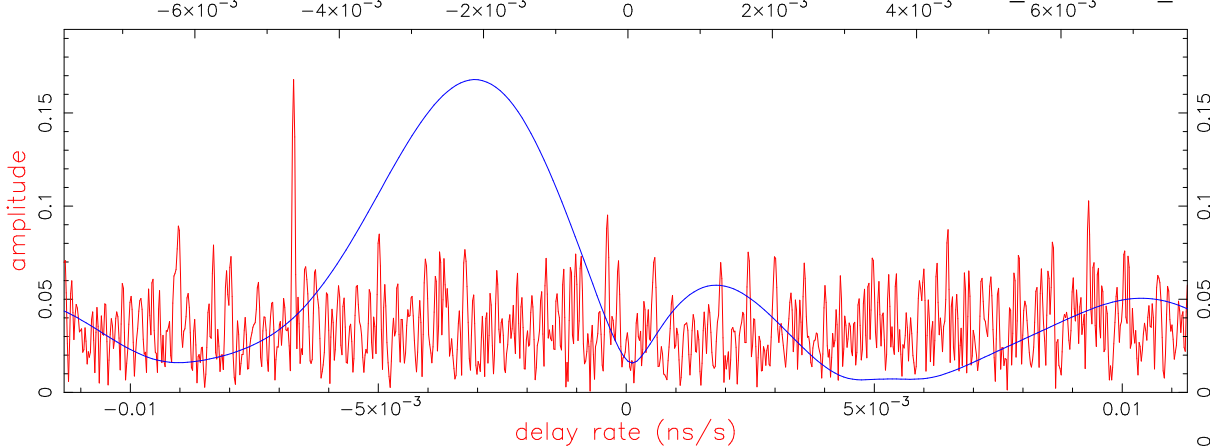
aux01

3C273.3MP2MB, No0707, no

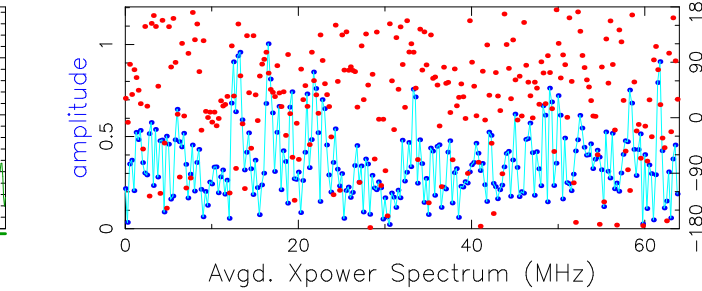
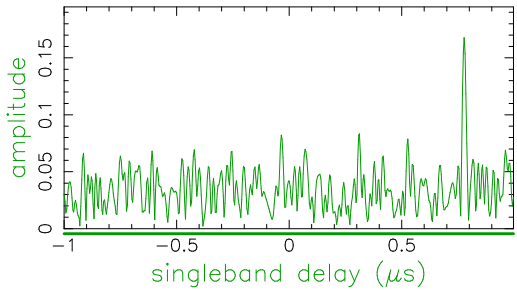
VLBA\_NL - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

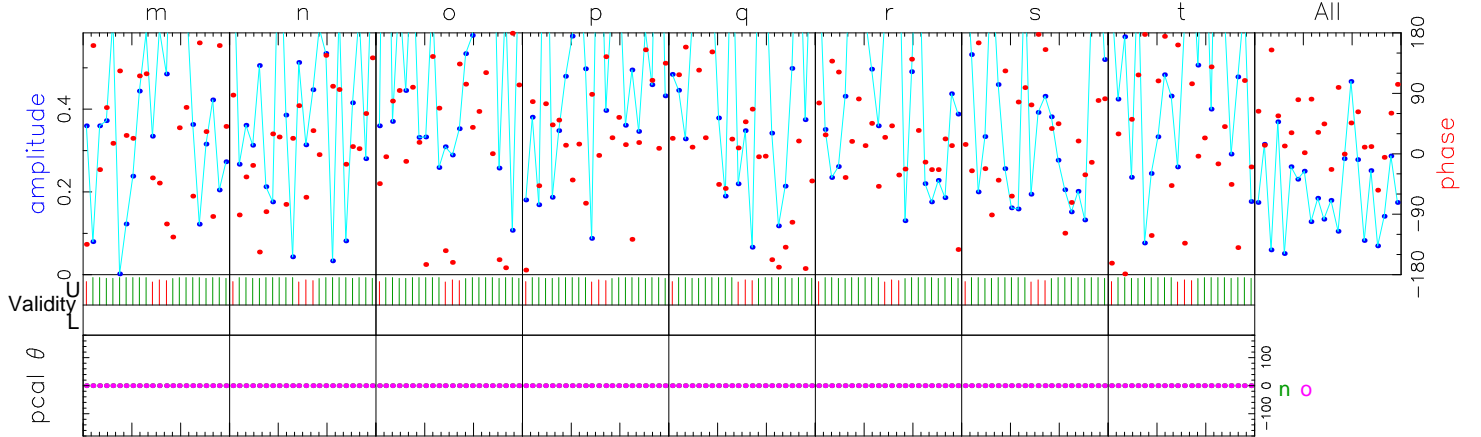


SNR 6.1  
 Int time 174.763  
 Amp 0.195  
 Phase 38.4  
 PFD 1.5e-01  
 Delays (us)  
 SBD 0.777227  
 MBD -0.002128  
 Fringe rate (Hz)  
 -0.578685  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 040000.00  
 Stop 040300.22  
 FRT 040130.00  
 Corr/FF/build  
 2024:361:053129  
 2025:041:180003  
 2024:113:095956  
 RA & Dec (J2000)  
 12h29m06.699742s  
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		456.0
n	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
n:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

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

ph/seg (deg) 46.4 44.0 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.3 76.8 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 26.7 Inc. seg. avg. 0.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.8 46.6 Inc. frq. avg. 0.190 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

n: az 164.0 el 49.1 pa -11.6 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 3075.309 510.301 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//no..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//no.W.260.3MP2MB

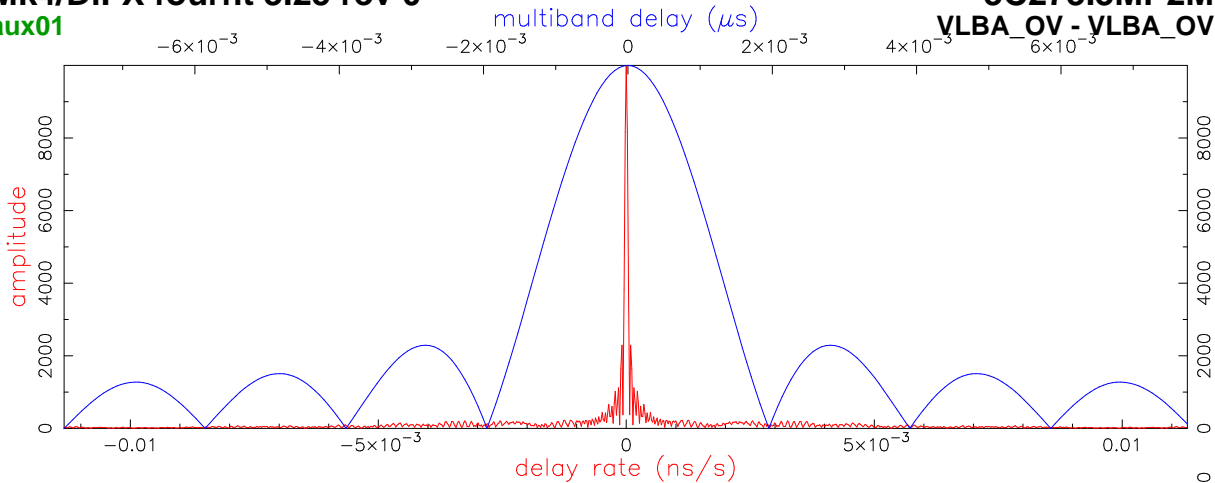


Mk4/DiFX fourfit 3.25 rev 0

aux01

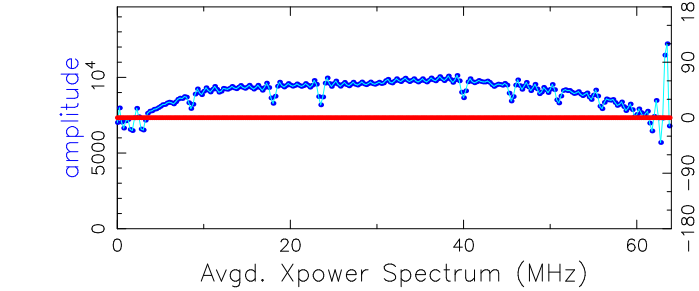
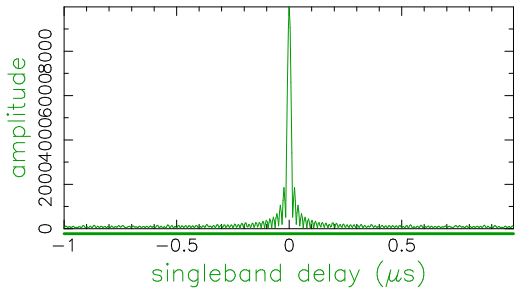
3C273.3MP2MB, No0707, oo

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



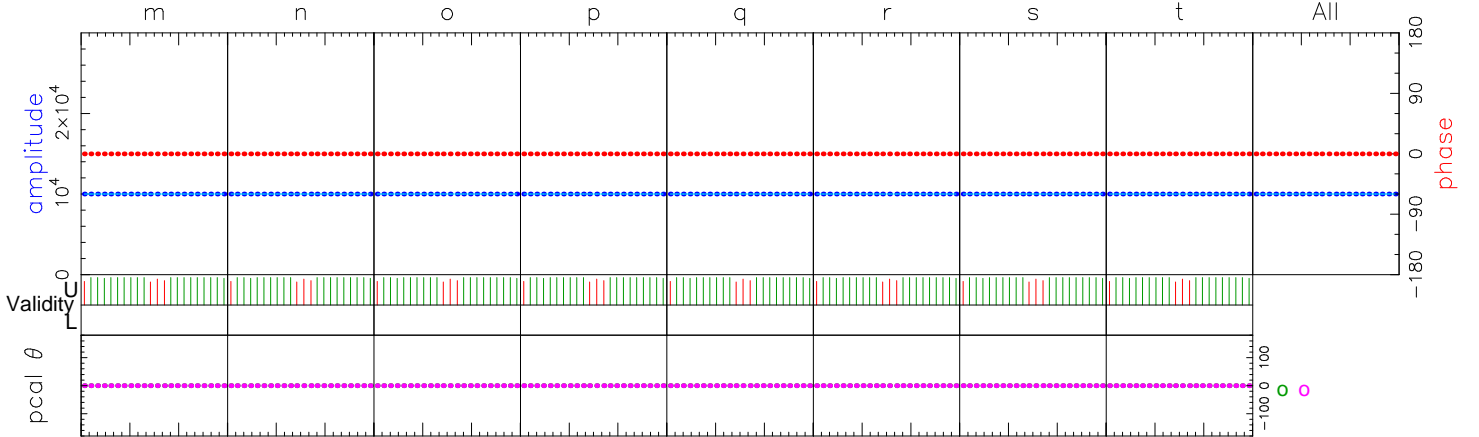
Fringe quality 9

SNR 362670.0  
 Int time 175.885  
 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  
 Yr:day 1234  
 Start 2024:111  
 Stop 2024:361:053129  
 FRT 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	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	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 +/- 2.4E-08  
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.9E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

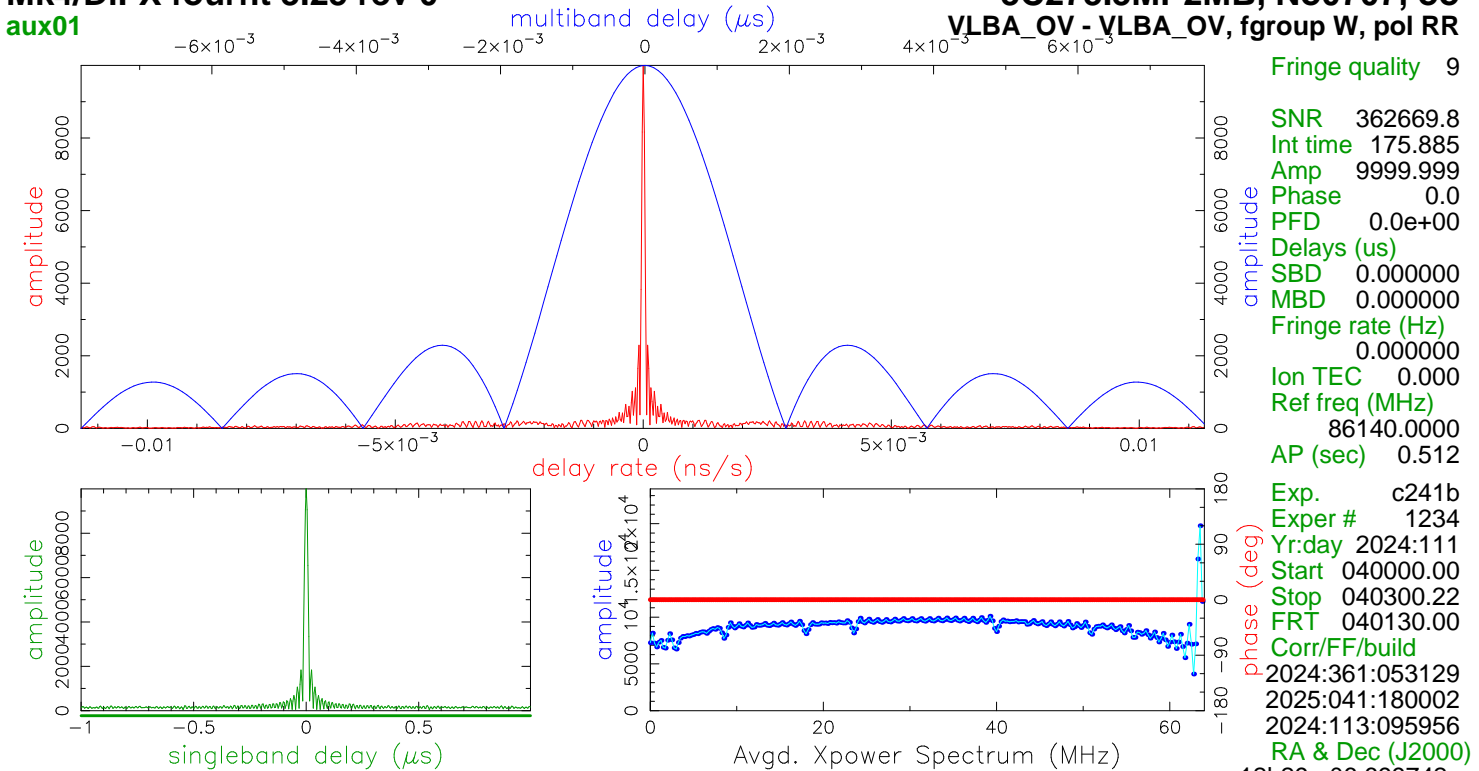
ph/seg (deg) 0.0 RMS 0.0 Theor. 0.0 Amplitude 9999.998 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 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 u, v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/oo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/oo.W.242.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

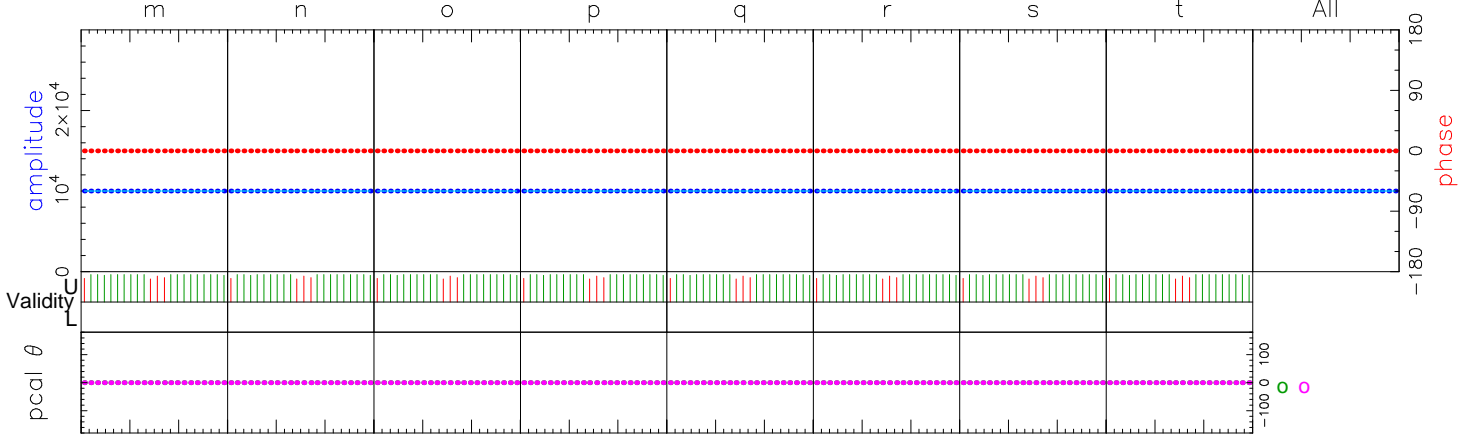
aux01

3C273.3MP2MB, No0707, oo

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



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	10000.0	10000.0
o	0	0	0	0	0	0	0	0	Ampl.	257.0
o	0	0	0	0	0	0	0	0	Sbd box	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.4E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.9E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 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

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011

o: az 127.0 el 40.9 pa -39.4 u, v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

o: az 127.0 el 40.9 pa -39.4 simultaneous interpolator

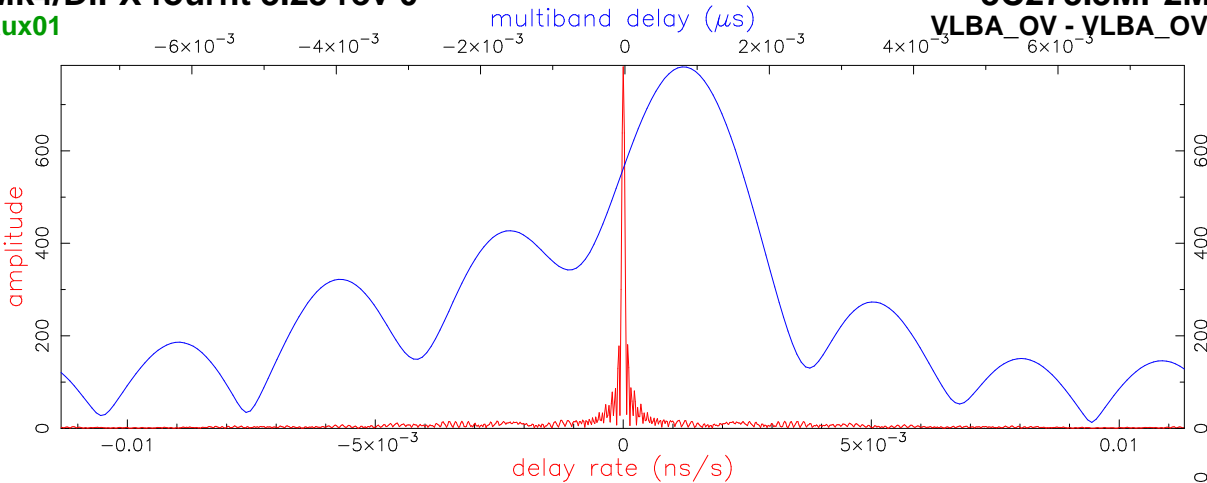
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/oo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/oo.W.252.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

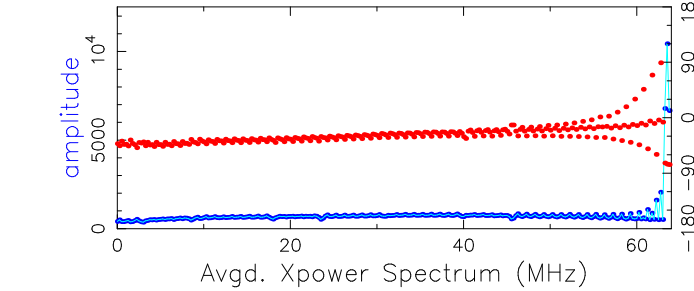
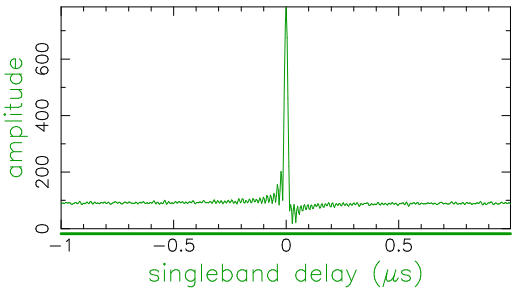
aux01

3C273.3MP2MB, No0707, oo

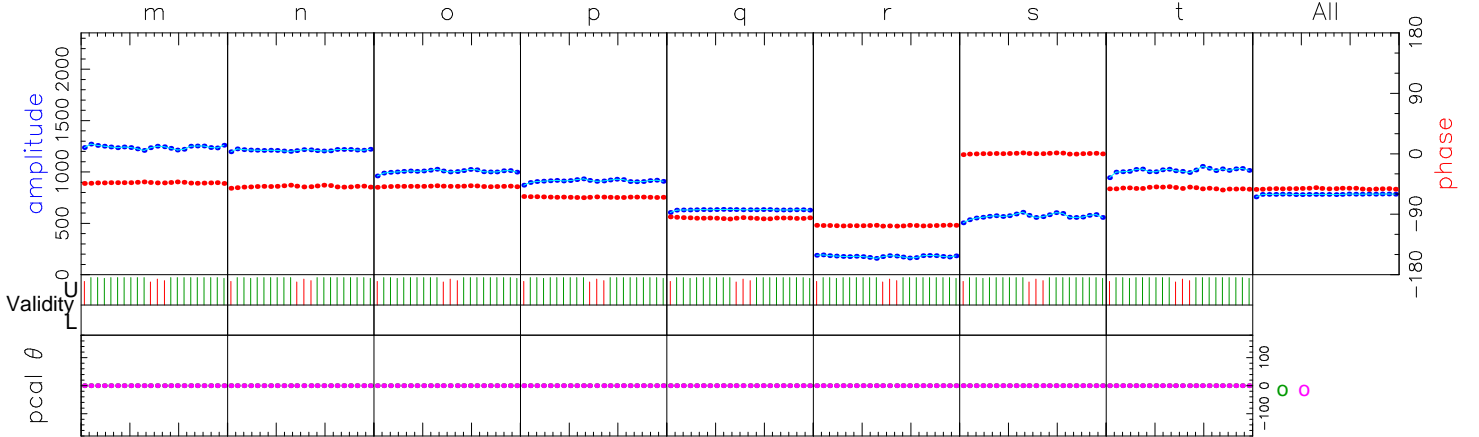
VLBA\_OV - VLBA\_OV, fgroup W, pol LR



Fringe quality 5  
 Error code G  
 SNR 28457.9  
 Int time 175.885  
 Amp 784.678  
 Phase -51.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000754  
 MBD 0.000820  
 Fringe rate (Hz)  
 0.000010  
 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  
 2025:041:180004  
 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
	-43.1	-48.7	-48.4	-64.6	-95.7	-106.9	0.3	-51.3	Phase	-51.9
	1240.7	1211.9	1005.8	913.4	631.4	178.9	569.6	1014.7	Ampl.	845.8
	257.1	256.9	257.2	257.1	257.0	258.2	257.1	255.7	Sbd box	256.8
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	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 8.20187500000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 8.20188E-04 +/- 3.8E-08  
 Sband delay (usec) -7.54500000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -7.54500E-04 +/- 3.0E-07  
 Phase delay (usec) -1.67507773737E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.67508E-06 +/- 1.3E-10  
 Delay rate (us/s) 1.10534988655E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.10535E-10 +/- 1.3E-12  
 Total phase (deg) -51.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -51.9 +/- 0.0

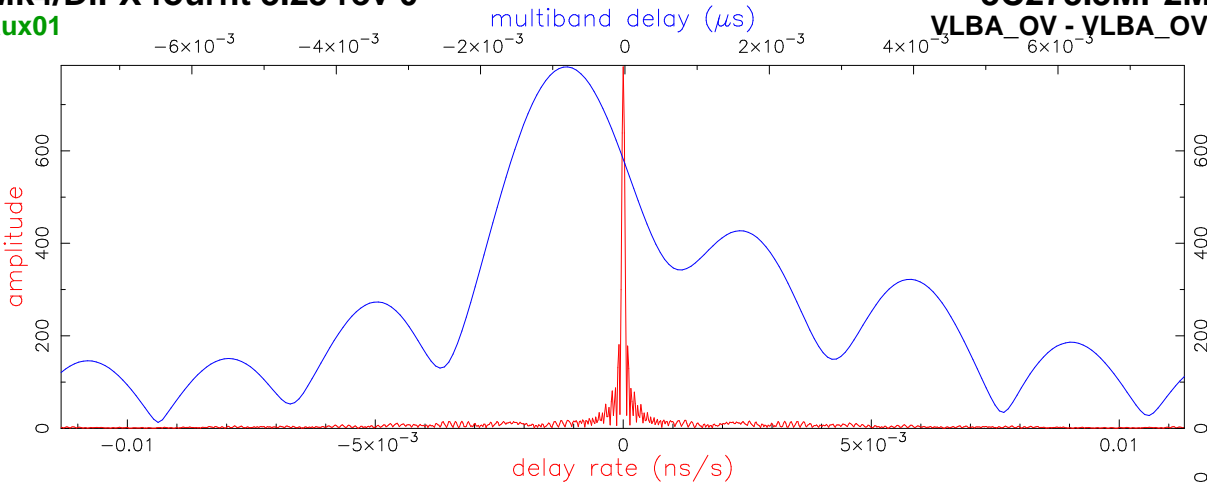
RMS Theor. Amplitude 784.678 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.6 0.0 Search (1024X32) 771.767 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 36.3 0.0 Inc. seg. avg. 781.709 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 43.8 0.0 Inc. frq. avg. 845.787 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 o: az 127.0 el 40.9 pa -39.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/oo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/oo.W.262.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

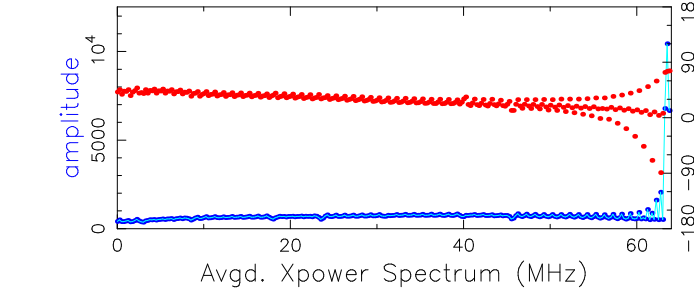
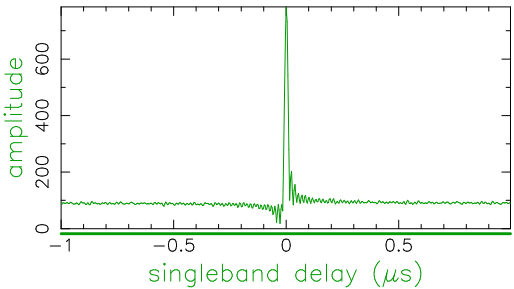
aux01

3C273.3MP2MB, No0707, oo

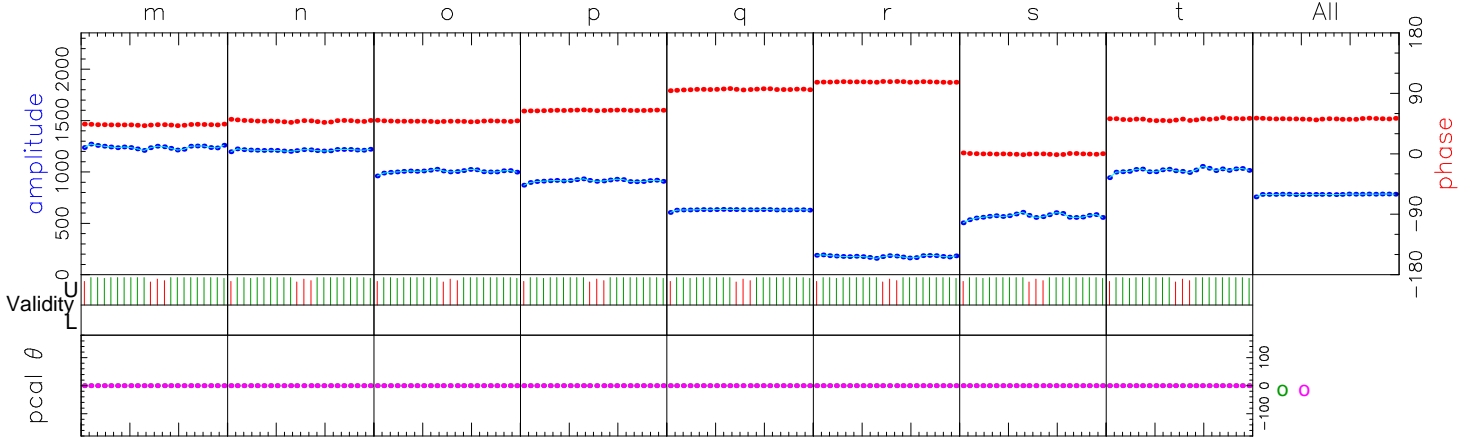
VLBA\_OV - VLBA\_OV, fgroup W, pol RL



Fringe quality 5  
 Error code G  
 SNR 28457.9  
 Int time 175.885  
 Amp 784.678  
 Phase 51.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000754  
 MBD -0.000820  
 Fringe rate (Hz)  
 -0.000010  
 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
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		
o:0	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -8.20187500000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -8.20188E-04 +/- 3.8E-08  
 Sband delay (usec) 7.54500000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 7.54500E-04 +/- 3.0E-07  
 Phase delay (usec) 1.67507773738E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.67508E-06 +/- 1.3E-10  
 Delay rate (us/s) -1.10534988655E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -1.10535E-10 +/- 1.3E-12  
 Total phase (deg) 51.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 51.9 +/- 0.0

ph/seg (deg) 0.6 0.0 RMS Theor. Amplitude 784.678 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.8 0.0 Search (1024X32) 771.767 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 36.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.8 0.0 Inc. seg. avg. 781.709 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 u, v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/oo..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/oo.W.269.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

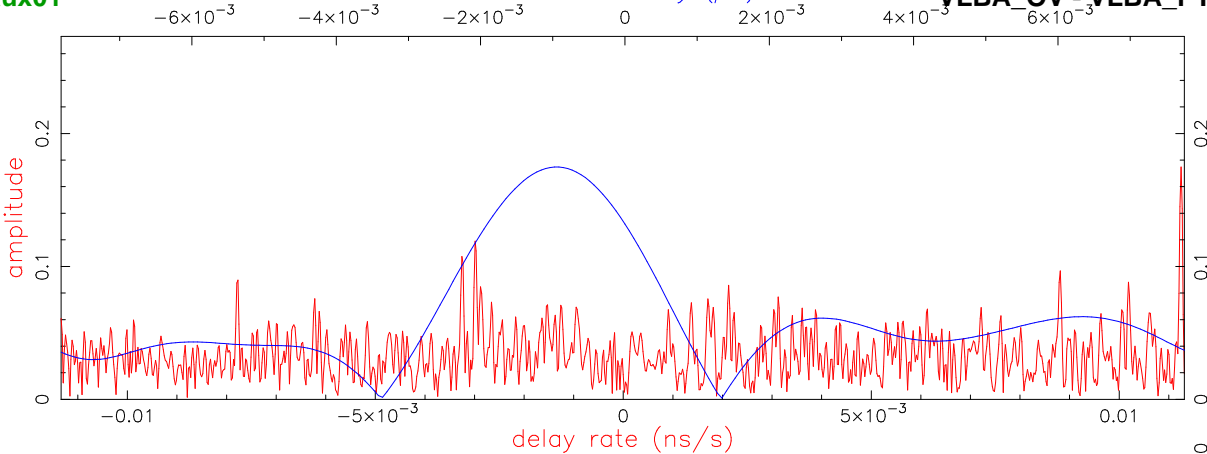
aux01

3C273.3MP2MB, No0707, op

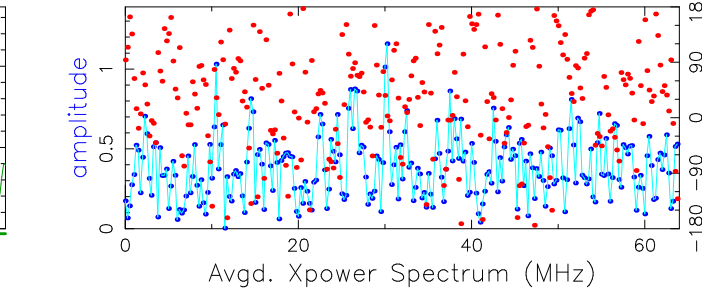
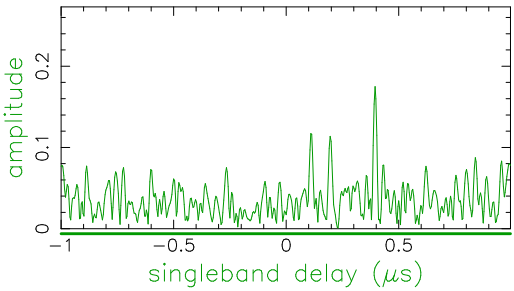
VLBA\_OV - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

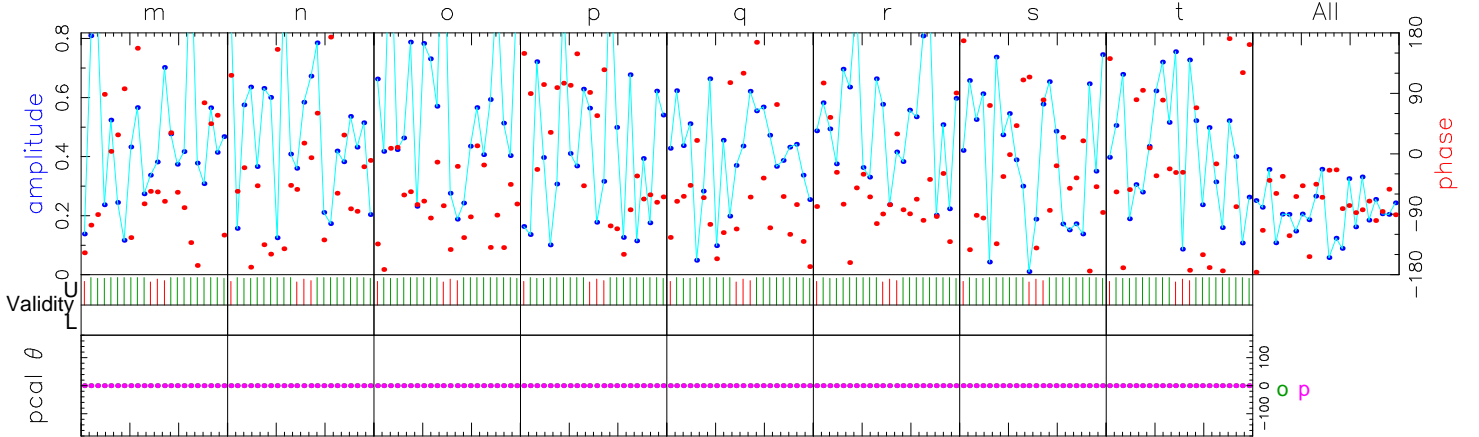


SNR 6.3  
 Int time 175.663  
 Amp 0.273  
 Phase -76.6  
 PFD 3.1e-02  
 Delays (us)  
 SBD 0.394868  
 MBD -0.000922  
 Fringe rate (Hz)  
 0.970443  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



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

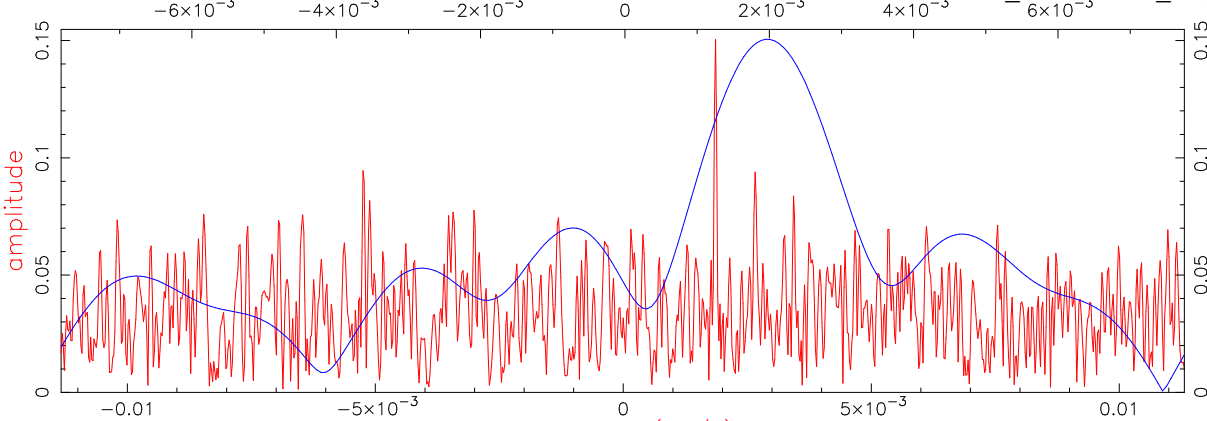
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

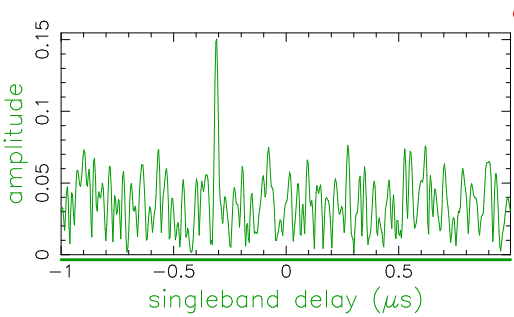
VLBA\_OV - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

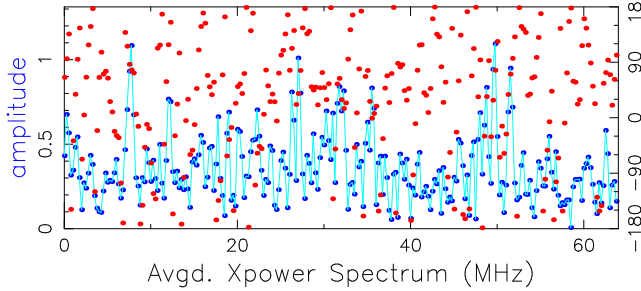


Fringe quality 0

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

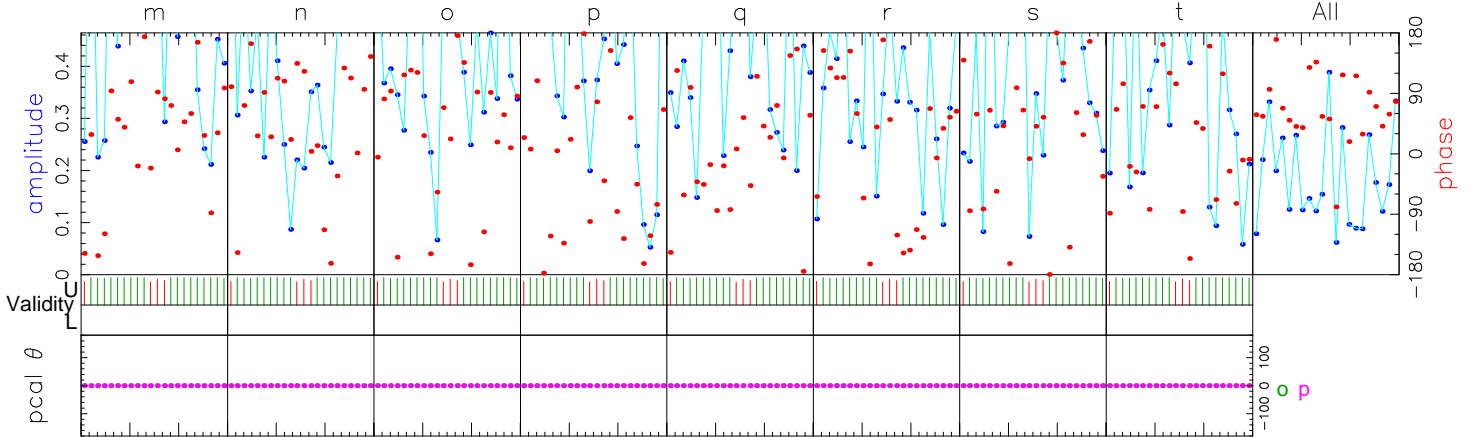


delay rate (ns/s)



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
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

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

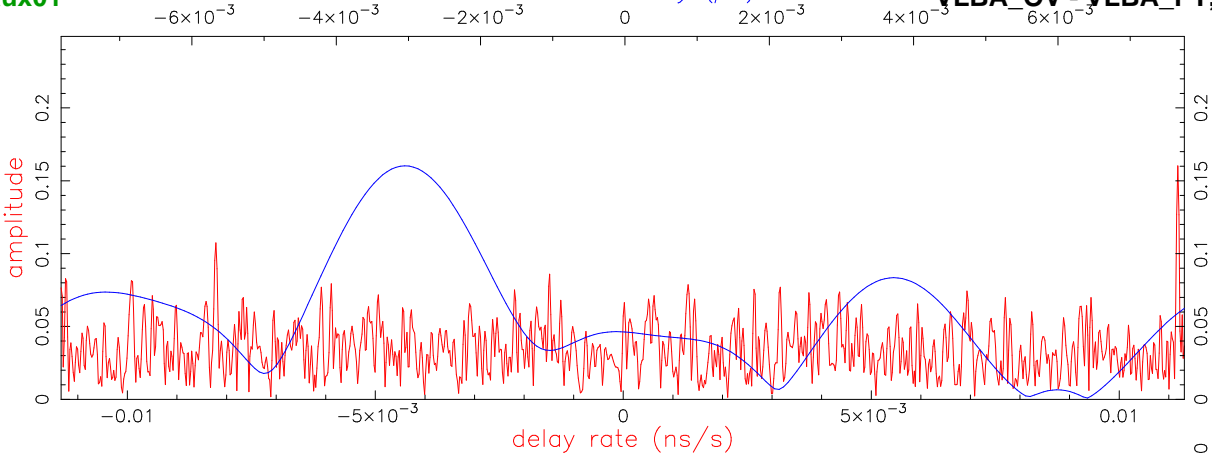
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

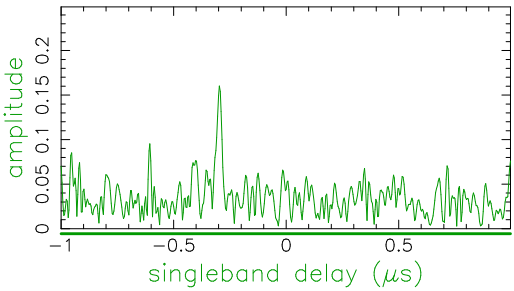
VLBA\_OV - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

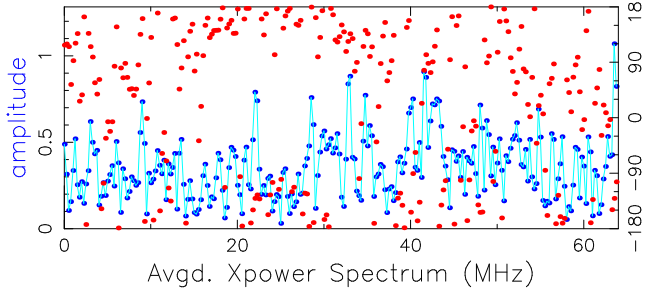


Fringe quality 0

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

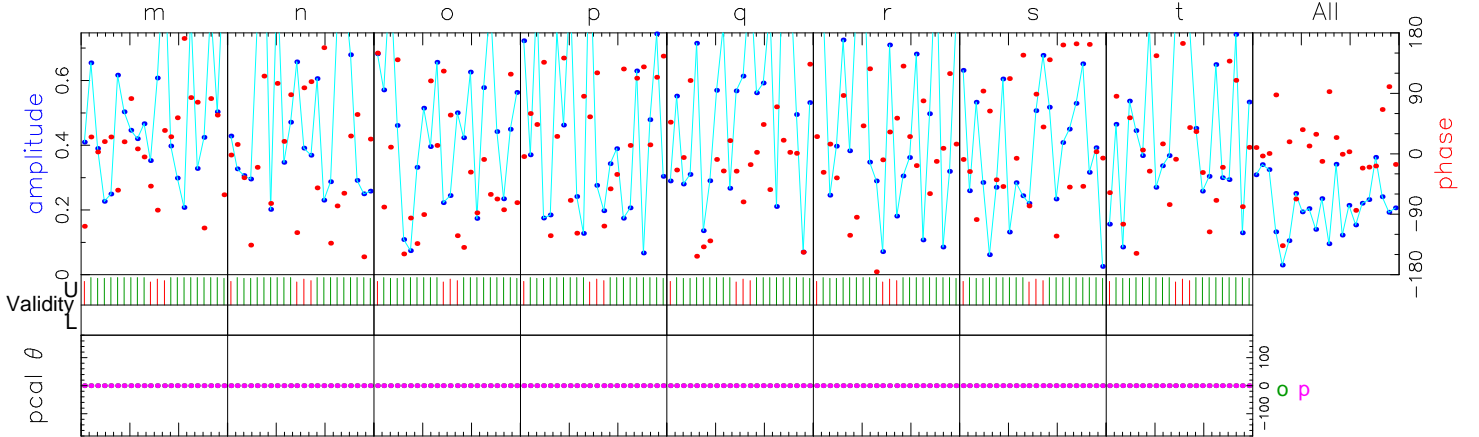


delay rate (ns/s)



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	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

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

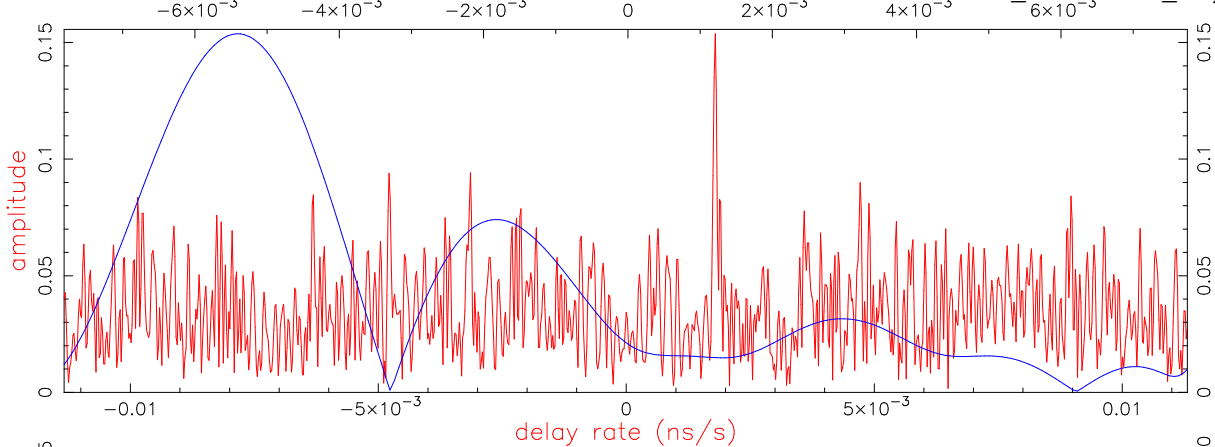
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, op

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

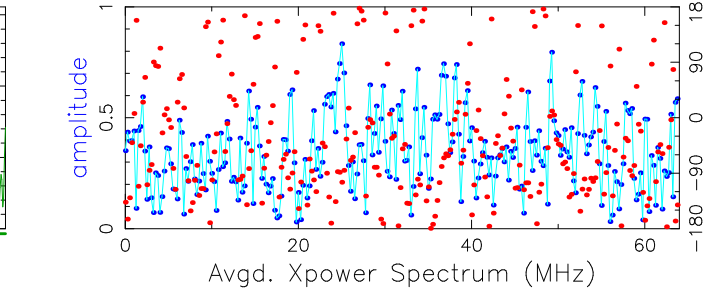
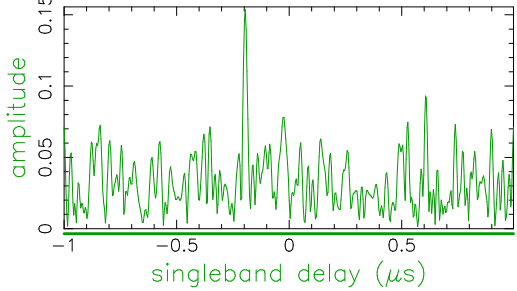
multiband delay ( $\mu$ s)



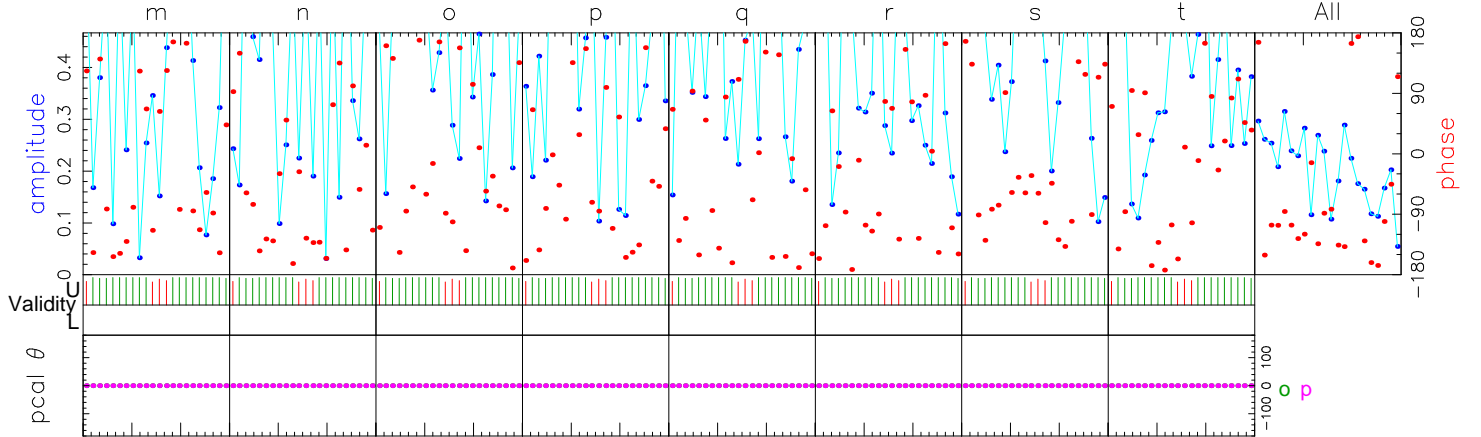
Fringe quality 0

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	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	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