

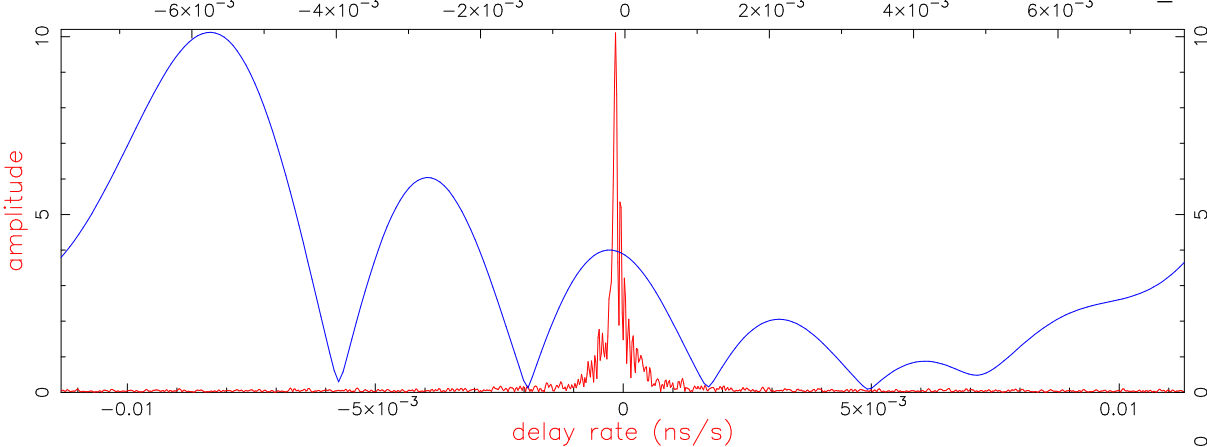
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ak

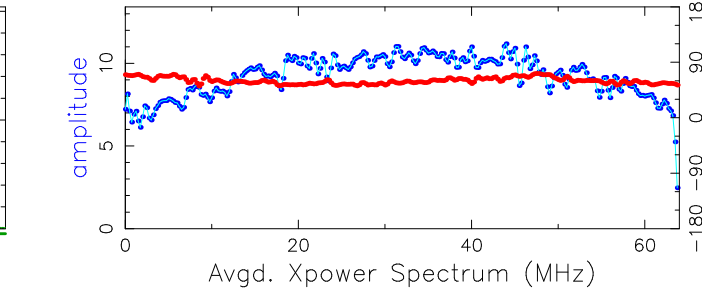
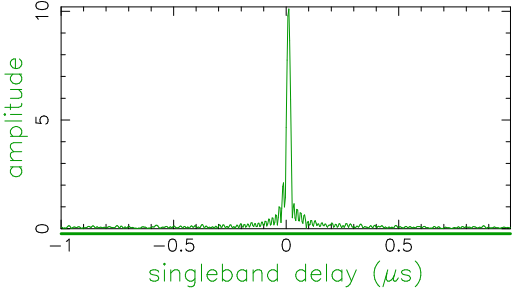
ALMA - VLBA_KP, fgroup W, pol XL

multiband delay (μ s)



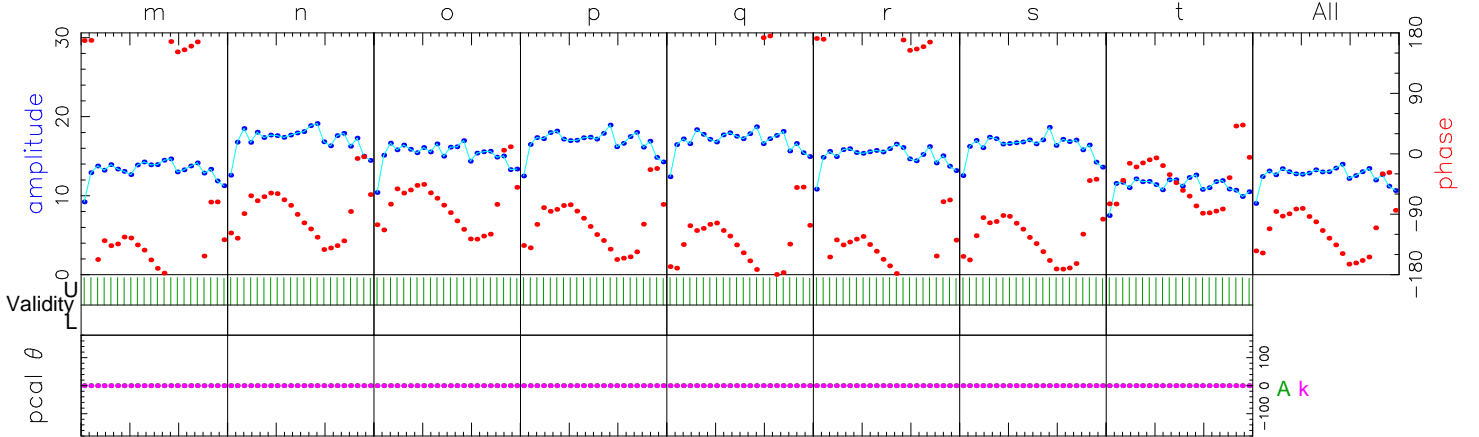
Fringe quality 3

SNR 374.3
 Int time 179.983
 Amp 10.204
 Phase -112.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.010438
 MBD -0.005822
 Fringe rate (Hz)
 -0.012811
 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
 2025:041:175905
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-156.4	-89.4	-76.9	-106.4	-135.2	-155.0	-123.2	-39.9	Phase	-112.9
	10.6	13.7	12.3	13.6	13.5	12.1	13.2	9.0	Ampl.	12.3
	261.5	259.7	259.0	259.4	259.6	259.4	260.0	261.8	Sbd box	259.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
A:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

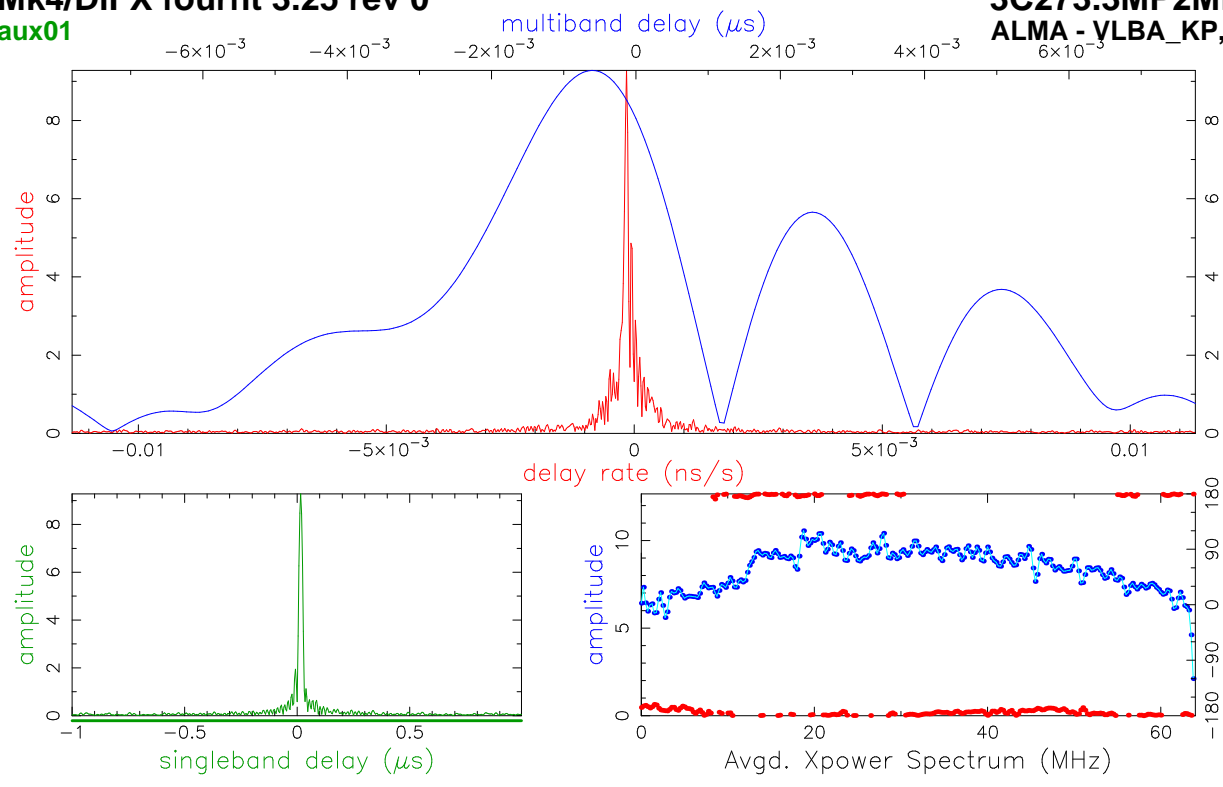
Group delay (usec) (SBD)	6.43941868758E+02	Apriori delay (usec)	6.43932065699E+02	Resid mbdelay (usec)	-5.82194E-03	+/-	2.9E-06
Sband delay (usec)	6.43942503449E+02	Apriori clock (usec)	-2.1075630E+03	Resid sbdelay (usec)	1.04378E-02	+/-	2.3E-05
Phase delay (usec)	6.43932062057E+02	Apriori clockrate (us/s)	-1.6303799E-07	Resid phdelay (usec)	-3.64139E-06	+/-	9.9E-09
Delay rate (us/s)	-1.00041910570E+00	Apriori rate (us/s)	-1.00041895698E+00	Resid rate (us/s)	-1.48728E-07	+/-	9.5E-11
Total phase (deg)	-62.8	Apriori accel (us/s/s)	-1.80950600117E-05	Resid phase (deg)	-112.9	+/-	0.3

ph/seg (deg)	38.2	Theor.	Amplitude	10.204 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	25.5	0.7	Search (1024X32)	9.931	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.8	1.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.3	0.8	Inc. seg. avg.	12.575	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	12.260	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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 5721.328 -8180.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ak..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ak.W.10.3MP2MB

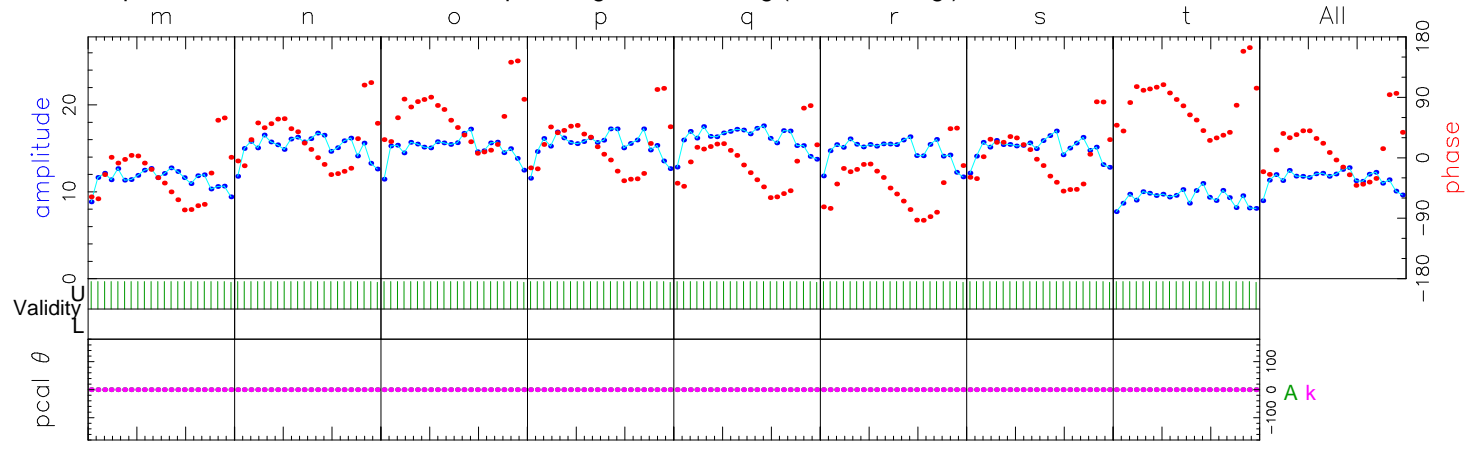
Mk4/DiFX fourfit 3.25 rev 0
aux01

3C273.3MP2MB, No0707, Ak
ALMA - VLBA_KP, fgroup W, pol YR



Fringe quality 3
SNR 340.5
Int time 179.983
Amp 9.281
Phase 9.5
PFD 0.0e+00
Delays (us)
SBD 0.015571
MBD -0.000609
Fringe rate (Hz)
-0.012781
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
2025:041:175906
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



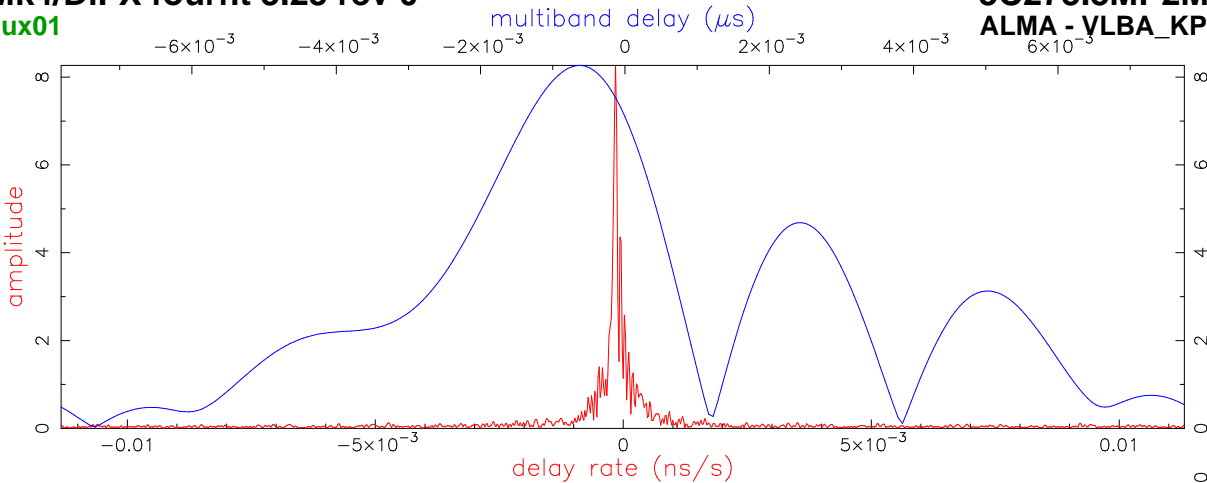
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-27.3	25.0	58.0	17.2	-8.9	-41.6	0.1	77.4	Phase	9.5	
	9.3	12.2	12.1	12.4	13.1	11.9	12.2	7.5	Ampl.	11.3	
	262.6	260.7	260.6	260.7	261.0	260.6	261.3	263.0	Sbd box	261.0	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
A	0	0	0	0	0	0	0	0	PC freqs		
k	0	0	0	0	0	0	0	0	PC freqs		
A:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
A:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000			
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	6.43947082070E+02		Apriori delay (usec)		6.43932065699E+02		Resid mbdelay (usec)		-6.08629E-04	+/- 3.2E-06	
Sband delay (usec)	6.43947636699E+02		Apriori clock (usec)		-2.1075630E+03		Resid sbdelay (usec)		1.55710E-02	+/- 2.5E-05	
Phase delay (usec)	6.43932066006E+02		Apriori clockrate (us/s)		-1.6303799E-07		Resid phdelay (usec)		3.06818E-07	+/- 1.1E-08	
Delay rate (us/s)	-1.00041910535E+00		Apriori rate (us/s)		-1.00041895698E+00		Resid rate (us/s)		-1.48375E-07	+/- 1.0E-10	
Total phase (deg)	59.7		Apriori accel (us/s/s)		-1.80950600117E-05		Resid phase (deg)		9.5	+/- 0.3	
RMS	Theor.	Amplitude	9.281 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	38.3	0.8	Search (1024X32)	9.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	26.2	1.4	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	44.1	0.5	Inc. seg. avg.	11.532	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	29.3	0.8	Inc. frq. avg.	11.333	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		k: az 130.2 el 48.5 pa -40.3		u,v (fr/asec) 5721.328 -8180.000		simultaneous interpolator					
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//Ak..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//Ak.W.13.3MP2MB							

Mk4/DiFX fourfit 3.25 rev 0

aux01

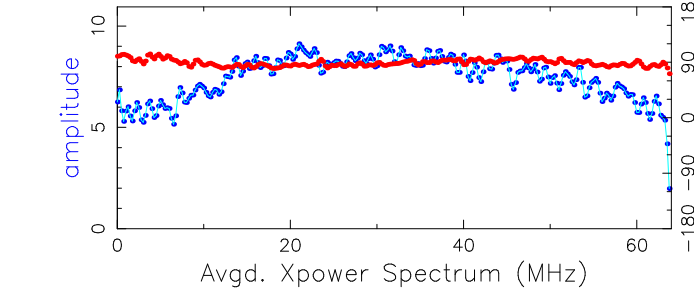
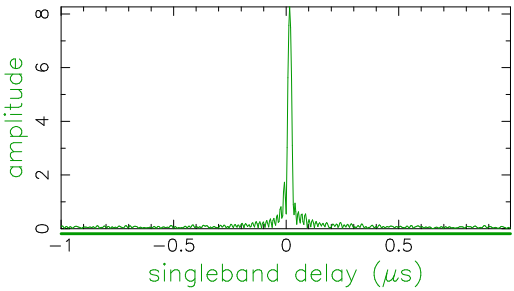
3C273.3MP2MB, No0707, Ak

ALMA - VLBA_KP, fgroup W, pol XR



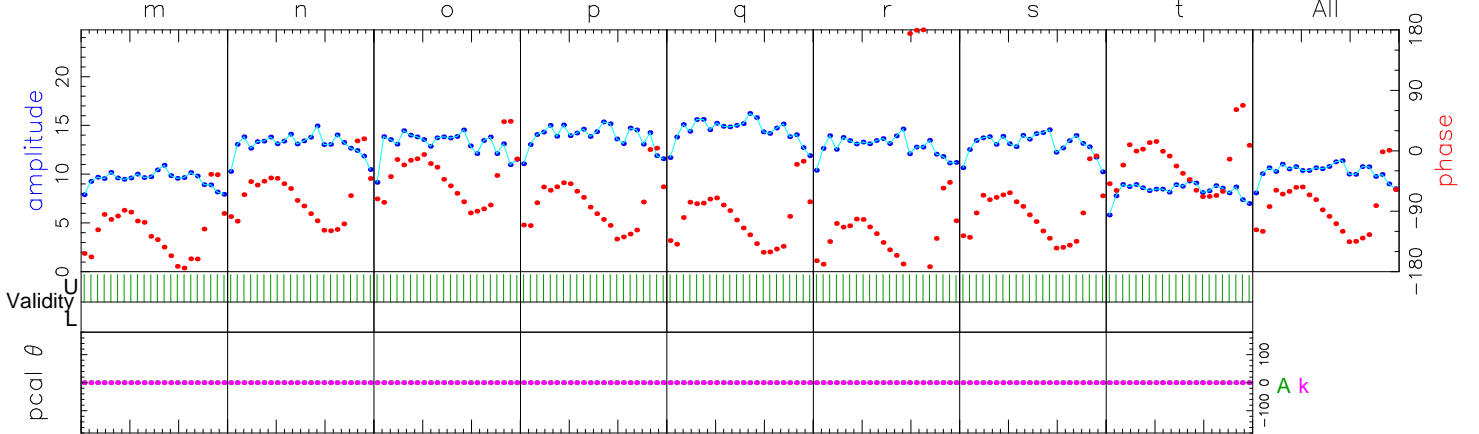
Fringe quality 3

SNR 303.3
 Int time 179.983
 Amp 8.268
 Phase -85.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.015487
 MBD -0.000638
 Fringe rate (Hz)
 -0.012744
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.7	-70.1	-39.8	-79.2	-101.8	-134.1	-94.5	-19.8	Phase	-85.2
	7.7	10.5	10.5	11.3	11.7	10.4	10.5	6.7	Ampl.	9.9
	262.7	260.7	260.6	260.7	261.0	260.6	261.3	262.9	Sbd box	261.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
A:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.43947052570E+02	Apriori delay (usec)	6.43932065699E+02	Resid mbdelay (usec)	-6.38129E-04	+/-	3.6E-06
Sband delay (usec)	6.43947553199E+02	Apriori clock (usec)	-2.1075630E+03	Resid sbdelay (usec)	1.54875E-02	+/-	2.8E-05
Phase delay (usec)	6.43932062952E+02	Apriori clockrate (us/s)	-1.6303799E-07	Resid phdelay (usec)	-2.74727E-06	+/-	1.2E-08
Delay rate (us/s)	-1.00041910493E+00	Apriori rate (us/s)	-1.00041895698E+00	Resid rate (us/s)	-1.47950E-07	+/-	1.2E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.80950600117E-05	Resid phase (deg)	-85.2	+/-	0.4

ph/seg (deg)	RMS 38.2	Theor. 0.9	Amplitude 8.268 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	26.0	1.5	Search (1024X32) 8.080	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	42.2	0.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	28.2	0.9	Inc. seg. avg. 10.259	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
			Inc. frq. avg. 9.911	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite

A: az 330.6 el 61.8 pa 152.8 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 5721.328 -8180.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ak..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ak.W.23.3MP2MB

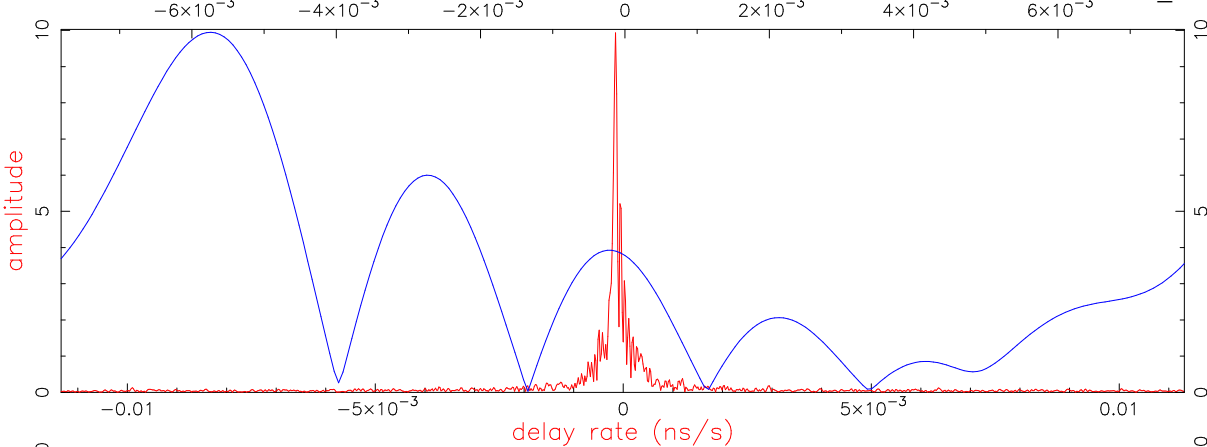
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Ak

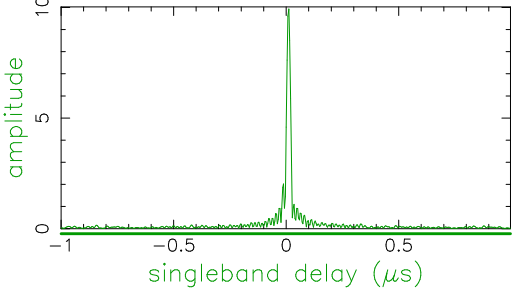
ALMA - VLBA_KP, fgroup W, pol YL

multiband delay (μ s)

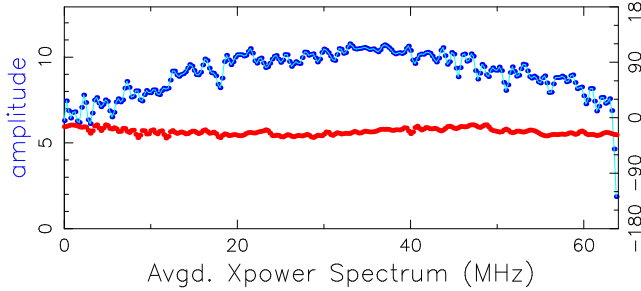


Fringe quality 3

SNR 367.8
 Int time 179.983
 Amp 10.027
 Phase 164.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.010456
 MBD -0.005814
 Fringe rate (Hz)
 -0.012829
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

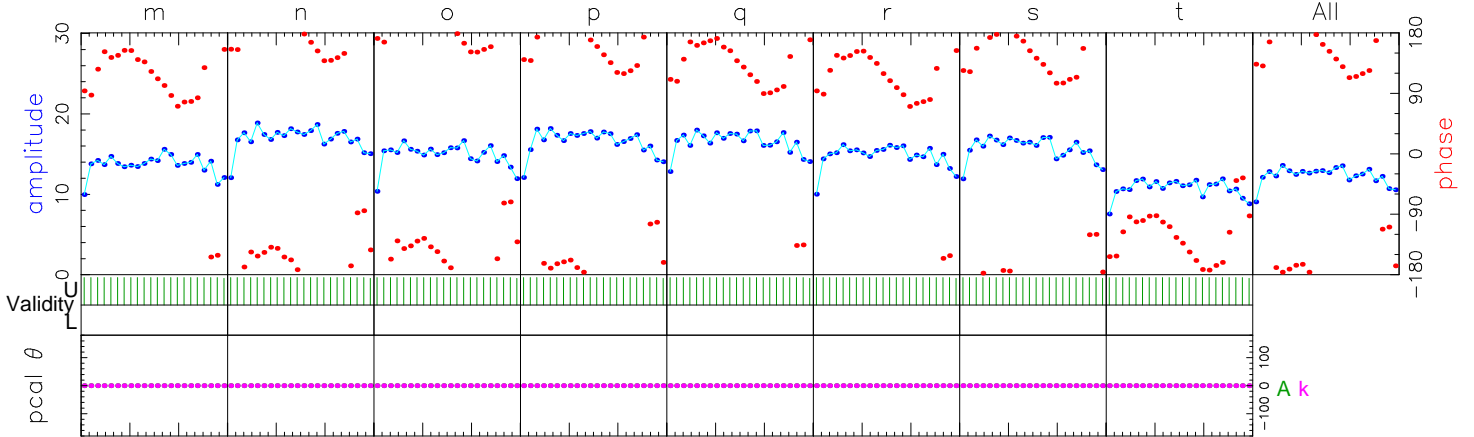


delay rate (ns/s)



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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
A	0	0	0	0	0	0	0	0		
k	0	0	0	0	0	0	0	0		
A:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	6.43941876914E+02	Apriori delay (usec)	6.43932065699E+02	Resid mbdelay (usec)	-5.81378E-03	+/-	3.0E-06
Sband delay (usec)	6.43942521949E+02	Apriori clock (usec)	-2.1075630E+03	Resid sbdelay (usec)	1.04563E-02	+/-	2.3E-05
Phase delay (usec)	6.43932071008E+02	Apriori clockrate (us/s)	-1.6303799E-07	Resid phdelay (usec)	5.30948E-06	+/-	1.0E-08
Delay rate (us/s)	-1.00041910590E+00	Apriori rate (us/s)	-1.00041895698E+00	Resid rate (us/s)	-1.48927E-07	+/-	9.7E-11
Total phase (deg)	214.8	Apriori accel (us/s/s)	-1.80950600117E-05	Resid phase (deg)	164.6	+/-	0.3

ph/seg (deg)	38.2	Theor.	Amplitude	10.027 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	25.2	0.7	Search (1024X32)	9.764	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	44.0	1.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.5	0.4	Inc. seg. avg.	12.325	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
		0.8	Inc. frq. avg.	12.070	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

A: az 330.6 el 61.8 pa 152.8 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 5721.328 -8180.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Ak..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Ak.W.34.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

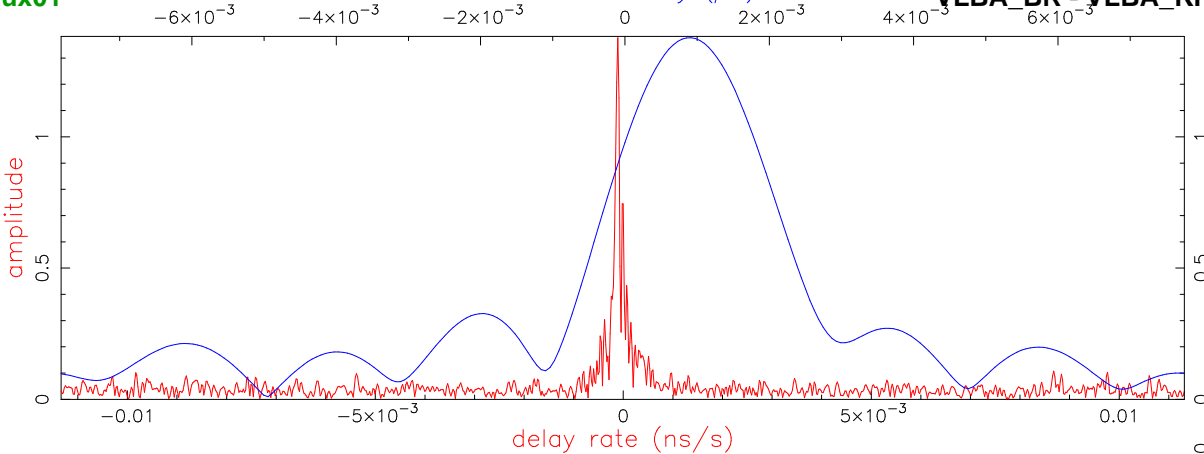
aux01

3C273.3MP2MB, No0707, bk

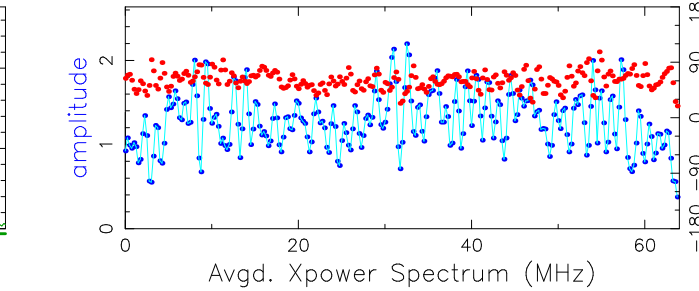
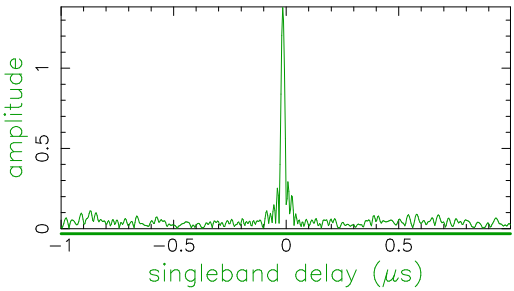
VLBA_BR - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

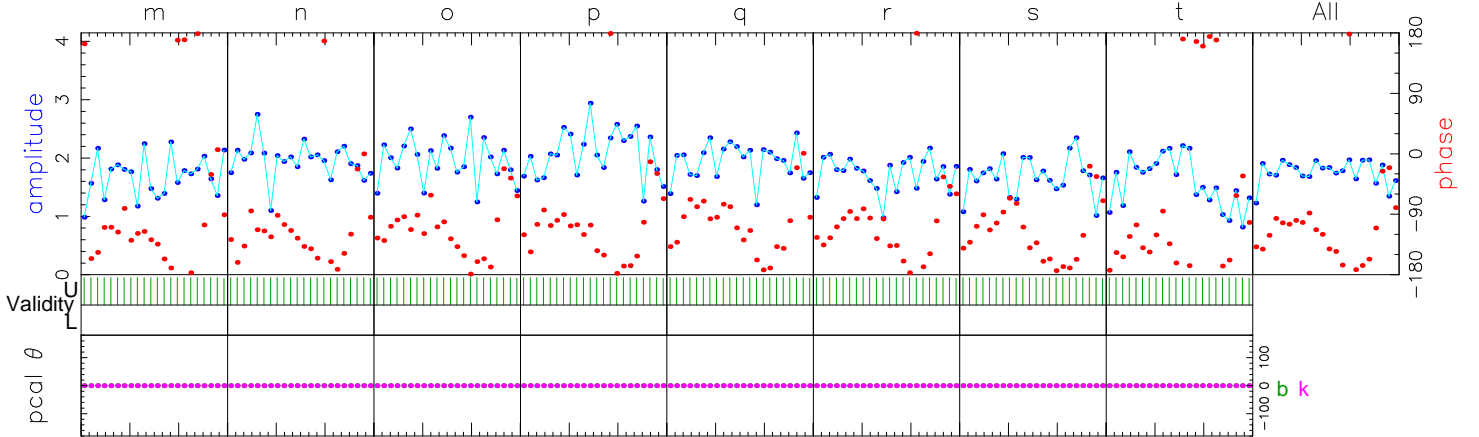


SNR 50.7
 Int time 179.965
 Amp 1.383
 Phase -121.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.014872
 MBD 0.000918
 Fringe rate (Hz)
 -0.009652
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175915
 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
	-133.2	-125.7	-113.4	-120.9	-104.1	-116.7	-120.0	-145.4	Phase	-121.7
	1.2	1.5	1.5	1.6	1.5	1.4	1.3	1.3	Ampl.	1.4
	253.5	253.4	253.0	253.0	253.5	252.9	253.3	252.4	Sbd box	253.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.29190517720E+03	Apriori delay (usec)	-4.29189047036E+03	Resid mbdelay (usec)	9.18158E-04	+/-	2.1E-05
Sband delay (usec)	-4.29190534211E+03	Apriori clock (usec)	4.4728985E+00	Resid sbdelay (usec)	-1.48718E-02	+/-	1.7E-04
Phase delay (usec)	-4.29189047428E+03	Apriori clockrate (us/s)	4.2423487E-07	Resid phdelay (usec)	-3.92543E-06	+/-	7.3E-08
Delay rate (us/s)	-1.97621392492E-02	Apriori rate (us/s)	-1.97620272007E-02	Resid rate (us/s)	-1.12048E-07	+/-	7.0E-10
Total phase (deg)	-163.7	Apriori accel (us/s/s)	2.36581300691E-05	Resid phase (deg)	-121.7	+/-	2.3

ph/seg (deg)	41.3	Theor.	5.3	Amplitude	1.383 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	30.7	Search (1024X32)	1.373	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	13.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	9.5	Inc. seg. avg.	1.754	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	1.404	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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 125.862 1968.942 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bk.W.52.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

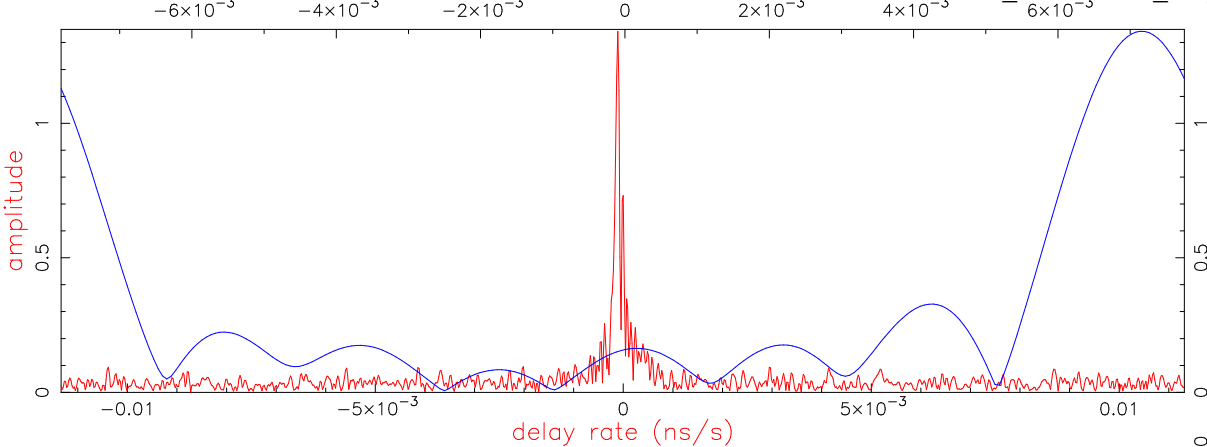
aux01

3C273.3MP2MB, No0707, bk

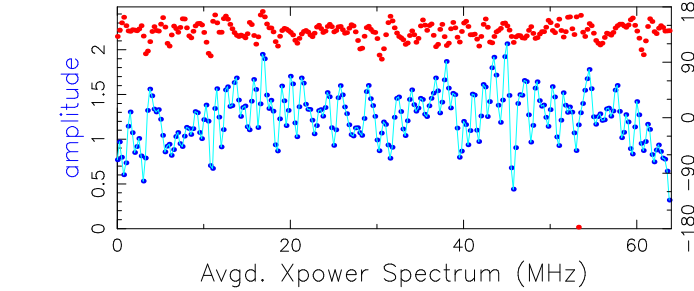
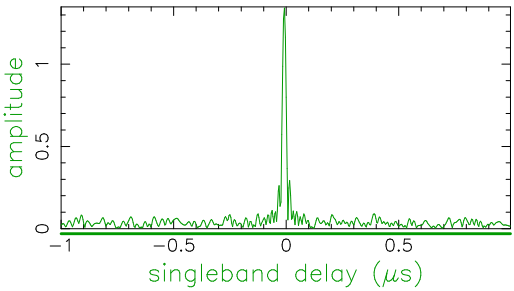
VLBA_BR - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 6

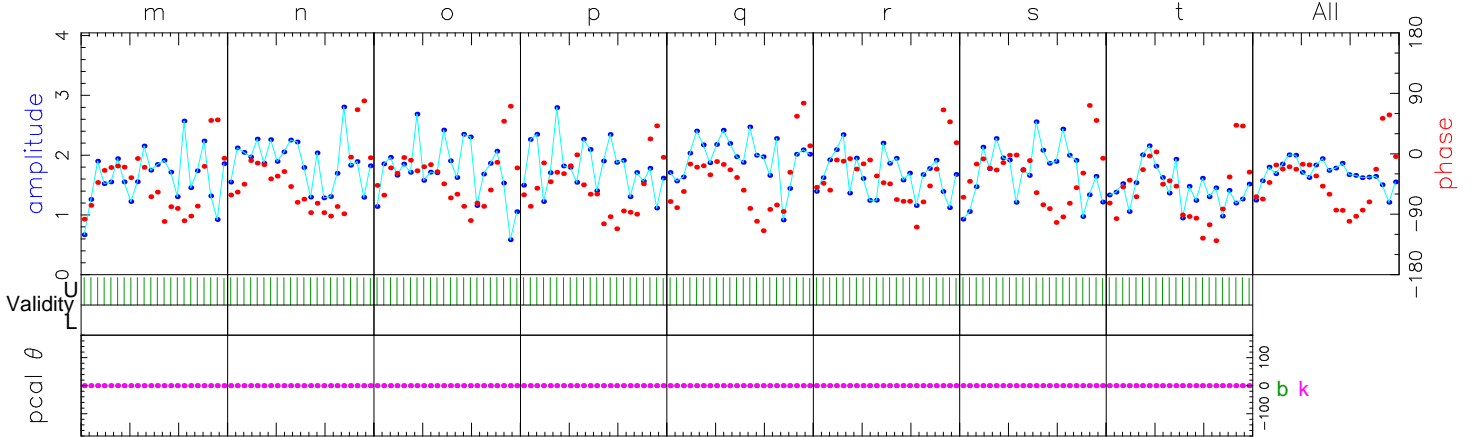


SNR 49.5
 Int time 179.965
 Amp 1.349
 Phase -42.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.008719
 MBD 0.007138
 Fringe rate (Hz)
 -0.009803
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175917
 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
	-45.8	-44.4	-38.9	-51.4	-39.8	-33.4	-36.0	-52.6	Phase	-42.5
	1.3	1.5	1.5	1.5	1.4	1.4	1.3	1.1	Ampl.	1.3
	254.4	255.0	254.8	254.6	255.2	254.8	254.7	254.2	Sbd box	254.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -4.29189895742E+03 Apriori delay (usec) -4.29189047036E+03 Resid mbdelay (usec) 7.13794E-03 +/- 2.2E-05
 Sband delay (usec) -4.29189918961E+03 Apriori clock (usec) 4.4728985E+00 Resid sbdelay (usec) -8.71925E-03 +/- 1.7E-04
 Phase delay (usec) -4.29189047173E+03 Apriori clockrate (us/s) 4.2423487E-07 Resid phdelay (usec) -1.37125E-06 +/- 7.5E-08
 Delay rate (us/s) -1.97621410008E-02 Apriori rate (us/s) -1.97620272007E-02 Resid rate (us/s) -1.13800E-07 +/- 7.2E-10
 Total phase (deg) -84.5 Apriori accel (us/s/s) 2.36581300691E-05 Resid phase (deg) -42.5 +/- 2.3

RMS Theor. Amplitude 1.349 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 41.4 5.4 Search (1024X32) 1.324 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 29.3 9.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 7.5 3.3 Inc. seg. avg. 1.683 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.6 5.7 Inc. frq. avg. 1.348 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

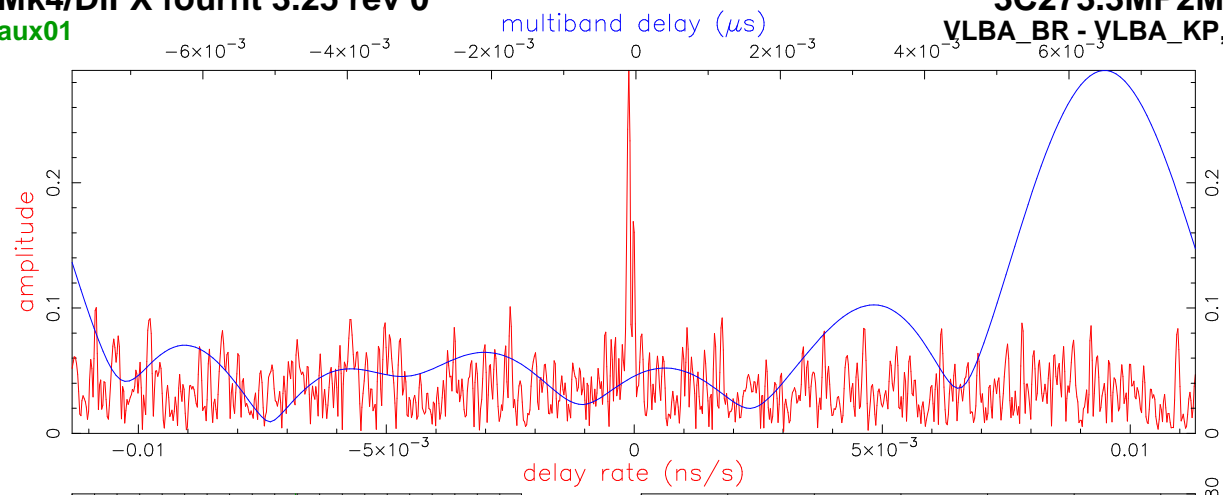
b: az 132.0 el 33.1 pa -29.7 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 125.862 1968.942 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bk.W.57.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, bk

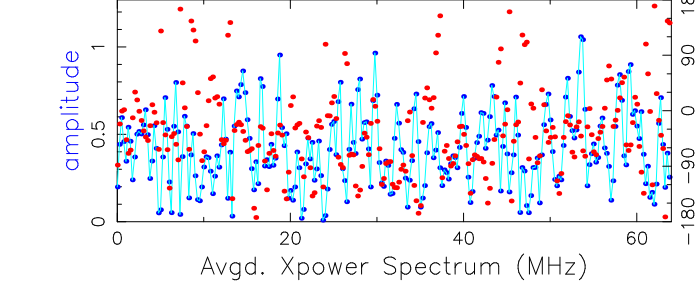
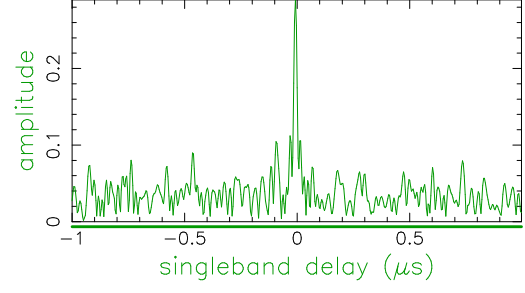
VLBA_BR - VLBA_KP, fgroup W, pol LR



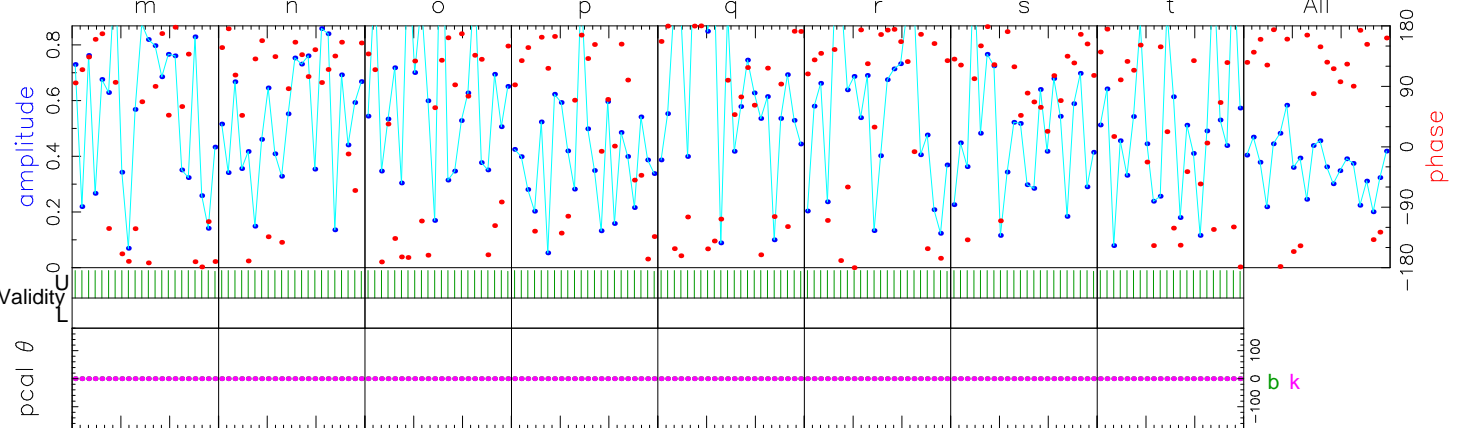
Fringe quality 9

SNR 10.6
 Int time 179.965
 Amp 0.290
 Phase 151.3
 PFD 5.2e-18
 Delays (us)
 SBD -0.007974
 MBD 0.006483
 Fringe rate (Hz) -0.009380
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0		
k	0	0	0	0	0	0	0	0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -4.29189961254E+03 Apriori delay (usec) -4.29189047036E+03 Resid mbdelay (usec) 6.48281E-03 +/- 1.0E-04
 Sband delay (usec) -4.29189844436E+03 Apriori clock (usec) 4.4728985E+00 Resid sbdelay (usec) -7.97400E-03 +/- 8.1E-04
 Phase delay (usec) -4.29189046548E+03 Apriori clockrate (us/s) 4.2423487E-07 Resid phdelay (usec) 4.87919E-06 +/- 3.5E-07
 Delay rate (us/s) -1.97621360876E-02 Apriori rate (us/s) -1.97620272007E-02 Resid rate (us/s) -1.08887E-07 +/- 3.3E-09
 Total phase (deg) 109.4 Apriori accel (us/s/s) 2.36581300691E-05 Resid phase (deg) 151.3 +/- 10.8

ph/seg (deg) 41.0 25.3 Search (1024X32) 0.286 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.4 44.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.2 15.3 Inc. seg. avg. 0.337 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.6 26.6 Inc. frq. avg. 0.294 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 b: az 132.0 el 33.1 pa -29.7 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 125.862 1968.942 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//bk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//bk.W.63.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

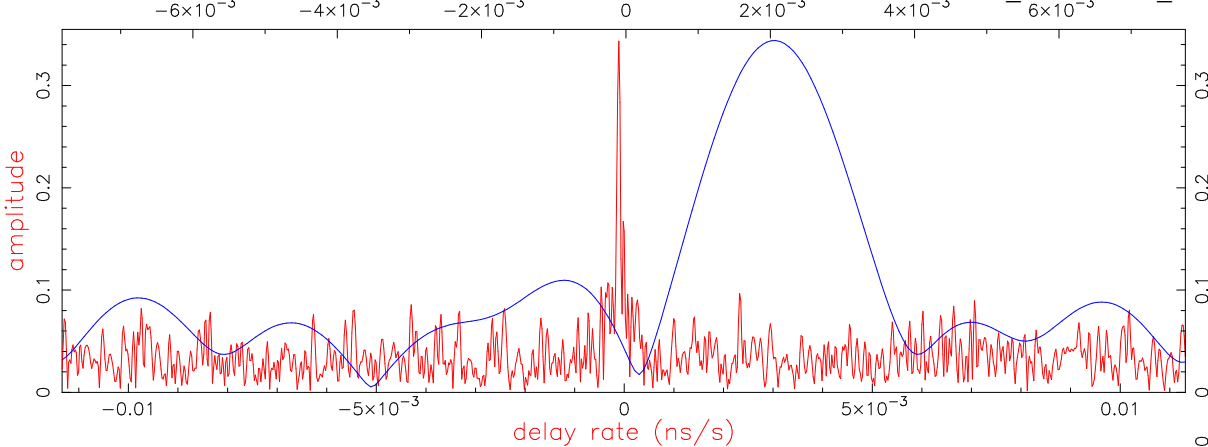
aux01

3C273.3MP2MB, No0707, bk

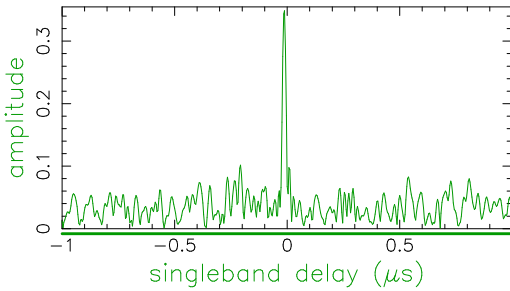
VLBA_BR - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

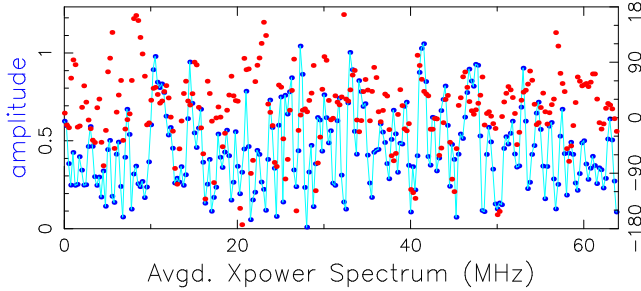
Fringe quality 9



SNR 13.0
 Int time 179.965
 Amp 0.355
 Phase -154.6
 PFD 2.6e-30
 Delays (us)
 SBD -0.013360
 MBD 0.002118
 Fringe rate (Hz)
 -0.009485
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

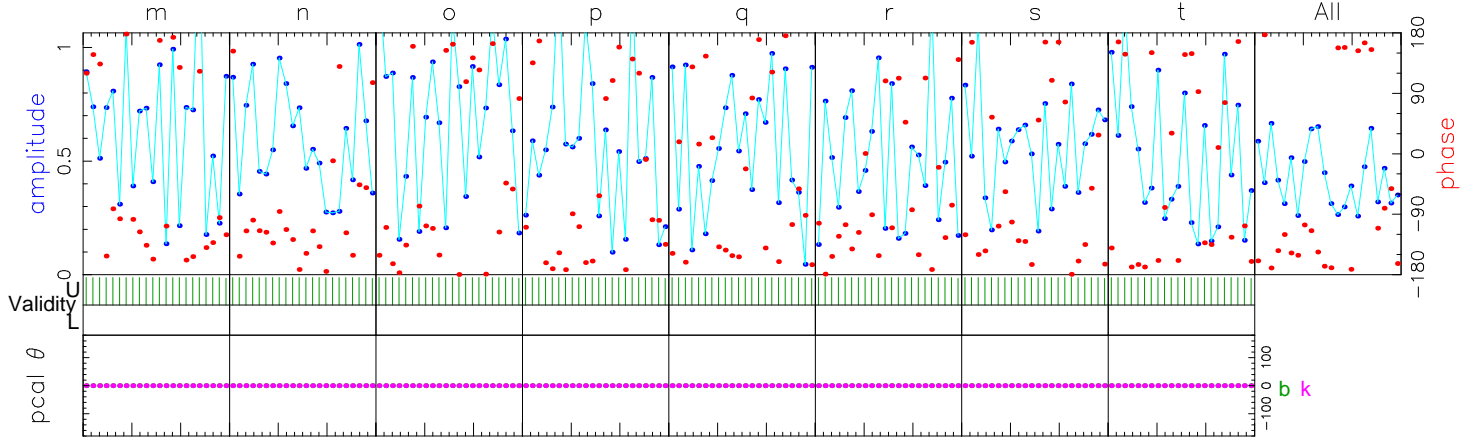


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175920
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



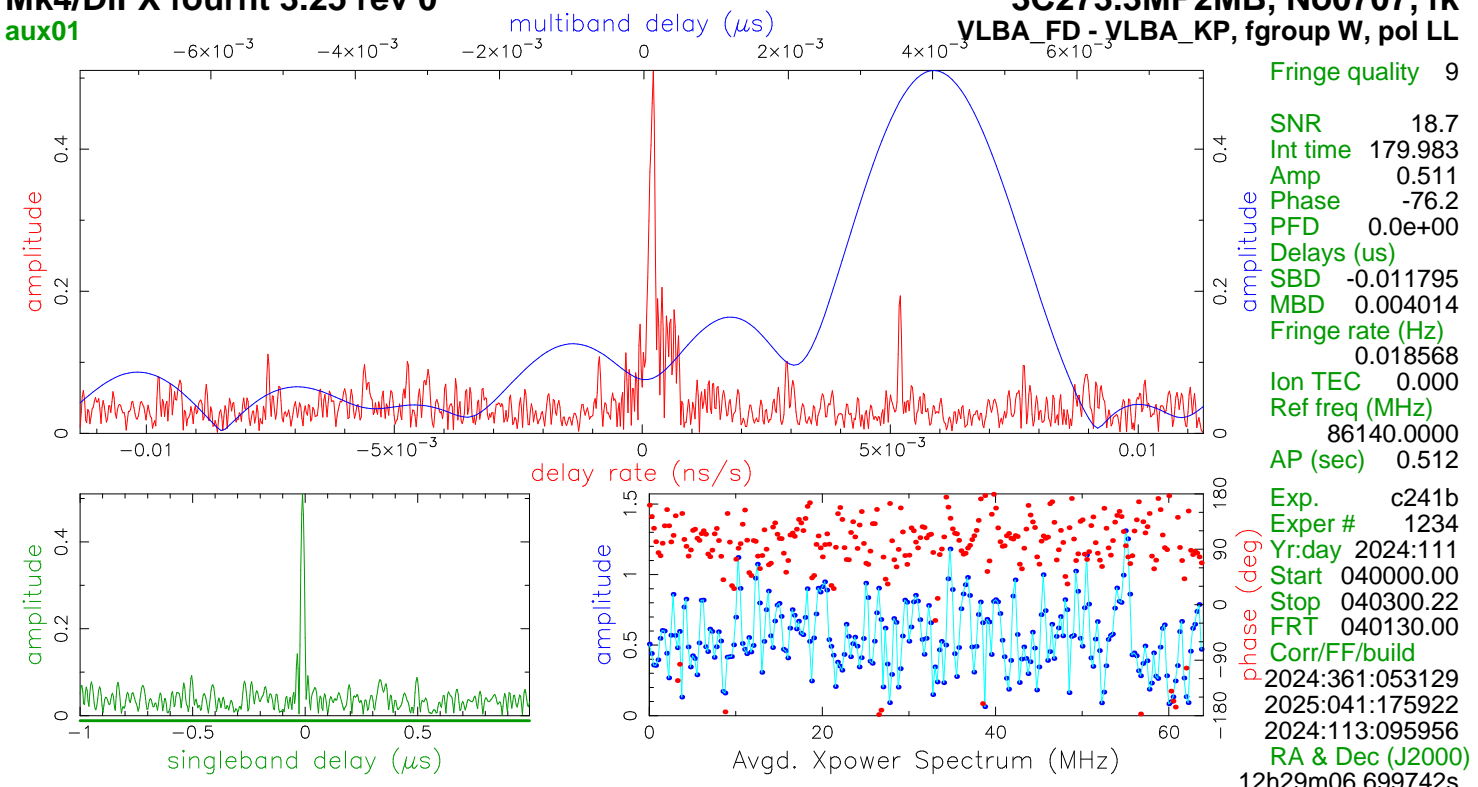
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.9	-120.7	-158.5	-165.9	-161.3	-132.4	-147.6	179.6	Phase	-154.6
	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	Ampl.	0.4
	253.3	253.5	253.1	253.9	253.8	254.1	253.7	253.5	Sbd box	253.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.29190397751E+03	Apriori delay (usec)	-4.29189047036E+03	Resid mbdelay (usec)	2.11785E-03	+/-	8.3E-05
Sband delay (usec)	-4.29190383011E+03	Apriori clock (usec)	4.4728985E+00	Resid sbdelay (usec)	-1.33597E-02	+/-	6.6E-04
Phase delay (usec)	-4.29189047534E+03	Apriori clockrate (us/s)	4.2423487E-07	Resid phdelay (usec)	-4.98399E-06	+/-	2.8E-07
Delay rate (us/s)	-1.97621373177E-02	Apriori rate (us/s)	-1.97620272007E-02	Resid rate (us/s)	-1.10117E-07	+/-	2.7E-09
Total phase (deg)	-196.5	Apriori accel (us/s/s)	2.36581300691E-05	Resid phase (deg)	-154.6	+/-	8.8

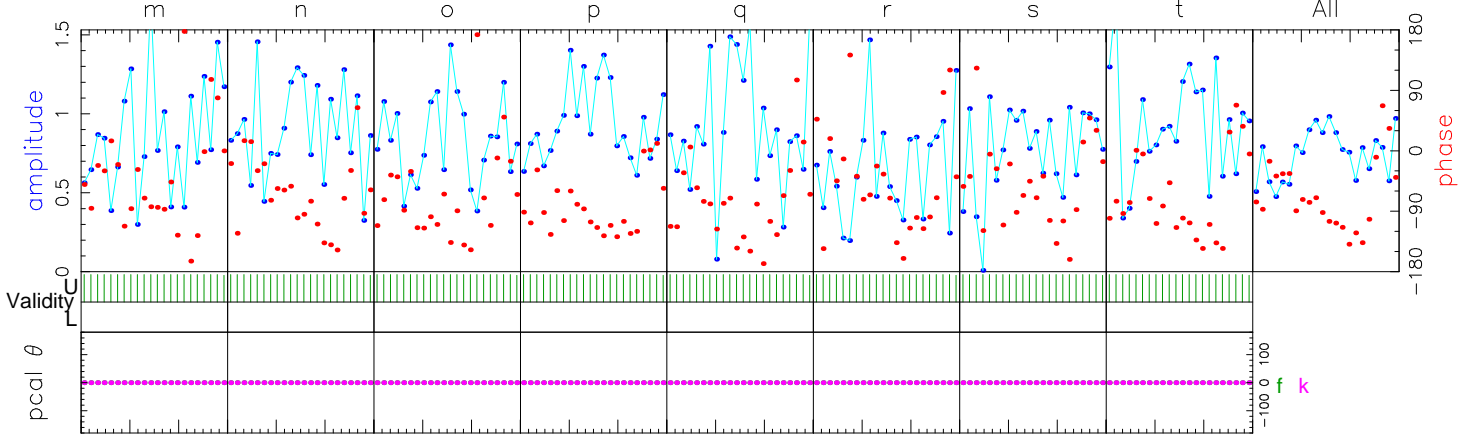
ph/seg (deg)	40.8	Theor.	20.6	Amplitude	0.355 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	43.8	Search (1024X32)	0.342	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.3	Inc. seg. avg.	0.406	Inc. frq. avg.	0.354	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	15.2	Inc. frq. avg.	0.354			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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 125.862 1968.942 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/bk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/bk.W.68.3MP2MB



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
	-64.9	-68.2	-84.7	-86.5	-93.1	-61.8	-48.9	-83.5	Phase	-76.2
	0.4	0.6	0.6	0.7	0.6	0.4	0.4	0.5	Ampl.	0.5
	253.6	254.0	254.2	253.7	254.1	253.9	253.6	254.5	Sbd box	254.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.28836097291E+03	Apriori delay (usec)	1.28837258347E+03	Resid mbdelay (usec)	4.01443E-03	+/-	5.8E-05
Sband delay (usec)	1.28836078822E+03	Apriori clock (usec)	-9.2676163E-02	Resid sbdelay (usec)	-1.17952E-02	+/-	4.6E-04
Phase delay (usec)	1.28837258102E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-2.45598E-06	+/-	2.0E-07
Delay rate (us/s)	-1.50929324539E-01	Apriori rate (us/s)	-1.50929540098E-01	Resid rate (us/s)	2.15559E-07	+/-	1.9E-09
Total phase (deg)	46.3	Apriori accel (us/s/s)	-6.92577797187E-06	Resid phase (deg)	-76.2	+/-	6.1

ph/seg (deg)	52.7	Theor.	14.3	Amplitude	0.511 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.5	Search (1024X32)	0.503	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.6	Inc. seg. avg.	0.720	Inc. frq. avg.	0.520	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	21.6	Inc. frq. avg.	0.520			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		k: az 130.2 el 48.5 pa -40.3		u, v (fr/asec)	861.275 -193.186	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//fk..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//fk.W.73.3MP2MB						simultaneous interpolator

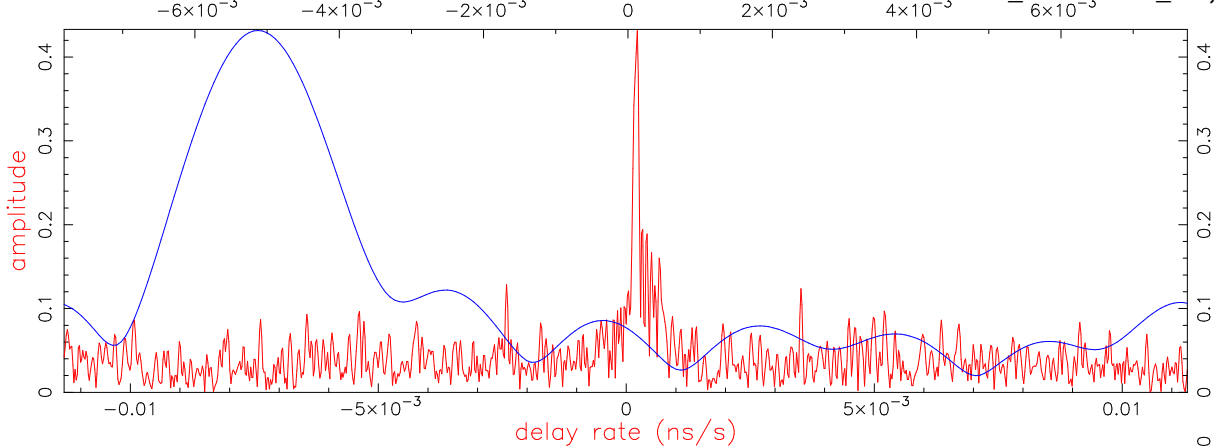
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, fk

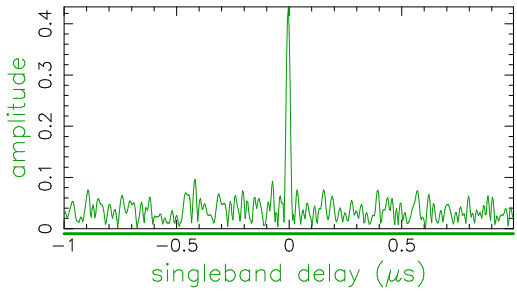
VLBA_FD - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

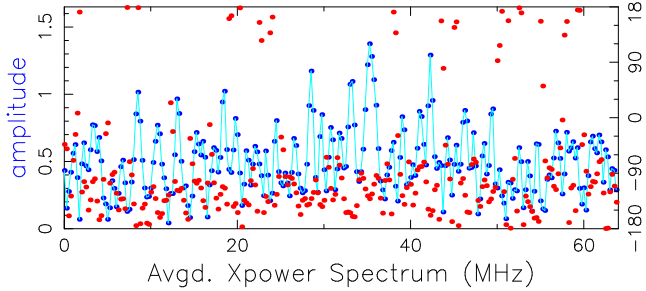


Fringe quality 9

SNR 15.9
 Int time 179.983
 Amp 0.433
 Phase -119.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.004608
 MBD -0.005127
 Fringe rate (Hz) 0.018207
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

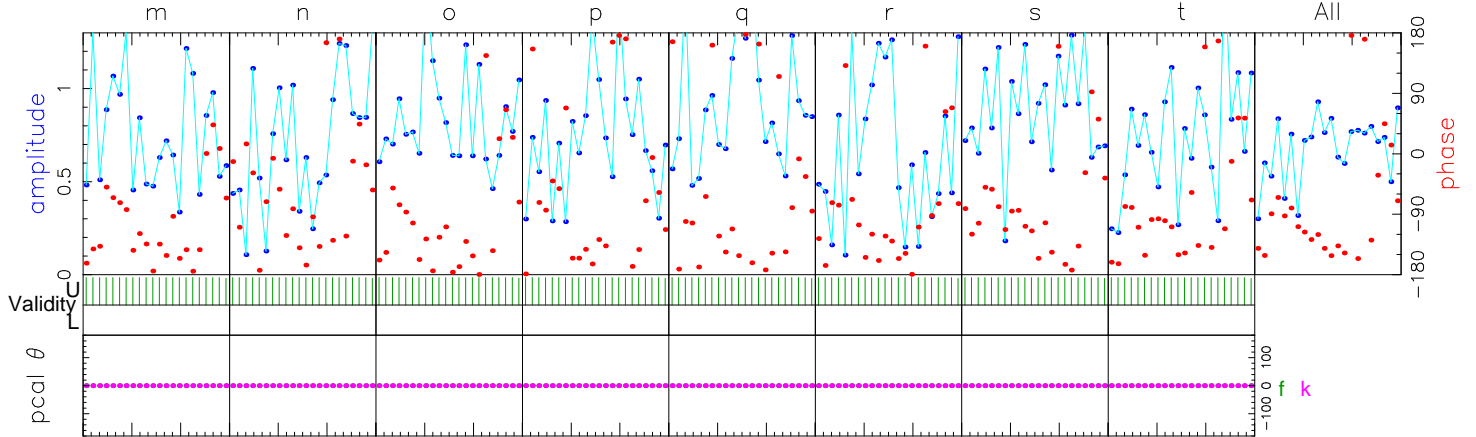


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175923
 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
	-110.9	-83.0	-131.3	-142.1	-138.1	-122.1	-105.2	-108.9	Phase	-119.9
	0.4	0.3	0.5	0.5	0.6	0.4	0.5	0.4	Ampl.	0.4
	255.3	255.5	256.2	255.6	256.4	256.3	255.6	255.1	Sbd box	255.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.28836745623E+03	Apriori delay (usec)	1.28837258347E+03	Resid mbdelay (usec)	-5.12724E-03	+/-	6.8E-05
Sband delay (usec)	1.28836797597E+03	Apriori clock (usec)	-9.2676163E-02	Resid sbdelay (usec)	-4.60750E-03	+/-	5.4E-04
Phase delay (usec)	1.28837257960E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-3.86704E-06	+/-	2.3E-07
Delay rate (us/s)	-1.50929328738E-01	Apriori rate (us/s)	-1.50929540098E-01	Resid rate (us/s)	2.11360E-07	+/-	2.2E-09
Total phase (deg)	2.6	Apriori accel (us/s/s)	-6.92577797187E-06	Resid phase (deg)	-119.9	+/-	7.2

ph/seg (deg) 58.7 16.9 Theor. Amplitude 0.433 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.9 29.5 Search (1024X32) 0.413 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.4 10.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 16.8 17.8 Inc. seg. avg. 0.650 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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 861.275 -193.186 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fk.W.83.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

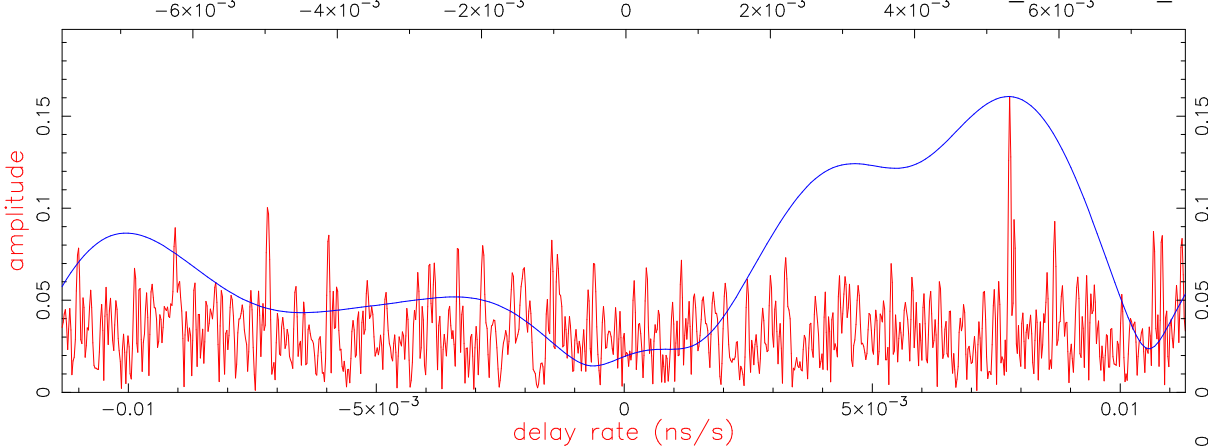
aux01

3C273.3MP2MB, No0707, fk

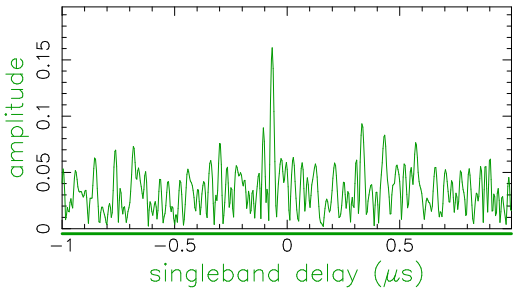
VLBA_FD - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

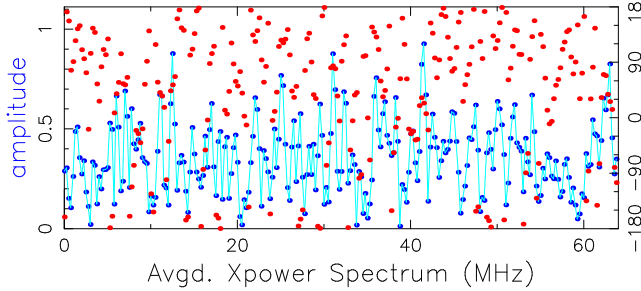
Fringe quality 0



SNR 5.9
 Int time 179.983
 Amp 0.197
 Phase -14.0
 PFD 3.6e-01
 Delays (us)
 SBD -0.067028
 MBD 0.005282
 Fringe rate (Hz) 0.670805
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

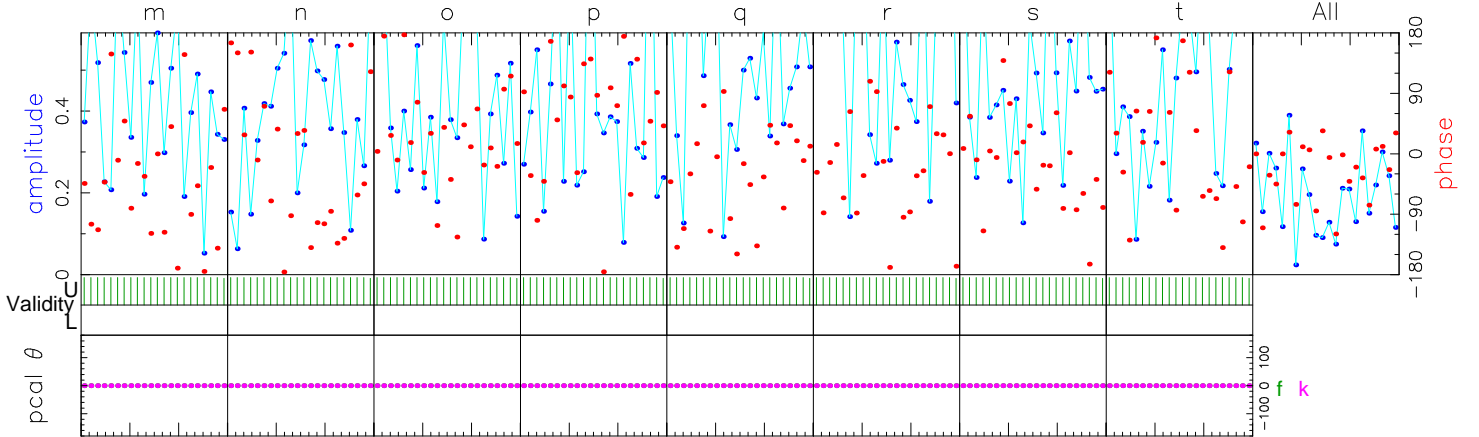


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175925
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-52.6	-101.0	33.7	83.0	-19.6	-19.6	-19.9	-39.6	Phase	-14.0
	0.2	0.1	0.3	0.2	0.4	0.5	0.3	0.1	Ampl.	0.2
	360.6	270.6	237.8	237.5	239.0	240.1	240.8	305.1	Sbd box	239.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.28829974039E+03	Apriori delay (usec)	1.28837258347E+03	Resid mbdelay (usec)	5.28191E-03	+/-	1.8E-04
Sband delay (usec)	1.28830555572E+03	Apriori clock (usec)	-9.2676163E-02	Resid sbdelay (usec)	-6.70277E-02	+/-	1.5E-03
Phase delay (usec)	1.28837258302E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-4.50298E-07	+/-	6.3E-07
Delay rate (us/s)	-1.50921752712E-01	Apriori rate (us/s)	-1.50929540098E-01	Resid rate (us/s)	7.78739E-06	+/-	6.0E-09
Total phase (deg)	108.5	Apriori accel (us/s/s)	-6.92577797187E-06	Resid phase (deg)	-14.0	+/-	19.4

ph/seg (deg)	45.2	Theor.	45.5	Amplitude	0.197 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.5		79.4	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	59.9		27.4	Inc. seg. avg.	0.184	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	67.2		47.9	Inc. frq. avg.	0.235	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 138.7 el 54.1 pa -34.5 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 861.275 -193.186 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707/fk._3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707/fk.W.91.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

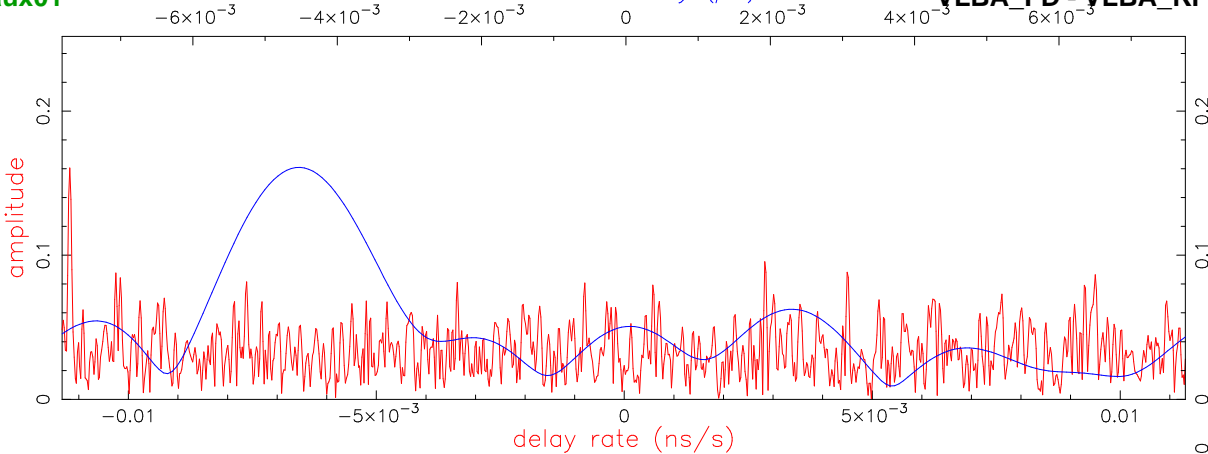
aux01

3C273.3MP2MB, No0707, fk

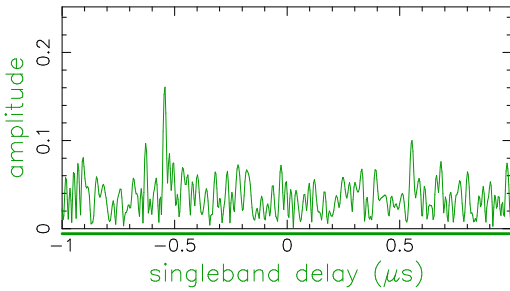
VLBA_FD - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

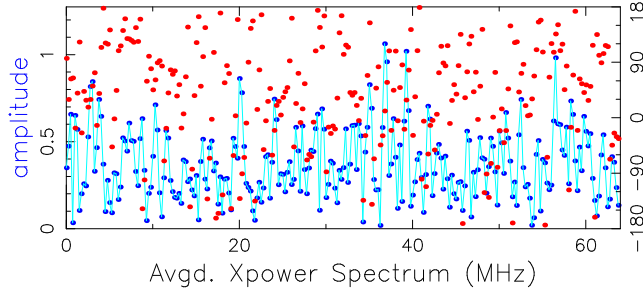
Fringe quality 0



SNR 6.0
 Int time 179.983
 Amp 0.252
 Phase -38.7
 PFD 2.9e-01
 Delays (us)
 SBD -0.544106
 MBD -0.004605
 Fringe rate (Hz)
 -0.964749
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

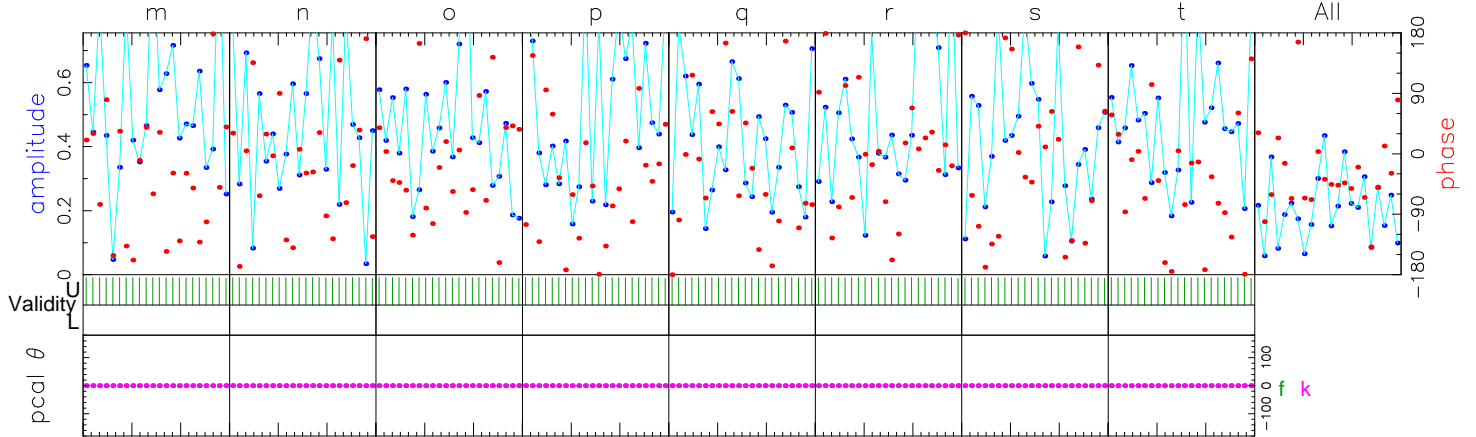


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.7	-34.1	-36.8	-47.0	-49.3	1.4	-79.8	-42.5	Phase	-38.7
	0.3	0.3	0.4	0.2	0.2	0.3	0.1	0.3	Ampl.	0.2
	423.1	338.5	346.0	19.7	172.4	171.4	255.3	406.4	Sbd box	117.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.28782110307E+03	Apriori delay (usec)	1.28837258347E+03	Resid mbdelay (usec)	-4.60540E-03	+/-	1.8E-04
Sband delay (usec)	1.28782847697E+03	Apriori clock (usec)	-9.2676163E-02	Resid sbdelay (usec)	-5.44106E-01	+/-	1.4E-03
Phase delay (usec)	1.28837258222E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-1.24660E-06	+/-	6.2E-07
Delay rate (us/s)	-1.50940739877E-01	Apriori rate (us/s)	-1.50929540098E-01	Resid rate (us/s)	-1.11998E-05	+/-	6.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.92577797187E-06	Resid phase (deg)	-38.7	+/-	19.3

ph/seg (deg)	RMS 56.3	Theor. 45.2	Amplitude Search (1024X32)	0.158	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.2	78.8	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)	25.1	27.2	Inc. seg. avg.	0.249	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.4	47.5	Inc. frq. avg.	0.238	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 138.7 el 54.1 pa -34.5 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 861.275 -193.186 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//fk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//fk.W.97.3MP2MB

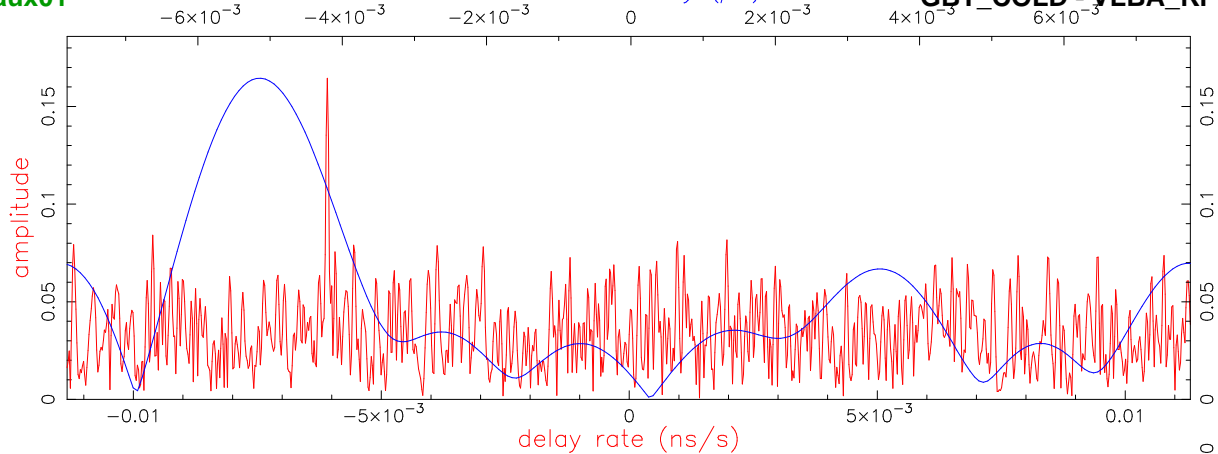
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gk

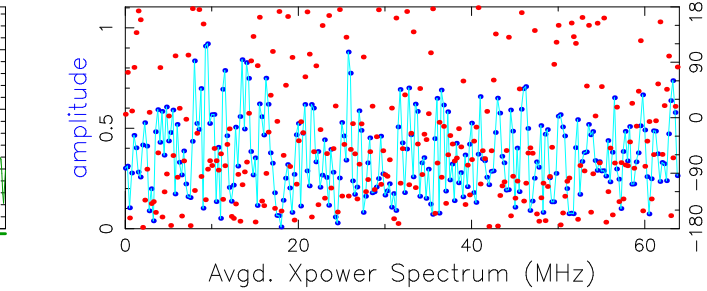
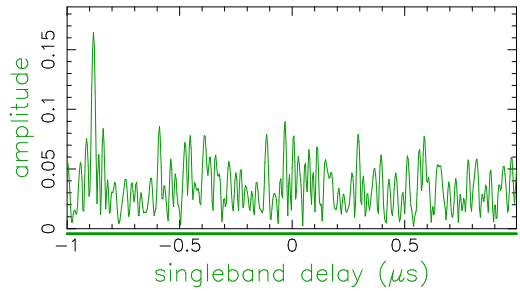
GBT_COLD - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)



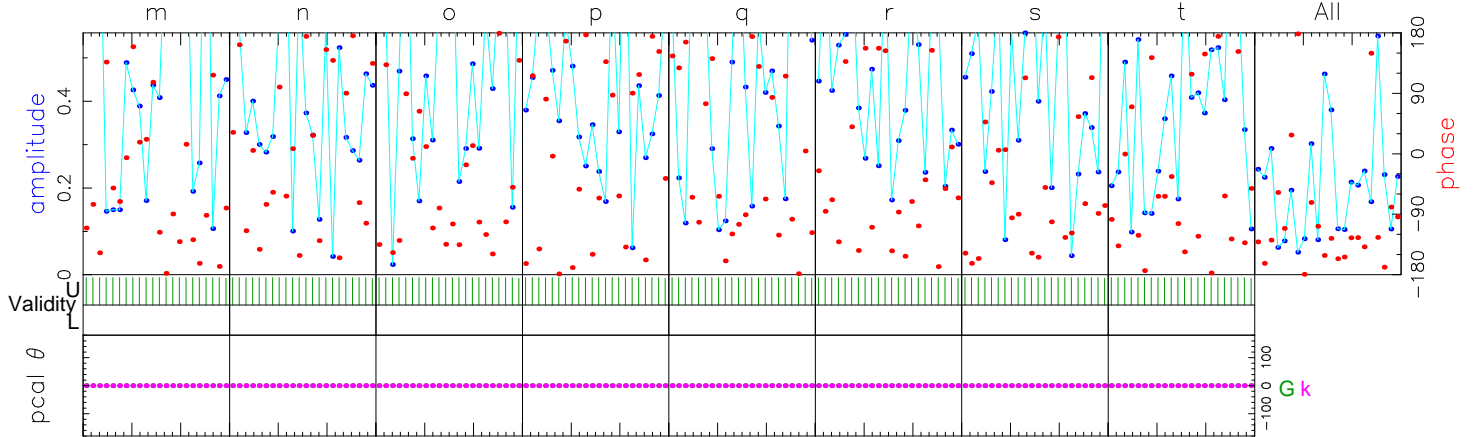
Fringe quality 0

SNR 6.0
 Int time 179.983
 Amp 0.186
 Phase -130.8
 PFD 1.8e-01
 Delays (us)
 SBD -0.882574
 MBD -0.005138
 Fringe rate (Hz)
 -0.525576
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175930
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.3	-153.8	-130.9	-179.8	-123.9	-122.7	-115.2	-137.0	Phase	-130.8
	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	413.1	497.3	91.3	248.6	92.5	349.1	287.6	326.7	Sbd box	31.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.09391268556E+03	Apriori delay (usec)	1.09479282364E+03	Resid mbdelay (usec)	-5.13808E-03	+/-	1.8E-04
Sband delay (usec)	1.09391024989E+03	Apriori clock (usec)	-1.4774915E+01	Resid sbdelay (usec)	-8.82574E-01	+/-	1.4E-03
Phase delay (usec)	1.09479281942E+03	Apriori clockrate (us/s)	-8.1823003E-08	Resid phdelay (usec)	-4.21702E-06	+/-	6.1E-07
Delay rate (us/s)	-6.96102552291E-01	Apriori rate (us/s)	-6.96096450875E-01	Resid rate (us/s)	-6.10142E-06	+/-	5.9E-09
Total phase (deg)	167.4	Apriori accel (us/s/s)	-5.55244719556E-06	Resid phase (deg)	-130.8	+/-	19.0

ph/seg (deg)	49.7	Theor.	44.5	Amplitude	0.186 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	82.2	Search (1024X32)	0.154	Search	0.154	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.9	Inc. seg. avg.	0.182	Inc. seg. avg.	0.182	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.5	Inc. frq. avg.	0.178	Inc. frq. avg.	0.178	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
G: az 182.2 el 53.5 pa 2.1		k: az 130.2 el 48.5 pa -40.3		u, v (fr/asec)	3986.200 799.934	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//Gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gk.W.110.3MP2MB

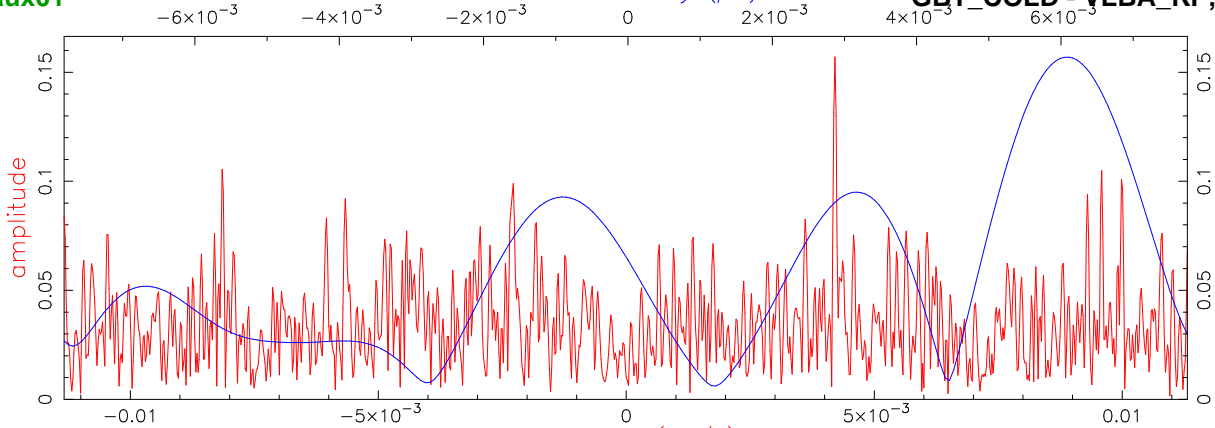
Mk4/DiFX fourfit 3.25 rev 0

aux01

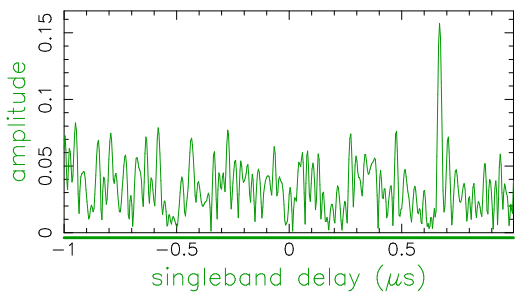
3C273.3MP2MB, No0707, Gk

GBT_COLD - VLBA_KP, fgroup W, pol RR

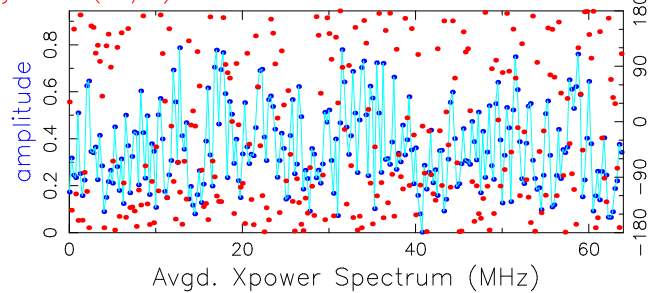
multiband delay (μ s)



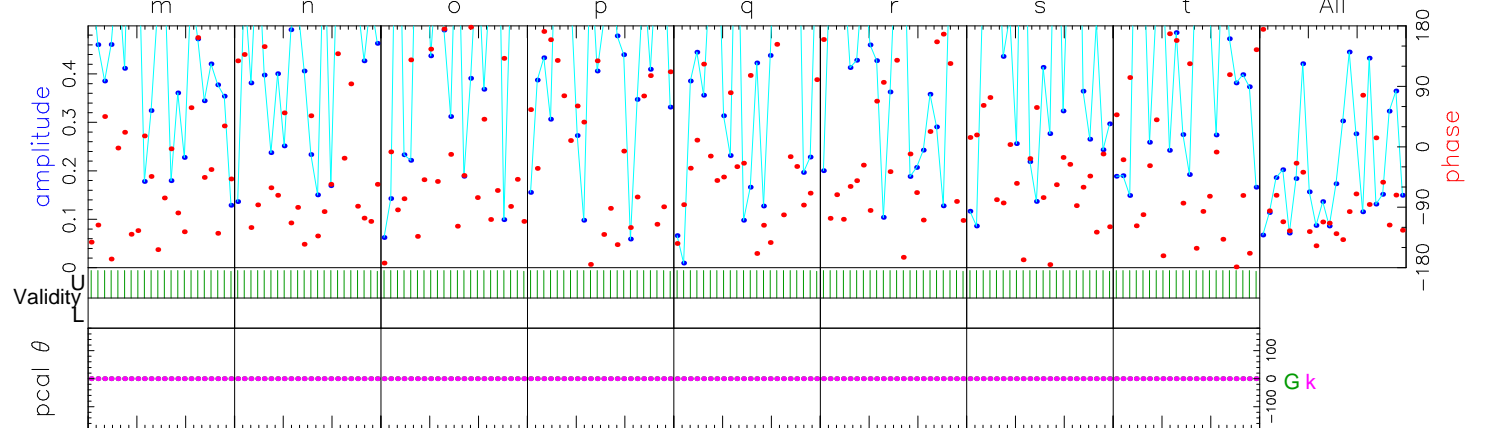
Fringe quality 0
 SNR 5.8
 Int time 179.983
 Amp 0.166
 Phase -90.2
 PFD 6.4e-01
 Delays (us)
 SBD 0.668323
 MBD 0.006089
 Fringe rate (Hz) 0.363704
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175932
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



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
	-93.0	-98.8	-88.3	150.2	-43.8	-96.5	-61.2	-125.7	Phase	-90.2
	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	333.3	193.6	427.2	12.6	438.9	126.4	107.5	13.5	Sbd box	428.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.09545516221E+03	Apriori delay (usec)	1.09479282364E+03	Resid mbdelay (usec)	6.08858E-03	+/-	1.9E-04
Sband delay (usec)	1.09546114689E+03	Apriori clock (usec)	-1.4774915E+01	Resid sbdelay (usec)	6.68323E-01	+/-	1.5E-03
Phase delay (usec)	1.09479282073E+03	Apriori clockrate (us/s)	-8.1823003E-08	Resid phdelay (usec)	-2.90987E-06	+/-	6.4E-07
Delay rate (us/s)	-6.96092228637E-01	Apriori rate (us/s)	-6.96096450875E-01	Resid rate (us/s)	4.22224E-06	+/-	6.2E-09
Total phase (deg)	207.9	Apriori accel (us/s/s)	-5.55244719556E-06	Resid phase (deg)	-90.2	+/-	19.9

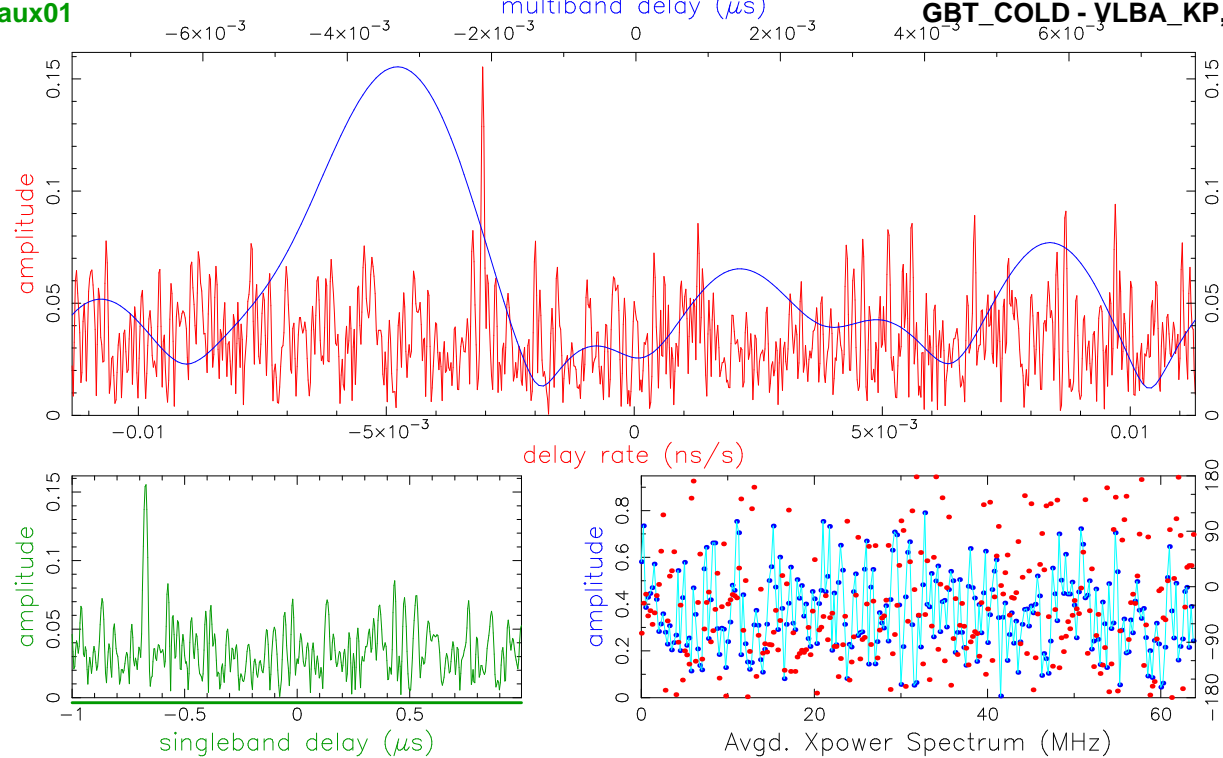
ph/seg (deg) 56.5 46.6 Amplitude 0.166 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.5 81.4 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.8 28.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.6 49.1 Inc. seg. avg. 0.166 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 G: az 182.2 el 53.5 pa 2.1 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 3986.200 799.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gk.W.122.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

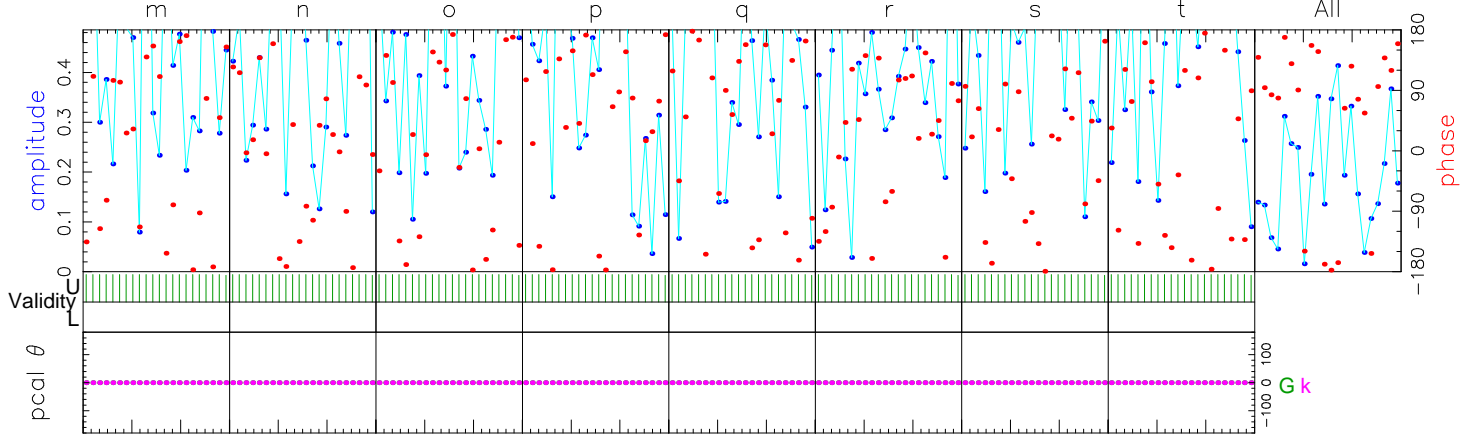
3C273.3MP2MB, No0707, Gk

GBT_COLD - VLBA_KP, fgroup W, pol LR



Fringe quality 0
 SNR 5.8
 Int time 179.983
 Amp 0.162
 Phase 139.8
 PFD 6.5e-01
 Delays (us)
 SBD -0.673514
 MBD -0.003341
 Fringe rate (Hz)
 -0.263835
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175934
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	147.3	117.1	160.3	120.5	158.5	87.5	67.8	179.7	Phase	139.8
	0.2	0.1	0.2	0.3	0.3	0.1	0.1	0.2	Ampl.	0.2
	47.6	291.3	427.5	140.3	82.9	511.6	273.8	56.2	Sbd box	84.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 1.09411760751E+03 Apriori delay (usec) 1.09479282364E+03 Resid mbdelay (usec) -3.34113E-03 +/- 1.9E-04
 Sband delay (usec) 1.09411930964E+03 Apriori clock (usec) -1.4774915E+01 Resid sbdelay (usec) -6.73514E-01 +/- 1.5E-03
 Phase delay (usec) 1.09479282815E+03 Apriori clockrate (us/s) -8.1823003E-08 Resid phdelay (usec) 4.50734E-06 +/- 6.4E-07
 Delay rate (us/s) -6.96099513743E-01 Apriori rate (us/s) -6.96096450875E-01 Resid rate (us/s) -3.06287E-06 +/- 6.2E-09
 Total phase (deg) 77.9 Apriori accel (us/s/s) -5.55244719556E-06 Resid phase (deg) 139.8 +/- 19.9

ph/seg (deg) 47.4 46.6 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.2 81.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.2 28.1 Inc. seg. avg. 0.155 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.0 49.1 Inc. frq. avg. 0.168 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

G: az 182.2 el 53.5 pa 2.1 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 3986.200 799.934 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gk.W.130.3MP2MB

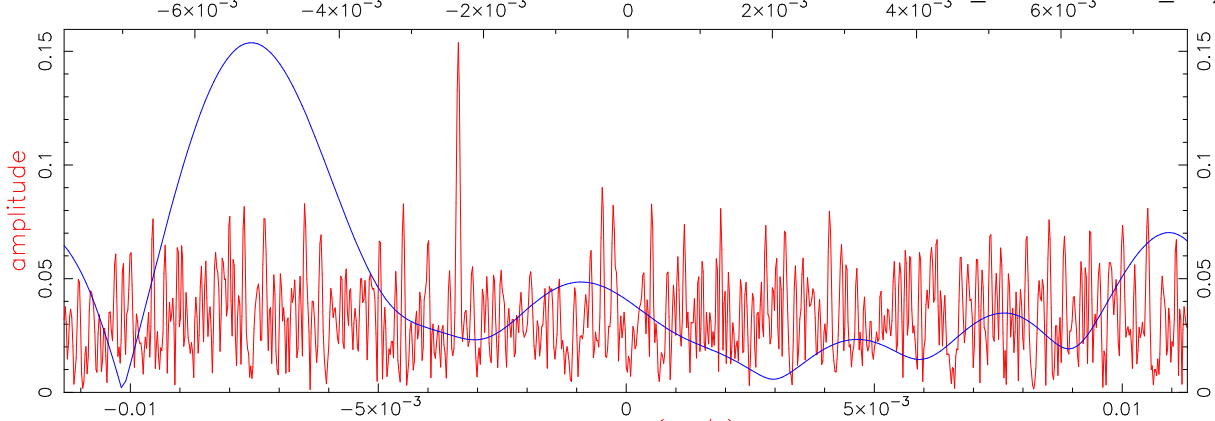
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, Gk

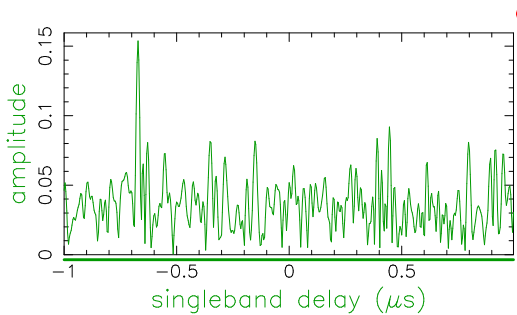
GBT_COLD - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

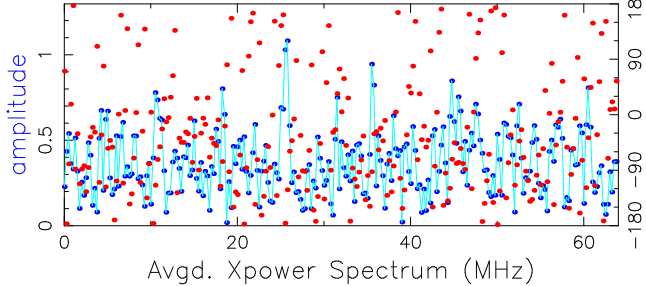


Fringe quality 0

SNR 5.6
 Int time 179.983
 Amp 0.160
 Phase 162.6
 PFD 8.7e-01
 Delays (us)
 SBD -0.671675
 MBD -0.005214
 Fringe rate (Hz)
 -0.291560
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

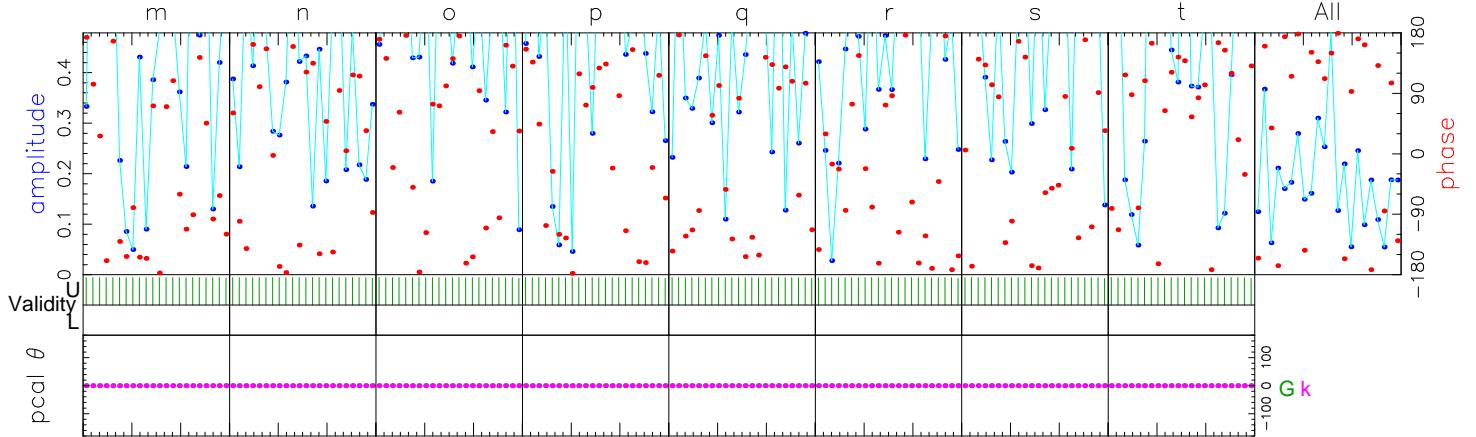


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	173.7	155.0	152.0	141.2	177.5	-137.6	170.5	133.8	Phase	162.6
	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.2
	183.1	267.1	232.6	127.9	488.1	356.8	372.8	368.3	Sbd box	85.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.09411573514E+03	Apriori delay (usec)	1.09479282364E+03	Resid mbdelay (usec)	-5.21350E-03	+/-	1.9E-04
Sband delay (usec)	1.09412114889E+03	Apriori clock (usec)	-1.4774915E+01	Resid sbdelay (usec)	-6.71675E-01	+/-	1.5E-03
Phase delay (usec)	1.09479282888E+03	Apriori clockrate (us/s)	-8.1823003E-08	Resid phdelay (usec)	5.24289E-06	+/-	6.5E-07
Delay rate (us/s)	-6.96099835594E-01	Apriori rate (us/s)	-6.96096450875E-01	Resid rate (us/s)	-3.38472E-06	+/-	6.3E-09
Total phase (deg)	100.7	Apriori accel (us/s/s)	-5.55244719556E-06	Resid phase (deg)	162.6	+/-	20.3

ph/seg (deg)	50.6	RMS	47.6	Theor.	Amplitude	0.160 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	70.4	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	sb window (us)	-1.000	1.000		
ph/frq (deg)	30.1	Inc. seg. avg.	0.148	Bits/sample: 2x2	Inc. frq. avg.	0.156	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	21.6	Inc. frq. avg.	0.156	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us			dr window (ns/s)	-0.011	0.011		
				Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

G: az 182.2 el 53.5 pa 2.1 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 3986.200 799.934 simultaneous interpolator

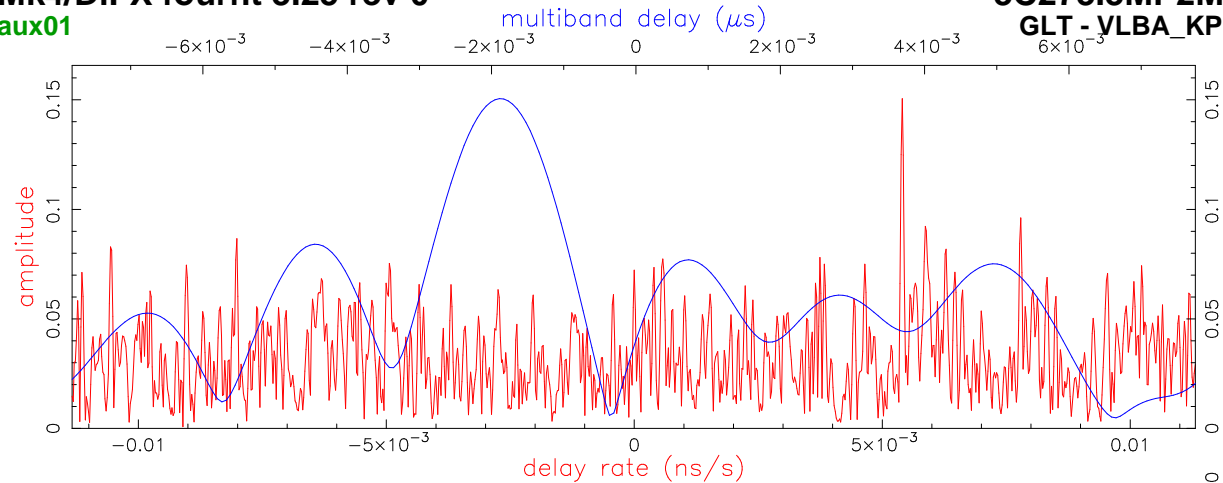
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//Gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//Gk.W.141.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

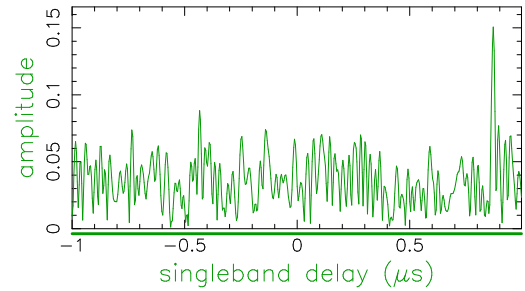
3C273.3MP2MB, No0707, gk

GLT - VLBA_KP, fgroup W, pol LL

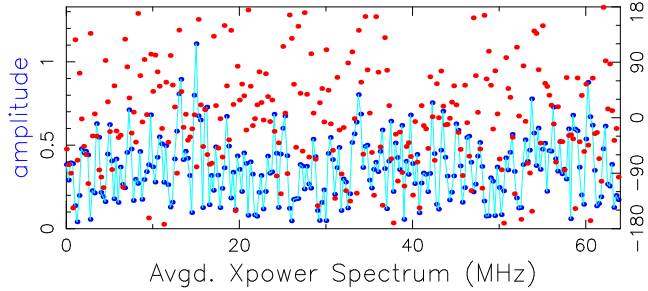


Fringe quality 0

SNR 5.5
 Int time 179.982
 Amp 0.166
 Phase -32.9
 PFD 9.8e-01
 Delays (us)
 SBD 0.870852
 MBD -0.001882
 Fringe rate (Hz)
 0.466399
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

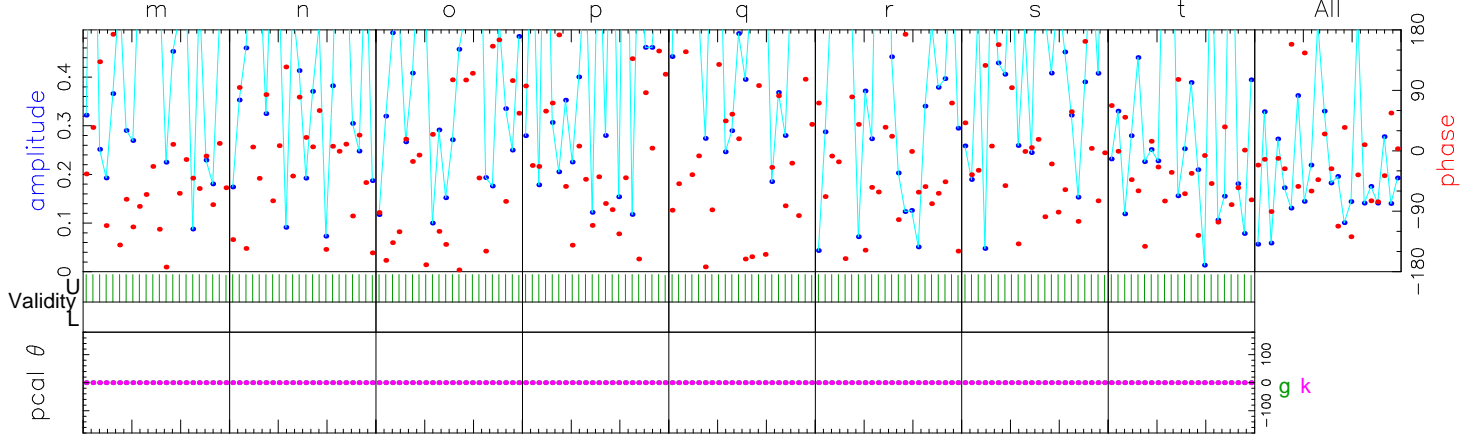


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	Ampl.	0.2
k	0	0	0	0	0	0	0	0	Sbd box	479.9
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	

Group delay (usec) (SBD)	-1.04697839287E+04	Apriori delay (usec)	-1.04706570464E+04	Resid mbdelay (usec)	-1.88227E-03	+/-	2.0E-04
Sband delay (usec)	-1.04697861939E+04	Apriori clock (usec)	1.8781662E-01	Resid sbdelay (usec)	8.70852E-01	+/-	1.6E-03
Phase delay (usec)	-1.04706570475E+04	Apriori clockrate (us/s)	6.3211589E-07	Resid phdelay (usec)	-1.06168E-06	+/-	6.7E-07
Delay rate (us/s)	-7.40877338700E-01	Apriori rate (us/s)	-7.40882753130E-01	Resid rate (us/s)	5.41443E-06	+/-	6.4E-09
Total phase (deg)	-25.5	Apriori accel (us/s/s)	5.73533163321E-05	Resid phase (deg)	-32.9	+/-	20.7

ph/seg (deg) 68.7 48.6 Search (1024X32) 0.142 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 94.7 84.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.6 29.3 Inc. seg. avg. 0.177 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.0 51.2 Inc. frq. avg. 0.164 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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 4275.880 4080.291 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gk.W.145.3MP2MB

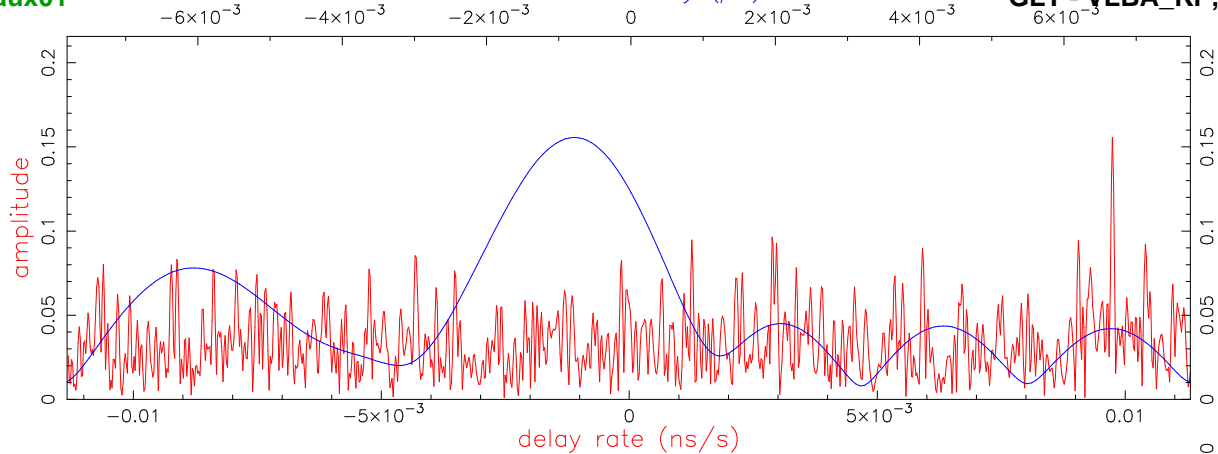
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gk

GLT - VLBA_KP, fgroup W, pol RR

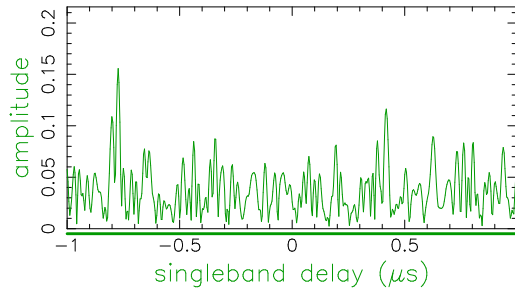
multiband delay (μ s)



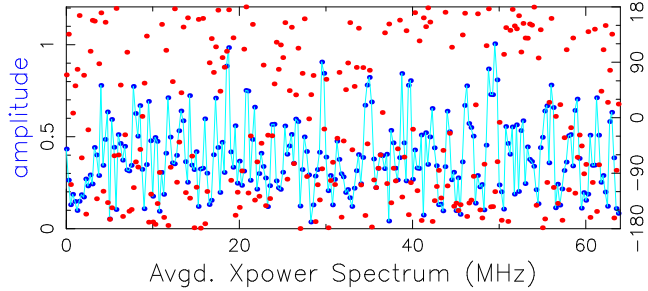
Fringe quality 0

SNR 5.7
 Int time 179.984
 Amp 0.216
 Phase -59.2
 PFD 7.5e-01
 Delays (us)
 SBD -0.773301
 MBD -0.000782
 Fringe rate (Hz) 0.841189
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

delay rate (ns/s)

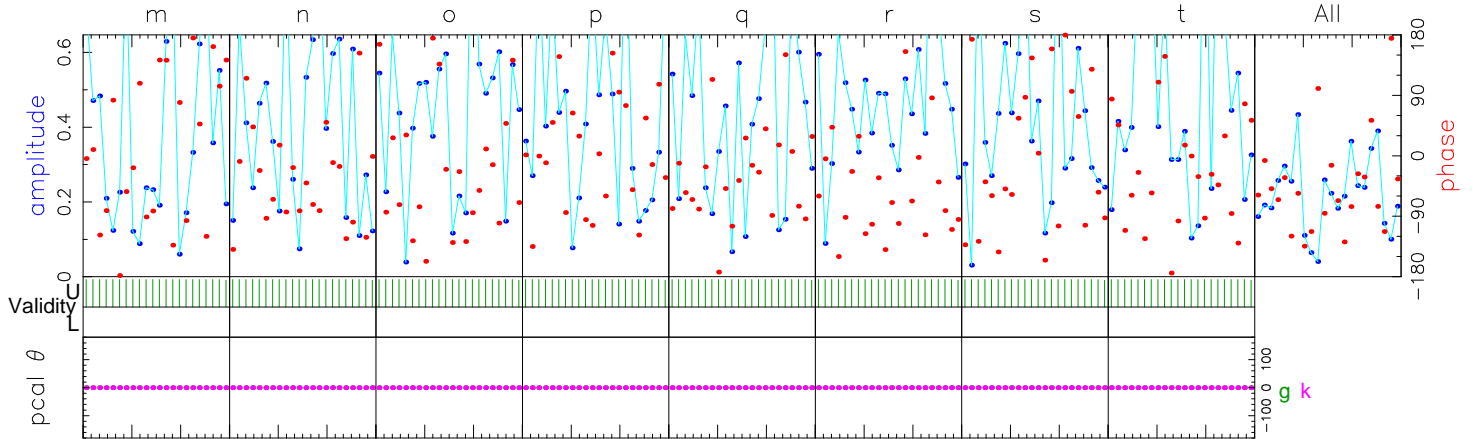


singleband delay (μ s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.5	-51.2	-80.0	-9.4	-47.0	-74.2	-97.5	-58.5	Phase	-59.2
	0.1	0.4	0.2	0.2	0.4	0.3	0.1	0.3	Ampl.	0.2
	364.2	246.7	87.7	56.3	58.9	498.0	53.0	275.4	Sbd box	59.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.04714234533E+04	Apriori delay (usec)	-1.04706570464E+04	Resid mbdelay (usec)	-7.81823E-04	+/-	1.9E-04
Sband delay (usec)	-1.04714303477E+04	Apriori clock (usec)	1.8781662E-01	Resid sbdelay (usec)	-7.73301E-01	+/-	1.5E-03
Phase delay (usec)	-1.04706570483E+04	Apriori clockrate (us/s)	6.3211589E-07	Resid phdelay (usec)	-1.90940E-06	+/-	6.5E-07
Delay rate (us/s)	-7.40872987755E-01	Apriori rate (us/s)	-7.40882753130E-01	Resid rate (us/s)	9.76537E-06	+/-	6.2E-09
Total phase (deg)	-51.7	Apriori accel (us/s/s)	5.73533163321E-05	Resid phase (deg)	-59.2	+/-	20.1

ph/seg (deg)	61.4	Theor.	47.1	Amplitude	0.216 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.9		82.1	Search (1024X32)	0.152	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.8		28.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.7		49.5	Inc. seg. avg.	0.230	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.212	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
g: az 192.9 el 15.1 pa 3.0		k: az 130.2 el 48.5 pa -40.3		u, v (fr/asec)	4275.880 4080.291				simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//gk..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//gk.W.152.3MP2MB						

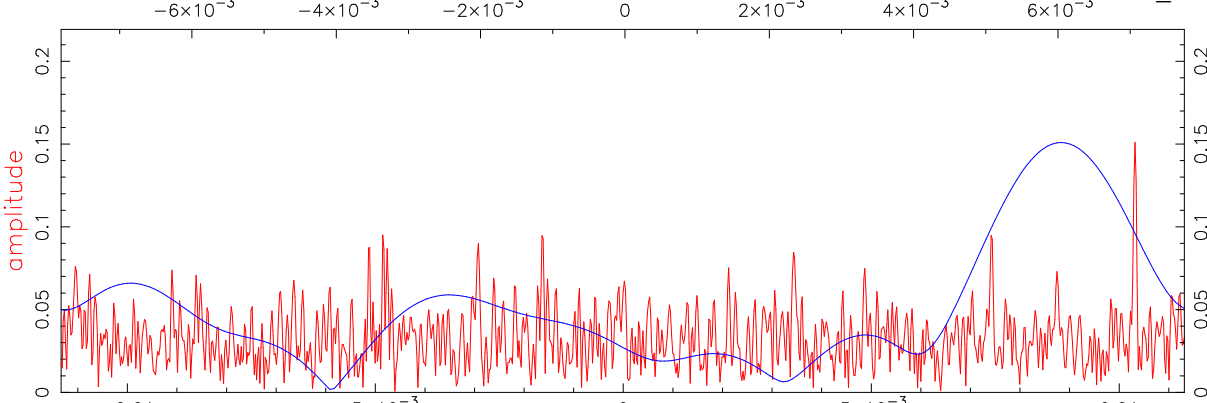
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gk

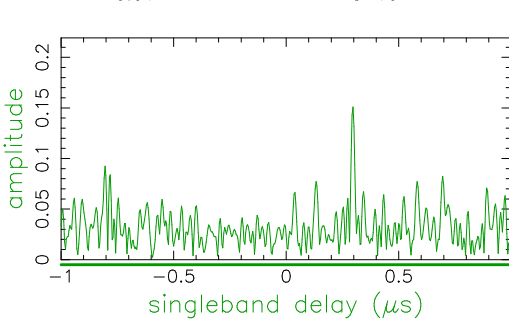
GLT - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

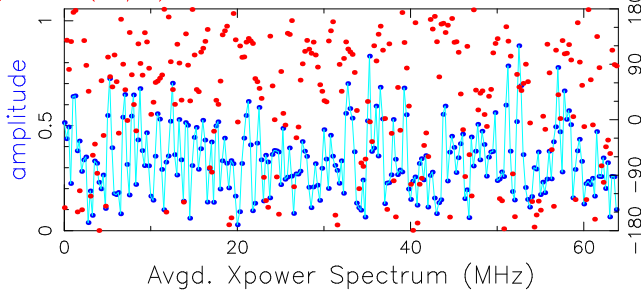


Fringe quality 0

SNR 5.6
 Int time 179.982
 Amp 0.219
 Phase -158.1
 PFD 9.6e-01
 Delays (us)
 SBD 0.296009
 MBD 0.006028
 Fringe rate (Hz)
 0.890678
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

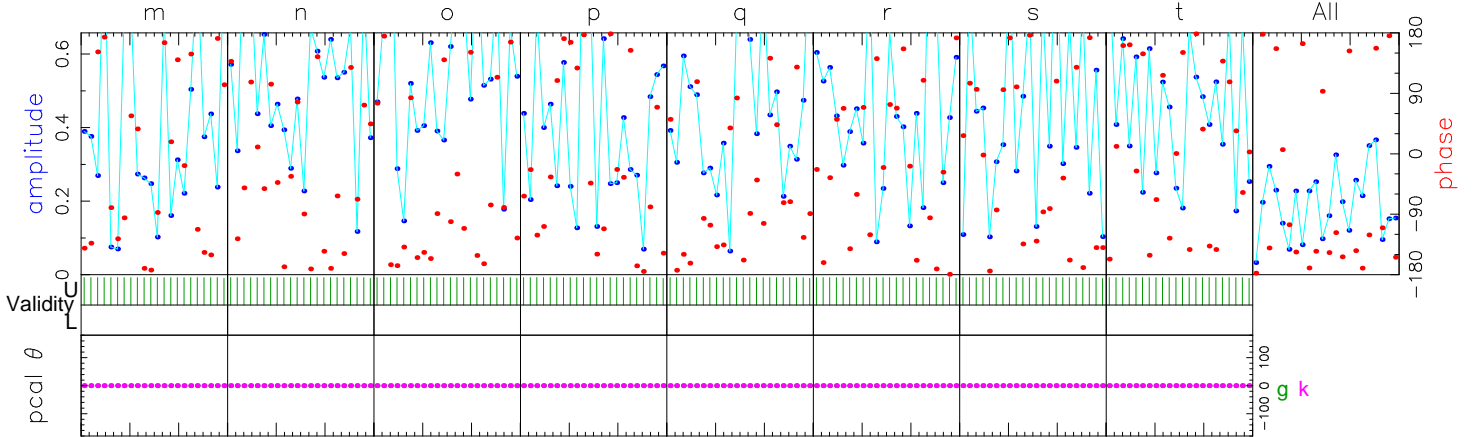


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175942
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0		
k	0	0	0	0	0	0	0	0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.04703541434E+04	Apriori delay (usec)	-1.04706570464E+04	Resid mbdelay (usec)	6.02803E-03	+/-	2.0E-04
Sband delay (usec)	-1.04703610372E+04	Apriori clock (usec)	1.8781662E-01	Resid sbdelay (usec)	2.96009E-01	+/-	1.5E-03
Phase delay (usec)	-1.04706570515E+04	Apriori clockrate (us/s)	6.3211589E-07	Resid phdelay (usec)	-5.09811E-06	+/-	6.6E-07
Delay rate (us/s)	-7.40872413237E-01	Apriori rate (us/s)	-7.40882753130E-01	Resid rate (us/s)	1.03399E-05	+/-	6.4E-09
Total phase (deg)	-150.6	Apriori accel (us/s/s)	5.73533163321E-05	Resid phase (deg)	-158.1	+/-	20.6

ph/seg (deg) 51.3 48.3 Search (1024X32) 0.147 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.6 84.3 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.8 29.1 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.6 50.9 Inc. frq. avg. 0.209 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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 4275.880 4080.291 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gk.W.164.3MP2MB

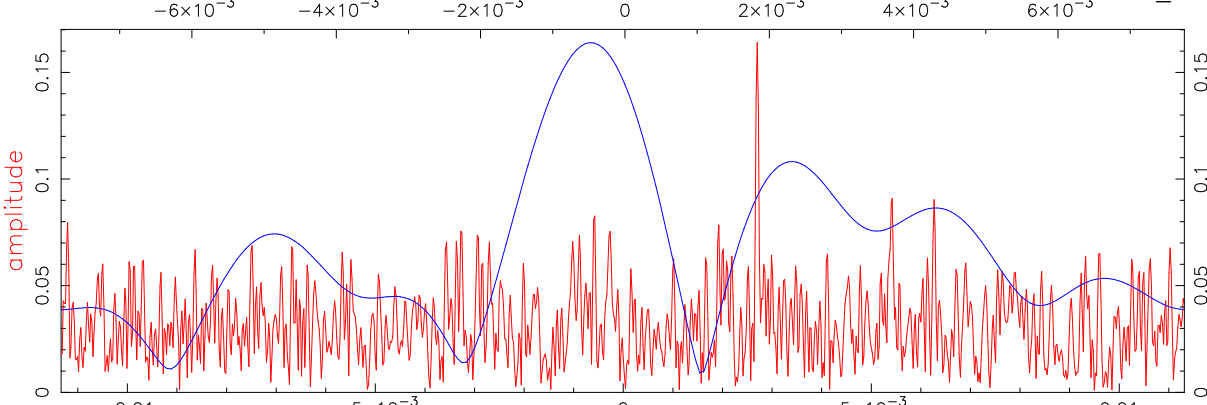
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, gk

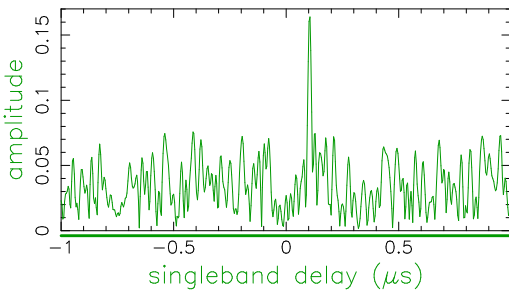
GLT - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

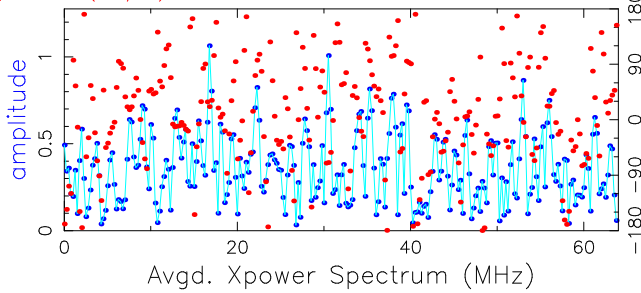


Fringe quality 0

SNR 6.1
 Int time 179.984
 Amp 0.170
 Phase 143.1
 PFD 1.3e-01
 Delays (us)
 SBD 0.103978
 MBD -0.000480
 Fringe rate (Hz)
 0.233402
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

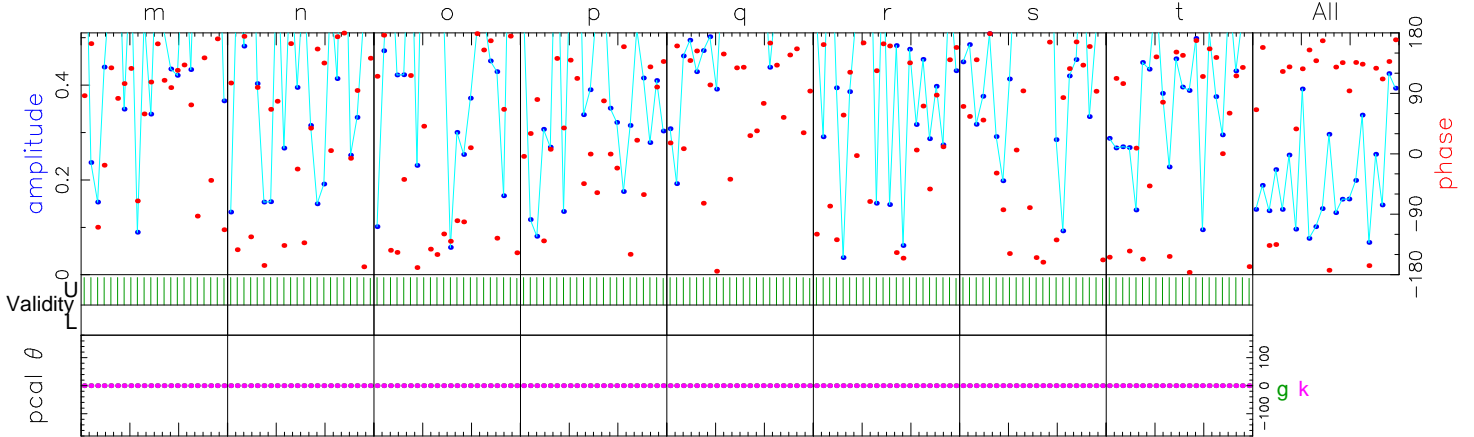


delay rate (ns/s)



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

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



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

Group delay (usec) (SBD)	-1.04705481512E+04	Apriori delay (usec)	-1.04706570464E+04	Resid mbdelay (usec)	-4.79818E-04	+/-	1.8E-04
Sband delay (usec)	-1.04705530684E+04	Apriori clock (usec)	1.8781662E-01	Resid sbdelay (usec)	1.03978E-01	+/-	1.4E-03
Phase delay (usec)	-1.04706570418E+04	Apriori clockrate (us/s)	6.3211589E-07	Resid phdelay (usec)	4.61509E-06	+/-	6.1E-07
Delay rate (us/s)	-7.40880043568E-01	Apriori rate (us/s)	-7.40882753130E-01	Resid rate (us/s)	2.70956E-06	+/-	5.8E-09
Total phase (deg)	-209.4	Apriori accel (us/s/s)	5.73533163321E-05	Resid phase (deg)	143.1	+/-	18.8

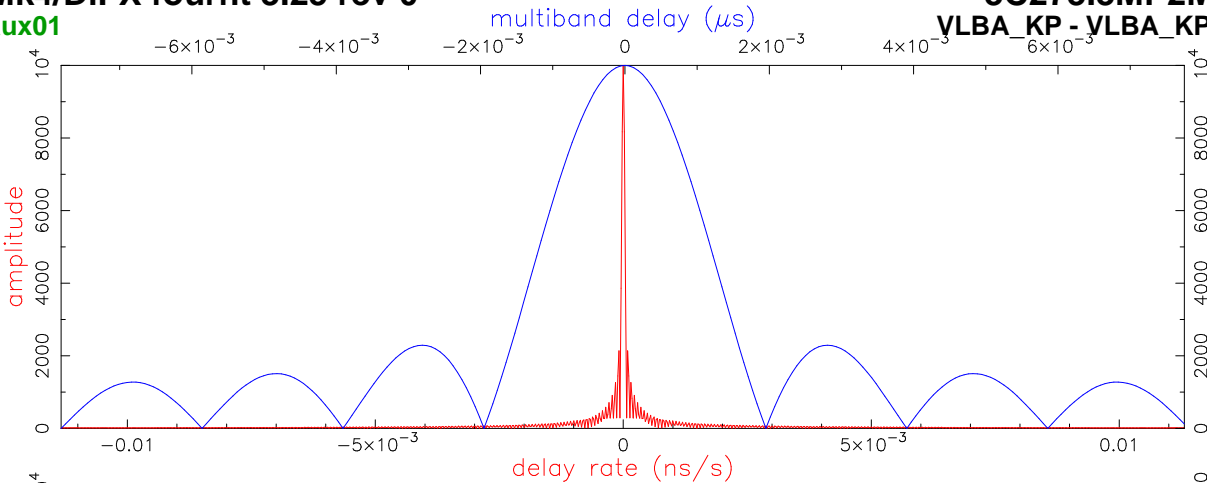
ph/seg (deg) 43.5 44.1 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.1 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.2 26.6 Inc. seg. avg. 0.160 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.9 46.4 Inc. frq. avg. 0.187 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 k: az 130.2 el 48.5 pa -40.3 u,v (fr/asec) 4275.880 4080.291 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//gk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//gk.W.175.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

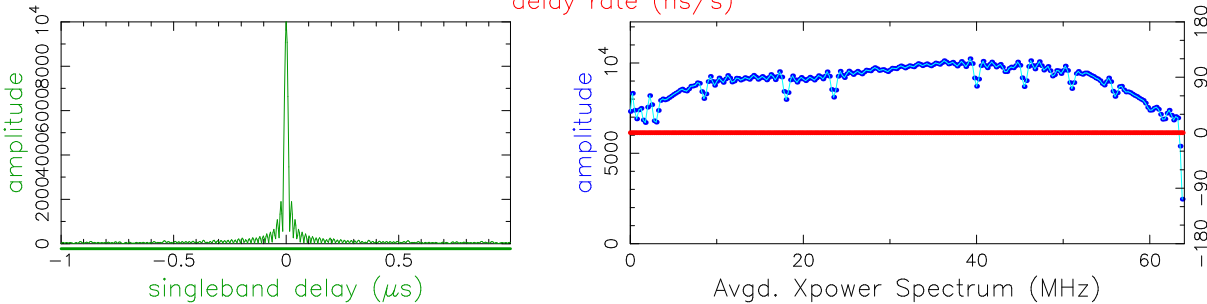
aux01

3C273.3MP2MB, No0707, kk

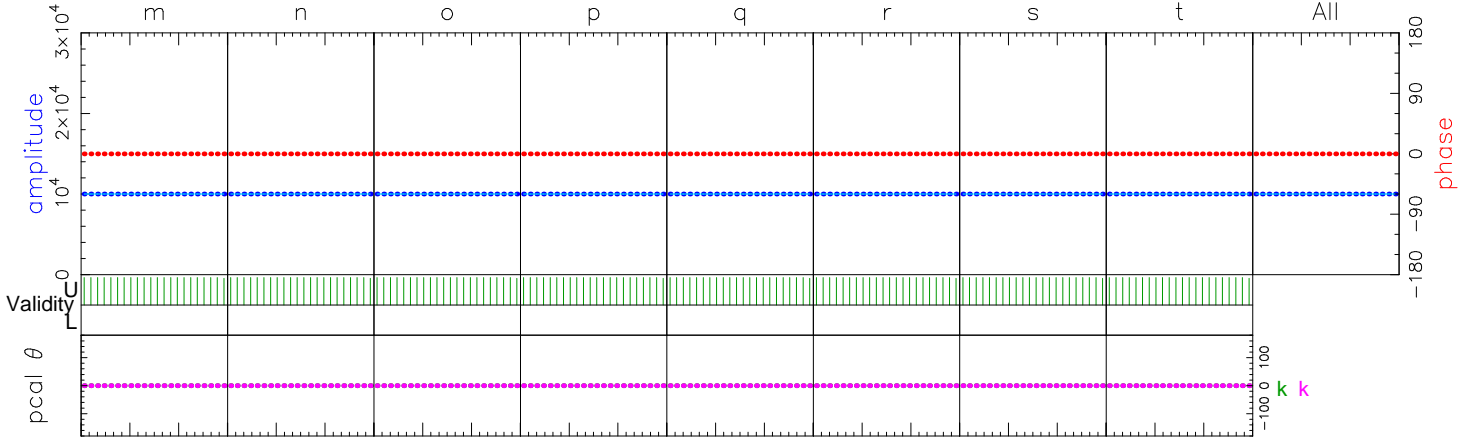
VLBA_KP - VLBA_KP, fgroup W, pol LL



Fringe quality 9
 SNR 366872.0
 Int time 179.984
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175941
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
k	0	0	0	0	0	0	0	0	Ampl.	10000.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	

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

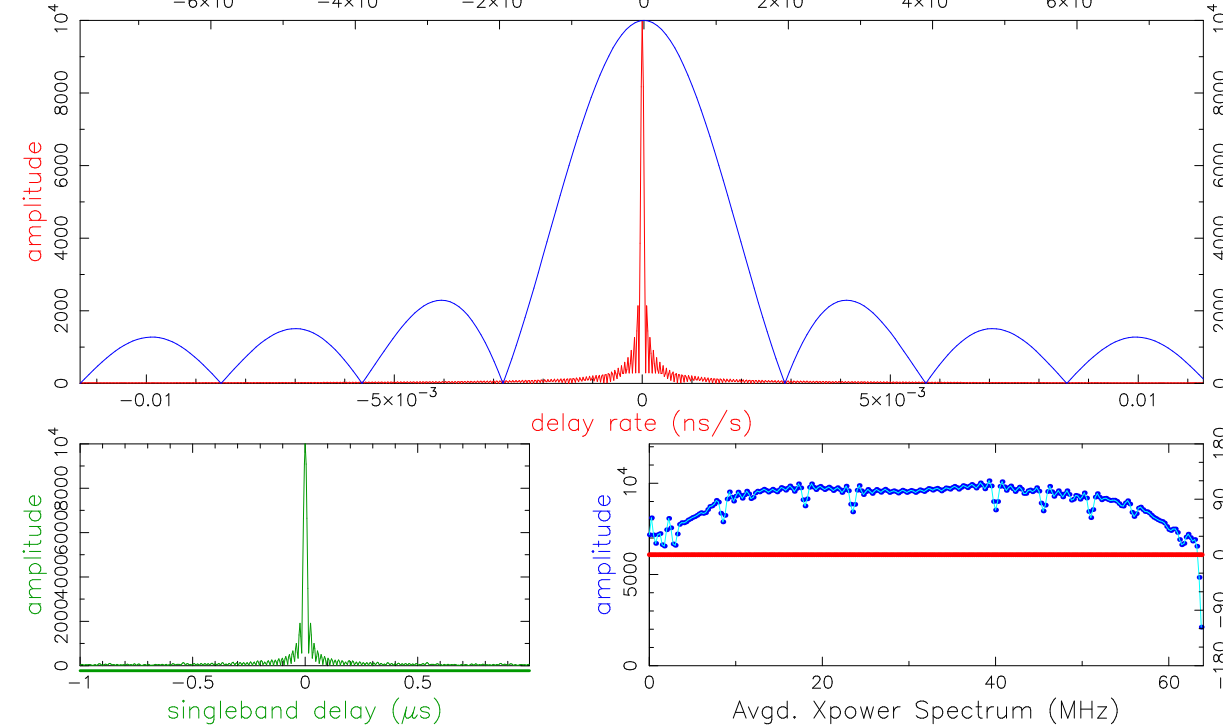
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 k: az 130.2 el 48.5 pa -40.3 k: az 130.2 el 48.5 pa -40.3 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//kk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kk.W.158.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kk

VLBA_KP - VLBA_KP, fgroup W, pol RR

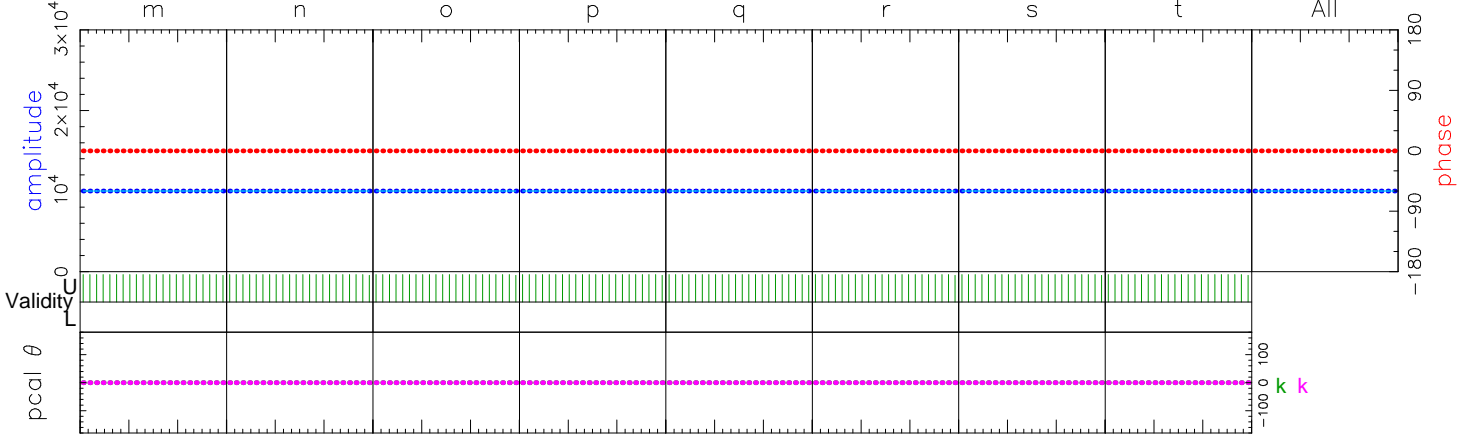


Fringe quality 9

SNR 366872.0
 Int time 179.984
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175943
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
k	0	0	0	0	0	0	0	0	Ampl.	257.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

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

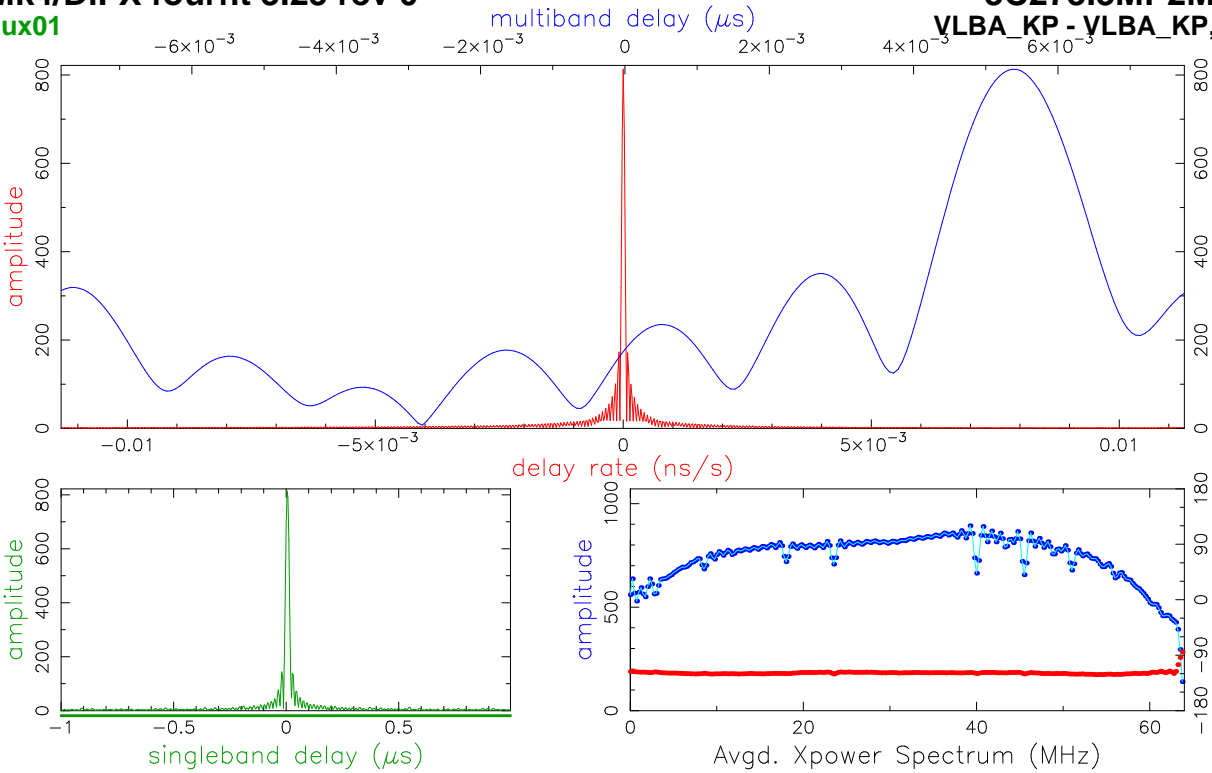
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 k: az 130.2 el 48.5 pa -40.3 k: az 130.2 el 48.5 pa -40.3 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//kk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kk.W.170.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kk

VLBA_KP - VLBA_KP, fgroup W, pol LR

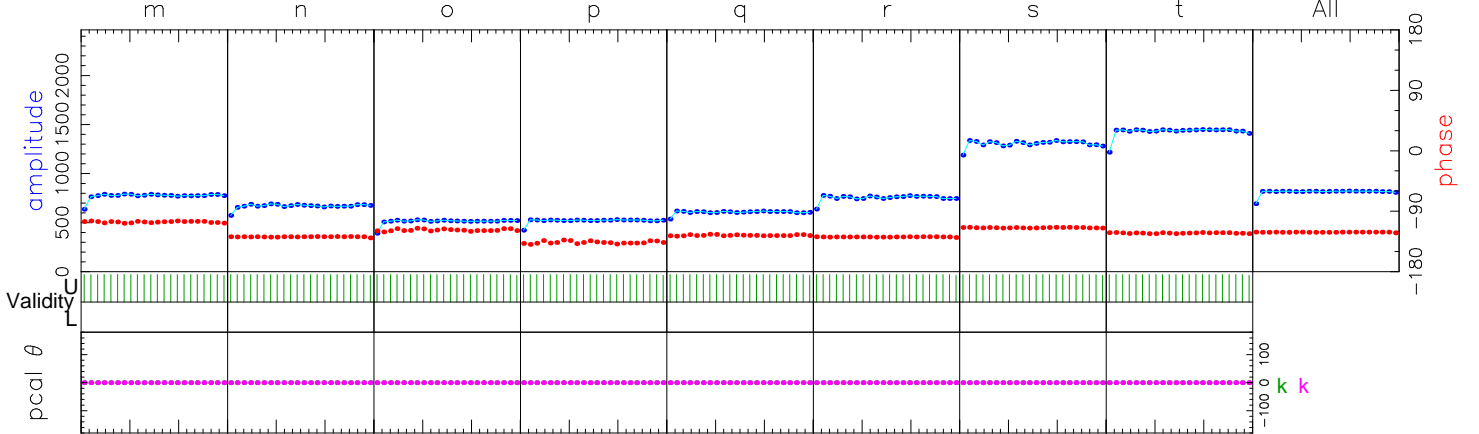


Fringe quality 7

SNR 30154.4
 Int time 179.984
 Amp 821.932
 Phase -121.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.005246
 MBD 0.005412
 Fringe rate (Hz) -0.000005
 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
 2025:041:175945
 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
	-105.9	-128.0	-117.9	-136.2	-125.8	-128.2	-114.4	-122.4	Phase	-121.2
	773.1	669.9	512.6	519.9	606.8	754.8	1306.8	1429.8	Ampl.	821.7
	258.3	258.0	258.4	258.3	258.6	258.4	258.4	258.2	Sbd box	258.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.411875000000E-03	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	5.41187E-03	+/-	3.6E-08
Sband delay (usec)	5.246250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	5.24625E-03	+/-	2.9E-07
Phase delay (usec)	-3.9073683824E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	-3.90737E-06	+/-	1.2E-10
Delay rate (us/s)	-5.52674943276E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	-5.52675E-11	+/-	1.2E-12
Total phase (deg)	-121.2	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	-121.2	+/-	0.0

ph/seg (deg) 0.2 0.0 Search (1024X32) 813.348 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.4 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.3 0.0 Inc. seg. avg. 813.246 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.1 0.0 Inc. frq. avg. 821.735 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 k: az 130.2 el 48.5 pa -40.3 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//kk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kk.W.180.3MP2MB simultaneous interpolator

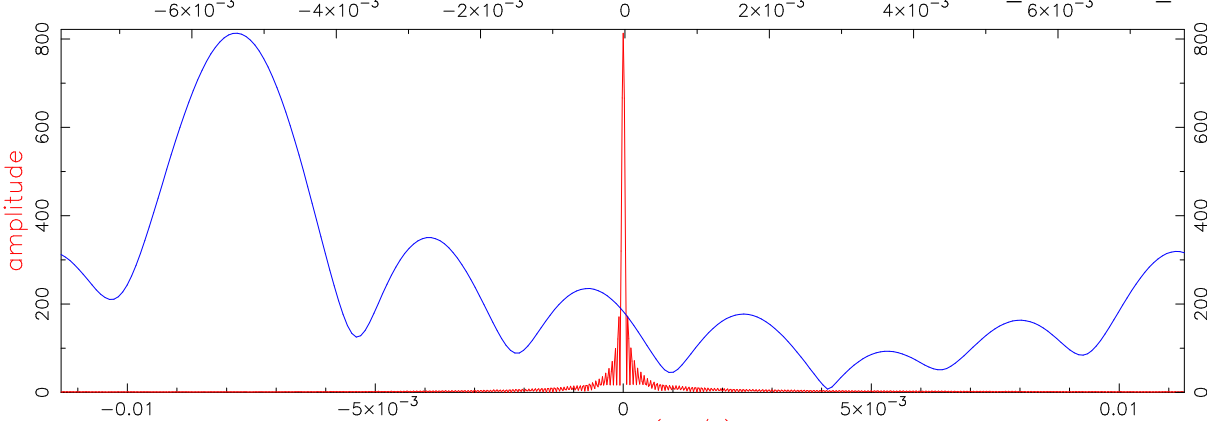
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kk

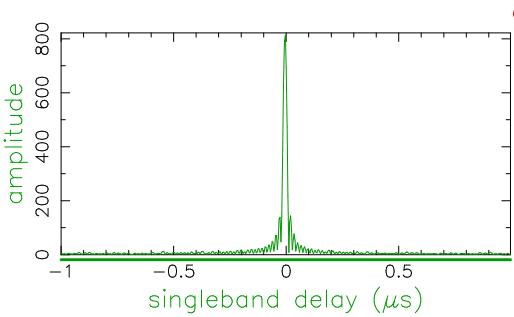
VLBA_KP - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

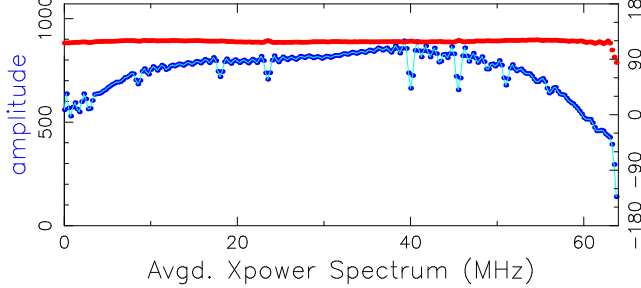


Fringe quality 7

SNR 30154.4
 Int time 179.984
 Amp 821.932
 Phase 121.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.005246
 MBD -0.005412
 Fringe rate (Hz)
 0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

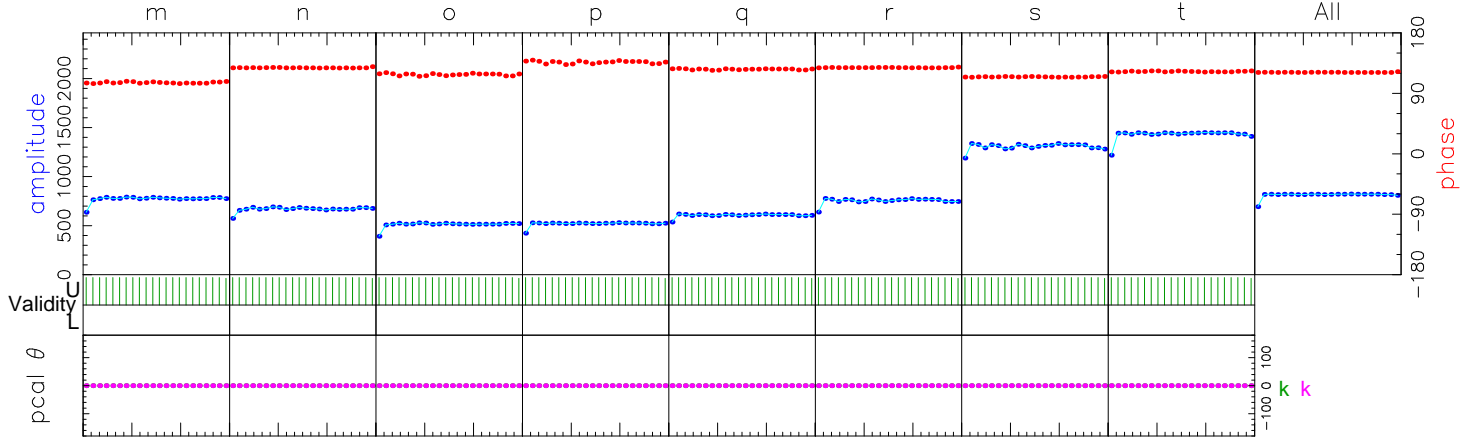


delay rate (ns/s)



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

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



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

Group delay (usec) (SBD)	-5.411875000000E-03	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	-5.41187E-03	+/-	3.6E-08
Sband delay (usec)	-5.246250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	-5.24625E-03	+/-	2.9E-07
Phase delay (usec)	3.9073683823E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	3.90737E-06	+/-	1.2E-10
Delay rate (us/s)	5.52674943276E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	5.52675E-11	+/-	1.2E-12
Total phase (deg)	121.2	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	121.2	+/-	0.0

ph/seg (deg) RMS Theor. Amplitude 821.932 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.4 0.0 Search (1024X32) 813.348 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.1 0.0 Inc. seg. avg. 813.246 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 k: az 130.2 el 48.5 pa -40.3 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//kk..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kk.W.187.3MP2MB simultaneous interpolator

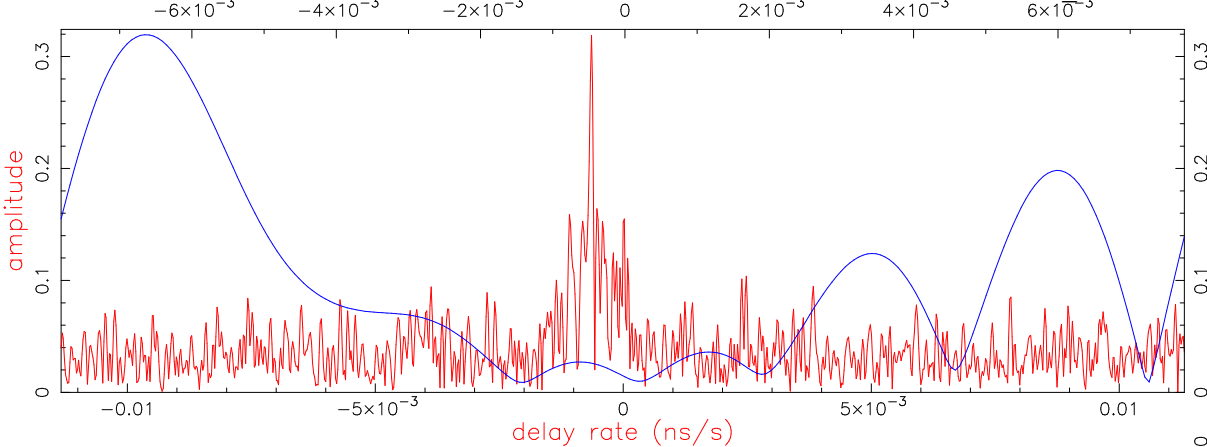
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kL

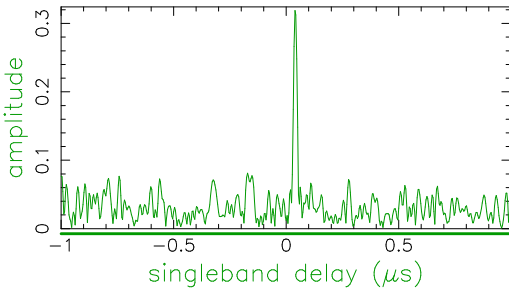
VLBA KP - JCMT, fgroup W, pol LL

multiband delay (μ s)

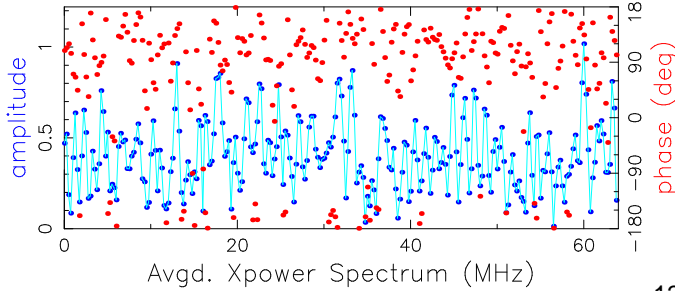


Fringe quality 9

SNR 11.9
Int time 179.984
Amp 0.324
Phase -54.7
PFD 3.8e-24
Delays (us)
SBD 0.040603
MBD -0.006567
Fringe rate (Hz)
-0.055514
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

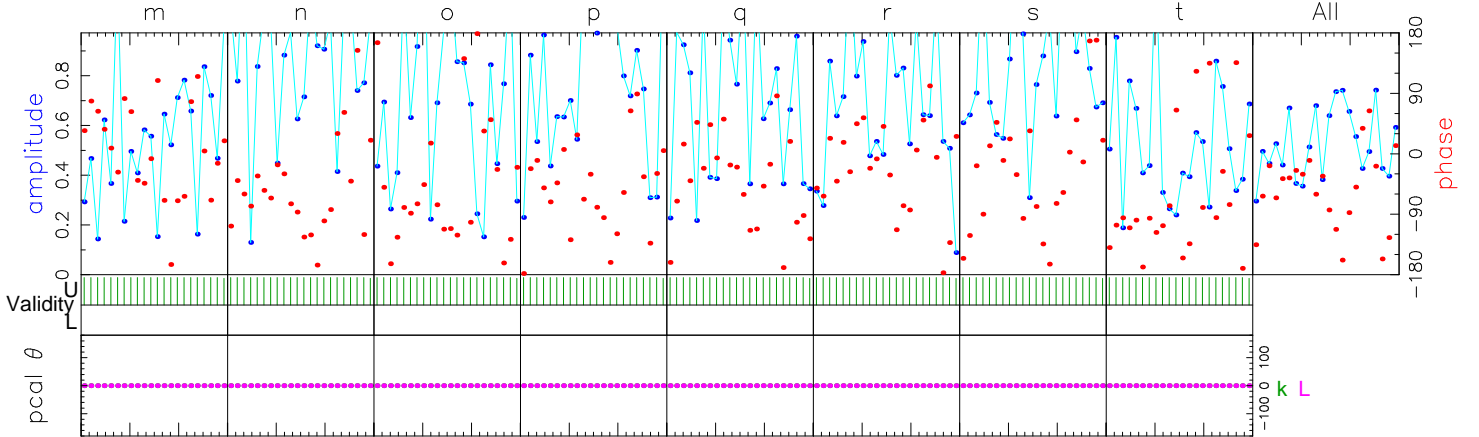


delay rate (ns/s)



Exp. c241b
Exper # 1234
Yr:day 2024:111
Start 040000.00
Stop 040300.22
FRT 040130.00
Corr/FF/build
2024:361:053129
2025:041:175942
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-8.9	-69.5	-96.3	-56.7	-34.8	-9.8	-46.6	-110.3	Phase	-54.7
	0.3	0.5	0.4	0.4	0.4	0.4	0.3	0.3	Ampl.	0.4
	265.3	266.8	267.4	268.2	267.6	267.8	266.0	265.0	Sbd box	267.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Tracks	

Group delay (usec) (SBD)	1.02297518260E+04	Apriori delay (usec)	1.02297115176E+04	Resid mbdelay (usec)	-6.56663E-03	+/-	9.1E-05
Sband delay (usec)	1.02297521206E+04	Apriori clock (usec)	3.6878395E-01	Resid sbdelay (usec)	4.06030E-02	+/-	7.3E-04
Phase delay (usec)	1.02297115158E+04	Apriori clockrate (us/s)	4.8829300E-07	Resid phdelay (usec)	-1.76233E-06	+/-	3.1E-07
Delay rate (us/s)	-7.42877251279E-01	Apriori rate (us/s)	-7.42876606821E-01	Resid rate (us/s)	-6.44459E-07	+/-	3.0E-09
Total phase (deg)	-9.2	Apriori accel (us/s/s)	-5.36766432871E-05	Resid phase (deg)	-54.7	+/-	9.6

ph/seg (deg)	57.4	RMS	22.6	Theor.	Amplitude	0.324 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	75.1	Search (1024X32)	0.312	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	sb window (us)	-1.000	1.000		
ph/frq (deg)	40.1	Inc. seg. avg.	0.489	Bits/sample: 2x2	Inc. frq. avg.	0.370	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	25.7	Inc. frq. avg.	0.370	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 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.807 1536.745 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kL.W.160.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

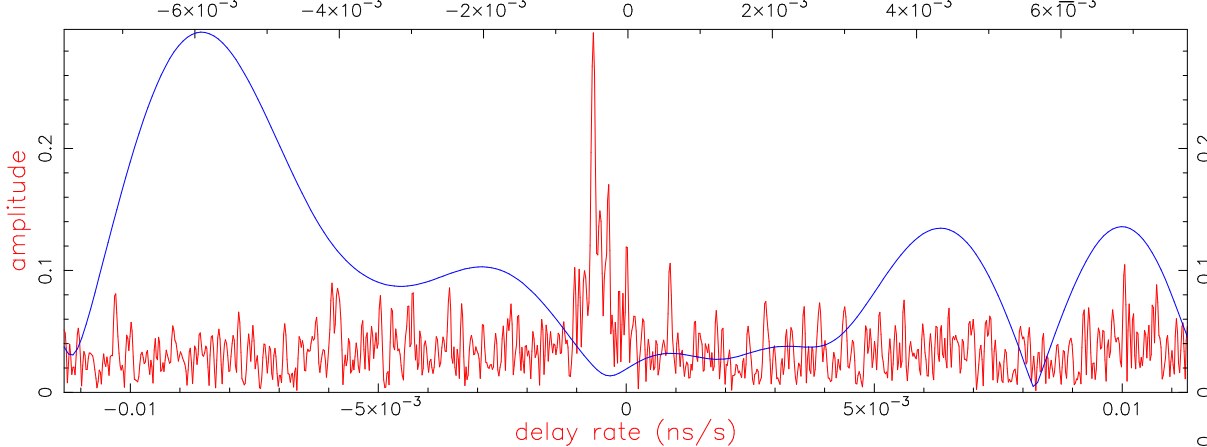
aux01

3C273.3MP2MB, No0707, kL

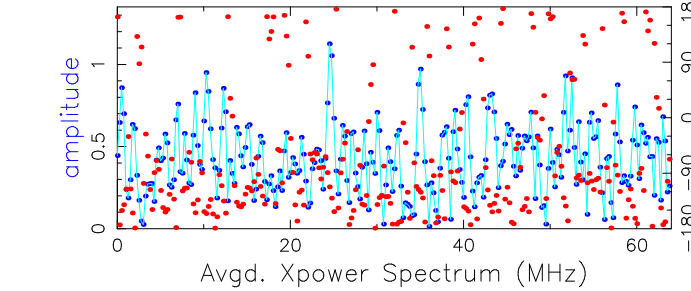
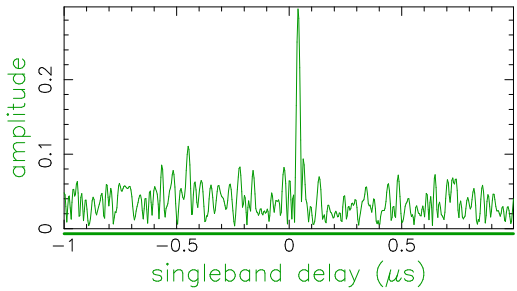
VLBA_KP - JCMT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

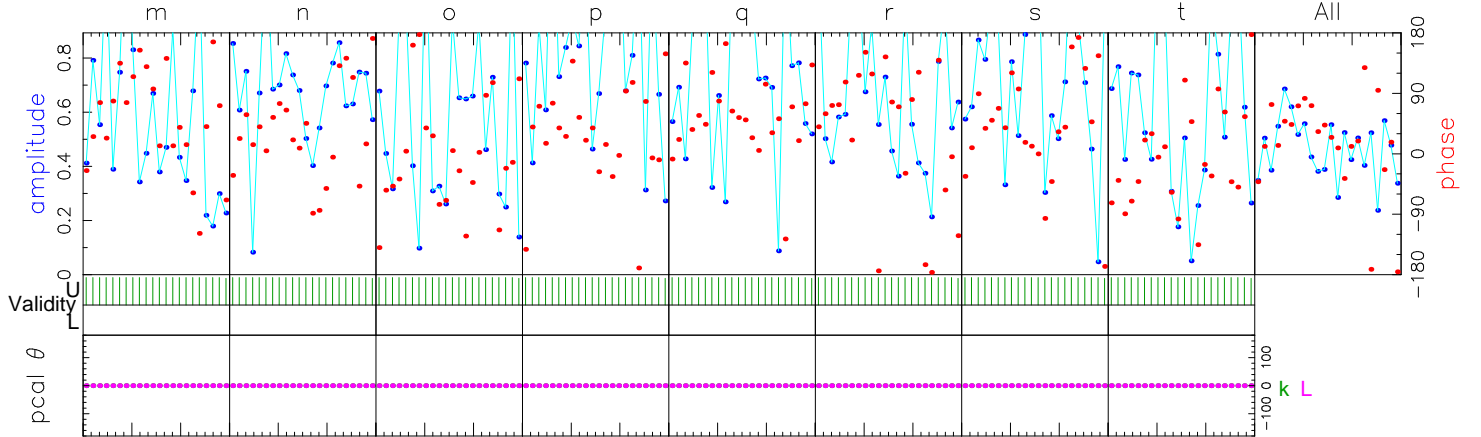


SNR 10.9
 Int time 179.984
 Amp 0.298
 Phase 35.8
 PFD 2.4e-19
 Delays (us)
 SBD 0.040173
 MBD -0.005837
 Fringe rate (Hz)
 -0.056517
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



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
	61.1	26.7	-13.5	37.6	52.9	87.5	56.0	-20.3		35.8
	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.4		0.3
	265.2	267.5	267.3	268.2	266.8	268.9	266.9	265.9		267.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0		
L	0	0	0	0	0	0	0	0		
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		Tracks
										Tracks
Group delay (usec) (SBD)	1.02297525559E+04		Apriori delay (usec)		1.02297115176E+04		Resid mbdelay (usec)		-5.83671E-03	+/- 9.9E-05
Sband delay (usec)	1.02297516909E+04		Apriori clock (usec)		3.6878395E-01		Resid sbdelay (usec)		4.01733E-02	+/- 7.9E-04
Phase delay (usec)	1.02297115188E+04		Apriori clockrate (us/s)		4.8829300E-07		Resid phdelay (usec)		1.15590E-06	+/- 3.4E-07
Delay rate (us/s)	-7.42877262925E-01		Apriori rate (us/s)		-7.42876606821E-01		Resid rate (us/s)		-6.56105E-07	+/- 3.3E-09
Total phase (deg)			81.3		Apriori accel (us/s/s)		-5.36766432871E-05		35.8	+/- 10.5

ph/seg (deg) 60.8 24.6 Amplitude 0.298 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.1 43.0 Search (1024X32) 0.291 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.2 14.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.0 25.9 Inc. seg. avg. 0.426 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 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.807 1536.745 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kL.W.172.3MP2MB

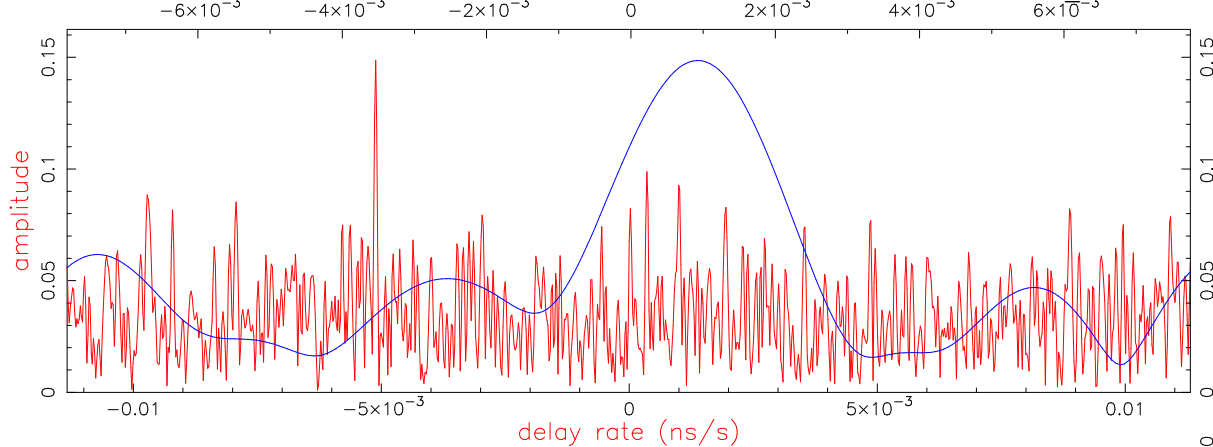
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kL

VLBA KP - JCMT, fgroup W, pol LR

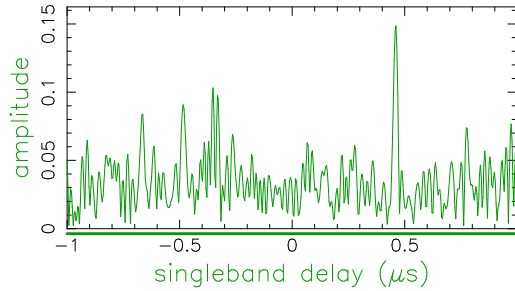
multiband delay (μ s)



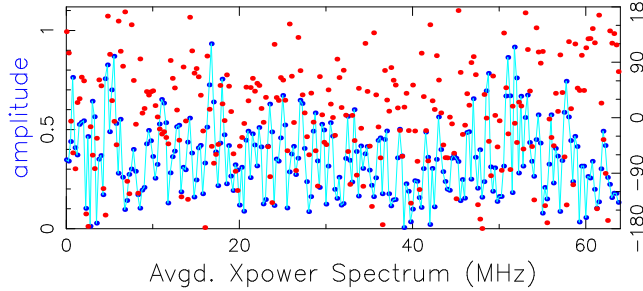
Fringe quality 0

SNR 5.5
 Int time 179.984
 Amp 0.163
 Phase -97.4
 PFD 9.9e-01
 Delays (us)
 SBD 0.459899
 MBD 0.000893
 Fringe rate (Hz)
 -0.440436
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

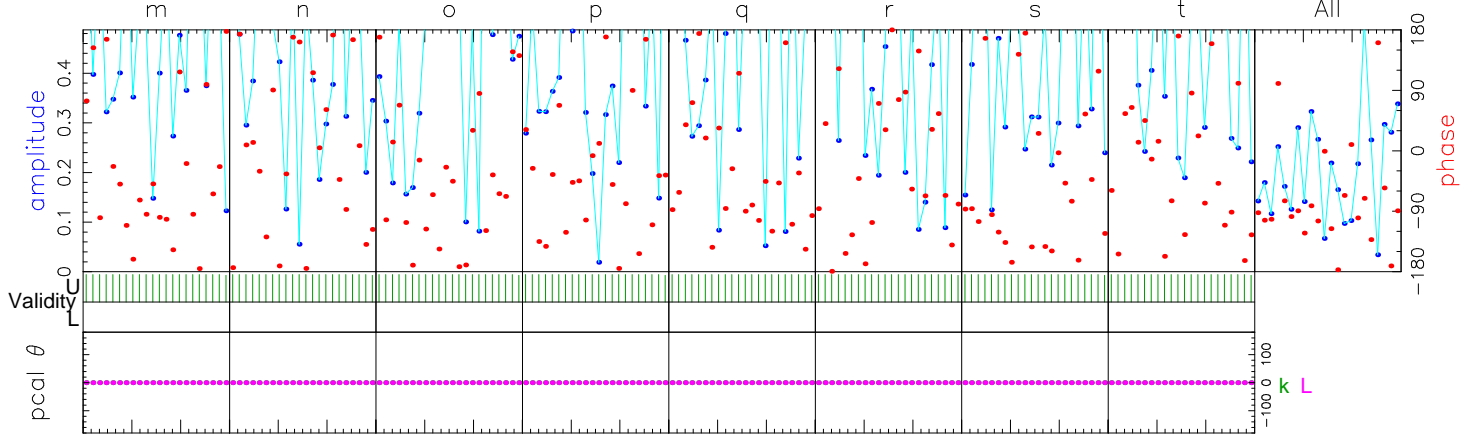
Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175946
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



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
	-100.3	-154.2	-92.8	-79.4	-84.6	-114.6	-132.5	-53.1	Phase	-97.4
	0.2	0.1	0.2	0.2	0.3	0.1	0.2	0.1	Ampl.	0.2
	271.2	477.5	45.7	35.7	374.8	190.2	188.3	486.0	Sbd box	374.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.02301655360E+04		Apriori delay (usec)		1.02297115176E+04		Resid mbdelay (usec)		8.93437E-04	+/- 2.0E-04
Sband delay (usec)	1.02301714166E+04		Apriori clock (usec)		3.6878395E-01		Resid sbdelay (usec)		4.59899E-01	+/- 1.6E-03
Phase delay (usec)	1.02297115145E+04		Apriori clockrate (us/s)		4.8829300E-07		Resid phdelay (usec)		-3.13957E-06	+/- 6.7E-07
Delay rate (us/s)	-7.42881719850E-01		Apriori rate (us/s)		-7.42876606821E-01		Resid rate (us/s)		-5.11303E-06	+/- 6.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.36766432871E-05		Resid phase (deg)		-97.4	+/- 20.9

ph/seg (deg) 58.8 49.1 Search (1024X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.9 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.7 29.6 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.4 51.7 Inc. frq. avg. 0.155 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 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.807 1536.745 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kL.W.184.3MP2MB

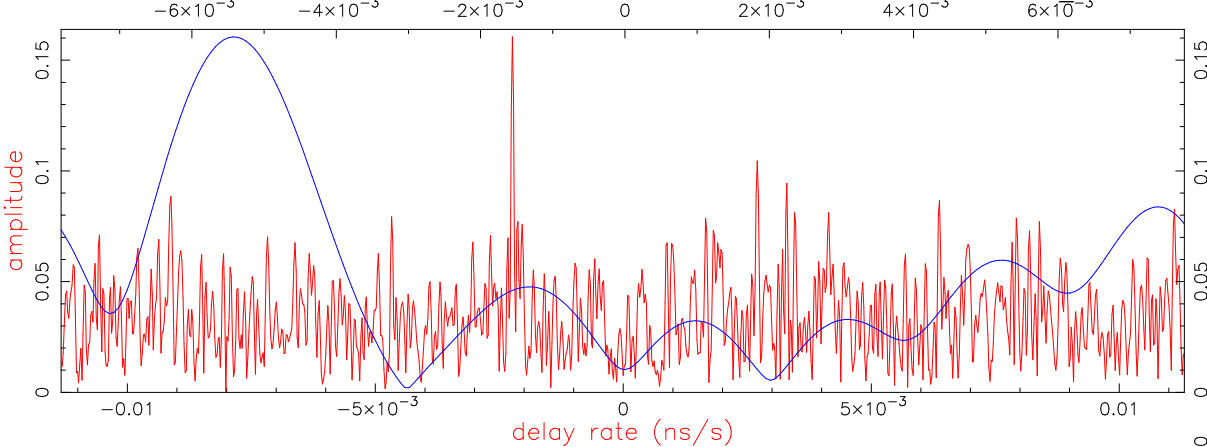
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kL

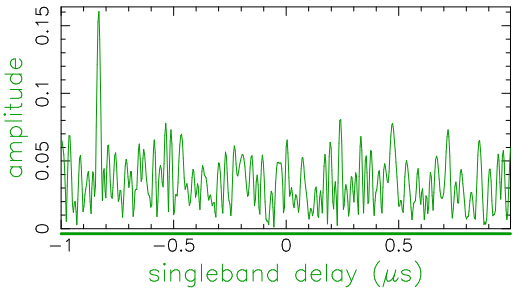
VLBA KP - JCMT, fgroup W, pol RL

multiband delay (μ s)

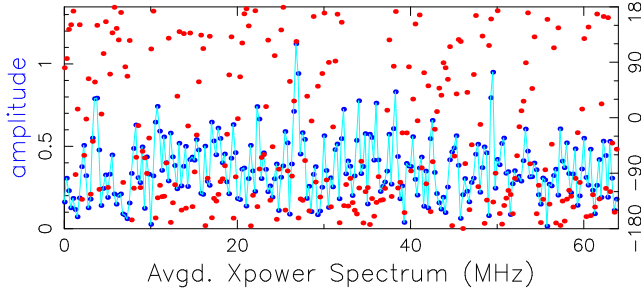


Fringe quality 0

SNR 5.9
 Int time 179.984
 Amp 0.164
 Phase 40.0
 PFD 3.4e-01
 Delays (us)
 SBD -0.832934
 MBD -0.005427
 Fringe rate (Hz)
 -0.193146
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

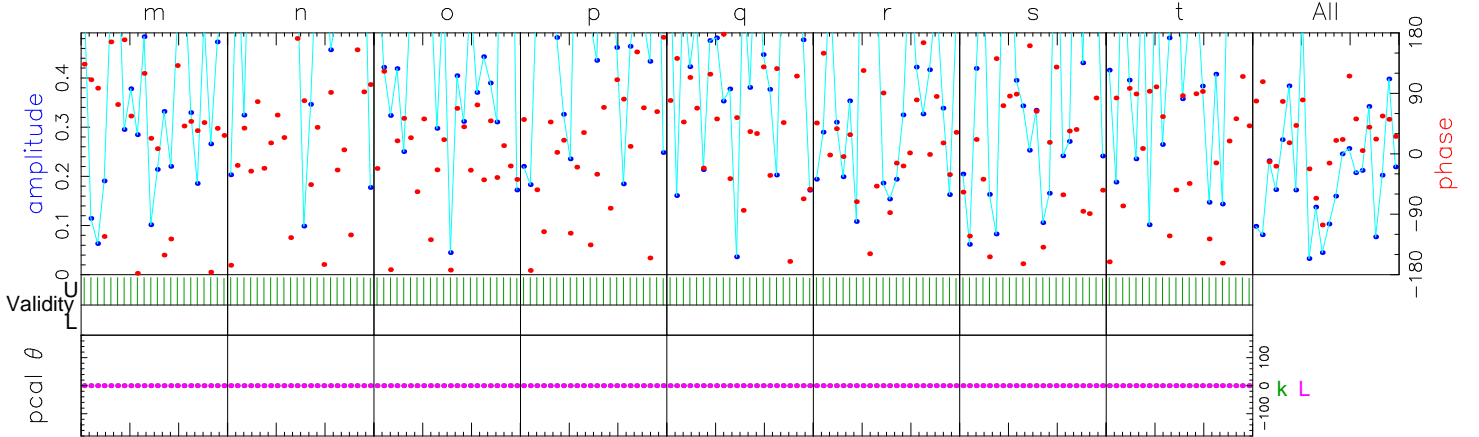


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.9	32.7	4.3	24.1	66.0	32.8	50.6	48.1	Phase	40.0
	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	1.5	427.9	43.0	463.1	344.6	301.2	154.6	102.4	Sbd box	43.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Tracks	

Group delay (usec) (SBD)	1.02288779656E+04	Apriori delay (usec)	1.02297115176E+04	Resid mbdelay (usec)	-5.42705E-03	+/-	1.8E-04
Sband delay (usec)	1.02288785834E+04	Apriori clock (usec)	3.6878395E-01	Resid sbdelay (usec)	-8.32934E-01	+/-	1.5E-03
Phase delay (usec)	1.02297115189E+04	Apriori clockrate (us/s)	4.8829300E-07	Resid phdelay (usec)	1.28934E-06	+/-	6.2E-07
Delay rate (us/s)	-7.42878849054E-01	Apriori rate (us/s)	-7.42876606821E-01	Resid rate (us/s)	-2.24223E-06	+/-	6.0E-09
Total phase (deg)	85.4	Apriori accel (us/s/s)	-5.36766432871E-05	Resid phase (deg)	40.0	+/-	19.4

ph/seg (deg)	53.9	Theor.	45.4	Amplitude	0.164 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.5		79.3	Search (1024X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.4		27.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.4		47.8	Inc. seg. avg.	0.162	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.163	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 L: az 93.6 el 15.4 pa -70.0 u,v (fr/asec) 4229.807 1536.745 simultaneous interpolator

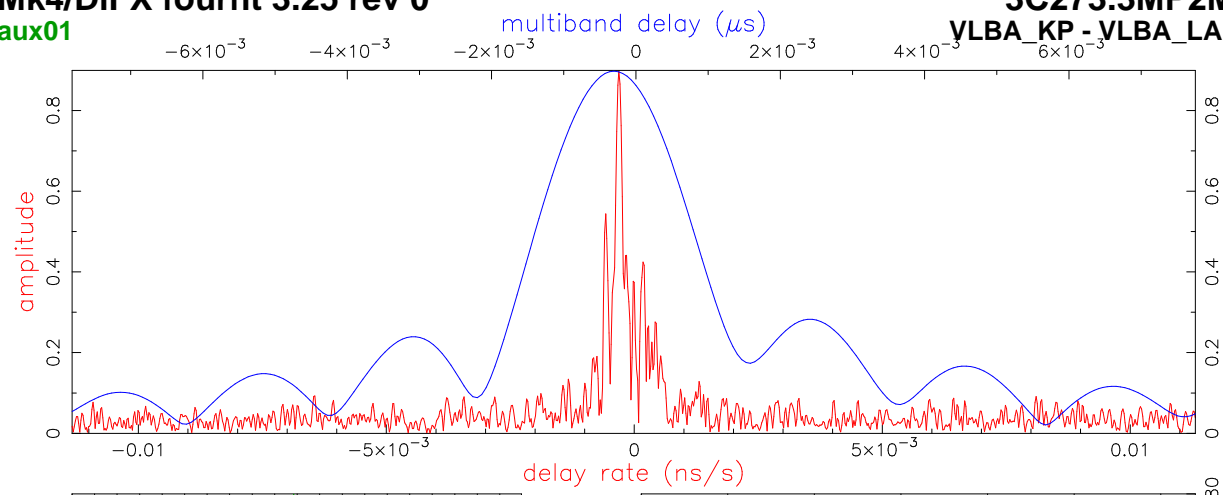
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kL..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kL.W.195.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kl

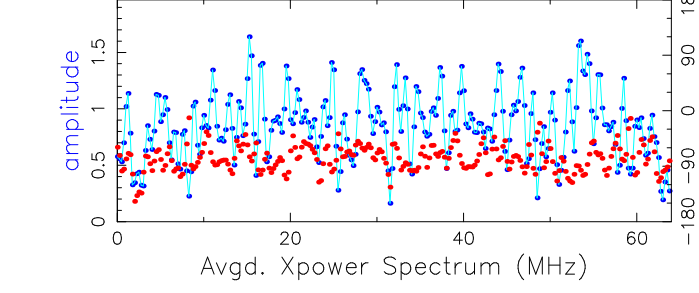
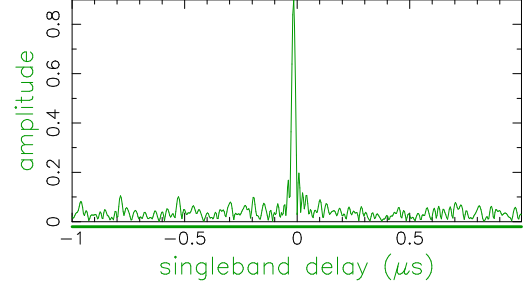
VLBA_KP - VLBA_LA, fgroup W, pol LL



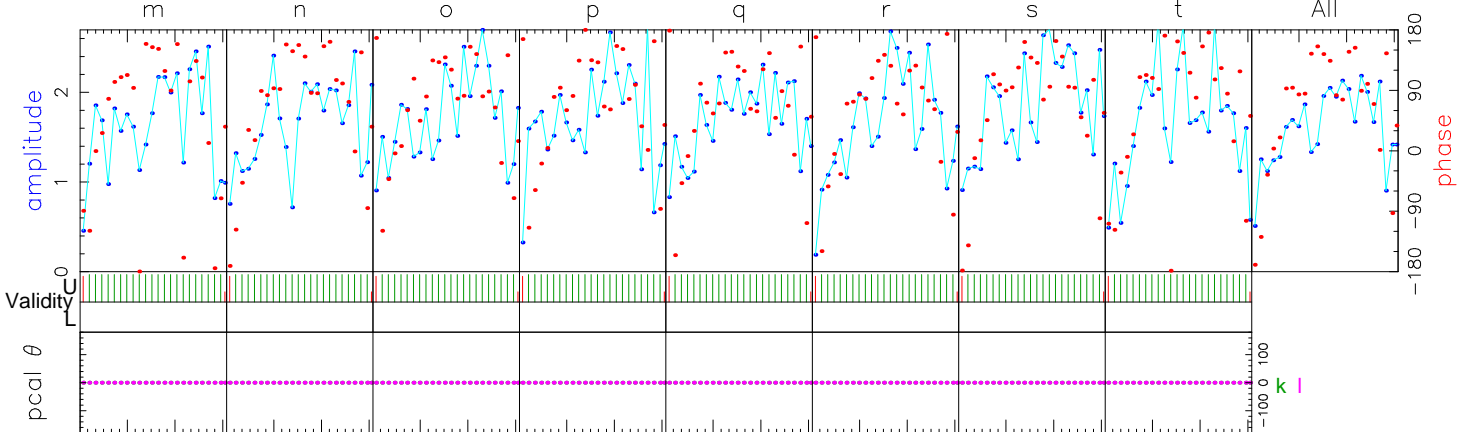
Fringe quality 6

SNR 32.9
 Int time 178.984
 Amp 0.899
 Phase 99.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.016174
 MBD -0.000319
 Fringe rate (Hz)
 -0.025965
 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
 2025:041:180008
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-9.46836329735E+01	Apriori delay (usec)	-9.46676893121E+01	Resid mbdelay (usec)	-3.18661E-04	+/-	3.3E-05
Sband delay (usec)	-9.46838635621E+01	Apriori clock (usec)	8.4501190E+00	Resid sbdelay (usec)	-1.61742E-02	+/-	2.6E-04
Phase delay (usec)	-9.46676860909E+01	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	3.22124E-06	+/-	1.1E-07
Delay rate (us/s)	1.33488547540E-01	Apriori rate (us/s)	1.33488848970E-01	Resid rate (us/s)	-3.01430E-07	+/-	1.1E-09
Total phase (deg)	-172.8	Apriori accel (us/s/s)	3.39652284060E-07	Resid phase (deg)	99.9	+/-	3.5

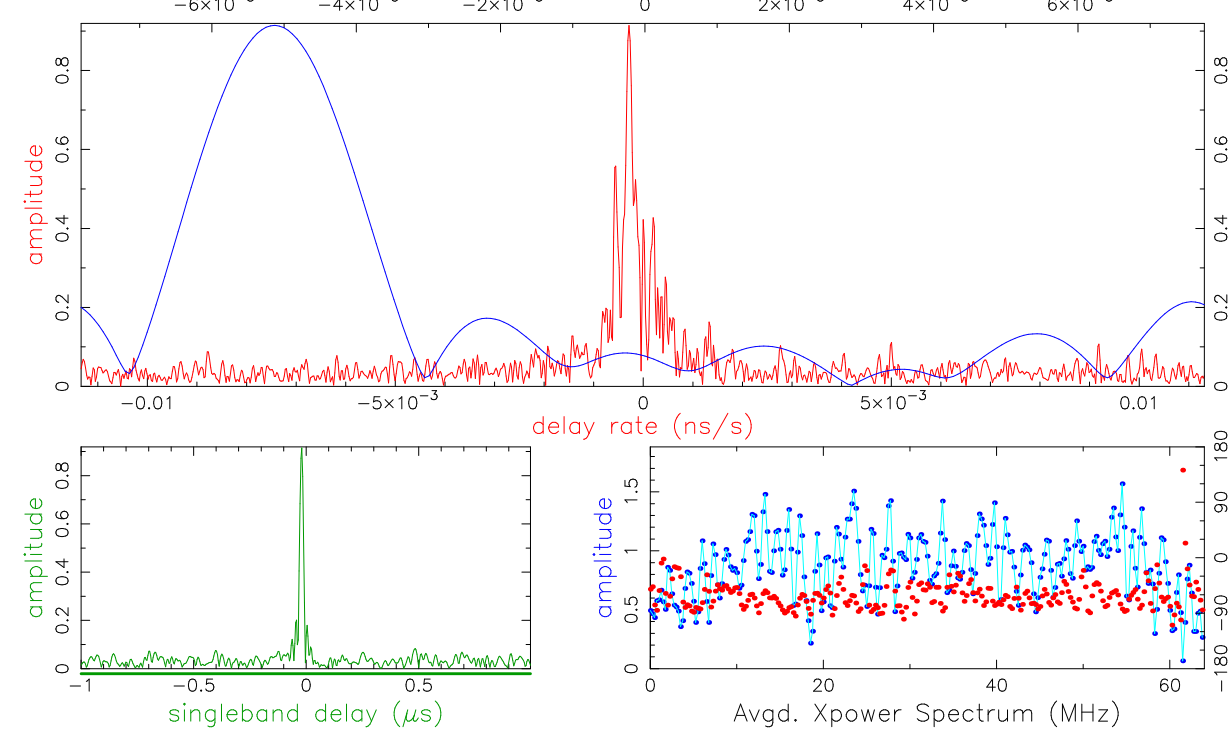
ph/seg (deg) 70.6 8.5 Amplitude 0.899 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 92.0 14.9 Search (1024X32) 0.872 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.9 4.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.0 8.6 Inc. seg. avg. 1.595 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 l: az 139.8 el 48.9 pa -31.4 u,v (fr/asec) -764.880 -488.546 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//kl..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kl.W.275.3MP2MB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kl

VLBA_KP - VLBA_LA, fgroup W, pol RR

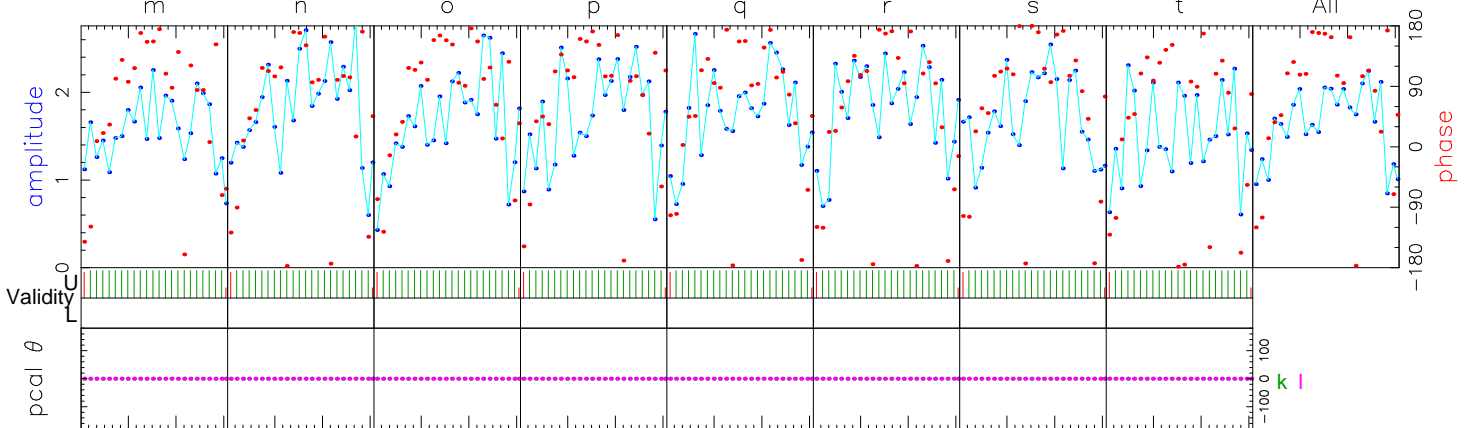


Fringe quality 7

SNR 33.6
 Int time 178.984
 Amp 0.919
 Phase 120.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.020489
 MBD -0.005152
 Fringe rate (Hz) -0.025585
 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
 2025:041:180010
 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



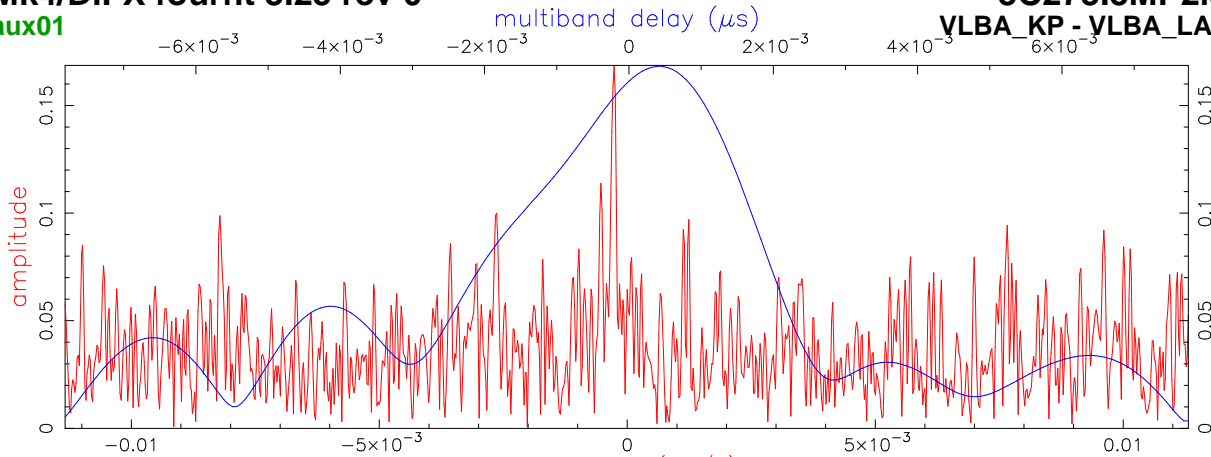
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	119.6	124.6	113.4	119.2	112.3	125.1	130.7	115.2	Phase	120.3	
	0.8	1.0	0.9	1.0	1.0	1.0	1.0	0.7	Ampl.	0.9	
	252.2	251.8	251.7	251.8	251.6	251.7	251.5	251.9	Sbd box	251.8	
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used		
k	0	0	0	0	0	0	0	0	PC freqs		
l	0	0	0	0	0	0	0	0	PC freqs		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
l	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	-9.46884664977E+01		Apriori delay (usec)		-9.46676893121E+01		Resid mbdelay (usec)		-5.15219E-03	+/- 3.2E-05	
Sband delay (usec)	-9.46881783121E+01		Apriori clock (usec)		8.4501190E+00		Resid sbdelay (usec)		-2.04890E-02	+/- 2.6E-04	
Phase delay (usec)	-9.46676854341E+01		Apriori clockrate (us/s)		3.8620713E-07		Resid phdelay (usec)		3.87805E-06	+/- 1.1E-07	
Delay rate (us/s)	1.33488551954E-01		Apriori rate (us/s)		1.33488848970E-01		Resid rate (us/s)		-2.97016E-07	+/- 1.1E-09	
Total phase (deg)			Apriori accel (us/s/s)		3.39652284060E-07		Resid phase (deg)		120.3	+/- 3.4	
	RMS	Theor.	Amplitude	0.919 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	70.6	8.3	Search (1024X32)	0.888		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	91.2	14.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	6.9	4.8	Inc. seg. avg.	1.642		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	11.1	8.4	Inc. frq. avg.	0.916		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			l: az 139.8 el 48.9 pa -31.4			u,v (fr/asec) -764.880 -488.546			simultaneous interpolator		
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//kl..3MP2MB			Output file: /Exps/c241b/v2/3mm/1234/No0707//kl.W.282.3MP2MB					

Mk4/DiFX fourfit 3.25 rev 0

aux01

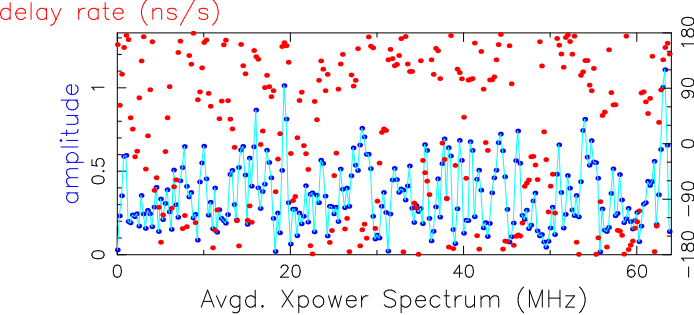
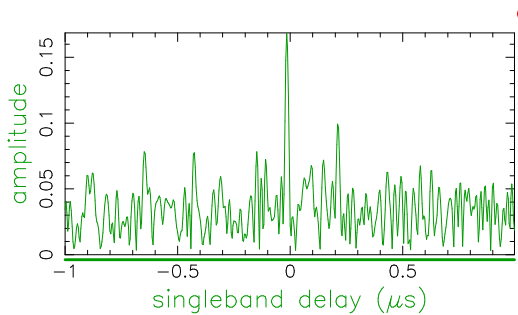
3C273.3MP2MB, No0707, kl

VLBA_KP - VLBA_LA, fgroup W, pol LR



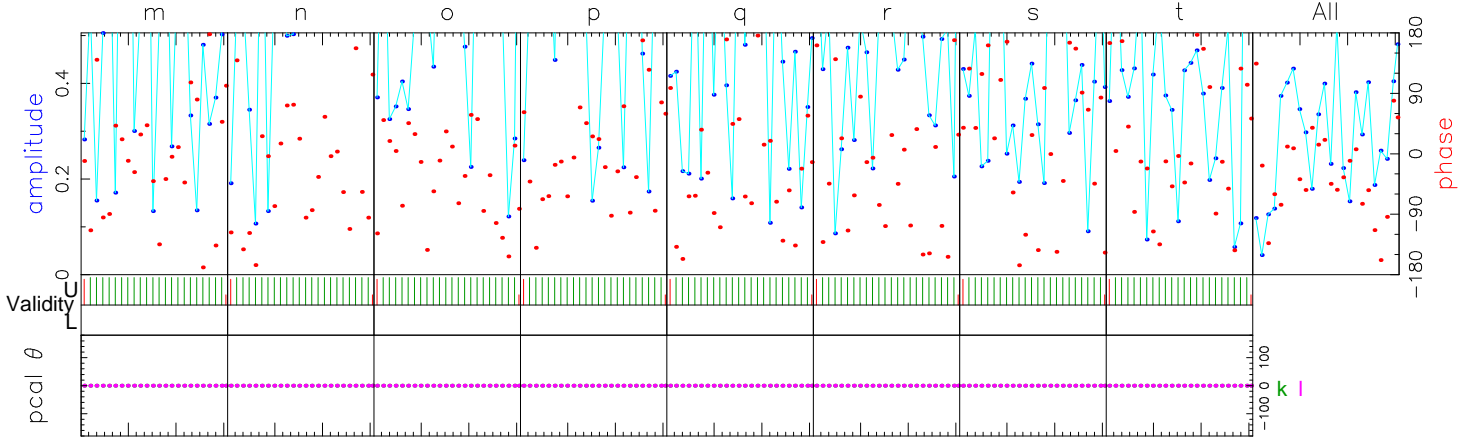
Fringe quality 0

SNR 6.2
 Int time 178.984
 Amp 0.169
 Phase -26.8
 PFD 8.8e-02
 Delays (us)
 SBD -0.015042
 MBD 0.000445
 Fringe rate (Hz)
 -0.023568
 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -9.46828691781E+01 Apriori delay (usec) -9.46676893121E+01 Resid mbdelay (usec) 4.45134E-04 +/- 1.8E-04
 Sband delay (usec) -9.46827310621E+01 Apriori clock (usec) 8.4501190E+00 Resid sbdelay (usec) -1.50417E-02 +/- 1.4E-03
 Phase delay (usec) -9.46676901752E+01 Apriori clockrate (us/s) 3.8620713E-07 Resid phdelay (usec) -8.63042E-07 +/- 6.0E-07
 Delay rate (us/s) 1.33488575370E-01 Apriori rate (us/s) 1.33488848970E-01 Resid rate (us/s) -2.73600E-07 +/- 5.8E-09
 Total phase (deg) -299.4 Apriori accel (us/s/s) 3.39652284060E-07 Resid phase (deg) -26.8 +/- 18.6

RMS Theor. Amplitude 0.169 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 65.2 45.5 Search (1024X32) 0.166 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 100.8 79.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 45.6 26.3 Inc. seg. avg. 0.218 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 49.1 45.9 Inc. frq. avg. 0.175 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 130.2 el 48.5 pa -40.3 l: az 139.8 el 48.9 pa -31.4 u,v (fr/asec) -764.880 -488.546 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kl..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kl.W.287.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

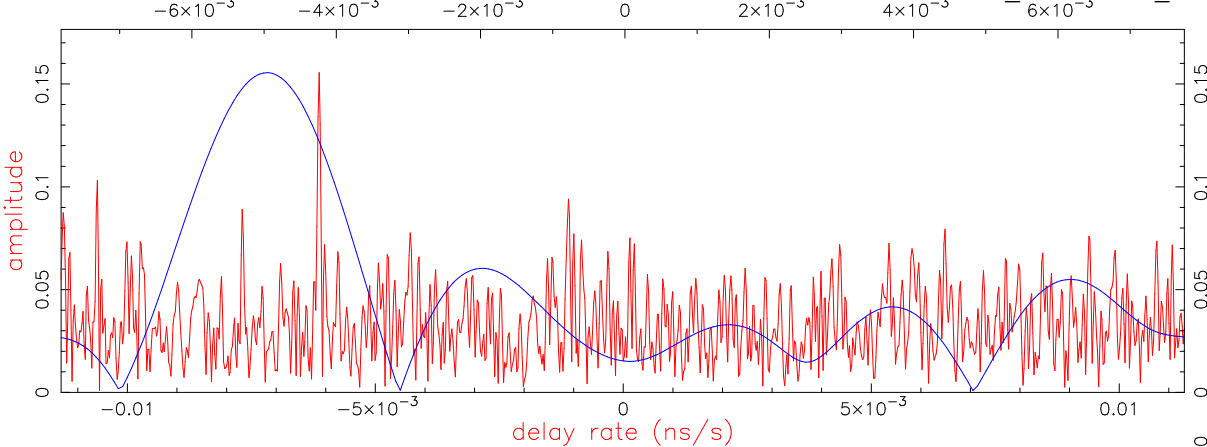
aux01

3C273.3MP2MB, No0707, km

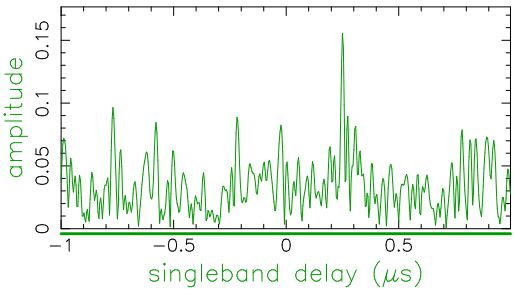
VLBA_KP - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

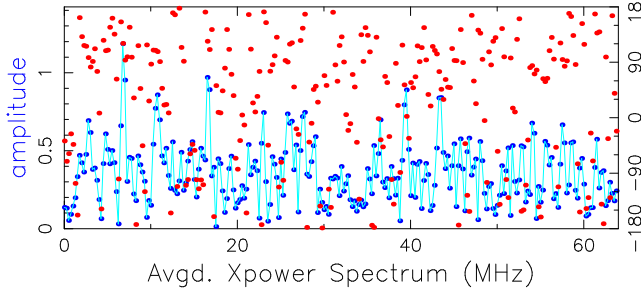
Fringe quality 0



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

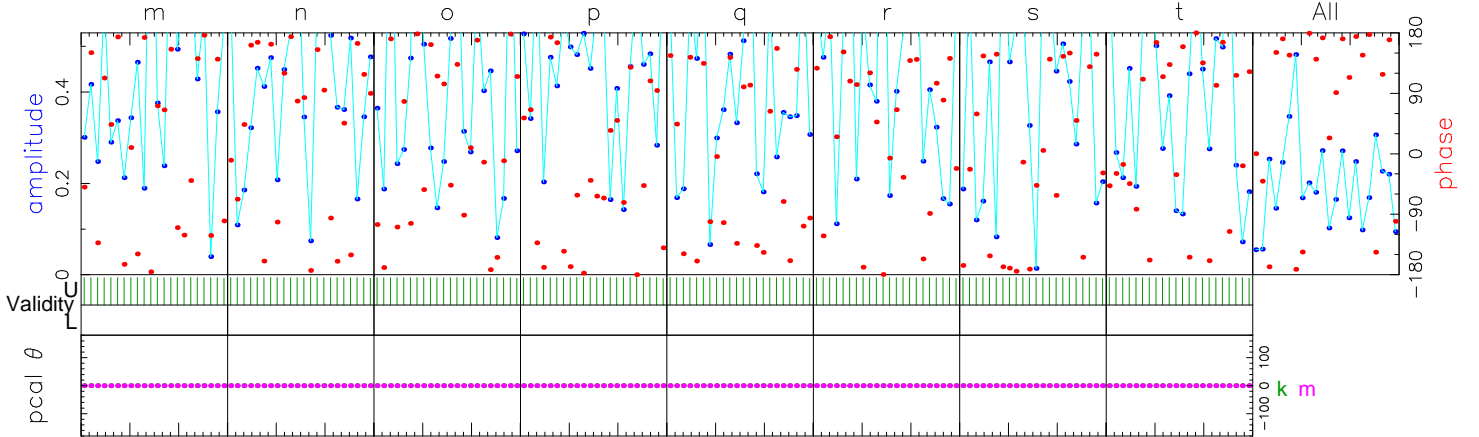


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.3	137.8	-173.6	-151.1	160.4	142.7	174.8	-179.0	Phase	169.4
	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	343.4	393.2	45.4	462.7	460.2	456.4	99.1	493.1	Sbd box	321.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

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

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

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

Mk4/DiFX fourfit 3.25 rev 0

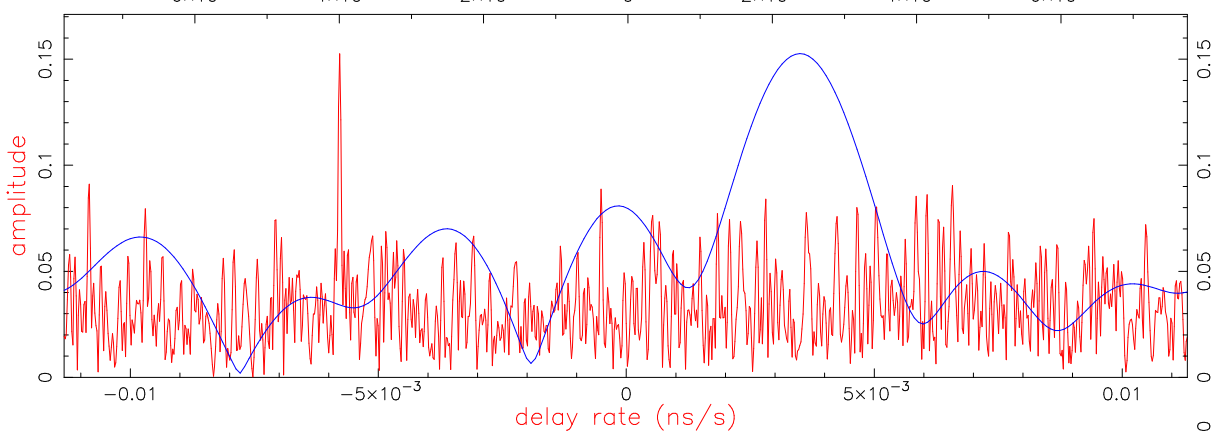
aux01

3C273.3MP2MB, No0707, km

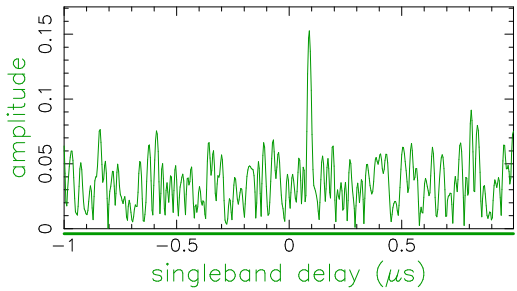
VLBA_KP - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

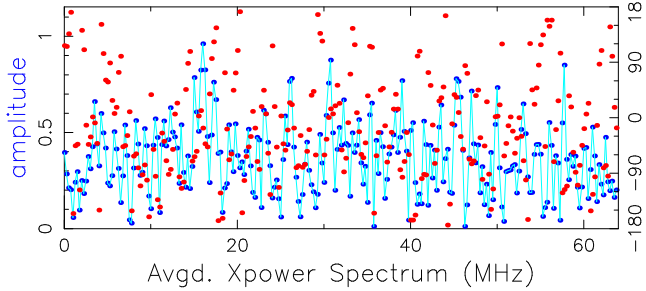
Fringe quality 0



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

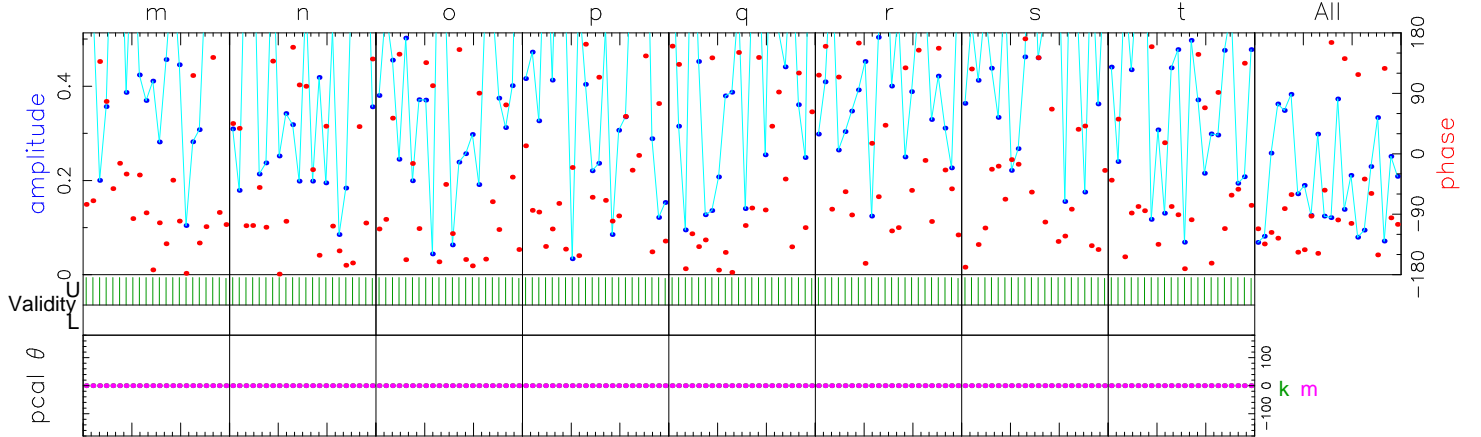


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.3	-143.9	-133.9	-103.3	175.2	-108.2	-91.0	-95.8	Phase	-111.7
	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	281.5	384.0	402.9	470.9	7.2	183.2	108.5	165.3	Sbd box	279.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

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

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

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

Mk4/DiFX fourfit 3.25 rev 0

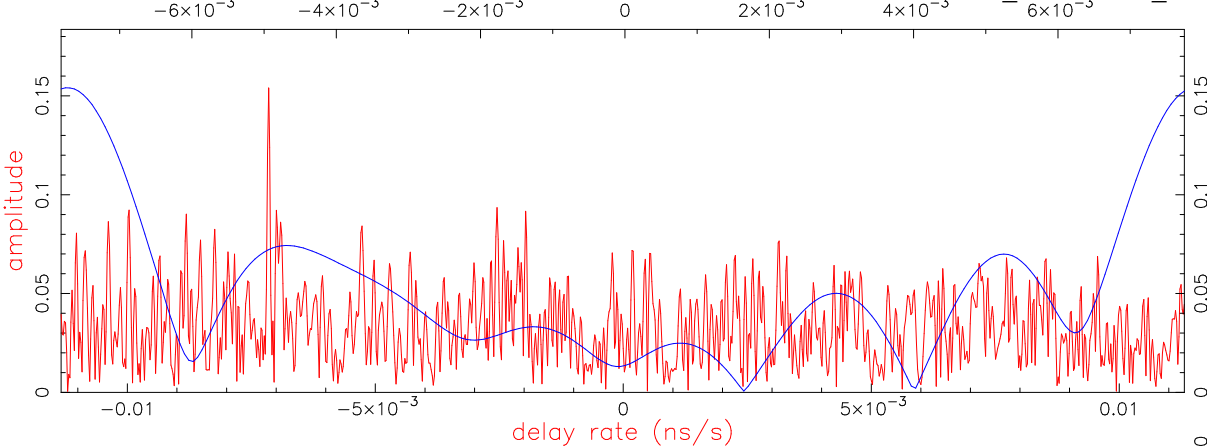
aux01

3C273.3MP2MB, No0707, km

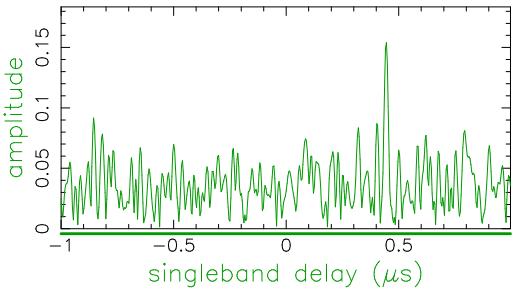
VLBA_KP - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

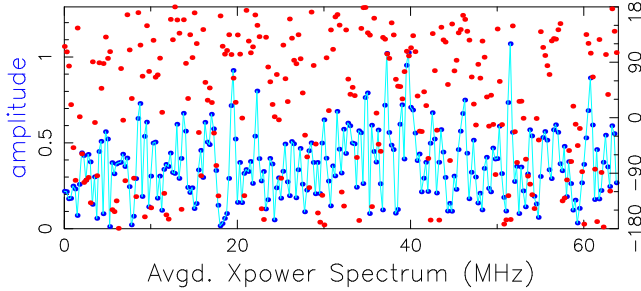
Fringe quality 0



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

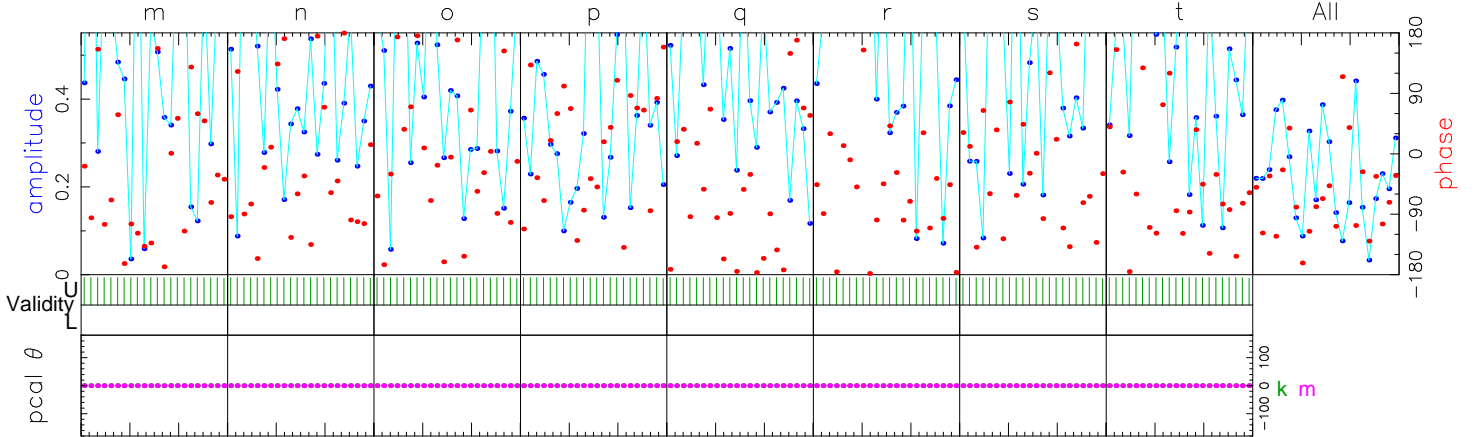


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.5	-84.7	-34.0	-12.6	-96.6	-60.3	-45.1	-98.9	Phase	-68.4
	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2	Ampl.	0.2
	160.9	148.9	91.2	168.9	142.1	460.2	477.2	48.8	Sbd box	370.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

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

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

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

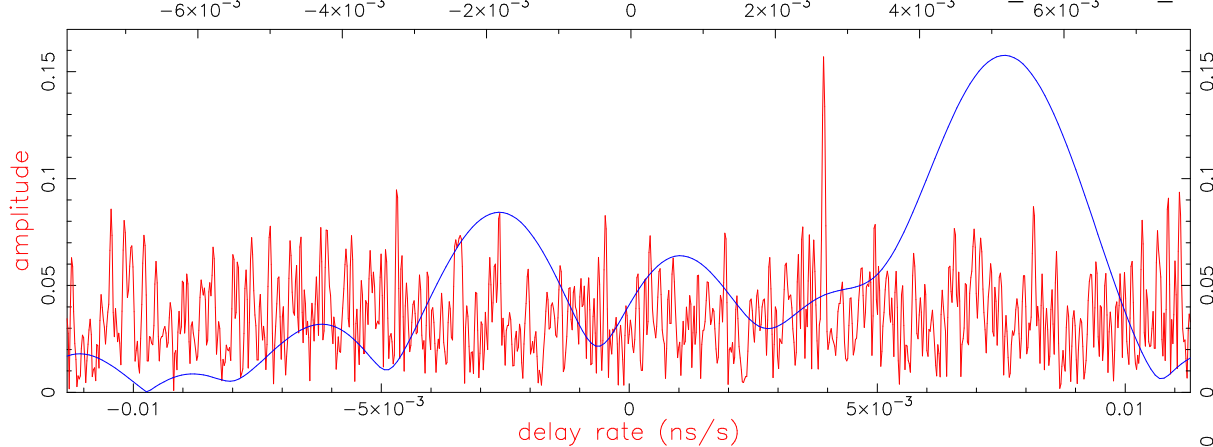
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, km

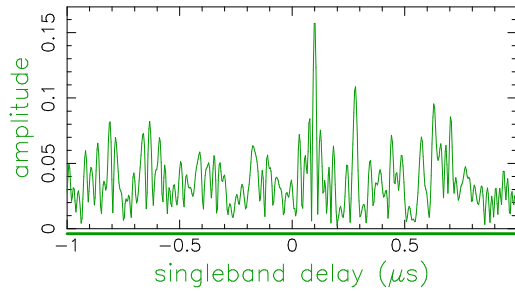
VLBA_KP - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

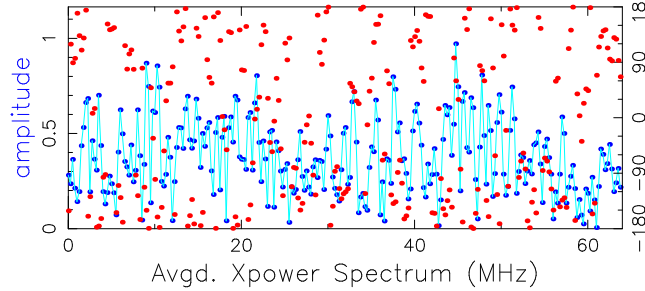


Fringe quality 0

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

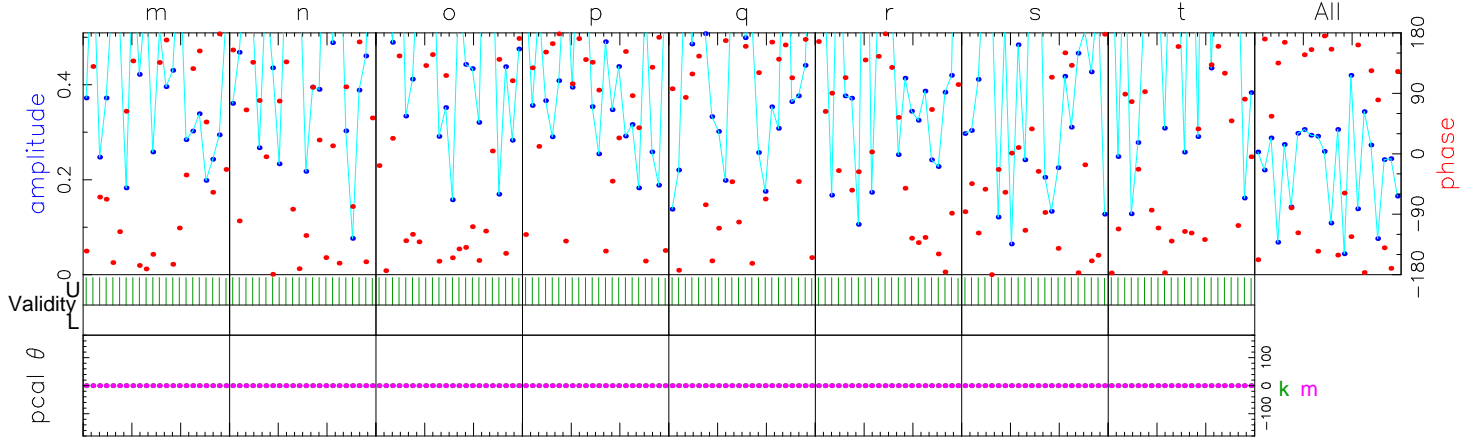


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-166.8	151.2	-164.3	167.9	-179.7	142.2	-83.6	-165.3	Phase	-176.7
	0.2	0.1	0.3	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	327.4	276.9	282.4	430.8	264.0	20.3	305.1	213.2	Sbd box	282.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

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

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

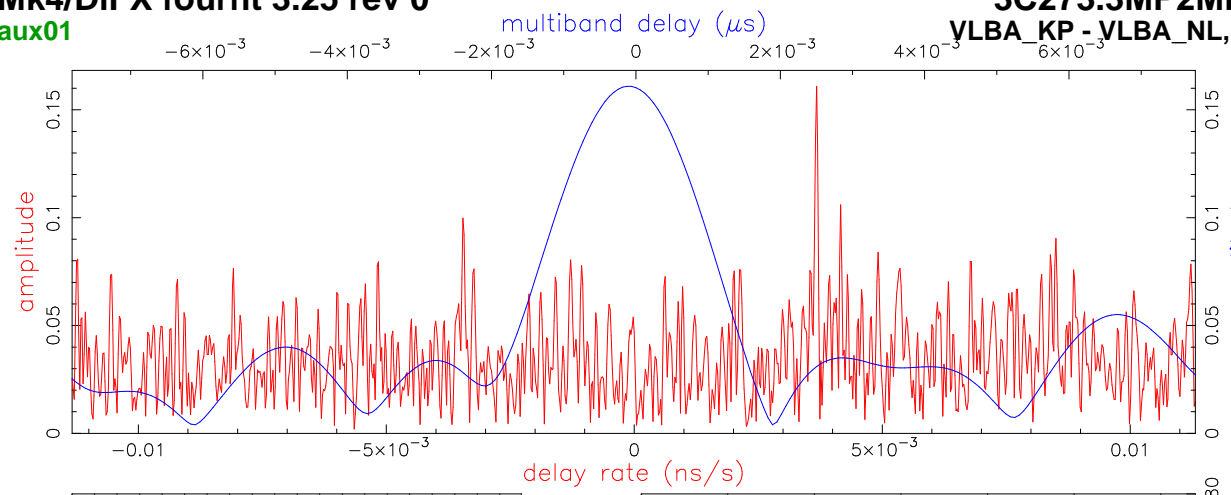
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//km..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//km.W.192.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kn

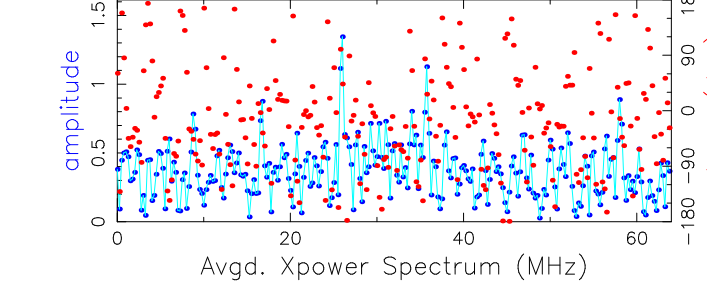
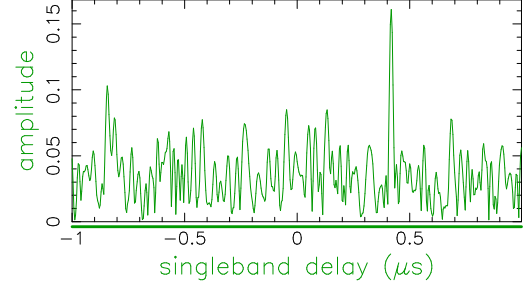
VLBA_KP - VLBA_NL, fgroup W, pol LL



Fringe quality 0

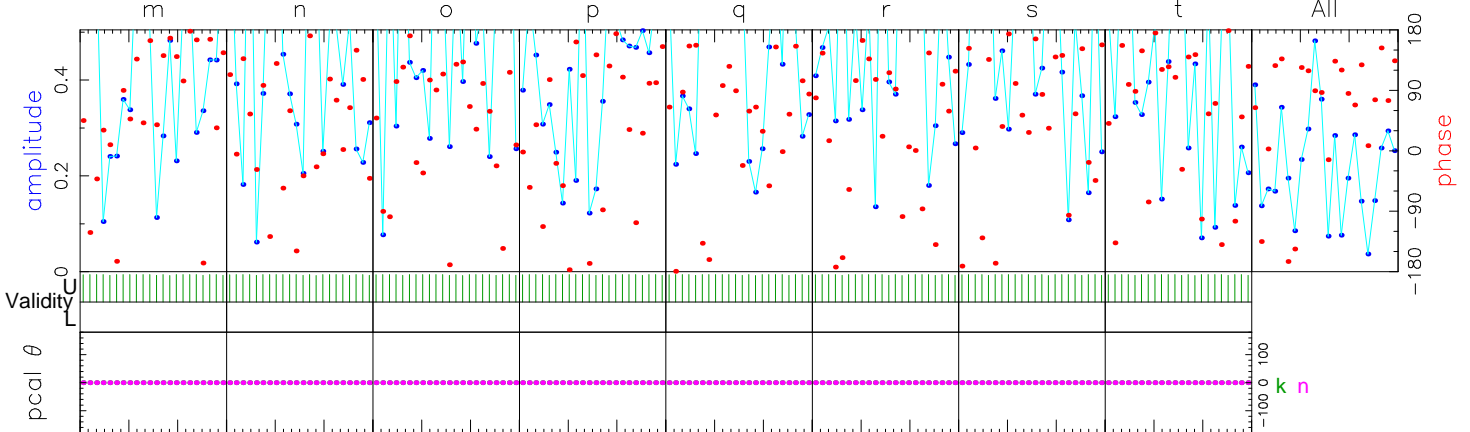
SNR 5.9
 Int time 178.864
 Amp 0.168
 Phase 106.4
 PFD 3.8e-01
 Delays (us)
 SBD 0.417537
 MBD -0.000125
 Fringe rate (Hz)
 0.316532
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build
 2024:361:053129
 2025:041:175942
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



Avgd. Xpower Spectrum (MHz)

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



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

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

ph/seg (deg) 60.6 45.6 Amplitude 0.168 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.2 79.6 Search (1024X32) 0.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.6 27.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.4 48.0 Inc. seg. avg. 0.178 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 k: az 130.2 el 48.5 pa -40.3 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2626.142 -1209.244 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.165.3MP2MB simultaneous interpolator

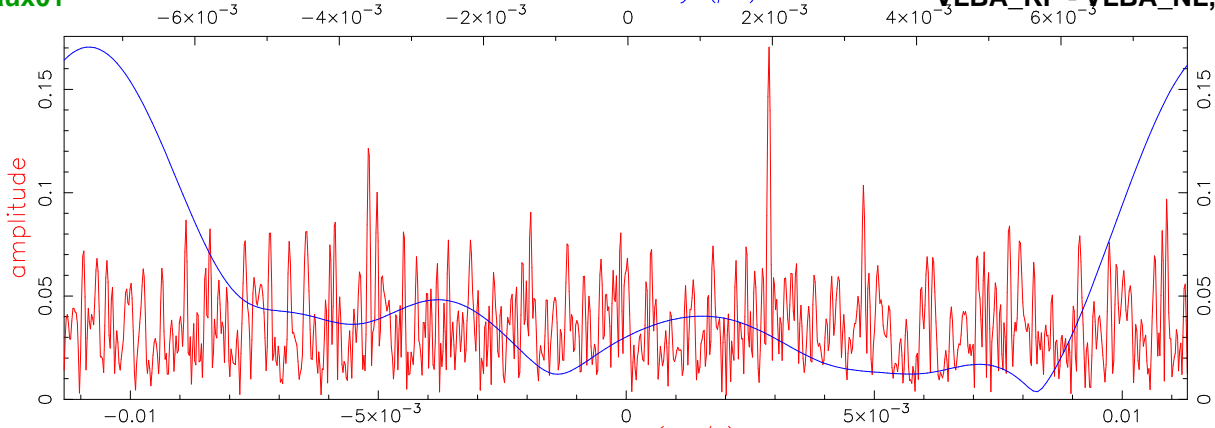
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kn

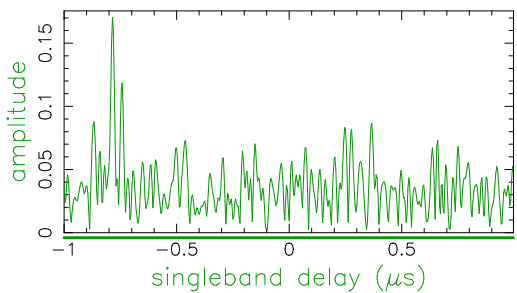
VLBA_KP - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

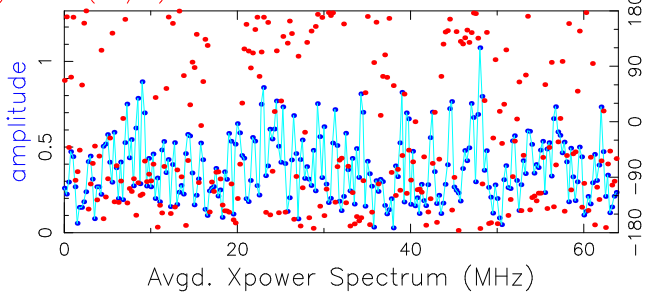


Fringe quality 0

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

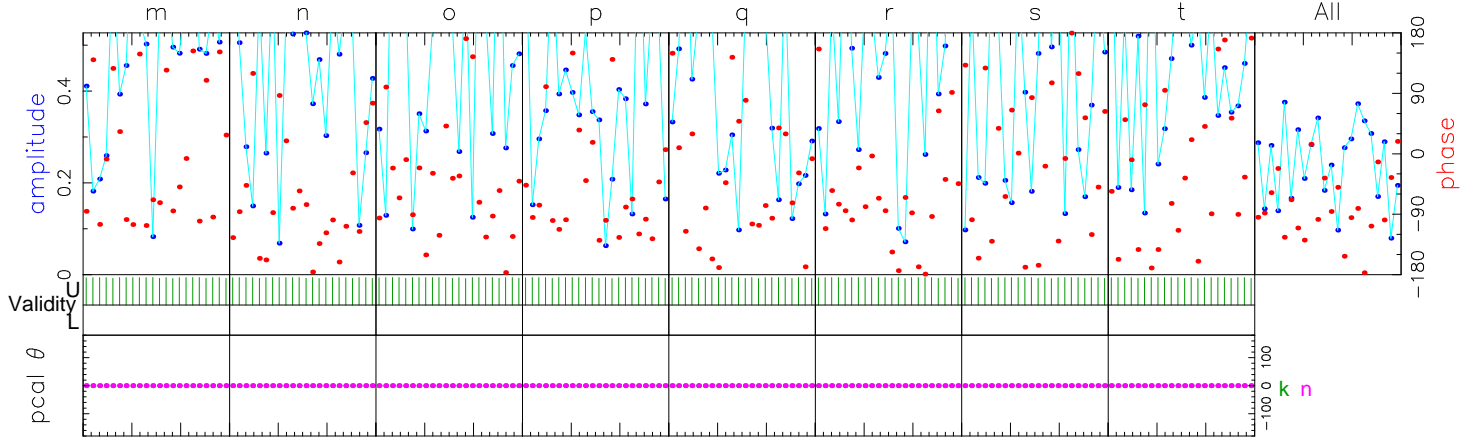


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-116.8	-99.0	-64.2	-88.3	-90.0	-80.9	-108.0	-112.3	Phase	-89.0
	0.1	0.3	0.3	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
	60.1	81.0	55.9	55.3	97.0	450.9	350.0	349.9	Sbd box	56.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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

ph/seg (deg)	50.8	Theor.	43.0	Amplitude	0.176 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	65.9	Search (1024X32)	0.169	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	20.2	Inc. seg. avg.	0.196	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.6	Inc. frq. avg.	0.165	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

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

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.177.3MP2MB

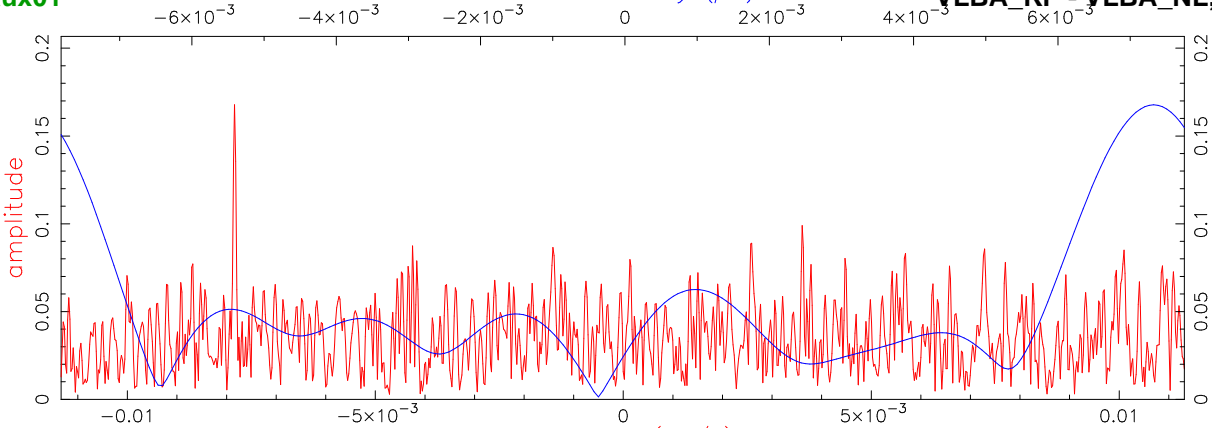
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kn

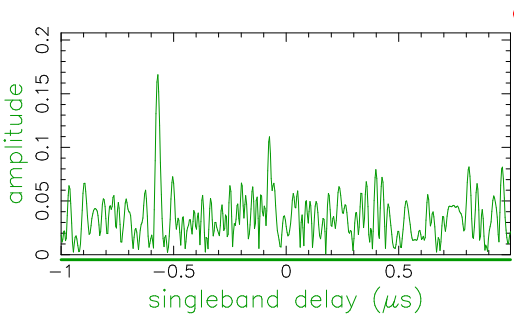
VLBA_KP - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

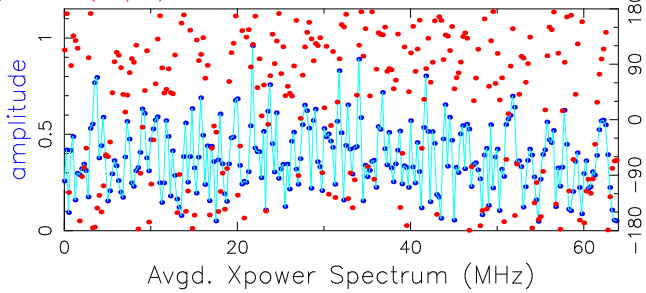


Fringe quality 0

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

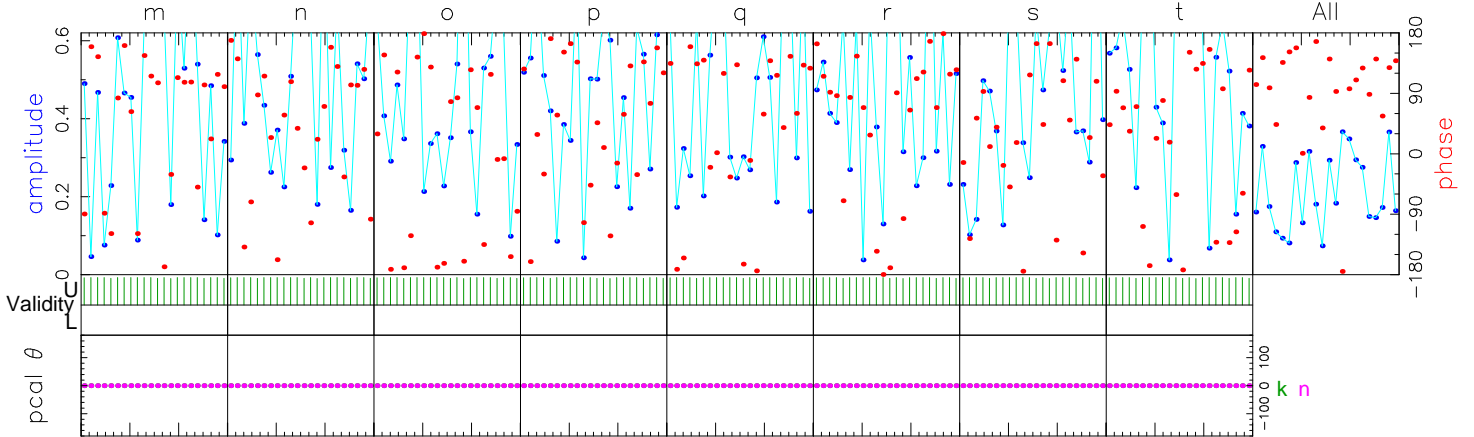


delay rate (ns/s)



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

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



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

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

ph/seg (deg)	RMS 46.0	Theor. 43.7	Amplitude Search (1024X32)	0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.5	76.2	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)	25.3	26.3	Inc. seg. avg.	0.203	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.2	46.0	Inc. frq. avg.	0.198	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

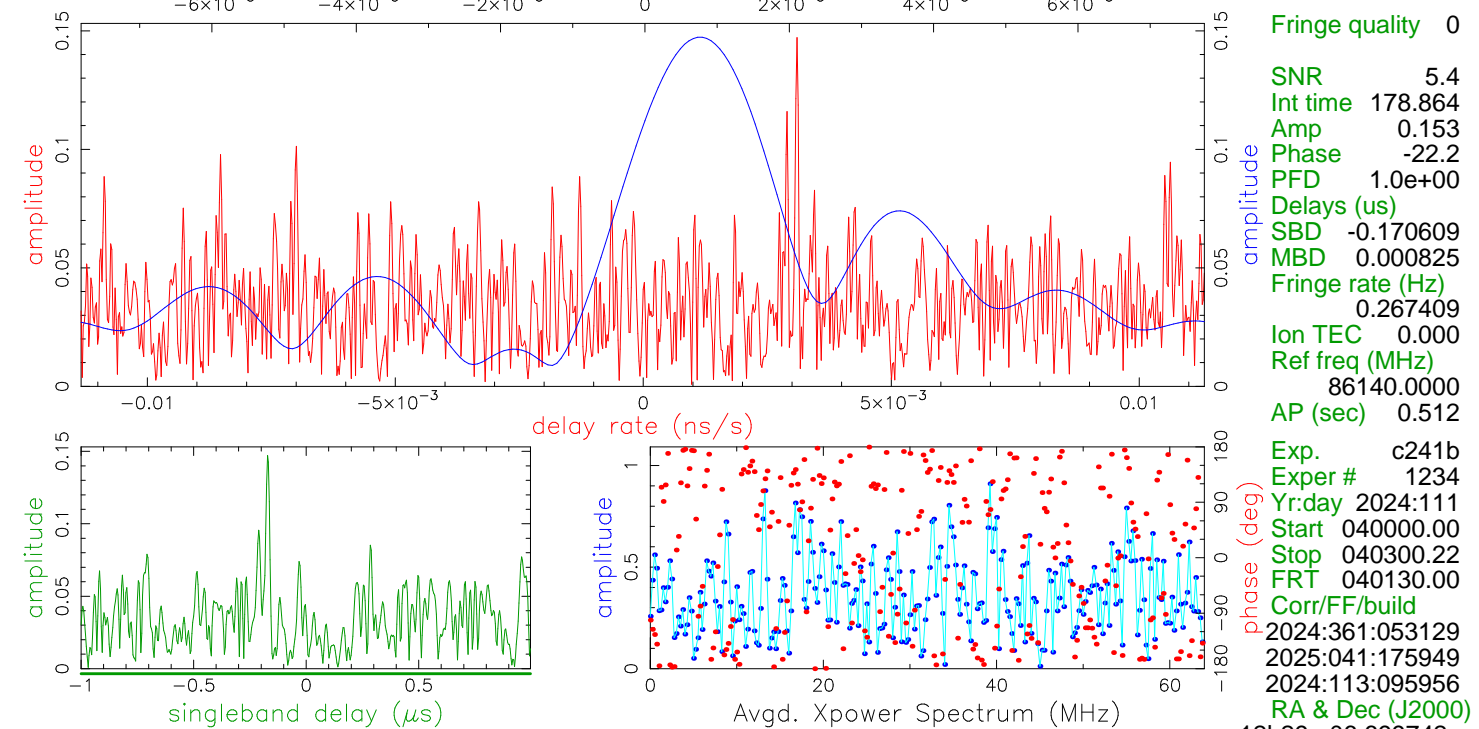
k: az 130.2 el 48.5 pa -40.3 n: az 164.0 el 49.1 pa -11.6 u,v (fr/asec) -2626.142 -1209.244 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.186.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

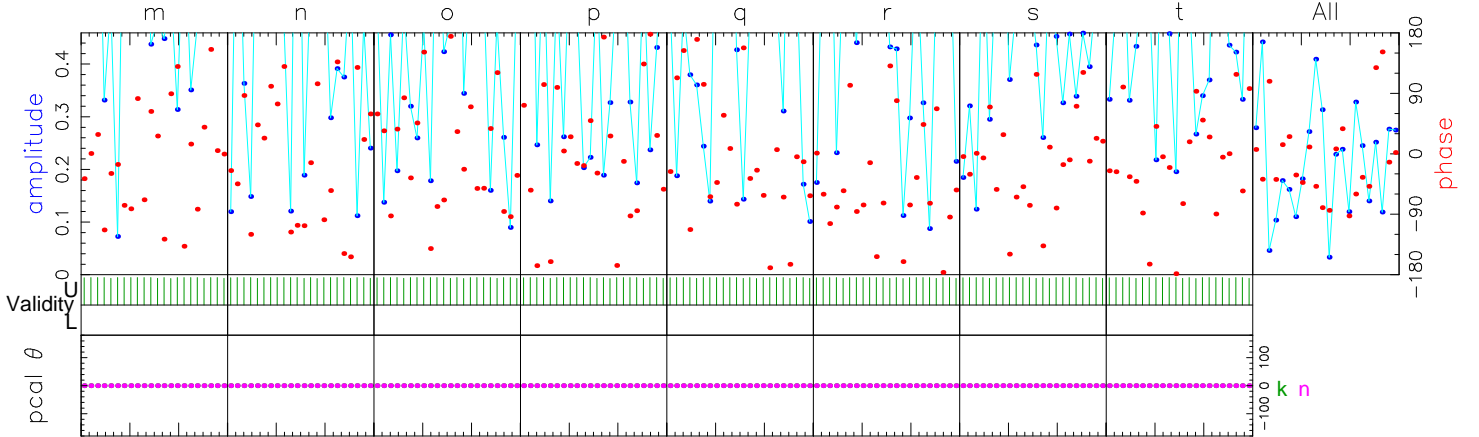
aux01

3C273.3MP2MB, No0707, kn

VLBA_KP - VLBA_NL, fgroup W, pol RL



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-22.1	11.7	-14.4	7.3	-44.1	-66.8	-12.1	-13.6	Phase	-22.2	
	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1	
	466.2	131.9	133.6	204.0	52.6	17.0	214.3	242.0	Sbd box	213.3	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
k	0	0	0	0	0	0	0	0	PC freqs		
n	0	0	0	0	0	0	0	0	PC freqs		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
n	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.06681629368E+02		Apriori delay (usec)		-1.06510579132E+02		Resid mbdelay (usec)		8.24763E-04	+/- 2.0E-04	
Sband delay (usec)	-1.06681188132E+02		Apriori clock (usec)		4.3710518E-01		Resid sbdelay (usec)		-1.70609E-01	+/- 1.6E-03	
Phase delay (usec)	-1.06510579847E+02		Apriori clockrate (us/s)		-1.4505389E-07		Resid phdelay (usec)		-7.15509E-07	+/- 6.8E-07	
Delay rate (us/s)	4.58244475655E-01		Apriori rate (us/s)		4.58241371301E-01		Resid rate (us/s)		3.10435E-06	+/- 6.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		5.29682671469E-08		Resid phase (deg)		-22.2	+/- 21.1	
	RMS	Theor.	Amplitude	0.153 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	66.1	49.5	Search (1024X32)	0.145		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	84.3	86.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	28.1	29.8	Inc. seg. avg.	0.162		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	35.1	52.1	Inc. frq. avg.	0.145		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
k: az 130.2 el 48.5 pa -40.3		n: az 164.0 el 49.1 pa -11.6		u,v (fr/asec) -2626.142 -1209.244						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0707//kn..3MP2MB		Output file: /Exps/c241b/v2/3mm/1234/No0707//kn.W.196.3MP2MB							

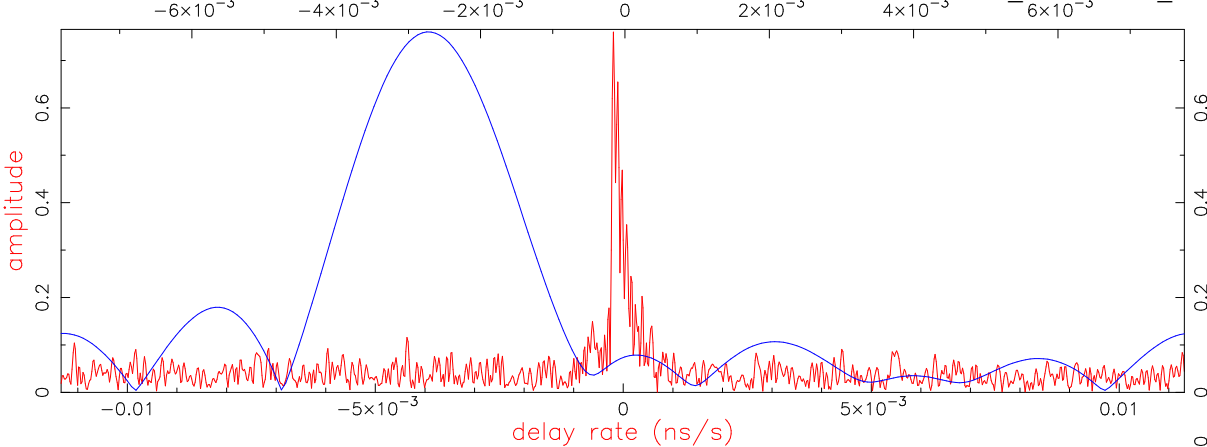
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, ko

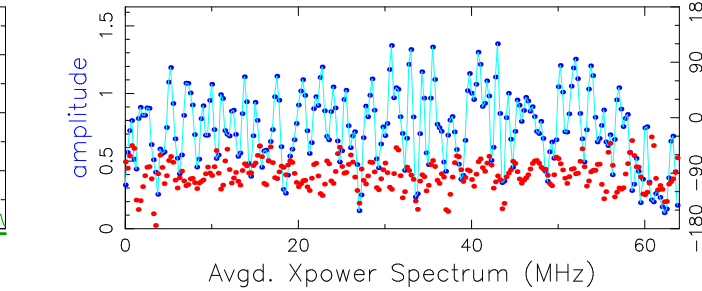
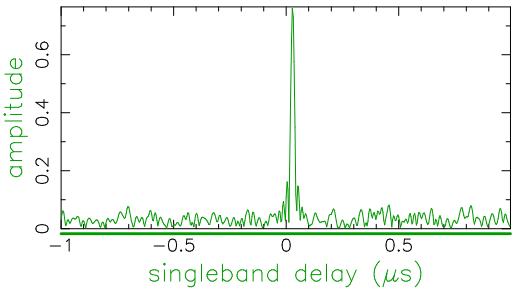
VLBA_KP - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

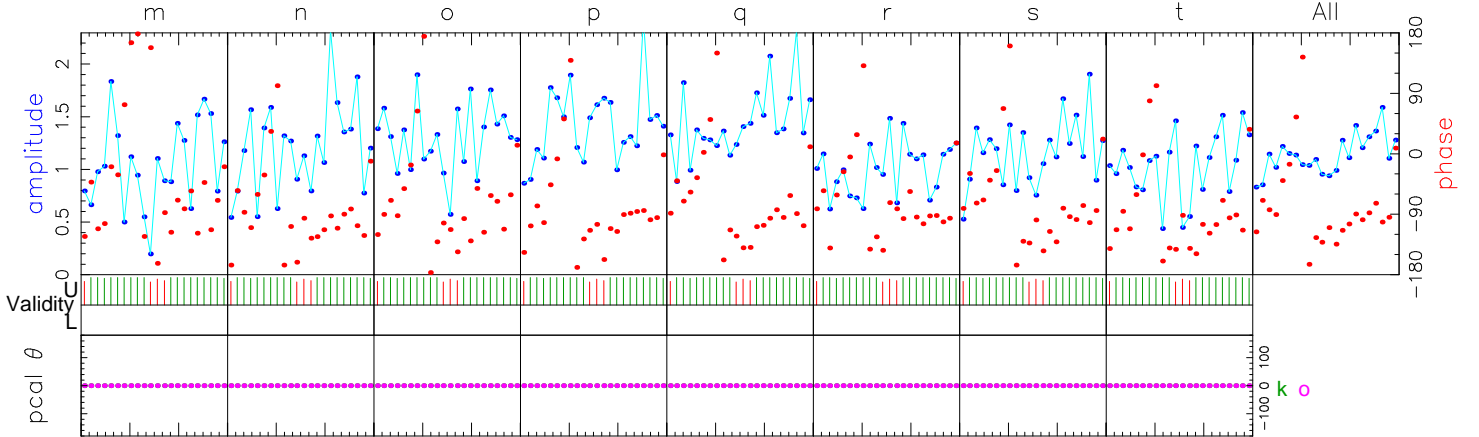


Fringe quality 7

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	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	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	ion window (TEC)	0.00 0.00	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.174.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

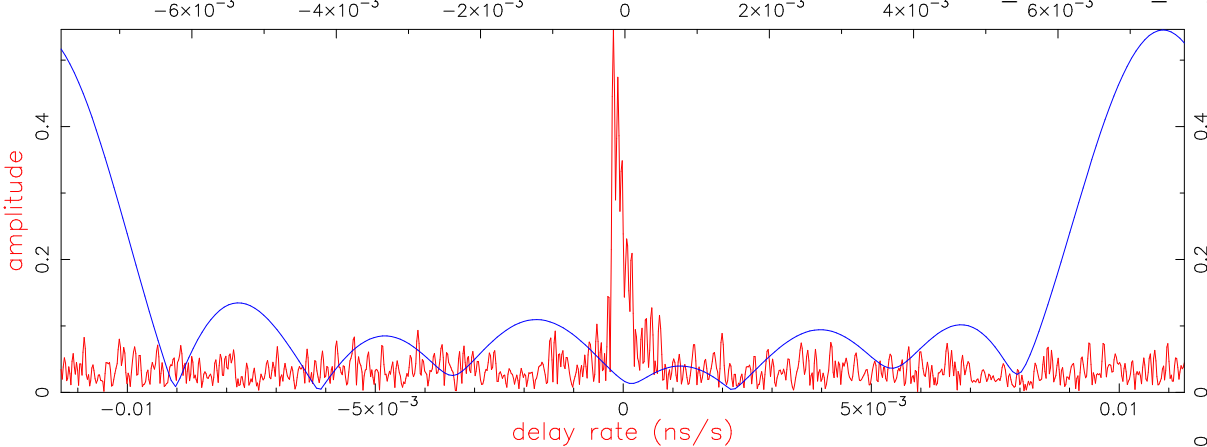
aux01

3C273.3MP2MB, No0707, ko

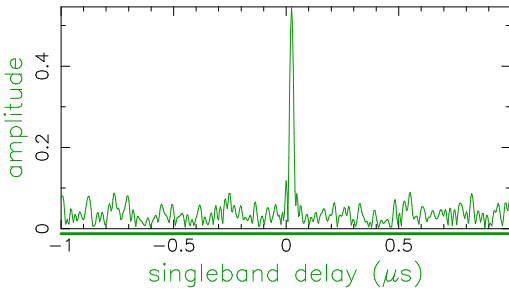
VLBA_KP - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

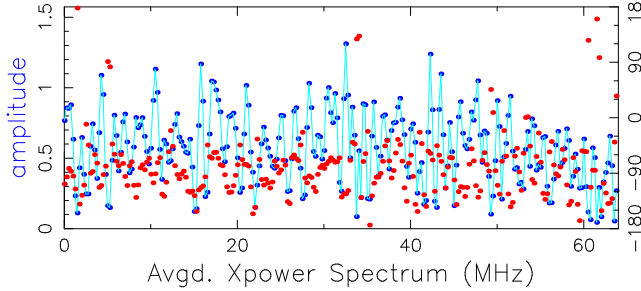
Fringe quality 9



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

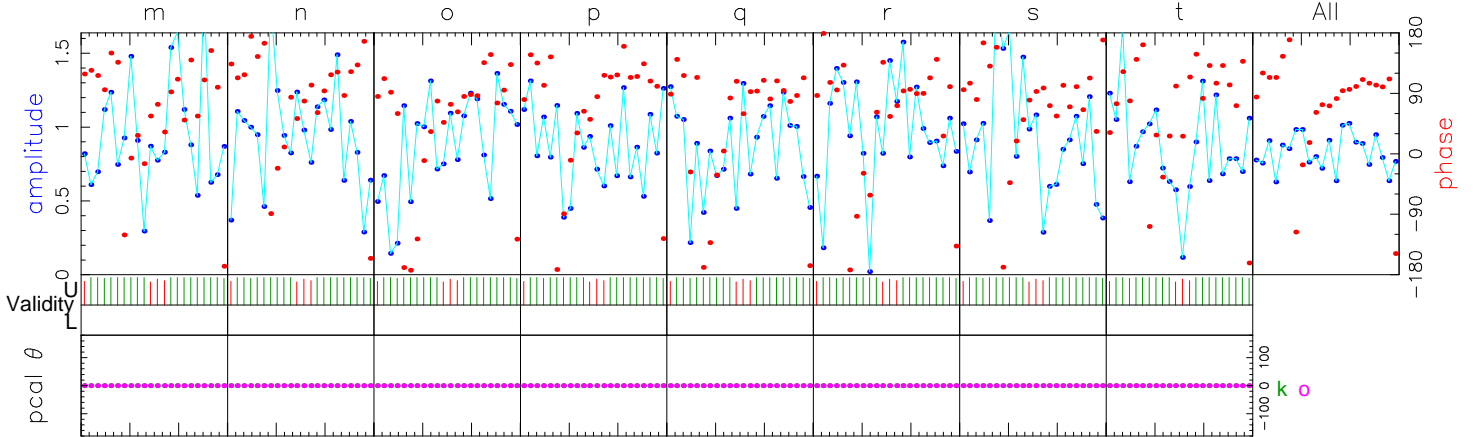


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	98.2	107.0	95.4	117.3	96.5	98.9	96.5	104.8	Phase	101.7
	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.5	Ampl.	0.5
	262.7	263.5	263.1	263.1	262.9	263.0	263.1	263.7	Sbd box	263.1
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

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	RMS	13.5	Theor.	13.5	Amplitude	0.546 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	57.2		23.5		23.5	Search (1024X32)	0.517	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.1		8.2		8.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	8.1		14.3		14.3	Inc. seg. avg.	0.812	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.544	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

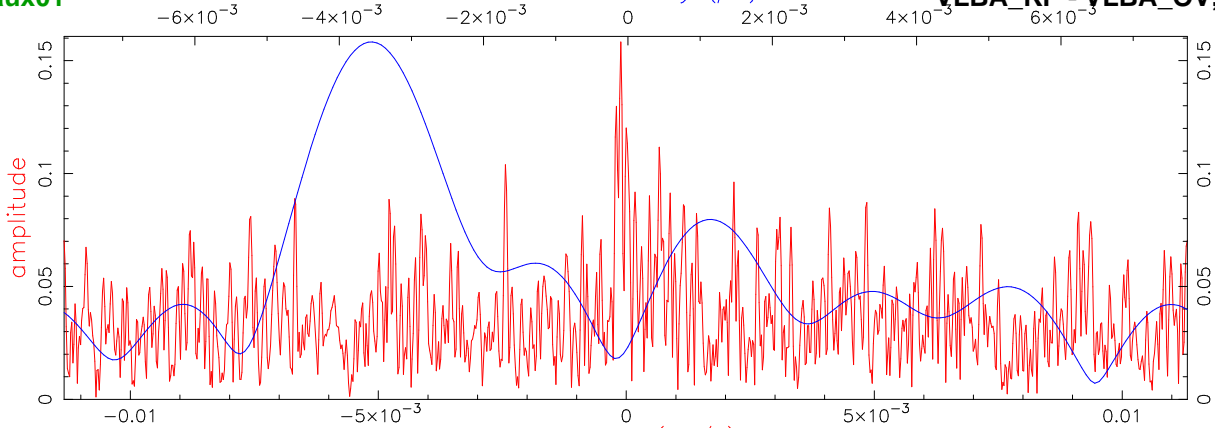
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, ko

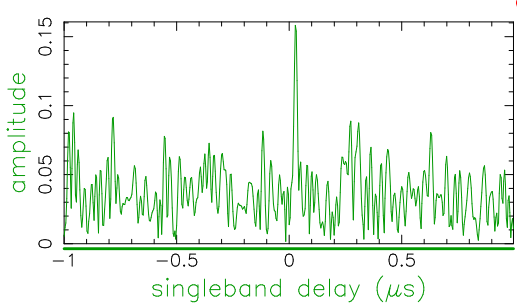
VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

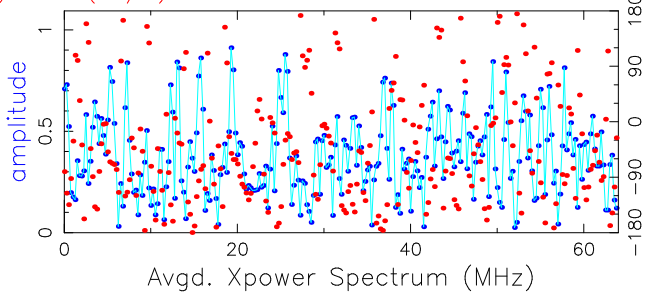


Fringe quality 0

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

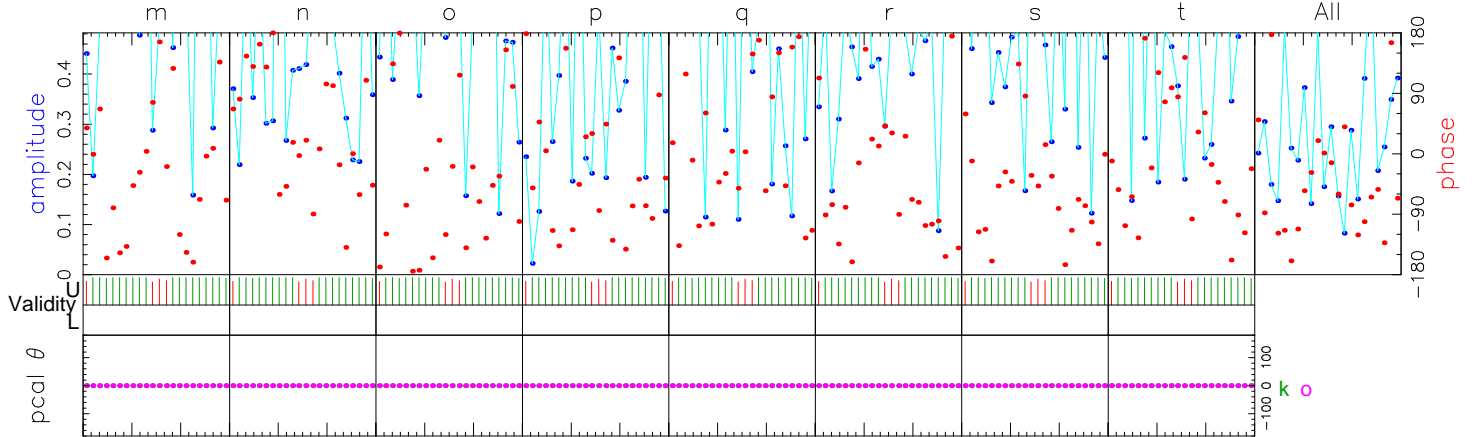


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.9	42.2	-107.4	-77.1	-78.8	-106.5	-73.9	-70.6		-78.3
	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.2		0.2
	424.0	138.7	448.0	293.5	349.8	178.8	264.3	115.5		264.4
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		
o	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		PC freqs
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
k	1000	1000	1000	1000	1000	1000	1000	1000		Mani PC
o	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		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)	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	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.9		48.5	Inc. frq. avg.	0.158	Data rate (Mb/s):	2048	t_cohere	infinite	ion window (TEC)	0.00	0.00

k: az 130.2 el 48.5 pa -40.3 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

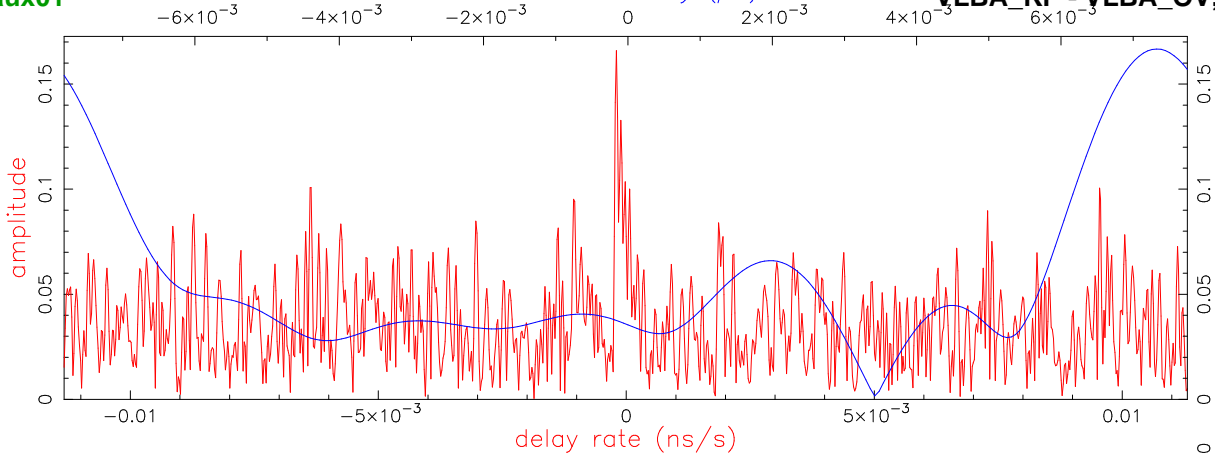
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, ko

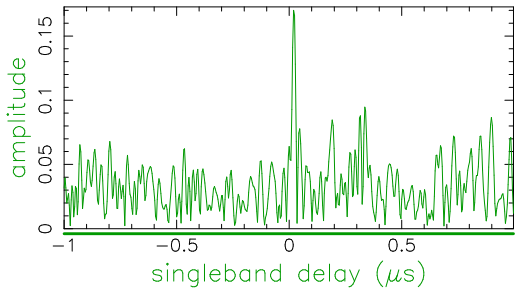
VLBA_KP - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

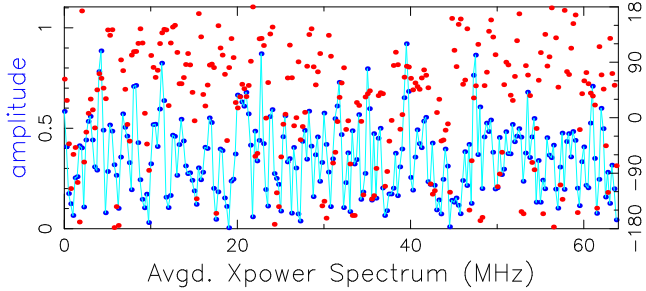


Fringe quality 0

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

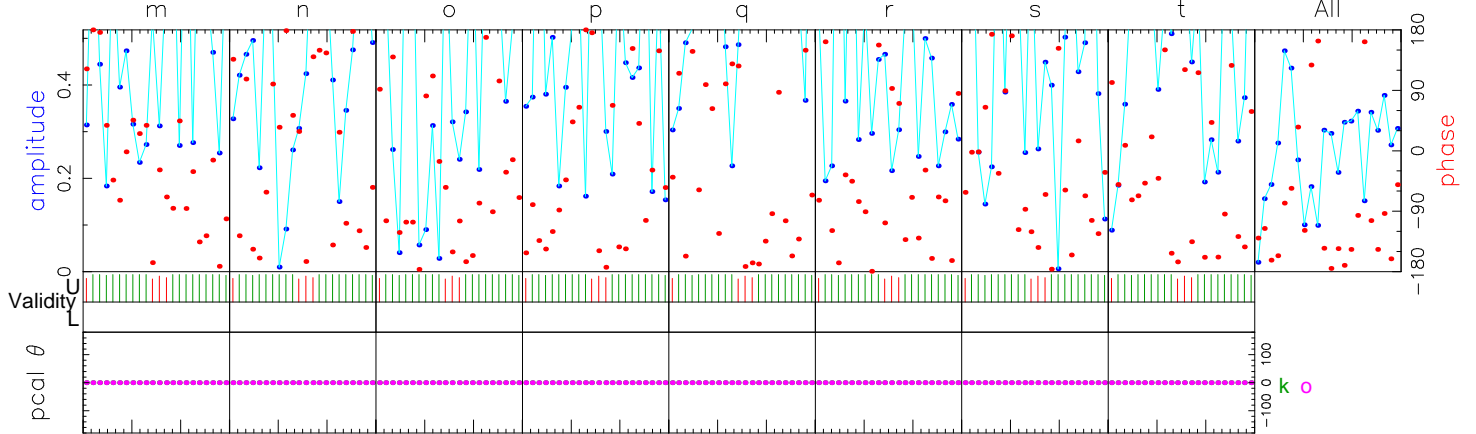


delay rate (ns/s)



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	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	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	32.7	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

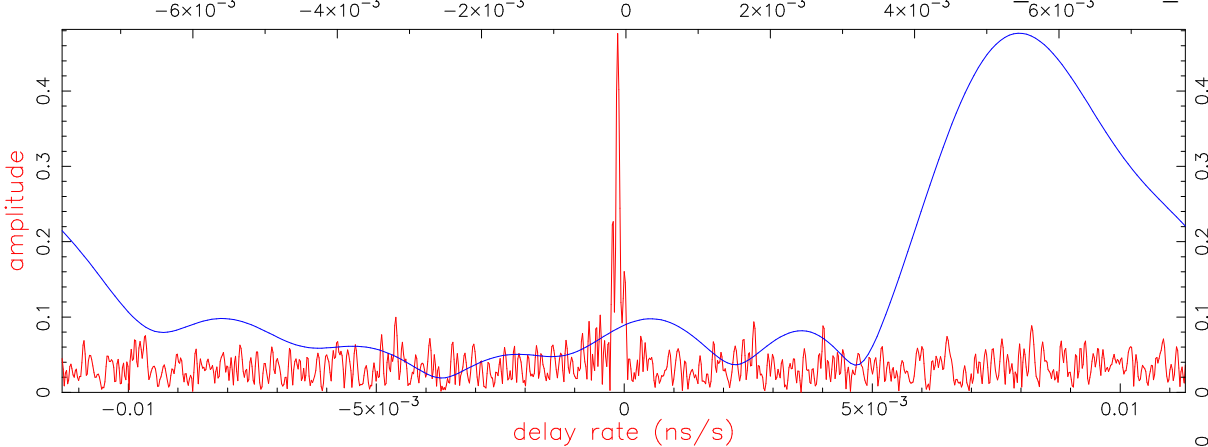
aux01

3C273.3MP2MB, No0707, kp

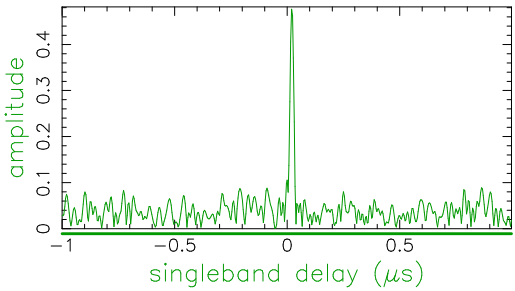
VLBA_KP - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

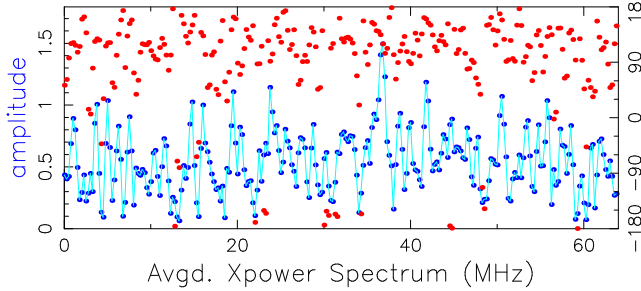
Fringe quality 7



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

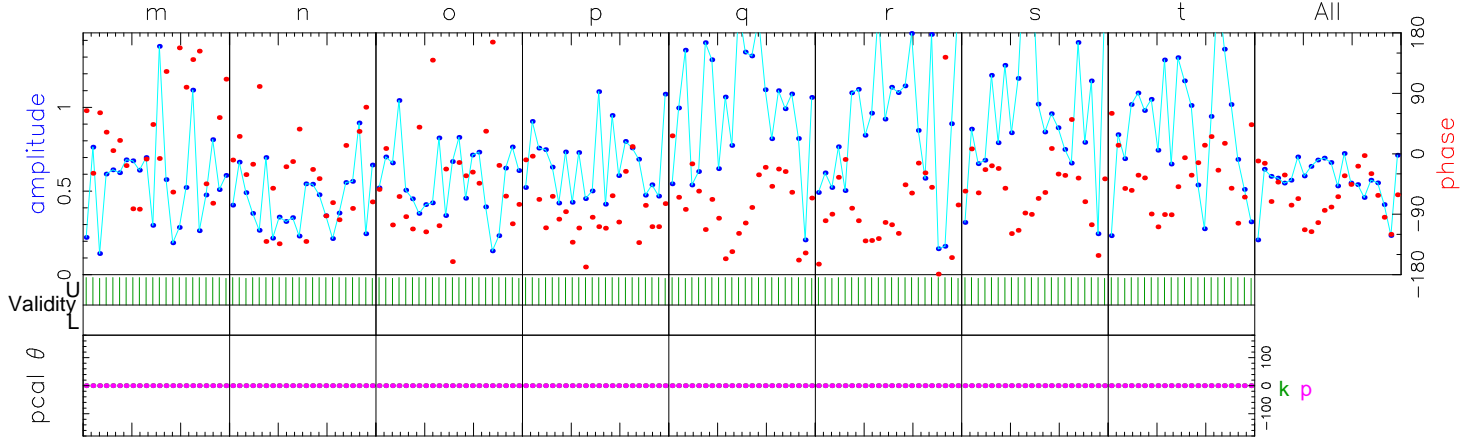


delay rate (ns/s)



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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.0	-35.6	-63.7	-81.6	-74.6	-88.0	-55.5	-38.1	Phase	-61.6
	0.2	0.2	0.3	0.5	0.7	0.7	0.8	0.7	Ampl.	0.5
	285.1	475.9	261.3	262.3	262.4	262.8	262.1	263.1	Sbd box	262.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

ph/seg (deg)	RMS 34.7	Theor. 15.2	Amplitude Search (1024X32)	0.468	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	32.5	26.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.7	9.2	Inc. seg. avg.	0.544	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.9	16.0	Inc. frq. avg.	0.513	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

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

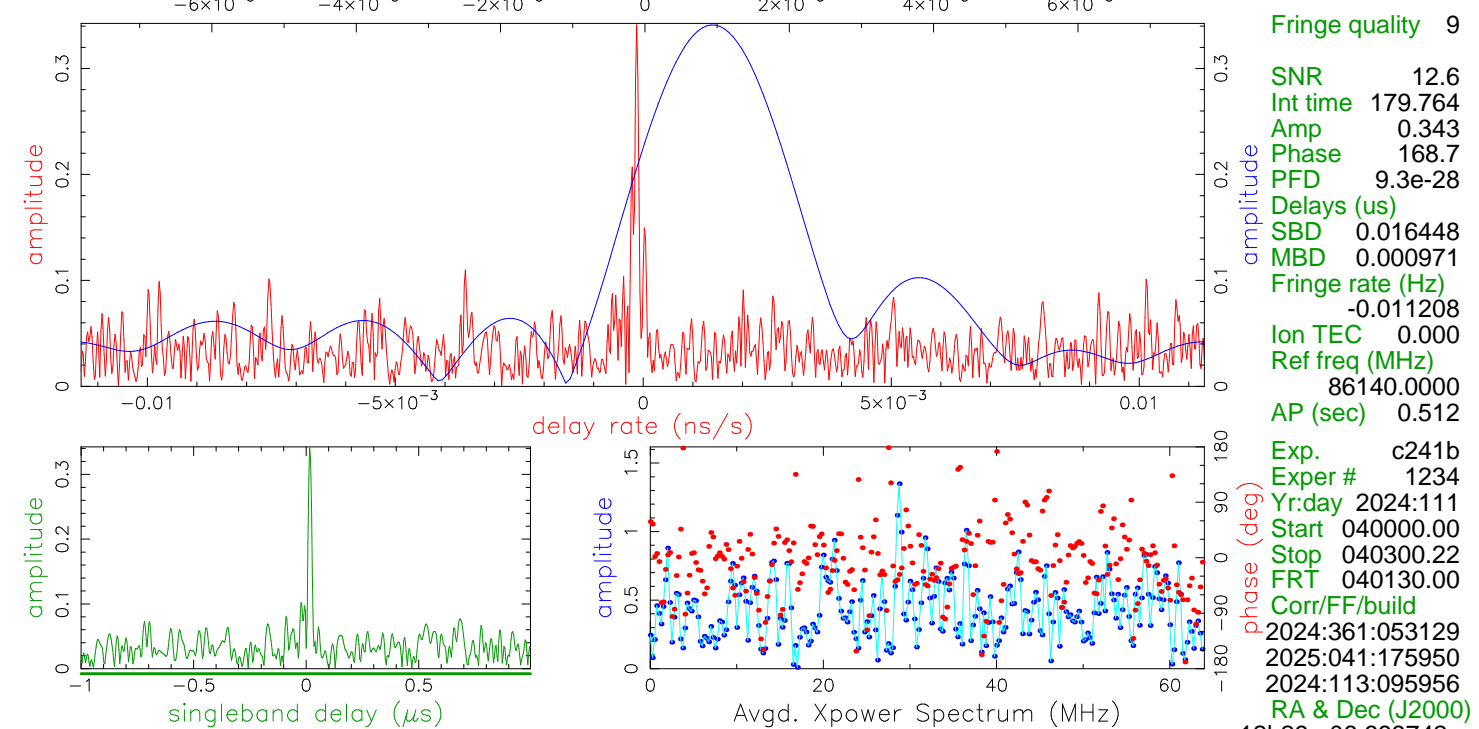
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.191.3MP2MB

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kp

VLBA_KP - VLBA_PT, fgroup W, pol RR



Fringe quality 9

SNR 12.6

Int time 179.764

Amp 0.343

Phase 168.7

PFD 9.3e-28

Delays (us)

SBD 0.016448

MBD 0.000971

Fringe rate (Hz)

-0.011208

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c241b

Exper # 1234

Yr:day 2024:111

Start 040000.00

Stop 040300.22

FRT 040130.00

Corr/FF/build

2024:361:053129

2025:041:175950

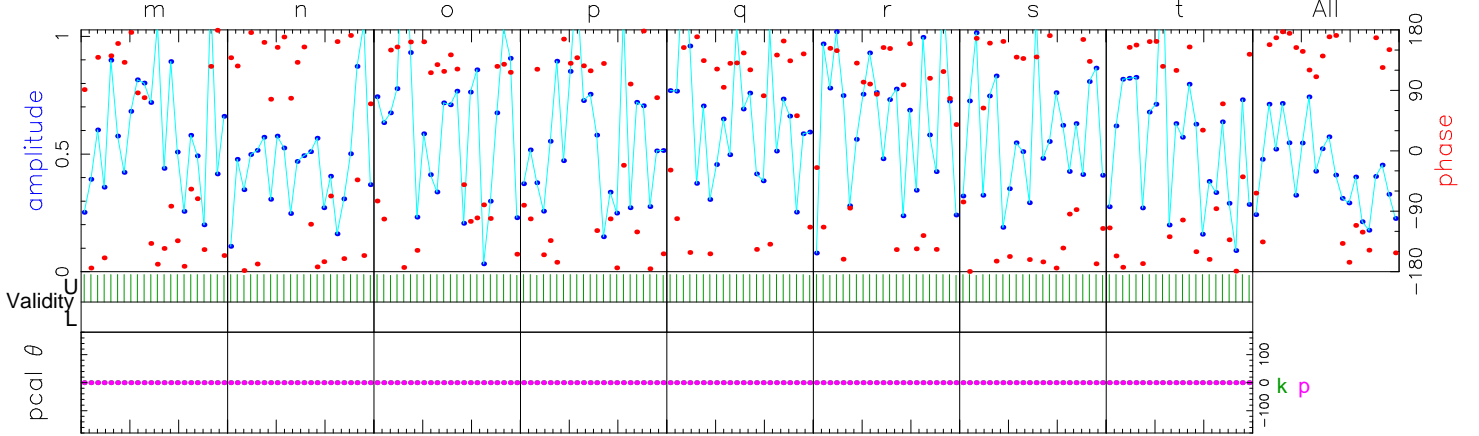
2024:113:095956

RA & Dec (J2000)

12h29m06.699742s

+02°03'08.598116"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC freqs
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
k	1000	1000	1000	1000	1000	1000	1000	1000		ManI PC
p	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

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

ph/seg (deg)	RMS 46.5	Theor. 21.4	Amplitude Search (1024X32)	0.343 +/- 0.027	0.340	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	54.1	37.3	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	11.2	12.9	Inc. seg. avg.	0.407	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	Data rate(Mb/s): 2048	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.7	22.5	Inc. frq. avg.	0.338	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

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

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.198.3MP2MB

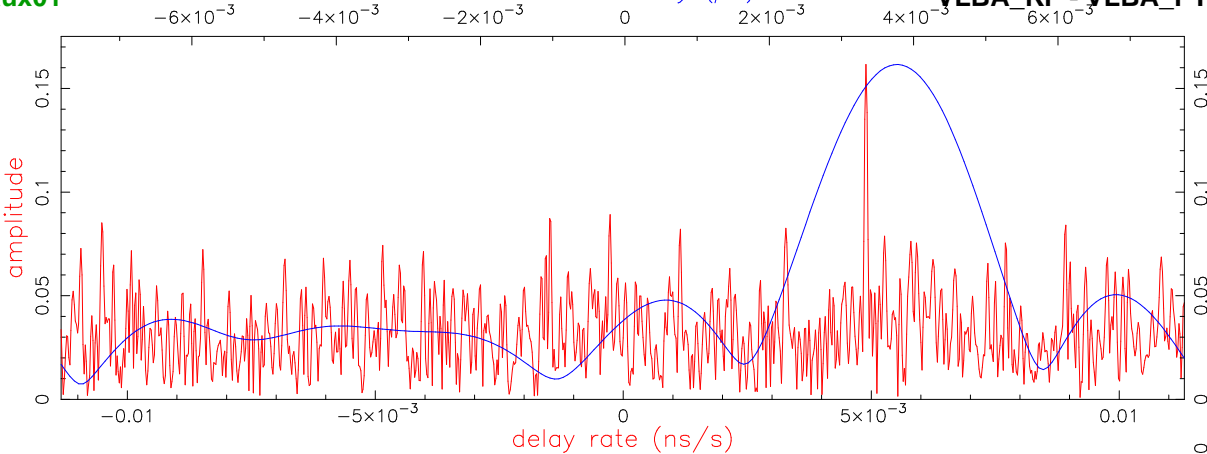
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP2MB, No0707, kp

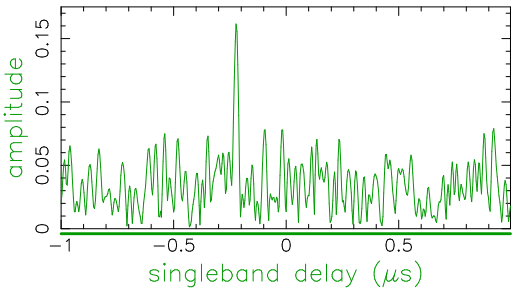
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

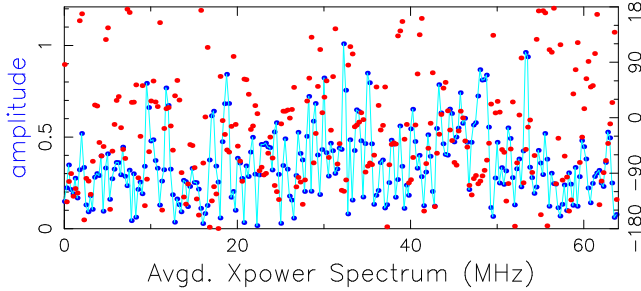


Fringe quality 0

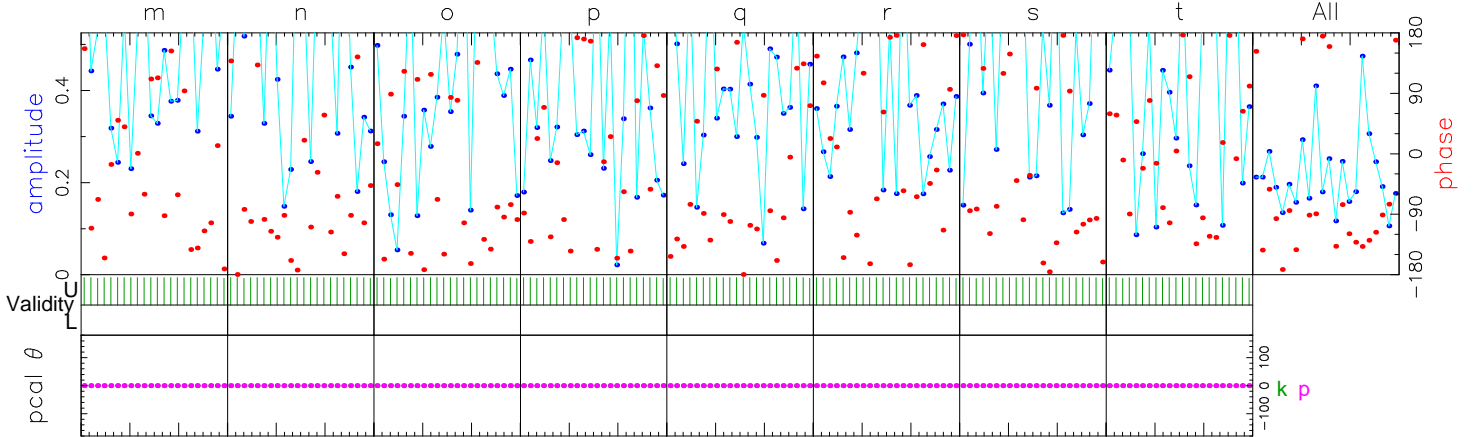
SNR 5.9
 Int time 179.764
 Amp 0.175
 Phase -128.1
 PFD 3.1e-01
 Delays (us)
 SBD -0.221825
 MBD 0.003755
 Fringe rate (Hz) 0.421379
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:111
 Start 040000.00
 Stop 040300.22
 FRT 040130.00
 Corr/FF/build 2024:361:053129
 2025:041:175952
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"



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



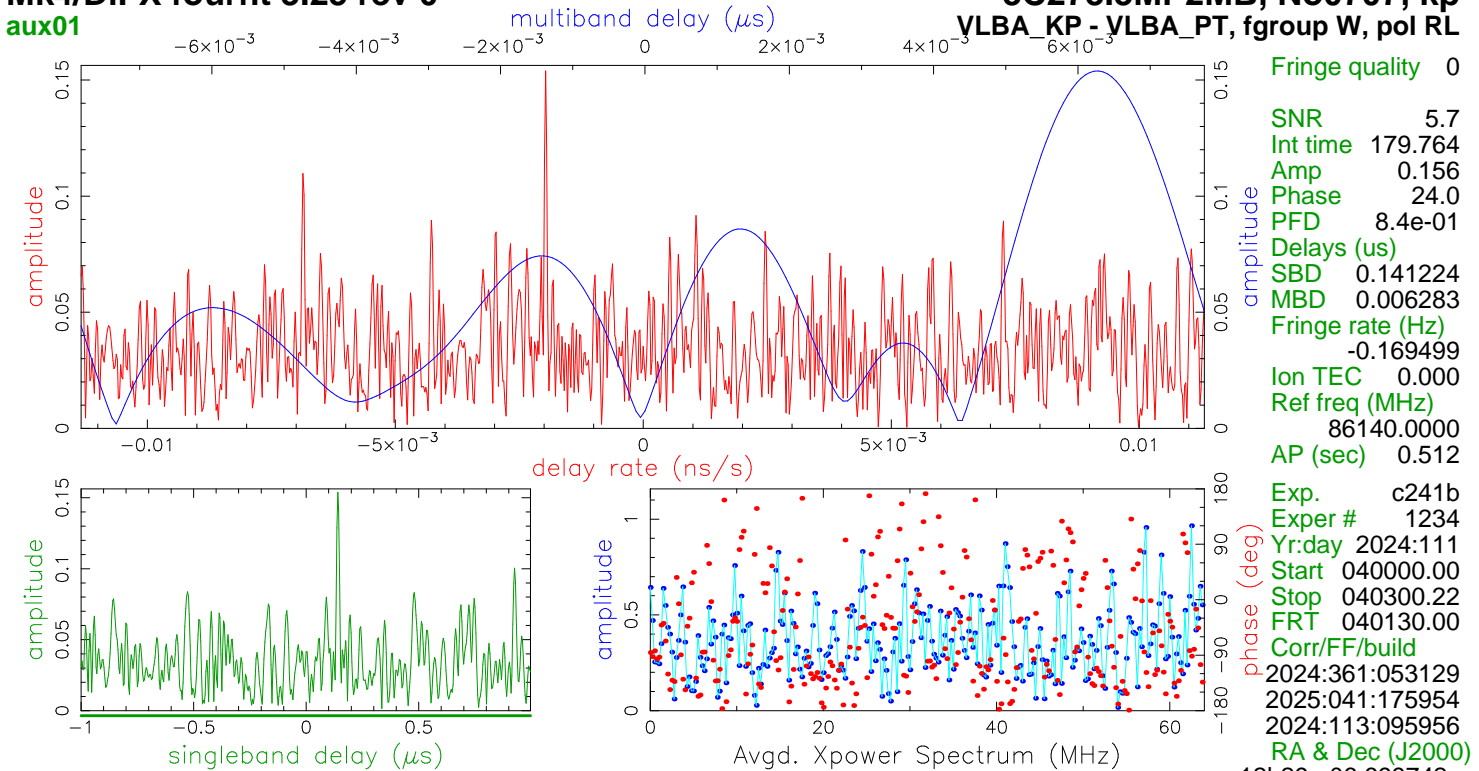
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All					
	-118.6	-120.8	-140.6	-137.0	-133.2	-133.7	-129.6	-72.9	Phase	-128.1					
	0.1	0.3	0.2	0.1	0.2	0.1	0.3	0.1	Ampl.	0.2					
	491.3	199.2	483.0	262.2	11.6	456.7	200.7	321.2	Sbd box	200.2					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used						
k	0	0	0	0	0	0	0	0	PC freqs						
p	0	0	0	0	0	0	0	0	PC freqs						
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC						
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
p	1000	1000	1000	1000	1000	1000	1000	1000							
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids						
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks						
									Tracks						
Group delay (usec) (SBD)	-1.30277724004E+02								Apriori delay (usec)	-1.30062728695E+02	Resid mbdelay (usec)	3.75469E-03	+/-	1.8E-04	
Sband delay (usec)	-1.30284554195E+02								Apriori clock (usec)	-5.5508556E+00	Resid sbdelay (usec)	-2.21825E-01	+/-	1.5E-03	
Phase delay (usec)	-1.30062732825E+02								Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-4.12987E-06	+/-	6.2E-07	
Delay rate (us/s)	8.61031303066E-02								Apriori rate (us/s)	8.60982385198E-02	Resid rate (us/s)	4.89179E-06	+/-	6.0E-09	
Total phase (deg)			-290.0						Apriori accel (us/s/s)	5.32722191816E-07	Resid phase (deg)	-128.1	+/-	19.3	
	RMS	Theor.	Amplitude	0.175 +/- 0.029					Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5			
ph/seg (deg)	44.4	45.2	Search (1024X32)	0.160					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	65.2	79.0	Interp.	0.000					Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	24.1	27.3	Inc. seg. avg.	0.183					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	41.9	47.6	Inc. frq. avg.	0.161					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
k: az 130.2 el 48.5 pa -40.3			p: az 136.3 el 49.0 pa -34.7						u,v (fr/asec) -493.174 -302.000					simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB						Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.207.3MP2MB						

Mk4/DiFX fourfit 3.25 rev 0

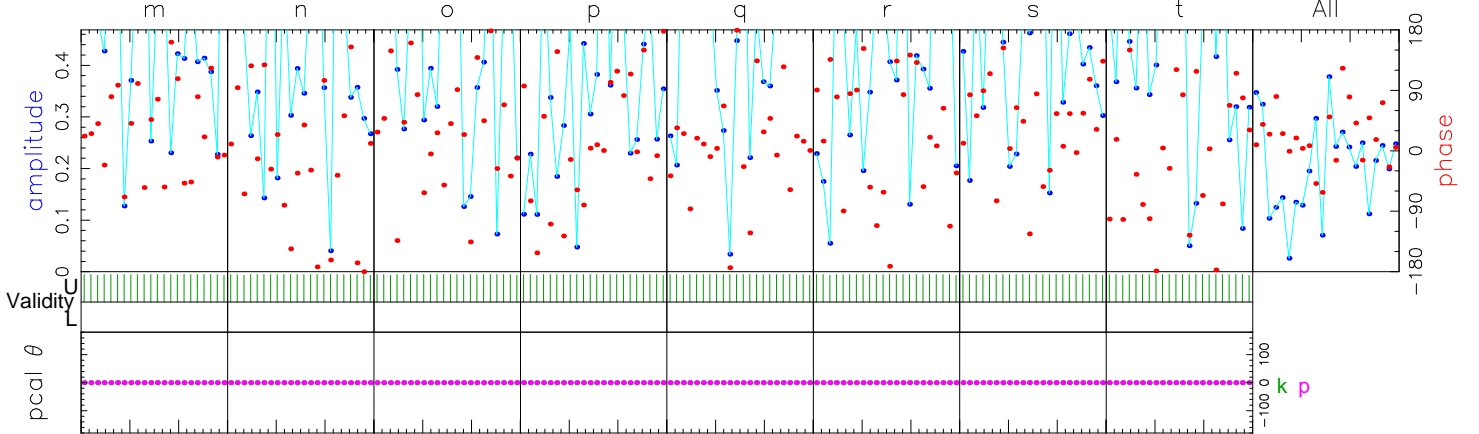
aux01

3C273.3MP2MB, No0707, kp

VLBA_KP - VLBA_PT, fgroup W, pol RL



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



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

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

ph/seg (deg)	RMS 42.7	Theor. 47.5	Amplitude Search (1024X32)	0.151	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.5	82.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	33.8	28.6	Inc. seg. avg.	0.154	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.5	50.0	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

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

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0707//kp..3MP2MB Output file: /Exps/c241b/v2/3mm/1234/No0707//kp.W.216.3MP2MB