

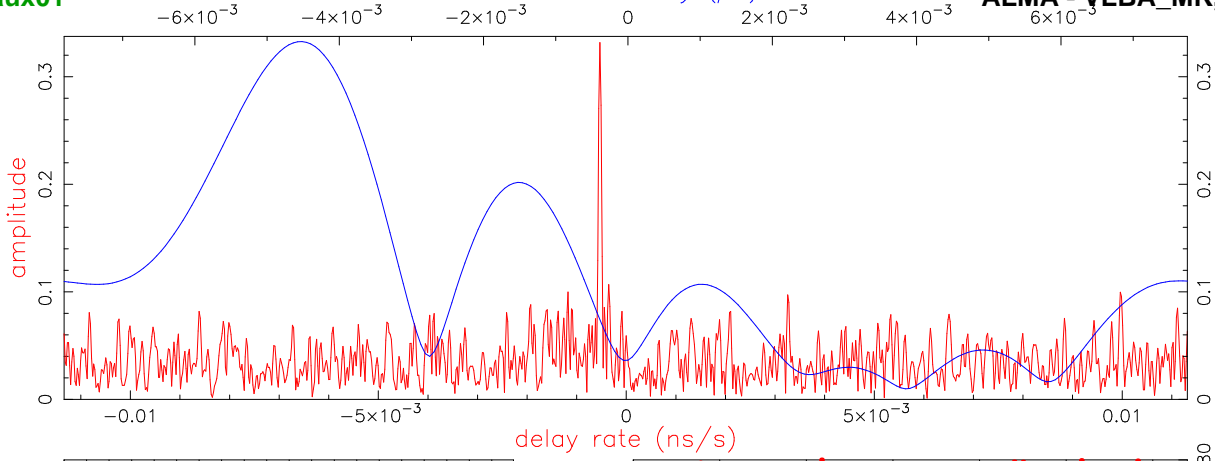
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Am

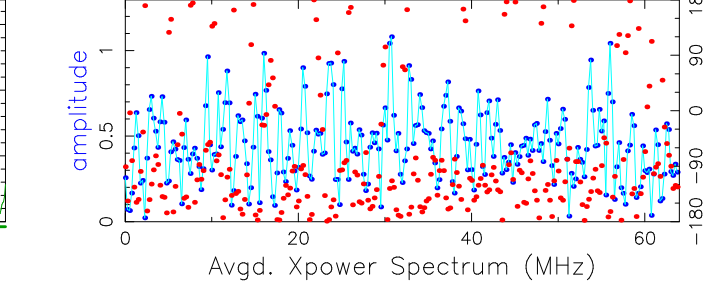
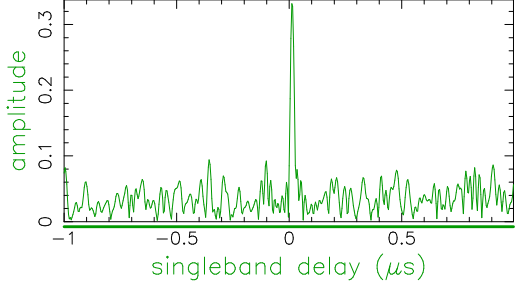
ALMA - VLBA\_MK, fgroup W, pol XL

multiband delay ( $\mu$ s)



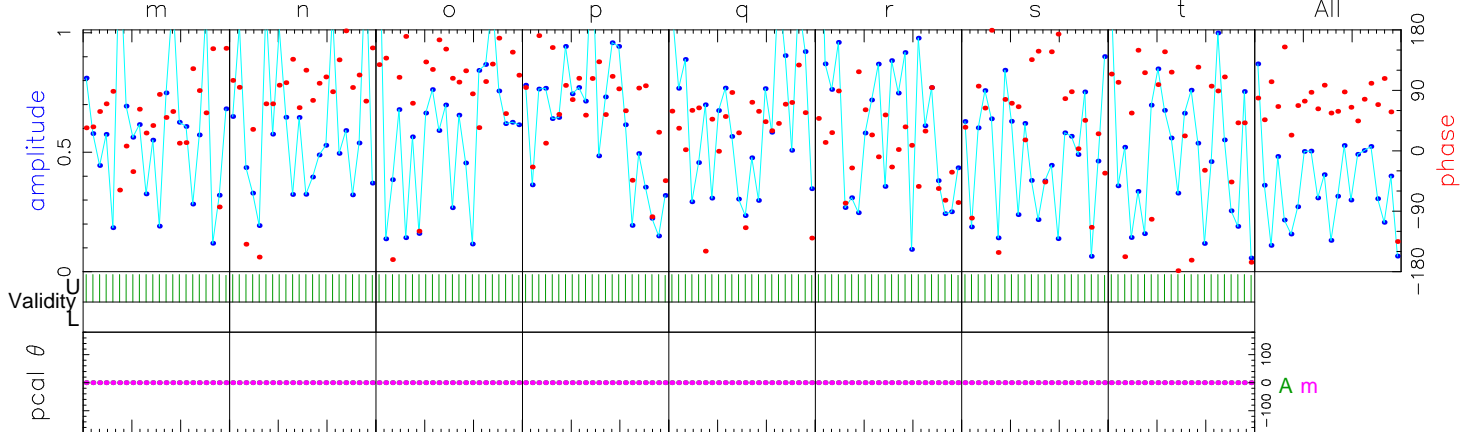
Fringe quality 9

SNR 12.4  
 Int time 179.992  
 Amp 0.338  
 Phase 75.0  
 PFD 9.6e-27  
 Delays (us)  
 SBD 0.013385  
 MBD -0.004441  
 Fringe rate (Hz)  
 -0.045566  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114401  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	38.7	98.0	121.1	87.9	54.4	18.6	61.4	114.0		75.0
	0.4	0.5	0.5	0.4	0.5	0.4	0.3	0.3		0.4
	262.1	260.7	260.0	259.1	259.9	259.2	402.8	261.2		260.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
A	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UX	W01UX	W02UX	W03UX	W04UX	W05UX	W06UX	W07UX		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	9.73349055115E+02	Apriori delay (usec)	9.73337871307E+02	Resid mbdelay (usec)	-4.44119E-03	+/-	8.8E-05
Sband delay (usec)	9.73351256807E+02	Apriori clock (usec)	-2.1079863E+03	Resid sbdelay (usec)	1.33855E-02	+/-	7.0E-04
Phase delay (usec)	9.73337873726E+02	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	2.41886E-06	+/-	3.0E-07
Delay rate (us/s)	-1.31142823768E+00	Apriori rate (us/s)	-1.31142770870E+00	Resid rate (us/s)	-5.28979E-07	+/-	2.9E-09
Total phase (deg)	159.4	Apriori accel (us/s/s)	-6.60946212792E-05	Resid phase (deg)	75.0	+/-	9.3

ph/seg (deg)	41.2	Theor.	21.7	Amplitude	0.338 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	54.1	Search (1024X32)	0.329	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	39.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	32.0	Inc. seg. avg.	0.339	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.392	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

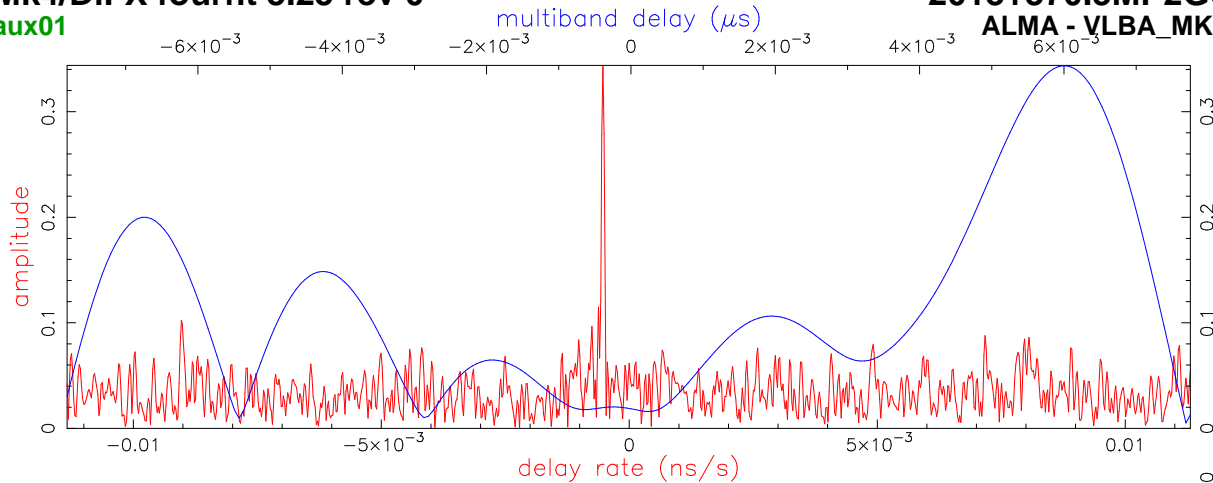
A: az 352.5 el 29.2 pa 171.1      m: az 56.4 el 20.0 pa -80.0      u,v (fr/asec) 9369.768 -9141.580      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350//Am..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350//Am.W.26.3MP2G6

# Mk4/DiFX fourfit 3.25 rev 0

aux01

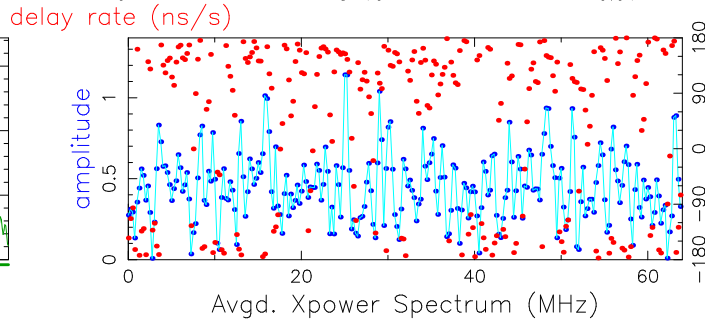
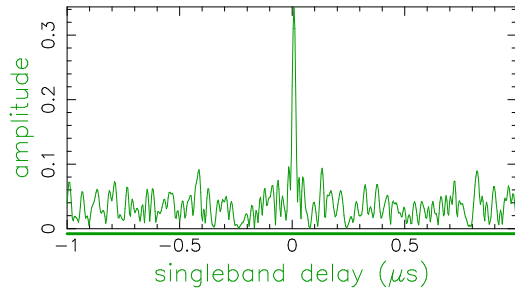
# 2013+370.3MP2G6, No0350, Am

ALMA - VLBA\_MK, fgroup W, pol YR



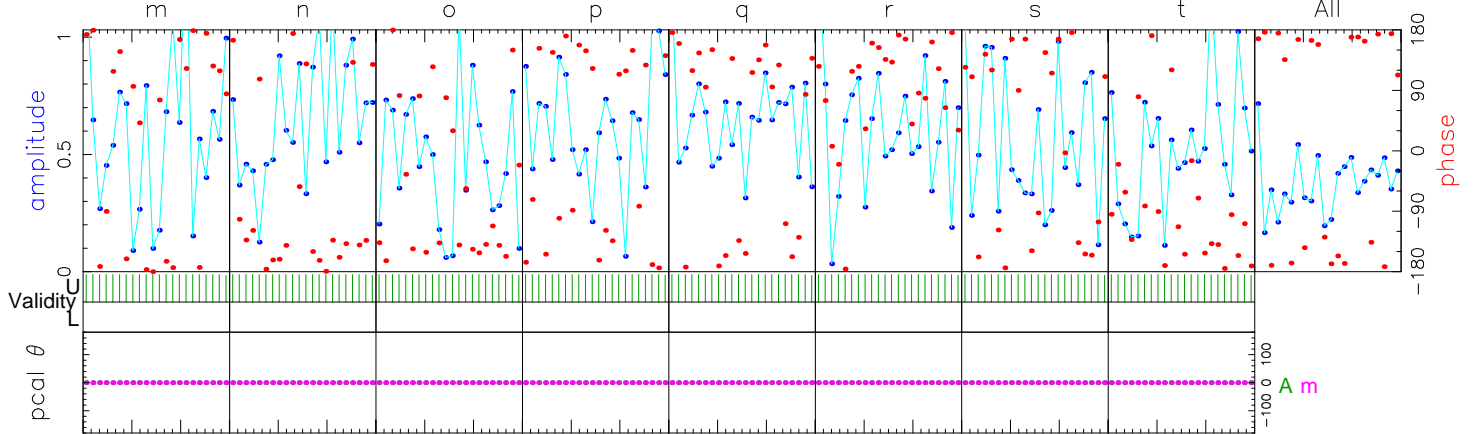
Fringe quality 9

SNR 12.6  
 Int time 179.989  
 Amp 0.344  
 Phase 176.8  
 PFD 5.3e-28  
 Delays (us)  
 SBD 0.007834  
 MBD 0.006005  
 Fringe rate (Hz)  
 -0.045282  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114404  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	157.6	-158.4	-156.6	-170.2	157.8	116.7	166.9	-126.5	Phase	176.8
	0.5	0.5	0.3	0.4	0.5	0.4	0.4	0.3	Ampl.	0.4
	260.7	258.4	355.2	258.1	258.8	258.1	259.0	260.2	Sbd box	259.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UY	W01UY	W02UY	W03UY	W04UY	W05UY	W06UY	W07UY	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.73343876303E+02	Apriori delay (usec)	9.73337871307E+02	Resid mbdelay (usec)	6.00500E-03	+/-	8.6E-05
Sband delay (usec)	9.73345705307E+02	Apriori clock (usec)	-2.1079863E+03	Resid sbdelay (usec)	7.83400E-03	+/-	6.8E-04
Phase delay (usec)	9.73337877007E+02	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	5.70007E-06	+/-	2.9E-07
Delay rate (us/s)	-1.31142823437E+00	Apriori rate (us/s)	-1.31142770870E+00	Resid rate (us/s)	-5.25676E-07	+/-	2.8E-09
Total phase (deg)	261.1	Apriori accel (us/s/s)	-6.60946212792E-05	Resid phase (deg)	176.8	+/-	9.1

ph/seg (deg)	RMS 26.3	Theor. 21.3	Amplitude Search (1024X32)	0.344 +/- 0.027	0.332	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	37.9	37.2	Interp.	0.000	0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	39.0	12.9	Inc. seg. avg.	0.355	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	25.8	22.4	Inc. frq. avg.	0.397	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00	

A: az 352.5 el 29.2 pa 171.1      m: az 56.4 el 20.0 pa -80.0      u,v (fr/asec) 9369.768 -9141.580      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350//Am..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350//Am.W.31.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

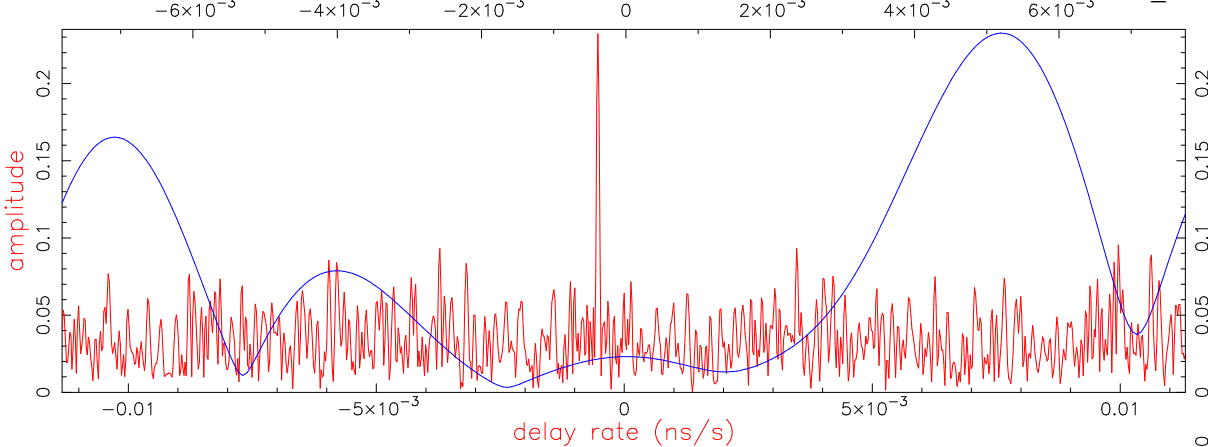
aux01

2013+370.3MP2G6, No0350, Am

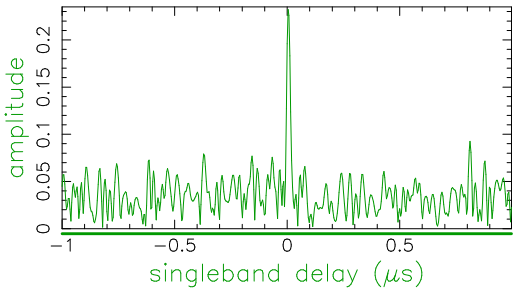
ALMA - VLBA\_MK, fgroup W, pol XR

multiband delay ( $\mu$ s)

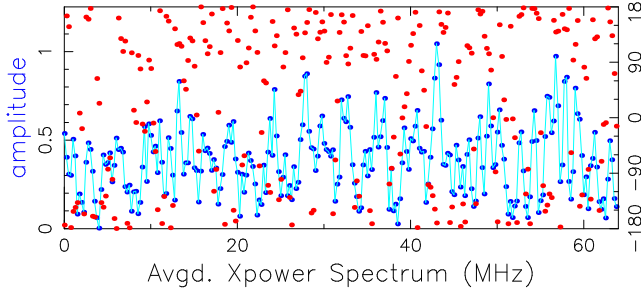
Fringe quality 9



SNR 8.6  
 Int time 179.992  
 Amp 0.235  
 Phase 154.3  
 PFD 1.3e-09  
 Delays (us)  
 SBD 0.005265  
 MBD 0.005281  
 Fringe rate (Hz)  
 -0.045718  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

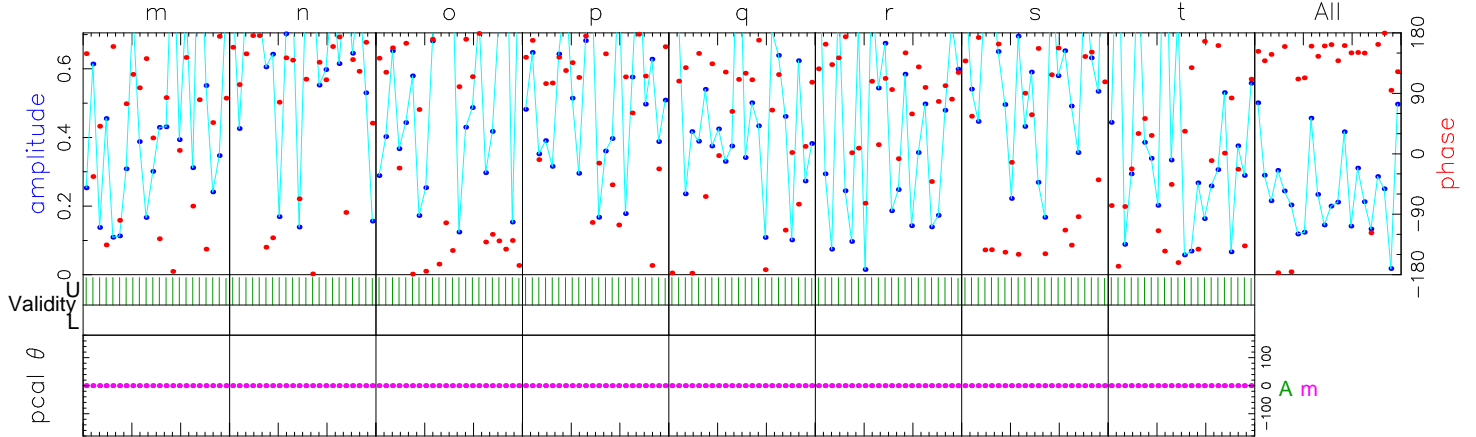


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114407  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	123.3	158.0	-165.8	157.6	122.9	104.9	164.1	-129.0	Phase	154.3
	0.2	0.5	0.4	0.2	0.2	0.3	0.3	0.1	Ampl.	0.3
	261.1	258.2	257.9	163.0	507.6	259.4	259.0	89.6	Sbd box	258.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UX	W01UX	W02UX	W03UX	W04UX	W05UX	W06UX	W07UX	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.73343152803E+02	Apriori delay (usec)	9.73337871307E+02	Resid mbdelay (usec)	5.28150E-03	+/-	1.3E-04
Sband delay (usec)	9.73343136807E+02	Apriori clock (usec)	-2.1079863E+03	Resid sbdelay (usec)	5.26550E-03	+/-	1.0E-03
Phase delay (usec)	9.73337876281E+02	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	4.97430E-06	+/-	4.3E-07
Delay rate (us/s)	-1.31142823944E+00	Apriori rate (us/s)	-1.31142770870E+00	Resid rate (us/s)	-5.30744E-07	+/-	4.1E-09
Total phase (deg)	238.6	Apriori accel (us/s/s)	-6.60946212792E-05	Resid phase (deg)	154.3	+/-	13.3

ph/seg (deg)	29.6	RMS	29.6	Theor.	31.2	Amplitude	0.235 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5				
amp/seg (%)	52.9	Search (1024X32)	0.231	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	44.7	Inc. seg. avg.	0.218	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	54.4	Inc. frq. avg.	0.257	u,v (fr/asec)	9369.768 -9141.580	simultaneous interpolator									

A: az 352.5 el 29.2 pa 171.1 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 9369.768 -9141.580 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350//Am..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350//Am.W.45.3MP2G6

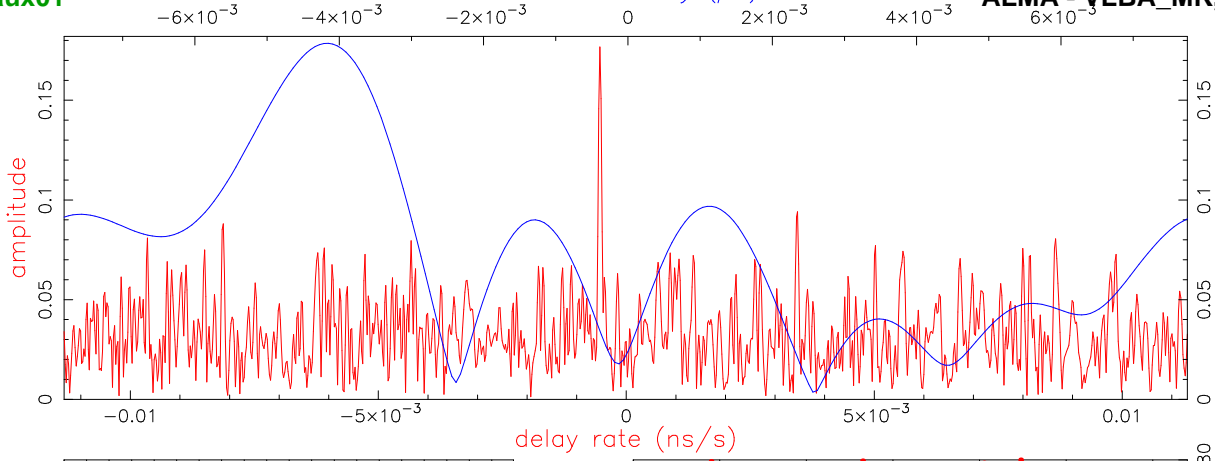
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Am

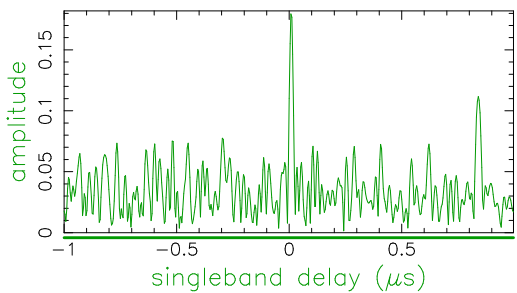
ALMA - VLBA\_MK, fgroup W, pol YL

multiband delay ( $\mu$ s)

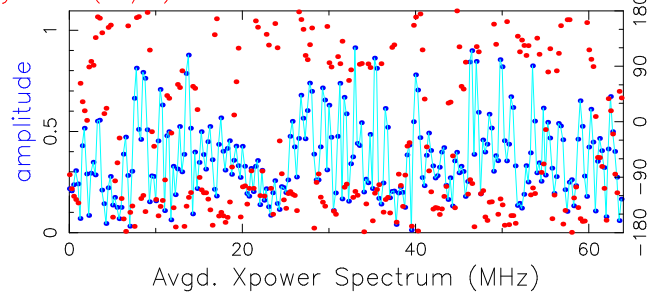


Fringe quality 0

SNR 6.7  
 Int time 179.989  
 Amp 0.182  
 Phase 3.1  
 PFD 3.6e-03  
 Delays (us)  
 SBD 0.009393  
 MBD -0.004340  
 Fringe rate (Hz)  
 -0.046379  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

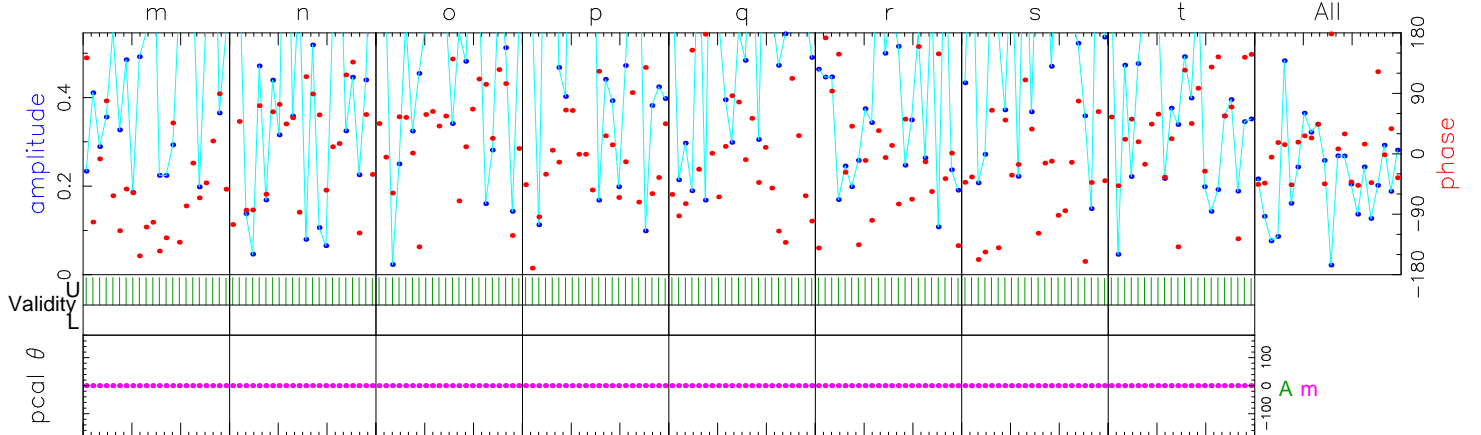


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114409  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.1	31.0	55.0	-4.3	-19.6	-28.1	-25.0	57.2	Phase	3.1
	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.2	Ampl.	0.2
	471.6	344.2	259.1	259.5	260.2	125.2	140.9	37.6	Sbd box	259.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UY	W01UY	W02UY	W03UY	W04UY	W05UY	W06UY	W07UY	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.73349156303E+02	Apriori delay (usec)	9.73337871307E+02	Resid mbdelay (usec)	-4.34000E-03	+/-	1.6E-04
Sband delay (usec)	9.73347264557E+02	Apriori clock (usec)	-2.1079863E+03	Resid sbdelay (usec)	9.39325E-03	+/-	1.3E-03
Phase delay (usec)	9.73337871407E+02	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	9.98003E-08	+/-	5.5E-07
Delay rate (us/s)	-1.31142824711E+00	Apriori rate (us/s)	-1.31142770870E+00	Resid rate (us/s)	-5.38412E-07	+/-	5.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.60946212792E-05	Resid phase (deg)	3.1	+/-	17.2

ph/seg (deg)	RMS 55.5	Theor. 40.3	Amplitude 55.5	0.182 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.5	70.3	Search (1024X32)	0.176	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	47.5	24.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.2	42.4	Inc. seg. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	0.212	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

A: az 352.5 el 29.2 pa 171.1      m: az 56.4 el 20.0 pa -80.0      u, v (fr/asec) 9369.768 -9141.580      simultaneous interpolator

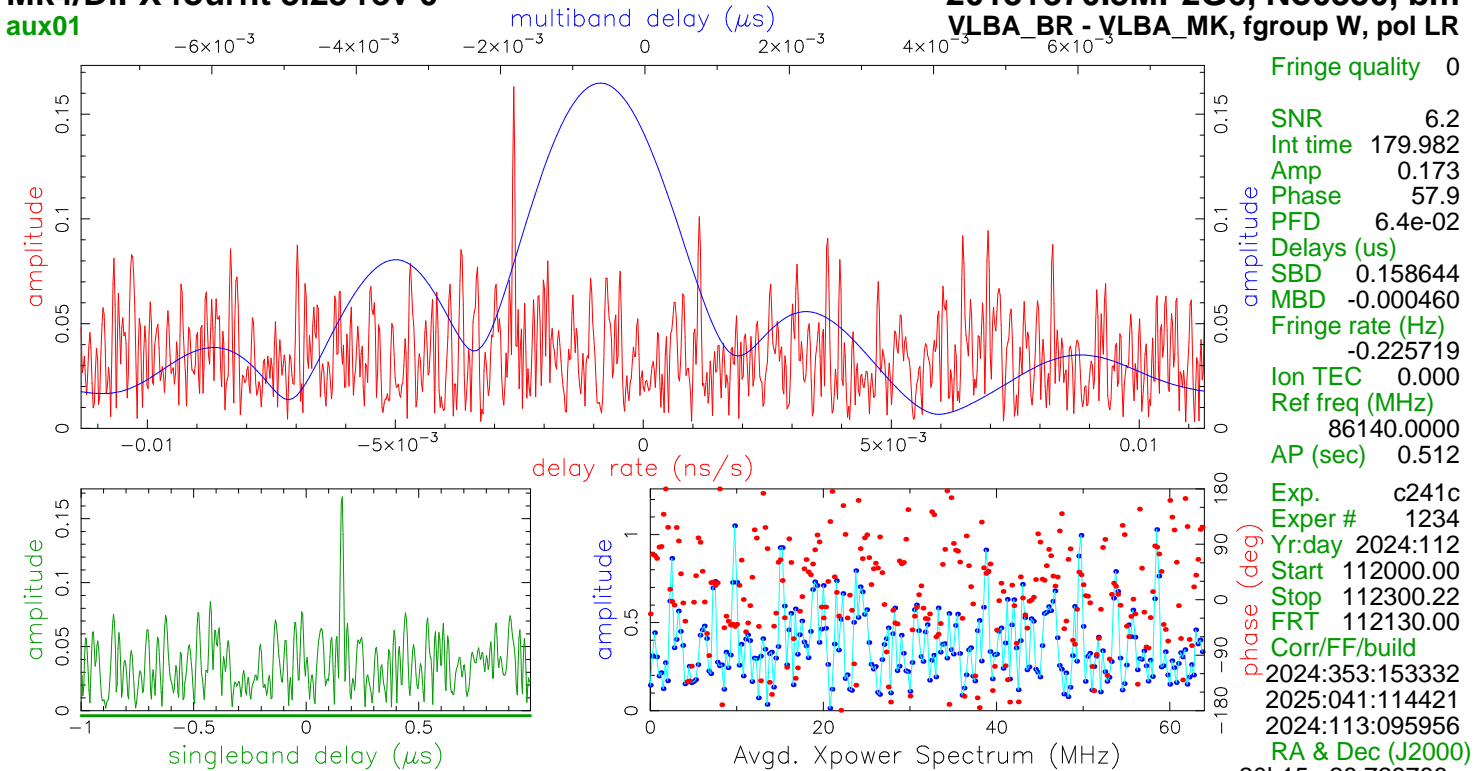
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Mk4/DiFX fourfit 3.25 rev 0

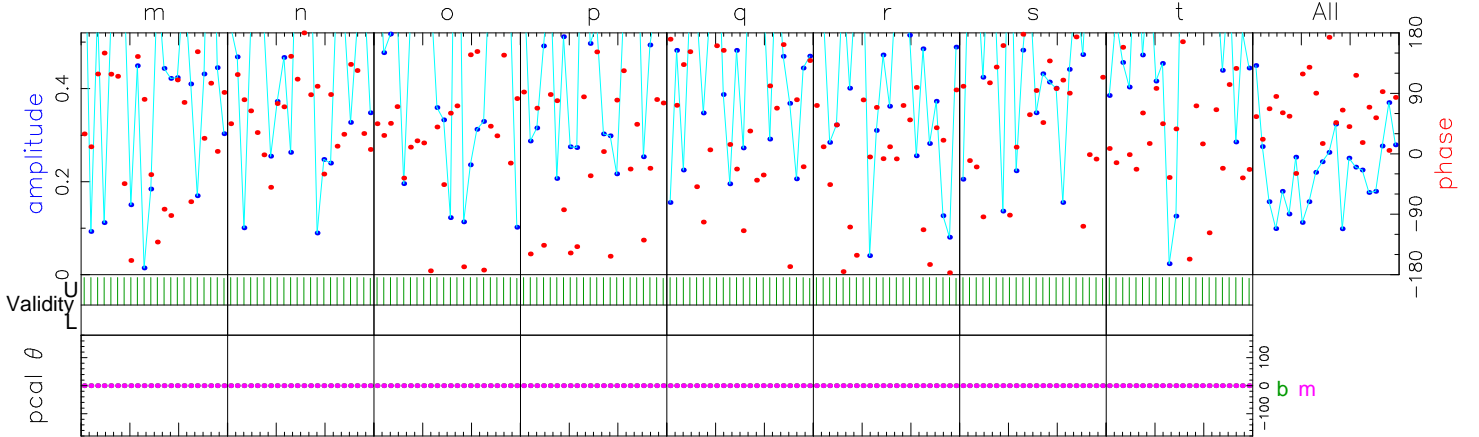
aux01

2013+370.3MP2G6, No0350, bm

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



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
	84.7	66.1	47.5	70.3	57.8	51.0	70.4	35.9	Phase	57.9
	0.1	0.3	0.3	0.1	0.1	0.1	0.2	0.2	Ampl.	0.2
	355.9	297.3	161.7	386.9	430.9	511.1	165.2	277.0	Sbd box	297.6
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	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.04392075636E+04		Apriori delay (usec)	1.04390517739E+04	Resid mbdelay (usec)	-4.60234E-04	+/-	1.7E-04		
Sband delay (usec)	1.04392104184E+04		Apriori clock (usec)	4.1013241E+00	Resid sbdelay (usec)	1.58644E-01	+/-	1.4E-03		
Phase delay (usec)	1.04390517757E+04		Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	1.86872E-06	+/-	5.9E-07		
Delay rate (us/s)	-5.75084024053E-01		Apriori rate (us/s)	-5.75081403682E-01	Resid rate (us/s)	-2.62037E-06	+/-	5.7E-09		
Total phase (deg)		345.8	Apriori accel (us/s/s)	-2.78024296801E-05	Resid phase (deg)	57.9	+/-	18.4		
RMS	45.3	43.2	Amplitude	0.173 +/- 0.028	Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5		
ph/seg (deg)	60.2	75.4	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	17.0	26.1	Inc. seg. avg.	0.179	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	45.6	45.5	Inc. frq. avg.	0.156	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011	
amp/frq (%)					Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00		
b: az 92.5 el 56.6 pa -56.8			m: az 56.4 el 20.0 pa -80.0		u,v (fr/asec) 4122.394 1171.705					simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/bm..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/bm.W.106.3MP2G6					

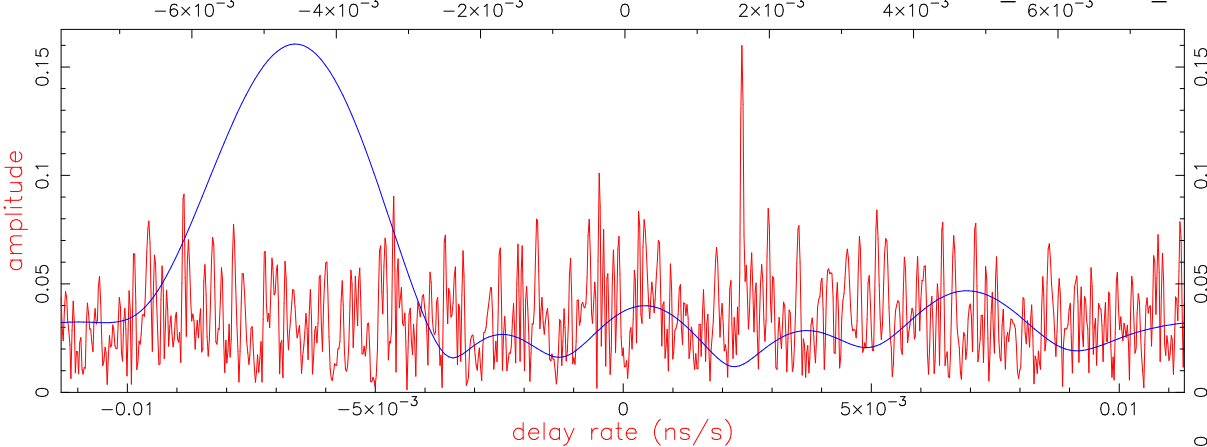
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, bm

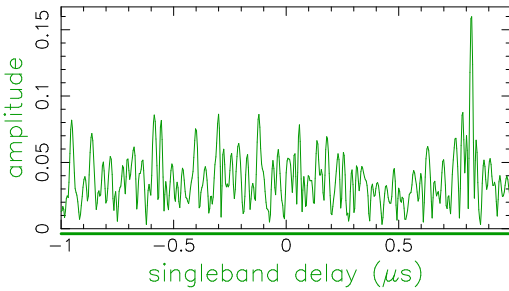
VLBA\_BR - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

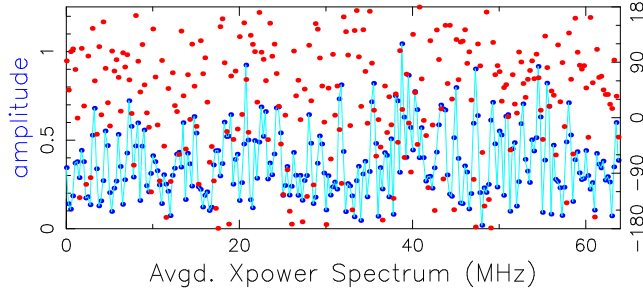


Fringe quality 0

SNR 6.0  
 Int time 179.982  
 Amp 0.167  
 Phase -128.9  
 PFD 2.0e-01  
 Delays (us)  
 SBD 0.822416  
 MBD -0.004679  
 Fringe rate (Hz)  
 0.207161  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

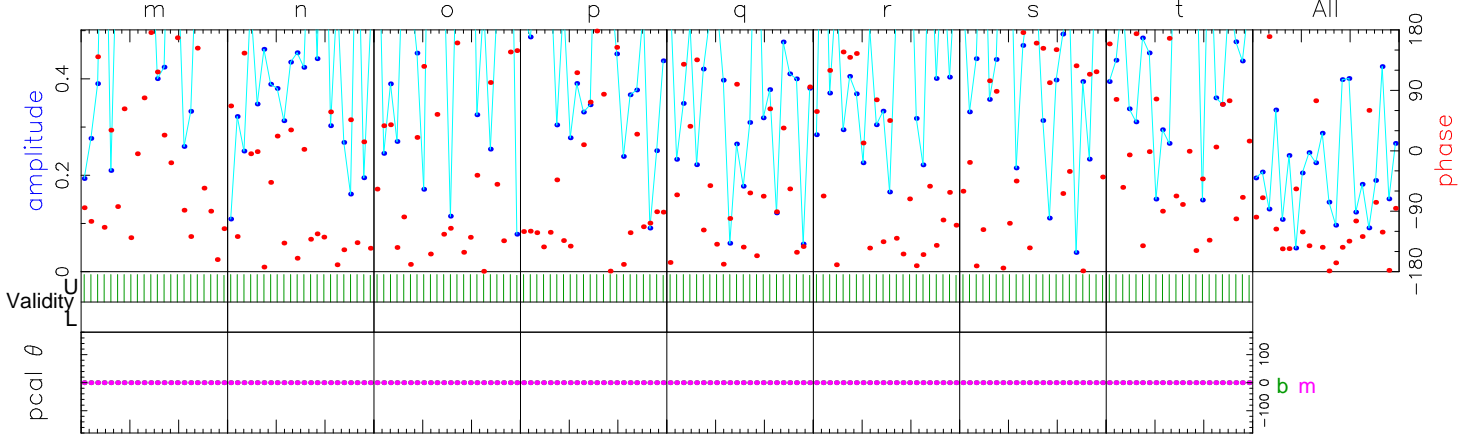


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114423  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-116.6	-123.8	-143.8	-142.2	-137.0	-123.9	-146.9	-66.2	Phase	-128.9
	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.1	Ampl.	0.2
	208.9	152.4	404.1	114.8	317.9	468.7	263.3	246.2	Sbd box	467.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.04398752195E+04	Apriori delay (usec)	1.04390517739E+04	Resid mbdelay (usec)	-4.67934E-03	+/-	1.8E-04
Sband delay (usec)	1.04398741896E+04	Apriori clock (usec)	4.1013241E+00	Resid sbdelay (usec)	8.22416E-01	+/-	1.4E-03
Phase delay (usec)	1.04390517697E+04	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	-4.15730E-06	+/-	6.1E-07
Delay rate (us/s)	-5.75078998744E-01	Apriori rate (us/s)	-5.75081403682E-01	Resid rate (us/s)	2.40494E-06	+/-	5.9E-09
Total phase (deg)	158.9	Apriori accel (us/s/s)	-2.78024296801E-05	Resid phase (deg)	-128.9	+/-	19.0

ph/seg (deg)	60.4	Theor.	44.6	Amplitude	0.167 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.5	Search (1024X32)	0.155	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.6	Inc. seg. avg.	0.167	Inc. frq. avg.	0.157	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.6	Inc. frq. avg.	0.157			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 92.5 el 56.6 pa -56.8 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4122.394 1171.705 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/bm.W.116.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

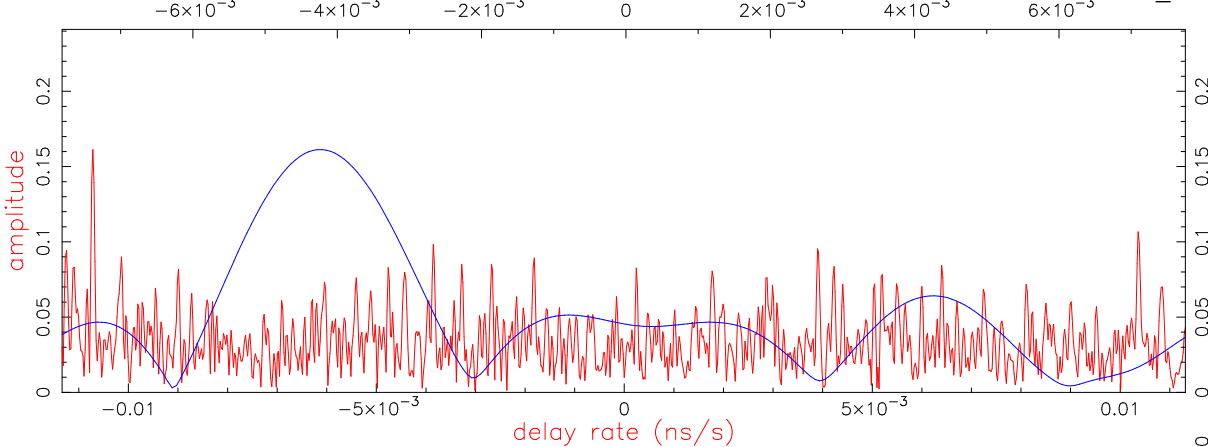
aux01

2013+370.3MP2G6, No0350, Bm

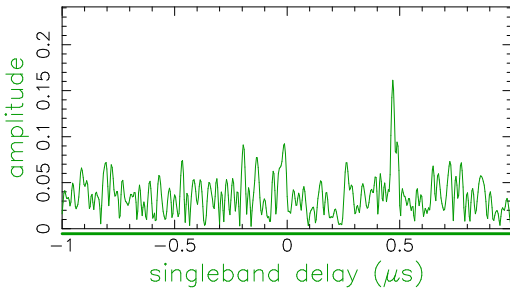
EFLSBERG - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

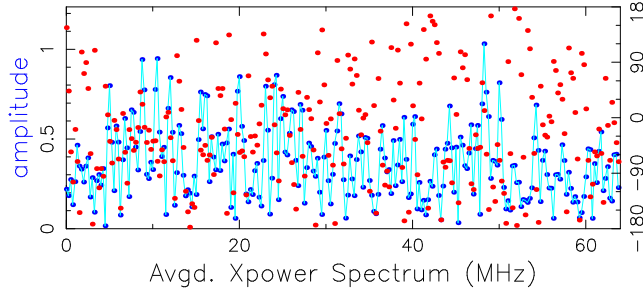
Fringe quality 0



SNR 5.9  
Int time 179.975  
Amp 0.241  
Phase 21.5  
PFD 3.2e-01  
Delays (us)  
SBD 0.469286  
MBD -0.004217  
Fringe rate (Hz)  
-0.924387  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

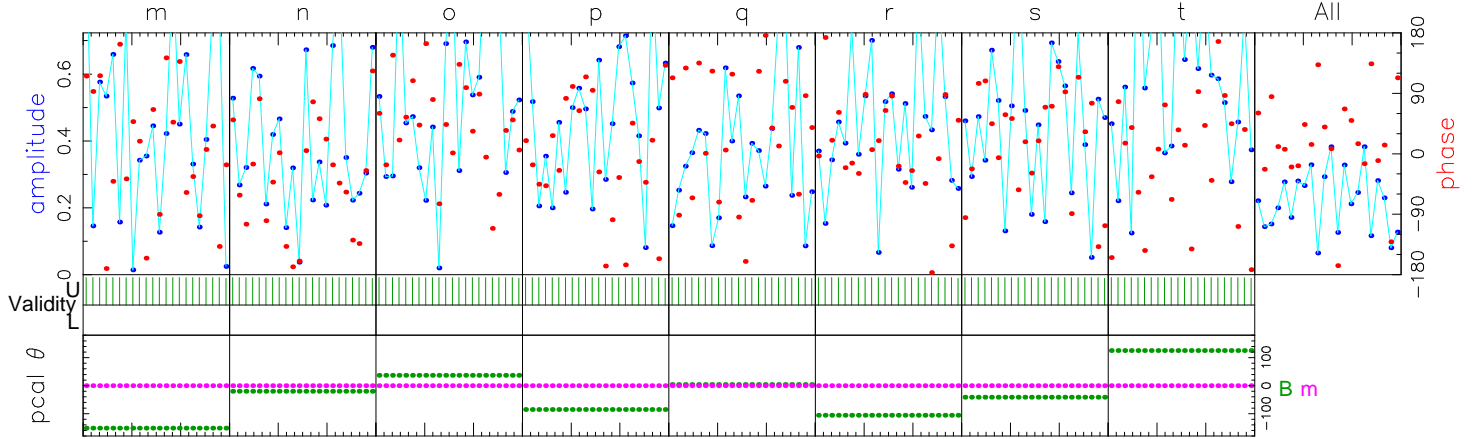


delay rate (ns/s)



Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build  
2024:353:153332  
2025:041:114427  
2024:113:095956  
RA & Dec (J2000)  
20h15m28.729786s  
+37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	53.3	-12.4	35.3	17.2	33.4	15.5	43.8	6.8	Phase	21.5
	0.1	0.2	0.4	0.2	0.1	0.4	0.2	0.3	Ampl.	0.2
	333.1	44.4	355.2	478.7	333.4	376.1	157.4	381.9	Sbd box	377.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.79847259833E+03	Apriori delay (usec)	3.79800806494E+03	Resid mbdelay (usec)	-4.21661E-03	+/-	1.8E-04
Sband delay (usec)	3.79847735069E+03	Apriori clock (usec)	-3.5944061E+01	Resid sbdelay (usec)	4.69286E-01	+/-	1.5E-03
Phase delay (usec)	3.79800806564E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	6.94896E-07	+/-	6.2E-07
Delay rate (us/s)	-1.92338554381E+00	Apriori rate (us/s)	-1.92337481259E+00	Resid rate (us/s)	-1.07312E-05	+/-	6.0E-09
Total phase (deg)	278.6	Apriori accel (us/s/s)	9.16207564066E-06	Resid phase (deg)	21.5	+/-	19.3

ph/seg (deg)	68.6	RMS	45.3	Theor.	45.3	Amplitude	0.241 +/- 0.041	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5				
amp/seg (%)	67.8	Search (1024X32)	0.157	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	23.3	Inc. seg. avg.	0.254	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate(Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	46.3	Inc. frq. avg.	0.228	simultaneous interpolator											

B: az 291.3 el 32.0 pa 48.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 13851.954 3509.199 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Bm.W.127.3MP2G6

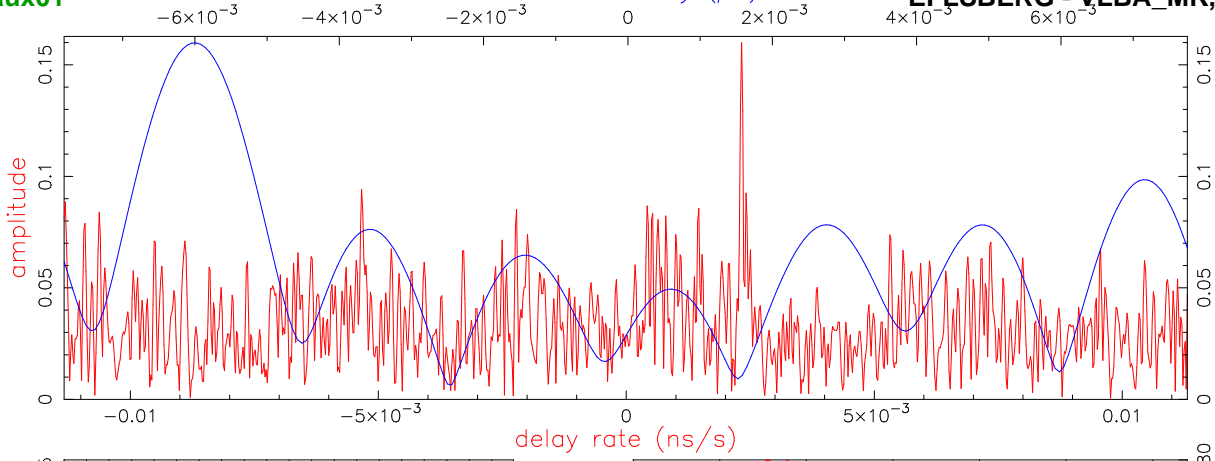
Mk4/DiFX fourfit 3.25 rev 0

aux01

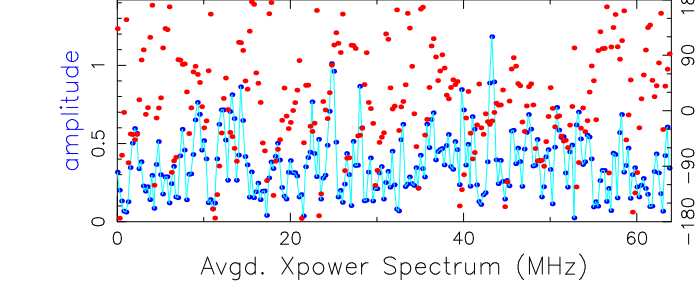
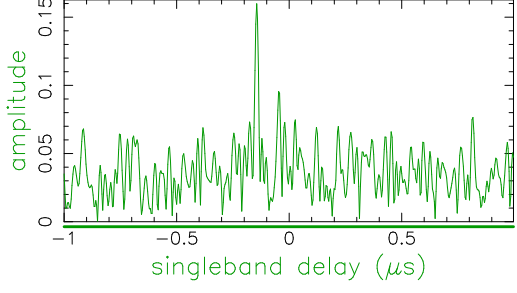
2013+370.3MP2G6, No0350, Bm

EFLSBERG - VLBA\_MK, fgroup W, pol RR

multiband delay ( $\mu$ s)

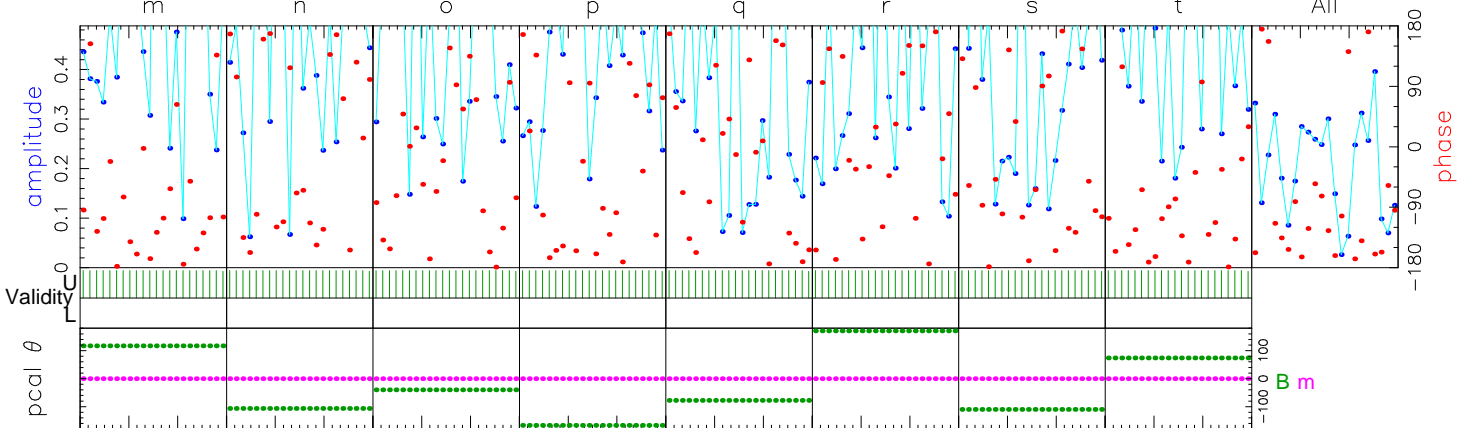


Fringe quality 0  
 SNR 5.9  
 Int time 179.975  
 Amp 0.163  
 Phase -139.8  
 PFD 4.3e-01  
 Delays (us)  
 SBD -0.144223  
 MBD -0.005989  
 Fringe rate (Hz) 0.200518  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114429  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



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
	-114.8	-161.4	-150.2	-169.6	-175.3	-136.6	-146.9	-127.0	Phase	-139.8
	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.3	Ampl.	0.2
	220.8	226.6	276.0	222.1	193.8	137.7	81.3	220.1	Sbd box	220.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.79786145097E+03	Apriori delay (usec)	3.79800806494E+03	Resid mbdelay (usec)	-5.98897E-03	+/-	1.8E-04
Sband delay (usec)	3.79786384144E+03	Apriori clock (usec)	-3.5944061E+01	Resid sbdelay (usec)	-1.44223E-01	+/-	1.5E-03
Phase delay (usec)	3.79800806043E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	-4.50922E-06	+/-	6.3E-07
Delay rate (us/s)	-1.92337248478E+00	Apriori rate (us/s)	-1.92337481259E+00	Resid rate (us/s)	2.32781E-06	+/-	6.1E-09
Total phase (deg)	117.2	Apriori accel (us/s/s)	9.16207564066E-06	Resid phase (deg)	-139.8	+/-	19.5

ph/seg (deg)	44.8	Theor.	45.8	Amplitude	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	68.8	Search (1024X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	24.4	Inc. seg. avg.	0.160	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	62.8	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

B: az 291.3 el 32.0 pa 48.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 13851.954 3509.199 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Bm.W.138.3MP2G6



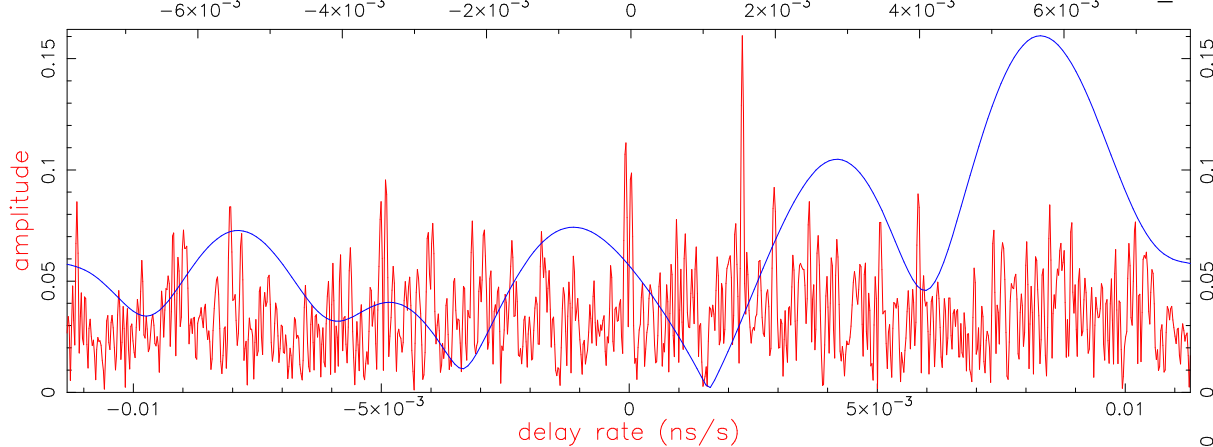
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Bm

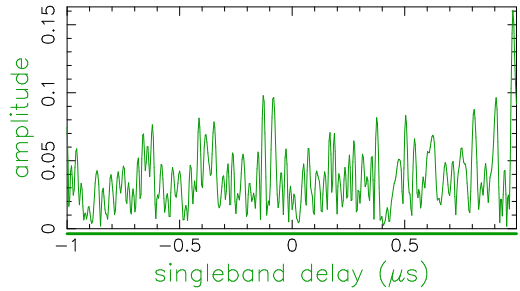
EFLSBERG - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

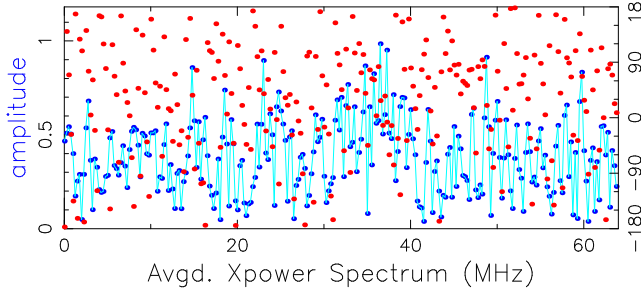


Fringe quality 0

SNR 5.9  
 Int time 179.975  
 Amp 0.163  
 Phase 142.9  
 PFD 3.9e-01  
 Delays (us)  
 SBD 0.980927  
 MBD 0.005686  
 Fringe rate (Hz)  
 0.196641  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

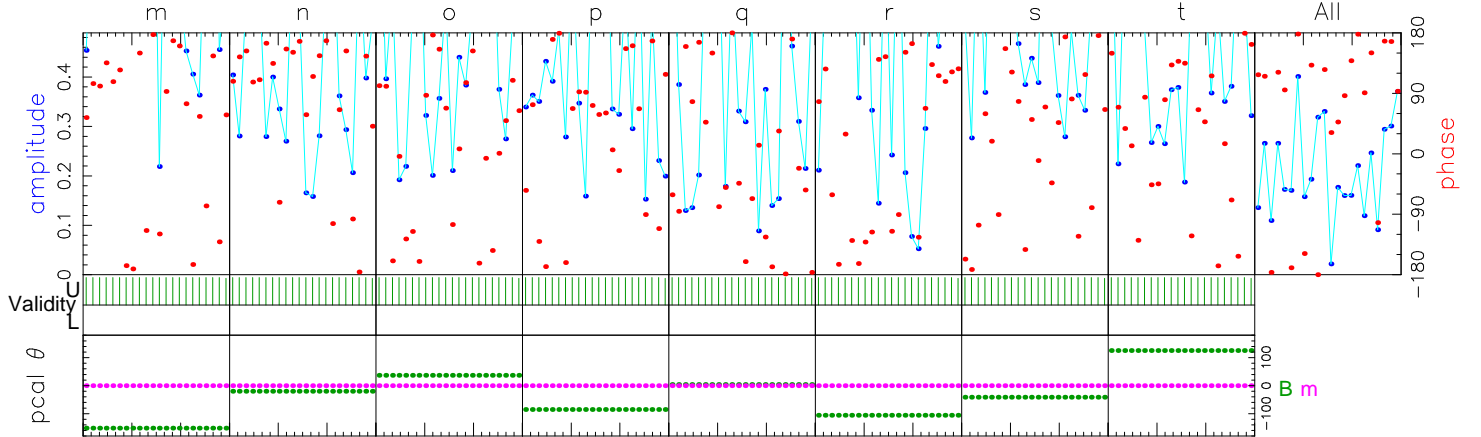


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114432  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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		
m	0	0	0	0	0	0	0	0		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	3.79898250140E+03	Apriori delay (usec)	3.79800806494E+03	Resid mbdelay (usec)	5.68646E-03	+/-	1.8E-04
Sband delay (usec)	3.79898899144E+03	Apriori clock (usec)	-3.5944061E+01	Resid sbdelay (usec)	9.80927E-01	+/-	1.5E-03
Phase delay (usec)	3.79800806955E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	4.60912E-06	+/-	6.3E-07
Delay rate (us/s)	-1.92337252978E+00	Apriori rate (us/s)	-1.92337481259E+00	Resid rate (us/s)	2.28281E-06	+/-	6.0E-09
Total phase (deg)	40.0	Apriori accel (us/s/s)	9.16207564066E-06	Resid phase (deg)	142.9	+/-	19.5

ph/seg (deg)	52.8	Theor.	45.7	Amplitude	0.163 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.3	Search (1024X32)	0.158	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.3	Inc. seg. avg.	0.164	Inc. frq. avg.	0.170	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	63.3	Inc. frq. avg.	0.170	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
B: az 291.3 el 32.0 pa 48.0		m: az 56.4 el 20.0 pa -80.0		u, v (fr/asec)	13851.954 3509.199	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Bm.W.147.3MP2G6

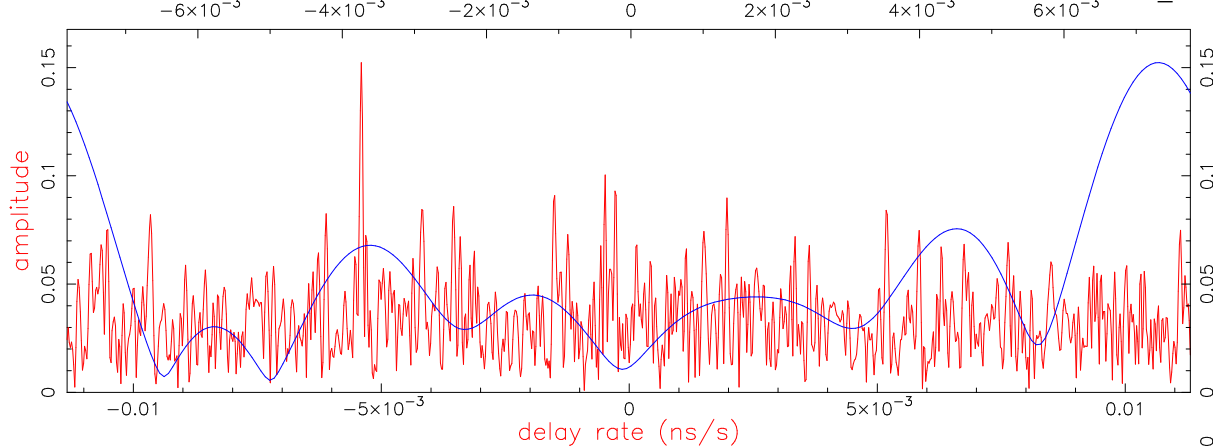
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Bm

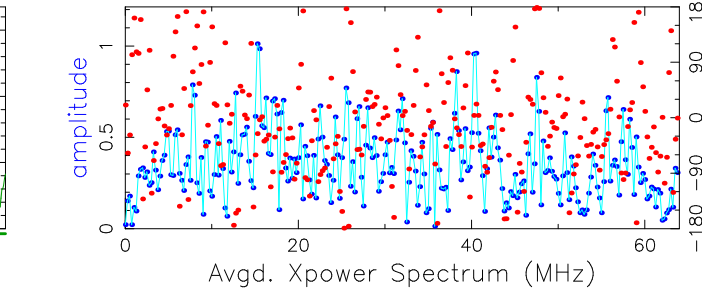
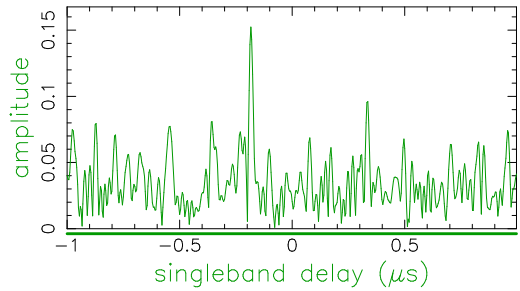
EFLSBERG - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)



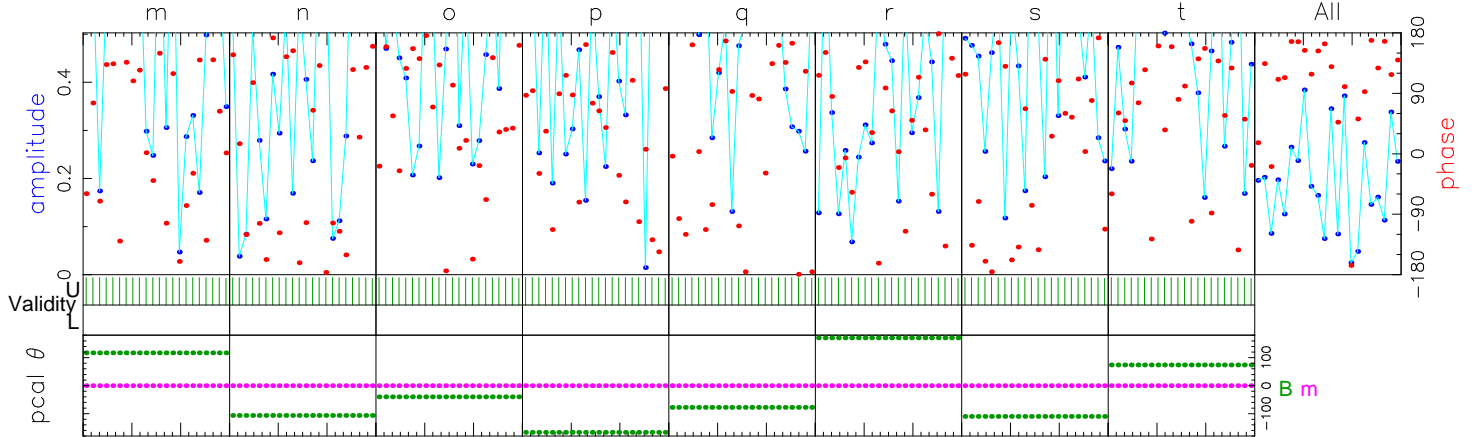
Fringe quality 0

SNR 5.6  
 Int time 179.975  
 Amp 0.168  
 Phase 127.8  
 PFD 9.4e-01  
 Delays (us)  
 SBD -0.183301  
 MBD -0.008301  
 Fringe rate (Hz)  
 -0.465914  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114435  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	3.79782788916E+03	Apriori delay (usec)	3.79800806494E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.9E-04
Sband delay (usec)	3.79782476419E+03	Apriori clock (usec)	-3.5944061E+01	Resid sbdelay (usec)	-1.83301E-01	+/-	1.5E-03
Phase delay (usec)	3.79800806906E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	4.12103E-06	+/-	6.6E-07
Delay rate (us/s)	-1.92338022139E+00	Apriori rate (us/s)	-1.92337481259E+00	Resid rate (us/s)	-5.40880E-06	+/-	6.4E-09
Total phase (deg)	24.8	Apriori accel (us/s/s)	9.16207564066E-06	Resid phase (deg)	127.8	+/-	20.5

ph/seg (deg)	53.3	Theor.	48.1	Amplitude	0.168 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.3		83.9	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.7		29.0	Inc. seg. avg.	0.158	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.6		50.6	Inc. frq. avg.	0.166	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 291.3 el 32.0 pa 48.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 13851.954 3509.199 simultaneous interpolator

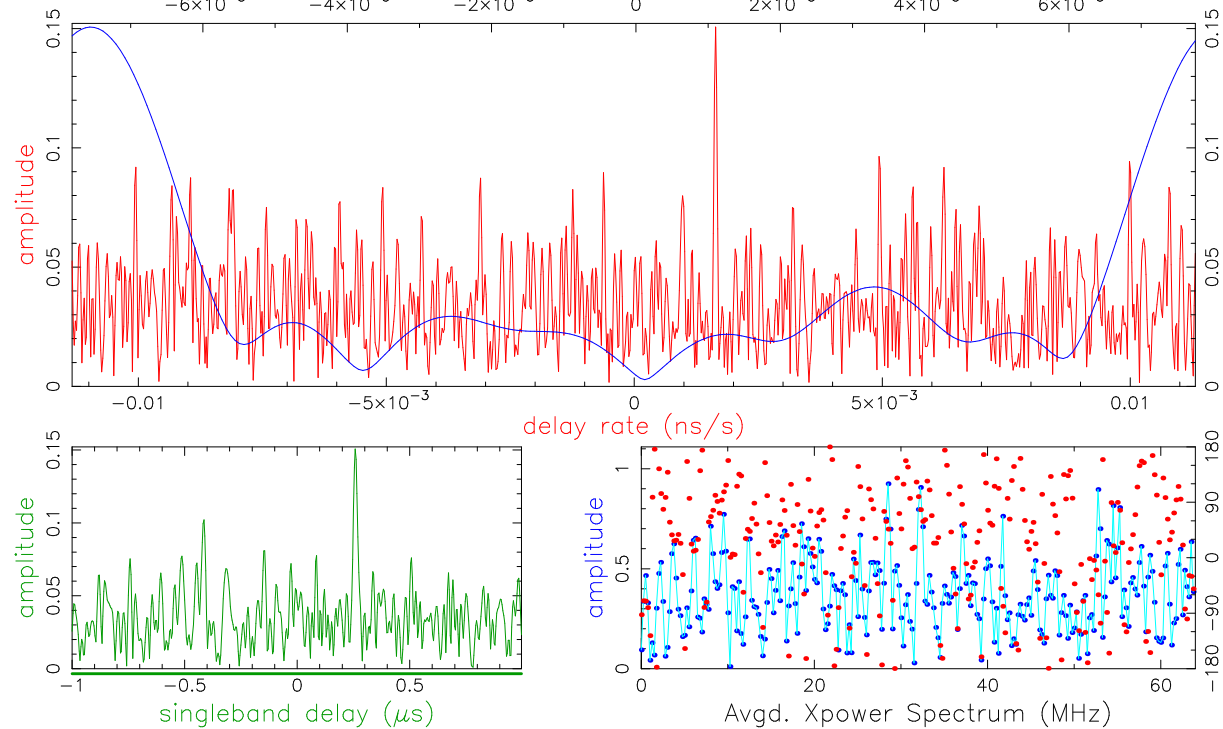
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Bm.W.161.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

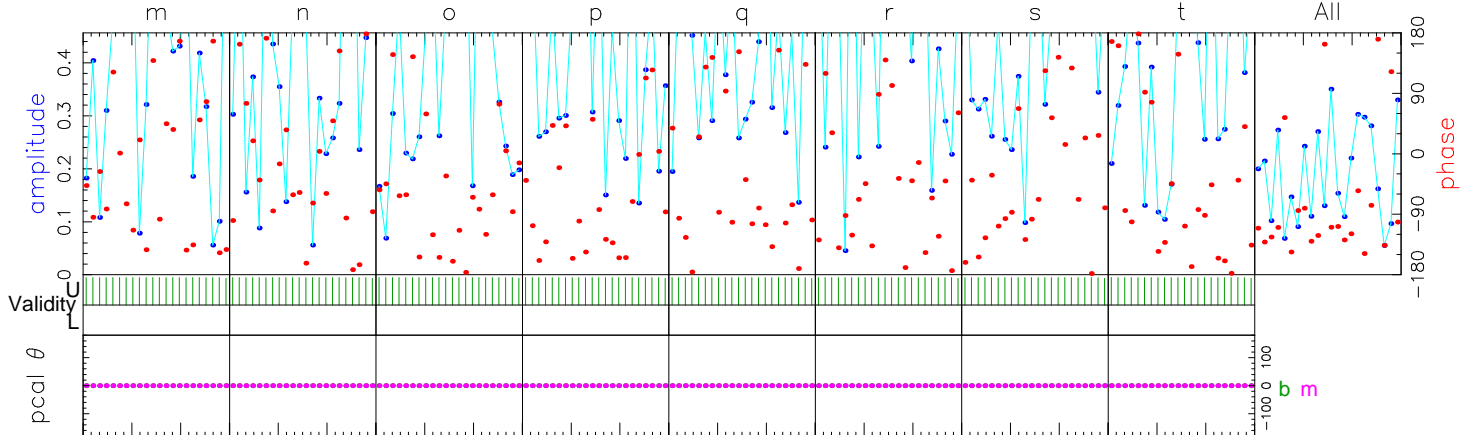
2013+370.3MP2G6, No0350, bm

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



Fringe quality 0  
 SNR 5.5  
 Int time 179.982  
 Amp 0.152  
 Phase -115.1  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.258375  
 MBD -0.007552  
 Fringe rate (Hz) 0.141382  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114415  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-121.9	-120.2	-104.2	-107.8	-126.0	-111.9	-92.6	-125.2	Phase	-115.1
	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
	149.6	259.4	382.6	260.3	29.6	371.2	354.3	374.5	Sbd box	323.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.04393098472E+04 Apriori delay (usec) 1.04390517739E+04 Resid mbdelay (usec) -7.55164E-03 +/- 2.0E-04  
 Sband delay (usec) 1.04393101486E+04 Apriori clock (usec) 4.1013241E+00 Resid sbdelay (usec) 2.58375E-01 +/- 1.6E-03  
 Phase delay (usec) 1.04390517701E+04 Apriori clockrate (us/s) 5.9094092E-07 Resid phdelay (usec) -3.71056E-06 +/- 6.7E-07  
 Delay rate (us/s) -5.75079762375E-01 Apriori rate (us/s) -5.75081403682E-01 Resid rate (us/s) 1.64131E-06 +/- 6.4E-09  
 Total phase (deg) 172.7 Apriori accel (us/s/s) -2.78024296801E-05 Resid phase (deg) -115.1 +/- 20.7

ph/seg (deg) 55.1 48.5 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.8 84.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.8 29.3 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 28.0 51.1 Inc. frq. avg. 0.137 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 b: az 92.5 el 56.6 pa -56.8 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4122.394 1171.705 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/bm.W.81.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

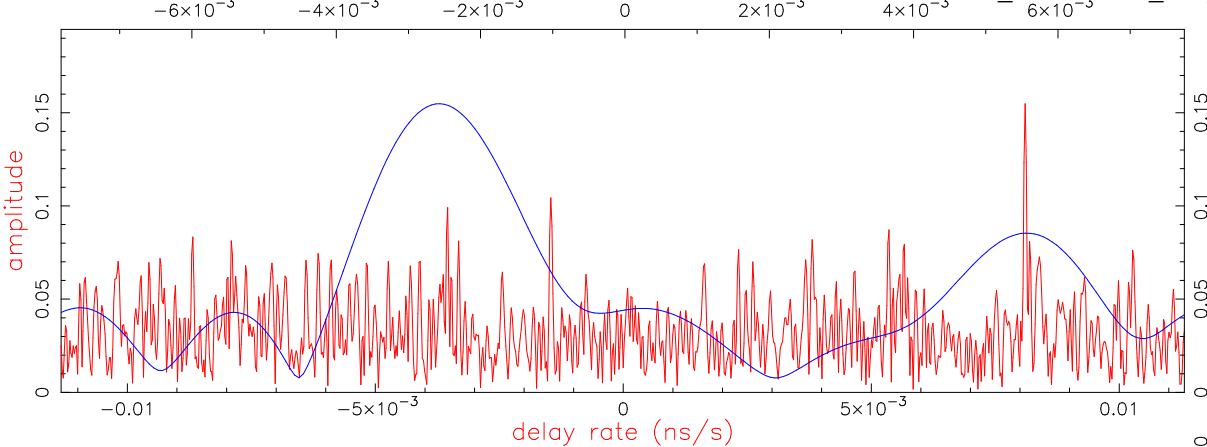
aux01

2013+370.3MP2G6, No0350, bm

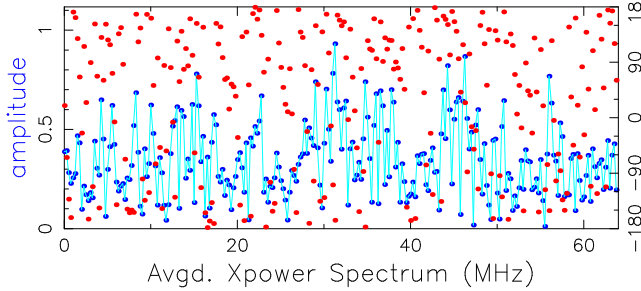
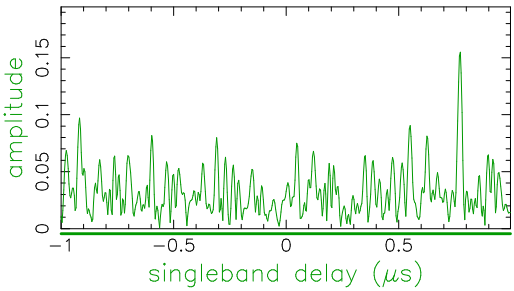
VLBA\_BR - VLBA\_MK, fgroup W, pol RR

multiband delay ( $\mu$ s)

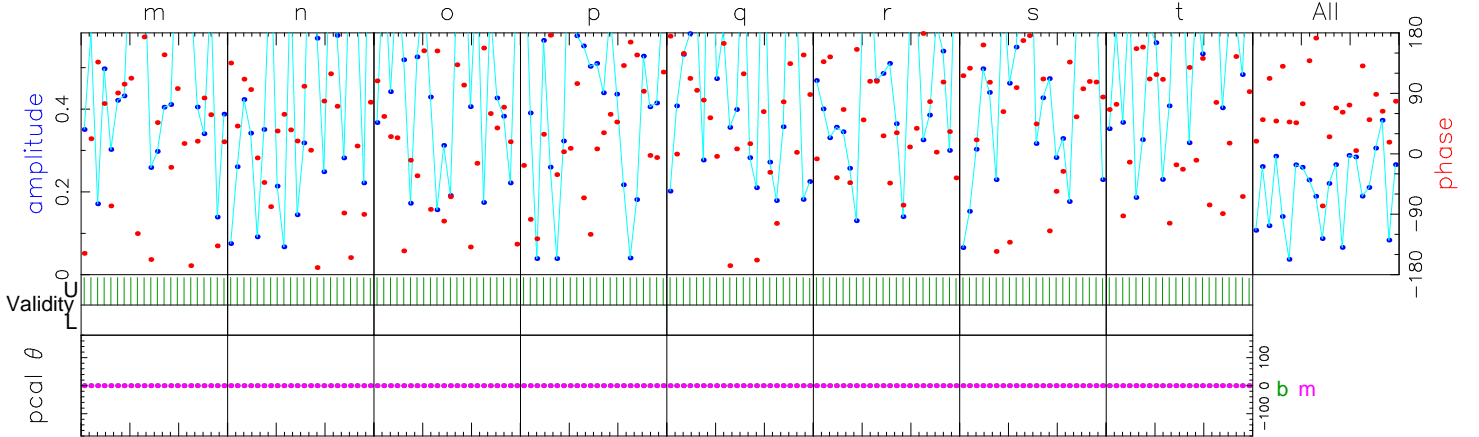
Fringe quality 0



SNR 5.7  
 Int time 179.982  
 Amp 0.195  
 Phase 68.0  
 PFD 7.2e-01  
 Delays (us)  
 SBD 0.772097  
 MBD -0.002594  
 Fringe rate (Hz) 0.699683  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114417  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.9	56.7	65.5	25.3	85.9	39.1	118.6	41.5	Phase	68.0
	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.2	Ampl.	0.2
	321.4	416.9	363.1	453.5	454.1	201.3	453.5	424.9	Sbd box	454.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.04398304297E+04		Apriori delay (usec)		1.04390517739E+04		Resid mbdelay (usec)		-2.59418E-03	+/- 1.9E-04
Sband delay (usec)	1.04398238706E+04		Apriori clock (usec)		4.1013241E+00		Resid sbdelay (usec)		7.72097E-01	+/- 1.5E-03
Phase delay (usec)	1.04390517760E+04		Apriori clockrate (us/s)		5.9094092E-07		Resid phdelay (usec)		2.19169E-06	+/- 6.5E-07
Delay rate (us/s)	-5.75073281057E-01		Apriori rate (us/s)		-5.75081403682E-01		Resid rate (us/s)		8.12263E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.78024296801E-05		Resid phase (deg)		68.0	+/- 20.0

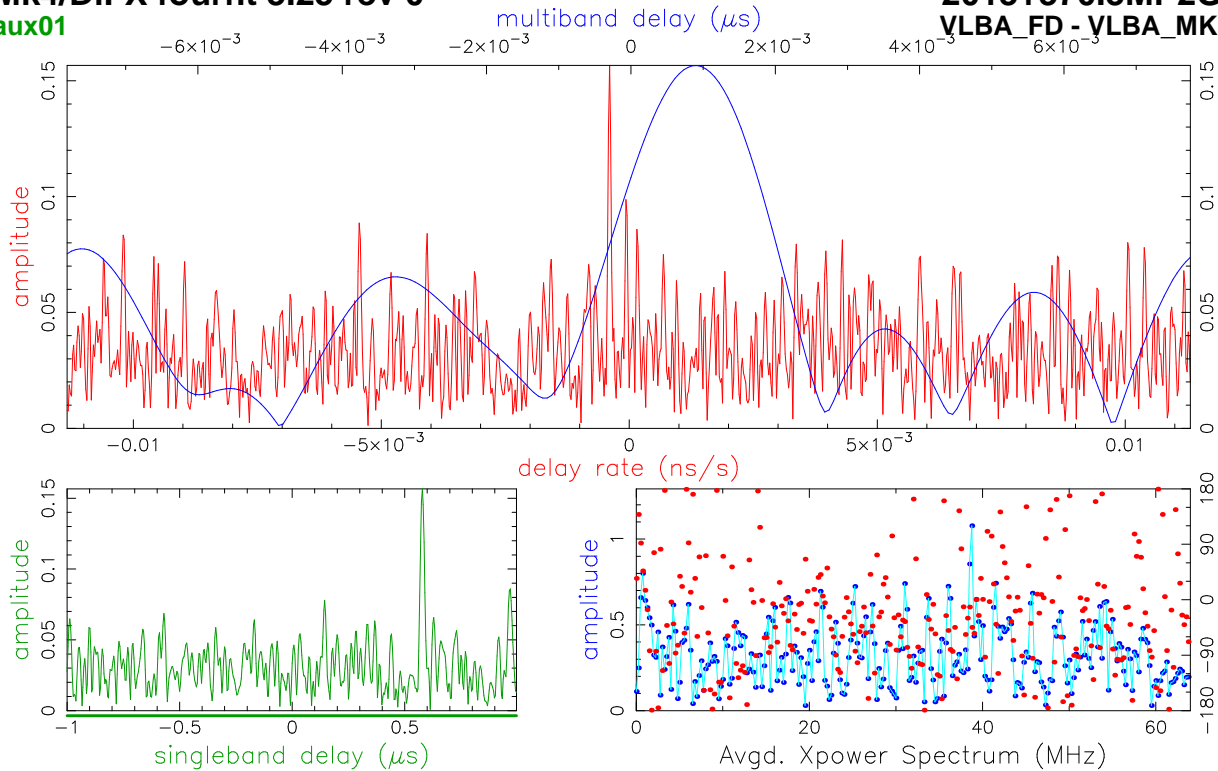
ph/seg (deg) 52.3 46.9 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.3 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.1 28.3 Inc. seg. avg. 0.192 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.6 49.4 Inc. frq. avg. 0.201 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 b: az 92.5 el 56.6 pa -56.8 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4122.394 1171.705 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/bm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/bm.W.92.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

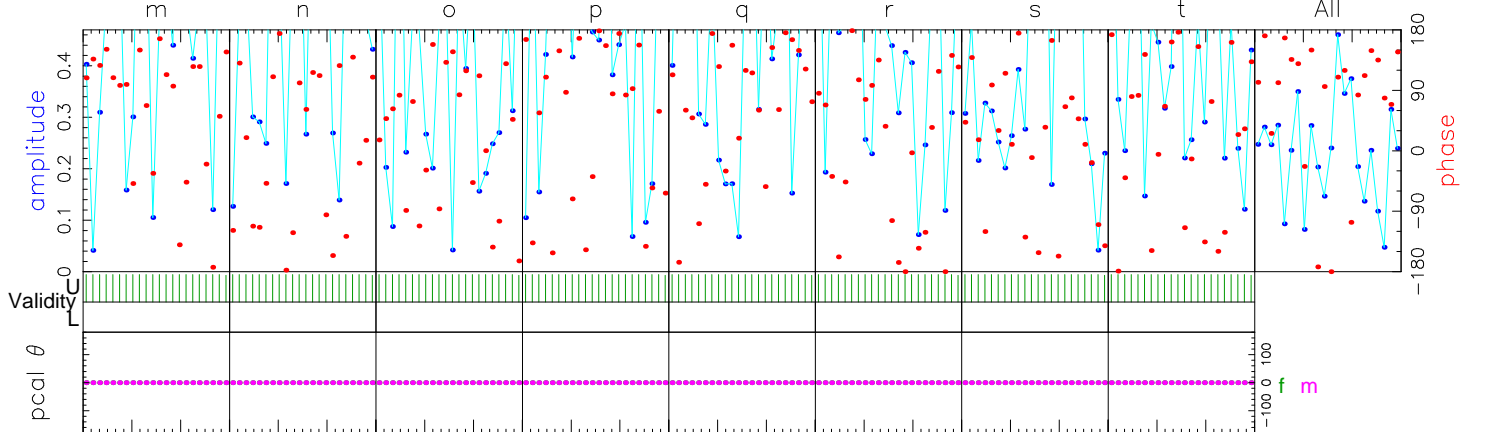
2013+370.3MP2G6, No0350, fm

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



Fringe quality 0  
 SNR 5.7  
 Int time 179.981  
 Amp 0.157  
 Phase 127.4  
 PFD 6.8e-01  
 Delays (us)  
 SBD 0.577957  
 MBD 0.000887  
 Fringe rate (Hz) -0.033856  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114442  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"

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
	119.0	140.1	95.2	161.8	118.0	126.9	65.9	150.3	Phase	127.4
	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
	404.0	347.8	461.2	167.9	489.3	470.7	463.4	487.7	Sbd box	405.0
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	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.21087586816E+04 Apriori delay (usec) 1.21081796692E+04 Resid mbdelay (usec) 8.87481E-04 +/- 1.9E-04  
 Sband delay (usec) 1.21087576264E+04 Apriori clock (usec) -4.8378372E-01 Resid sbdelay (usec) 5.77957E-01 +/- 1.5E-03  
 Phase delay (usec) 1.21081796733E+04 Apriori clockrate (us/s) 6.4719931E-08 Resid phdelay (usec) 4.10786E-06 +/- 6.4E-07  
 Delay rate (us/s) -6.48755843620E-01 Apriori rate (us/s) -6.48755450580E-01 Resid rate (us/s) -3.93040E-07 +/- 6.2E-09  
 Total phase (deg) 19.7 Apriori accel (us/s/s) -5.27519858698E-05 Resid phase (deg) 127.4 +/- 20.0

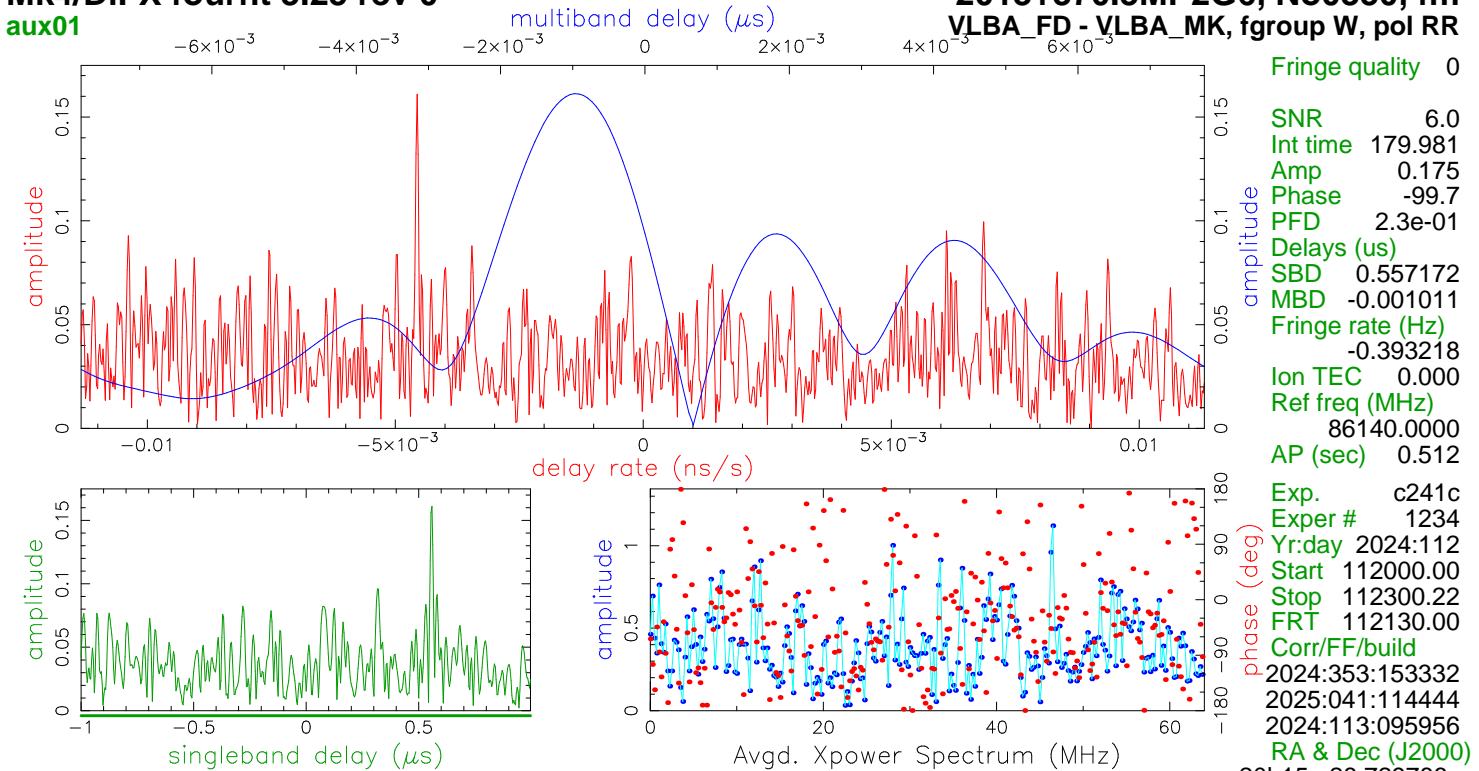
ph/seg (deg) RMS Theor. Amplitude 0.157 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.9 46.8 Search (1024X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 81.5 81.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.8 28.2 Inc. seg. avg. 0.176 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 f: az 66.5 el 65.9 pa -97.7 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4628.609 -1979.121 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/fm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/fm.W.176.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

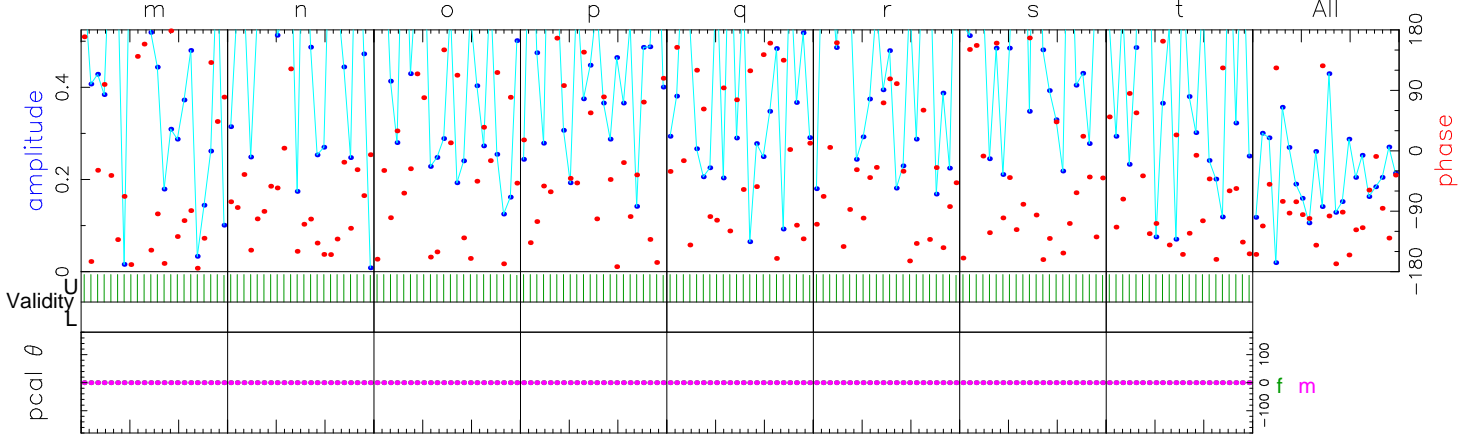
aux01

2013+370.3MP2G6, No0350, fm

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



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-155.8	-83.2	-34.9	-113.0	-101.3	-82.1	-109.9	-95.4	Phase	-99.7
	0.2	0.4	0.1	0.1	0.1	0.2	0.3	0.2	Ampl.	0.2
	274.4	399.7	391.1	166.1	416.8	466.4	399.6	33.7	Sbd box	399.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.21087411580E+04		Apriori delay (usec)	1.21081796692E+04	Resid mbdelay (usec)	-1.01113E-03	+/-	1.8E-04		
Sband delay (usec)	1.21087368417E+04		Apriori clock (usec)	-4.8378372E-01	Resid sbdelay (usec)	5.57172E-01	+/-	1.4E-03		
Phase delay (usec)	1.21081796659E+04		Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-3.21638E-06	+/-	6.2E-07		
Delay rate (us/s)	-6.48760015454E-01		Apriori rate (us/s)	-6.48755450580E-01	Resid rate (us/s)	-4.56487E-06	+/-	5.9E-09		
Total phase (deg)		152.6	Apriori accel (us/s/s)	-5.27519858698E-05	Resid phase (deg)	-99.7	+/-	19.1		
RMS	55.9	44.8	Amplitude	0.175 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	55.9	44.8	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	63.0	78.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	37.0	27.0	Inc. seg. avg.	0.175	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	51.0	47.2	Inc. frq. avg.	0.172	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
f: az 66.5 el 65.9 pa -97.7			m: az 56.4 el 20.0 pa -80.0			u,v (fr/asec) 4628.609 -1979.121			simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/fm..3MP2G6			Output file: /Exps/c241c/v2/3mm/1234/No0350/fm.W.187.3MP2G6				

Mk4/DiFX fourfit 3.25 rev 0

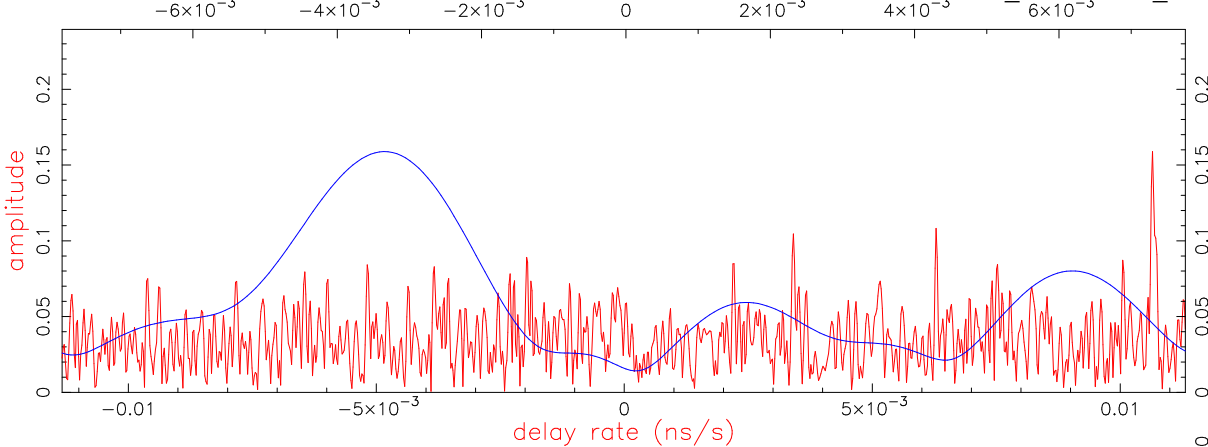
aux01

2013+370.3MP2G6, No0350, fm

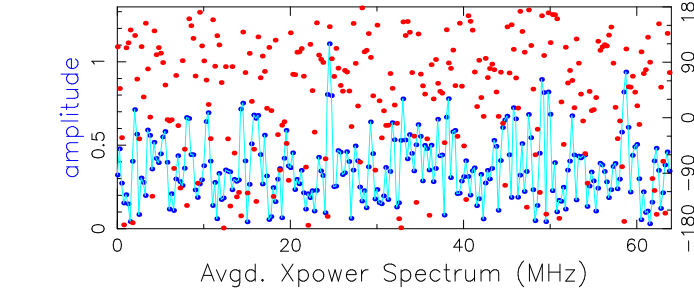
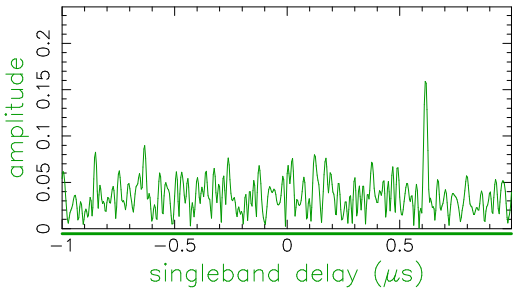
VLBA\_FD - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

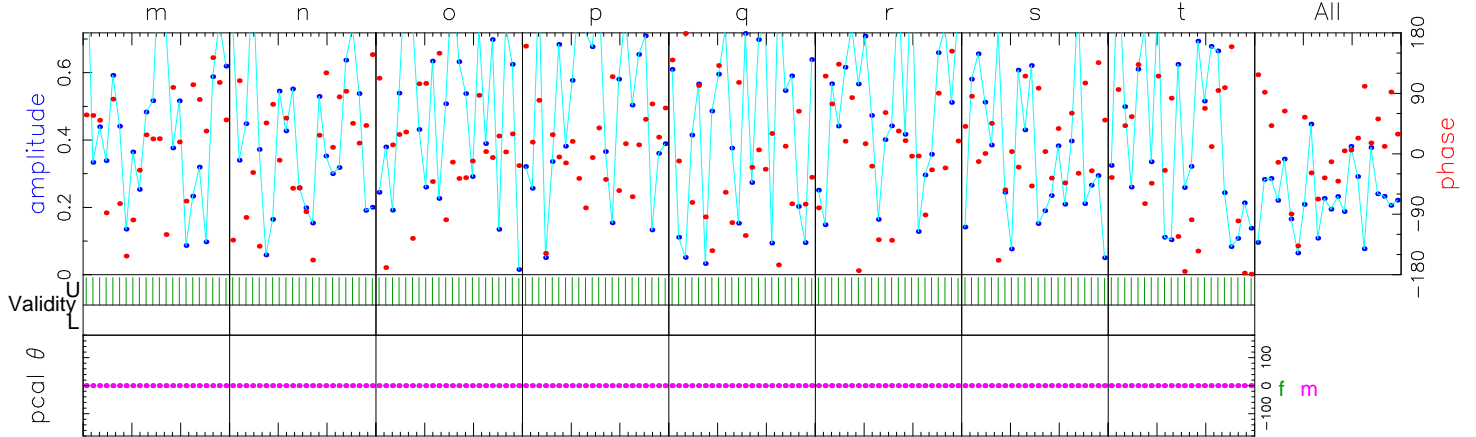


SNR 5.9  
Int time 179.981  
Amp 0.239  
Phase 17.2  
PFD 3.3e-01  
Delays (us)  
SBD 0.614953  
MBD -0.003336  
Fringe rate (Hz)  
0.917946  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build  
2024:353:153332  
2025:041:114448  
2024:113:095956  
RA & Dec (J2000)  
20h15m28.729786s  
+37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	0	0	0	0	0	0	0	0	Ampl.	0.2
m	0	0	0	0	0	0	0	0	Sbd box	414.4
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	

Group delay (usec) (SBD)	1.21088013328E+04	Apriori delay (usec)	1.21081796692E+04	Resid mbdelay (usec)	-3.33631E-03	+/-	1.8E-04
Sband delay (usec)	1.21087946217E+04	Apriori clock (usec)	-4.8378372E-01	Resid sbdelay (usec)	6.14953E-01	+/-	1.5E-03
Phase delay (usec)	1.21081796697E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	5.55605E-07	+/-	6.2E-07
Delay rate (us/s)	-6.48744794134E-01	Apriori rate (us/s)	-6.48755450580E-01	Resid rate (us/s)	1.06564E-05	+/-	6.0E-09
Total phase (deg)	269.6	Apriori accel (us/s/s)	-5.27519858698E-05	Resid phase (deg)	17.2	+/-	19.3

ph/seg (deg)	62.7	Theor.	45.4	Amplitude	0.239 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	74.1	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	51.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	50.1	Inc. seg. avg.	0.262	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.248	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 66.5 el 65.9 pa -97.7 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4628.609 -1979.121 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/fm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/fm.W.201.3MP2G6







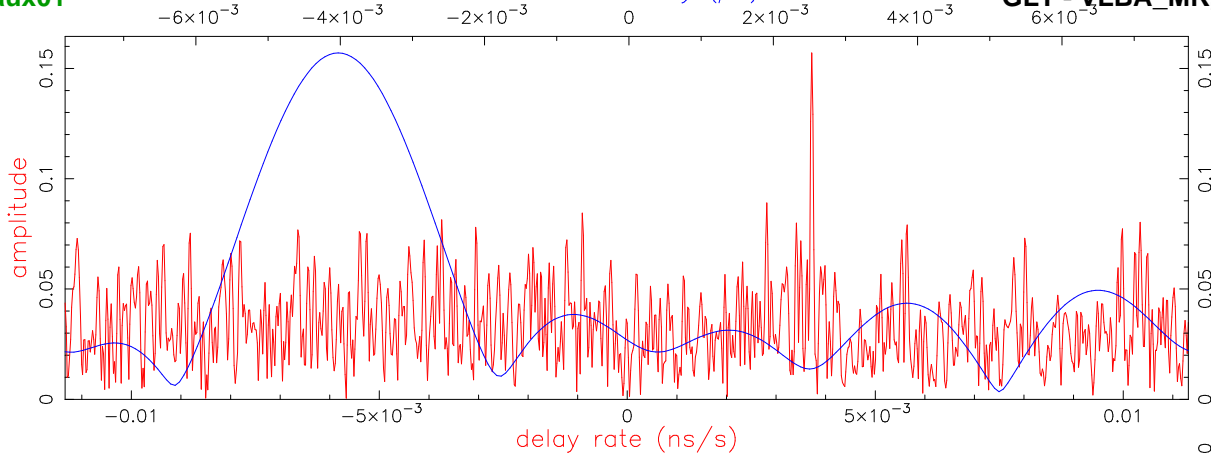
# Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, gm

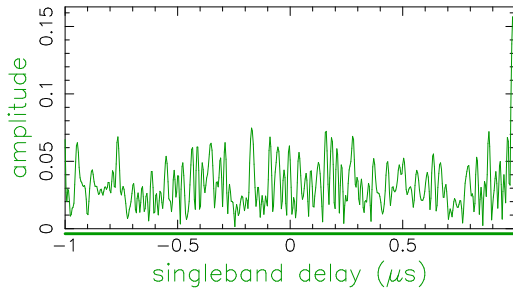
GLT - VLBA\_MK, fgroup W, pol RR

multiband delay ( $\mu$ s)

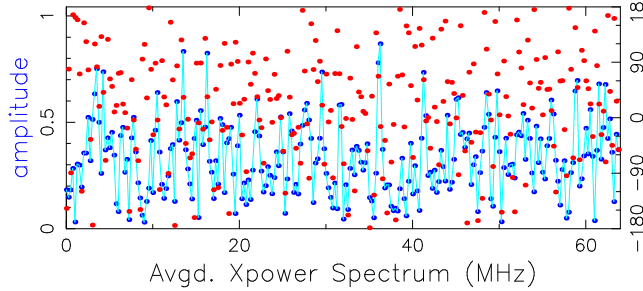


Fringe quality 0

SNR 5.8  
 Int time 179.983  
 Amp 0.165  
 Phase -42.1  
 PFD 6.2e-01  
 Delays (us)  
 SBD 0.988827  
 MBD -0.004022  
 Fringe rate (Hz)  
 0.320275  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

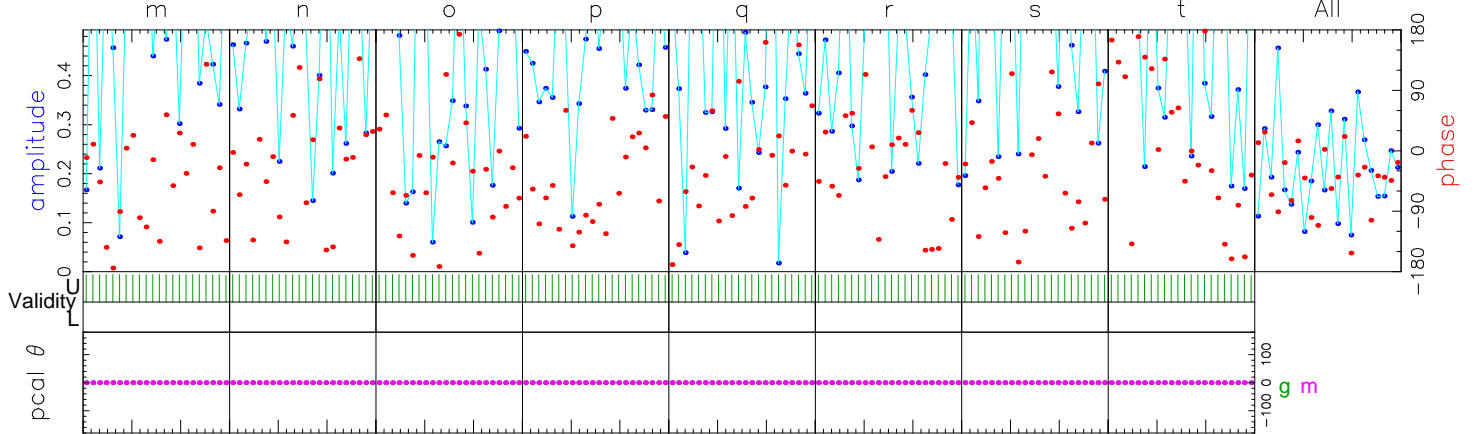


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114455  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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

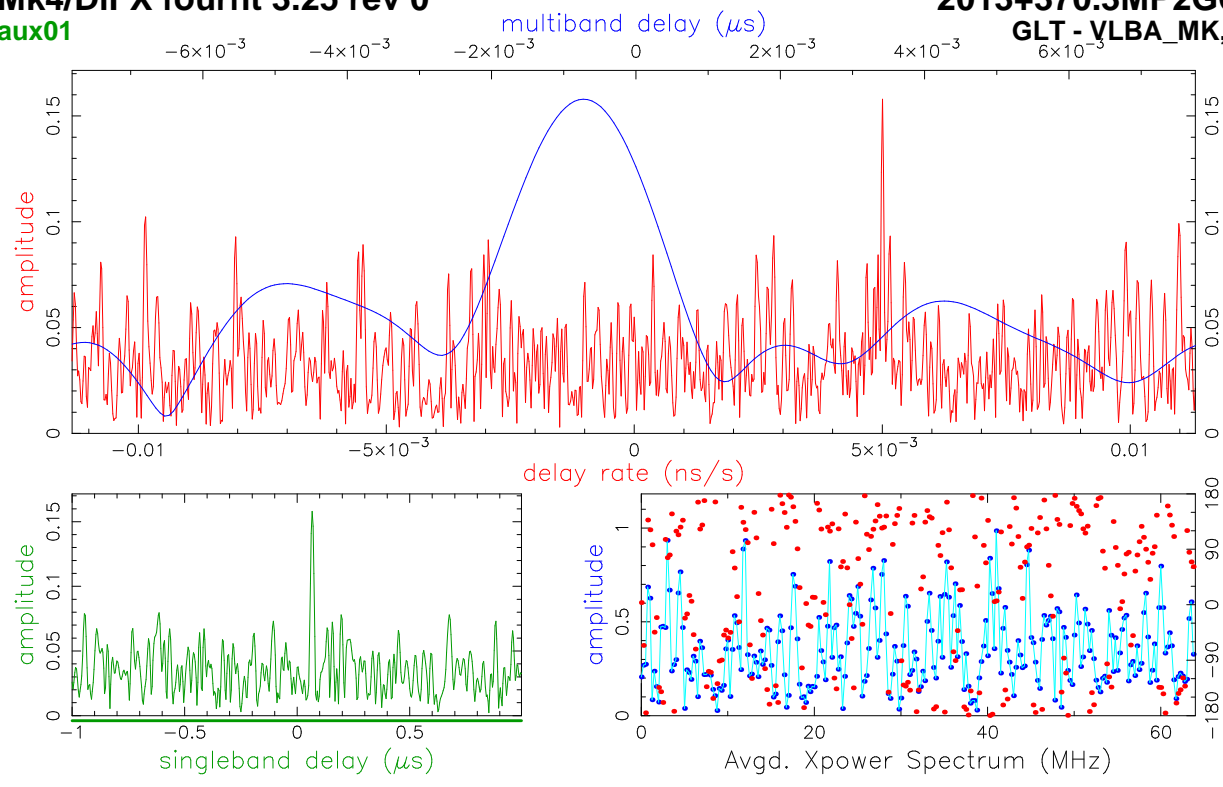


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	511.5	419.1	182.3	48.7	146.6	367.3	359.2	380.8	Sbd box	510.1
g	0	0	0	0	0	0	0	0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.06196382380E+03	Apriori delay (usec)	9.06096784530E+03	Resid mbdelay (usec)	-4.02150E-03	+/-	1.9E-04
Sband delay (usec)	9.06195667205E+03	Apriori clock (usec)	-9.1043472E-02	Resid sbdelay (usec)	9.88827E-01	+/-	1.5E-03
Phase delay (usec)	9.06096784394E+03	Apriori clockrate (us/s)	7.9886098E-07	Resid phdelay (usec)	-1.35608E-06	+/-	6.4E-07
Delay rate (us/s)	-1.18046981374E+00	Apriori rate (us/s)	-1.18047353182E+00	Resid rate (us/s)	3.71808E-06	+/-	6.2E-09
Total phase (deg)	27.8	Apriori accel (us/s/s)	-4.88399524489E-06	Resid phase (deg)	-42.1	+/-	19.9

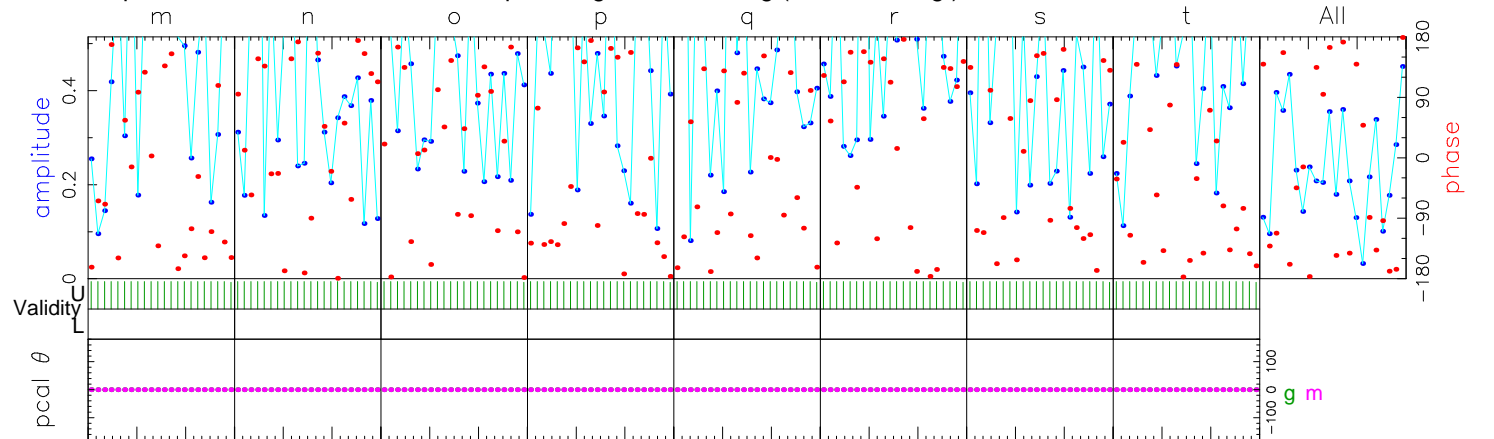
ph/seg (deg)	46.1	Theor.	46.6	Amplitude	0.165 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.6	Search (1024X32)	0.156	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.8	Inc. seg. avg.	0.170	Inc. frq. avg.	0.154	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.8	Inc. frq. avg.	0.154			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
g: az 189.1 el 50.6 pa 2.7		m: az 56.4 el 20.0 pa -80.0		u, v (fr/asec)	8499.808 4124.600	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/c241c/v2/3mm/1234/No0350/gm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/gm.W.228.3MP2G6 simultaneous interpolator



Fringe quality 0  
SNR 5.8  
Int time 179.983  
Amp 0.172  
Phase -165.9  
PFD 5.6e-01  
Delays (us)  
SBD 0.066816  
MBD -0.000724  
Fringe rate (Hz) 0.431063  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build 2024:353:153332  
2025:041:114457  
2024:113:095956  
RA & Dec (J2000) 20h15m28.729786s  
+37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-155.4	167.9	139.7	-135.8	-135.8	162.1	-166.6	-147.6	Phase	-165.9
	0.2	0.1	0.1	0.3	0.2	0.4	0.2	0.2	Ampl.	0.2
	115.1	382.9	431.8	214.0	176.4	274.1	64.0	89.4	Sbd box	274.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	9.06102962168E+03					9.06096784530E+03			Resid mbdelay (usec)	-7.23623E-04 +/- 1.9E-04
Sband delay (usec)	9.06103466130E+03					-9.1043472E-02			Resid sbdelay (usec)	6.68160E-02 +/- 1.5E-03
Phase delay (usec)	9.06096783995E+03					7.9886098E-07			Resid phdelay (usec)	-5.34941E-06 +/- 6.4E-07
Delay rate (us/s)	-1.18046852761E+00					-1.18047353182E+00			Resid rate (us/s)	5.00421E-06 +/- 6.1E-09
Total phase (deg)			-96.0			-4.88399524489E-06			Resid phase (deg)	-165.9 +/- 19.8
	RMS	Theor.	Amplitude	0.172 +/- 0.030					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	67.1	46.3	Search (1024X32)	0.154					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	88.9	80.8	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	34.0	27.9	Inc. seg. avg.	0.196					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.4	48.8	Inc. frq. avg.	0.173					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 189.1 el 50.6 pa 2.7			m: az 56.4 el 20.0 pa -80.0			u, v (fr/asec) 8499.808 4124.600				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/gm..3MP2G6			Output file: /Exps/c241c/v2/3mm/1234/No0350/gm.W.241.3MP2G6				

Mk4/DiFX fourfit 3.25 rev 0

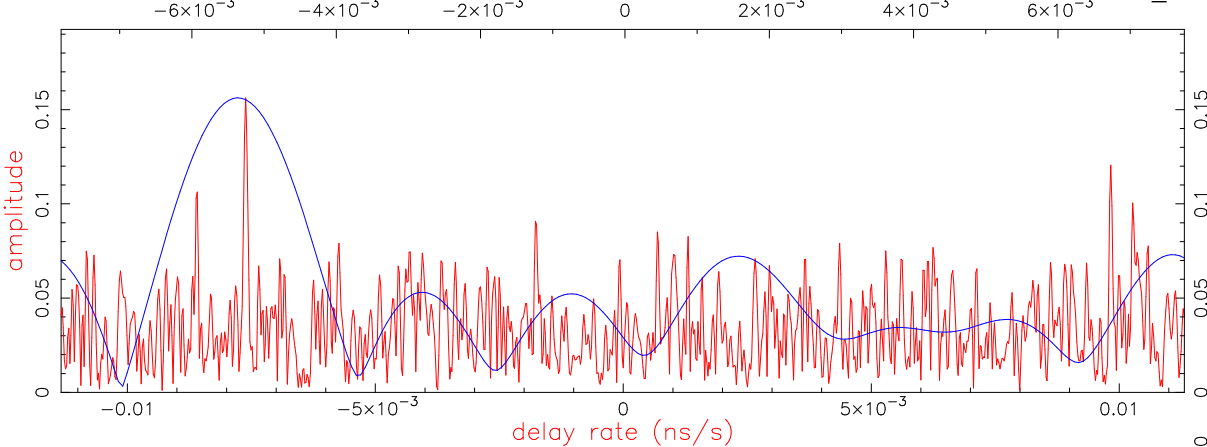
aux01

2013+370.3MP2G6, No0350, gm

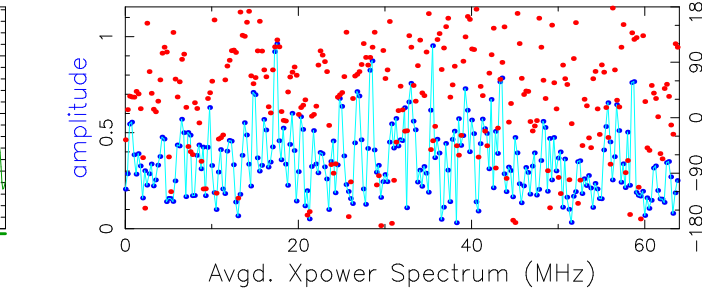
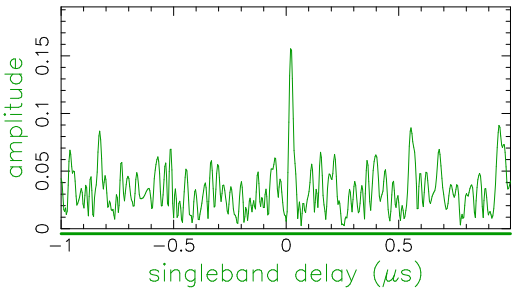
GLT - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

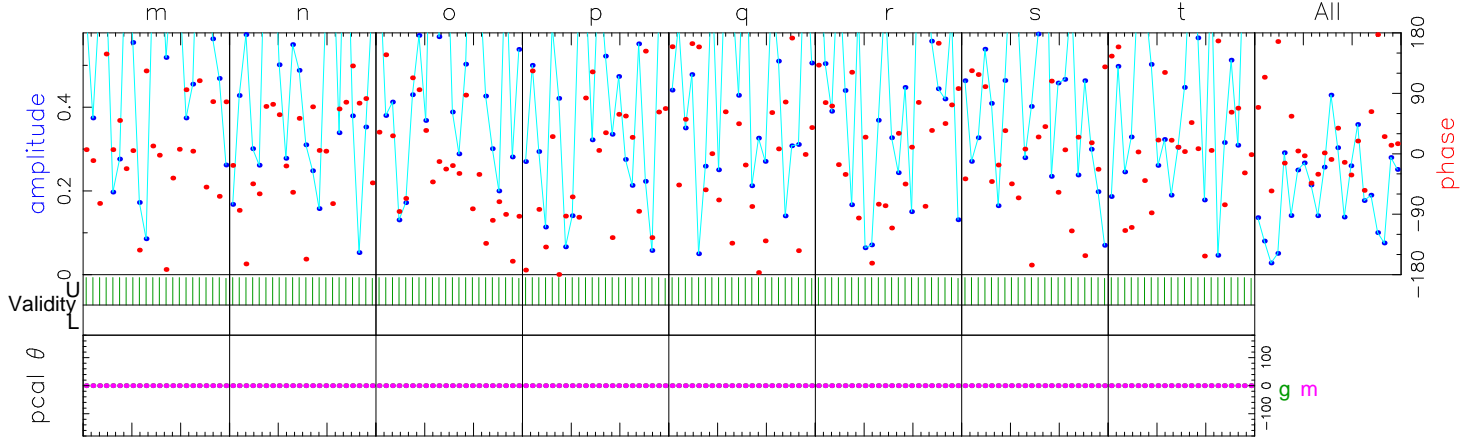


SNR 5.8  
 Int time 179.983  
 Amp 0.193  
 Phase 4.8  
 PFD 5.1e-01  
 Delays (us)  
 SBD 0.021270  
 MBD -0.005329  
 Fringe rate (Hz)  
 -0.656250  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114459  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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	5.6	30.6	-35.5	53.8	8.8	14.2	-5.0	0.5	Ampl.	4.8
g	0.3	0.2	0.3	0.1	0.2	0.1	0.2	0.3	Ampl.	0.2
m	503.2	412.0	256.5	382.9	22.3	141.8	242.7	263.7	Sbd box	262.4
g	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec) (SBD)	9.06099376641E+03		Apriori delay (usec)		9.06096784530E+03		Resid mbdelay (usec)		-5.32889E-03	+/- 1.9E-04
Sband delay (usec)	9.06098911505E+03		Apriori clock (usec)		-9.1043472E-02		Resid sbdelay (usec)		2.12697E-02	+/- 1.5E-03
Phase delay (usec)	9.06096784545E+03		Apriori clockrate (us/s)		7.9886098E-07		Resid phdelay (usec)		1.56317E-07	+/- 6.3E-07
Delay rate (us/s)	-1.18048115023E+00		Apriori rate (us/s)		-1.18047353182E+00		Resid rate (us/s)		-7.61841E-06	+/- 6.1E-09
Total phase (deg)	74.7		Apriori accel (us/s/s)		-4.88399524489E-06		Resid phase (deg)		4.8	+/- 19.7
ph/seg (deg)	RMS 65.0	Theor. 46.1	Amplitude 46.1	0.193 +/- 0.033	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	69.2	80.5	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	28.6	27.8	Interp.	0.000	Bits/sample: 2x2		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	32.6	48.6	Inc. seg. avg.	0.184	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
g: az 189.1 el 50.6 pa 2.7	m: az 56.4 el 20.0 pa -80.0		u,v (fr/asec) 8499.808 4124.600						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0350/gm..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/gm.W.250.3MP2G6							

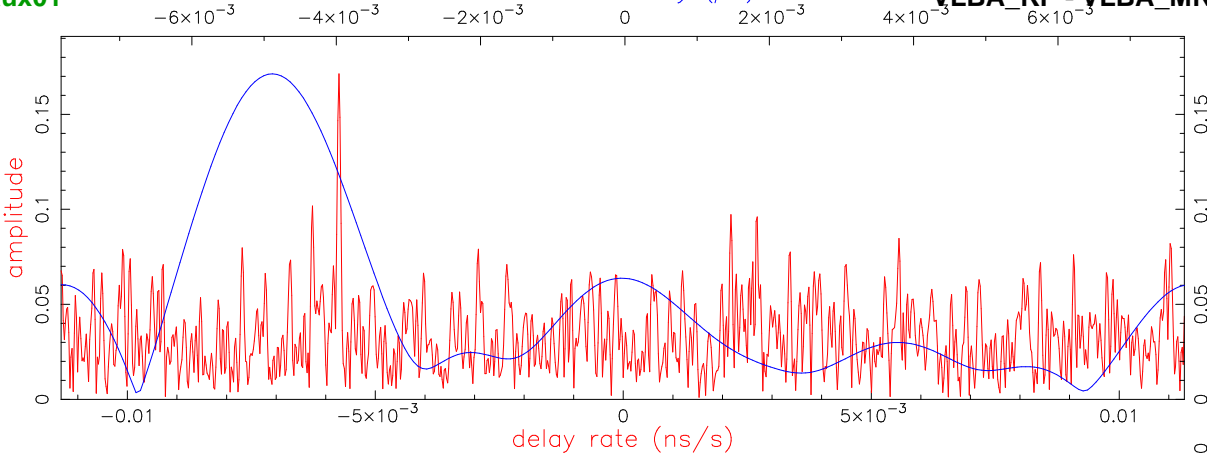
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, km

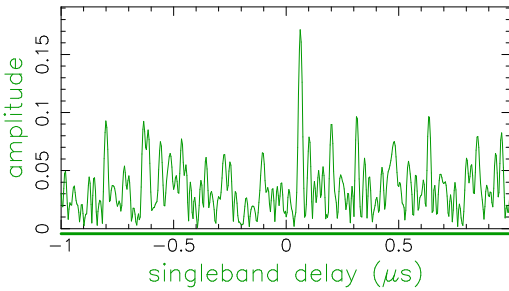
VLBA\_KP - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

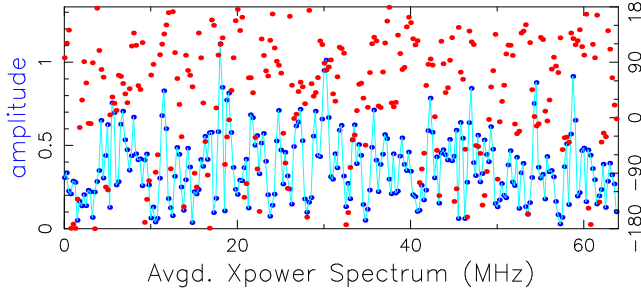


Fringe quality 0

SNR 6.3  
 Int time 179.982  
 Amp 0.191  
 Phase 144.7  
 PFD 4.2e-02  
 Delays (us)  
 SBD 0.062982  
 MBD -0.004860  
 Fringe rate (Hz)  
 -0.494694  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

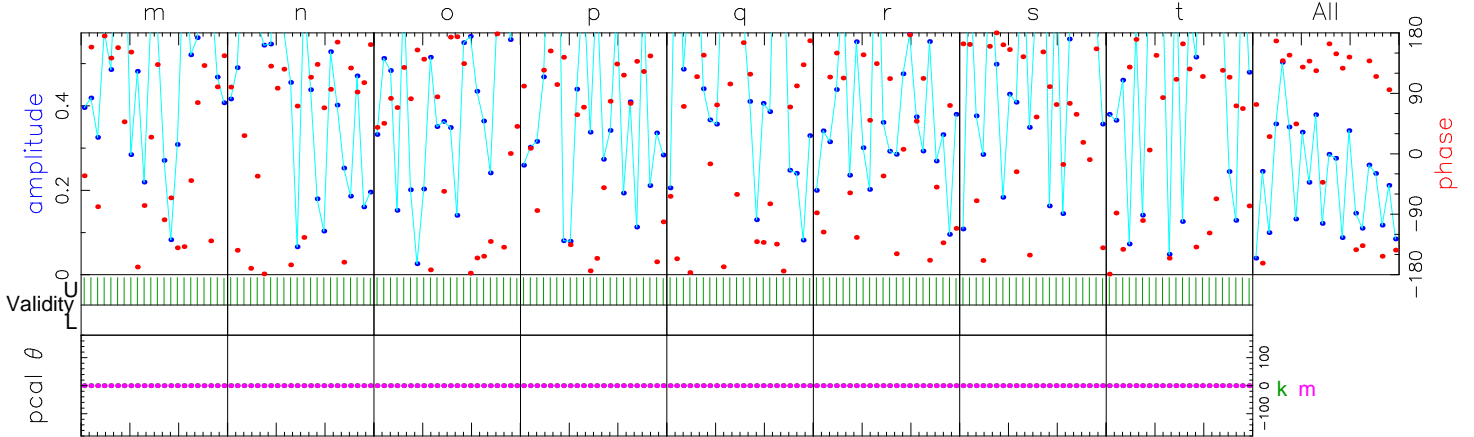


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114501  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



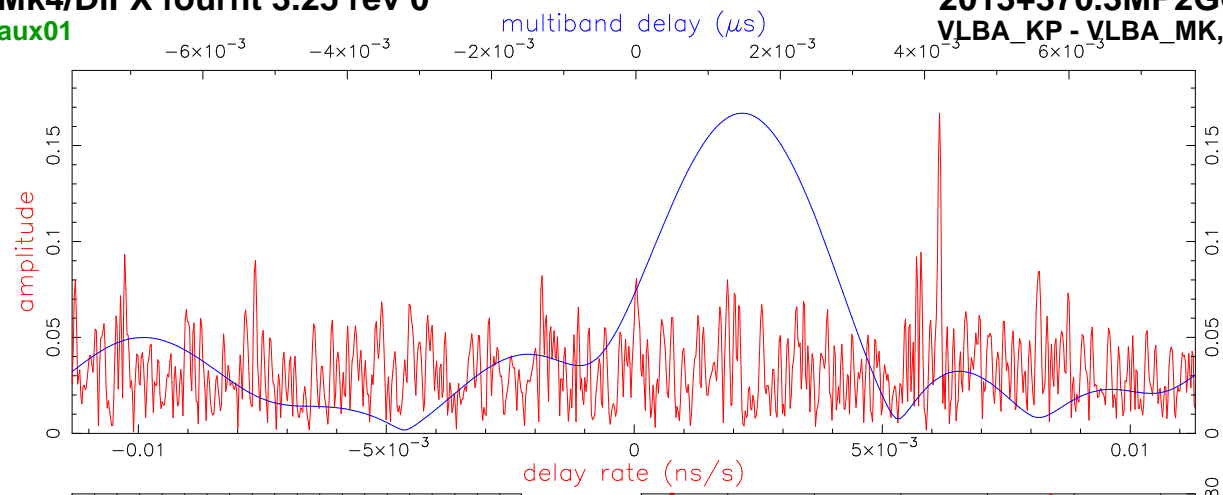
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	157.6	135.9	140.1	124.3	178.6	165.3	123.9	141.6	Phase	144.7
	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	59.0	375.1	243.2	33.7	274.0	227.3	95.5	472.5	Sbd box	273.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.11786216444E+04	Apriori delay (usec)	1.11785640044E+04	Resid mbdelay (usec)	-4.85998E-03	+/-	1.7E-04
Sband delay (usec)	1.11786269866E+04	Apriori clock (usec)	-3.8732147E-01	Resid sbdelay (usec)	6.29822E-02	+/-	1.4E-03
Phase delay (usec)	1.11785640090E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	4.66666E-06	+/-	5.9E-07
Delay rate (us/s)	-5.35928727478E-01	Apriori rate (us/s)	-5.35922984570E-01	Resid rate (us/s)	-5.74291E-06	+/-	5.6E-09
Total phase (deg)	265.7	Apriori accel (us/s/s)	-4.64622480812E-05	Resid phase (deg)	144.7	+/-	18.2

ph/seg (deg)	63.2	Theor.	42.7	Amplitude	0.191 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.7		74.6	Search (1024X32)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	21.2		25.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	22.2		45.0	Inc. seg. avg.	0.196	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.183	Data rate(Mb/s): 2048	t_cohere infinite			

k: az 69.7 el 60.3 pa -89.6      m: az 56.4 el 20.0 pa -80.0      u,v (fr/asec) 3822.179 -1459.253      simultaneous interpolator

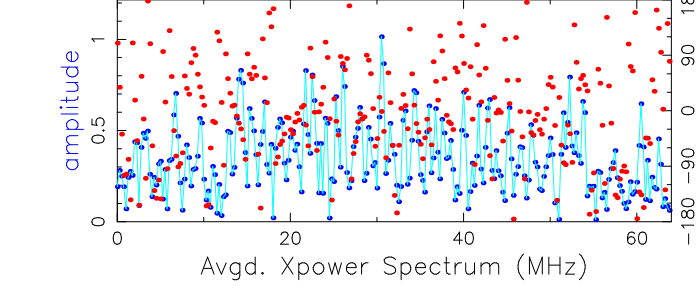
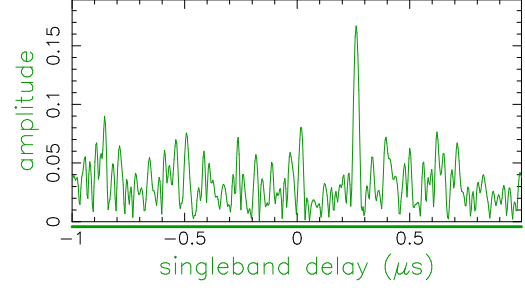
Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350/km..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350/km.W.259.3MP2G6



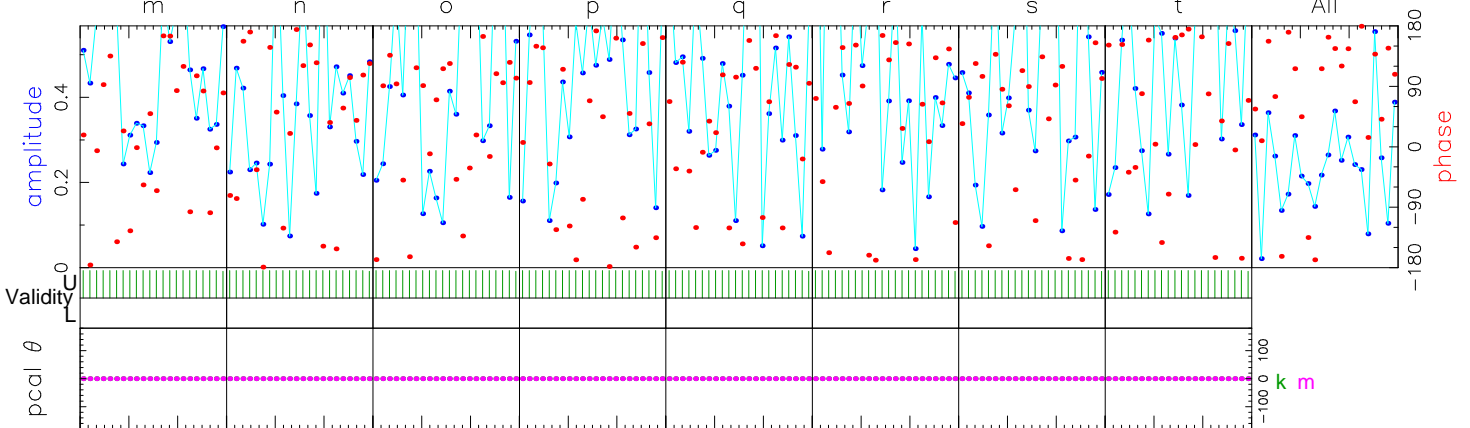
Fringe quality 0

SNR 6.1  
Int time 179.982  
Amp 0.189  
Phase 125.8  
PFD 1.1e-01  
Delays (us)  
SBD 0.262203  
MBD 0.001481  
Fringe rate (Hz) 0.531039  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build 2024:353:153332  
2025:041:114505  
2024:113:095956  
RA & Dec (J2000) 20h15m28.729786s  
+37°10'59.514736"



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
	111.6	140.8	104.0	152.7	120.4	132.3	106.2	136.0	Phase	125.8
	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.1	Ampl.	0.2
	225.2	187.6	492.0	359.8	211.2	25.6	158.9	12.2	Sbd box	324.1
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	
									Tracks	
Group delay (usec) (SBD)	1.11788311106E+04					1.11785640044E+04			Resid mbdelay (usec)	1.48121E-03 +/- 1.8E-04
Sband delay (usec)	1.11788262076E+04					-3.8732147E-01			Resid sbdelay (usec)	2.62203E-01 +/- 1.4E-03
Phase delay (usec)	1.11785640084E+04					1.6670606E-07			Resid phdelay (usec)	4.05828E-06 +/- 6.0E-07
Delay rate (us/s)	-5.35916819738E-01					-5.35922984570E-01			Resid rate (us/s)	6.16483E-06 +/- 5.8E-09
Total phase (deg)		246.9				-4.64622480812E-05			Resid phase (deg)	125.8 +/- 18.7
	RMS	Theor.	Amplitude	0.189 +/- 0.031					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.1	43.9	Search (1024X32)	0.160					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	82.9	76.6	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	19.1	26.4	Inc. seg. avg.	0.215					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	32.5	46.2	Inc. frq. avg.	0.179					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
k: az 69.7 el 60.3 pa -89.6			m: az 56.4 el 20.0 pa -80.0			u, v (fr/asec) 3822.179 -1459.253				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/km..3MP2G6			Output file: /Exps/c241c/v2/3mm/1234/No0350/km.W.269.3MP2G6				

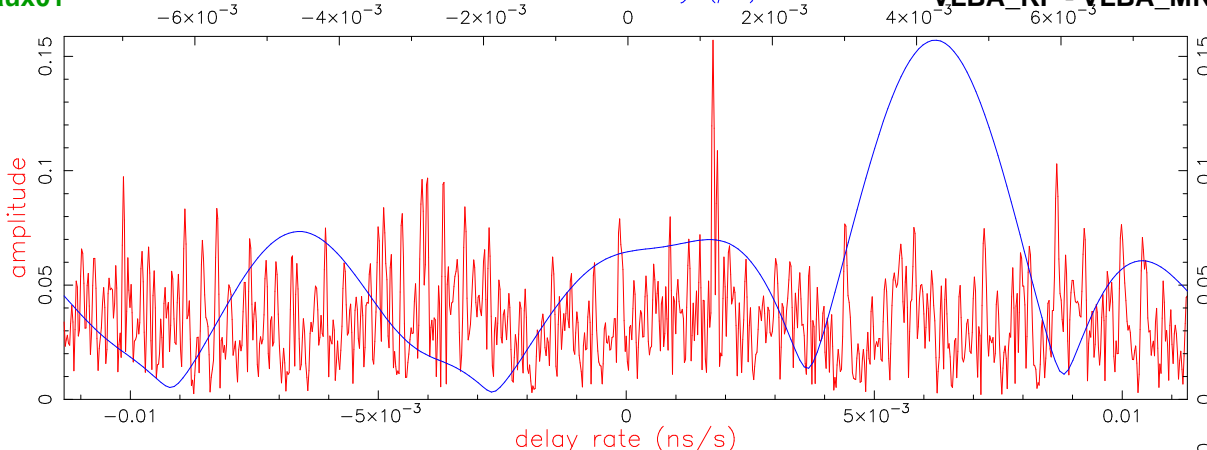
Mk4/DiFX fourfit 3.25 rev 0

aux01

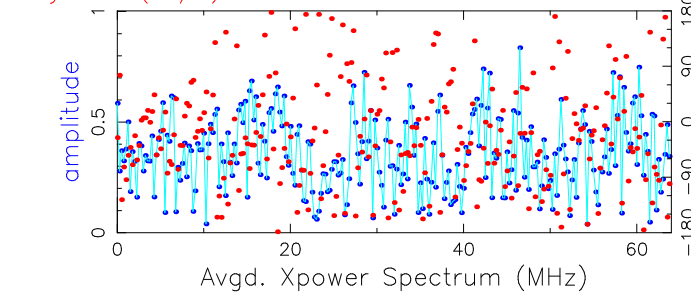
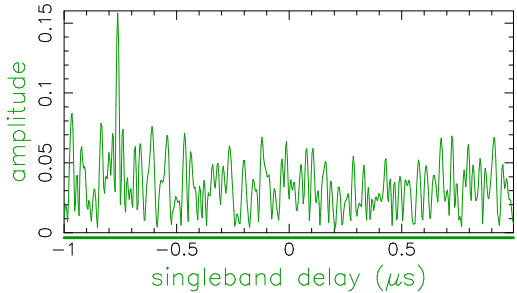
2013+370.3MP2G6, No0350, km

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

multiband delay ( $\mu$ s)

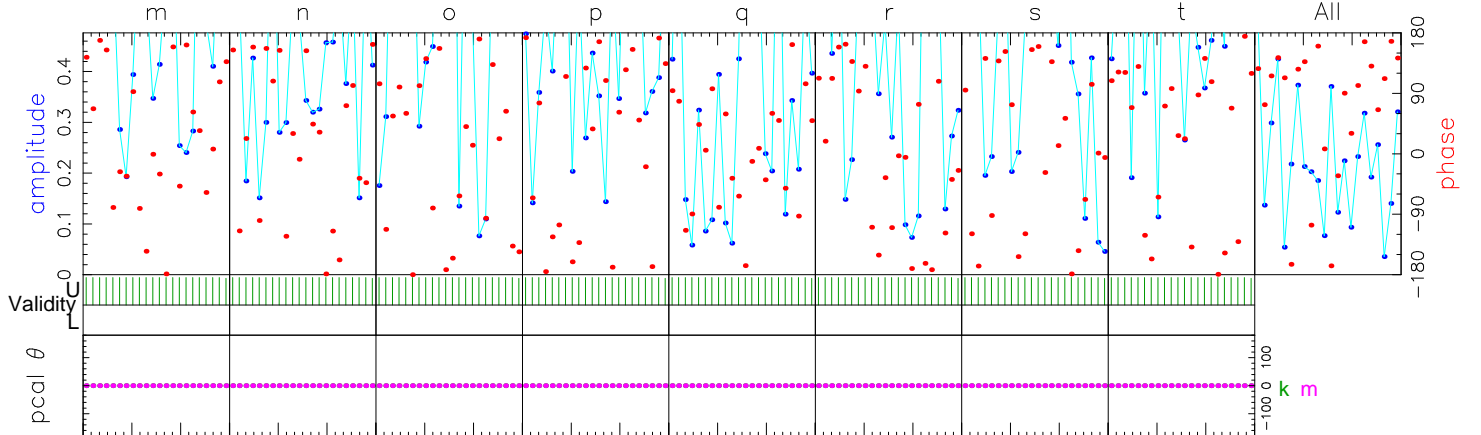


Fringe quality 0  
 SNR 5.8  
 Int time 179.982  
 Amp 0.159  
 Phase 135.1  
 PFD 6.3e-01  
 Delays (us)  
 SBD -0.761995  
 MBD 0.004249  
 Fringe rate (Hz)  
 0.150740  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114507  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"



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	
	125.2	144.8	129.5	153.2	46.3	154.3	148.6	128.9	Phase	135.1	
	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	Ampl.	0.2	
	439.6	400.8	24.8	200.3	431.8	3.2	381.6	61.6	Sbd box	61.9	
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		
									Tracks		
Group delay (usec) (SBD)	1.11778026286E+04		Apriori delay (usec)		1.11785640044E+04		Resid mbdelay (usec)		4.24920E-03	+/- 1.9E-04	
Sband delay (usec)	1.11778020091E+04		Apriori clock (usec)		-3.8732147E-01		Resid sbdelay (usec)		-7.61995E-01	+/- 1.5E-03	
Phase delay (usec)	1.11785640087E+04		Apriori clockrate (us/s)		1.6670606E-07		Resid phdelay (usec)		4.35585E-06	+/- 6.4E-07	
Delay rate (us/s)	-5.35921234623E-01		Apriori rate (us/s)		-5.35922984570E-01		Resid rate (us/s)		1.74995E-06	+/- 6.2E-09	
Total phase (deg)	256.1		Apriori accel (us/s/s)		-4.64622480812E-05		Resid phase (deg)		135.1	+/- 19.9	
	RMS	Theor.	Amplitude	0.159 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	65.0	46.6	Search (1024X32)	0.153		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	89.0	81.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	38.8	28.1	Inc. seg. avg.	0.173		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	44.9	49.0	Inc. frq. avg.	0.157		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
k: az 69.7 el 60.3 pa -89.6		m: az 56.4 el 20.0 pa -80.0		u,v (fr/asec) 3822.179 -1459.253						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0350/km..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/km.W.277.3MP2G6							

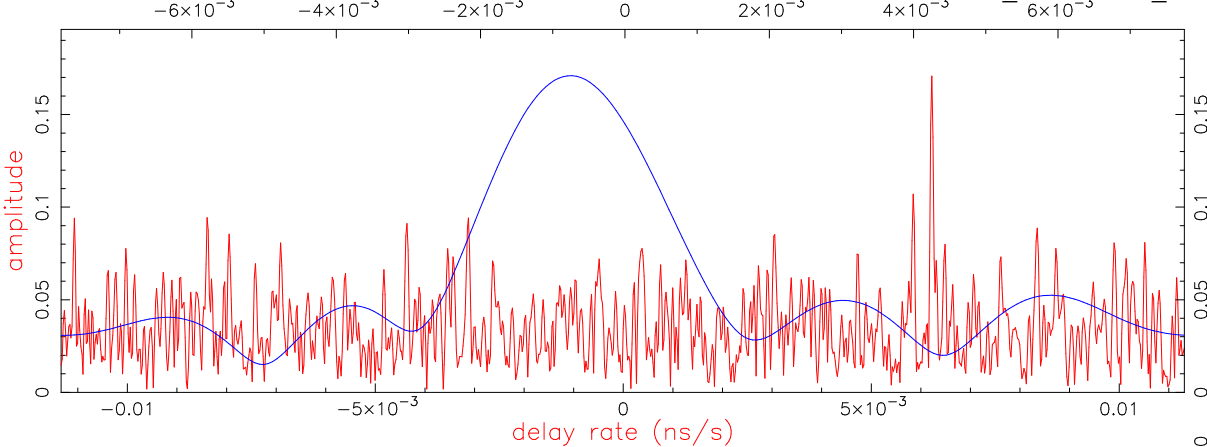
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, km

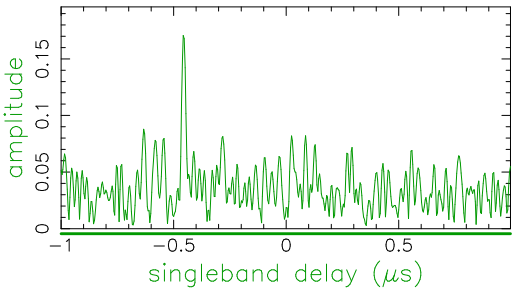
VLBA\_KP - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

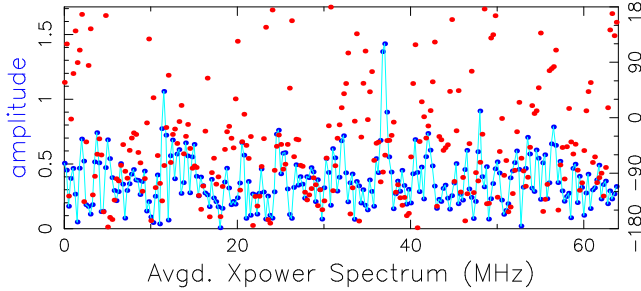


Fringe quality 0

SNR 6.3  
 Int time 179.982  
 Amp 0.196  
 Phase 89.2  
 PFD 3.3e-02  
 Delays (us)  
 SBD -0.455542  
 MBD -0.000683  
 Fringe rate (Hz) 0.536633  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

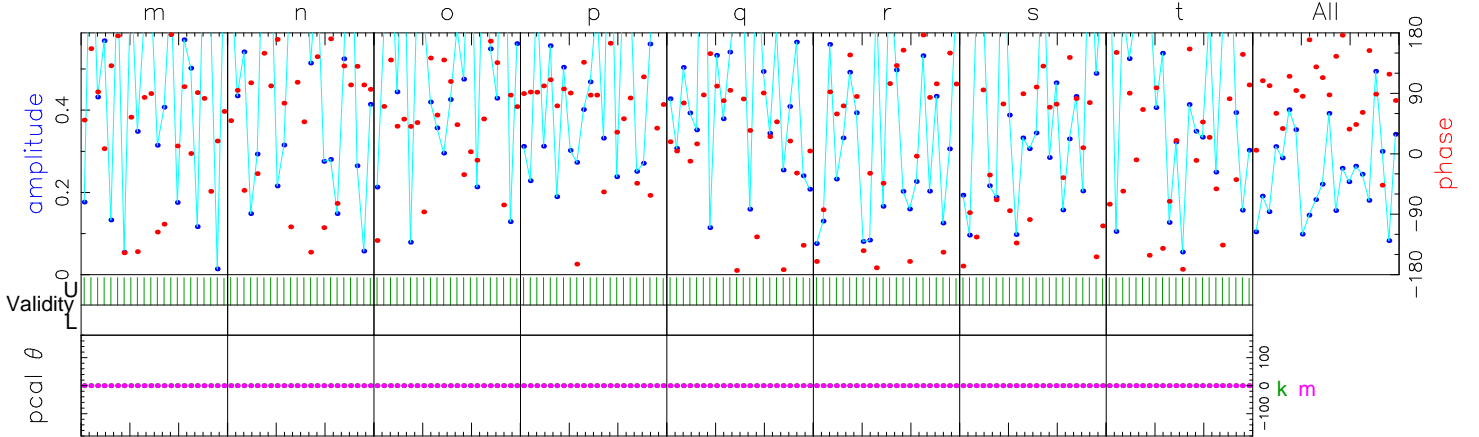


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114510  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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		
m	0	0	0	0	0	0	0	0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	1.11781101959E+04	Apriori delay (usec)	1.11785640044E+04	Resid mbdelay (usec)	-6.83455E-04	+/-	1.7E-04
Sband delay (usec)	1.11781084621E+04	Apriori clock (usec)	-3.8732147E-01	Resid sbdelay (usec)	-4.55542E-01	+/-	1.4E-03
Phase delay (usec)	1.11785640072E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	2.87714E-06	+/-	5.8E-07
Delay rate (us/s)	-5.35916754791E-01	Apriori rate (us/s)	-5.35922984570E-01	Resid rate (us/s)	6.22978E-06	+/-	5.6E-09
Total phase (deg)	210.2	Apriori accel (us/s/s)	-4.64622480812E-05	Resid phase (deg)	89.2	+/-	18.1

ph/seg (deg)	52.4	RMS	42.5	Theor.	52.4	Amplitude	0.196 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.0	Search (1024X32)	0.165	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	37.1	Inc. seg. avg.	0.218	Inc. frq. avg.	0.197	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	40.1	Inc. frq. avg.	0.197	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 69.7 el 60.3 pa -89.6      m: az 56.4 el 20.0 pa -80.0      u,v (fr/asec) 3822.179 -1459.253      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350/km..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350/km.W.284.3MP2G6



Mk4/DiFX fourfit 3.25 rev 0

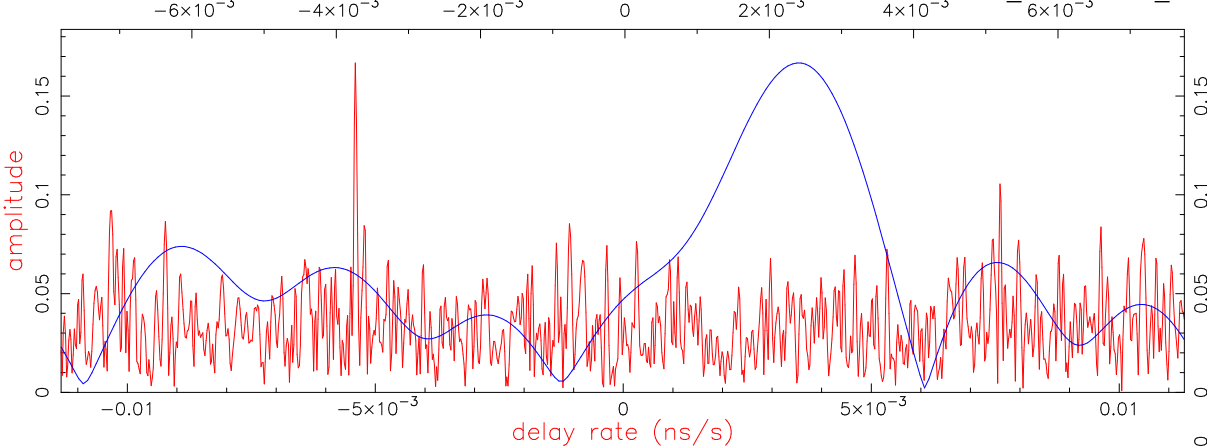
aux01

2013+370.3MP2G6, No0350, Im

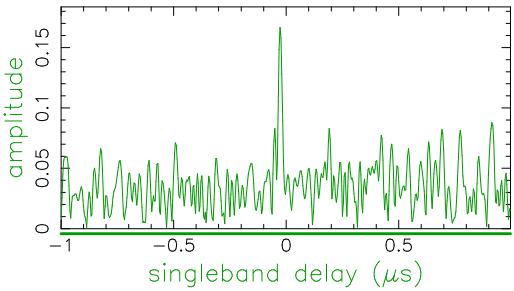
VLBA\_LA - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

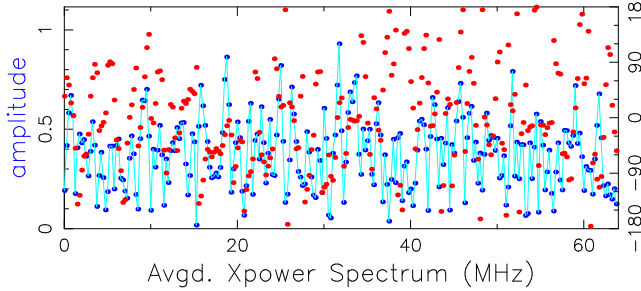
Fringe quality 0



SNR 6.1  
 Int time 179.981  
 Amp 0.184  
 Phase 16.7  
 PFD 1.1e-01  
 Delays (us)  
 SBD -0.026724  
 MBD 0.002443  
 Fringe rate (Hz)  
 -0.465404  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

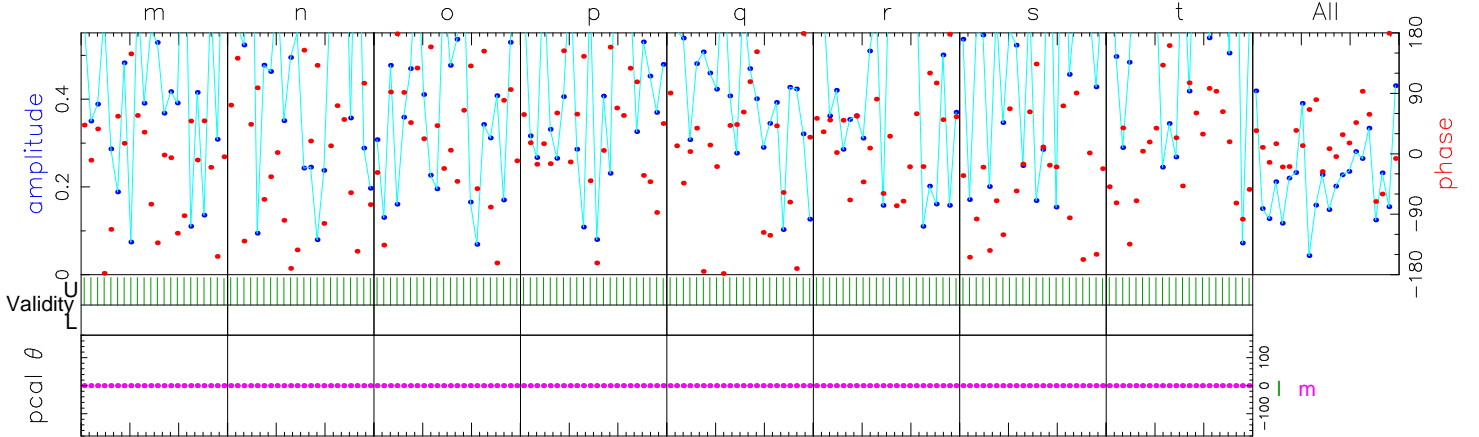


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114511  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-19.0	32.9	47.2	31.1	55.3	22.0	-19.5	11.4	Phase	16.7
	0.2	0.1	0.2	0.3	0.1	0.3	0.2	0.3	Ampl.	0.2
	78.7	157.6	68.6	469.2	445.6	418.9	246.8	247.4	Sbd box	250.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.20635539208E+04	Apriori delay (usec)	1.20635827276E+04	Resid mbdelay (usec)	2.44323E-03	+/-	1.8E-04
Sband delay (usec)	1.20635560036E+04	Apriori clock (usec)	-8.8517761E+00	Resid sbdelay (usec)	-2.67240E-02	+/-	1.4E-03
Phase delay (usec)	1.20635827282E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	5.38060E-07	+/-	6.0E-07
Delay rate (us/s)	-6.41465844792E-01	Apriori rate (us/s)	-6.41460441913E-01	Resid rate (us/s)	-5.40288E-06	+/-	5.8E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.74362435212E-05	Resid phase (deg)	16.7	+/-	18.7

ph/seg (deg)	53.2	Theor.	43.8	Amplitude	0.184 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.5	Search (1024X32)	0.166	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.4	Inc. seg. avg.	0.191	Inc. frq. avg.	0.180	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.4	Inc. frq. avg.	0.180			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 77.5 el 65.7 pa -84.2 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4581.634 -1132.278 simultaneous interpolator

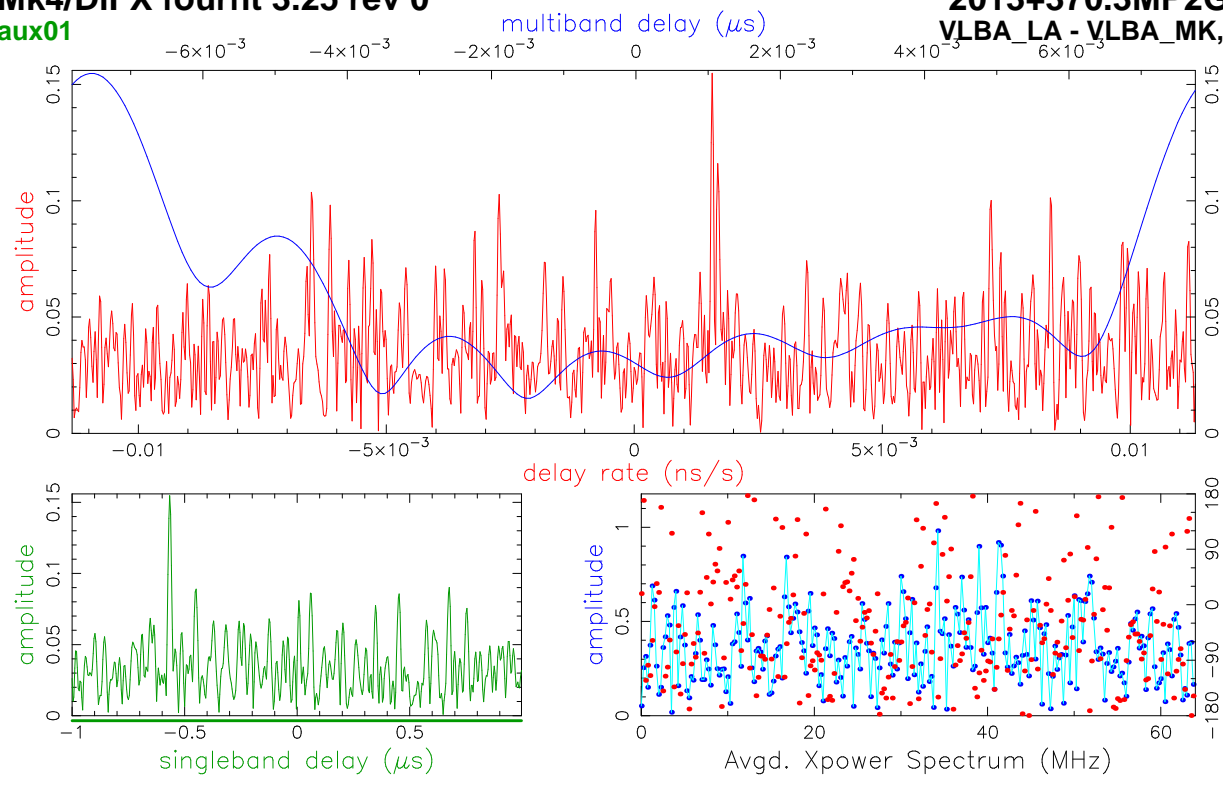
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/lm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/lm.W.290.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

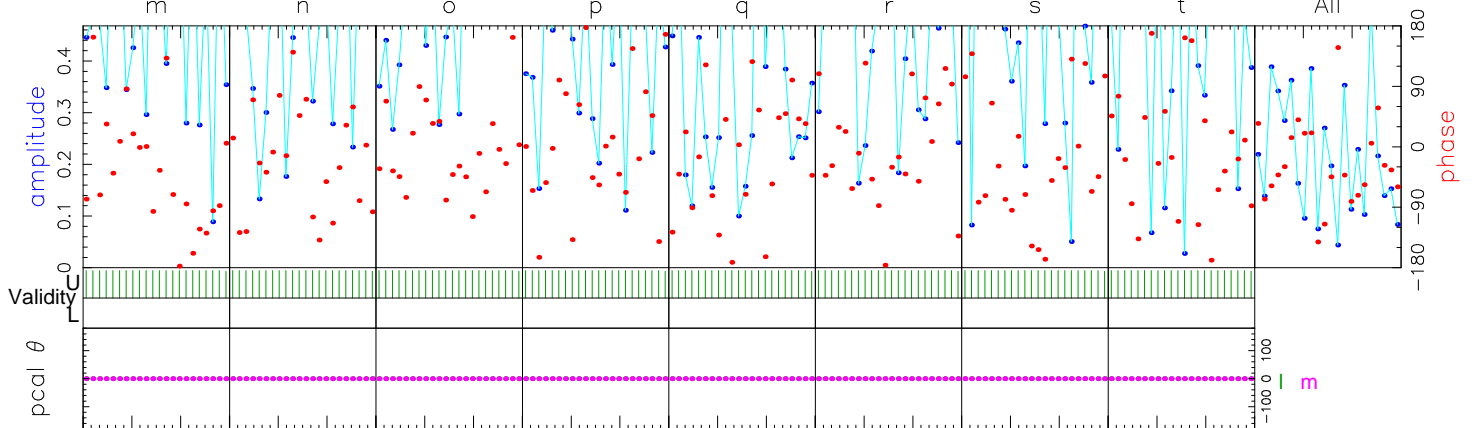
2013+370.3MP2G6, No0350, Im

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



Fringe quality 0  
 SNR 5.7  
 Int time 179.981  
 Amp 0.156  
 Phase -24.3  
 PFD 8.1e-01  
 Delays (us)  
 SBD -0.566226  
 MBD -0.007533  
 Fringe rate (Hz) 0.136112  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114513  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-71.6	-12.8	-12.1	8.0	16.4	3.4	-51.8	-52.0	Phase	-24.3		
	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2		
	327.7	119.0	111.2	266.4	506.2	39.2	77.4	463.8	Sbd box	112.0		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
l	0	0	0	0	0	0	0	0	PC freqs			
m	0	0	0	0	0	0	0	0	PC freqs			
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
m	1000	1000	1000	1000	1000	1000	1000	1000				
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	1.20630126947E+04		Apriori delay (usec)		1.20635827276E+04		Resid mbdelay (usec)		-7.53294E-03	+/- 1.9E-04		
Sband delay (usec)	1.20630165016E+04		Apriori clock (usec)		-8.8517761E+00		Resid sbdelay (usec)		-5.66226E-01	+/- 1.5E-03		
Phase delay (usec)	1.20635827268E+04		Apriori clockrate (us/s)		-2.1950107E-07		Resid phdelay (usec)		-7.84543E-07	+/- 6.5E-07		
Delay rate (us/s)	-6.41458861791E-01		Apriori rate (us/s)		-6.41460441913E-01		Resid rate (us/s)		1.58012E-06	+/- 6.3E-09		
Total phase (deg)	32.2		Apriori accel (us/s/s)		-4.74362435212E-05		Resid phase (deg)		-24.3	+/- 20.2		
	RMS	Theor.	Amplitude	0.156 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	62.3	47.3	Search (1024X32)	0.149		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	90.6	82.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	35.4	28.5	Inc. seg. avg.	0.167		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	39.5	49.8	Inc. frq. avg.	0.159		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
l: az 77.5 el 65.7 pa -84.2		m: az 56.4 el 20.0 pa -80.0		u, v (fr/asec) 4581.634 -1132.278				simultaneous interpolator				
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0350/lm..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/lm.W.300.3MP2G6								

Mk4/DiFX fourfit 3.25 rev 0

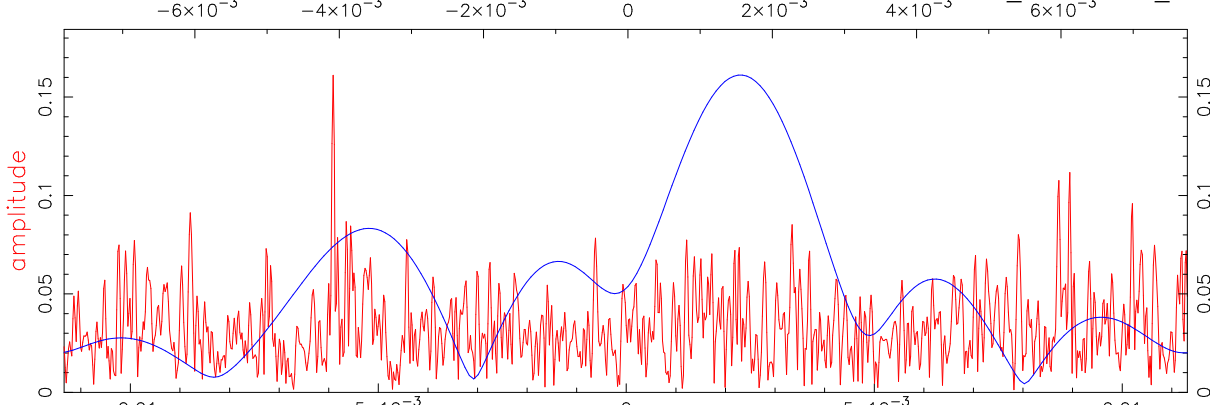
aux01

2013+370.3MP2G6, No0350, Im

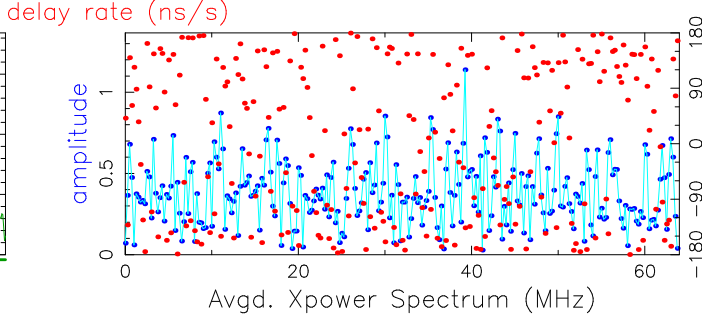
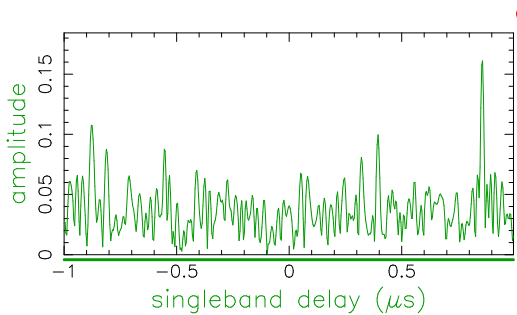
VLBA\_LA - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

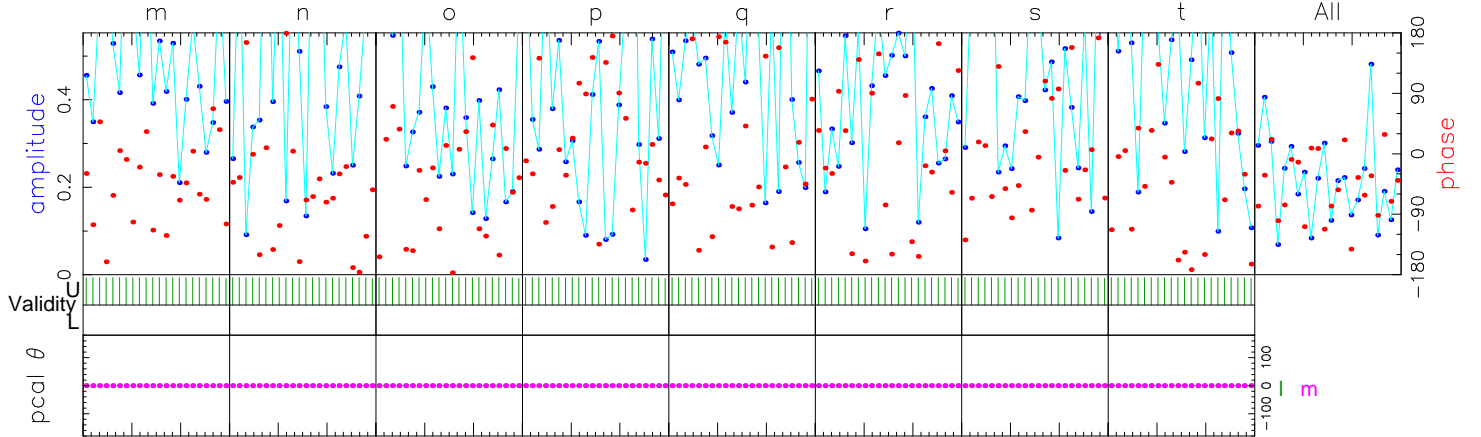


SNR 6.0  
 Int time 179.981  
 Amp 0.184  
 Phase -42.2  
 PFD 1.9e-01  
 Delays (us)  
 SBD 0.857762  
 MBD 0.001513  
 Fringe rate (Hz)  
 -0.510939  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114519  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-32.0	-58.9	-27.0	-41.6	-69.8	56.9	-37.3	-29.5		Phase
	0.3	0.3	0.1	0.2	0.2	0.0	0.2	0.1		Ampl.
	475.5	476.0	385.0	28.9	181.6	7.7	185.9	76.5		Sbd box
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		476.6
l	0	0	0	0	0	0	0	0		APs used
m	0	0	0	0	0	0	0	0		PC freqs
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Manl PC
l	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	1.20644436155E+04	Apriori delay (usec)	1.20635827276E+04	Resid mbdelay (usec)	1.51288E-03	+/-	1.8E-04
Sband delay (usec)	1.20644404899E+04	Apriori clock (usec)	-8.8517761E+00	Resid sbdelay (usec)	8.57762E-01	+/-	1.4E-03
Phase delay (usec)	1.20635827263E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-1.35979E-06	+/-	6.1E-07
Delay rate (us/s)	-6.41466373409E-01	Apriori rate (us/s)	-6.41460441913E-01	Resid rate (us/s)	-5.93150E-06	+/-	5.9E-09
Total phase (deg)	14.4	Apriori accel (us/s/s)	-4.74362435212E-05	Resid phase (deg)	-42.2	+/-	19.0

ph/seg (deg)	47.9	Theor.	44.6	Amplitude	0.184 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.8		77.8	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.5		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.2		46.9	Inc. seg. avg.	0.191	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.172	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 77.5 el 65.7 pa -84.2 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 4581.634 -1132.278 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/lm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/lm.W.305.3MP2G6

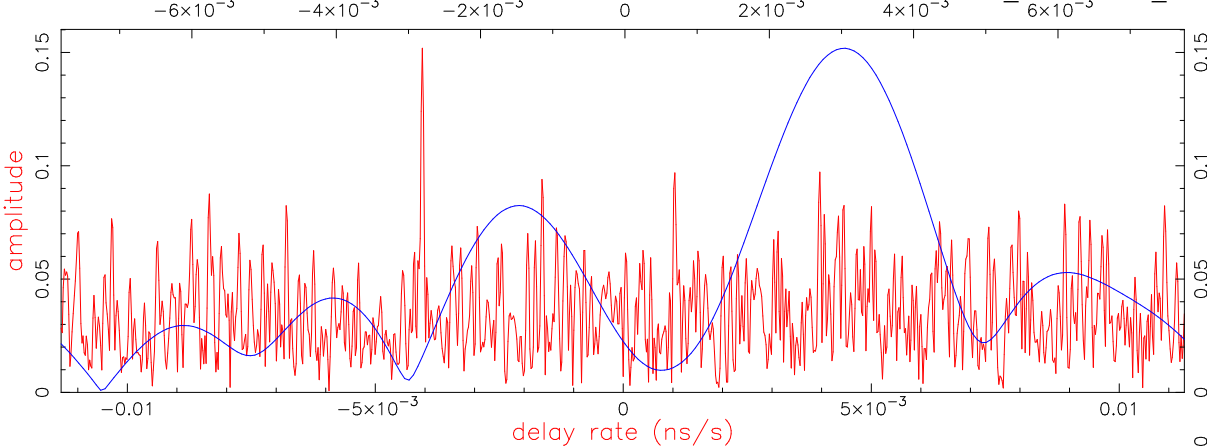
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Im

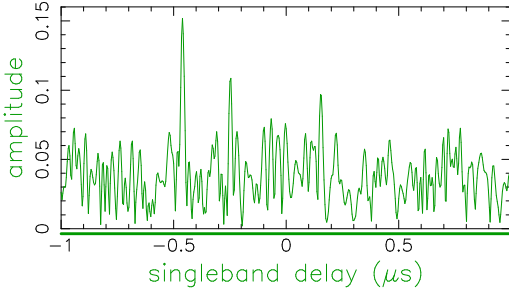
VLBA\_LA - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

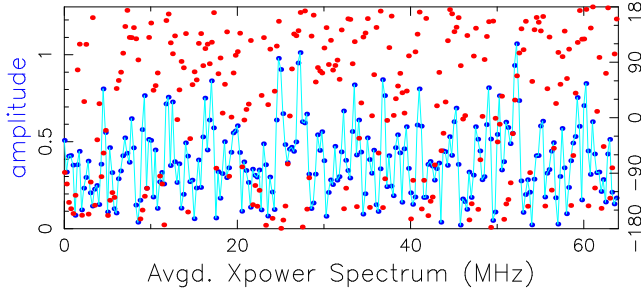


Fringe quality 0

SNR 5.6  
 Int time 179.981  
 Amp 0.160  
 Phase -157.5  
 PFD 9.5e-01  
 Delays (us)  
 SBD -0.460745  
 MBD 0.003041  
 Fringe rate (Hz)  
 -0.349563  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

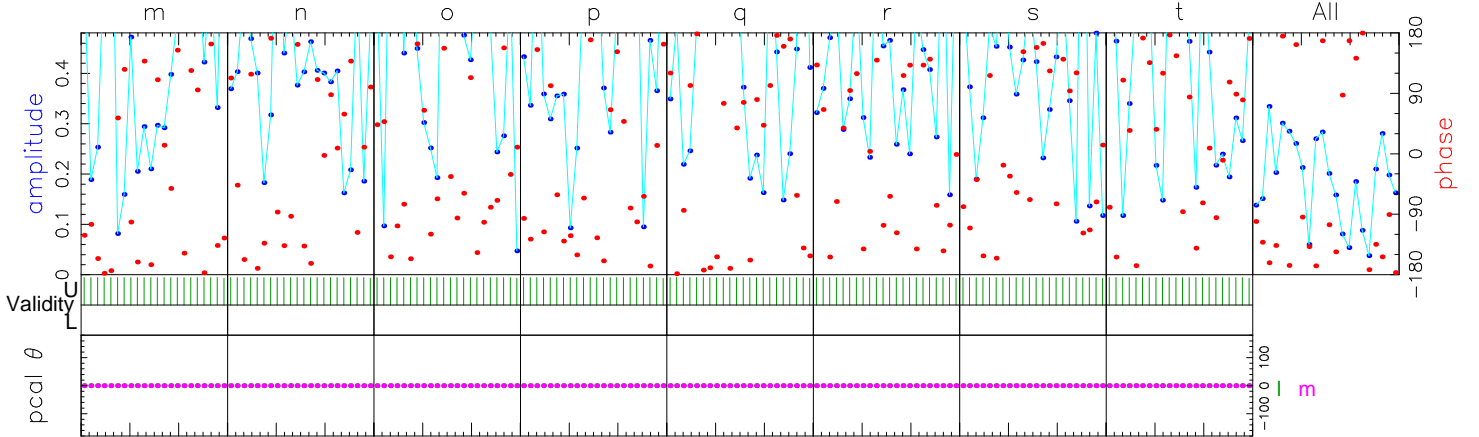


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114521  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-172.0	-159.9	-118.6	-144.6	171.5	-178.8	-116.1	-177.7	Phase	-157.5
	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.2
	255.2	288.9	232.6	180.9	327.8	34.4	16.8	194.4	Sbd box	139.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.20631170187E+04	Apriori delay (usec)	1.20635827276E+04	Resid mbdelay (usec)	3.04110E-03	+/-	1.9E-04
Sband delay (usec)	1.20631219831E+04	Apriori clock (usec)	-8.8517761E+00	Resid sbdelay (usec)	-4.60745E-01	+/-	1.5E-03
Phase delay (usec)	1.20635827225E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-5.08035E-06	+/-	6.6E-07
Delay rate (us/s)	-6.41464499990E-01	Apriori rate (us/s)	-6.41460441913E-01	Resid rate (us/s)	-4.05808E-06	+/-	6.4E-09
Total phase (deg)	-101.0	Apriori accel (us/s/s)	-4.74362435212E-05	Resid phase (deg)	-157.5	+/-	20.6

ph/seg (deg)	42.4	RMS	48.2	Theor.	48.2	Amplitude	0.160 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5				
amp/seg (%)	61.1	Search (1024X32)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	30.1	Inc. seg. avg.	0.147	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	38.4	Inc. frq. avg.	0.158	u,v (fr/asec)	4581.634 -1132.278	simultaneous interpolator									

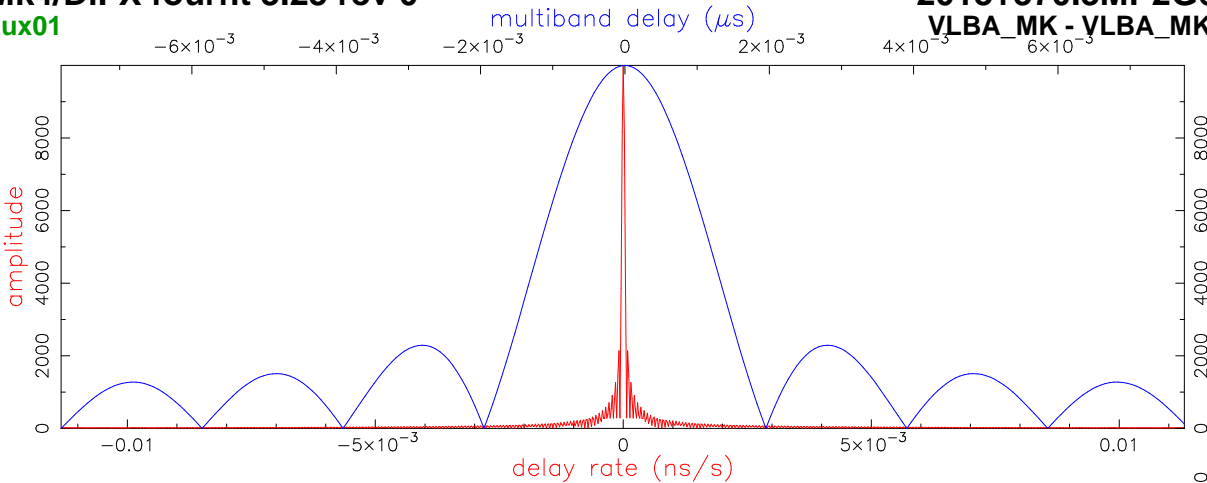
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Im..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Im.W.316.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

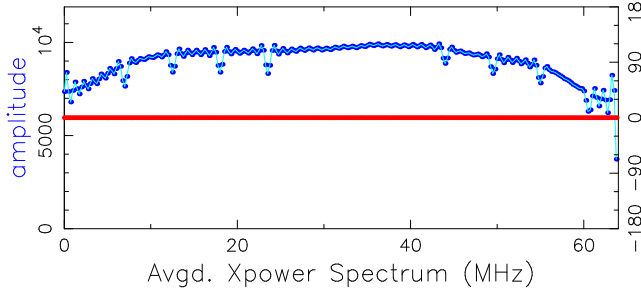
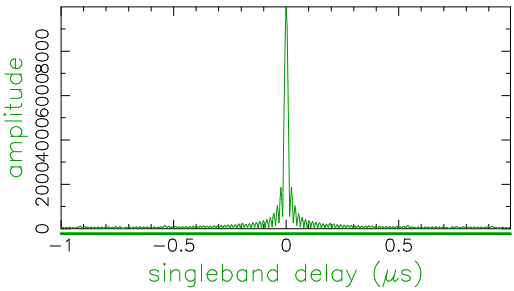
2013+370.3MP2G6, No0350, mm

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



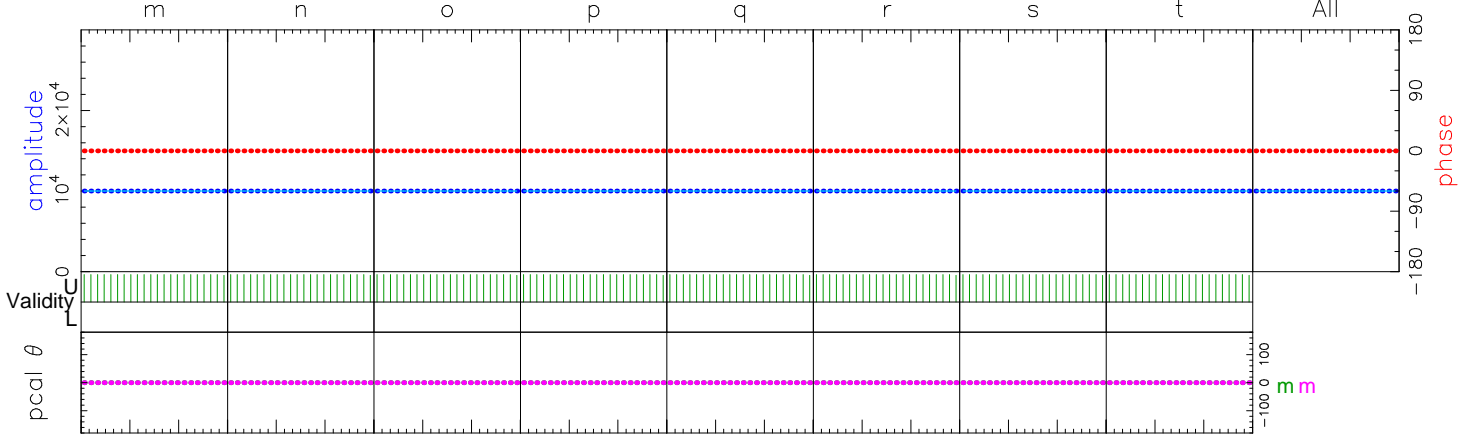
Fringe quality 9

SNR 366880.9  
 Int time 179.993  
 Amp 9999.999  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Yr:day 1234  
 Start 2024:112  
 Stop 2024:112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114533  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
m	0	0	0	0	0	0	0	0	Ampl.	10000.0
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 m: az 56.4 el 20.0 pa -80.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

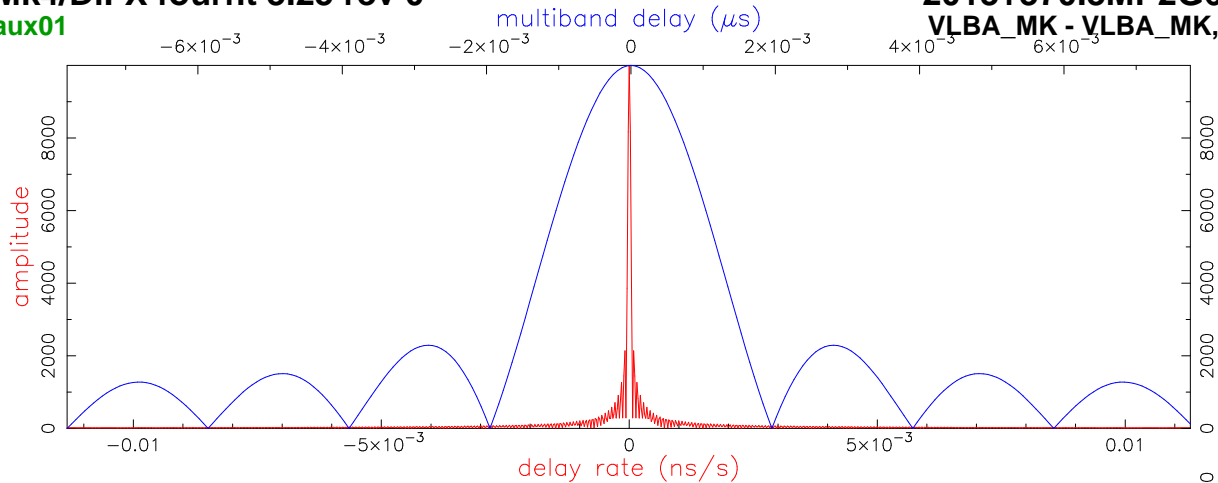
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mm...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mm.W.360.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

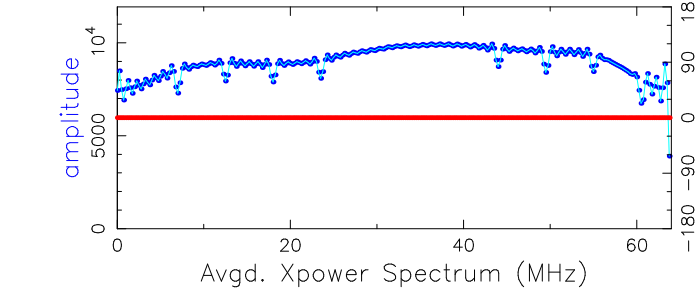
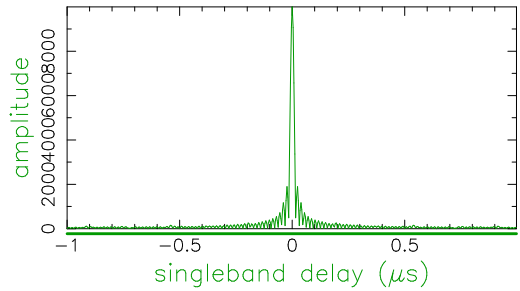
2013+370.3MP2G6, No0350, mm

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



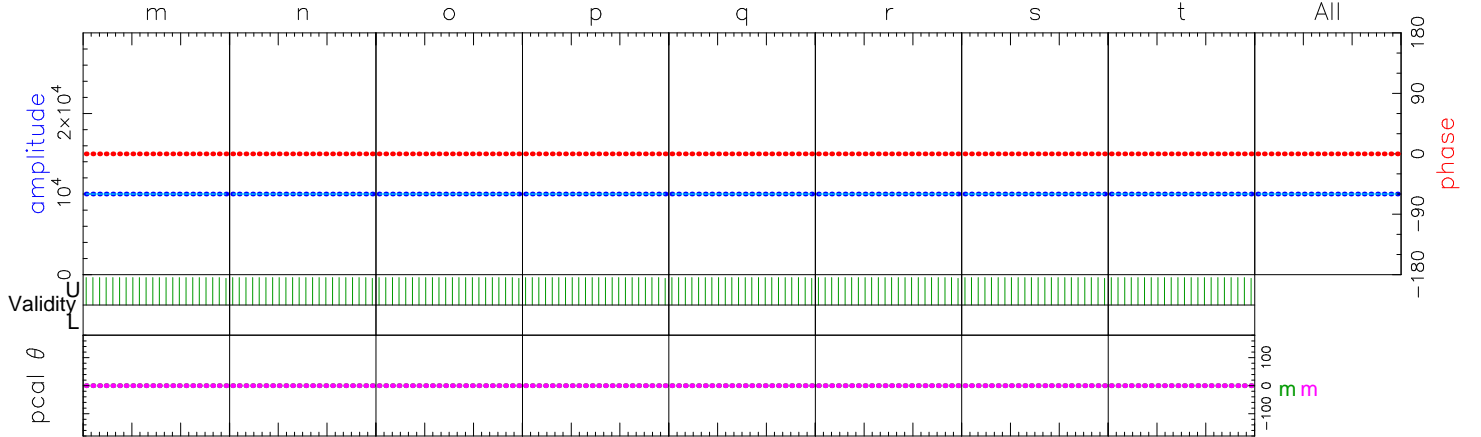
Fringe quality 9

SNR 366880.9  
 Int time 179.993  
 Amp 9999.999  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Yr:day 1234  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114535  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	0	0	0	0	0	0	0	0		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

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

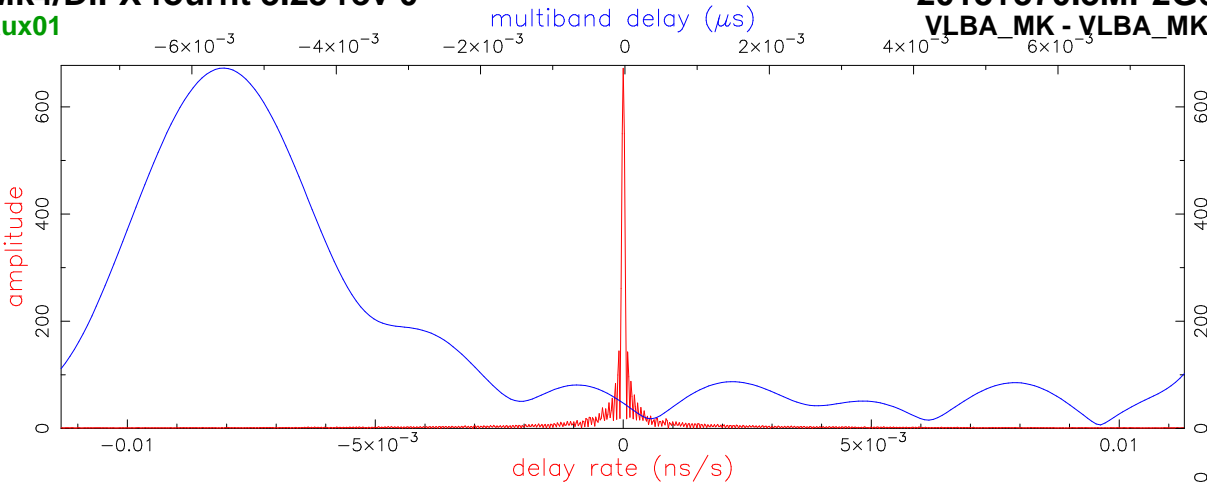
RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 m: az 56.4 el 20.0 pa -80.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mm...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mm.W.373.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

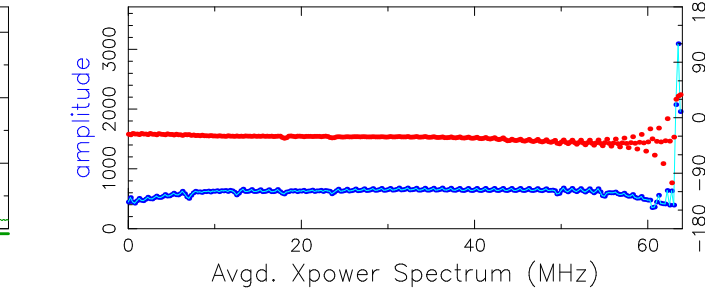
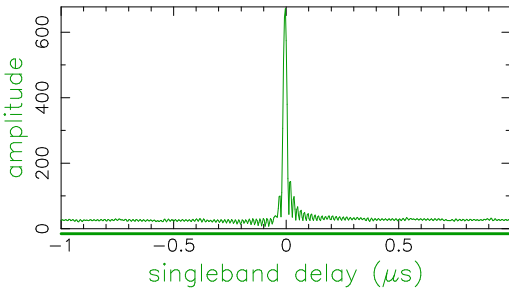
2013+370.3MP2G6, No0350, mm

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



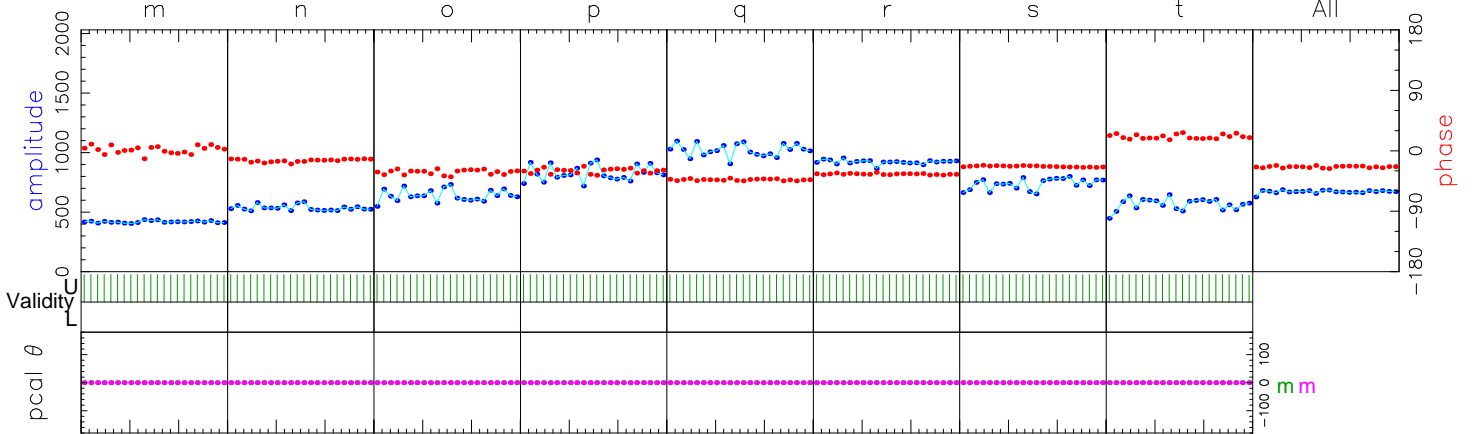
Fringe quality 6

SNR 24848.9  
 Int time 179.993  
 Amp 677.302  
 Phase -24.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.005016  
 MBD -0.005601  
 Fringe rate (Hz)  
 0.000016  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114538  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	1.6	-14.4	-31.7	-30.1	-43.1	-34.6	-23.2	20.8	Phase	-24.0
	417.7	536.5	640.9	827.0	1021.5	922.1	738.7	567.7	Ampl.	709.0
	255.5	255.0	255.4	255.5	255.5	255.8	255.9	256.4	Sbd box	255.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -5.60143750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -5.60144E-03 +/- 4.4E-08  
 Sband delay (usec) -5.01625000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -5.01625E-03 +/- 3.5E-07  
 Phase delay (usec) -7.73309030612E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -7.73309E-07 +/- 1.5E-10  
 Delay rate (us/s) 1.91310557288E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.91311E-10 +/- 1.4E-12  
 Total phase (deg) -24.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -24.0 +/- 0.0

RMS Theor. Amplitude 677.302 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 1.2 0.0 Search (1024X32) 664.438 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 2.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 23.5 0.0 Inc. seg. avg. 672.220 Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 28.8 0.0 Inc. frq. avg. 709.004 Data rate (Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 m: az 56.4 el 20.0 pa -80.0 m: az 56.4 el 20.0 pa -80.0 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

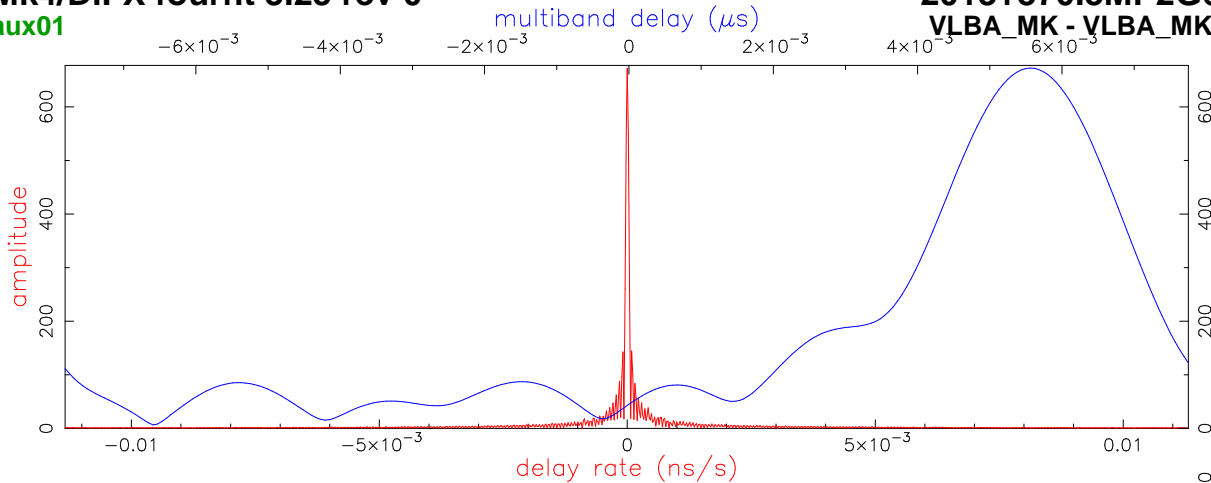
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mm...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mm.W.379.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

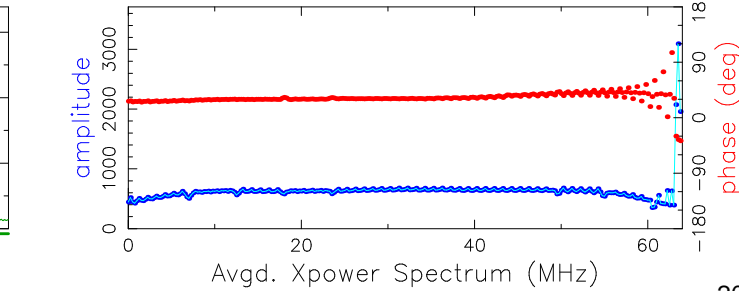
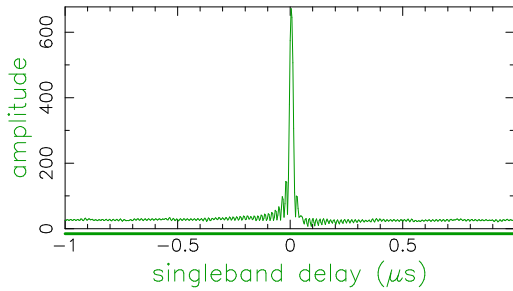
2013+370.3MP2G6, No0350, mm

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



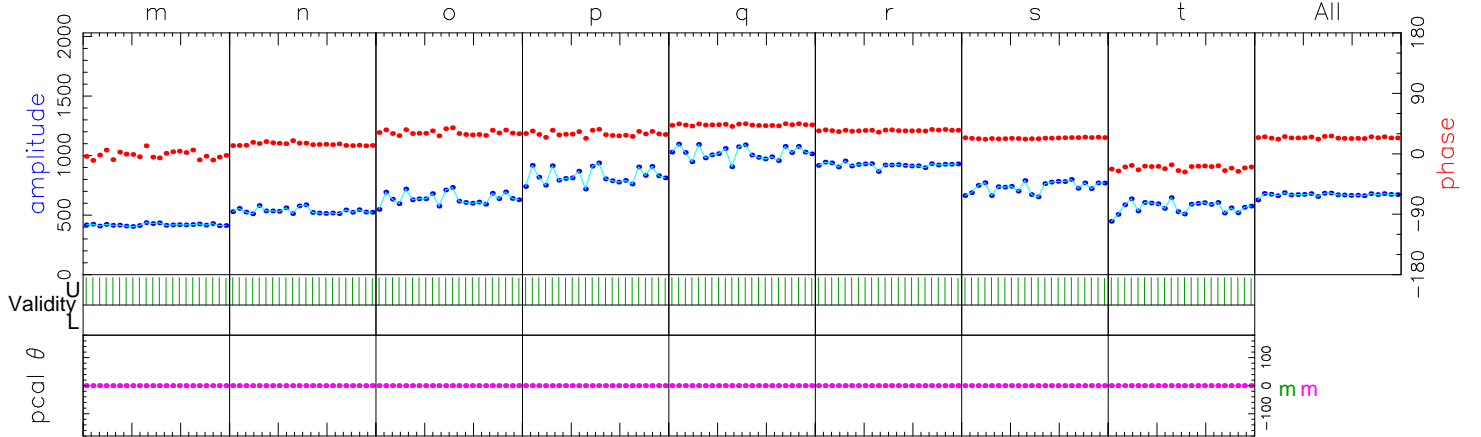
Fringe quality 6

SNR 24848.9  
 Int time 179.993  
 Amp 677.302  
 Phase 24.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.005016  
 MBD 0.005601  
 Fringe rate (Hz)  
 -0.000016  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114540  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-1.6	14.4	31.7	30.1	43.1	34.6	23.2	-20.8	Phase	24.0
	417.7	536.5	640.9	827.0	1021.5	922.1	738.7	567.7	Ampl.	709.0
	258.5	259.0	258.6	258.5	258.5	258.2	258.1	257.6	Sbd box	258.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 5.60143750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 5.60144E-03 +/- 4.4E-08  
 Sband delay (usec) 5.01625000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 5.01625E-03 +/- 3.5E-07  
 Phase delay (usec) 7.73309030574E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 7.73309E-07 +/- 1.5E-10  
 Delay rate (us/s) -1.91310557288E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -1.91311E-10 +/- 1.4E-12  
 Total phase (deg) 24.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 24.0 +/- 0.0

RMS Theor. Amplitude 677.302 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 1.2 0.0 Search (1024X32) 664.438 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 2.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 23.5 0.0 Inc. seg. avg. 672.220 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 28.8 0.0 Inc. frq. avg. 709.004 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 m: az 56.4 el 20.0 pa -80.0 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mm.W.390.3MP2G6



Mk4/DiFX fourfit 3.25 rev 0

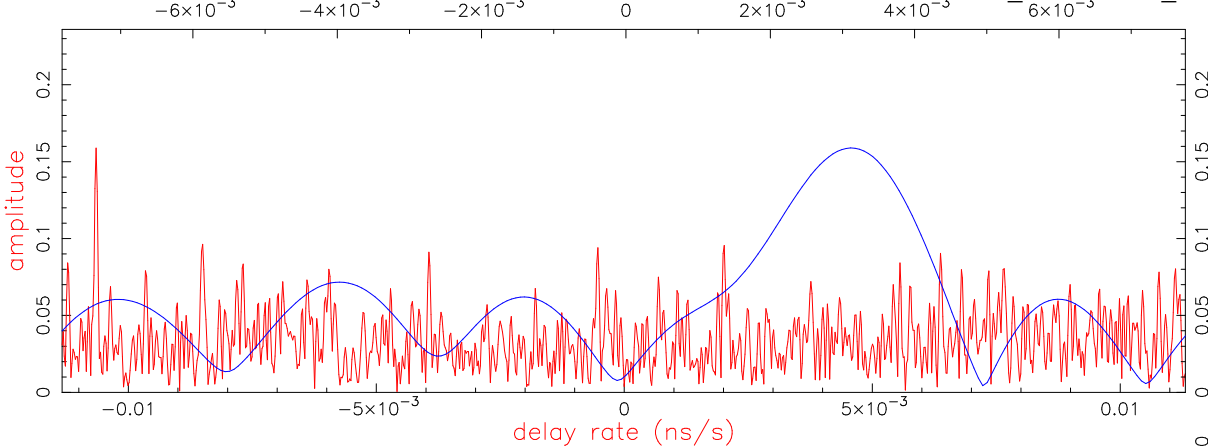
aux01

2013+370.3MP2G6, No0350, mn

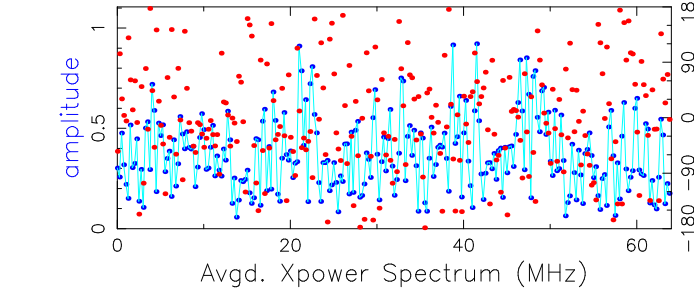
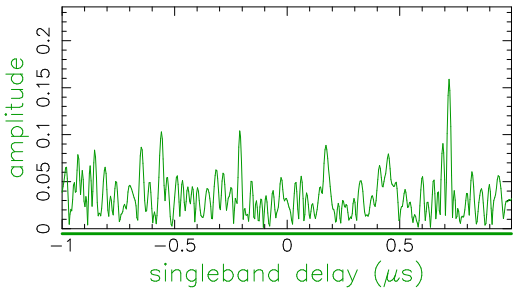
VLBA\_MK - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

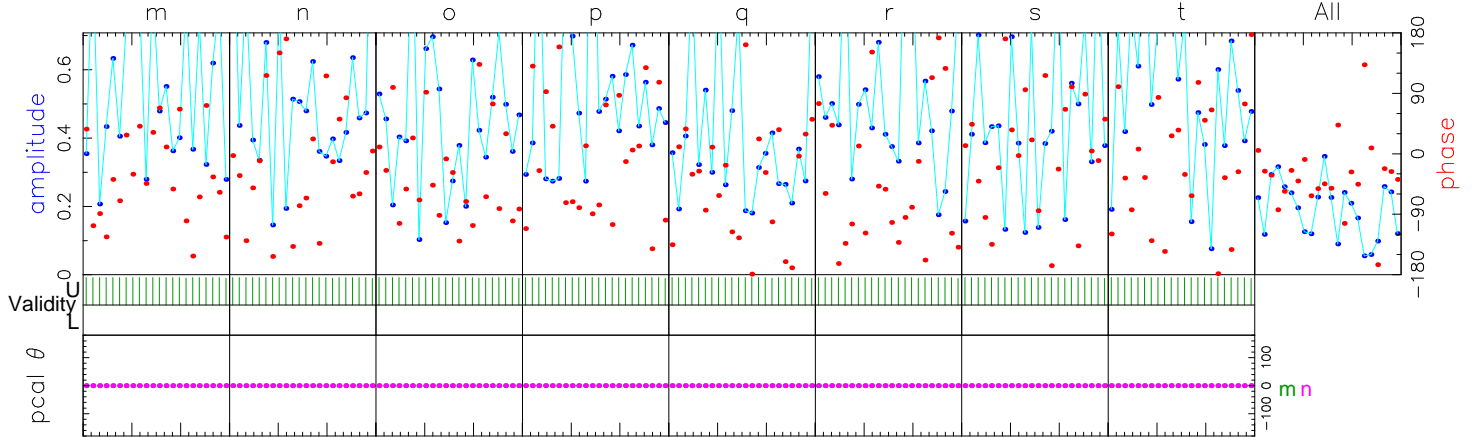


SNR 5.8  
Int time 179.814  
Amp 0.236  
Phase -41.3  
PFD 5.0e-01  
Delays (us)  
SBD 0.719116  
MBD 0.003135  
Fringe rate (Hz) -0.918719  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build  
2024:353:153332  
2025:041:114534  
2024:113:095956  
RA & Dec (J2000)  
20h15m28.729786s  
+37°10'59.514736"

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
	-32.2	-30.4	-41.0	-53.7	-43.6	-107.3	10.9	-17.5		Phase
	0.4	0.2	0.3	0.3	0.3	0.4	0.3	0.1		Ampl.
	450.3	344.4	368.2	110.0	250.1	115.7	245.6	109.2		Sbd box
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		441.1
m	0	0	0	0	0	0	0	0		APs used
n	0	0	0	0	0	0	0	0		PC freqs
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-1.33958403083E+04	Apriori delay (usec)	-1.33965621929E+04	Resid mbdelay (usec)	3.13469E-03	+/-	1.9E-04
Sband delay (usec)	-1.33958430772E+04	Apriori clock (usec)	8.1904221E-01	Resid sbdelay (usec)	7.19116E-01	+/-	1.5E-03
Phase delay (usec)	-1.33965621943E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	-1.33259E-06	+/-	6.3E-07
Delay rate (us/s)	8.99306454717E-01	Apriori rate (us/s)	8.99317120132E-01	Resid rate (us/s)	-1.06654E-05	+/-	6.1E-09
Total phase (deg)	-149.4	Apriori accel (us/s/s)	4.89230247378E-05	Resid phase (deg)	-41.3	+/-	19.7

ph/seg (deg)	54.9	Theor.	46.1	Amplitude	0.236 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.3	Search (1024X32)	0.155	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	36.5	Inc. seg. avg.	0.216	Inc. frq. avg.	0.249	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	35.5	Inc. frq. avg.	0.249	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
m: az 56.4 el 20.0 pa -80.0		n: az 105.4 el 77.1 pa -64.1		u, v (fr/asec)	-6436.965 659.027	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mn...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mn.W.361.3MP2G6

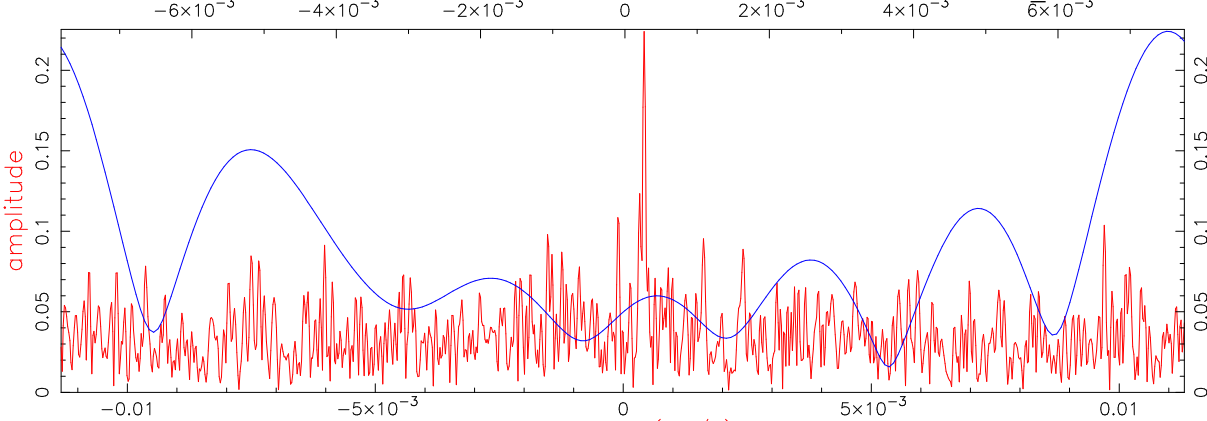
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mN

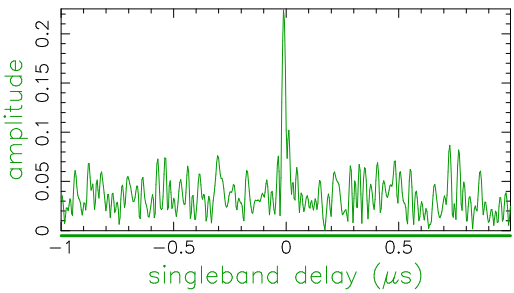
VLBA\_MK- NOEMA, fgroup W, pol LL

multiband delay ( $\mu$ s)

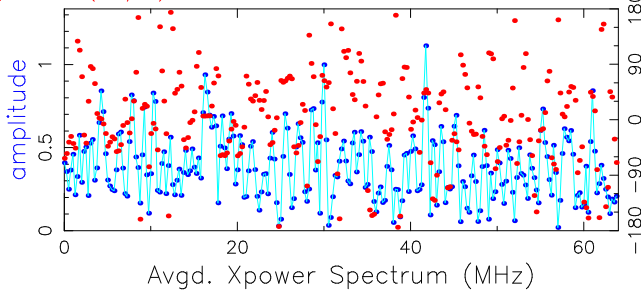


Fringe quality 9

SNR 8.3  
 Int time 179.989  
 Amp 0.225  
 Phase 155.9  
 PFD 2.5e-08  
 Delays (us)  
 SBD -0.010827  
 MBD 0.007552  
 Fringe rate (Hz)  
 0.036370  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

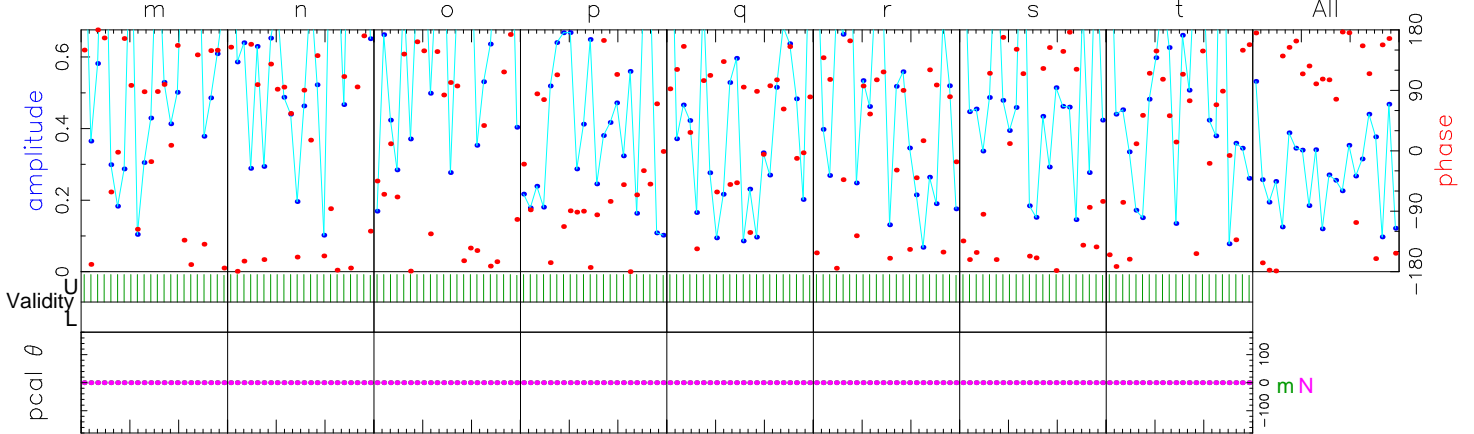


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114534  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	-3.28844338233E+03	Apriori delay (usec)	-3.28843530943E+03	Resid mbdelay (usec)	7.55210E-03	+/-	1.3E-04
Sband delay (usec)	-3.28844613593E+03	Apriori clock (usec)	1.3897129E+01	Resid sbdelay (usec)	-1.08265E-02	+/-	1.0E-03
Phase delay (usec)	-3.28843530440E+03	Apriori clockrate (us/s)	-2.8799012E-08	Resid phdelay (usec)	5.02747E-06	+/-	4.5E-07
Delay rate (us/s)	2.01467840303E+00	Apriori rate (us/s)	2.01467798082E+00	Resid rate (us/s)	4.22215E-07	+/-	4.3E-09
Total phase (deg)	-43.5	Apriori accel (us/s/s)	-7.26424497345E-06	Resid phase (deg)	155.9	+/-	13.9

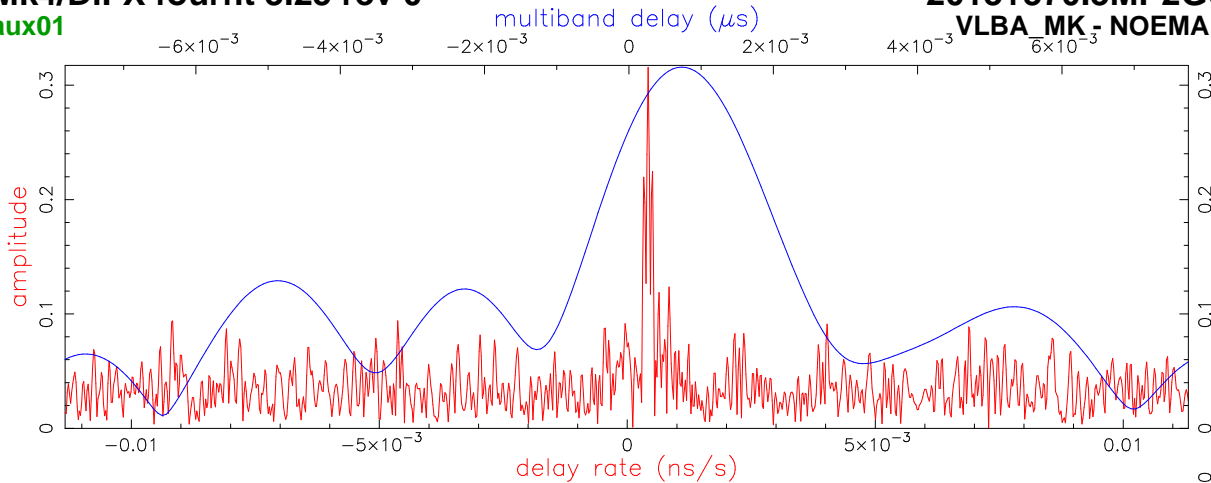
ph/seg (deg)	41.0	Theor.	32.5	Amplitude	0.225 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	57.7		56.8	Search (1024X32)	0.220	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	52.8		19.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.2		34.2	Inc. seg. avg.	0.246	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
m: az 56.4 el 20.0 pa -80.0		N: az 294.0 el 30.4 pa 54.7		Inc. frq. avg.	0.256	Data rate(Mb/s): 2048				
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0350/mN...3MP2G6		u,v (fr/asec) -14506.102 -2903.721						simultaneous interpolator
										Output file: /Exps/c241c/v2/3mm/1234/No0350/mN.W.362.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

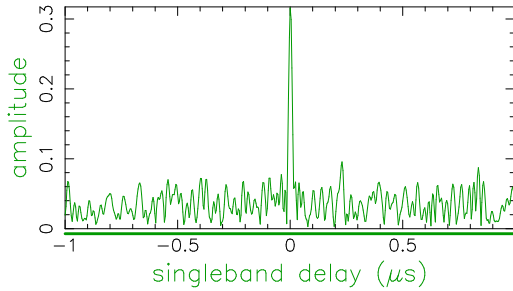
2013+370.3MP2G6, No0350, mN

VLBA\_MK - NOEMA, fgroup W, pol RR

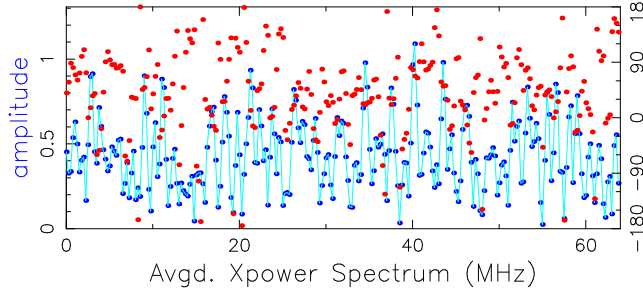


Fringe quality 9

SNR 11.6  
 Int time 179.989  
 Amp 0.317  
 Phase 44.1  
 PFD 6.7e-23  
 Delays (us)  
 SBD 0.000871  
 MBD 0.000779  
 Fringe rate (Hz) 0.036161  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

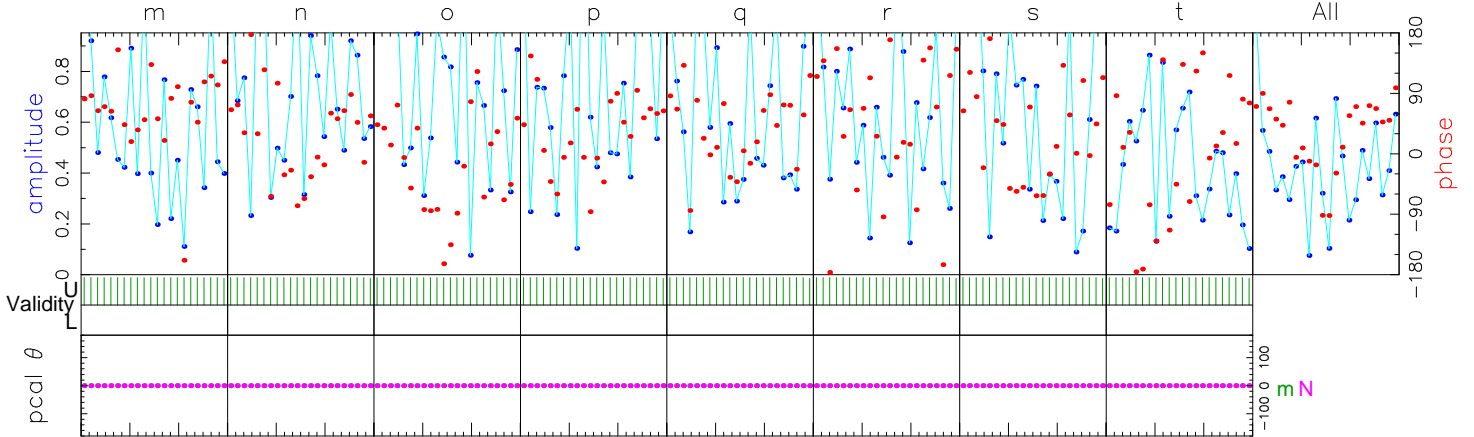


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114535  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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	75.0	32.7	-1.0	32.4	47.0	94.6	37.8	27.2	Phase	44.1
m	0.5	0.4	0.3	0.5	0.5	0.2	0.4	0.0	Ampl.	0.3
N	256.2	257.1	258.5	257.7	257.5	269.9	256.1	253.2	Sbd box	257.2
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-3.28843453023E+03	Apriori delay (usec)	-3.28843530943E+03	Resid mbdelay (usec)	7.79193E-04	+/-	9.3E-05
Sband delay (usec)	-3.28843443868E+03	Apriori clock (usec)	1.3897129E+01	Resid sbdelay (usec)	8.70750E-04	+/-	7.4E-04
Phase delay (usec)	-3.28843530800E+03	Apriori clockrate (us/s)	-2.8799012E-08	Resid phdelay (usec)	1.42338E-06	+/-	3.2E-07
Delay rate (us/s)	2.01467840061E+00	Apriori rate (us/s)	2.01467798082E+00	Resid rate (us/s)	4.19791E-07	+/-	3.1E-09
Total phase (deg)	-155.3	Apriori accel (us/s/s)	-7.26424497345E-06	Resid phase (deg)	44.1	+/-	9.8

ph/seg (deg)	RMS 53.6	Theor. 23.1	Amplitude Search (1024X32)	0.317 +/- 0.027	0.310	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.4	40.3	Interp.	0.000	0.000E+00 (us/s)	1.3897129E+01	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	32.0	13.9	Inc. seg. avg.	0.403	Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us	-2.8799012E-08	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.9	24.3	Inc. frq. avg.	0.339	Data rate (Mb/s): 2048	2.01467798082E+00	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 56.4 el 20.0 pa -80.0 N: az 294.0 el 30.4 pa 54.7 u,v (fr/asec) -14506.102 -2903.721 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mN...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mN.W.374.3MP2G6

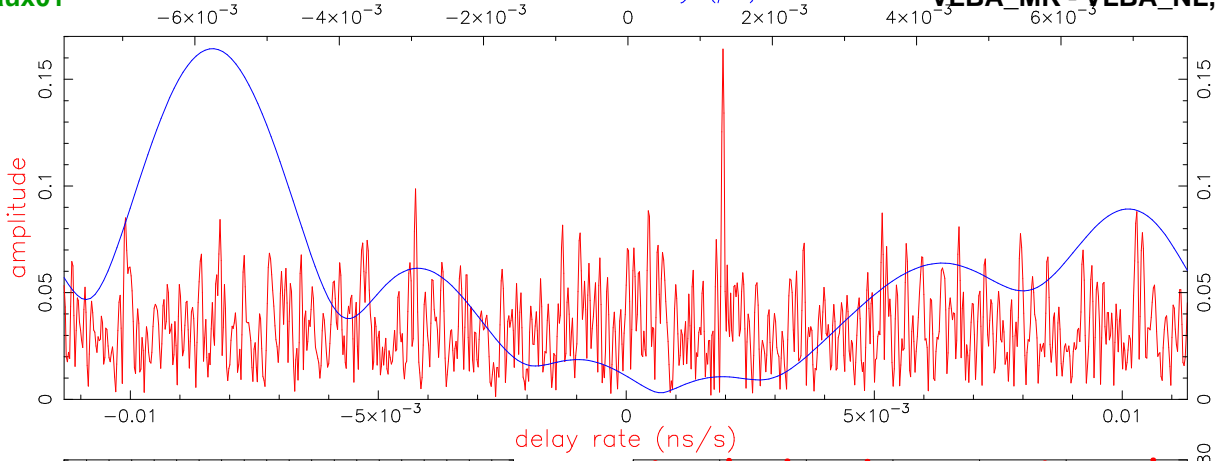
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mn

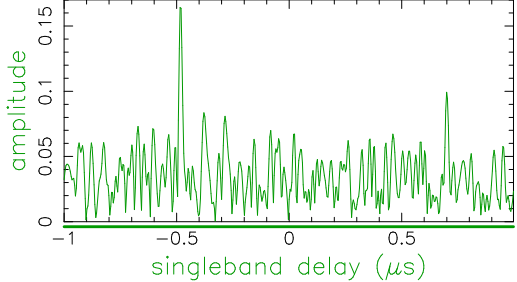
VLBA\_MK - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

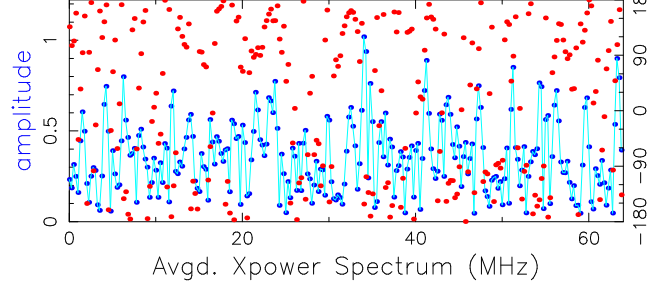


Fringe quality 0

SNR 6.2  
 Int time 179.814  
 Amp 0.170  
 Phase 66.7  
 PFD 9.0e-02  
 Delays (us)  
 SBD -0.482506  
 MBD -0.005710  
 Fringe rate (Hz)  
 0.167580  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

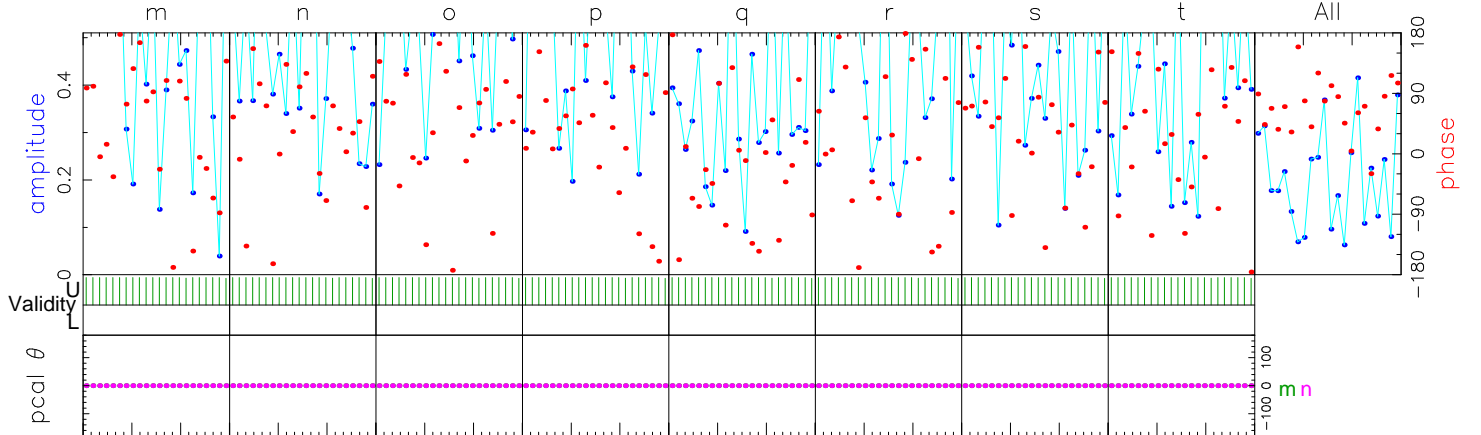


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114535  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.8	63.0	73.7	55.8	-58.2	118.7	54.9	61.8	Phase	66.7
	0.2	0.3	0.3	0.3	0.1	0.1	0.2	0.1	Ampl.	0.2
	235.7	132.7	132.6	134.3	118.9	447.7	133.8	426.3	Sbd box	133.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.33970522784E+04		Apriori delay (usec)		-1.33965621929E+04		Resid mbdelay (usec)		-5.71044E-03	+/- 1.8E-04
Sband delay (usec)	-1.33970446992E+04		Apriori clock (usec)		8.1904221E-01		Resid sbdelay (usec)		-4.82506E-01	+/- 1.4E-03
Phase delay (usec)	-1.33965621908E+04		Apriori clockrate (us/s)		-3.1175995E-07		Resid phdelay (usec)		2.14973E-06	+/- 6.0E-07
Delay rate (us/s)	8.99319065570E-01		Apriori rate (us/s)		8.99317120132E-01		Resid rate (us/s)		1.94544E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		4.89230247378E-05		Resid phase (deg)		66.7	+/- 18.6

ph/seg (deg) 40.4 43.6 Amplitude 0.170 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.0 76.1 Search (1024X32) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 56.0 26.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.9 45.9 Inc. seg. avg. 0.160 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 n: az 105.4 el 77.1 pa -64.1 u,v (fr/asec) -6436.965 659.027 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mn..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mn.W.375.3MP2G6

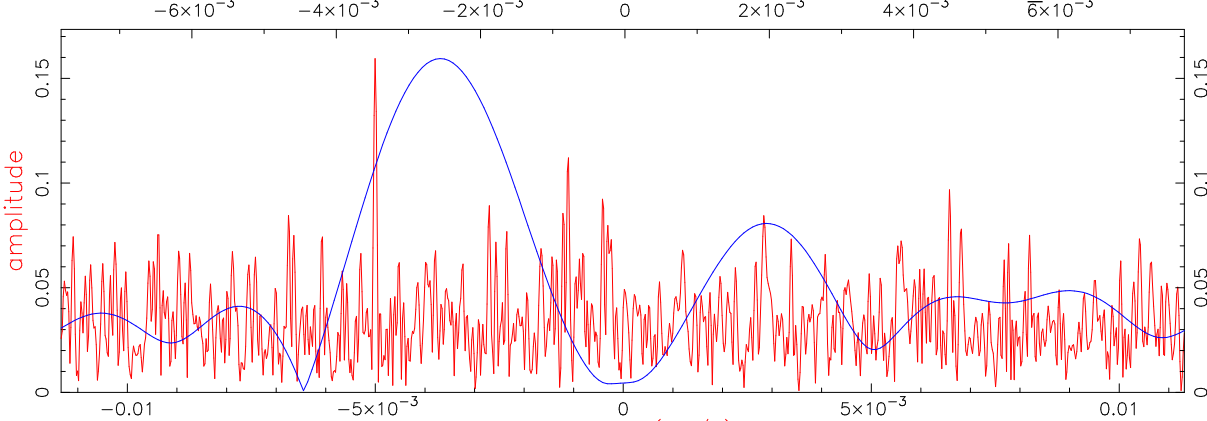
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mN

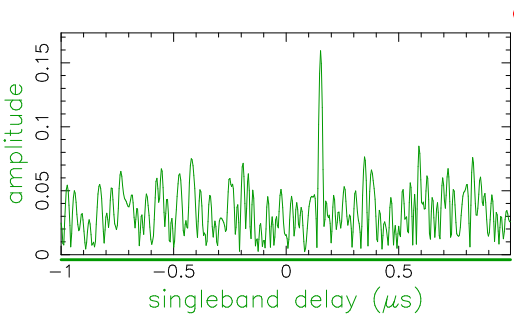
VLBA\_MK- NOEMA, fgroup W, pol LR

multiband delay ( $\mu$ s)

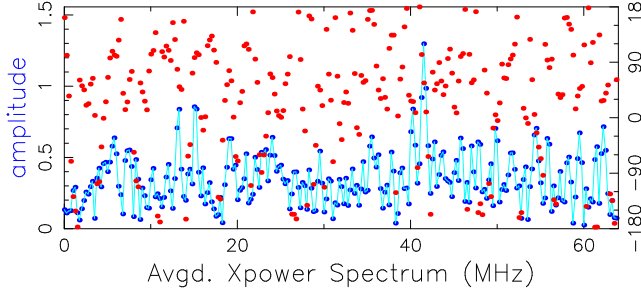


Fringe quality 0

SNR 5.9  
Int time 179.989  
Amp 0.173  
Phase 58.0  
PFD 4.4e-01  
Delays (us)  
SBD 0.152916  
MBD -0.002541  
Fringe rate (Hz)  
-0.432623  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

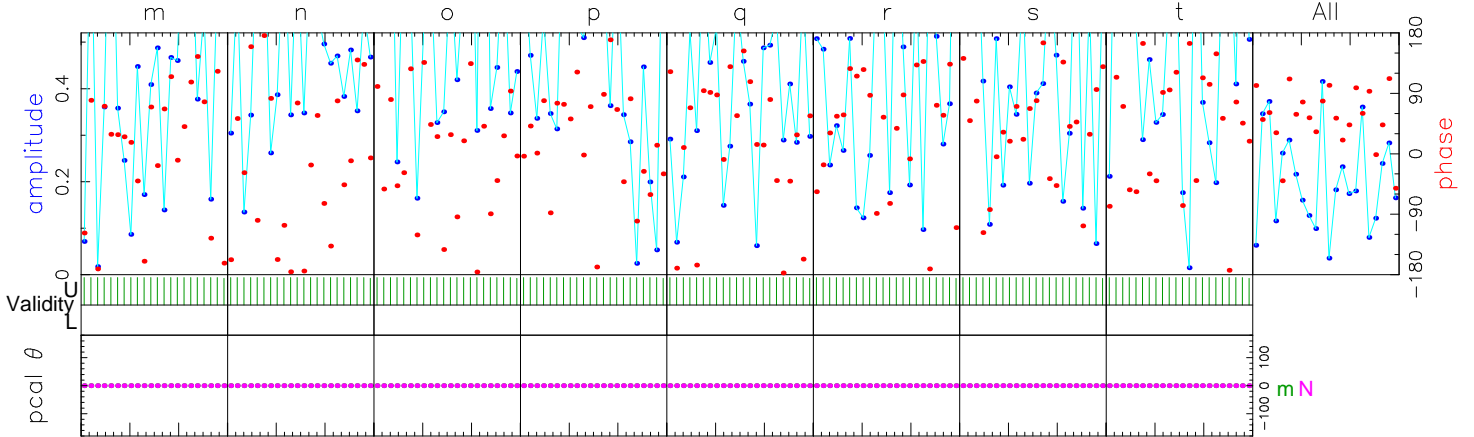


delay rate (ns/s)



Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build  
2024:353:153332  
2025:041:114538  
2024:113:095956  
RA & Dec (J2000)  
20h15m28.729786s  
+37°10'59.514736"

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



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

Group delay (usec) (SBD)	-3.28828160029E+03	Apriori delay (usec)	-3.28843530943E+03	Resid mbdelay (usec)	-2.54086E-03	+/-	1.9E-04
Sband delay (usec)	-3.28828239343E+03	Apriori clock (usec)	1.3897129E+01	Resid sbdelay (usec)	1.52916E-01	+/-	1.5E-03
Phase delay (usec)	-3.28843530755E+03	Apriori clockrate (us/s)	-2.8799012E-08	Resid phdelay (usec)	1.87093E-06	+/-	6.3E-07
Delay rate (us/s)	2.01467295849E+00	Apriori rate (us/s)	2.01467798082E+00	Resid rate (us/s)	-5.02232E-06	+/-	6.1E-09
Total phase (deg)	-141.4	Apriori accel (us/s/s)	-7.26424497345E-06	Resid phase (deg)	58.0	+/-	19.6

ph/seg (deg)	43.4	Theor.	45.9	Amplitude	0.173 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.1	Search (1024X32)	0.156	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)	53.5	Inc. seg. avg.	0.169	Inc. frq. avg.	0.165	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.4	Inc. frq. avg.	0.165			Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 56.4 el 20.0 pa -80.0 N: az 294.0 el 30.4 pa 54.7 u,v (fr/asec) -14506.102 -2903.721 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mN..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mN.W.380.3MP2G6

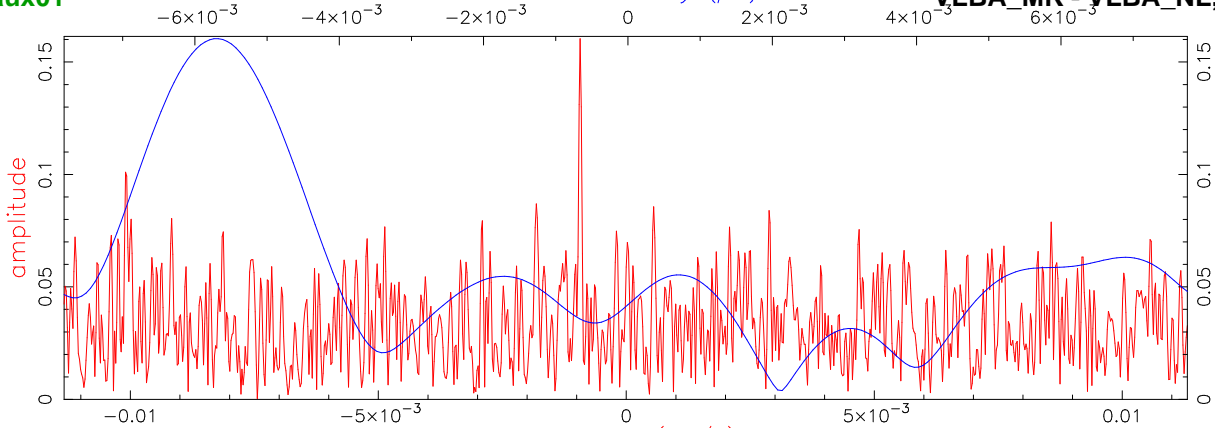
Mk4/DiFX fourfit 3.25 rev 0

aux01

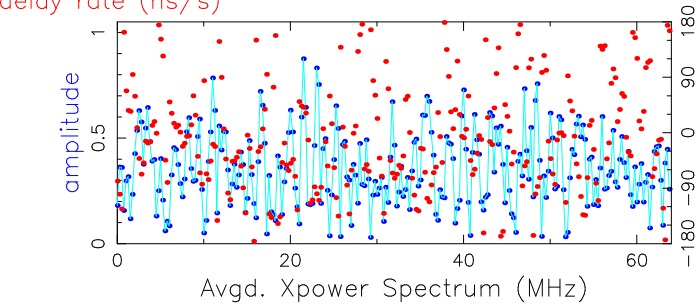
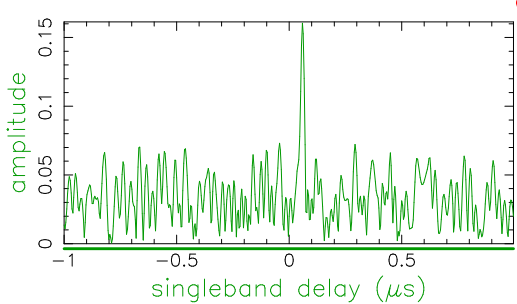
2013+370.3MP2G6, No0350, mn

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

multiband delay ( $\mu$ s)

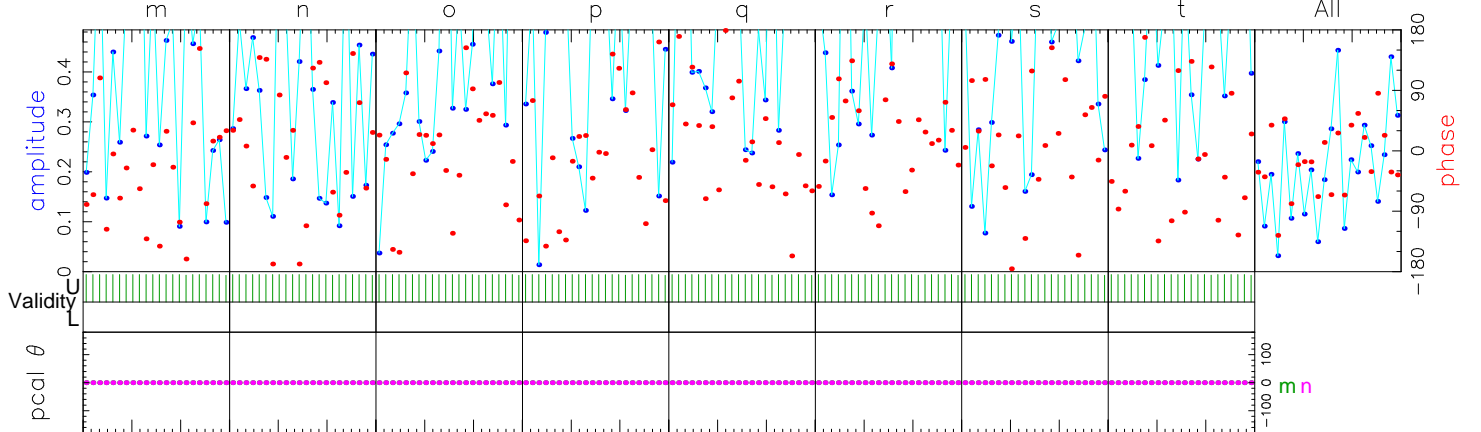


Fringe quality 0  
 SNR 5.9  
 Int time 179.814  
 Amp 0.161  
 Phase -3.2  
 PFD 3.7e-01  
 Delays (us)  
 SBD 0.059405  
 MBD -0.005677  
 Fringe rate (Hz)  
 -0.079909  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114538  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"



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
	-24.2	23.3	2.5	-23.1	-16.6	19.5	19.6	-54.4	Phase	-3.2
	0.1	0.1	0.2	0.1	0.1	0.4	0.2	0.2	Ampl.	0.2
	131.2	170.9	6.2	259.5	15.0	272.3	260.0	372.0	Sbd box	272.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.33965053701E+04					-1.33965621929E+04			Resid mbdelay (usec)	-5.67715E-03 +/- 1.8E-04
Sband delay (usec)	-1.33965027874E+04					8.1904221E-01			Resid sbdelay (usec)	5.94055E-02 +/- 1.5E-03
Phase delay (usec)	-1.33965621930E+04					-3.1175995E-07			Resid phdelay (usec)	-1.02088E-07 +/- 6.3E-07
Delay rate (us/s)	8.99316192473E-01					8.99317120132E-01			Resid rate (us/s)	-9.27659E-07 +/- 6.0E-09
Total phase (deg)			-111.2			4.89230247378E-05			Resid phase (deg)	-3.2 +/- 19.4
	RMS	Theor.	Amplitude	0.161 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.3	45.5	Search (1024X32)	0.155					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.8	79.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	30.0	27.5	Inc. seg. avg.	0.161					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	48.4	47.9	Inc. frq. avg.	0.161					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
m: az 56.4 el 20.0 pa -80.0			n: az 105.4 el 77.1 pa -64.1			u, v (fr/asec) -6436.965 659.027				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/mn..3MP2G6			Output file: /Exps/c241c/v2/3mm/1234/No0350/mn.W.384.3MP2G6				

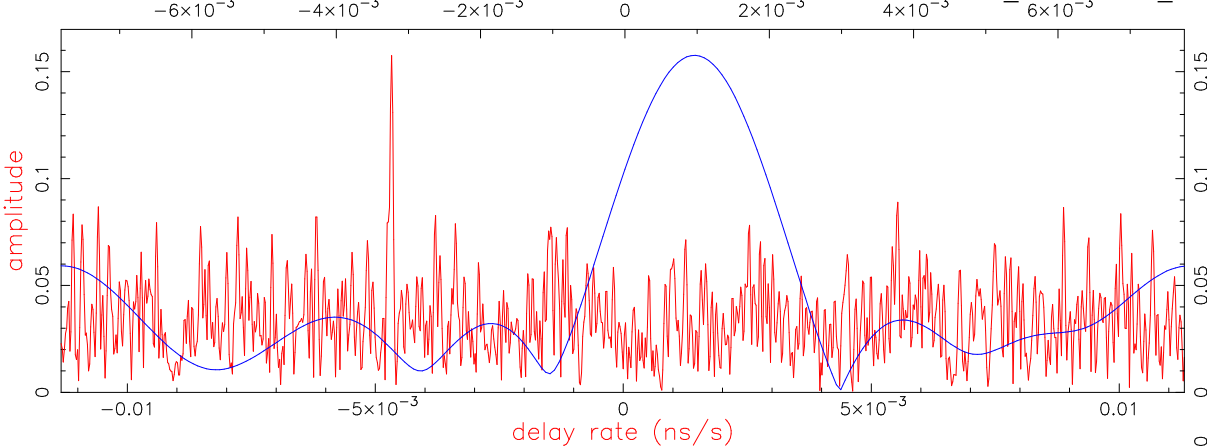
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mn

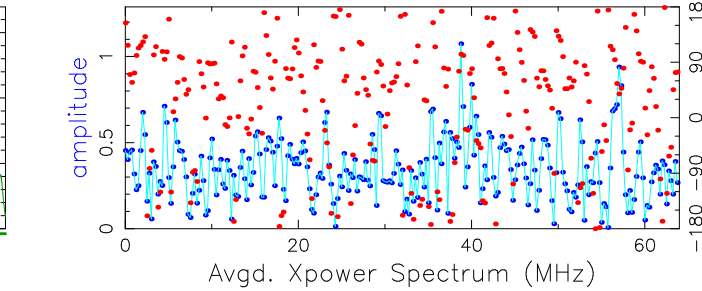
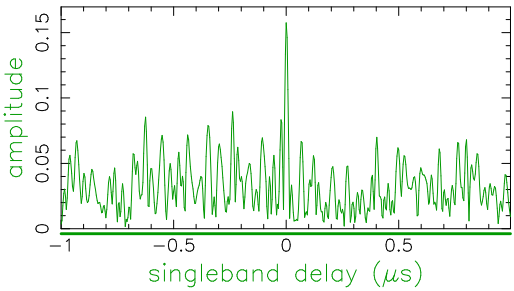
VLBA\_MK - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)



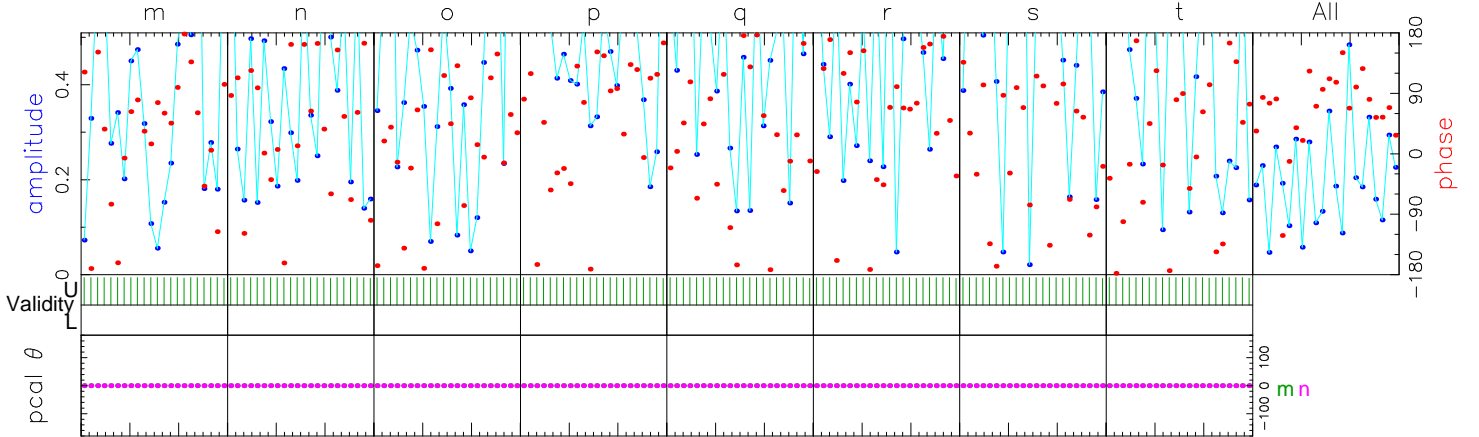
Fringe quality 0

SNR 5.8  
 Int time 179.814  
 Amp 0.170  
 Phase 78.7  
 PFD 5.7e-01  
 Delays (us)  
 SBD 0.000676  
 MBD 0.000999  
 Fringe rate (Hz) -0.403345  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114540  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	88.6	83.1	55.5	112.1	47.0	82.4	74.6	83.6	Phase	78.7
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	233.1	355.9	81.8	257.5	273.7	182.2	122.9	203.5	Sbd box	257.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.33965611937E+04	Apriori delay (usec)	-1.33965621929E+04	Resid mbdelay (usec)	9.99243E-04	+/-	1.9E-04
Sband delay (usec)	-1.33965615169E+04	Apriori clock (usec)	8.1904221E-01	Resid sbdelay (usec)	6.76000E-04	+/-	1.5E-03
Phase delay (usec)	-1.33965621904E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	2.53902E-06	+/-	6.4E-07
Delay rate (us/s)	8.99312437698E-01	Apriori rate (us/s)	8.99317120132E-01	Resid rate (us/s)	-4.68243E-06	+/-	6.1E-09
Total phase (deg)	-29.3	Apriori accel (us/s/s)	4.89230247378E-05	Resid phase (deg)	78.7	+/-	19.8

ph/seg (deg)	RMS 50.9	Theor. 46.3	Amplitude Search (1024X32)	0.170 +/- 0.029	0.150	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.9	80.9	Interp.	0.000	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.7	27.9	Inc. seg. avg.	0.166	0.166	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.0	48.8	Inc. frq. avg.	0.161	0.161	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 56.4 el 20.0 pa -80.0 n: az 105.4 el 77.1 pa -64.1 u,v (fr/asec) -6436.965 659.027 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mn..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mn.W.391.3MP2G6

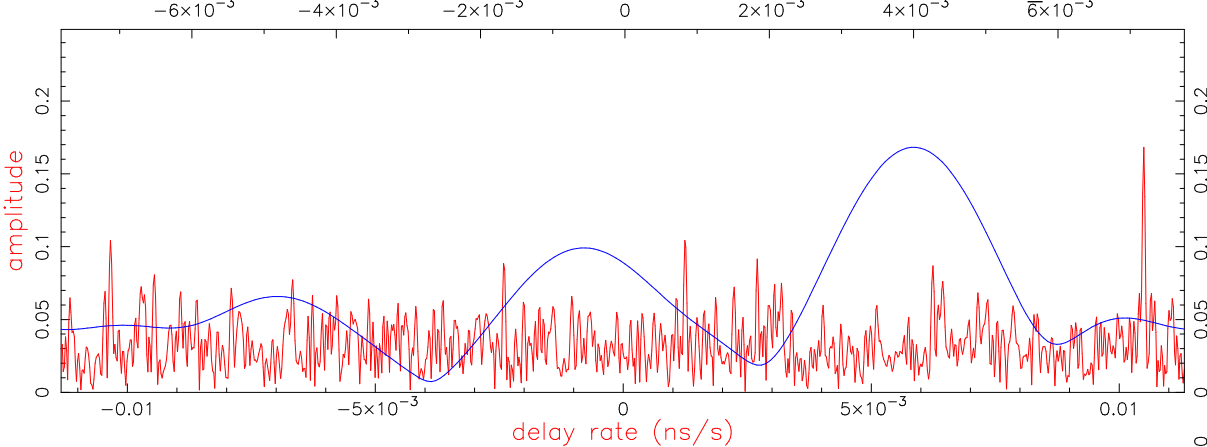
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mN

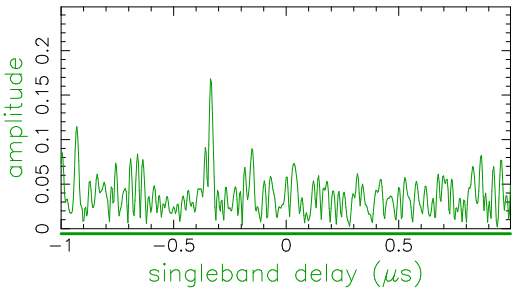
VLBA\_MK- NOEMA, fgroup W, pol RL

multiband delay ( $\mu$ s)

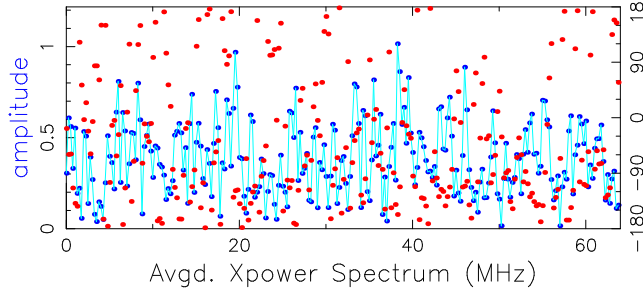


Fringe quality 0

SNR 6.2  
 Int time 179.989  
 Amp 0.249  
 Phase -47.1  
 PFD 6.0e-02  
 Delays (us)  
 SBD -0.334601  
 MBD 0.004039  
 Fringe rate (Hz) 0.905991  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

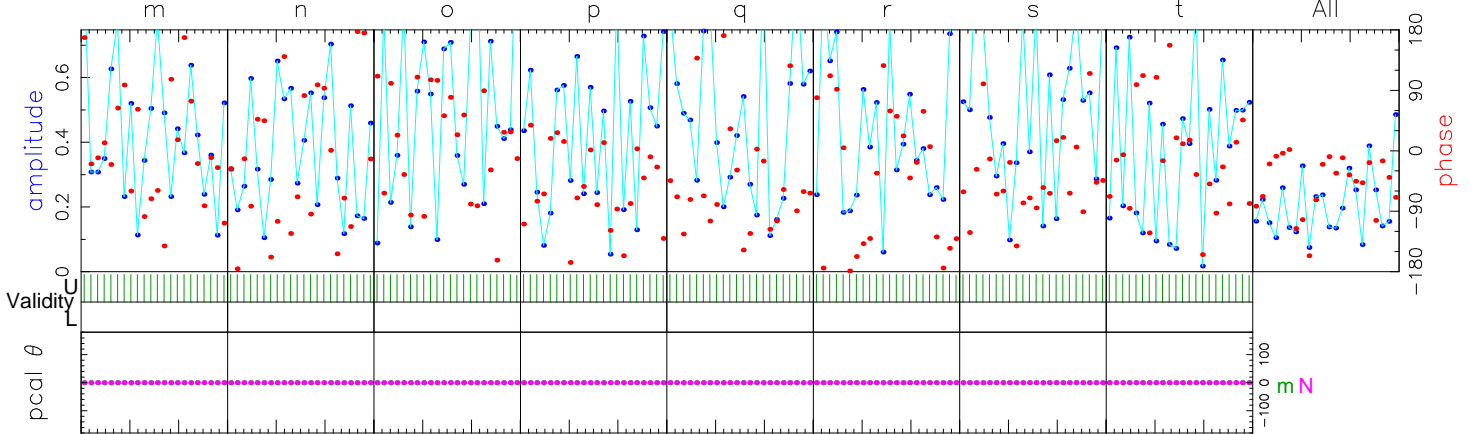


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114541  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.2	-89.4	-9.5	-42.9	-74.3	167.1	-49.8	-32.2	Phase	-47.1
	0.2	0.1	0.3	0.4	0.4	0.1	0.5	0.4	Ampl.	0.3
	220.8	19.5	180.7	171.0	171.3	404.4	389.8	500.6	Sbd box	171.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.28877501997E+03	Apriori delay (usec)	-3.28843530943E+03	Resid mbdelay (usec)	4.03946E-03	+/-	1.7E-04
Sband delay (usec)	-3.28876991093E+03	Apriori clock (usec)	1.3897129E+01	Resid sbdelay (usec)	-3.34601E-01	+/-	1.4E-03
Phase delay (usec)	-3.28843531094E+03	Apriori clockrate (us/s)	-2.8799012E-08	Resid phdelay (usec)	-1.51745E-06	+/-	5.9E-07
Delay rate (us/s)	2.01468849847E+00	Apriori rate (us/s)	2.01467798082E+00	Resid rate (us/s)	1.05177E-05	+/-	5.7E-09
Total phase (deg)	-246.5	Apriori accel (us/s/s)	-7.26424497345E-06	Resid phase (deg)	-47.1	+/-	18.4

ph/seg (deg)	41.7	Theor.	43.1	Amplitude	0.249 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.2		75.3	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	65.6		26.0	Inc. seg. avg.	0.238	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	56.6		45.4	Inc. frq. avg.	0.256	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 56.4 el 20.0 pa -80.0 N: az 294.0 el 30.4 pa 54.7 u,v (fr/asec) -14506.102 -2903.721 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350//mN...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350//mN.W.394.3MP2G6



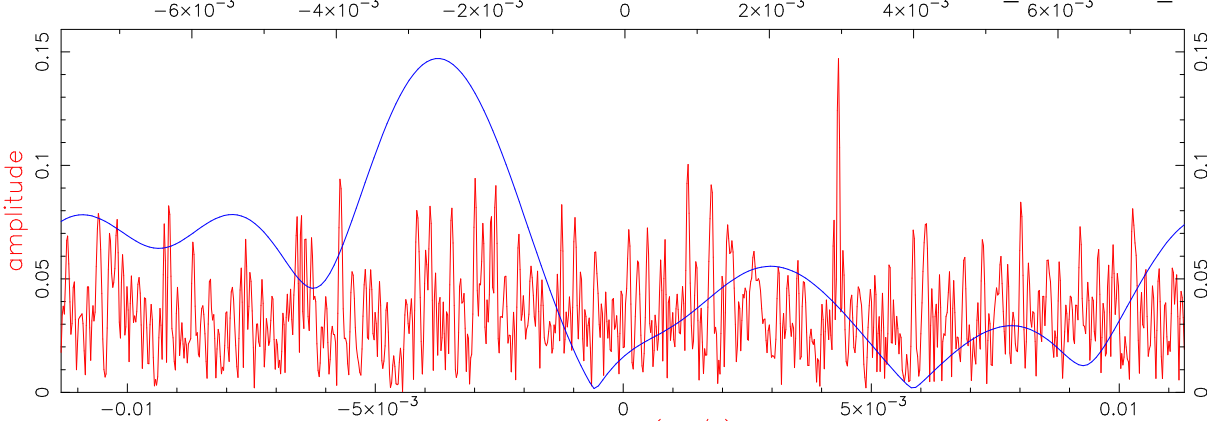
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mo

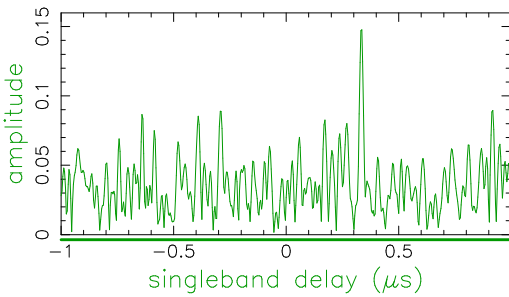
VLBA\_MK - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

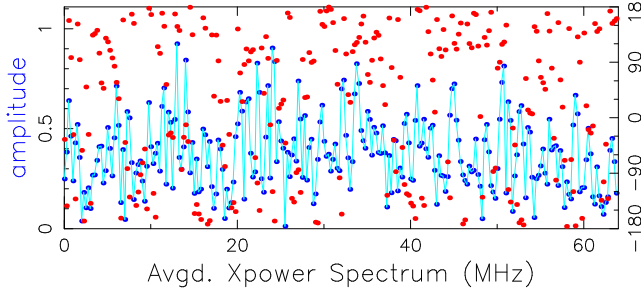


Fringe quality 0

SNR 5.5  
 Int time 177.786  
 Amp 0.160  
 Phase 65.5  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.334085  
 MBD -0.002574  
 Fringe rate (Hz)  
 0.374500  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

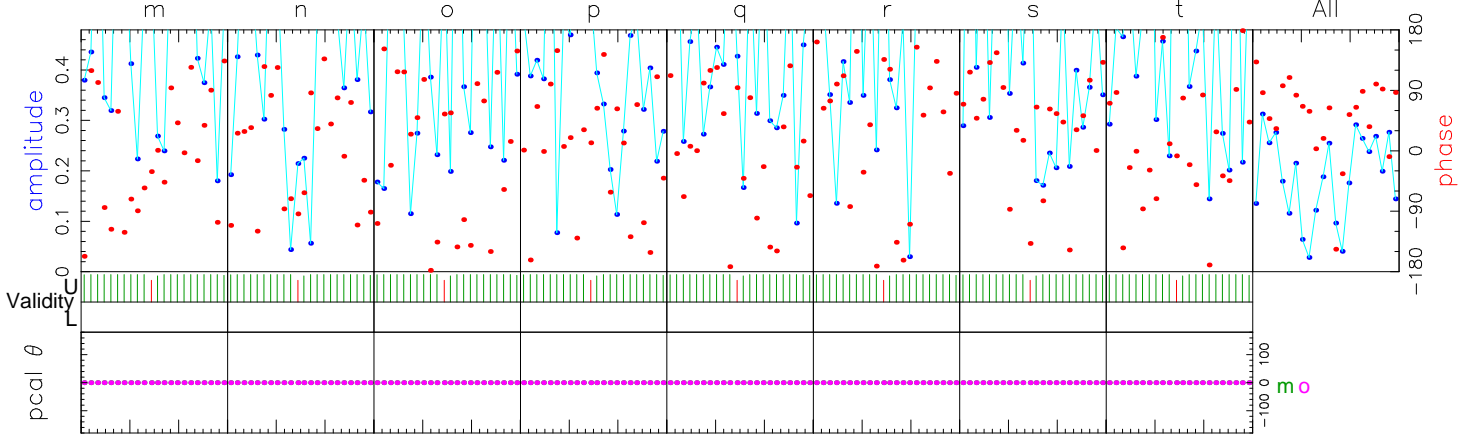


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114535  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0		
m	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.04736539699E+04	Apriori delay (usec)	-1.04739951462E+04	Resid mbdelay (usec)	-2.57371E-03	+/-	2.0E-04
Sband delay (usec)	-1.04736610612E+04	Apriori clock (usec)	-2.4528360E+01	Resid sbdelay (usec)	3.34085E-01	+/-	1.6E-03
Phase delay (usec)	-1.04739951441E+04	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	2.11259E-06	+/-	6.7E-07
Delay rate (us/s)	4.83759612721E-01	Apriori rate (us/s)	4.83755265151E-01	Resid rate (us/s)	4.34757E-06	+/-	6.5E-09
Total phase (deg)	-255.7	Apriori accel (us/s/s)	3.74158264463E-05	Resid phase (deg)	65.5	+/-	20.9

ph/seg (deg)	50.9	RMS	48.9	Theor.	50.9	Amplitude	0.160 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.0	Search (1024X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	37.2	Inc. seg. avg.	0.147	Inc. frq. avg.	0.165	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	42.4	Inc. frq. avg.	0.165	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 56.4 el 20.0 pa -80.0      o: az 76.8 el 56.6 pa -76.9      u,v (fr/asec) -3455.342 382.946      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350/mo..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350/mo.W.371.3MP2G6

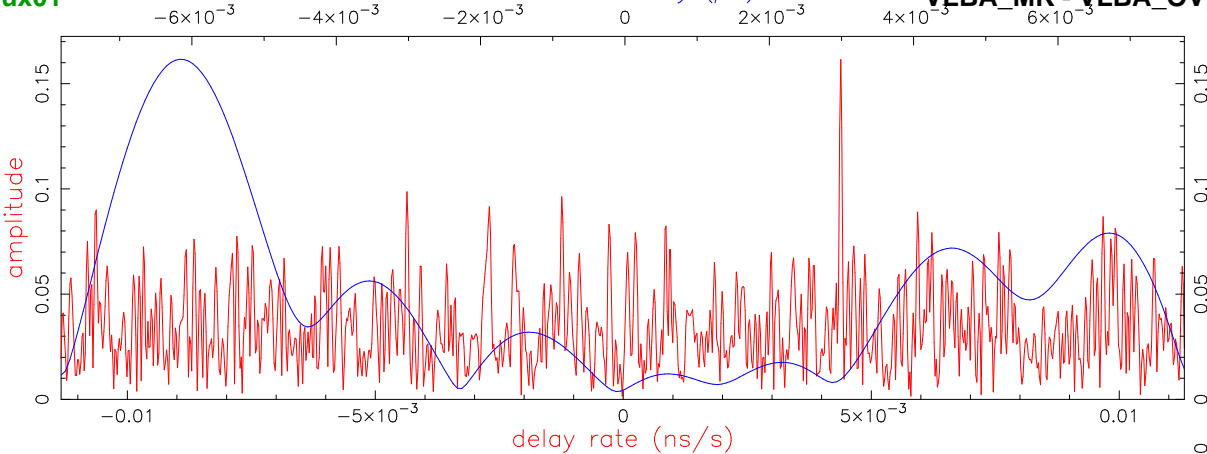
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mo

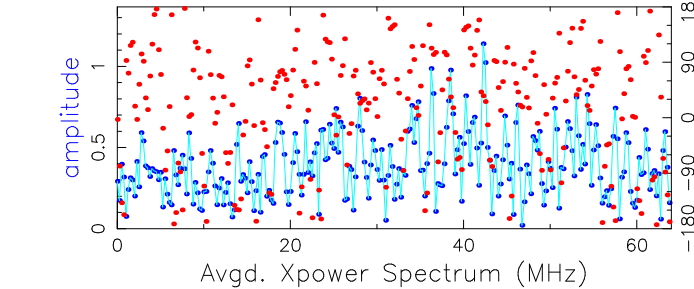
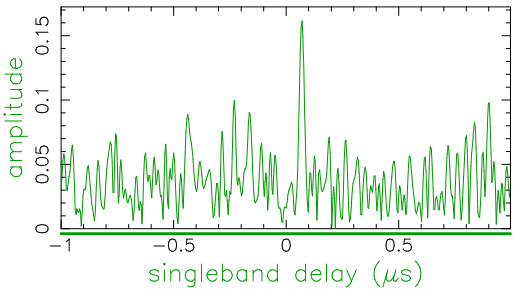
VLBA\_MK - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

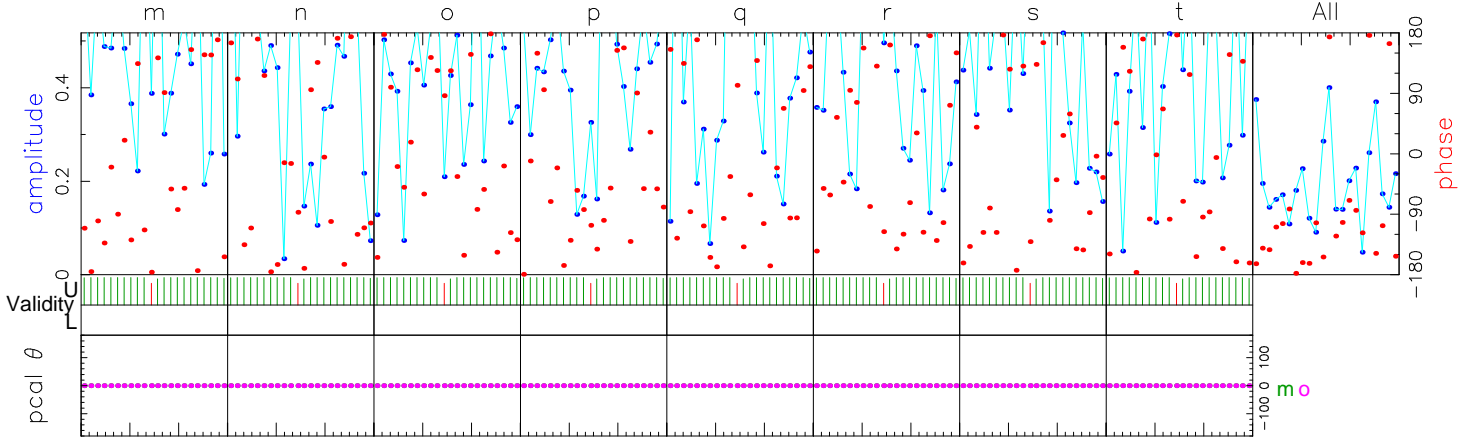


Fringe quality 0

SNR 5.9  
 Int time 177.786  
 Amp 0.172  
 Phase -142.8  
 PFD 3.6e-01  
 Delays (us)  
 SBD 0.069440  
 MBD -0.006172  
 Fringe rate (Hz) 0.379046  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114538  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-144.2	-161.1	-161.6	-94.8	-126.3	-146.6	-142.2	-160.0	Phase	-142.8
	0.3	0.3	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	148.3	58.6	462.3	166.1	226.3	415.8	112.2	420.8	Sbd box	274.8
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.04739231929E+04					-1.04739951462E+04			Resid mbdelay (usec)	-6.17171E-03 +/- 1.8E-04
Sband delay (usec)	-1.04739257064E+04					-2.4528360E+01			Resid sbdelay (usec)	6.94397E-02 +/- 1.5E-03
Phase delay (usec)	-1.04739951508E+04					-4.9577204E-07			Resid phdelay (usec)	-4.60486E-06 +/- 6.3E-07
Delay rate (us/s)	4.83759665496E-01					4.83755265151E-01			Resid rate (us/s)	4.40035E-06 +/- 6.0E-09
Total phase (deg)			-104.0			3.74158264463E-05			Resid phase (deg)	-142.8 +/- 19.4
	RMS	Theor.	Amplitude	0.172 +/- 0.029					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	37.0	45.4	Search (1024X32)	0.155					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	59.6	79.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	24.4	27.4	Inc. seg. avg.	0.160					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	37.4	47.9	Inc. frq. avg.	0.164					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
m: az 56.4 el 20.0 pa -80.0			o: az 76.8 el 56.6 pa -76.9						u,v (fr/asec) -3455.342 382.946	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/mo..3MP2G6						Output file: /Exps/c241c/v2/3mm/1234/No0350/mo.W.382.3MP2G6	

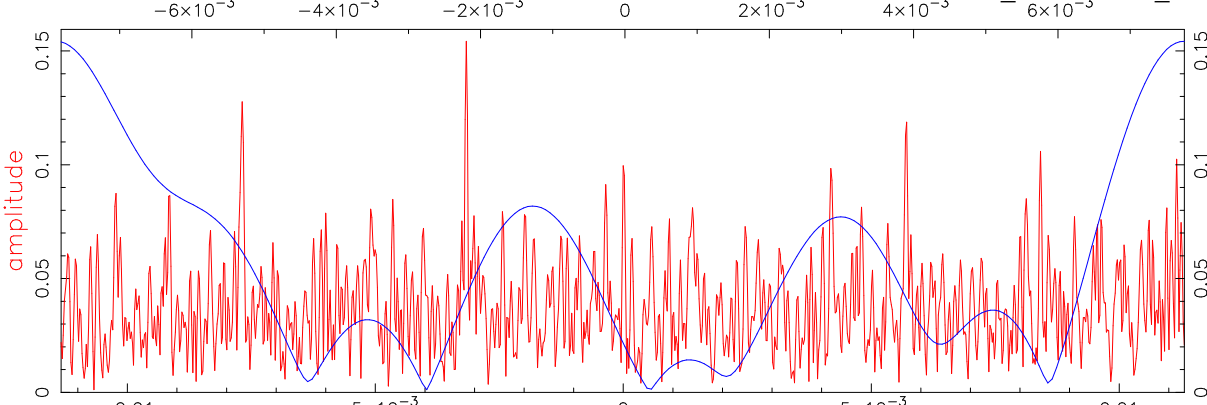
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mo

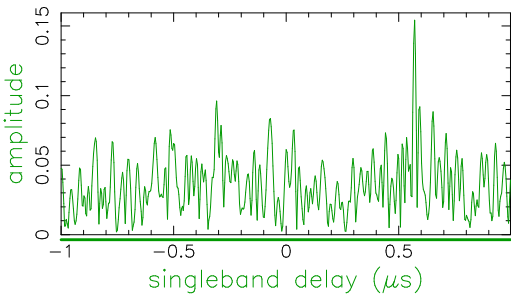
VLBA\_MK - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

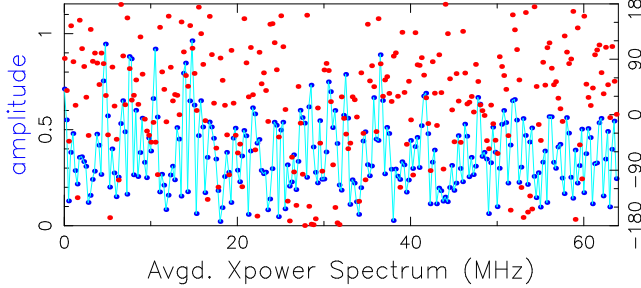


Fringe quality 0

SNR 5.6  
 Int time 177.786  
 Amp 0.159  
 Phase -123.2  
 PFD 8.9e-01  
 Delays (us)  
 SBD 0.569965  
 MBD -0.007899  
 Fringe rate (Hz)  
 -0.273215  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

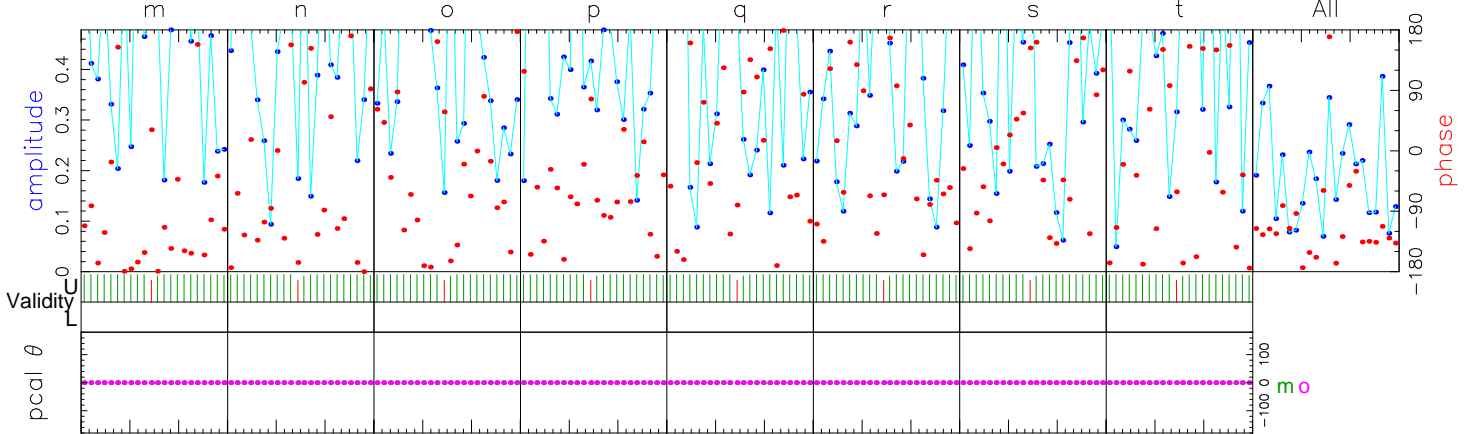


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114542  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-140.2	-136.5	-120.8	-87.2	-139.6	-91.4	-79.3	-162.9	Phase	-123.2
	0.3	0.2	0.2	0.3	0.1	0.1	0.0	0.2	Ampl.	0.2
	402.6	485.3	476.4	403.0	420.8	310.5	431.1	178.8	Sbd box	402.9
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.04734249197E+04	Apriori delay (usec)	-1.04739951462E+04	Resid mbdelay (usec)	-7.89856E-03	+/-	1.9E-04
Sband delay (usec)	-1.04734251807E+04	Apriori clock (usec)	-2.4528360E+01	Resid sbdelay (usec)	5.69965E-01	+/-	1.5E-03
Phase delay (usec)	-1.04739951502E+04	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	-3.97421E-06	+/-	6.6E-07
Delay rate (us/s)	4.83752093392E-01	Apriori rate (us/s)	4.83755265151E-01	Resid rate (us/s)	-3.17176E-06	+/-	6.3E-09
Total phase (deg)	-84.4	Apriori accel (us/s/s)	3.74158264463E-05	Resid phase (deg)	-123.2	+/-	20.4

ph/seg (deg)	38.1	Theor.	47.6	Amplitude	0.159 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.4		83.1	Search (1024X32)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	33.1		28.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.1		50.2	Inc. seg. avg.	0.150	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.158	Data rate (Mb/s):	2048	t_cohere:	infinite			

m: az 56.4 el 20.0 pa -80.0      o: az 76.8 el 56.6 pa -76.9      u,v (fr/asec) -3455.342 382.946      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350/mo..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350/mo.W.396.3MP2G6

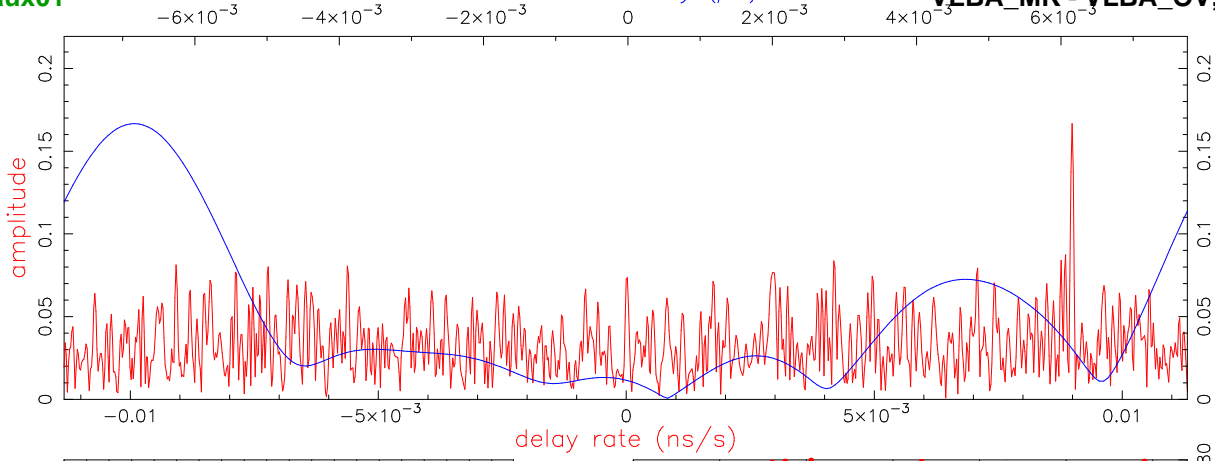
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mo

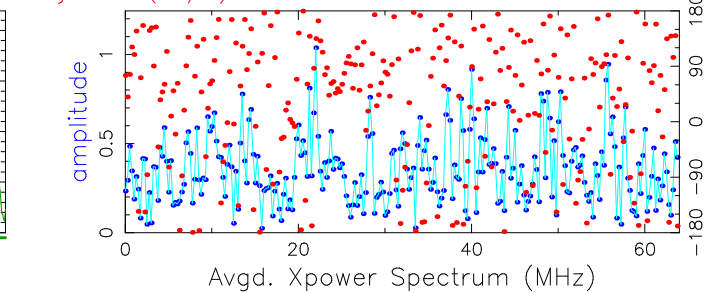
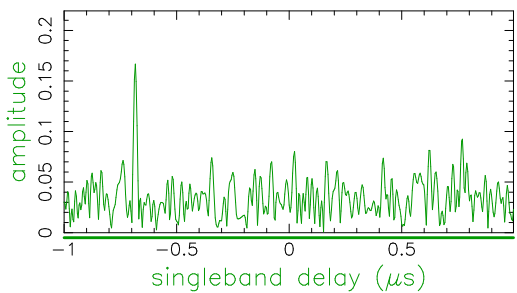
VLBA\_MK - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)



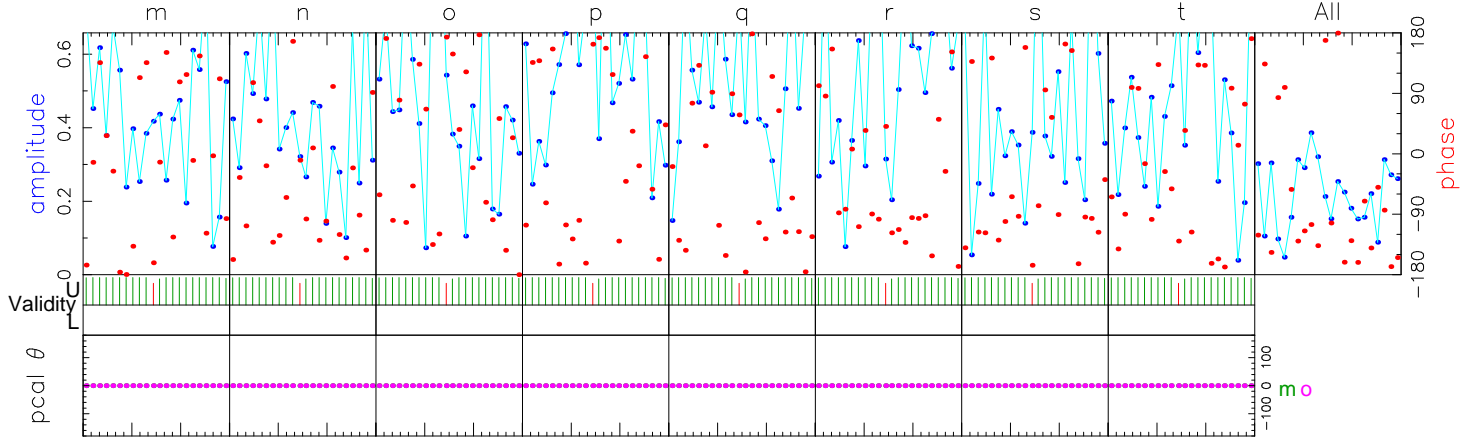
Fringe quality 0

SNR 6.1  
 Int time 177.786  
 Amp 0.219  
 Phase -133.4  
 PFD 1.5e-01  
 Delays (us)  
 SBD -0.683715  
 MBD -0.006845  
 Fringe rate (Hz) 0.776077  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114544  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"

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
	-167.7	-100.6	-118.5	-156.2	-148.5	-108.1	-117.7	-166.8	Phase	-133.4
	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.2	Ampl.	0.2
	186.8	242.8	414.7	238.1	386.4	233.1	472.8	280.6	Sbd box	82.0
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.04746738663E+04	Apriori delay (usec)	-1.04739951462E+04	Resid mbdelay (usec)	-6.84510E-03	+/-	1.8E-04
Sband delay (usec)	-1.04746788607E+04	Apriori clock (usec)	-2.4528360E+01	Resid sbdelay (usec)	-6.83715E-01	+/-	1.4E-03
Phase delay (usec)	-1.04739951505E+04	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	-4.30188E-06	+/-	6.1E-07
Delay rate (us/s)	4.83764274631E-01	Apriori rate (us/s)	4.83755265151E-01	Resid rate (us/s)	9.00948E-06	+/-	5.9E-09
Total phase (deg)	-94.6	Apriori accel (us/s/s)	3.74158264463E-05	Resid phase (deg)	-133.4	+/-	18.9

ph/seg (deg) 59.1 44.1 Search (1024X32) 0.164 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.1 77.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.5 26.7 Inc. seg. avg. 0.222 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.5 46.5 Inc. frq. avg. 0.216 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 o: az 76.8 el 56.6 pa -76.9 u,v (fr/asec) -3455.342 382.946 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mo..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mo.W.405.3MP2G6

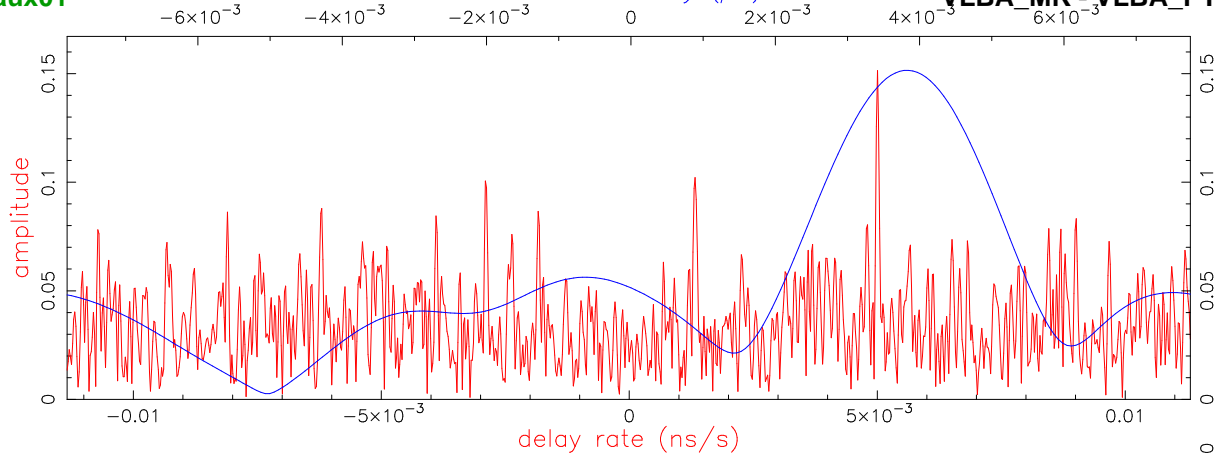
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mp

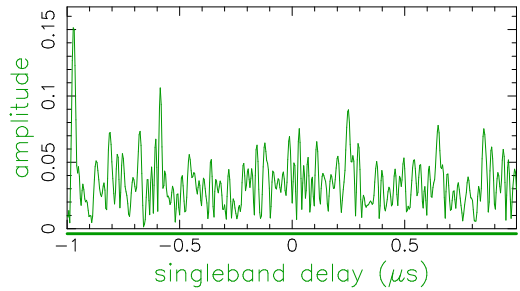
VLBA\_MK - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

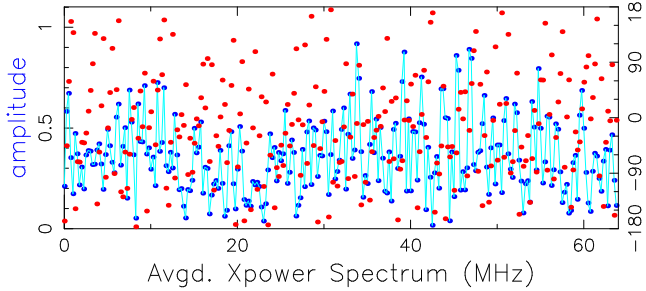


Fringe quality 0

SNR 5.7  
 Int time 179.979  
 Amp 0.167  
 Phase -85.2  
 PFD 8.5e-01  
 Delays (us)  
 SBD -0.970931  
 MBD 0.003885  
 Fringe rate (Hz)  
 0.431075  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

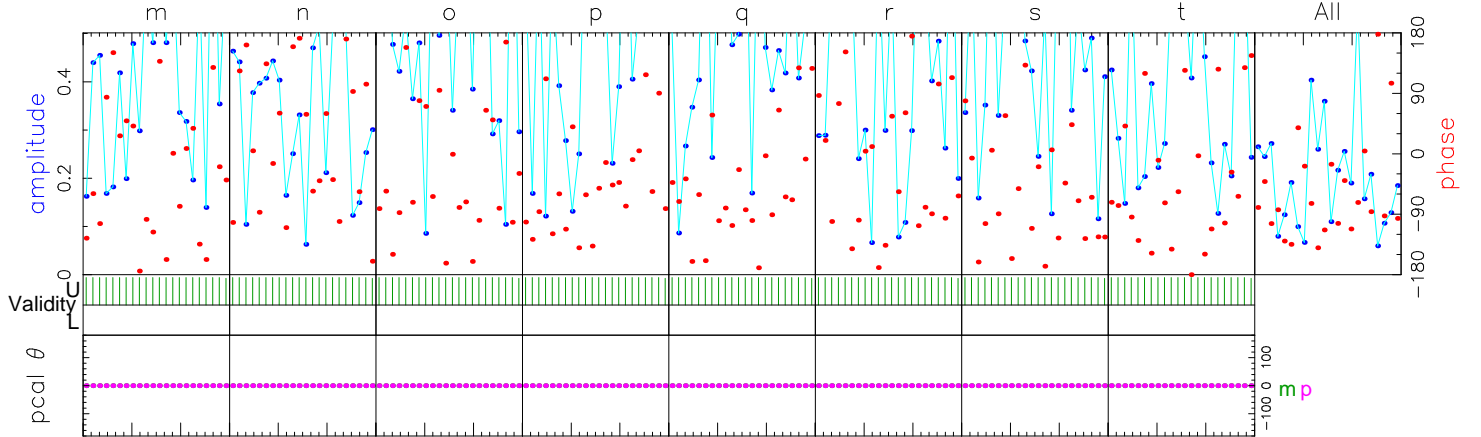


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114535  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-89.8	-92.3	-85.6	-70.1	-86.8	-159.7	-67.7	-103.0	Phase	-85.2
	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	429.6	396.1	367.0	7.0	496.6	199.9	8.7	65.6	Sbd box	8.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.17903488178E+04	Apriori delay (usec)	-1.17893839528E+04	Resid mbdelay (usec)	3.88510E-03	+/-	1.9E-04
Sband delay (usec)	-1.17903548833E+04	Apriori clock (usec)	-5.1719418E+00	Resid sbdelay (usec)	-9.70931E-01	+/-	1.5E-03
Phase delay (usec)	-1.17893839556E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-2.74799E-06	+/-	6.5E-07
Delay rate (us/s)	6.03686565953E-01	Apriori rate (us/s)	6.03681561597E-01	Resid rate (us/s)	5.00436E-06	+/-	6.3E-09
Total phase (deg)	-336.6	Apriori accel (us/s/s)	4.73392319739E-05	Resid phase (deg)	-85.2	+/-	20.3

ph/seg (deg)	62.2	Theor.	47.5	Amplitude	0.167 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	84.0	Search (1024X32)	0.150	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.9	Inc. seg. avg.	0.167	Inc. frq. avg.	0.156	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	54.4	Inc. frq. avg.	0.156	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
m: az 56.4 el 20.0 pa -80.0		p: az 74.1 el 63.8 pa -86.7		u, v (fr/asec)	-4309.558 1272.980	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mp..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mp.W.372.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

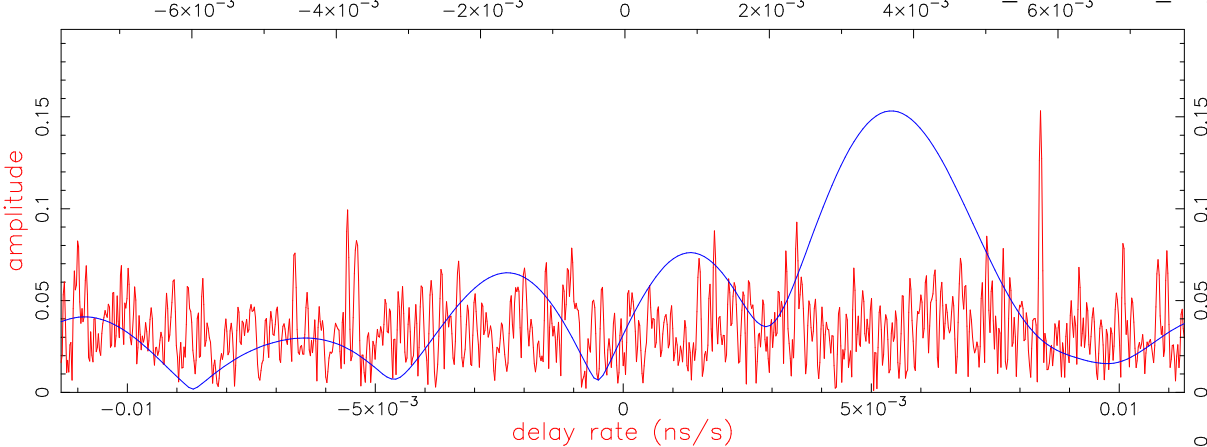
aux01

2013+370.3MP2G6, No0350, mp

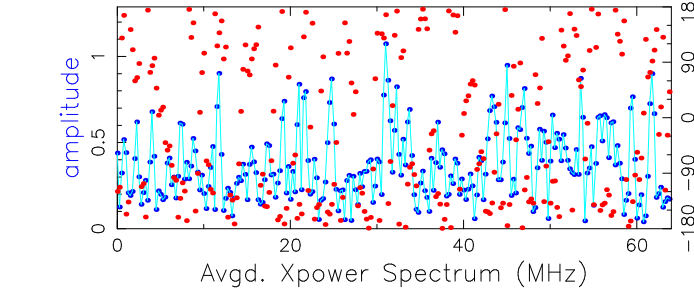
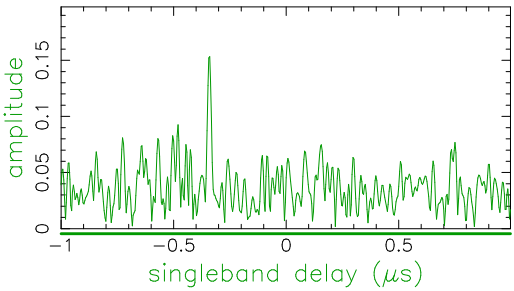
VLBA\_MK - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

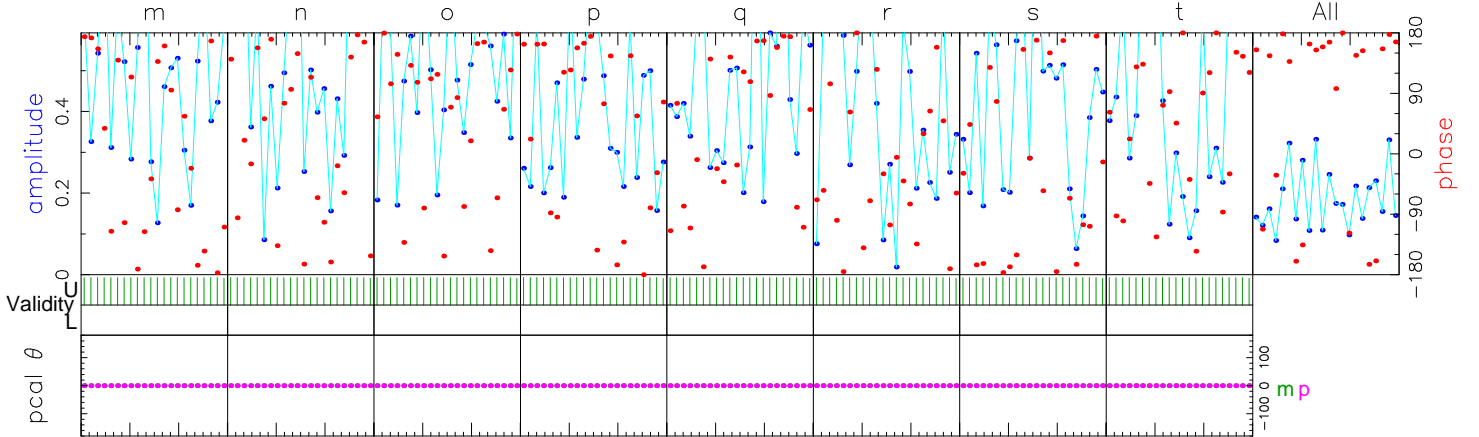


SNR 5.7  
 Int time 179.979  
 Amp 0.198  
 Phase 171.7  
 PFD 7.5e-01  
 Delays (us)  
 SBD -0.341611  
 MBD 0.003679  
 Fringe rate (Hz) 0.725454  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114538  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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				
	-166.6	155.5	146.6	167.4	173.9	-99.8	178.1	147.0	Phase	171.7				
	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.1	Ampl.	0.2				
	137.3	174.9	153.3	297.2	384.1	262.8	276.9	149.3	Sbd box	169.5				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
m	0	0	0	0	0	0	0	0	PC freqs					
p	0	0	0	0	0	0	0	0	PC freqs					
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000						
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.17897240240E+04								Apriori delay (usec)	-1.17893839528E+04	Resid mbdelay (usec)	3.67880E-03	+/-	1.9E-04
Sband delay (usec)	-1.17897255636E+04								Apriori clock (usec)	-5.1719418E+00	Resid sbdelay (usec)	-3.41611E-01	+/-	1.5E-03
Phase delay (usec)	-1.17893839473E+04								Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	5.53579E-06	+/-	6.5E-07
Delay rate (us/s)	6.03689983403E-01								Apriori rate (us/s)	6.03681561597E-01	Resid rate (us/s)	8.42181E-06	+/-	6.2E-09
Total phase (deg)			-79.7						Apriori accel (us/s/s)	4.73392319739E-05	Resid phase (deg)	171.7	+/-	20.1

RMS Theor. Amplitude 0.198 +/- 0.035  
 ph/seg (deg) 47.7 47.0 Search (1024X32) 0.149  
 amp/seg (%) 52.1 82.1 Interp. 0.000  
 ph/frq (deg) 40.6 28.4 Inc. seg. avg. 0.178  
 amp/frq (%) 31.7 49.5 Inc. frq. avg. 0.194  
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 m: az 56.4 el 20.0 pa -80.0 p: az 74.1 el 63.8 pa -86.7 u,v (fr/asec) -4309.558 1272.980 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mp..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mp.W.383.3MP2G6

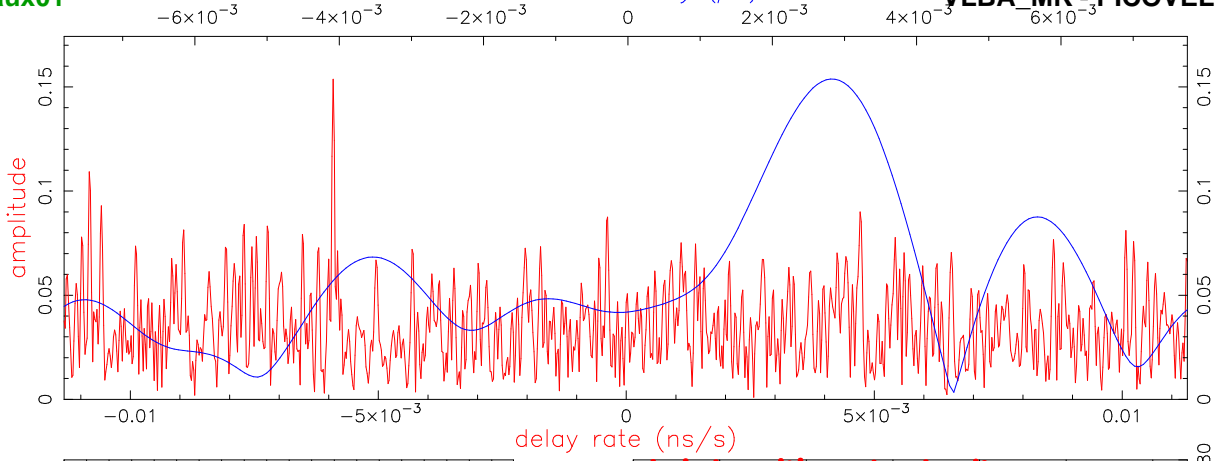
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mP

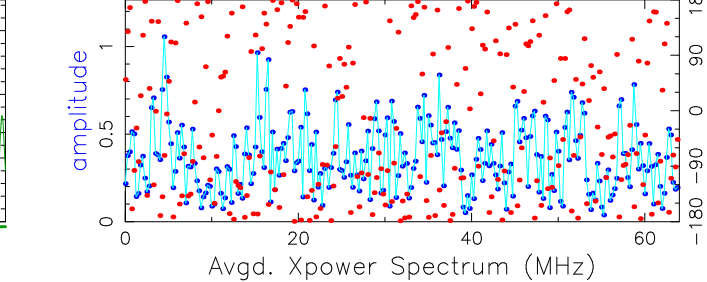
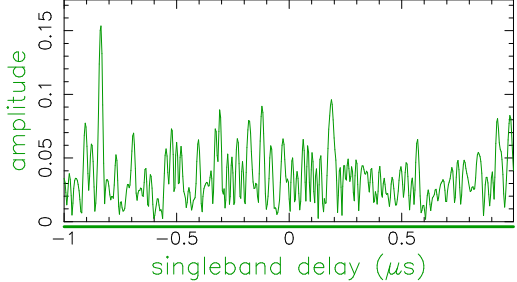
VLBA\_MK - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)



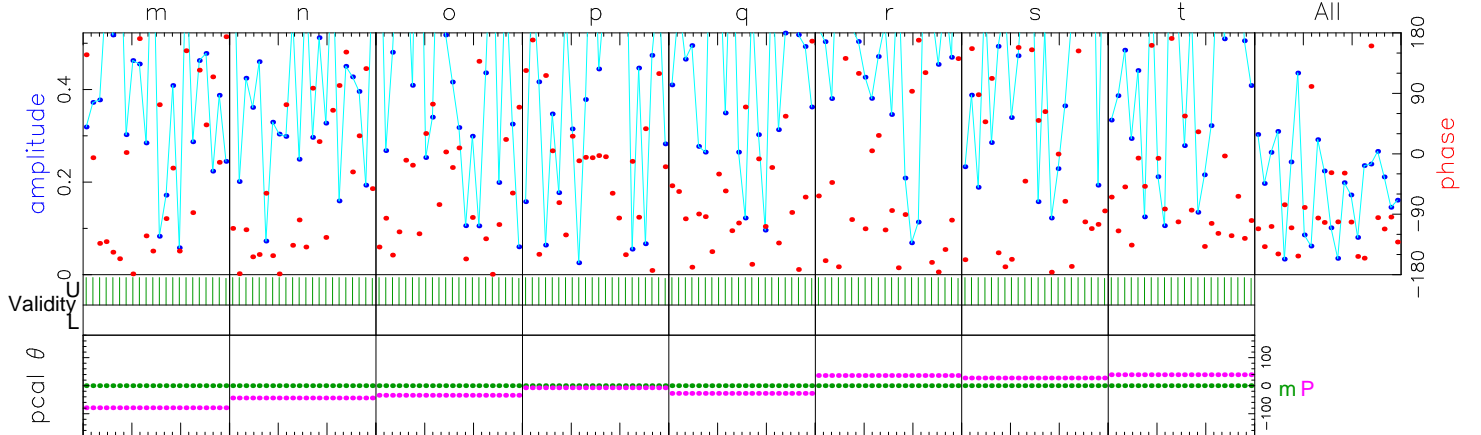
Fringe quality 0

SNR 5.7  
 Int time 179.988  
 Amp 0.174  
 Phase -119.1  
 PFD 7.7e-01  
 Delays (us)  
 SBD -0.837344  
 MBD 0.002787  
 Fringe rate (Hz)  
 -0.509366  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114539  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
m	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-4.35962448052E+03	Apriori delay (usec)	-4.35878351795E+03	Resid mbdelay (usec)	2.78743E-03	+/-	1.9E-04
Sband delay (usec)	-4.35962086145E+03	Apriori clock (usec)	1.4342861E+00	Resid sbdelay (usec)	-8.37344E-01	+/-	1.5E-03
Phase delay (usec)	-4.35878352179E+03	Apriori clockrate (us/s)	-6.1273707E-07	Resid phdelay (usec)	-3.84158E-06	+/-	6.5E-07
Delay rate (us/s)	2.08567864594E+00	Apriori rate (us/s)	2.08568455917E+00	Resid rate (us/s)	-5.91323E-06	+/-	6.2E-09
Total phase (deg)	-204.3	Apriori accel (us/s/s)	5.18273109003E-06	Resid phase (deg)	-119.1	+/-	20.1

ph/seg (deg) 49.6 47.1 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.9 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.3 28.4 Inc. seg. avg. 0.164 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.8 49.6 Inc. frq. avg. 0.182 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 P: az 294.1 el 33.7 pa 66.2 u,v (fr/asec) -15005.370 -1452.627 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

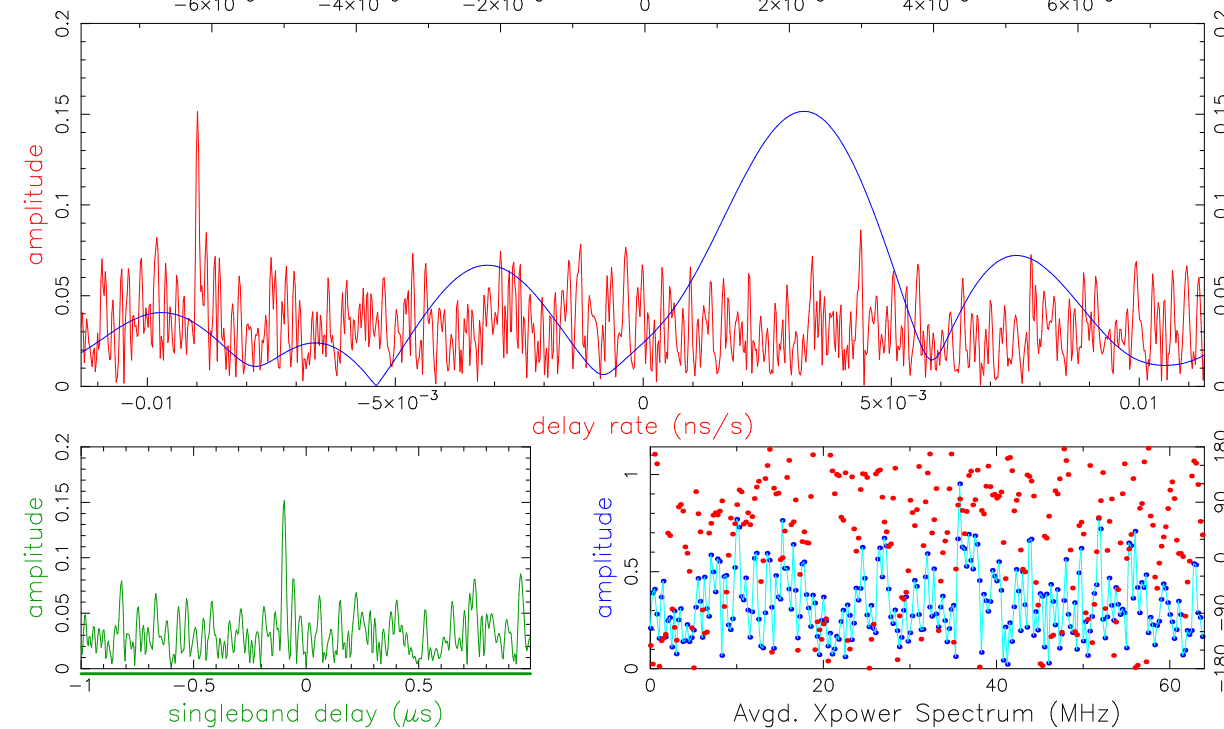
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mP..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mP.W.385.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

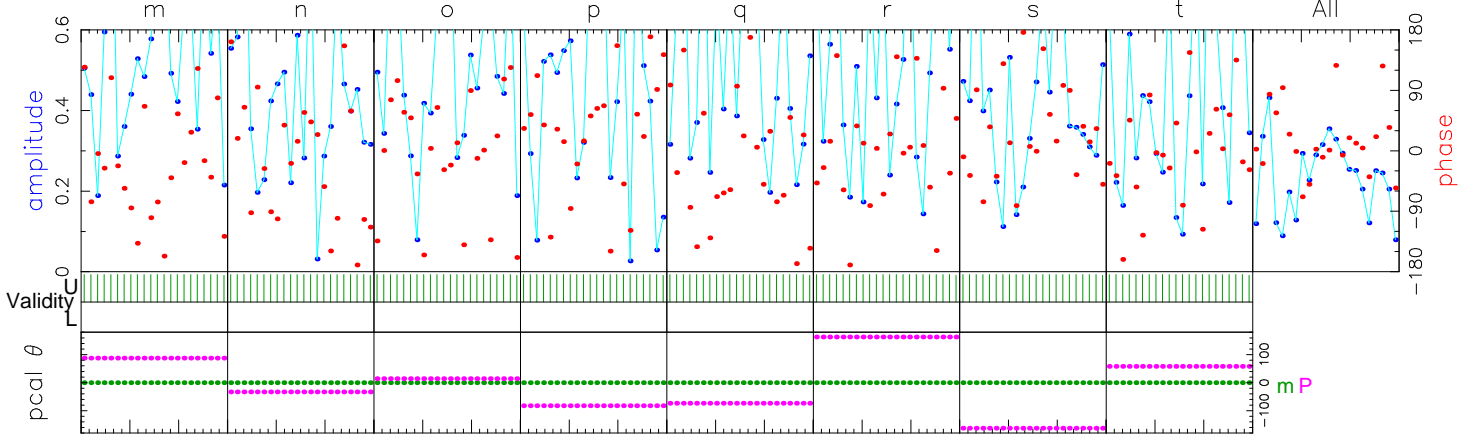
2013+370.3MP2G6, No0350, mP

VLBA\_MK - PICOVEL, fgroup W, pol RR



Fringe quality 0  
 SNR 5.6  
 Int time 179.988  
 Amp 0.200  
 Phase 13.2  
 PFD 9.4e-01  
 Delays (us)  
 SBD -0.098598  
 MBD 0.002153  
 Fringe rate (Hz)  
 -0.774720  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114541  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-23.6	5.6	42.2	39.0	-31.9	-4.4	28.8	10.8		Phase 13.2	
	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.3		Ampl. 0.2	
	141.2	216.8	282.8	230.8	506.8	223.4	16.6	354.9		Sbd box 231.8	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
m	0	0	0	0	0	0	0	0		PC freqs	
P	0	0	0	0	0	0	0	0		PC freqs	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
m:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
										Tracks	
Group delay (usec) (SBD)	-4.35887511452E+03		Apriori delay (usec)		-4.35878351795E+03		Resid mbdelay (usec)		2.15344E-03	+/- 1.9E-04	
Sband delay (usec)	-4.35888211620E+03		Apriori clock (usec)		1.4342861E+00		Resid sbdelay (usec)		-9.85982E-02	+/- 1.5E-03	
Phase delay (usec)	-4.35878351753E+03		Apriori clockrate (us/s)		-6.1273707E-07		Resid phdelay (usec)		4.24403E-07	+/- 6.6E-07	
Delay rate (us/s)	2.08567556544E+00		Apriori rate (us/s)		2.08568455917E+00		Resid rate (us/s)		-8.99373E-06	+/- 6.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		5.18273109003E-06		Resid phase (deg)		13.2	+/- 20.5	
	RMS	Theor.	Amplitude	0.200 +/- 0.036		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	52.4	48.1	Search (1024X32)	0.150		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	81.1	84.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	30.3	29.0	Inc. seg. avg.	0.227		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	36.9	50.7	Inc. frq. avg.	0.194		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
m: az 56.4 el 20.0 pa -80.0	P: az 294.1 el 33.7 pa 66.2		u, v (fr/asec)		-15005.370 -1452.627				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0350/mP..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/mP.W.393.3MP2G6								



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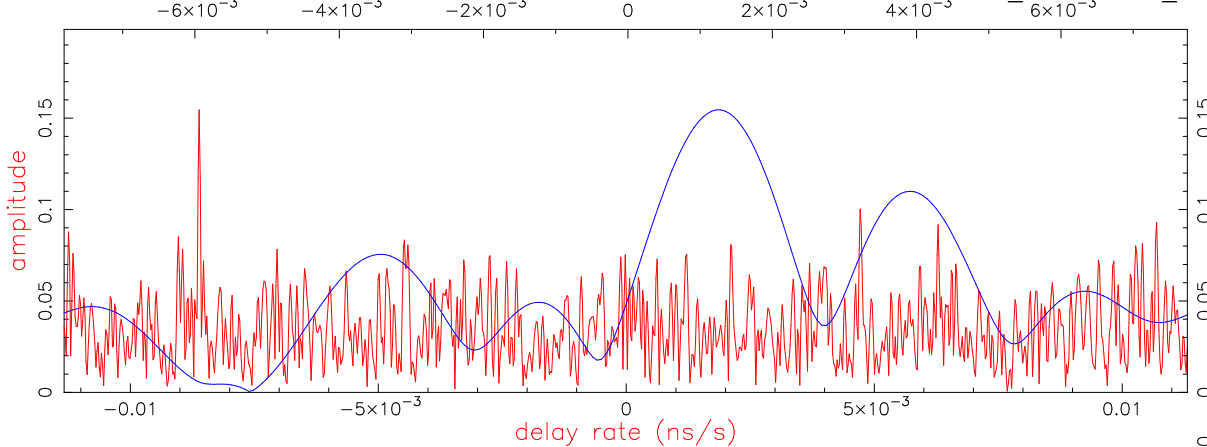
aux01

2013+370.3MP2G6, No0350, mp

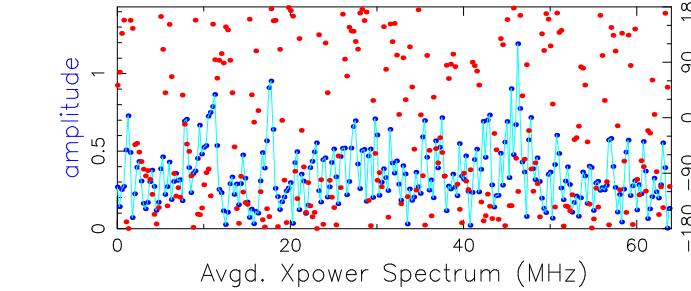
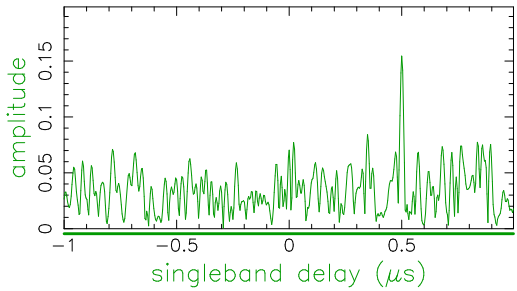
VLBA\_MK - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

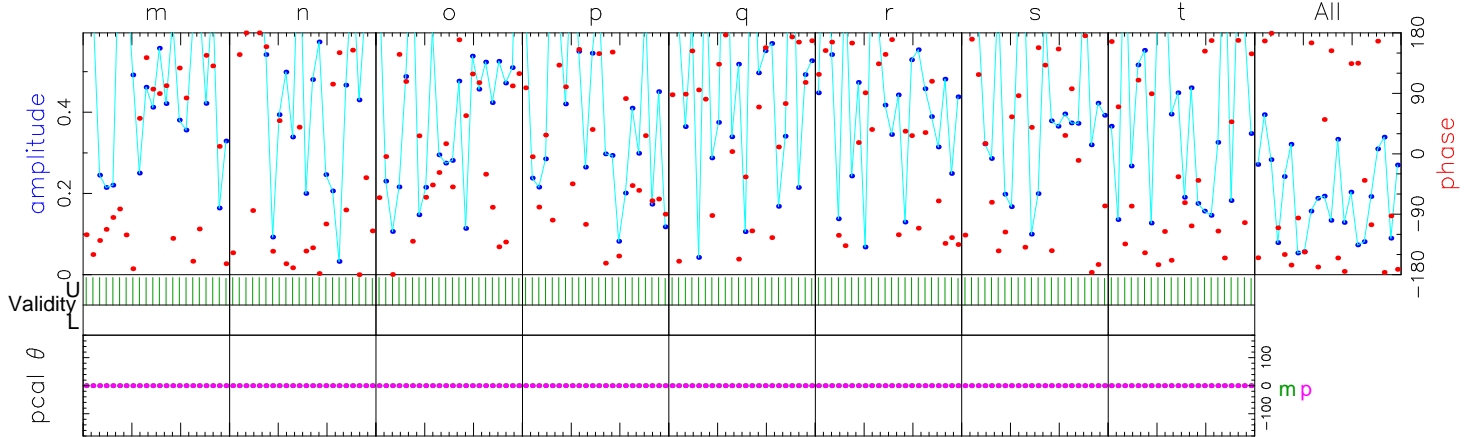


SNR 5.7  
 Int time 179.979  
 Amp 0.199  
 Phase -172.4  
 PFD 8.2e-01  
 Delays (us)  
 SBD 0.500181  
 MBD 0.001263  
 Fringe rate (Hz)  
 -0.742530  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114543  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.0	-166.5	-142.8	-22.7	157.1	166.1	-179.8	-146.4		-172.4
	0.3	0.3	0.0	0.0	0.3	0.2	0.2	0.3	Ampl.	0.2
	387.0	444.2	11.3	347.3	308.5	229.4	183.8	384.9	Sbd box	385.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.17888826901E+04		Apriori delay (usec)		-1.17893839528E+04		Resid mbdelay (usec)		1.26272E-03	+/- 1.9E-04
Sband delay (usec)	-1.1788837718E+04		Apriori clock (usec)		-5.1719418E+00		Resid sbdelay (usec)		5.00181E-01	+/- 1.5E-03
Phase delay (usec)	-1.17893839584E+04		Apriori clockrate (us/s)		-3.9319698E-07		Resid phdelay (usec)		-5.56039E-06	+/- 6.5E-07
Delay rate (us/s)	6.03672941563E-01		Apriori rate (us/s)		6.03681561597E-01		Resid rate (us/s)		-8.62003E-06	+/- 6.3E-09
Total phase (deg)			Apriori accel (us/s/s)		4.73392319739E-05		Resid phase (deg)		-172.4	+/- 20.2

ph/seg (deg) 55.2 47.4 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.4 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 65.3 28.6 Inc. seg. avg. 0.191 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 59.7 49.9 Inc. frq. avg. 0.193 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 p: az 74.1 el 63.8 pa -86.7 u,v (fr/asec) -4309.558 1272.980 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mp..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mp.W.398.3MP2G6

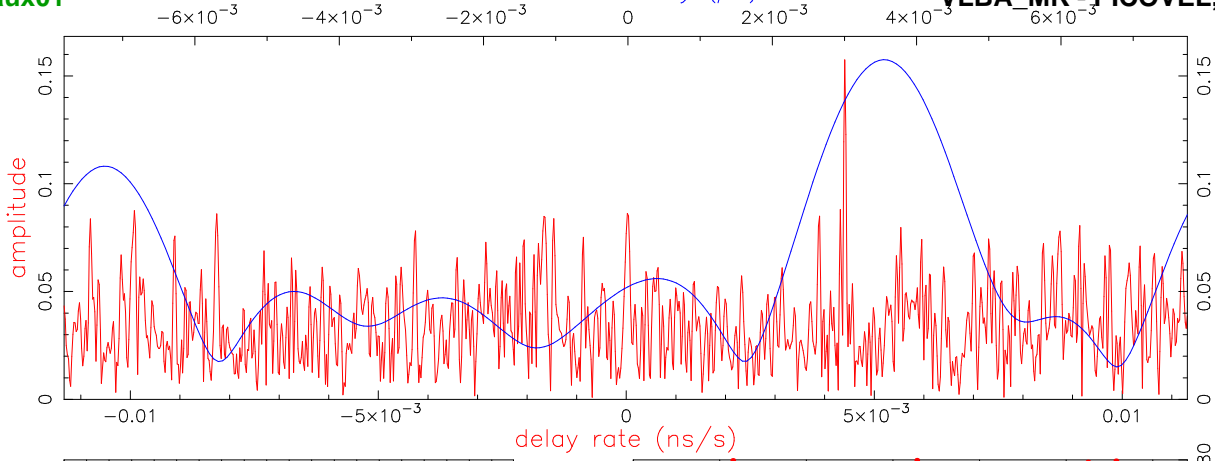
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mP

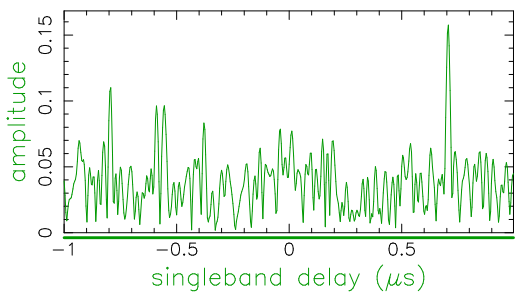
VLBA\_MK - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

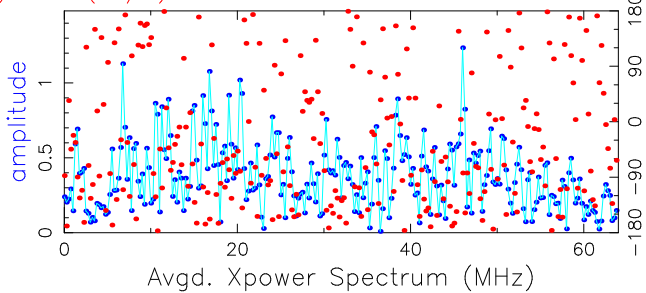


Fringe quality 0

SNR 5.8  
Int time 179.988  
Amp 0.168  
Phase 60.6  
PFD 5.7e-01  
Delays (us)  
SBD 0.706170  
MBD 0.003531  
Fringe rate (Hz) 0.380088  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

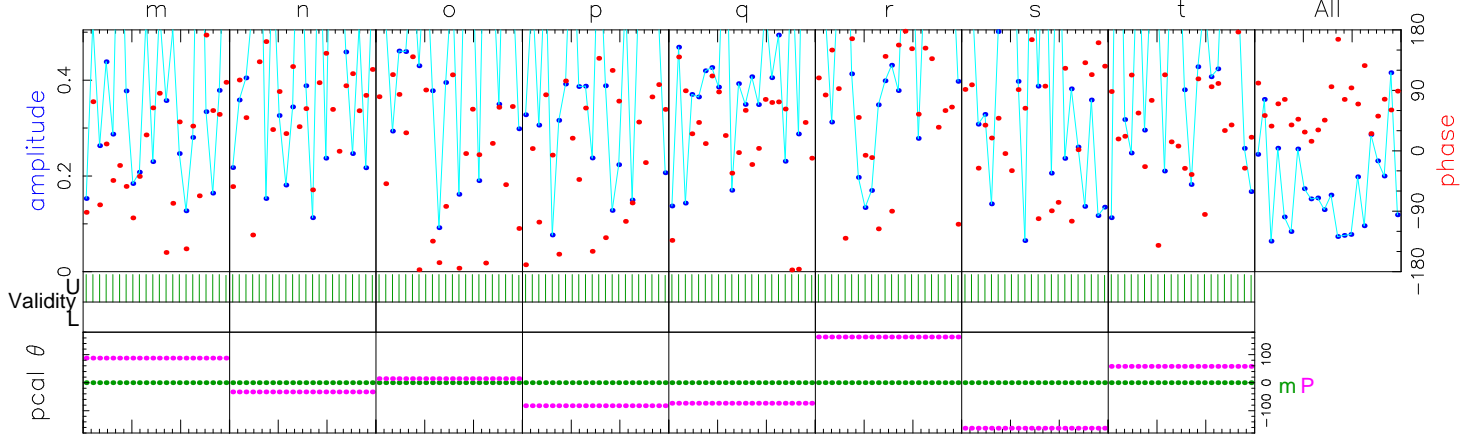


delay rate (ns/s)



Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 112000.00  
Stop 112300.22  
FRT 112130.00  
Corr/FF/build  
2024:353:153332  
2025:041:114543  
2024:113:095956  
RA & Dec (J2000)  
20h15m28.729786s  
+37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
m	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	-4.35807686204E+03	Apriori delay (usec)	-4.35878351795E+03	Resid mbdelay (usec)	3.53091E-03	+/-	1.9E-04
Sband delay (usec)	-4.35807734795E+03	Apriori clock (usec)	1.4342861E+00	Resid sbdelay (usec)	7.06170E-01	+/-	1.5E-03
Phase delay (usec)	-4.35878351600E+03	Apriori clockrate (us/s)	-6.1273707E-07	Resid phdelay (usec)	1.95509E-06	+/-	6.4E-07
Delay rate (us/s)	2.08568897161E+00	Apriori rate (us/s)	2.08568455917E+00	Resid rate (us/s)	4.41244E-06	+/-	6.1E-09
Total phase (deg)	-24.5	Apriori accel (us/s/s)	5.18273109003E-06	Resid phase (deg)	60.6	+/-	19.8

ph/seg (deg) 35.7 46.3 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 60.7 80.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 39.1 27.9 Inc. seg. avg. 0.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 45.9 48.8 Inc. frq. avg. 0.178 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
m: az 56.4 el 20.0 pa -80.0 P: az 294.1 el 33.7 pa 66.2 u,v (fr/asec) -15005.370 -1452.627 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mP..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mP.W.400.3MP2G6

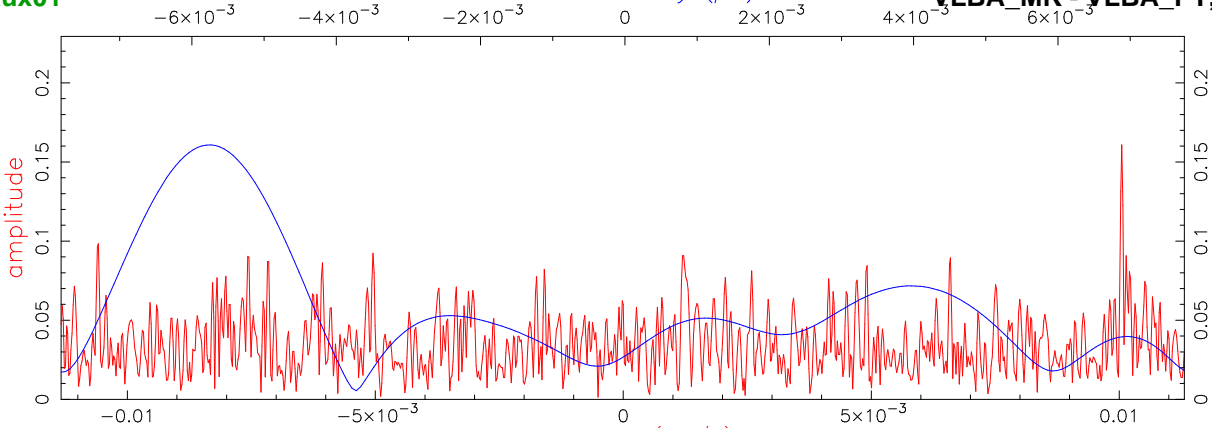
Mk4/DiFX fourfit 3.25 rev 0

aux01

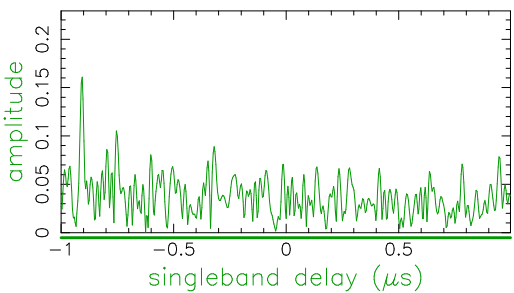
2013+370.3MP2G6, No0350, mp

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

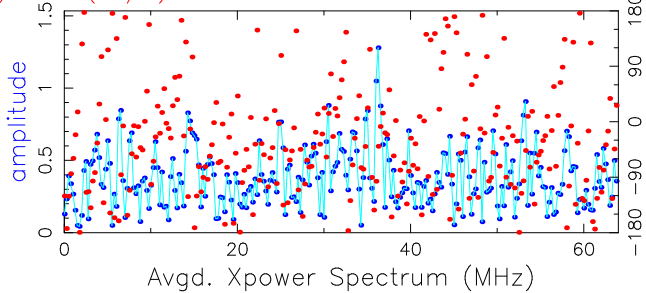
multiband delay ( $\mu$ s)



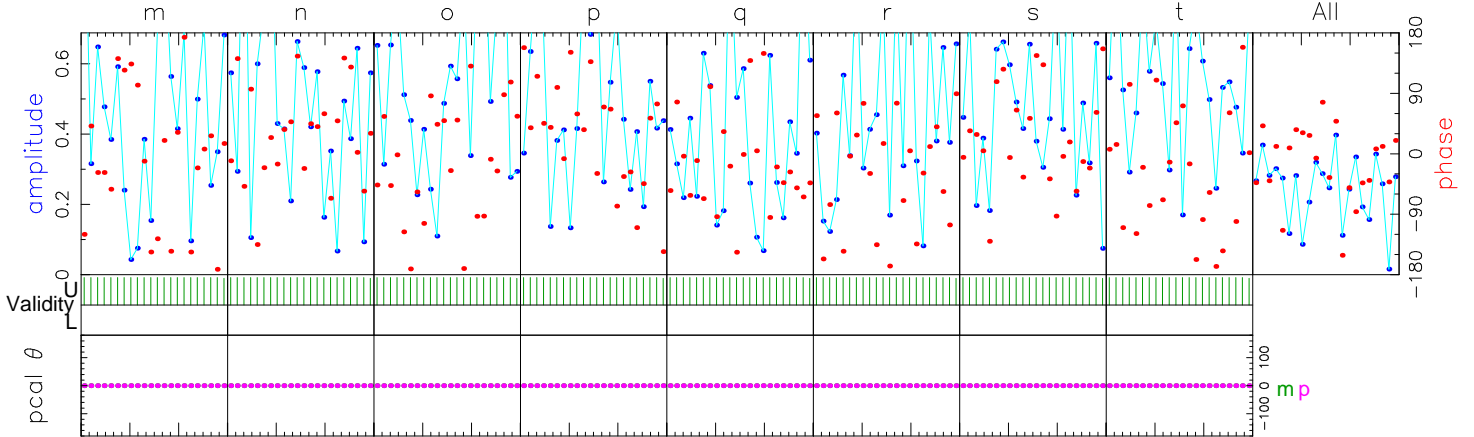
Fringe quality 0  
 SNR 5.9  
 Int time 179.979  
 Amp 0.229  
 Phase -3.7  
 PFD 3.0e-01  
 Delays (us)  
 SBD -0.907370  
 MBD -0.005785  
 Fringe rate (Hz) 0.866603  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114545  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"



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	
	-35.8	9.1	-28.3	44.8	-41.8	11.7	22.2	-33.1	Phase	-3.7	
	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.2	Ampl.	0.2	
	49.1	429.9	169.8	189.1	233.9	189.5	48.5	174.0	Sbd box	24.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
m	0	0	0	0	0	0	0	0	PC freqs		
p	0	0	0	0	0	0	0	0	PC freqs		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.17902959875E+04		Apriori delay (usec)		-1.17893839528E+04		Resid mbdelay (usec)		-5.78462E-03	+/- 1.8E-04	
Sband delay (usec)	-1.17902913231E+04		Apriori clock (usec)		-5.1719418E+00		Resid sbdelay (usec)		-9.07370E-01	+/- 1.4E-03	
Phase delay (usec)	-1.17893839530E+04		Apriori clockrate (us/s)		-3.9319698E-07		Resid phdelay (usec)		-1.18153E-07	+/- 6.2E-07	
Delay rate (us/s)	6.03691622003E-01		Apriori rate (us/s)		6.03681561597E-01		Resid rate (us/s)		1.00604E-05	+/- 6.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		4.73392319739E-05		Resid phase (deg)		-3.7	+/- 19.3	
	RMS	Theor.	Amplitude	0.229 +/- 0.039		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	55.3	45.2	Search (1024X32)	0.155		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	77.3	78.9	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	35.1	27.3	Inc. seg. avg.	0.264		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	32.2	47.6	Inc. frq. avg.	0.236		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
m: az 56.4 el 20.0 pa -80.0		p: az 74.1 el 63.8 pa -86.7		u,v (fr/asec) -4309.558 1272.980						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0350/mp..3MP2G6		Output file: /Exps/c241c/v2/3mm/1234/No0350/mp.W.409.3MP2G6							

Mk4/DiFX fourfit 3.25 rev 0

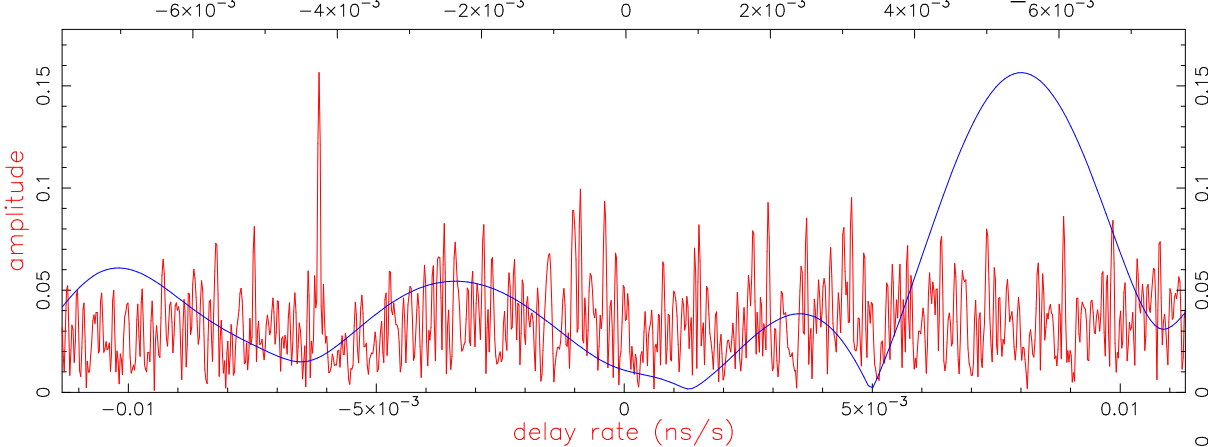
aux01

2013+370.3MP2G6, No0350, mP

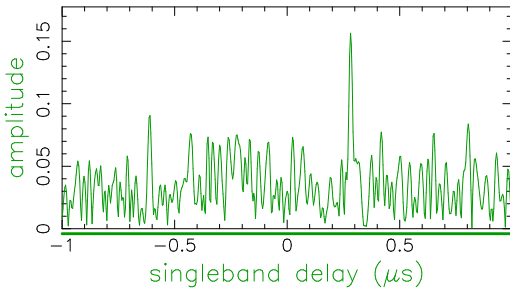
VLBA\_MK - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

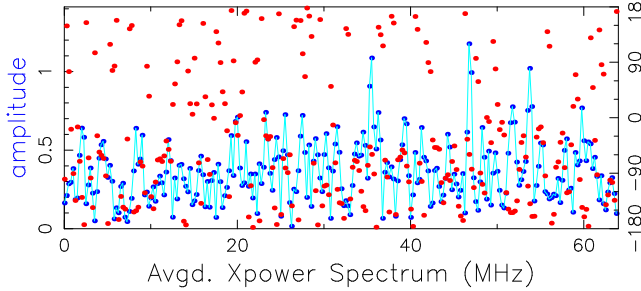
Fringe quality 0



SNR 5.8  
 Int time 179.988  
 Amp 0.178  
 Phase -162.9  
 PFD 6.6e-01  
 Delays (us)  
 SBD 0.281889  
 MBD 0.005495  
 Fringe rate (Hz)  
 -0.530243  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

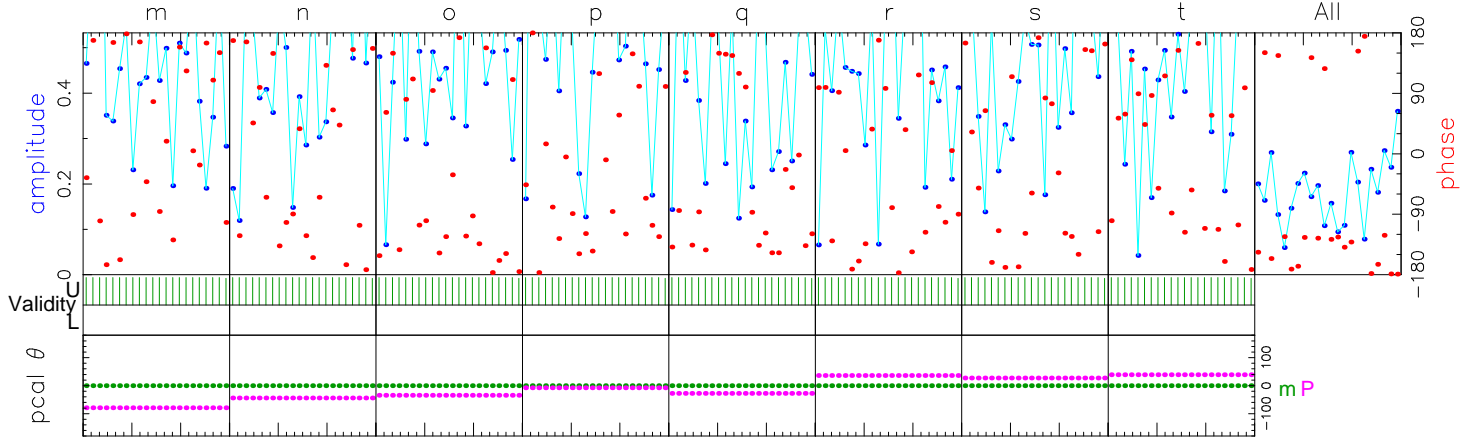


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114545  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.1	-176.5	-163.5	-140.5	-140.0	161.4	-171.9	-162.6	Phase	-162.9
	0.1	0.2	0.3	0.1	0.2	0.1	0.3	0.1	Ampl.	0.2
	97.4	422.9	328.5	3.0	502.8	375.6	329.3	34.5	Sbd box	329.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.35849677251E+03	Apriori delay (usec)	-4.35878351795E+03	Resid mbdelay (usec)	5.49545E-03	+/-	1.9E-04
Sband delay (usec)	-4.35850162895E+03	Apriori clock (usec)	1.4342861E+00	Resid sbdelay (usec)	2.81889E-01	+/-	1.5E-03
Phase delay (usec)	-4.35878352320E+03	Apriori clockrate (us/s)	-6.1273707E-07	Resid phdelay (usec)	-5.25166E-06	+/-	6.4E-07
Delay rate (us/s)	2.08567840358E+00	Apriori rate (us/s)	2.08568455917E+00	Resid rate (us/s)	-6.15559E-06	+/-	6.2E-09
Total phase (deg)	-248.0	Apriori accel (us/s/s)	5.18273109003E-06	Resid phase (deg)	-162.9	+/-	19.9

ph/seg (deg)	34.9	Theor.	46.7	Amplitude	0.178 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	48.8	Search (1024X32)	0.154	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.7	Inc. seg. avg.	0.157	Inc. frq. avg.	0.164	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.9	Inc. frq. avg.	0.164	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
m: az 56.4 el 20.0 pa -80.0		P: az 294.1 el 33.7 pa 66.2		u,v (fr/asec)	-15005.370 -1452.627	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mP..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mP.W.411.3MP2G6

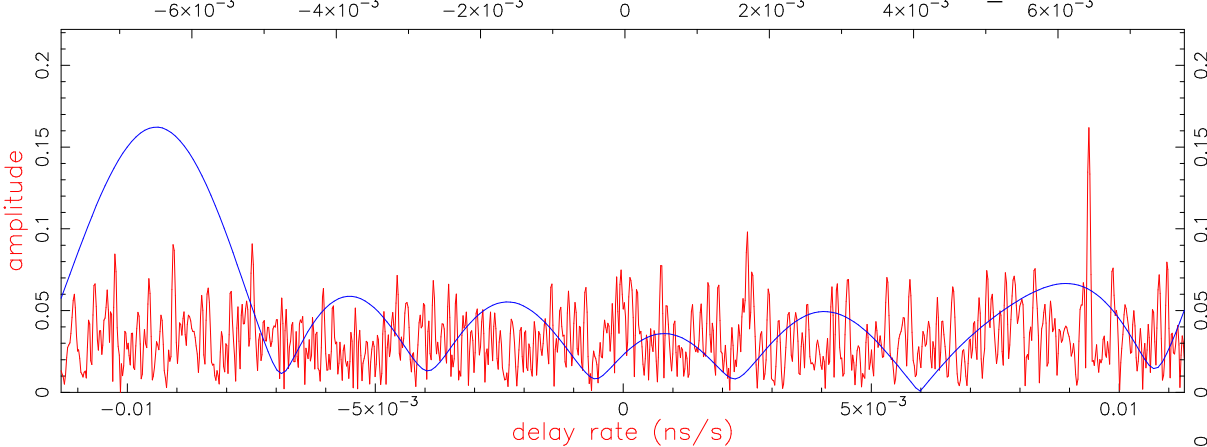
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mX

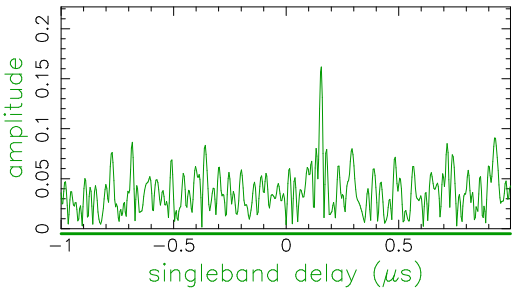
VLBA\_MK - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

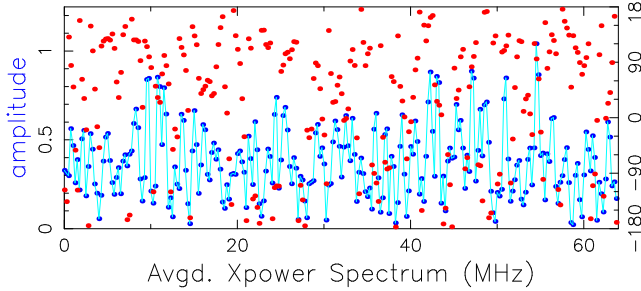


Fringe quality 0

SNR 6.0  
 Int time 179.855  
 Amp 0.222  
 Phase 158.6  
 PFD 2.0e-01  
 Delays (us)  
 SBD 0.154838  
 MBD -0.006569  
 Fringe rate (Hz) 0.810864  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

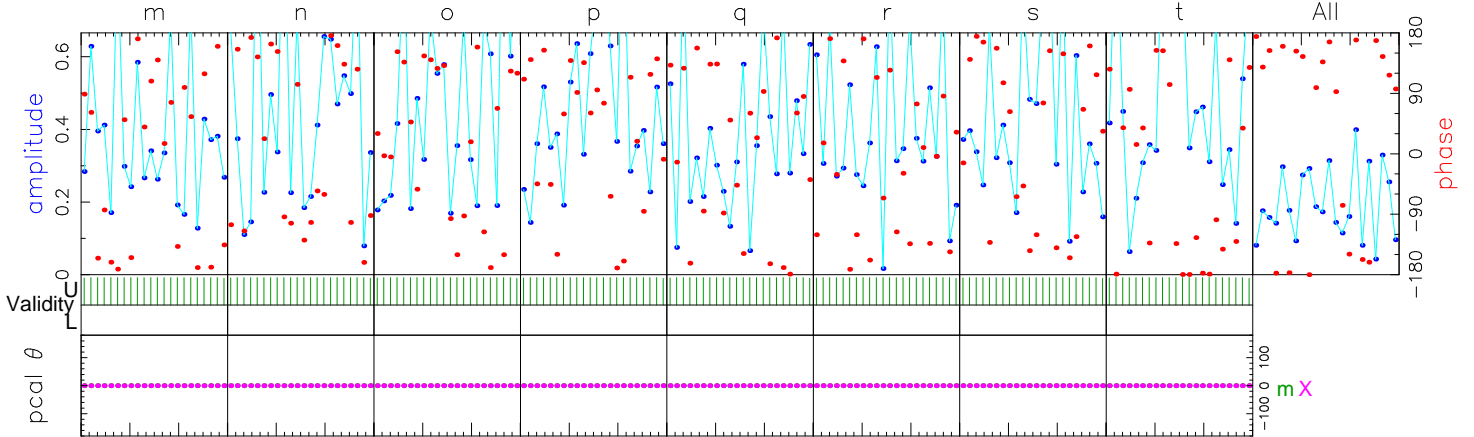


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114534  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	-3.85636558578E+03	Apriori delay (usec)	-3.85651526676E+03	Resid mbdelay (usec)	-6.56902E-03	+/-	1.8E-04
Sband delay (usec)	-3.85636042901E+03	Apriori clock (usec)	-1.1236600E+02	Resid sbdelay (usec)	1.54838E-01	+/-	1.4E-03
Phase delay (usec)	-3.85651526164E+03	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	5.11601E-06	+/-	6.1E-07
Delay rate (us/s)	1.80891096556E+00	Apriori rate (us/s)	1.80890155224E+00	Resid rate (us/s)	9.41332E-06	+/-	5.9E-09
Total phase (deg)	130.4	Apriori accel (us/s/s)	-1.44646889891E-05	Resid phase (deg)	158.6	+/-	19.0

ph/seg (deg)	42.2	Theor.	44.6	Amplitude	0.222 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	61.5	Search (1024X32)	0.161	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	26.3	Inc. seg. avg.	0.203	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.9	Inc. frq. avg.	0.212	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
				Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 56.4 el 20.0 pa -80.0 X: az 290.7 el 31.7 pa 39.2 u,v (fr/asec) -13033.841 -4329.452 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mX...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mX.W.364.3MP2G6

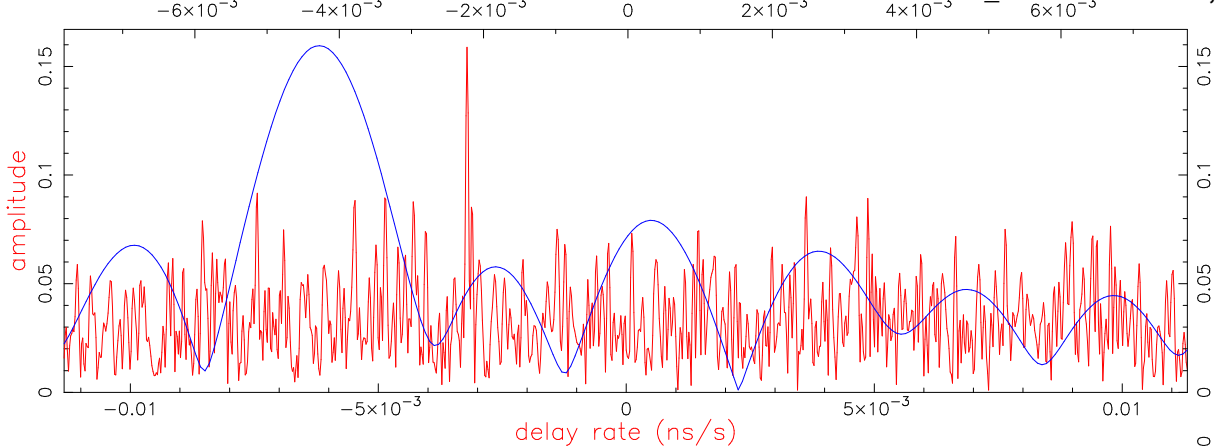
# Mk4/DiFX fourfit 3.25 rev 0

aux01

# 2013+370.3MP2G6, No0350, mX

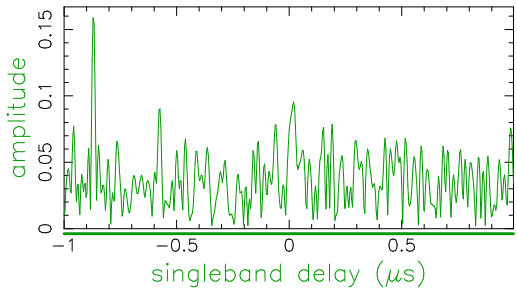
VLBA\_MK - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

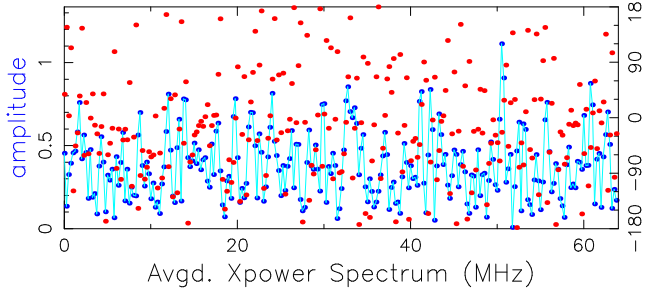


Fringe quality 0

SNR 5.9  
 Int time 179.855  
 Amp 0.167  
 Phase 85.5  
 PFD 3.3e-01  
 Delays (us)  
 SBD -0.869605  
 MBD -0.004187  
 Fringe rate (Hz)  
 -0.277492  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

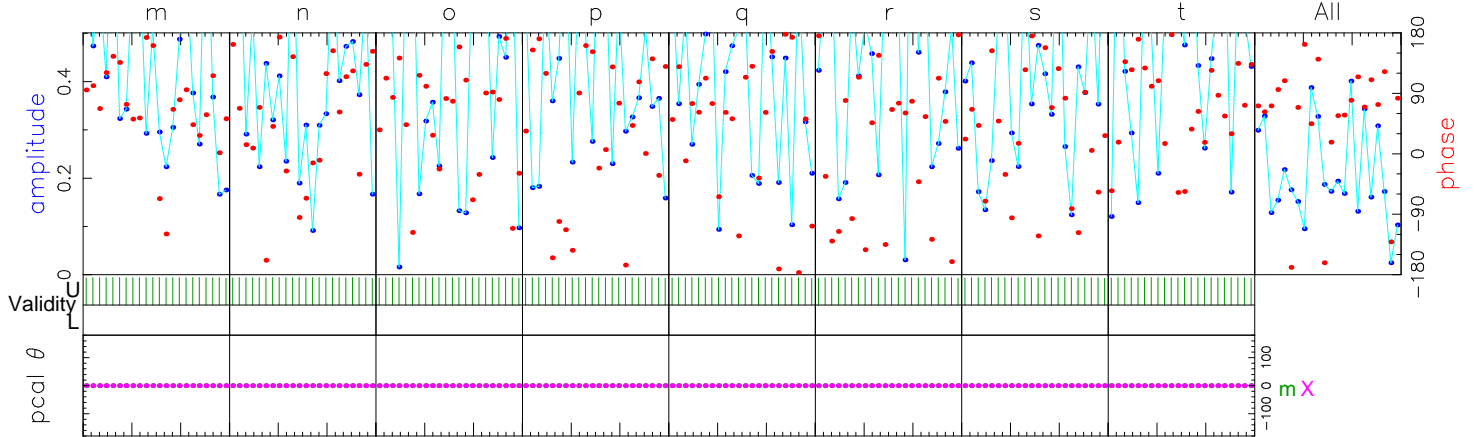


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114536  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-3.85737882914E+03	Apriori delay (usec)	-3.85651526676E+03	Resid mbdelay (usec)	-4.18739E-03	+/-	1.8E-04
Sband delay (usec)	-3.85738487201E+03	Apriori clock (usec)	-1.1236600E+02	Resid sbdelay (usec)	-8.69605E-01	+/-	1.5E-03
Phase delay (usec)	-3.85651526400E+03	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	2.75561E-06	+/-	6.2E-07
Delay rate (us/s)	1.80889833082E+00	Apriori rate (us/s)	1.80890155224E+00	Resid rate (us/s)	-3.22141E-06	+/-	6.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.44646889891E-05	Resid phase (deg)	85.5	+/-	19.3

ph/seg (deg)	55.0	Theor.	45.4	Amplitude	0.167 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.8	Search (1024X32)	0.151	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.3	Inc. seg. avg.	0.166	Inc. frq. avg.	0.152	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.5	Inc. frq. avg.	0.152			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 56.4 el 20.0 pa -80.0 X: az 290.7 el 31.7 pa 39.2 u,v (fr/asec) -13033.841 -4329.452 simultaneous interpolator

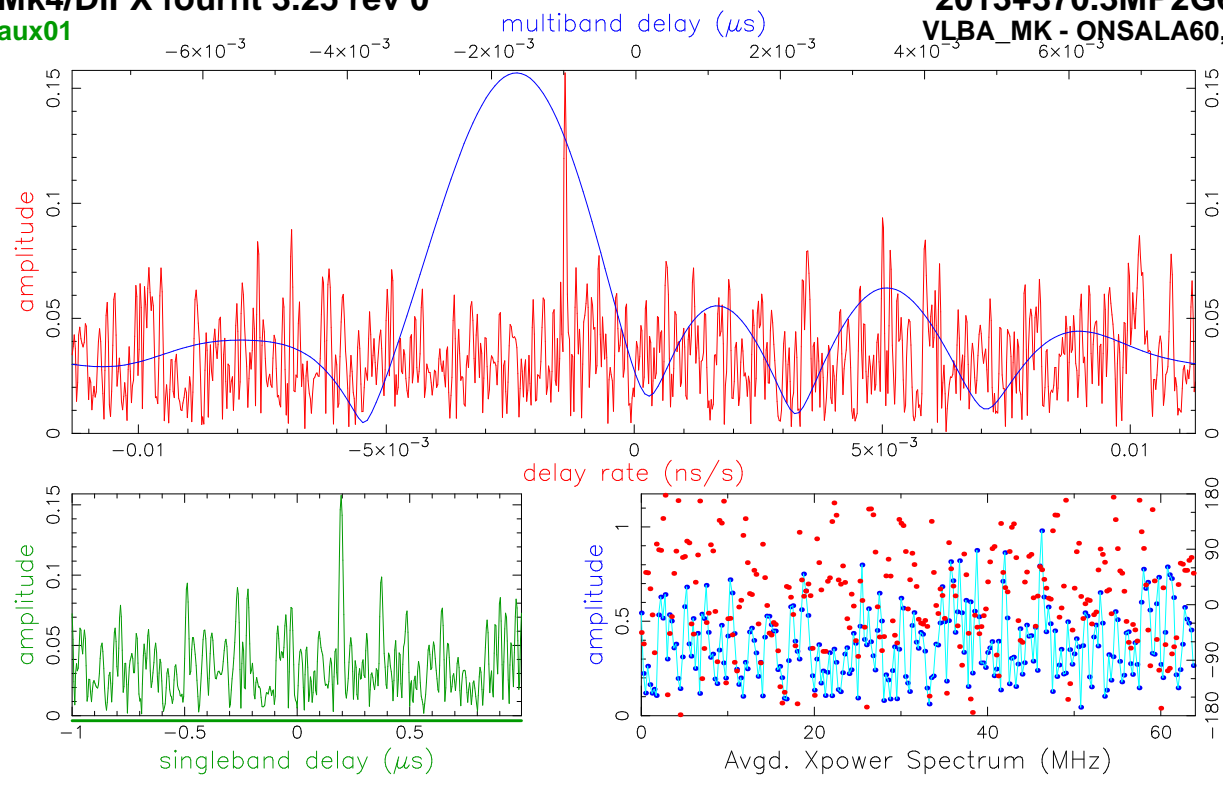
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mX...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mX.W.376.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

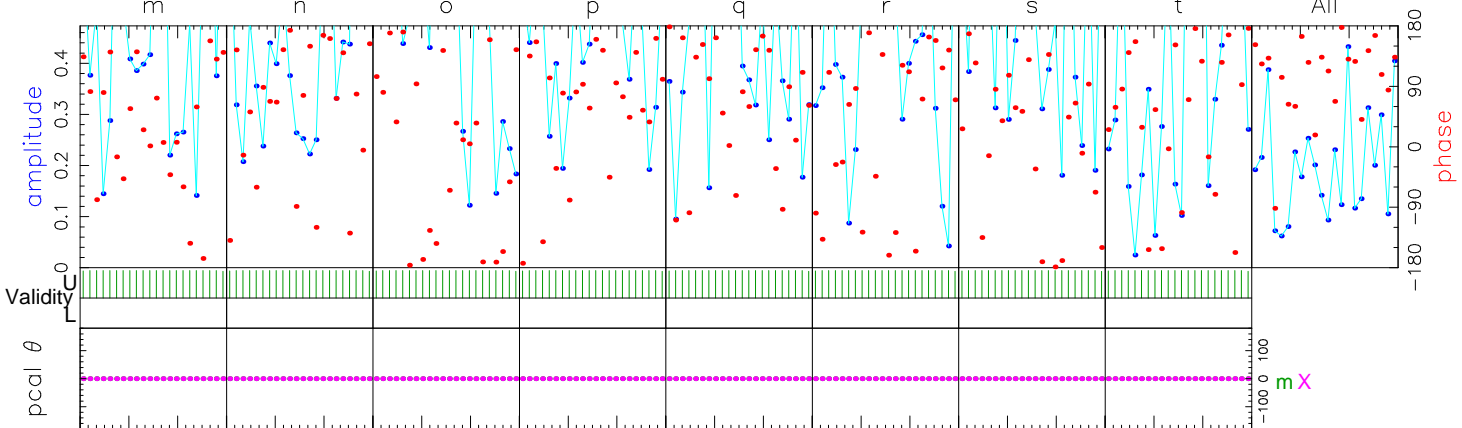
2013+370.3MP2G6, No0350, mX

VLBA\_MK - ONSALA60, fgroup W, pol LR



Fringe quality 0  
 SNR 5.8  
 Int time 179.855  
 Amp 0.158  
 Phase 120.5  
 PFD 6.7e-01  
 Delays (us)  
 SBD 0.194941  
 MBD -0.001667  
 Fringe rate (Hz)  
 -0.120428  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114538  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.2	129.4	146.6	112.7	114.9	157.5	87.5	126.7	Phase	120.5
	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	205.0	461.9	147.9	90.8	99.3	118.8	420.4	378.1	Sbd box	306.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -3.85631380845E+03 Apriori delay (usec) -3.85651526676E+03 Resid mbdelay (usec) -1.66669E-03 +/- 1.9E-04  
 Sband delay (usec) -3.85632032551E+03 Apriori clock (usec) -1.1236600E+02 Resid sbdelay (usec) 1.94941E-01 +/- 1.5E-03  
 Phase delay (usec) -3.85651526287E+03 Apriori clockrate (us/s) -1.2311231E-06 Resid phdelay (usec) 3.88715E-06 +/- 6.4E-07  
 Delay rate (us/s) 1.80890015419E+00 Apriori rate (us/s) 1.80890155224E+00 Resid rate (us/s) -1.39805E-06 +/- 6.2E-09  
 Total phase (deg) 92.3 Apriori accel (us/s/s) -1.44646889891E-05 Resid phase (deg) 120.5 +/- 19.9

ph/seg (deg) 52.1 Theor. 46.7 Amplitude 0.158 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.9 81.6 Search (1024X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.3 28.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 30.3 49.2 Inc. seg. avg. 0.153 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 X: az 290.7 el 31.7 pa 39.2 u,v (fr/asec) -13033.841 -4329.452 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mX...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mX.W.381.3MP2G6

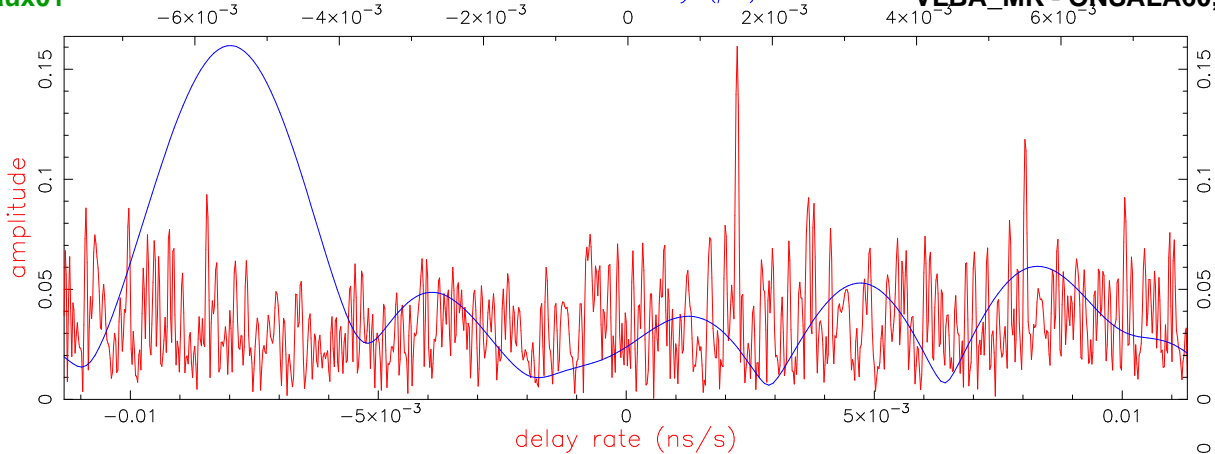
# Mk4/DiFX fourfit 3.25 rev 0

aux01

# 2013+370.3MP2G6, No0350, mX

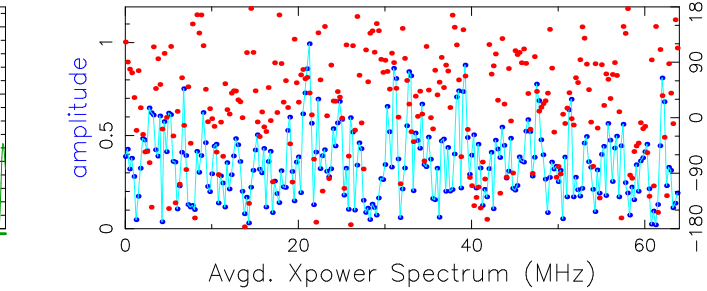
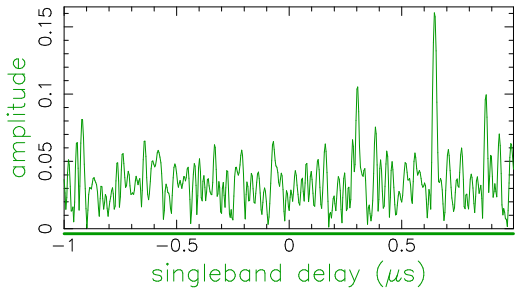
VLBA\_MK - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)



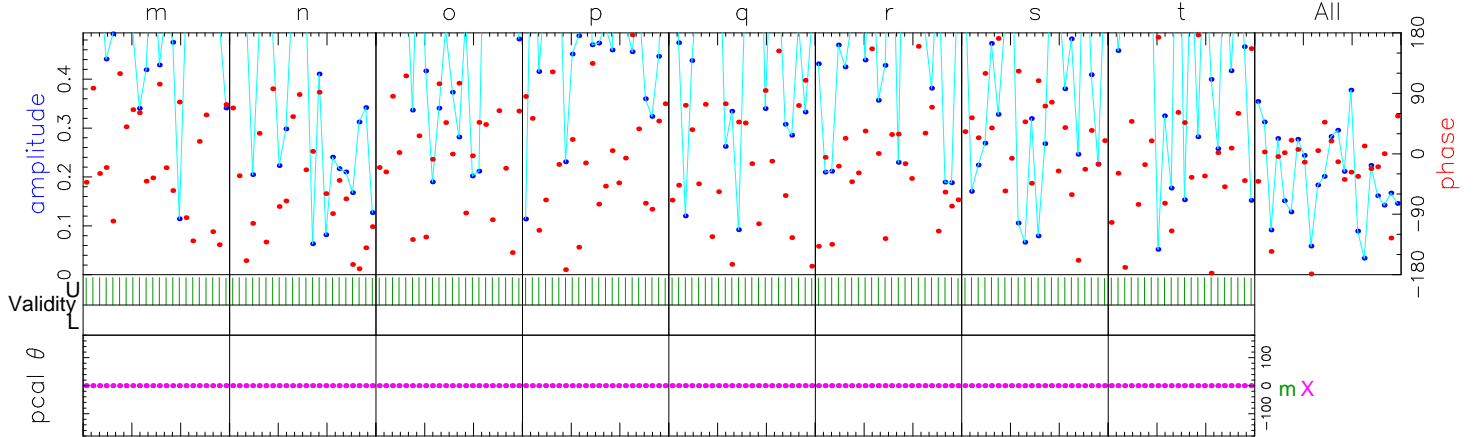
Fringe quality 0

SNR 6.0  
 Int time 179.855  
 Amp 0.165  
 Phase -9.3  
 PFD 2.9e-01  
 Delays (us)  
 SBD 0.646026  
 MBD -0.005438  
 Fringe rate (Hz) 0.192771  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114541  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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					
	-9.6	-4.2	14.0	-9.4	-34.2	-24.7	12.2	-23.4	Phase	-9.3					
	0.2	0.0	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2					
	20.7	248.1	150.0	184.3	221.6	302.3	422.6	46.0	Sbd box	422.4					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used						
m	0	0	0	0	0	0	0	0	PC freqs						
X	0	0	0	0	0	0	0	0	PC freqs						
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC						
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
X	1000	1000	1000	1000	1000	1000	1000	1000							
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids						
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks						
									Tracks						
Group delay (usec) (SBD)	-3.85586445446E+03								Apriori delay (usec)	-3.85651526676E+03	Resid mbdelay (usec)	-5.43770E-03	+/-	1.8E-04	
Sband delay (usec)	-3.85586924101E+03								Apriori clock (usec)	-1.1236600E+02	Resid sbdelay (usec)	6.46026E-01	+/-	1.4E-03	
Phase delay (usec)	-3.85651526706E+03								Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-2.99255E-07	+/-	6.2E-07	
Delay rate (us/s)	1.80890379012E+00								Apriori rate (us/s)	1.80890155224E+00	Resid rate (us/s)	2.23788E-06	+/-	6.0E-09	
Total phase (deg)			-37.5						Apriori accel (us/s/s)	-1.44646889891E-05	Resid phase (deg)	-9.3	+/-	19.3	
	RMS	Theor.	Amplitude	0.165 +/- 0.028					Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5			
ph/seg (deg)	58.0	45.2	Search (1024X32)	0.158					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	61.4	78.8	Interp.	0.000					Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.6	27.2	Inc. seg. avg.	0.155					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	35.2	47.5	Inc. frq. avg.	0.153					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
m: az 56.4 el 20.0 pa -80.0			X: az 290.7 el 31.7 pa 39.2						u,v (fr/asec) -13033.841 -4329.452					simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0350/mX...3MP2G6						Output file: /Exps/c241c/v2/3mm/1234/No0350/mX.W.395.3MP2G6						



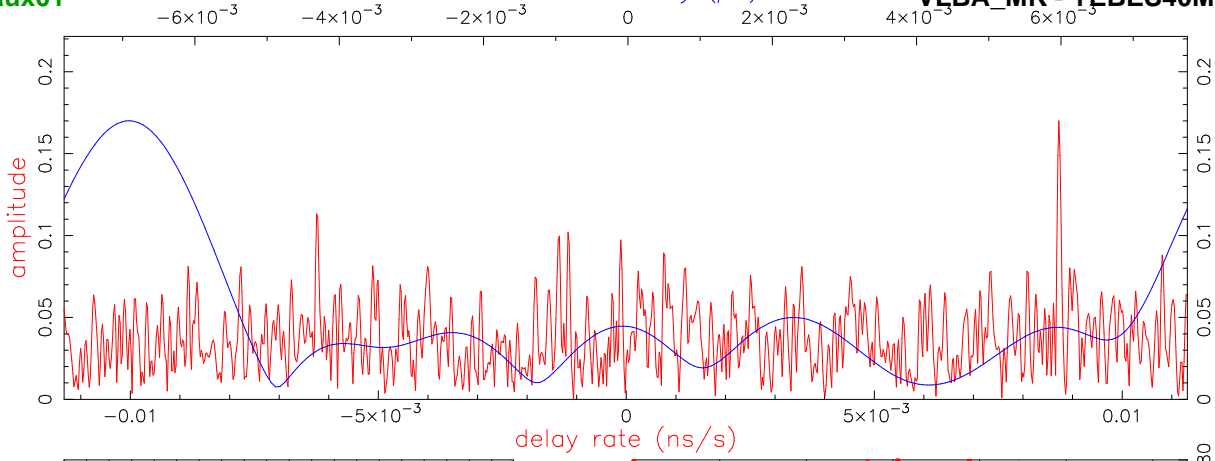
Mk4/DiFX fourfit 3.25 rev 0

aux01

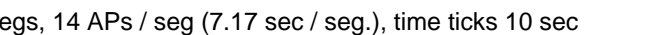
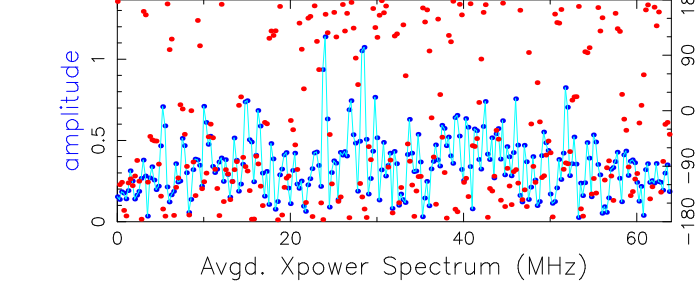
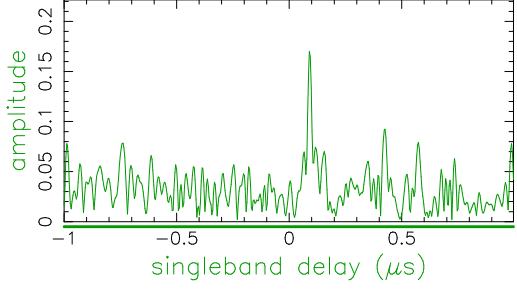
2013+370.3MP2G6, No0350, mY

VLBA\_MK - YEBES40M, fgroup W, pol LL

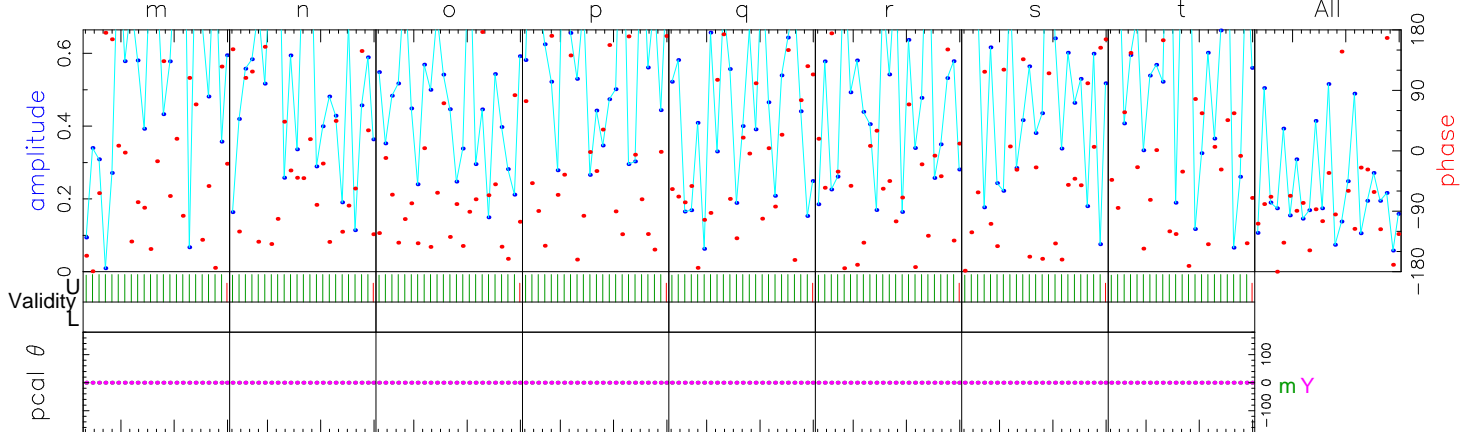
multiband delay ( $\mu$ s)



Fringe quality 0  
 SNR 6.0  
 Int time 162.343  
 Amp 0.222  
 Phase -93.0  
 PFD 2.7e-01  
 Delays (us)  
 SBD 0.091006  
 MBD -0.006866  
 Fringe rate (Hz) 0.753298  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112017.41  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114609  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.9	-80.9	-97.4	-100.8	-92.8	-93.0	-123.5	-76.6	Phase	-93.0
	0.2	0.2	0.4	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	18.5	197.6	147.8	68.1	441.5	294.5	496.4	4.8	Sbd box	280.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.59609064886E+03	Apriori delay (usec)	-4.59617753256E+03	Resid mbdelay (usec)	-6.86630E-03	+/-	1.8E-04
Sband delay (usec)	-4.59608652656E+03	Apriori clock (usec)	1.1120547E+02	Resid sbdelay (usec)	9.10060E-02	+/-	1.4E-03
Phase delay (usec)	-4.59617753556E+03	Apriori clockrate (us/s)	1.4412690E-02	Resid phdelay (usec)	-2.99779E-06	+/-	6.2E-07
Delay rate (us/s)	2.04235246350E+00	Apriori rate (us/s)	2.04234371845E+00	Resid rate (us/s)	8.74505E-06	+/-	6.6E-09
Total phase (deg)	-328.6	Apriori accel (us/s/s)	3.82848223628E-06	Resid phase (deg)	-93.0	+/-	19.2

ph/seg (deg) 51.8 46.1 Search (1024X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 87.7 80.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.4 27.2 Inc. seg. avg. 0.231 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.7 47.4 Inc. frq. avg. 0.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 Y: az 292.0 el 34.9 pa 62.2 u,v (fr/asec) -14695.440 -1865.998 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mY...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mY.W.490.3MP2G6

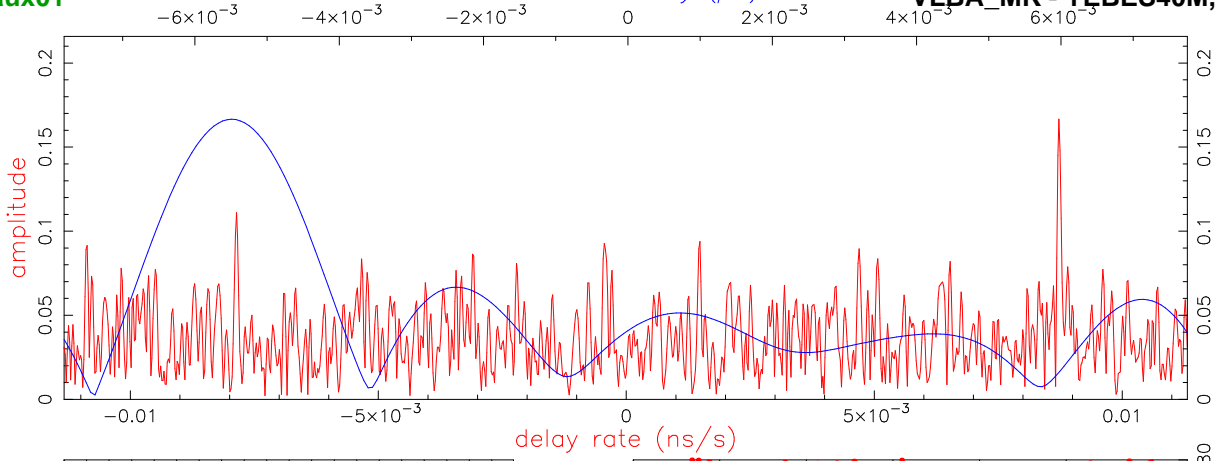
Mk4/DiFX fourfit 3.25 rev 0

aux01

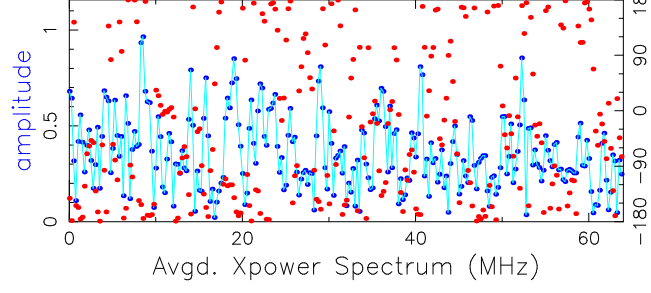
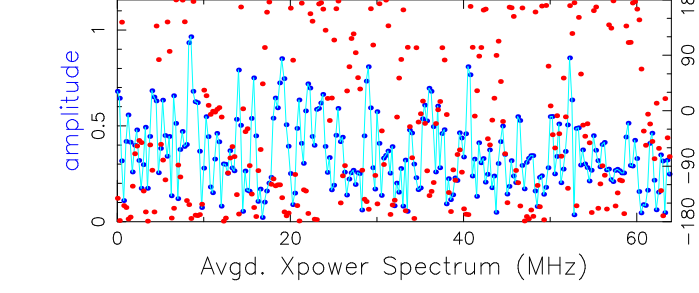
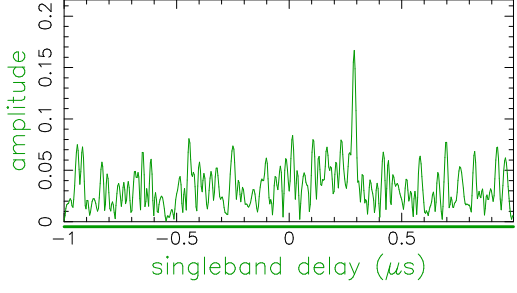
2013+370.3MP2G6, No0350, mY

VLBA\_MK - YEYES40M, fgroup W, pol RR

multiband delay ( $\mu$ s)

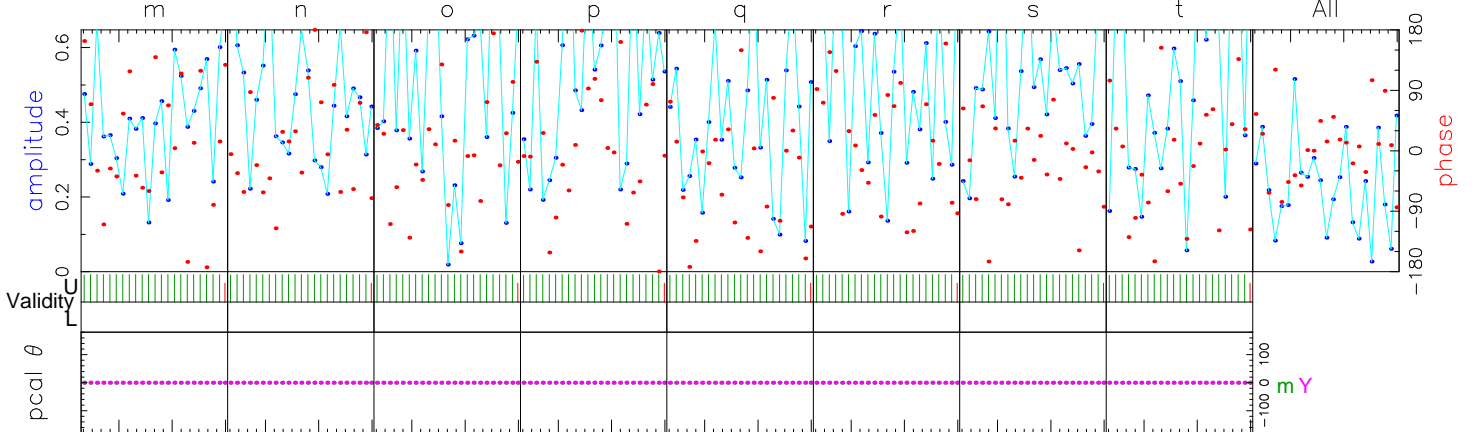


Fringe quality 0  
 SNR 5.8  
 Int time 162.343  
 Amp 0.216  
 Phase -3.0  
 PFD 5.4e-01  
 Delays (us)  
 SBD 0.288647  
 MBD -0.005495  
 Fringe rate (Hz) 0.753439  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112017.41  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114615  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	23.9	-16.0	-4.8	16.2	-17.1	39.1	-20.5	8.2	Phase	-3.0
	0.1	0.3	0.3	0.2	0.2	0.1	0.4	0.2	Ampl.	0.2
	101.8	254.1	296.6	237.4	143.8	424.0	331.3	497.7	Sbd box	330.9
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-4.59588615229E+03		Apriori delay (usec)		-4.59617753256E+03		Resid mbdelay (usec)		-5.49474E-03	+/- 1.9E-04
Sband delay (usec)	-4.59588888581E+03		Apriori clock (usec)		1.1120547E+02		Resid sbdelay (usec)		2.88647E-01	+/- 1.5E-03
Phase delay (usec)	-4.59617753265E+03		Apriori clockrate (us/s)		1.4412690E-02		Resid phdelay (usec)		-9.58758E-08	+/- 6.4E-07
Delay rate (us/s)	2.04235246513E+00		Apriori rate (us/s)		2.04234371845E+00		Resid rate (us/s)		8.74668E-06	+/- 6.8E-09
Total phase (deg)			Apriori accel (us/s/s)		3.82848223628E-06		Resid phase (deg)		-3.0	+/- 19.7

ph/seg (deg) 53.9 47.3 Search (1024X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.1 82.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.7 27.9 Inc. seg. avg. 0.223 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.8 48.7 Inc. frq. avg. 0.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 m: az 56.4 el 20.0 pa -80.0 Y: az 292.0 el 34.9 pa 62.2 u,v (fr/asec) -14695.440 -1865.998 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mY..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mY.W.502.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mY

VLBA\_MK - YEBES40M, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

SNR 5.7

Int time 162.343

Amp 0.258

Phase -85.1

PFD 6.9e-01

Delays (us)

SBD -0.738085

MBD 0.002431

Fringe rate (Hz)

-0.972941

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c241c

Exper # 1234

Yr:day 2024:112

Start 112017.41

Stop 112300.22

FRT 112130.00

Corr/FF/build

2024:353:153332

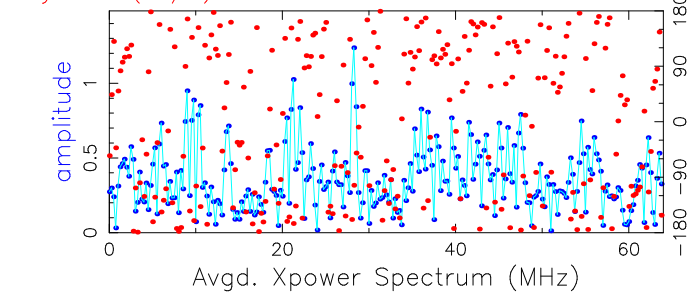
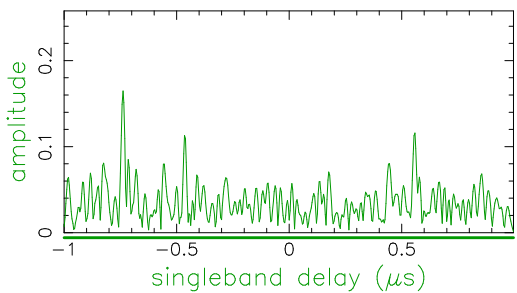
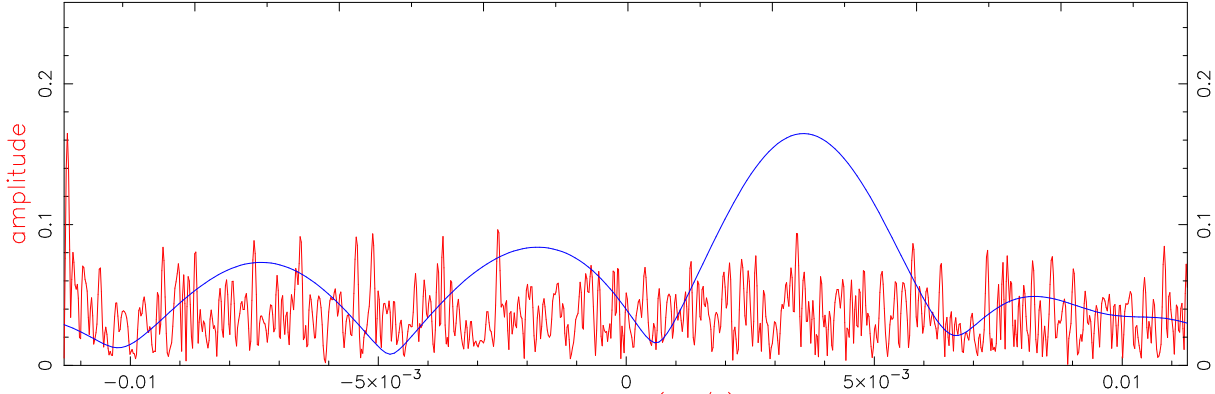
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2024:113:095956

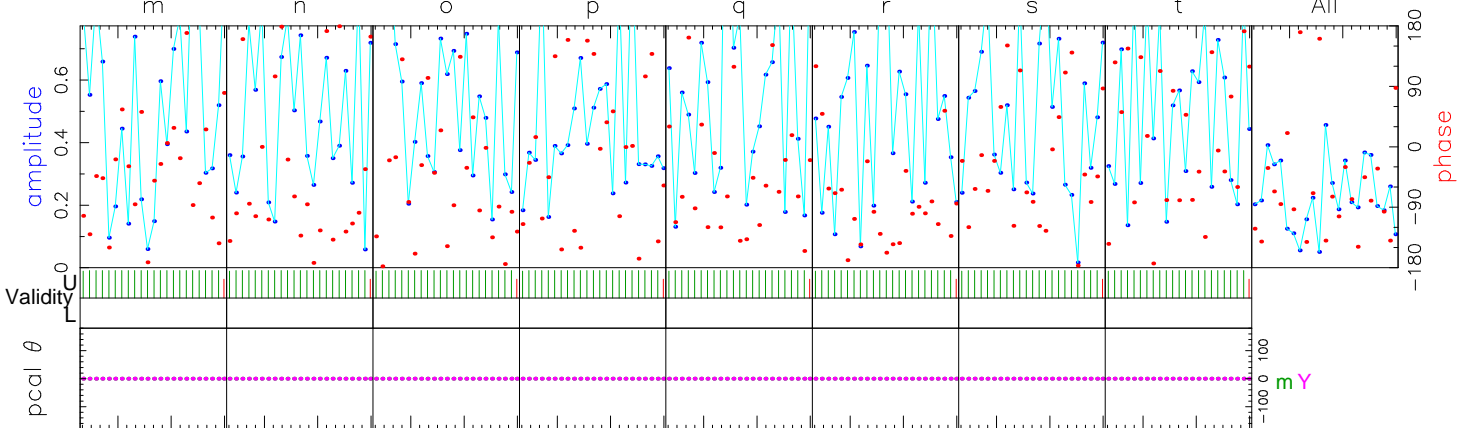
RA & Dec (J2000)

20h15m28.729786s

+37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-51.1	-119.4	-81.0	-112.5	-69.5	-105.9	-58.0	-36.1	Phase	-85.1
	0.4	0.4	0.3	0.1	0.3	0.5	0.2	0.0	Ampl.	0.3
	69.1	66.2	38.6	229.6	399.2	68.3	212.4	410.0	Sbd box	68.1
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-4.59690947673E+03	Apriori delay (usec)	-4.59617753256E+03	Resid mbdelay (usec)	2.43082E-03	+/-	1.9E-04
Sband delay (usec)	-4.59691561781E+03	Apriori clock (usec)	1.1120547E+02	Resid sbdelay (usec)	-7.38085E-01	+/-	1.5E-03
Phase delay (usec)	-4.59617753530E+03	Apriori clockrate (us/s)	1.4412690E-02	Resid phdelay (usec)	-2.74466E-06	+/-	6.4E-07
Delay rate (us/s)	2.04233242357E+00	Apriori rate (us/s)	2.04234371845E+00	Resid rate (us/s)	-1.12949E-05	+/-	6.8E-09
Total phase (deg)	-320.7	Apriori accel (us/s/s)	3.82848223628E-06	Resid phase (deg)	-85.1	+/-	20.0

ph/seg (deg)	61.1	Theor.	47.9	Amplitude	0.258 +/- 0.045	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	77.8	Search (1024X32)	0.162	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	33.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	56.2	Inc. seg. avg.	0.271	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.257	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 56.4 el 20.0 pa -80.0 Y: az 292.0 el 34.9 pa 62.2 u, v (fr/asec) -14695.440 -1865.998 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mY...3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mY.W.511.3MP2G6

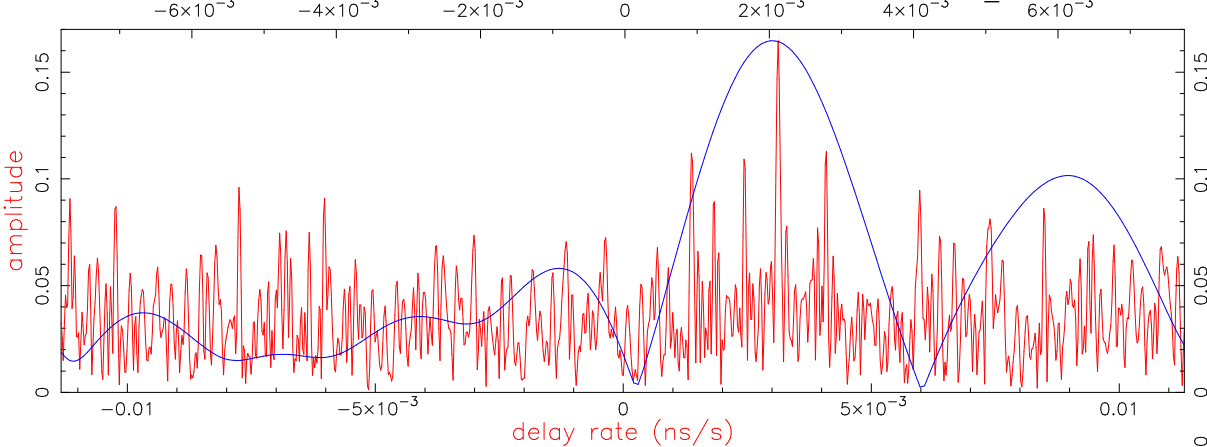
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, mY

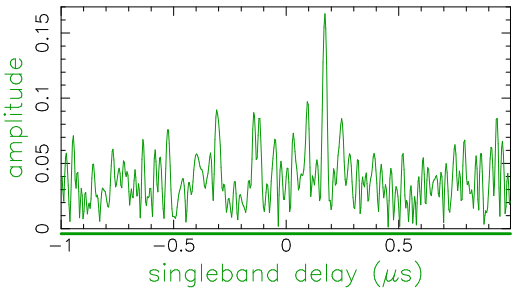
VLBA\_MK - YEYES40M, fgroup W, pol RL

multiband delay ( $\mu$ s)

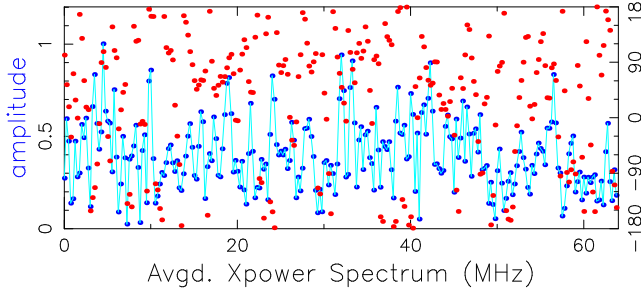


Fringe quality 0

SNR 5.7  
 Int time 162.343  
 Amp 0.170  
 Phase -110.8  
 PFD 6.9e-01  
 Delays (us)  
 SBD 0.171839  
 MBD 0.002041  
 Fringe rate (Hz)  
 0.270072  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

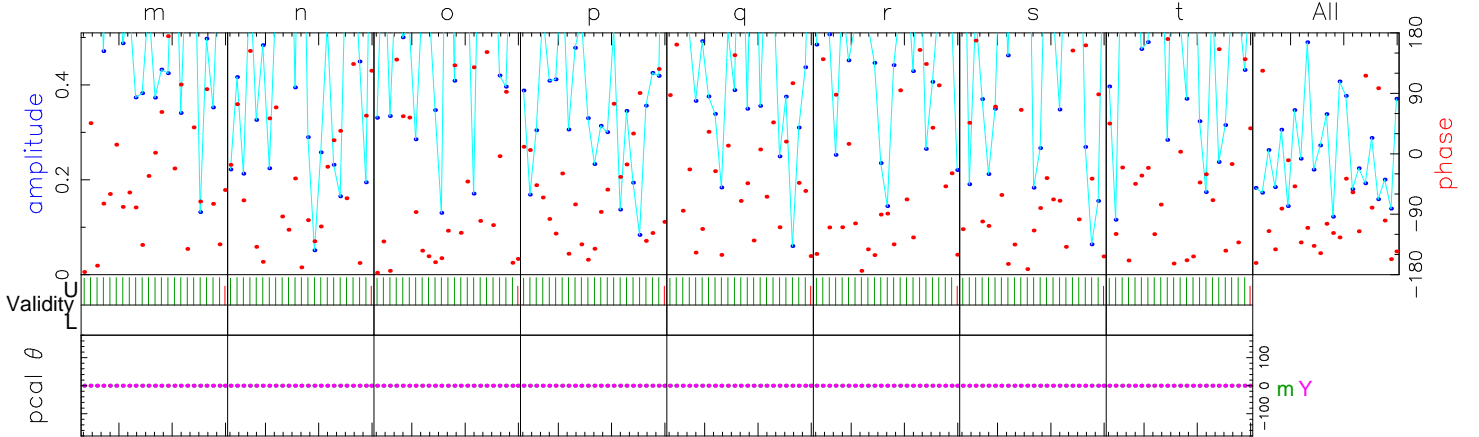


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112017.41  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114620  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-67.0	-140.7	-141.0	-84.2	-68.2	-142.5	-123.7	-92.8	Phase	-110.8
	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	108.9	508.3	301.4	139.8	495.8	227.9	301.3	178.2	Sbd box	301.0
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.59600361674E+03	Apriori delay (usec)	-4.59617753256E+03	Resid mbdelay (usec)	2.04082E-03	+/-	1.9E-04
Sband delay (usec)	-4.59600569381E+03	Apriori clock (usec)	1.1120547E+02	Resid sbdelay (usec)	1.71839E-01	+/-	1.5E-03
Phase delay (usec)	-4.59617753613E+03	Apriori clockrate (us/s)	1.4412690E-06	Resid phdelay (usec)	-3.57199E-06	+/-	6.4E-07
Delay rate (us/s)	2.04234685372E+00	Apriori rate (us/s)	2.04234371845E+00	Resid rate (us/s)	3.13527E-06	+/-	6.8E-09
Total phase (deg)	-346.4	Apriori accel (us/s/s)	3.82848223628E-06	Resid phase (deg)	-110.8	+/-	20.0

ph/seg (deg)	63.1	Theor.	47.9	Amplitude	0.170 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.4	Search (1024X32)	0.160	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	35.9	Inc. seg. avg.	0.193	Inc. frq. avg.	0.174	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.6	Inc. frq. avg.	0.174			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 56.4 el 20.0 pa -80.0 Y: az 292.0 el 34.9 pa 62.2 u, v (fr/asec) -14695.440 -1865.998 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/mY..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/mY.W.516.3MP2G6

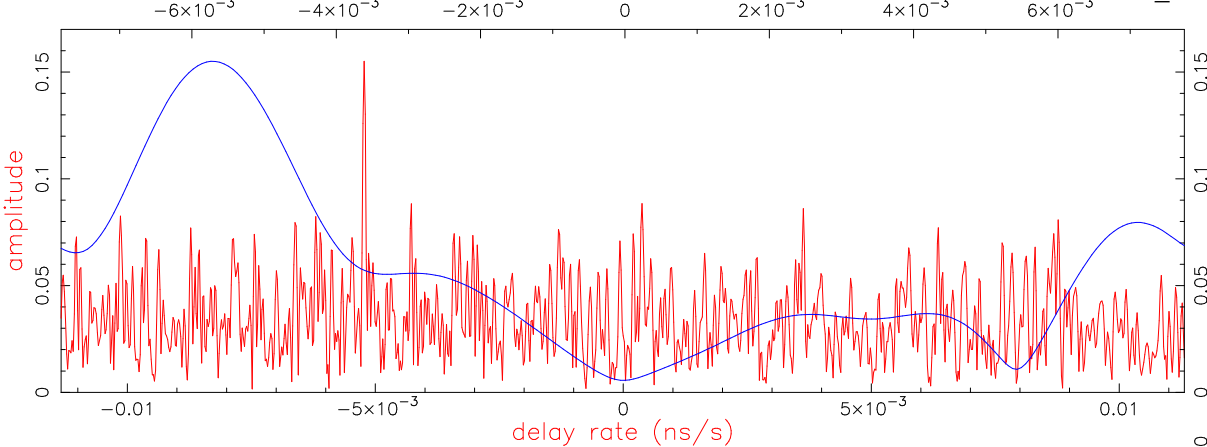
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Zm

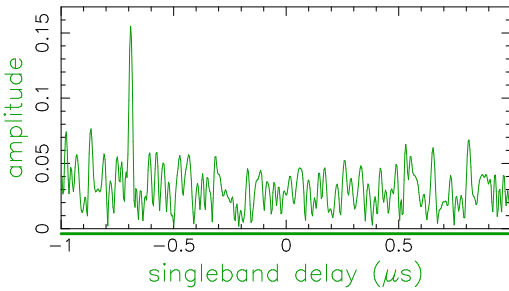
METSAHOV - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

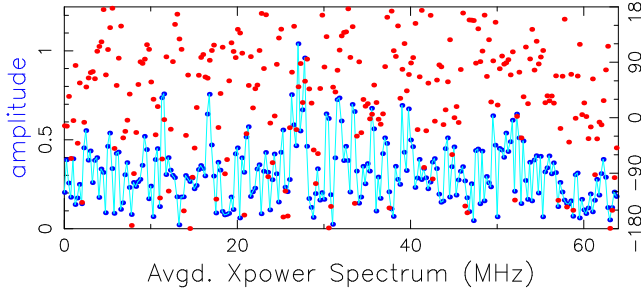


Fringe quality 0

SNR 5.7  
 Int time 179.677  
 Amp 0.170  
 Phase 100.7  
 PFD 7.7e-01  
 Delays (us)  
 SBD -0.690709  
 MBD -0.005715  
 Fringe rate (Hz)  
 -0.450177  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

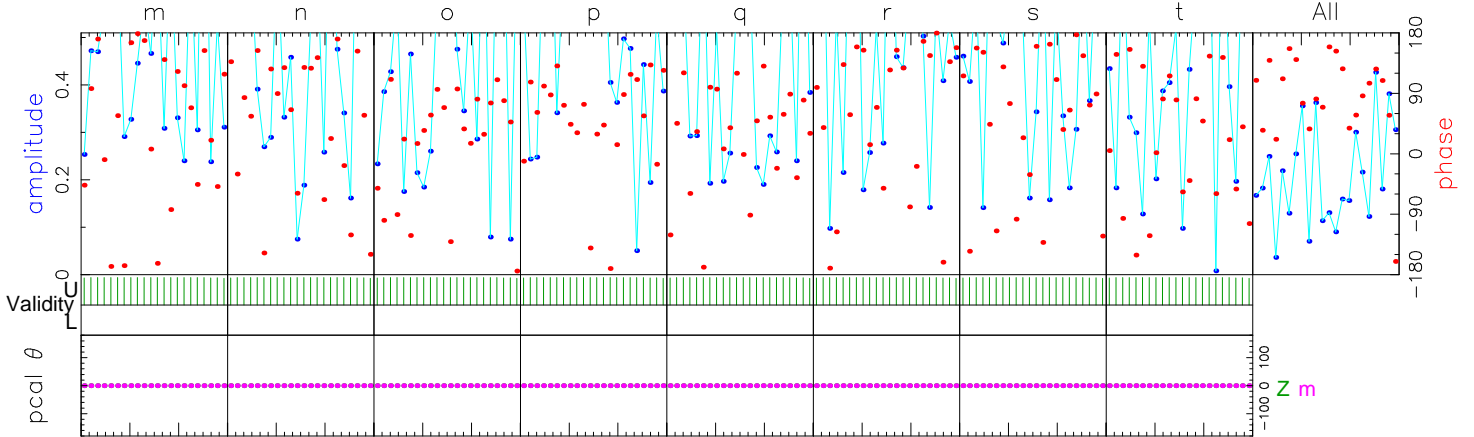


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114528  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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

Group delay (usec) (SBD)	2.22413349952E+03	Apriori delay (usec)	2.22482671430E+03	Resid mbdelay (usec)	-5.71478E-03	+/-	1.9E-04
Sband delay (usec)	2.22413600555E+03	Apriori clock (usec)	-3.1114578E-01	Resid sbdelay (usec)	-6.90709E-01	+/-	1.5E-03
Phase delay (usec)	2.22482671755E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	3.24576E-06	+/-	6.5E-07
Delay rate (us/s)	-1.74647929696E+00	Apriori rate (us/s)	-1.74647407085E+00	Resid rate (us/s)	-5.22611E-06	+/-	6.2E-09
Total phase (deg)	161.8	Apriori accel (us/s/s)	2.42900244287E-05	Resid phase (deg)	100.7	+/-	20.1

ph/seg (deg)	46.7	Theor.	47.1	Amplitude	0.170 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	76.2	Search (1024X32)	0.153	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)	36.4	Inc. seg. avg.	0.171	Inc. frq. avg.	0.177	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	47.7					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 298.5 el 27.0 pa 33.2 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 12592.923 5099.647 simultaneous interpolator

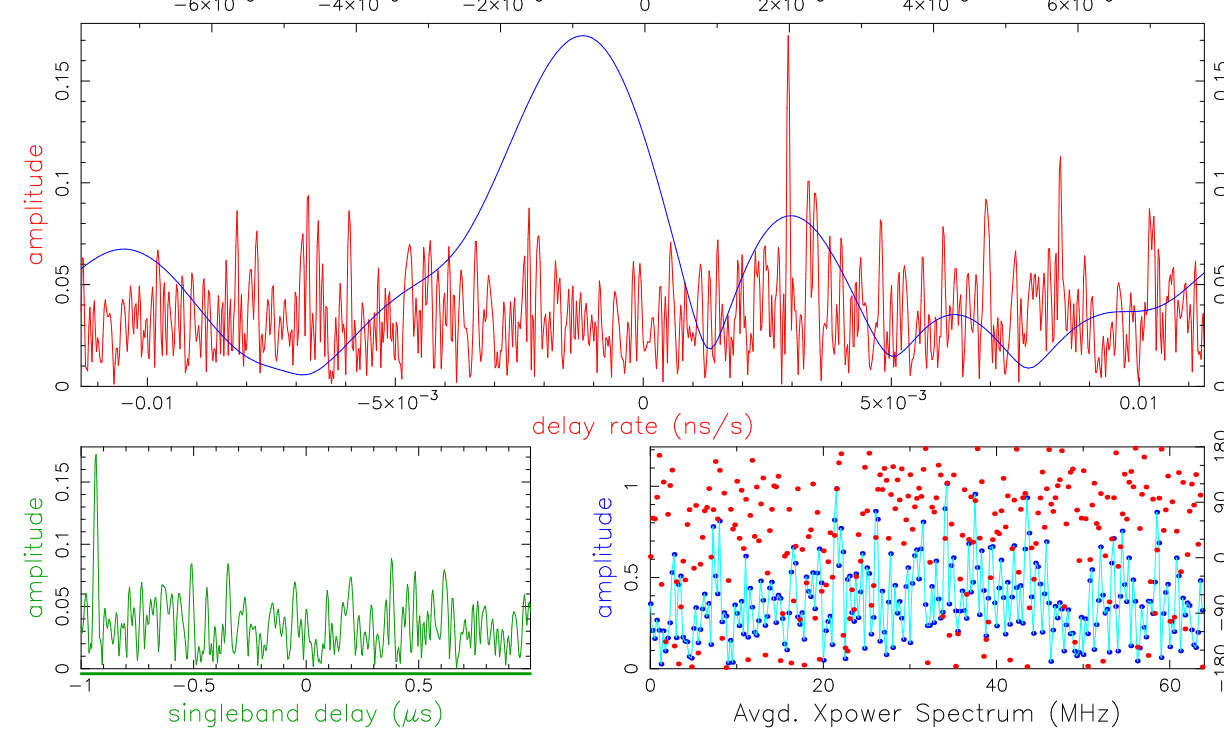
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Zm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Zm.W.336.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Zm

MEṬSAHOV - VLBA\_MK, fgroup W, pol RR

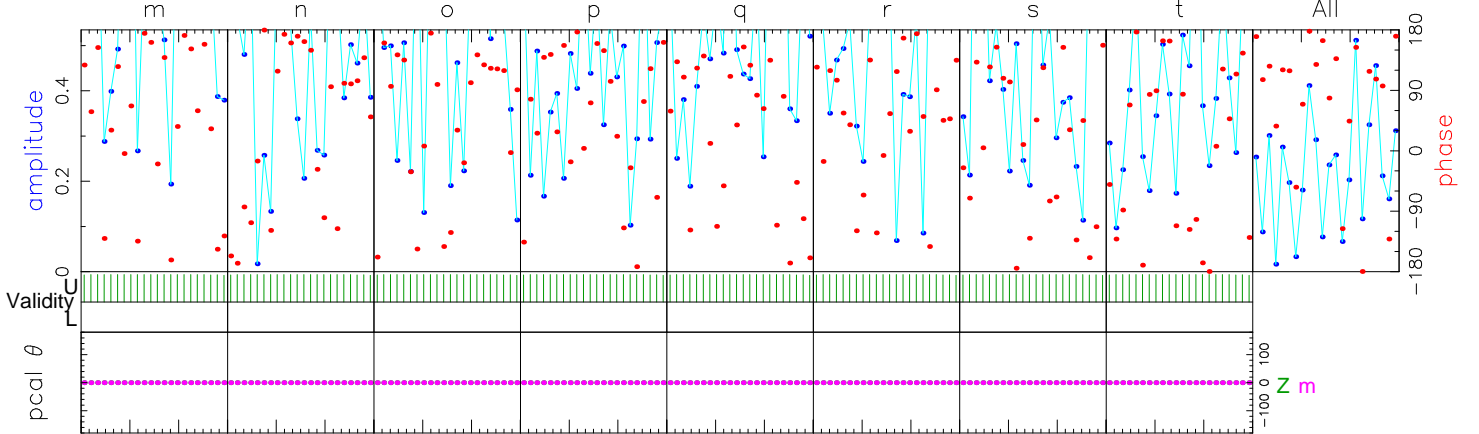


Fringe quality 0

SNR 6.4  
 Int time 179.677  
 Amp 0.178  
 Phase 132.7  
 PFD 2.8e-02  
 Delays (us)  
 SBD -0.934728  
 MBD -0.000890  
 Fringe rate (Hz) 0.251642  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build 2024:353:153332  
 2025:041:114529  
 2024:113:095956  
 RA & Dec (J2000) 20h15m28.729786s  
 +37°10'59.514736"

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
	115.8	163.9	139.7	104.7	123.7	90.5	144.0	169.2	Phase	132.7
	0.3	0.2	0.3	0.1	0.2	0.2	0.1	0.1	Ampl.	0.2
	455.0	67.2	19.1	171.3	215.8	125.6	440.2	411.6	Sbd box	17.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.22388832476E+03 Apriori delay (usec) 2.22482671430E+03 Resid mbdelay (usec) -8.89540E-04 +/- 1.7E-04  
 Sband delay (usec) 2.22389198630E+03 Apriori clock (usec) -3.1114578E-01 Resid sbdelay (usec) -9.34728E-01 +/- 1.4E-03  
 Phase delay (usec) 2.22482671858E+03 Apriori clockrate (us/s) 6.2435994E-07 Resid phdelay (usec) 4.28038E-06 +/- 5.8E-07  
 Delay rate (us/s) -1.74647114953E+00 Apriori rate (us/s) -1.74647407085E+00 Resid rate (us/s) 2.92131E-06 +/- 5.6E-09  
 Total phase (deg) 193.9 Apriori accel (us/s/s) 2.42900244287E-05 Resid phase (deg) 132.7 +/- 18.0

RMS Theor. Amplitude 0.178 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 63.1 42.3 Search (1024X32) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 80.6 73.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 30.0 25.5 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 (%) 40.3 44.5 Inc. frq. avg. 0.177 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 298.5 el 27.0 pa 33.2 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 12592.923 5099.647 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350/Zm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350/Zm.W.347.3MP2G6

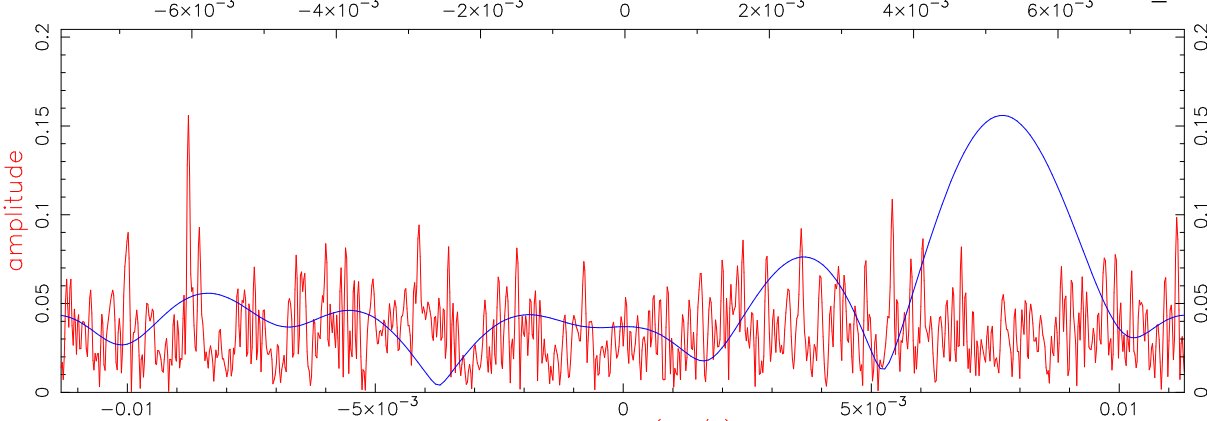
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP2G6, No0350, Zm

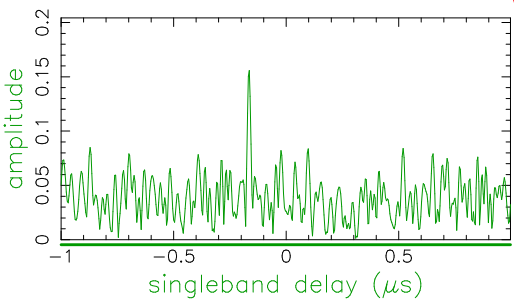
METSAHOV - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

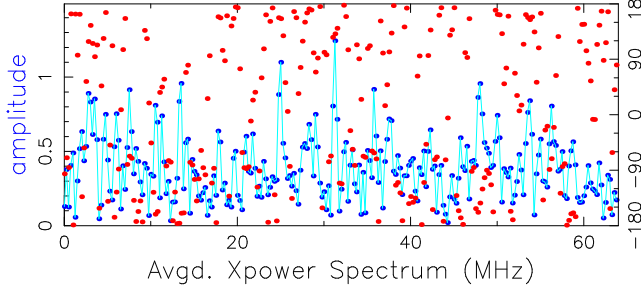


Fringe quality 0

SNR 5.8  
 Int time 179.677  
 Amp 0.204  
 Phase 10.7  
 PFD 6.3e-01  
 Delays (us)  
 SBD -0.165312  
 MBD 0.005196  
 Fringe rate (Hz)  
 -0.757332  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

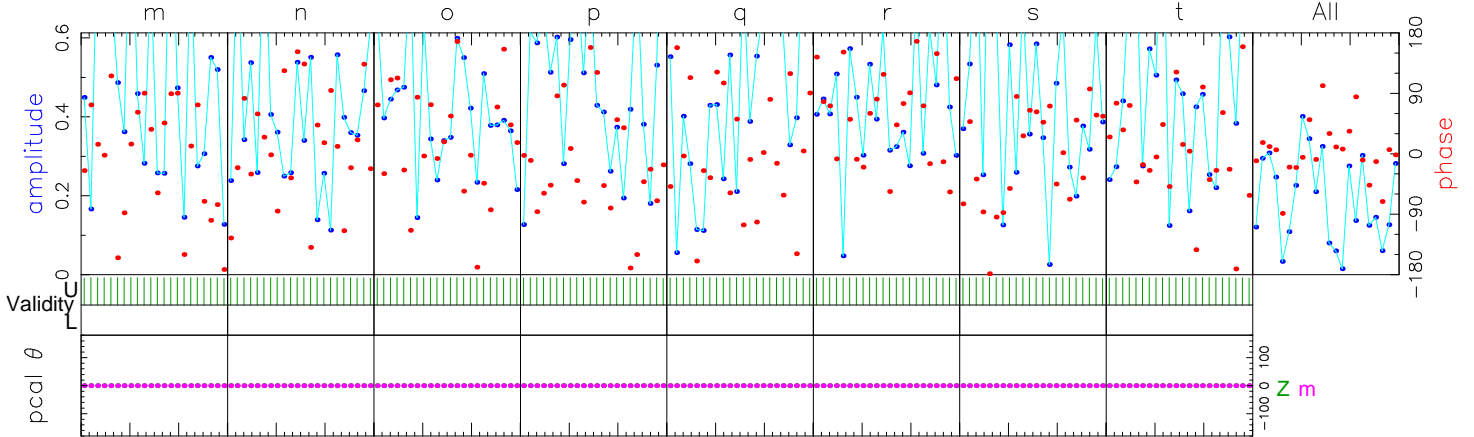


delay rate (ns/s)



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114532  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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		
Z	0	0	0	0	0	0	0	0		
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 2.22466003540E+03 Apriori delay (usec) 2.22482671430E+03 Resid mbdelay (usec) 5.19610E-03 +/- 1.9E-04  
 Sband delay (usec) 2.22466140230E+03 Apriori clock (usec) -3.1114578E-01 Resid sbdelay (usec) -1.65312E-01 +/- 1.5E-03  
 Phase delay (usec) 2.22482671465E+03 Apriori clockrate (us/s) 6.2435994E-07 Resid phdelay (usec) 3.46507E-07 +/- 6.4E-07  
 Delay rate (us/s) -1.74648286272E+00 Apriori rate (us/s) -1.74647407085E+00 Resid rate (us/s) -8.79187E-06 +/- 6.2E-09  
 Total phase (deg) 71.9 Apriori accel (us/s/s) 2.42900244287E-05 Resid phase (deg) 10.7 +/- 19.9

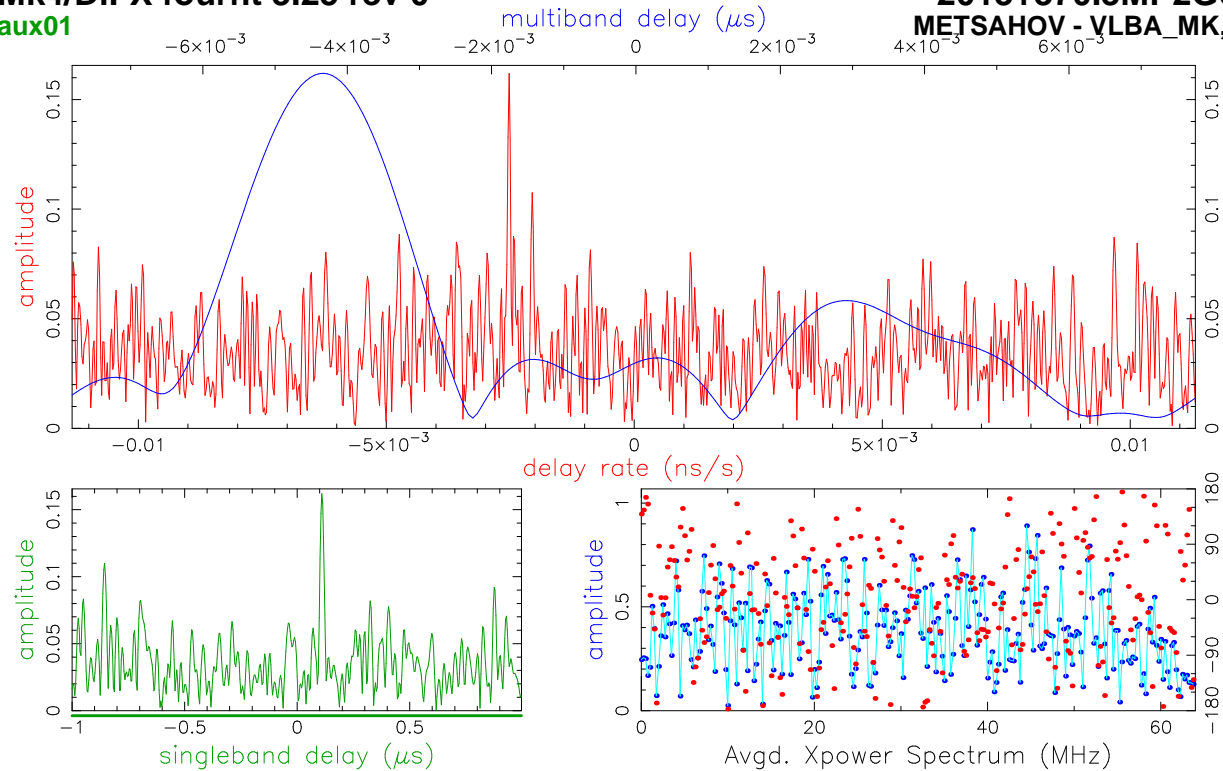
ph/seg (deg) 42.7 46.6 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.8 81.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.4 28.1 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 23.0 49.0 Inc. frq. avg. 0.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Z: az 298.5 el 27.0 pa 33.2 m: az 56.4 el 20.0 pa -80.0 u,v (fr/asec) 12592.923 5099.647 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/3mm/1234/No0350//Zm..3MP2G6 Output file: /Exps/c241c/v2/3mm/1234/No0350//Zm.W.353.3MP2G6

Mk4/DiFX fourfit 3.25 rev 0

aux01

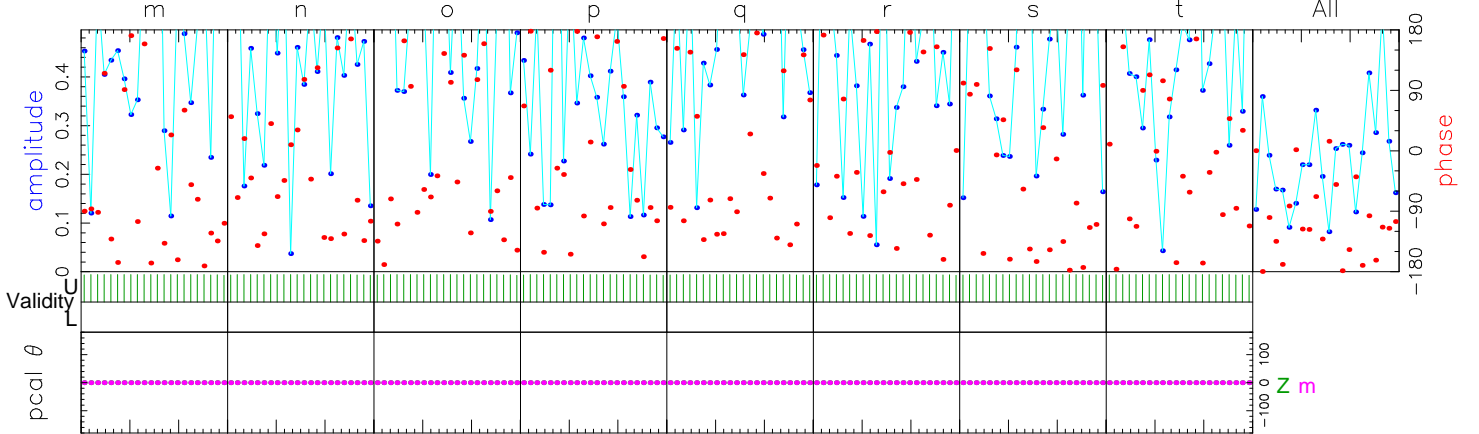
2013+370.3MP2G6, No0350, Zm

METSAHOV - VLBA\_MK, fgroup W, pol RL



Fringe quality 0  
 SNR 5.9  
 Int time 179.677  
 Amp 0.166  
 Phase -118.1  
 PFD 3.0e-01  
 Delays (us)  
 SBD 0.110027  
 MBD -0.004310  
 Fringe rate (Hz)  
 -0.217158  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 112000.00  
 Stop 112300.22  
 FRT 112130.00  
 Corr/FF/build  
 2024:353:153332  
 2025:041:114534  
 2024:113:095956  
 RA & Dec (J2000)  
 20h15m28.729786s  
 +37°10'59.514736"

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
	-130.3	-75.0	-122.8	-107.9	-121.8	-110.7	-133.0	-117.0	Phase	-118.1
	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.1	Ampl.	0.2
	281.9	493.0	420.3	341.1	287.0	16.2	77.6	325.4	Sbd box	285.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.22493177955E+03	Apriori delay (usec)	2.22482671430E+03	Resid mbdelay (usec)	-4.30975E-03	+/-	1.8E-04
Sband delay (usec)	2.22493674155E+03	Apriori clock (usec)	-3.1114578E-01	Resid sbdelay (usec)	1.10027E-01	+/-	1.4E-03
Phase delay (usec)	2.22482671049E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	-3.80988E-06	+/-	6.2E-07
Delay rate (us/s)	-1.74647659183E+00	Apriori rate (us/s)	-1.74647407085E+00	Resid rate (us/s)	-2.52098E-06	+/-	6.0E-09
Total phase (deg)	-57.0	Apriori accel (us/s/s)	2.42900244287E-05	Resid phase (deg)	-118.1	+/-	19.3

ph/seg (deg)	59.4	Theor.	45.2	Amplitude	0.166 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.5		78.9	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	20.1		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.6		47.6	Inc. seg. avg.	0.182	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.153	Data rate(Mb/s): 2048	t_cohere infinite			

Z: az 298.5 el 27.0 pa 33.2      m: az 56.4 el 20.0 pa -80.0      u,v (fr/asec) 12592.923 5099.647      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/3mm/1234/No0350/Zm..3MP2G6      Output file: /Exps/c241c/v2/3mm/1234/No0350/Zm.W.363.3MP2G6