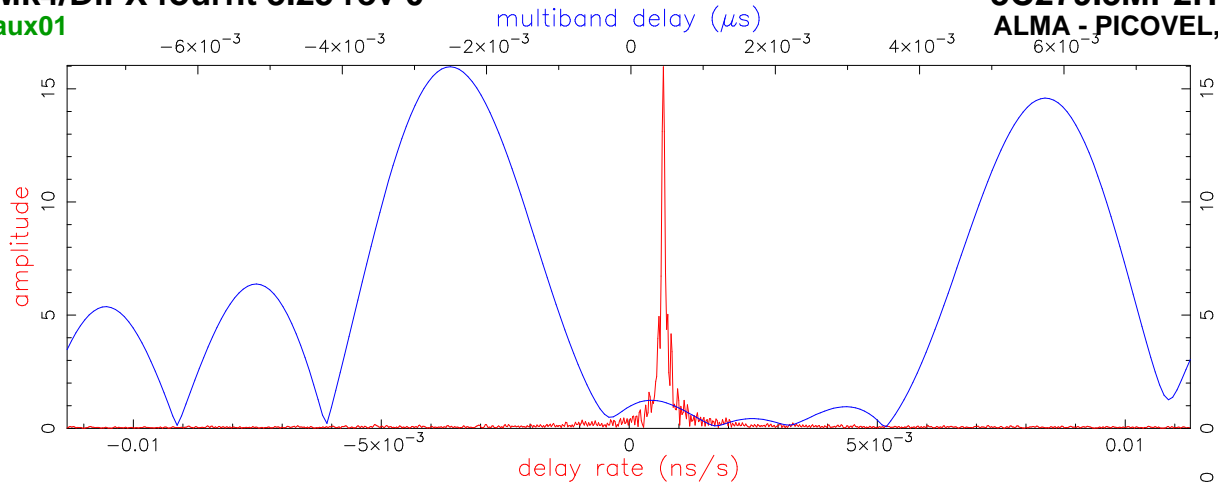


Mk4/DiFX fourfit 3.25 rev 0

aux01

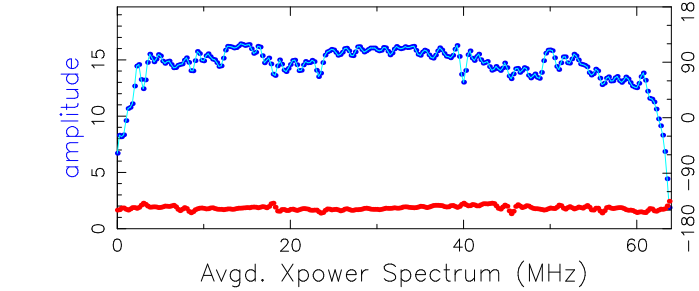
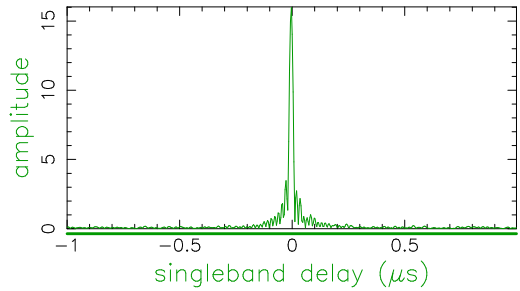
3C279.3MP2H5, No0694, AP

ALMA - PICOVEL, fgroup W, pol YR



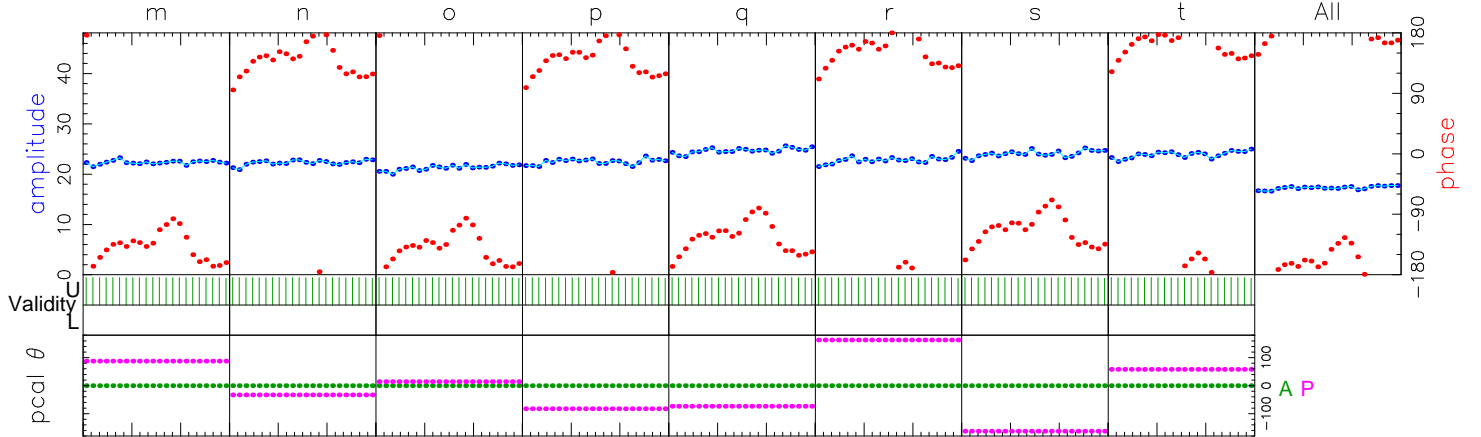
Fringe quality 5

SNR 587.3  
 Int time 179.982  
 Amp 16.034  
 Phase -169.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004534  
 MBD -0.002515  
 Fringe rate (Hz)  
 0.059745  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175223  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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
	-140.6	139.2	-142.2	140.2	-125.3	153.9	-114.4	166.4	Phase	-169.8
	20.7	20.6	19.7	20.8	22.8	21.1	22.2	22.1	Ampl.	21.3
	255.2	255.2	255.2	255.7	256.0	255.3	255.7	255.6	Sbd box	255.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.14222396862E+04	Apriori delay (usec)	1.14222422015E+04	Resid mbdelay (usec)	-2.51524E-03	+/-	1.8E-06
Sband delay (usec)	1.14222376672E+04	Apriori clock (usec)	-2.1065278E+03	Resid sbdelay (usec)	-4.53425E-03	+/-	1.5E-05
Phase delay (usec)	1.14222421960E+04	Apriori clockrate (us/s)	-6.0906900E-07	Resid phdelay (usec)	-5.47405E-06	+/-	6.3E-09
Delay rate (us/s)	1.15742731206E+00	Apriori rate (us/s)	1.15742661848E+00	Resid rate (us/s)	6.93580E-07	+/-	6.0E-11
Total phase (deg)	-84.9	Apriori accel (us/s/s)	-6.03953199292E-05	Resid phase (deg)	-169.8	+/-	0.2

ph/seg (deg)	22.7	RMS	22.7	Theor.	0.5	Amplitude	16.034 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	8.2		0.8		0.5	Search (1024X32)	15.431	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.7		0.3		0.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.1		0.5		0.5	Inc. seg. avg.	17.312	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	21.258	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 11.4 el 72.6 pa -170.3 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6699.706 -8247.761 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//AP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//AP.W.11.3MP2H5

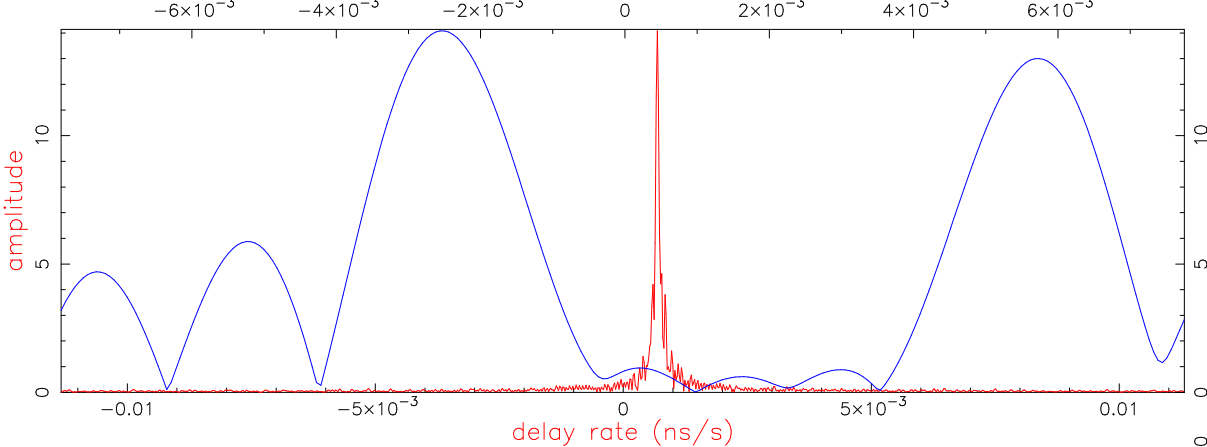
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, AP

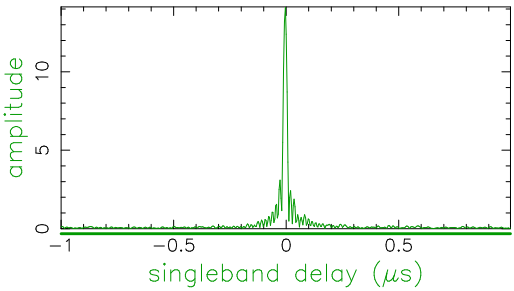
ALMA - PICOVEL, fgroup W, pol XR

multiband delay ( $\mu$ s)

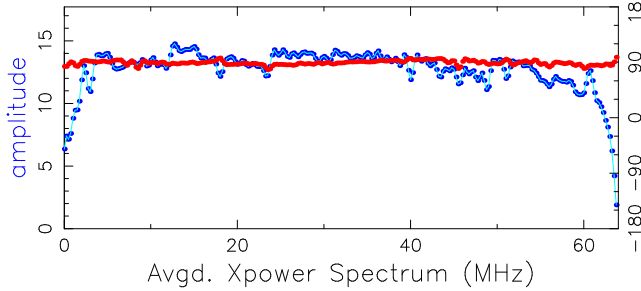


Fringe quality 4

SNR 517.9  
 Int time 179.982  
 Amp 14.140  
 Phase 66.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004524  
 MBD -0.002543  
 Fringe rate (Hz)  
 0.059810  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

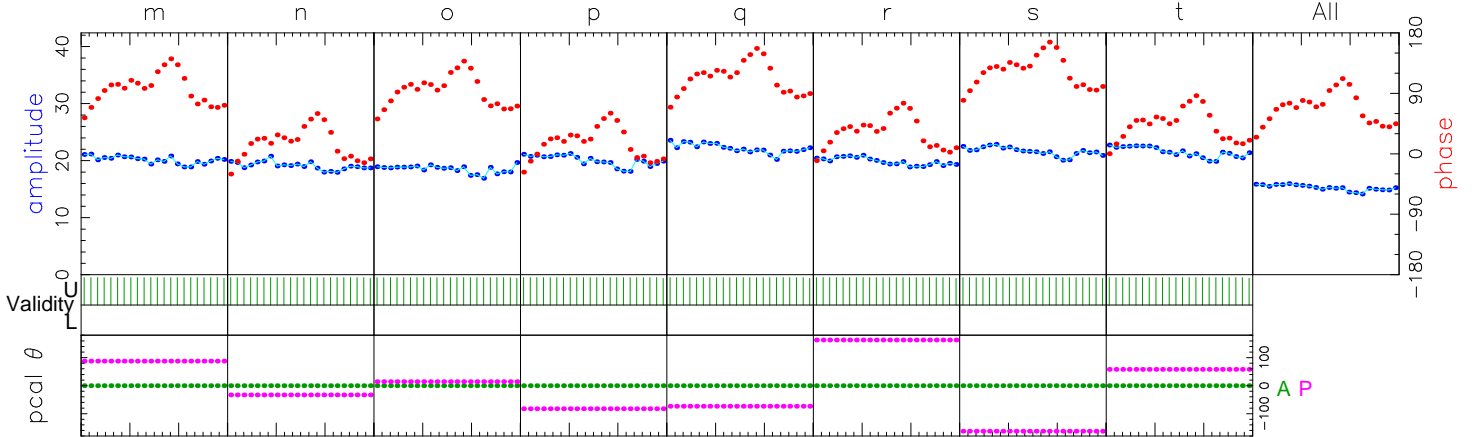


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175225  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
A	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
A:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
A	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.14222396589E+04	Apriori delay (usec)	1.14222422015E+04	Resid mbdelay (usec)	-2.54262E-03	+/-	2.1E-06
Sband delay (usec)	1.14222376777E+04	Apriori clock (usec)	-2.1065278E+03	Resid sbdelay (usec)	-4.52375E-03	+/-	1.7E-05
Phase delay (usec)	1.14222422036E+04	Apriori clockrate (us/s)	-6.0906900E-07	Resid phdelay (usec)	2.15046E-06	+/-	7.1E-09
Delay rate (us/s)	1.15742731281E+00	Apriori rate (us/s)	1.15742661848E+00	Resid rate (us/s)	6.94335E-07	+/-	6.9E-11
Total phase (deg)	151.5	Apriori accel (us/s/s)	-6.03953199292E-05	Resid phase (deg)	66.7	+/-	0.2

ph/seg (deg)	RMS 23.0	Theor. 0.5	Amplitude Search (1024X32)	14.140 +/- 0.027	13.499	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	8.9	0.9	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	48.1	0.3	Inc. seg. avg.	15.295	15.295	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.1	0.5	Inc. frq. avg.	18.829	18.829	Data rate(Mb/s): 2048	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00

A: az 11.4 el 72.6 pa -170.3 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6699.706 -8247.761 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//AP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//AP.W.18.3MP2H5

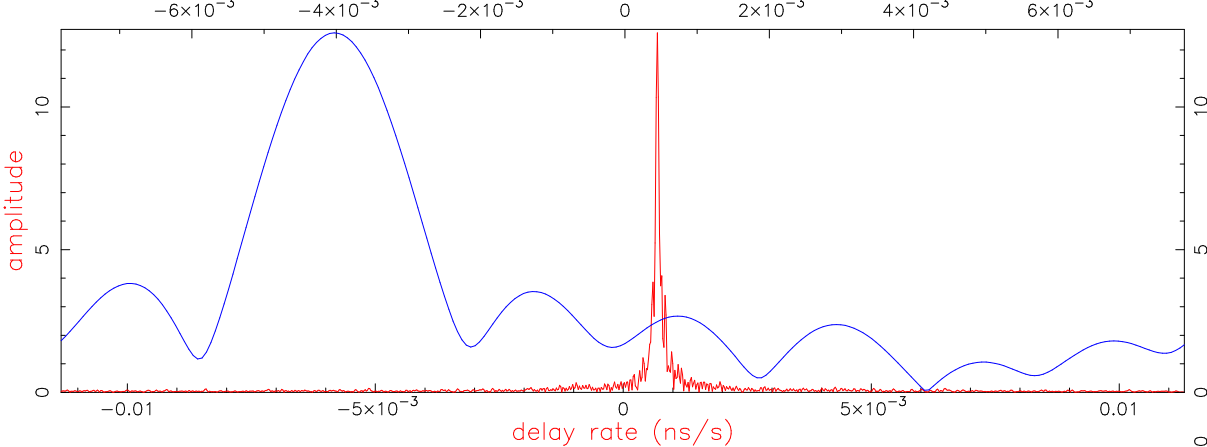
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, AP

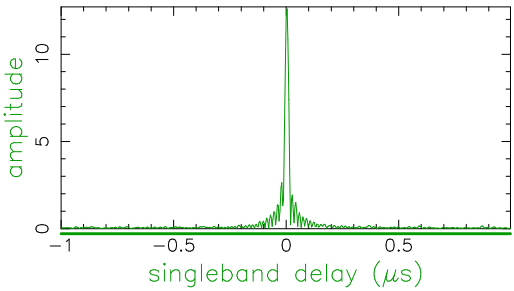
ALMA - PICOVEL, fgroup W, pol YL

multiband delay ( $\mu$ s)

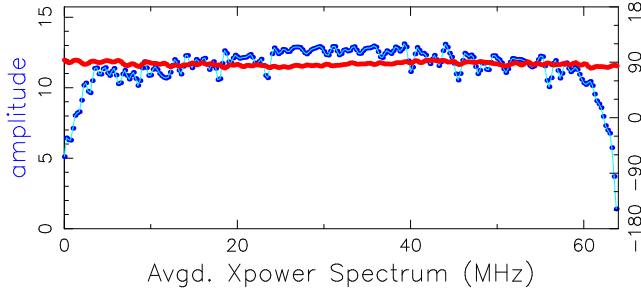


Fringe quality 6

SNR 465.9  
Int time 179.982  
Amp 12.718  
Phase 165.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.002749  
MBD -0.004038  
Fringe rate (Hz) 0.059692  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

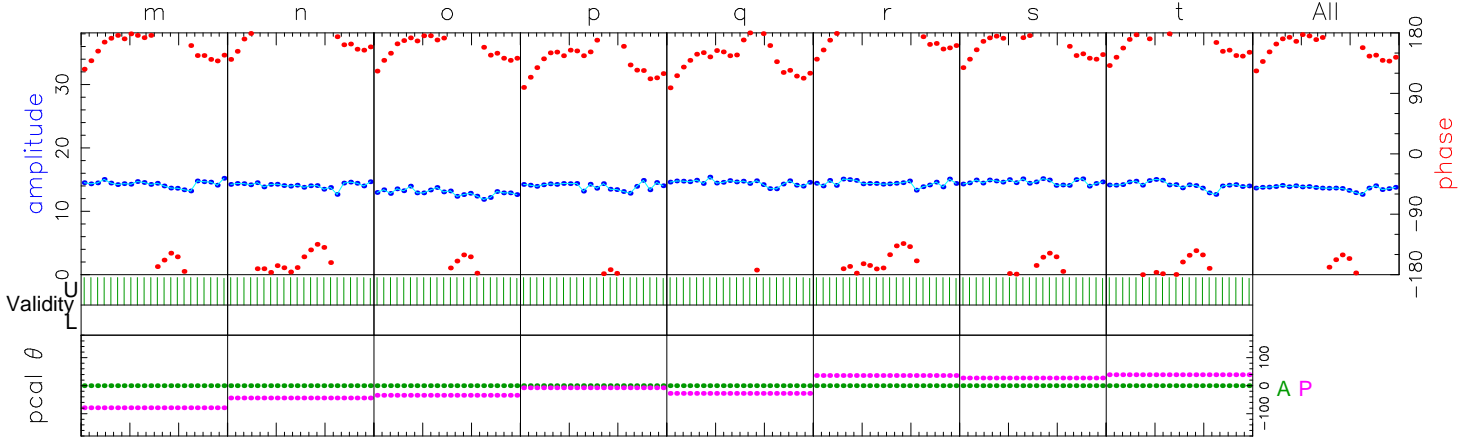


delay rate (ns/s)



Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 032000.00  
Stop 032300.22  
FRT 032130.00  
Corr/FF/build  
2024:361:002011  
2025:041:175226  
2024:113:095956  
RA & Dec (J2000)  
12h56m11.166579s  
-5°47'21.525152"

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
	166.9	-178.6	165.5	142.4	142.2	-176.7	168.7	172.3	Phase	165.5
	13.2	13.0	12.0	12.8	13.4	13.3	13.5	13.1	Ampl.	13.0
	257.7	257.6	257.4	257.9	258.1	257.8	257.9	257.8	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.14222381635E+04	Apriori delay (usec)	1.14222422015E+04	Resid mbdelay (usec)	-4.03796E-03	+/-	2.3E-06
Sband delay (usec)	1.14222449507E+04	Apriori clock (usec)	-2.1065278E+03	Resid sbdelay (usec)	2.74925E-03	+/-	1.8E-05
Phase delay (usec)	1.14222422068E+04	Apriori clockrate (us/s)	-6.0906900E-07	Resid phdelay (usec)	5.33546E-06	+/-	7.9E-09
Delay rate (us/s)	1.15742731144E+00	Apriori rate (us/s)	1.15742661848E+00	Resid rate (us/s)	6.92962E-07	+/-	7.6E-11
Total phase (deg)	250.3	Apriori accel (us/s/s)	-6.03953199292E-05	Resid phase (deg)	165.5	+/-	0.2

ph/seg (deg)	23.1	RMS	12.718 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	8.1	Theor.	12.127	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.8	Search (1024X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	4.3	Interp.	13.688	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	13.036	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
		Inc. frq. avg.						

A: az 11.4 el 72.6 pa -170.3 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6699.706 -8247.761 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//AP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//AP.W.24.3MP2H5

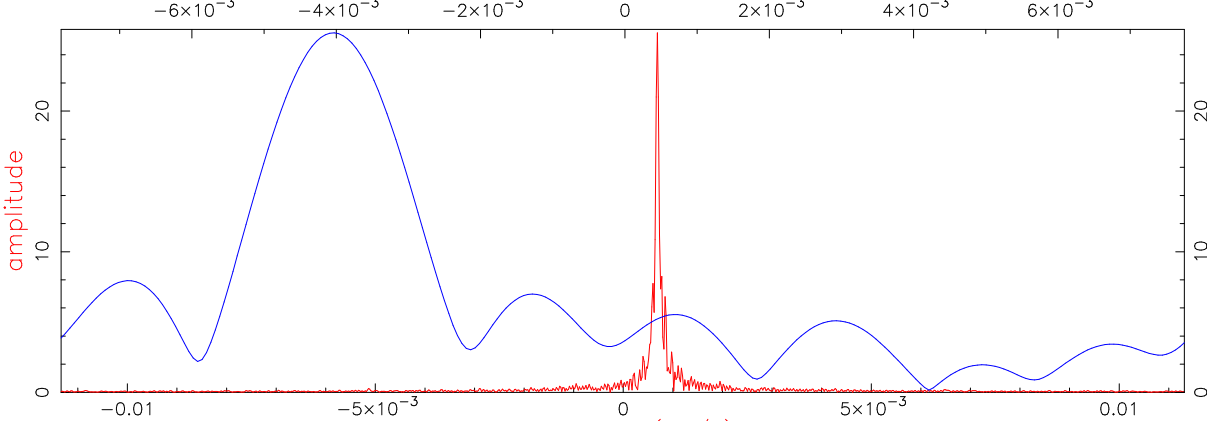
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, AP

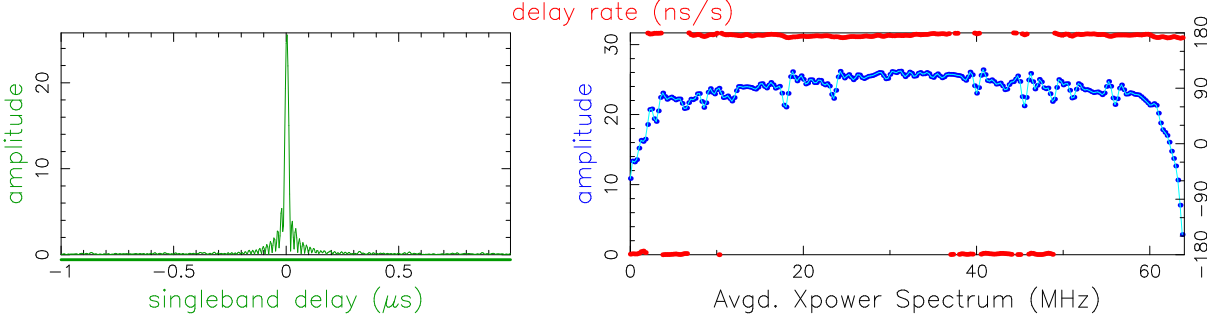
ALMA - PICOVEL, fgroup W, pol XL

multiband delay ( $\mu$ s)



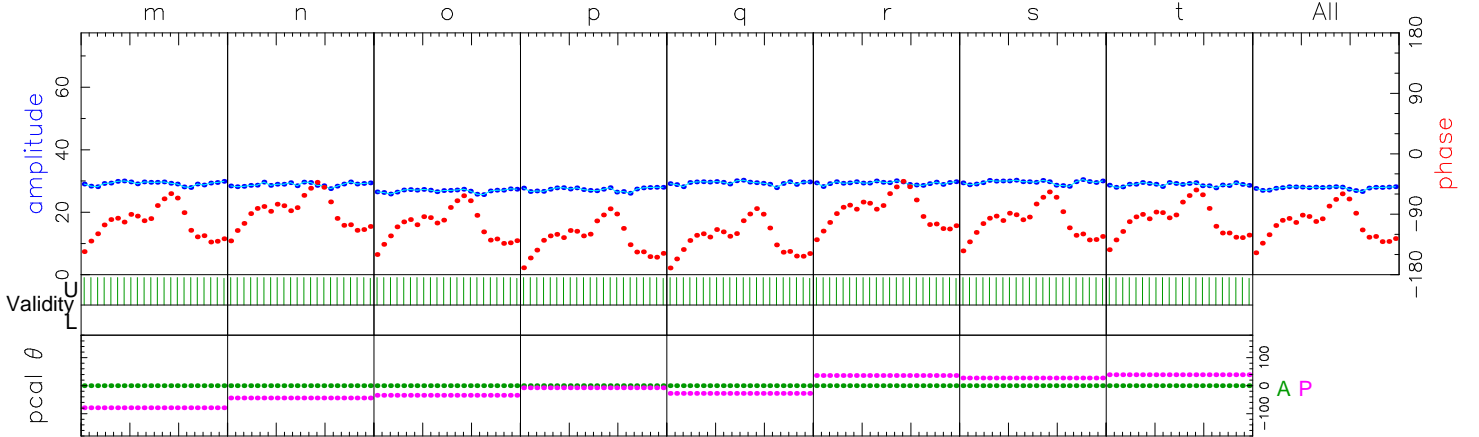
Fringe quality 6

SNR 945.4  
 Int time 179.982  
 Amp 25.809  
 Phase -104.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002747  
 MBD -0.004054  
 Fringe rate (Hz)  
 0.059704  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175221  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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
	-103.5	-87.3	-106.8	-127.0	-126.4	-85.3	-101.5	-98.7	Phase	-104.3
	26.9	26.7	24.7	25.2	27.1	27.1	27.3	26.5	Ampl.	26.4
	257.7	257.6	257.4	257.9	258.1	257.8	257.9	257.8	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.14222381474E+04		Apriori delay (usec)		1.14222422015E+04		Resid mbdelay (usec)		-4.05405E-03	+/- 1.1E-06
Sband delay (usec)	1.14222449480E+04		Apriori clock (usec)		-2.1065278E+03		Resid sbdelay (usec)		2.74650E-03	+/- 9.1E-06
Phase delay (usec)	1.14222421981E+04		Apriori clockrate (us/s)		-6.0906900E-07		Resid phdelay (usec)		-3.36458E-06	+/- 3.9E-09
Delay rate (us/s)	1.15742731159E+00		Apriori rate (us/s)		1.15742661848E+00		Resid rate (us/s)		6.93108E-07	+/- 3.8E-11
Total phase (deg)			Apriori accel (us/s/s)		-6.03953199292E-05		Resid phase (deg)		-104.3	+/- 0.1

ph/seg (deg) 23.1 0.3 Theor. Amplitude 25.809 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 7.9 0.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.8 0.2 Inc. seg. avg. 27.791 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 4.3 0.3 Inc. frq. avg. 26.446 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 A: az 11.4 el 72.6 pa -170.3 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6699.706 -8247.761 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//AP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//AP.W.6.3MP2H5

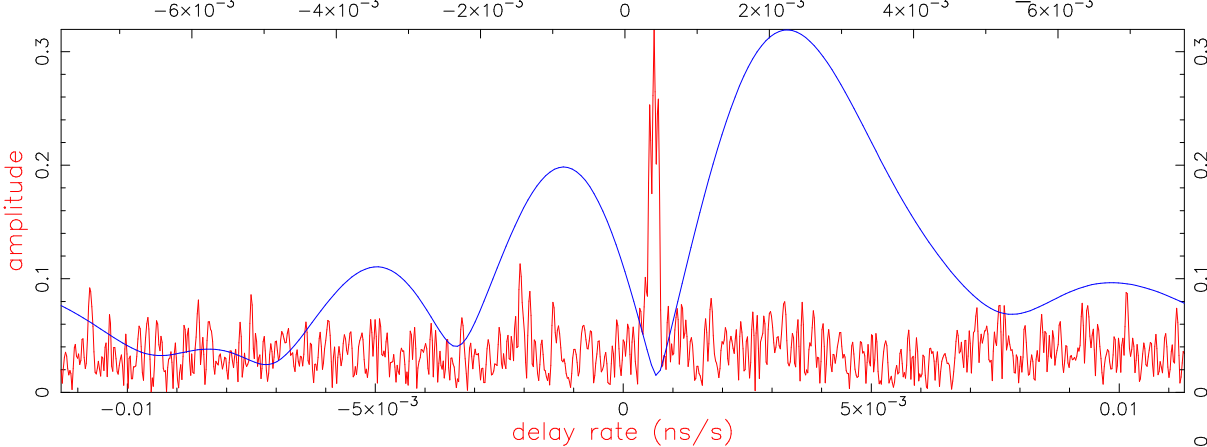
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, bP

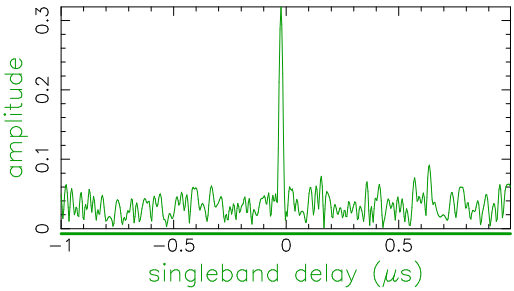
VLBA\_BR - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

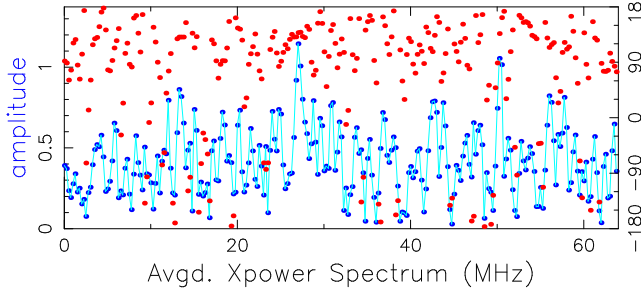


Fringe quality 9

SNR 11.7  
 Int time 179.993  
 Amp 0.320  
 Phase -170.9  
 PFD 2.8e-23  
 Delays (us)  
 SBD -0.023203  
 MBD 0.002257  
 Fringe rate (Hz) 0.052671  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

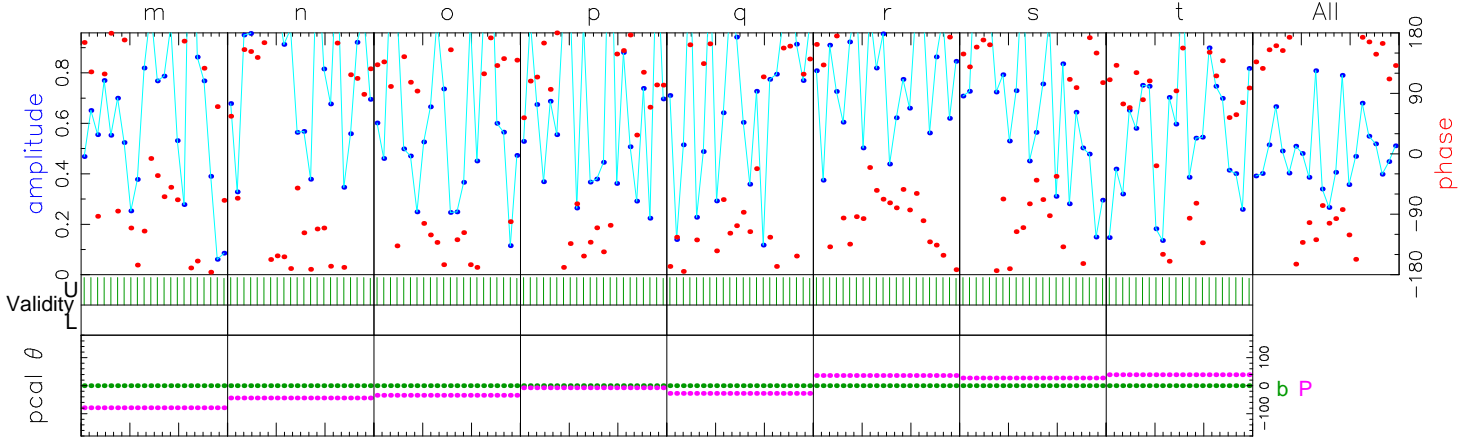


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175227  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.6	177.1	171.0	163.0	-166.9	-108.7	-157.9	121.4	Phase	-170.9
	0.2	0.5	0.4	0.3	0.5	0.5	0.3	0.3	Ampl.	0.4
	249.0	251.5	250.8	251.0	252.2	251.9	250.6	251.0	Sbd box	251.1
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	
P	0	0	0	0	0	0	0	0	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.96160357663E+02	Apriori delay (usec)	-2.96131364178E+02	Resid mbdelay (usec)	2.25652E-03	+/-	9.3E-05
Sband delay (usec)	-2.96154566928E+02	Apriori clock (usec)	5.5064735E+00	Resid sbdelay (usec)	-2.32028E-02	+/-	7.4E-04
Phase delay (usec)	-2.96131369690E+02	Apriori clockrate (us/s)	-2.1796150E-08	Resid phdelay (usec)	-5.51188E-06	+/-	3.2E-07
Delay rate (us/s)	1.92704165381E+00	Apriori rate (us/s)	1.92704104235E+00	Resid rate (us/s)	6.11460E-07	+/-	3.0E-09
Total phase (deg)	-66.6	Apriori accel (us/s/s)	-4.63666519829E-08	Resid phase (deg)	-170.9	+/-	9.8

ph/seg (deg)	52.2	RMS	22.9	Theor.	Amplitude	0.320 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.5	Search (1024X32)	0.303	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)	42.5	Inc. seg. avg.	0.454	Inc. frq. avg.	0.381	Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	37.2	Inc. frq. avg.	0.381	u,v (fr/asec)	-11094.708 1248.483	Data rate (Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00		

b: az 120.9 el 17.5 pa -35.1 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11094.708 1248.483 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/bP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/bP.W.27.3MP2H5

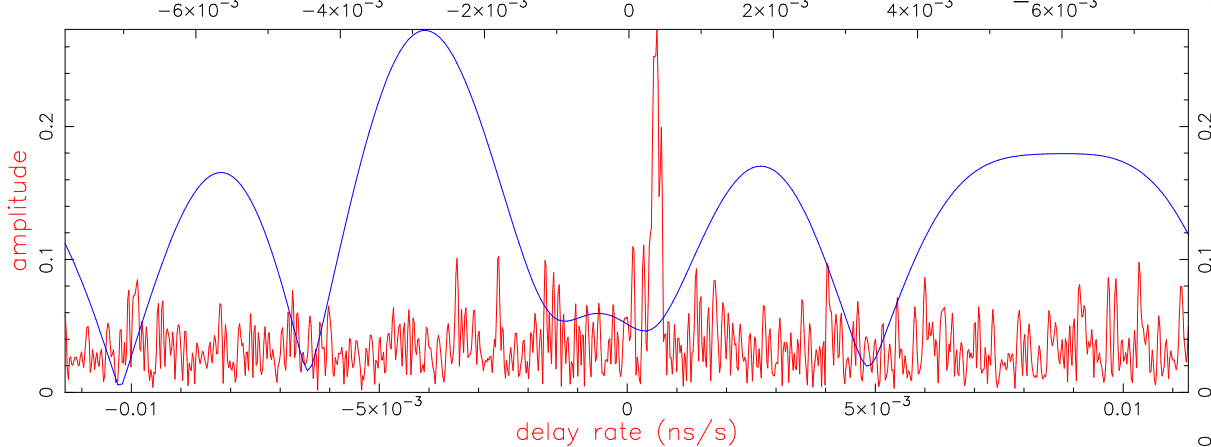
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, bP

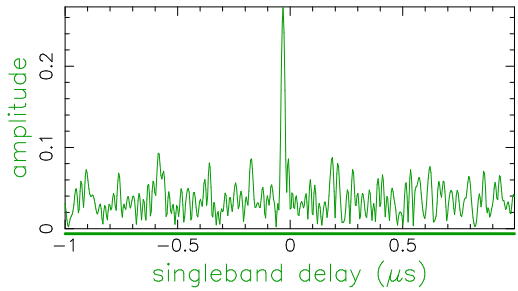
VLBA\_BR - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)

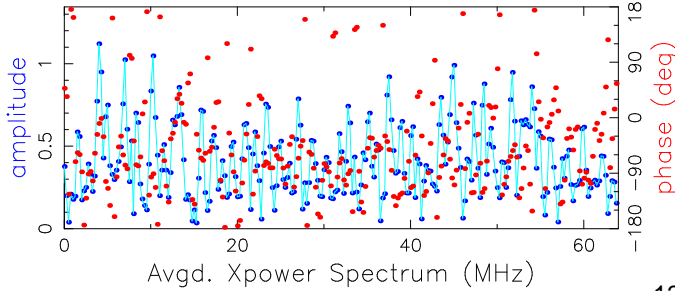


Fringe quality 9

SNR 10.0  
 Int time 179.993  
 Amp 0.273  
 Phase -42.1  
 PFD 3.0e-15  
 Delays (us)  
 SBD -0.031781  
 MBD -0.002838  
 Fringe rate (Hz)  
 0.051982  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

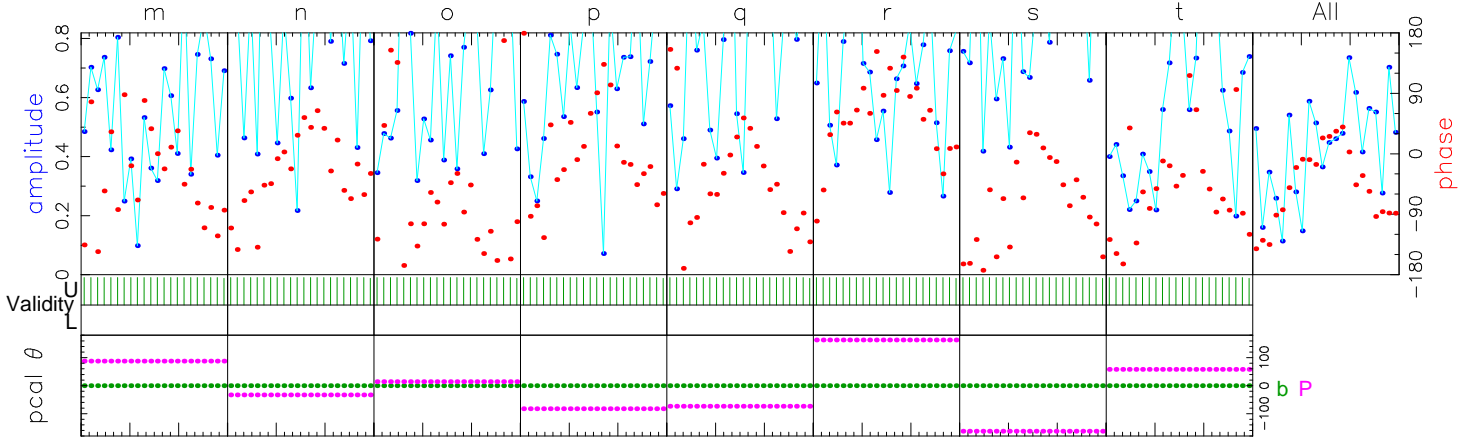


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175229  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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
	-49.6	-25.2	-122.0	-8.8	-51.0	57.1	-67.1	-58.5	Phase	-42.1
	0.3	0.5	0.4	0.4	0.4	0.4	0.5	0.3	Ampl.	0.4
	246.3	249.6	250.2	250.2	250.3	249.6	248.8	247.5	Sbd box	248.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.96165452244E+02	Apriori delay (usec)	-2.96131364178E+02	Resid mbdelay (usec)	-2.83807E-03	+/-	1.1E-04
Sband delay (usec)	-2.96163145428E+02	Apriori clock (usec)	5.5064735E+00	Resid sbdelay (usec)	-3.17812E-02	+/-	8.6E-04
Phase delay (usec)	-2.96131365535E+02	Apriori clockrate (us/s)	-2.1796150E-08	Resid phdelay (usec)	-1.35678E-06	+/-	3.7E-07
Delay rate (us/s)	1.92704164581E+00	Apriori rate (us/s)	1.92704104235E+00	Resid rate (us/s)	6.03464E-07	+/-	3.5E-09
Total phase (deg)	-297.8	Apriori accel (us/s/s)	-4.63666519829E-08	Resid phase (deg)	-42.1	+/-	11.5

ph/seg (deg)	54.9	RMS	26.9	Theor.	0.273 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.6	Search (1024X32)	0.267	Amplitude	0.273 +/- 0.027	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	55.8	Inc. seg. avg.	0.391	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.1	Inc. frq. avg.	0.382	Inc. seg. avg.	0.391	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.382	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 120.9 el 17.5 pa -35.1 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11094.708 1248.483 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/bP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/bP.W.34.3MP2H5

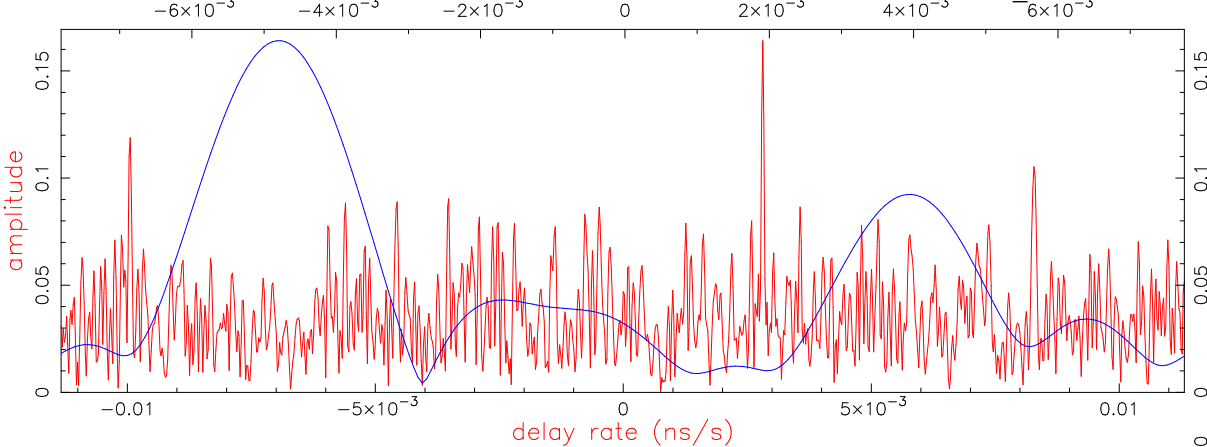
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, bP

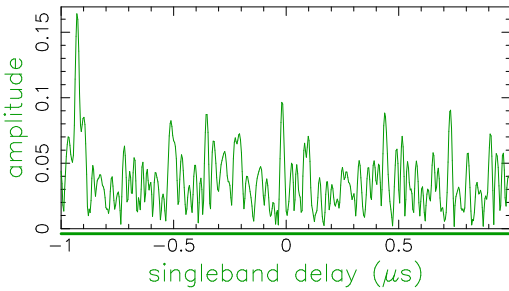
VLBA\_BR - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

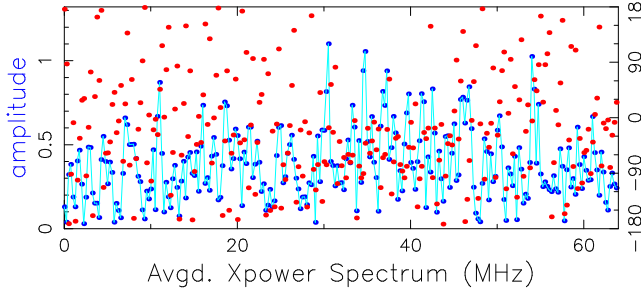


Fringe quality 0

SNR 6.1  
 Int time 179.993  
 Amp 0.169  
 Phase 120.9  
 PFD 1.7e-01  
 Delays (us)  
 SBD -0.928530  
 MBD -0.004776  
 Fringe rate (Hz)  
 0.242744  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

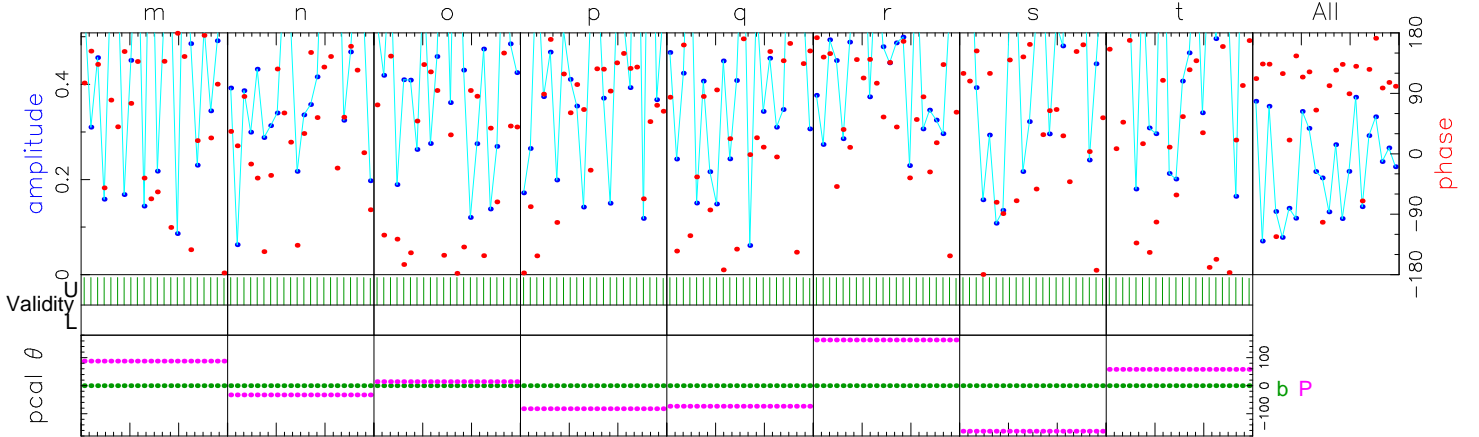


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175232  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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		
P	0	0	0	0	0	0	0	0		
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
b	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-2.97058015029E+02	Apriori delay (usec)	-2.96131364178E+02	Resid mbdelay (usec)	-4.77585E-03	+/-	1.8E-04
Sband delay (usec)	-2.97059894428E+02	Apriori clock (usec)	5.5064735E+00	Resid sbdelay (usec)	-9.28530E-01	+/-	1.4E-03
Phase delay (usec)	-2.96131360279E+02	Apriori clockrate (us/s)	-2.1796150E-08	Resid phdelay (usec)	3.89920E-06	+/-	6.1E-07
Delay rate (us/s)	1.92704386036E+00	Apriori rate (us/s)	1.92704104235E+00	Resid rate (us/s)	2.81801E-06	+/-	5.9E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.63666519829E-08	Resid phase (deg)	120.9	+/-	18.9

ph/seg (deg)	60.5	Theor.	44.4	Amplitude	0.169 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.9		77.4	Search (1024X32)	0.159	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.3		26.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	24.6		46.7	Inc. seg. avg.	0.177	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

b: az 120.9 el 17.5 pa -35.1 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11094.708 1248.483 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/bP...3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/bP.W.41.3MP2H5

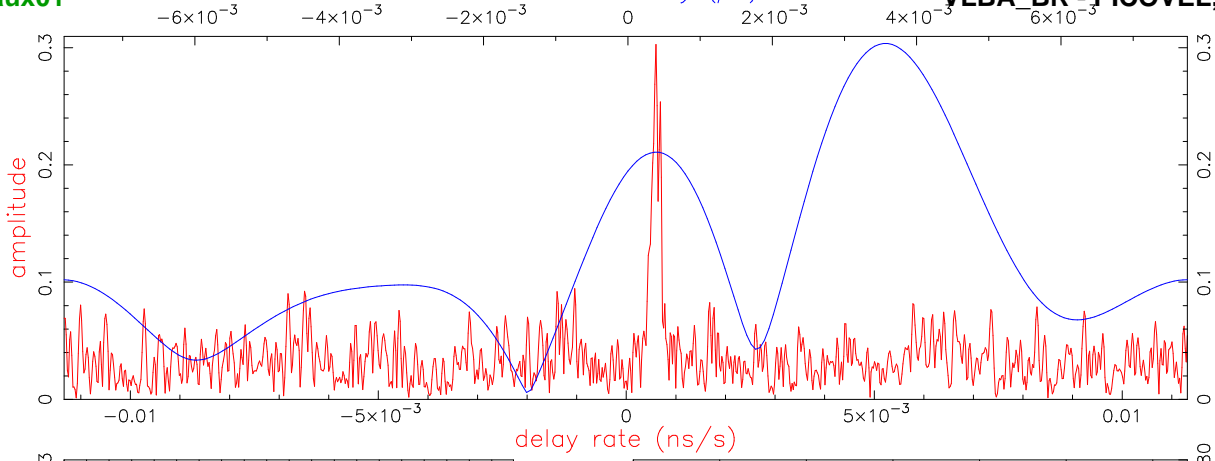
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, bP

VLBA\_BR - PICOVEL, fgroup W, pol RL

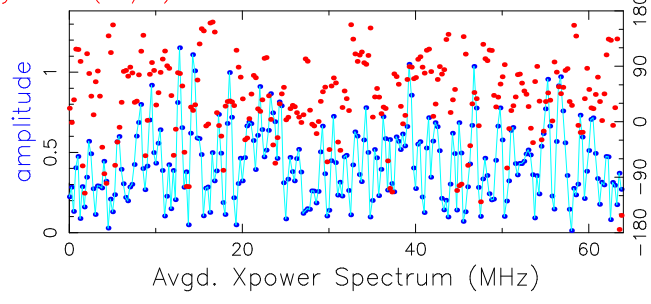
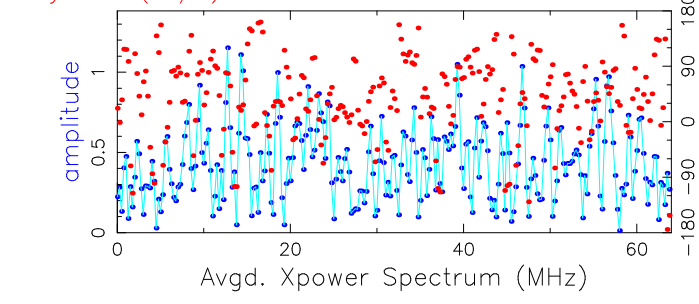
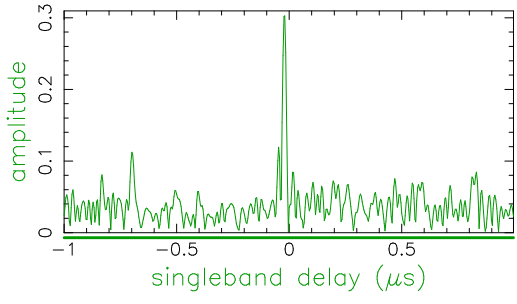
multiband delay ( $\mu$ s)



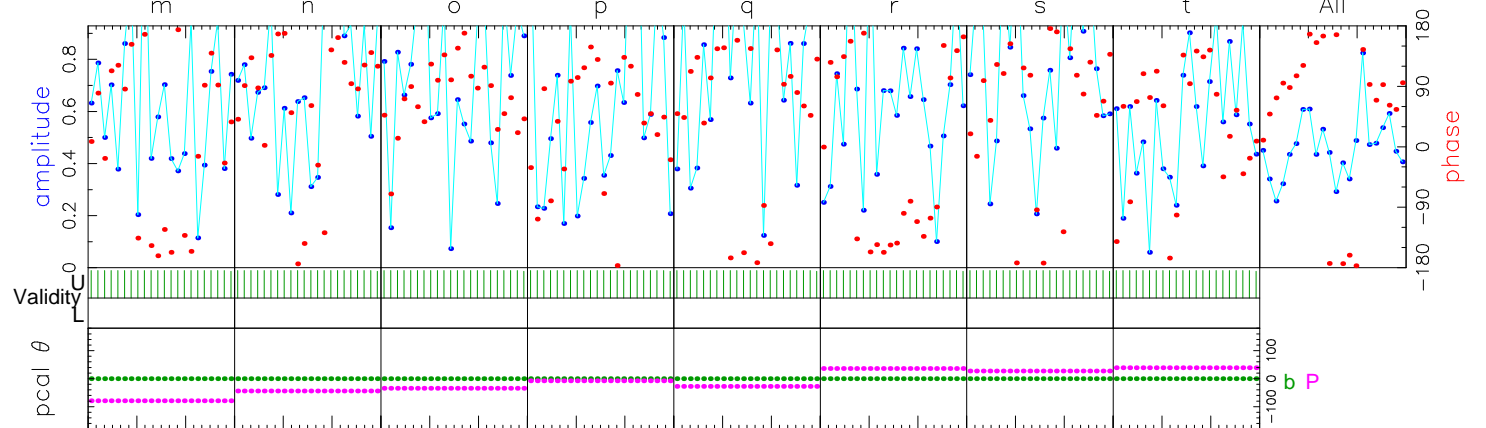
Fringe quality 9

SNR 11.3  
 Int time 179.993  
 Amp 0.310  
 Phase 118.7  
 PFD 1.8e-21  
 Delays (us)  
 SBD -0.021436  
 MBD 0.003472  
 Fringe rate (Hz) 0.052217  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build 2024:361:002011  
 2025:041:175234  
 2024:113:095956  
 RA & Dec (J2000) 12h56m11.166579s  
 -5°47'21.525152"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	0	0	0	0	0	0	0	0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.96159141931E+02	Apriori delay (usec)	-2.96131364178E+02	Resid mbdelay (usec)	3.47225E-03	+/-	9.6E-05
Sband delay (usec)	-2.96152800678E+02	Apriori clock (usec)	5.5064735E+00	Resid sbdelay (usec)	-2.14365E-02	+/-	7.6E-04
Phase delay (usec)	-2.96131360349E+02	Apriori clockrate (us/s)	-2.1796150E-08	Resid phdelay (usec)	3.82914E-06	+/-	3.3E-07
Delay rate (us/s)	1.92704164853E+00	Apriori rate (us/s)	1.92704104235E+00	Resid rate (us/s)	6.06187E-07	+/-	3.1E-09
Total phase (deg)	-137.0	Apriori accel (us/s/s)	-4.63666519829E-08	Resid phase (deg)	118.7	+/-	10.1

	RMS	Theor.	Amplitude	0.310 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.5	23.7	Search (1024X32)	0.296	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	63.7	41.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.2	14.3	Inc. seg. avg.	0.427	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	43.6	24.9	Inc. frq. avg.	0.368	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 120.9 el 17.5 pa -35.1 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11094.708 1248.483 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/bP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/bP.W.49.3MP2H5

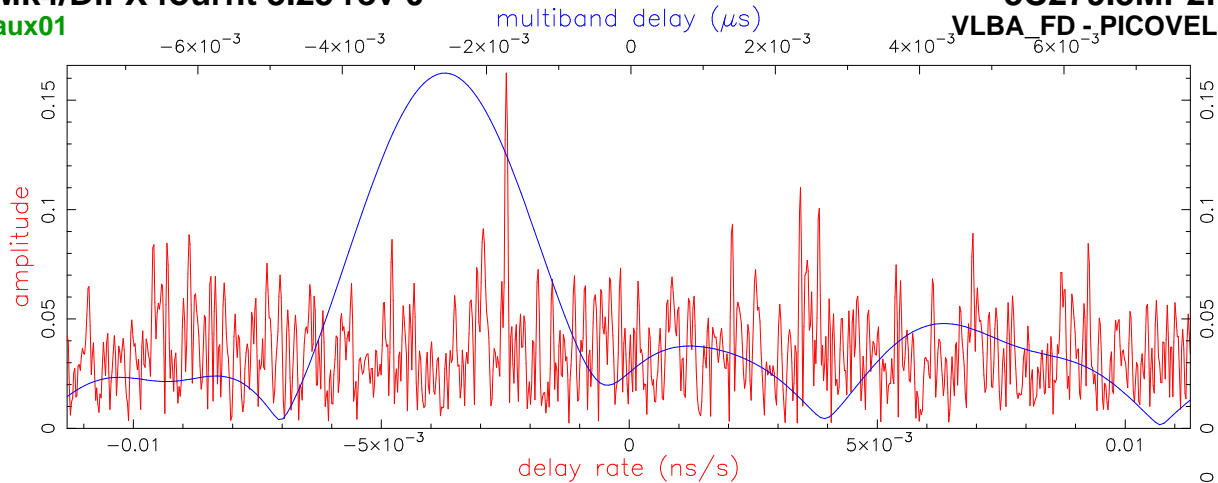


Mk4/DiFX fourfit 3.25 rev 0

aux01

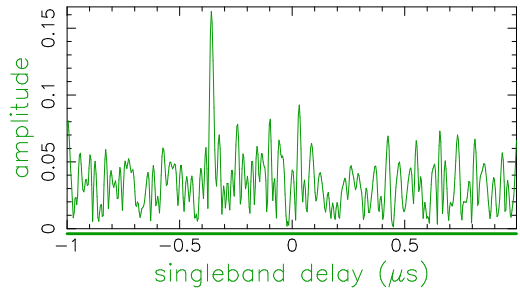
3C279.3MP2H5, No0694, fP

VLBA\_FD - PICOVEL, fgroup W, pol LL

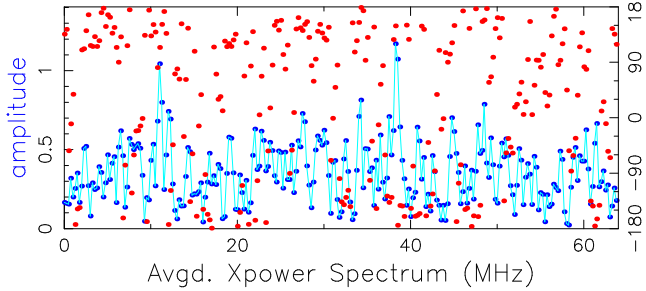


Fringe quality 0

SNR 5.9  
 Int time 177.987  
 Amp 0.166  
 Phase 2.1  
 PFD 3.1e-01  
 Delays (us)  
 SBD -0.358790  
 MBD -0.002549  
 Fringe rate (Hz)  
 -0.214111  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

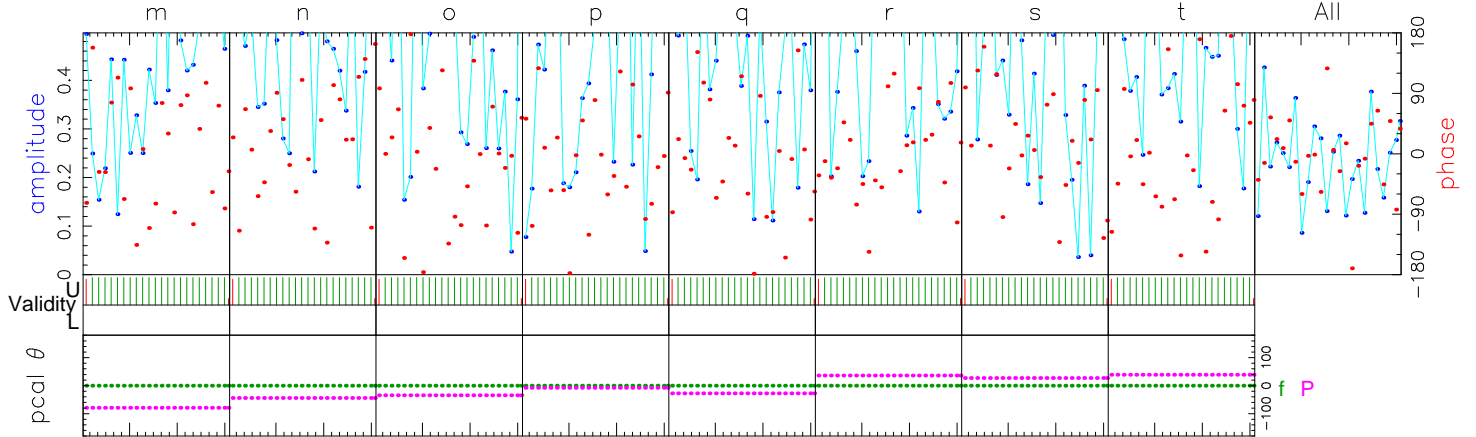


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175257  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-10.5	17.0	17.0	-7.2	-10.2	-0.3	37.5	-22.0	Phase	2.1
	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
	3.7	445.5	287.2	274.8	217.9	165.8	159.9	318.1	Sbd box	165.1
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.21065837879E+03	Apriori delay (usec)	6.21102030322E+03	Resid mbdelay (usec)	-2.54944E-03	+/-	1.8E-04
Sband delay (usec)	6.21066151372E+03	Apriori clock (usec)	9.4216156E-01	Resid sbdelay (usec)	-3.58790E-01	+/-	1.5E-03
Phase delay (usec)	6.21102030329E+03	Apriori clockrate (us/s)	-5.4801714E-07	Resid phdelay (usec)	6.82390E-08	+/-	6.2E-07
Delay rate (us/s)	1.92271053437E+00	Apriori rate (us/s)	1.92271301998E+00	Resid rate (us/s)	-2.48561E-06	+/-	6.0E-09
Total phase (deg)	333.2	Apriori accel (us/s/s)	-3.19354866507E-05	Resid phase (deg)	2.1	+/-	19.3

ph/seg (deg)	58.5	Theor.	47.3	Amplitude	0.166 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.6	Search (1024X32)	0.159	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.1	Inc. seg. avg.	0.179	Inc. seg. avg.	0.179	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.5	Inc. frq. avg.	0.156	Inc. frq. avg.	0.156	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
f: az 127.1 el 37.4 pa -43.5		P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec)	-11087.193 -563.116	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

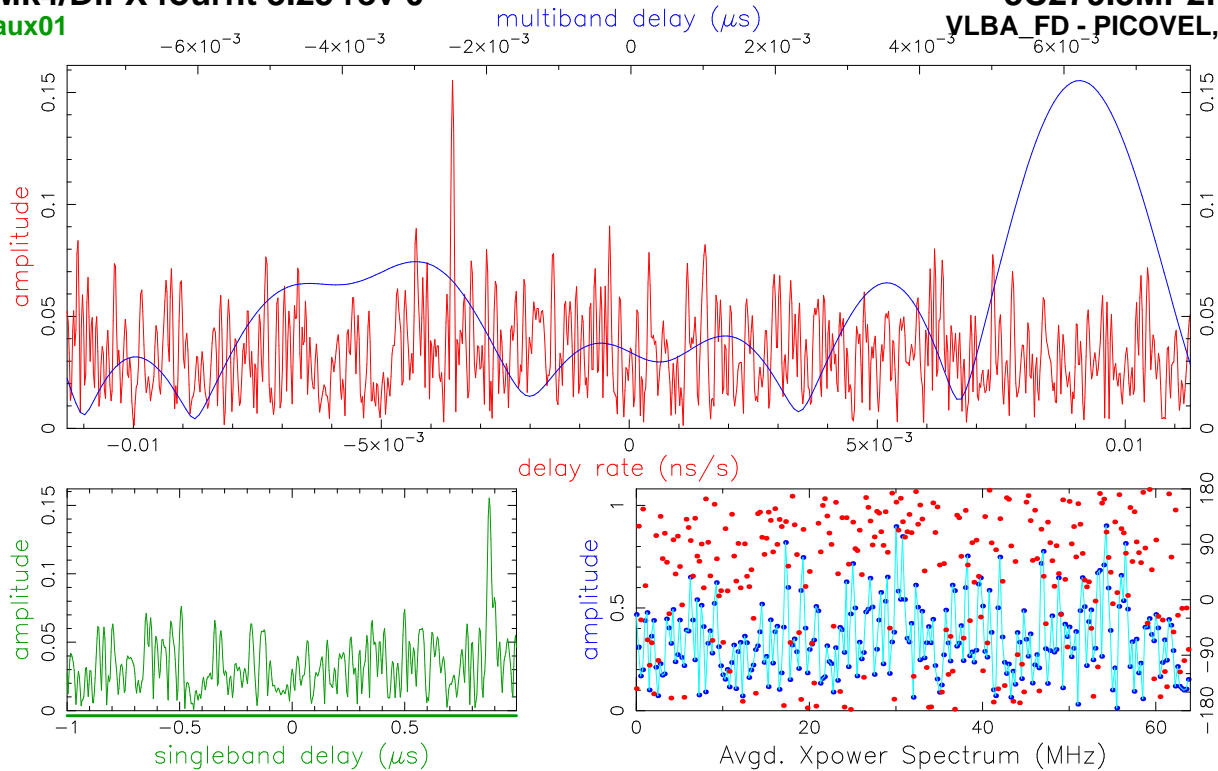
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/fP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/fP.W.163.3MP2H5 simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

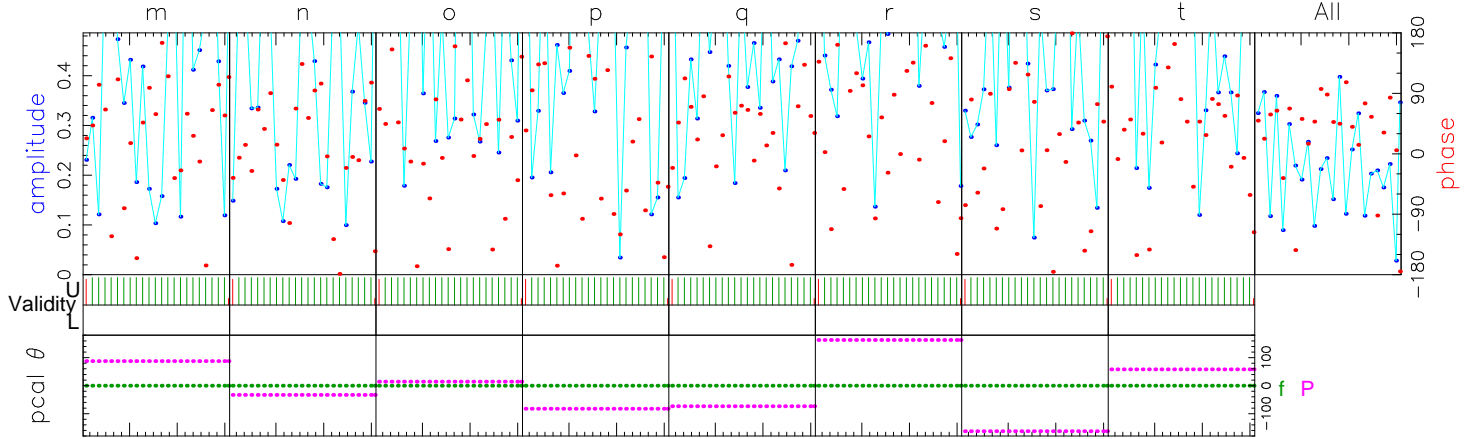
3C279.3MP2H5, No0694, fP

VLBA\_FD - PICOVEL, fgroup W, pol RR



Fringe quality 0  
 SNR 5.7  
 Int time 177.987  
 Amp 0.162  
 Phase 49.9  
 PFD 8.2e-01  
 Delays (us)  
 SBD 0.875676  
 MBD 0.006237  
 Fringe rate (Hz)  
 -0.306809  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175259  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
f	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	6.21190154055E+03	Apriori delay (usec)		6.21102030322E+03	Resid mbdelay (usec)	6.23733E-03	+/-	1.9E-04	
Sband delay (usec)	6.21189597897E+03	Apriori clock (usec)		9.4216156E-01	Resid sbdelay (usec)	8.75676E-01	+/-	1.5E-03	
Phase delay (usec)	6.21102030483E+03	Apriori clockrate (us/s)		-5.4801714E-07	Resid phdelay (usec)	1.61072E-06	+/-	6.5E-07	
Delay rate (us/s)	1.92270945823E+00	Apriori rate (us/s)		1.92271301998E+00	Resid rate (us/s)	-3.56175E-06	+/-	6.3E-09	
Total phase (deg)		21.0	Apriori accel (us/s/s)		-3.19354866507E-05	Resid phase (deg)	49.9	+/-	20.2

ph/seg (deg)	56.7	Theor.	49.5	Amplitude	0.162 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	73.7	56.7	49.5	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.8	73.7	86.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.6	40.8	28.6	Inc. seg. avg.	0.165	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		49.6	49.8	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

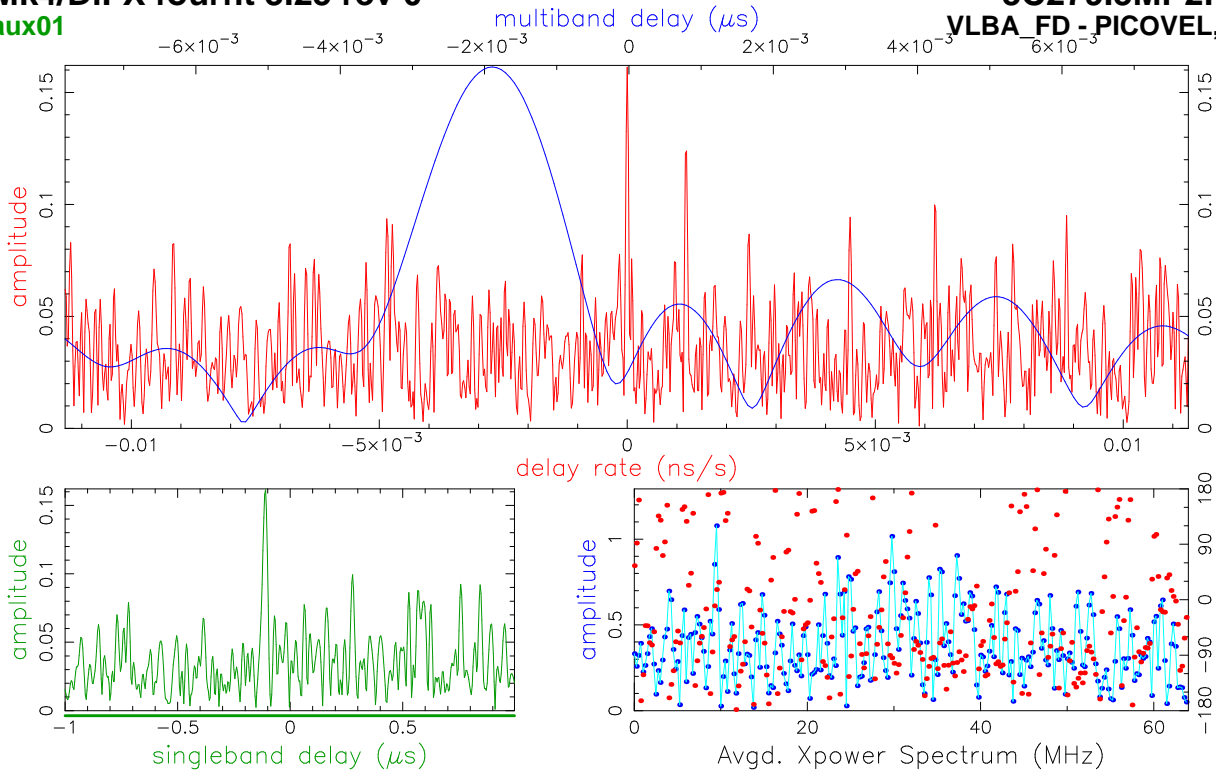
f: az 127.1 el 37.4 pa -43.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11087.193 -563.116 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/fP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/fP.W.171.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, fP

VLBA\_FD - PICOVEL, fgroup W, pol LR

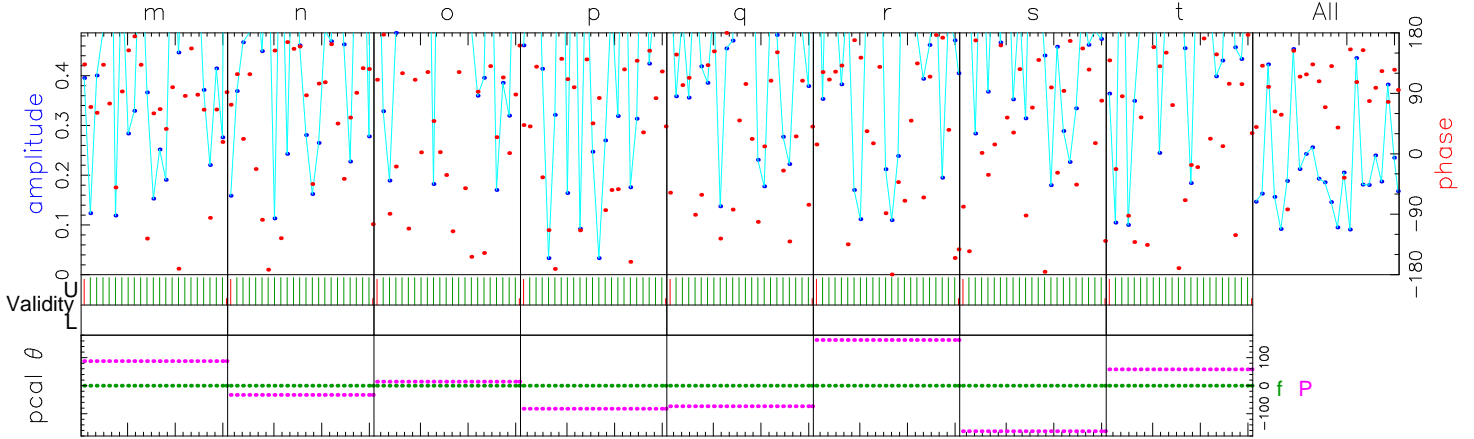


Fringe quality 0

SNR 5.9  
 Int time 177.987  
 Amp 0.162  
 Phase 106.9  
 PFD 3.5e-01  
 Delays (us)  
 SBD -0.110523  
 MBD -0.001913  
 Fringe rate (Hz)  
 -0.000028  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175301  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



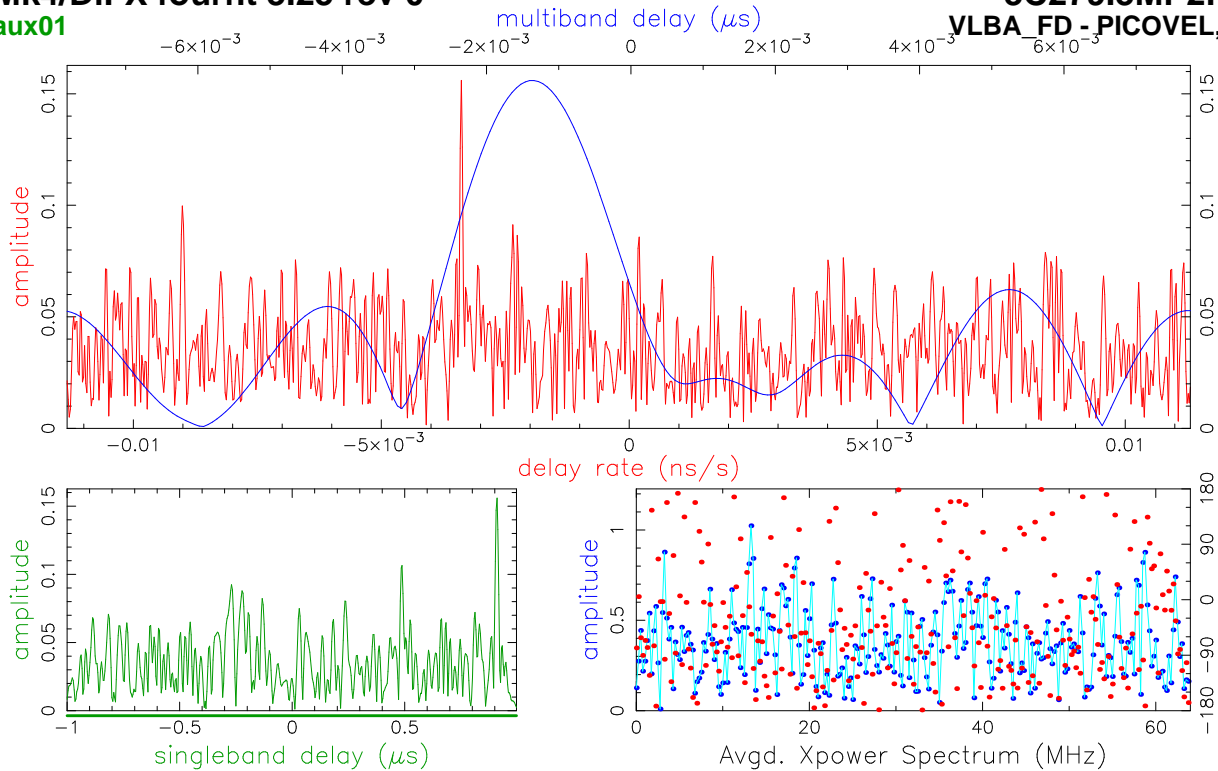
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
f	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	6.21090901488E+03		Apriori delay (usec)		6.21102030322E+03		Resid mbdelay (usec)		-1.91334E-03	+/- 1.8E-04
Sband delay (usec)	6.21090978047E+03		Apriori clock (usec)		9.4216156E-01		Resid sbdelay (usec)		-1.10523E-01	+/- 1.5E-03
Phase delay (usec)	6.21102030667E+03		Apriori clockrate (us/s)		-5.4801714E-07		Resid phdelay (usec)		3.44628E-06	+/- 6.2E-07
Delay rate (us/s)	1.92271301966E+00		Apriori rate (us/s)		1.92271301998E+00		Resid rate (us/s)		-3.21685E-10	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.19354866507E-05		Resid phase (deg)		106.9	+/- 19.4
ph/seg (deg)	RMS 56.9	Theor. 47.5	Amplitude 0.162 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	73.2	82.8	Search (1024X32) 0.161		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	18.8	27.4	Interp. 0.000		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite		dr window (ns/s)	-0.011 0.011
amp/frq (%)	42.1	47.8	Inc. seg. avg. 0.165		Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
f: az 127.1 el 37.4 pa -43.5	P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec) -11087.193 -563.116						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0694/fP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/fP.W.182.3MP2H5							

Mk4/DiFX fourfit 3.25 rev 0

aux01

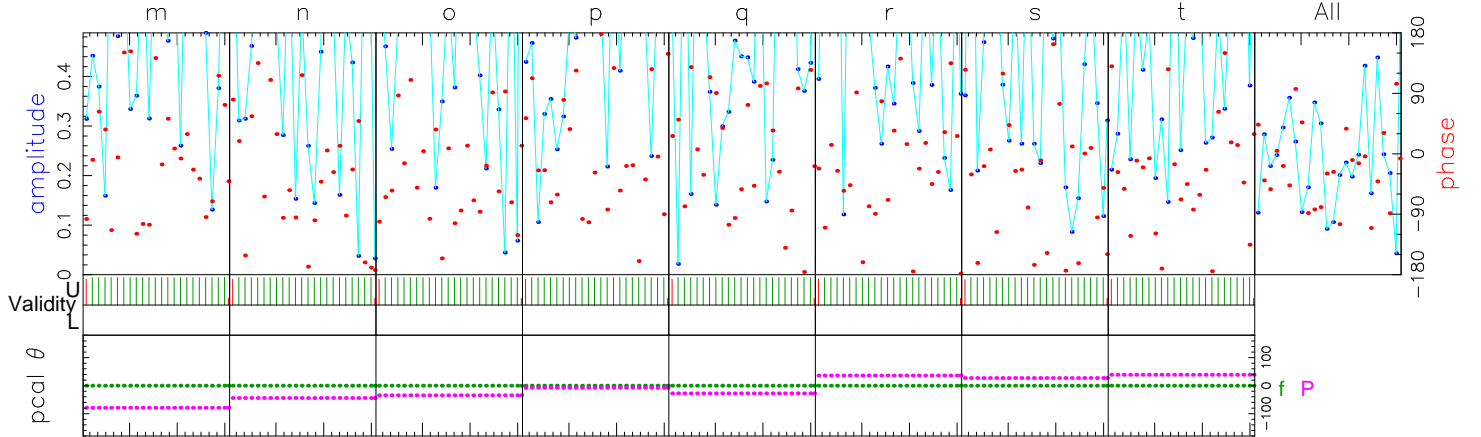
3C279.3MP2H5, No0694, fP

VLBA\_FD - PICOVEL, fgroup W, pol RL



Fringe quality 0  
 SNR 5.7  
 Int time 177.987  
 Amp 0.163  
 Phase -30.6  
 PFD 7.3e-01  
 Delays (us)  
 SBD 0.909283  
 MBD -0.001361  
 Fringe rate (Hz)  
 -0.292004  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175303  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



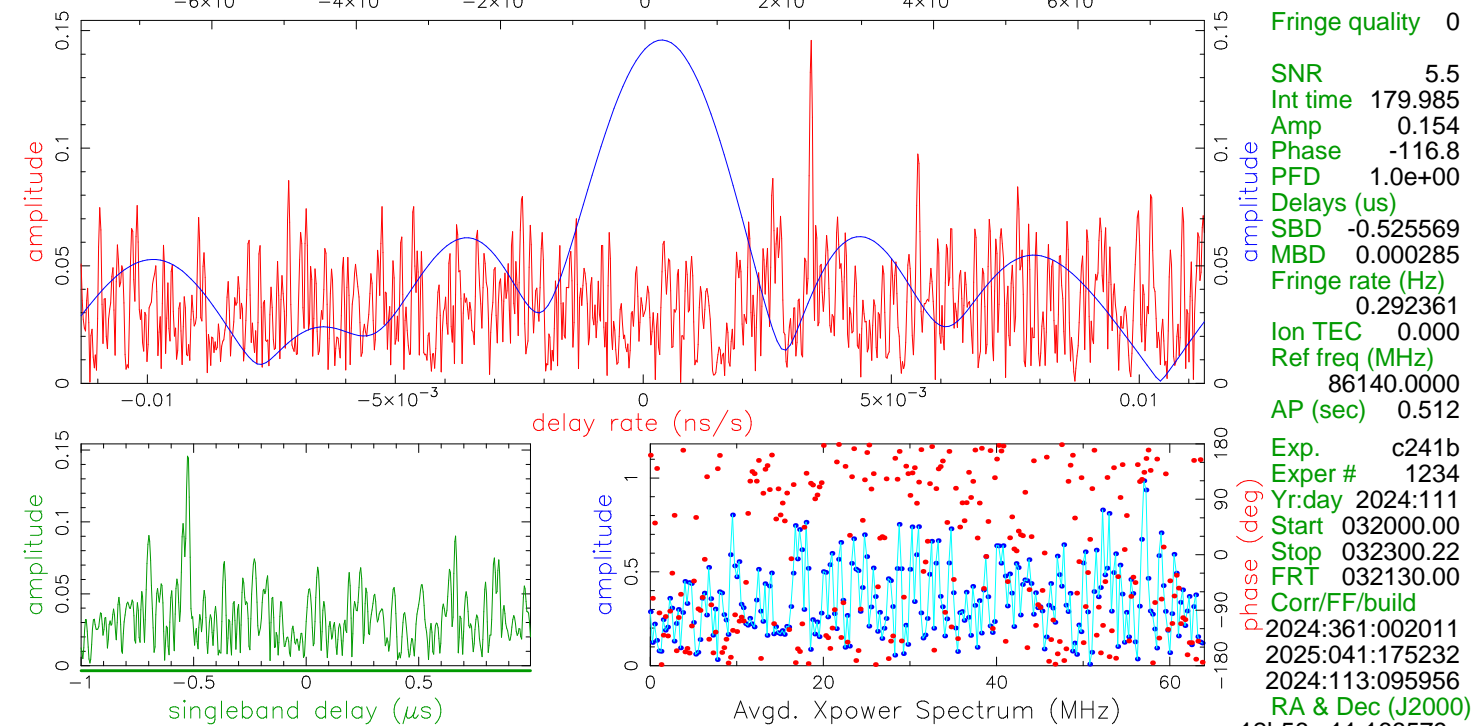
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-16.6	-14.6	-45.1	-48.1	-23.0	-21.0	-38.3	-28.9	Phase	-30.6
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.3	Ampl.	0.1
	455.5	399.5	360.1	215.8	382.0	372.9	198.9	347.6	Sbd box	489.8
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	6.21192519211E+03		Apriori delay (usec)		6.21102030322E+03		Resid mbdelay (usec)		-1.36111E-03	+/- 1.9E-04
Sband delay (usec)	6.21192958597E+03		Apriori clock (usec)		9.4216156E-01		Resid sbdelay (usec)		9.09283E-01	+/- 1.5E-03
Phase delay (usec)	6.21102030224E+03		Apriori clockrate (us/s)		-5.4801714E-07		Resid phdelay (usec)		-9.85236E-07	+/- 6.5E-07
Delay rate (us/s)	1.92270963011E+00		Apriori rate (us/s)		1.92271301998E+00		Resid rate (us/s)		-3.38987E-06	+/- 6.3E-09
Total phase (deg)	300.5		Apriori accel (us/s/s)		-3.19354866507E-05		Resid phase (deg)		-30.6	+/- 20.0
ph/seg (deg)	RMS 59.2	Theor. 49.1	Amplitude 59.2	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	81.8	85.6	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	14.0	28.3	Inc. seg. avg.	0.178	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite		dr window (ns/s)	-0.011 0.011
amp/frq (%)	39.9	49.4	Inc. frq. avg.	0.147	Data rate(Mb/s): 2048		ion window (TEC)		0.00 0.00	
f: az 127.1 el 37.4 pa -43.5	P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec) -11087.193 -563.116		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0694/fP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/fP.W.193.3MP2H5							

Mk4/DiFX fourfit 3.25 rev 0

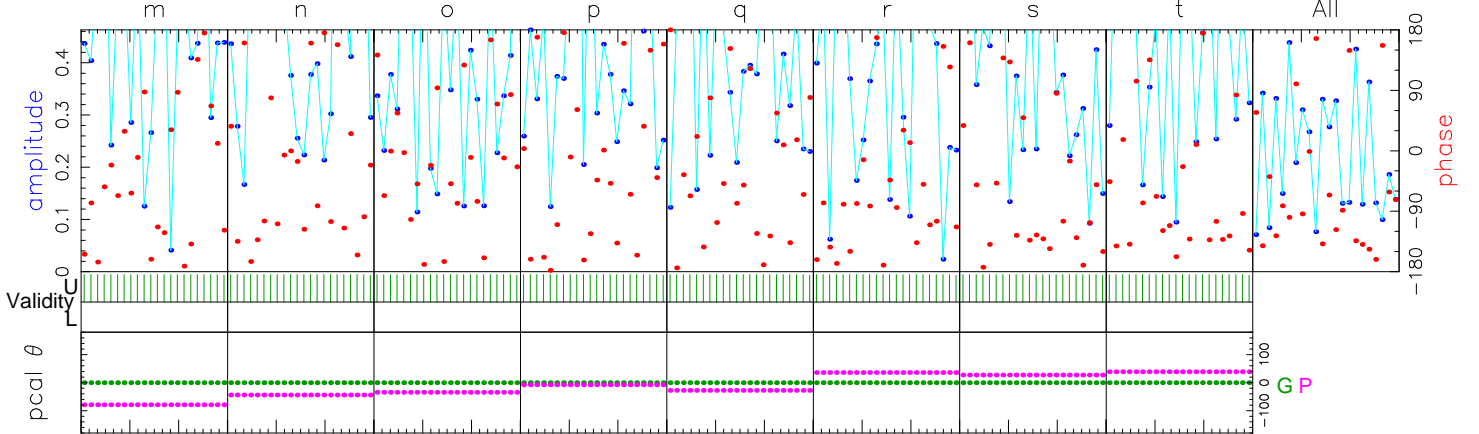
aux01

3C279.3MP2H5, No0694, GP

GBT\_COLD - PICOVEL, fgroup W, pol LL



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



86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
-113.0	-129.5	-46.8	-150.6	-102.3	-112.5	-137.2	-118.6	Phase	-116.8
0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
92.9	211.8	92.4	471.7	307.0	501.8	162.5	121.0	Sbd box	122.5
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
G 0	0	0	0	0	0	0	0	PC freqs	
P 0	0	0	0	0	0	0	0	PC freqs	
G:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:P 0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000	1000	1000	1000	1000		
G W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	7.85521641855E+03	Apriori delay (usec)	7.85574738321E+03	Resid mbdelay (usec)	2.85346E-04	+/-	2.0E-04
Sband delay (usec)	7.85522181371E+03	Apriori clock (usec)	-1.3740126E+01	Resid sbdelay (usec)	-5.25569E-01	+/-	1.6E-03
Phase delay (usec)	7.85574737944E+03	Apriori clockrate (us/s)	-5.2785402E-07	Resid phdelay (usec)	-3.76724E-06	+/-	6.8E-07
Delay rate (us/s)	1.39789478857E+00	Apriori rate (us/s)	1.39789139455E+00	Resid rate (us/s)	3.39402E-06	+/-	6.5E-09
Total phase (deg)	95.4	Apriori accel (us/s/s)	-4.20621426056E-05	Resid phase (deg)	-116.8	+/-	21.0

ph/seg (deg)	RMS 70.0	Theor. 49.3	Amplitude Search (1024X32)	0.154 +/- 0.028	0.145	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	93.3	86.0	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	33.8	29.7	Inc. seg. avg.	0.171		Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.0	51.8	Inc. frq. avg.	0.145		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		

G: az 158.6 el 43.4 pa -16.5 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -8070.034 505.997 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//GP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//GP.W.40.3MP2H5

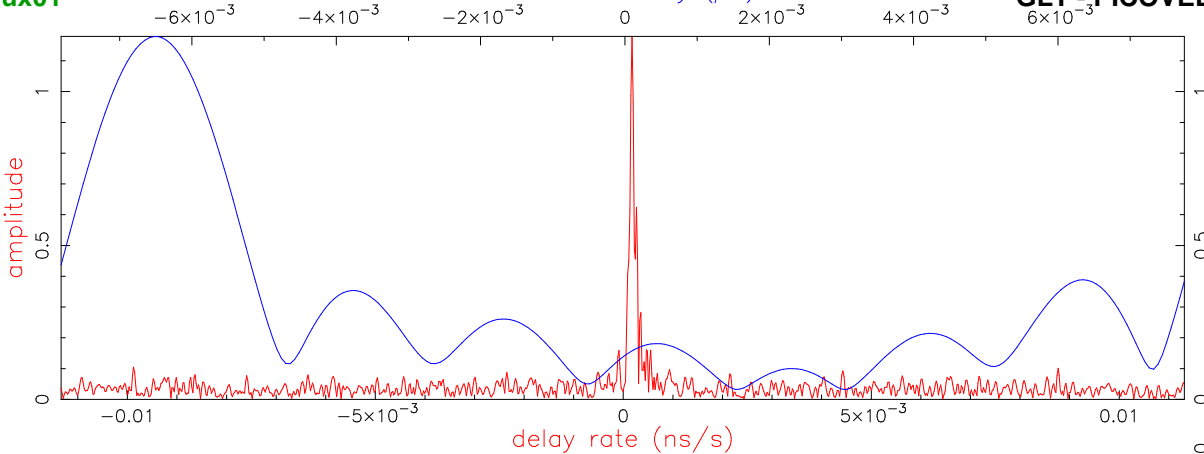
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, gP

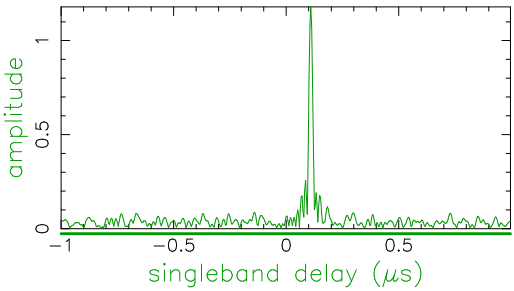
GLT - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

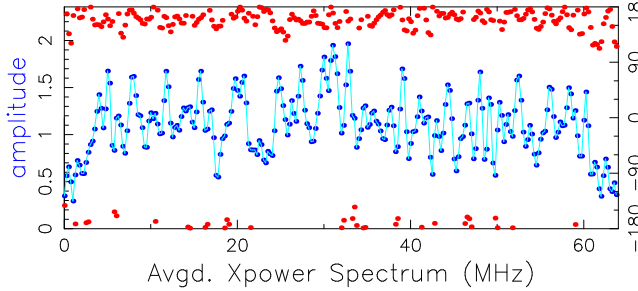


Fringe quality 7

SNR 43.3  
 Int time 179.993  
 Amp 1.179  
 Phase 57.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.109248  
 MBD -0.006503  
 Fringe rate (Hz)  
 0.016137  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

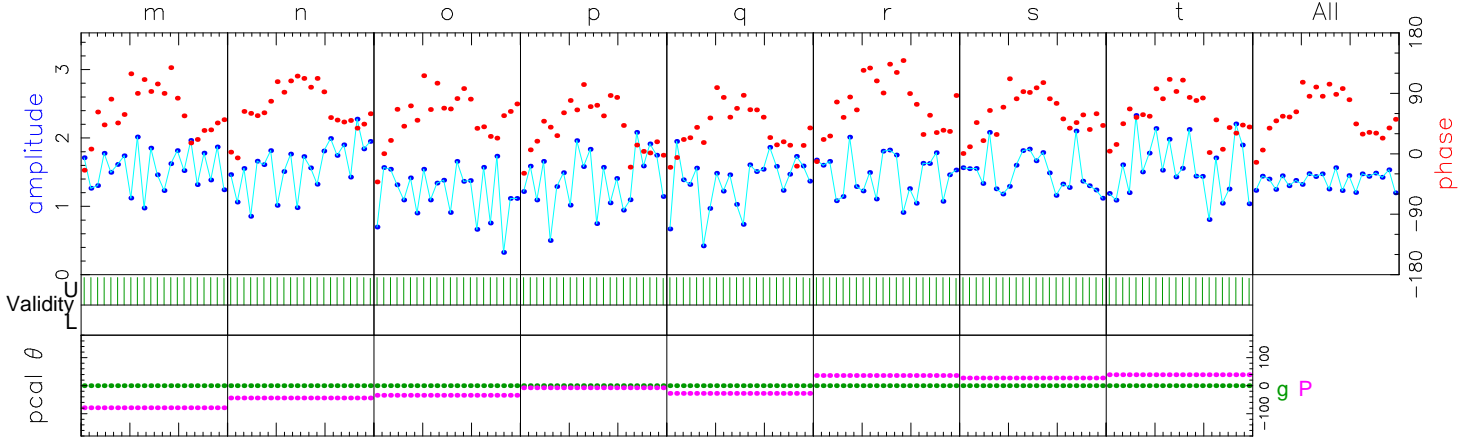


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175233  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
g	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-3.99353501912E+03	Apriori delay (usec)	-3.99363789108E+03	Resid mbdelay (usec)	-6.50304E-03	+/-	2.5E-05
Sband delay (usec)	-3.99352864333E+03	Apriori clock (usec)	1.2208920E+03	Resid sbdelay (usec)	1.09248E-01	+/-	2.0E-04
Phase delay (usec)	-3.99363788924E+03	Apriori clockrate (us/s)	1.8608487E-07	Resid phdelay (usec)	1.83942E-06	+/-	8.5E-08
Delay rate (us/s)	1.10708133620E+00	Apriori rate (us/s)	1.10708114886E+00	Resid rate (us/s)	1.87338E-07	+/-	8.2E-10
Total phase (deg)	-280.6	Apriori accel (us/s/s)	1.69310495399E-05	Resid phase (deg)	57.0	+/-	2.6

ph/seg (deg) 32.3 6.2 Search (1024X32) 1.114 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 19.7 10.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 14.2 3.7 Inc. seg. avg. 1.375 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 10.3 6.5 Inc. frq. avg. 1.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 175.6 el 7.5 pa -1.0 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6363.853 3125.786 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/gP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/gP.W.46.3MP2H5

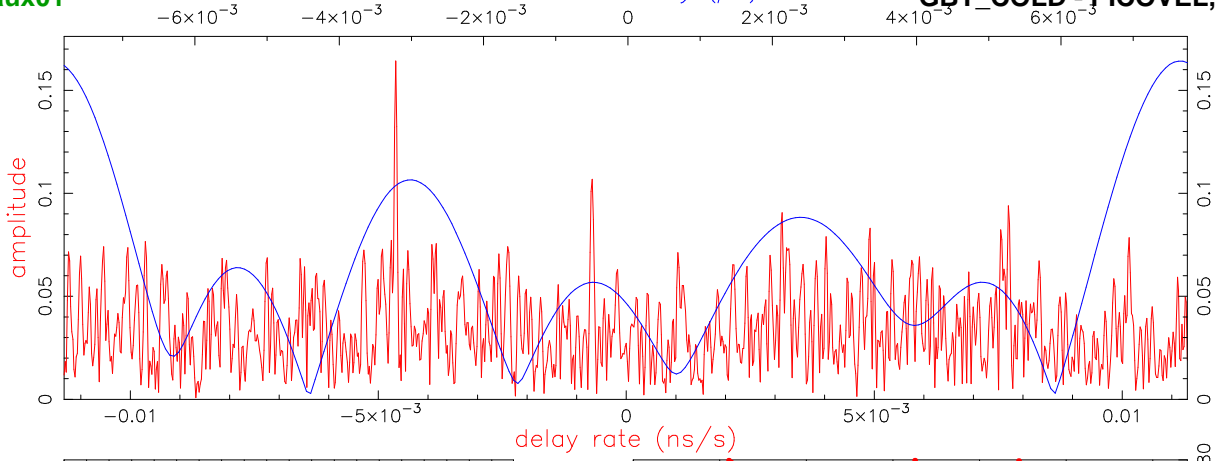
Mk4/DiFX fourfit 3.25 rev 0

aux01

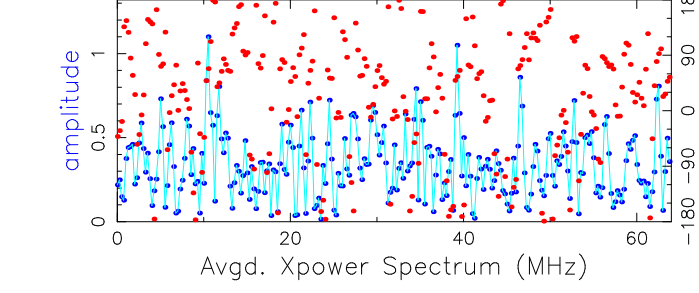
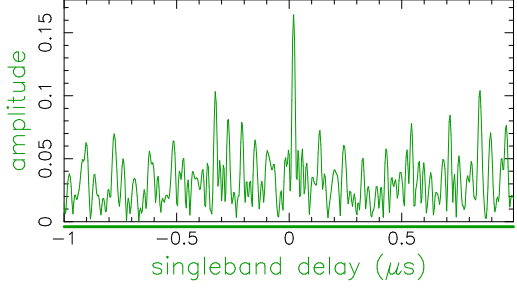
3C279.3MP2H5, No0694, GP

GBT\_COLD - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)

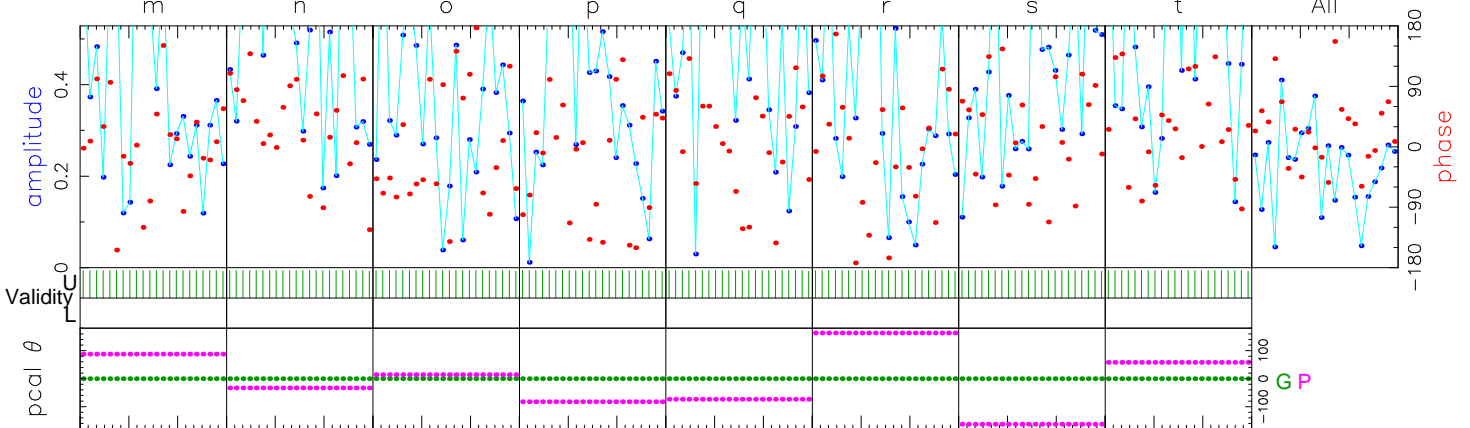


Fringe quality 0  
 SNR 6.0  
 Int time 179.985  
 Amp 0.176  
 Phase 20.8  
 PFD 2.0e-01  
 Delays (us)  
 SBD 0.019486  
 MBD -0.007975  
 Fringe rate (Hz)  
 -0.400722  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175234  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
G	0	0	0	0	0	0	0	0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
G:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Mani PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	7.85577065844E+03	Apriori delay (usec)	7.85574738321E+03	Resid mbdelay (usec)	-7.97477E-03	+/-	1.8E-04
Sband delay (usec)	7.85576686921E+03	Apriori clock (usec)	-1.3740126E+01	Resid sbdelay (usec)	1.94860E-02	+/-	1.4E-03
Phase delay (usec)	7.85574738388E+03	Apriori clockrate (us/s)	-5.2785402E-07	Resid phdelay (usec)	6.69945E-07	+/-	6.1E-07
Delay rate (us/s)	1.39788674257E+00	Apriori rate (us/s)	1.39789139455E+00	Resid rate (us/s)	-4.65198E-06	+/-	5.9E-09
Total phase (deg)	233.0	Apriori accel (us/s/s)	-4.20621426056E-05	Resid phase (deg)	20.8	+/-	19.0

ph/seg (deg)	53.0	Theor.	44.6	Search (1024X32)	0.158	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.3		77.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	37.8		26.9	Inc. seg. avg.	0.182	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	56.5		46.9	Inc. frq. avg.	0.182	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

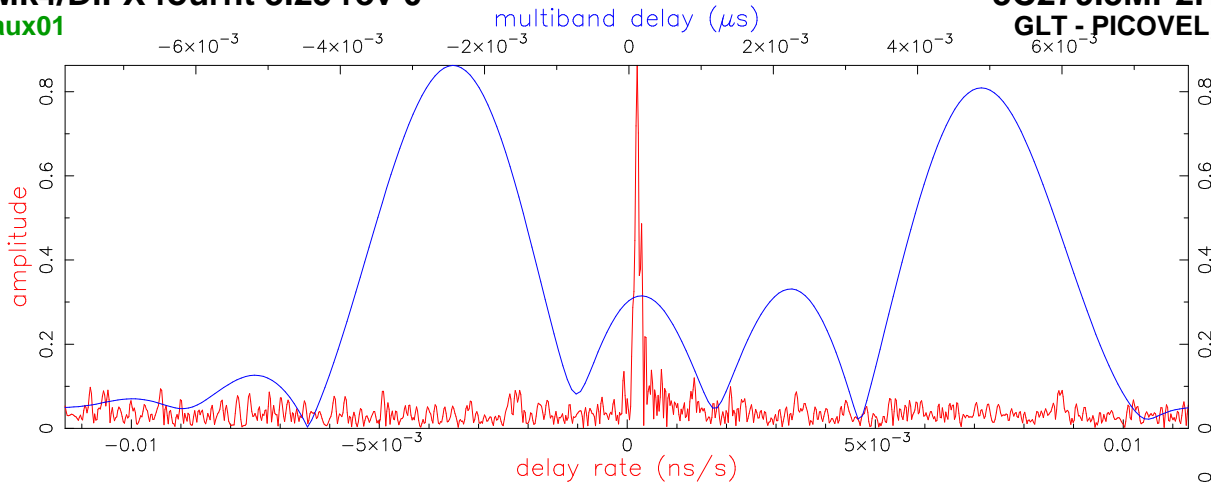
G: az 158.6 el 43.4 pa -16.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -8070.034 505.997 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//GP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//GP.W.48.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

aux01

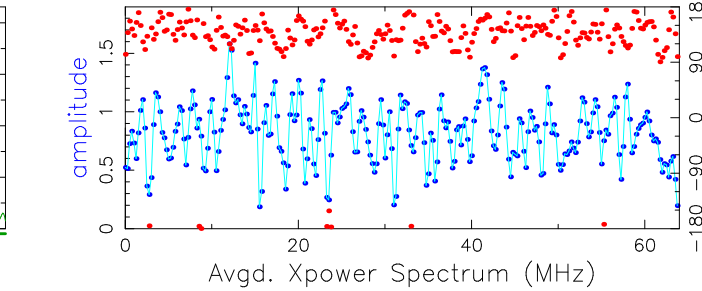
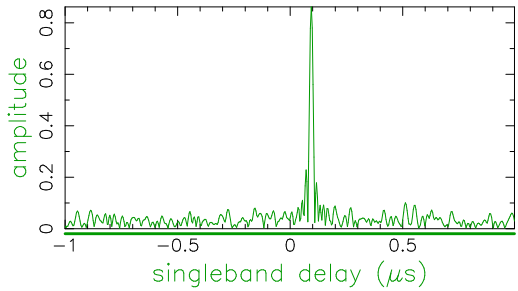
3C279.3MP2H5, No0694, gP

GLT - PICOVEL, fgroup W, pol RR



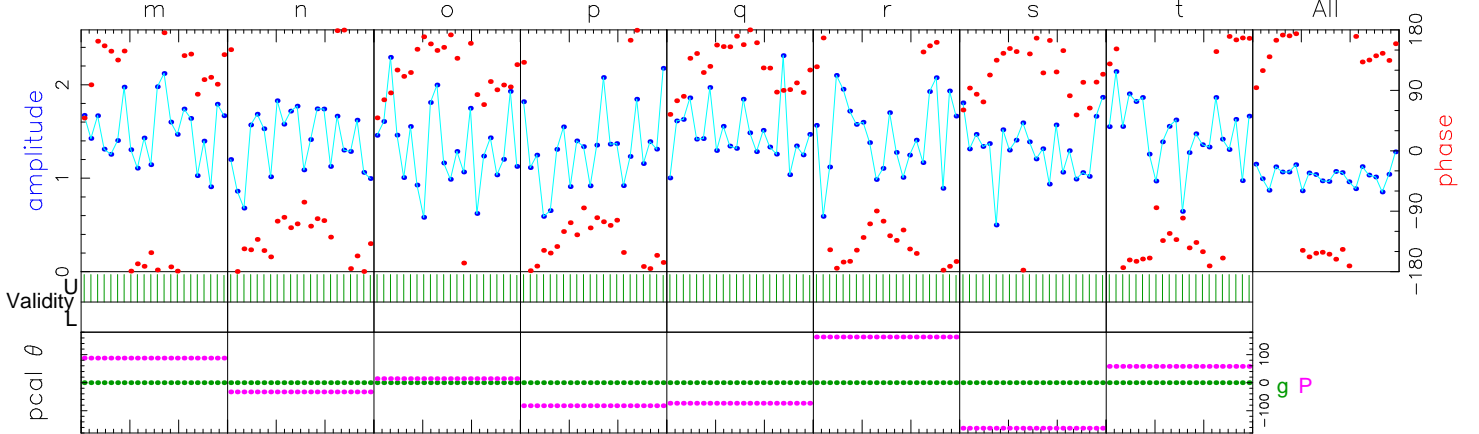
Fringe quality 5

SNR 31.6  
 Int time 179.993  
 Amp 0.862  
 Phase 167.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.093764  
 MBD -0.002437  
 Fringe rate (Hz)  
 0.016400  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175235  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-3.99354657779E+03	Apriori delay (usec)	-3.99363789108E+03	Resid mbdelay (usec)	-2.43671E-03	+/-	3.4E-05
Sband delay (usec)	-3.99354412733E+03	Apriori clock (usec)	1.2208920E+00	Resid sbdelay (usec)	9.37637E-02	+/-	2.7E-04
Phase delay (usec)	-3.99363788567E+03	Apriori clockrate (us/s)	1.8608487E-07	Resid phdelay (usec)	5.40975E-06	+/-	1.2E-07
Delay rate (us/s)	1.10708133925E+00	Apriori rate (us/s)	1.10708114886E+00	Resid rate (us/s)	1.90389E-07	+/-	1.1E-09
Total phase (deg)		Apriori accel (us/s/s)	1.69310495399E-05	Resid phase (deg)	167.8	+/-	3.6

ph/seg (deg) 33.6 8.5  
 amp/seg (%) 22.7 14.8  
 ph/frq (deg) 49.0 5.1  
 amp/frq (%) 35.0 8.9

RMS Theor. Amplitude 0.862 +/- 0.027  
 Search (1024X32) 0.833  
 Interp. 0.000  
 Inc. seg. avg. 1.018  
 Inc. frq. avg. 1.151

g: az 175.6 el 7.5 pa -1.0 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6363.853 3125.786  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/gP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/gP.W.53.3MP2H5

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

simultaneous interpolator

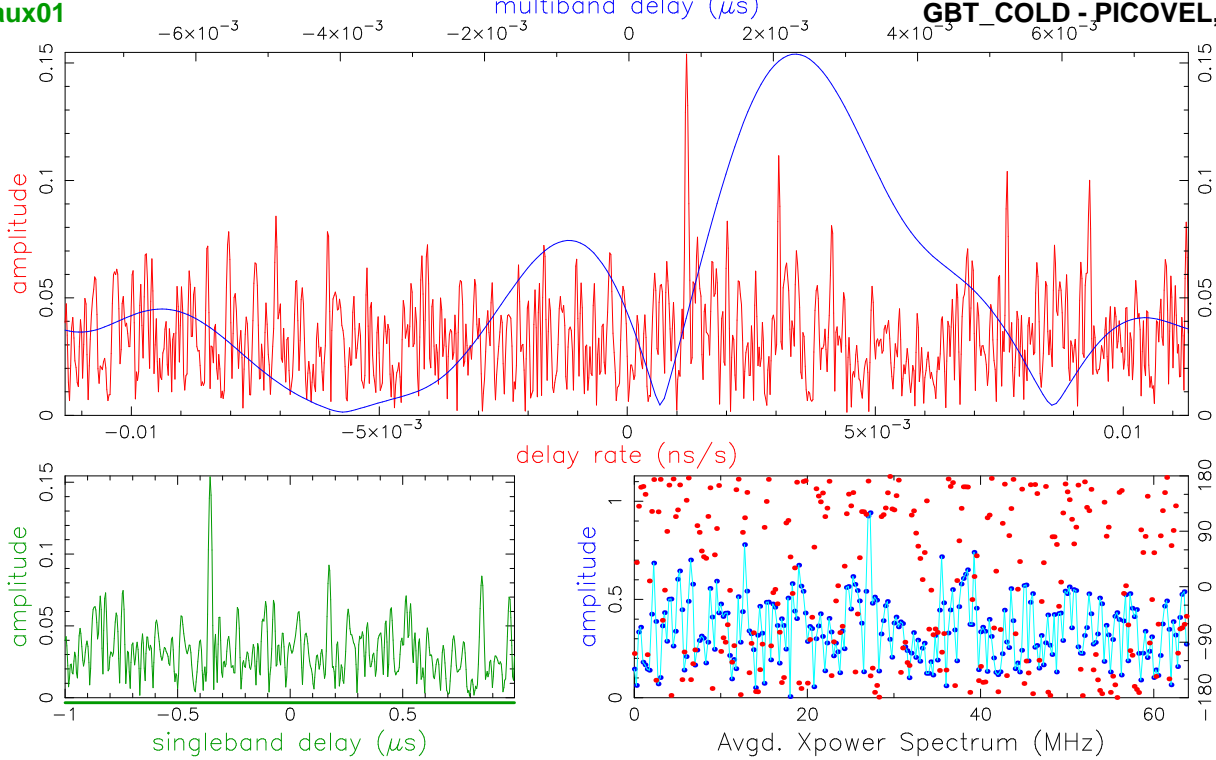


Mk4/DiFX fourfit 3.25 rev 0

aux01

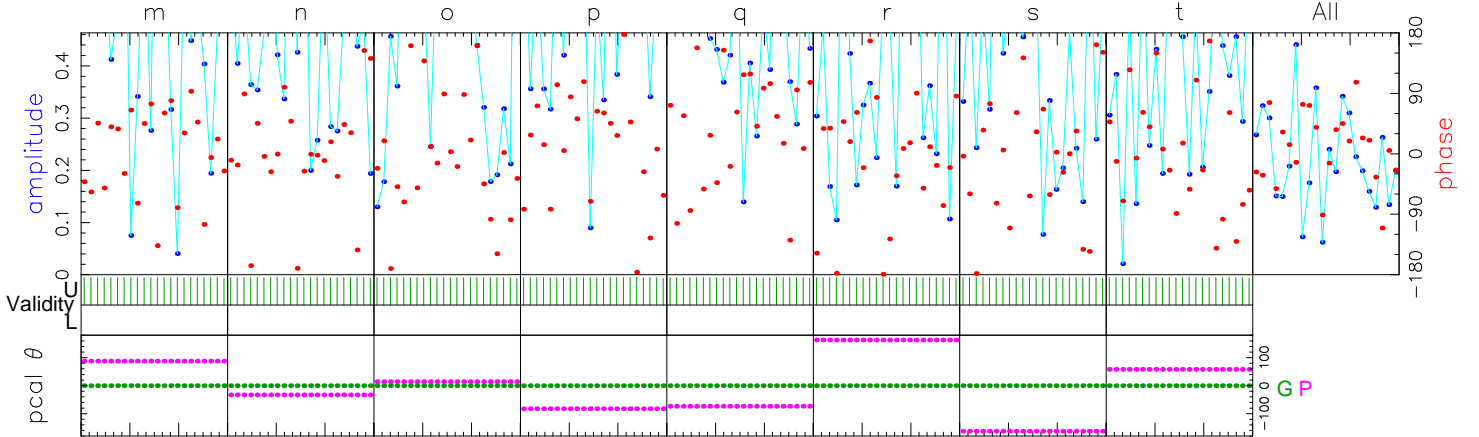
3C279.3MP2H5, No0694, GP

GBT\_COLD - PICOVEL, fgroup W, pol LR



Fringe quality 0  
 SNR 5.6  
 Int time 179.985  
 Amp 0.154  
 Phase 11.6  
 PFD 8.7e-01  
 Delays (us)  
 SBD -0.355271  
 MBD 0.002315  
 Fringe rate (Hz)  
 0.102701  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175236  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



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

Group delay (usec) (SBD) 7.85539032361E+03 Apriori delay (usec) 7.85574738321E+03 Resid mbdelay (usec) 2.31540E-03 +/- 1.9E-04  
 Sband delay (usec) 7.85539211271E+03 Apriori clock (usec) -1.3740126E+01 Resid sbdelay (usec) -3.55271E-01 +/- 1.5E-03  
 Phase delay (usec) 7.85574738358E+03 Apriori clockrate (us/s) -5.2785402E-07 Resid phdelay (usec) 3.74426E-07 +/- 6.5E-07  
 Delay rate (us/s) 1.39789258681E+00 Apriori rate (us/s) 1.39789139455E+00 Resid rate (us/s) 1.19226E-06 +/- 6.3E-09  
 Total phase (deg) 223.9 Apriori accel (us/s/s) -4.20621426056E-05 Resid phase (deg) 11.6 +/- 20.3

RMS Theor. Amplitude 0.154 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 52.8 47.6 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 75.6 83.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 35.4 28.7 Inc. seg. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 40.0 50.1 Inc. frq. avg. 0.155 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

G: az 158.6 el 43.4 pa -16.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -8070.034 505.997 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//GP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//GP.W.58.3MP2H5

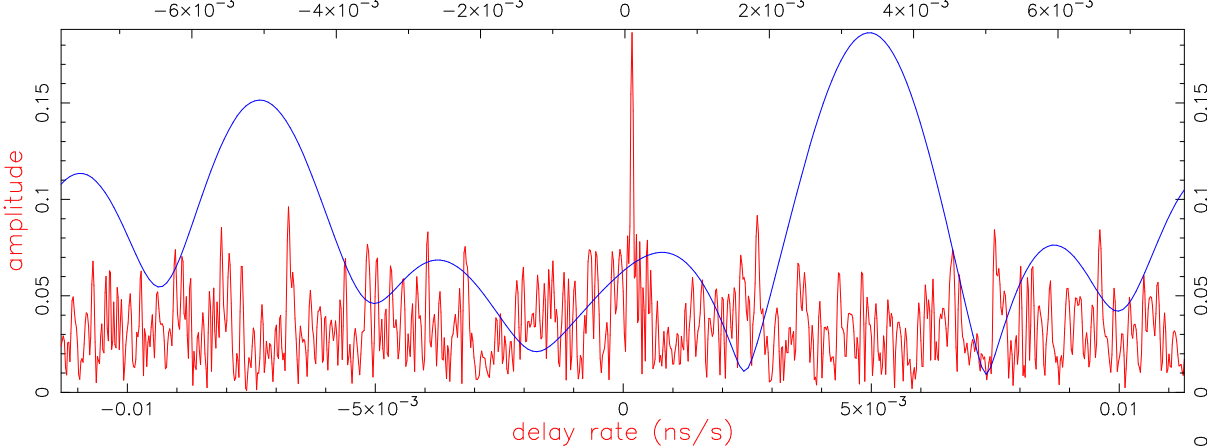
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, gP

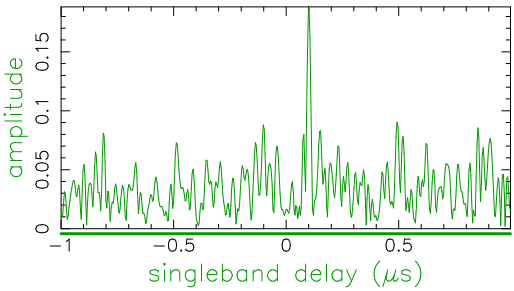
GLT - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

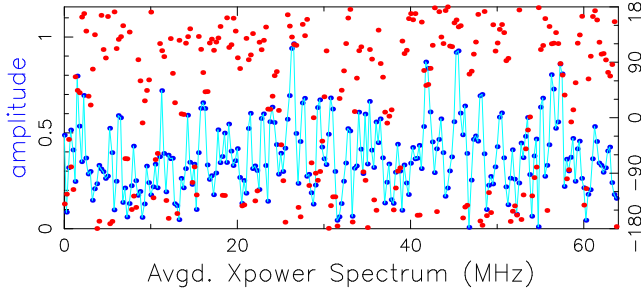


Fringe quality 0

SNR 6.9  
 Int time 179.993  
 Amp 0.188  
 Phase 174.8  
 PFD 7.6e-04  
 Delays (us)  
 SBD 0.100323  
 MBD 0.003389  
 Fringe rate (Hz) 0.015659  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

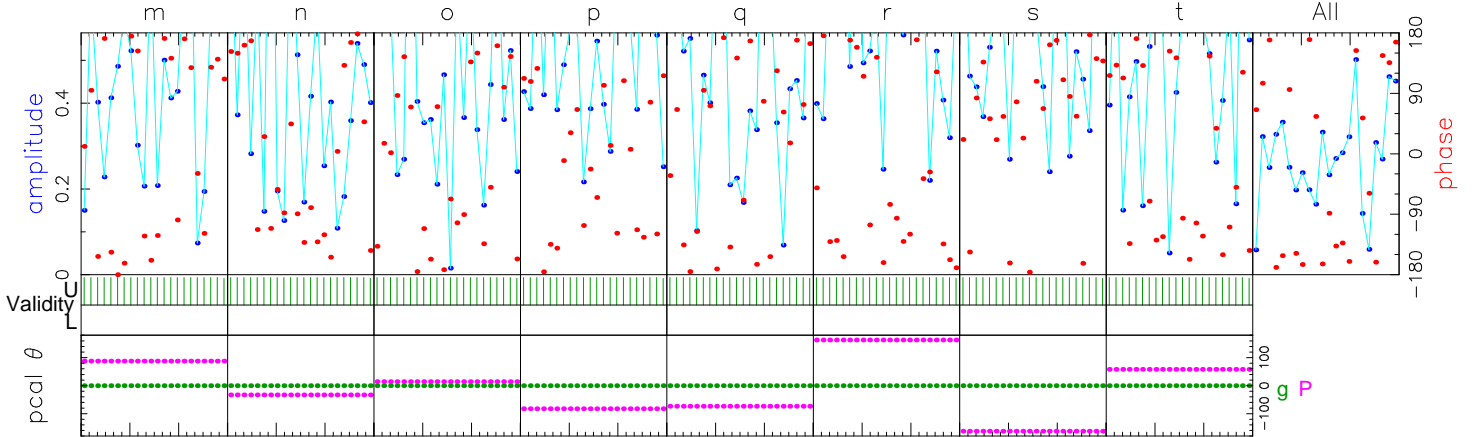


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175236  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -3.99354075231E+03 Apriori delay (usec) -3.99363789108E+03 Resid mbdelay (usec) 3.38877E-03 +/- 1.6E-04  
 Sband delay (usec) -3.99353756783E+03 Apriori clock (usec) 1.2208920E+00 Resid sbdelay (usec) 1.00323E-01 +/- 1.2E-03  
 Phase delay (usec) -3.99363788545E+03 Apriori clockrate (us/s) 1.8608487E-07 Resid phdelay (usec) 5.63599E-06 +/- 5.4E-07  
 Delay rate (us/s) 1.10708133064E+00 Apriori rate (us/s) 1.10708114886E+00 Resid rate (us/s) 1.81782E-07 +/- 5.1E-09  
 Total phase (deg) -162.9 Apriori accel (us/s/s) 1.69310495399E-05 Resid phase (deg) 174.8 +/- 16.6

ph/seg (deg) 64.1 38.9 Search (1024X32) 0.185 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.5 68.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 40.1 23.5 Inc. seg. avg. 0.222 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 60.8 41.0 Inc. frq. avg. 0.218 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 175.6 el 7.5 pa -1.0 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -6363.853 3125.786 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/gP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/gP.W.61.3MP2H5

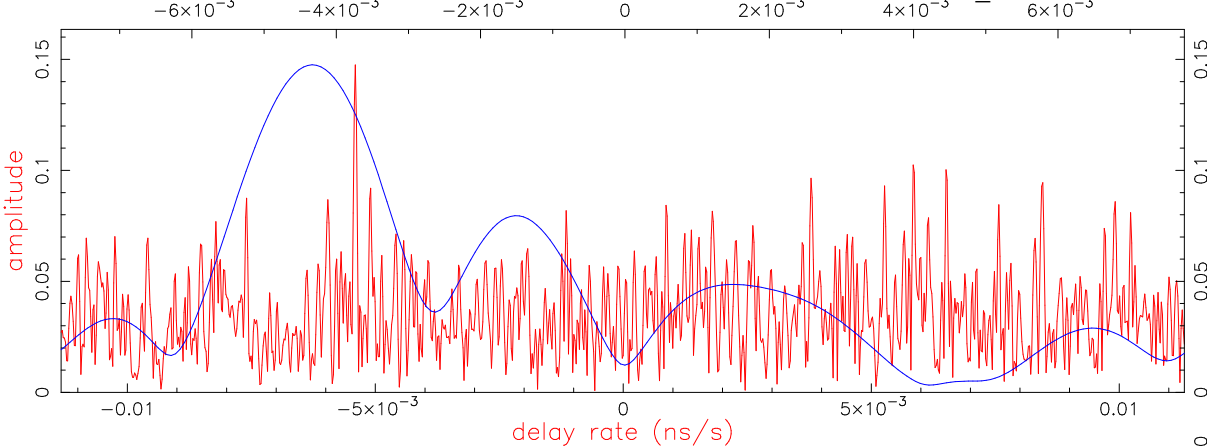
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, GP

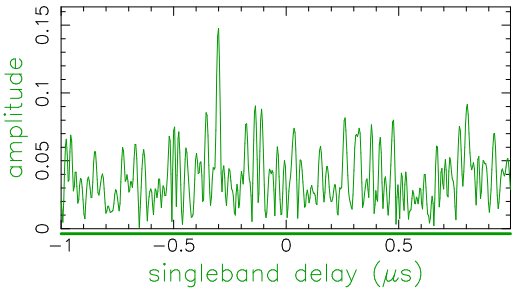
GBT\_COLD - PICOVEL, fgroup W, pol RL

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

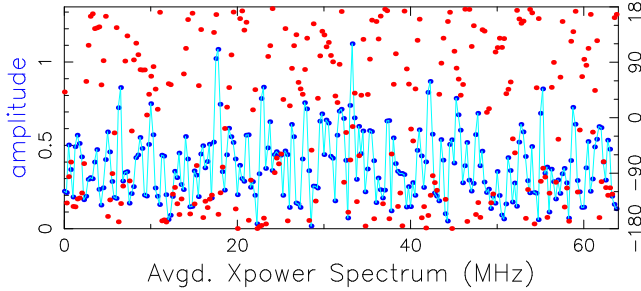


Fringe quality 0

SNR 5.5  
 Int time 179.985  
 Amp 0.164  
 Phase -22.4  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.301922  
 MBD -0.004365  
 Fringe rate (Hz)  
 -0.465239  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

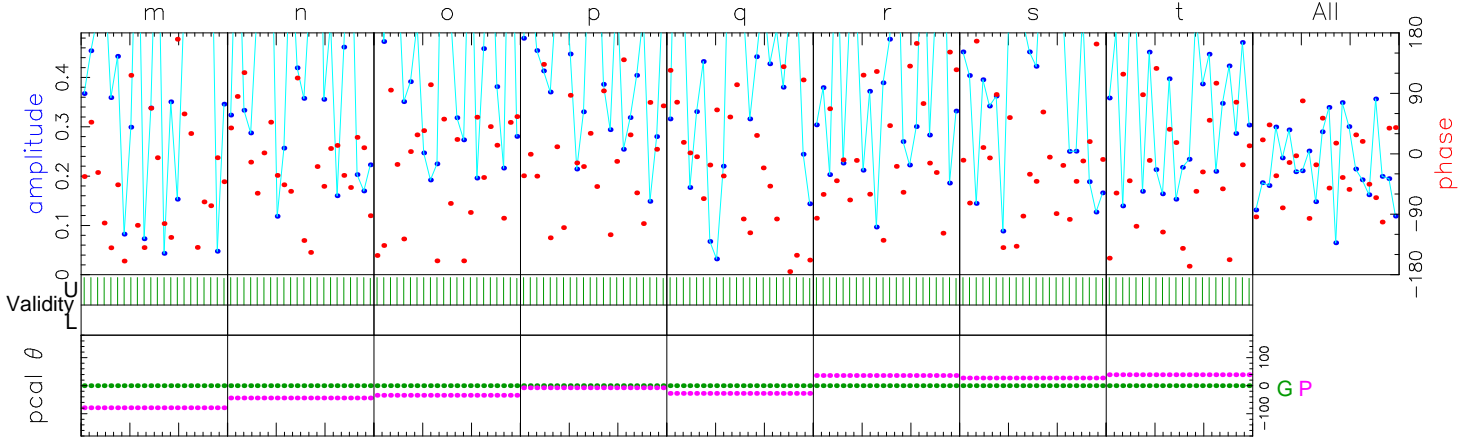


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175237  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.9	-13.7	10.1	-11.1	17.3	-34.9	-24.2	-35.3		Phase
	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1		Ampl.
	219.9	181.1	108.4	136.0	291.6	442.8	198.8	184.5		Sbd box
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		179.7
G	0	0	0	0	0	0	0	0		APs used
P	0	0	0	0	0	0	0	0		PC freqs
G:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
G:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		Mani PC
G	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
P	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec) (SBD)	7.85544614362E+03		Apriori delay (usec)		7.85574738321E+03		Resid mbdelay (usec)		-4.36458E-03	+/- 2.0E-04
Sband delay (usec)	7.85544546096E+03		Apriori clock (usec)		-1.3740126E+01		Resid sbdelay (usec)		-3.01922E-01	+/- 1.6E-03
Phase delay (usec)	7.85574738249E+03		Apriori clockrate (us/s)		-5.2785402E-07		Resid phdelay (usec)		-7.21728E-07	+/- 6.8E-07
Delay rate (us/s)	1.39788599359E+00		Apriori rate (us/s)		1.39789139455E+00		Resid rate (us/s)		-5.40096E-06	+/- 6.5E-09
Total phase (deg)	189.9		Apriori accel (us/s/s)		-4.20621426056E-05		Resid phase (deg)		-22.4	+/- 21.0

ph/seg (deg) 52.3 49.3 Search (1024X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.3 86.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.1 29.7 Inc. seg. avg. 0.180 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.7 51.9 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 158.6 el 43.4 pa -16.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -8070.034 505.997 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//GP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//GP.W.66.3MP2H5

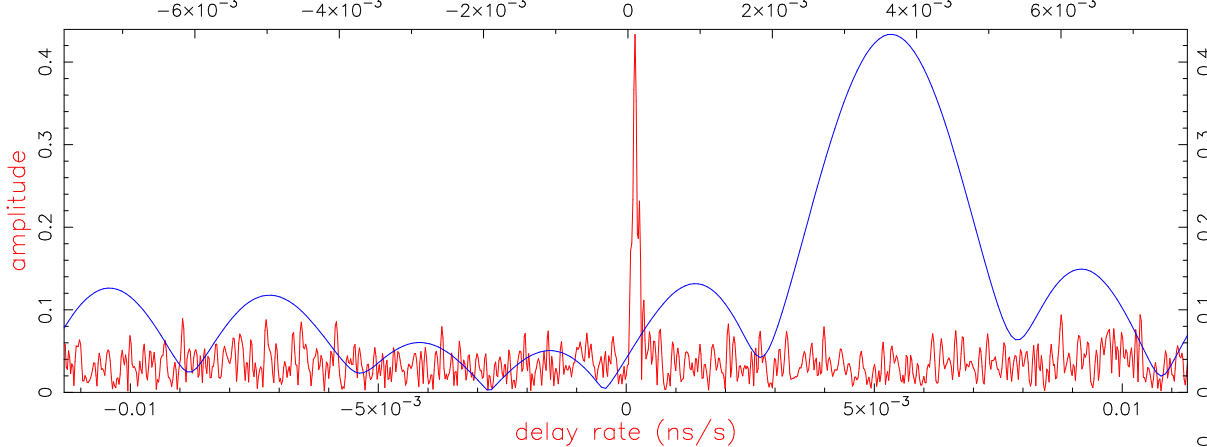
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, gP

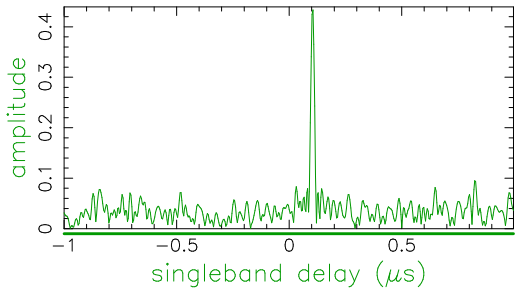
GLT - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

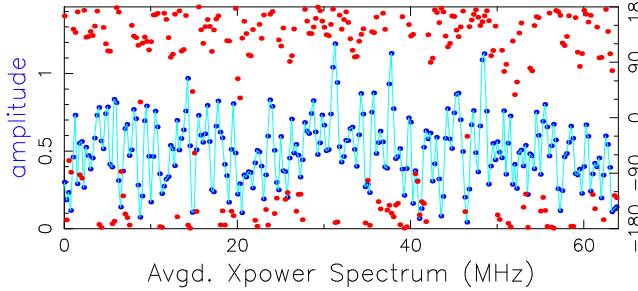


Fringe quality 9

SNR 16.1  
 Int time 179.993  
 Amp 0.440  
 Phase -122.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.103961  
 MBD 0.003625  
 Fringe rate (Hz)  
 0.015985  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

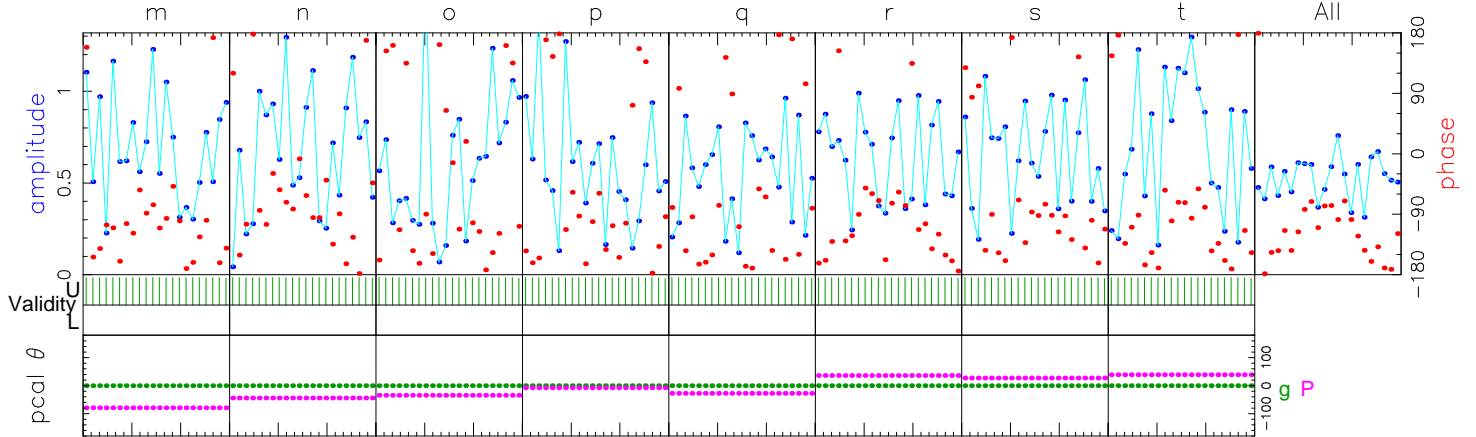


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175239  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-120.8	-99.9	-141.5	-137.2	-141.3	-119.8	-127.3	-106.2	Phase	-122.7	
	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	Ampl.	0.4	
	283.6	284.2	283.0	283.8	283.3	283.9	283.5	284.1	Sbd box	283.6	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
P/g	0	0	0	0	0	0	0	0	PC freqs		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Mani PC		
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000			
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-3.99354051625E+03		Apriori delay (usec)		-3.99363789108E+03		Resid mbdelay (usec)		3.62483E-03	+/- 6.7E-05	
Sband delay (usec)	-3.99353392983E+03		Apriori clock (usec)		1.2208920E+00		Resid sbdelay (usec)		1.03961E-01	+/- 5.3E-04	
Phase delay (usec)	-3.99363789504E+03		Apriori clockrate (us/s)		1.8608487E-07		Resid phdelay (usec)		-3.95731E-06	+/- 2.3E-07	
Delay rate (us/s)	1.10708133443E+00		Apriori rate (us/s)		1.10708114886E+00		Resid rate (us/s)		1.85570E-07	+/- 2.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		1.69310495399E-05		Resid phase (deg)		-122.7	+/- 7.1	
RMS	35.3	16.7	Amplitude		0.440 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	35.3	16.7	Search (1024X32)		0.414		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	32.0	29.1	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	17.0	10.0	Inc. seg. avg.		0.506		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	15.1	17.5	Inc. frq. avg.		0.441		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
g: az 175.6 el 7.5 pa -1.0	P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec)		-6363.853 3125.786				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0694/gP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/gP.W.71.3MP2H5								

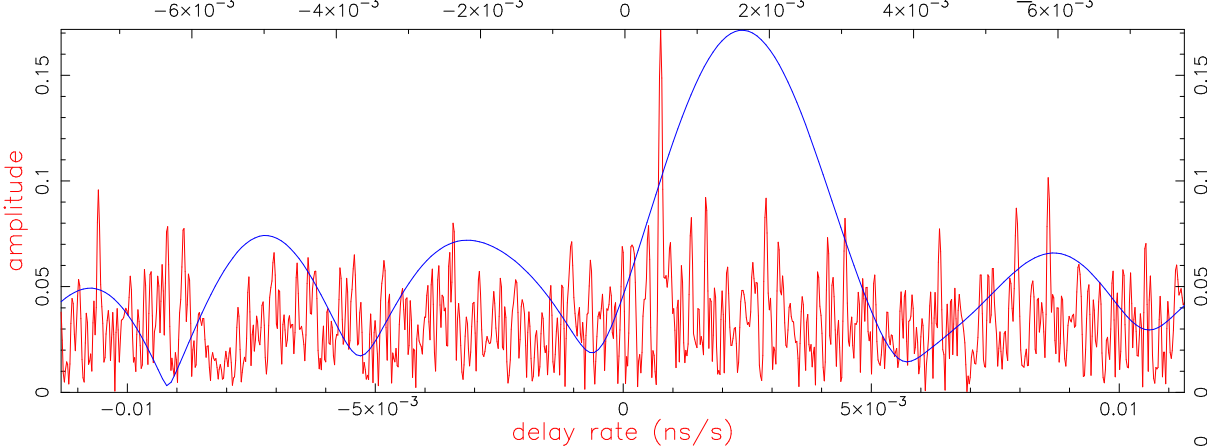
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, kP

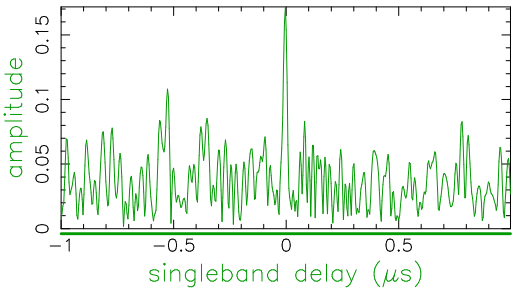
VLBA\_KP - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

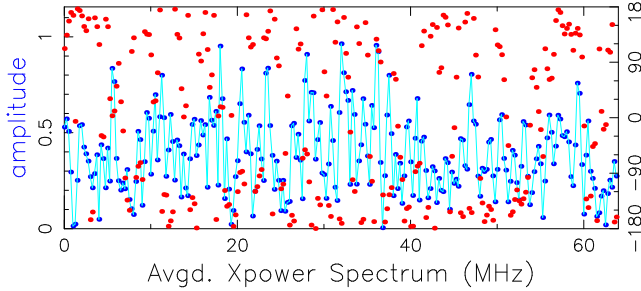


Fringe quality 0

SNR 6.3  
 Int time 179.979  
 Amp 0.172  
 Phase 105.0  
 PFD 4.3e-02  
 Delays (us)  
 SBD -0.004226  
 MBD 0.001603  
 Fringe rate (Hz)  
 0.064076  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

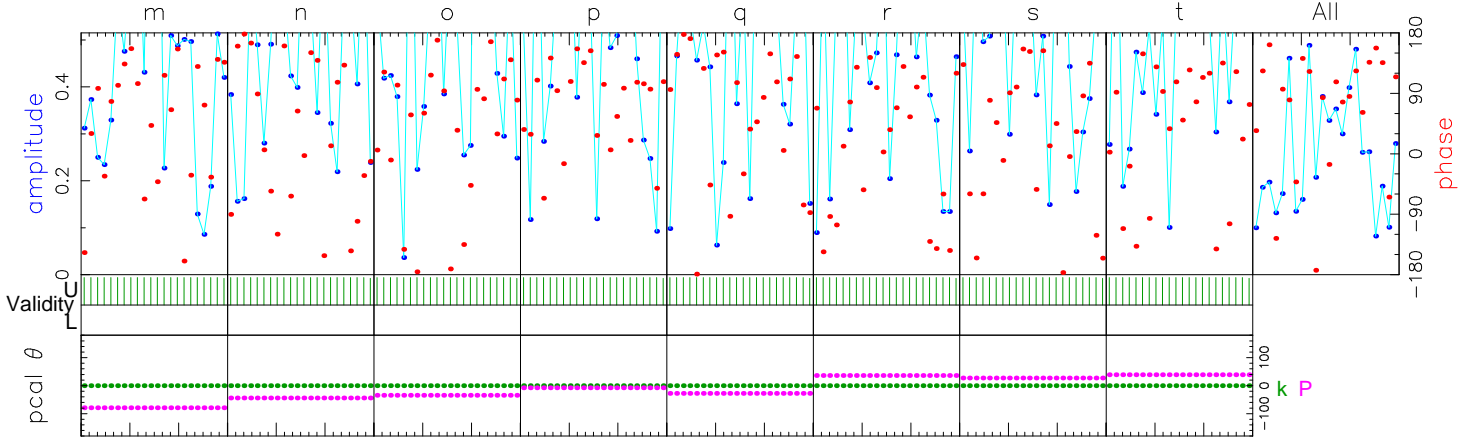


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175235  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	0	0	0	0	0	0	0	0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.33170050577E+03	Apriori delay (usec)	4.33169890233E+03	Resid mbdelay (usec)	1.60344E-03	+/-	1.7E-04
Sband delay (usec)	4.33169467608E+03	Apriori clock (usec)	1.0345936E+00	Resid sbdelay (usec)	-4.22625E-03	+/-	1.4E-03
Phase delay (usec)	4.33169890572E+03	Apriori clockrate (us/s)	-4.4603102E-07	Resid phdelay (usec)	3.38565E-06	+/-	5.9E-07
Delay rate (us/s)	2.03919131482E+00	Apriori rate (us/s)	2.03919057097E+00	Resid rate (us/s)	7.43855E-07	+/-	5.6E-09
Total phase (deg)	266.0	Apriori accel (us/s/s)	-2.21712661781E-05	Resid phase (deg)	105.0	+/-	18.2

ph/seg (deg)	70.0	Theor.	Amplitude	0.172 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	88.0	42.7	Search (1024X32)	0.166	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.1	25.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.5	45.0	Inc. seg. avg.	0.201	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.171	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 121.3 el 31.2 pa -46.7 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11752.765 -469.013 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/kP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/kP.W.56.3MP2H5

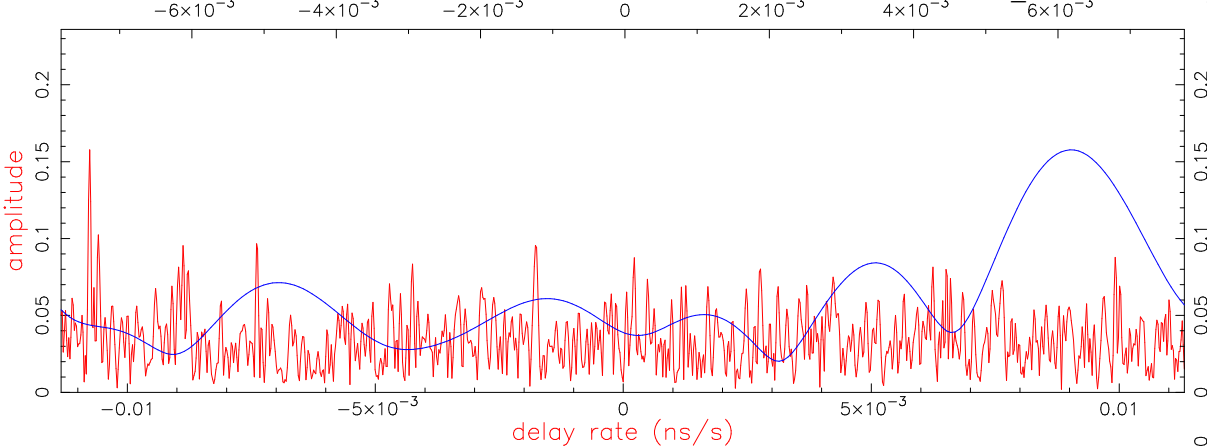
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, kP

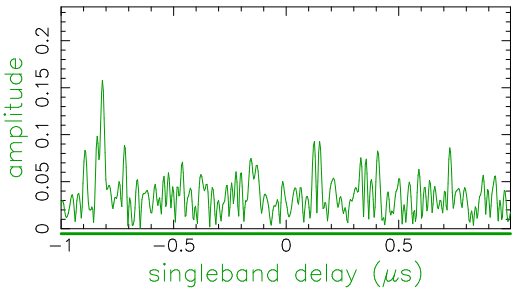
VLBA\_KP - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)

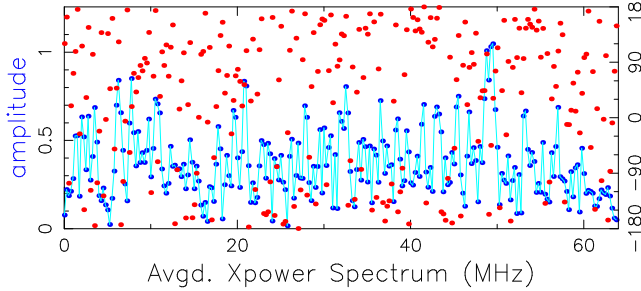


Fringe quality 0

SNR 5.8  
 Int time 179.979  
 Amp 0.236  
 Phase 16.3  
 PFD 6.0e-01  
 Delays (us)  
 SBD -0.816278  
 MBD 0.006180  
 Fringe rate (Hz)  
 -0.927578  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

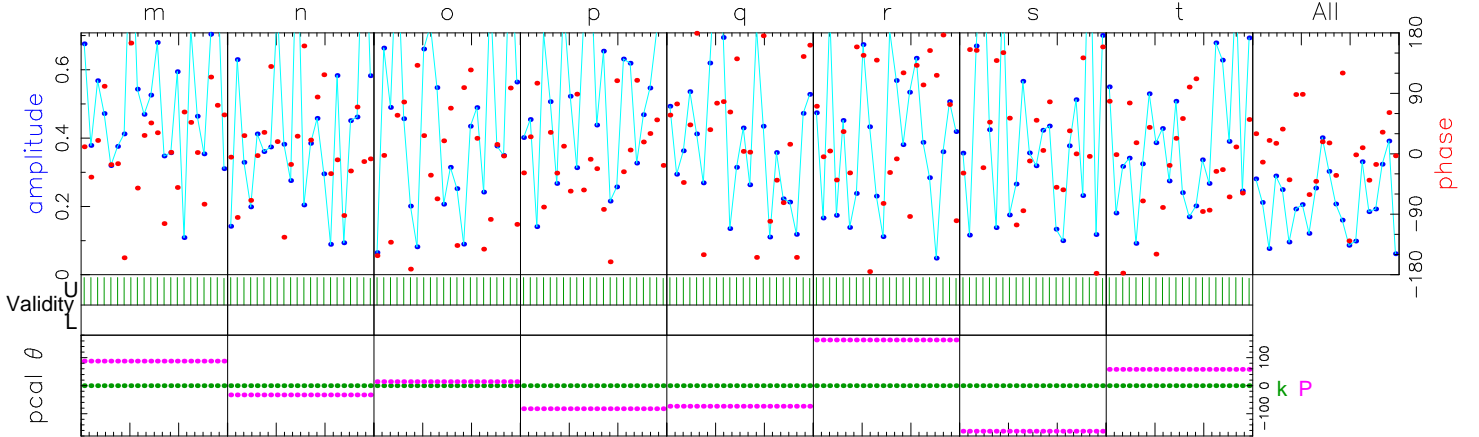


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175237  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	4.33087695758E+03	Apriori delay (usec)	4.33169890233E+03	Resid mbdelay (usec)	6.18024E-03	+/-	1.9E-04
Sband delay (usec)	4.33088262408E+03	Apriori clock (usec)	1.0345936E+00	Resid sbdelay (usec)	-8.16278E-01	+/-	1.5E-03
Phase delay (usec)	4.33169890286E+03	Apriori clockrate (us/s)	-4.4603102E-07	Resid phdelay (usec)	5.26813E-07	+/-	6.4E-07
Delay rate (us/s)	2.03917980270E+00	Apriori rate (us/s)	2.03919057097E+00	Resid rate (us/s)	-1.07683E-05	+/-	6.1E-09
Total phase (deg)	177.3	Apriori accel (us/s/s)	-2.21712661781E-05	Resid phase (deg)	16.3	+/-	19.8

ph/seg (deg)	54.6	Theor.	46.5	Amplitude	0.236 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	71.9	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)	40.6	Inc. seg. avg.	0.242	Inc. frq. avg.	0.238	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	54.3	Inc. frq. avg.	0.238	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
								ion window (TEC) 0.00 0.00

k: az 121.3 el 31.2 pa -46.7 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11752.765 -469.013 simultaneous interpolator

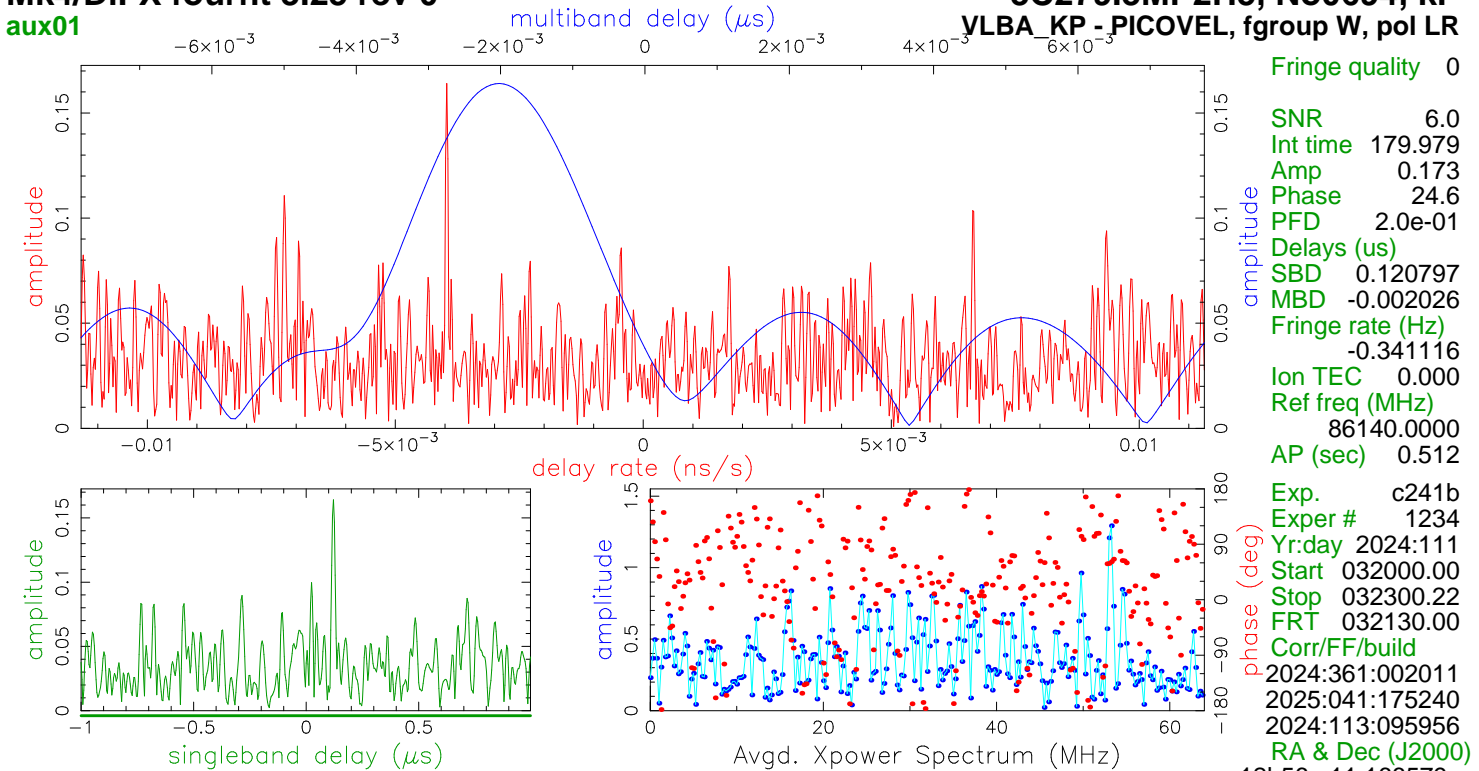
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/kP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/kP.W.64.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

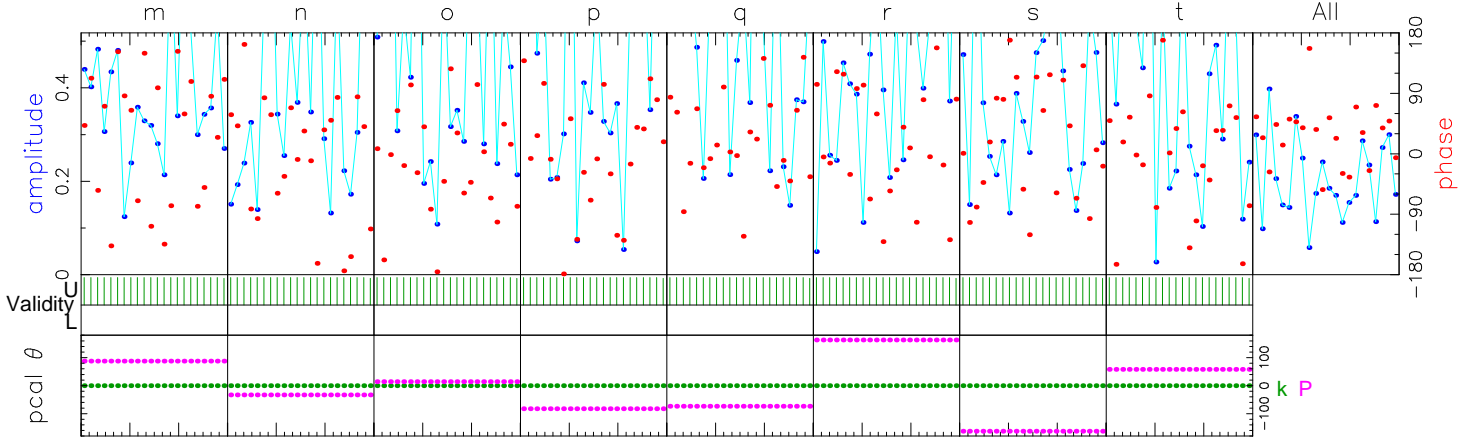
aux01

3C279.3MP2H5, No0694, kP

VLBA\_KP - PICOVEL, 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
	76.9	49.5	-13.4	32.7	20.2	14.3	-1.4	45.0	Phase	24.6
	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.2	Ampl.	0.2
	57.0	489.1	263.4	183.4	54.5	441.4	227.6	286.8	Sbd box	287.9
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	
P	0	0	0	0	0	0	0	0	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	4.33182187638E+03		Apriori delay (usec)	4.33169890233E+03	Resid mbdelay (usec)	-2.02595E-03	+/-	1.8E-04		
Sband delay (usec)	4.33181969958E+03		Apriori clock (usec)	1.0345936E+00	Resid sbdelay (usec)	1.20797E-01	+/-	1.4E-03		
Phase delay (usec)	4.33169890313E+03		Apriori clockrate (us/s)	-4.4603102E-07	Resid phdelay (usec)	7.93272E-07	+/-	6.1E-07		
Delay rate (us/s)	2.03918661095E+00		Apriori rate (us/s)	2.03919057097E+00	Resid rate (us/s)	-3.96001E-06	+/-	5.9E-09		
Total phase (deg)		185.6	Apriori accel (us/s/s)	-2.21712661781E-05	Resid phase (deg)	24.6	+/-	19.0		
RMS	45.2	44.6	Search (1024X32)	0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	56.8	77.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	31.8	26.9	Inc. seg. avg.	0.166	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	46.5	47.0	Inc. frq. avg.	0.169	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
amp/frq (%)					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
k: az 121.3 el 31.2 pa -46.7		P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec) -11752.765 -469.013					simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0694/kP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/kP.W.73.3MP2H5						

Mk4/DiFX fourfit 3.25 rev 0

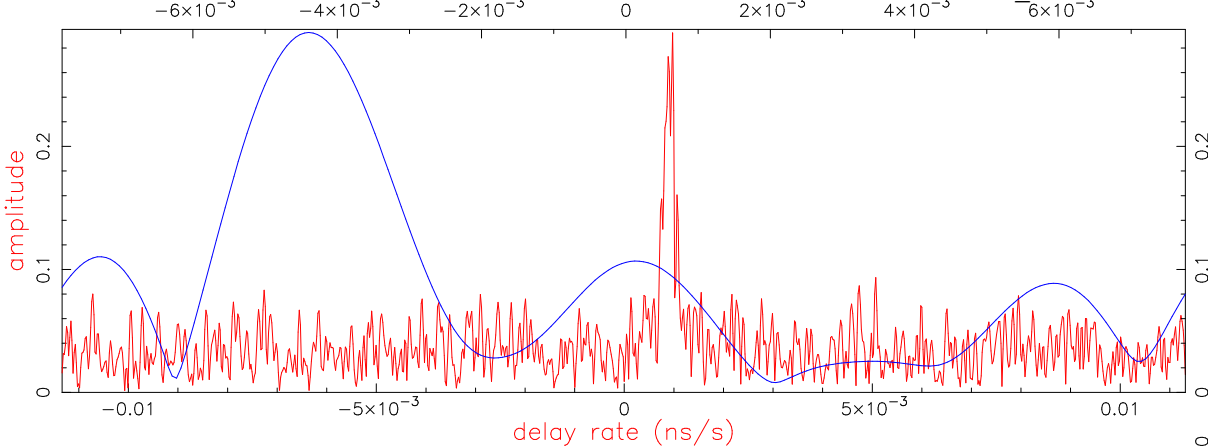
aux01

3C279.3MP2H5, No0694, kP

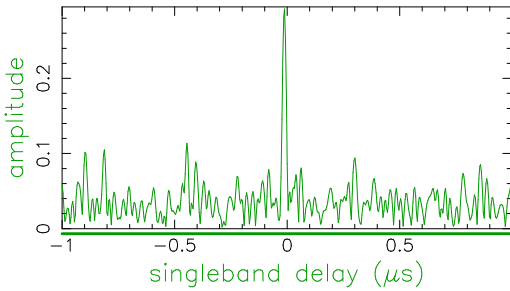
VLBA\_KP - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

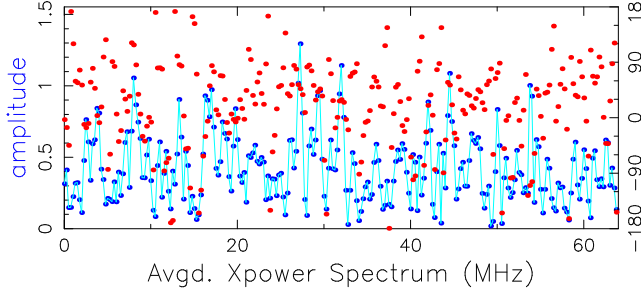
Fringe quality 9



SNR 10.8  
Int time 179.979  
Amp 0.295  
Phase -62.9  
PFD 8.1e-19  
Delays (us)  
SBD -0.012792  
MBD -0.004445  
Fringe rate (Hz)  
0.083302  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

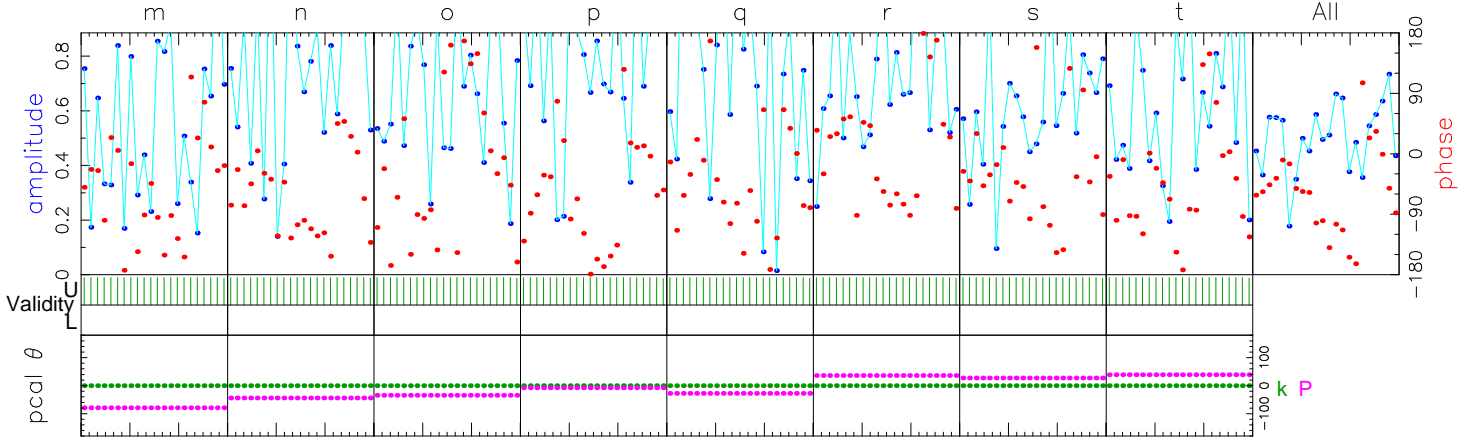


delay rate (ns/s)



Exp. c241b  
Exper # 1234  
Yr:day 2024:111  
Start 032000.00  
Stop 032300.22  
FRT 032130.00  
Corr/FF/build  
2024:361:002011  
2025:041:175242  
2024:113:095956  
RA & Dec (J2000)  
12h56m11.166579s  
--5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-45.6	-63.1	-122.8	-77.6	-55.4	-26.4	-57.0	-71.9	Phase	-62.9
	0.3	0.4	0.2	0.4	0.4	0.3	0.3	0.3	Ampl.	0.3
	251.4	253.5	451.9	253.8	254.3	252.8	253.5	252.1	Sbd box	253.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.33167883255E+03	Apriori delay (usec)	4.33169890233E+03	Resid mbdelay (usec)	-4.44478E-03	+/-	1.0E-04
Sband delay (usec)	4.33168610983E+03	Apriori clock (usec)	1.0345936E+00	Resid sbdelay (usec)	-1.27925E-02	+/-	8.0E-04
Phase delay (usec)	4.33169890031E+03	Apriori clockrate (us/s)	-4.4603102E-07	Resid phdelay (usec)	-2.02902E-06	+/-	3.4E-07
Delay rate (us/s)	2.03919153802E+00	Apriori rate (us/s)	2.03919057097E+00	Resid rate (us/s)	9.67058E-07	+/-	3.3E-09
Total phase (deg)	98.0	Apriori accel (us/s/s)	-2.21712661781E-05	Resid phase (deg)	-62.9	+/-	10.6

ph/seg (deg)	63.2	Theor.	24.9	Amplitude	0.295 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	82.8	Search (1024X32)	0.283	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.6	Inc. seg. avg.	0.461	Inc. frq. avg.	0.307	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.1	Inc. frq. avg.	0.307			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 121.3 el 31.2 pa -46.7 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11752.765 -469.013 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/kP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/kP.W.79.3MP2H5



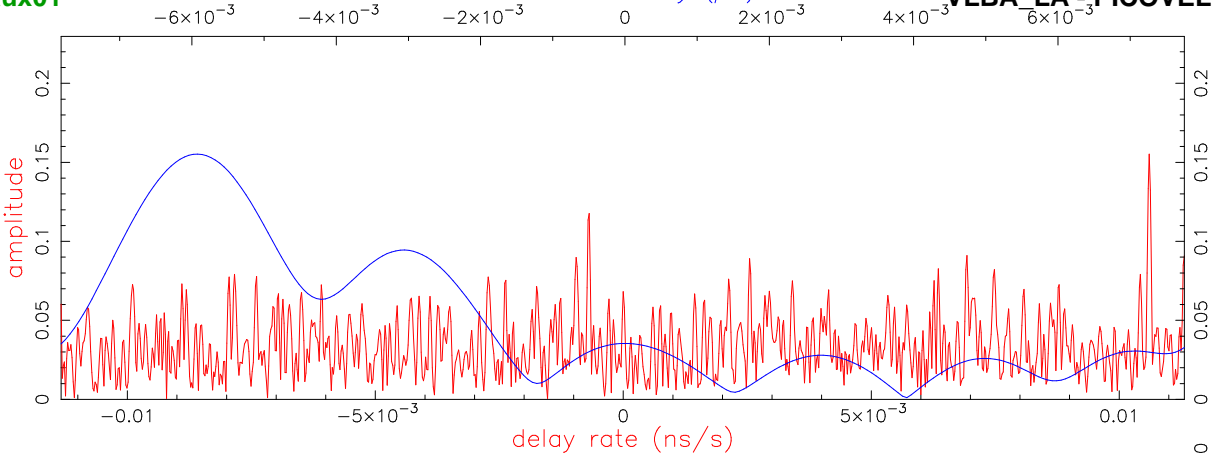
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, IP

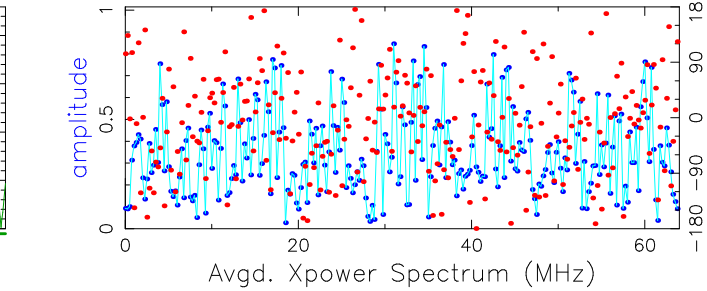
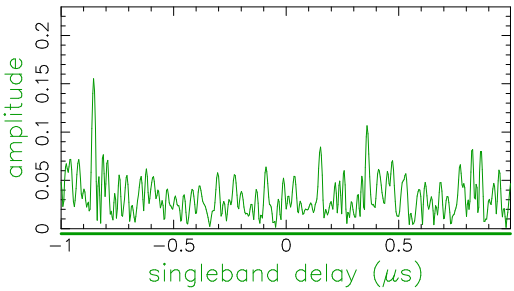
VLBA\_LA - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)



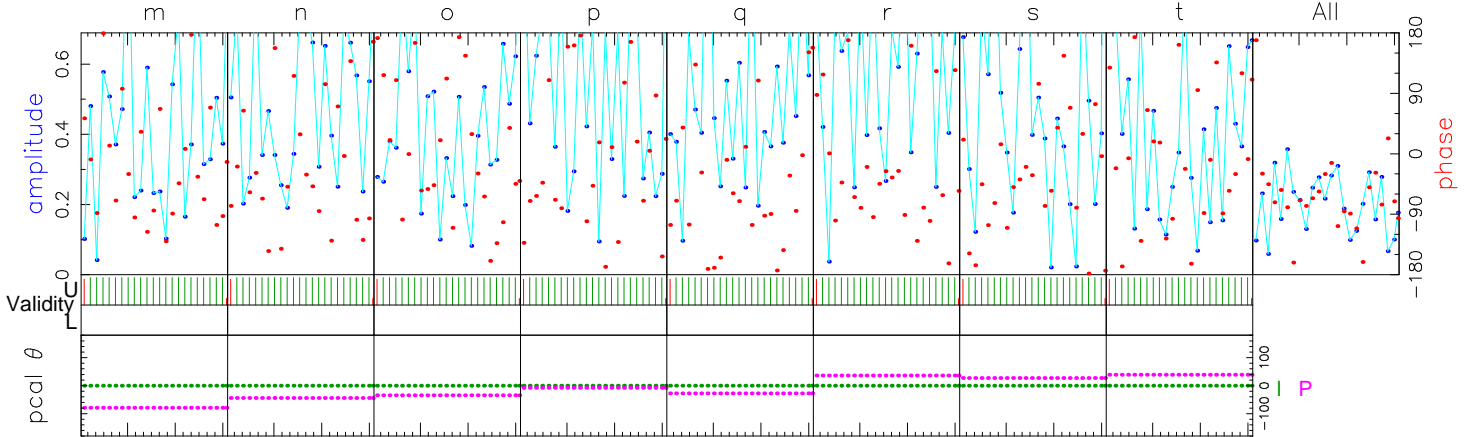
Fringe quality 0

SNR 5.7  
 Int time 177.988  
 Amp 0.230  
 Phase -70.8  
 PFD 8.4e-01  
 Delays (us)  
 SBD -0.855239  
 MBD -0.005920  
 Fringe rate (Hz) 0.915379  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build 2024:361:002011  
 2025:041:175310  
 2024:113:095956  
 RA & Dec (J2000) 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-50.8	-50.1	-77.4	-104.6	-105.8	-84.1	-31.0	-39.6	Phase	-70.8
	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.1	Ampl.	0.2
	413.1	452.9	243.4	204.7	260.3	37.5	108.8	375.0	Sbd box	38.1
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.78873328653E+03	Apriori delay (usec)	4.78958295702E+03	Resid mbdelay (usec)	-5.92049E-03	+/-	1.9E-04
Sband delay (usec)	4.78872771802E+03	Apriori clock (usec)	-7.4145985E+00	Resid sbdelay (usec)	-8.55239E-01	+/-	1.5E-03
Phase delay (usec)	4.78958295474E+03	Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-2.28397E-06	+/-	6.5E-07
Delay rate (us/s)	1.91336028785E+00	Apriori rate (us/s)	1.91334966121E+00	Resid rate (us/s)	1.06266E-05	+/-	6.3E-09
Total phase (deg)	259.6	Apriori accel (us/s/s)	-2.52948073662E-05	Resid phase (deg)	-70.8	+/-	20.2

ph/seg (deg)	47.6	RMS	49.6	Theor.	47.6	Amplitude	0.230 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	62.2	Search (1024X32)	0.154	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	0.154	sb window (us)	-1.000 1.000
ph/frq (deg)	31.6	Inc. seg. avg.	0.218	Inc. frq. avg.	0.229	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.0	Inc. frq. avg.	0.229	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
I: az 127.9 el 32.7 pa -40.0		P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec) -11029.536 43.979				ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0694/IP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/IP.W.222.3MP2H5				simultaneous interpolator	

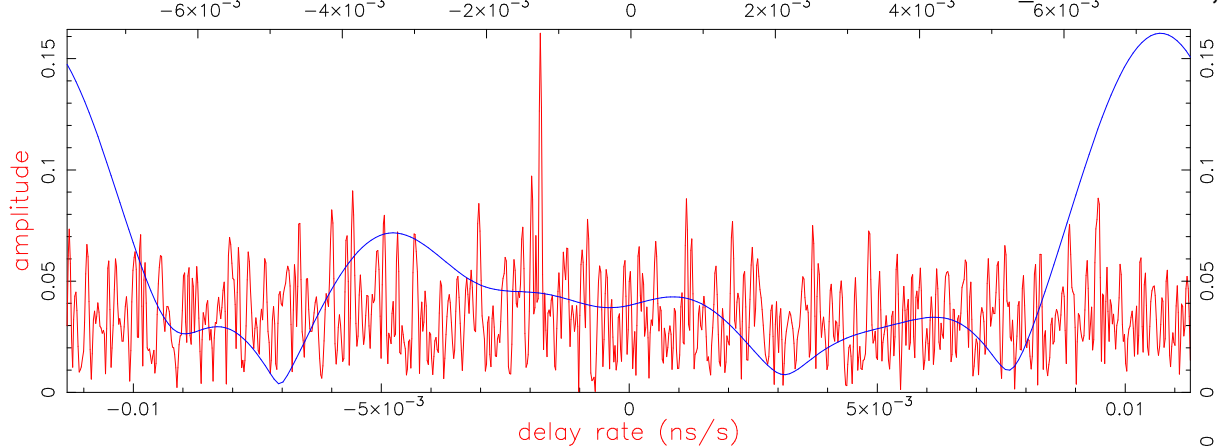
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, IP

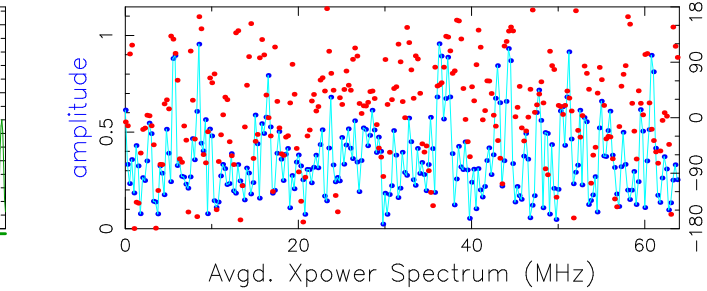
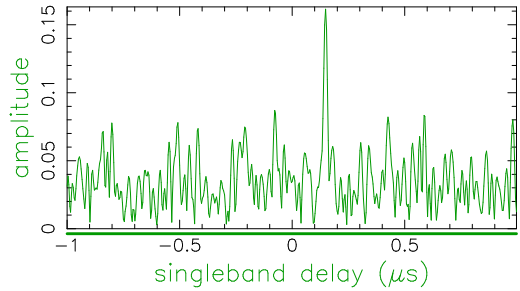
VLBA\_LA - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)



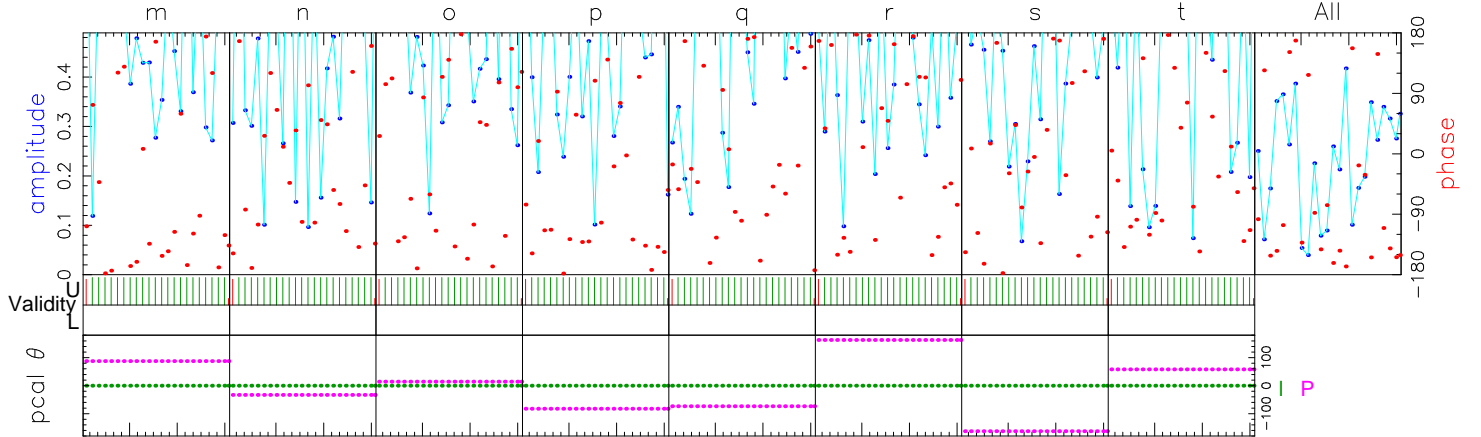
Fringe quality 0

SNR 5.9  
 Int time 177.988  
 Amp 0.163  
 Phase -146.5  
 PFD 3.8e-01  
 Delays (us)  
 SBD 0.148217  
 MBD 0.007331  
 Fringe rate (Hz)  
 -0.154388  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175313  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
I	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	4.78973091297E+03	Apriori delay (usec)		4.78958295702E+03	Resid mbdelay (usec)	7.33095E-03	+/-	1.8E-04	
Sband delay (usec)	4.78973117427E+03	Apriori clock (usec)		-7.4145985E+00	Resid sbdelay (usec)	1.48217E-01	+/-	1.5E-03	
Phase delay (usec)	4.78958295230E+03	Apriori clockrate (us/s)		-8.3223814E-07	Resid phdelay (usec)	-4.72305E-06	+/-	6.3E-07	
Delay rate (us/s)	1.91334786891E+00	Apriori rate (us/s)		1.91334966121E+00	Resid rate (us/s)	-1.79229E-06	+/-	6.1E-09	
Total phase (deg)	184.0		Apriori accel (us/s/s)		-2.52948073662E-05	Resid phase (deg)	-146.5	+/-	19.4

ph/seg (deg)	56.9	Theor. 47.6	Amplitude Search (1024X32)	0.163 +/- 0.028	0.158	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.6	83.1	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	25.9	27.5	Inc. seg. avg.	0.173	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	39.2	48.0	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00	

I: az 127.9 el 32.7 pa -40.0 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11029.536 43.979 simultaneous interpolator

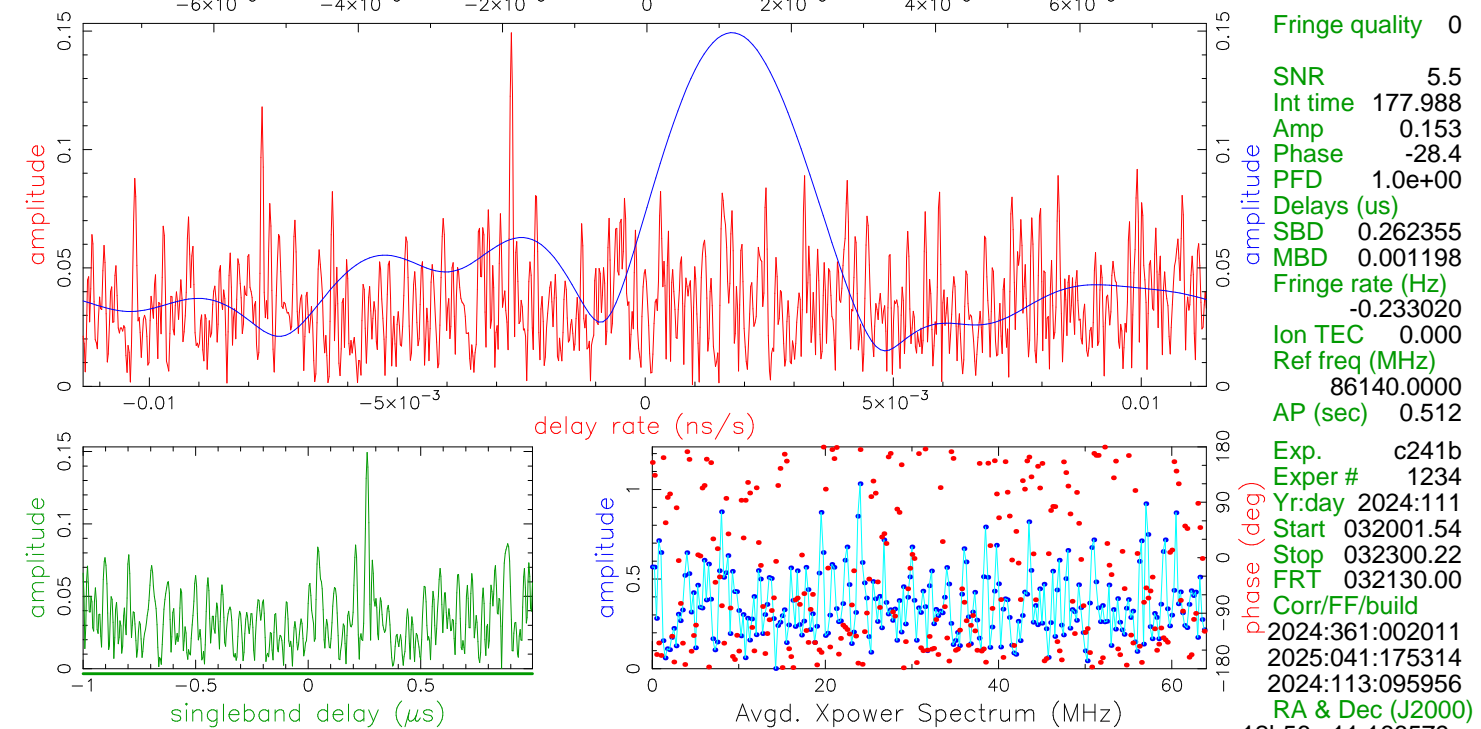
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/IP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/IP.W.229.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

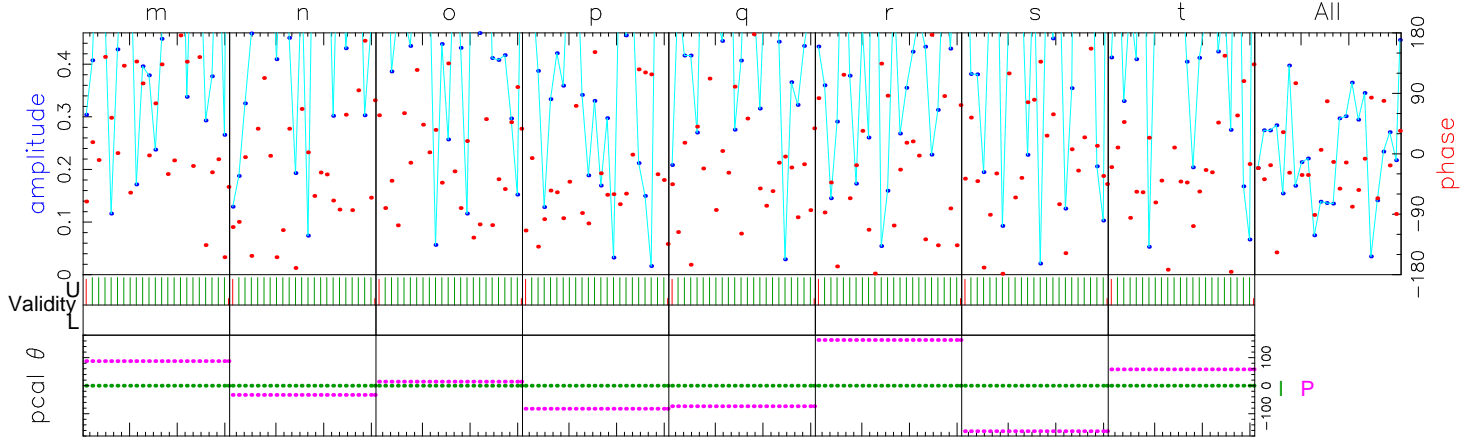
aux01

3C279.3MP2H5, No0694, IP

VLBA\_LA - PICOVEL, fgroup W, pol LR



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	7.2	-33.7	-15.0	-53.3	-34.8	-140.0	-12.3	-24.9		Phase	-28.4	
	0.1	0.1	0.2	0.2	0.2	0.0	0.2	0.2		Ampl.	0.1	
	84.3	409.0	505.1	100.3	310.7	489.0	244.4	322.9		Sbd box	324.2	
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		APs used		
I	0	0	0	0	0	0	0	0		PC freqs		
P	0	0	0	0	0	0	0	0		PC freqs		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase		
I:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58		ManI PC		
I	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000				
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks		
										Chan ids		
										Tracks		
Group delay (usec) (SBD)	4.78984978024E+03		Apriori delay (usec)		4.78958295702E+03		Resid mbdelay (usec)		1.19822E-03	+/-	2.0E-04	
Sband delay (usec)	4.78984531227E+03		Apriori clock (usec)		-7.4145985E+00		Resid sbdelay (usec)		2.62355E-01	+/-	1.6E-03	
Phase delay (usec)	4.78958295611E+03		Apriori clockrate (us/s)		-8.3223814E-07		Resid phdelay (usec)		-9.15629E-07	+/-	6.8E-07	
Delay rate (us/s)	1.91334695608E+00		Apriori rate (us/s)		1.91334966121E+00		Resid rate (us/s)		-2.70513E-06	+/-	6.6E-09	
Total phase (deg)	302.1		Apriori accel (us/s/s)		-2.52948073662E-05		Resid phase (deg)		-28.4	+/-	21.0	
	RMS	Theor.	Amplitude	0.153 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	61.3	51.4	Search (1024X32)	0.147		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	80.9	89.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	49.7	29.7	Inc. seg. avg.	0.166		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	43.0	51.8	Inc. frq. avg.	0.147		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
I: az 127.9 el 32.7 pa -40.0		P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec) -11029.536 43.979						simultaneous interpolator		
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0694/IP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/IP.W.238.3MP2H5								

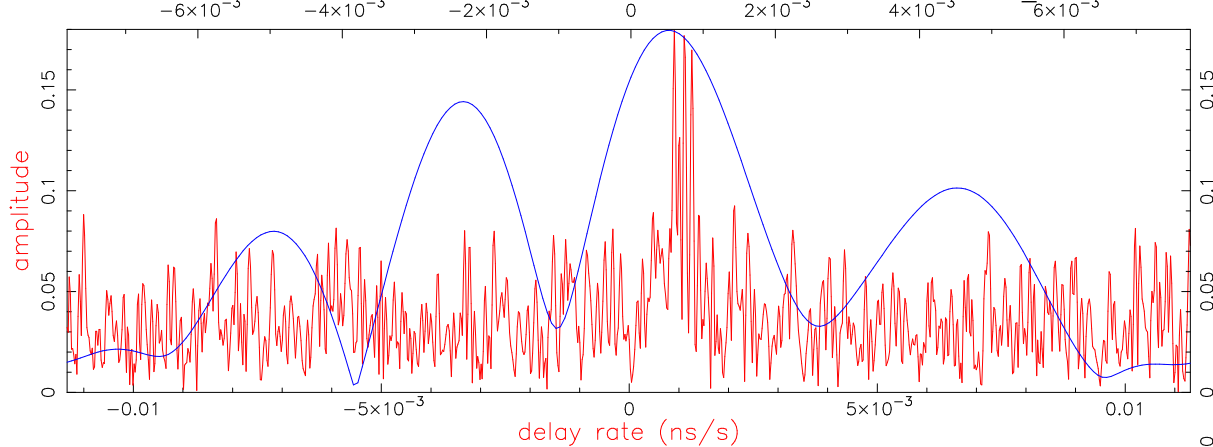
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, IP

VLBA\_LA - PICOVEL, fgroup W, pol RL

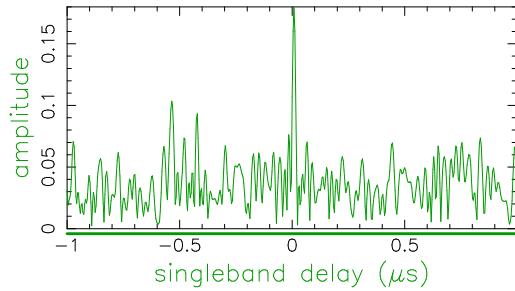
multiband delay ( $\mu$ s)



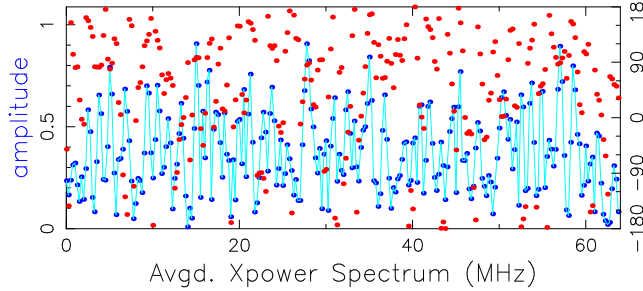
Fringe quality 0

SNR 6.5  
 Int time 177.988  
 Amp 0.180  
 Phase -177.4  
 PFD 8.1e-03  
 Delays (us)  
 SBD 0.007792  
 MBD 0.000523  
 Fringe rate (Hz) 0.077880  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

delay rate (ns/s)



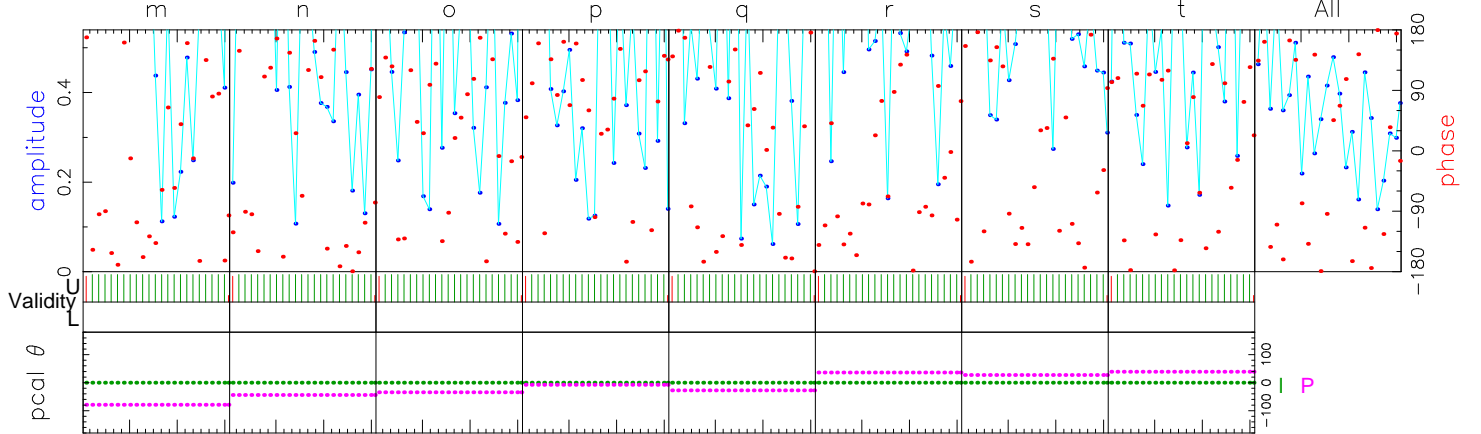
singleband delay ( $\mu$ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build 2024:361:002011  
 2025:041:175316  
 2024:113:095956  
 RA & Dec (J2000) 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
I	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	4.78958348035E+03	Apriori delay (usec)	4.78958295702E+03	Resid mbdelay (usec)	5.23329E-04	+/-	1.7E-04
Sband delay (usec)	4.78959074952E+03	Apriori clock (usec)	-7.4145985E+00	Resid sbdelay (usec)	7.79250E-03	+/-	1.3E-03
Phase delay (usec)	4.78958295130E+03	Apriori clockrate (us/s)	-8.3223814E-07	Resid phdelay (usec)	-5.72133E-06	+/-	5.6E-07
Delay rate (us/s)	1.91335056532E+00	Apriori rate (us/s)	1.91334966121E+00	Resid rate (us/s)	9.04111E-07	+/-	5.5E-09
Total phase (deg)	153.0	Apriori accel (us/s/s)	-2.52948073662E-05	Resid phase (deg)	-177.4	+/-	17.5

ph/seg (deg)	67.5	Theor.	42.9	Amplitude	0.180 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	128.2	Search (1024X32)	0.178	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	50.9	Inc. seg. avg.	0.287	Inc. frq. avg.	0.218	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.9	Inc. frq. avg.	0.218			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 127.9 el 32.7 pa -40.0 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11029.536 43.979 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/IP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/IP.W.248.3MP2H5

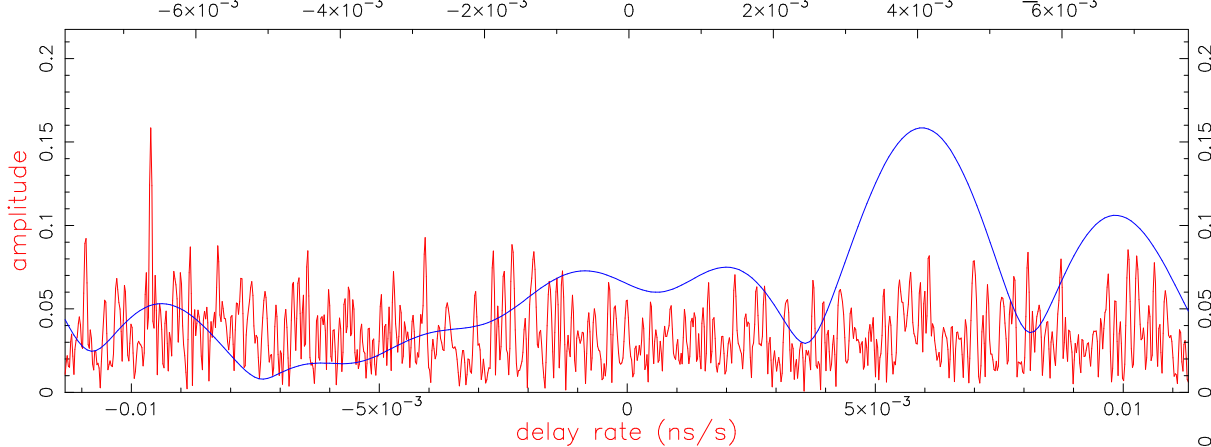
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, nP

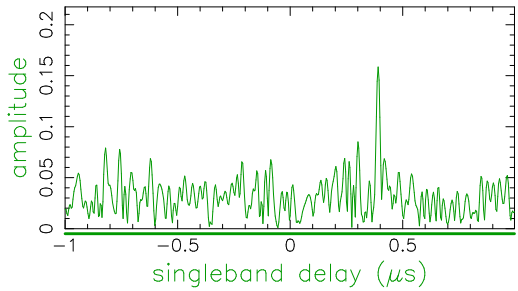
VLBA\_NL - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

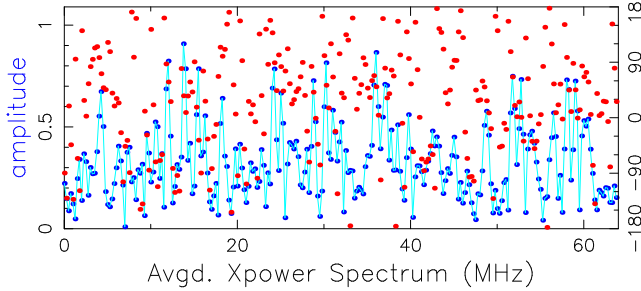


Fringe quality 0

SNR 5.8  
 Int time 178.271  
 Amp 0.217  
 Phase -177.8  
 PFD 5.9e-01  
 Delays (us)  
 SBD 0.390739  
 MBD 0.004063  
 Fringe rate (Hz)  
 -0.829273  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

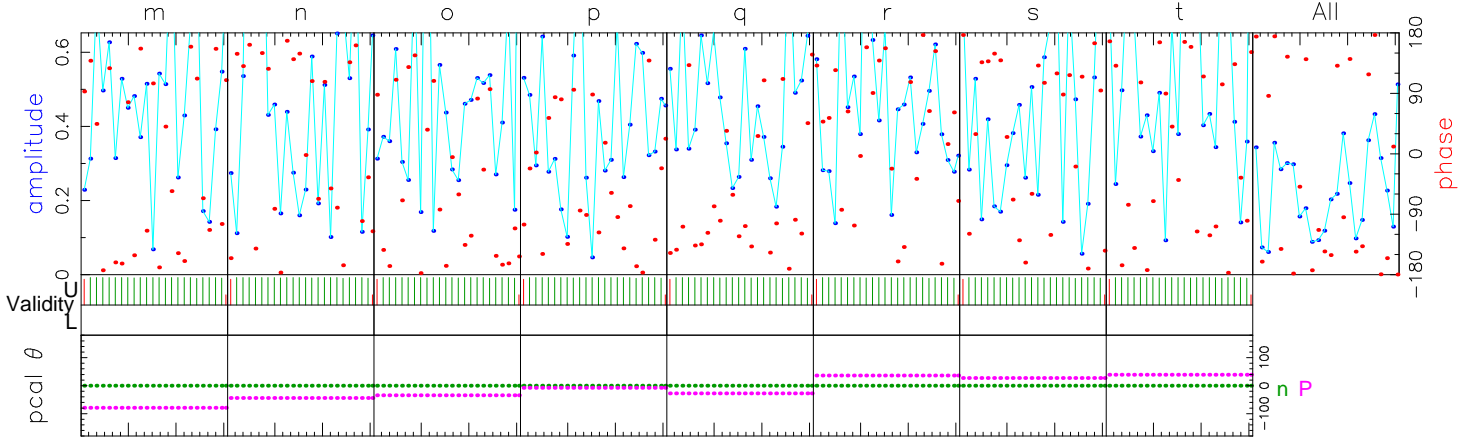


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.51  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175247  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
n	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	5.84944843950E+03	Apriori delay (usec)	5.84905375110E+03	Resid mbdelay (usec)	4.06340E-03	+/-	1.9E-04
Sband delay (usec)	5.84944449035E+03	Apriori clock (usec)	5.9713936E-01	Resid sbdelay (usec)	3.90739E-01	+/-	1.5E-03
Phase delay (usec)	5.84905374537E+03	Apriori clockrate (us/s)	-3.0097713E-07	Resid phdelay (usec)	-5.73367E-06	+/-	6.4E-07
Delay rate (us/s)	1.60280328654E+00	Apriori rate (us/s)	1.60281291357E+00	Resid rate (us/s)	-9.62703E-06	+/-	6.2E-09
Total phase (deg)	-134.7	Apriori accel (us/s/s)	-3.18334835739E-05	Resid phase (deg)	-177.8	+/-	19.8

ph/seg (deg)	60.0	Theor.	48.5	Amplitude	0.217 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	84.2	Search (1024X32)	0.155	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.5	Inc. seg. avg.	0.229	Inc. seg. avg.	0.229	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.8	Inc. frq. avg.	0.234	Inc. frq. avg.	0.234	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
n:	az 145.7 el 36.2 pa -24.9	P:	az 246.8 el 18.9 pa 47.6	u,v (fr/asec)	-9244.487 814.841	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/nP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/nP.W.103.3MP2H5

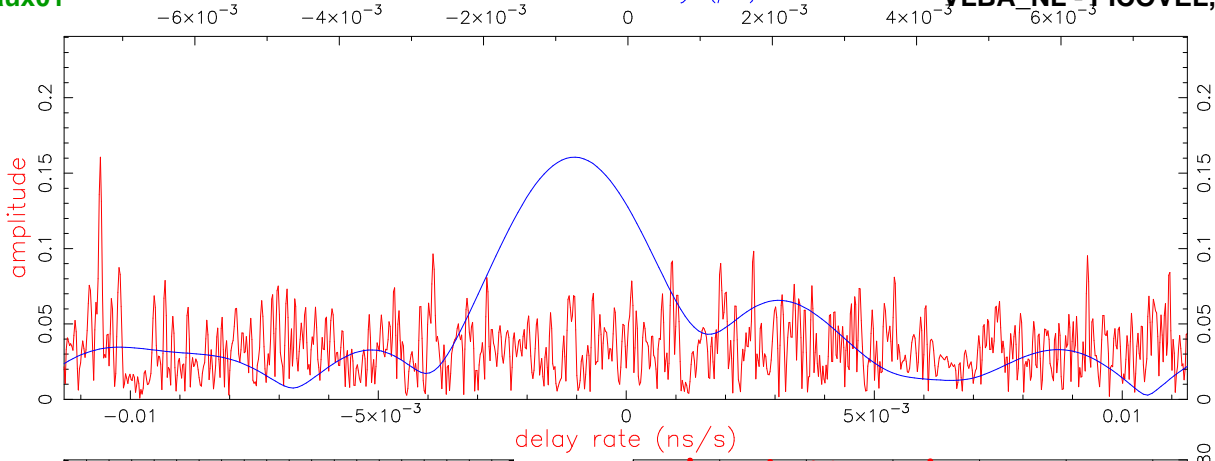
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, nP

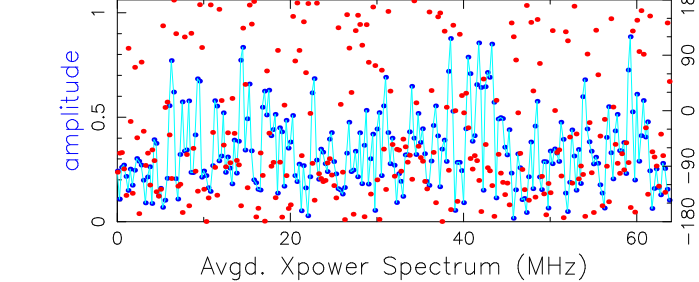
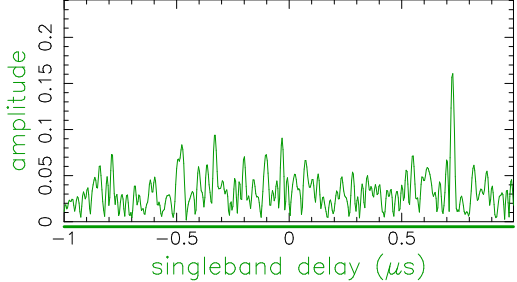
VLBA\_NL - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)



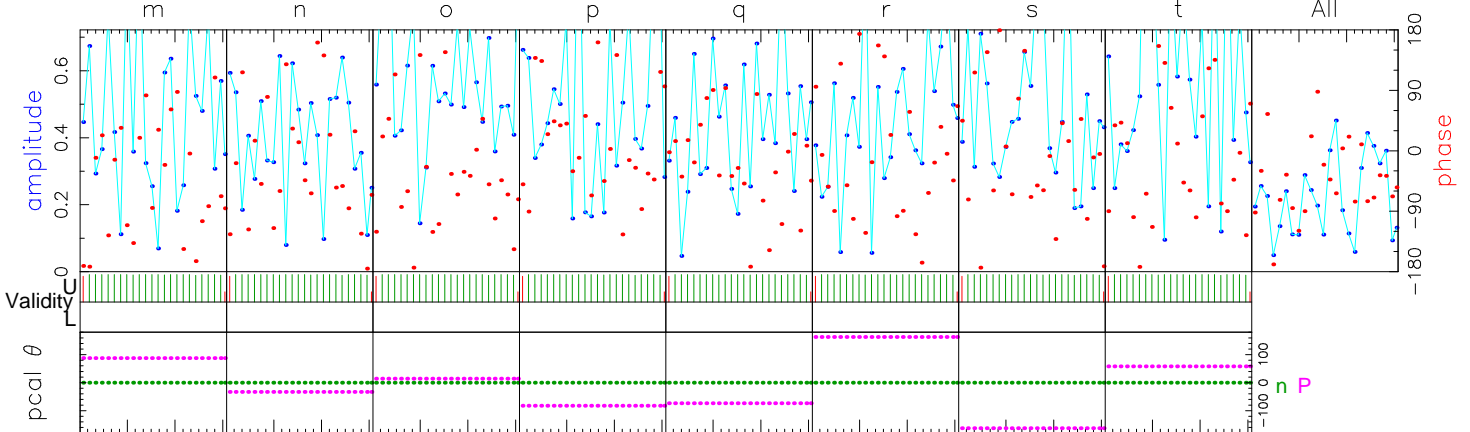
Fringe quality 0

SNR 5.9  
 Int time 178.271  
 Amp 0.241  
 Phase -42.5  
 PFD 3.1e-01  
 Delays (us)  
 SBD 0.725119  
 MBD -0.000756  
 Fringe rate (Hz)  
 -0.915852  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.51  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175250  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-67.6	-46.7	-52.0	-5.9	-13.3	-64.8	-38.9	-57.2	Phase	-42.5
	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	Ampl.	0.2
	49.7	90.8	505.7	398.7	420.0	134.3	171.2	173.0	Sbd box	442.6
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 5.84977174540E+03 Apriori delay (usec) 5.84905375110E+03 Resid mbdelay (usec) -7.55703E-04 +/- 1.8E-04  
 Sband delay (usec) 5.84977886960E+03 Apriori clock (usec) 5.9713936E-01 Resid sbdelay (usec) 7.25119E-01 +/- 1.5E-03  
 Phase delay (usec) 5.84905374973E+03 Apriori clockrate (us/s) -3.0097713E-07 Resid phdelay (usec) -1.36966E-06 +/- 6.2E-07  
 Delay rate (us/s) 1.60280228144E+00 Apriori rate (us/s) 1.60281291357E+00 Resid rate (us/s) -1.06321E-05 +/- 6.0E-09  
 Total phase (deg) 0.7 Apriori accel (us/s/s) -3.18334835739E-05 Resid phase (deg) -42.5 +/- 19.3

RMS Theor. Amplitude 0.241 +/- 0.041 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 56.2 47.3 Search (1024X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 80.6 82.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 24.7 27.3 Inc. seg. avg. 0.248 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 20.6 47.6 Inc. frq. avg. 0.229 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 145.7 el 36.2 pa -24.9 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -9244.487 814.841 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/nP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/nP.W.118.3MP2H5

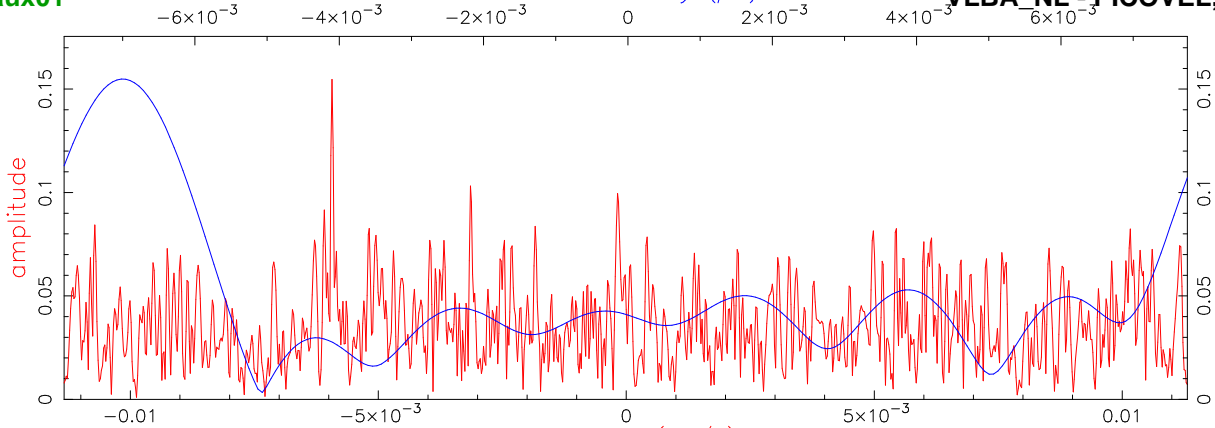
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, nP

VLBA\_NL - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

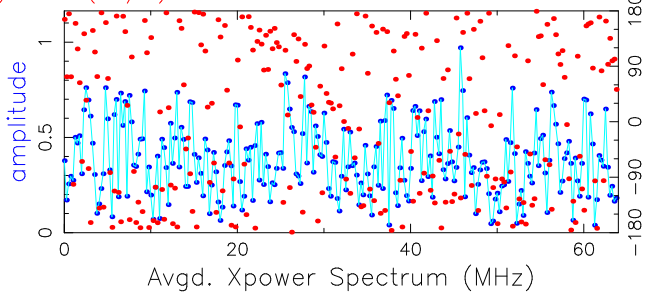
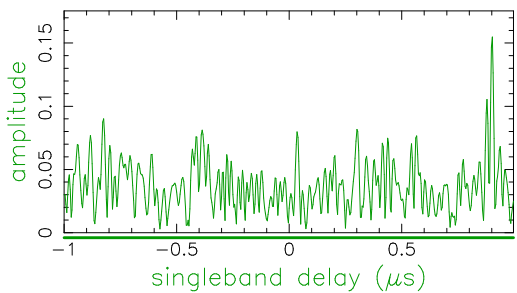


Fringe quality 0

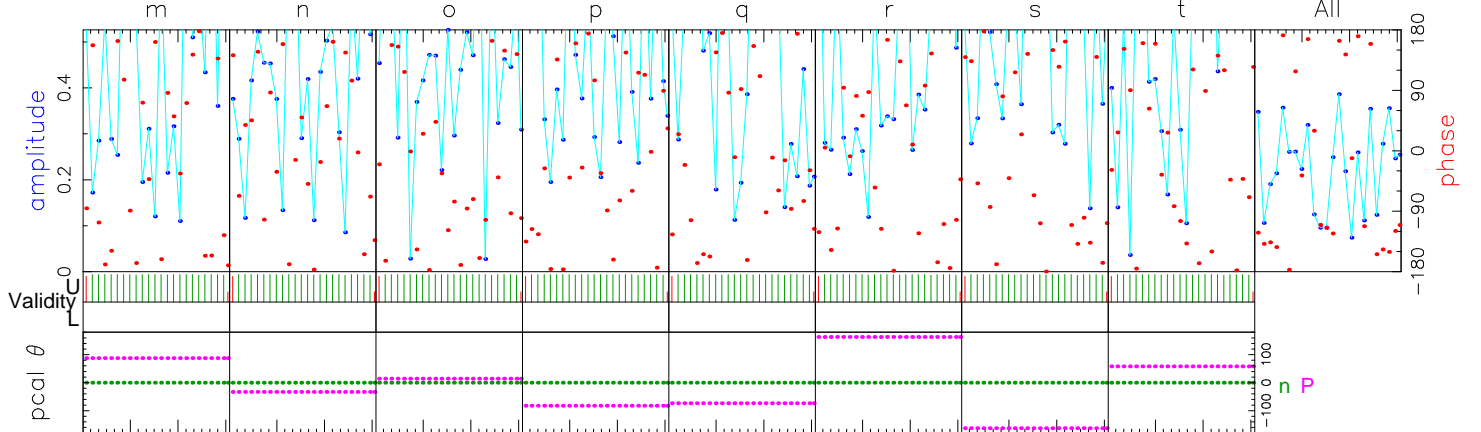
SNR 5.7  
 Int time 178.271  
 Amp 0.175  
 Phase -161.9  
 PFD 7.5e-01  
 Delays (us)  
 SBD 0.901193  
 MBD -0.007046  
 Fringe rate (Hz)  
 -0.511192  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.51  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175252  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-174.4	57.8	-164.5	-152.0	-141.5	-151.8	-160.6	-175.4	Phase	-161.9	
	0.3	0.0	0.2	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2	
	486.7	465.4	472.0	490.1	339.2	16.9	32.6	167.0	Sbd box	487.7	
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used		
n	0	0	0	0	0	0	0	0	PC freqs		
P	0	0	0	0	0	0	0	0	PC freqs		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
n:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Mani PC		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000			
n	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)	5.84995295543E+03		Apriori delay (usec)		5.84905375110E+03		Resid mbdelay (usec)		-7.04567E-03	+/- 1.9E-04	
Sband delay (usec)	5.84995494460E+03		Apriori clock (usec)		5.9713936E-01		Resid sbdelay (usec)		9.01193E-01	+/- 1.5E-03	
Phase delay (usec)	5.84905374588E+03		Apriori clockrate (us/s)		-3.0097713E-07		Resid phdelay (usec)		-5.22002E-06	+/- 6.5E-07	
Delay rate (us/s)	1.60280697915E+00		Apriori rate (us/s)		1.60281291357E+00		Resid rate (us/s)		-5.93443E-06	+/- 6.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		-3.18334835739E-05		Resid phase (deg)		-161.9	+/- 20.1	
	RMS	Theor.	Amplitude	0.175 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	64.5	49.2	Search (1024X32)	0.153		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	76.4	85.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	58.7	28.4	Inc. seg. avg.	0.187		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	41.2	49.5	Inc. frq. avg.	0.161		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
n: az 145.7 el 36.2 pa -24.9	P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec)		-9244.487 814.841				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0694/nP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/nP.W.135.3MP2H5								

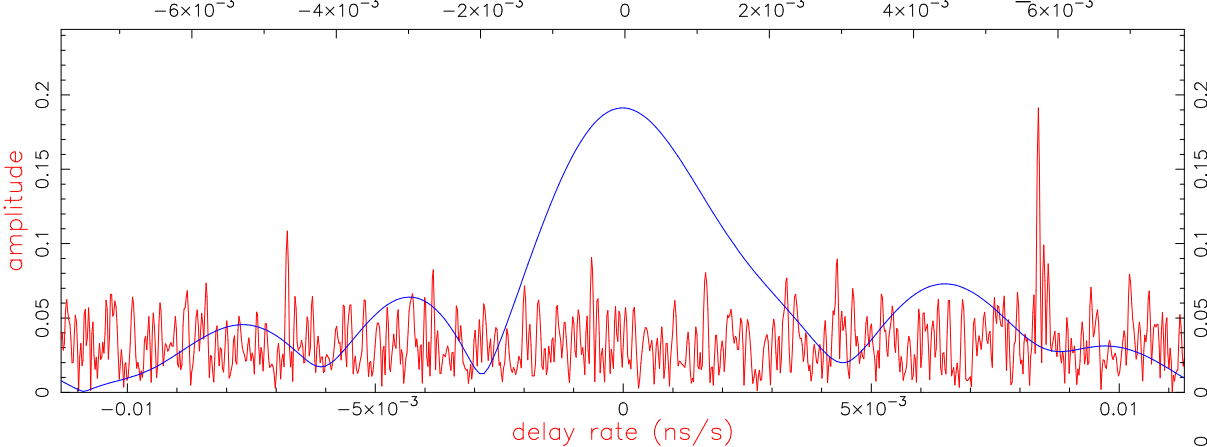
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, nP

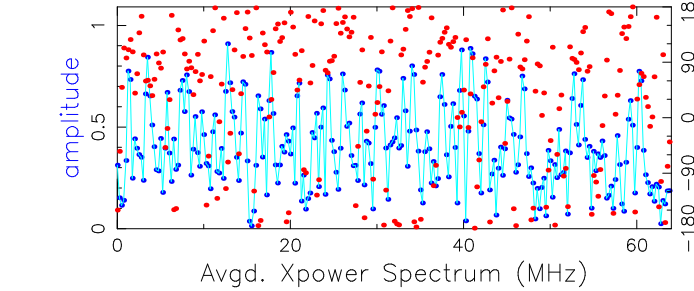
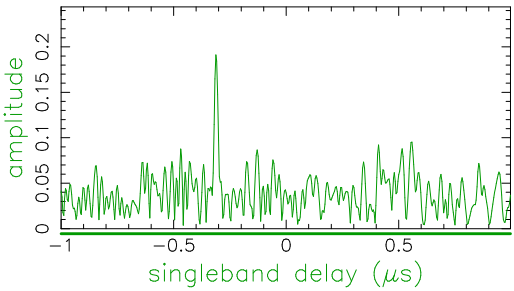
VLBA\_NL - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)



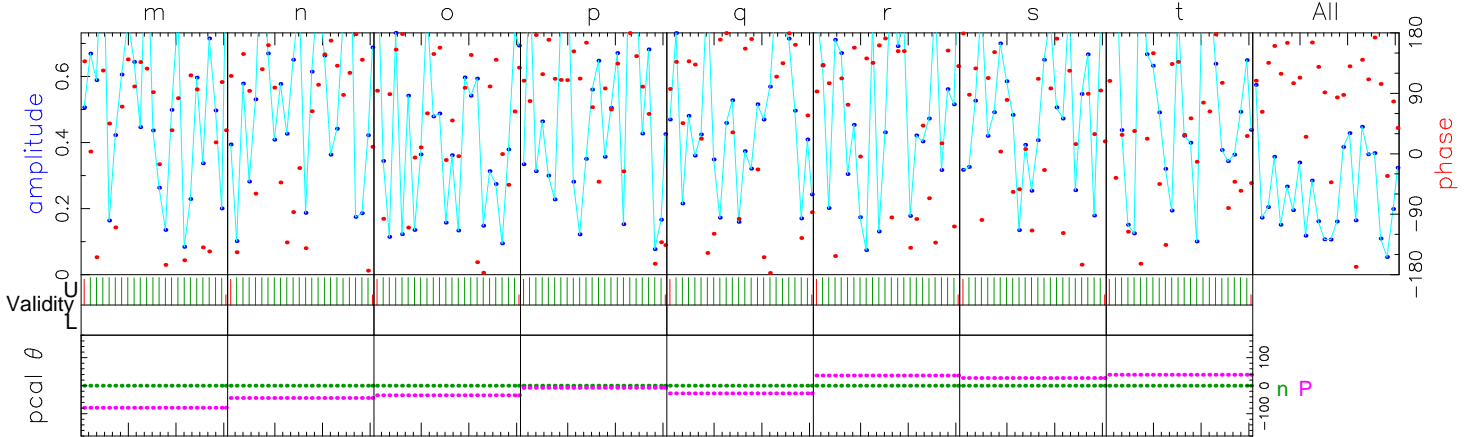
Fringe quality 0

SNR 7.0  
 Int time 178.271  
 Amp 0.244  
 Phase 122.3  
 PFD 3.0e-04  
 Delays (us)  
 SBD -0.311337  
 MBD -0.000011  
 Fringe rate (Hz)  
 0.722334  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.51  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175255  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
n	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.84874123972E+03	Apriori delay (usec)	5.84905375110E+03	Resid mbdelay (usec)	-1.13857E-05	+/-	1.5E-04
Sband delay (usec)	5.84874241385E+03	Apriori clock (usec)	5.9713936E-01	Resid sbdelay (usec)	-3.11337E-01	+/-	1.2E-03
Phase delay (usec)	5.84905375505E+03	Apriori clockrate (us/s)	-3.0097713E-07	Resid phdelay (usec)	3.94467E-06	+/-	5.3E-07
Delay rate (us/s)	1.60282129916E+00	Apriori rate (us/s)	1.60281291357E+00	Resid rate (us/s)	8.38559E-06	+/-	5.1E-09
Total phase (deg)	165.5	Apriori accel (us/s/s)	-3.18334835739E-05	Resid phase (deg)	122.3	+/-	16.3

ph/seg (deg) 61.0 39.9 Search (1024X32) 0.183 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.2 69.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.9 23.0 Inc. seg. avg. 0.254 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.0 40.2 Inc. frq. avg. 0.249 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 n: az 145.7 el 36.2 pa -24.9 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -9244.487 814.841 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/nP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/nP.W.150.3MP2H5



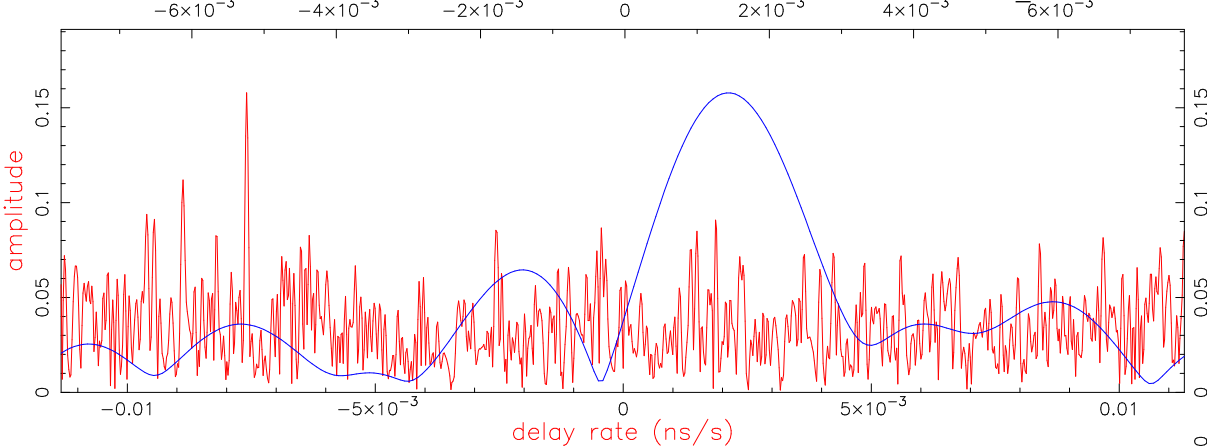
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, oP

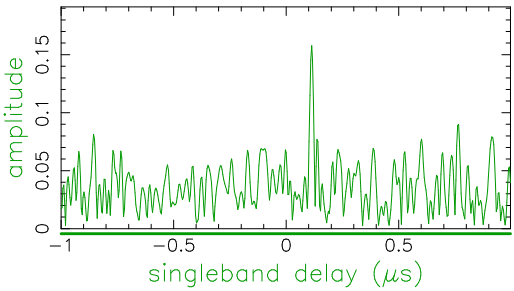
VLBA\_OV - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

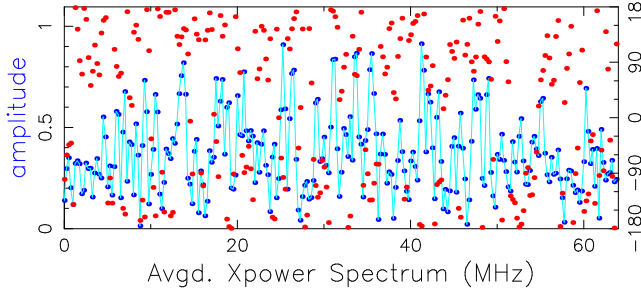


Fringe quality 0

SNR 5.7  
 Int time 175.789  
 Amp 0.191  
 Phase 13.7  
 PFD 7.3e-01  
 Delays (us)  
 SBD 0.113372  
 MBD 0.001436  
 Fringe rate (Hz)  
 -0.654519  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

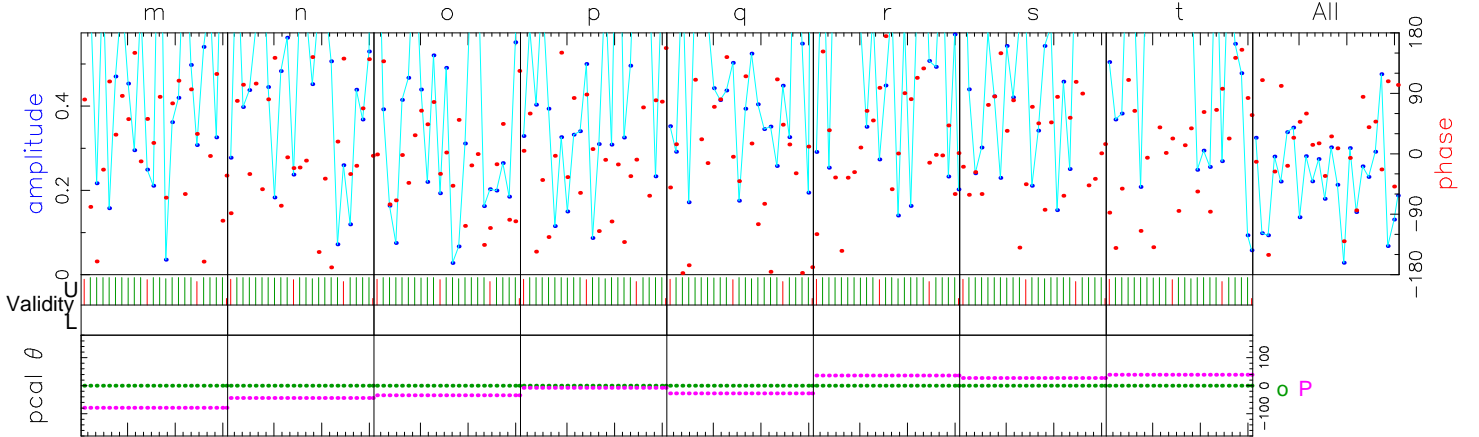


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175315  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	38.5	5.1	0.9	-6.2	34.6	11.9	9.1	25.1	Phase	13.7
	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	318.4	61.2	70.1	22.3	469.3	397.4	492.1	163.6	Sbd box	286.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.92894142779E+03	Apriori delay (usec)	1.92883061719E+03	Resid mbdelay (usec)	1.43560E-03	+/-	1.9E-04
Sband delay (usec)	1.92894398919E+03	Apriori clock (usec)	2.5937267E+01	Resid sbdelay (usec)	1.13372E-01	+/-	1.5E-03
Phase delay (usec)	1.92883061763E+03	Apriori clockrate (us/s)	-1.1696503E-07	Resid phdelay (usec)	4.42436E-07	+/-	6.5E-07
Delay rate (us/s)	2.07191186626E+00	Apriori rate (us/s)	2.07191946457E+00	Resid rate (us/s)	-7.59832E-06	+/-	6.3E-09
Total phase (deg)	144.9	Apriori accel (us/s/s)	-1.01428099621E-05	Resid phase (deg)	13.7	+/-	20.0

ph/seg (deg)	68.1	RMS	49.0	Theor.	68.1	Amplitude	0.191 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.3	Search (1024X32)	0.156	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)	17.5	Inc. seg. avg.	0.202	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 (%)	28.1	Inc. frq. avg.	0.176	u, v (fr/asec)	-11934.707 99.891	simultaneous interpolator							

o: az 118.5 el 23.8 pa -44.7 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11934.707 99.891 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/oP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/oP.W.239.3MP2H5

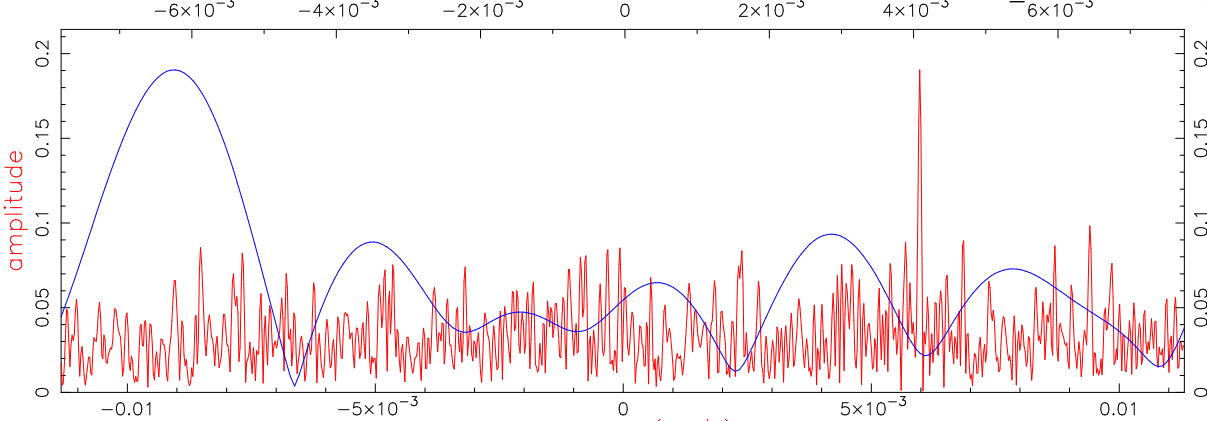
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, oP

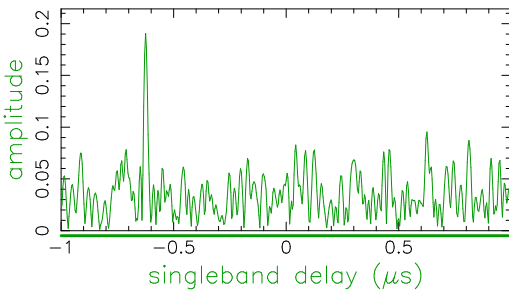
VLBA\_OV - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)

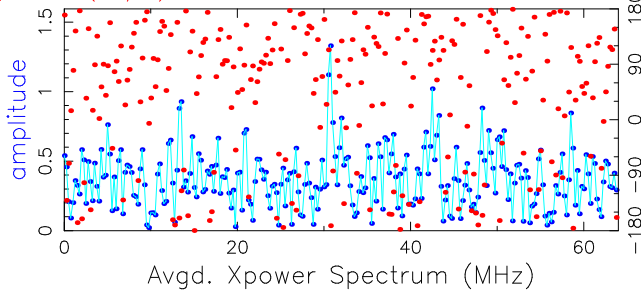


Fringe quality 0

SNR 6.9  
 Int time 175.789  
 Amp 0.214  
 Phase -156.2  
 PFD 7.3e-04  
 Delays (us)  
 SBD -0.624702  
 MBD -0.006235  
 Fringe rate (Hz)  
 0.516100  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

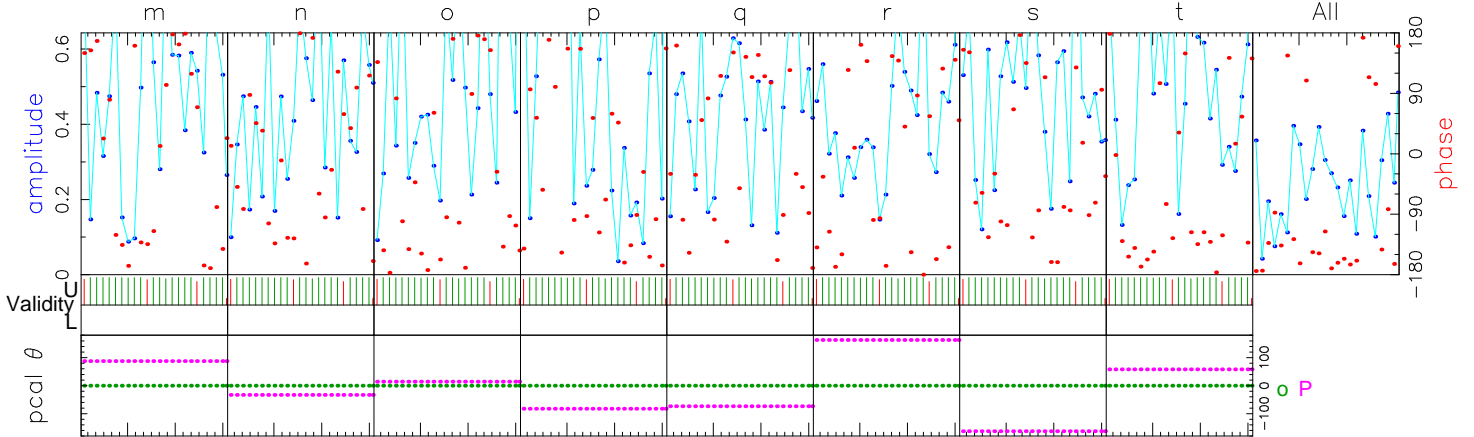


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175316  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-175.5	-86.7	-143.8	-154.1	-174.6	165.1	-144.5	-151.9	Phase	-156.2
	0.3	0.1	0.4	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
	333.3	334.4	96.8	95.6	264.4	58.4	417.3	97.4	Sbd box	97.1
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.92819938186E+03	Apriori delay (usec)	1.92883061719E+03	Resid mbdelay (usec)	-6.23532E-03	+/-	1.6E-04
Sband delay (usec)	1.92820591494E+03	Apriori clock (usec)	2.5937267E+01	Resid sbdelay (usec)	-6.24702E-01	+/-	1.2E-03
Phase delay (usec)	1.92883061215E+03	Apriori clockrate (us/s)	-1.1696503E-07	Resid phdelay (usec)	-5.03608E-06	+/-	5.3E-07
Delay rate (us/s)	2.07192545599E+00	Apriori rate (us/s)	2.07191946457E+00	Resid rate (us/s)	5.99141E-06	+/-	5.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.01428099621E-05	Resid phase (deg)	-156.2	+/-	16.6

ph/seg (deg)	44.6	Theor.	40.6	Amplitude	0.214 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	64.9	Search (1024X32)	0.183	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	35.0	Inc. seg. avg.	0.219	Inc. frq. avg.	0.215	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	47.8	Inc. frq. avg.	0.215			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

o: az 118.5 el 23.8 pa -44.7 P: az 246.8 el 18.9 pa 47.6 u, v (fr/asec) -11934.707 99.891 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/oP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/oP.W.249.3MP2H5

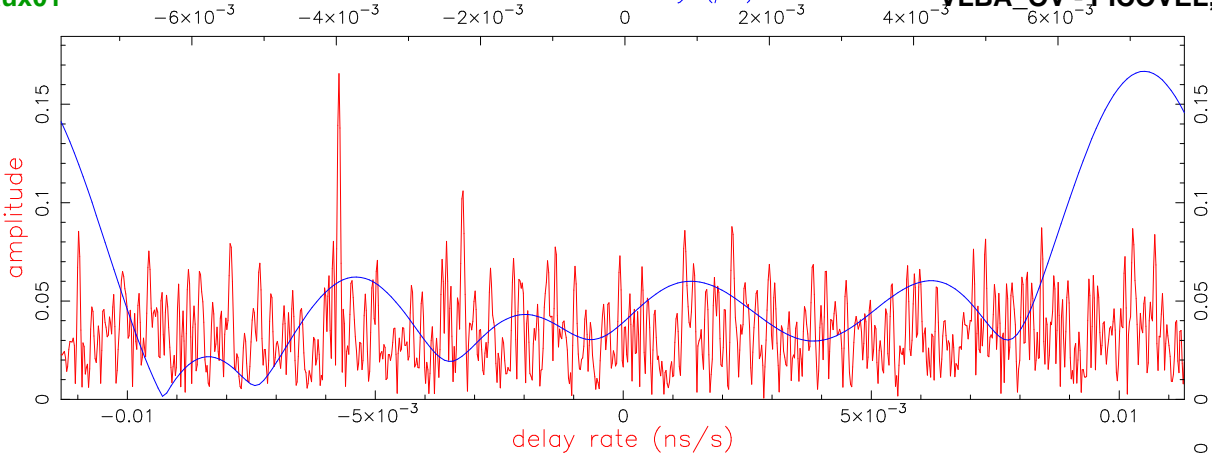
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, oP

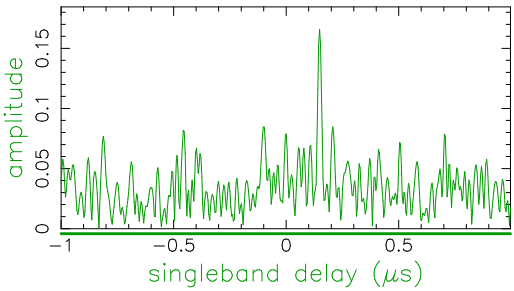
VLBA\_OV - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

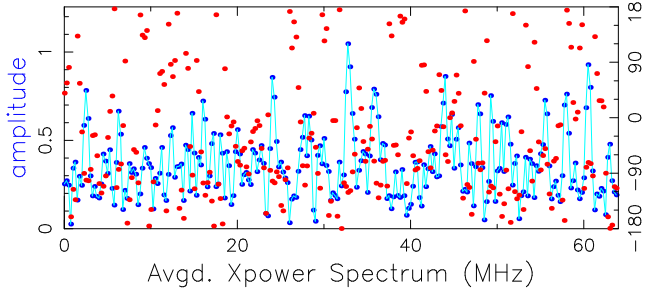


Fringe quality 0

SNR 6.0  
 Int time 175.789  
 Amp 0.185  
 Phase -81.5  
 PFD 2.2e-01  
 Delays (us)  
 SBD 0.148368  
 MBD -0.008301  
 Fringe rate (Hz)  
 -0.495612  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

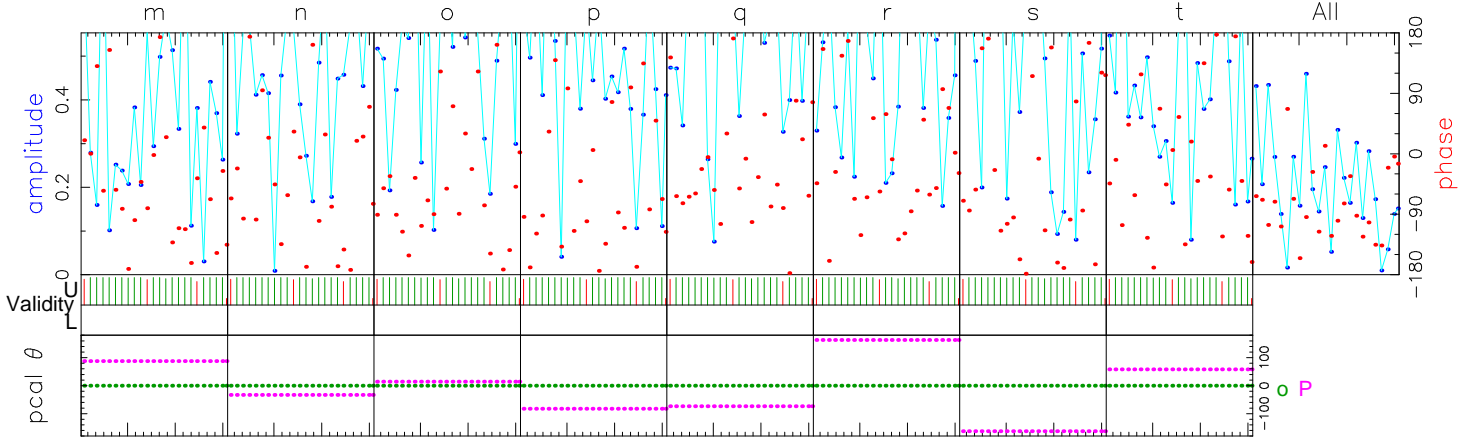


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175318  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.2	-54.0	-84.6	-119.6	-47.7	-74.7	-123.0	-86.3	Phase	-81.5
	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	45.1	310.7	446.0	154.8	294.7	171.8	108.1	239.2	Sbd box	295.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.92897856640E+03		Apriori delay (usec)	1.92883061719E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.8E-04		
Sband delay (usec)	1.92897898544E+03		Apriori clock (usec)	2.5937267E+01	Resid sbdelay (usec)	1.48368E-01	+/-	1.4E-03		
Phase delay (usec)	1.92883061456E+03		Apriori clockrate (us/s)	-1.1696503E-07	Resid phdelay (usec)	-2.62800E-06	+/-	6.2E-07		
Delay rate (us/s)	2.07191371101E+00		Apriori rate (us/s)	2.07191946457E+00	Resid rate (us/s)	-5.75357E-06	+/-	6.0E-09		
Total phase (deg)		49.7	Apriori accel (us/s/s)	-1.01428099621E-05	Resid phase (deg)	-81.5	+/-	19.1		

ph/seg (deg) 53.5 46.7 Search (1024X32) 0.164 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.8 81.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.4 27.0 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.9 47.1 Inc. frq. avg. 0.183 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 o: az 118.5 el 23.8 pa -44.7 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11934.707 99.891 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/oP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/oP.W.258.3MP2H5 simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

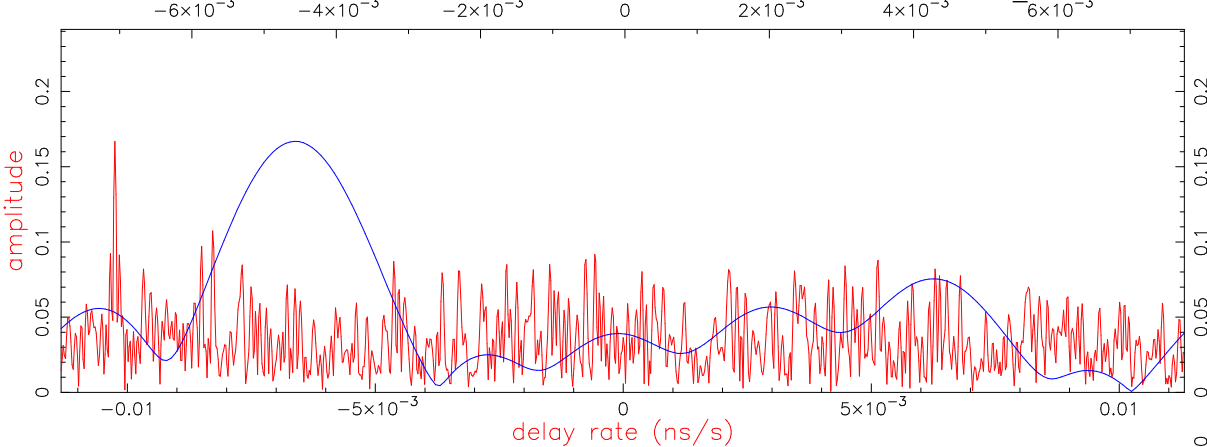
aux01

3C279.3MP2H5, No0694, oP

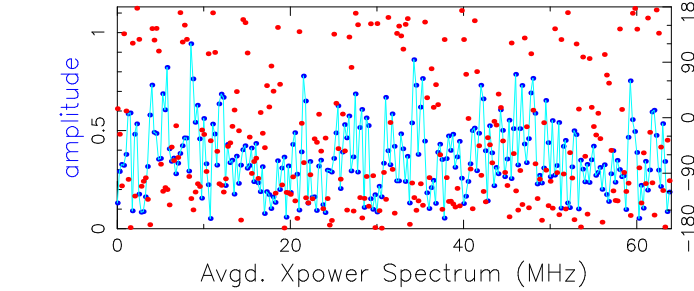
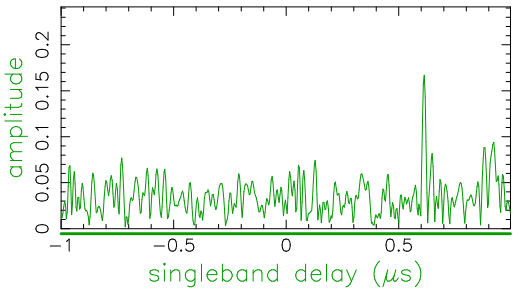
VLBA\_OV - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

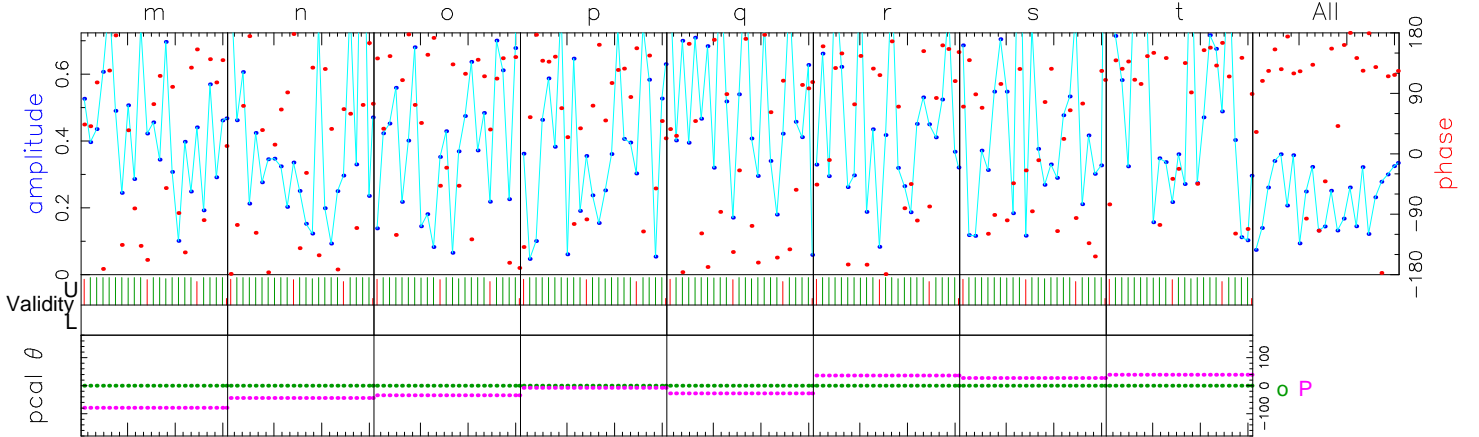


SNR 6.1  
 Int time 175.789  
 Amp 0.241  
 Phase 140.9  
 PFD 1.5e-01  
 Delays (us)  
 SBD 0.612449  
 MBD -0.004582  
 Fringe rate (Hz)  
 -0.885174  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175320  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	PC phase	
P	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.92943541052E+03	Apriori delay (usec)	1.92883061719E+03	Resid mbdelay (usec)	-4.58166E-03	+/-	1.8E-04
Sband delay (usec)	1.92944306569E+03	Apriori clock (usec)	2.5937267E+01	Resid sbdelay (usec)	6.12449E-01	+/-	1.4E-03
Phase delay (usec)	1.92883062173E+03	Apriori clockrate (us/s)	-1.1696503E-07	Resid phdelay (usec)	4.54487E-06	+/-	6.1E-07
Delay rate (us/s)	2.07190918858E+00	Apriori rate (us/s)	2.07191946457E+00	Resid rate (us/s)	-1.02760E-05	+/-	5.9E-09
Total phase (deg)	272.1	Apriori accel (us/s/s)	-1.01428099621E-05	Resid phase (deg)	140.9	+/-	18.9

ph/seg (deg)	62.0	RMS	46.1	Theor.	46.1	Amplitude	0.241 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	64.6	Search (1024X32)	0.161	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	17.8	Inc. seg. avg.	0.250	Inc. frq. avg.	0.223	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	43.2	Inc. frq. avg.	0.223	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

o: az 118.5 el 23.8 pa -44.7 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11934.707 99.891 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/oP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/oP.W.261.3MP2H5

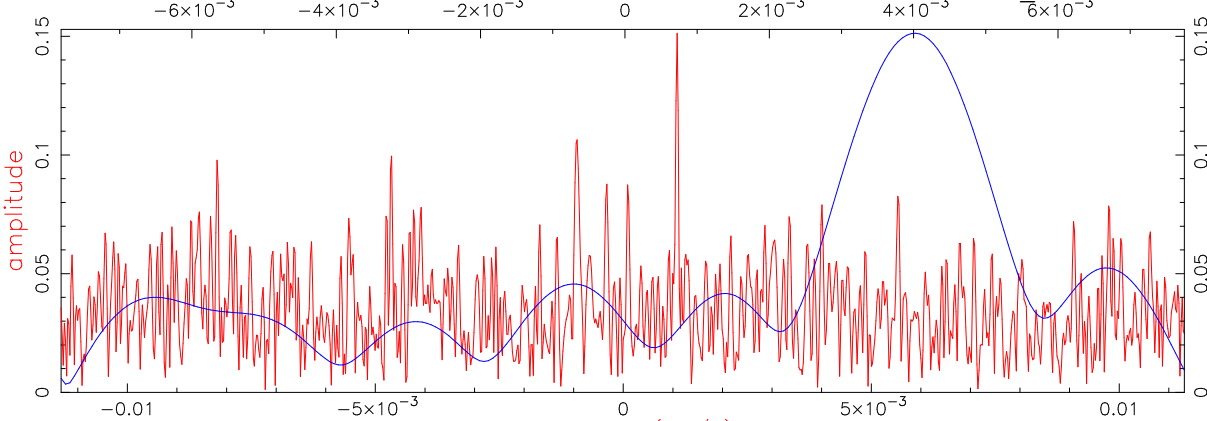
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, pP

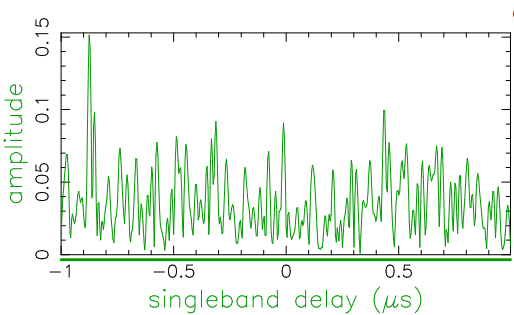
VLBA\_PT - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

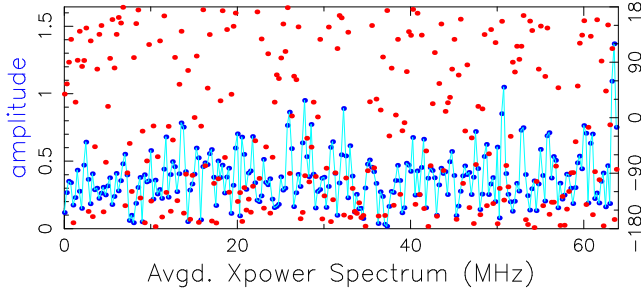


Fringe quality 0

SNR 5.6  
 Int time 177.989  
 Amp 0.153  
 Phase 154.4  
 PFD 9.6e-01  
 Delays (us)  
 SBD -0.874049  
 MBD 0.004011  
 Fringe rate (Hz)  
 0.093682  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

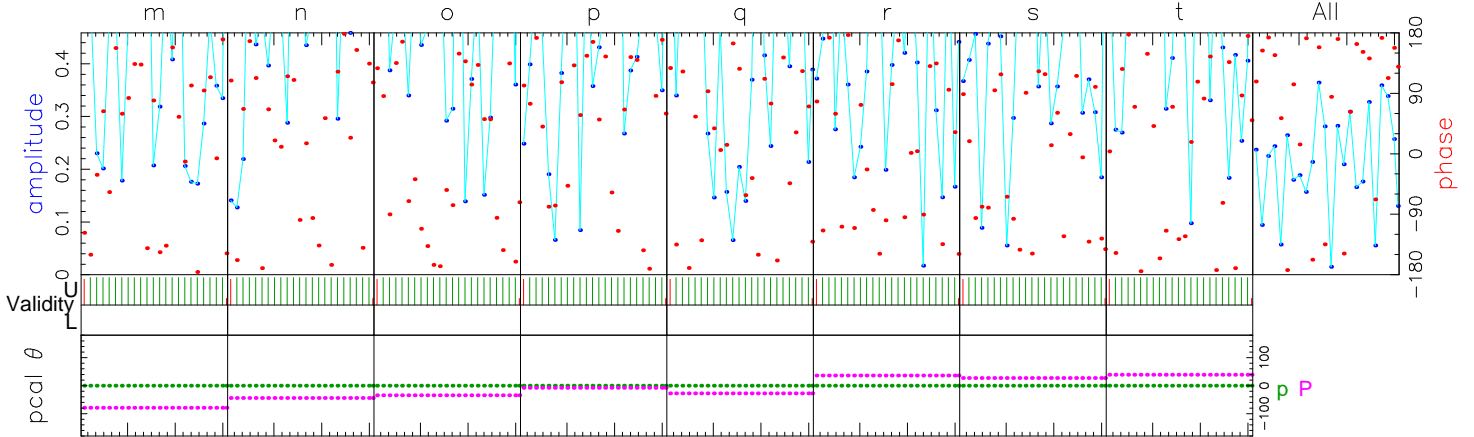


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175317  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	153.8	141.9	175.7	155.6	131.5	-174.2	142.4	154.3	Phase	154.4
p:P	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
p:P	299.5	464.8	386.8	210.5	39.9	436.5	383.0	146.1	Sbd box	33.2
p:P	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
p:P	0	0	0	0	0	0	0	0	PC freqs	
p:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Mani PC	
p:P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p:P	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.69639225031E+03	Apriori delay (usec)	4.69726323895E+03	Resid mbdelay (usec)	4.01136E-03	+/-	2.0E-04
Sband delay (usec)	4.69638918995E+03	Apriori clock (usec)	6.5849037E-07	Resid sbdelay (usec)	-8.74049E-01	+/-	1.6E-03
Phase delay (usec)	4.69726324393E+03	Apriori clockrate (us/s)	-2.1954010E-07	Resid phdelay (usec)	4.97961E-06	+/-	6.6E-07
Delay rate (us/s)	1.95926346407E+00	Apriori rate (us/s)	1.95926237651E+00	Resid rate (us/s)	1.08755E-06	+/-	6.4E-09
Total phase (deg)	299.7	Apriori accel (us/s/s)	-2.44847292360E-05	Resid phase (deg)	154.4	+/-	20.6

ph/seg (deg)	59.5	Theor.	50.5	Amplitude	0.153 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.5	Search (1024X32)	0.150	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)	19.4	Inc. seg. avg.	0.157	Inc. frq. avg.	0.139	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 (%)	32.2	Inc. frq. avg.	0.139			Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	0.00
p: az 125.5 el 32.4 pa -42.5		P: az 246.8 el 18.9 pa 47.6		u, v (fr/asec)	-11293.574 -147.929					simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0694/pP..3MP2H5		Output file: /Exps/c241b/v2/3mm/1234/No0694/pP.W.256.3MP2H5						

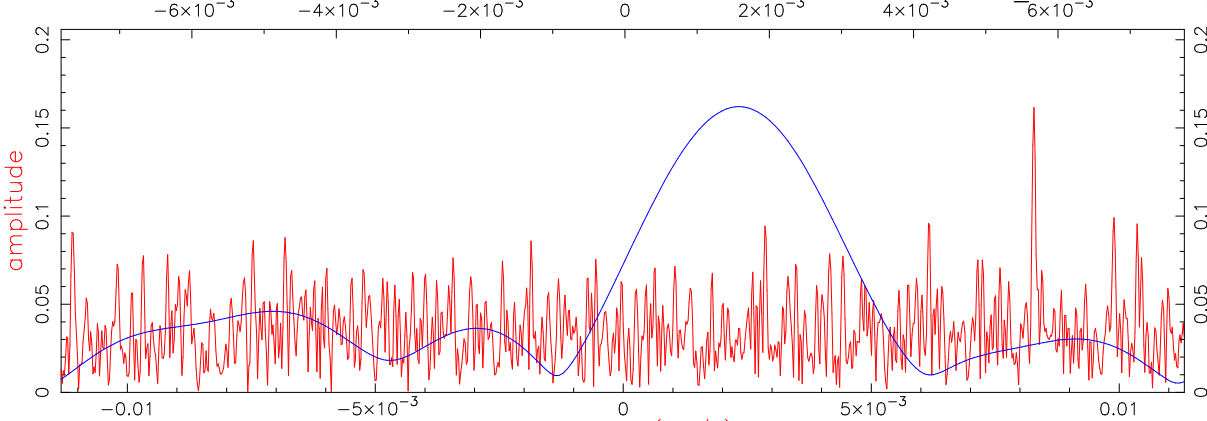
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, pP

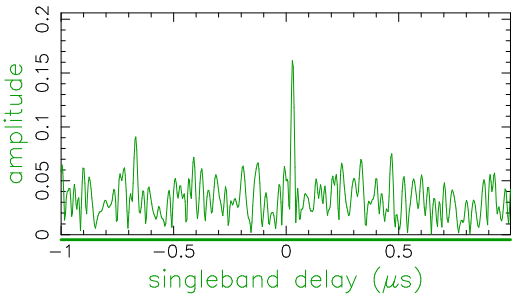
VLBA\_PT - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)

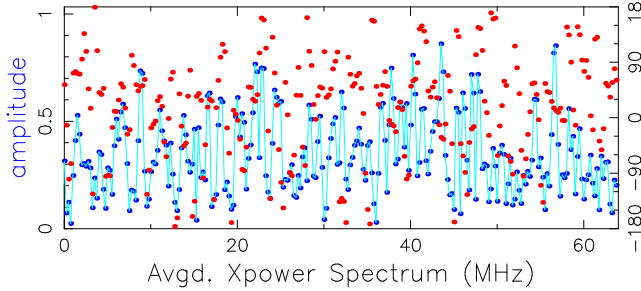


Fringe quality 0

SNR 6.0  
 Int time 177.989  
 Amp 0.206  
 Phase -15.8  
 PFD 2.7e-01  
 Delays (us)  
 SBD 0.028639  
 MBD 0.001690  
 Fringe rate (Hz) 0.714220  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

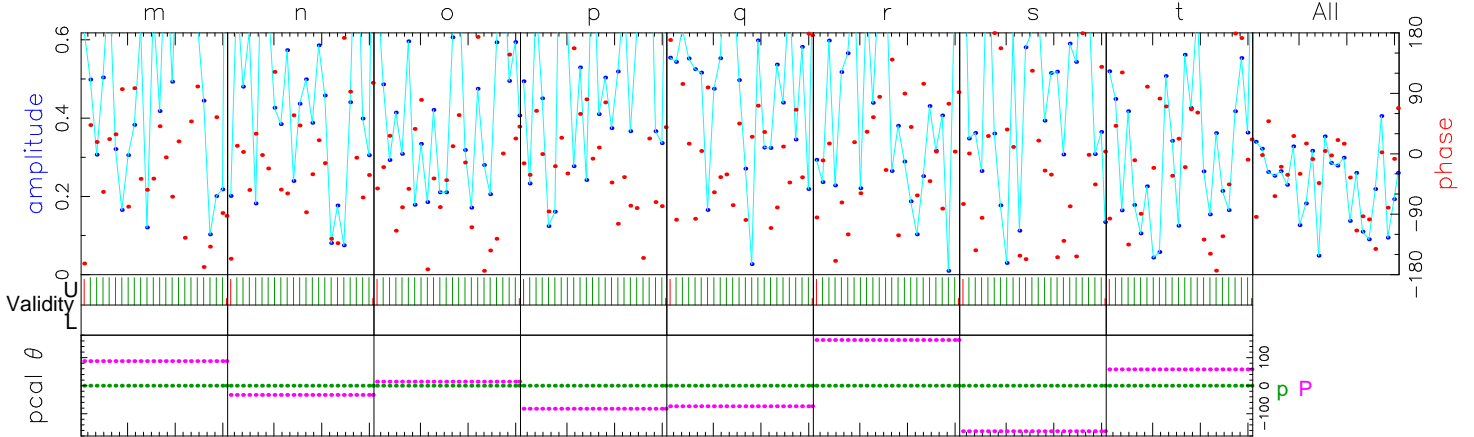


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175320  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.7	-11.3	-24.8	-9.7	-31.3	0.5	-72.3	33.0	Phase	-15.8
	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.0	Ampl.	0.2
	137.9	166.6	351.1	265.2	337.7	505.1	386.1	376.7	Sbd box	264.3
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
p:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	4.69729617933E+03	Apriori delay (usec)	4.69726323895E+03	Resid mbdelay (usec)	1.69038E-03	+/-	1.8E-04
Sband delay (usec)	4.69729187845E+03	Apriori clock (usec)	6.5849037E+00	Resid sbdelay (usec)	2.86395E-02	+/-	1.4E-03
Phase delay (usec)	4.69726323844E+03	Apriori clockrate (us/s)	-2.1954010E-07	Resid phdelay (usec)	-5.08975E-07	+/-	6.2E-07
Delay rate (us/s)	1.95927066790E+00	Apriori rate (us/s)	1.95926237651E+00	Resid rate (us/s)	8.29139E-06	+/-	6.0E-09
Total phase (deg)	129.5	Apriori accel (us/s/s)	-2.44847292360E-05	Resid phase (deg)	-15.8	+/-	19.2

ph/seg (deg)	52.5	RMS	47.1	Theor.	47.1	Amplitude	0.206 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.0		82.1		82.1	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	32.4		27.2		27.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	47.1		47.4		47.4	Inc. seg. avg.	0.221	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
						Inc. frq. avg.	0.193	Data rate(Mb/s): 2048	t_cohere infinite			

p: az 125.5 el 32.4 pa -42.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11293.574 -147.929 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/pP...3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/pP.W.262.3MP2H5

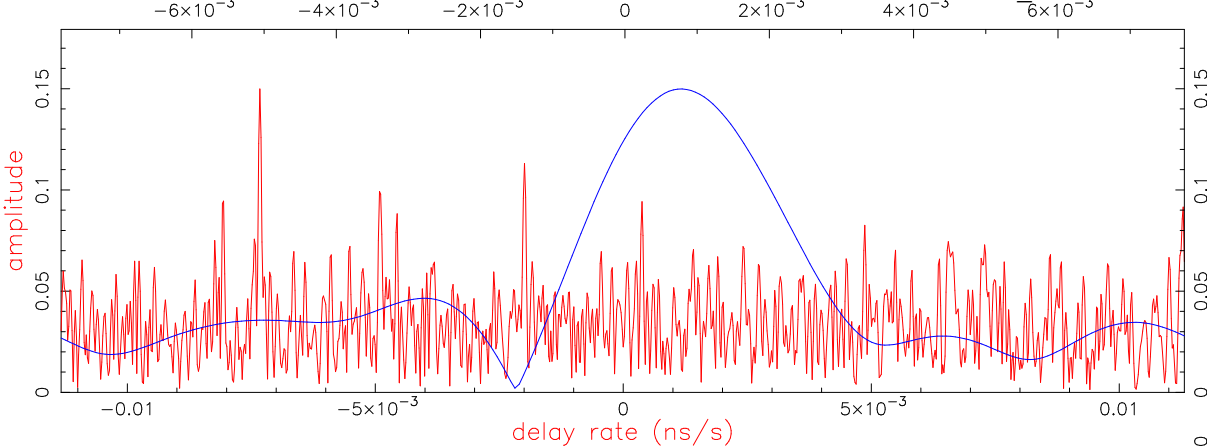
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, pP

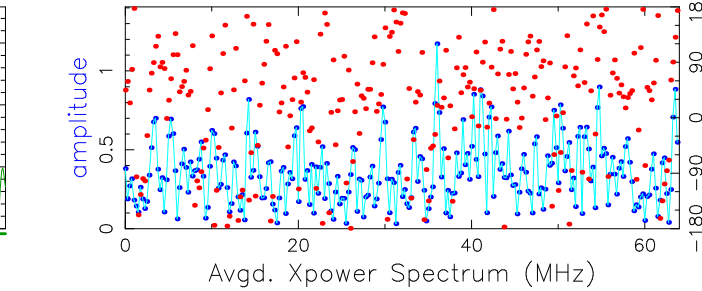
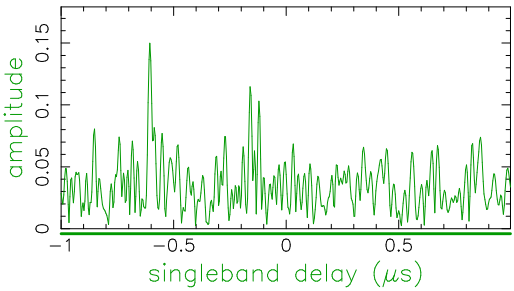
VLBA\_PT - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)



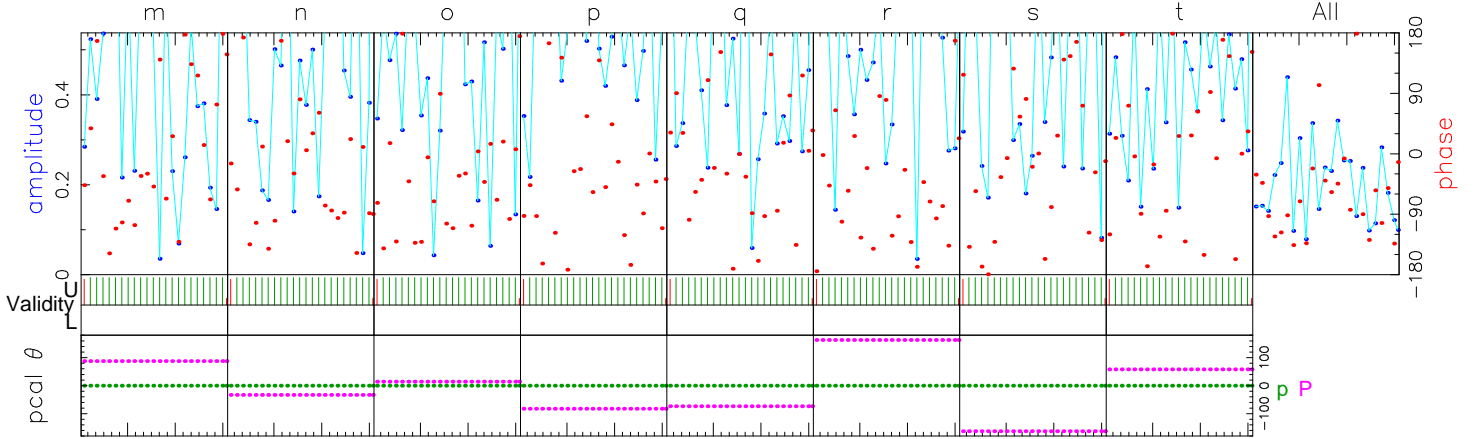
Fringe quality 0

SNR 5.5  
 Int time 177.989  
 Amp 0.179  
 Phase -74.3  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.605555  
 MBD 0.000785  
 Fringe rate (Hz)  
 -0.633210  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175323  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.0	-74.3	-74.1	-77.0	-26.5	-75.0	-78.4	-161.7	Phase	-74.3
	0.2	0.2	0.3	0.2	0.1	0.3	0.1	0.0	Ampl.	0.2
	94.1	214.6	103.2	226.4	187.1	108.1	187.6	37.8	Sbd box	102.0
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
p:p	0	0	0	0	0	0	0	0	PC freqs	
p:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 4.69665464936E+03 Apriori delay (usec) 4.69726323895E+03 Resid mbdelay (usec) 7.85402E-04 +/- 2.0E-04  
 Sband delay (usec) 4.69665768420E+03 Apriori clock (usec) 6.5849037E-07 Resid sbdelay (usec) -6.05555E-01 +/- 1.6E-03  
 Phase delay (usec) 4.69726323656E+03 Apriori clockrate (us/s) -2.1954010E-07 Resid phdelay (usec) -2.39660E-06 +/- 6.8E-07  
 Delay rate (us/s) 1.95925502557E+00 Apriori rate (us/s) 1.95926237651E+00 Resid rate (us/s) -7.35094E-06 +/- 6.6E-09  
 Total phase (deg) 70.9 Apriori accel (us/s/s) -2.44847292360E-05 Resid phase (deg) -74.3 +/- 21.0

RMS Theor. Amplitude 0.179 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 57.5 51.3 Search (1024X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 72.0 89.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 41.0 29.6 Inc. seg. avg. 0.178 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 52.3 51.7 Inc. frq. avg. 0.168 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

p: az 125.5 el 32.4 pa -42.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11293.574 -147.929 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/pP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/pP.W.270.3MP2H5

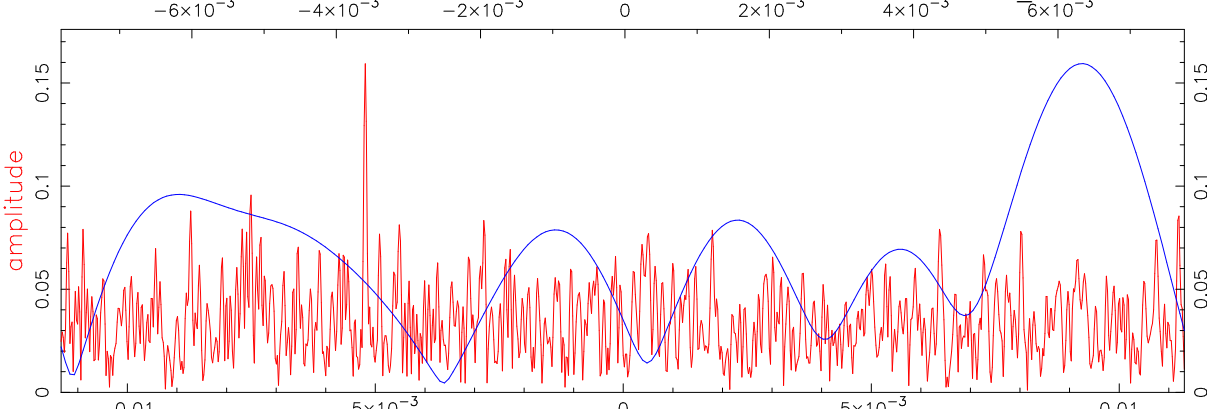
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, pP

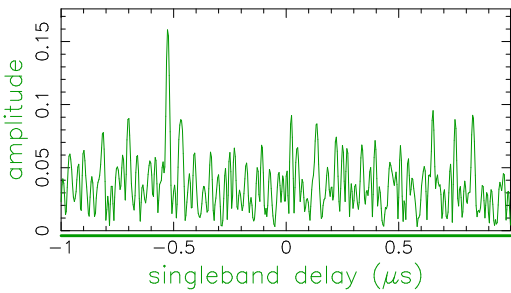
VLBA\_PT - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

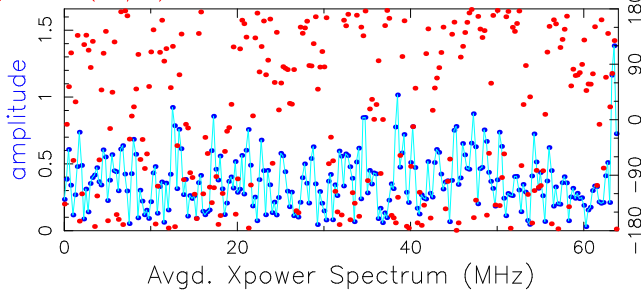


Fringe quality 0

SNR 5.9  
 Int time 177.989  
 Amp 0.176  
 Phase 146.4  
 PFD 4.1e-01  
 Delays (us)  
 SBD -0.526024  
 MBD 0.006308  
 Fringe rate (Hz)  
 -0.448568  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

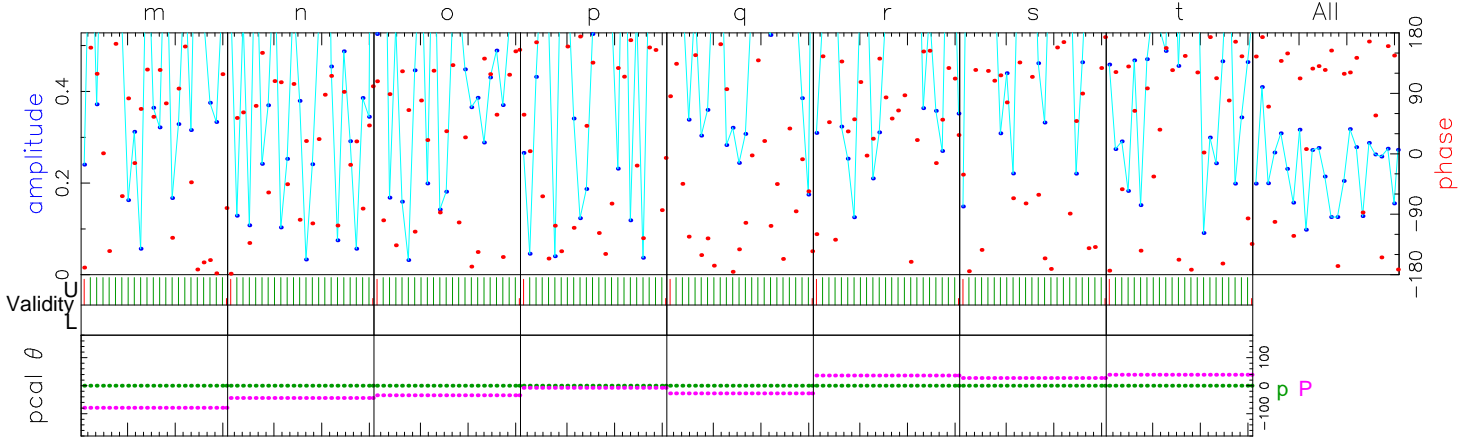


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032001.54  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175325  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
p:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
p	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	4.69673829678E+03	Apriori delay (usec)	4.69726323895E+03	Resid mbdelay (usec)	6.30782E-03	+/-	1.8E-04
Sband delay (usec)	4.69673721495E+03	Apriori clock (usec)	6.5849037E+00	Resid sbdelay (usec)	-5.26024E-01	+/-	1.5E-03
Phase delay (usec)	4.69726324367E+03	Apriori clockrate (us/s)	-2.1954010E-07	Resid phdelay (usec)	4.72075E-06	+/-	6.3E-07
Delay rate (us/s)	1.95925716908E+00	Apriori rate (us/s)	1.95926237651E+00	Resid rate (us/s)	-5.20743E-06	+/-	6.1E-09
Total phase (deg)	291.6	Apriori accel (us/s/s)	-2.44847292360E-05	Resid phase (deg)	146.4	+/-	19.5

ph/seg (deg)	59.3	Theor.	47.8	Amplitude	0.176 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	65.0	Search (1024X32)	0.157	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.5	Inc. seg. avg.	0.190	Inc. frq. avg.	0.202	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.5	Inc. frq. avg.	0.202	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
									ion window (TEC)	0.00 0.00

p: az 125.5 el 32.4 pa -42.5 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) -11293.574 -147.929 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/pP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/pP.W.284.3MP2H5

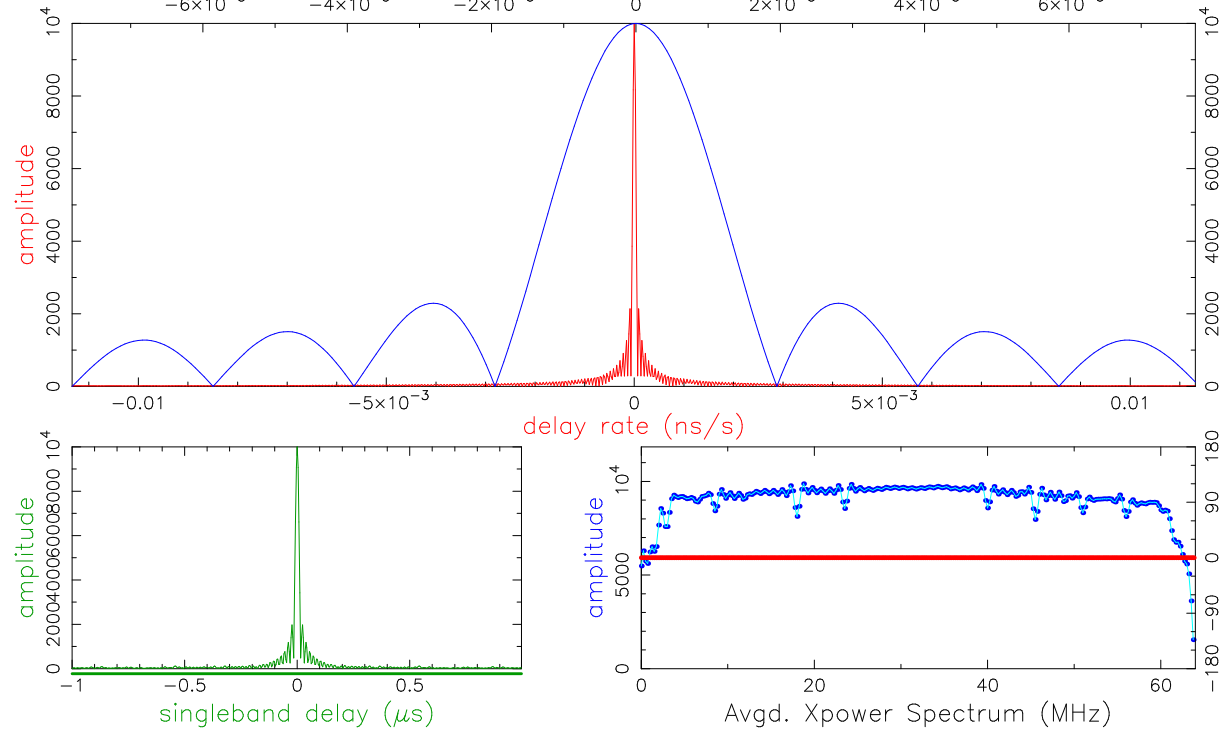


Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, PP

PICOVEL - PICOVEL, fgroup W, pol LL

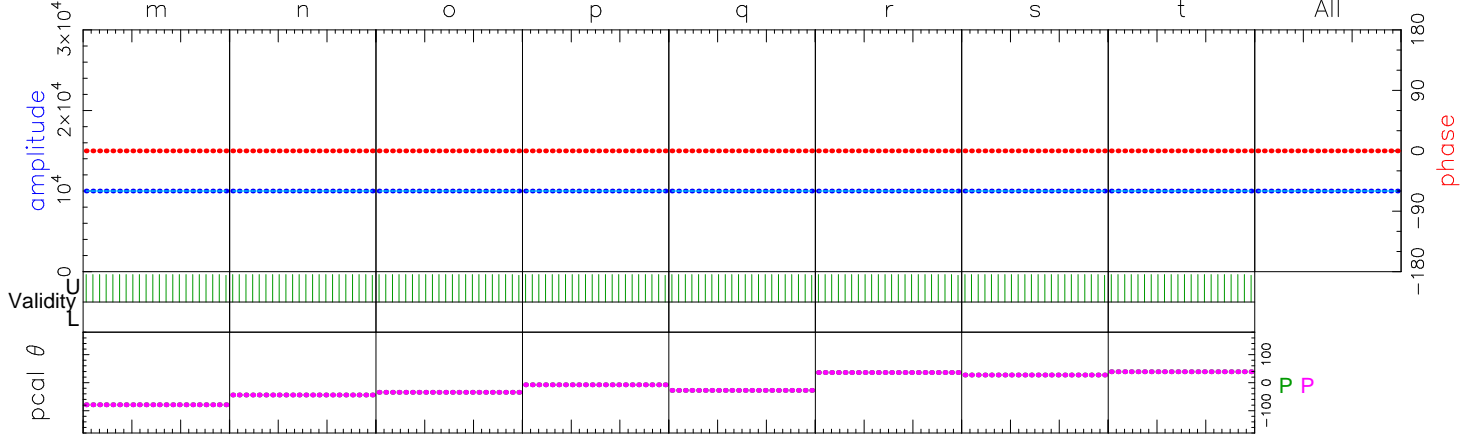


Fringe quality 9

SNR 366881.2  
 Int time 179.993  
 Amp 10000.000  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175237  
 2024:113:095956  
 RA & Dec (J2000) 12h56m11.166579s --5°47'21.525152"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
P	0	0	0	0	0	0	0	0	0.0	0.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
P:P	-79:-79	-44:-44	-34:-34	-8:-8	-28:-28	36:36	27:27	39:39	257.0	257.0
P	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
P	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	257.0	257.0
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	10000.0	10000.0

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

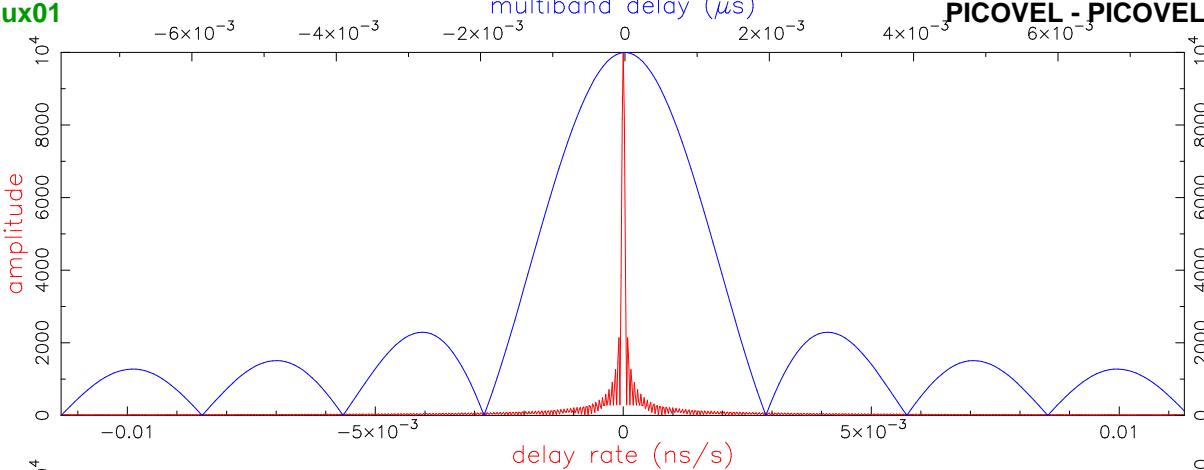
RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 P: az 246.8 el 18.9 pa 47.6 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PP.W.62.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

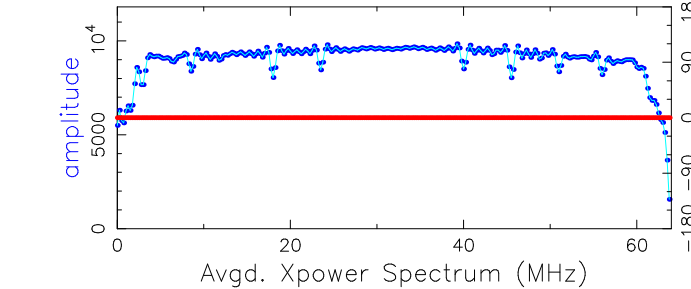
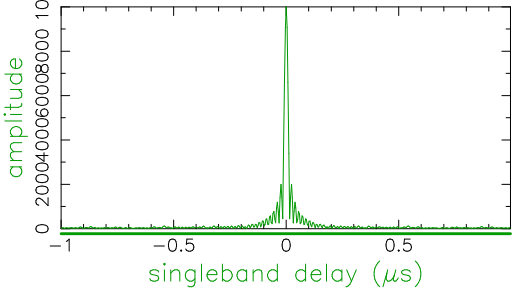
aux01

3C279.3MP2H5, No0694, PP

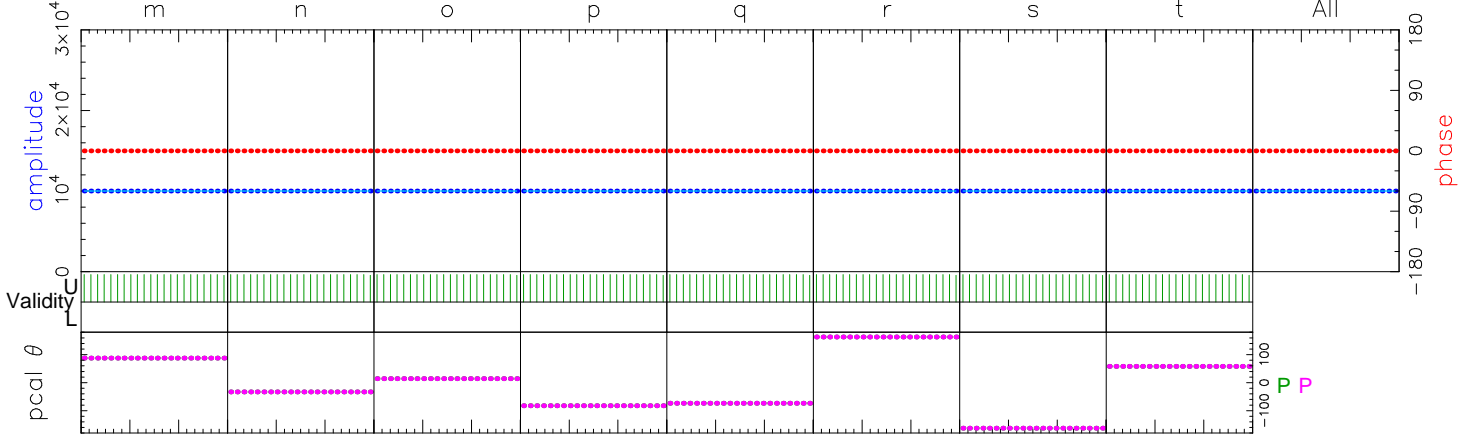
PICOVEL - PICOVEL, fgroup W, pol RR



Fringe quality 9  
 SNR 366881.2  
 Int time 179.993  
 Amp 10000.000  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175240  
 2024:113:095956  
 RA & Dec (J2000) 12h56m11.166579s --5°47'21.525152"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
P	0	0	0	0	0	0	0	0		
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:P	88:88	-33:-33	15:15	-82:-82	-74:-74	163:163	-163:-163	58:58		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	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

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 P: az 246.8 el 18.9 pa 47.6 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PP.W.72.3MP2H5 simultaneous interpolator

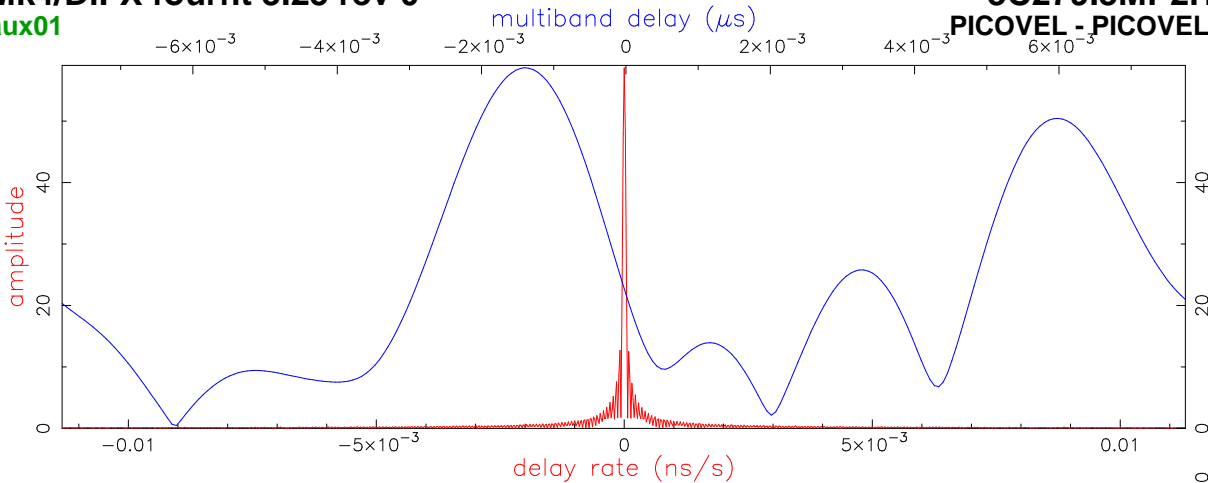


Mk4/DiFX fourfit 3.25 rev 0

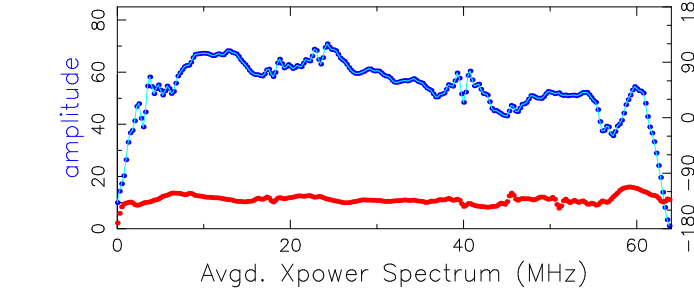
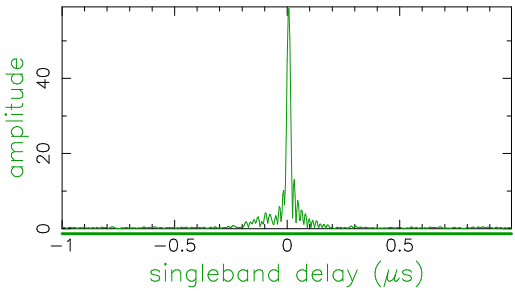
aux01

3C279.3MP2H5, No0694, PP

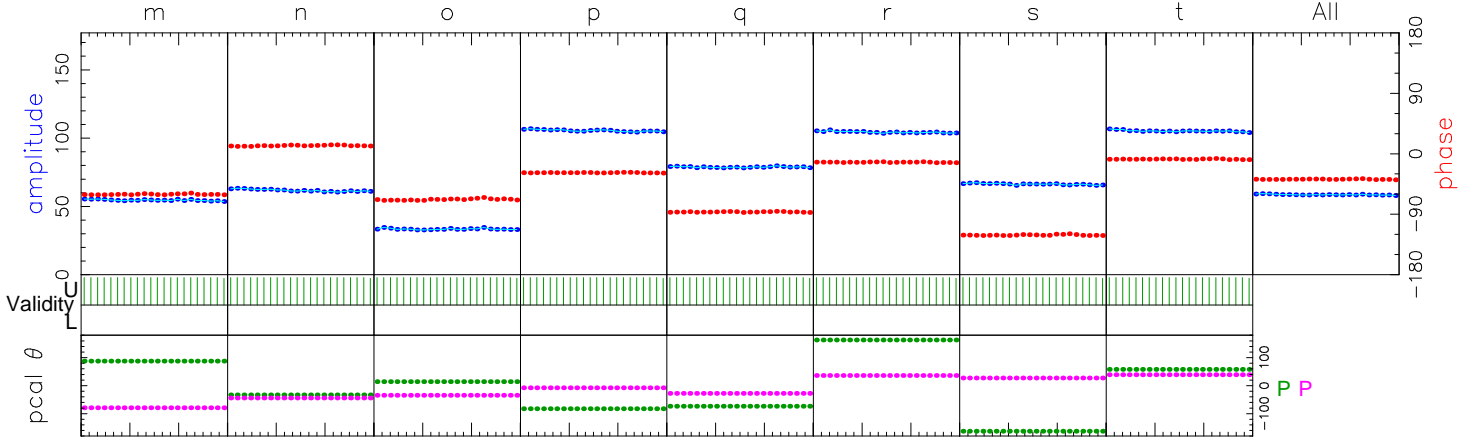
PICOVEL - PICOVEL, fgroup W, pol RL



Fringe quality 5  
 Error code G  
 SNR 2166.4  
 Int time 179.993  
 Amp 59.048  
 Phase -37.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.006722  
 MBD -0.001425  
 Fringe rate (Hz)  
 0.000017  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032000.00  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175244  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"



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
	-60.3	12.1	-68.0	-28.1	-86.5	-12.6	-120.9	-8.0	Phase	-37.9
	54.6	61.8	33.4	105.6	78.9	104.4	66.4	105.3	Ampl.	76.3
	258.9	258.4	259.0	259.1	260.2	260.2	259.6	258.6	Sbd box	258.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P	88:-79	-33:-44	15:-34	-82:-8	-74:-28	163:36	-163:27	58:39	Mani PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.42002812500E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.42472E-03	+/-	5.0E-07
Sband delay (usec)	6.72175000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	6.72175E-03	+/-	4.0E-06
Phase delay (usec)	-1.22308506518E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.22309E-06	+/-	1.7E-09
Delay rate (us/s)	2.01230363962E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.01230E-10	+/-	1.6E-11
Total phase (deg)	-37.9	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-37.9	+/-	0.1

ph/seg (deg) 0.3 0.1  
 amp/seg (%) 0.9 0.2  
 ph/frq (deg) 49.6 0.1  
 amp/frq (%) 51.8 0.1

RMS Theor. Amplitude 59.048 +/- 0.027  
 Search (1024X32) 58.545  
 Interp. 0.000  
 Inc. seg. avg. 58.639  
 Inc. frq. avg. 76.298

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
 Bits/sample: 2x2 SampCntNorm: enabled  
 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

sb window (us) -1.000 1.000  
 mb window (us) -0.008 0.008  
 dr window (ns/s) -0.011 0.011  
 ion window (TEC) 0.00 0.00

P: az 246.8 el 18.9 pa 47.6 P: az 246.8 el 18.9 pa 47.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694//PP..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694//PP.W.88.3MP2H5

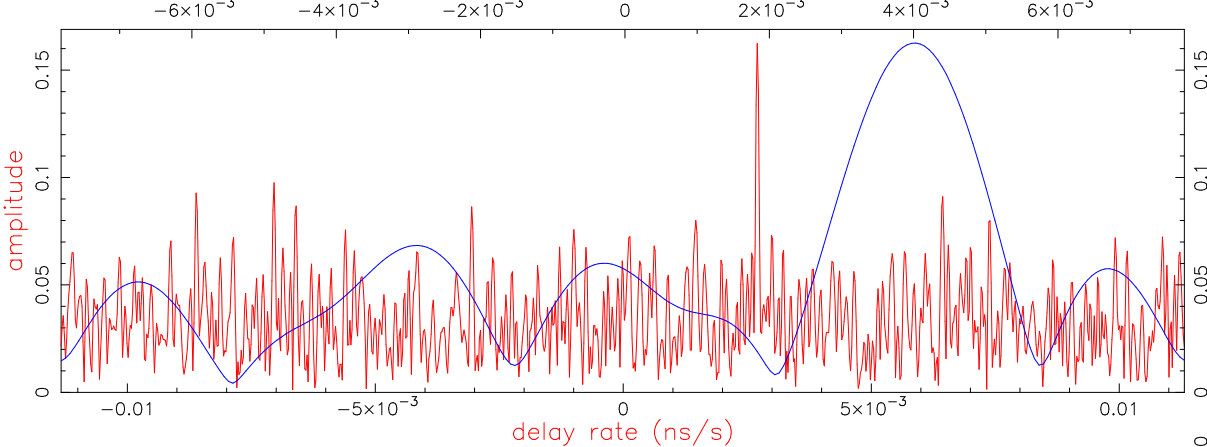
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, PY

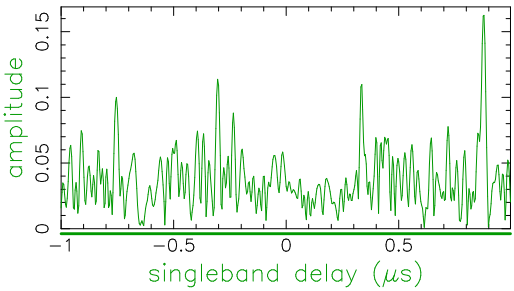
PICOVEL - YEBES40M, fgroup W, pol LL

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

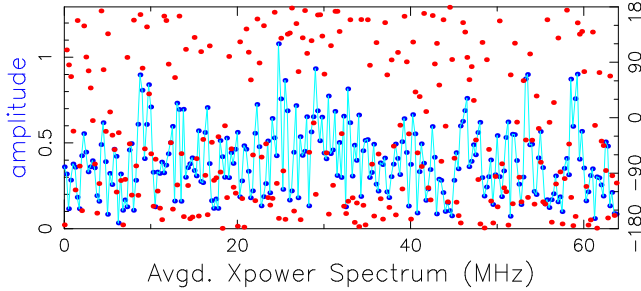


Fringe quality 0

SNR 5.9  
 Int time 169.867  
 Amp 0.169  
 Phase 171.5  
 PFD 4.0e-01  
 Delays (us)  
 SBD 0.877046  
 MBD 0.003970  
 Fringe rate (Hz)  
 0.233556  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

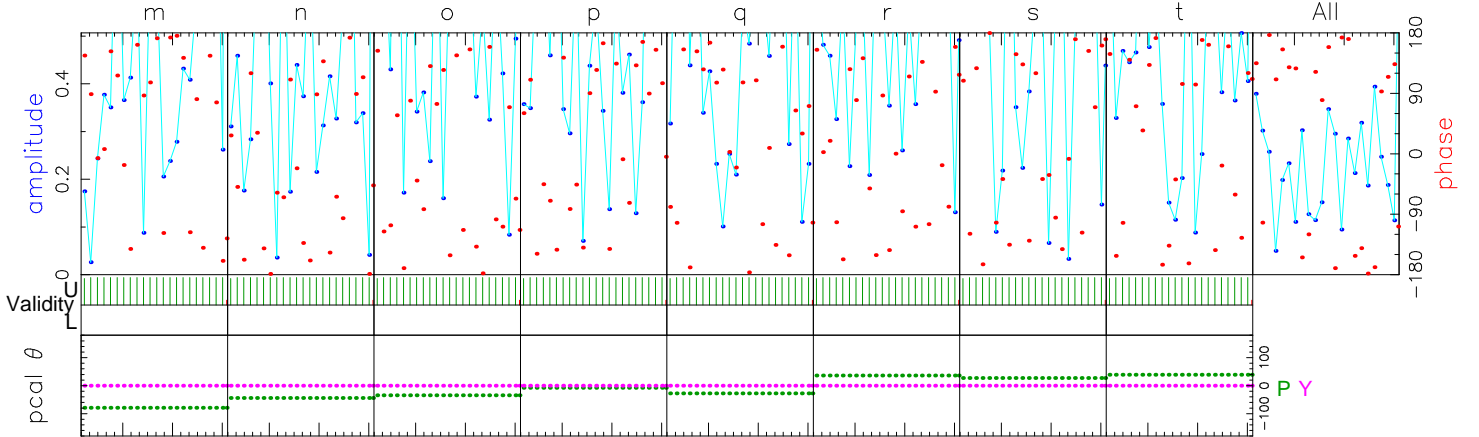


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032009.73  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175323  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	333/0	333/0	333/0	333/0	333/0	333/0	333/0	333/0		
P	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:Y	-79:0	-44:0	-34:0	-8:0	-28:0	36:0	27:0	39:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	6.74205120634E+02	Apriori delay (usec)	6.73326150616E+02	Resid mbdelay (usec)	3.97002E-03	+/-	1.8E-04
Sband delay (usec)	6.74203196866E+02	Apriori clock (usec)	1.0980481E+02	Resid sbdelay (usec)	8.77046E-01	+/-	1.5E-03
Phase delay (usec)	6.73326156147E+02	Apriori clockrate (us/s)	-1.1708490E-02	Resid phdelay (usec)	5.53158E-06	+/-	6.3E-07
Delay rate (us/s)	-4.83944869075E-02	Apriori rate (us/s)	-4.83971982613E-02	Resid rate (us/s)	2.71135E-06	+/-	6.4E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.45052123231E-06	Resid phase (deg)	171.5	+/-	19.5

ph/seg (deg)	47.5	Theor.	46.7	Amplitude	0.169 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	72.0	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	26.4	Inc. seg. avg.	0.174	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.7	Inc. frq. avg.	0.159	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

P: az 246.8 el 18.9 pa 47.6 Y: az 245.9 el 17.2 pa 44.4 u,v (fr/asec) 277.184 -393.021 simultaneous interpolator

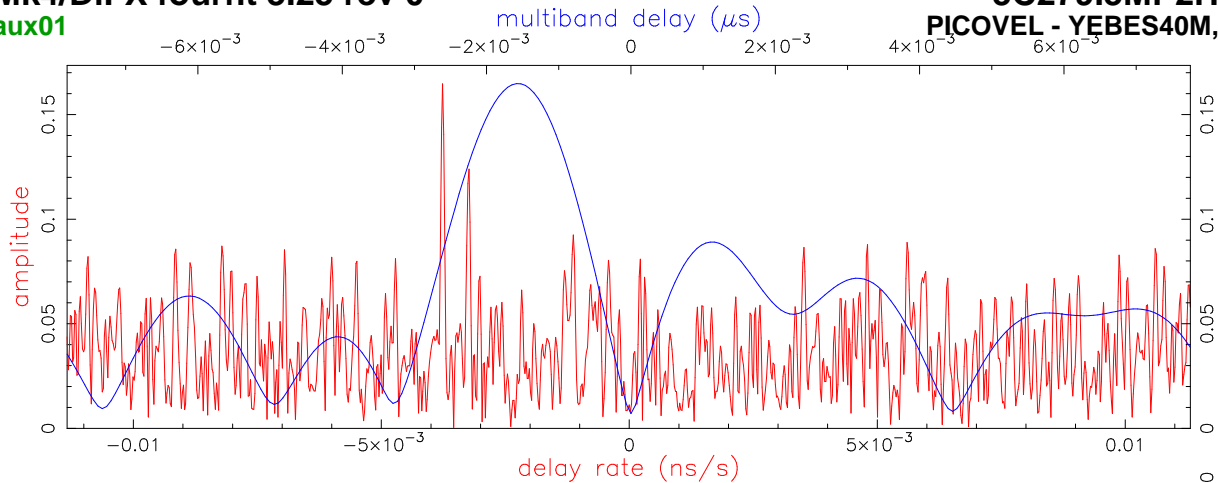
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PY..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PY.W.273.3MP2H5

Mk4/DiFX fourfit 3.25 rev 0

aux01

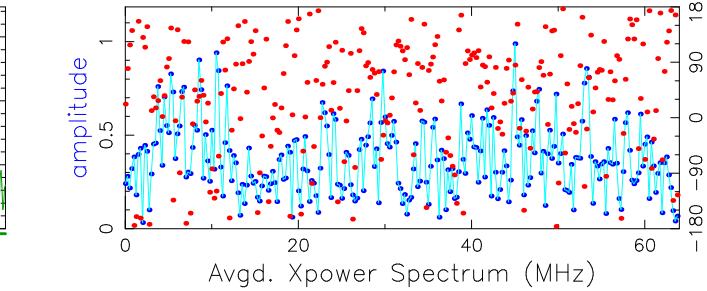
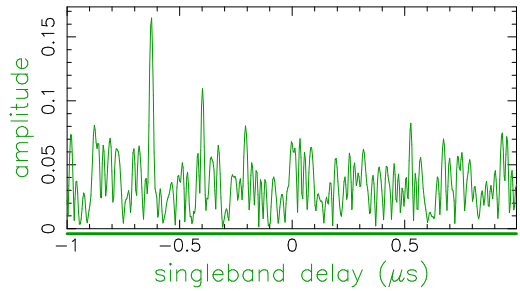
3C279.3MP2H5, No0694, PY

PICOVEL - YEBES40M, fgroup W, pol RR



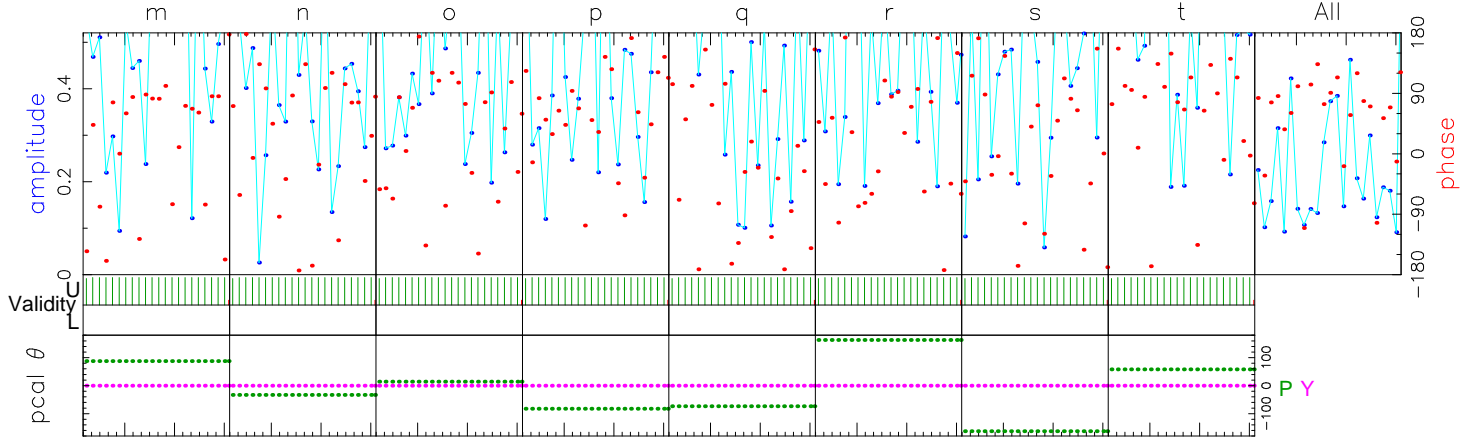
Fringe quality 0

SNR 5.9  
 Int time 169.867  
 Amp 0.174  
 Phase 77.4  
 PFD 3.6e-01  
 Delays (us)  
 SBD -0.626053  
 MBD -0.001597  
 Fringe rate (Hz)  
 -0.324166  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032009.73  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175325  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	333/0	333/0	333/0	333/0	333/0	333/0	333/0	333/0		
P	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	6.72699553137E+02	Apriori delay (usec)	6.73326150616E+02	Resid mbdelay (usec)	-1.59748E-03	+/-	1.8E-04
Sband delay (usec)	6.72700097616E+02	Apriori clock (usec)	1.0980481E+02	Resid sbdelay (usec)	-6.26053E-01	+/-	1.5E-03
Phase delay (usec)	6.73326153112E+02	Apriori clockrate (us/s)	-1.1708490E-02	Resid phdelay (usec)	2.49605E-06	+/-	6.3E-07
Delay rate (us/s)	-4.84009615030E-02	Apriori rate (us/s)	-4.83971982613E-02	Resid rate (us/s)	-3.76324E-06	+/-	6.4E-09
Total phase (deg)	298.5	Apriori accel (us/s/s)	-2.45052123231E-06	Resid phase (deg)	77.4	+/-	19.4

ph/seg (deg)	68.0	Theor.	46.5	Amplitude	0.174 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.0	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)	23.8	Inc. seg. avg.	0.172	Inc. frq. avg.	0.164	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.3	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
P:	az 246.8 el 18.9 pa 47.6	Y:	az 245.9 el 17.2 pa 44.4	u, v (fr/asec)	277.184 -393.021	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PY..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PY.W.286.3MP2H5

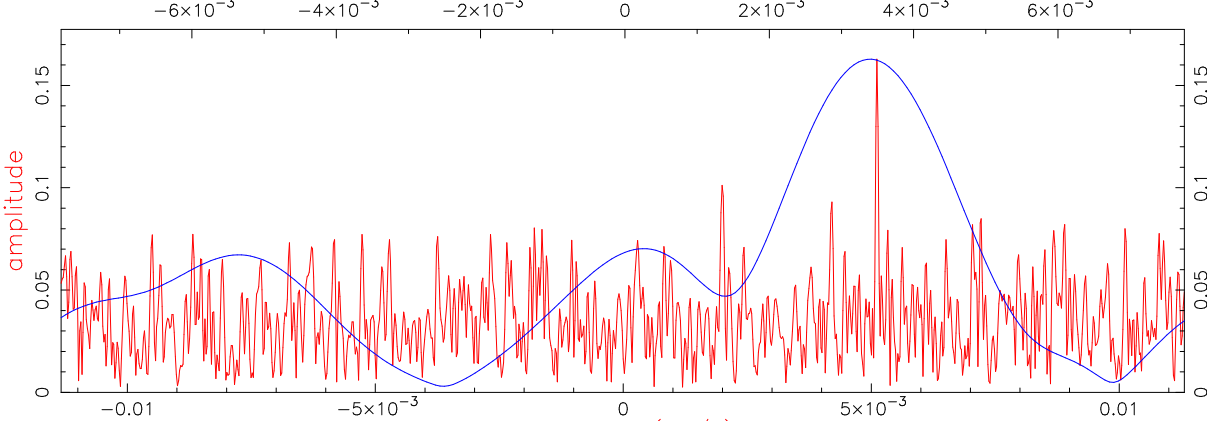
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C279.3MP2H5, No0694, PY

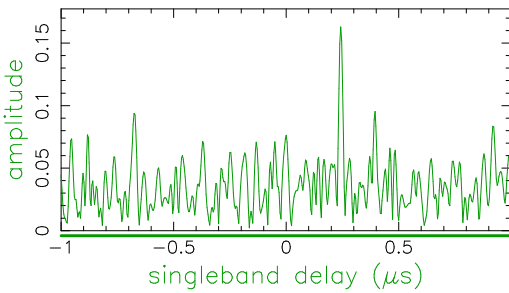
PICOVEL - YEBES40M, fgroup W, pol LR

multiband delay ( $\mu$ s)

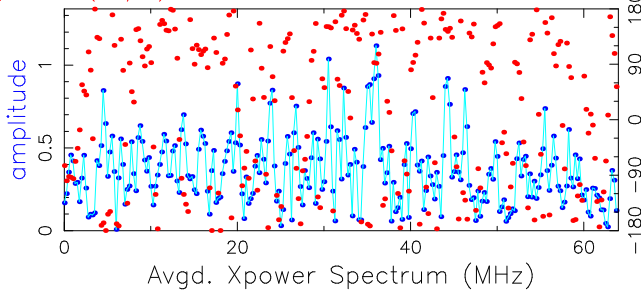


Fringe quality 0

SNR 5.8  
 Int time 169.867  
 Amp 0.177  
 Phase 21.1  
 PFD 5.5e-01  
 Delays (us)  
 SBD 0.242362  
 MBD 0.003395  
 Fringe rate (Hz) 0.441258  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

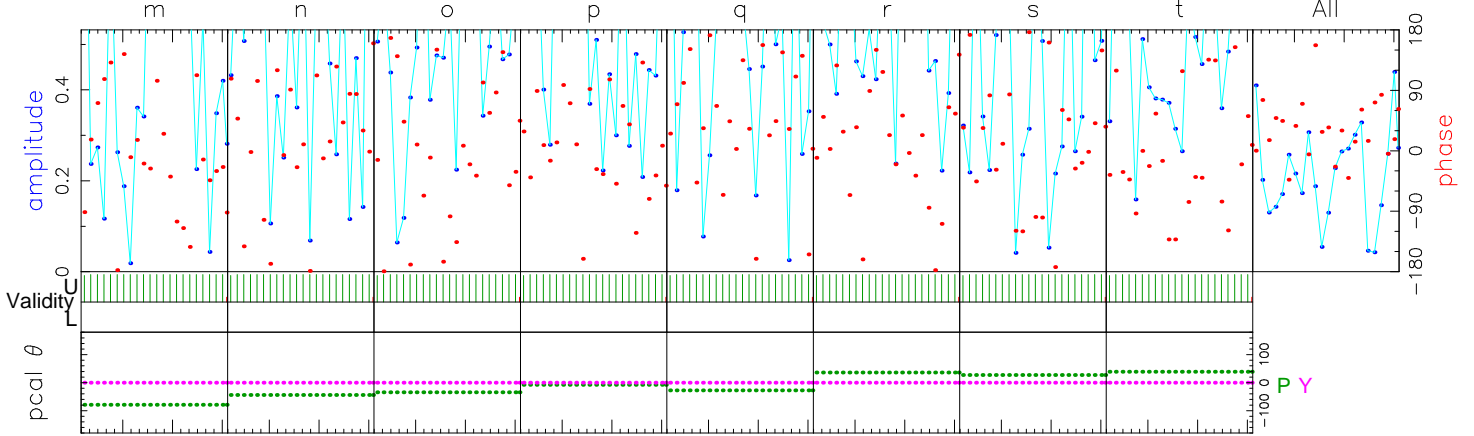


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032009.73  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175332  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-23.5	37.6	-24.0	22.4	71.7	33.5	4.6	-23.5		Phase 21.1
	0.1	0.3	0.1	0.3	0.2	0.3	0.2	0.1		Ampl. 0.2
	104.0	84.7	242.5	147.1	208.2	318.0	16.6	142.9		Sbd box 319.0
U/L	333/0	333/0	333/0	333/0	333/0	333/0	333/0	333/0		APs used
P	0	0	0	0	0	0	0	0		PC freqs
Y	0	0	0	0	0	0	0	0		PC freqs
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
P:Y	-79:0	-44:0	-34:0	-8:0	-28:0	36:0	27:0	39:0		Manl PC
P	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	6.73563920514E+02	Apriori delay (usec)	6.73326150616E+02	Resid mbdelay (usec)	3.39490E-03	+/-	1.9E-04
Sband delay (usec)	6.73568512866E+02	Apriori clock (usec)	1.0980481E+02	Resid sbdelay (usec)	2.42362E-01	+/-	1.5E-03
Phase delay (usec)	6.73326151296E+02	Apriori clockrate (us/s)	-1.1708490E-02	Resid phdelay (usec)	6.79922E-07	+/-	6.4E-07
Delay rate (us/s)	-4.83920756916E-02	Apriori rate (us/s)	-4.83971982613E-02	Resid rate (us/s)	5.12257E-06	+/-	6.5E-09
Total phase (deg)	242.1	Apriori accel (us/s/s)	-2.45052123231E-06	Resid phase (deg)	21.1	+/-	19.7

ph/seg (deg)	45.5	RMS	47.3	Theor.	0.177 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.1	Search (1024X32)	0.158	Amplitude	0.177 +/- 0.031	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.3	Inc. seg. avg.	0.174	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.7	Inc. frq. avg.	0.182	Inc. seg. avg.	0.174	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.182	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

P: az 246.8 el 18.9 pa 47.6 Y: az 245.9 el 17.2 pa 44.4 u, v (fr/asec) 277.184 -393.021 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PY..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PY.W.303.3MP2H5

# Mk4/DiFX fourfit 3.25 rev 0

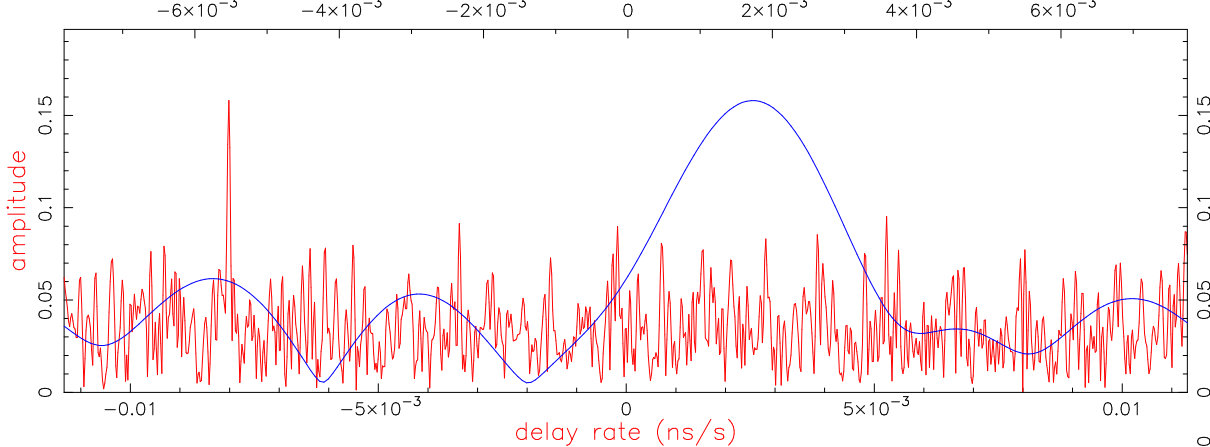
aux01

# 3C279.3MP2H5, No0694, PY

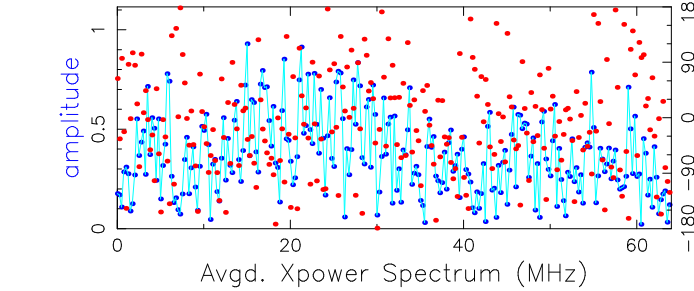
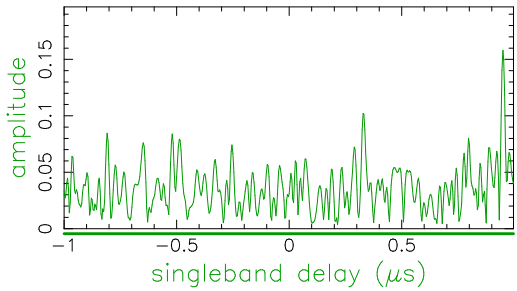
PICOVEL - YEBES40M, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

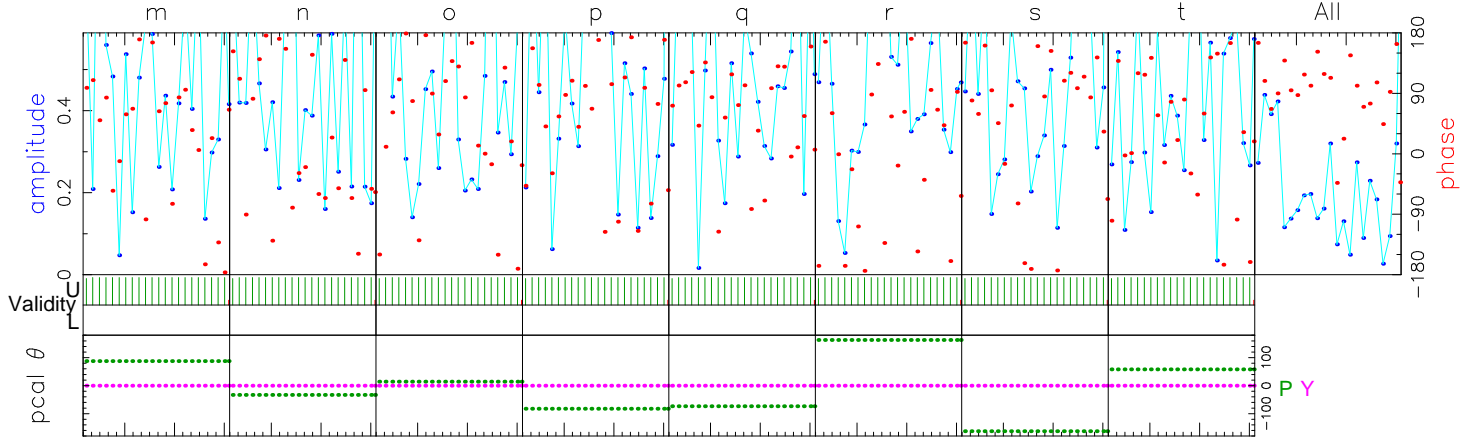


SNR 5.6  
 Int time 169.867  
 Amp 0.197  
 Phase 104.1  
 PFD 8.6e-01  
 Delays (us)  
 SBD 0.949881  
 MBD 0.001721  
 Fringe rate (Hz)  
 -0.692090  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:111  
 Start 032009.73  
 Stop 032300.22  
 FRT 032130.00  
 Corr/FF/build  
 2024:361:002011  
 2025:041:175333  
 2024:113:095956  
 RA & Dec (J2000)  
 12h56m11.166579s  
 -5°47'21.525152"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	333/0	333/0	333/0	333/0	333/0	333/0	333/0	333/0		
P	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	6.74280996971E+02	Apriori delay (usec)	6.73326150616E+02	Resid mbdelay (usec)	1.72136E-03	+/-	1.9E-04
Sband delay (usec)	6.74276031366E+02	Apriori clock (usec)	1.0980481E+02	Resid sbdelay (usec)	9.49881E-01	+/-	1.5E-03
Phase delay (usec)	6.73326153973E+02	Apriori clockrate (us/s)	-1.1708490E-02	Resid phdelay (usec)	3.35713E-06	+/-	6.5E-07
Delay rate (us/s)	-4.84052327351E-02	Apriori rate (us/s)	-4.83971982613E-02	Resid rate (us/s)	-8.03447E-06	+/-	6.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.45052123231E-06	Resid phase (deg)	104.1	+/-	20.3

ph/seg (deg)	48.8	Theor.	48.7	Amplitude	0.197 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	85.1	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	41.5	Inc. seg. avg.	0.187	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.4	Inc. frq. avg.	0.195	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

P: az 246.8 el 18.9 pa 47.6 Y: az 245.9 el 17.2 pa 44.4 u,v (fr/asec) 277.184 -393.021 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0694/PY..3MP2H5 Output file: /Exps/c241b/v2/3mm/1234/No0694/PY.W.308.3MP2H5