

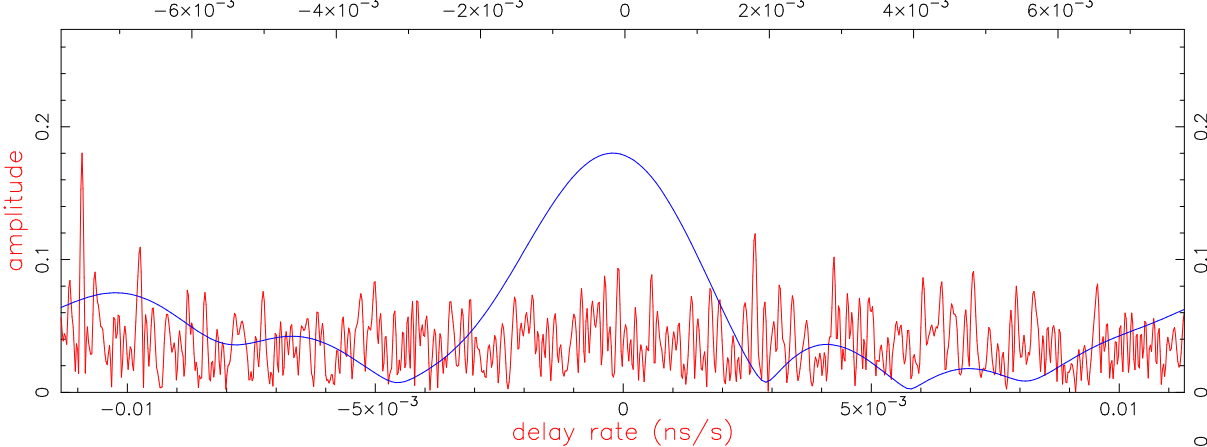
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, By

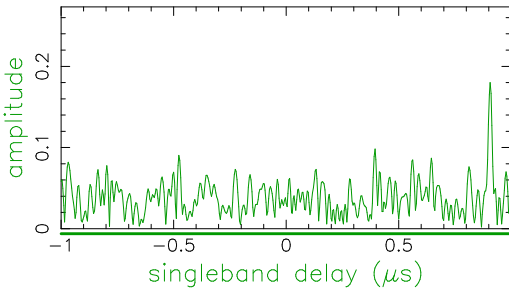
EFLSBERG - KVNYS, fgroup W, pol RL

multiband delay (μ s)

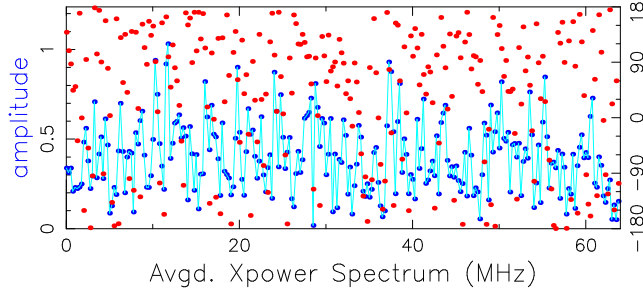


Fringe quality 0

SNR 6.0
 Int time 149.839
 Amp 0.273
 Phase 112.5
 PFD 1.9e-01
 Delays (us)
 SBD 0.906394
 MBD -0.000158
 Fringe rate (Hz)
 -0.941757
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

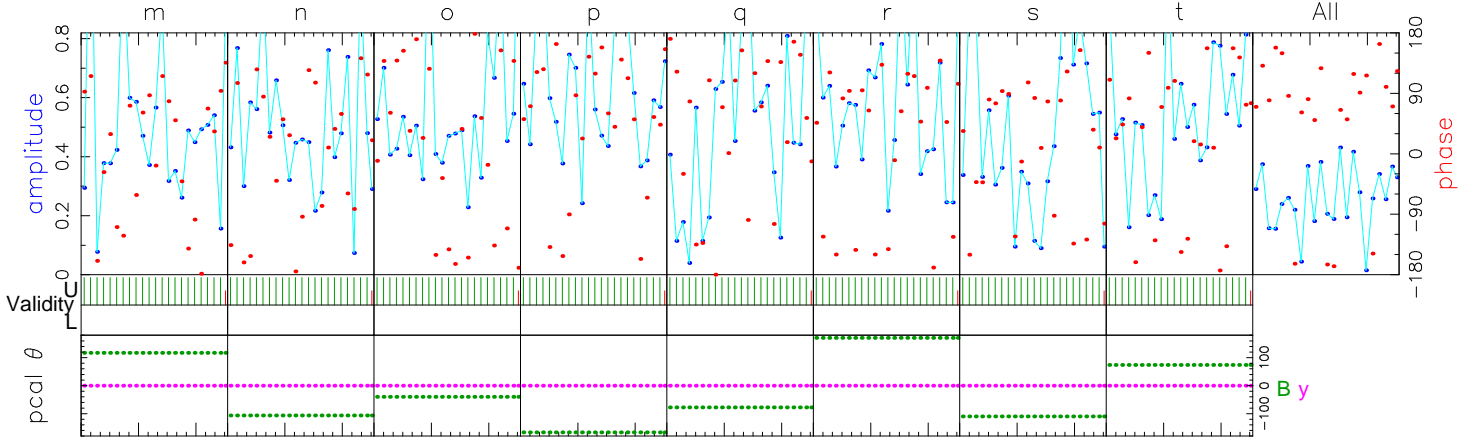


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105528
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
B	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-5.17922504067E+03	Apriori delay (usec)	-5.18013113225E+03	Resid mbdelay (usec)	-1.58420E-04	+/-	1.8E-04
Sband delay (usec)	-5.17922473875E+03	Apriori clock (usec)	-4.1830074E+01	Resid sbdelay (usec)	9.06394E-01	+/-	1.4E-03
Phase delay (usec)	-5.18013112862E+03	Apriori clockrate (us/s)	-1.8910004E-07	Resid phdelay (usec)	3.62884E-06	+/-	6.1E-07
Delay rate (us/s)	-2.62567870503E-01	Apriori rate (us/s)	-2.62556937637E-01	Resid rate (us/s)	-1.09329E-05	+/-	7.1E-09
Total phase (deg)	-151.1	Apriori accel (us/s/s)	4.45218171325E-05	Resid phase (deg)	112.5	+/-	19.0

ph/seg (deg)	50.0	Theor.	45.6	Amplitude	0.273 +/- 0.045	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.9	Search (1024X32)	0.175	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.5	Inc. seg. avg.	0.297	Inc. seg. avg.	0.297	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	44.9	Inc. frq. avg.	0.259	Inc. frq. avg.	0.259	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 4.0 el 30.6 pa -7.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 4479.693 9958.419 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//By..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//By.W.101.3MP15Q

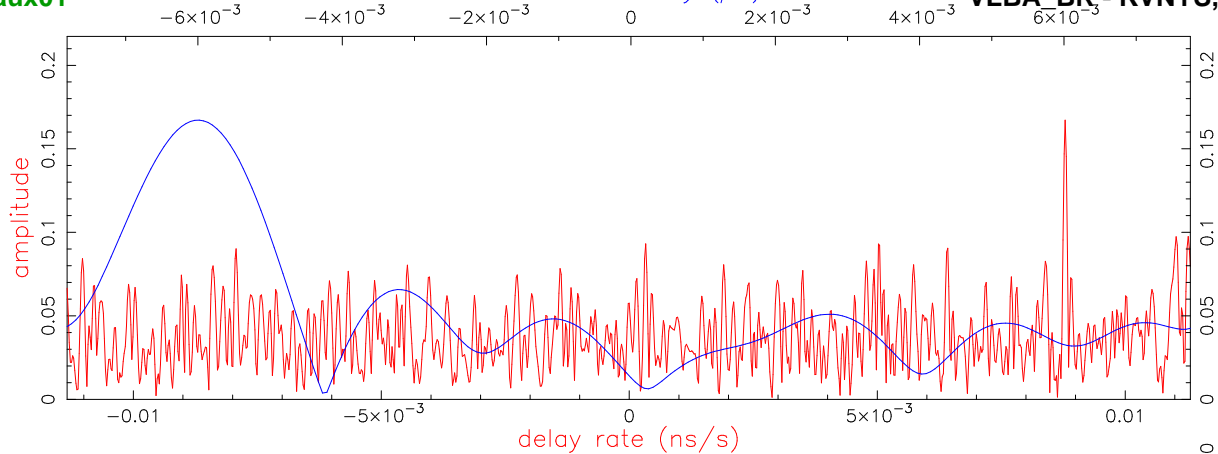
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, by

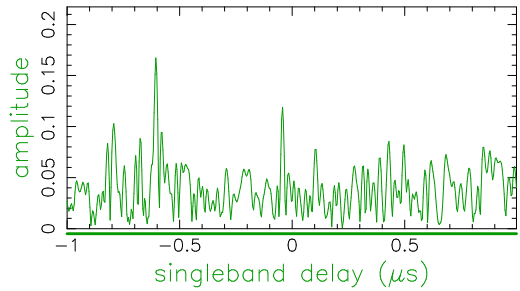
VLBA_BR - KVNYS, fgroup W, pol RR

multiband delay (μ s)

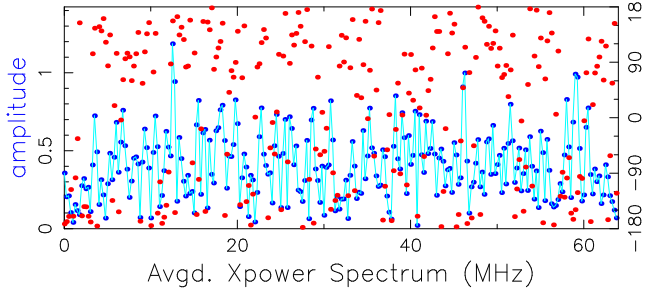


Fringe quality 0

SNR 5.6
 Int time 149.137
 Amp 0.217
 Phase 72.9
 PFD 9.4e-01
 Delays (us)
 SBD -0.605329
 MBD -0.005995
 Fringe rate (Hz)
 0.758949
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

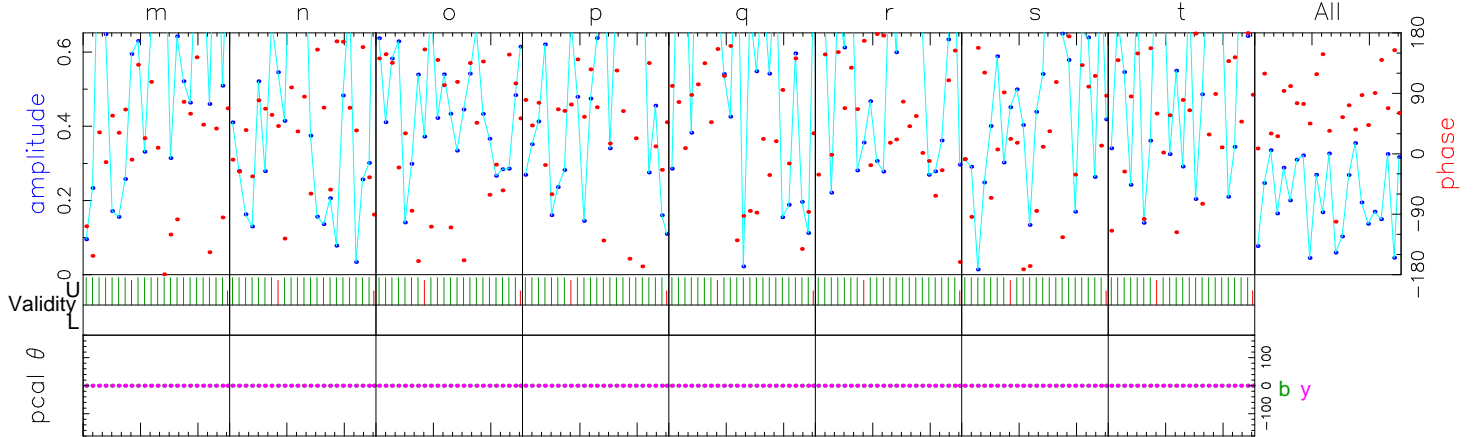


delay rate (ns/s)



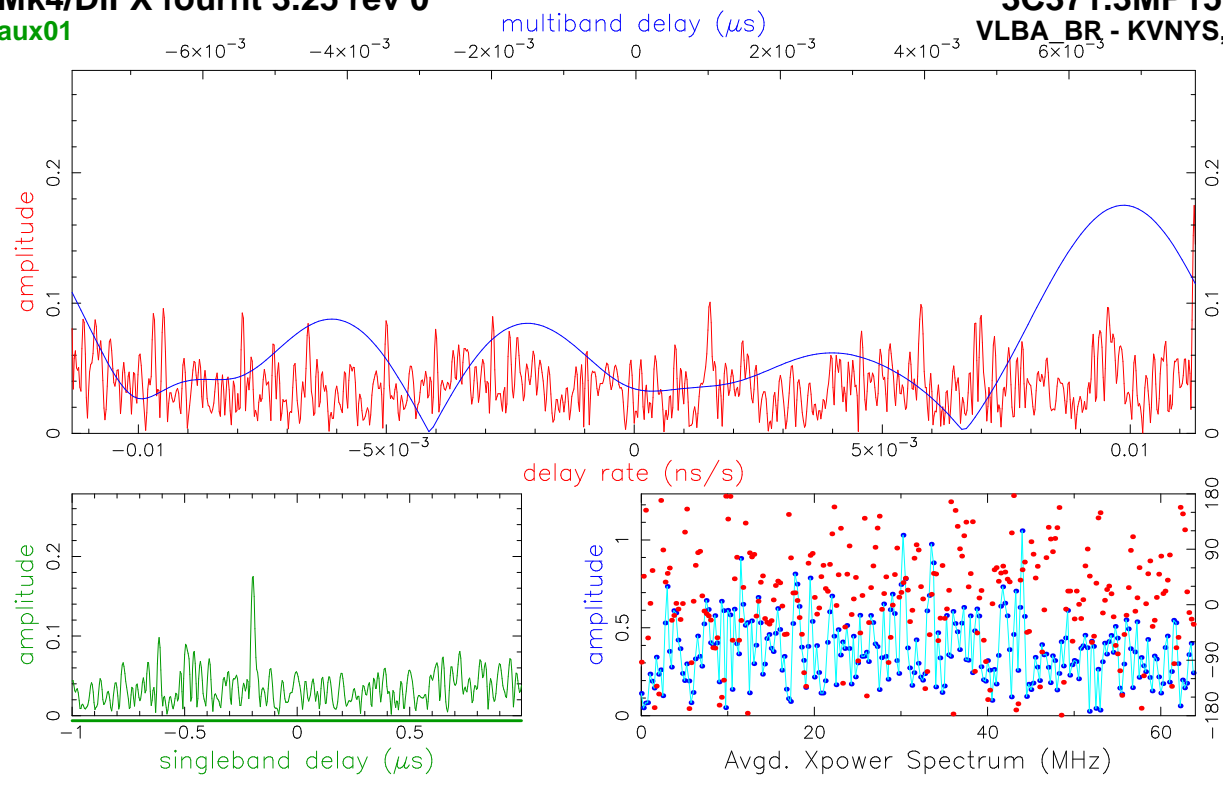
Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105500
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



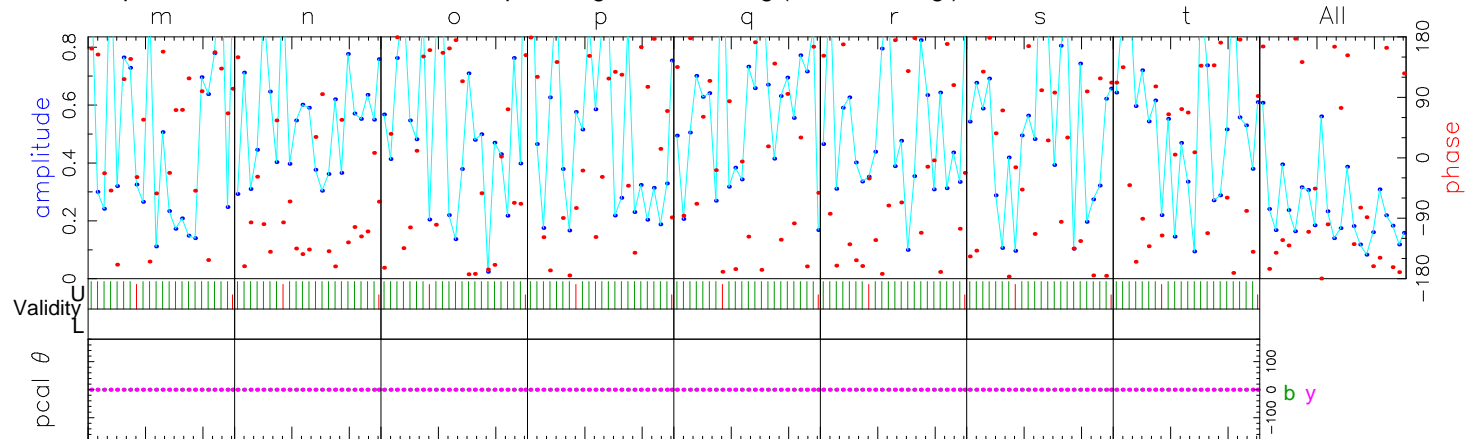
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
b	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	54.1	58.3	144.2	85.9	75.7	68.1	54.3	72.7		
Sband delay (usec)	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3		
Phase delay (usec)	309.7	208.1	480.1	142.3	283.3	103.1	145.8	93.6		
Delay rate (us/s)										
Total phase (deg)			317.7							
Apriori delay (usec)		1.08639152138E+03			1.08699126631E+03					
Apriori clock (usec)		1.08638593781E+03			-1.7925797E+00					
Apriori clockrate (us/s)		1.08699126866E+03			5.7687991E-07					
Apriori rate (us/s)		-6.44539274492E-01			-6.44548085135E-01					
Apriori accel (us/s/s)					8.51903598017E-06					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 54.3 49.2 Search (1024X32) 0.164 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.1 85.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.1 29.0 Inc. seg. avg. 0.199 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.0 50.6 Inc. frq. avg. 0.210 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 b: az 328.9 el 53.3 pa 92.4 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 10725.401 2106.737 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/by..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/by.W.17.3MP15Q



Fringe quality 0
SNR 5.9
Int time 149.137
Amp 0.279
Phase -164.2
PFD 3.1e-01
Delays (us)
SBD -0.197034
MBD 0.006808
Fringe rate (Hz) 0.974409
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c241a
Exper # 1234
Yr:day 2024:109
Start 163000.00
Stop 163230.02
FRT 163115.00
Corr/FF/build 2025:007:141222
2025:041:105504
2024:113:095956
RA & Dec (J2000) 18h06m50.680649s
+69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	
	146.6	-115.0	-161.0	-179.2	178.8	-127.2	161.9	178.4	Phase	-164.2	
	0.4	0.5	0.4	0.3	0.3	0.4	0.2	0.3	Ampl.	0.3	
	205.7	208.5	343.1	235.6	497.7	257.7	227.4	157.9	Sbd box	206.6	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
b	0	0	0	0	0	0	0	0	PC freqs		
y	0	0	60000	0	0	0	4000	0	PC freqs		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
y	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	1.08679494902E+03		Apriori delay (usec)		1.08699126631E+03		Resid mbdelay (usec)		6.80771E-03	+/- 1.8E-04	
Sband delay (usec)	1.08679423256E+03		Apriori clock (usec)		-1.7925797E+00		Resid sbdelay (usec)		-1.97034E-01	+/- 1.5E-03	
Phase delay (usec)	1.08699126101E+03		Apriori clockrate (us/s)		5.7687991E-07		Resid phdelay (usec)		-5.29549E-06	+/- 6.2E-07	
Delay rate (us/s)	-6.44536773214E-01		Apriori rate (us/s)		-6.44548085135E-01		Resid rate (us/s)		1.13119E-05	+/- 7.2E-09	
Total phase (deg)	80.5		Apriori accel (us/s/s)		8.51903598017E-06		Resid phase (deg)		-164.2	+/- 19.3	
ph/seg (deg)	RMS	Theor.	Amplitude		0.279 +/- 0.047		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	54.0	46.3	Search (1024X32)		0.173		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	84.4	80.8	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.9	27.3	Inc. seg. avg.		0.292		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
	34.8	47.6	Inc. frq. avg.		0.296		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
b: az 328.9 el 53.3 pa 92.4	y: az 23.5 el 48.4 pa -114.6		u,v (fr/asec)		10725.401 2106.737				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//by..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//by.W.31.3MP15Q								

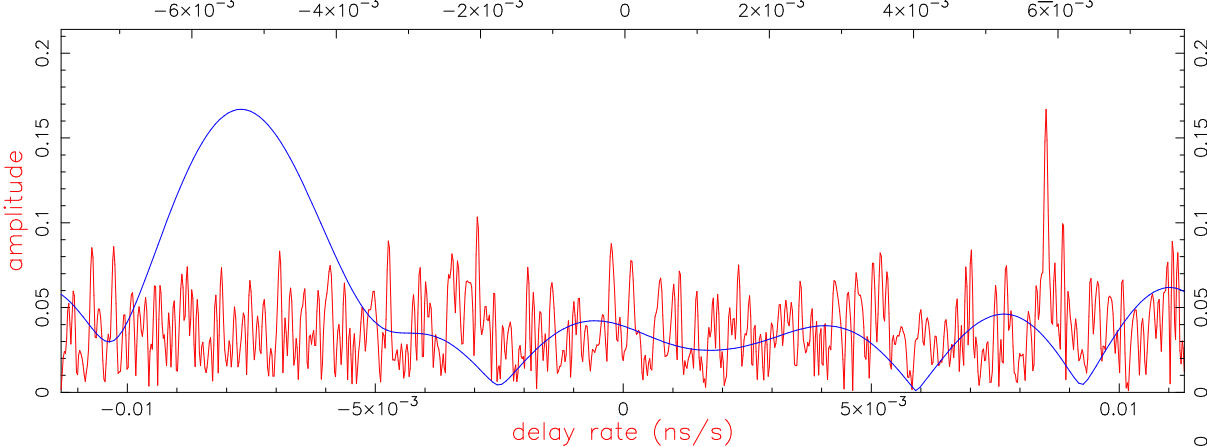
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, by

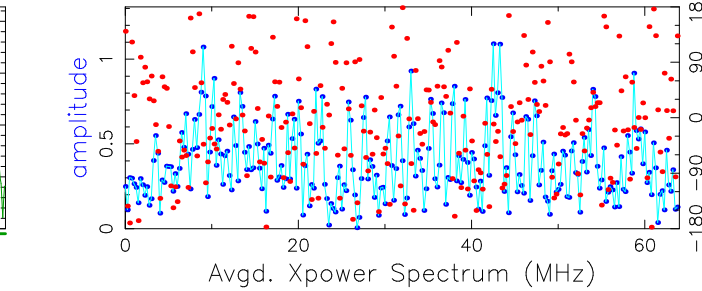
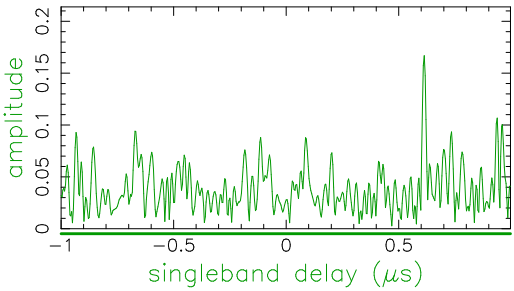
VLBA_BR - KVNYS, fgroup W, pol RL

multiband delay (μ s)



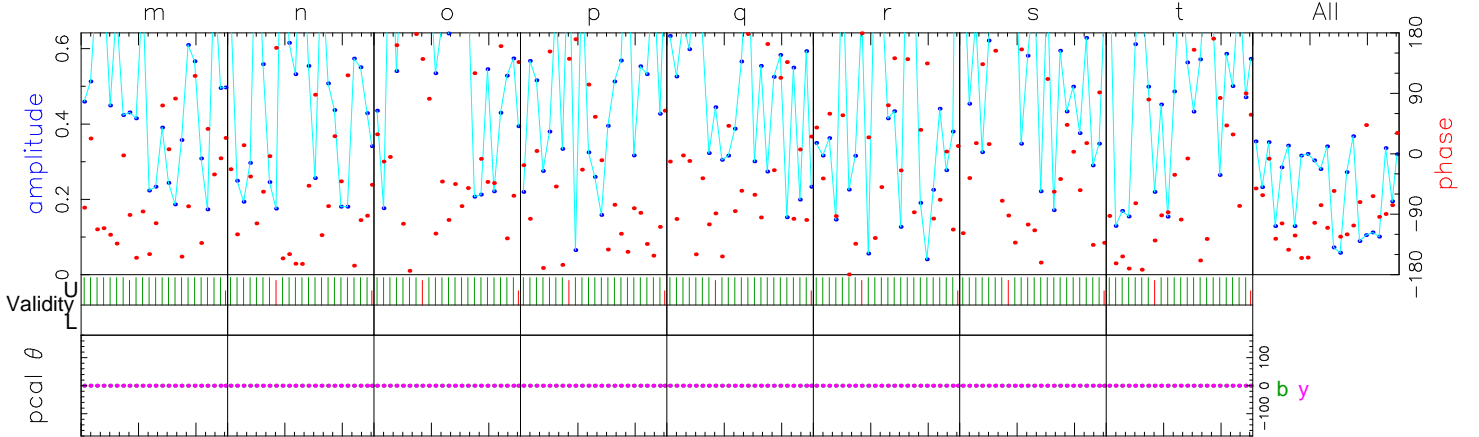
Fringe quality 0

SNR 5.6
 Int time 149.137
 Amp 0.214
 Phase -95.5
 PFD 9.4e-01
 Delays (us)
 SBD 0.612602
 MBD -0.005329
 Fringe rate (Hz)
 0.736267
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105506
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.0	-109.6	-90.7	-114.1	-76.7	-62.7	-87.8	-110.9	Phase	-95.5
	0.3	0.3	0.2	0.2	0.3	0.1	0.2	0.2	Ampl.	0.2
	365.6	413.4	126.2	23.0	293.8	52.8	331.4	391.0	Sbd box	413.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.08761093696E+03	Apriori delay (usec)	1.08699126631E+03	Resid mbdelay (usec)	-5.32935E-03	+/-	1.9E-04
Sband delay (usec)	1.08760386881E+03	Apriori clock (usec)	-1.7925797E+00	Resid sbdelay (usec)	6.12602E-01	+/-	1.5E-03
Phase delay (usec)	1.08699126323E+03	Apriori clockrate (us/s)	5.7687991E-07	Resid phdelay (usec)	-3.08089E-06	+/-	6.6E-07
Delay rate (us/s)	-6.44539537808E-01	Apriori rate (us/s)	-6.44548085135E-01	Resid rate (us/s)	8.54733E-06	+/-	7.6E-09
Total phase (deg)	149.2	Apriori accel (us/s/s)	8.51903598017E-06	Resid phase (deg)	-95.5	+/-	20.5

ph/seg (deg)	49.3	RMS	49.2	Theor.	49.2	Amplitude	0.214 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	75.3		75.3		85.8	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	20.0		20.0		29.0	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008 0.008
amp/frq (%)	36.6		36.6		50.6	Inc. seg. avg.	0.218	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
						Inc. frq. avg.	0.196	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

b: az 328.9 el 53.3 pa 92.4 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 10725.401 2106.737 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/by..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/by.W.40.3MP15Q

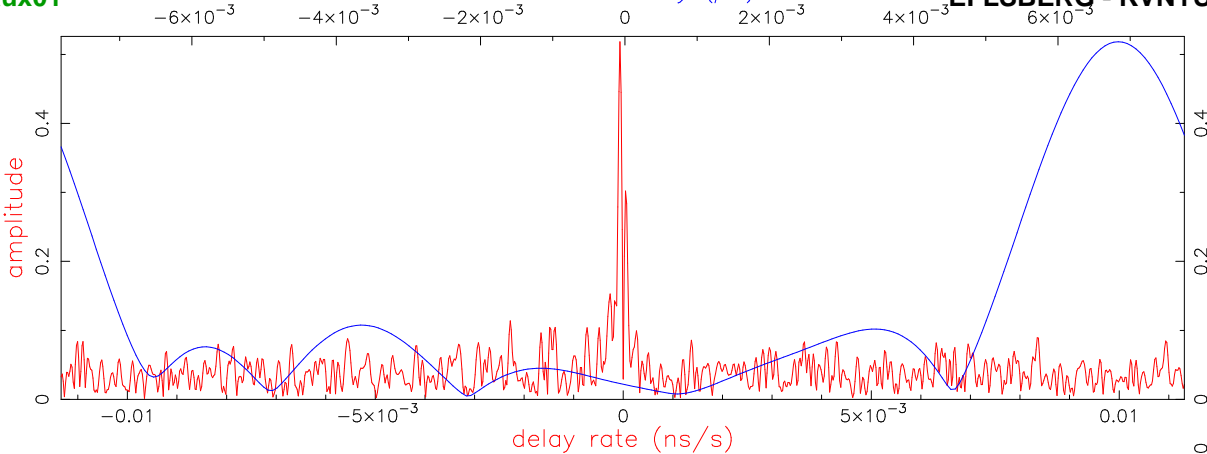
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, By

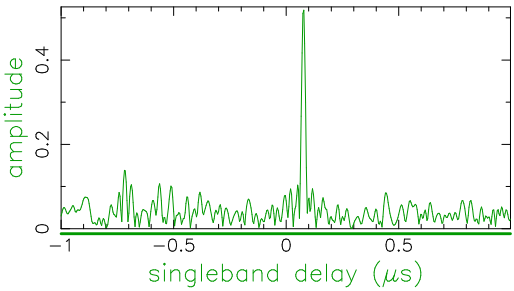
EFLSBERG - KVNYS, fgroup W, pol LL

multiband delay (μs)

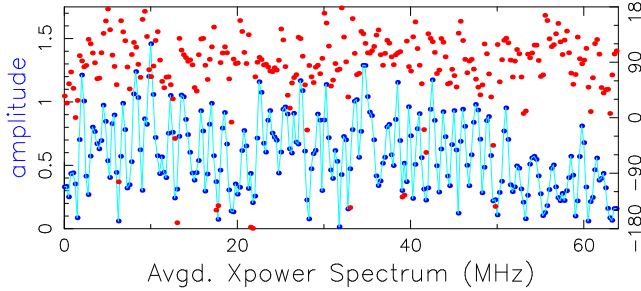


Fringe quality 9

SNR 17.6
 Int time 149.839
 Amp 0.526
 Phase -176.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.076514
 MBD 0.006819
 Fringe rate (Hz) -0.006037
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

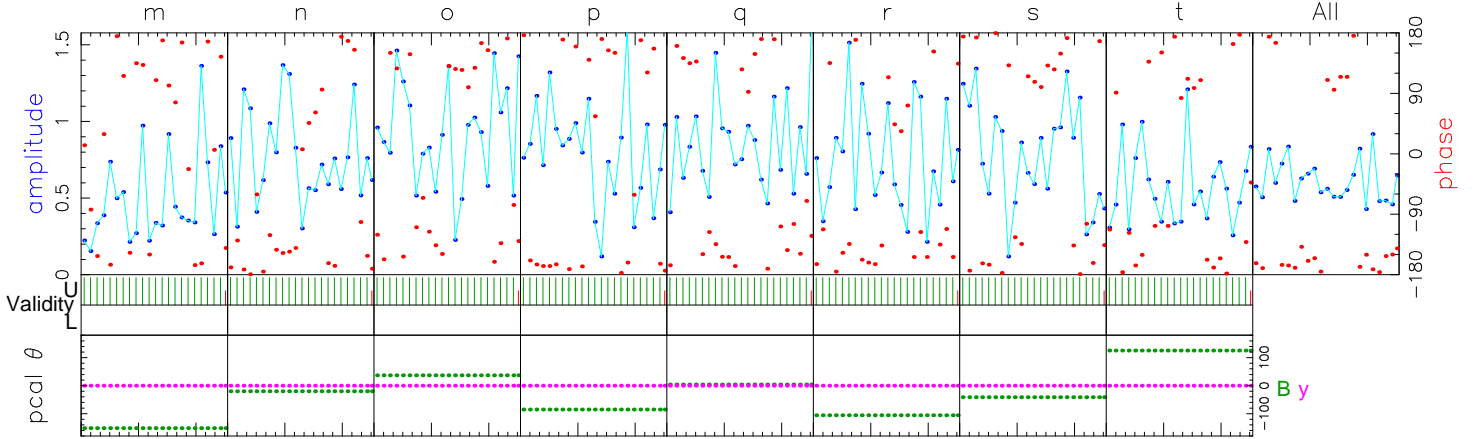


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105519
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



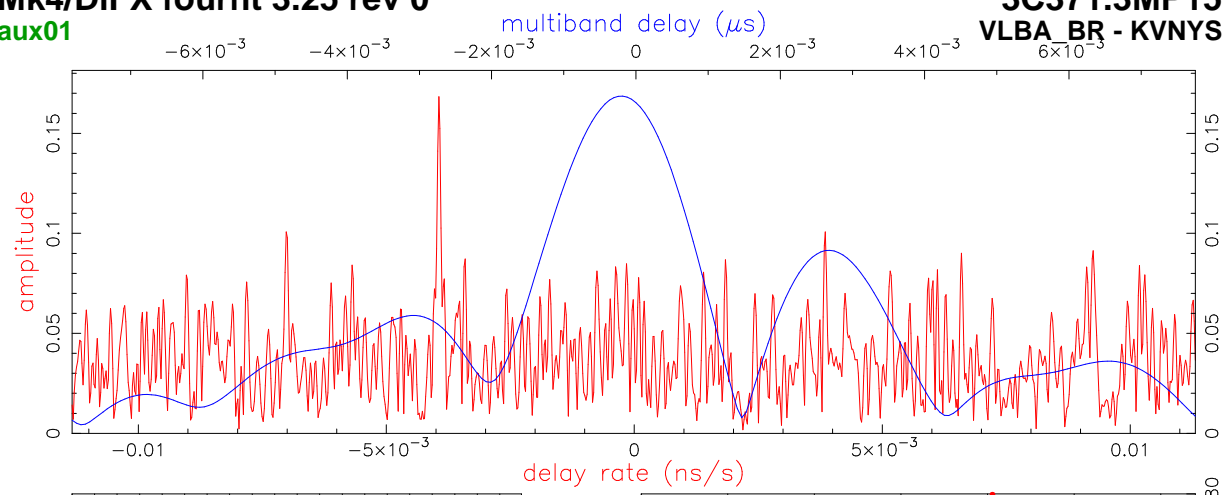
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
B	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:y	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-5.18006181366E+03	Apriori delay (usec)	-5.18013113225E+03	Resid mbdelay (usec)	6.81860E-03	+/-	6.2E-05
Sband delay (usec)	-5.18005461850E+03	Apriori clock (usec)	-4.1830074E+01	Resid sbdelay (usec)	7.65138E-02	+/-	4.9E-04
Phase delay (usec)	-5.18013113796E+03	Apriori clockrate (us/s)	-1.8910004E-07	Resid phdelay (usec)	-5.70313E-06	+/-	2.1E-07
Delay rate (us/s)	-2.62557007725E-01	Apriori rate (us/s)	-2.62556937637E-01	Resid rate (us/s)	-7.00877E-08	+/-	2.4E-09
Total phase (deg)	-80.5	Apriori accel (us/s/s)	4.45218171325E-05	Resid phase (deg)	-176.9	+/-	6.5

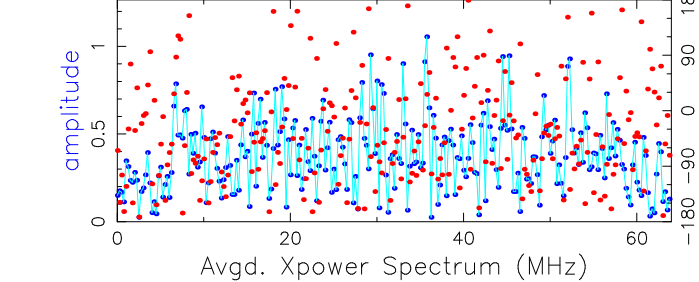
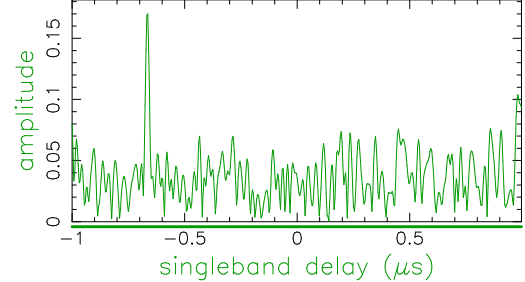
ph/seg (deg)	RMS 35.7	Theor. 15.6	Amplitude Search (1024X32)	0.526 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	30.3	27.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	14.9	9.2	Inc. seg. avg.	0.590	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 (%)	25.2	16.1	Inc. frq. avg.	0.522	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

B: az 4.0 el 30.6 pa -7.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 4479.693 9958.419 simultaneous interpolator

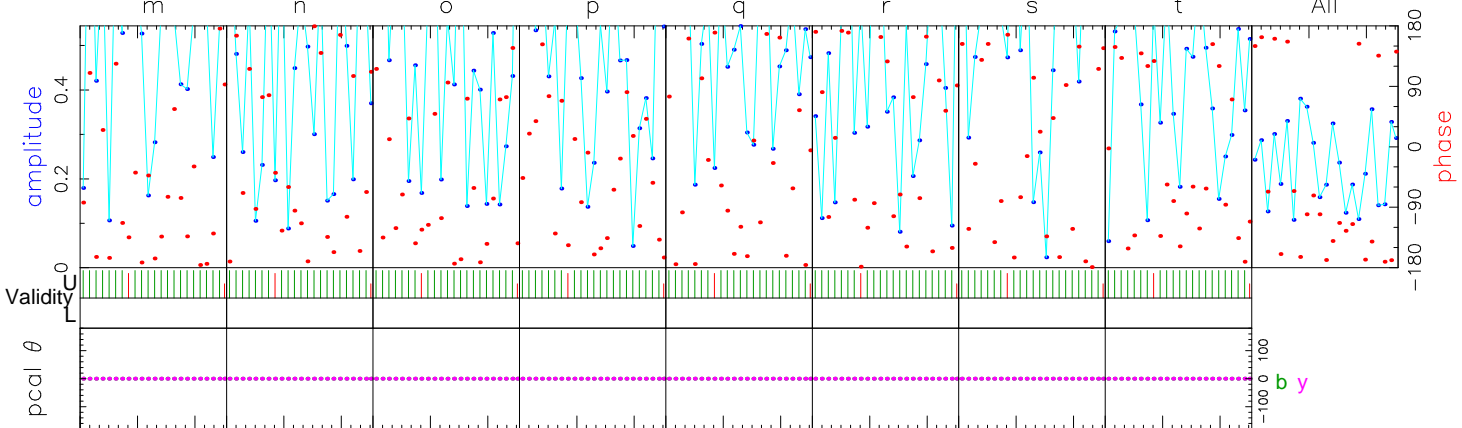
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//By..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//By.W.81.3MP15Q



Fringe quality 0
SNR 5.8
Int time 149.137
Amp 0.181
Phase -155.4
PFD 6.4e-01
Delays (us)
SBD -0.665786
MBD -0.000139
Fringe rate (Hz)
-0.339687
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c241a
Exper # 1234
Yr:day 2024:109
Start 163000.00
Stop 163230.02
FRT 163115.00
Corr/FF/build
2025:007:141222
2025:041:105459
2024:113:095956
RA & Dec (J2000)
18h06m50.680649s
+69°49'28.108492"



Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-152.3	-164.5	-143.7	-78.3	-144.1	-174.3	179.8	-141.5	Phase	-155.4
	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	Ampl.	0.2
	365.9	377.9	399.4	162.6	510.2	134.6	326.2	106.3	Sbd box	86.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.08631925225E+03		Apriori delay (usec)		1.08699126631E+03		Resid mbdelay (usec)		-1.39061E-04	+/- 1.9E-04
Sband delay (usec)	1.08632548056E+03		Apriori clock (usec)		-1.7925797E+00		Resid sbdelay (usec)		-6.65786E-01	+/- 1.5E-03
Phase delay (usec)	1.08699126130E+03		Apriori clockrate (us/s)		5.7687991E-07		Resid phdelay (usec)		-5.01116E-06	+/- 6.4E-07
Delay rate (us/s)	-6.44552028563E-01		Apriori rate (us/s)		-6.44548085135E-01		Resid rate (us/s)		-3.94343E-06	+/- 7.4E-09
Total phase (deg)	89.4		Apriori accel (us/s/s)		8.51903598017E-06		Resid phase (deg)		-155.4	+/- 19.9

ph/seg (deg) 48.5 47.7 Search (1024X32) 0.167 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.9 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 35.2 28.1 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 27.8 49.1 Inc. frq. avg. 0.171 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
b: az 328.9 el 53.3 pa 92.4 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 10725.401 2106.737 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/by..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/by.W.8.3MP15Q

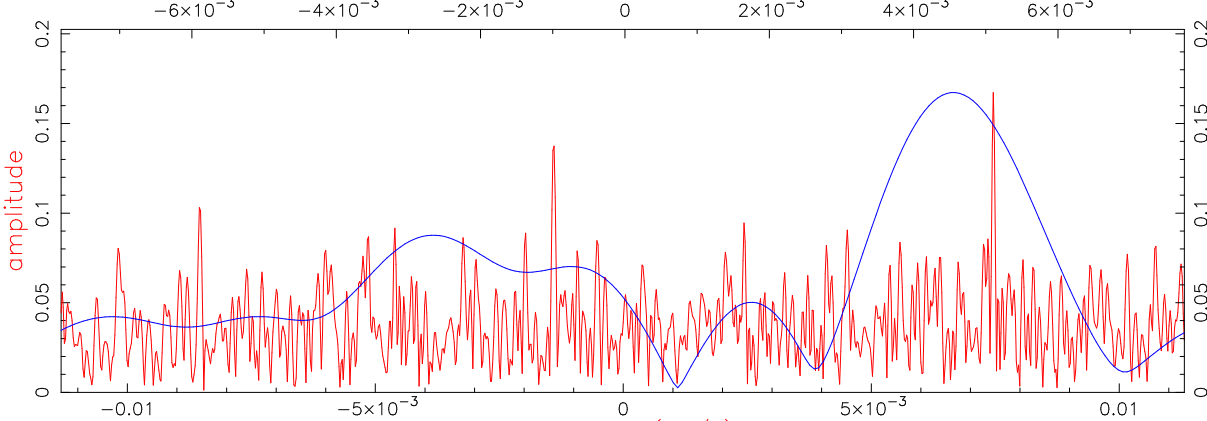
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, By

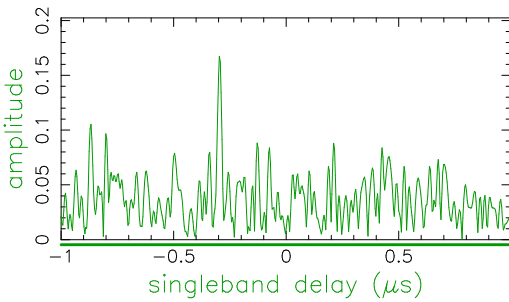
EFLSBERG - KVNYS, fgroup W, pol LR

multiband delay (μ s)

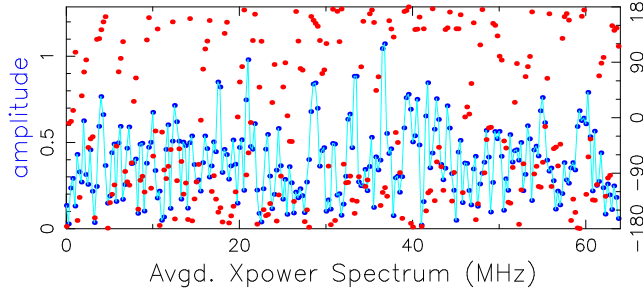


Fringe quality 0

SNR 5.6
 Int time 149.839
 Amp 0.203
 Phase -16.0
 PFD 8.8e-01
 Delays (us)
 SBD -0.295744
 MBD 0.004567
 Fringe rate (Hz)
 0.642879
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

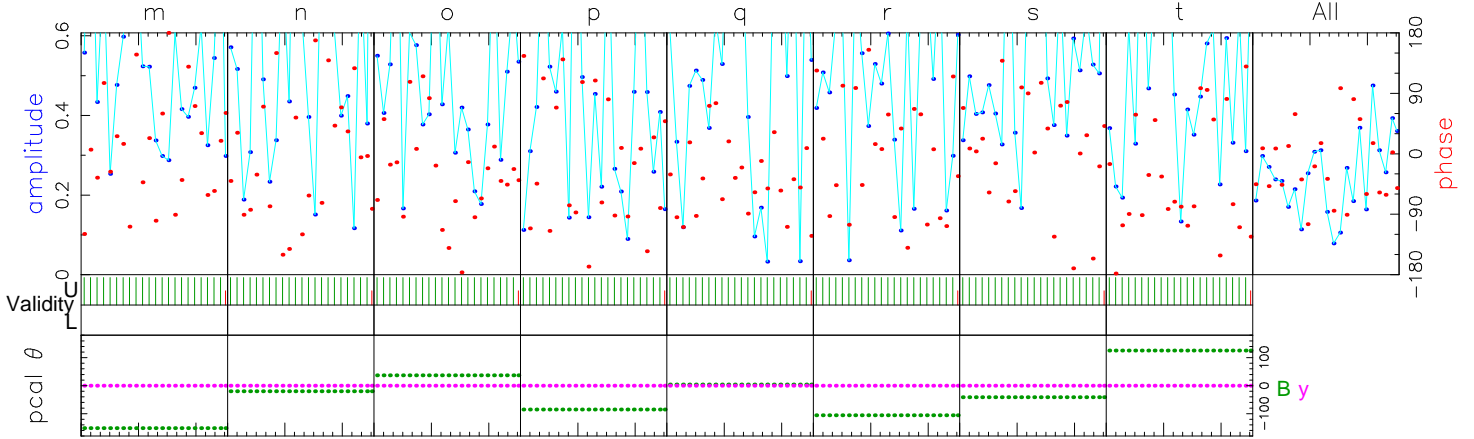


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105525
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-2.3	-25.8	-22.2	-0.2	-26.2	-2.1	28.7	-61.5	Phase	-16.0
	0.2	0.2	0.3	0.0	0.4	0.1	0.3	0.2	Ampl.	0.2
	418.6	298.7	412.9	423.1	180.8	434.2	410.1	367.4	Sbd box	181.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:y	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-5.18042344070E+03	Apriori delay (usec)	-5.18013113225E+03	Resid mbdelay (usec)	4.56655E-03	+/-	1.9E-04
Sband delay (usec)	-5.18042687625E+03	Apriori clock (usec)	-4.1830074E+01	Resid sbdelay (usec)	-2.95744E-01	+/-	1.5E-03
Phase delay (usec)	-5.18013113277E+03	Apriori clockrate (us/s)	-1.8910004E-07	Resid phdelay (usec)	-5.16033E-07	+/-	6.6E-07
Delay rate (us/s)	-2.62549474455E-01	Apriori rate (us/s)	-2.62556937637E-01	Resid rate (us/s)	7.46318E-06	+/-	7.6E-09
Total phase (deg)	-279.6	Apriori accel (us/s/s)	4.45218171325E-05	Resid phase (deg)	-16.0	+/-	20.3

ph/seg (deg)	53.7	RMS	53.7	Theor.	48.8	Amplitude	0.203 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.7		73.7		85.1	Search (1024X32)	0.167	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.7		28.7		28.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	58.0		58.0		50.2	Inc. seg. avg.	0.218	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.196	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 4.0 el 30.6 pa -7.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 4479.693 9958.419 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//By..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//By.W.94.3MP15Q

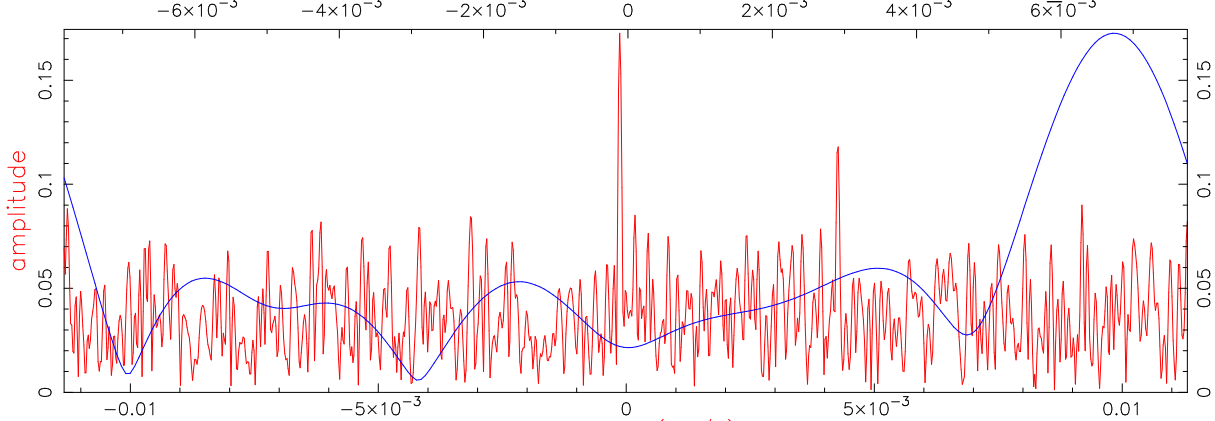
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fy

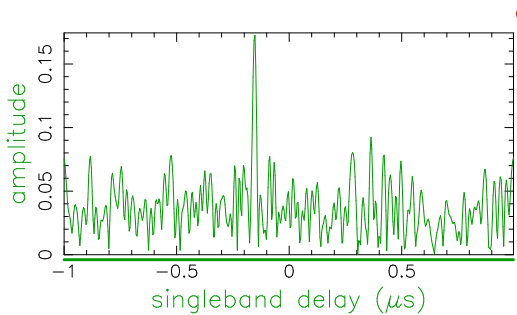
VLBA_FD - KVNYS, fgroup W, pol LL

multiband delay (μ s)

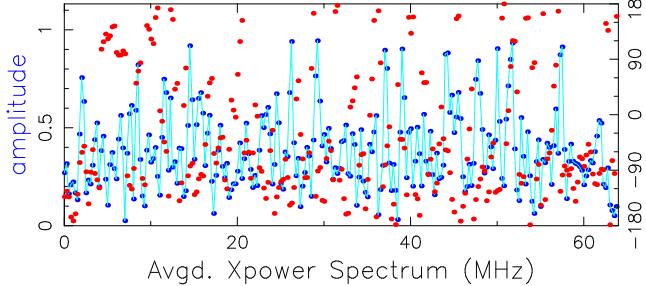


Fringe quality 0

SNR 5.8
 Int time 149.853
 Amp 0.174
 Phase -154.9
 PFD 4.8e-01
 Delays (us)
 SBD -0.153717
 MBD 0.006722
 Fringe rate (Hz)
 -0.011084
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

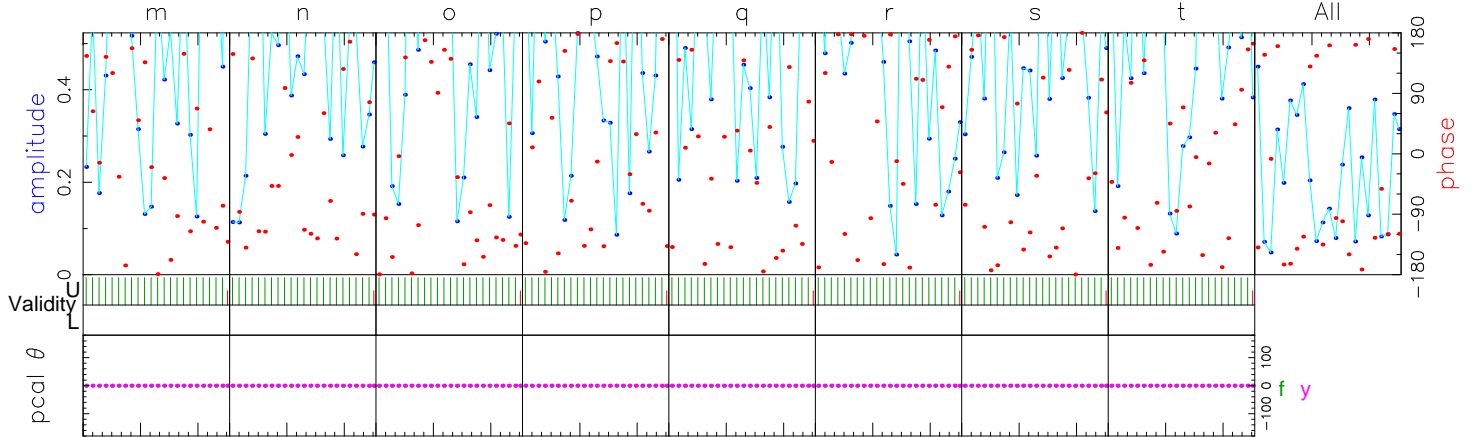


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105538
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-153.2	-126.3	-165.2	-174.4	-148.0	-158.1	-170.0	-116.9	Phase	-154.9
	0.1	0.2	0.3	0.1	0.1	0.2	0.3	0.1	Ampl.	0.2
	209.7	506.4	218.7	31.5	289.3	123.8	181.9	330.6	Sbd box	217.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.61510684702E+03	Apriori delay (usec)	-4.61495731912E+03	Resid mbdelay (usec)	6.72210E-03	+/-	1.9E-04
Sband delay (usec)	-4.61511103587E+03	Apriori clock (usec)	-6.3722668E+00	Resid sbdelay (usec)	-1.53717E-01	+/-	1.5E-03
Phase delay (usec)	-4.61495732412E+03	Apriori clockrate (us/s)	5.0658913E-08	Resid phdelay (usec)	-4.99525E-06	+/-	6.3E-07
Delay rate (us/s)	-7.76850438743E-01	Apriori rate (us/s)	-7.76850310067E-01	Resid rate (us/s)	-1.28675E-07	+/-	7.3E-09
Total phase (deg)	-323.9	Apriori accel (us/s/s)	1.39277289884E-05	Resid phase (deg)	-154.9	+/-	19.6

ph/seg (deg) 54.1 47.1 Search (1024X32) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.2 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.5 27.8 Inc. seg. avg. 0.164 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.3 48.4 Inc. frq. avg. 0.163 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 f: az 336.4 el 32.3 pa 88.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 12931.216 2518.302 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//fy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//fy.W.140.3MP15Q

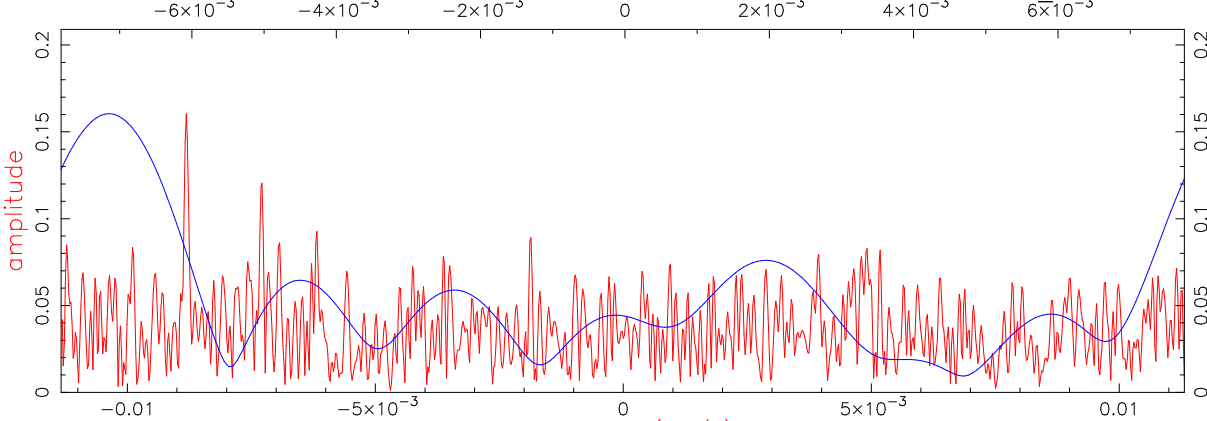
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fy

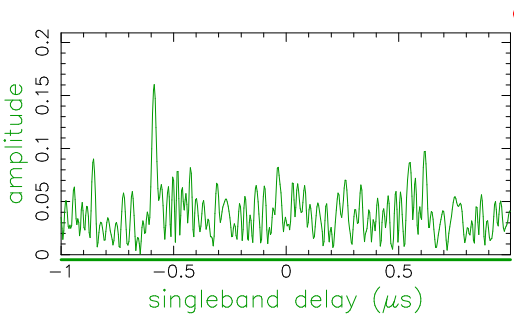
VLBA_FD - KVNYS, fgroup W, pol RR

multiband delay (μ s)

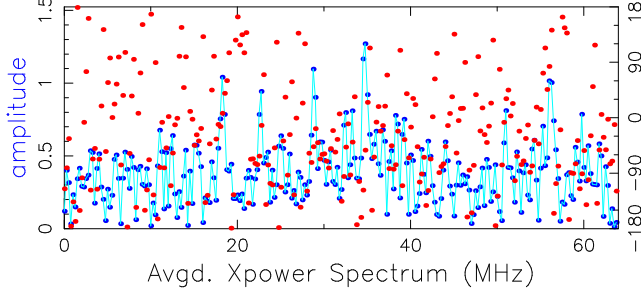


Fringe quality 0

SNR 5.4
 Int time 149.853
 Amp 0.209
 Phase 119.4
 PFD 1.0e+00
 Delays (us)
 SBD -0.586799
 MBD -0.007193
 Fringe rate (Hz)
 -0.759409
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

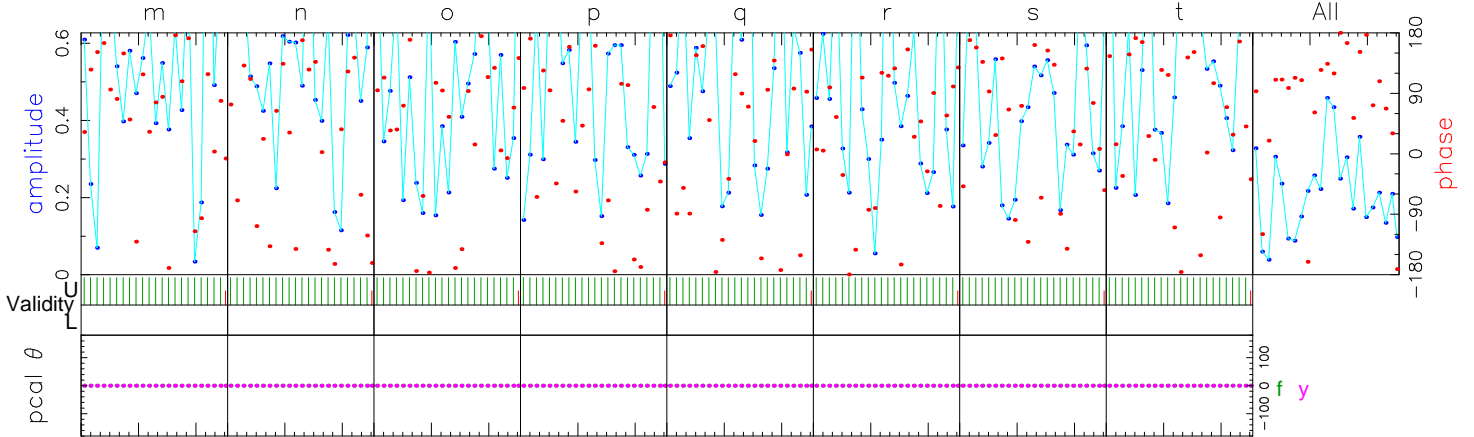


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105540
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
f	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-4.61554263669E+03	Apriori delay (usec)	-4.61495731912E+03	Resid mbdelay (usec)	-7.19257E-03	+/-	2.0E-04
Sband delay (usec)	-4.61554411837E+03	Apriori clock (usec)	-6.3722668E+00	Resid sbdelay (usec)	-5.86799E-01	+/-	1.6E-03
Phase delay (usec)	-4.61495731527E+03	Apriori clockrate (us/s)	5.0658913E-08	Resid phdelay (usec)	3.84895E-06	+/-	6.9E-07
Delay rate (us/s)	-7.76859126050E-01	Apriori rate (us/s)	-7.76850310067E-01	Resid rate (us/s)	-8.81598E-06	+/-	7.9E-09
Total phase (deg)	-49.6	Apriori accel (us/s/s)	1.39277289884E-05	Resid phase (deg)	119.4	+/-	21.3

ph/seg (deg)	54.1	Theor.	51.1	Amplitude	0.209 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.9	Search (1024X32)	0.158	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.7	Inc. seg. avg.	0.203	Inc. frq. avg.	0.197	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.3	Inc. frq. avg.	0.197			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
f: az 336.4 el 32.3 pa 88.6		y: az 23.5 el 48.4 pa -114.6		u, v (fr/asec)	12931.216 2518.302	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/c241a/v2/3mm/1234/No0901/fy..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/fy.W.151.3MP15Q						simultaneous interpolator

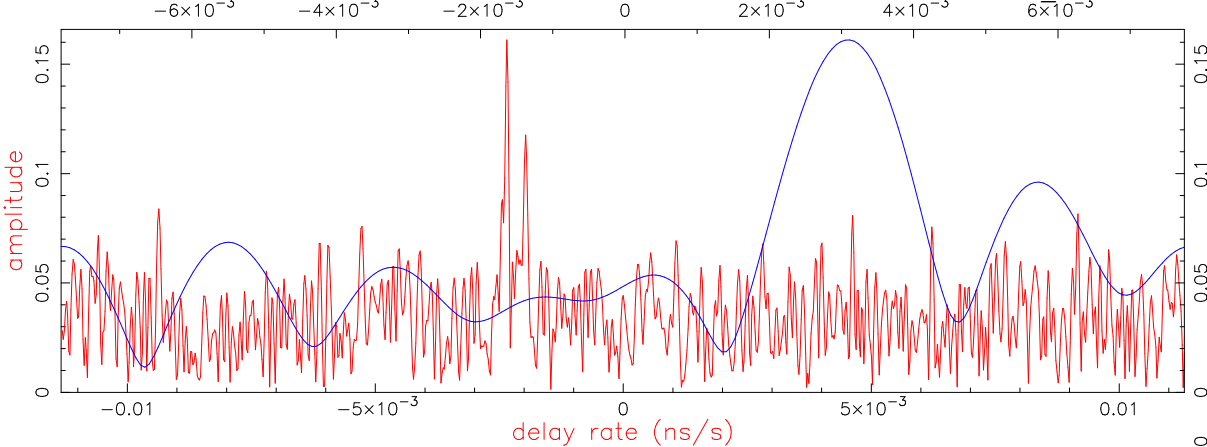
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fy

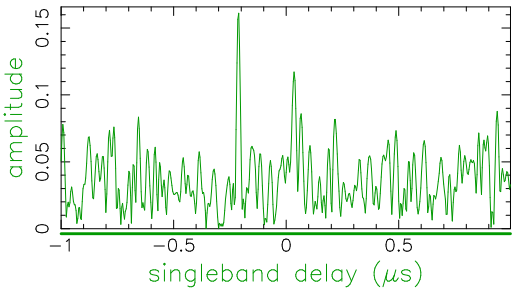
VLBA_FD - KVNYS, fgroup W, pol LR

multiband delay (μ s)

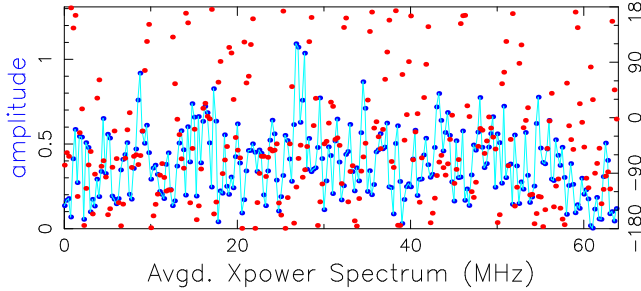


Fringe quality 0

SNR 5.5
 Int time 149.853
 Amp 0.166
 Phase -43.9
 PFD 1.0e+00
 Delays (us)
 SBD -0.212304
 MBD 0.003107
 Fringe rate (Hz)
 -0.202860
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

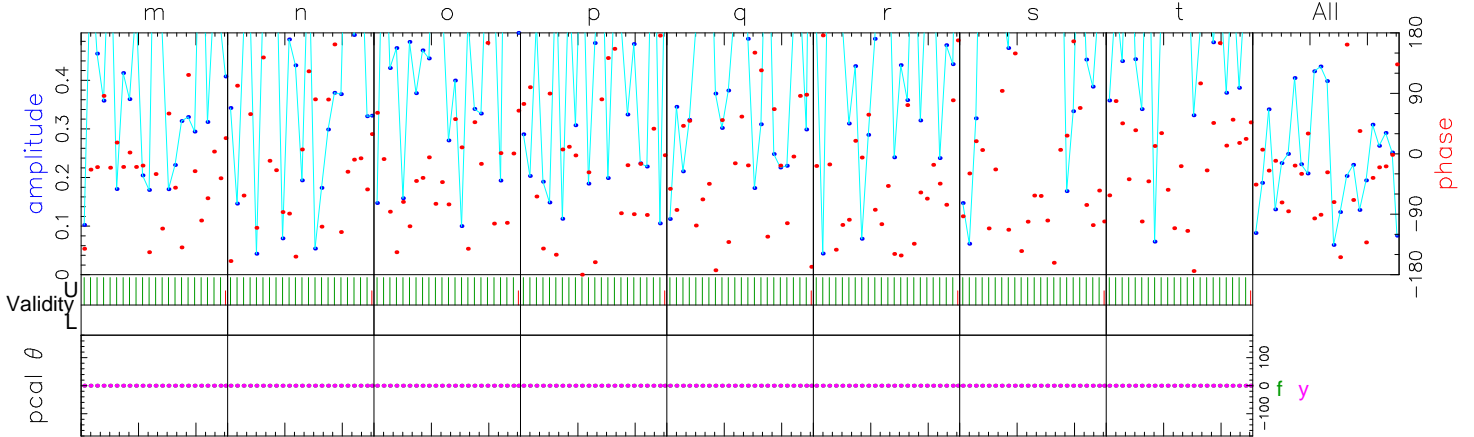


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105544
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-31.9	-23.4	-60.7	-16.1	-31.6	-75.4	-67.5	-7.5	Phase	-43.9
	0.3	0.1	0.2	0.0	0.1	0.2	0.2	0.3	Ampl.	0.2
	202.0	100.9	499.0	88.1	457.2	323.1	42.9	202.0	Sbd box	202.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-4.61517296240E+03	Apriori delay (usec)	-4.61495731912E+03	Resid mbdelay (usec)	3.10672E-03	+/-	2.0E-04
Sband delay (usec)	-4.61516962312E+03	Apriori clock (usec)	-6.3722668E+00	Resid sbdelay (usec)	-2.12304E-01	+/-	1.6E-03
Phase delay (usec)	-4.61495732054E+03	Apriori clockrate (us/s)	5.0658913E-08	Resid phdelay (usec)	-1.41568E-06	+/-	6.8E-07
Delay rate (us/s)	-7.76852665070E-01	Apriori rate (us/s)	-7.76850310067E-01	Resid rate (us/s)	-2.35500E-06	+/-	7.8E-09
Total phase (deg)	-212.8	Apriori accel (us/s/s)	1.39277289884E-05	Resid phase (deg)	-43.9	+/-	21.0

ph/seg (deg)	62.6	Theor.	50.4	Amplitude	0.166 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.2	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)	27.8	Inc. seg. avg.	0.177	Inc. frq. avg.	0.159	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.0	Inc. frq. avg.	0.159			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
f: az 336.4 el 32.3 pa 88.6		y: az 23.5 el 48.4 pa -114.6		u,v (fr/asec)	12931.216 2518.302	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/c241a/v2/3mm/1234/No0901//fy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//fy.W.161.3MP15Q

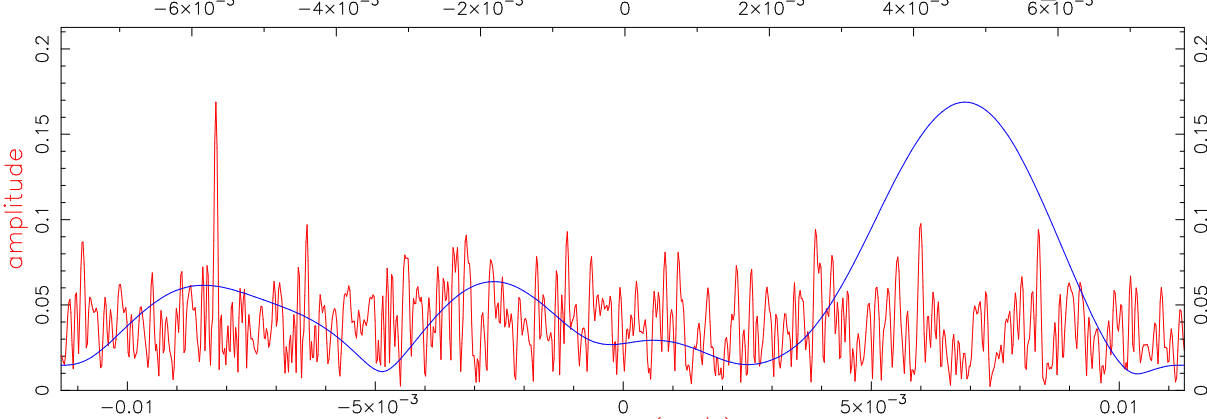
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fy

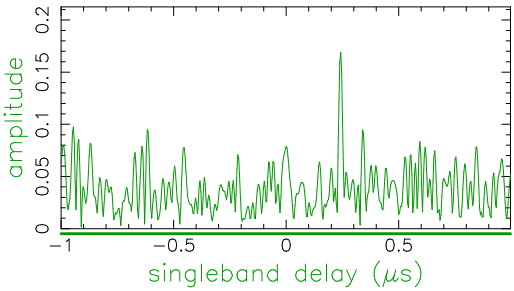
VLBA_FD - KVNYS, fgroup W, pol RL

multiband delay (μ s)

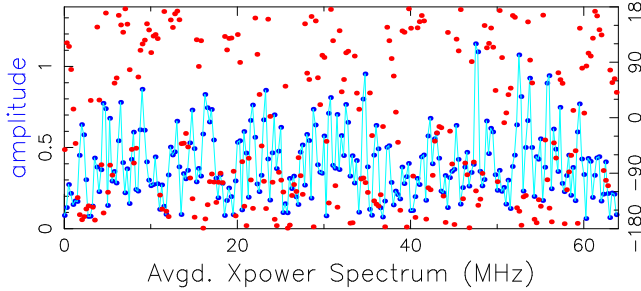


Fringe quality 0

SNR 5.7
 Int time 149.853
 Amp 0.213
 Phase 38.1
 PFD 8.2e-01
 Delays (us)
 SBD 0.241432
 MBD 0.004728
 Fringe rate (Hz)
 -0.709137
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

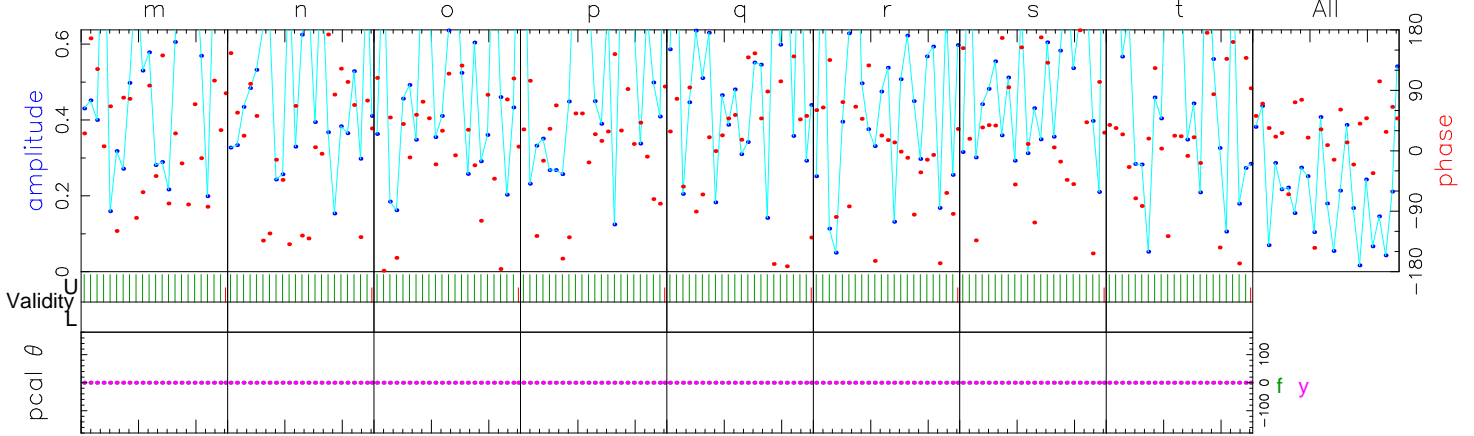


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105546
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	
	23.4	98.7	44.7	34.0	71.4	13.2	38.3	39.0	Phase	38.1	
	0.2	0.1	0.3	0.4	0.2	0.3	0.2	0.1	Ampl.	0.2	
	216.8	421.3	93.9	319.0	243.0	435.1	4.6	288.1	Sbd box	318.8	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
f	0	0	0	0	0	0	0	0	PC freqs		
y	0	0	60000	0	0	0	4000	0	PC freqs		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
y	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-4.61471821654E+03		Apriori delay (usec)		-4.61495731912E+03		Resid mbdelay (usec)		4.72758E-03	+/- 1.9E-04	
Sband delay (usec)	-4.61471588737E+03		Apriori clock (usec)		-6.3722668E+00		Resid sbdelay (usec)		2.41432E-01	+/- 1.5E-03	
Phase delay (usec)	-4.61495731789E+03		Apriori clockrate (us/s)		5.0658913E-08		Resid phdelay (usec)		1.22969E-06	+/- 6.5E-07	
Delay rate (us/s)	-7.76858542449E-01		Apriori rate (us/s)		-7.76850310067E-01		Resid rate (us/s)		-8.23238E-06	+/- 7.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		1.39277289884E-05		Resid phase (deg)		38.1	+/- 20.2	
	RMS	Theor.	Amplitude	0.213 +/- 0.037		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	53.8	48.5	Search (1024X32)	0.167		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	80.2	84.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	30.7	28.6	Inc. seg. avg.	0.198		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	49.2	49.9	Inc. frq. avg.	0.200		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
f: az 336.4 el 32.3 pa 88.6	y: az 23.5 el 48.4 pa -114.6		u,v (fr/asec)		12931.216 2518.302				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//fy..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//fy.W.172.3MP15Q								

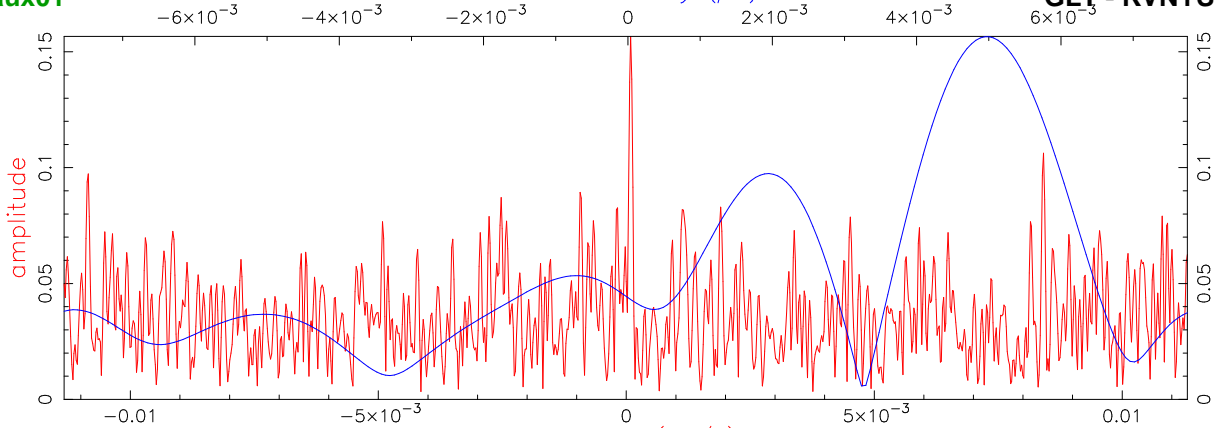
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gy

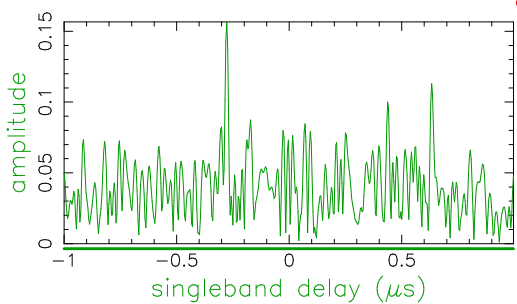
GLT - KVNYS, fgroup W, pol LL

multiband delay (μ s)

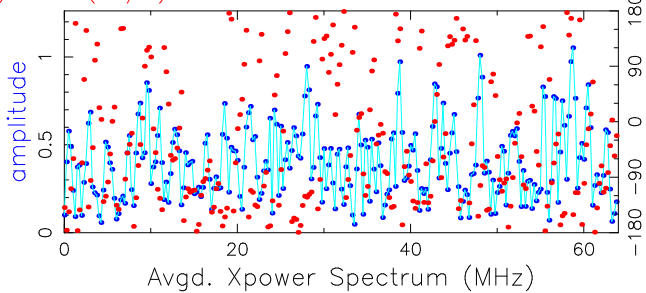


Fringe quality 0

SNR 5.2
 Int time 149.846
 Amp 0.157
 Phase -141.5
 PFD 1.0e+00
 Delays (us)
 SBD -0.277670
 MBD 0.004955
 Fringe rate (Hz)
 0.007470
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

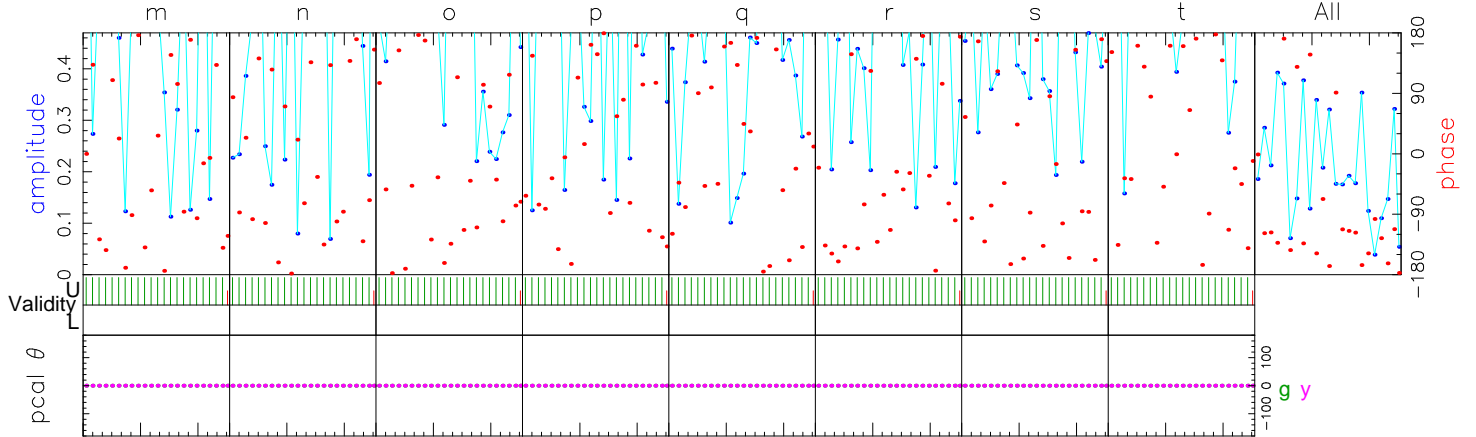


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105551
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.6	-160.4	-136.4	-153.2	162.9	-98.1	-147.5	-165.9	Phase	-141.5
	0.1	0.3	0.2	0.1	0.1	0.3	0.2	0.1	Ampl.	0.2
	206.8	215.5	420.0	350.7	18.3	430.9	1.4	358.2	Sbd box	185.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.74699883904E+03	Apriori delay (usec)	2.74727513401E+03	Resid mbdelay (usec)	4.95503E-03	+/-	2.1E-04
Sband delay (usec)	2.74699746401E+03	Apriori clock (usec)	-5.9657707E+00	Resid sbdelay (usec)	-2.77670E-01	+/-	1.6E-03
Phase delay (usec)	2.74727512945E+03	Apriori clockrate (us/s)	8.0399879E-08	Resid phdelay (usec)	-4.56281E-06	+/-	7.0E-07
Delay rate (us/s)	-4.37130642461E-01	Apriori rate (us/s)	-4.37130729186E-01	Resid rate (us/s)	8.67246E-08	+/-	8.1E-09
Total phase (deg)	-125.7	Apriori accel (us/s/s)	2.38779496032E-05	Resid phase (deg)	-141.5	+/-	21.9

ph/seg (deg)	54.0	Theor.	52.4	Amplitude	0.157 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	77.7	Search (1024X32)	0.156	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	32.9	Inc. seg. avg.	0.153	Inc. frq. avg.	0.151	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	46.3	Inc. frq. avg.	0.151			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

g: az 318.7 el 61.6 pa 26.5 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 7327.343 6128.107 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/gy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/gy.W.191.3MP15Q

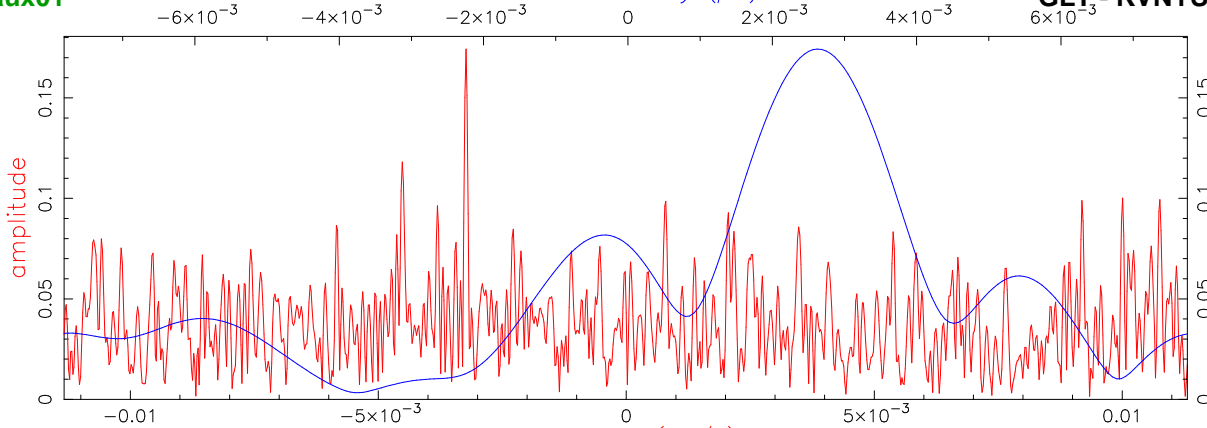
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gy

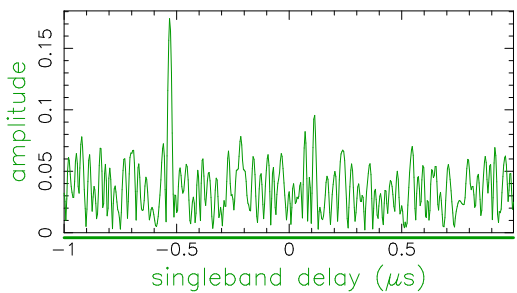
GLT - KVNYS, fgroup W, pol RR

multiband delay (μ s)

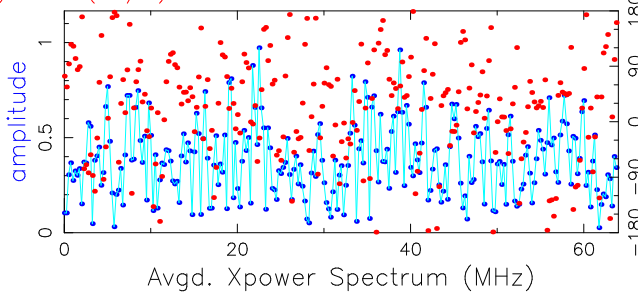


Fringe quality 0

SNR 5.8
 Int time 149.846
 Amp 0.181
 Phase 16.7
 PFD 4.7e-01
 Delays (us)
 SBD -0.530680
 MBD 0.002628
 Fringe rate (Hz)
 -0.278541
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

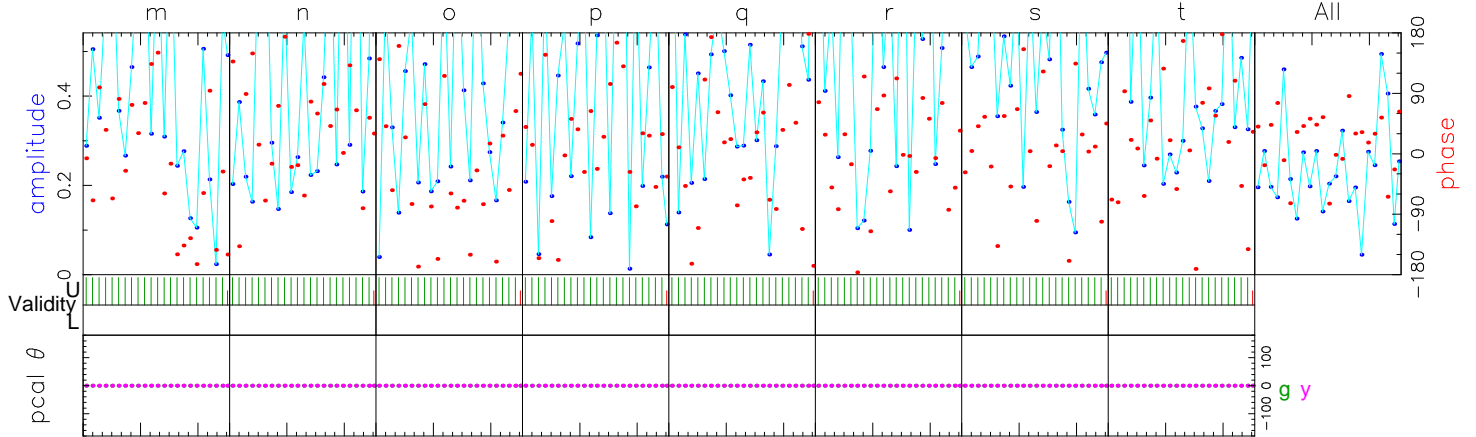


delay rate (ns/s)



Exp. c241a
 Yr:day 1234
 Start 2024:109
 Stop 2024:109
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105555
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
g	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	2.74674651163E+03					2.74727513401E+03			2.62762E-03	+/- 1.9E-04
Sband delay (usec)	2.74674445351E+03					-5.9657707E+00			-5.30680E-01	+/- 1.5E-03
Phase delay (usec)	2.74727513455E+03					8.0399879E-08			5.37141E-07	+/- 6.3E-07
Delay rate (us/s)	-4.37133962771E-01					-4.37130729186E-01			-3.23358E-06	+/- 7.3E-09
Total phase (deg)			32.5			2.38779496032E-05			16.7	+/- 19.6
	RMS	Theor.	Amplitude	0.181 +/- 0.031		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	44.2	47.0	Search (1024X32)	0.173		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	70.3	82.0	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	22.1	27.7	Inc. seg. avg.	0.184		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us			dr window (ns/s)	-0.011 0.011
amp/frq (%)	44.4	48.4	Inc. frq. avg.	0.168		Data rate(Mb/s): 2048			nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00
g: az 318.7 el 61.6 pa 26.5		y: az 23.5 el 48.4 pa -114.6		u,v (fr/asec) 7327.343 6128.107						simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241a/v2/3mm/1234/No0901/gy..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/gy.W.202.3MP15Q						

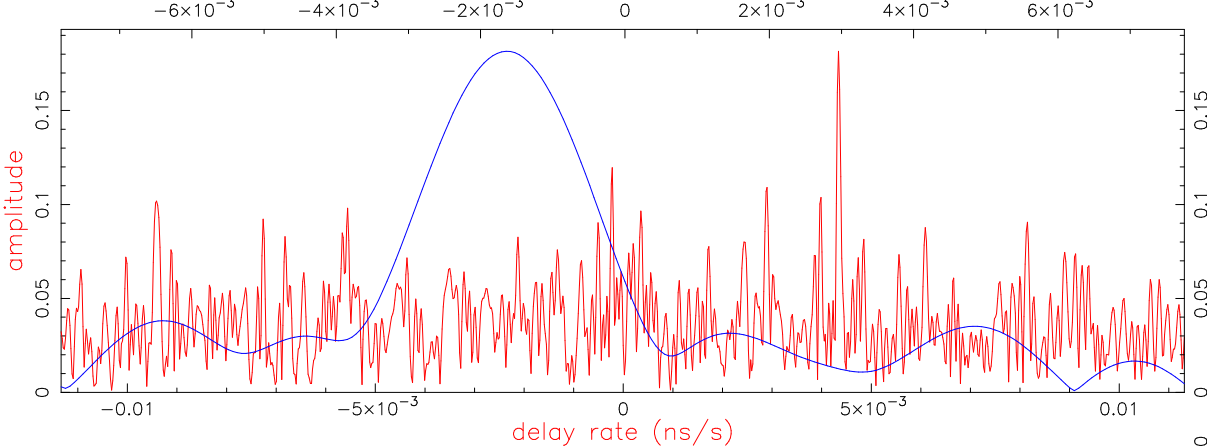
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gy

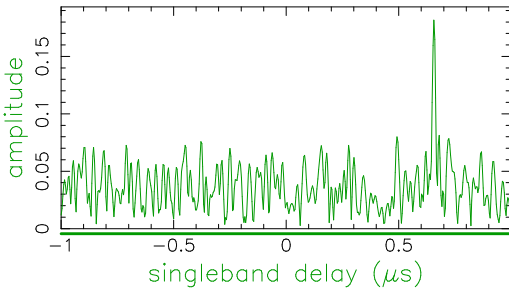
GLT - KVNYS, fgroup W, pol LR

multiband delay (μ s)

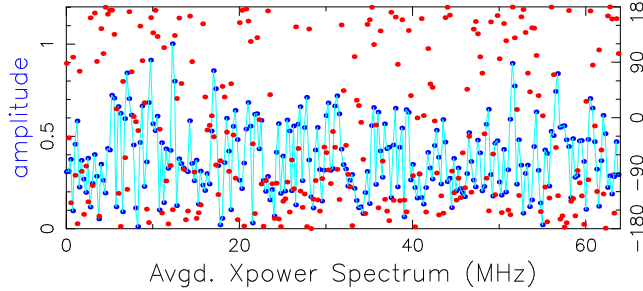


Fringe quality 0

SNR 6.1
 Int time 149.846
 Amp 0.193
 Phase -134.9
 PFD 1.4e-01
 Delays (us)
 SBD 0.656570
 MBD -0.001633
 Fringe rate (Hz)
 0.374552
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

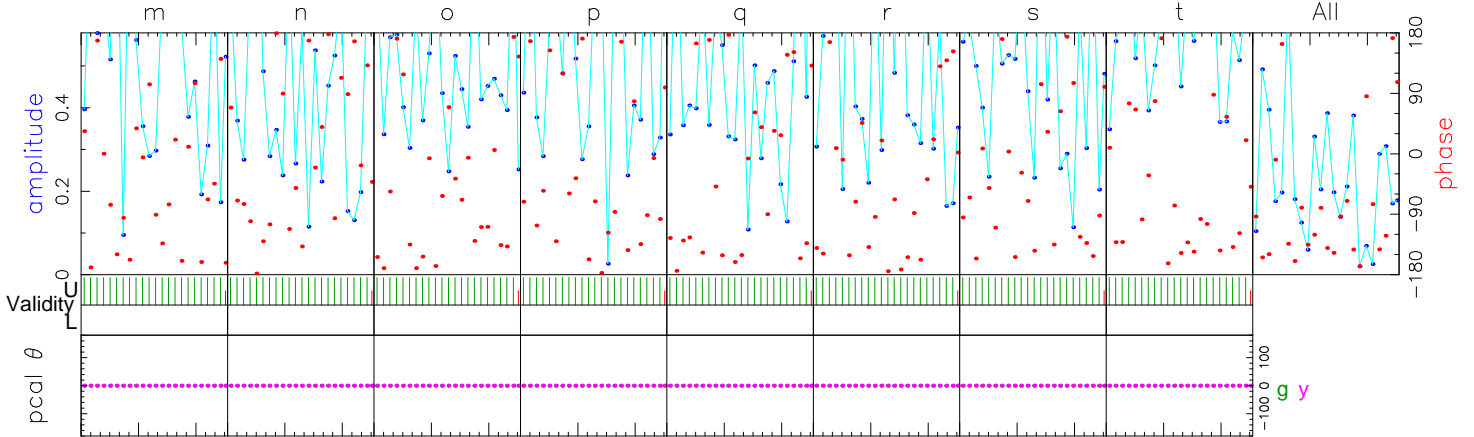


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105557
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-112.7	-141.9	-132.6	-129.5	-161.2	-143.7	-118.1	-123.8	Phase	-134.9
	0.1	0.1	0.3	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	88.9	137.8	233.6	28.3	424.9	132.0	307.8	287.2	Sbd box	425.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.74792975137E+03 Apriori delay (usec) 2.74727513401E+03 Resid mbdelay (usec) -1.63265E-03 +/- 1.8E-04
 Sband delay (usec) 2.74793170376E+03 Apriori clock (usec) -5.9657707E+08 Resid sbdelay (usec) 6.56570E-01 +/- 1.4E-03
 Phase delay (usec) 2.74727512966E+03 Apriori clockrate (us/s) 8.0399879E-08 Resid phdelay (usec) -4.35061E-06 +/- 6.1E-07
 Delay rate (us/s) -4.37126381003E-01 Apriori rate (us/s) -4.37130729186E-01 Resid rate (us/s) 4.34818E-06 +/- 7.0E-09
 Total phase (deg) -119.1 Apriori accel (us/s/s) 2.38779496032E-05 Resid phase (deg) -134.9 +/- 18.8

RMS Theor. Amplitude 0.193 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.5 45.2 Search (1024X32) 0.178 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 89.7 78.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 17.1 26.6 Inc. seg. avg. 0.188 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 24.7 46.5 Inc. frq. avg. 0.180 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 318.7 el 61.6 pa 26.5 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 7327.343 6128.107 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gy.W.212.3MP15Q

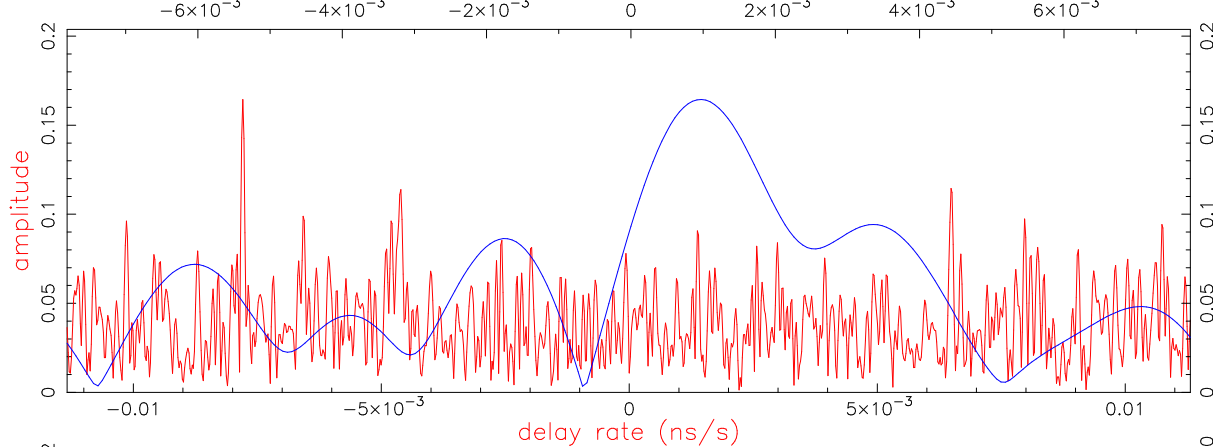
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gy

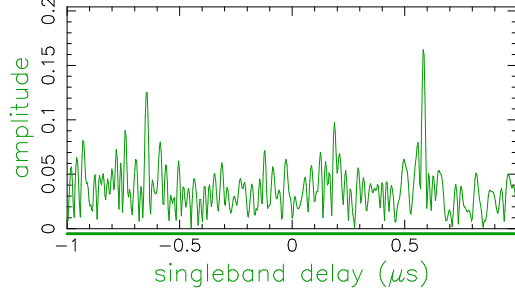
GLT - KVNYS, fgroup W, pol RL

multiband delay (μ s)

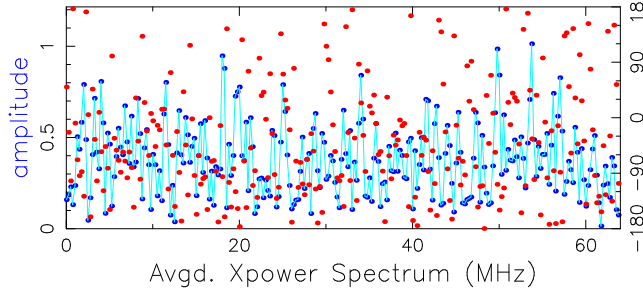


Fringe quality 0

SNR 5.6
 Int time 149.846
 Amp 0.204
 Phase 150.5
 PFD 9.5e-01
 Delays (us)
 SBD 0.583376
 MBD 0.000979
 Fringe rate (Hz)
 -0.671566
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

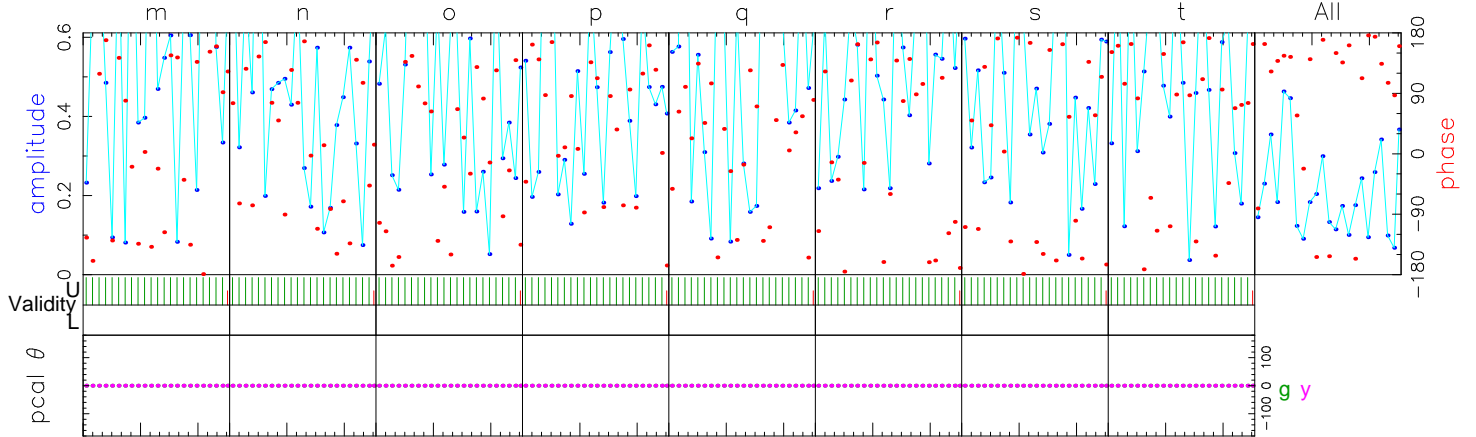


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105559
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-178.4	130.9	149.7	98.6	90.2	148.0	-179.7	151.3	Phase	150.5
	0.3	0.1	0.1	0.2	0.1	0.4	0.3	0.3	Ampl.	0.2
	384.1	162.2	234.9	101.0	93.8	407.0	405.4	80.6	Sbd box	406.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	2.74785423782E+03		Apriori delay (usec)	2.74727513401E+03		Resid mbdelay (usec)	9.78810E-04		+/-	1.9E-04
Sband delay (usec)	2.74785850976E+03		Apriori clock (usec)	-5.9657707E+00		Resid sbdelay (usec)	5.83376E-01		+/-	1.5E-03
Phase delay (usec)	2.74727513887E+03		Apriori clockrate (us/s)	8.0399879E-08		Resid phdelay (usec)	4.85282E-06		+/-	6.6E-07
Delay rate (us/s)	-4.37138525407E-01		Apriori rate (us/s)	-4.37130729186E-01		Resid rate (us/s)	-7.79622E-06		+/-	7.7E-09
Total phase (deg)		166.3	Apriori accel (us/s/s)	2.38779496032E-05		Resid phase (deg)	150.5		+/-	20.6

ph/seg (deg) 57.8 49.3 Search (1024X32) 0.163 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.4 86.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.8 29.1 Inc. seg. avg. 0.187 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.8 50.8 Inc. frq. avg. 0.205 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 318.7 el 61.6 pa 26.5 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 7327.343 6128.107 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/gy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/gy.W.221.3MP15Q

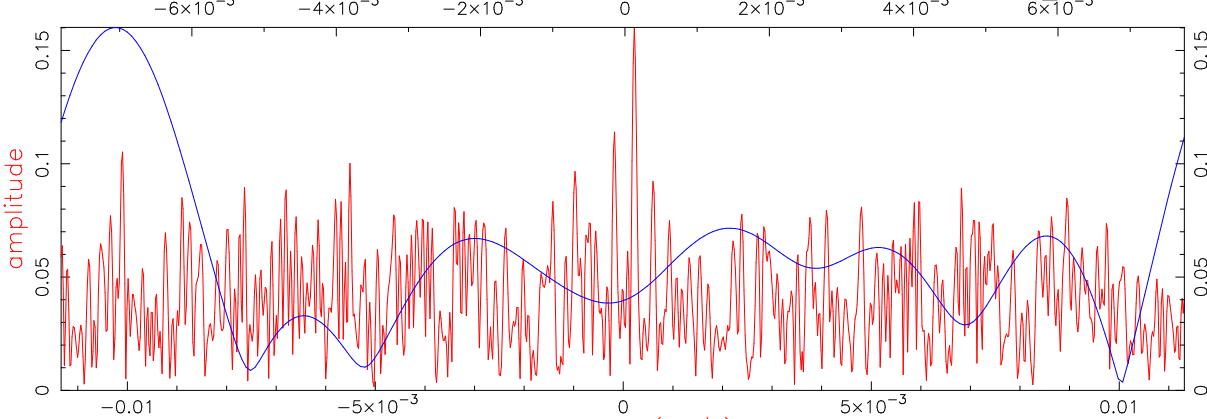
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ky

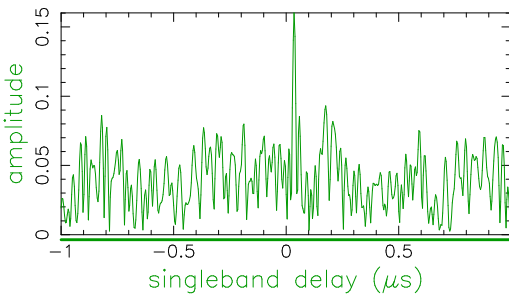
VLBA_KP - KVNYS, fgroup W, pol LL

multiband delay (μ s)

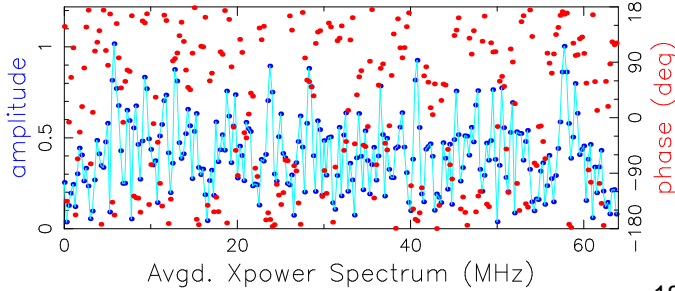


Fringe quality 0

SNR 5.4
 Int time 149.852
 Amp 0.160
 Phase -81.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.035326
 MBD -0.007054
 Fringe rate (Hz)
 0.018251
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

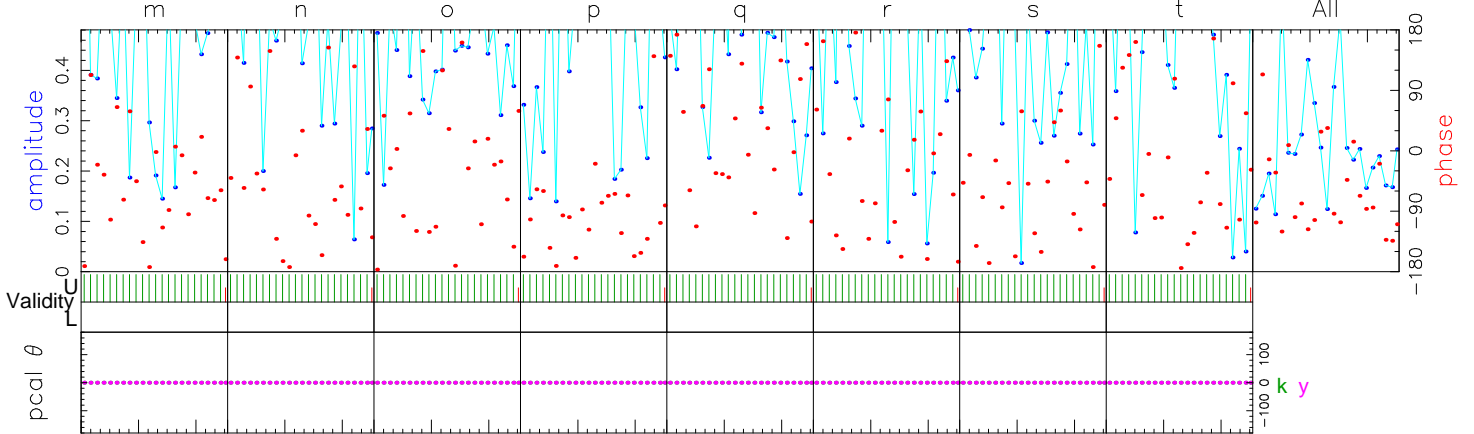


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105625
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-76.2	-97.9	-51.8	-106.7	2.6	-83.8	-75.0	-96.8	Phase	-81.9
	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.2	Ampl.	0.2
	300.4	366.4	29.0	266.0	198.7	314.0	184.7	480.8	Sbd box	266.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ky	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.43054142494E+03	Apriori delay (usec)	-3.43058124545E+03	Resid mbdelay (usec)	-7.05448E-03	+/-	2.0E-04
Sband delay (usec)	-3.43054591895E+03	Apriori clock (usec)	-6.2768555E+00	Resid sbdelay (usec)	3.53265E-02	+/-	1.6E-03
Phase delay (usec)	-3.43058124810E+03	Apriori clockrate (us/s)	1.5264504E-07	Resid phdelay (usec)	-2.64127E-06	+/-	6.9E-07
Delay rate (us/s)	-7.55525027076E-01	Apriori rate (us/s)	-7.55525238952E-01	Resid rate (us/s)	2.11876E-07	+/-	8.0E-09
Total phase (deg)	-256.0	Apriori accel (us/s/s)	9.71748395052E-06	Resid phase (deg)	-81.9	+/-	21.4

ph/seg (deg)	64.3	Theor.	51.2	Amplitude	0.160 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	93.0	Search (1024X32)	0.154	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	39.2	Inc. seg. avg.	0.180	Inc. frq. avg.	0.159	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	45.7	Inc. frq. avg.	0.159	Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us		Data rate (Mb/s): 2048	nlags: 256 t_cohere infinite

k: az 336.1 el 36.1 pa 95.2 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 12566.479 1683.055 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ky..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ky.W.292.3MP15Q

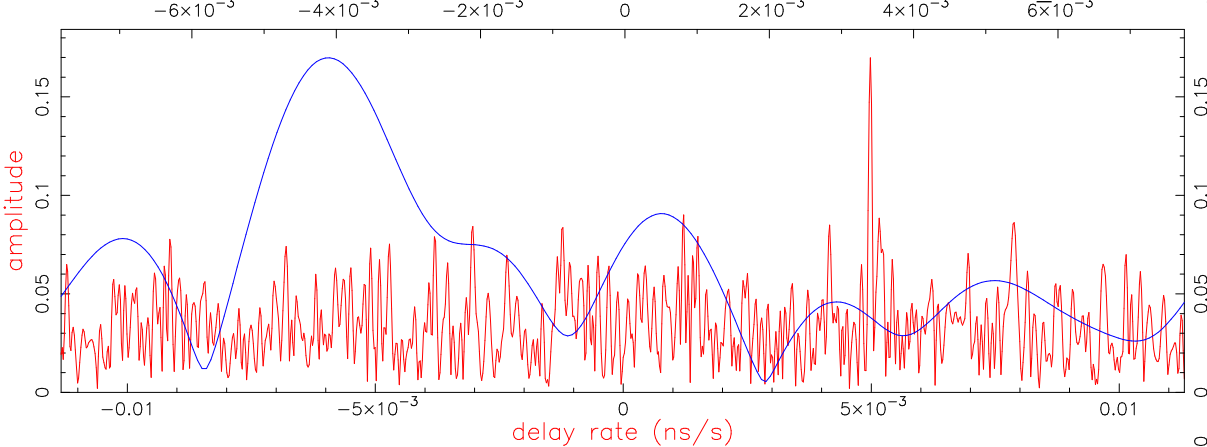
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ky

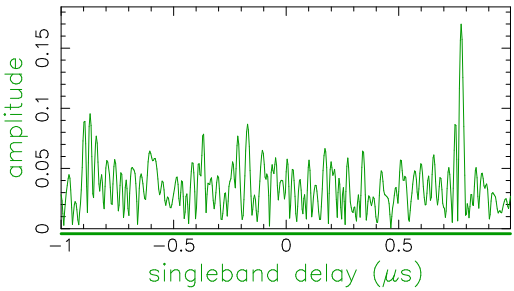
VLBA_KP - KVNYS, fgroup W, pol RR

multiband delay (μ s)

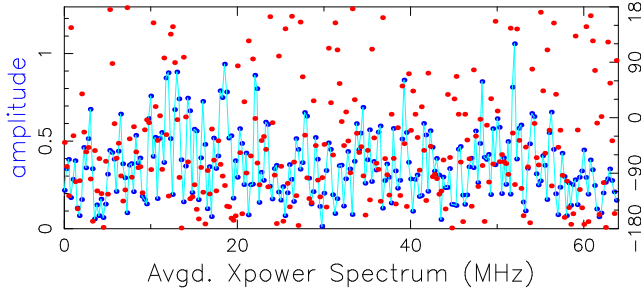


Fringe quality 0

SNR 5.7
 Int time 149.852
 Amp 0.184
 Phase -81.4
 PFD 8.0e-01
 Delays (us)
 SBD 0.777301
 MBD -0.004110
 Fringe rate (Hz)
 0.430665
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

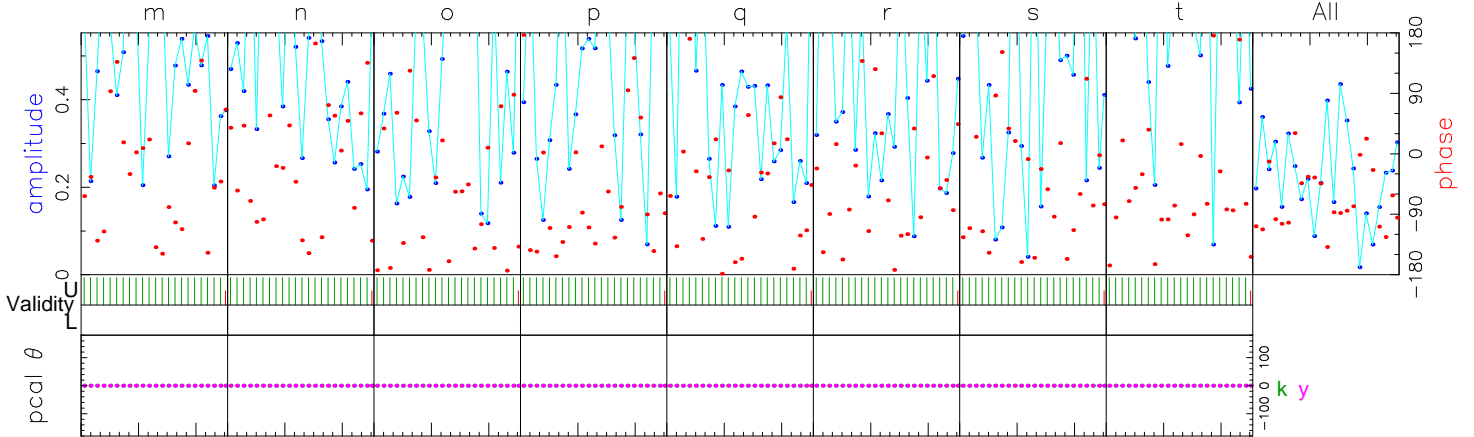


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105626
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

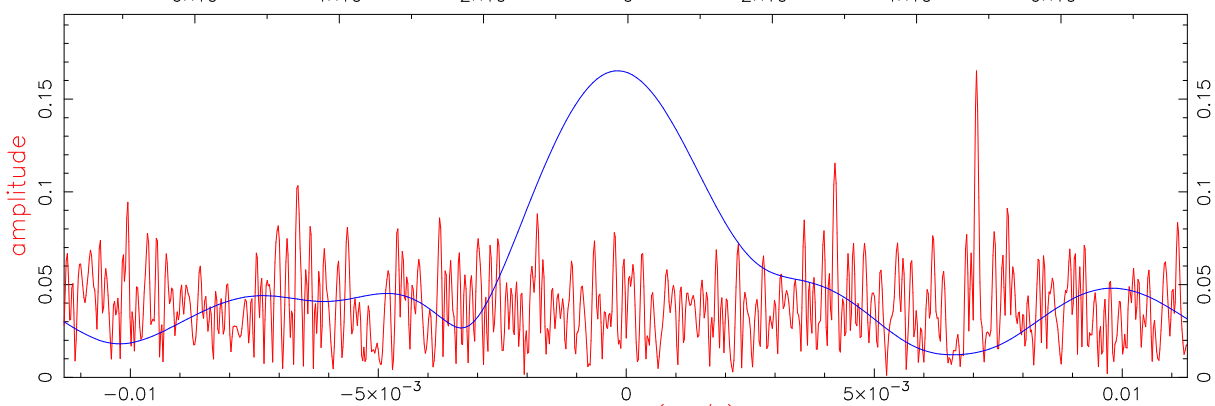
Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



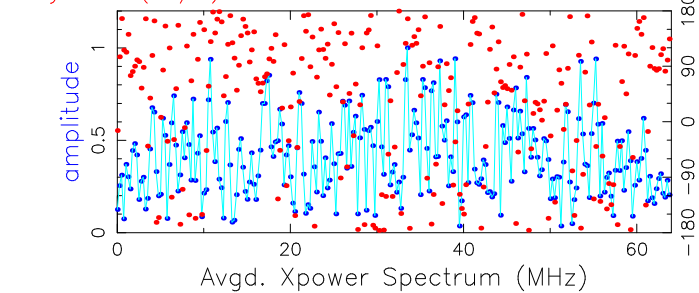
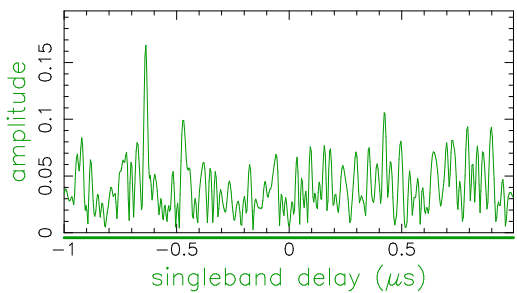
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-66.7	-22.5	-118.9	-112.9	-71.2	-105.7	-78.2	-70.6	Phase	-81.4	
	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.5	Ampl.	0.2	
	59.7	171.0	363.3	405.4	205.2	240.8	385.6	455.7	Sbd box	456.0	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
k	0	0	0	0	0	0	0	0	PC freqs		
y	0	0	60000	0	0	0	4000	0	PC freqs		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
ky	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
y	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	-3.42980410573E+03				-3.43058124545E+03				Resid mbdelay (usec)	-4.11028E-03 +/- 1.9E-04	
Sband delay (usec)	-3.42980394445E+03				-6.2768555E+00				Resid sbdelay (usec)	7.77301E-01 +/- 1.5E-03	
Phase delay (usec)	-3.43058124808E+03				1.5264504E-07				Resid phdelay (usec)	-2.62649E-06 +/- 6.5E-07	
Delay rate (us/s)	-7.55520239364E-01				-7.55525238952E-01				Resid rate (us/s)	4.99959E-06 +/- 7.5E-09	
Total phase (deg)			-255.5		9.71748395052E-06				Resid phase (deg)	-81.4 +/- 20.1	
									PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	49.1	48.3	Search (1024X32)	0.167	PCal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	69.5	84.3	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	33.9	28.5	Inc. seg. avg.	0.182	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	56.4	49.7	Inc. frq. avg.	0.182	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
k: az 336.1 el 36.1 pa 95.2			y: az 23.5 el 48.4 pa -114.6		u,v (fr/asec) 12566.479 1683.055					simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241a/v2/3mm/1234/No0901/ky..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/ky.W.301.3MP15Q						

multiband delay (μ s)

Fringe quality 0

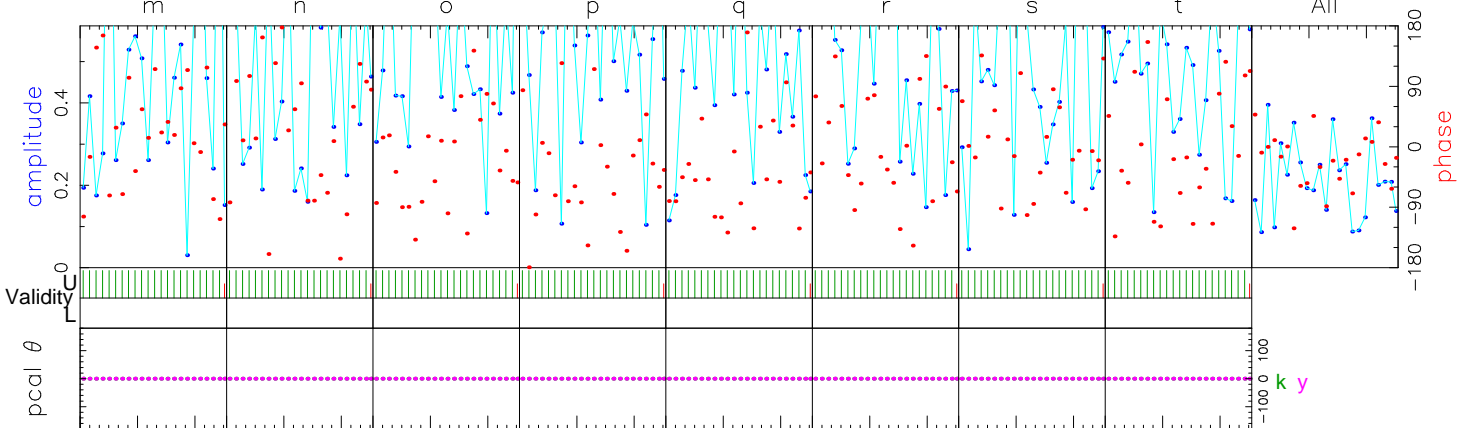


SNR 5.6
Int time 149.852
Amp 0.196
Phase -21.2
PFD 9.7e-01
Delays (us)
SBD -0.637496
MBD -0.000155
Fringe rate (Hz)
0.608572
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c241a
Exper # 1234
Yr:day 2024:109
Start 163000.00
Stop 163230.02
FRT 163115.00
Corr/FF/build
2025:007:141222
2025:041:105629
2024:113:095956
RA & Dec (J2000)
18h06m50.680649s
+69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-2.5	35.0	-26.5	-48.5	-50.6	3.8	-9.4	-12.2	Phase	-21.2
	0.2	0.1	0.3	0.3	0.3	0.3	0.2	0.1	Ampl.	0.2
	451.8	57.8	93.9	310.4	47.7	158.4	229.0	22.5	Sbd box	93.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ky	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.43122202576E+03		Apriori delay (usec)	-3.43058124545E+03		Resid mbdelay (usec)	-1.55301E-04	+/-	2.0E-04	
Sband delay (usec)	-3.43121874120E+03		Apriori clock (usec)	-6.2768555E+00		Resid sbdelay (usec)	-6.37496E-01	+/-	1.6E-03	
Phase delay (usec)	-3.43058124614E+03		Apriori clockrate (us/s)	1.5264504E-07		Resid phdelay (usec)	-6.84384E-07	+/-	6.7E-07	
Delay rate (us/s)	-7.55518174039E-01		Apriori rate (us/s)	-7.55525238952E-01		Resid rate (us/s)	7.06491E-06	+/-	7.7E-09	
Total phase (deg)		-195.3	Apriori accel (us/s/s)	9.71748395052E-06		Resid phase (deg)	-21.2	+/-	20.6	

ph/seg (deg) 41.4 49.5 Search (1024X32) 0.163 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 62.9 86.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 31.6 29.2 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 43.9 50.9 Inc. frq. avg. 0.188 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 336.1 el 36.1 pa 95.2 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 12566.479 1683.055 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ky..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ky.W.308.3MP15Q

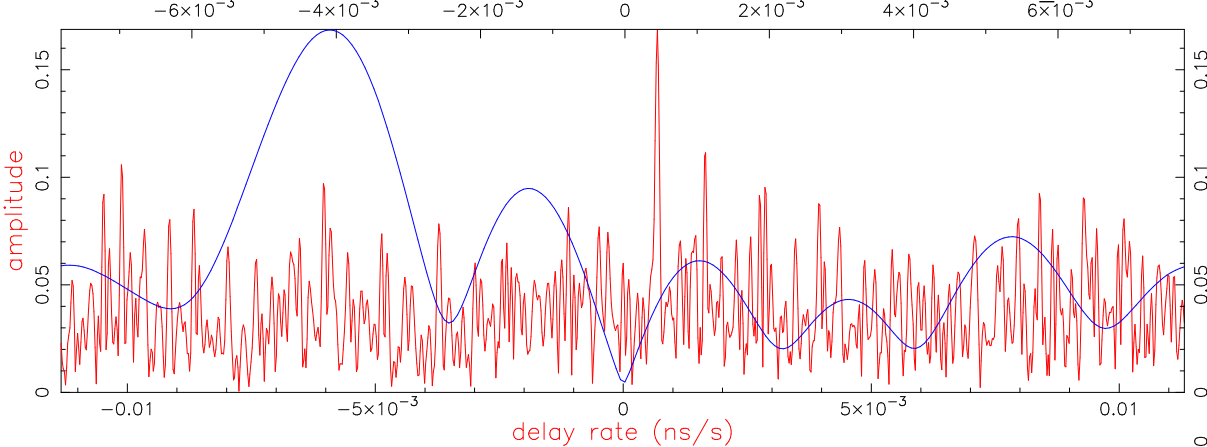
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ky

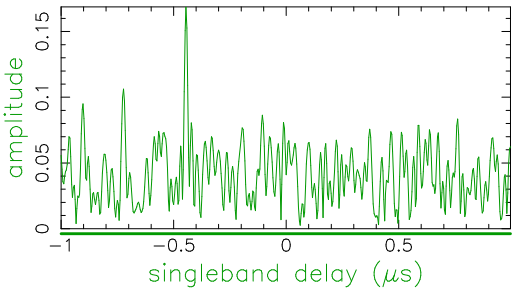
VLBA_KP - KVNYS, fgroup W, pol RL

multiband delay (μ s)

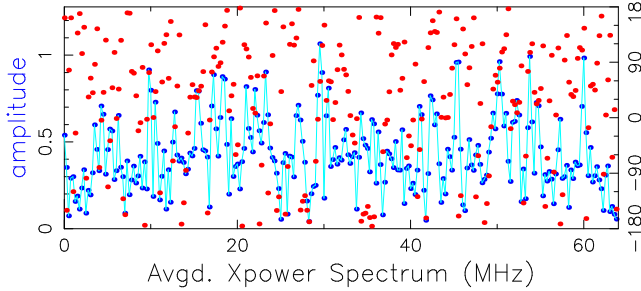


Fringe quality 0

SNR 5.6
 Int time 149.852
 Amp 0.169
 Phase 49.1
 PFD 8.7e-01
 Delays (us)
 SBD -0.445200
 MBD -0.004088
 Fringe rate (Hz)
 0.058570
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

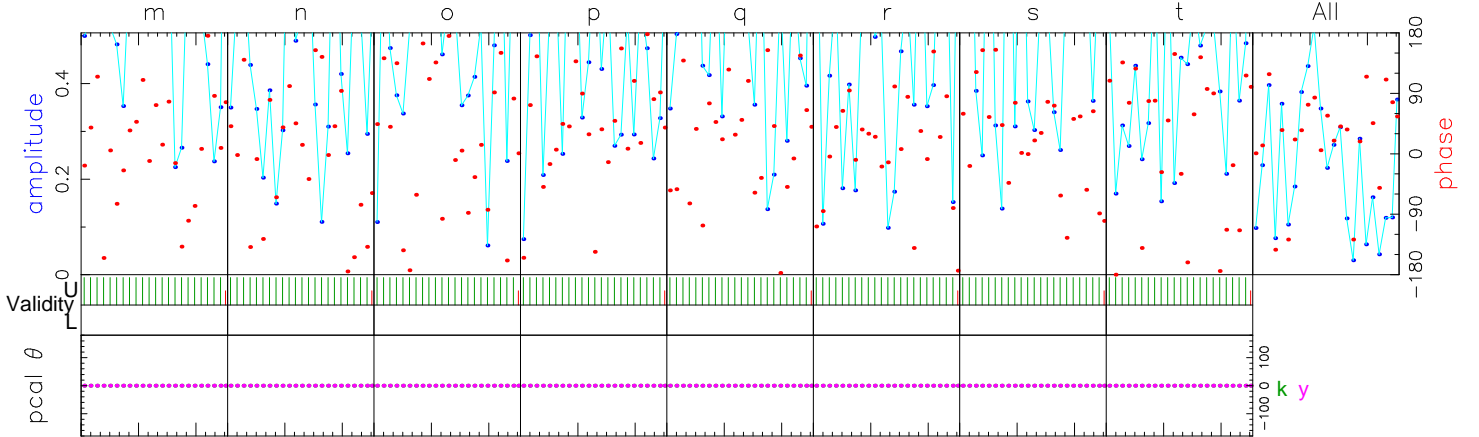


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105631
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
k	0	0	0	0	0	0	0	0		
y	0	0	60000	0	0	0	4000	0		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ky	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec) (SBD)	-3.43102283381E+03									
Sband delay (usec)	-3.43102644545E+03									
Phase delay (usec)	-3.43058124387E+03									
Delay rate (us/s)	-7.55524559016E-01									
Total phase (deg)			-125.0							
Apriori delay (usec)					-3.43058124545E+03					
Apriori clock (usec)					-6.2768555E+00					
Apriori clockrate (us/s)					1.5264504E-07					
Apriori rate (us/s)					-7.55525238952E-01					
Apriori accel (us/s/s)					9.71748395052E-06					
Resid mbdelay (usec)									-4.08835E-03	+/- 1.9E-04
Resid sbdelay (usec)									-4.45200E-01	+/- 1.5E-03
Resid phdelay (usec)									1.58314E-06	+/- 6.5E-07
Resid rate (us/s)									6.79936E-07	+/- 7.6E-09
Resid phase (deg)									49.1	+/- 20.3

ph/seg (deg) 74.5 48.7 Search (1024X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.6 85.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.2 28.7 Inc. seg. avg. 0.166 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.3 50.1 Inc. frq. avg. 0.179 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 k: az 336.1 el 36.1 pa 95.2 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 12566.479 1683.055 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ky..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ky.W.316.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

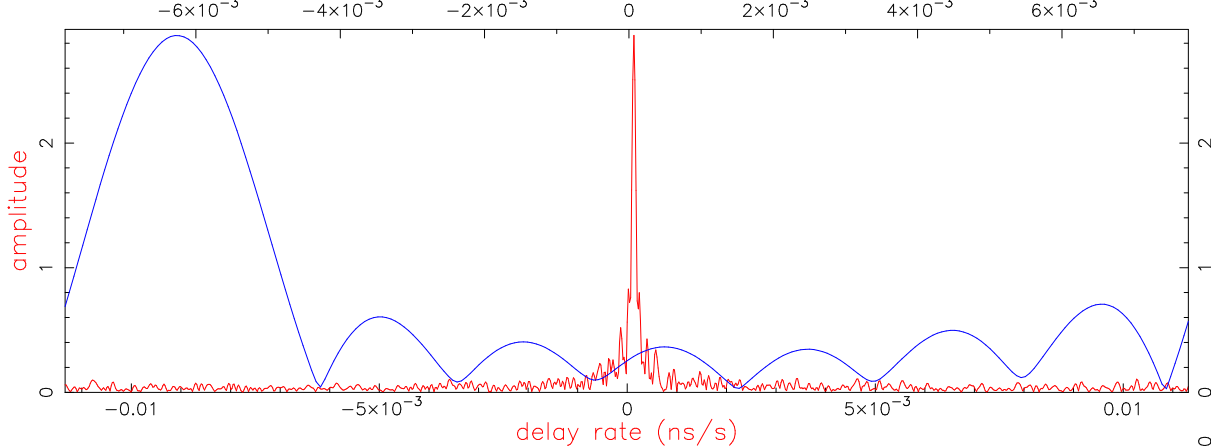
aux01

3C371.3MP15Q, No0901, Ly

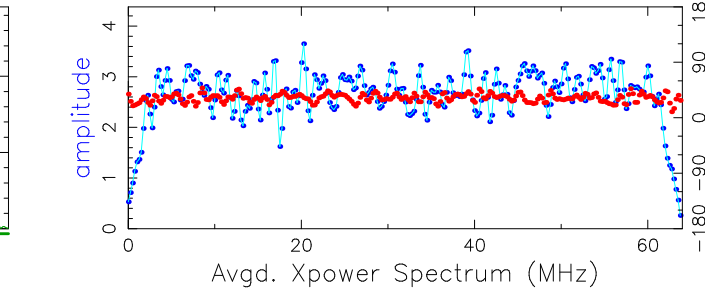
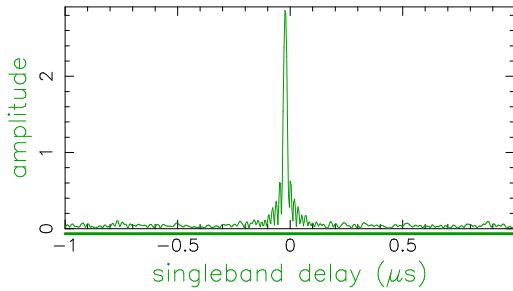
KVNPQ - KVNYs, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 8

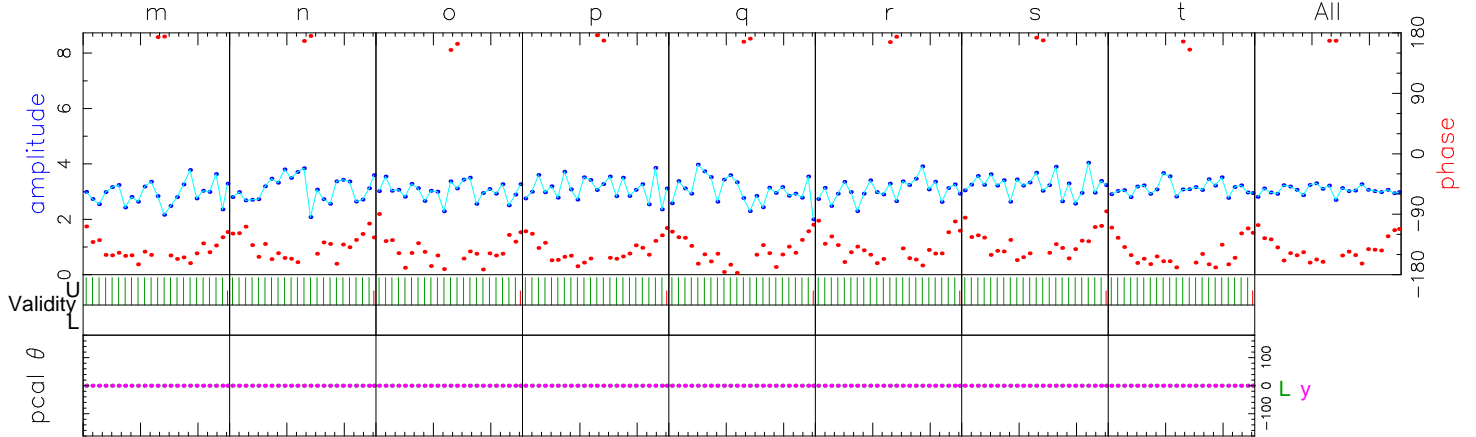


SNR 97.5
 Int time 149.859
 Amp 2.911
 Phase -146.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.021800
 MBD -0.006259
 Fringe rate (Hz)
 0.011154
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105610
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-147.4	-142.4	-149.4	-148.4	-149.6	-145.8	-138.4	-152.8	Phase	-146.7
	2.8	2.9	2.8	3.0	2.8	2.8	3.0	2.9	Ampl.	2.9
	251.4	251.4	251.3	251.5	251.4	251.6	251.3	251.3	Sbd box	251.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	7.76149049477E+01	Apriori delay (usec)	7.76367892364E+01	Resid mbdelay (usec)	-6.25929E-03	+/-	1.1E-05
Sband delay (usec)	7.76149889864E+01	Apriori clock (usec)	-3.1797340E+01	Resid sbdelay (usec)	-2.18002E-02	+/-	8.8E-05
Phase delay (usec)	7.76367845047E+01	Apriori clockrate (us/s)	-7.4410998E-06	Resid phdelay (usec)	-4.73165E-06	+/-	3.8E-08
Delay rate (us/s)	-7.20188446063E-03	Apriori rate (us/s)	-7.20201394812E-03	Resid rate (us/s)	1.29487E-07	+/-	4.4E-10
Total phase (deg)	-137.8	Apriori accel (us/s/s)	-6.24094164810E-07	Resid phase (deg)	-146.7	+/-	1.2

ph/seg (deg)	21.0	2.8	Search (1024X32)	2.843	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	7.1	4.9	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)	4.9	1.7	Inc. seg. avg.	3.053	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	2.9	2.9	Inc. frq. avg.	2.870	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.249.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

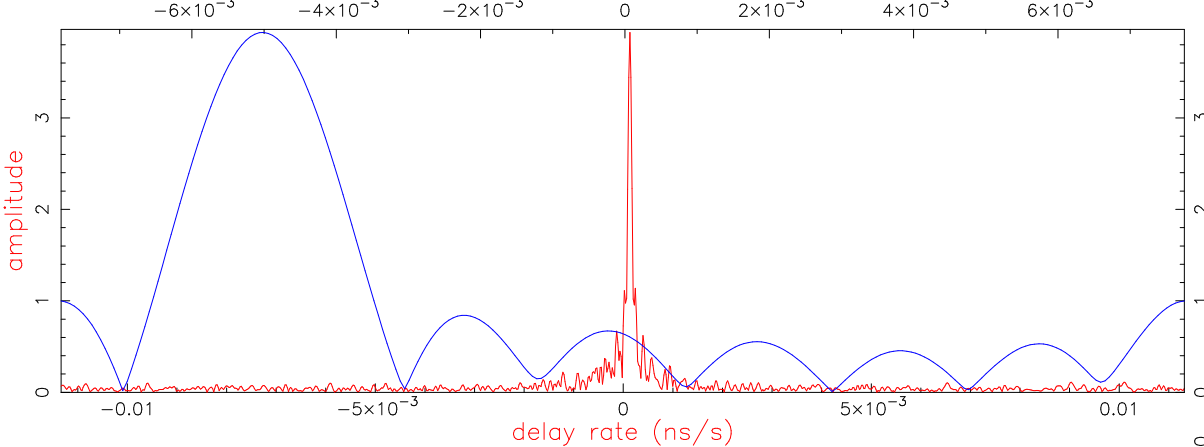
aux01

3C371.3MP15Q, No0901, Ly

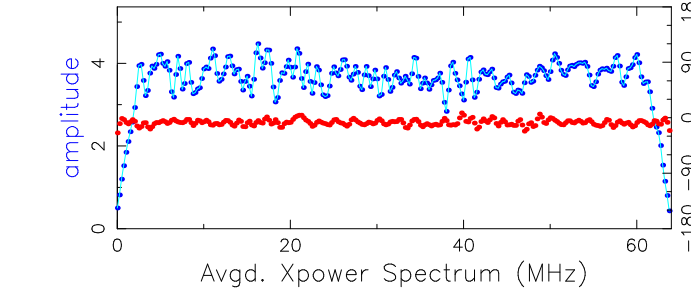
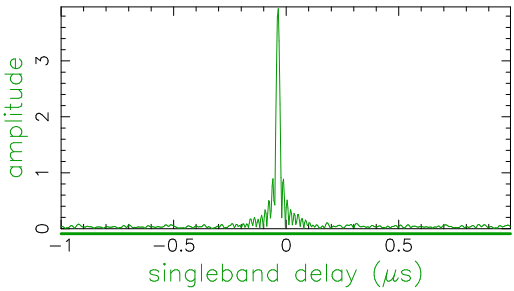
KVNPC - KVNY, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 8

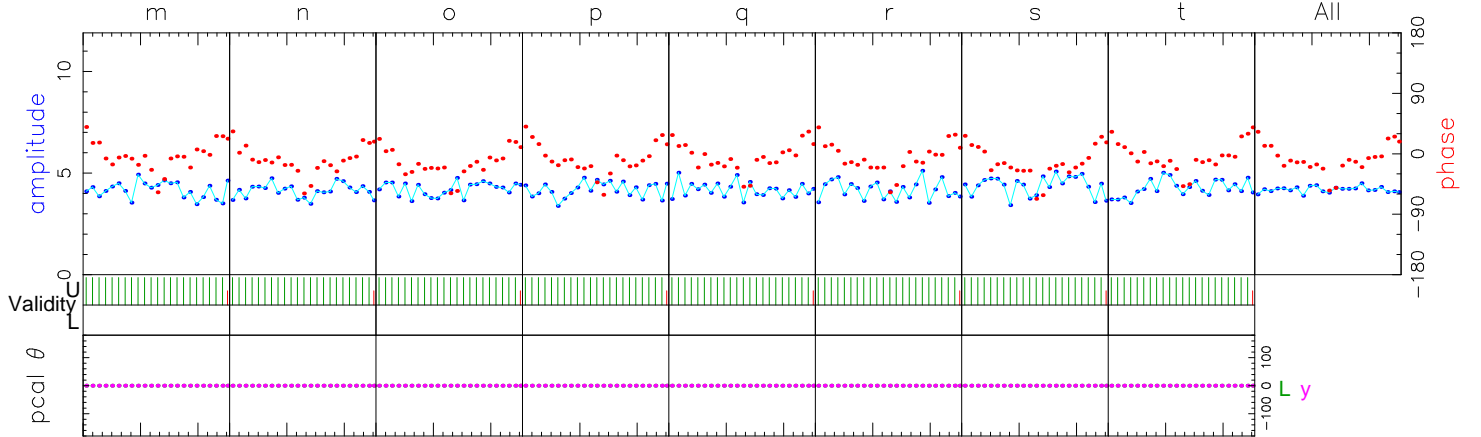


SNR 132.8
 Int time 149.859
 Amp 3.967
 Phase -8.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.036303
 MBD -0.005020
 Fringe rate (Hz)
 0.011115
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105613
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-3.8	-9.5	-13.7	-8.1	-4.7	-5.8	-13.6	-5.1	Phase	-8.1
	3.9	3.9	4.0	3.9	3.9	4.1	4.1	4.0	Ampl.	3.9
	247.7	247.7	247.6	247.9	247.7	247.7	247.7	247.7	Sbd box	247.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD) 7.76005192289E+01 Apriori delay (usec) 7.76367892364E+01 Resid mbdelay (usec) -5.02001E-03 +/- 8.2E-06
 Sband delay (usec) 7.76004862364E+01 Apriori clock (usec) -3.1797340E+01 Resid sbdelay (usec) -3.63030E-02 +/- 6.5E-05
 Phase delay (usec) 7.76367889765E+01 Apriori clockrate (us/s) -7.4410998E-06 Resid phdelay (usec) -2.59845E-07 +/- 2.8E-08
 Delay rate (us/s) -7.20188491411E-03 Apriori rate (us/s) -7.20201394812E-03 Resid rate (us/s) 1.29034E-07 +/- 3.2E-10
 Total phase (deg) 0.9 Apriori accel (us/s/s) -6.24094164810E-07 Resid phase (deg) -8.1 +/- 0.9

RMS Theor. Amplitude 3.967 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 20.7 2.1 Search (1024X32) 3.877 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 6.7 3.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 4.2 1.2 Inc. seg. avg. 4.192 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 1.6 2.1 Inc. frq. avg. 3.941 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.267.3MP15Q

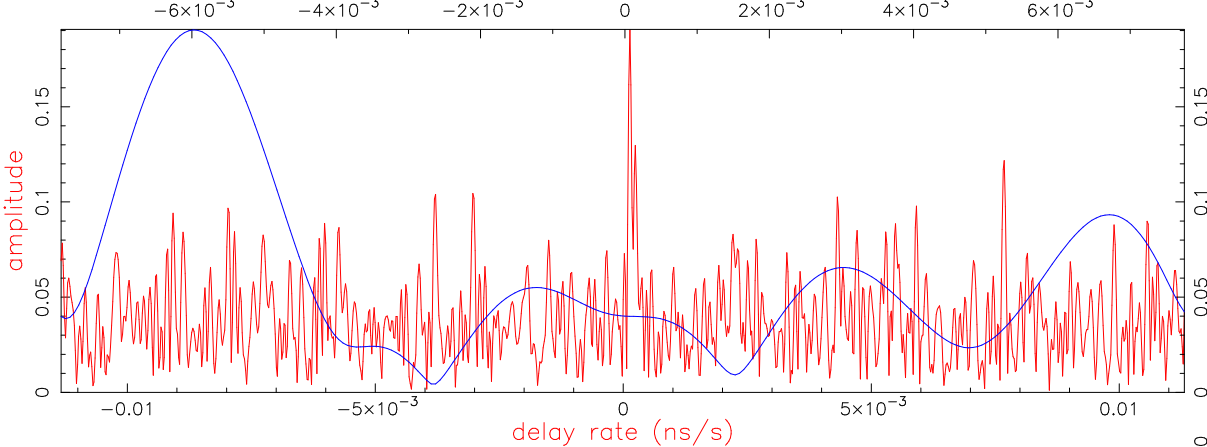
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ly

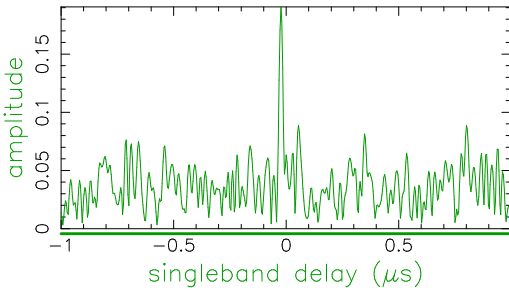
KVNPC - KVNY, fgroup W, pol LR

multiband delay (μ s)

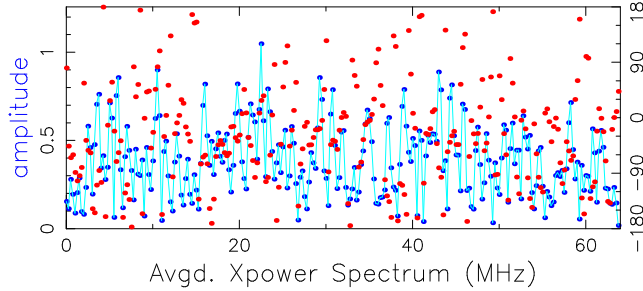


Fringe quality 0

SNR 6.4
 Int time 149.859
 Amp 0.191
 Phase 125.5
 PFD 2.4e-02
 Delays (us)
 SBD -0.022931
 MBD -0.005966
 Fringe rate (Hz)
 0.010652
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

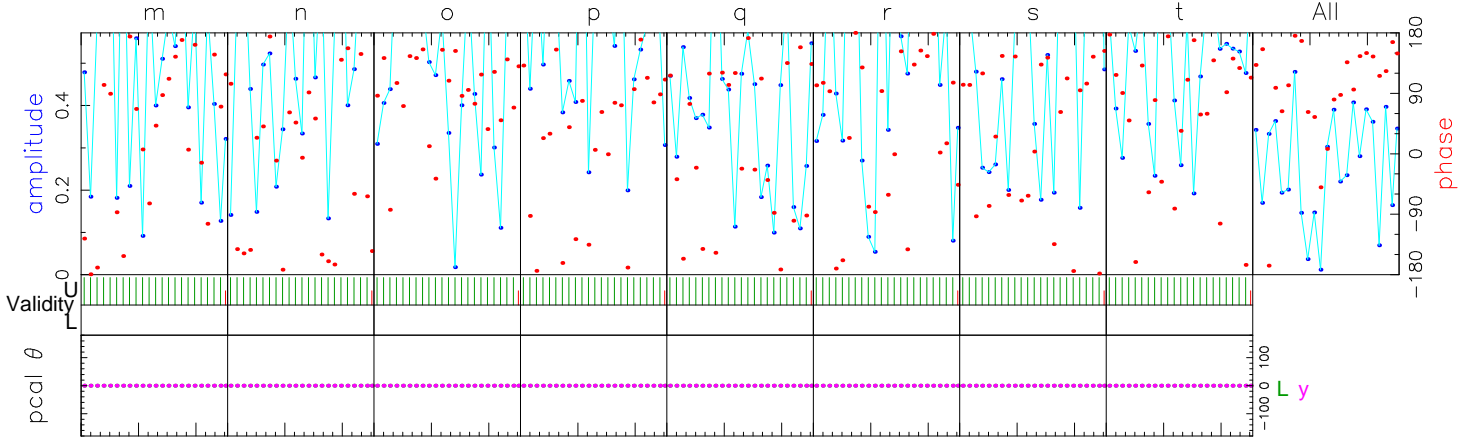


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105617
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
y	0	0	60000	0	0	0	4000	0		
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	7.76151984164E+01									
Sband delay (usec)	7.76138584864E+01									
Phase delay (usec)	7.76367932822E+01									
Delay rate (us/s)	-7.20189029065E-03									
Total phase (deg)			134.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.275.3MP15Q

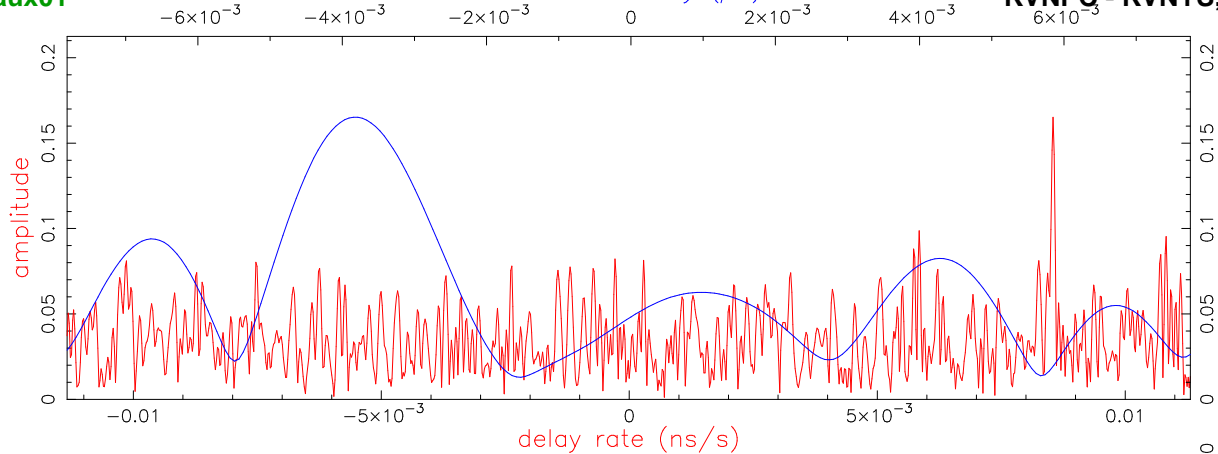
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ly

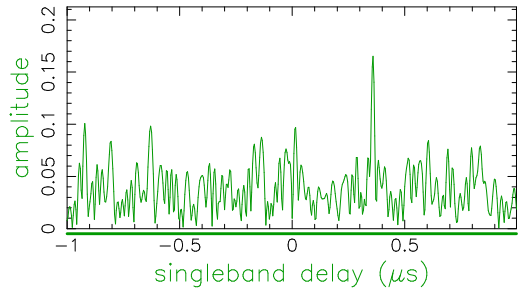
KVNPC - KVNY, fgroup W, pol RL

multiband delay (μs)

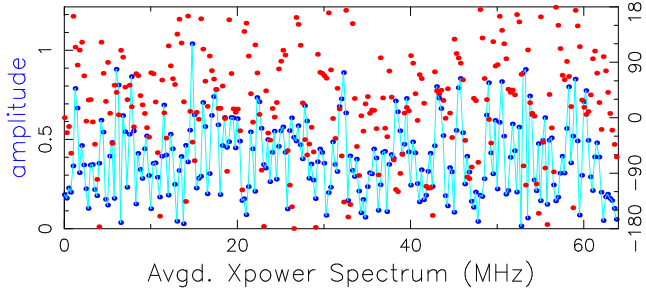


Fringe quality 0

SNR 5.6
 Int time 149.859
 Amp 0.212
 Phase -107.5
 PFD 9.6e-01
 Delays (us)
 SBD 0.358565
 MBD -0.003805
 Fringe rate (Hz)
 0.738061
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

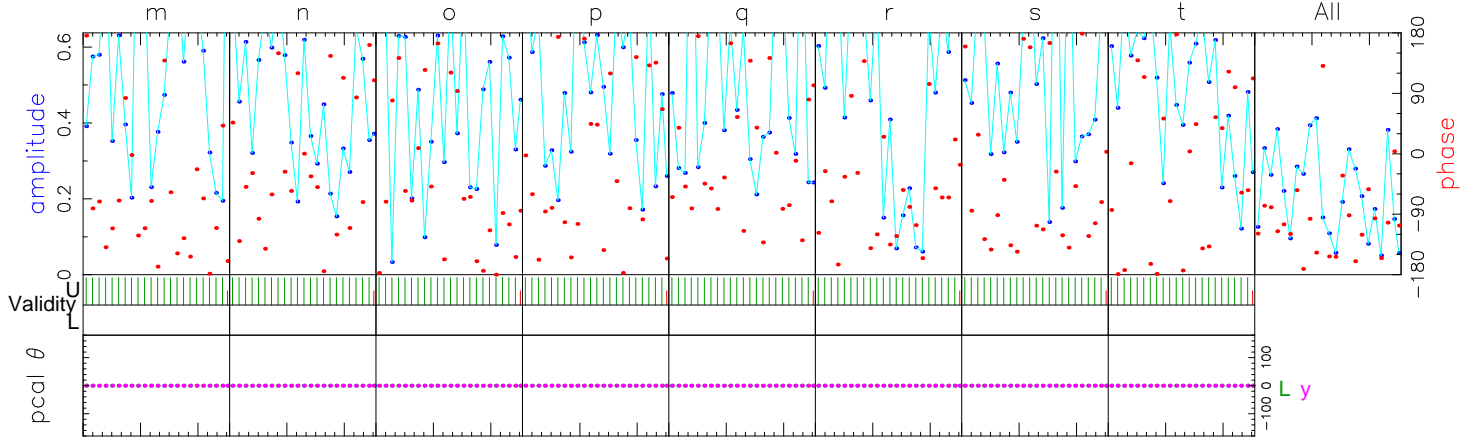


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105621
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-115.7	-73.3	-127.2	-124.2	-76.8	-69.2	-113.3	178.5	Phase	-107.5
	0.4	0.1	0.2	0.2	0.3	0.2	0.3	0.1	Ampl.	0.2
	349.6	324.7	105.9	68.0	259.7	256.2	494.6	417.8	Sbd box	348.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	7.79923594141E+01				7.76367892364E+01				Resid mbdelay (usec)	-3.80482E-03 +/- 2.0E-04
Sband delay (usec)	7.79953542364E+01				-3.1797340E+01				Resid sbdelay (usec)	3.58565E-01 +/- 1.6E-03
Phase delay (usec)	7.76367857709E+01				-7.4410998E-06				Resid phdelay (usec)	-3.46544E-06 +/- 6.7E-07
Delay rate (us/s)	-7.19344578738E-03				-7.20201394812E-03				Resid rate (us/s)	8.56816E-06 +/- 7.7E-09
Total phase (deg)			-98.5						Resid phase (deg)	-107.5 +/- 20.6
	RMS	Theor.	Amplitude	0.212 +/- 0.038					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.9	49.5	Search (1024X32)	0.164					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.4	86.3	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	40.4	29.2	Inc. seg. avg.	0.206					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	52.2	50.9	Inc. frq. avg.	0.212					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256 t_cohere infinite	

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.282.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

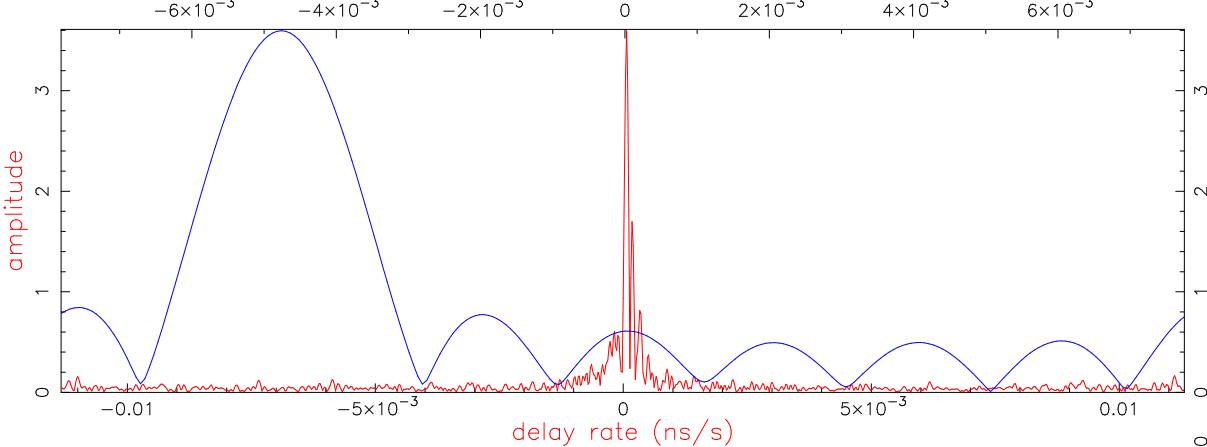
aux01

3C371.3MP15Q, No0901, uy

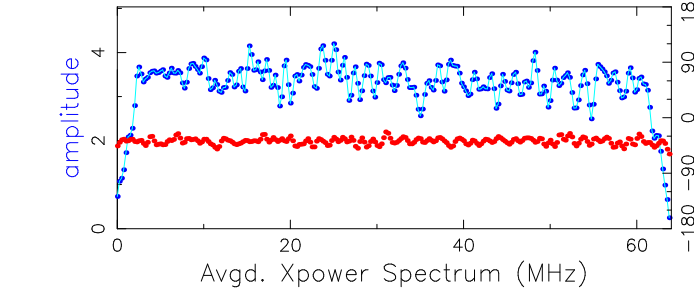
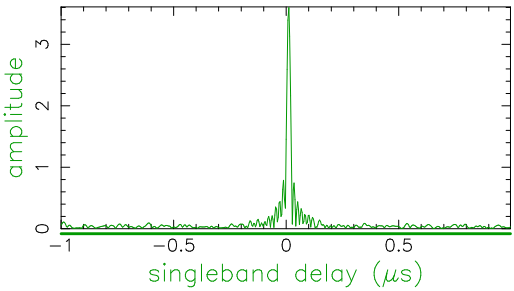
KVNUŞ - KVNYŞ, fgroup W, pol LL

multiband delay (μs)

Fringe quality 7

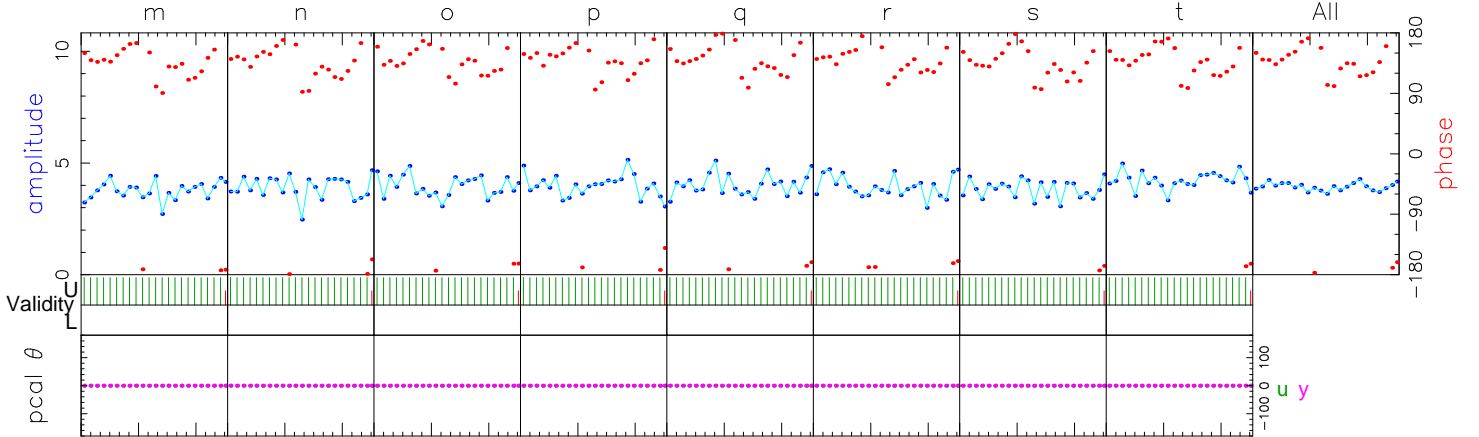


SNR 120.9
 Int time 149.862
 Amp 3.610
 Phase 143.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.010931
 MBD -0.004760
 Fringe rate (Hz)
 0.006598
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105646
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
u	0	0	60000	0	0	0	0	0	APs used	
y	0	0	60000	0	0	0	0	0	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -2.88779234295E+02 Apriori delay (usec) -2.88790099354E+02 Resid mbdelay (usec) -4.75994E-03 +/- 9.0E-06
 Sband delay (usec) -2.88779168604E+02 Apriori clock (usec) -5.0917435E+00 Resid sbdelay (usec) 1.09307E-02 +/- 7.1E-05
 Phase delay (usec) -2.88790094743E+02 Apriori clockrate (us/s) 1.6319997E-07 Resid phdelay (usec) 4.61071E-06 +/- 3.1E-08
 Delay rate (us/s) -3.11025594296E-03 Apriori rate (us/s) -3.11033253804E-03 Resid rate (us/s) 7.65951E-08 +/- 3.5E-10
 Total phase (deg) 86.0 Apriori accel (us/s/s) -1.48807153221E-06 Resid phase (deg) 143.0 +/- 0.9

ph/seg (deg) 24.4 RMS 2.3 Theor. 2.3 Amplitude 3.610 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.3 2.4 2.3 Search (1024X32) 3.475 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 3.0 1.3 1.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 3.7 2.3 2.3 Inc. seg. avg. 3.936 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 3.599 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 22.1 el 47.3 pa -118.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 47.125 -405.070 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/uy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/uy.W.348.3MP15Q

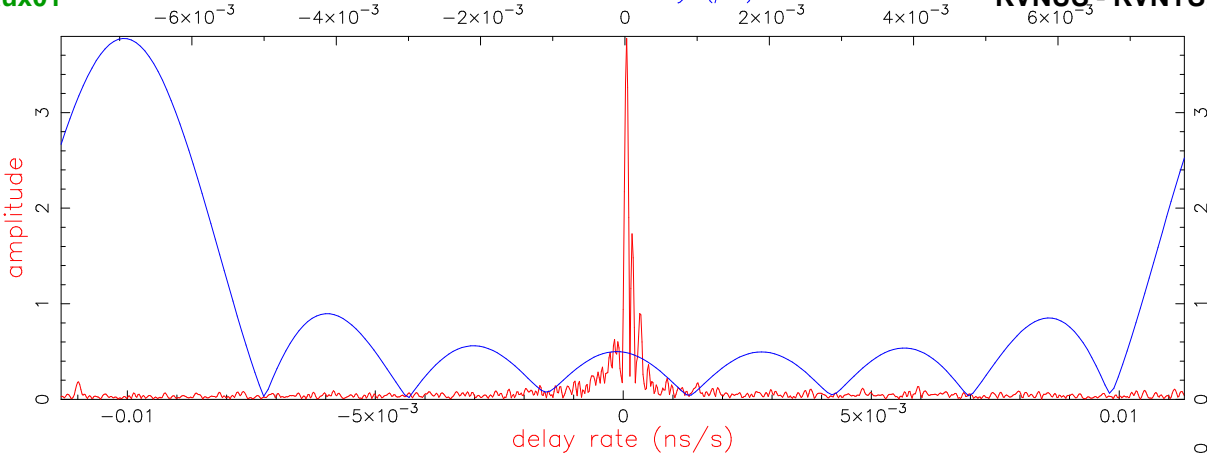
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, uy

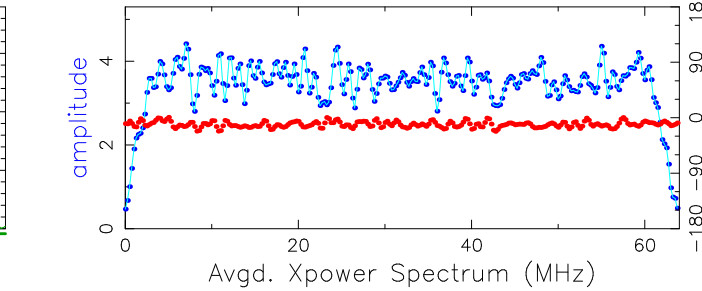
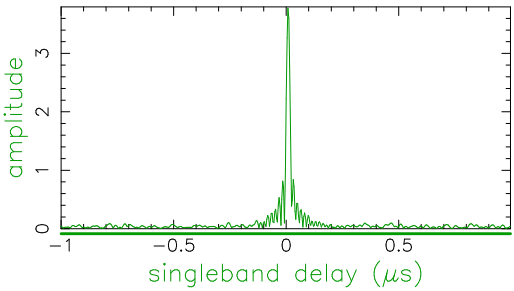
KVNU5 - KVNY5, fgroup W, pol RR

multiband delay (μ s)



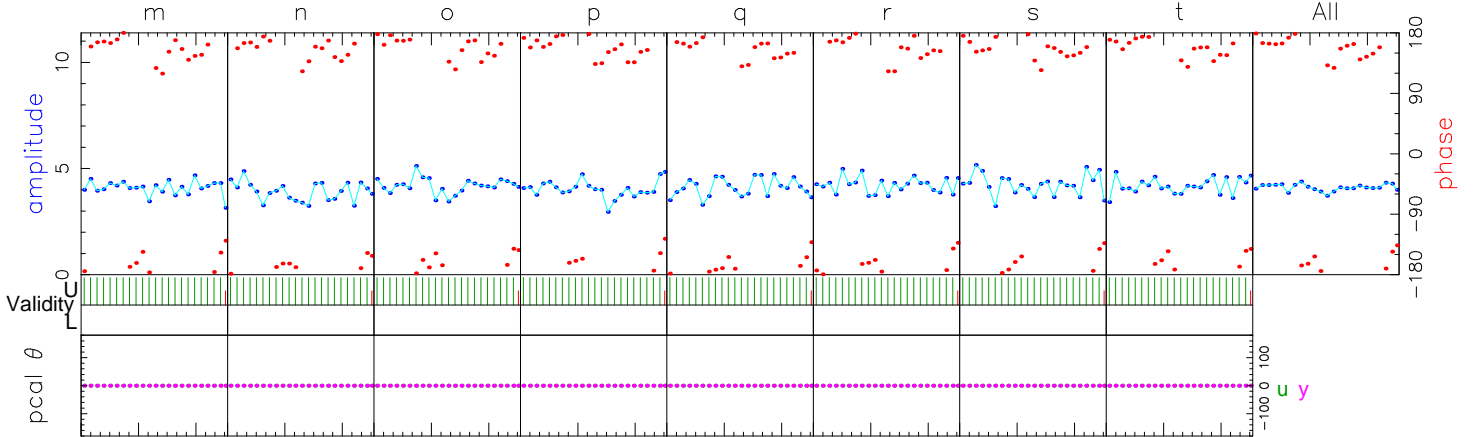
Fringe quality 7

SNR 127.1
 Int time 149.862
 Amp 3.797
 Phase 169.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.008750
 MBD -0.006940
 Fringe rate (Hz)
 0.006618
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105651
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
u	0	0	60000	0	0	0	4000	0		
y	0	0	60000	0	0	0	4000	0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-2.88781413952E+02	Apriori delay (usec)	-2.88790099354E+02	Resid mbdelay (usec)	-6.93960E-03	+/-	8.5E-06
Sband delay (usec)	-2.88781349354E+02	Apriori clock (usec)	-5.0917435E+00	Resid sbdelay (usec)	8.75000E-03	+/-	6.8E-05
Phase delay (usec)	-2.88790093878E+02	Apriori clockrate (us/s)	1.6319997E-07	Resid phdelay (usec)	5.47564E-06	+/-	2.9E-08
Delay rate (us/s)	-3.11025571056E-03	Apriori rate (us/s)	-3.11033253804E-03	Resid rate (us/s)	7.68275E-08	+/-	3.4E-10
Total phase (deg)	112.8	Apriori accel (us/s/s)	-1.48807153221E-06	Resid phase (deg)	169.8	+/-	0.9

ph/seg (deg)	23.8	RMS	2.2	Theor.	2.2	Amplitude	3.797 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	9.3	Search (1024X32)	3.647	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)	1.8	Inc. seg. avg.	4.112	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 (%)	2.4	Inc. frq. avg.	3.777	u:	az 22.1 el 47.3 pa -118.3	u,v (fr/asec)	47.125 -405.070	simultaneous interpolator						

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/uy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/uy.W.359.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

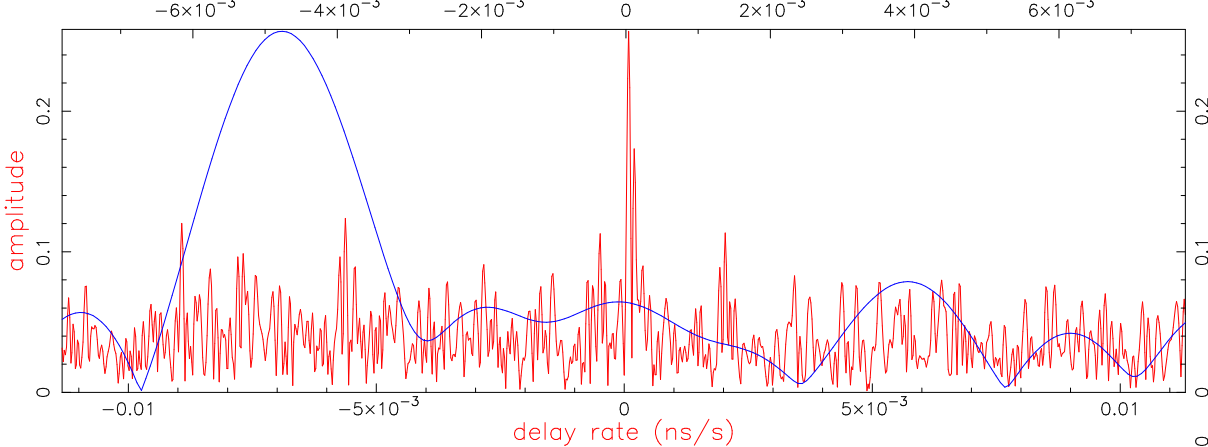
aux01

3C371.3MP15Q, No0901, uy

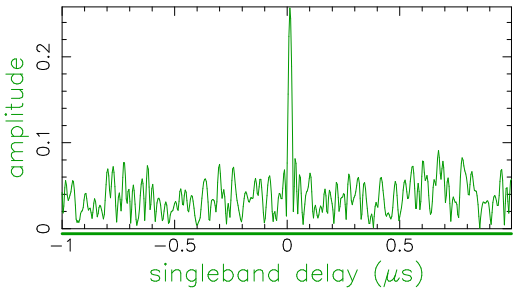
KVNU\$ - KVNY\$, fgroup W, pol LR

multiband delay (μ s)

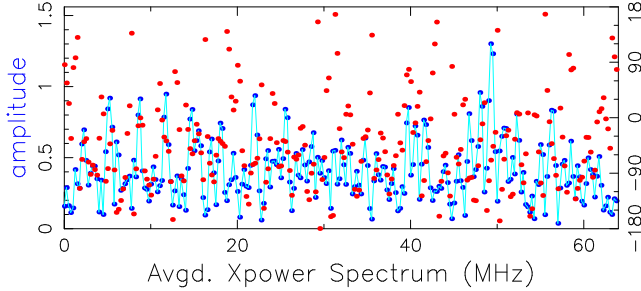
Fringe quality 9



SNR 8.6
 Int time 149.862
 Amp 0.258
 Phase 144.4
 PFD 1.0e-09
 Delays (us)
 SBD 0.012647
 MBD -0.004761
 Fringe rate (Hz) 0.006823
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

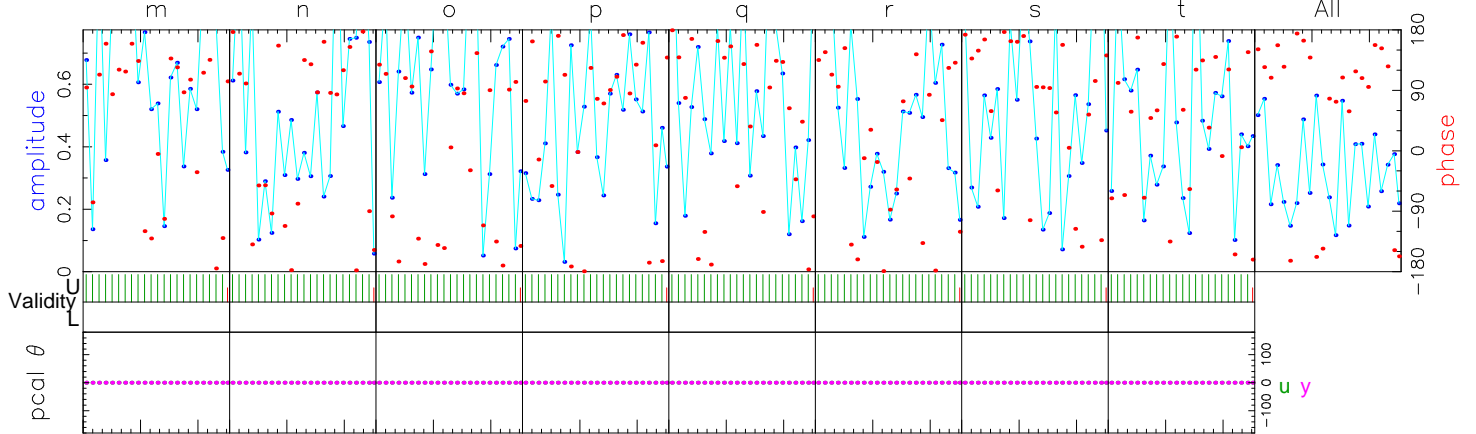


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105653
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
u	0	0	60000	0	0	0	4000	0		
y	0	0	60000	0	0	0	4000	0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-2.88779235390E+02				-2.88790099354E+02				86140.00	
Sband delay (usec)	-2.88777452104E+02				-5.0917435E+00				86460.00	
Phase delay (usec)	-2.88790094699E+02				1.6319997E-07					
Delay rate (us/s)	-3.11025332413E-03				-3.11033253804E-03					
Total phase (deg)			87.4		-1.48807153221E-06					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
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								

ph/seg (deg) 44.2 31.8 Amplitude 0.258 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.2 55.5 Search (1024X32) 0.248 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.6 18.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.2 32.7 Inc. seg. avg. 0.287 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 u: az 22.1 el 47.3 pa -118.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 47.125 -405.070 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/uy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/uy.W.367.3MP15Q

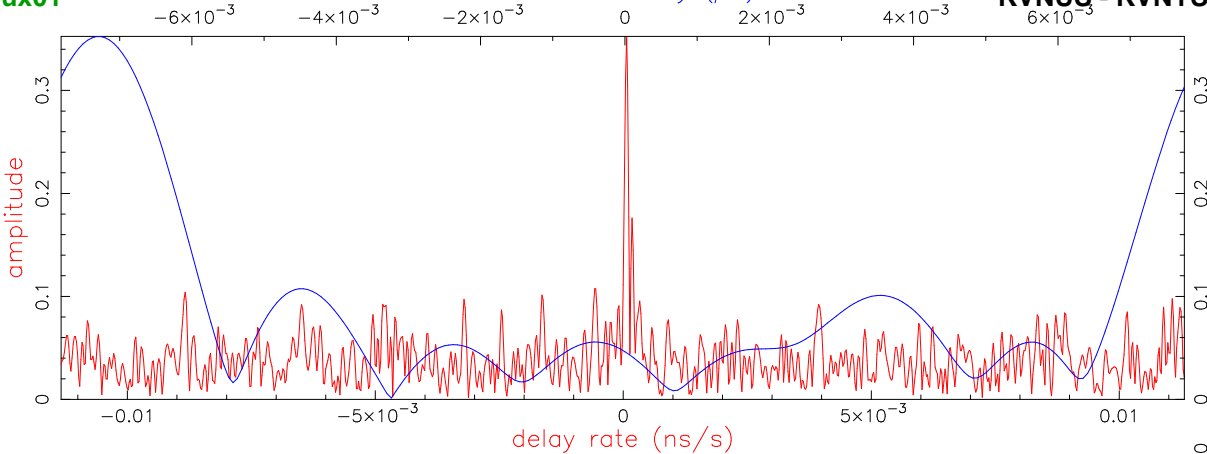
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, uy

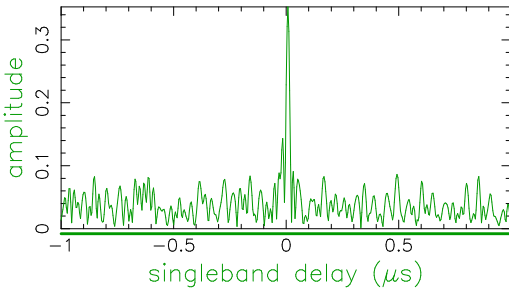
KVNU_S - KVNY_S, fgroup W, pol RL

multiband delay (μ s)

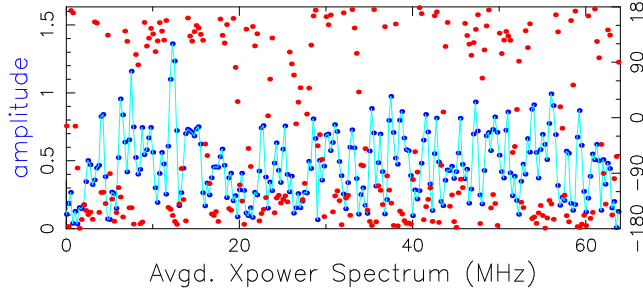


Fringe quality 9

SNR 11.8
 Int time 149.862
 Amp 0.352
 Phase -1.3
 PFD 9.7e-24
 Delays (us)
 SBD 0.007584
 MBD -0.007288
 Fringe rate (Hz)
 0.006395
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

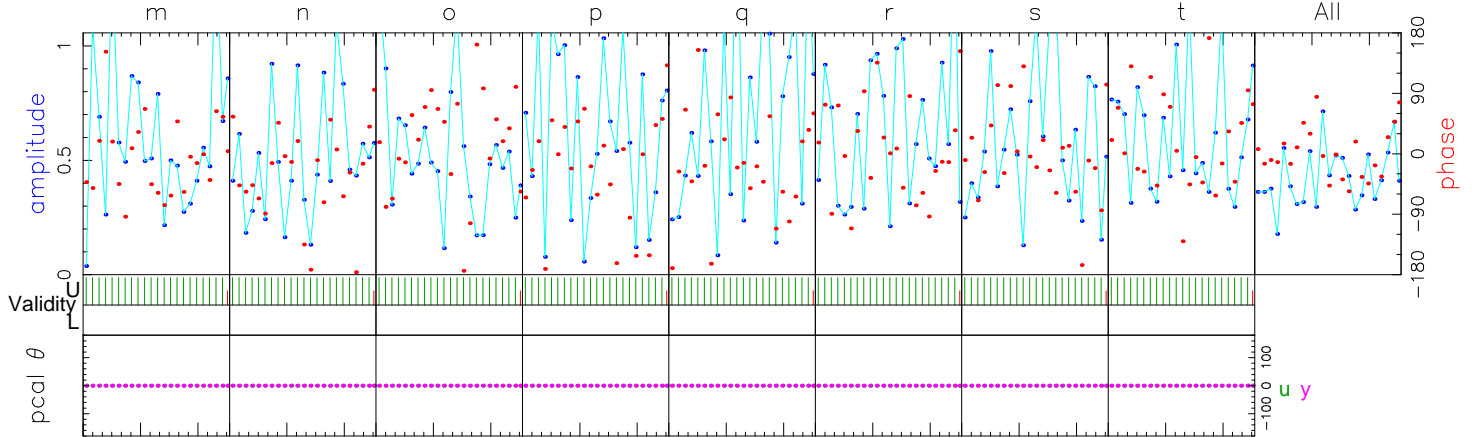


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105655
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
u	0	0	60000	0	0	0	4000	0		
y	0	0	60000	0	0	0	4000	0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-2.88781762045E+02	Apriori delay (usec)	-2.88790099354E+02	Resid mbdelay (usec)	-7.28769E-03	+/-	9.2E-05
Sband delay (usec)	-2.88782515354E+02	Apriori clock (usec)	-5.0917435E+00	Resid sbdelay (usec)	7.58400E-03	+/-	7.3E-04
Phase delay (usec)	-2.88790099395E+02	Apriori clockrate (us/s)	1.6319997E-07	Resid phdelay (usec)	-4.04858E-08	+/-	3.1E-07
Delay rate (us/s)	-3.11025829962E-03	Apriori rate (us/s)	-3.11033253804E-03	Resid rate (us/s)	7.42384E-08	+/-	3.6E-09
Total phase (deg)	-58.3	Apriori accel (us/s/s)	-1.48807153221E-06	Resid phase (deg)	-1.3	+/-	9.7

ph/seg (deg)	35.8	Theor.	23.3	Amplitude	0.352 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	41.6	Search (1024X32)	0.346	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	14.9	Inc. seg. avg.	0.394	Inc. frq. avg.	0.350	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	12.9	Inc. frq. avg.	0.350			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

u: az 22.1 el 47.3 pa -118.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 47.125 -405.070 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/uy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/uy.W.372.3MP15Q

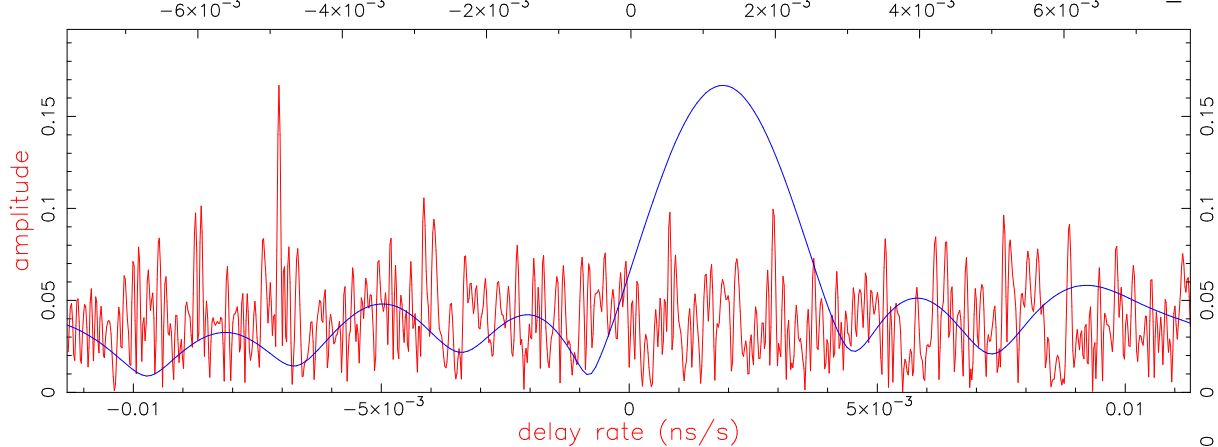
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yl

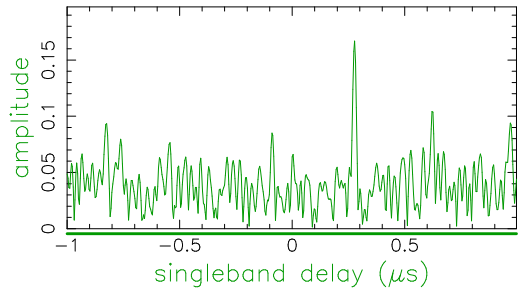
KVNS - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

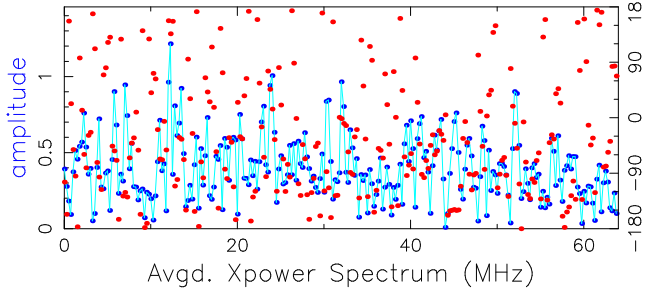


Fringe quality 0

SNR 5.6
 Int time 149.852
 Amp 0.197
 Phase -140.4
 PFD 9.3e-01
 Delays (us)
 SBD 0.276651
 MBD 0.001242
 Fringe rate (Hz)
 -0.608737
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

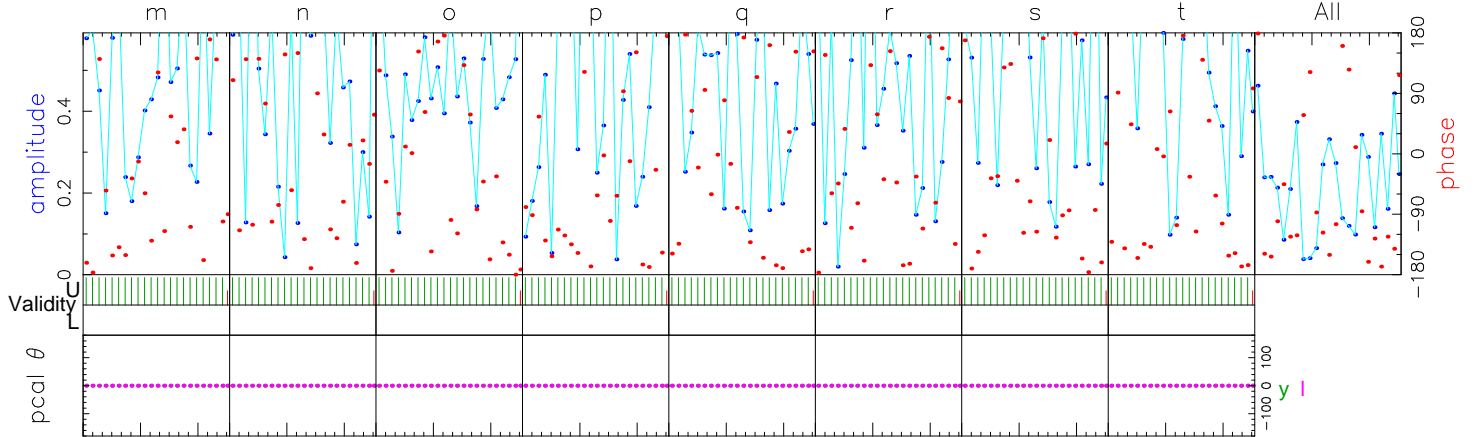


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105659
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-145.9	-113.7	-161.0	-133.2	-143.8	-167.7	-124.7	-140.5	Phase	-140.4
	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	44.5	419.1	1.6	383.7	135.3	467.1	327.7	67.9	Sbd box	327.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	2.96066526142E+03	Apriori delay (usec)	2.96038276922E+03	Resid mbdelay (usec)	1.24221E-03	+/-	1.9E-04
Sband delay (usec)	2.96065942022E+03	Apriori clock (usec)	1.4737329E+01	Resid sbdelay (usec)	2.76651E-01	+/-	1.5E-03
Phase delay (usec)	2.96038276469E+03	Apriori clockrate (us/s)	2.3356208E-07	Resid phdelay (usec)	-4.52698E-06	+/-	6.6E-07
Delay rate (us/s)	7.47583202641E-01	Apriori rate (us/s)	7.47590269471E-01	Resid rate (us/s)	-7.06683E-06	+/-	7.6E-09
Total phase (deg)	126.1	Apriori accel (us/s/s)	-1.30290984542E-05	Resid phase (deg)	-140.4	+/-	20.5

ph/seg (deg)	66.3	RMS	49.1	Theor.	66.3	Amplitude	0.197 +/- 0.035	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.6		85.6		80.6	Search (1024X32)	0.164	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.3		28.9		19.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.9		50.5		30.9	Inc. seg. avg.	0.192	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.181	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 23.5 el 48.4 pa -114.6 l: az 334.9 el 37.8 pa 88.1 u,v (fr/asec) -12444.630 -2561.277 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yl..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yl.W.384.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

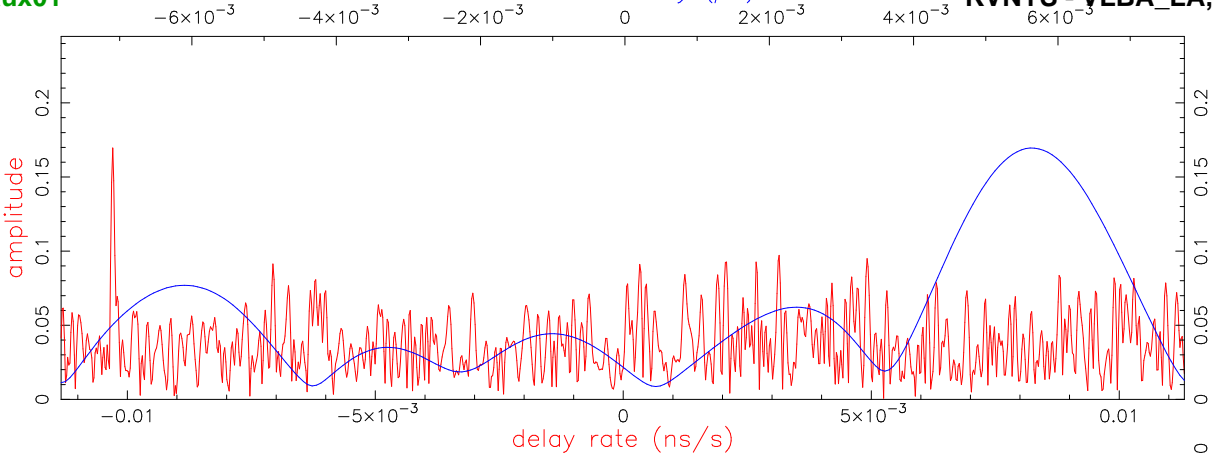
aux01

3C371.3MP15Q, No0901, yl

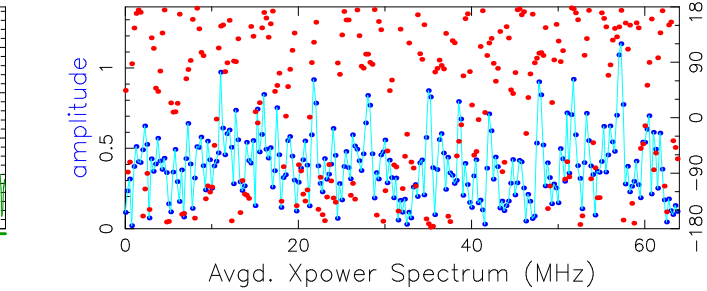
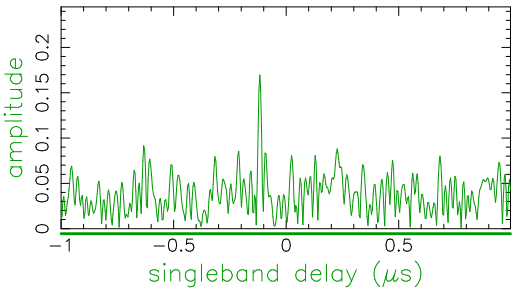
KVNYS - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

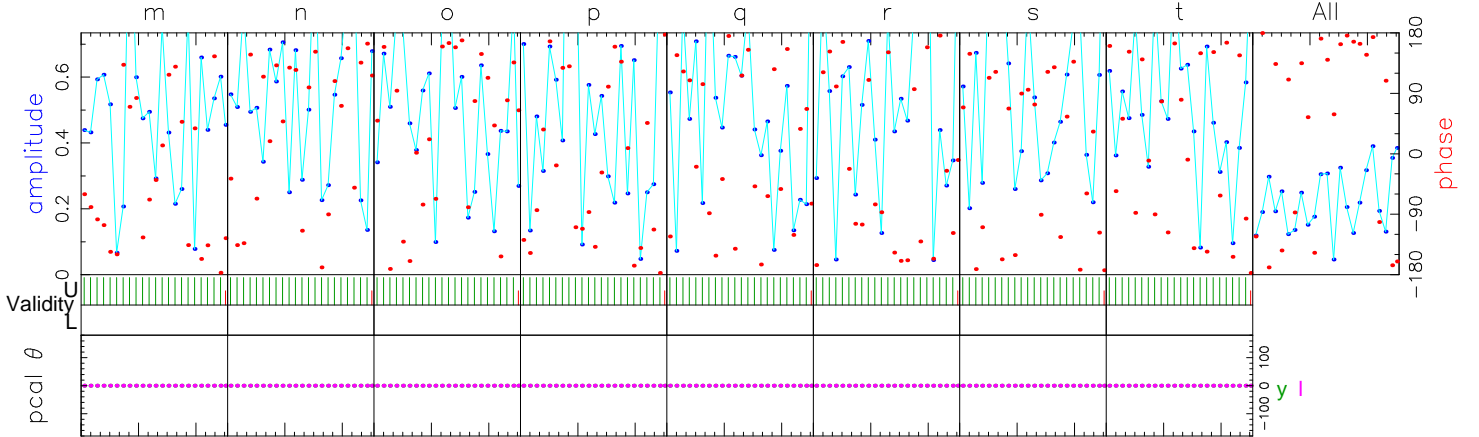


SNR 5.7
 Int time 149.852
 Amp 0.245
 Phase 172.4
 PFD 8.2e-01
 Delays (us)
 SBD -0.117137
 MBD 0.005639
 Fringe rate (Hz)
 -0.888897
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105702
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-141.8	137.0	150.9	-169.5	-145.1	176.4	141.1	-164.3	Phase	172.4
	0.2	0.2	0.4	0.3	0.2	0.4	0.4	0.2	Ampl.	0.2
	394.4	39.3	124.7	234.1	266.3	324.6	227.8	293.8	Sbd box	227.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	2.96026340779E+03	Apriori delay (usec)	2.96038276922E+03	Resid mbdelay (usec)	5.63858E-03	+/-	1.9E-04
Sband delay (usec)	2.96026563222E+03	Apriori clock (usec)	1.4737329E+01	Resid sbdelay (usec)	-1.17137E-01	+/-	1.5E-03
Phase delay (usec)	2.96038277478E+03	Apriori clockrate (us/s)	2.3356208E-07	Resid phdelay (usec)	5.56076E-06	+/-	6.5E-07
Delay rate (us/s)	7.47579950255E-01	Apriori rate (us/s)	7.47590269471E-01	Resid rate (us/s)	-1.03192E-05	+/-	7.5E-09
Total phase (deg)	78.9	Apriori accel (us/s/s)	-1.30290984542E-05	Resid phase (deg)	172.4	+/-	20.2

ph/seg (deg)	54.2	Theor.	48.4	Amplitude	0.245 +/- 0.043	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	62.2	Search (1024X32)	0.168	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	35.3	Inc. seg. avg.	0.237	Inc. frq. avg.	0.246	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.7	Inc. frq. avg.	0.246			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

y: az 23.5 el 48.4 pa -114.6 l: az 334.9 el 37.8 pa 88.1 u,v (fr/asec) -12444.630 -2561.277 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yl..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yl.W.391.3MP15Q

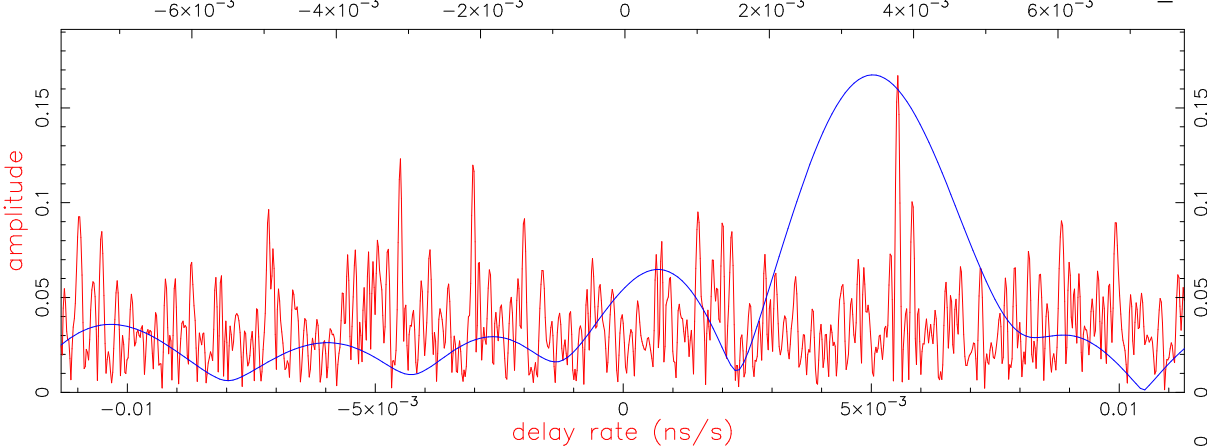
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yl

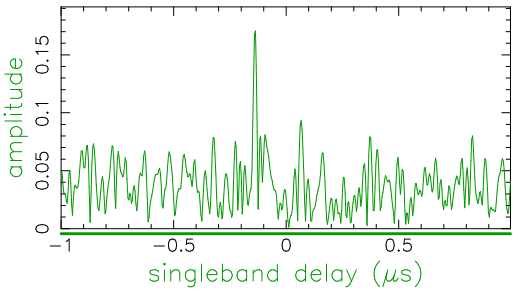
KVNS - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

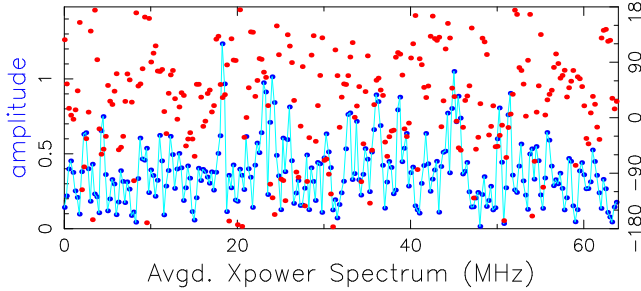


Fringe quality 0

SNR 5.8
 Int time 149.852
 Amp 0.191
 Phase -148.2
 PFD 5.7e-01
 Delays (us)
 SBD -0.138218
 MBD 0.003511
 Fringe rate (Hz)
 0.477114
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

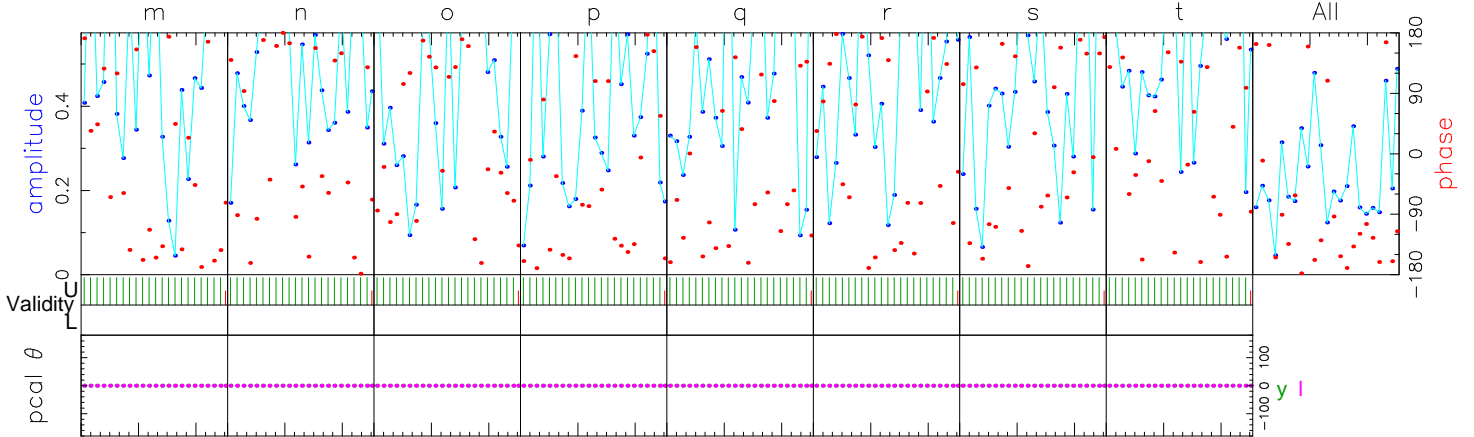


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105704
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-143.2	-158.7	-150.6	-141.6	-120.1	-149.2	-162.3	175.3	Phase	-148.2
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	222.4	70.6	21.3	425.3	218.9	110.3	223.0	309.6	Sbd box	221.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.96024565494E+03	Apriori delay (usec)	2.96038276922E+03	Resid mbdelay (usec)	3.51072E-03	+/-	1.9E-04
Sband delay (usec)	2.96024455122E+03	Apriori clock (usec)	1.4737329E+01	Resid sbdelay (usec)	-1.38218E-01	+/-	1.5E-03
Phase delay (usec)	2.96038276444E+03	Apriori clockrate (us/s)	2.3356208E-07	Resid phdelay (usec)	-4.77989E-06	+/-	6.4E-07
Delay rate (us/s)	7.47595808295E-01	Apriori rate (us/s)	7.47590269471E-01	Resid rate (us/s)	5.53882E-06	+/-	7.4E-09
Total phase (deg)	118.3	Apriori accel (us/s/s)	-1.30290984542E-05	Resid phase (deg)	-148.2	+/-	19.8

ph/seg (deg)	51.4	Theor.	47.4	Amplitude	0.191 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.1	Search (1024X32)	0.166	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.4	Inc. seg. avg.	0.192	Inc. frq. avg.	0.171	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.1	Inc. frq. avg.	0.171			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

y: az 23.5 el 48.4 pa -114.6 l: az 334.9 el 37.8 pa 88.1 u, v (fr/asec) -12444.630 -2561.277 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yl..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yl.W.397.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

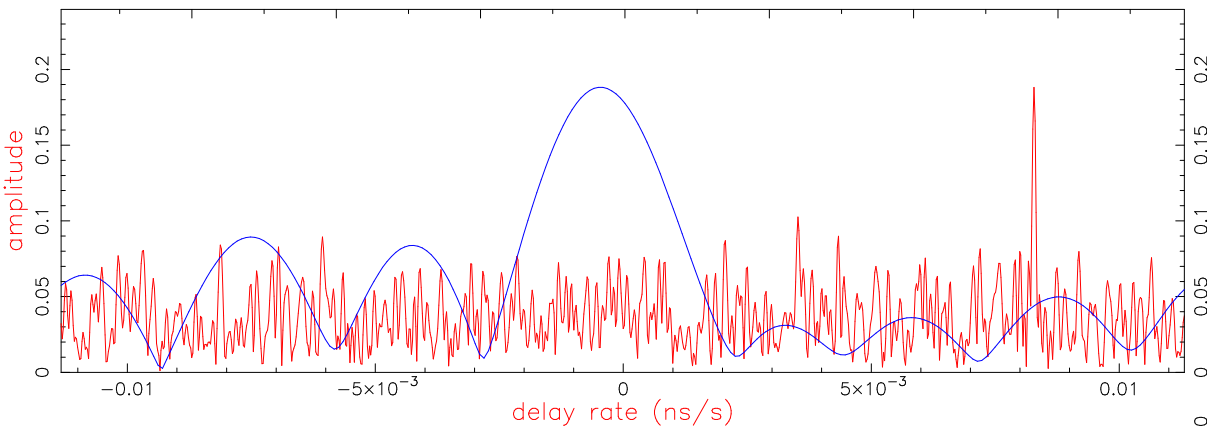
aux01

3C371.3MP15Q, No0901, yl

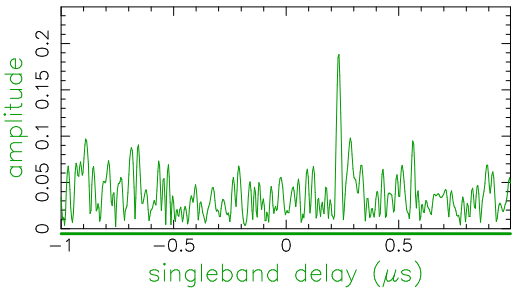
KVNYS - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

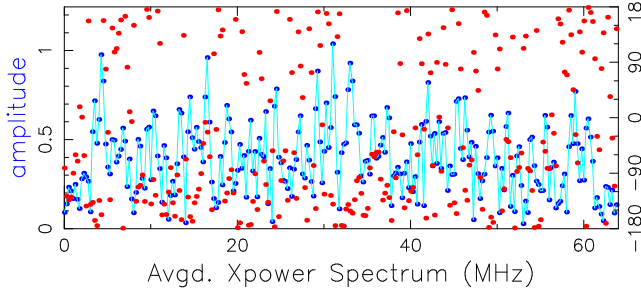
Fringe quality 0



SNR 6.4
 Int time 149.852
 Amp 0.240
 Phase 20.9
 PFD 2.6e-02
 Delays (us)
 SBD 0.232861
 MBD -0.000363
 Fringe rate (Hz)
 0.714942
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

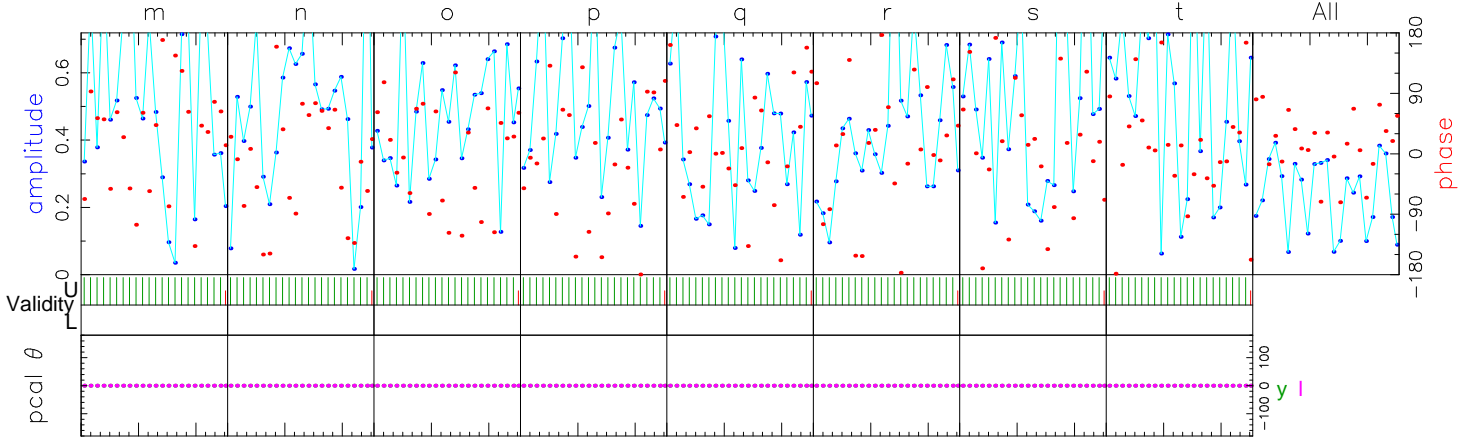


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105705
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	35.7	-7.7	14.3	20.0	15.4	37.4	59.5	8.0	Phase	20.9
	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.4	Ampl.	0.2
	81.1	80.7	202.2	11.9	202.6	246.2	33.7	47.3	Sbd box	316.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	

Group delay (usec) (SBD)	2.96061678144E+03	Apriori delay (usec)	2.96038276922E+03	Resid mbdelay (usec)	-3.62776E-04	+/-	1.7E-04
Sband delay (usec)	2.96061562997E+03	Apriori clock (usec)	1.4737329E+01	Resid sbdelay (usec)	2.32861E-01	+/-	1.4E-03
Phase delay (usec)	2.96038276989E+03	Apriori clockrate (us/s)	2.3356208E-07	Resid phdelay (usec)	6.73707E-07	+/-	5.8E-07
Delay rate (us/s)	7.47598569240E-01	Apriori rate (us/s)	7.47590269471E-01	Resid rate (us/s)	8.29977E-06	+/-	6.7E-09
Total phase (deg)	287.4	Apriori accel (us/s/s)	-1.30290984542E-05	Resid phase (deg)	20.9	+/-	18.0

ph/seg (deg)	44.9	RMS	43.2	Theor.	43.2	Amplitude	0.240 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.9	44.9	43.2	43.2	43.2	Search (1024X32)	0.187	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.5	31.6	44.4	44.4	44.4	Inc. seg. avg.	0.238	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.6	44.4	44.4	44.4	44.4	Inc. frq. avg.	0.228	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

y: az 23.5 el 48.4 pa -114.6 l: az 334.9 el 37.8 pa 88.1 u,v (fr/asec) -12444.630 -2561.277 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yl..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yl.W.402.3MP15Q

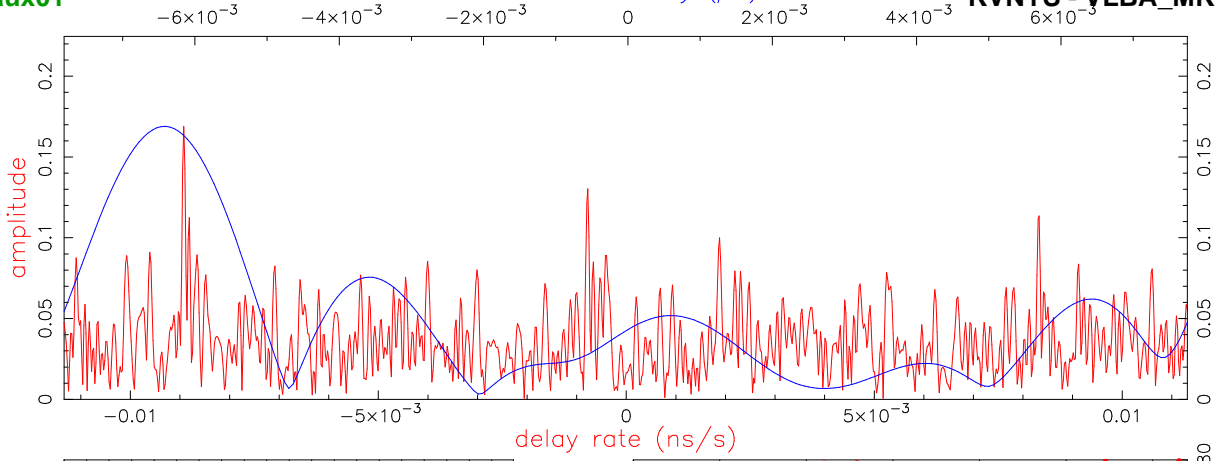
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ym

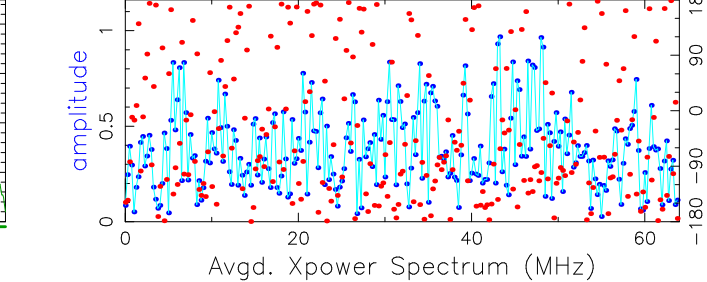
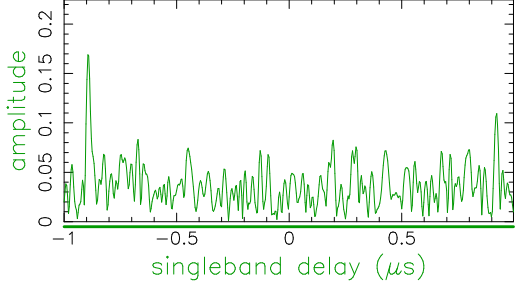
KVNYS - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)



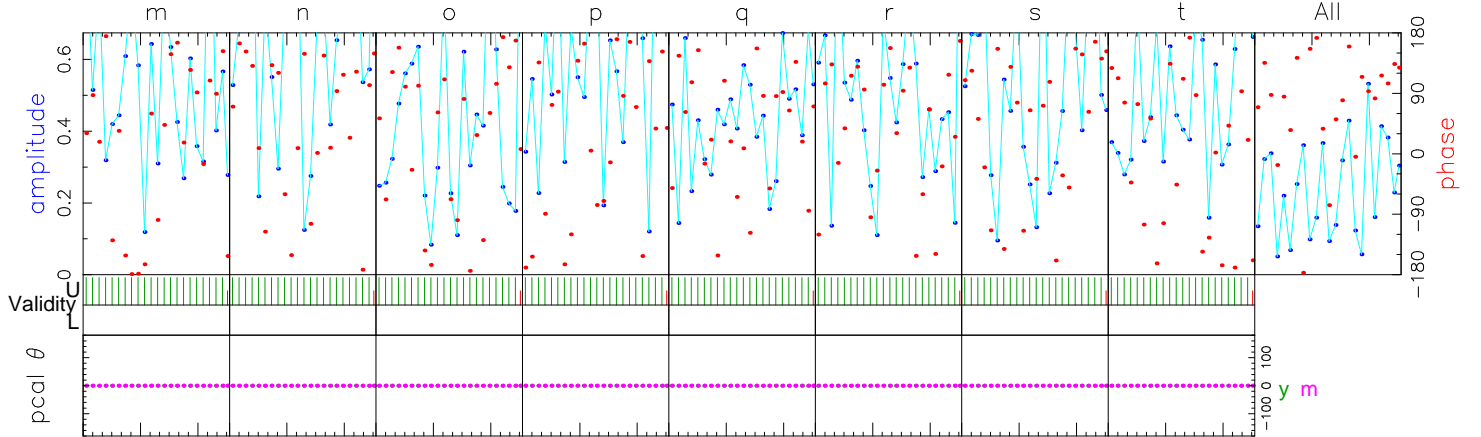
Fringe quality 0

SNR 5.7
 Int time 149.852
 Amp 0.225
 Phase 109.0
 PFD 6.8e-01
 Delays (us)
 SBD -0.892766
 MBD -0.006390
 Fringe rate (Hz)
 -0.768890
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105702
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y	0	0	60000	0	0	0	4000	0		
m	0	0	0	0	0	0	0	0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	3.05587218336E+03	Apriori delay (usec)	3.05676919845E+03	Resid mbdelay (usec)	-6.39010E-03	+/-	1.9E-04
Sband delay (usec)	3.05587643245E+03	Apriori clock (usec)	5.8878174E+00	Resid sbdelay (usec)	-8.92766E-01	+/-	1.5E-03
Phase delay (usec)	3.05676920197E+03	Apriori clockrate (us/s)	1.4061018E-08	Resid phdelay (usec)	3.51519E-06	+/-	6.4E-07
Delay rate (us/s)	5.60013943720E-01	Apriori rate (us/s)	5.60022869773E-01	Resid rate (us/s)	-8.92605E-06	+/-	7.4E-09
Total phase (deg)	20.7	Apriori accel (us/s/s)	1.23967786658E-05	Resid phase (deg)	109.0	+/-	20.0

ph/seg (deg)	64.8	Theor.	47.8	Amplitude	0.225 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	88.7	Search (1024X32)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	24.2	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.1	Inc. seg. avg.	0.233	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.207	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 23.5 el 48.4 pa -114.6 m: az 348.4 el 37.3 pa 146.6 u,v (fr/asec) -9258.612 3584.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ym..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ym.W.394.3MP15Q

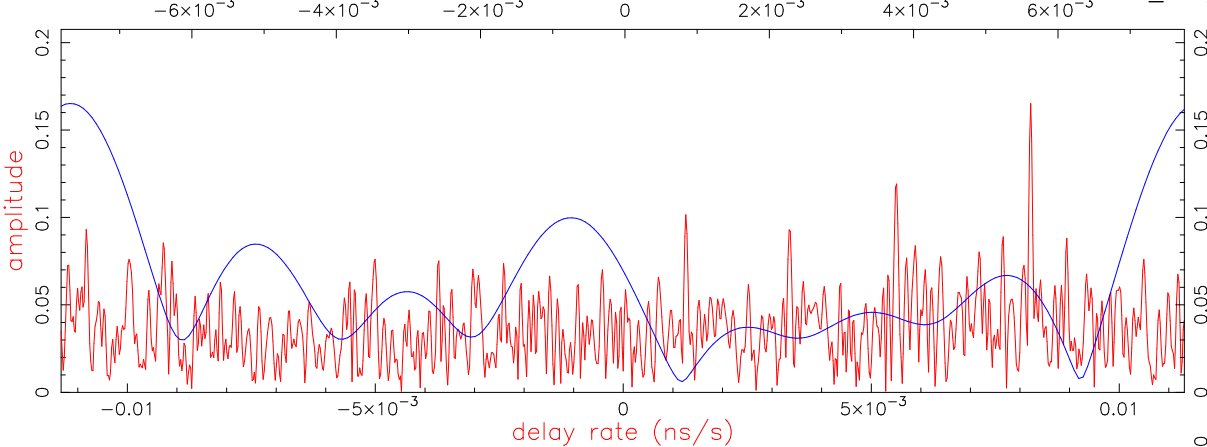
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ym

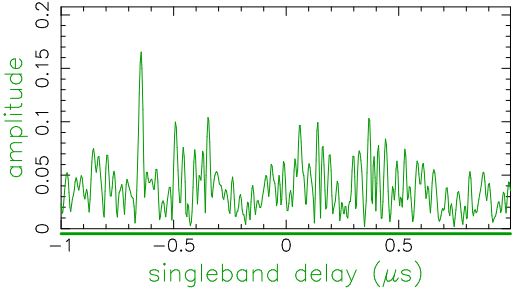
KVNS - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

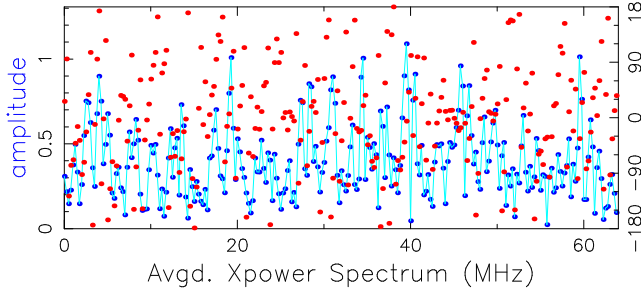


Fringe quality 0

SNR 5.5
 Int time 149.852
 Amp 0.208
 Phase 35.5
 PFD 9.8e-01
 Delays (us)
 SBD -0.644940
 MBD 0.007934
 Fringe rate (Hz)
 0.709529
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

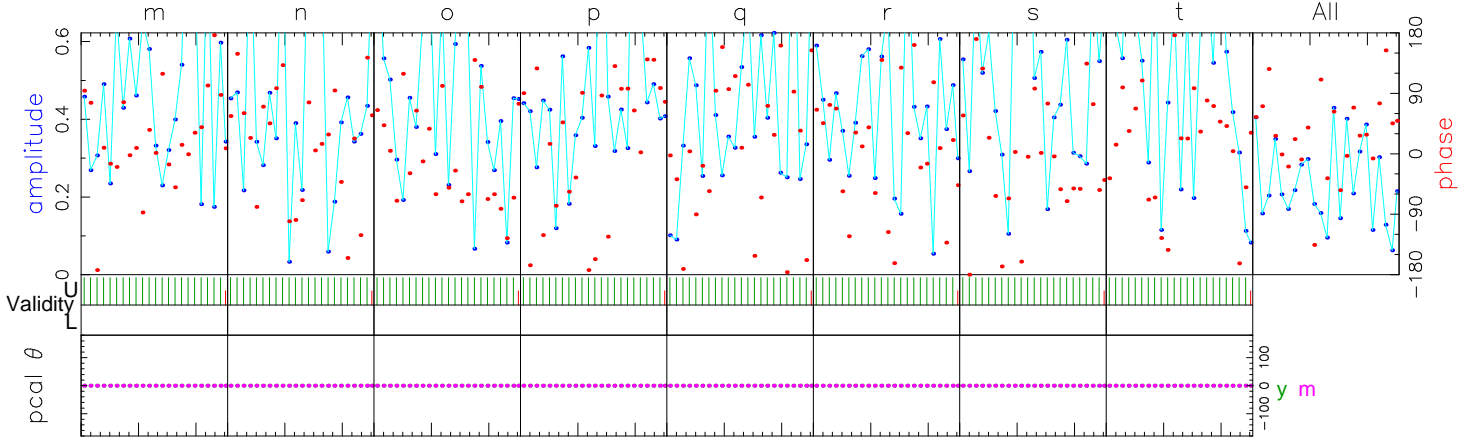


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105704
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	23.7	54.5	-4.5	95.3	71.3	25.7	-3.0	40.0	Phase	35.5
	0.4	0.2	0.3	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
	92.8	351.6	449.3	43.6	498.0	167.8	54.3	90.9	Sbd box	91.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.05612088198E+03	Apriori delay (usec)	3.05676919845E+03	Resid mbdelay (usec)	7.93353E-03	+/-	2.0E-04
Sband delay (usec)	3.05612425870E+03	Apriori clock (usec)	5.8878174E+00	Resid sbdelay (usec)	-6.44940E-01	+/-	1.6E-03
Phase delay (usec)	3.05676919960E+03	Apriori clockrate (us/s)	1.4061018E-08	Resid phdelay (usec)	1.14571E-06	+/-	6.7E-07
Delay rate (us/s)	5.60031106699E-01	Apriori rate (us/s)	5.60022869773E-01	Resid rate (us/s)	8.23693E-06	+/-	7.7E-09
Total phase (deg)	307.2	Apriori accel (us/s/s)	1.23967786658E-05	Resid phase (deg)	35.5	+/-	20.7

ph/seg (deg)	61.6	Theor.	49.6	Amplitude	0.208 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.4	Search (1024X32)	0.164	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.8	Inc. seg. avg.	0.216	Inc. frq. avg.	0.214	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.1	Inc. frq. avg.	0.214			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

y: az 23.5 el 48.4 pa -114.6 m: az 348.4 el 37.3 pa 146.6 u,v (fr/asec) -9258.612 3584.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ym..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ym.W.399.3MP15Q

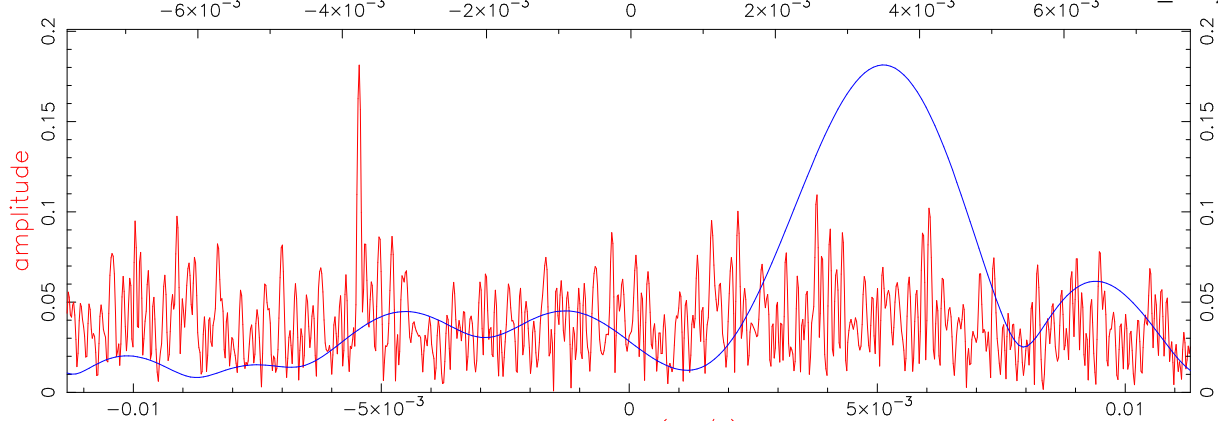
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ym

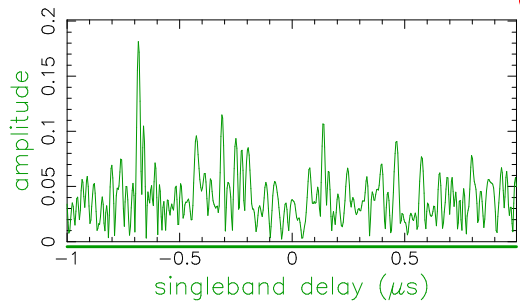
KVNYS - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

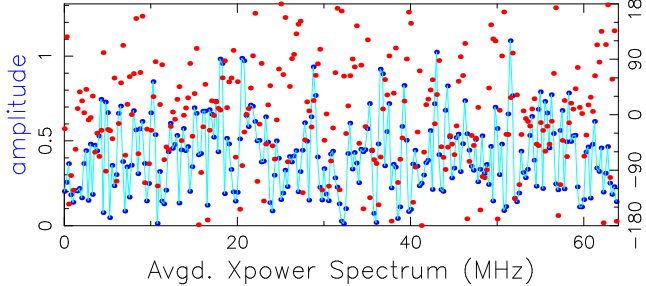


Fringe quality 0

SNR 6.1
 Int time 149.852
 Amp 0.201
 Phase 20.1
 PFD 1.2e-01
 Delays (us)
 SBD -0.682631
 MBD 0.003536
 Fringe rate (Hz)
 -0.470284
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

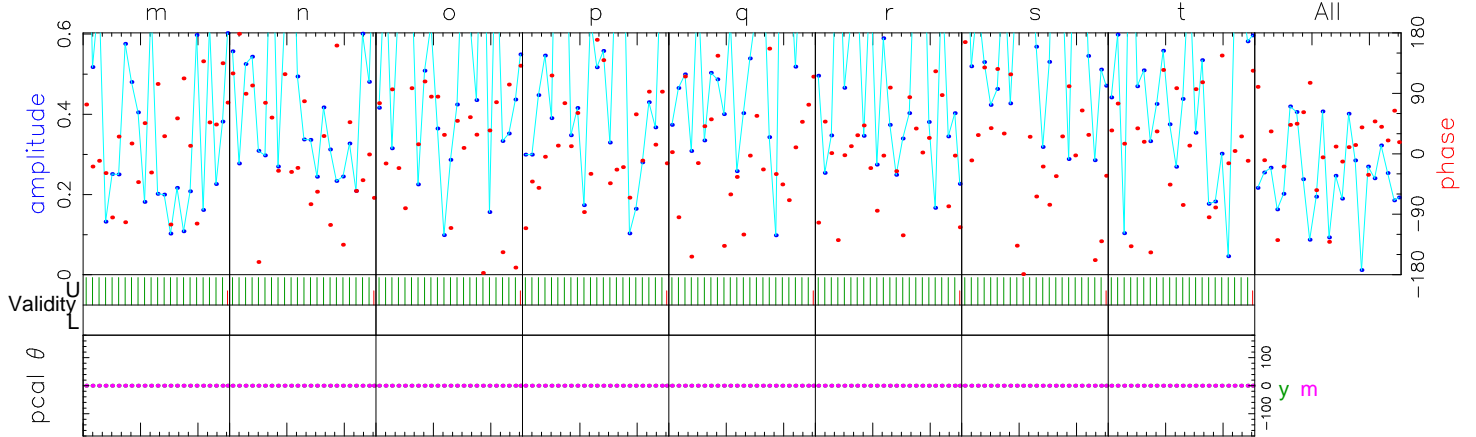


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105707
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	13.5	24.0	64.7	14.1	-3.6	6.0	23.8	34.7	Phase	20.1
	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	420.7	255.8	479.3	388.8	63.3	460.6	105.2	201.2	Sbd box	82.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.05608523423E+03	Apriori delay (usec)	3.05676919845E+03	Resid mbdelay (usec)	3.53577E-03	+/-	1.8E-04
Sband delay (usec)	3.05608656745E+03	Apriori clock (usec)	5.8878174E+00	Resid sbdelay (usec)	-6.82631E-01	+/-	1.4E-03
Phase delay (usec)	3.05676919910E+03	Apriori clockrate (us/s)	1.4061018E-08	Resid phdelay (usec)	6.47268E-07	+/-	6.0E-07
Delay rate (us/s)	5.60017410239E-01	Apriori rate (us/s)	5.60022869773E-01	Resid rate (us/s)	-5.45953E-06	+/-	7.0E-09
Total phase (deg)	291.7	Apriori accel (us/s/s)	1.23967786658E-05	Resid phase (deg)	20.1	+/-	18.8

ph/seg (deg)	RMS 58.6	Theor. 45.0	Amplitude Search (1024X32)	0.201 +/- 0.033	0.177	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.2	78.5	Interp.	0.000	0.204	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	22.6	26.5	Inc. seg. avg.	0.204	0.191	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	24.9	46.3	Inc. frq. avg.	0.191		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 m: az 348.4 el 37.3 pa 146.6 u,v (fr/asec) -9258.612 3584.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/ym..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/ym.W.408.3MP15Q

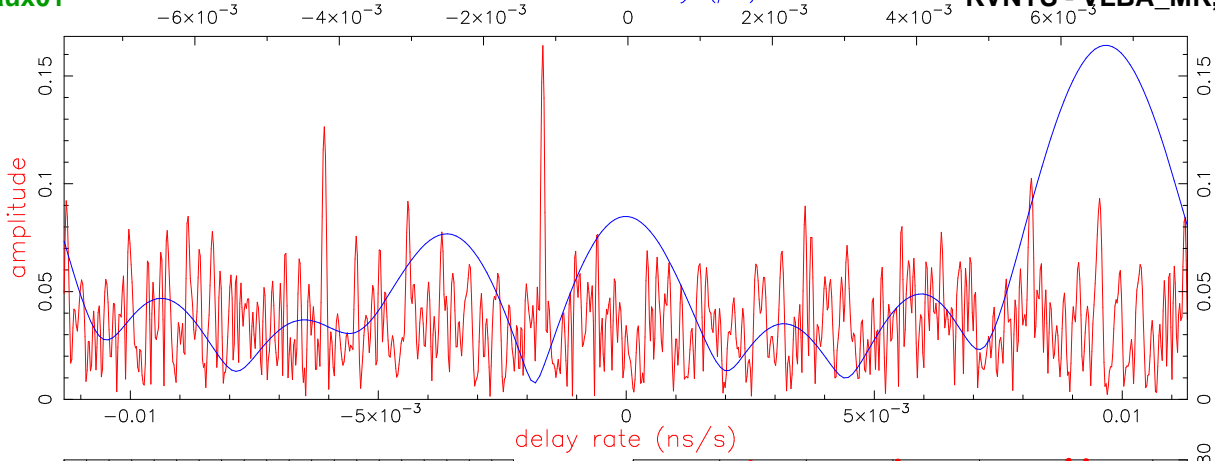
Mk4/DiFX fourfit 3.25 rev 0

aux01

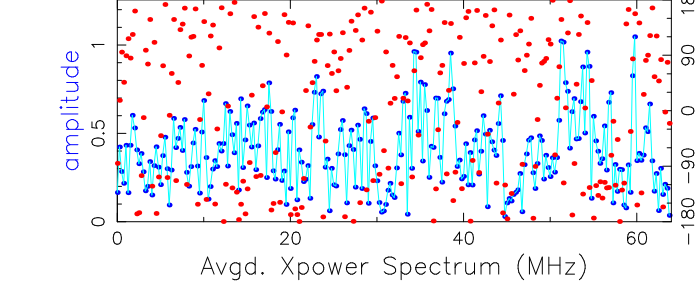
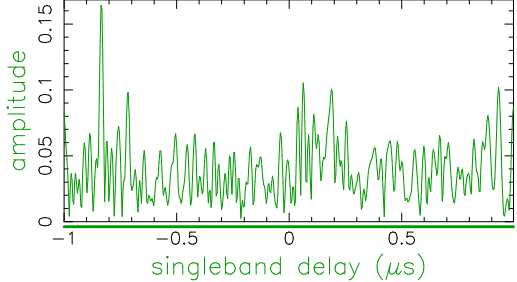
3C371.3MP15Q, No0901, ym

KVNYS - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

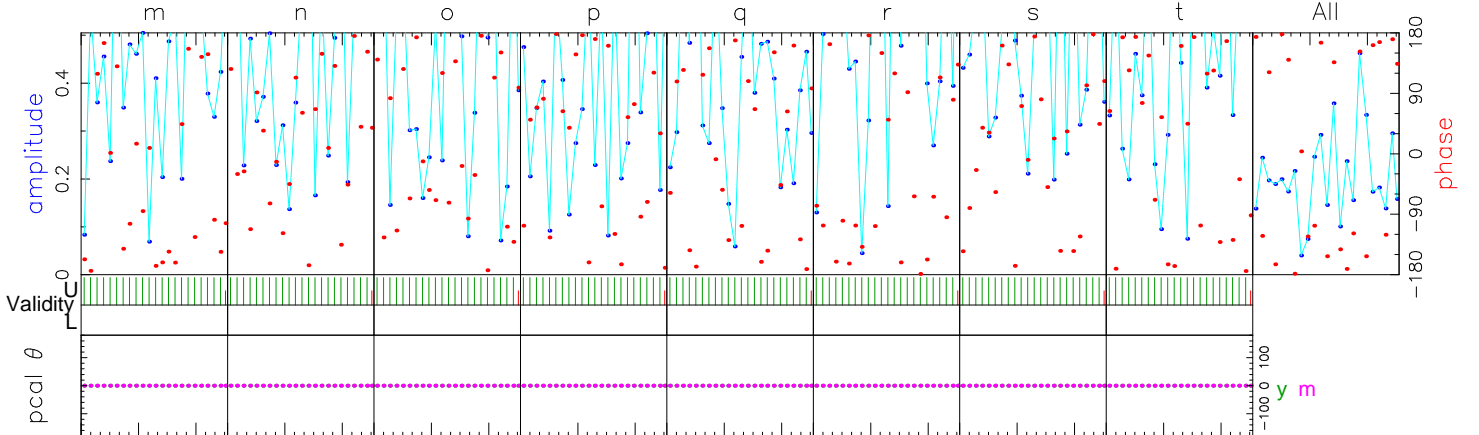


Fringe quality 0
 SNR 5.6
 Int time 149.852
 Amp 0.168
 Phase -178.6
 PFD 9.4e-01
 Delays (us)
 SBD -0.834312
 MBD 0.006660
 Fringe rate (Hz) -0.144465
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105709
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-168.2	134.6	-152.9	158.6	172.9	-169.1	156.4	-178.4	Phase	-178.6
	0.2	0.1	0.2	0.1	0.2	0.3	0.1	0.3	Ampl.	0.2
	15.1	87.4	379.5	417.7	27.1	43.7	274.1	255.5	Sbd box	43.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.05593210851E+03	Apriori delay (usec)	3.05676919845E+03	Resid mbdelay (usec)	6.66006E-03	+/-	1.9E-04
Sband delay (usec)	3.05593488595E+03	Apriori clock (usec)	5.8878174E+00	Resid sbdelay (usec)	-8.34312E-01	+/-	1.5E-03
Phase delay (usec)	3.05676919269E+03	Apriori clockrate (us/s)	1.4061018E-08	Resid phdelay (usec)	-5.75923E-06	+/-	6.6E-07
Delay rate (us/s)	5.60021192683E-01	Apriori rate (us/s)	5.60022869773E-01	Resid rate (us/s)	-1.67709E-06	+/-	7.6E-09
Total phase (deg)	93.1	Apriori accel (us/s/s)	1.23967786658E-05	Resid phase (deg)	-178.6	+/-	20.5

ph/seg (deg) 53.1 49.2 Search (1024X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.5 85.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.7 29.0 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.1 50.6 Inc. frq. avg. 0.154 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 y: az 23.5 el 48.4 pa -114.6 m: az 348.4 el 37.3 pa 146.6 u,v (fr/asec) -9258.612 3584.931 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/ym..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/ym.W.415.3MP15Q simultaneous interpolator

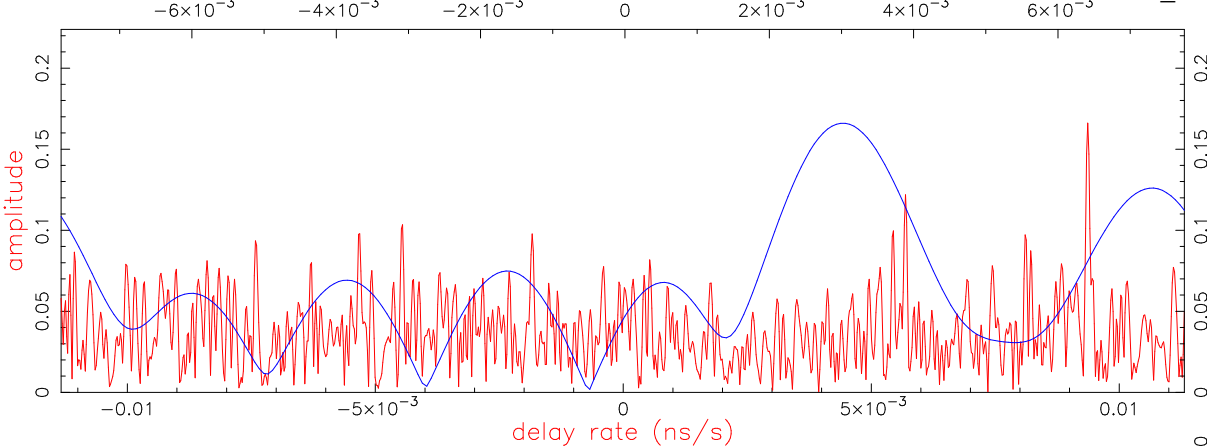
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yn

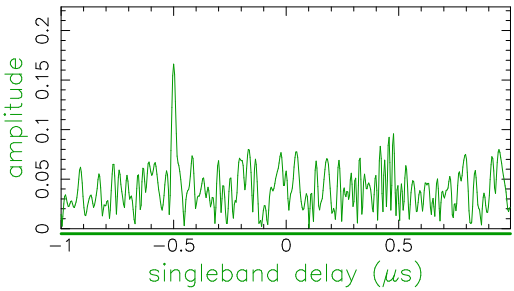
KVNYS - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

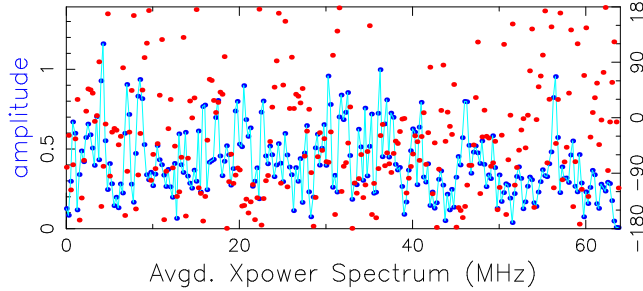


Fringe quality 0

SNR 5.6
 Int time 149.821
 Amp 0.224
 Phase -104.6
 PFD 9.6e-01
 Delays (us)
 SBD -0.499905
 MBD 0.003021
 Fringe rate (Hz)
 0.807255
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

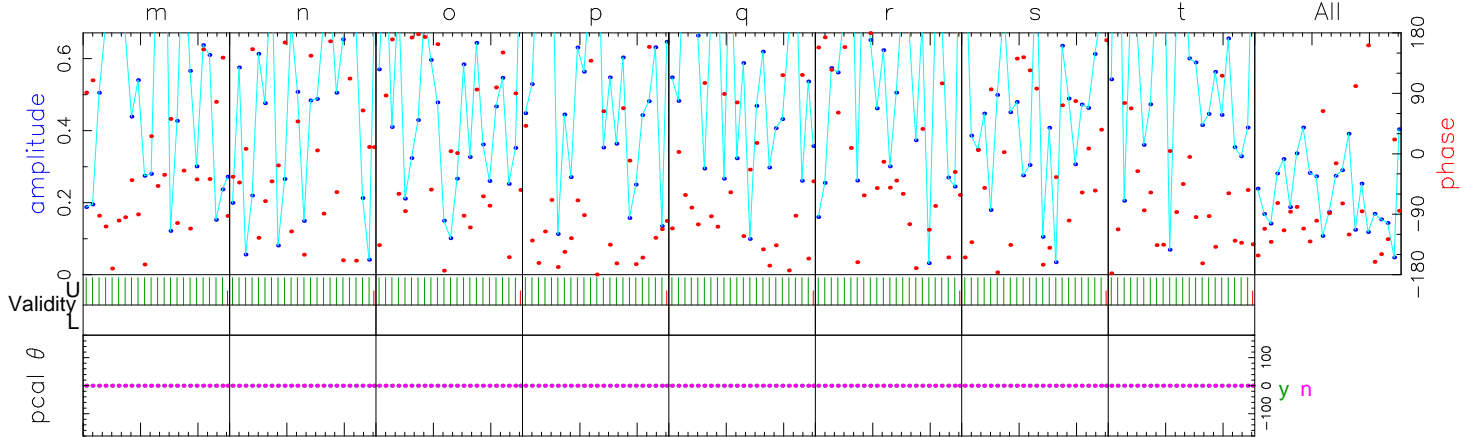


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105704
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-77.7	-109.5	-160.9	-140.4	-101.1	-53.7	153.9	-98.2	Phase	-104.6
	0.4	0.1	0.1	0.4	0.4	0.2	0.0	0.4	Ampl.	0.2
	153.1	266.7	221.8	274.9	302.0	501.0	180.7	129.1	Sbd box	129.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.83110401245E+03	Apriori delay (usec)	2.83160099166E+03	Resid mbdelay (usec)	3.02079E-03	+/-	2.0E-04
Sband delay (usec)	2.83110108616E+03	Apriori clock (usec)	6.7100697E+00	Resid sbdelay (usec)	-4.99905E-01	+/-	1.5E-03
Phase delay (usec)	2.83160098828E+03	Apriori clockrate (us/s)	-2.9769893E-07	Resid phdelay (usec)	-3.37248E-06	+/-	6.6E-07
Delay rate (us/s)	7.23139229249E-01	Apriori rate (us/s)	7.23129857820E-01	Resid rate (us/s)	9.37143E-06	+/-	7.7E-09
Total phase (deg)	47.1	Apriori accel (us/s/s)	-2.10063576838E-05	Resid phase (deg)	-104.6	+/-	20.6

ph/seg (deg)	66.1	Theor.	49.4	Amplitude	0.224 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.8	Search (1024X32)	0.163	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	55.0	Inc. seg. avg.	0.223	Inc. frq. avg.	0.229	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	66.1	Inc. frq. avg.	0.229			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

y: az 23.5 el 48.4 pa -114.6 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -12061.322 -4519.447 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yn..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yn.W.398.3MP15Q

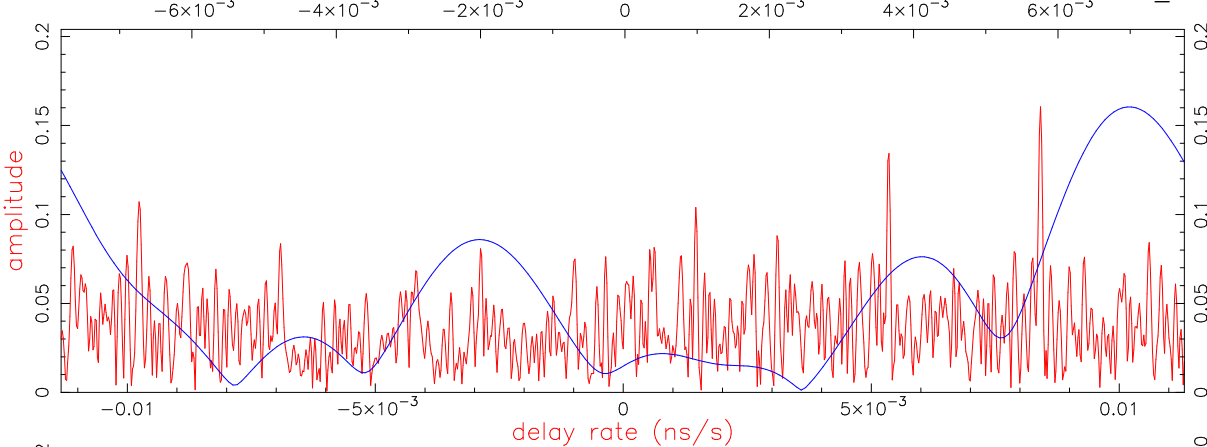
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yn

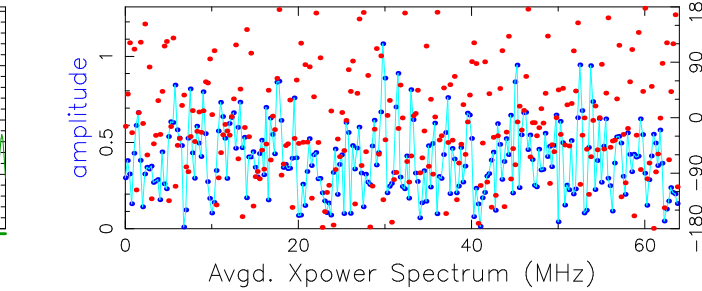
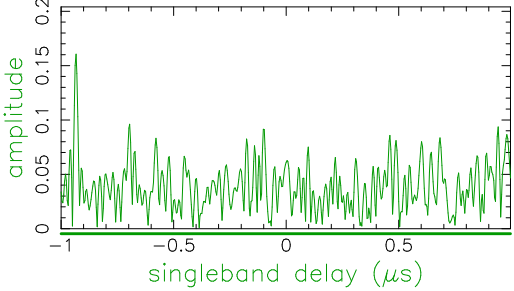
KVNYS - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)



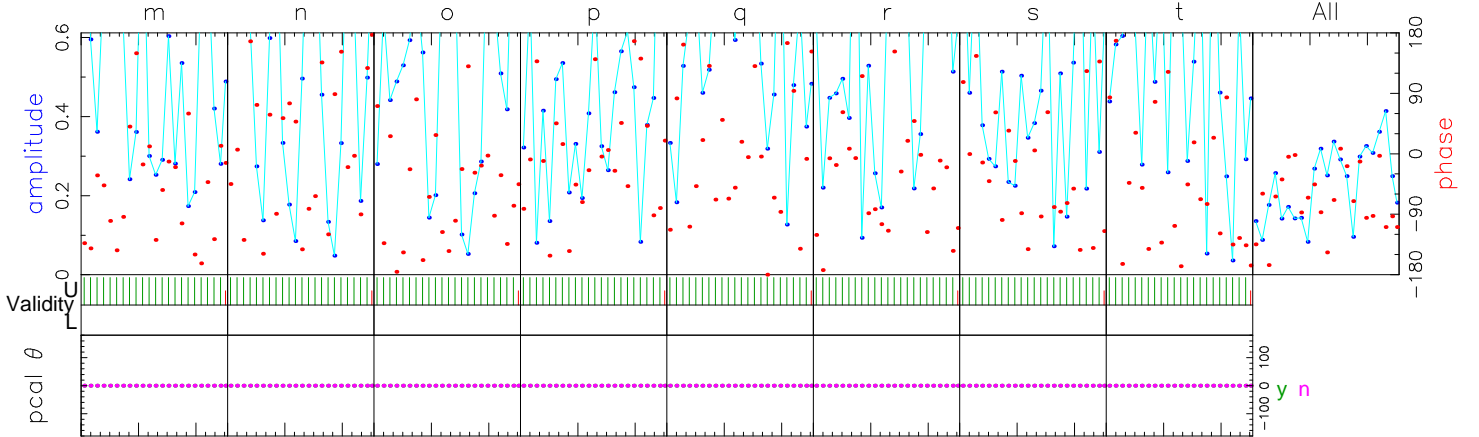
Fringe quality 0

SNR 5.4
 Int time 149.821
 Amp 0.204
 Phase -66.0
 PFD 1.0e+00
 Delays (us)
 SBD -0.934151
 MBD 0.006983
 Fringe rate (Hz)
 0.725226
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105706
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-80.5	-68.8	-86.2	-21.8	-49.0	-42.0	-105.5	-111.1	Phase	-66.0
	0.3	0.2	0.3	0.2	0.2	0.4	0.1	0.2	Ampl.	0.2
	18.3	369.8	363.1	395.4	484.3	17.6	401.1	228.1	Sbd box	17.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.83067047478E+03	Apriori delay (usec)	2.83160099166E+03	Resid mbdelay (usec)	6.98312E-03	+/-	2.0E-04
Sband delay (usec)	2.83066684066E+03	Apriori clock (usec)	6.7100697E+00	Resid sbdelay (usec)	-9.34151E-01	+/-	1.6E-03
Phase delay (usec)	2.83160098953E+03	Apriori clockrate (us/s)	-2.9769893E-07	Resid phdelay (usec)	-2.12978E-06	+/-	6.9E-07
Delay rate (us/s)	7.23138276980E-01	Apriori rate (us/s)	7.23129857820E-01	Resid rate (us/s)	8.41916E-06	+/-	7.9E-09
Total phase (deg)	85.6	Apriori accel (us/s/s)	-2.10063576838E-05	Resid phase (deg)	-66.0	+/-	21.3

ph/seg (deg)	47.6	Theor.	51.0	Search (1024X32)	0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.8		89.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.2		30.1	Inc. seg. avg.	0.210	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.8		52.5	Inc. frq. avg.	0.202	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -12061.322 -4519.447 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yn..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yn.W.405.3MP15Q

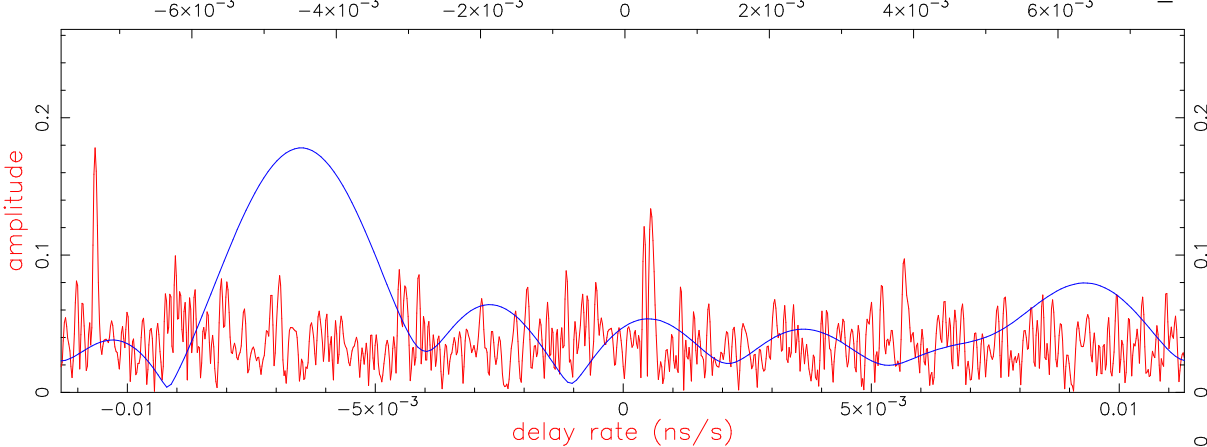
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yn

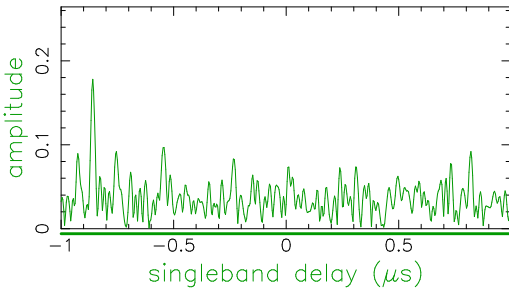
KVNYS - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

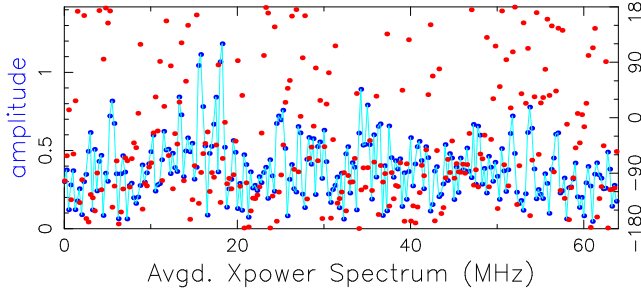


Fringe quality 0

SNR 6.0
 Int time 149.821
 Amp 0.264
 Phase 125.1
 PFD 2.8e-01
 Delays (us)
 SBD -0.859455
 MBD -0.004489
 Fringe rate (Hz)
 -0.918990
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

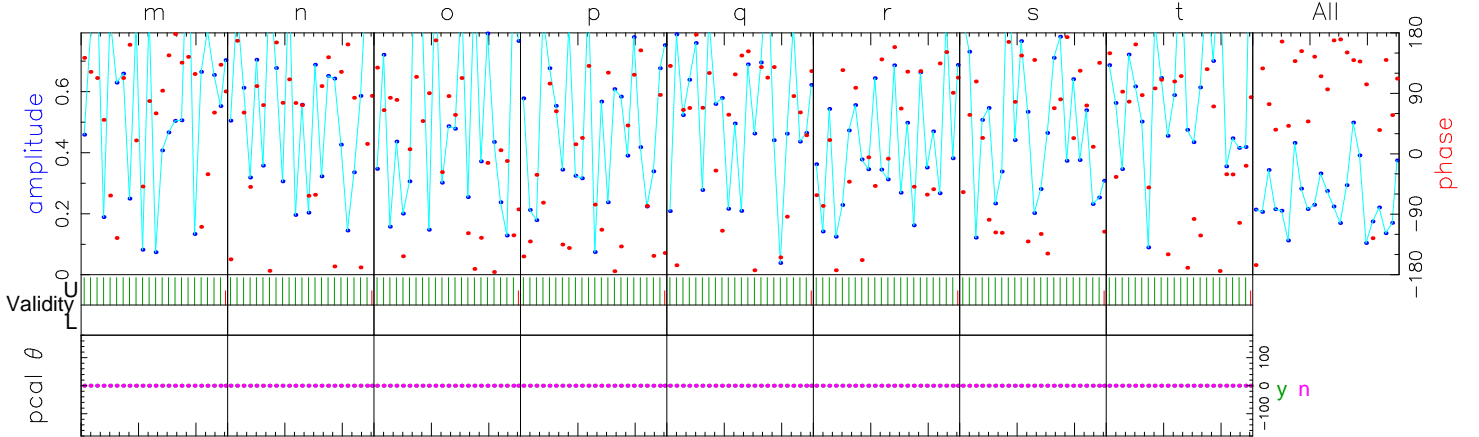


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105708
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	116.7	124.9	116.7	174.2	121.7	106.0	118.3	124.2	Phase	125.1
	0.3	0.4	0.2	0.2	0.4	0.1	0.2	0.4	Ampl.	0.2
	18.9	253.4	431.1	45.2	404.9	65.3	254.8	189.2	Sbd box	37.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.83073712722E+03	Apriori delay (usec)	2.83160099166E+03	Resid mbdelay (usec)	-4.48944E-03	+/-	1.8E-04
Sband delay (usec)	2.83074153666E+03	Apriori clock (usec)	6.7100697E+00	Resid sbdelay (usec)	-8.59455E-01	+/-	1.4E-03
Phase delay (usec)	2.83160099569E+03	Apriori clockrate (us/s)	-2.9769893E-07	Resid phdelay (usec)	4.03358E-06	+/-	6.2E-07
Delay rate (us/s)	7.23119189257E-01	Apriori rate (us/s)	7.23129857820E-01	Resid rate (us/s)	-1.06686E-05	+/-	7.2E-09
Total phase (deg)	276.8	Apriori accel (us/s/s)	-2.10063576838E-05	Resid phase (deg)	125.1	+/-	19.2

	RMS	Theor.	Amplitude	0.264 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.7	46.1	Search (1024X32)	0.172	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.1	80.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	22.2	27.2	Inc. seg. avg.	0.281	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
amp/frq (%)	38.9	47.5	Inc. frq. avg.	0.248	Data rate(Mb/s): 2048	t_cohere infinite			

y: az 23.5 el 48.4 pa -114.6 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -12061.322 -4519.447 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yn..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yn.W.411.3MP15Q

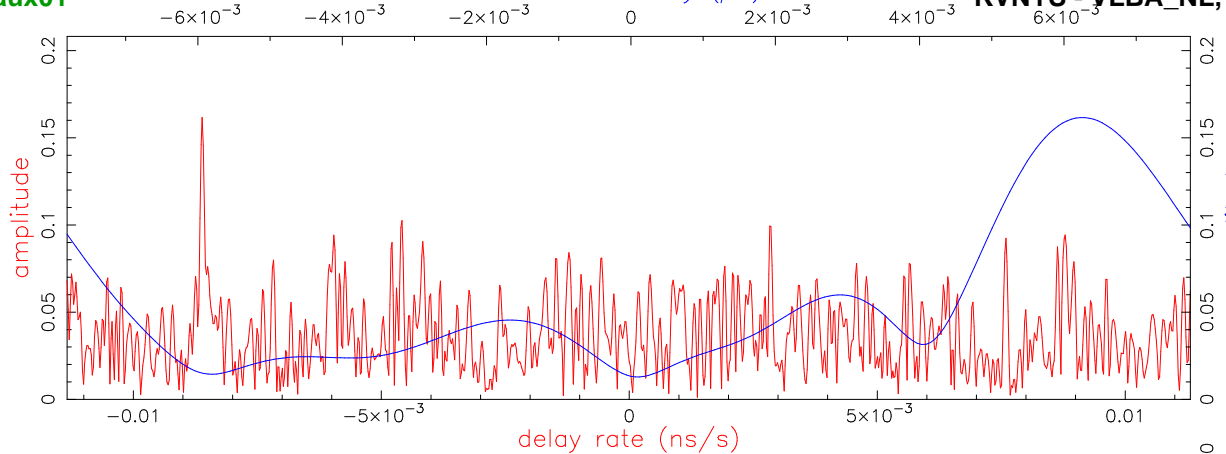
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yn

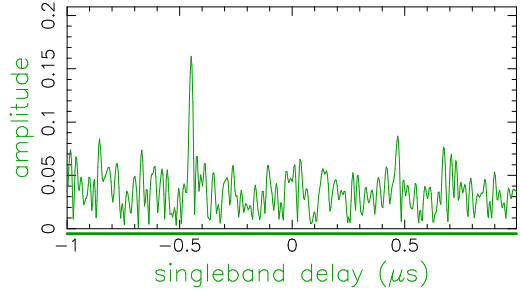
KVNYS - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

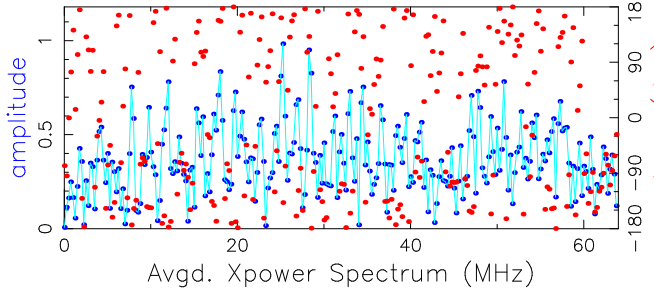


Fringe quality 0

SNR 5.4
 Int time 149.821
 Amp 0.208
 Phase -16.4
 PFD 1.0e+00
 Delays (us)
 SBD -0.448599
 MBD 0.006238
 Fringe rate (Hz)
 -0.743757
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

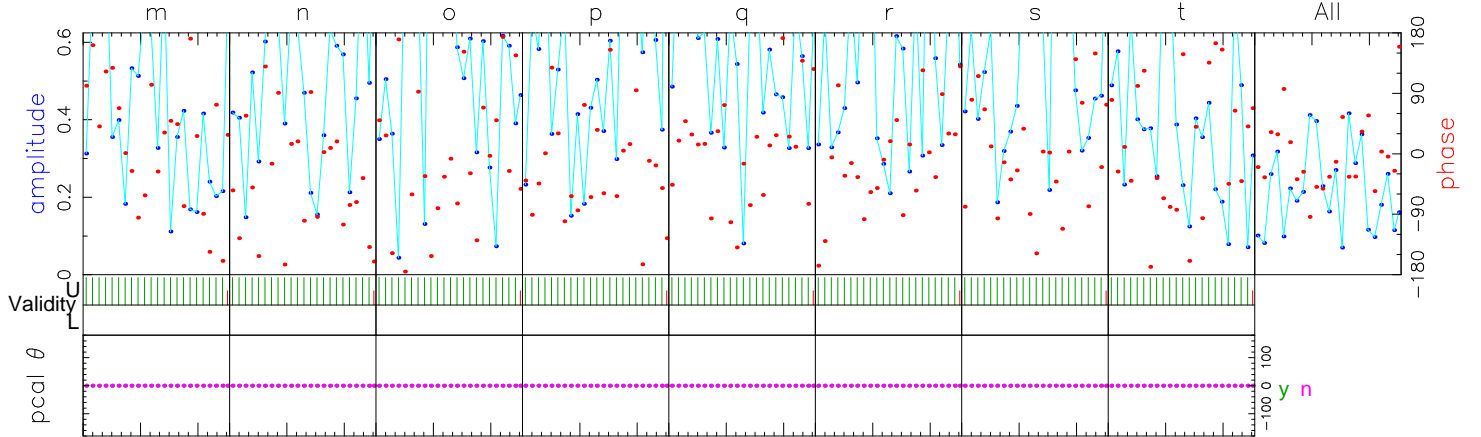


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105710
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y	0	0	60000	0	0	0	4000	0		
n	0	0	0	0	0	0	0	0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	2.83115410489E+03	Apriori delay (usec)	2.83160099166E+03	Resid mbdelay (usec)	6.23823E-03	+/-	2.0E-04
Sband delay (usec)	2.83115239266E+03	Apriori clock (usec)	6.7100697E+00	Resid sbdelay (usec)	-4.48599E-01	+/-	1.6E-03
Phase delay (usec)	2.83160099113E+03	Apriori clockrate (us/s)	-2.9769893E-07	Resid phdelay (usec)	-5.28268E-07	+/-	6.8E-07
Delay rate (us/s)	7.23121223534E-01	Apriori rate (us/s)	7.23129857820E-01	Resid rate (us/s)	-8.63429E-06	+/-	7.9E-09
Total phase (deg)	135.3	Apriori accel (us/s/s)	-2.10063576838E-05	Resid phase (deg)	-16.4	+/-	21.1

ph/seg (deg)	51.4	Theor.	50.7	Amplitude	0.208 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.6	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)	38.9	Inc. seg. avg.	0.203	Inc. frq. avg.	0.204	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.1	Inc. frq. avg.	0.204			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

y: az 23.5 el 48.4 pa -114.6 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -12061.322 -4519.447 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yn..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yn.W.419.3MP15Q

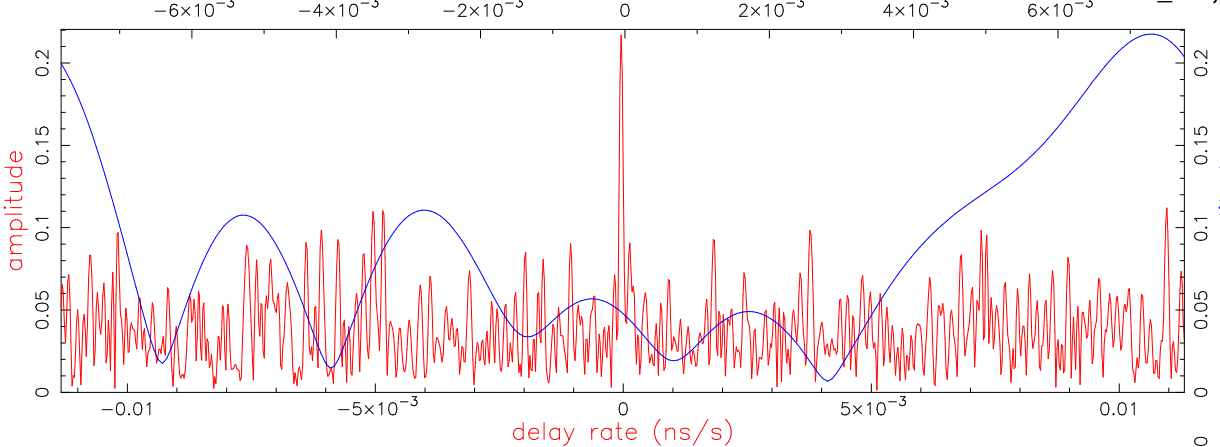
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yo

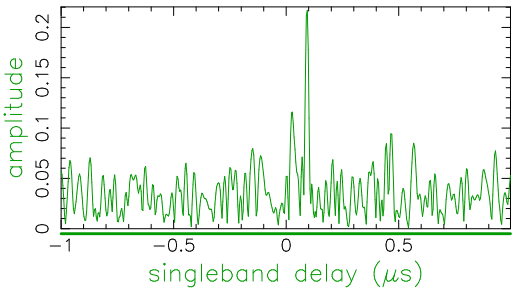
KVNYS - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

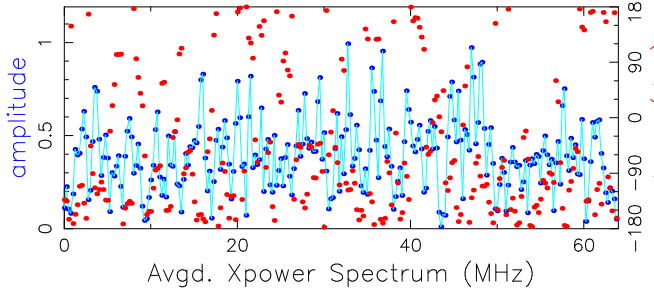


Fringe quality 9

SNR 7.4
 Int time 149.850
 Amp 0.220
 Phase 128.6
 PFD 2.5e-05
 Delays (us)
 SBD 0.092245
 MBD 0.007184
 Fringe rate (Hz)
 -0.003327
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

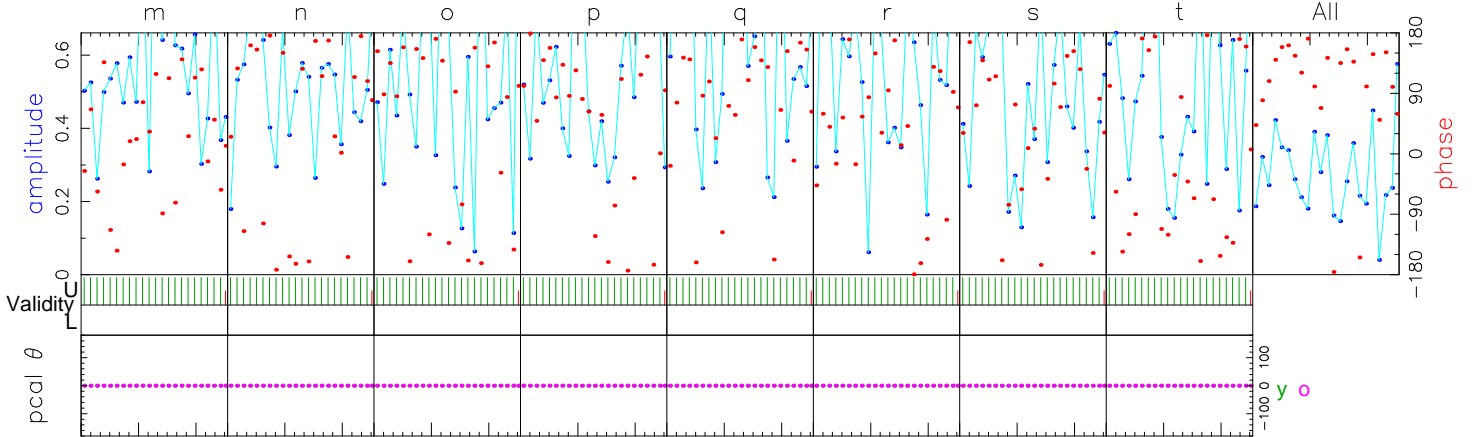


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105706
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	64.5	161.6	159.3	116.7	115.8	79.8	106.6	-147.2	Phase	128.6
	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.2	Ampl.	0.3
	283.0	281.5	279.6	280.4	280.4	262.9	176.7	282.3	Sbd box	280.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.38551389333E+03 Apriori delay (usec) 1.38542858455E+03 Resid mbdelay (usec) 7.18378E-03 +/- 1.5E-04
 Sband delay (usec) 1.38552082955E+03 Apriori clock (usec) -1.8635433E+01 Resid sbdelay (usec) 9.22450E-02 +/- 1.2E-03
 Phase delay (usec) 1.38542858870E+03 Apriori clockrate (us/s) -4.8171103E-07 Resid phdelay (usec) 4.14677E-06 +/- 5.0E-07
 Delay rate (us/s) 7.10801871126E-01 Apriori rate (us/s) 7.10801909748E-01 Resid rate (us/s) -3.86221E-08 +/- 5.8E-09
 Total phase (deg) 226.9 Apriori accel (us/s/s) -6.98761047084E-06 Resid phase (deg) 128.6 +/- 15.5

RMS Theor. Amplitude 0.220 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.3 37.2 Search (1024X32) 0.215 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.6 65.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 52.3 22.0 Inc. seg. avg. 0.225 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 42.9 38.3 Inc. frq. avg. 0.265 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 23.5 el 48.4 pa -114.6 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -11818.369 -1339.743 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yo.W.407.3MP15Q

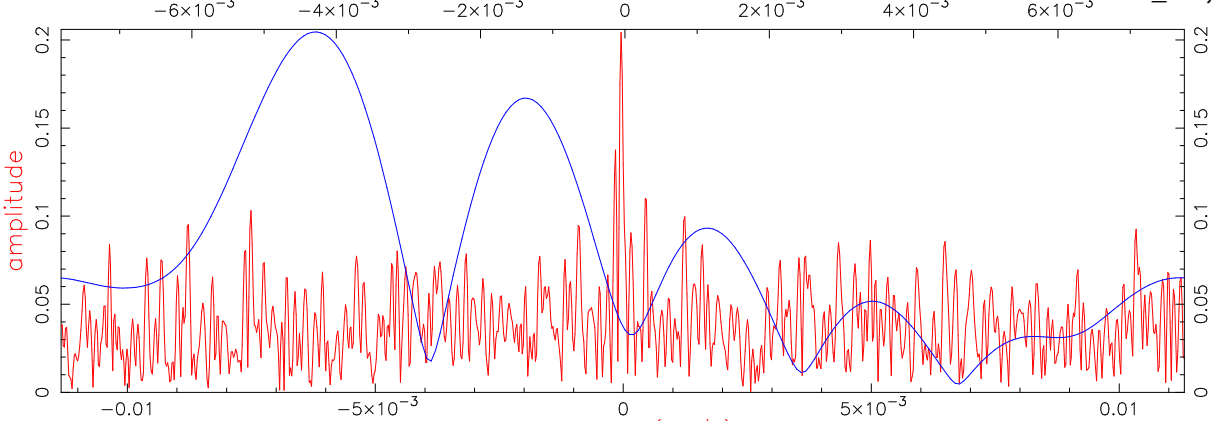
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yo

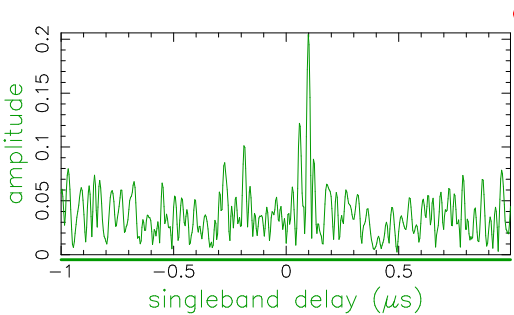
KVNYS - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

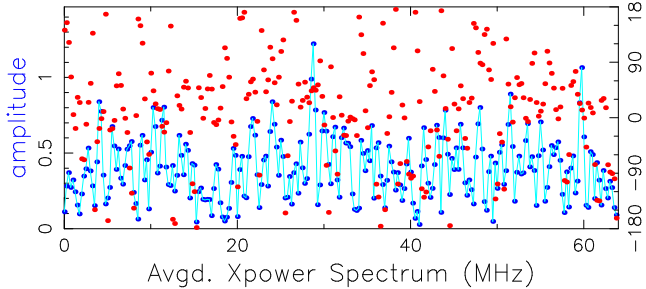


Fringe quality 0

SNR 6.9
 Int time 149.850
 Amp 0.206
 Phase 130.3
 PFD 8.0e-04
 Delays (us)
 SBD 0.098757
 MBD -0.004227
 Fringe rate (Hz)
 -0.003195
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

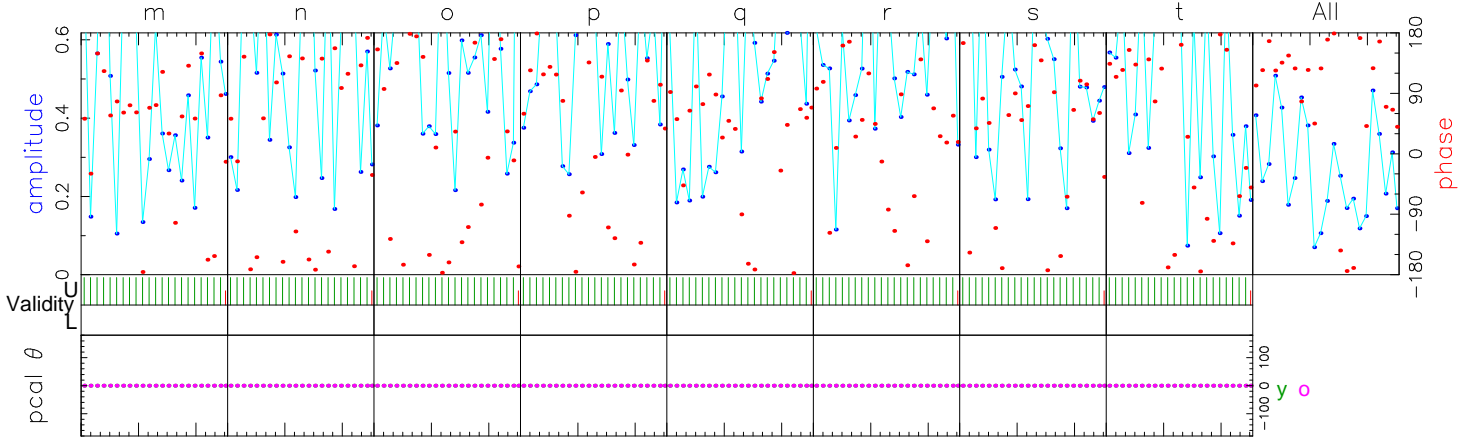


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105708
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y 0	0	0	60000	0	0	0	4000	0		
y:0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.38553373237E+03	Apriori delay (usec)	1.38542858455E+03	Resid mbdelay (usec)	-4.22719E-03	+/-	1.6E-04
Sband delay (usec)	1.38552734205E+03	Apriori clock (usec)	-1.8635433E+01	Resid sbdelay (usec)	9.87575E-02	+/-	1.2E-03
Phase delay (usec)	1.38542858875E+03	Apriori clockrate (us/s)	-4.8171103E-07	Resid phdelay (usec)	4.20077E-06	+/-	5.4E-07
Delay rate (us/s)	7.10801872659E-01	Apriori rate (us/s)	7.10801909748E-01	Resid rate (us/s)	-3.70887E-08	+/-	6.2E-09
Total phase (deg)	228.6	Apriori accel (us/s/s)	-6.98761047084E-06	Resid phase (deg)	130.3	+/-	16.6

ph/seg (deg)	48.8	RMS	Theor.	Amplitude	0.206 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.4	48.8	39.9	Search (1024X32)	0.201	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	45.6	68.4	69.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.9	45.6	23.5	Inc. seg. avg.	0.220	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
		40.9	41.0	Inc. frq. avg.	0.242	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

y: az 23.5 el 48.4 pa -114.6 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -11818.369 -1339.743 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yo.W.413.3MP15Q

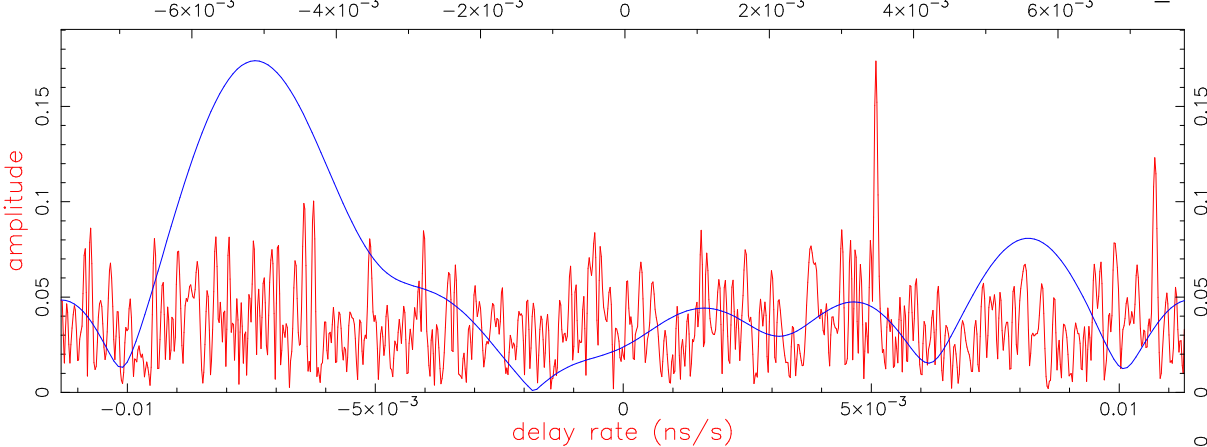
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yo

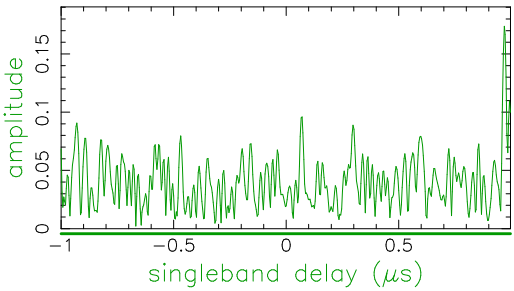
KVNYS - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

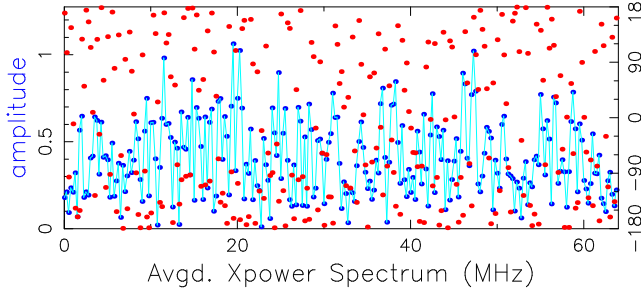


Fringe quality 0

SNR 5.9
 Int time 149.850
 Amp 0.190
 Phase -101.6
 PFD 4.5e-01
 Delays (us)
 SBD 0.969841
 MBD -0.005070
 Fringe rate (Hz)
 0.438565
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

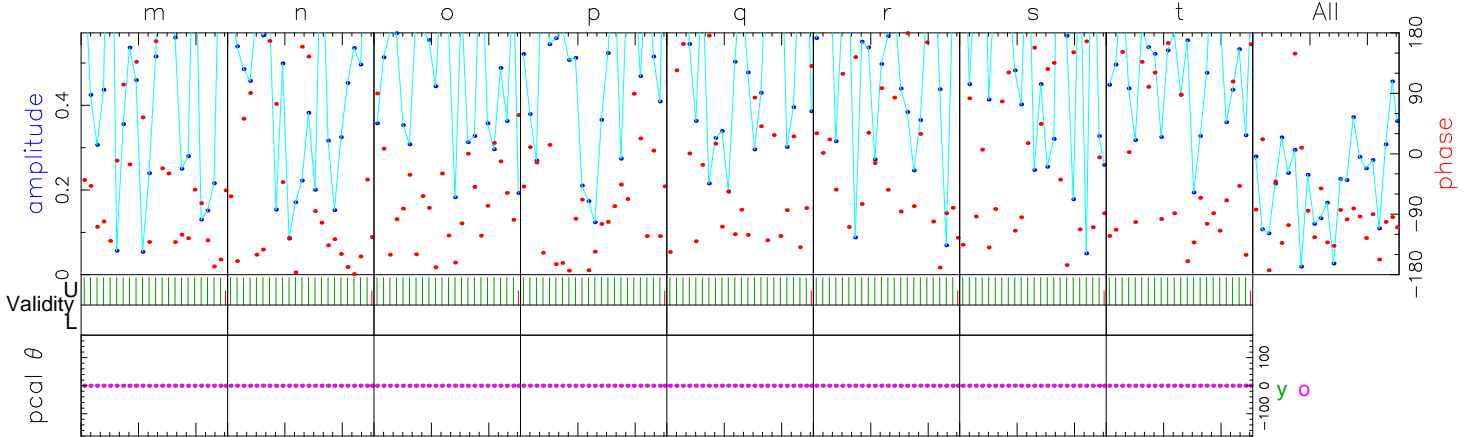


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105711
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.5	-138.5	-83.6	-90.1	-110.4	-51.0	-87.7	-139.7	Phase	-101.6
	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.2	Ampl.	0.2
	111.2	105.0	113.7	276.4	290.2	71.9	170.1	399.0	Sbd box	505.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.38639226505E+03	Apriori delay (usec)	1.38542858455E+03	Resid mbdelay (usec)	-5.06950E-03	+/-	1.9E-04
Sband delay (usec)	1.38639842530E+03	Apriori clock (usec)	-1.8635433E+01	Resid sbdelay (usec)	9.69841E-01	+/-	1.5E-03
Phase delay (usec)	1.38542858127E+03	Apriori clockrate (us/s)	-4.8171103E-07	Resid phdelay (usec)	-3.27510E-06	+/-	6.3E-07
Delay rate (us/s)	7.10807001049E-01	Apriori rate (us/s)	7.10801909748E-01	Resid rate (us/s)	5.09130E-06	+/-	7.3E-09
Total phase (deg)	-3.2	Apriori accel (us/s/s)	-6.98761047084E-06	Resid phase (deg)	-101.6	+/-	19.6

ph/seg (deg)	RMS 51.5	Theor. 46.9	Amplitude Search (1024X32)	0.171	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.8	81.9	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)	32.1	27.7	Inc. seg. avg.	0.179	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	48.3	Inc. frq. avg.	0.187	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -11818.369 -1339.743 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yo.W.420.3MP15Q

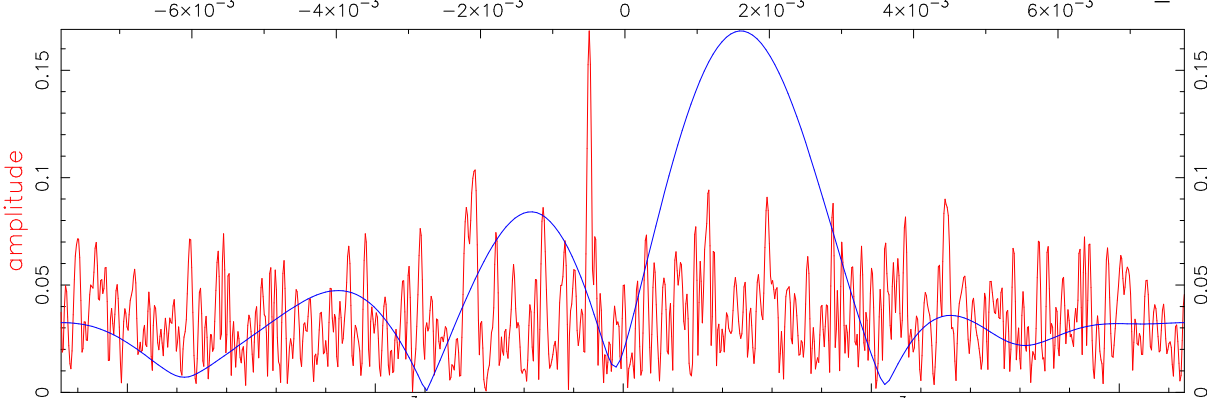
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yo

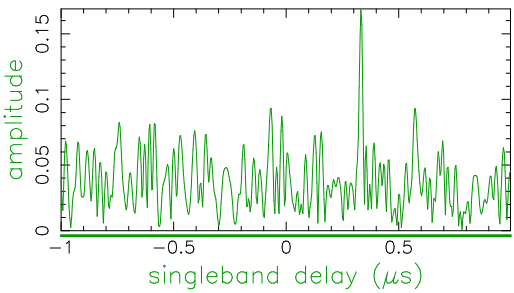
KVNYS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

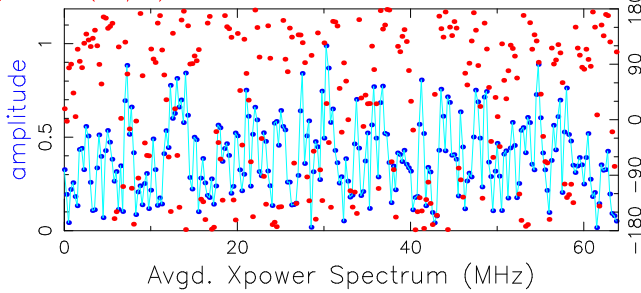


Fringe quality 0

SNR 5.6
 Int time 149.850
 Amp 0.169
 Phase 2.5
 PFD 8.6e-01
 Delays (us)
 SBD 0.332693
 MBD 0.001595
 Fringe rate (Hz)
 -0.058741
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

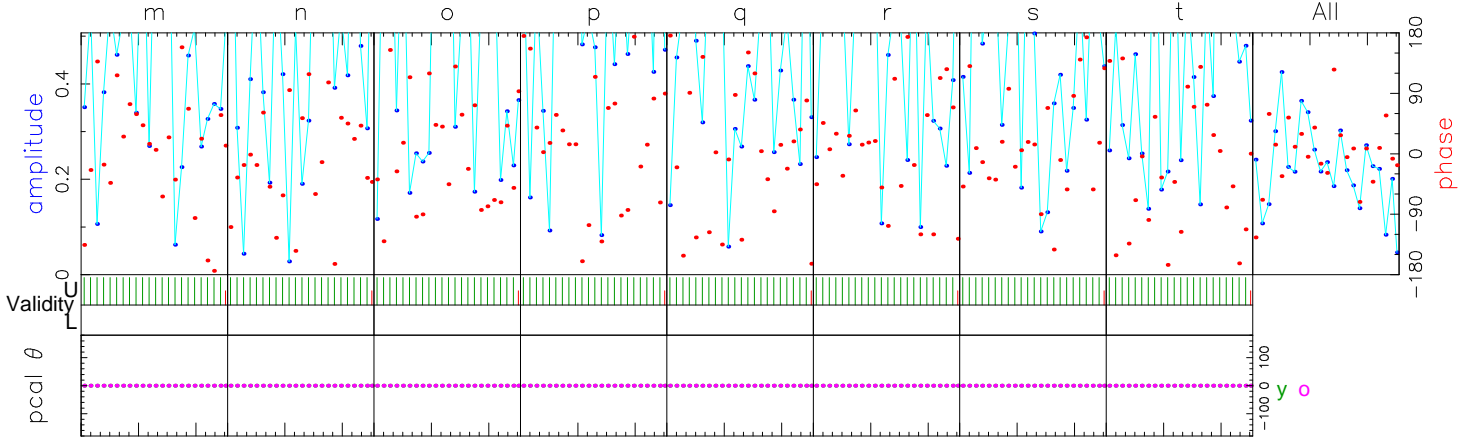


delay rate (ns/s)



Exp. c241a
 Yr:day 1234
 Start 2024:109
 Stop 2024:109
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105715
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y 0	0	0	60000	0	0	0	0	0		
y:0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	1.38575830443E+03	Apriori delay (usec)	1.38542858455E+03	Resid mbdelay (usec)	1.59488E-03	+/-	1.9E-04
Sband delay (usec)	1.38576127705E+03	Apriori clock (usec)	-1.8635433E+01	Resid sbdelay (usec)	3.32693E-01	+/-	1.5E-03
Phase delay (usec)	1.38542858463E+03	Apriori clockrate (us/s)	-4.8171103E-07	Resid phdelay (usec)	7.99120E-08	+/-	6.5E-07
Delay rate (us/s)	7.10801227826E-01	Apriori rate (us/s)	7.10801909748E-01	Resid rate (us/s)	-6.81922E-07	+/-	7.6E-09
Total phase (deg)	100.8	Apriori accel (us/s/s)	-6.98761047084E-06	Resid phase (deg)	2.5	+/-	20.3

ph/seg (deg)	50.9	Theor.	48.6	Amplitude	0.169 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	60.6	Search (1024X32)	0.165	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	18.3	Inc. seg. avg.	0.168	Inc. frq. avg.	0.156	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.7	Inc. frq. avg.	0.156			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 23.5 el 48.4 pa -114.6 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -11818.369 -1339.743 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yo.W.425.3MP15Q

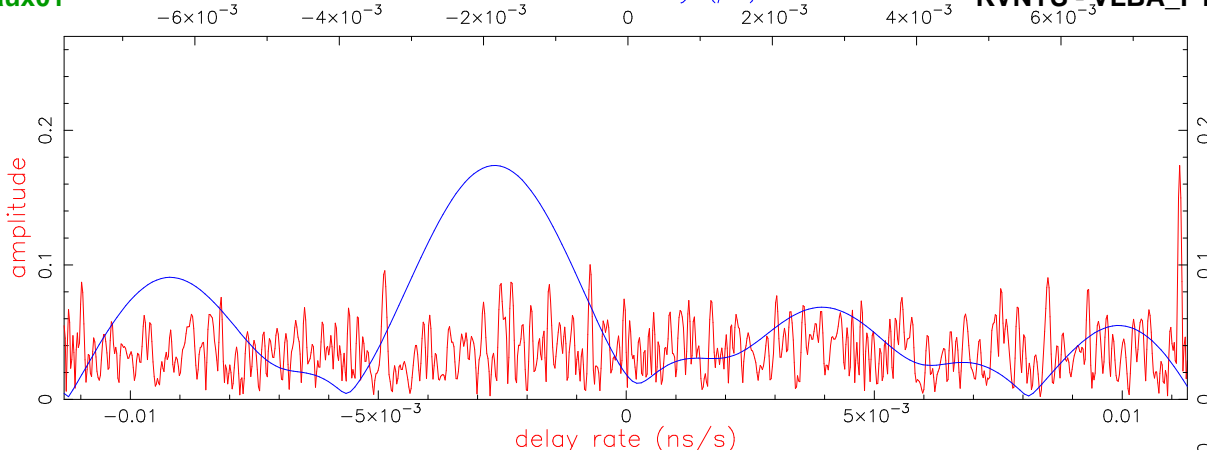
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yp

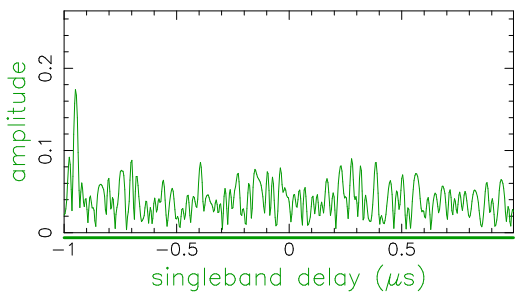
KVNYS - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

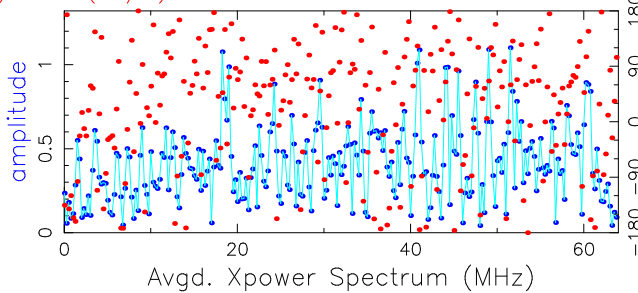


Fringe quality 0

SNR 5.8
 Int time 149.845
 Amp 0.270
 Phase -19.0
 PFD 4.9e-01
 Delays (us)
 SBD -0.948414
 MBD -0.001835
 Fringe rate (Hz)
 0.961804
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

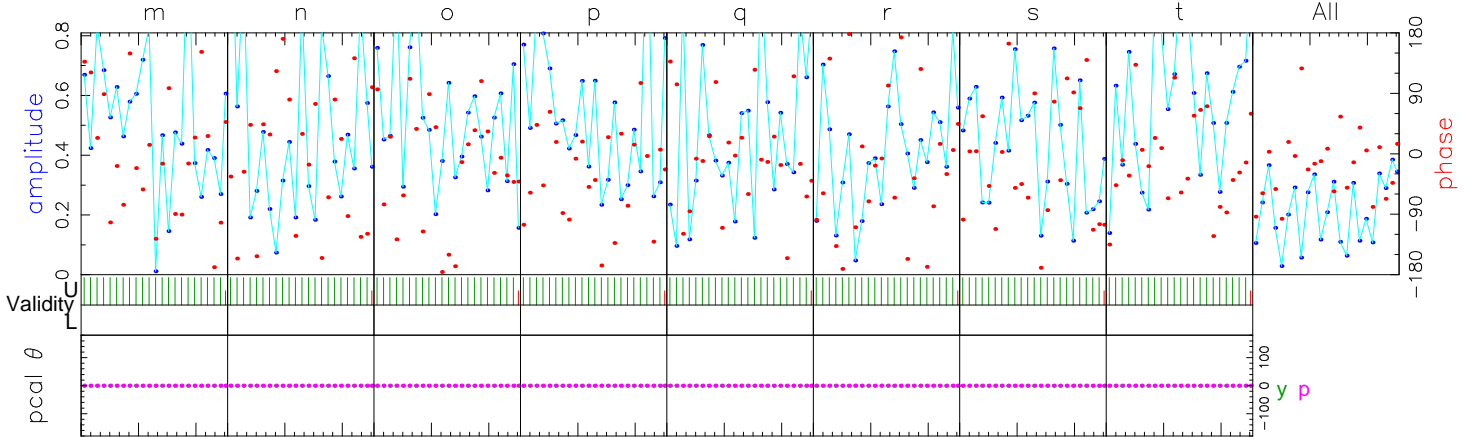


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105706
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-7.0	-53.0	10.1	-21.1	-20.0	-61.2	-18.3	-13.8	Phase	-19.0
	0.3	0.2	0.2	0.4	0.4	0.1	0.2	0.5	Ampl.	0.3
	247.9	220.1	66.1	15.5	13.5	351.5	301.4	14.3	Sbd box	14.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.14715637995E+03	Apriori delay (usec)	3.14811134001E+03	Resid mbdelay (usec)	-1.83506E-03	+/-	1.9E-04
Sband delay (usec)	3.14716292576E+03	Apriori clock (usec)	7.1992874E-01	Resid sbdelay (usec)	-9.48414E-01	+/-	1.5E-03
Phase delay (usec)	3.14811133940E+03	Apriori clockrate (us/s)	-3.7913596E-07	Resid phdelay (usec)	-6.14061E-07	+/-	6.3E-07
Delay rate (us/s)	7.51870589126E-01	Apriori rate (us/s)	7.51859423532E-01	Resid rate (us/s)	1.11656E-05	+/-	7.3E-09
Total phase (deg)	279.2	Apriori accel (us/s/s)	-1.18757785520E-05	Resid phase (deg)	-19.0	+/-	19.6

ph/seg (deg)	RMS 50.9	Theor. 47.1	Amplitude Search (1024X32)	0.270 +/- 0.046	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.9	82.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	25.7	27.8	Inc. seg. avg.	0.246	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.1	48.4	Inc. frq. avg.	0.251	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

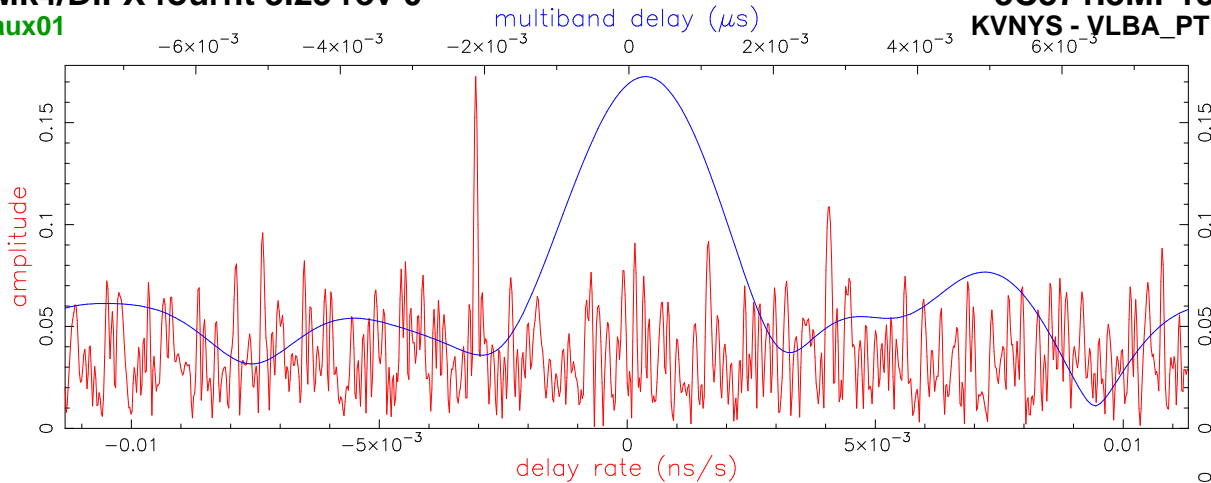
y: az 23.5 el 48.4 pa -114.6 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12512.034 -2249.749 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yp.W.404.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

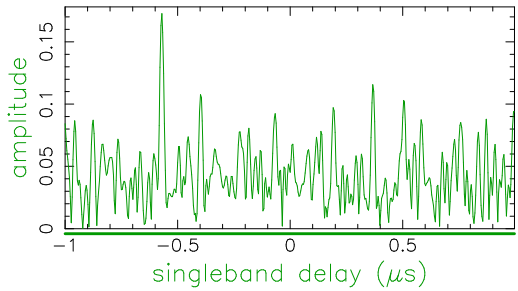
3C371.3MP15Q, No0901, yp

KVNYS - VLBA_PT, fgroup W, pol RR

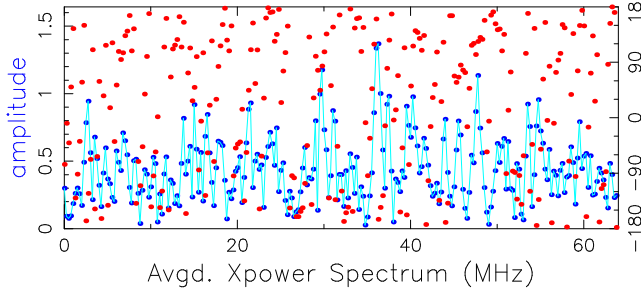


Fringe quality 0

SNR 5.8
 Int time 149.845
 Amp 0.178
 Phase 41.5
 PFD 6.0e-01
 Delays (us)
 SBD -0.570792
 MBD 0.000218
 Fringe rate (Hz)
 -0.263971
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

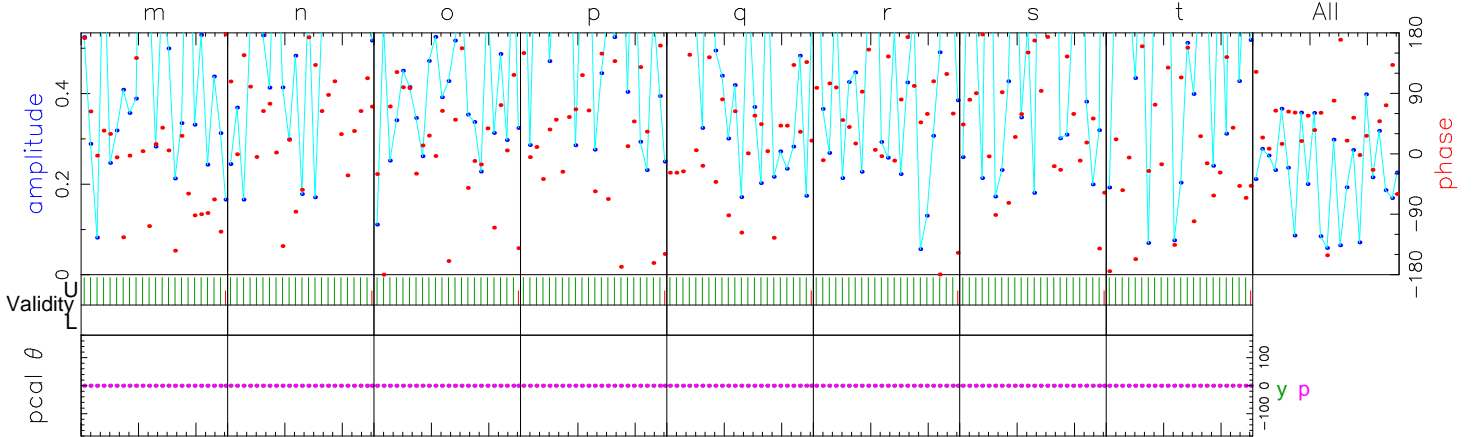


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105708
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.9	58.5	63.8	61.4	19.1	84.7	31.2	2.4	Phase	41.5
	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	47.0	111.4	388.7	195.6	355.7	444.8	120.0	352.7	Sbd box	110.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.14753343328E+03	Apriori delay (usec)	3.14811134001E+03	Resid mbdelay (usec)	2.18264E-04	+/-	1.9E-04
Sband delay (usec)	3.14754054826E+03	Apriori clock (usec)	7.1992874E-01	Resid sbdelay (usec)	-5.70792E-01	+/-	1.5E-03
Phase delay (usec)	3.14811134135E+03	Apriori clockrate (us/s)	-3.7913596E-07	Resid phdelay (usec)	1.33727E-06	+/-	6.4E-07
Delay rate (us/s)	7.51856359091E-01	Apriori rate (us/s)	7.51859423532E-01	Resid rate (us/s)	-3.06444E-06	+/-	7.4E-09
Total phase (deg)	339.8	Apriori accel (us/s/s)	-1.18757785520E-05	Resid phase (deg)	41.5	+/-	19.8

ph/seg (deg)	59.1	Theor.	47.5	Amplitude	0.178 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	65.3	Search (1024X32)	0.168	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	40.8	Inc. seg. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	35.9	Inc. frq. avg.	0.191	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

y: az 23.5 el 48.4 pa -114.6 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12512.034 -2249.749 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yp.W.410.3MP15Q

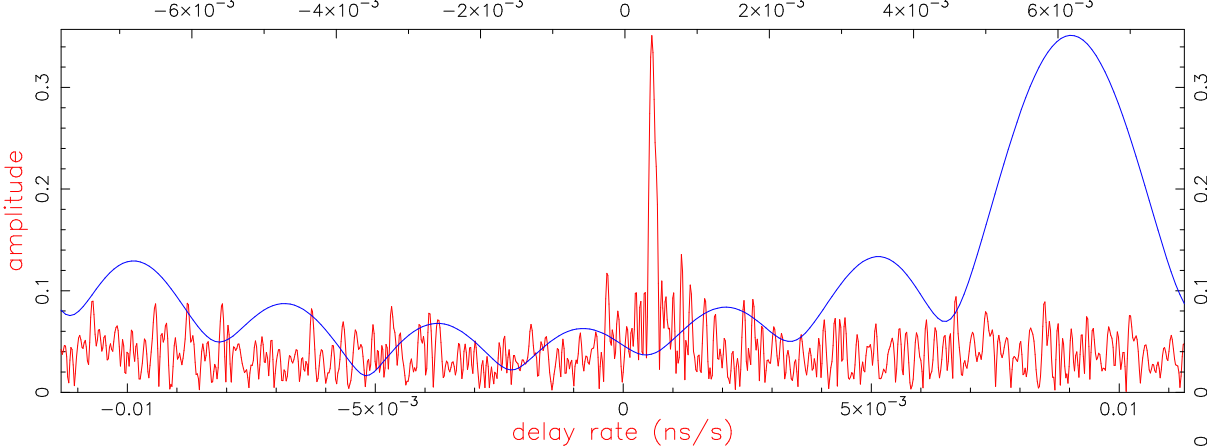
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yP

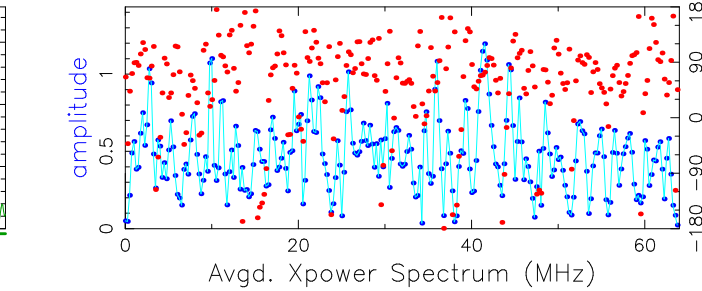
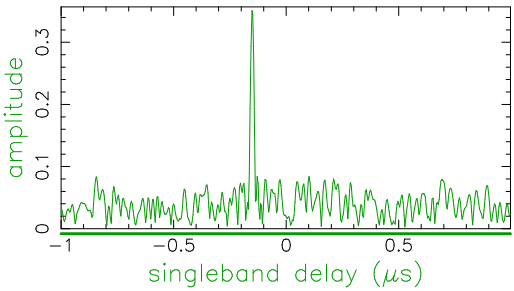
KVNYS - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



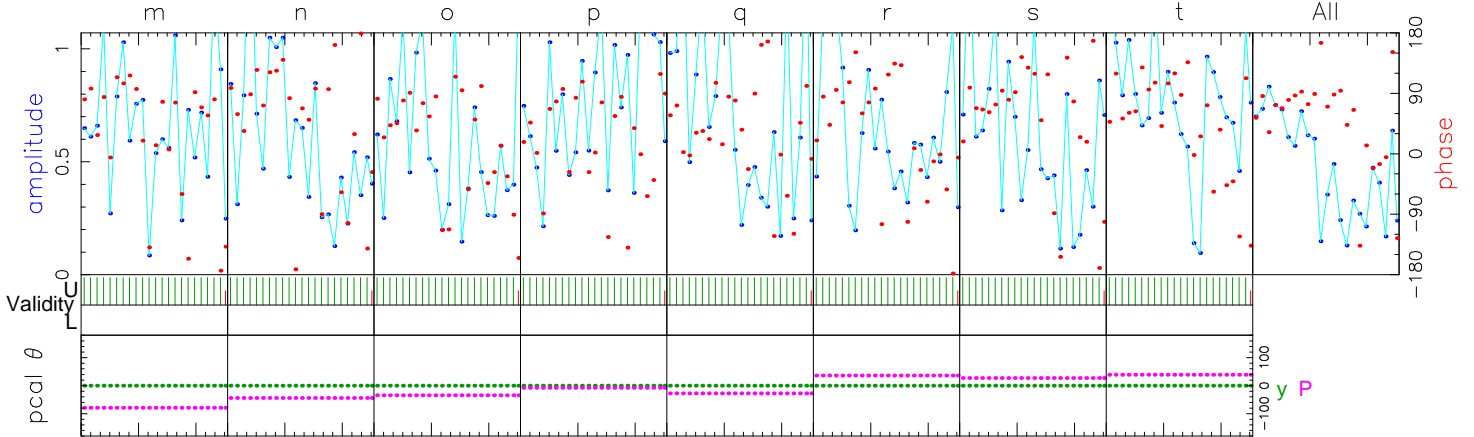
Fringe quality 9

SNR 11.9
 Int time 149.859
 Amp 0.357
 Phase 71.2
 PFD 1.8e-24
 Delays (us)
 SBD -0.150763
 MBD 0.006206
 Fringe rate (Hz)
 0.049903
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105708
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	82.3	102.2	59.6	41.1	43.5	64.0	93.7	77.5	Phase	71.2
	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	Ampl.	0.4
	218.2	218.7	218.9	218.6	217.2	239.9	218.3	218.6	Sbd box	218.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
y:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 9.77869615301E+03 Apriori delay (usec) 9.77884619685E+03 Resid mbdelay (usec) 6.20616E-03 +/- 9.1E-05
 Sband delay (usec) 9.77869543335E+03 Apriori clock (usec) 7.4384174E+00 Resid sbdelay (usec) -1.50763E-01 +/- 7.2E-04
 Phase delay (usec) 9.77884619915E+03 Apriori clockrate (us/s) -5.9867606E-07 Resid phdelay (usec) 2.29481E-06 +/- 3.1E-07
 Delay rate (us/s) 3.23316674896E-01 Apriori rate (us/s) 3.23316095574E-01 Resid rate (us/s) 5.79322E-07 +/- 3.6E-09
 Total phase (deg) 214.0 Apriori accel (us/s/s) -5.12542723530E-05 Resid phase (deg) 71.2 +/- 9.6

RMS Theor. Amplitude 0.357 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 60.5 23.0 Search (1024X32) 0.342 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 71.1 40.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.1 13.6 Inc. seg. avg. 0.447 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 17.3 23.7 Inc. frq. avg. 0.366 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 23.5 el 48.4 pa -114.6 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5502.699 -10868.402 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yP.W.414.3MP15Q

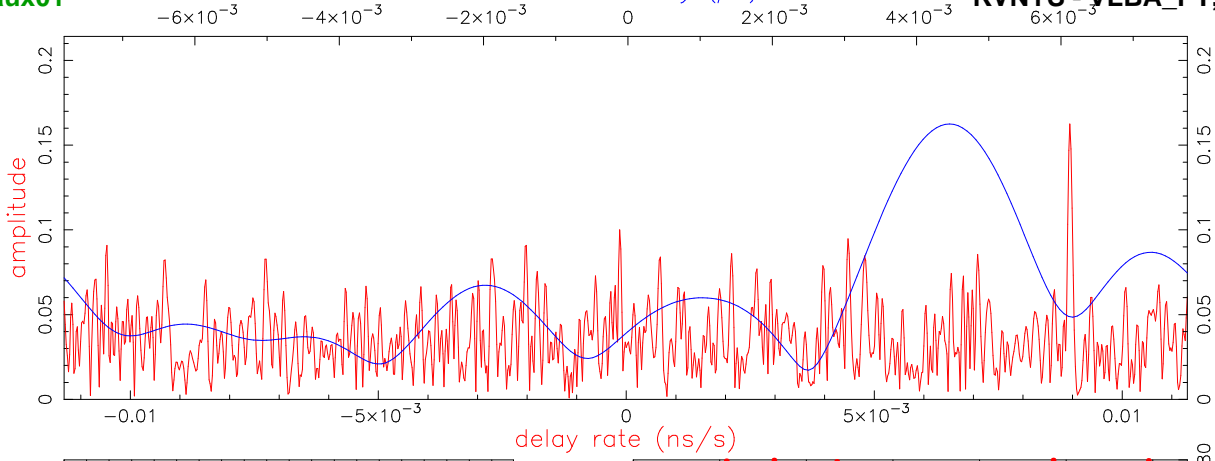
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yp

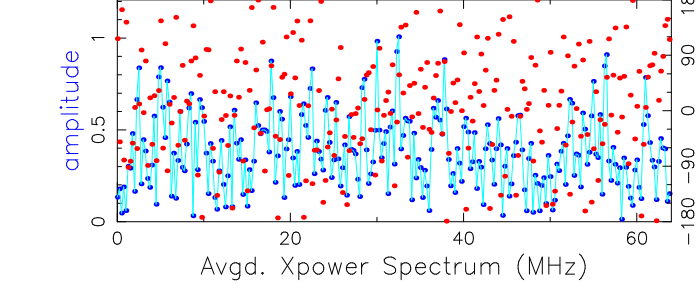
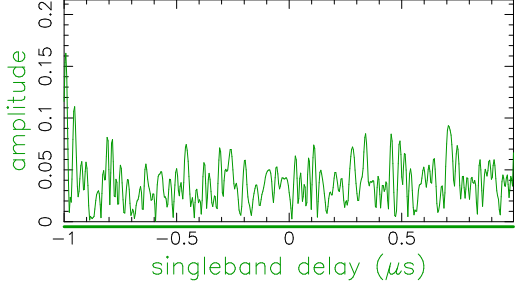
KVNS - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



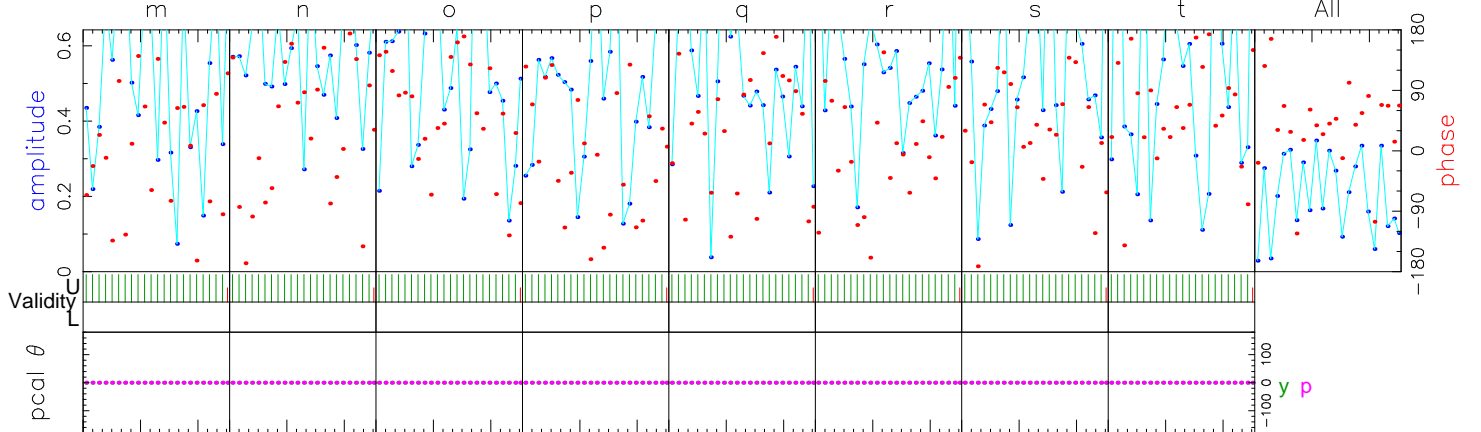
Fringe quality 0

SNR 5.5
 Int time 149.845
 Amp 0.214
 Phase 50.2
 PFD 1.0e+00
 Delays (us)
 SBD -0.993075
 MBD 0.004448
 Fringe rate (Hz)
 0.770762
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105709
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	30.2	91.9	70.7	-1.7	64.7	28.3	42.2	64.2	Phase	50.2
	0.1	0.1	0.3	0.2	0.1	0.2	0.4	0.4	Ampl.	0.2
	20.4	199.7	509.7	409.5	248.0	277.4	2.7	2.2	Sbd box	2.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.14711578757E+03	Apriori delay (usec)	3.1481134001E+03	Resid mbdelay (usec)	4.44756E-03	+/-	2.0E-04
Sband delay (usec)	3.14711826476E+03	Apriori clock (usec)	7.1992874E-01	Resid sbdelay (usec)	-9.93075E-01	+/-	1.6E-03
Phase delay (usec)	3.1481134163E+03	Apriori clockrate (us/s)	-3.7913596E-07	Resid phdelay (usec)	1.61913E-06	+/-	6.8E-07
Delay rate (us/s)	7.51868371311E-01	Apriori rate (us/s)	7.51859423532E-01	Resid rate (us/s)	8.94778E-06	+/-	7.8E-09
Total phase (deg)	348.5	Apriori accel (us/s/s)	-1.18757785520E-05	Resid phase (deg)	50.2	+/-	21.0

ph/seg (deg) 63.6 50.2 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.0 87.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.2 29.6 Inc. seg. avg. 0.196 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.9 51.7 Inc. frq. avg. 0.204 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 y: az 23.5 el 48.4 pa -114.6 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12512.034 -2249.749 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yp.W.417.3MP15Q simultaneous interpolator

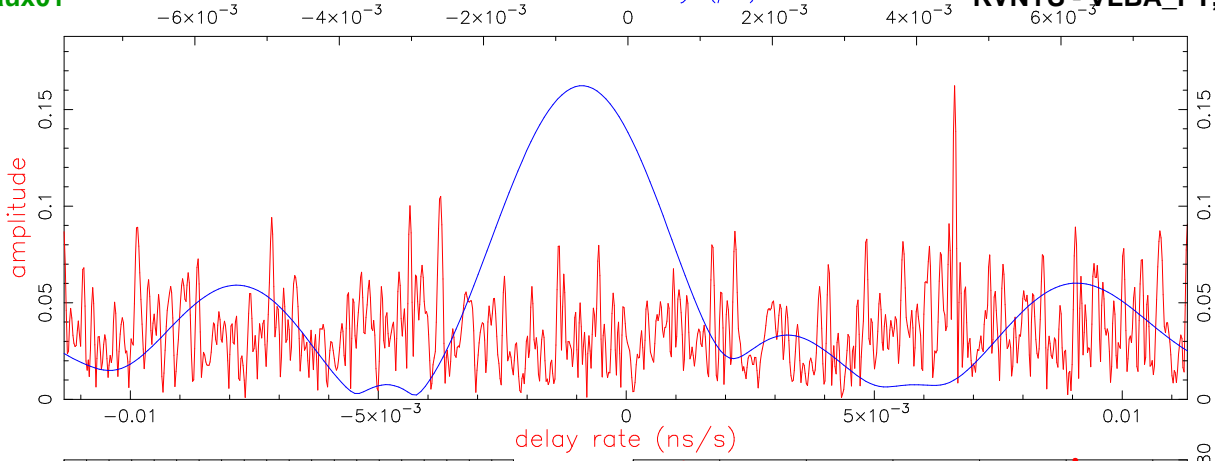
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yp

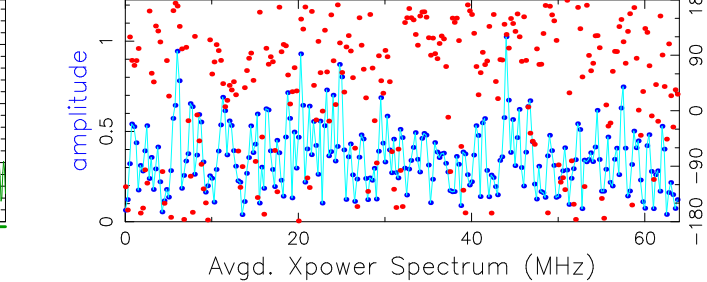
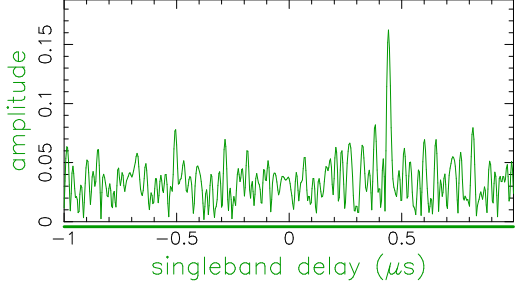
KVNYS - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



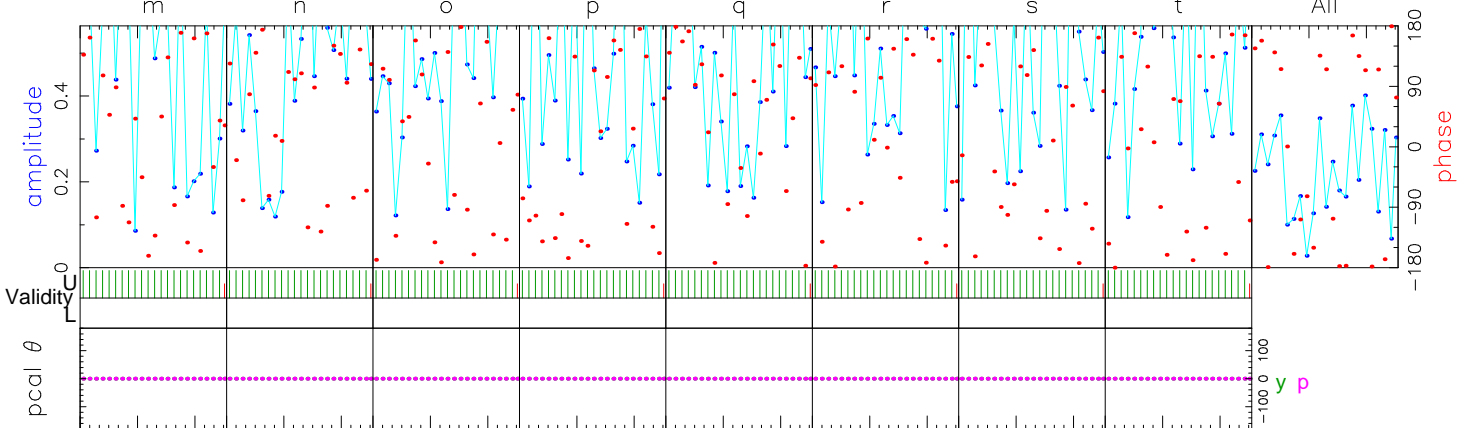
Fringe quality 0

SNR 5.4
 Int time 149.845
 Amp 0.188
 Phase 157.8
 PFD 1.0e+00
 Delays (us)
 SBD 0.440966
 MBD -0.000654
 Fringe rate (Hz)
 0.571577
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105713
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	163.7	155.2	140.0	-171.3	124.7	162.1	165.8	165.4	Phase	157.8
	0.2	0.2	0.1	0.3	0.3	0.2	0.1	0.2	Ampl.	0.2
	222.7	466.0	33.4	329.5	424.0	489.7	333.0	233.4	Sbd box	369.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	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)	3.14854818611E+03		Apriori delay (usec)		3.14811134001E+03		Resid mbdelay (usec)		-6.53902E-04	+/- 2.0E-04
Sband delay (usec)	3.14855230651E+03		Apriori clock (usec)		7.1992874E-01		Resid sbdelay (usec)		4.40966E-01	+/- 1.6E-03
Phase delay (usec)	3.14811134510E+03		Apriori clockrate (us/s)		-3.7913596E-07		Resid phdelay (usec)		5.08980E-06	+/- 6.8E-07
Delay rate (us/s)	7.51866058976E-01		Apriori rate (us/s)		7.51859423532E-01		Resid rate (us/s)		6.63544E-06	+/- 7.8E-09
Total phase (deg)	96.1		Apriori accel (us/s/s)		-1.18757785520E-05		Resid phase (deg)		157.8	+/- 21.1

ph/seg (deg) 59.7 50.5 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.0 88.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.6 29.8 Inc. seg. avg. 0.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.0 52.0 Inc. frq. avg. 0.176 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 y: az 23.5 el 48.4 pa -114.6 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12512.034 -2249.749 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yp.W.422.3MP15Q simultaneous interpolator

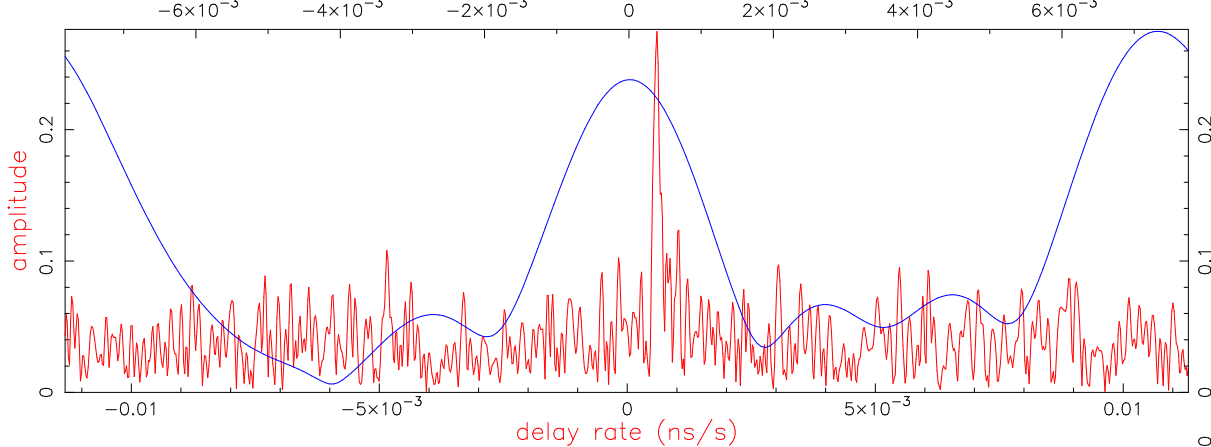
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yP

KVNS - PICOVEL, fgroup W, pol RR

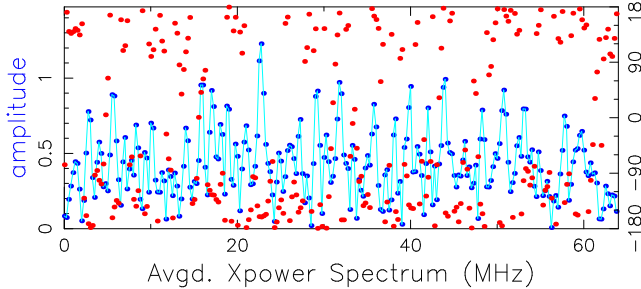
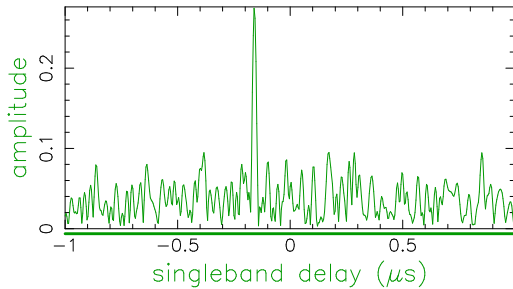
multiband delay (μ s)



Fringe quality 9

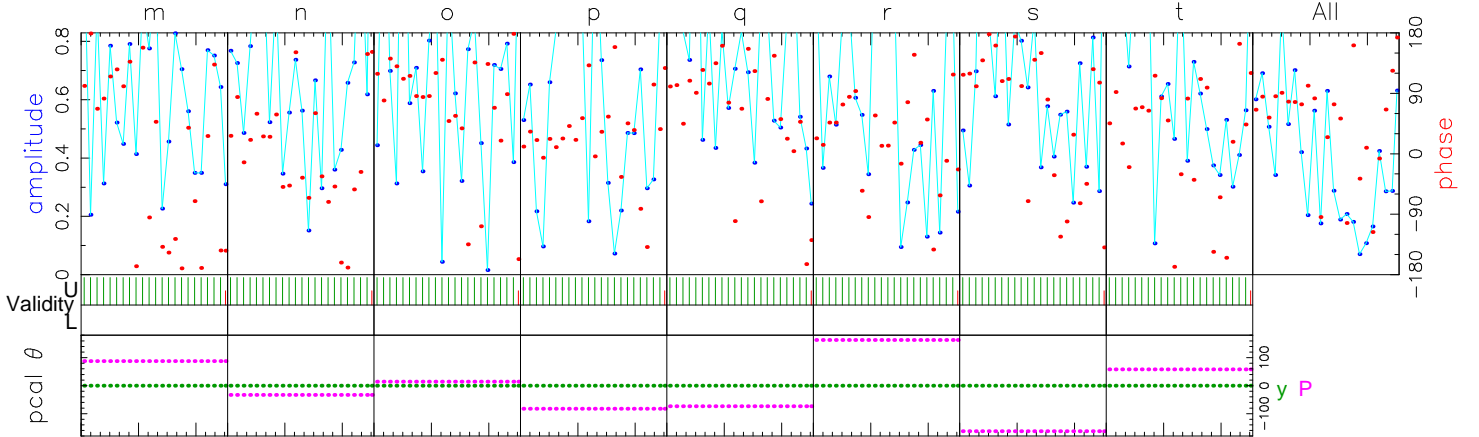
SNR 9.2
 Int time 149.859
 Amp 0.276
 Phase 73.8
 PFD 4.8e-12
 Delays (us)
 SBD -0.159240
 MBD 0.007376
 Fringe rate (Hz) 0.050687
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105713
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y	0	0	60000	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
y:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
y	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	9.77868169810E+03	Apriori delay (usec)	9.77884619685E+03	Resid mbdelay (usec)	7.37625E-03	+/-	1.2E-04
Sband delay (usec)	9.77868695735E+03	Apriori clock (usec)	7.4384174E+00	Resid sbdelay (usec)	-1.59240E-01	+/-	9.3E-04
Phase delay (usec)	9.77884619923E+03	Apriori clockrate (us/s)	-5.9867606E-07	Resid phdelay (usec)	2.37904E-06	+/-	4.0E-07
Delay rate (us/s)	3.23316684001E-01	Apriori rate (us/s)	3.23316095574E-01	Resid rate (us/s)	5.88427E-07	+/-	4.6E-09
Total phase (deg)	216.7	Apriori accel (us/s/s)	-5.12542723530E-05	Resid phase (deg)	73.8	+/-	12.4

ph/seg (deg)	76.4	Theor.	29.7	Amplitude	0.276 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	91.2	Search (1024X32)	0.270	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	52.9	Inc. seg. avg.	0.345	Inc. frq. avg.	0.354	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.4	Inc. frq. avg.	0.354			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 23.5 el 48.4 pa -114.6 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5502.699 -10868.402 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yP.W.423.3MP15Q

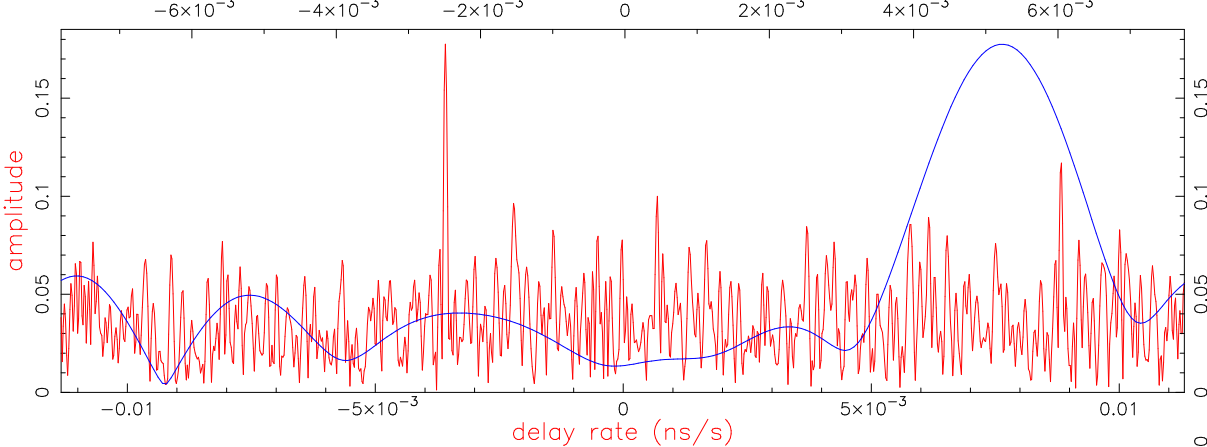
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yP

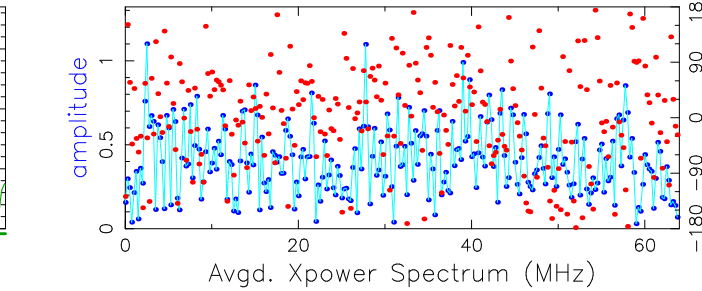
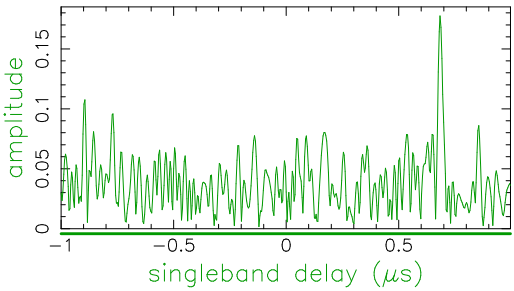
KVNYS - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



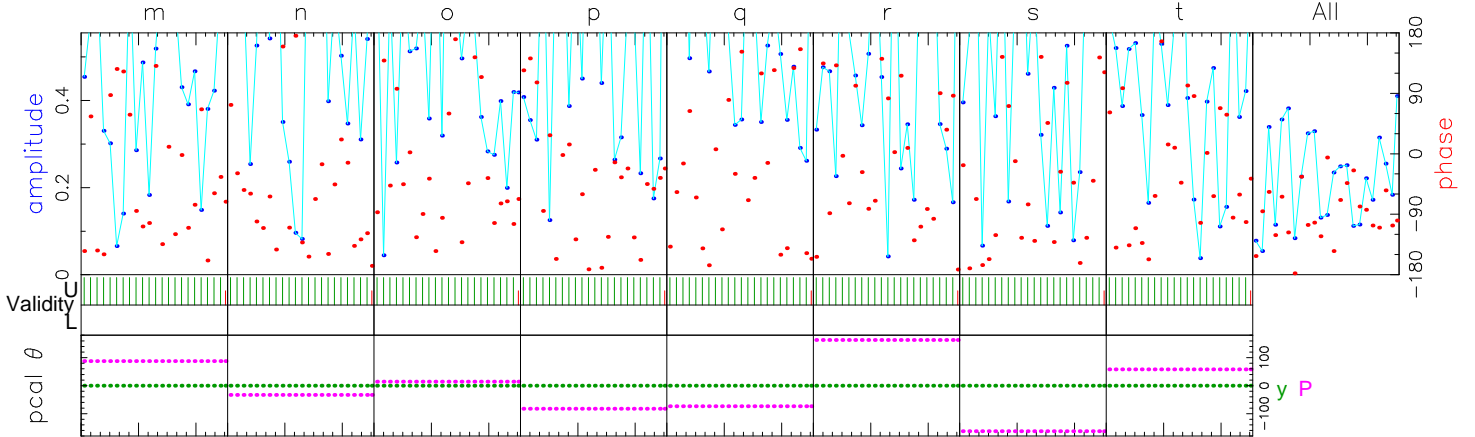
Fringe quality 0

SNR 5.9
 Int time 149.859
 Amp 0.185
 Phase -87.3
 PFD 3.0e-01
 Delays (us)
 SBD 0.683877
 MBD 0.005233
 Fringe rate (Hz)
 -0.308676
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105716
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-93.5	-86.7	-85.1	-78.5	-91.2	-69.4	-127.6	-66.0		-87.3
	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.2		0.2
	238.5	431.7	375.1	221.7	63.4	293.4	81.5	310.3		432.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y	0	0	60000	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
y:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
y	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	9.77952330508E+03	Apriori delay (usec)	9.77884619685E+03	Resid mbdelay (usec)	5.23323E-03	+/-	1.8E-04
Sband delay (usec)	9.77953007335E+03	Apriori clock (usec)	7.4384174E+00	Resid sbdelay (usec)	6.83877E-01	+/-	1.4E-03
Phase delay (usec)	9.77884619404E+03	Apriori clockrate (us/s)	-5.9867606E-07	Resid phdelay (usec)	-2.81404E-06	+/-	6.2E-07
Delay rate (us/s)	3.23312512151E-01	Apriori rate (us/s)	3.23316095574E-01	Resid rate (us/s)	-3.58342E-06	+/-	7.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-5.12542723530E-05	Resid phase (deg)	-87.3	+/-	19.3

ph/seg (deg) 41.8 46.2 Search (1024X32) 0.175 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.1 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.6 27.3 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.2 47.6 Inc. frq. avg. 0.174 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 y: az 23.5 el 48.4 pa -114.6 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5502.699 -10868.402 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yP.W.429.3MP15Q simultaneous interpolator

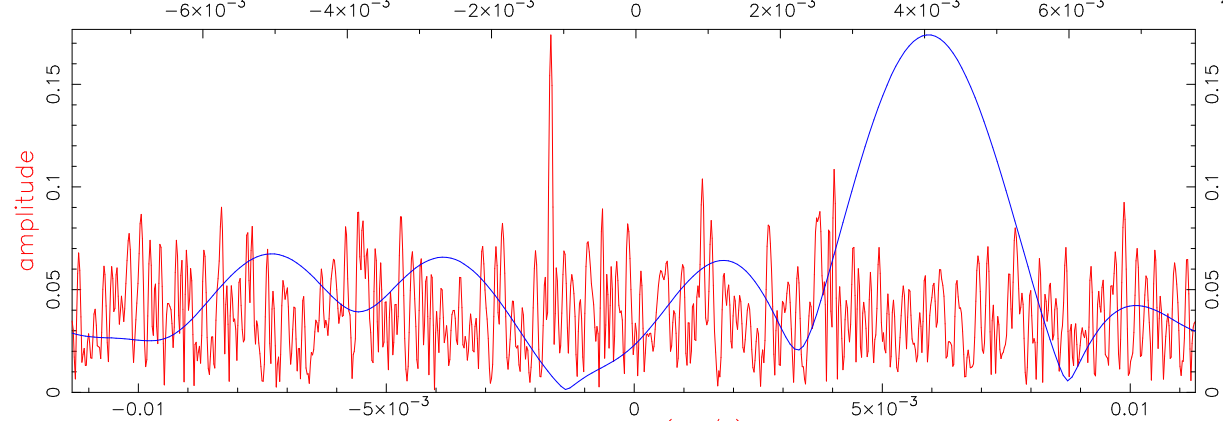
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yP

KVNS - PICOVEL, fgroup W, pol RL

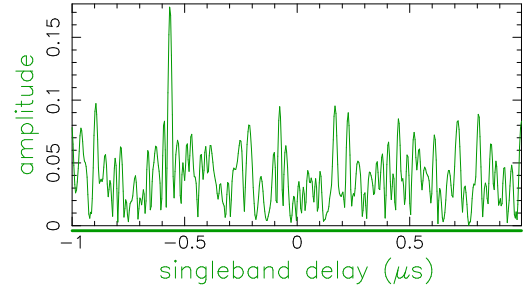
multiband delay (μ s)



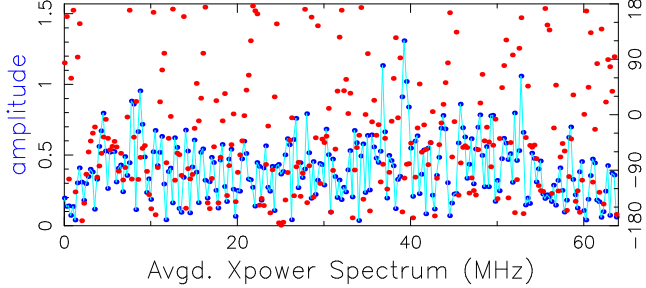
Fringe quality 0

SNR 5.9
 Int time 149.859
 Amp 0.177
 Phase -154.7
 PFD 4.4e-01
 Delays (us)
 SBD -0.565345
 MBD 0.004074
 Fringe rate (Hz)
 -0.145662
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

delay rate (ns/s)

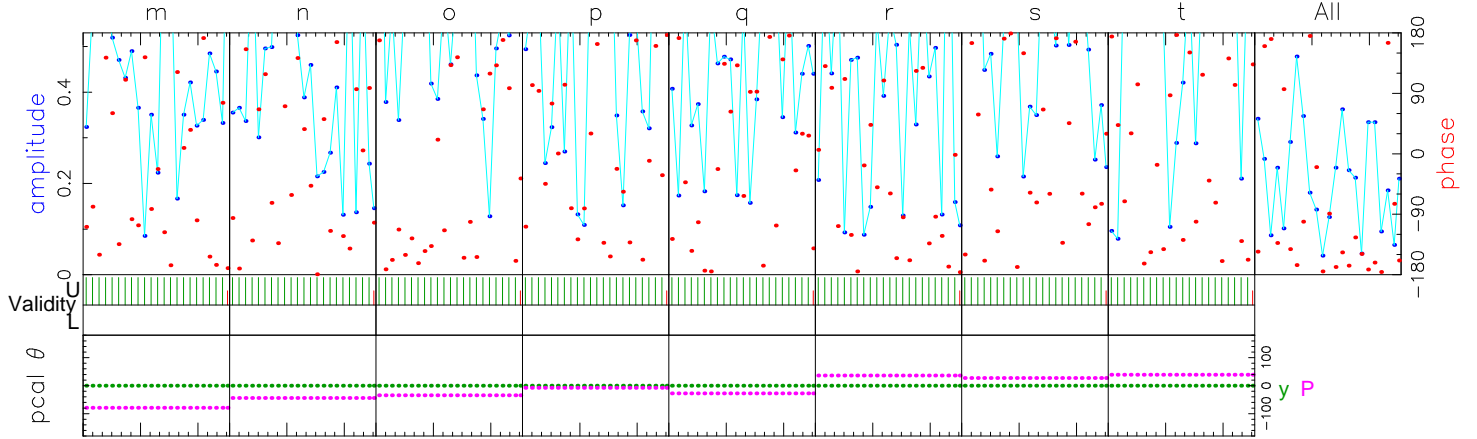


singleband delay (μ s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105719
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-145.4	-144.7	-161.5	-153.9	-160.3	-158.3	-142.3	-159.4	Phase	-154.7
	0.2	0.1	0.4	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2
	309.0	283.6	112.9	246.2	472.5	480.7	206.3	127.4	Sbd box	112.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
y:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.77828777113E+03	Apriori delay (usec)	9.77884619685E+03	Resid mbdelay (usec)	4.07428E-03	+/-	1.9E-04
Sband delay (usec)	9.77828085235E+03	Apriori clock (usec)	7.4384174E+00	Resid sbdelay (usec)	-5.65345E-01	+/-	1.5E-03
Phase delay (usec)	9.77884619187E+03	Apriori clockrate (us/s)	-5.9867606E-07	Resid phdelay (usec)	-4.98755E-06	+/-	6.3E-07
Delay rate (us/s)	3.23314404577E-01	Apriori rate (us/s)	3.23316095574E-01	Resid rate (us/s)	-1.69100E-06	+/-	7.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-5.12542723530E-05	Resid phase (deg)	-154.7	+/-	19.5

ph/seg (deg)	48.5	Theor.	46.9	Amplitude	0.177 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.8	Search (1024X32)	0.166	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.7	Inc. seg. avg.	0.162	Inc. frq. avg.	0.159	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.4	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

y: az 23.5 el 48.4 pa -114.6 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5502.699 -10868.402 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yP.W.435.3MP15Q

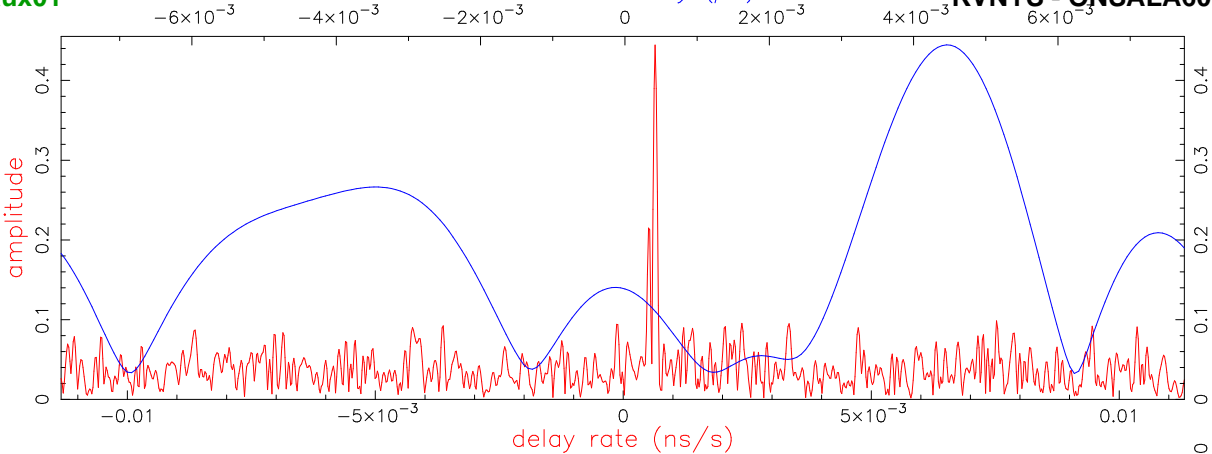
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yX

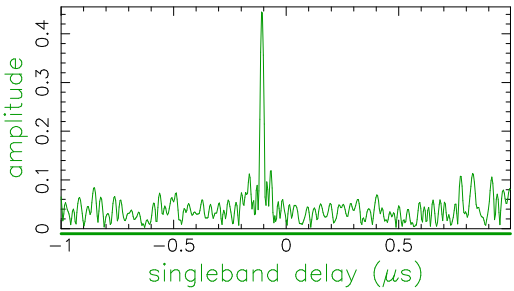
KVNYS - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

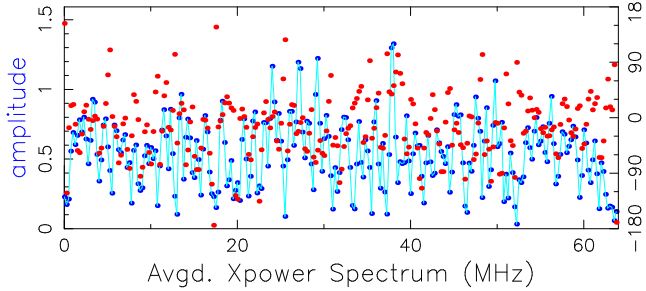


Fringe quality 8

SNR 15.2
 Int time 149.703
 Amp 0.455
 Phase 135.6
 PFD 9.2e-44
 Delays (us)
 SBD -0.107509
 MBD 0.004496
 Fringe rate (Hz)
 0.055899
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

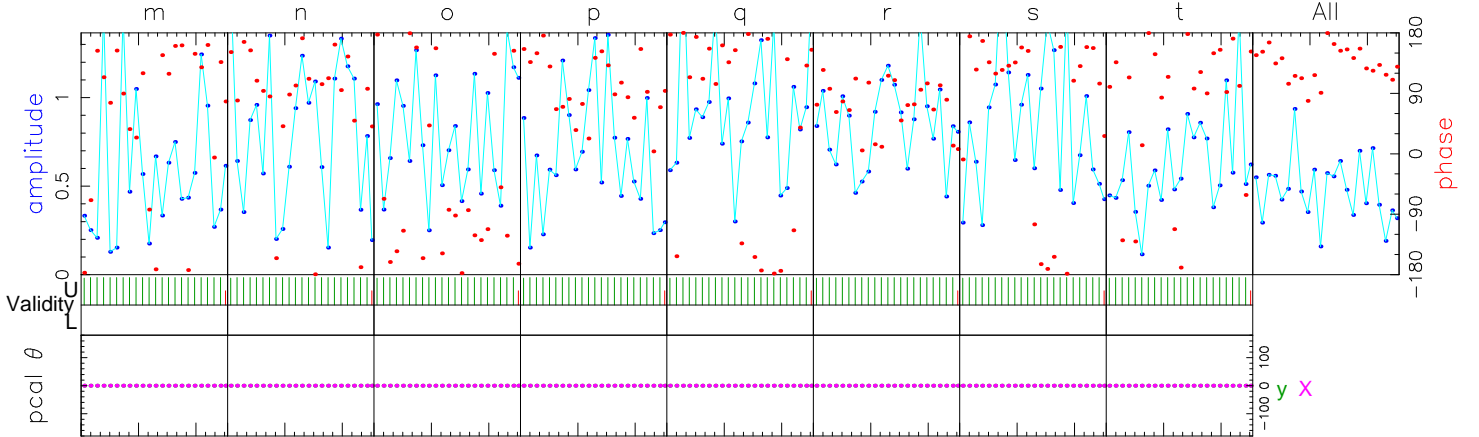


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105706
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
y	0	0	60000	0	0	0	4000	0		
X	0	0	0	0	0	0	0	0		
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	2.84754506434E+03	Apriori delay (usec)		2.84764994372E+03	Resid mbdelay (usec)		4.49562E-03	+/- 7.1E-05	
Sband delay (usec)	2.84754243447E+03	Apriori clock (usec)		-1.0623351E+02	Resid sbdelay (usec)		-1.07509E-01	+/- 5.7E-04	
Phase delay (usec)	2.84764994809E+03	Apriori clockrate (us/s)		-1.2170620E-06	Resid phdelay (usec)		4.37123E-06	+/- 2.4E-07	
Delay rate (us/s)	2.47047284373E-01	Apriori rate (us/s)		2.47046635446E-01	Resid rate (us/s)		6.48927E-07	+/- 2.8E-09	
Total phase (deg)	190.4	Apriori accel (us/s/s)		-4.03880230922E-05	Resid phase (deg)		135.6	+/- 7.5	

ph/seg (deg)	RMS 24.9	Theor. 18.1	Amplitude Search (1024X32)	0.455 +/- 0.030	0.438	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	38.9	31.5	Interp.	0.000	0.000E+00	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	45.3	10.7	Inc. seg. avg.	0.462	2048	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	37.3	18.6	Inc. frq. avg.	0.564	2048	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

y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4212.750 -9294.056 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.403.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

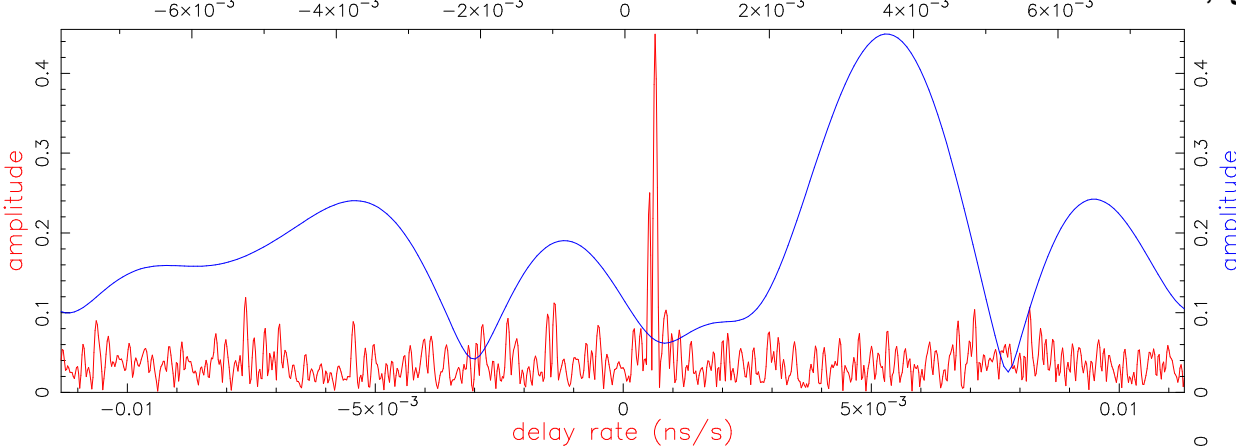
aux01

3C371.3MP15Q, No0901, yX

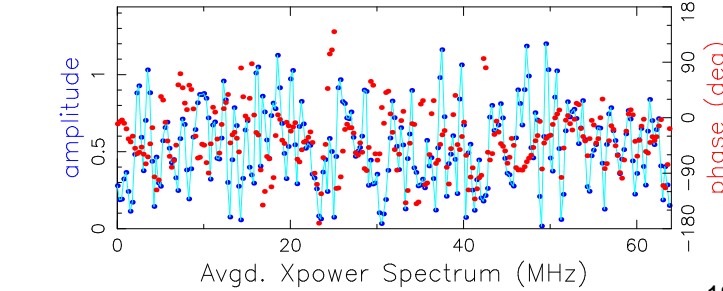
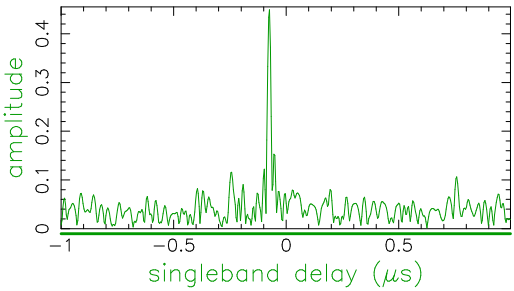
KVNYS - ONSALA60, fgroup W, pol RR

multiband delay (μs)

Fringe quality 8

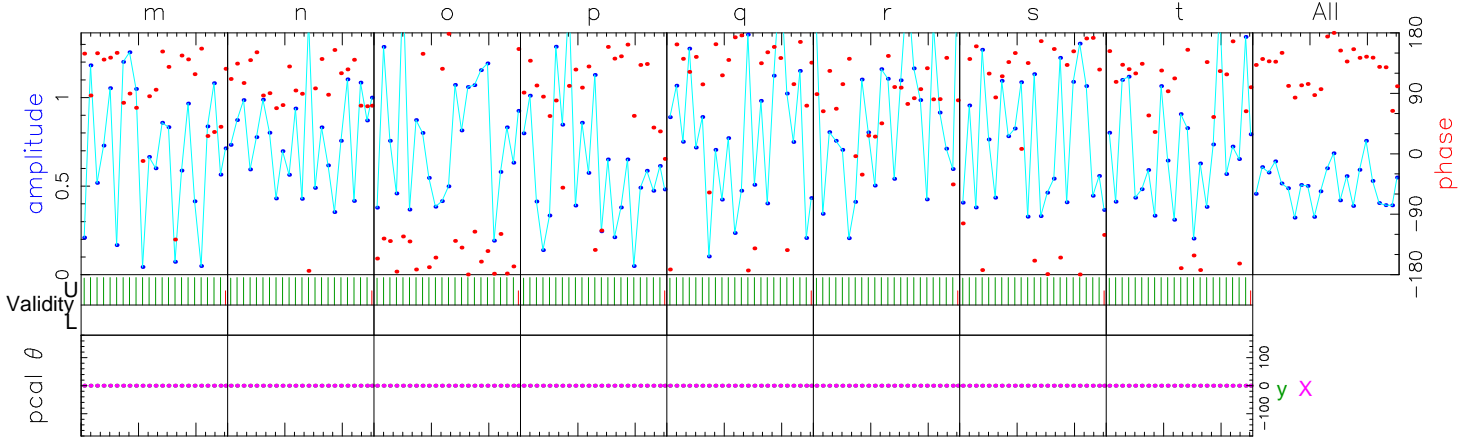


SNR 15.2
 Int time 149.703
 Amp 0.455
 Phase 131.9
 PFD 9.5e-44
 Delays (us)
 SBD -0.075544
 MBD 0.003585
 Fringe rate (Hz)
 0.055679
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105707
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.5	111.3	-152.8	113.4	153.5	80.0	159.8	125.5	Phase	131.9
	0.5	0.6	0.7	0.4	0.7	0.6	0.5	0.5	Ampl.	0.6
	239.0	237.9	237.2	236.8	236.5	236.9	237.1	238.4	Sbd box	237.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.84757540422E+03	Apriori delay (usec)	2.84764994372E+03	Resid mbdelay (usec)	3.58550E-03	+/-	7.1E-05
Sband delay (usec)	2.84757439947E+03	Apriori clock (usec)	-1.0623351E+02	Resid sbdelay (usec)	-7.55443E-02	+/-	5.7E-04
Phase delay (usec)	2.84764994798E+03	Apriori clockrate (us/s)	-1.2170620E-06	Resid phdelay (usec)	4.25246E-06	+/-	2.4E-07
Delay rate (us/s)	2.47047281828E-01	Apriori rate (us/s)	2.47046635446E-01	Resid rate (us/s)	6.46382E-07	+/-	2.8E-09
Total phase (deg)	186.7	Apriori accel (us/s/s)	-4.03880230922E-05	Resid phase (deg)	131.9	+/-	7.5

ph/seg (deg)	29.4	RMS	18.1	Theor.	18.1	Amplitude	0.455 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	27.0	Search (1024X32)	0.439	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	43.5	Inc. seg. avg.	0.484	Inc. frq. avg.	0.565	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	34.4	Inc. frq. avg.	0.565	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

y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) -4212.750 -9294.056 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.409.3MP15Q

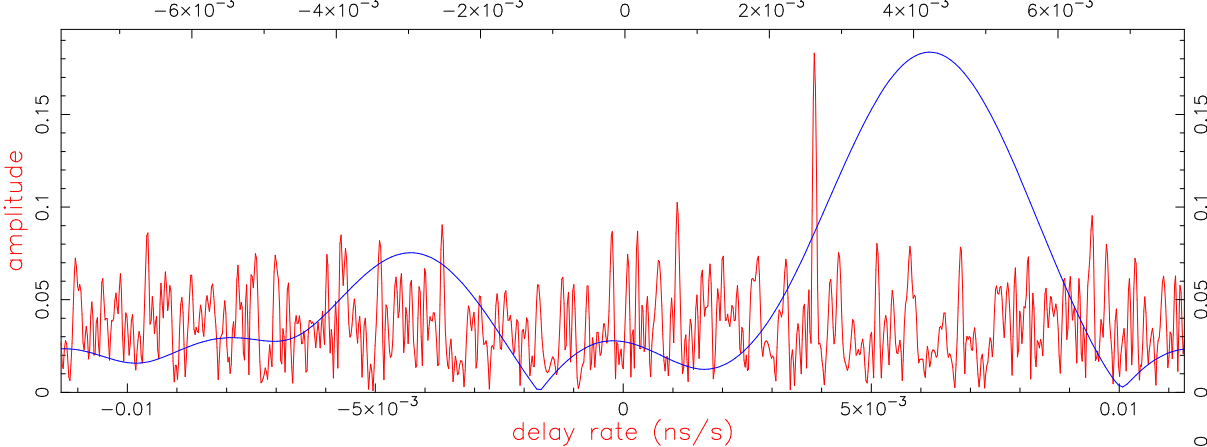
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yX

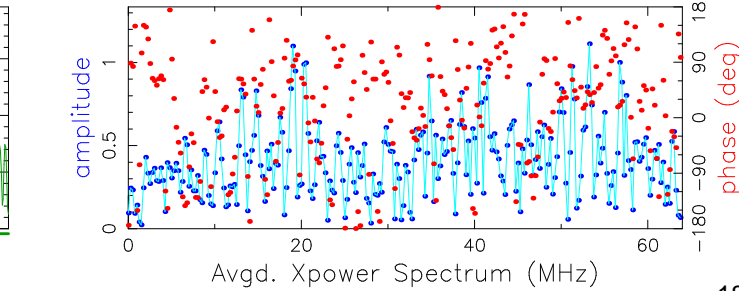
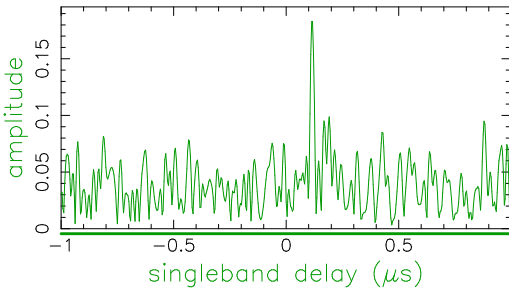
KVNYS - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



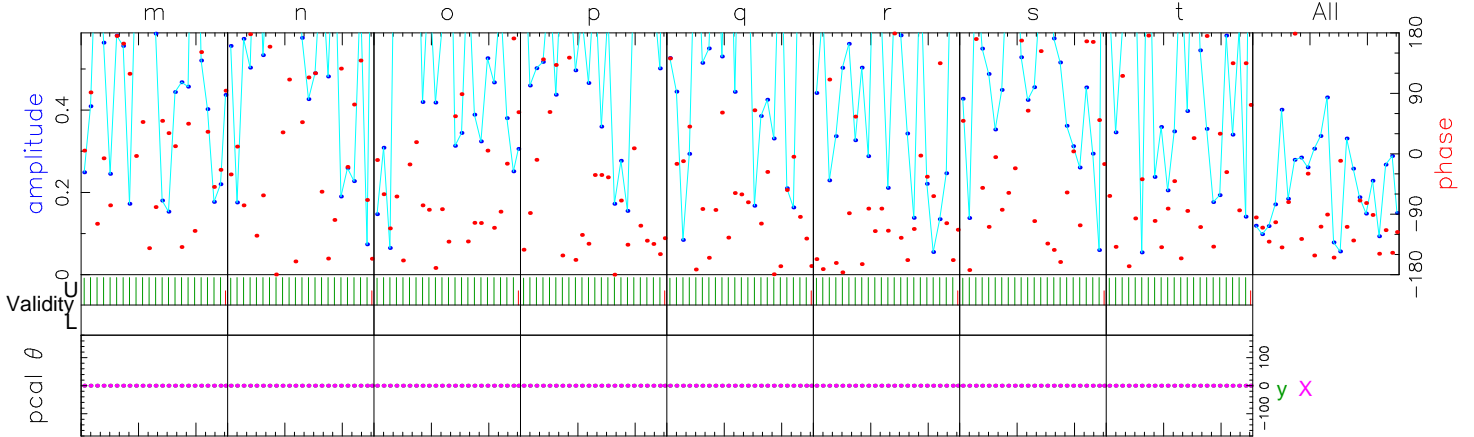
Fringe quality 0

SNR 6.2
 Int time 149.703
 Amp 0.196
 Phase -113.6
 PFD 5.4e-02
 Delays (us)
 SBD 0.115218
 MBD 0.004331
 Fringe rate (Hz) 0.331588
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105710
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-73.6	-163.8	-80.8	-122.3	-104.3	-133.6	-102.0	-123.8	Phase	-113.6
	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	401.6	275.8	303.6	37.2	286.9	284.9	406.0	414.9	Sbd box	286.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	2.84776364957E+03		Apriori delay (usec)		2.84764994372E+03		Resid mbdelay (usec)		4.33085E-03	+/- 1.7E-04
Sband delay (usec)	2.84776516147E+03		Apriori clock (usec)		-1.0623351E+02		Resid sbdelay (usec)		1.15218E-01	+/- 1.4E-03
Phase delay (usec)	2.84764994006E+03		Apriori clockrate (us/s)		-1.2170620E-02		Resid phdelay (usec)		-3.66273E-06	+/- 5.9E-07
Delay rate (us/s)	2.47050484852E-01		Apriori rate (us/s)		2.47046635446E-01		Resid rate (us/s)		3.84941E-06	+/- 6.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.03880230922E-05		Resid phase (deg)		-113.6	+/- 18.3

ph/seg (deg) 40.0 44.0 Search (1024X32) 0.182 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.3 76.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.6 25.9 Inc. seg. avg. 0.180 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.0 45.3 Inc. frq. avg. 0.191 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4212.750 -9294.056 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.418.3MP15Q

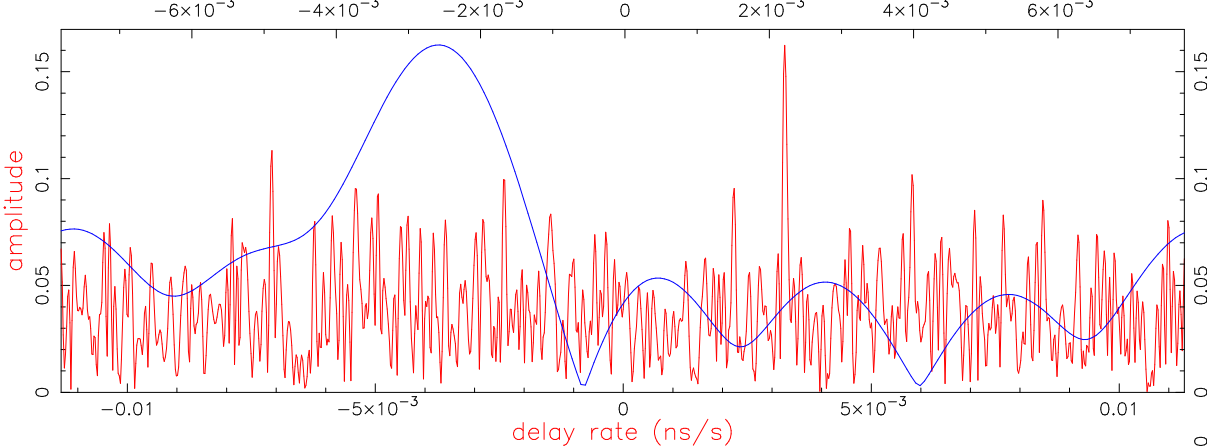
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yX

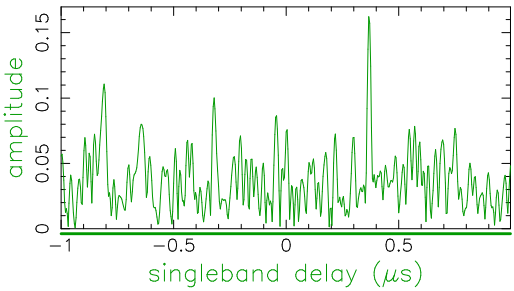
KVNYS - ONSALA60, fgroup W, pol RL

multiband delay (μs)

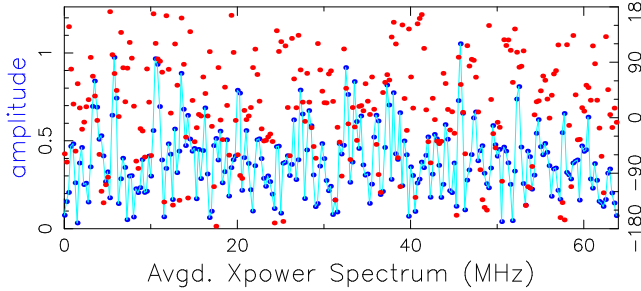


Fringe quality 0

SNR 5.5
 Int time 149.703
 Amp 0.170
 Phase -5.7
 PFD 9.9e-01
 Delays (us)
 SBD 0.368507
 MBD -0.002644
 Fringe rate (Hz)
 0.280101
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

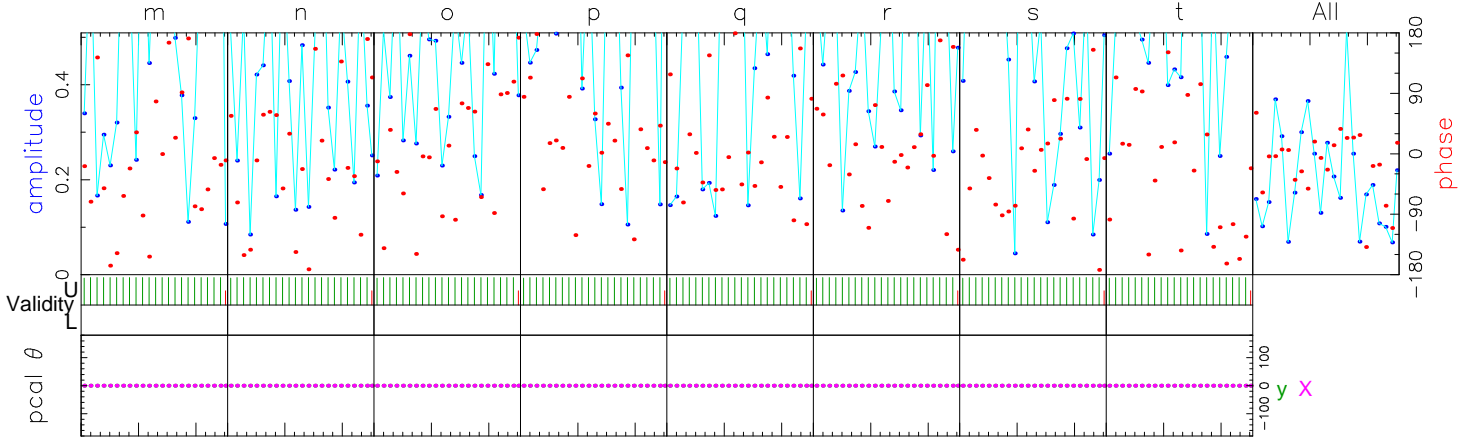


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105712
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-41.0	3.4	62.9	13.3	-19.8	1.1	-15.1	13.9	Phase	-5.7
	0.2	0.1	0.1	0.3	0.3	0.2	0.3	0.0	Ampl.	0.2
	449.1	247.8	389.5	352.0	350.9	48.2	452.3	447.7	Sbd box	351.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.84802229985E+03	Apriori delay (usec)	2.84764994372E+03	Resid mbdelay (usec)	-2.64387E-03	+/-	2.0E-04
Sband delay (usec)	2.84801845047E+03	Apriori clock (usec)	-1.0623351E+02	Resid sbdelay (usec)	3.68507E-01	+/-	1.6E-03
Phase delay (usec)	2.84764994354E+03	Apriori clockrate (us/s)	-1.2170620E-06	Resid phdelay (usec)	-1.82687E-07	+/-	6.7E-07
Delay rate (us/s)	2.47049887137E-01	Apriori rate (us/s)	2.47046635446E-01	Resid rate (us/s)	3.25169E-06	+/-	7.8E-09
Total phase (deg)	49.1	Apriori accel (us/s/s)	-4.03880230922E-05	Resid phase (deg)	-5.7	+/-	20.9

ph/seg (deg)	47.7	Theor.	50.0	Search (1024X32)	0.161	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.6		87.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.4		29.5	Inc. seg. avg.	0.153	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.7		51.5	Inc. frq. avg.	0.166	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

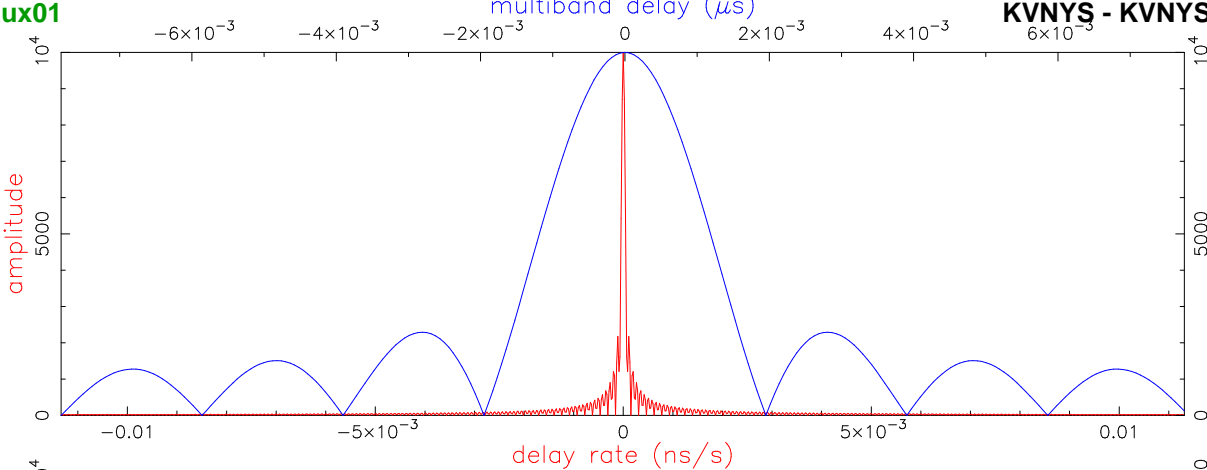
y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4212.750 -9294.056 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.421.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

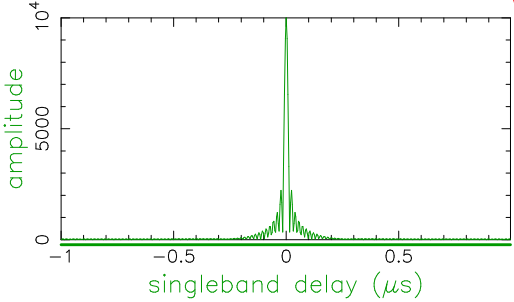
3C371.3MP15Q, No0901, yy

KVNY5 - KVNY5, fgroup W, pol LL

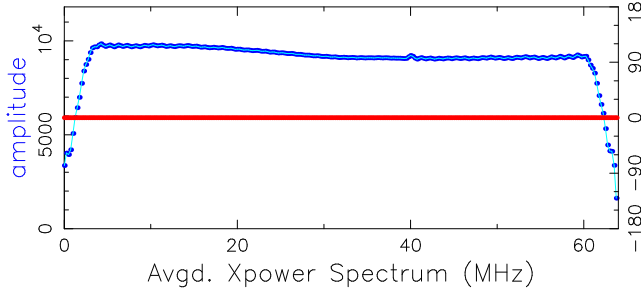


Fringe quality 9

SNR 334770.7
 Int time 149.865
 Amp 10000.001
 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

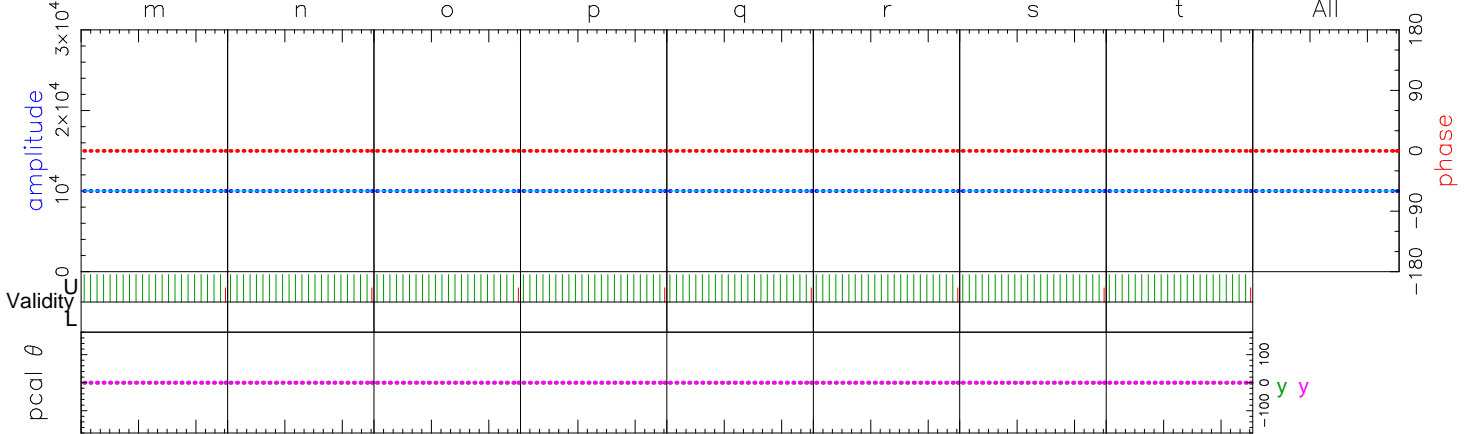


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105659
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	10000.0	10000.0
y	0	0	60000	0	0	0	4000	0	Ampl.	10000.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.2E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.6E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.1E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.3E-13
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

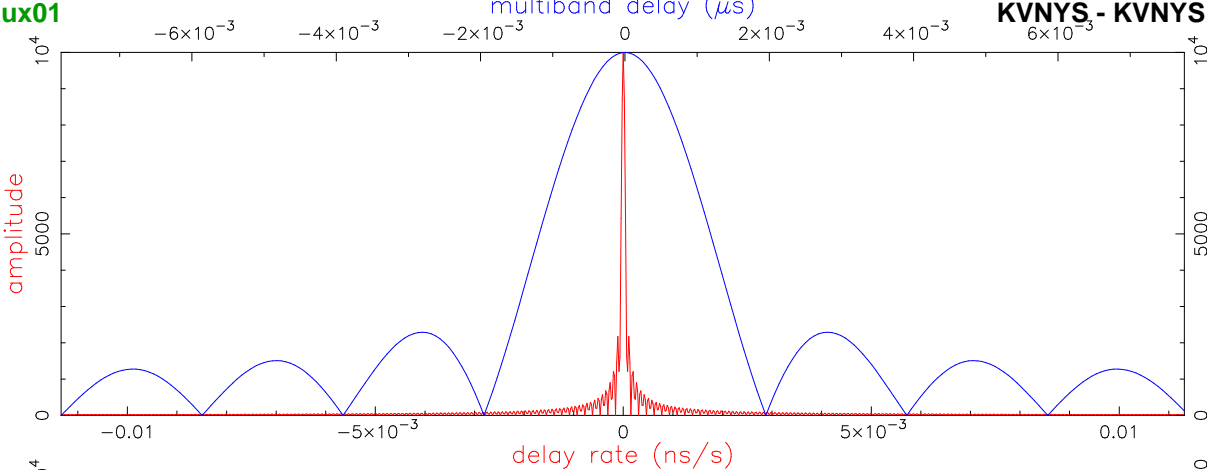
RMS Theor. Amplitude 10000.001 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 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. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 y: az 23.5 el 48.4 pa -114.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yy.W.383.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

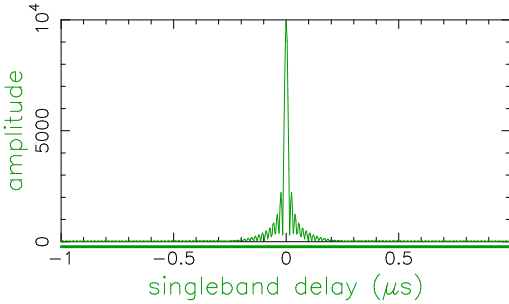
aux01

3C371.3MP15Q, No0901, yy
KVNYS - KVNYS, fgroup W, pol RR

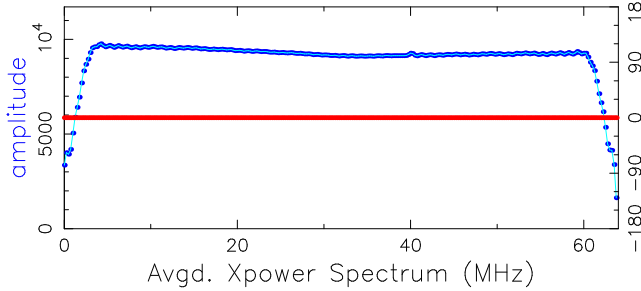


Fringe quality 9

SNR 334770.7
Int time 149.865
Amp 10000.001
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

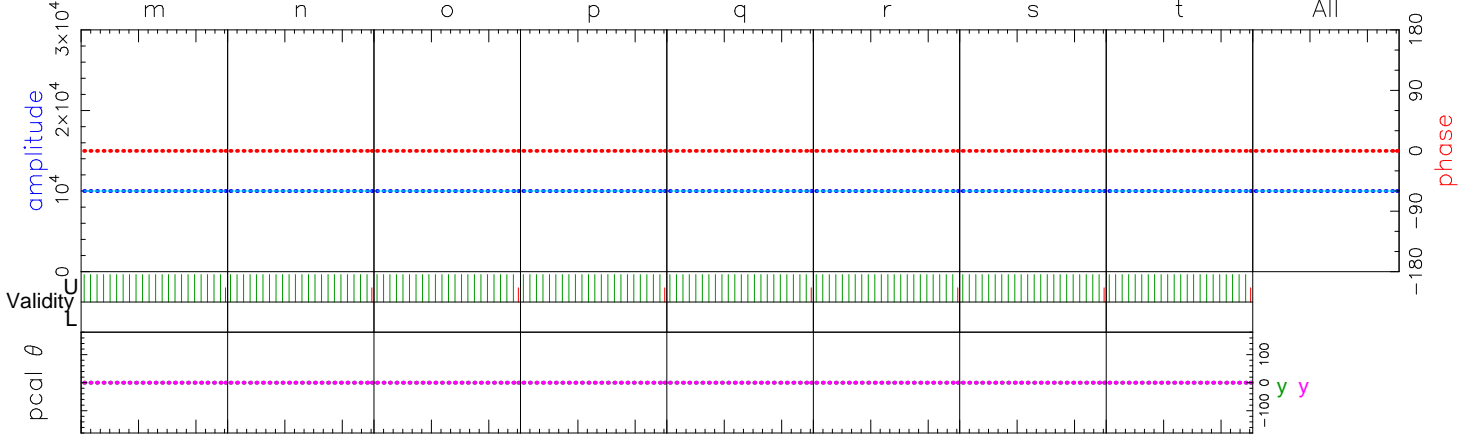


delay rate (ns/s)



Exp. c241a
Exper # 1234
Yr:day 2024:109
Start 163000.00
Stop 163230.02
FRT 163115.00
Corr/FF/build
2025:007:141222
2025:041:105701
2024:113:095956
RA & Dec (J2000)
18h06m50.680649s
+69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	10000.0	10000.0
y	0	0	60000	0	0	0	4000	0	Ampl.	10000.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.2E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.6E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.1E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.3E-13
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 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. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 y: az 23.5 el 48.4 pa -114.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

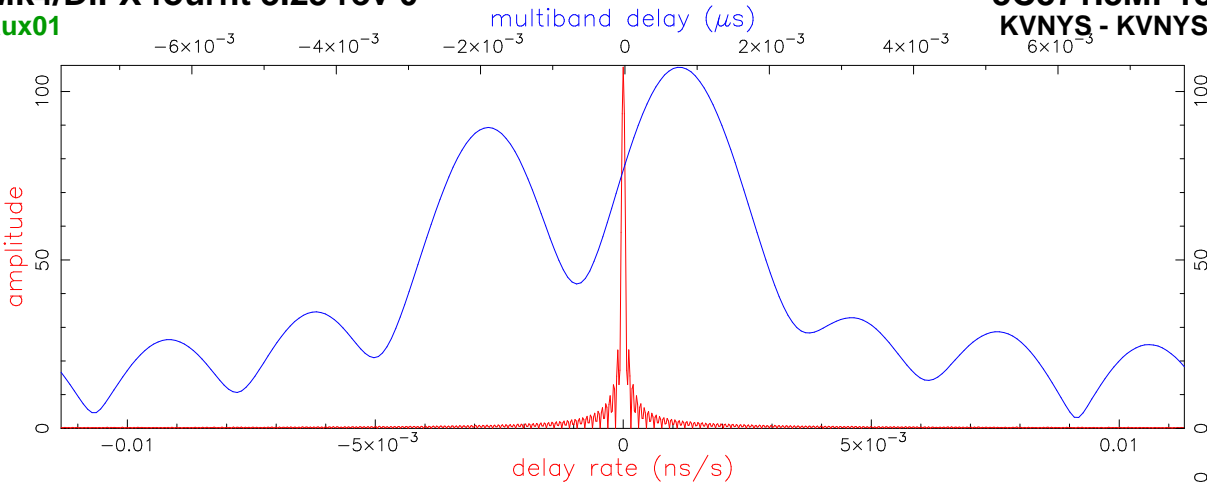
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yy.W.390.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

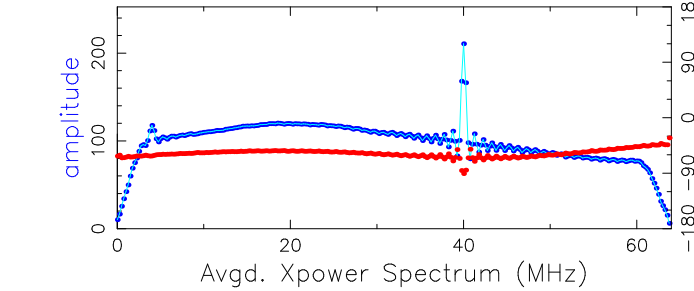
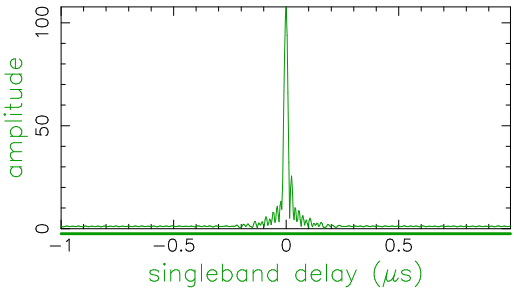
aux01

3C371.3MP15Q, No0901, yy

KVNS - KVNS, fgroup W, pol RL

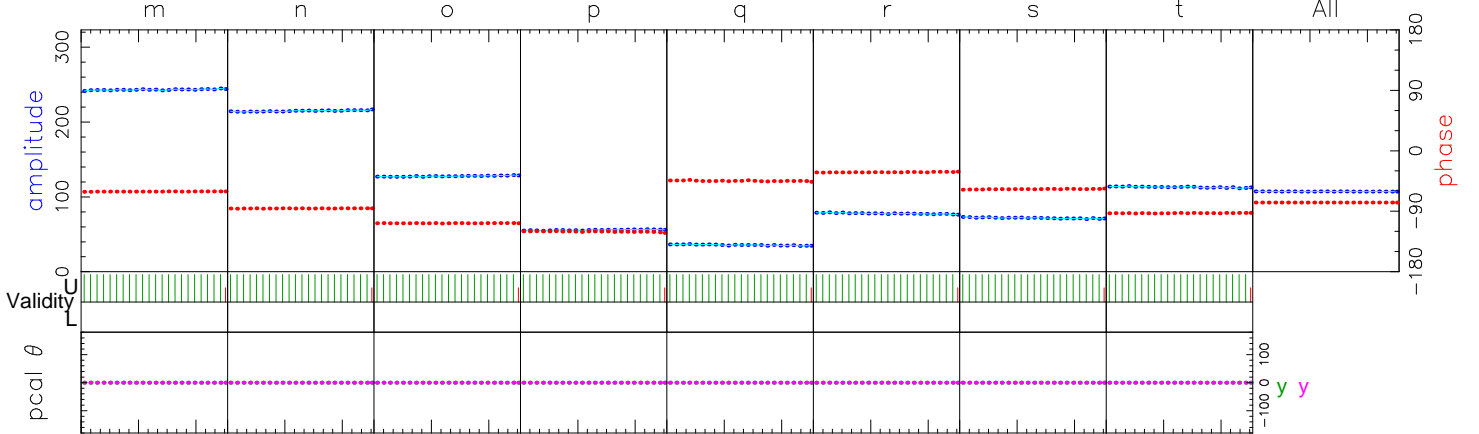


Fringe quality 5
 Error code G
 SNR 3606.5
 Int time 149.865
 Amp 107.732
 Phase -77.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000929
 MBD 0.000753
 Fringe rate (Hz)
 -0.000010
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105705
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-60.6	-85.7	-107.7	-120.3	-44.7	-31.9	-57.1	-92.8	Phase	-77.0
	243.1	214.8	127.7	55.8	35.8	77.9	71.9	113.1	Ampl.	117.5
	257.0	256.9	256.8	257.0	256.7	256.7	256.6	256.5	Sbd box	256.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 7.531875000000E-04 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 7.53188E-04 +/- 3.0E-07
 Sband delay (usec) -9.287500000000E-04 Apriori clock (usec) 0.00000000E+00 Resid sbdelay (usec) -9.28750E-04 +/- 2.4E-06
 Phase delay (usec) -2.48225733291E-06 Apriori clockrate (us/s) 0.00000000E+00 Resid phdelay (usec) -2.48226E-06 +/- 1.0E-09
 Delay rate (us/s) -1.11952103894E-10 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) -1.11952E-10 +/- 1.2E-11
 Total phase (deg) -77.0 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) -77.0 +/- 0.0

RMS Theor. Amplitude 107.732 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.1 Search (1024X32) 104.582 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.5 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 33.9 0.0 Inc. seg. avg. 107.204 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 65.9 0.1 Inc. frq. avg. 117.508 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 23.5 el 48.4 pa -114.6 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yy..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yy.W.401.3MP15Q

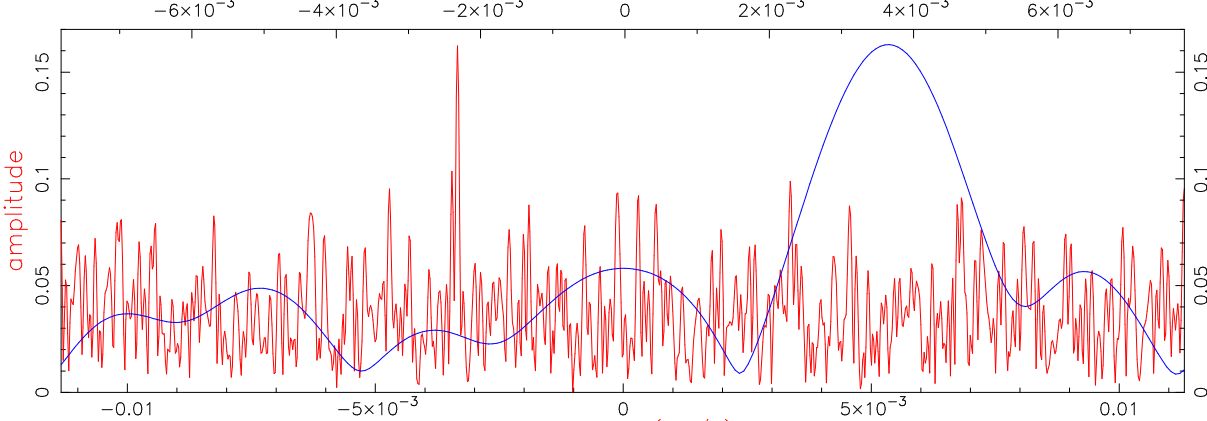
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yY

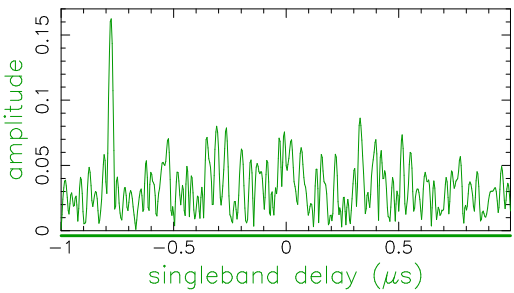
KVNYS - YEBES40M, fgroup W, pol LL

multiband delay (μ s)

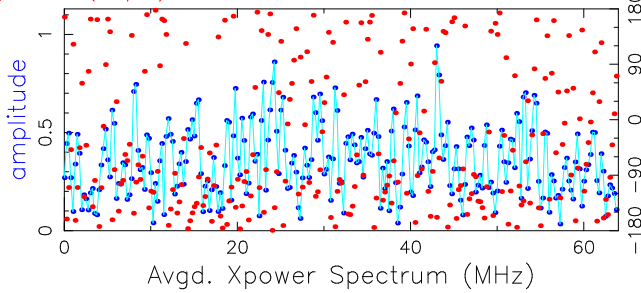


Fringe quality 0

SNR 5.5
 Int time 149.667
 Amp 0.170
 Phase -152.4
 PFD 9.9e-01
 Delays (us)
 SBD -0.778890
 MBD 0.003555
 Fringe rate (Hz)
 -0.287740
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

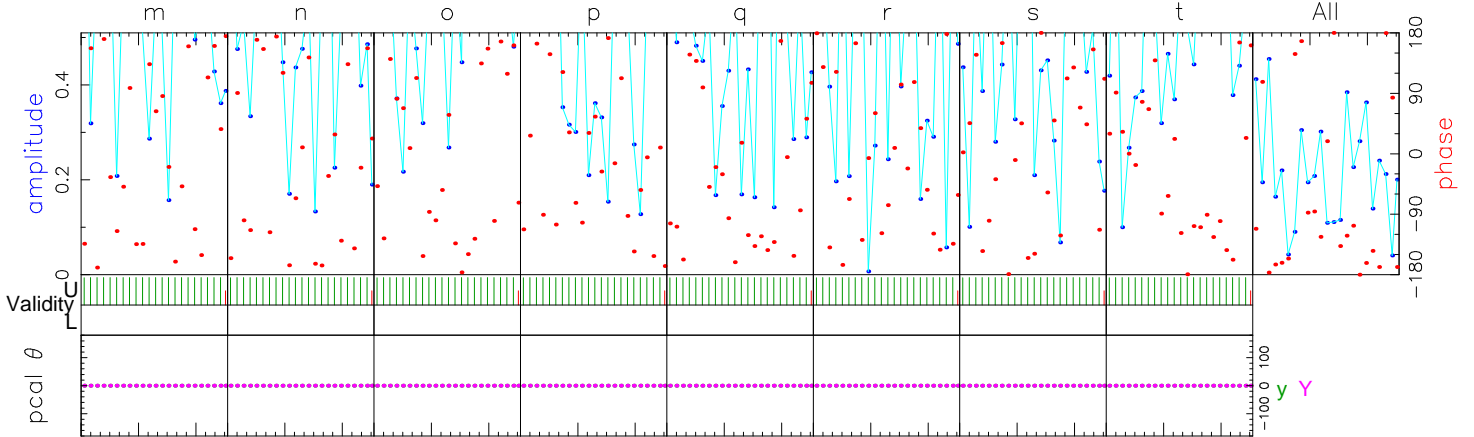


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105709
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.8	-165.2	-150.9	-101.9	-136.2	-150.4	155.1	-124.3	Phase	-152.4
	0.2	0.2	0.2	0.1	0.3	0.2	0.1	0.1	Ampl.	0.2
	276.0	264.0	425.0	181.3	57.3	116.9	440.5	207.8	Sbd box	57.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	8.67569968712E+03	Apriori delay (usec)	8.67647738194E+03	Resid mbdelay (usec)	3.55519E-03	+/-	2.0E-04
Sband delay (usec)	8.67569849144E+03	Apriori clock (usec)	1.1697482E+02	Resid sbdelay (usec)	-7.78890E-01	+/-	1.6E-03
Phase delay (usec)	8.67647737702E+03	Apriori clockrate (us/s)	1.2132300E-06	Resid phdelay (usec)	-4.91361E-06	+/-	6.7E-07
Delay rate (us/s)	3.21153718451E-01	Apriori rate (us/s)	3.21157058831E-01	Resid rate (us/s)	-3.34038E-06	+/-	7.8E-09
Total phase (deg)	92.5	Apriori accel (us/s/s)	-4.97724539392E-05	Resid phase (deg)	-152.4	+/-	20.9

ph/seg (deg)	58.8	Theor.	50.1	Search (1024X32)	0.162	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	76.1		87.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	33.6		29.5	Inc. seg. avg.	0.164	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.1		51.5	Inc. frq. avg.	0.163	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 Y: az 0.0 el 20.3 pa -0.2 u,v (fr/asec) -5463.869 -10695.399 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yY.W.416.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

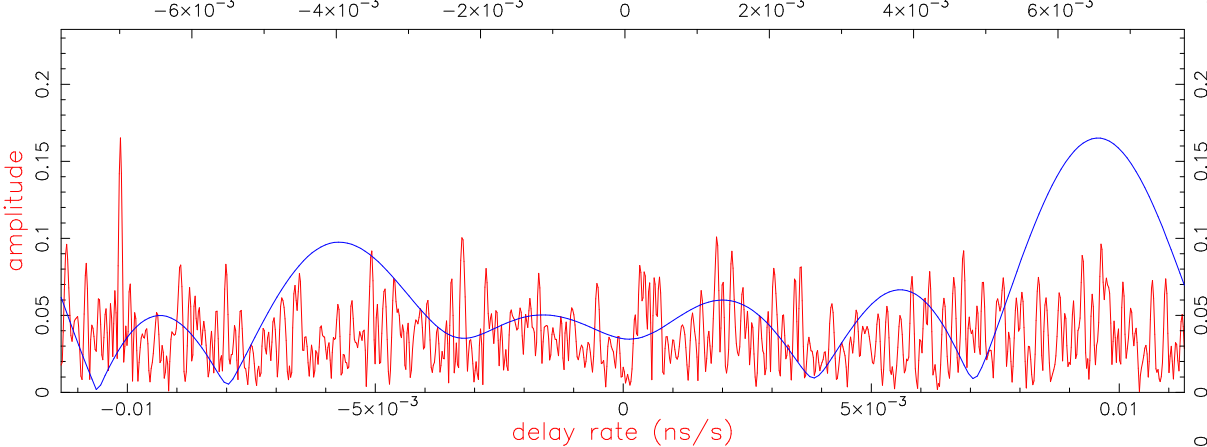
aux01

3C371.3MP15Q, No0901, yY

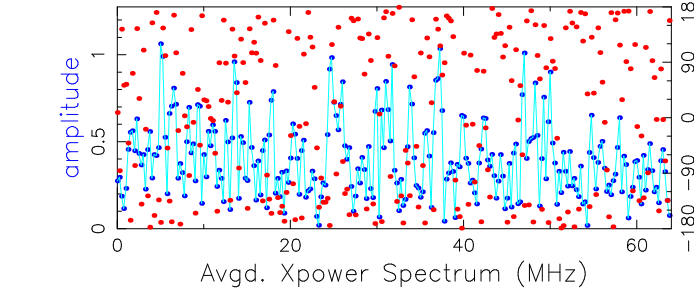
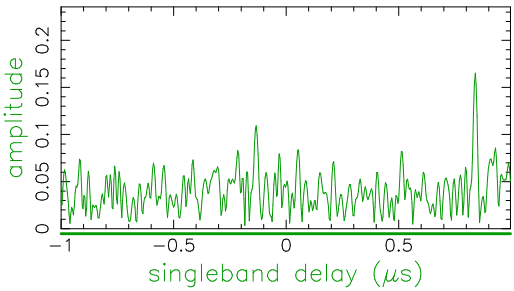
KVNYS - YEBES40M, fgroup W, pol RR

multiband delay (μs)

Fringe quality 0

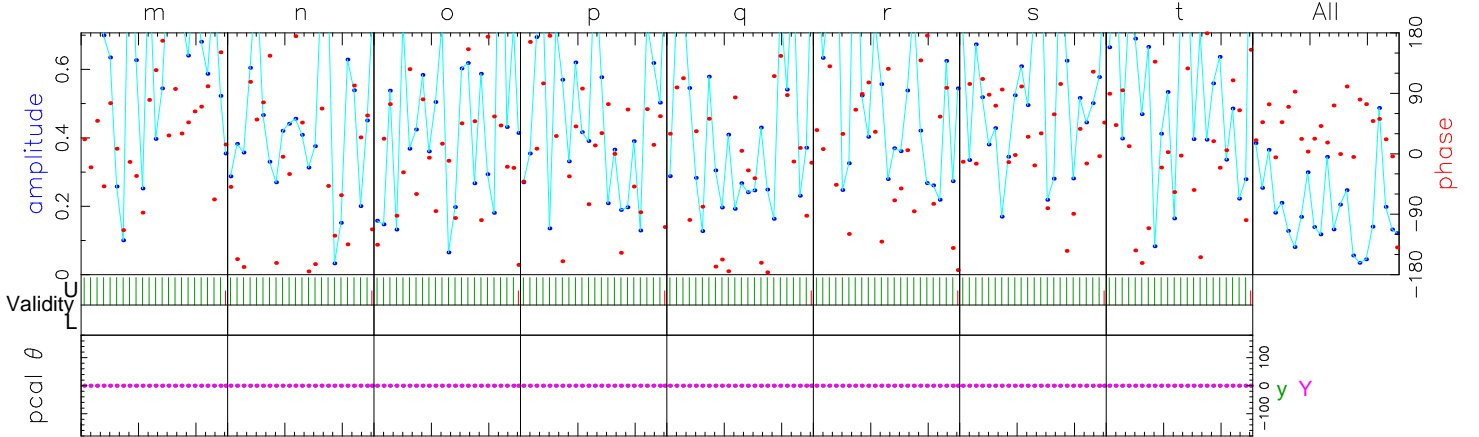


SNR 5.5
 Int time 149.667
 Amp 0.236
 Phase 37.6
 PFD 9.8e-01
 Delays (us)
 SBD 0.839760
 MBD 0.006549
 Fringe rate (Hz) -0.875372
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105713
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	37.9	85.9	13.7	29.3	78.7	35.2	36.7	40.8	Phase	37.6
	0.5	0.1	0.2	0.3	0.1	0.2	0.4	0.1	Ampl.	0.2
	472.1	221.3	177.7	22.3	34.0	288.9	355.2	244.1	Sbd box	472.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	8.67731205582E+03	Apriori delay (usec)	8.67647738194E+03	Resid mbdelay (usec)	6.54888E-03	+/-	2.0E-04
Sband delay (usec)	8.67731714169E+03	Apriori clock (usec)	1.1697482E+02	Resid sbdelay (usec)	8.39760E-01	+/-	1.6E-03
Phase delay (usec)	8.67647738315E+03	Apriori clockrate (us/s)	1.2132300E-06	Resid phdelay (usec)	1.21278E-06	+/-	6.7E-07
Delay rate (us/s)	3.21146896627E-01	Apriori rate (us/s)	3.21157058831E-01	Resid rate (us/s)	-1.01622E-05	+/-	7.7E-09
Total phase (deg)	282.5	Apriori accel (us/s/s)	-4.97724539392E-05	Resid phase (deg)	37.6	+/-	20.7

ph/seg (deg)	42.0	Theor.	49.7	Amplitude	0.236 +/- 0.043	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.1		86.8	Search (1024X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.9		29.3	Inc. seg. avg.	0.203	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	60.8		51.2	Inc. frq. avg.	0.218	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

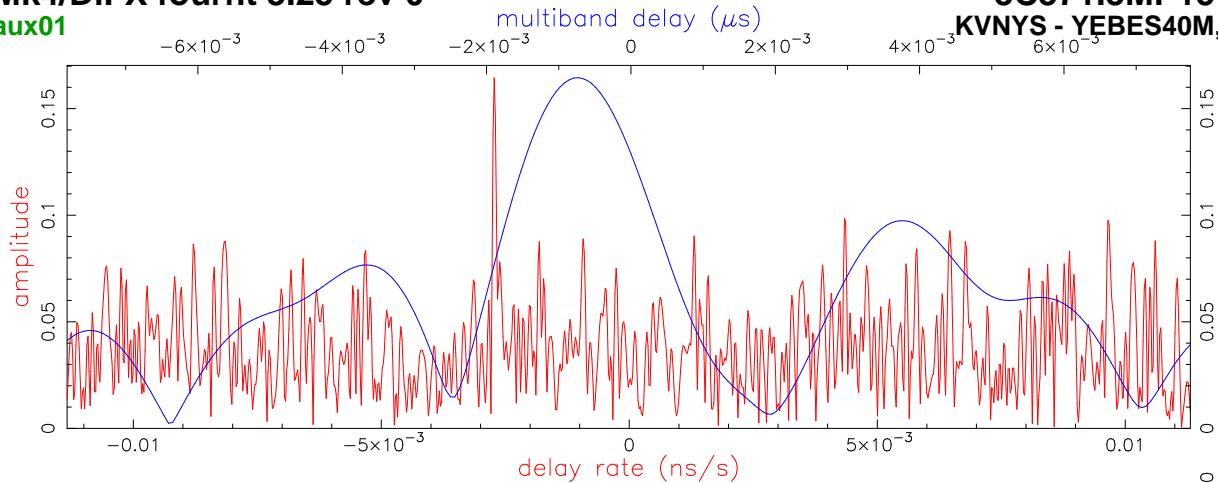
y: az 23.5 el 48.4 pa -114.6 Y: az 0.0 el 20.3 pa -0.2 u,v (fr/asec) -5463.869 -10695.399 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yY.W.424.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

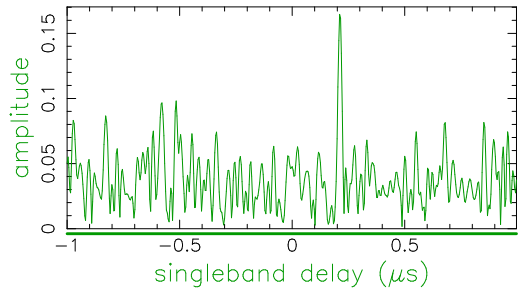
3C371.3MP15Q, No0901, yY

KVNYS - YEBES40M, fgroup W, pol LR

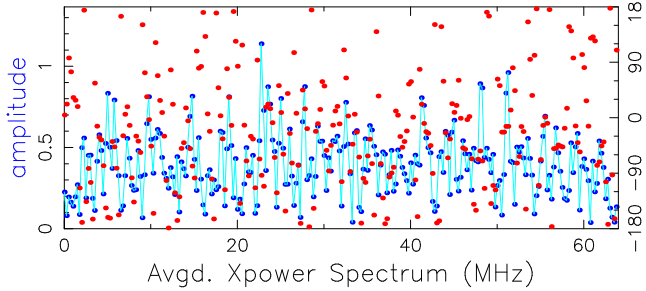


Fringe quality 0

SNR 5.6
 Int time 149.667
 Amp 0.170
 Phase -93.0
 PFD 9.6e-01
 Delays (us)
 SBD 0.212434
 MBD -0.000716
 Fringe rate (Hz)
 -0.235253
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

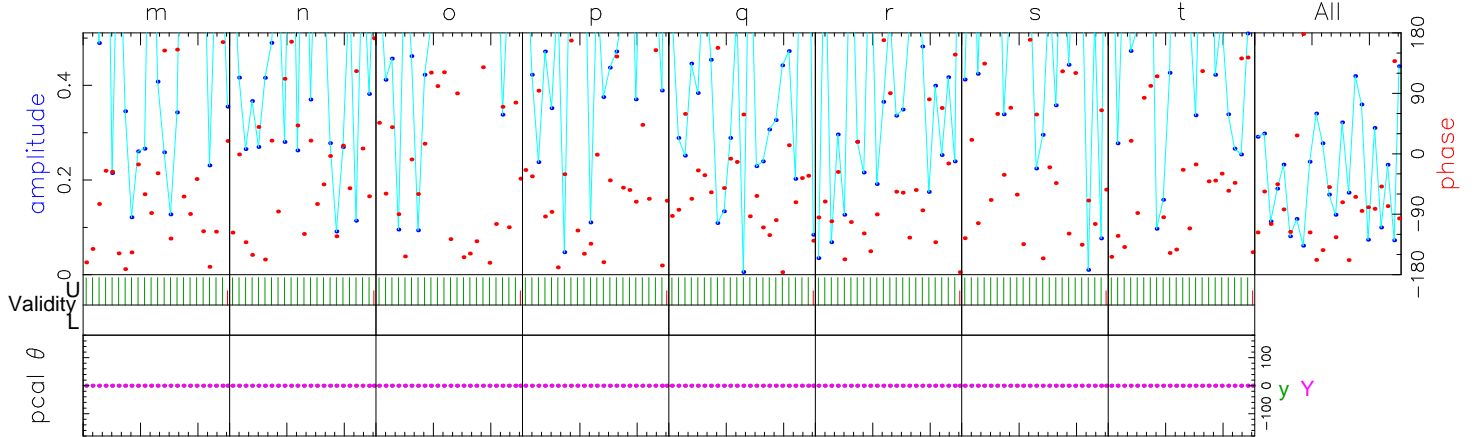


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105716
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	-97.9	-75.7	179.9	-91.6	-54.8	-97.3	-112.1	-118.3	Phase	-93.0
	0.4	0.2	0.1	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	310.2	82.0	329.1	92.6	91.4	319.1	410.4	510.0	Sbd box	311.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	8.67669541587E+03	Apriori delay (usec)	8.67647738194E+03	Resid mbdelay (usec)	-7.16067E-04	+/-	2.0E-04
Sband delay (usec)	8.67668981569E+03	Apriori clock (usec)	1.1697482E+02	Resid sbdelay (usec)	2.12434E-01	+/-	1.5E-03
Phase delay (usec)	8.67647737894E+03	Apriori clockrate (us/s)	1.2132300E-06	Resid phdelay (usec)	-2.99867E-06	+/-	6.6E-07
Delay rate (us/s)	3.21154327782E-01	Apriori rate (us/s)	3.21157058831E-01	Resid rate (us/s)	-2.73105E-06	+/-	7.7E-09
Total phase (deg)	151.9	Apriori accel (us/s/s)	-4.97724539392E-05	Resid phase (deg)	-93.0	+/-	20.6

ph/seg (deg)	52.6	Theor.	49.4	Amplitude	0.170 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.9	Search (1024X32)	0.162	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.6	Inc. seg. avg.	0.160	Inc. frq. avg.	0.170	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.6	Inc. frq. avg.	0.170			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

y: az 23.5 el 48.4 pa -114.6 Y: az 0.0 el 20.3 pa -0.2 u,v (fr/asec) -5463.869 -10695.399 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yY.W.429.3MP15Q

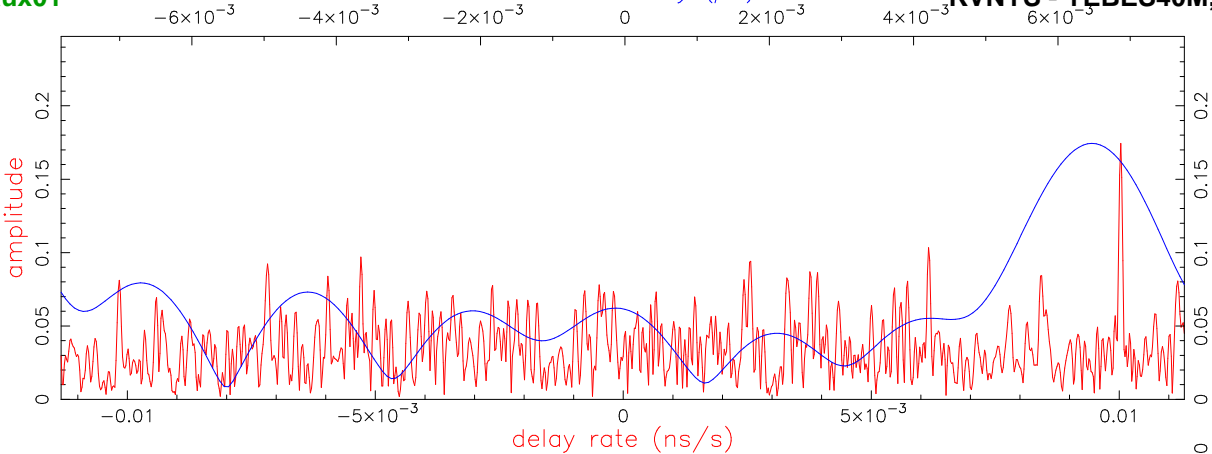
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yY

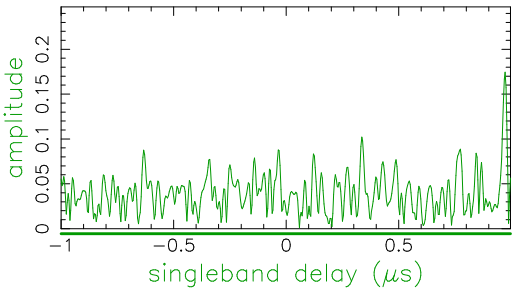
KVNYS - YEBES40M, fgroup W, pol RL

multiband delay (μs)

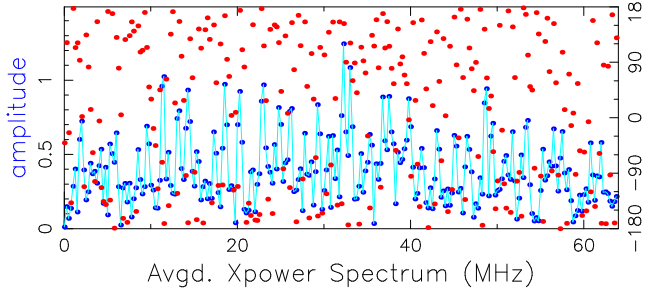


Fringe quality 0

SNR 5.8
 Int time 149.667
 Amp 0.247
 Phase 111.5
 PFD 4.7e-01
 Delays (us)
 SBD 0.971969
 MBD 0.006450
 Fringe rate (Hz) 0.865941
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

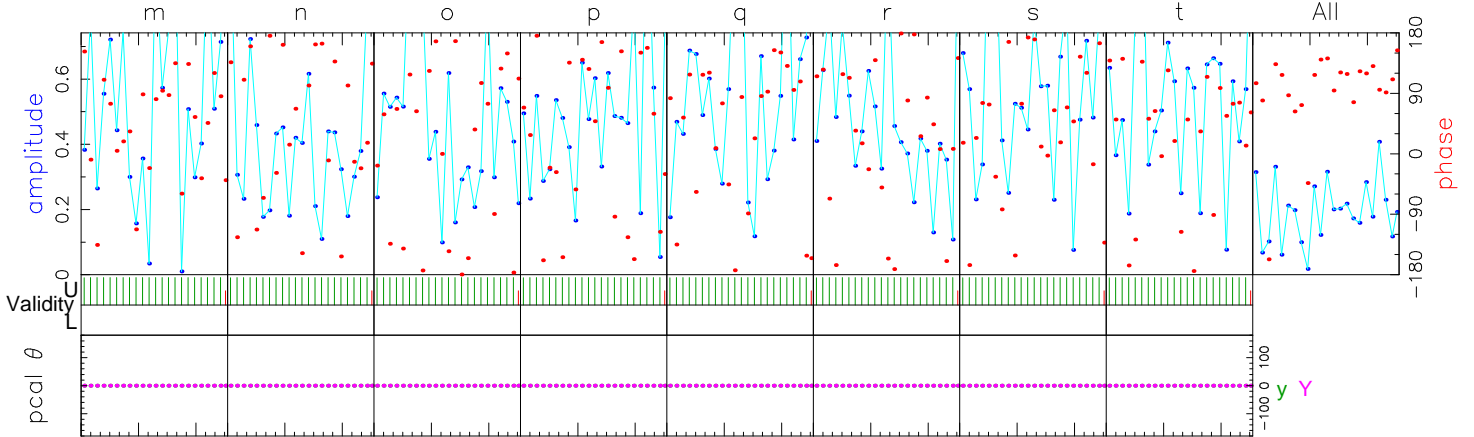


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105719
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	72.4	130.8	135.7	150.3	126.2	130.5	74.7	95.7	Phase	111.5
	0.4	0.2	0.3	0.2	0.4	0.2	0.2	0.3	Ampl.	0.3
	25.2	267.2	410.1	228.6	2.2	163.0	298.8	46.0	Sbd box	505.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	8.67745258200E+03	Apriori delay (usec)	8.67647738194E+03	Resid mbdelay (usec)	6.45006E-03	+/-	1.9E-04
Sband delay (usec)	8.67744935144E+03	Apriori clock (usec)	1.1697482E+02	Resid sbdelay (usec)	9.71969E-01	+/-	1.5E-03
Phase delay (usec)	8.67647738553E+03	Apriori clockrate (us/s)	1.2132300E-06	Resid phdelay (usec)	3.59609E-06	+/-	6.3E-07
Delay rate (us/s)	3.21167111549E-01	Apriori rate (us/s)	3.21157058831E-01	Resid rate (us/s)	1.00527E-05	+/-	7.3E-09
Total phase (deg)	356.4	Apriori accel (us/s/s)	-4.97724539392E-05	Resid phase (deg)	111.5	+/-	19.6

ph/seg (deg)	44.2	Theor.	47.0	Amplitude	0.247 +/- 0.042	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.8	Search (1024X32)	0.172	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	32.1	Inc. seg. avg.	0.206	Inc. frq. avg.	0.250	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	40.2	Inc. frq. avg.	0.250	u, v (fr/asec)	-5463.869 -10695.399	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	mb window (us) -0.008 0.008
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

y: az 23.5 el 48.4 pa -114.6 Y: az 0.0 el 20.3 pa -0.2 u, v (fr/asec) -5463.869 -10695.399 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/yY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/yY.W.434.3MP15Q

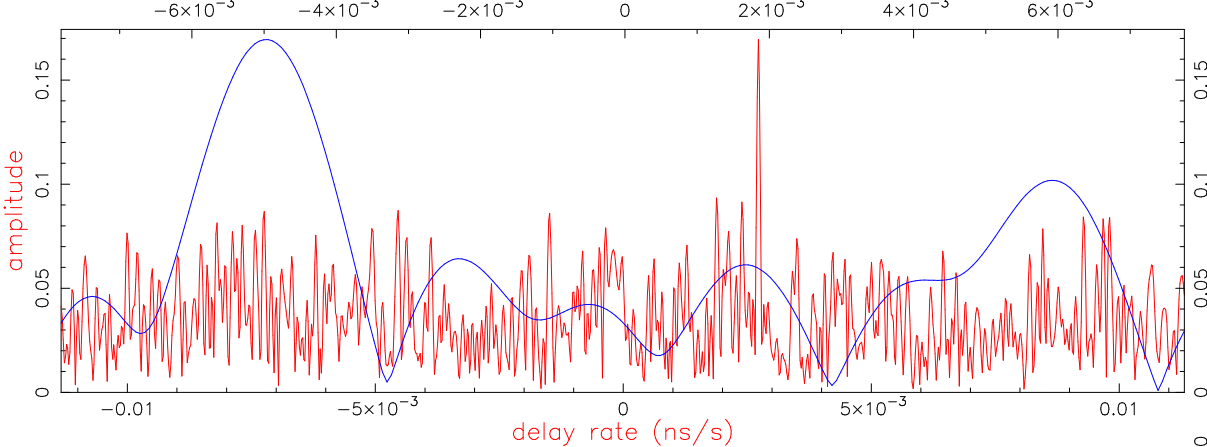
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yZ

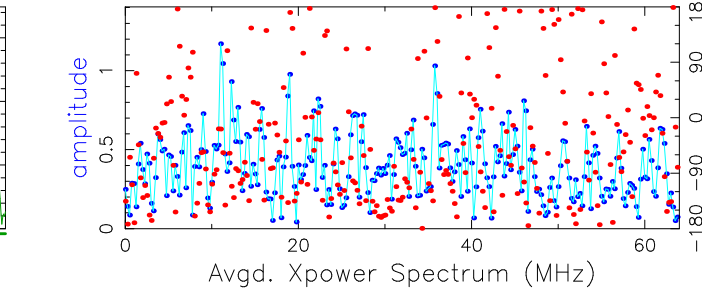
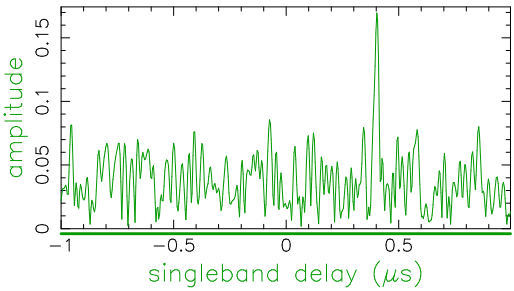
KVNYS - METSAHOV, fgroup W, pol LL

multiband delay (μ s)



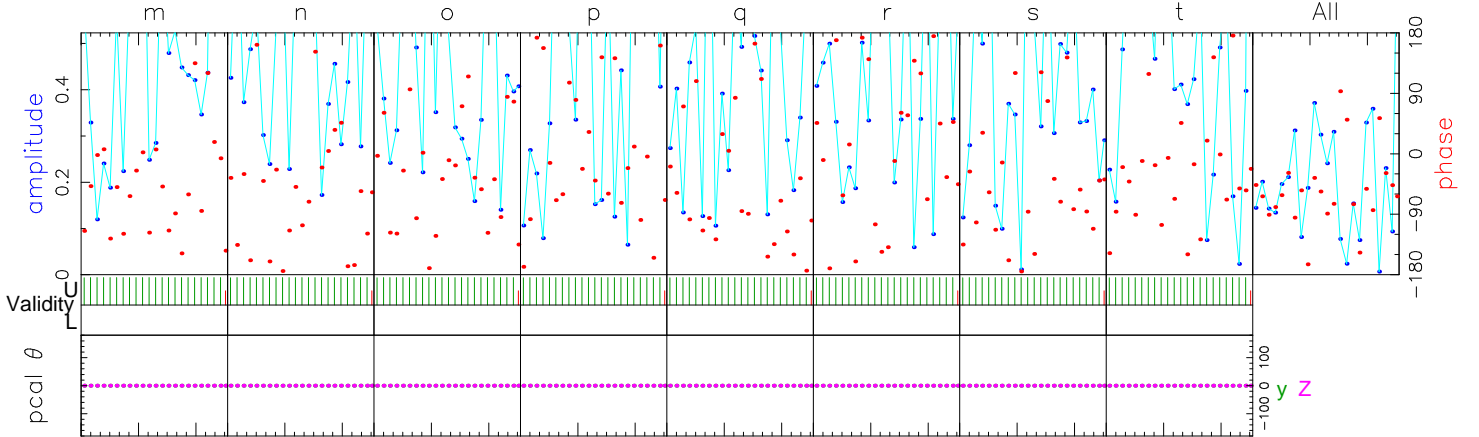
Fringe quality 0

SNR 5.7
 Int time 149.818
 Amp 0.174
 Phase -65.9
 PFD 7.7e-01
 Delays (us)
 SBD 0.403349
 MBD -0.004956
 Fringe rate (Hz)
 0.234000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105702
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.1	-103.9	-40.8	-47.3	-106.0	-69.8	-82.2	-48.2	Phase	-65.9
	0.3	0.2	0.1	0.2	0.2	0.0	0.2	0.3	Ampl.	0.2
	361.5	102.4	245.1	388.0	357.2	462.4	152.3	361.5	Sbd box	360.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.86052001035E+03	Apriori delay (usec)	1.86011871638E+03	Resid mbdelay (usec)	-4.95603E-03	+/-	1.9E-04
Sband delay (usec)	1.86052206488E+03	Apriori clock (usec)	6.3153973E+00	Resid sbdelay (usec)	4.03349E-01	+/-	1.5E-03
Phase delay (usec)	1.86011871425E+03	Apriori clockrate (us/s)	-6.1029892E-07	Resid phdelay (usec)	-2.12625E-06	+/-	6.5E-07
Delay rate (us/s)	1.99212778562E-01	Apriori rate (us/s)	1.99210062049E-01	Resid rate (us/s)	2.71651E-06	+/-	7.5E-09
Total phase (deg)	16.5	Apriori accel (us/s/s)	-3.72488640187E-05	Resid phase (deg)	-65.9	+/-	20.1

ph/seg (deg)	58.4	Theor.	48.2	Amplitude	0.174 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.3		84.2	Search (1024X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.3		28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.3		49.6	Inc. seg. avg.	0.153	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.172	Data rate(Mb/s): 2048	t_cohere infinite			

y: az 23.5 el 48.4 pa -114.6 Z: az 12.3 el 41.5 pa -18.1 u,v (fr/asec) -3410.835 -8710.884 simultaneous interpolator

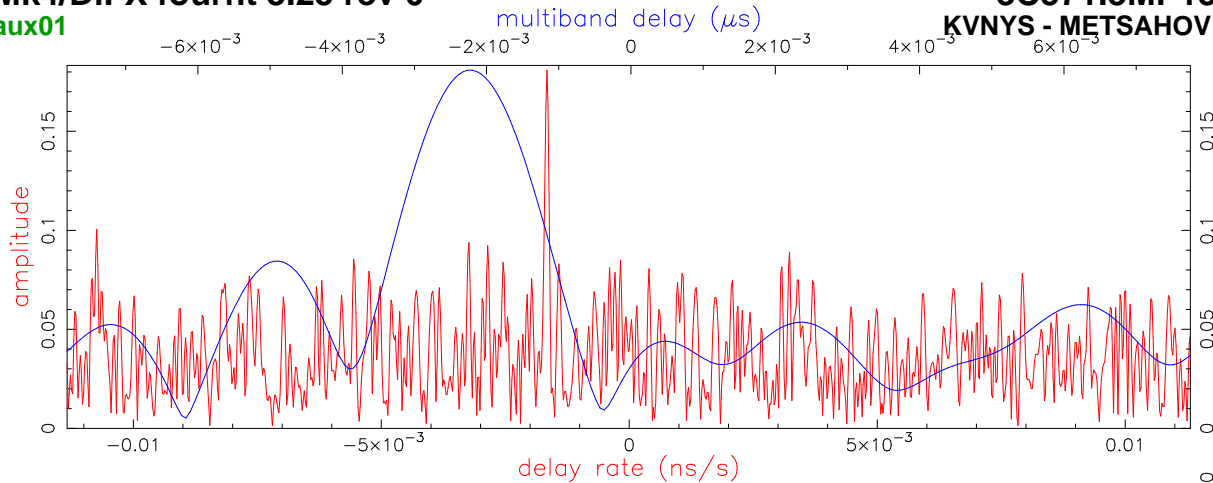
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yZ..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yZ.W.395.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

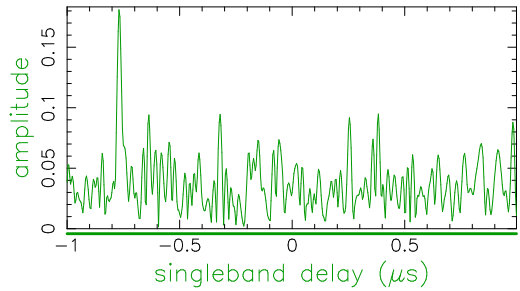
3C371.3MP15Q, No0901, yZ

KVNYS - METSAHOV, fgroup W, pol RR

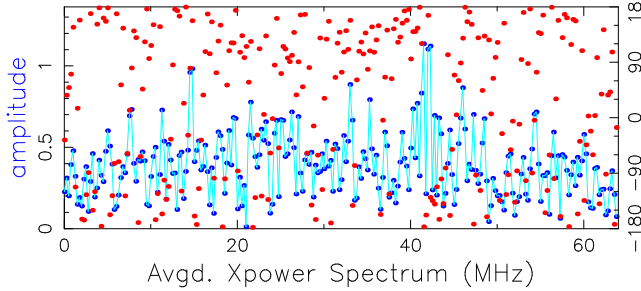


Fringe quality 0

SNR 6.1
 Int time 149.818
 Amp 0.183
 Phase -38.8
 PFD 1.4e-01
 Delays (us)
 SBD -0.768561
 MBD -0.002223
 Fringe rate (Hz)
 -0.142799
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

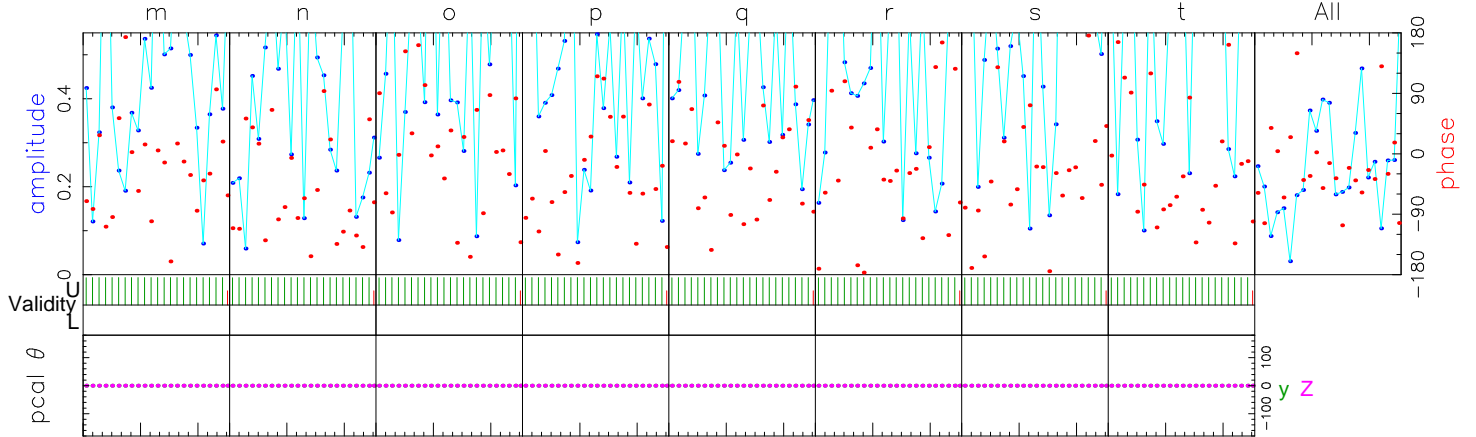


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105704
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.6	-84.1	-23.8	-54.9	2.9	-22.7	-47.0	-50.2	Phase	-38.8
	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.2	Ampl.	0.2
	60.8	388.6	206.2	219.8	351.9	354.5	61.2	58.1	Sbd box	60.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.85935086844E+03	Apriori delay (usec)	1.86011871638E+03	Resid mbdelay (usec)	-2.22294E-03	+/-	1.8E-04
Sband delay (usec)	1.85935015513E+03	Apriori clock (usec)	6.3153973E+00	Resid sbdelay (usec)	-7.68561E-01	+/-	1.4E-03
Phase delay (usec)	1.86011871513E+03	Apriori clockrate (us/s)	-6.1029892E-07	Resid phdelay (usec)	-1.25058E-06	+/-	6.1E-07
Delay rate (us/s)	1.99208404296E-01	Apriori rate (us/s)	1.99210062049E-01	Resid rate (us/s)	-1.65775E-06	+/-	7.0E-09
Total phase (deg)	43.6	Apriori accel (us/s/s)	-3.72488640187E-05	Resid phase (deg)	-38.8	+/-	18.8

ph/seg (deg)	62.6	Theor.	45.2	Amplitude	0.183 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.4		78.9	Search (1024X32)	0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.4		26.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.4		46.5	Inc. seg. avg.	0.187	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.179	Data rate(Mb/s): 2048	t_cohere infinite			

y: az 23.5 el 48.4 pa -114.6 Z: az 12.3 el 41.5 pa -18.1 u,v (fr/asec) -3410.835 -8710.884 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yZ..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yZ.W.400.3MP15Q

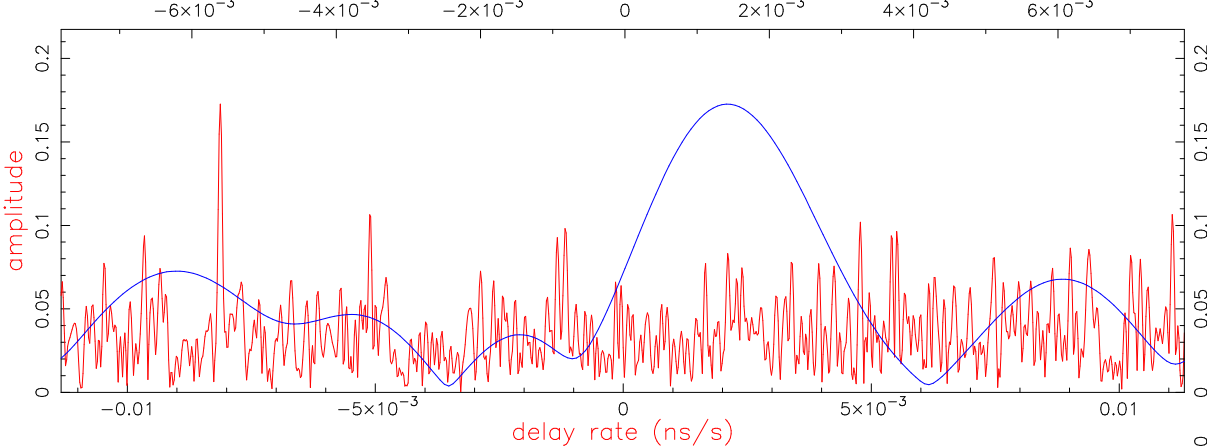
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yZ

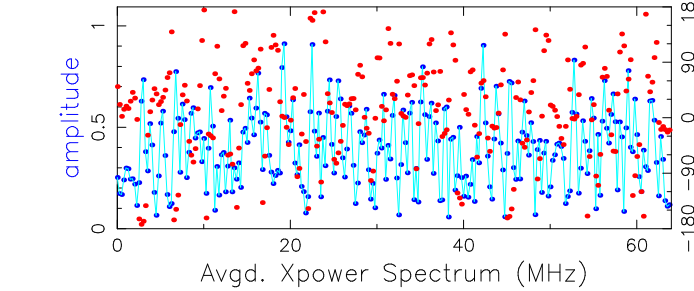
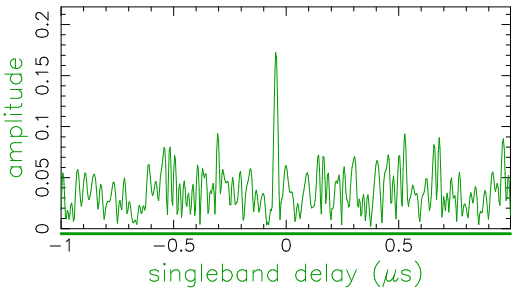
KVNYS - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



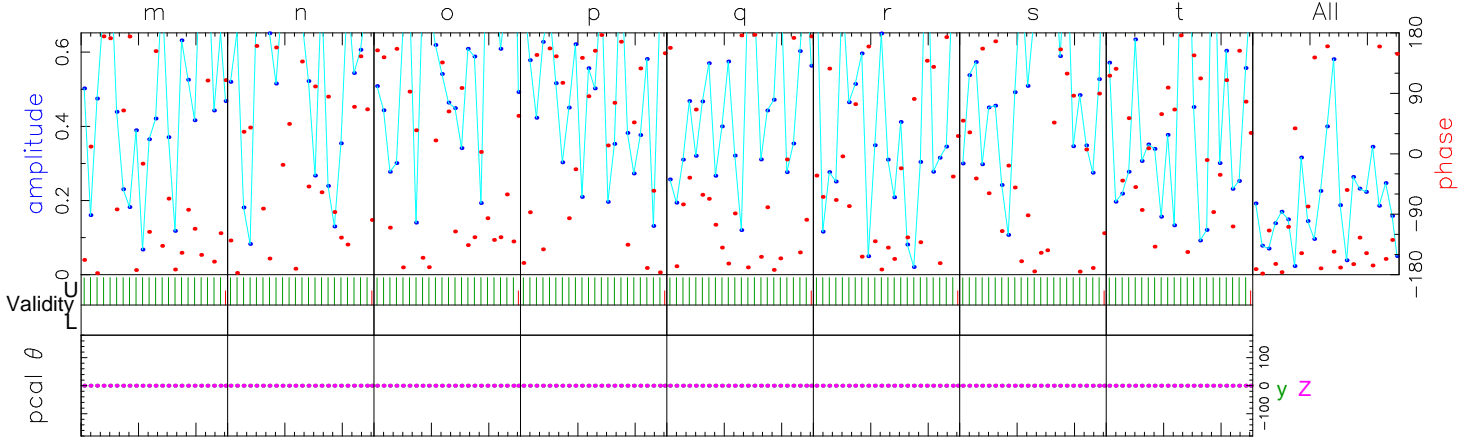
Fringe quality 0

SNR 5.8
 Int time 149.818
 Amp 0.217
 Phase -158.4
 PFD 5.1e-01
 Delays (us)
 SBD -0.045660
 MBD 0.001418
 Fringe rate (Hz)
 -0.701967
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105706
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-157.4	-167.0	-149.0	171.1	-135.0	-112.7	-168.1	174.9	Phase	-158.4
	0.4	0.1	0.3	0.3	0.3	0.1	0.2	0.1	Ampl.	0.2
	246.4	305.4	471.4	156.2	244.5	509.5	179.1	468.6	Sbd box	245.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.86007325924E+03	Apriori delay (usec)	1.86011871638E+03	Resid mbdelay (usec)	1.41786E-03	+/-	1.9E-04
Sband delay (usec)	1.86007305588E+03	Apriori clock (usec)	6.3153973E+00	Resid sbdelay (usec)	-4.56605E-02	+/-	1.5E-03
Phase delay (usec)	1.86011871127E+03	Apriori clockrate (us/s)	-6.1029892E-07	Resid phdelay (usec)	-5.10904E-06	+/-	6.3E-07
Delay rate (us/s)	1.99201912903E-01	Apriori rate (us/s)	1.99210062049E-01	Resid rate (us/s)	-8.14915E-06	+/-	7.3E-09
Total phase (deg)	-76.0	Apriori accel (us/s/s)	-3.72488640187E-05	Resid phase (deg)	-158.4	+/-	19.7

ph/seg (deg)	51.9	Theor.	47.2	Amplitude	0.217 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.3	Search (1024X32)	0.171	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.5	Inc. seg. avg.	0.186	Inc. frq. avg.	0.206	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	54.4	Inc. frq. avg.	0.206			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

y: az 23.5 el 48.4 pa -114.6 Z: az 12.3 el 41.5 pa -18.1 u,v (fr/asec) -3410.835 -8710.884 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//yZ..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//yZ.W.406.3MP15Q

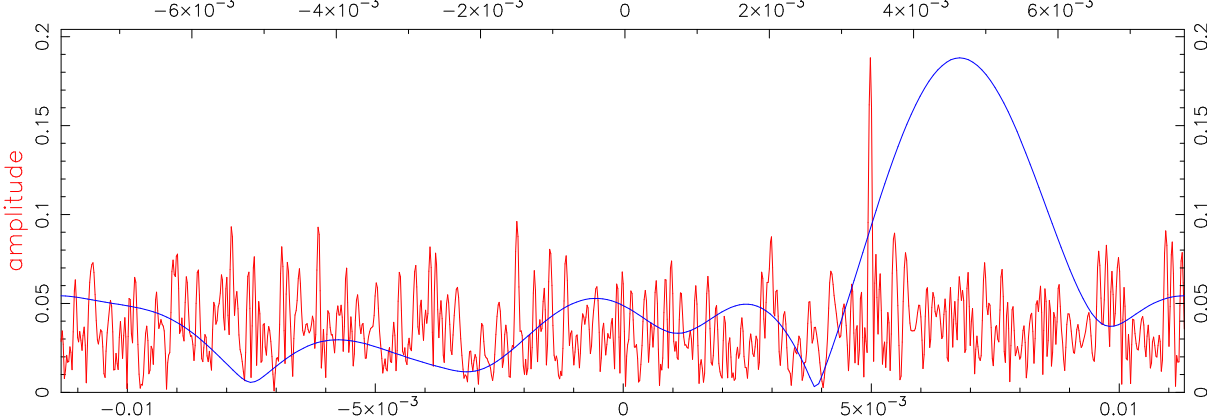
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yZ

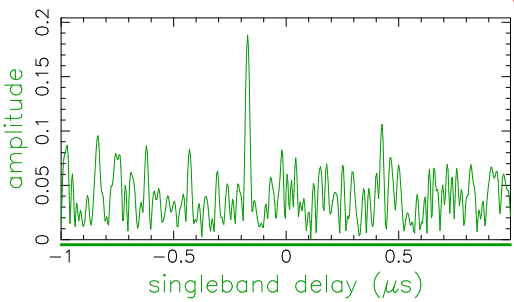
KVNYS - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

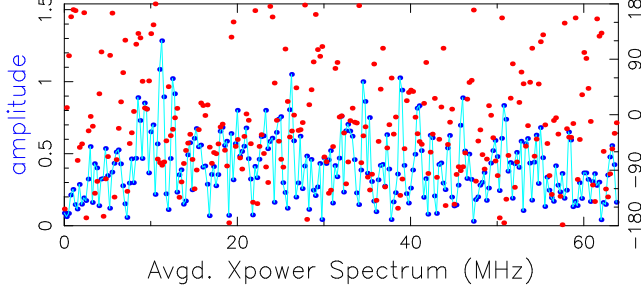


Fringe quality 0

SNR 6.3
 Int time 149.818
 Amp 0.204
 Phase 84.3
 PFD 4.0e-02
 Delays (us)
 SBD -0.171485
 MBD 0.004639
 Fringe rate (Hz)
 0.430158
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

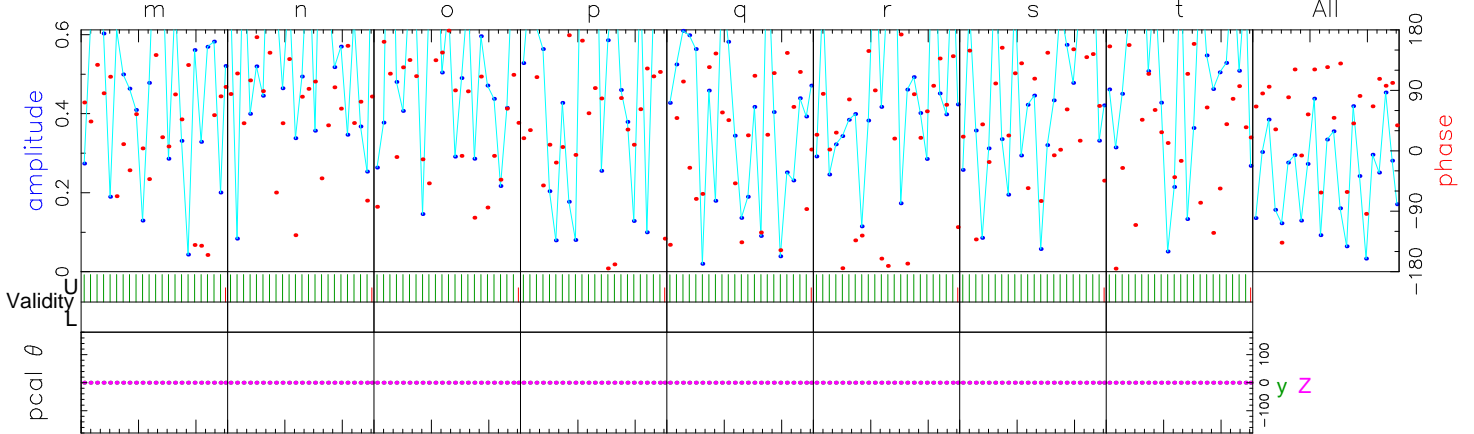


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:109
 Start 163000.00
 Stop 163230.02
 FRT 163115.00
 Corr/FF/build
 2025:007:141222
 2025:041:105708
 2024:113:095956
 RA & Dec (J2000)
 18h06m50.680649s
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 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
	63.3	79.4	107.5	90.4	57.0	105.2	97.4	46.3	Phase	84.3
	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	242.6	212.3	506.7	146.8	502.9	203.8	489.1	314.8	Sbd box	213.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.85995148073E+03	Apriori delay (usec)	1.86011871638E+03	Resid mbdelay (usec)	4.63935E-03	+/-	1.7E-04
Sband delay (usec)	1.85994723088E+03	Apriori clock (usec)	6.3153973E+00	Resid sbdelay (usec)	-1.71485E-01	+/-	1.4E-03
Phase delay (usec)	1.86011871910E+03	Apriori clockrate (us/s)	-6.1029892E-07	Resid phdelay (usec)	2.71802E-06	+/-	5.9E-07
Delay rate (us/s)	1.99215055754E-01	Apriori rate (us/s)	1.99210062049E-01	Resid rate (us/s)	4.99371E-06	+/-	6.8E-09
Total phase (deg)	166.7	Apriori accel (us/s/s)	-3.72488640187E-05	Resid phase (deg)	84.3	+/-	18.2

ph/seg (deg)	RMS 72.4	Theor. 43.6	Amplitude Search (1024X32)	0.204 +/- 0.032	0.179	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.0	76.1	Interp.	0.000	0.000E+00	0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	25.3	25.7	Inc. seg. avg.	0.209	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 (%)	25.9	44.9	Inc. frq. avg.	0.197	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 Z: az 12.3 el 41.5 pa -18.1 u, v (fr/asec) -3410.835 -8710.884 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//yZ..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//yZ.W.412.3MP15Q