

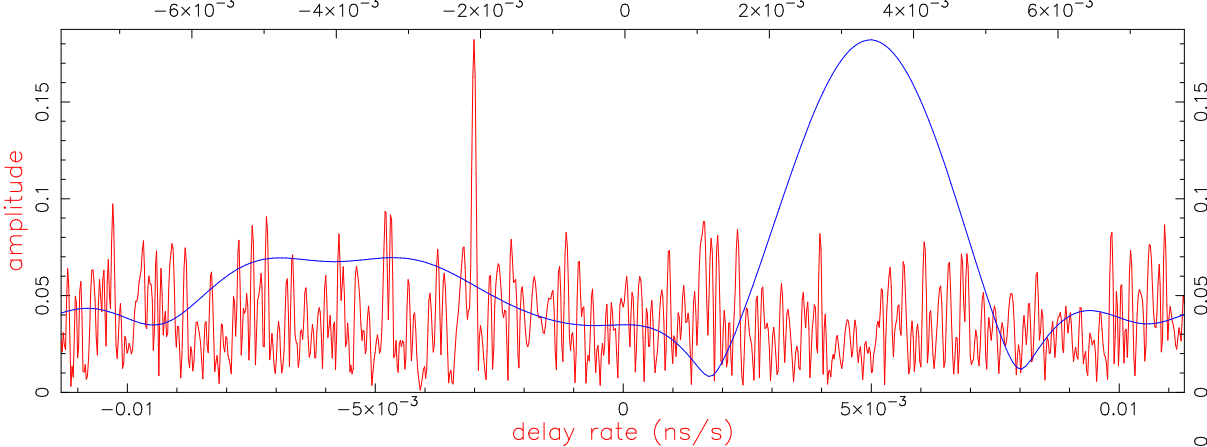
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, Bg

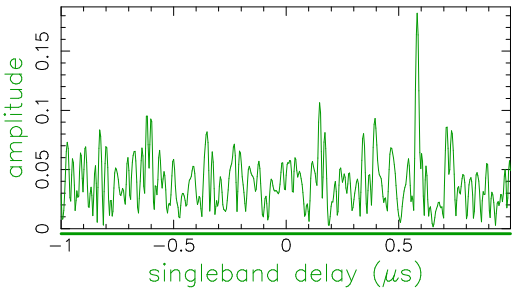
EFLSBERG - GLT, fgroup W, pol RR

multiband delay (μ s)

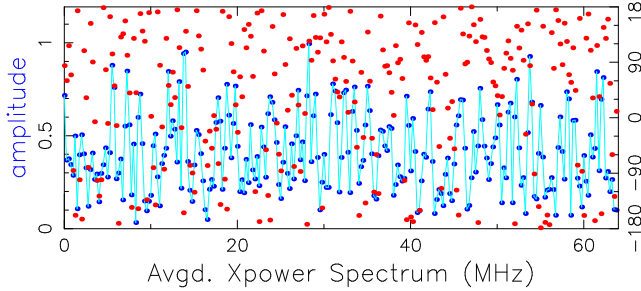


Fringe quality 0

SNR 6.1
 Int time 149.960
 Amp 0.187
 Phase -54.2
 PFD 1.3e-01
 Delays (us)
 SBD 0.582004
 MBD 0.003401
 Fringe rate (Hz)
 -0.259288
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

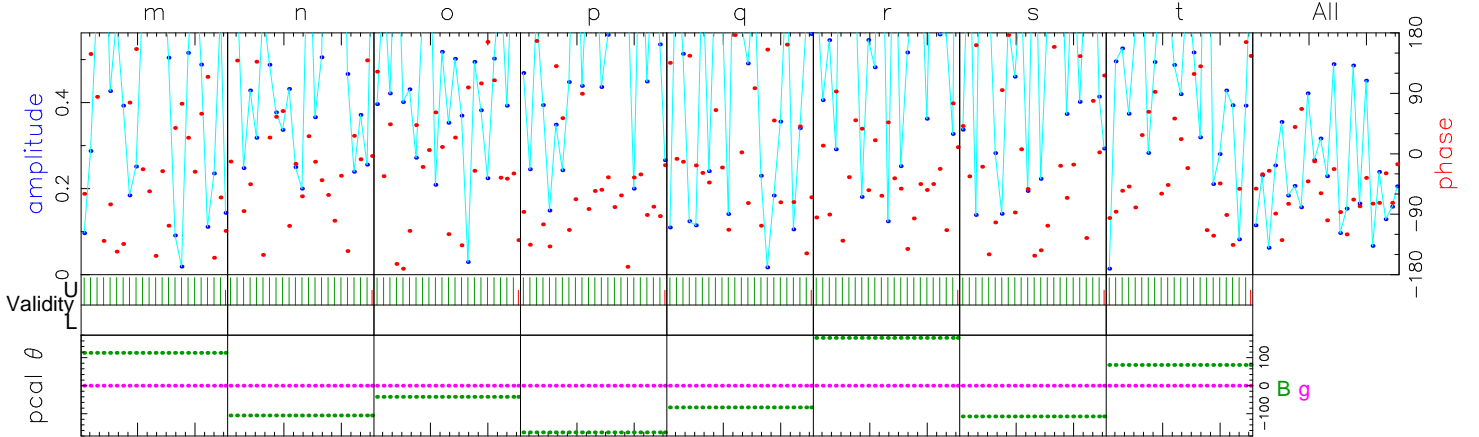


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143505
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-78.5	-33.0	-22.0	-79.2	-19.7	-49.8	-62.8	-56.0	Phase	-54.2
	0.2	0.2	0.1	0.3	0.1	0.4	0.1	0.1	Ampl.	0.2
	81.8	446.6	379.0	406.2	3.7	406.2	465.4	247.5	Sbd box	406.0
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	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	7.39694524025E+03	Apriori delay (usec)	7.39636371464E+03	Resid mbdelay (usec)	3.40061E-03	+/-	1.8E-04
Sband delay (usec)	7.39694571889E+03	Apriori clock (usec)	-3.5872551E+01	Resid sbdelay (usec)	5.82004E-01	+/-	1.4E-03
Phase delay (usec)	7.39636371290E+03	Apriori clockrate (us/s)	-2.6949992E-07	Resid phdelay (usec)	-1.74700E-06	+/-	6.1E-07
Delay rate (us/s)	-2.85372480959E-03	Apriori rate (us/s)	-2.85071473211E-03	Resid rate (us/s)	-3.01008E-06	+/-	7.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-5.4077327892E-05	Resid phase (deg)	-54.2	+/-	18.8

ph/seg (deg)	45.2	Theor.	45.1	Amplitude	0.187 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.9		78.7	Search (1024X32)	0.178	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.8		26.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.2		46.4	Inc. seg. avg.	0.187	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.181	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 117.4 el 71.5 pa -47.1 g: az 72.5 el 36.9 pa -16.8 u,v (fr/asec) -22.796 -4902.866 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/Bg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/Bg.W.11.3MP28E

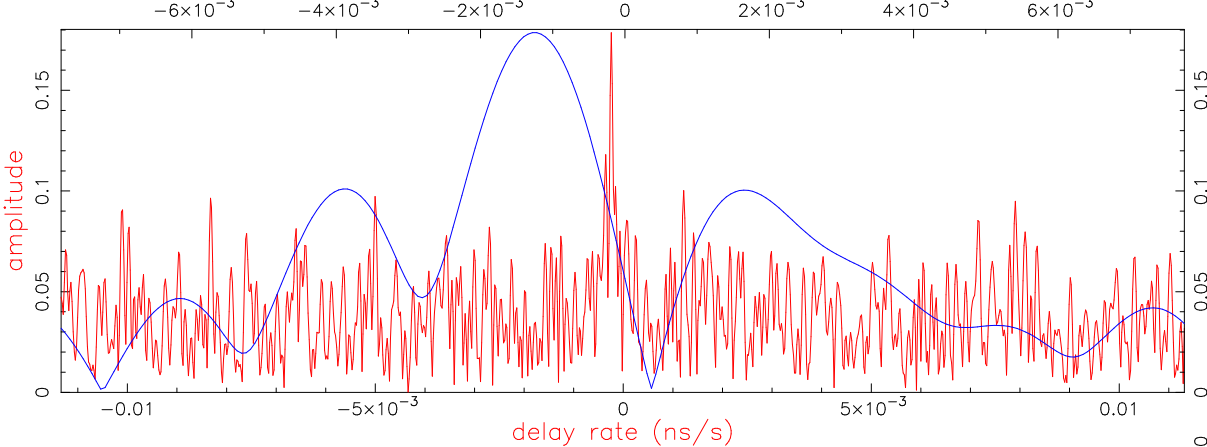
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, Bg

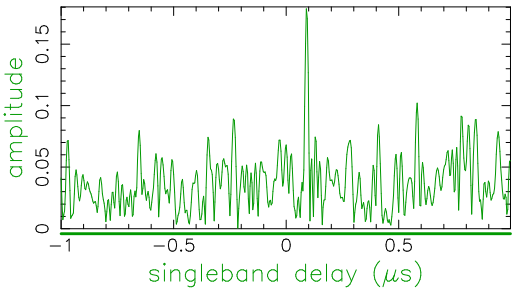
EFLSBERG - GLT, fgroup W, pol LL

multiband delay (μ s)

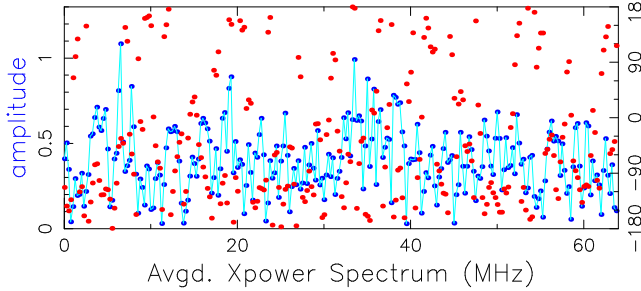


Fringe quality 0

SNR 6.0
 Int time 149.962
 Amp 0.180
 Phase -131.9
 PFD 1.9e-01
 Delays (us)
 SBD 0.090971
 MBD -0.001227
 Fringe rate (Hz)
 -0.021158
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

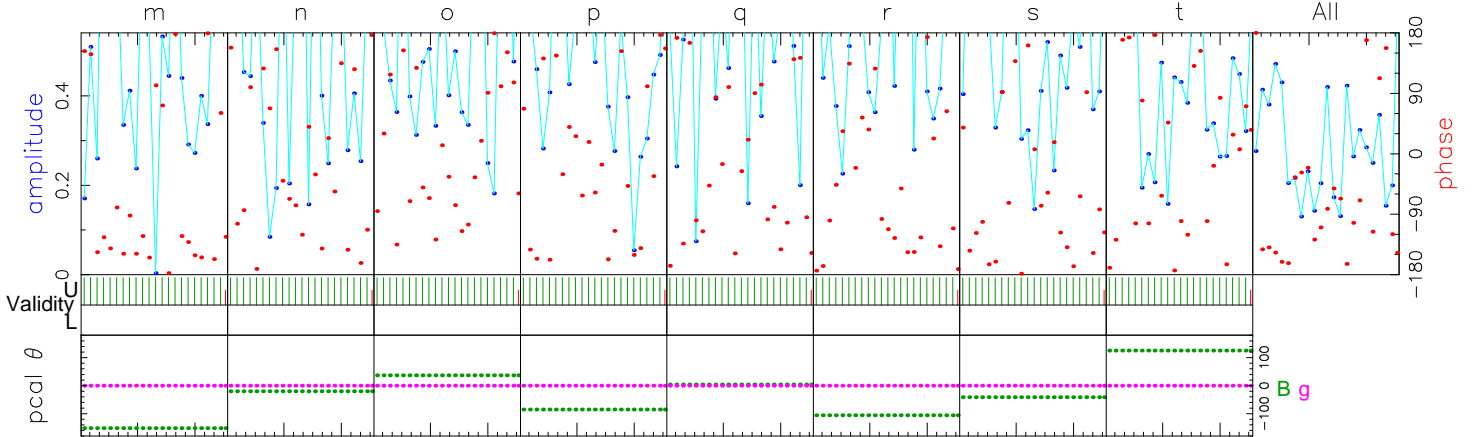


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143503
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-147.2	-116.3	-45.1	-95.4	-128.4	-128.7	-127.1	-161.6	Phase	-131.9
	0.3	0.2	0.1	0.0	0.2	0.3	0.3	0.2	Ampl.	0.2
	280.0	15.7	409.5	198.2	230.5	109.3	425.7	149.0	Sbd box	280.3
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	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	7.39645623797E+03	Apriori delay (usec)	7.39636371464E+03	Resid mbdelay (usec)	-1.22667E-03	+/-	1.8E-04
Sband delay (usec)	7.39645468514E+03	Apriori clock (usec)	-3.5872551E+01	Resid sbdelay (usec)	9.09705E-02	+/-	1.4E-03
Phase delay (usec)	7.39636371039E+03	Apriori clockrate (us/s)	-2.6949992E-07	Resid phdelay (usec)	-4.25213E-06	+/-	6.1E-07
Delay rate (us/s)	-2.85096035503E-03	Apriori rate (us/s)	-2.85071473211E-03	Resid rate (us/s)	-2.45623E-07	+/-	7.1E-09
Total phase (deg)		Apriori accel (us/s/s)	-5.40477327892E-05	Resid phase (deg)	-131.9	+/-	19.0

ph/seg (deg)	59.2	Theor.	45.5	Amplitude	0.180 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.1		79.5	Search (1024X32)	0.173	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.4		26.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	56.5		46.9	Inc. seg. avg.	0.215	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.172	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 117.4 el 71.5 pa -47.1 g: az 72.5 el 36.9 pa -16.8 u,v (fr/asec) -22.796 -4902.866 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/Bg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/Bg.W.2.3MP28E

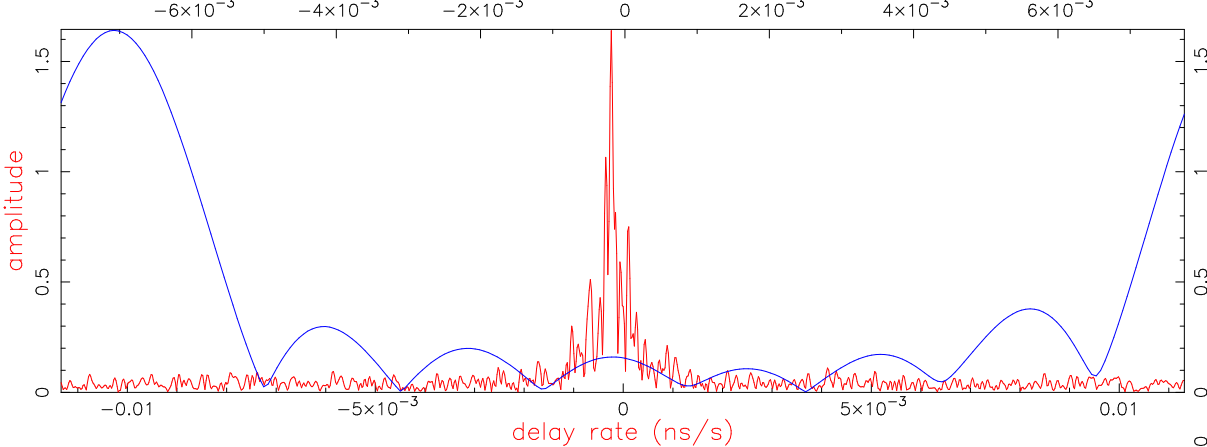
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, Bg

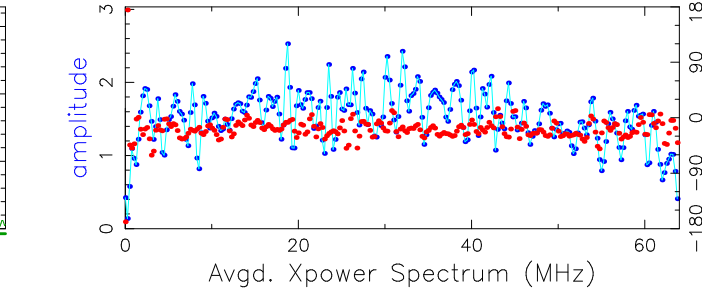
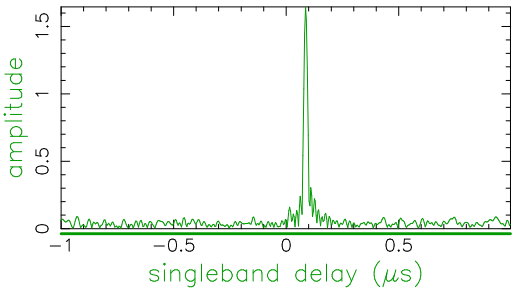
EFLSBERG - GLT, fgroup W, pol LR

multiband delay (μ s)



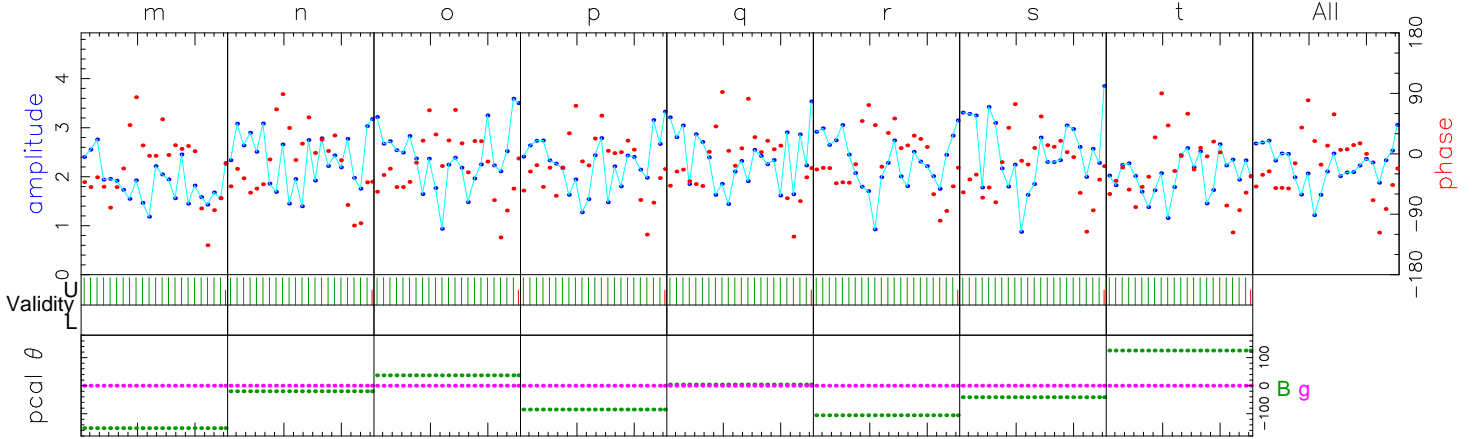
Fringe quality 5

SNR 55.1
 Int time 149.960
 Amp 1.645
 Phase -19.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.086622
 MBD -0.007066
 Fringe rate (Hz)
 -0.021650
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143509
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-21.3	-18.4	-20.8	-18.2	-16.9	-12.6	-22.6	-25.3	Phase	-19.3
	1.3	1.6	1.8	1.7	1.8	1.8	1.8	1.4	Ampl.	1.6
	277.5	278.5	279.7	279.6	279.7	279.6	279.3	278.3	Sbd box	279.2
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	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B:g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 7.39645039866E+03 Apriori delay (usec) 7.39636371464E+03 Resid mbdelay (usec) -7.06599E-03 +/- 2.0E-05
 Sband delay (usec) 7.39645033714E+03 Apriori clock (usec) -3.5872551E+01 Resid sbdelay (usec) 8.66225E-02 +/- 1.6E-04
 Phase delay (usec) 7.39636371402E+03 Apriori clockrate (us/s) -2.6949992E-07 Resid phdelay (usec) -6.23267E-07 +/- 6.7E-08
 Delay rate (us/s) -2.85096606317E-03 Apriori rate (us/s) -2.85071473211E-03 Resid rate (us/s) -2.51331E-07 +/- 7.7E-10
 Total phase (deg) 117.2 Apriori accel (us/s/s) -5.40477327892E-05 Resid phase (deg) -19.3 +/- 2.1

RMS Theor. Amplitude 1.645 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 45.5 5.0 Search (1024X32) 1.573 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 42.0 8.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 4.2 2.9 Inc. seg. avg. 2.209 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 10.6 5.1 Inc. frq. avg. 1.642 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 117.4 el 71.5 pa -47.1 g: az 72.5 el 36.9 pa -16.8 u, v (fr/asec) -22.796 -4902.866 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/Bg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/Bg.W.35.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

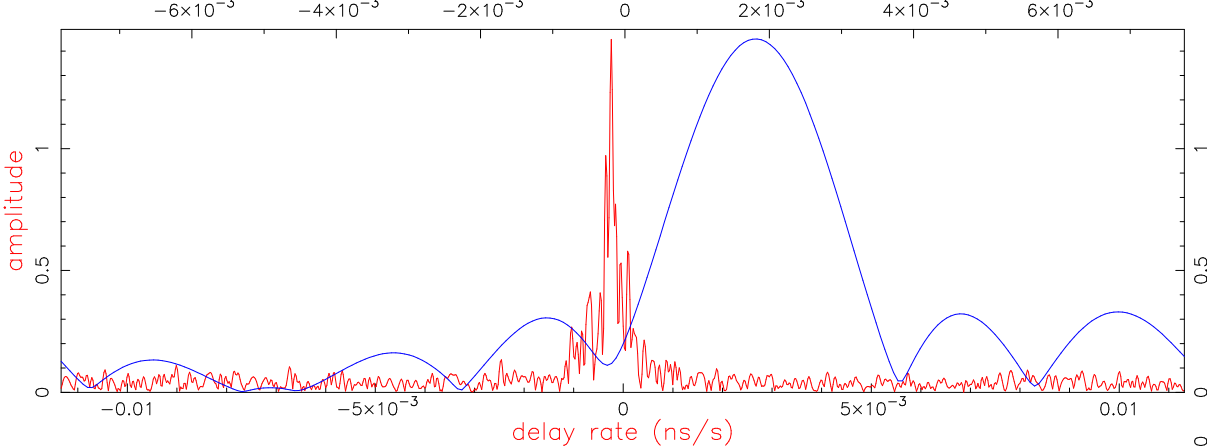
aux01

3C345.3MP28E, No1250, Bg

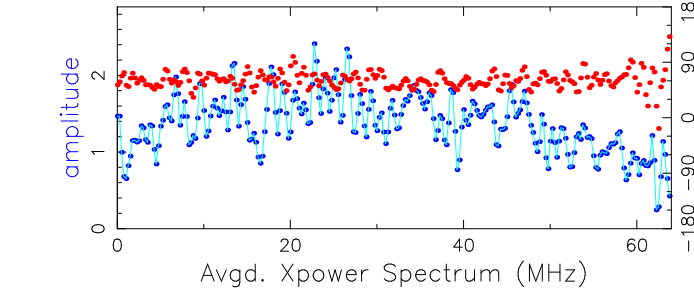
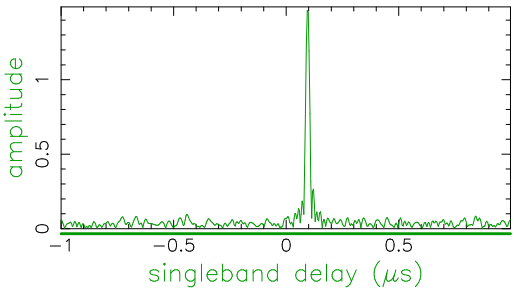
EFLSBERG - GLT, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 5

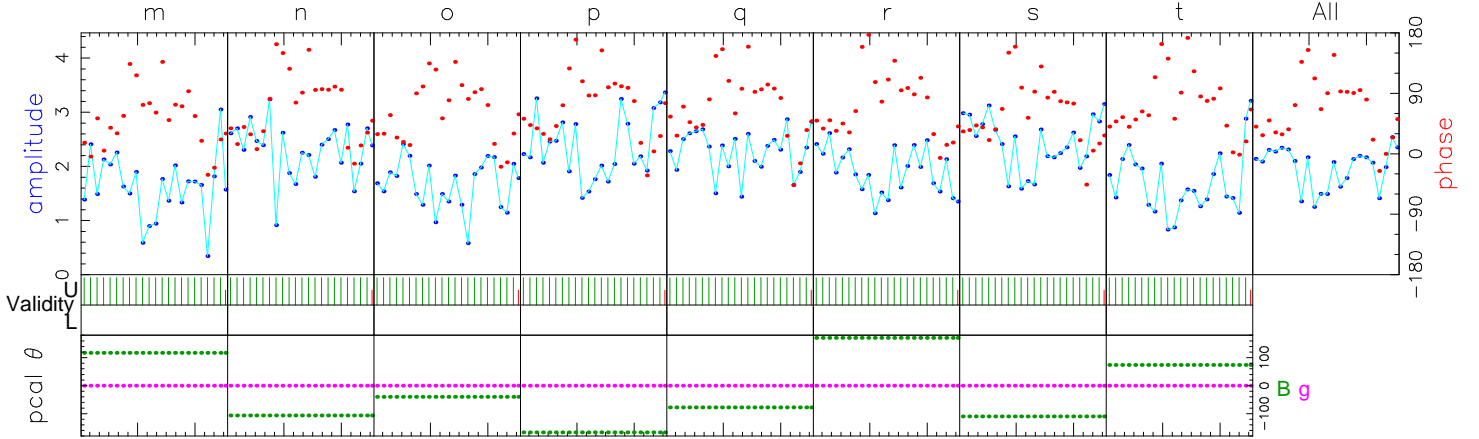


SNR 49.9
 Int time 149.962
 Amp 1.489
 Phase 62.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.095463
 MBD 0.001755
 Fringe rate (Hz)
 -0.021666
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143511
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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

Group delay (usec) (SBD) 7.39645921978E+03 Apriori delay (usec) 7.39636371464E+03 Resid mbdelay (usec) 1.75514E-03 +/- 2.2E-05
 Sband delay (usec) 7.39645917789E+03 Apriori clock (usec) -3.5872551E+01 Resid sbdelay (usec) 9.54633E-02 +/- 1.7E-04
 Phase delay (usec) 7.39636371665E+03 Apriori clockrate (us/s) -2.6949992E-07 Resid phdelay (usec) 2.00776E-06 +/- 7.4E-08
 Delay rate (us/s) -2.85096625023E-03 Apriori rate (us/s) -2.85071473211E-03 Resid rate (us/s) -2.51518E-07 +/- 8.6E-10
 Total phase (deg) 198.8 Apriori accel (us/s/s) -5.40477327892E-05 Resid phase (deg) 62.3 +/- 2.3

ph/seg (deg) 46.1 5.5 Search (1024X32) 1.411 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.8 9.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.6 3.3 Inc. seg. avg. 1.971 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.7 5.7 Inc. frq. avg. 1.458 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 117.4 el 71.5 pa -47.1 g: az 72.5 el 36.9 pa -16.8 u,v (fr/asec) -22.796 -4902.866 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/Bg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/Bg.W.54.3MP28E

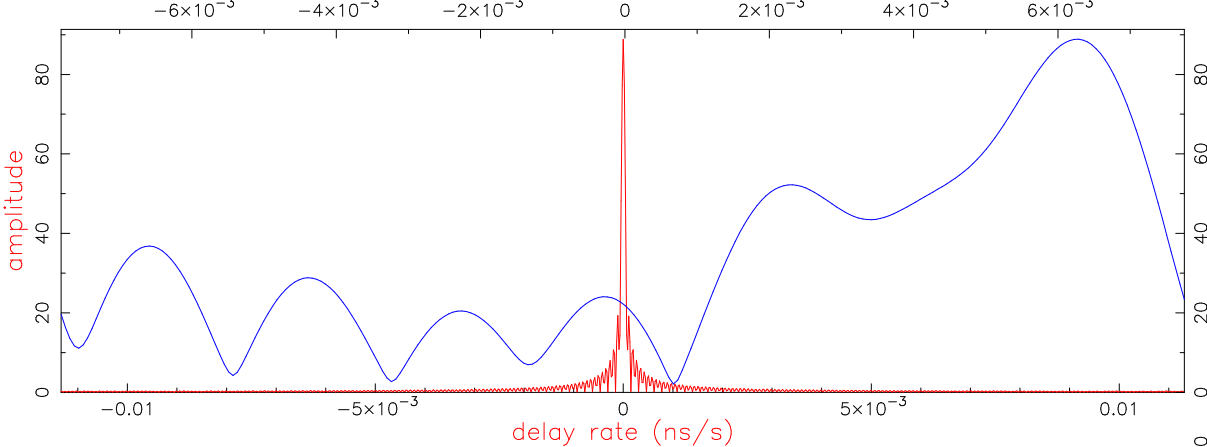
Mk4/DiFX fourfit 3.25 rev 0

aux01

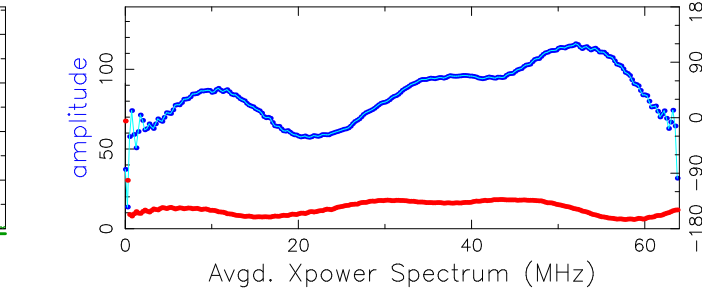
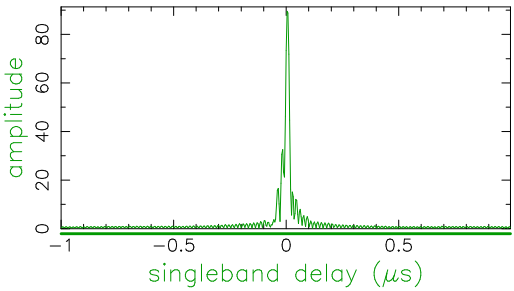
3C345.3MP28E, No1250, gg

GLT - GLT, fgroup W, pol RL

multiband delay (μ s)

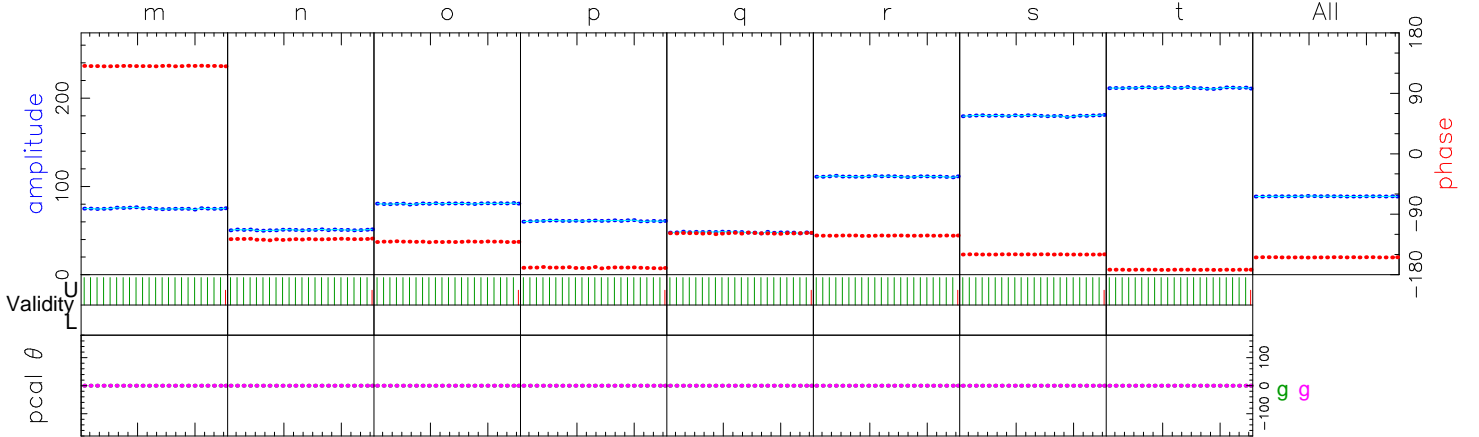


Fringe quality 5
 Error code G
 SNR 3059.0
 Int time 149.985
 Amp 91.341
 Phase -154.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.005707
 MBD 0.006218
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143519
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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

Group delay (usec) (SBD)	6.21812500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	6.21813E-03	+/-	3.5E-07
Sband delay (usec)	5.70675000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	5.70675E-03	+/-	2.8E-06
Phase delay (usec)	-4.96855982005E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.96856E-06	+/-	1.2E-09
Delay rate (us/s)	-1.41711523917E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.41712E-12	+/-	1.4E-11
Total phase (deg)	-154.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-154.1	+/-	0.0

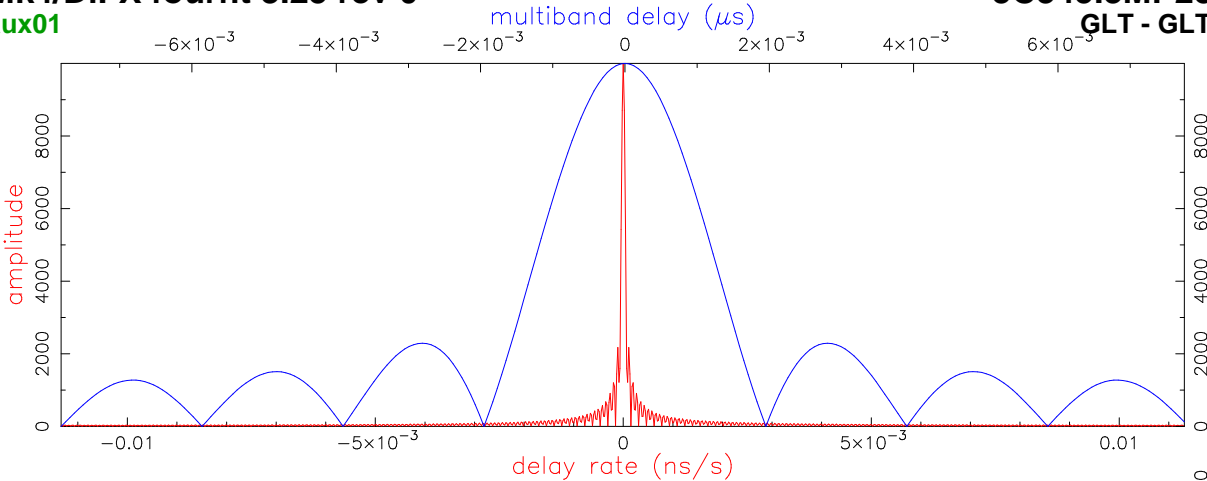
ph/seg (deg) 0.1 0.1 Search (1024X32) 88.649 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.8 0.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.5 0.1 Inc. seg. avg. 88.804 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 64.3 0.1 Inc. frq. avg. 102.288 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 g: az 72.5 el 36.9 pa -16.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gg.W.105.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

aux01

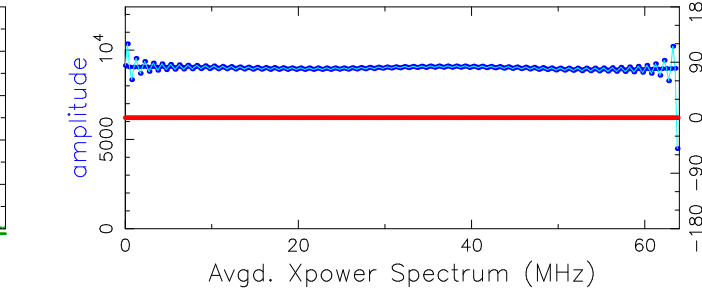
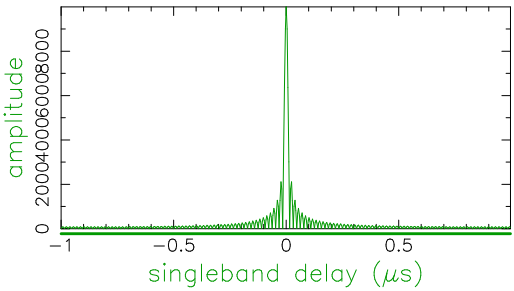
3C345.3MP28E, No1250, gg

GLT - GLT, fgroup W, pol LL



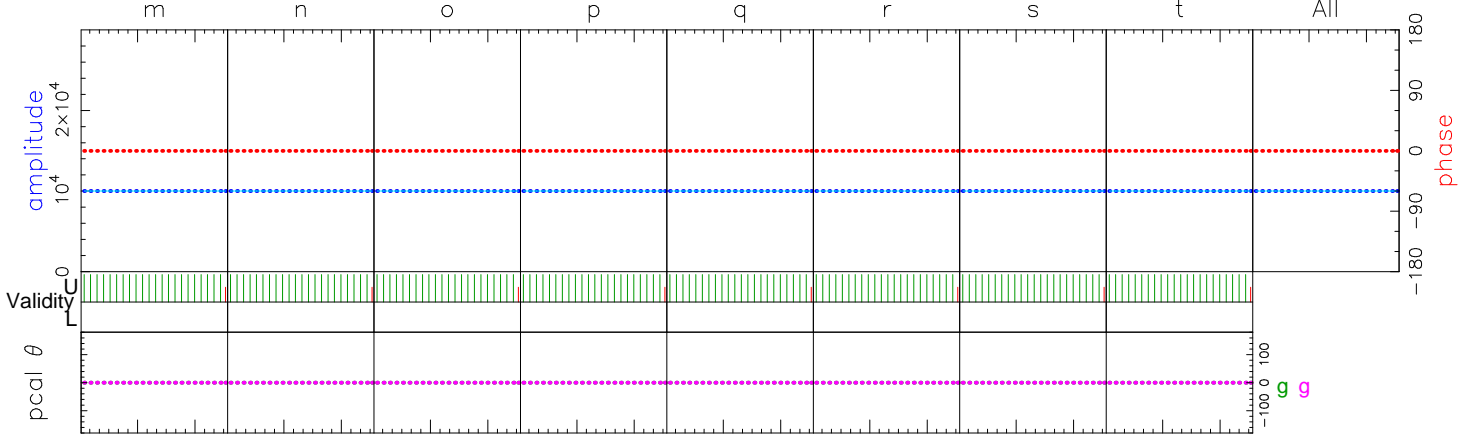
Fringe quality 9

SNR 334906.9
 Int time 149.987
 Amp 9999.998
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143507
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
g	0	0	0	0	0	0	0	0	Ampl.	10000.0
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	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

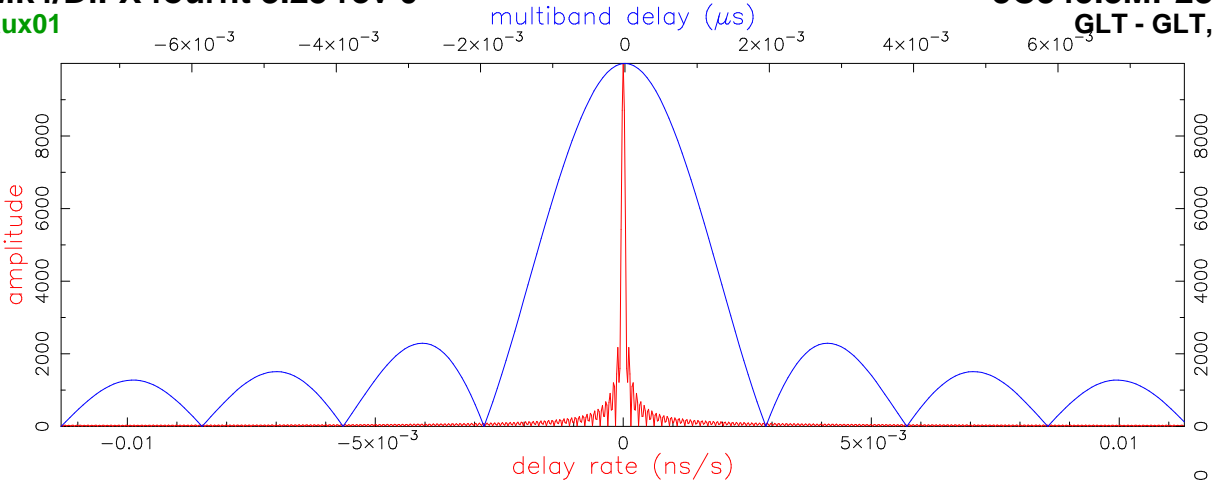
RMS Theor. Amplitude 9999.998 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.998 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 g: az 72.5 el 36.9 pa -16.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gg..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gg.W.21.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

aux01

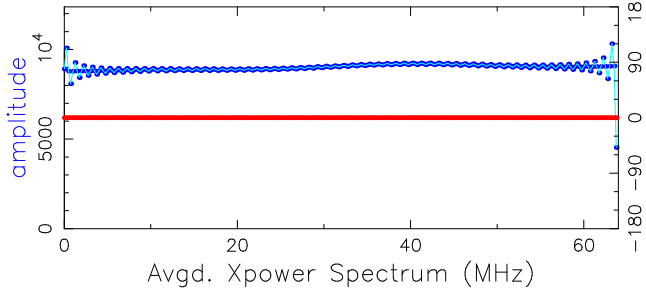
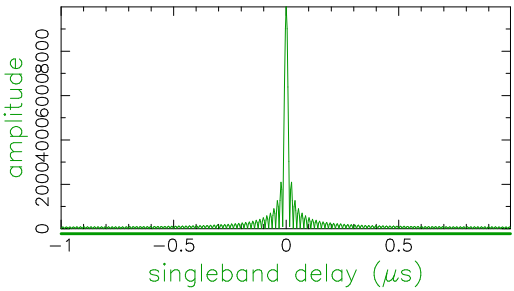
3C345.3MP28E, No1250, gg

GLT - GLT, fgroup W, pol RR



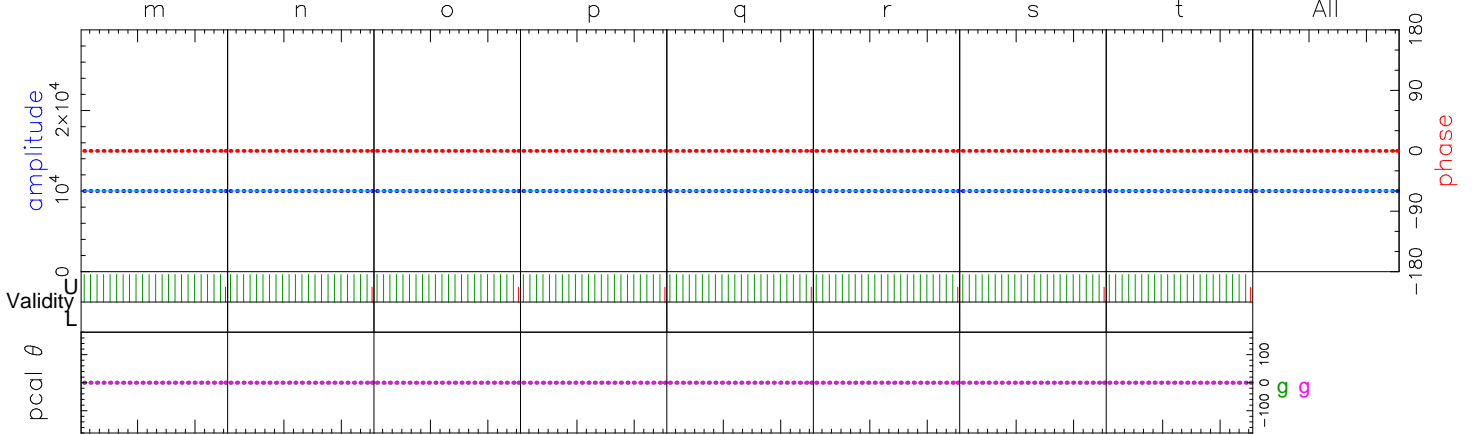
Fringe quality 9

SNR 334904.7
 Int time 149.985
 Amp 9999.997
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143509
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
g	0	0	0	0	0	0	0	0	Ampl.	257.0
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.2E-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

ph/seg (deg) 0.0 0.0
 amp/seg (%) 0.0 0.0
 ph/frq (deg) 0.0 0.0
 amp/frq (%) 0.0 0.0
 g: az 72.5 el 36.9 pa -16.8
 Control file: cf_1234_gmva

Amplitude 9999.997 +/- 0.030
 Search (1024X32) 9999.997
 Interp. 0.000
 Inc. seg. avg. 10000.000
 Inc. frq. avg. 9999.997
 g: az 72.5 el 36.9 pa -16.8
 Input file: /Exps/c241a/v2/3mm/1234/No1250/gg..3MP28E

u,v (fr/asec) 0.000 0.000
 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
 simultaneous interpolator

PC period (AP's) 5, 5
 sb window (us) -1.000 1.000
 SampCntNorm: enabled
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

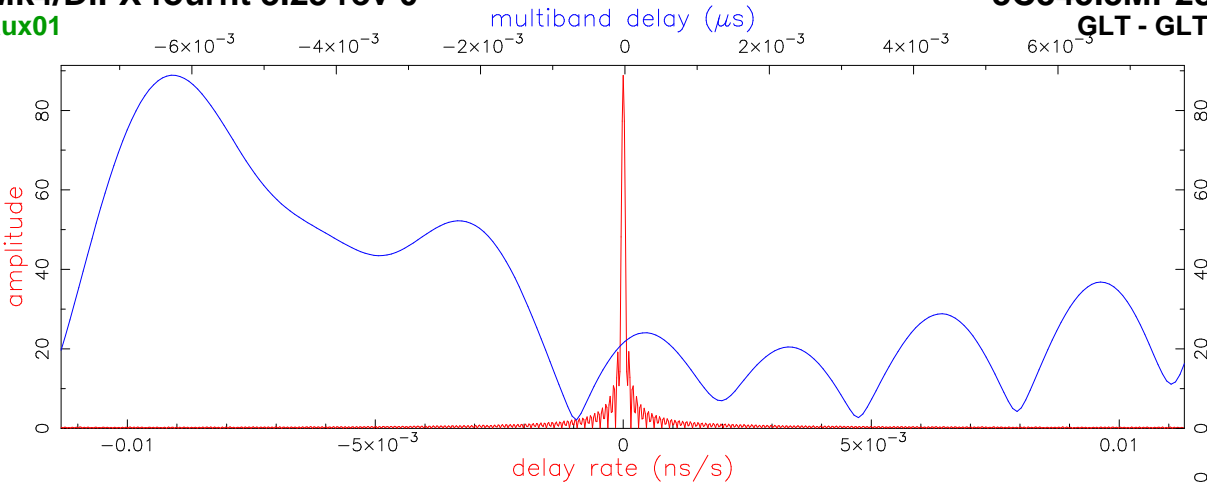
Output file: /Exps/c241a/v2/3mm/1234/No1250/gg.W.38.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

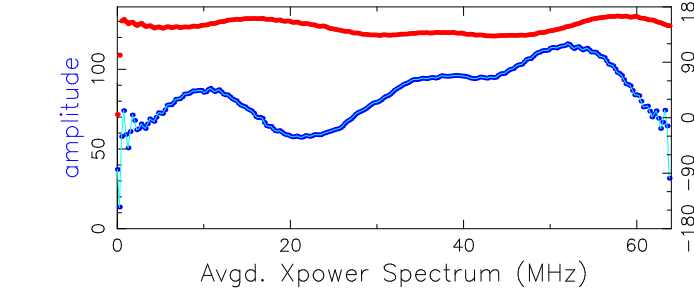
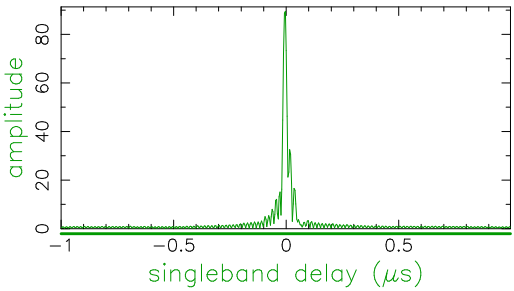
aux01

3C345.3MP28E, No1250, gg

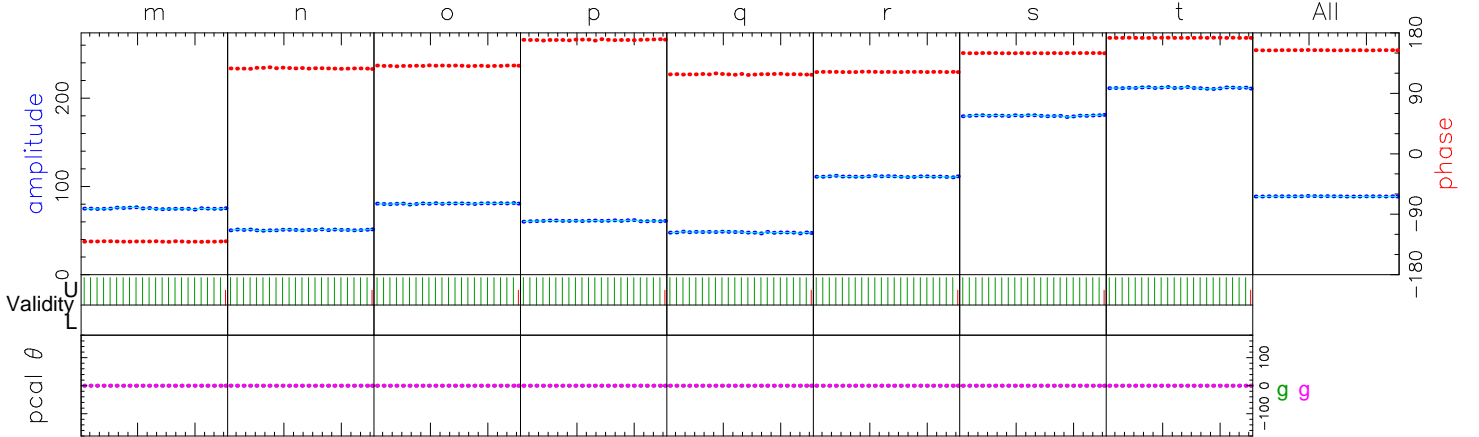
GLT - GLT, fgroup W, pol LR



Fringe quality 5
 Error code G
 SNR 3059.0
 Int time 149.985
 Amp 91.341
 Phase 154.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.005707
 MBD -0.006218
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143514
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



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		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-6.21812500000E-03									
Sband delay (usec)	-5.70675000000E-03									
Phase delay (usec)	4.96855982005E-06									
Delay rate (us/s)	1.41711523917E-12									
Total phase (deg)			154.1							
Apriori delay (usec)					0.00000000000E+00					
Apriori clock (usec)					0.0000000E+00					
Apriori clockrate (us/s)					0.0000000E+00					
Apriori rate (us/s)					0.00000000000E+00					
Apriori accel (us/s/s)					0.00000000000E+00					
Resid mbdelay (usec)									-6.21813E-03	+/- 3.5E-07
Resid sbdelay (usec)									-5.70675E-03	+/- 2.8E-06
Resid phdelay (usec)									4.96856E-06	+/- 1.2E-09
Resid rate (us/s)									1.41712E-12	+/- 1.4E-11
Resid phase (deg)									154.1	+/- 0.0
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00							
g: az 72.5 el 36.9 pa -16.8	g: az 72.5 el 36.9 pa -16.8		u,v (fr/asec) 0.000 0.000						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No1250/gg..3MP28E		Output file: /Exps/c241a/v2/3mm/1234/No1250/gg.W.76.3MP28E							

Mk4/DiFX fourfit 3.25 rev 0

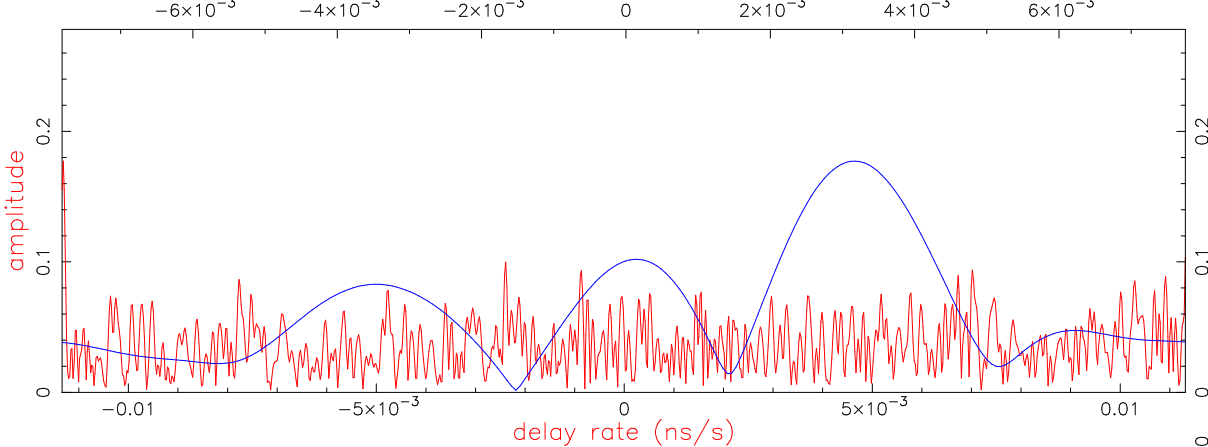
aux01

3C345.3MP28E, No1250, gL

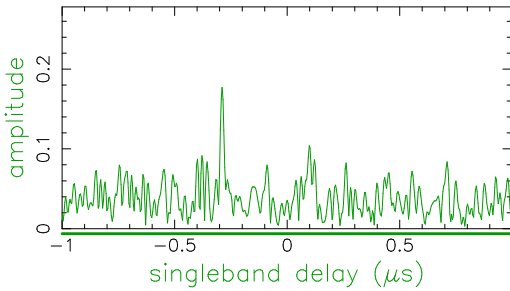
GLT - KVNPC, fgroup W, pol LL

multiband delay (μ s)

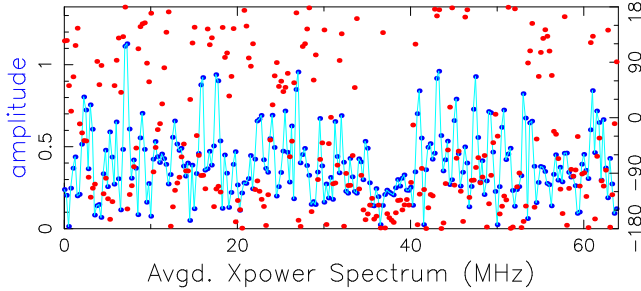
Fringe quality 0



SNR 5.9
 Int time 149.795
 Amp 0.278
 Phase 92.0
 PFD 3.2e-01
 Delays (us)
 SBD -0.289201
 MBD 0.003170
 Fringe rate (Hz)
 -0.975679
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

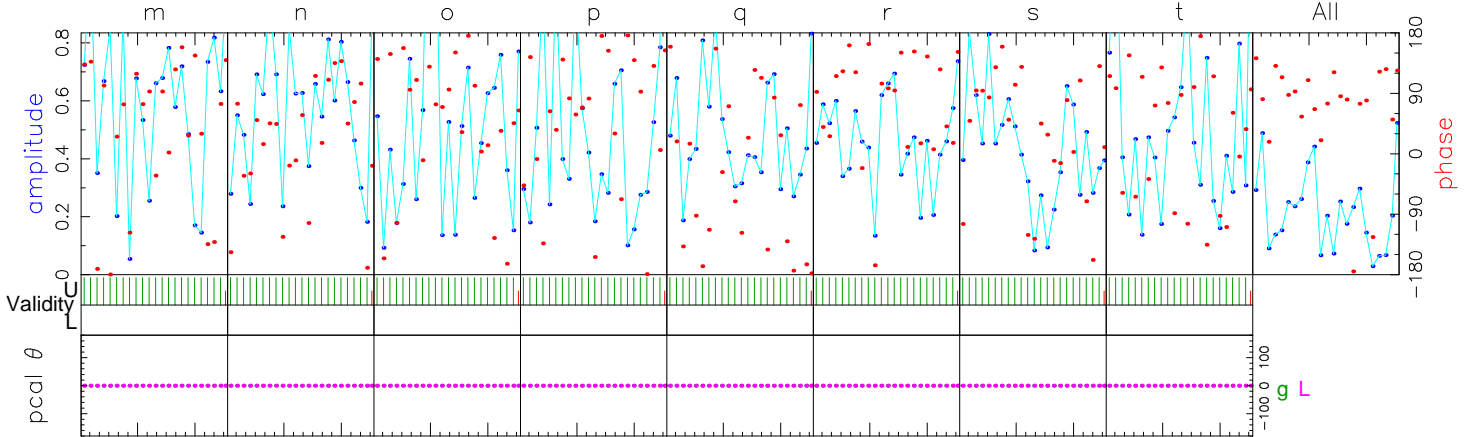


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143506
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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		
L	0	0	60000	0	0	0	4000	0		
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:L	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		
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	6.87463524684E+03	Apriori delay (usec)	6.87492895196E+03	Resid mbdelay (usec)	3.16988E-03	+/-	1.8E-04	
Sband delay (usec)	6.87463975146E+03	Apriori clock (usec)	2.6061737E+01	Resid sbdelay (usec)	-2.89201E-01	+/-	1.5E-03	
Phase delay (usec)	6.87492895493E+03	Apriori clockrate (us/s)	7.5214999E-06	Resid phdelay (usec)	2.96574E-06	+/-	6.2E-07	
Delay rate (us/s)	1.20801544263E+00	Apriori rate (us/s)	1.20802676929E+00	Resid rate (us/s)	-1.13267E-05	+/-	7.2E-09	
Total phase (deg)		63.8	Apriori accel (us/s/s)	-1.01426198504E-05	Resid phase (deg)	92.0	+/-	19.3

ph/seg (deg)	48.6	Theor.	46.3	Amplitude	0.278 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.7		80.8	Search (1024X32)	0.171	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.1		27.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	44.2		47.7	Inc. seg. avg.	0.253	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.285	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 72.5 el 36.9 pa -16.8 L: az 307.9 el 16.4 pa 54.4 u, v (fr/asec) -8999.715 1874.507 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gL..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gL.W.16.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

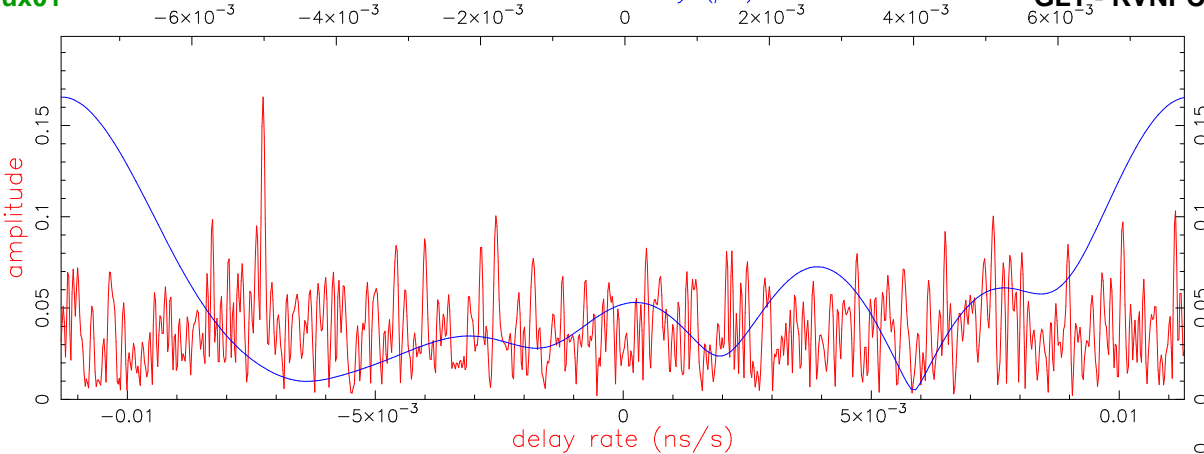
aux01

3C345.3MP28E, No1250, gL

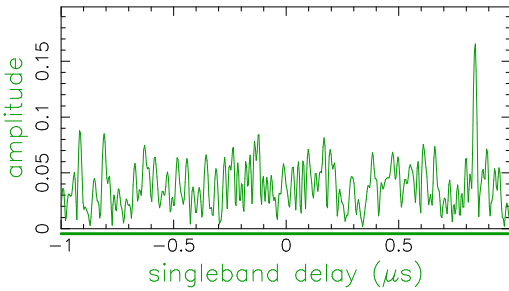
GLT - KVNPC, fgroup W, pol RR

multiband delay (μ s)

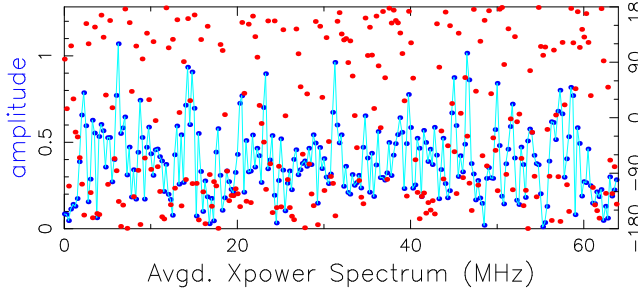
Fringe quality 0



SNR 5.6
 Int time 149.793
 Amp 0.199
 Phase -127.2
 PFD 9.4e-01
 Delays (us)
 SBD 0.838746
 MBD -0.007831
 Fringe rate (Hz)
 -0.626280
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

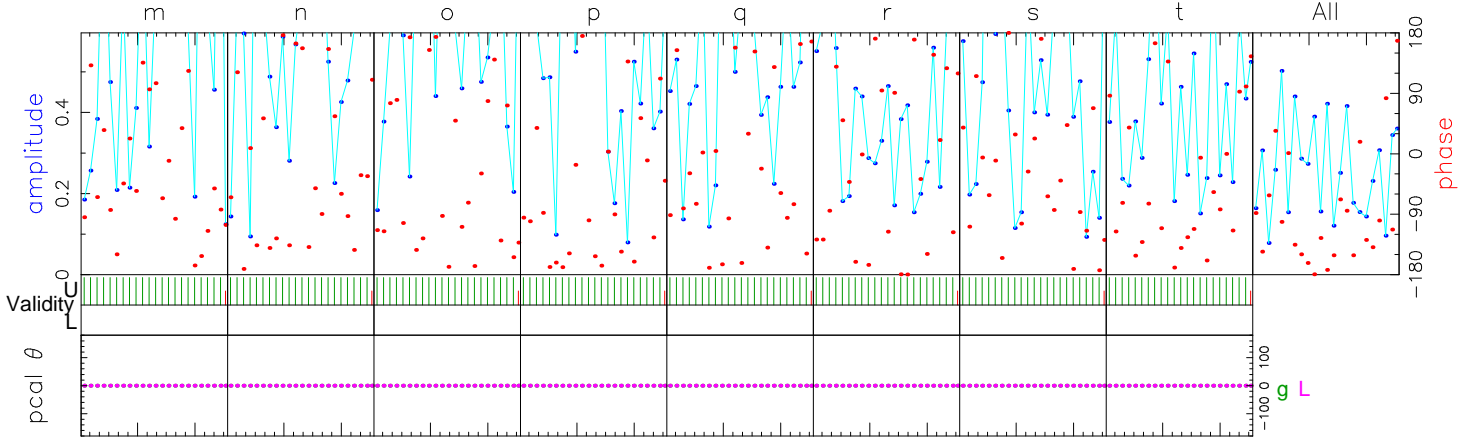


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143509
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-72.5	-136.3	-154.3	-133.9	-126.5	-158.6	-56.3	-139.0	Phase	-127.2
	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	364.3	470.4	466.1	105.0	479.7	398.6	140.2	98.2	Sbd box	471.7
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	
L	0	0	60000	0	0	0	4000	0	PC freqs	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:L	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	
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	6.87576487109E+03				6.87492895196E+03				Resid mbdelay (usec)	-7.83087E-03 +/- 1.9E-04
Sband delay (usec)	6.87576769821E+03				2.6061737E+01				Resid sbdelay (usec)	8.38746E-01 +/- 1.5E-03
Phase delay (usec)	6.87492894786E+03				7.5214999E-06				Resid phdelay (usec)	-4.10165E-06 +/- 6.6E-07
Delay rate (us/s)	1.20801949881E+00				1.20802676929E+00				Resid rate (us/s)	-7.27049E-06 +/- 7.6E-09
Total phase (deg)		204.7			-1.01426198504E-05				Resid phase (deg)	-127.2 +/- 20.5
	RMS	Theor.	Amplitude	0.199 +/- 0.036					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	69.7	49.2	Search (1024X32)	0.161					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	90.6	85.9	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	40.8	29.0	Inc. seg. avg.	0.226					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	30.6	50.7	Inc. frq. avg.	0.207					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 72.5 el 36.9 pa -16.8			L: az 307.9 el 16.4 pa 54.4		u, v (fr/asec) -8999.715 1874.507					simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241a/v2/3mm/1234/No1250/gL..3MP28E		Output file: /Exps/c241a/v2/3mm/1234/No1250/gL.W.42.3MP28E					

Mk4/DiFX fourfit 3.25 rev 0

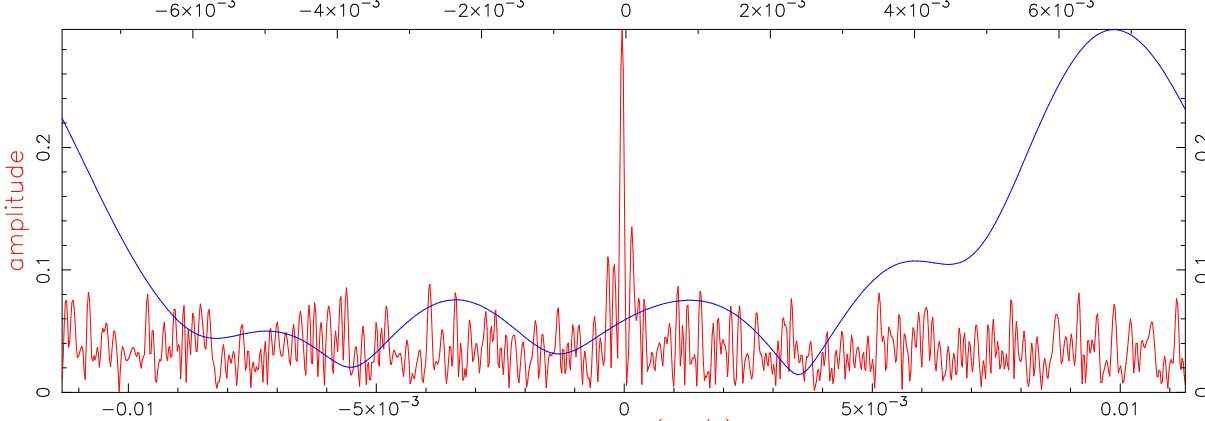
aux01

3C345.3MP28E, No1250, gL

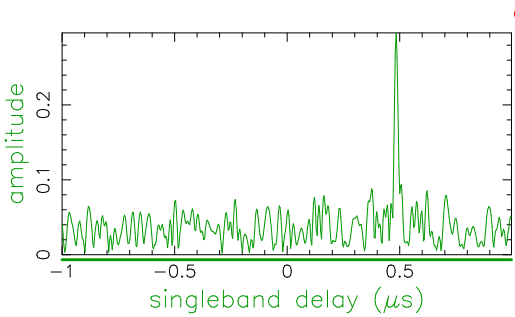
GLT - KVNPC, fgroup W, pol LR

multiband delay (μ s)

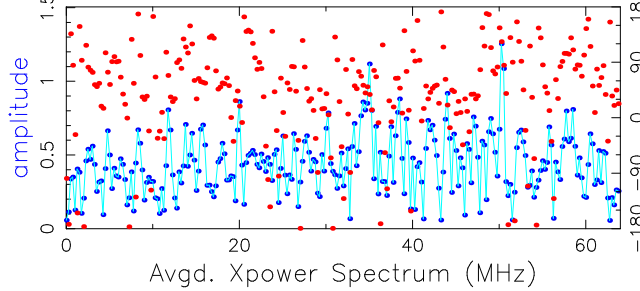
Fringe quality 9



SNR 9.9
 Int time 149.795
 Amp 0.296
 Phase 162.7
 PFD 7.1e-15
 Delays (us)
 SBD 0.484024
 MBD 0.006747
 Fringe rate (Hz)
 -0.003119
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

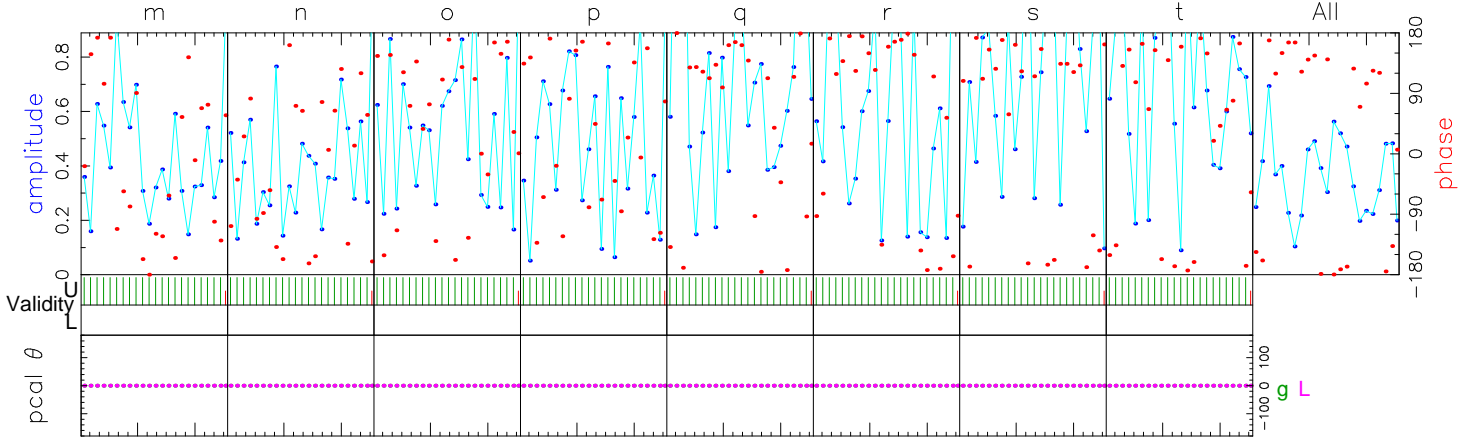


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143513
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-147.9	157.4	134.9	-178.5	168.5	166.4	161.5	162.7	Phase	162.7
	0.1	0.1	0.3	0.1	0.5	0.4	0.5	0.5	Ampl.	0.3
	358.9	452.0	470.9	28.1	380.2	380.9	381.4	381.1	Sbd box	380.9
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	
L	0	0	60000	0	0	0	4000	0	PC freqs	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:L	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	
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.87542007384E+03	Apriori delay (usec)	6.87492895196E+03	Resid mbdelay (usec)	6.74688E-03	+/-	1.1E-04
Sband delay (usec)	6.87541297546E+03	Apriori clock (usec)	2.6061737E+01	Resid sbdelay (usec)	4.84024E-01	+/-	8.7E-04
Phase delay (usec)	6.87492895721E+03	Apriori clockrate (us/s)	7.5214999E-06	Resid phdelay (usec)	5.24661E-06	+/-	3.7E-07
Delay rate (us/s)	1.20802673309E+00	Apriori rate (us/s)	1.20802676929E+00	Resid rate (us/s)	-3.62045E-08	+/-	4.3E-09
Total phase (deg)	134.6	Apriori accel (us/s/s)	-1.01426198504E-05	Resid phase (deg)	162.7	+/-	11.6

ph/seg (deg) 44.4 27.7 Search (1024X32) 0.291 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.1 48.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.7 16.3 Inc. seg. avg. 0.328 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 64.3 28.5 Inc. frq. avg. 0.293 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 L: az 307.9 el 16.4 pa 54.4 u, v (fr/asec) -8999.715 1874.507 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gL..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gL.W.70.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

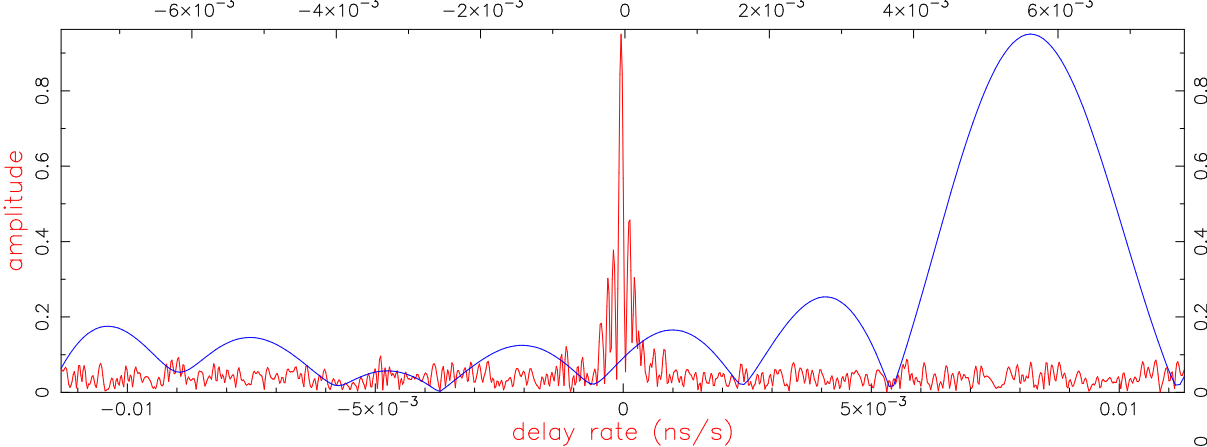
aux01

3C345.3MP28E, No1250, gL

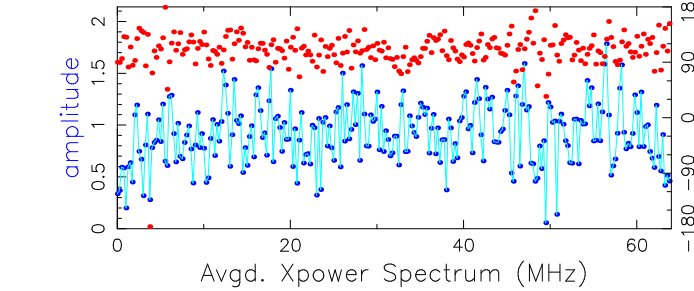
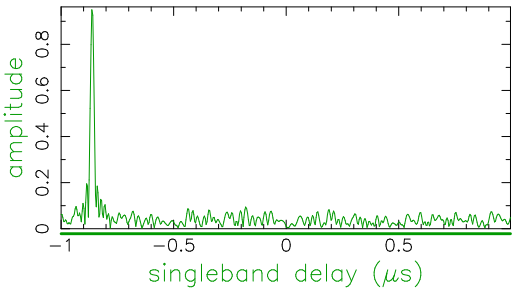
GLT - KVNPC, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 8

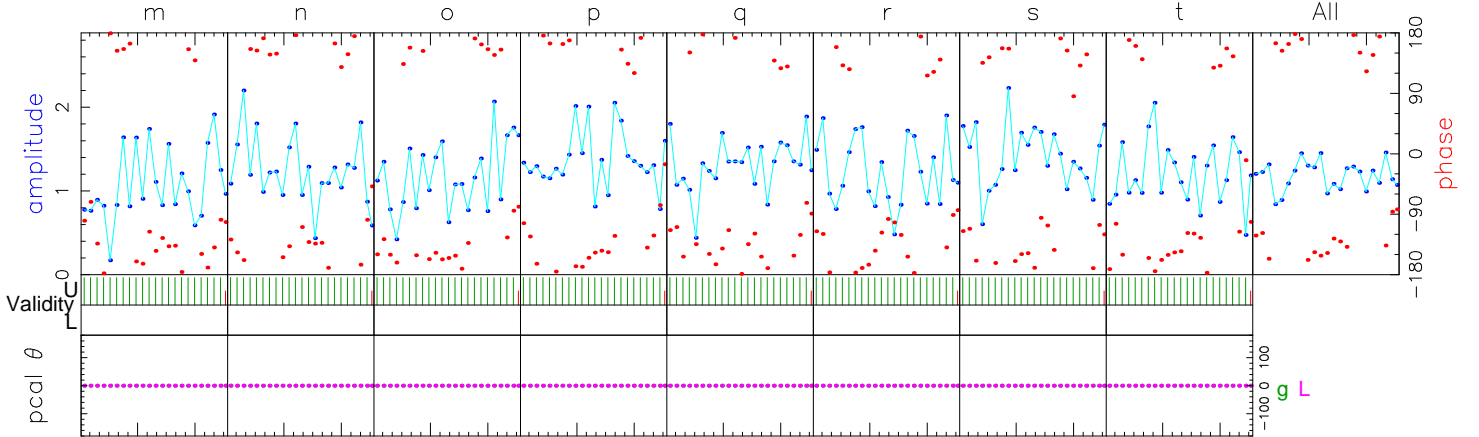


SNR 32.2
 Int time 149.793
 Amp 0.963
 Phase -161.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.861835
 MBD 0.005631
 Fringe rate (Hz)
 -0.003469
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143515
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-152.1	-170.2	-164.4	-163.5	-153.2	-161.1	-162.6	-164.8	Phase	-161.7
	0.9	1.0	0.9	1.0	1.0	0.9	1.0	0.9	Ampl.	1.0
	35.9	36.5	36.6	36.5	36.1	36.4	36.1	36.8	Sbd box	36.4
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	
L	0	0	60000	0	0	0	4000	0	PC freqs	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:L	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	
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 6.87405958253E+03 Apriori delay (usec) 6.87492895196E+03 Resid mbdelay (usec) 5.63056E-03 +/- 3.4E-05
 Sband delay (usec) 6.87406711671E+03 Apriori clock (usec) 2.6061737E+01 Resid sbdelay (usec) -8.61835E-01 +/- 2.7E-04
 Phase delay (usec) 6.87492894675E+03 Apriori clockrate (us/s) 7.5214999E-06 Resid phdelay (usec) -5.21378E-06 +/- 1.1E-07
 Delay rate (us/s) 1.20802672902E+00 Apriori rate (us/s) 1.20802676929E+00 Resid rate (us/s) -4.02673E-08 +/- 1.3E-09
 Total phase (deg) 170.2 Apriori accel (us/s/s) -1.01426198504E-05 Resid phase (deg) -161.7 +/- 3.6

RMS Theor. Amplitude 0.963 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.7 8.5 Search (1024X32) 0.923 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 28.9 14.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 6.5 5.0 Inc. seg. avg. 1.171 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.6 8.8 Inc. frq. avg. 0.951 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 72.5 el 36.9 pa -16.8 L: az 307.9 el 16.4 pa 54.4 u,v (fr/asec) -8999.715 1874.507 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gL..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gL.W.80.3MP28E

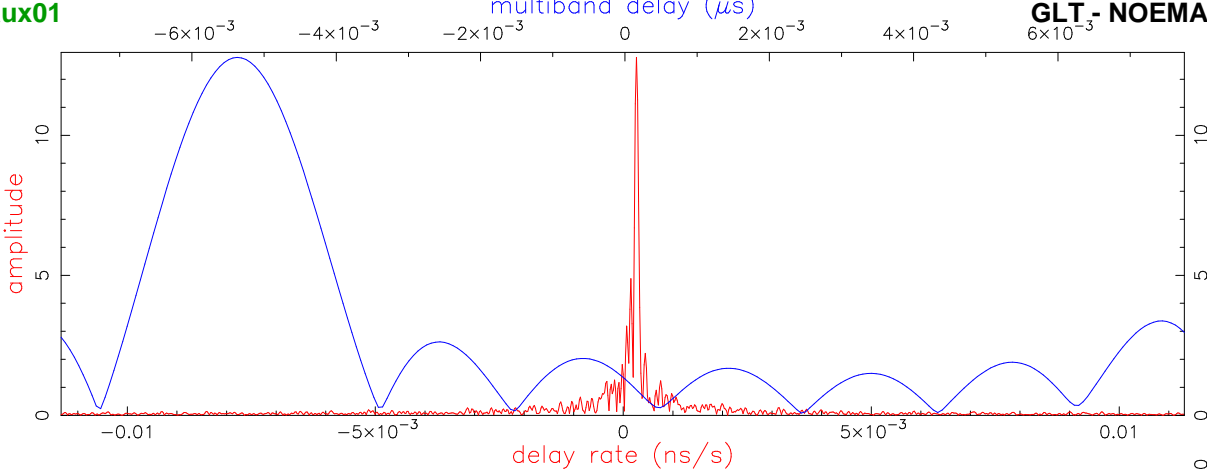
Mk4/DiFX fourfit 3.25 rev 0

aux01

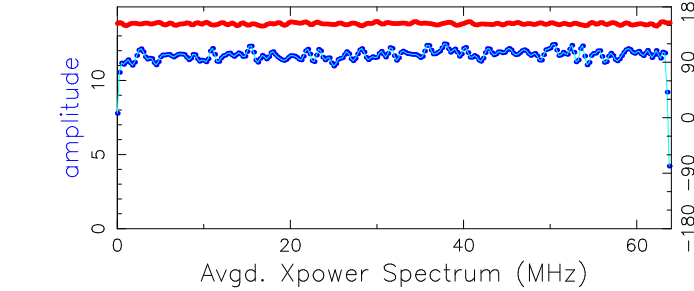
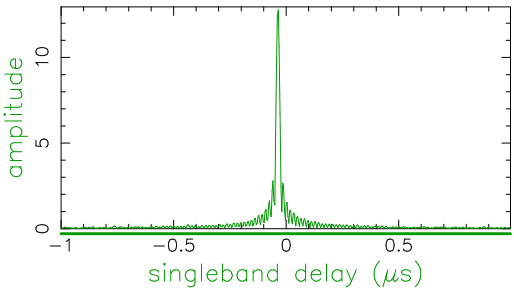
3C345.3MP28E, No1250, gN

GLT - NOEMA, fgroup W, pol RL

Fringe quality 8

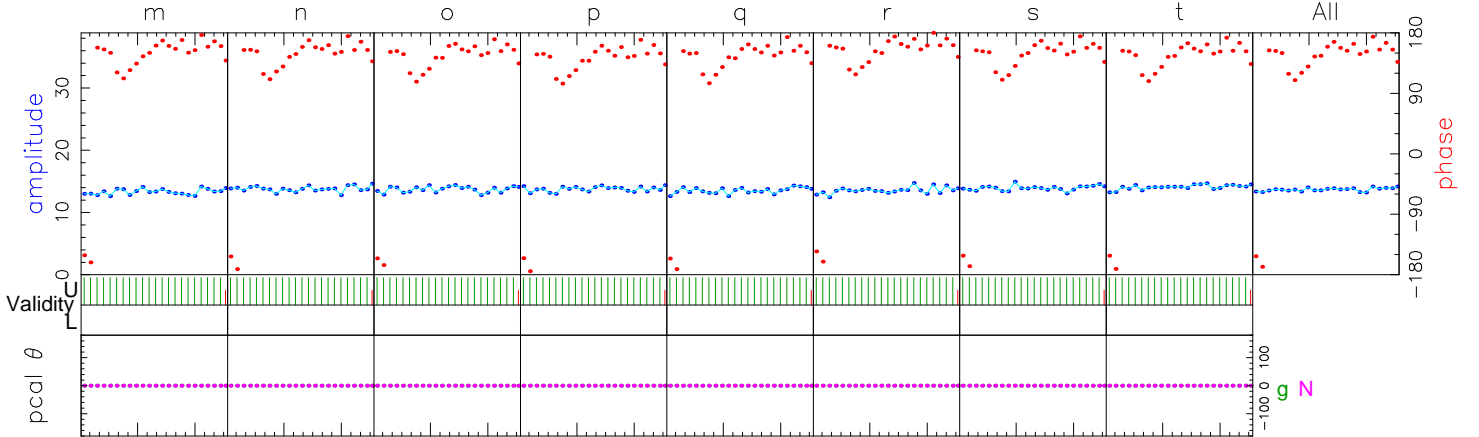


SNR 433.9
 Int time 149.977
 Amp 12.959
 Phase 152.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.036592
 MBD -0.005369
 Fringe rate (Hz)
 0.023221
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143517
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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

Group delay (usec) (SBD) -7.56608571564E+03 Apriori delay (usec) -7.56604909669E+03 Resid mbdelay (usec) -5.36895E-03 +/- 2.5E-06
 Sband delay (usec) -7.56608568819E+03 Apriori clock (usec) 1.3821482E+01 Resid sbdelay (usec) -3.65915E-02 +/- 2.0E-05
 Phase delay (usec) -7.56604909176E+03 Apriori clockrate (us/s) 6.5661886E-08 Resid phdelay (usec) 4.93022E-06 +/- 8.5E-09
 Delay rate (us/s) -4.33059337211E-02 Apriori rate (us/s) -4.33062032932E-02 Resid rate (us/s) 2.69572E-07 +/- 9.8E-11
 Total phase (deg) 84.9 Apriori accel (us/s/s) 5.98248455430E-05 Resid phase (deg) 152.9 +/- 0.3

ph/seg (deg) 21.4 RMS Theor. 0.6 Amplitude 12.959 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 6.0 1.1 Search (1024X32) 12.696 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.0 0.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 2.0 0.7 Inc. seg. avg. 13.691 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 N: az 98.6 el 72.8 pa -66.3 u,v (fr/asec) 372.262 5749.368 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gN..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gN.W.101.3MP28E

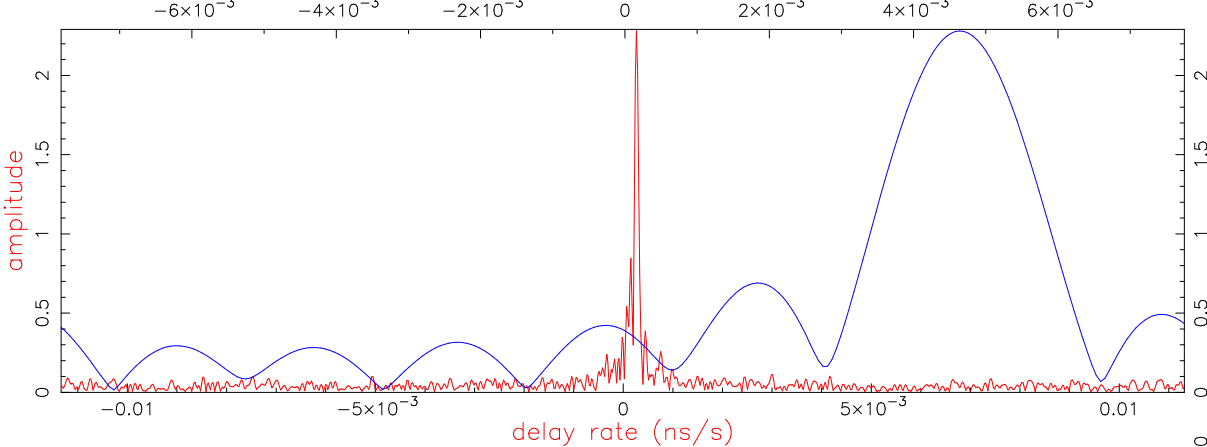
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gN

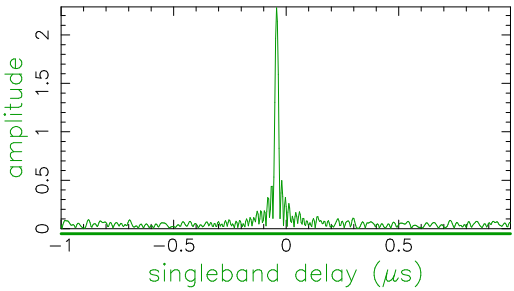
GLT - NOEMA, fgroup W, pol LL

multiband delay (μ s)

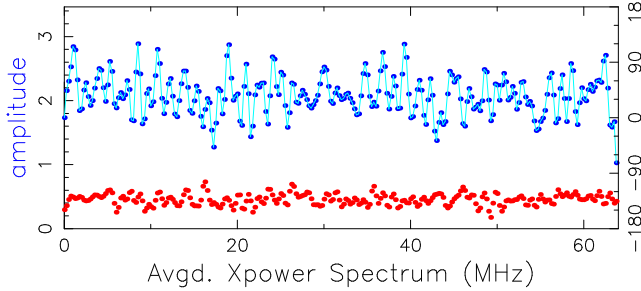


Fringe quality 8

SNR 76.7
 Int time 149.979
 Amp 2.291
 Phase 47.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.042191
 MBD 0.004641
 Fringe rate (Hz) 0.023342
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

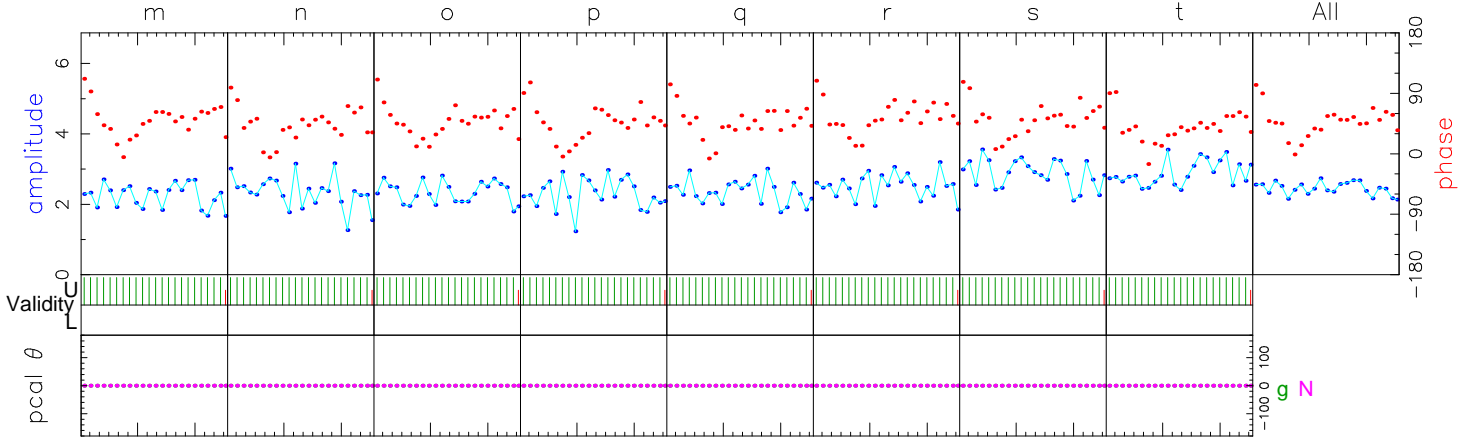


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143507
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -7.56609133042E+03 Apriori delay (usec) -7.56604909669E+03 Resid mbdelay (usec) 4.64127E-03 +/- 1.4E-05
 Sband delay (usec) -7.56609128769E+03 Apriori clock (usec) 1.3821482E+01 Resid sbdelay (usec) -4.21910E-02 +/- 1.1E-04
 Phase delay (usec) -7.56604909515E+03 Apriori clockrate (us/s) 6.5661886E-08 Resid phdelay (usec) 1.54514E-06 +/- 4.8E-08
 Delay rate (us/s) -4.33059323124E-02 Apriori rate (us/s) -4.33062032932E-02 Resid rate (us/s) 2.70981E-07 +/- 5.6E-10
 Total phase (deg) -20.1 Apriori accel (us/s/s) 5.98248455430E-05 Resid phase (deg) 47.9 +/- 1.5

ph/seg (deg) 22.3 3.6 Search (1024X32) 2.207 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.5 6.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.5 2.1 Inc. seg. avg. 2.453 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.0 3.7 Inc. frq. avg. 2.288 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 N: az 98.6 el 72.8 pa -66.3 u,v (fr/asec) 372.262 5749.368 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gN..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gN.W.22.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

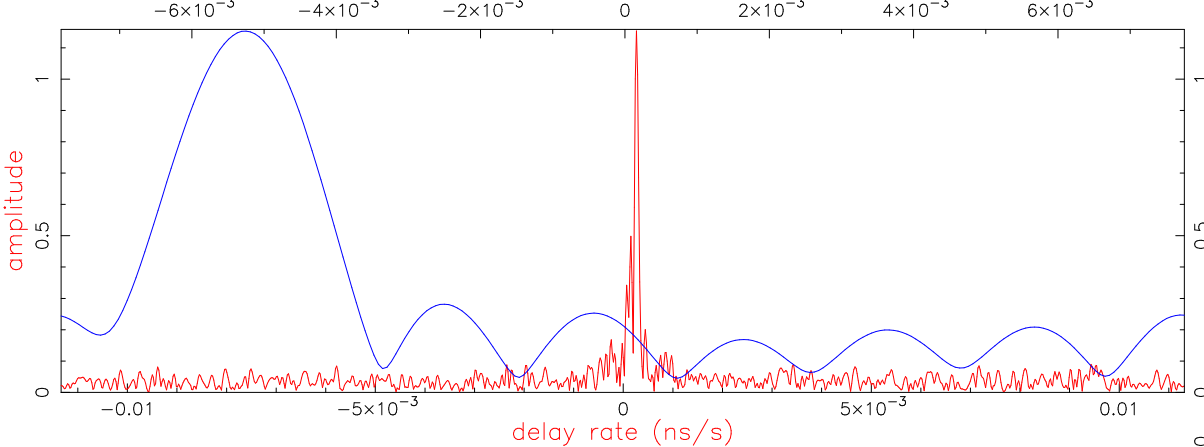
aux01

3C345.3MP28E, No1250, gN

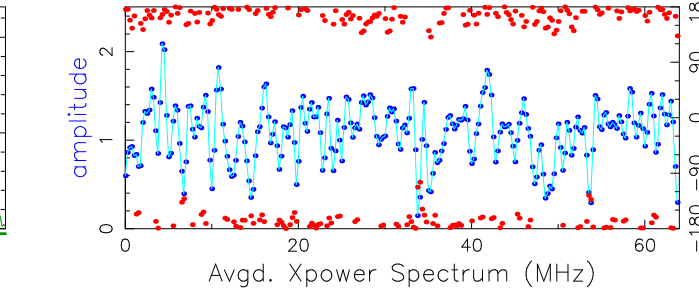
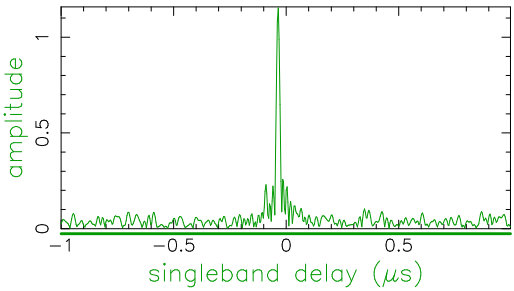
GLT - NOEMA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 8

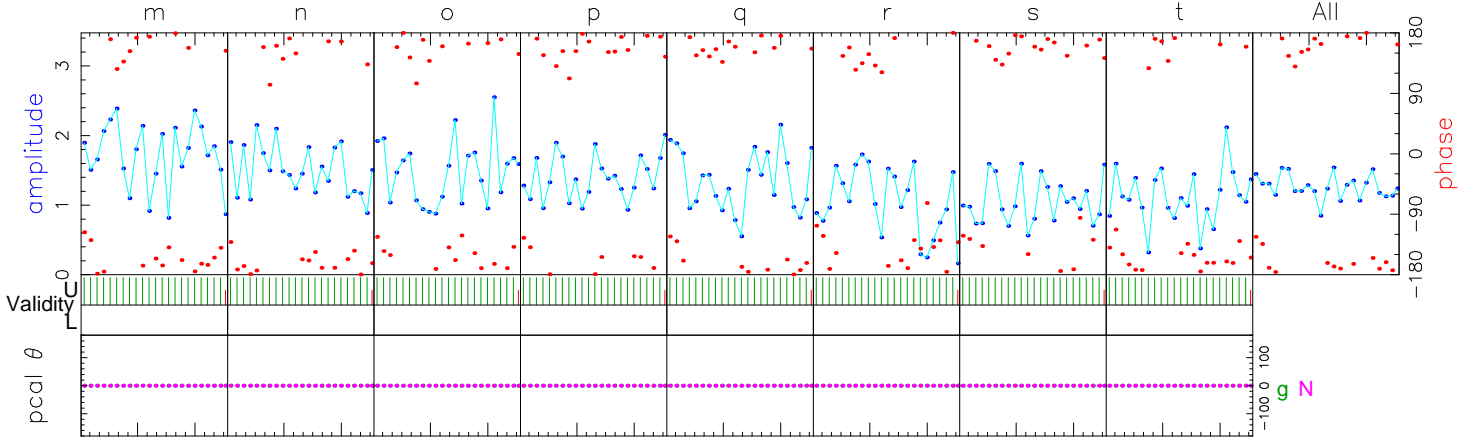


SNR 38.8
 Int time 149.977
 Amp 1.159
 Phase -177.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.035948
 MBD -0.005264
 Fringe rate (Hz)
 0.023190
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143512
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-173.9	-179.6	-171.5	172.5	178.8	-179.3	175.2	-165.2	Phase	-177.7
	1.5	1.3	1.3	1.2	1.2	0.8	0.9	1.0	Ampl.	1.2
	247.6	247.7	248.0	247.7	248.0	247.8	247.7	247.9	Sbd box	247.8
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	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -7.56608561080E+03 Apriori delay (usec) -7.56604909669E+03 Resid mbdelay (usec) -5.26411E-03 +/- 2.8E-05
 Sband delay (usec) -7.56608504494E+03 Apriori clock (usec) 1.3821482E+01 Resid sbdelay (usec) -3.59483E-02 +/- 2.2E-04
 Phase delay (usec) -7.56604910242E+03 Apriori clockrate (us/s) 6.5661886E-08 Resid phdelay (usec) -5.73119E-06 +/- 9.5E-08
 Delay rate (us/s) -4.33059340782E-02 Apriori rate (us/s) -4.33062032932E-02 Resid rate (us/s) 2.69215E-07 +/- 1.1E-09
 Total phase (deg) -245.8 Apriori accel (us/s/s) 5.98248455430E-05 Resid phase (deg) -177.7 +/- 3.0

RMS Theor. Amplitude 1.159 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 24.1 7.1 Search (1024X32) 1.143 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.3 12.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 7.9 4.2 Inc. seg. avg. 1.255 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.1 7.3 Inc. frq. avg. 1.159 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 N: az 98.6 el 72.8 pa -66.3 u, v (fr/asec) 372.262 5749.368 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gN..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gN.W.61.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

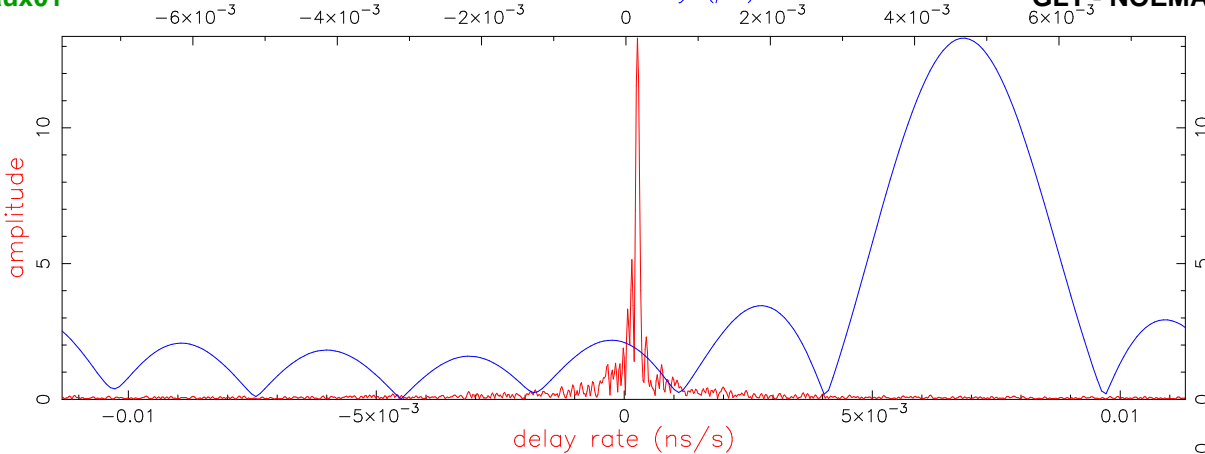
aux01

3C345.3MP28E, No1250, gN

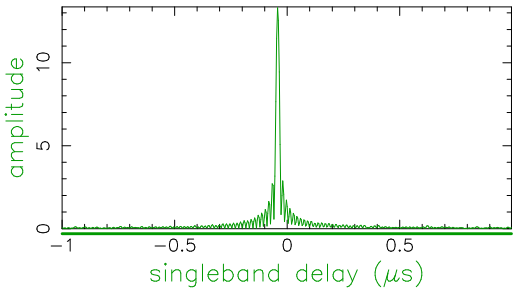
GLT - NOEMA, fgroup W, pol LR

multiband delay (μ s)

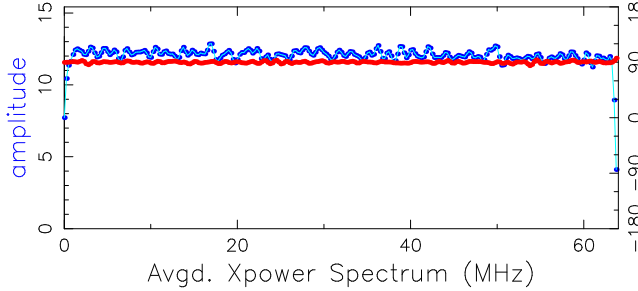
Fringe quality 8



SNR 447.6
 Int time 149.979
 Amp 13.367
 Phase -89.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.042138
 MBD 0.004678
 Fringe rate (Hz)
 0.023231
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

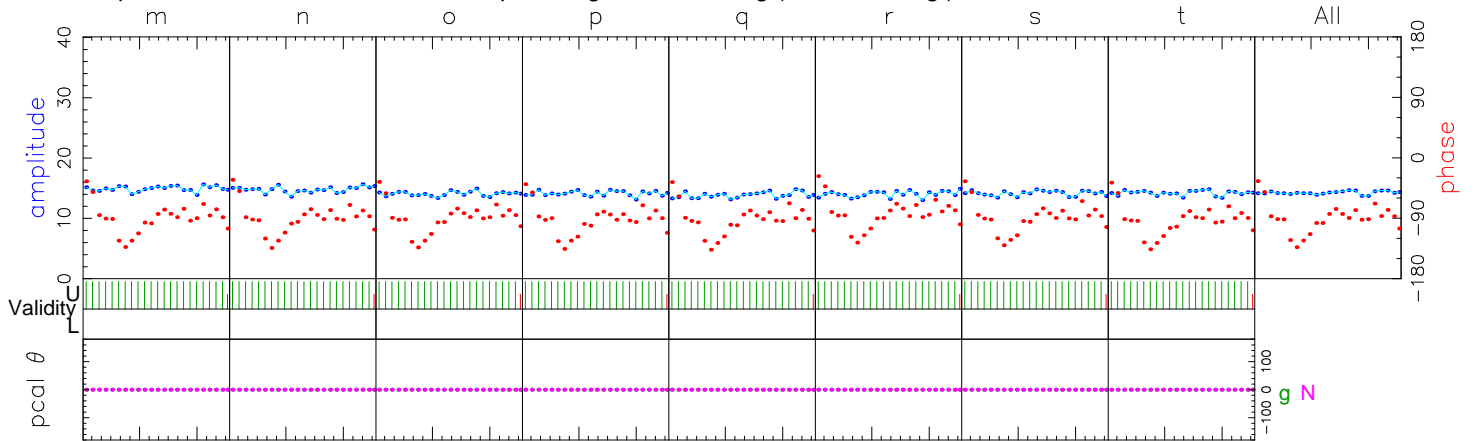


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143515
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-89.0	-89.4	-89.0	-91.7	-91.9	-82.8	-88.2	-92.6	Phase	-89.3
	13.9	13.8	13.2	13.2	12.9	13.1	13.3	13.2	Ampl.	13.3
	246.1	246.2	246.3	246.2	246.3	246.2	246.2	246.2	Sbd box	246.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-7.56609129383E+03	Apriori delay (usec)	-7.56604909669E+03	Resid mbdelay (usec)	4.67786E-03	+/-	2.4E-06
Sband delay (usec)	-7.56609123469E+03	Apriori clock (usec)	1.3821482E+01	Resid sbdelay (usec)	-4.21380E-02	+/-	1.9E-05
Phase delay (usec)	-7.56604909957E+03	Apriori clockrate (us/s)	6.5661886E-08	Resid phdelay (usec)	-2.88083E-06	+/-	8.3E-09
Delay rate (us/s)	-4.33059336049E-02	Apriori rate (us/s)	-4.33062032932E-02	Resid rate (us/s)	2.69688E-07	+/-	9.5E-11
Total phase (deg)	-157.4	Apriori accel (us/s/s)	5.98248455430E-05	Resid phase (deg)	-89.3	+/-	0.3

ph/seg (deg) 21.5 0.6
 amp/seg (%) 7.0 1.1
 ph/frq (deg) 3.4 0.4
 amp/frq (%) 2.4 0.6

RMS Theor. Amplitude 13.367 +/- 0.030
 Search (1024X32) 12.927
 Interp. 0.000
 Inc. seg. avg. 14.263
 Inc. frq. avg. 13.322

g: az 72.5 el 36.9 pa -16.8
 N: az 98.6 el 72.8 pa -66.3
 u,v (fr/asec) 372.262 5749.368

Control file: cf_1234_gmva
 Input file: /Exps/c241a/v2/3mm/1234/No1250/gN..3MP28E
 Output file: /Exps/c241a/v2/3mm/1234/No1250/gN.W.88.3MP28E

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

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

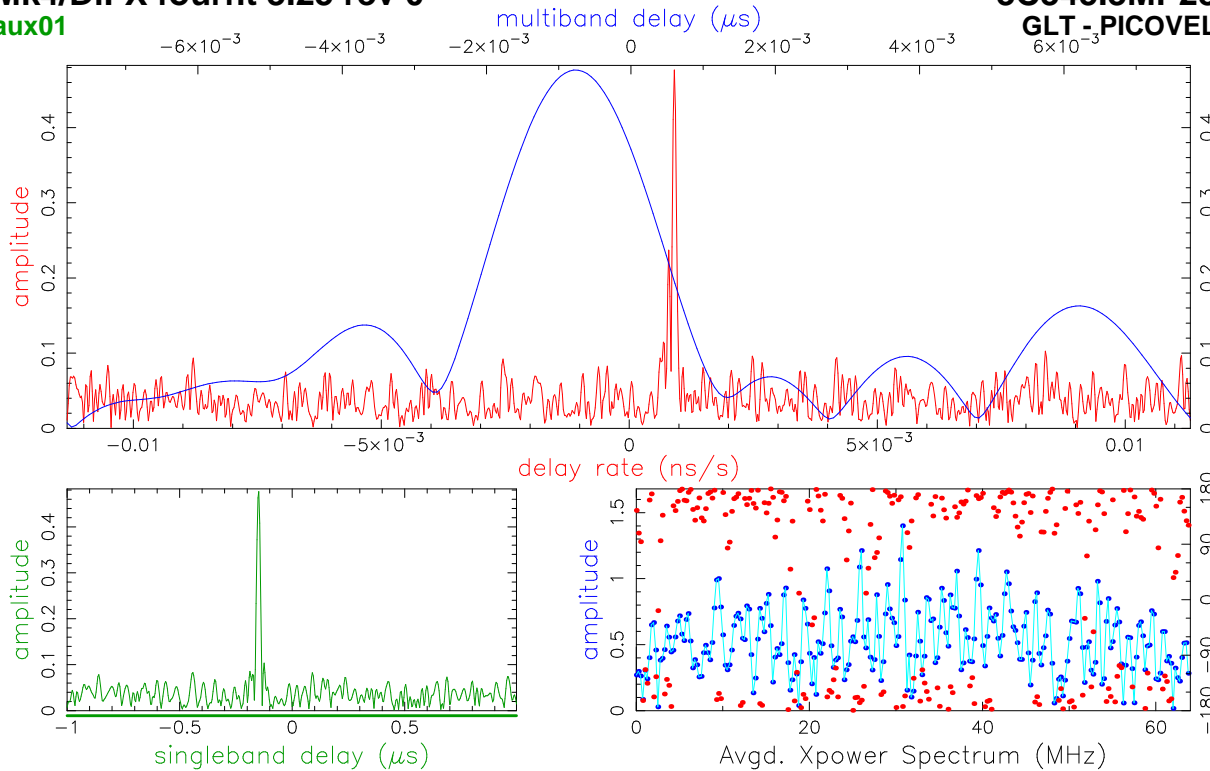
simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gP

GLT - PICOVEL, fgroup W, pol LL

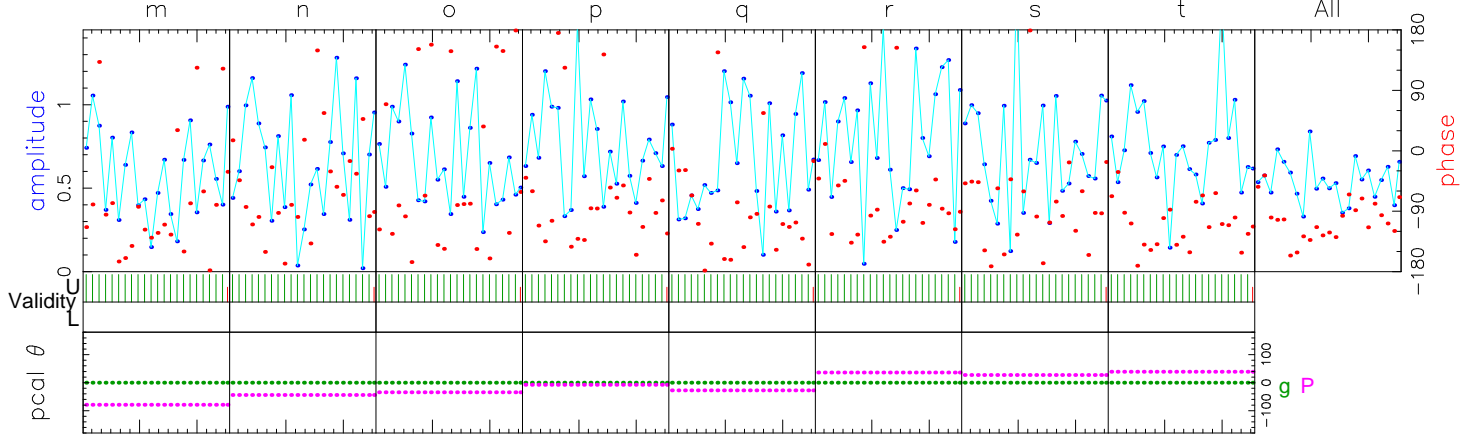


Fringe quality 9

SNR 16.1
 Int time 149.980
 Amp 0.483
 Phase -104.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.149753
 MBD -0.000775
 Fringe rate (Hz) 0.078164
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143508
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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	
	-116.4	-76.6	-130.7	-100.9	-117.3	-86.0	-98.8	-112.5	Phase	-104.0	
	0.4	0.4	0.4	0.6	0.4	0.6	0.5	0.6	Ampl.	0.5	
	219.1	219.3	219.2	218.4	218.8	219.0	218.2	218.5	Sbd box	218.7	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC		
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-6.57534928255E+03		Apriori delay (usec)		-6.57519225710E+03		Resid mbdelay (usec)		-7.75457E-04	+/- 6.7E-05	
Sband delay (usec)	-6.57534201035E+03		Apriori clock (usec)		1.4567871E+00		Resid sbdelay (usec)		-1.49753E-01	+/- 5.3E-04	
Phase delay (usec)	-6.57519226045E+03		Apriori clockrate (us/s)		-5.1827618E-07		Resid phdelay (usec)		-3.35328E-06	+/- 2.3E-07	
Delay rate (us/s)	-2.19989347523E-01		Apriori rate (us/s)		-2.19990254933E-01		Resid rate (us/s)		9.07410E-07	+/- 2.6E-09	
Total phase (deg)			Apriori accel (us/s/s)		6.16979194756E-05		Resid phase (deg)		-104.0	+/- 7.1	
	RMS	Theor.	Amplitude	0.483 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	29.4	17.0	Search (1024X32)	0.470		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	28.4	29.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	19.3	10.1	Inc. seg. avg.	0.522		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	20.0	17.5	Inc. frq. avg.	0.490		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
g: az 72.5 el 36.9 pa -16.8	P: az 74.0 el 65.1 pa -86.3		u, v (fr/asec)		1691.777 6543.728				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No1250/gP..3MP28E		Output file: /Exps/c241a/v2/3mm/1234/No1250/gP.W.28.3MP28E								

Mk4/DiFX fourfit 3.25 rev 0

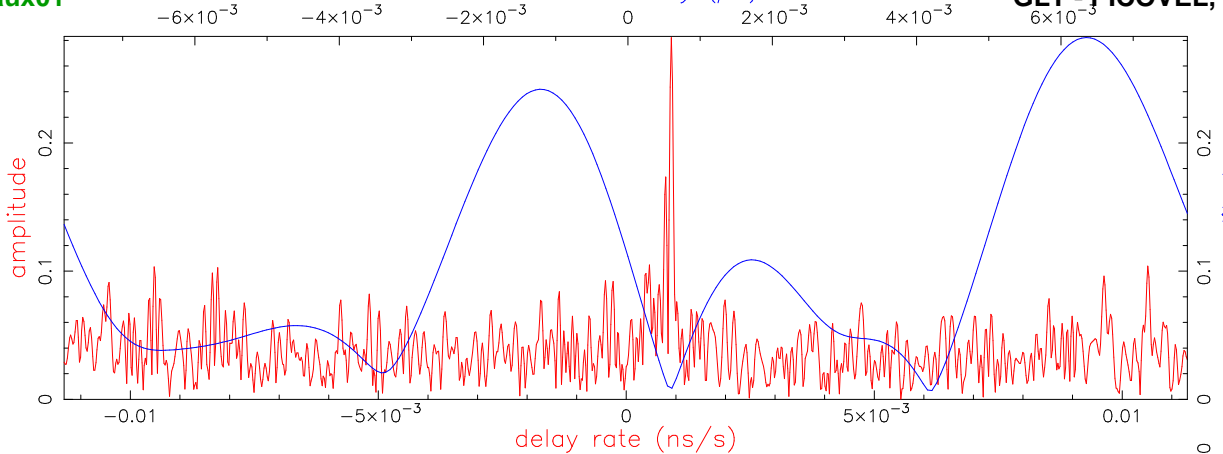
aux01

3C345.3MP28E, No1250, gP

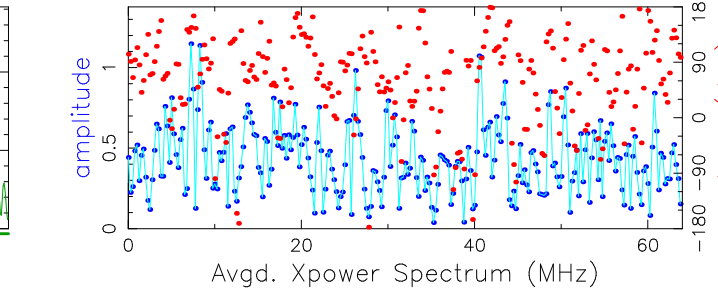
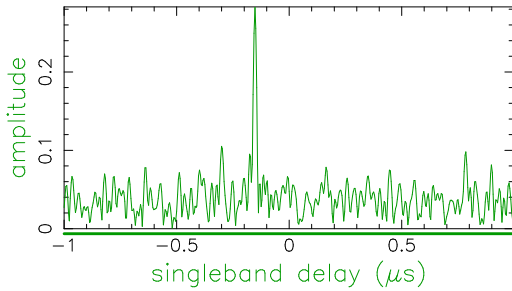
GLT - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

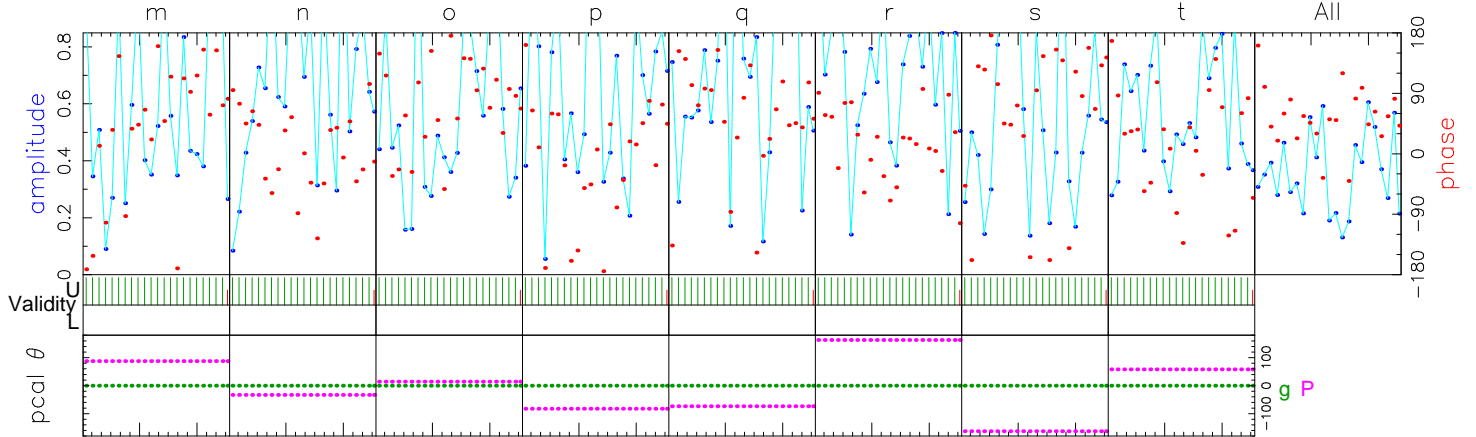


SNR 9.5
 Int time 149.978
 Amp 0.283
 Phase 53.3
 PFD 6.4e-13
 Delays (us)
 SBD -0.152124
 MBD 0.006355
 Fringe rate (Hz)
 0.078892
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143510
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
g	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -6.57534215230E+03 Apriori delay (usec) -6.57519225710E+03 Resid mbdelay (usec) 6.35479E-03 +/- 1.1E-04
 Sband delay (usec) -6.57534438135E+03 Apriori clock (usec) 1.4567871E+00 Resid sbdelay (usec) -1.52124E-01 +/- 9.1E-04
 Phase delay (usec) -6.57519225538E+03 Apriori clockrate (us/s) -5.1827618E-07 Resid phdelay (usec) 1.71992E-06 +/- 3.9E-07
 Delay rate (us/s) -2.19989339080E-01 Apriori rate (us/s) -2.19990254933E-01 Resid rate (us/s) 9.15853E-07 +/- 4.5E-09
 Total phase (deg) 43.9 Apriori accel (us/s/s) 6.16979194756E-05 Resid phase (deg) 53.3 +/- 12.1

ph/seg (deg) 43.7 Theor. Amplitude 0.283 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.0 50.7 Search (1024X32) 0.275 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.2 17.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 29.9 Inc. seg. avg. 0.323 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 P: az 74.0 el 65.1 pa -86.3 u,v (fr/asec) 1691.777 6543.728 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gP..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gP.W.48.3MP28E

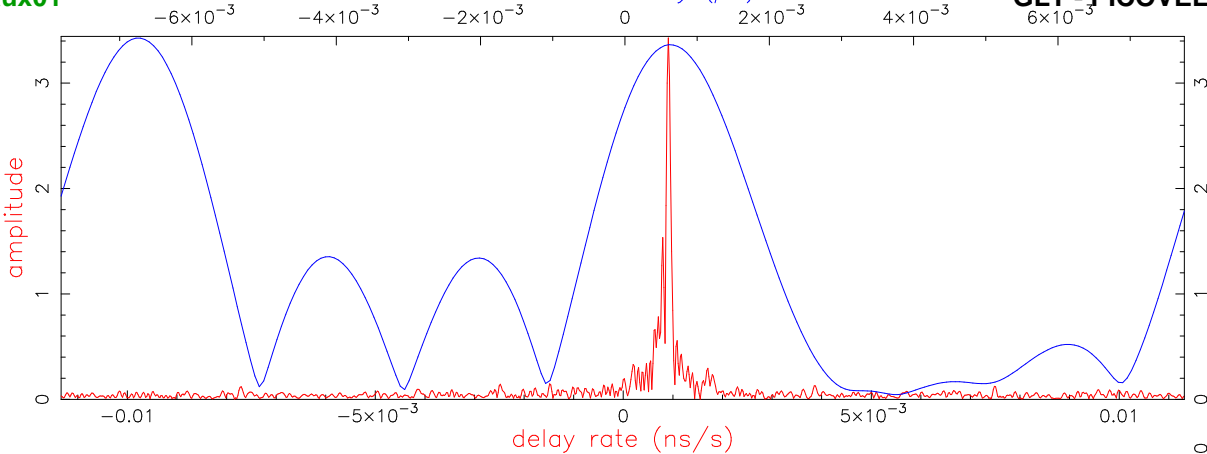
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gP

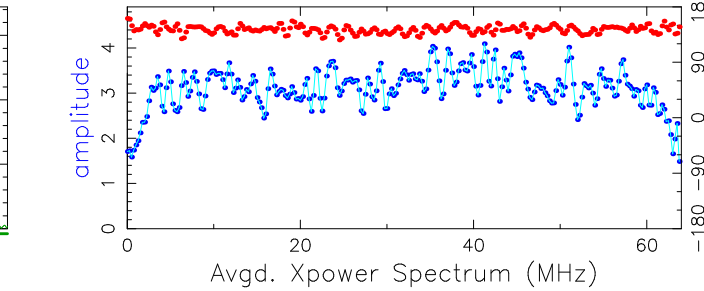
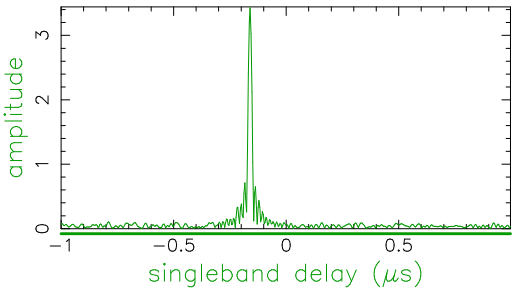
GLT - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



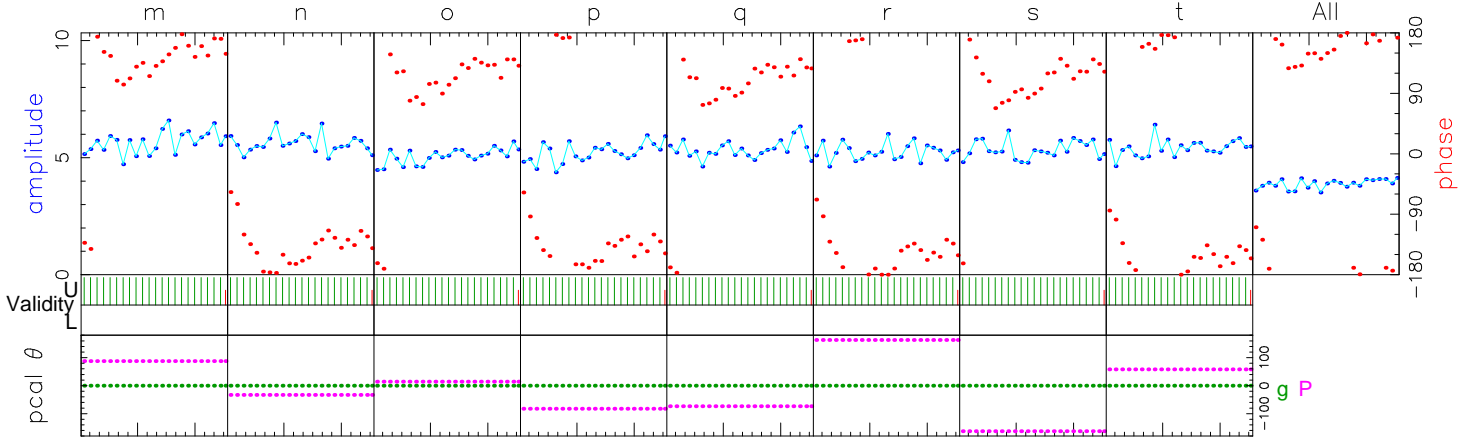
Fringe quality 4

SNR 115.0
 Int time 149.980
 Amp 3.443
 Phase 169.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.160695
 MBD -0.006745
 Fringe rate (Hz)
 0.078083
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143513
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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

Group delay (usec) (SBD)	-6.57535525208E+03	Apriori delay (usec)	-6.57519225710E+03	Resid mbdelay (usec)	-6.74499E-03	+/-	9.4E-06
Sband delay (usec)	-6.57535295235E+03	Apriori clock (usec)	1.4567871E+00	Resid sbdelay (usec)	-1.60695E-01	+/-	7.5E-05
Phase delay (usec)	-6.57519225163E+03	Apriori clockrate (us/s)	-5.1827618E-07	Resid phdelay (usec)	5.46548E-06	+/-	3.2E-08
Delay rate (us/s)	-2.19989348464E-01	Apriori rate (us/s)	-2.19990254933E-01	Resid rate (us/s)	9.06469E-07	+/-	3.7E-10
Total phase (deg)	160.0	Apriori accel (us/s/s)	6.16979194756E-05	Resid phase (deg)	169.5	+/-	1.0

ph/seg (deg) 29.4 2.4 Search (1024X32) 3.404 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.0 4.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.5 1.4 Inc. seg. avg. 3.884 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.6 2.5 Inc. frq. avg. 4.728 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 P: az 74.0 el 65.1 pa -86.3 u,v (fr/asec) 1691.777 6543.728 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gP..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gP.W.71.3MP28E simultaneous interpolator

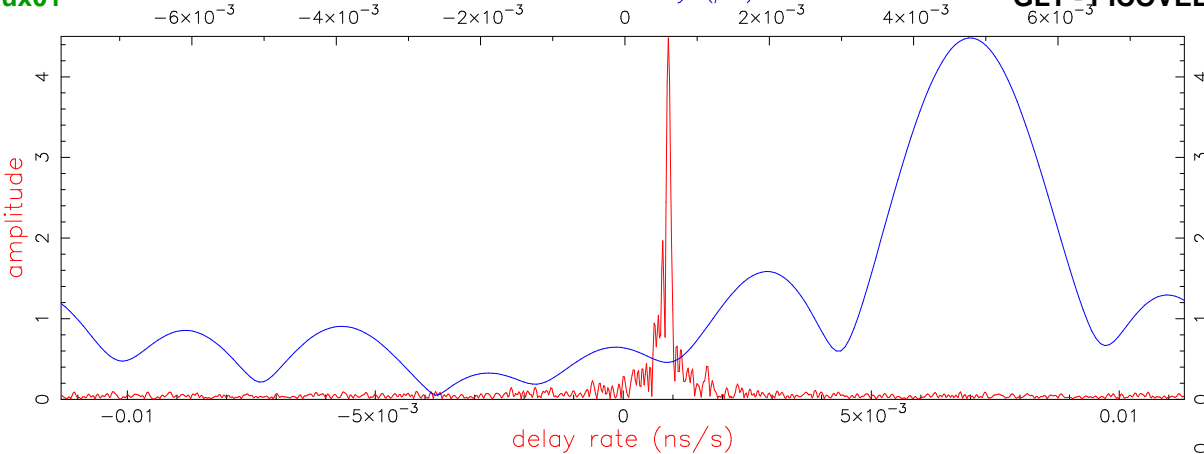
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gP

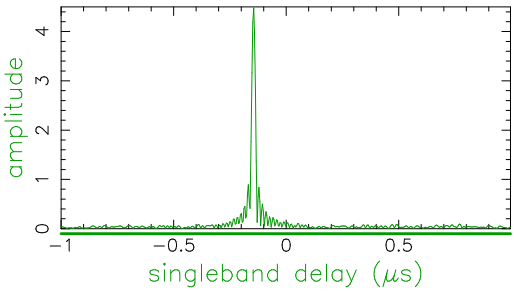
GLT - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

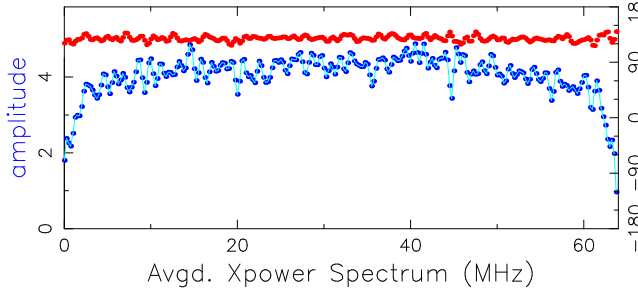


Fringe quality 6

SNR 150.4
 Int time 149.978
 Amp 4.502
 Phase -157.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.145050
 MBD 0.004779
 Fringe rate (Hz)
 0.078155
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

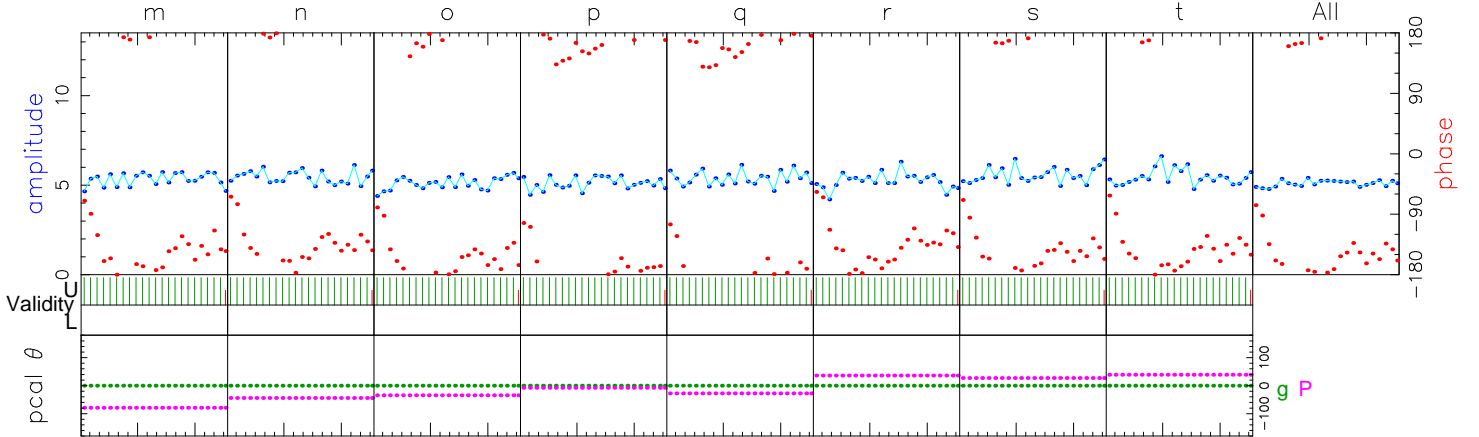


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143515
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-149.1	-142.1	-161.8	177.8	173.7	-138.4	-152.8	-149.3	Phase	-157.4
	4.7	4.8	4.5	4.5	4.7	4.6	4.9	4.8	Ampl.	4.7
	219.9	219.9	219.6	219.9	220.1	219.8	220.2	220.1	Sbd box	219.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
P/g	0	0	0	0	0	0	0	0	PC freqs	
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -6.57534372777E+03 Apriori delay (usec) -6.57519225710E+03 Resid mbdelay (usec) 4.77932E-03 +/- 7.2E-06
 Sband delay (usec) -6.57533730685E+03 Apriori clock (usec) 1.4567871E+00 Resid sbdelay (usec) -1.45050E-01 +/- 5.7E-05
 Phase delay (usec) -6.57519226217E+03 Apriori clockrate (us/s) -5.1827618E-07 Resid phdelay (usec) -5.07450E-06 +/- 2.5E-08
 Delay rate (us/s) -2.19989347627E-01 Apriori rate (us/s) -2.19990254933E-01 Resid rate (us/s) 9.07307E-07 +/- 2.8E-10
 Total phase (deg) -166.8 Apriori accel (us/s/s) 6.16979194756E-05 Resid phase (deg) -157.4 +/- 0.8

RMS Theor. Amplitude 4.502 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.8 1.8 Search (1024X32) 4.401 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 14.1 3.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 19.3 1.1 Inc. seg. avg. 5.110 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 5.3 1.9 Inc. frq. avg. 4.687 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 P: az 74.0 el 65.1 pa -86.3 u,v (fr/asec) 1691.777 6543.728 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gP..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gP.W.81.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

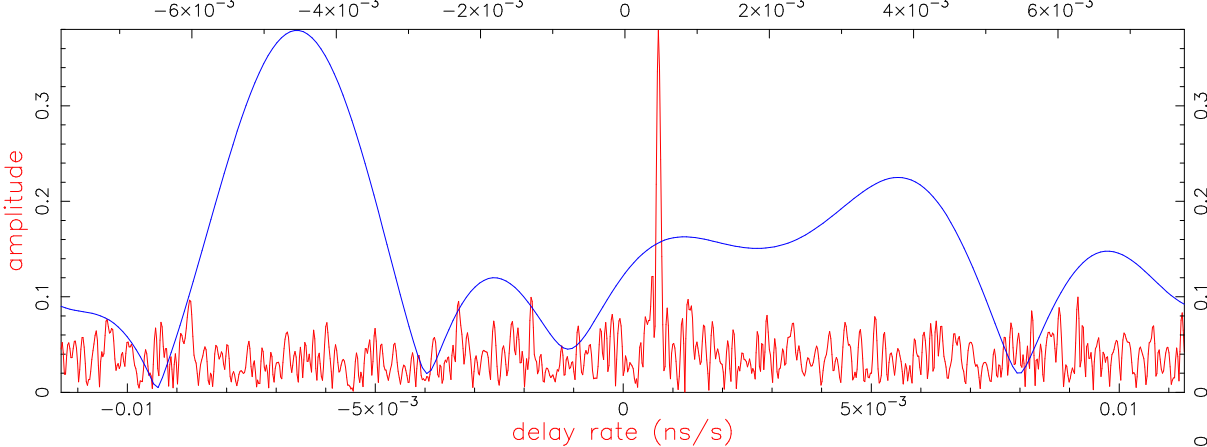
aux01

3C345.3MP28E, No1250, gX

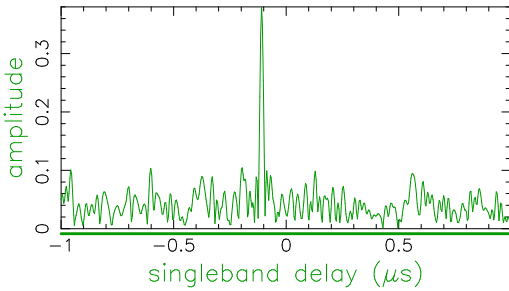
GLT - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

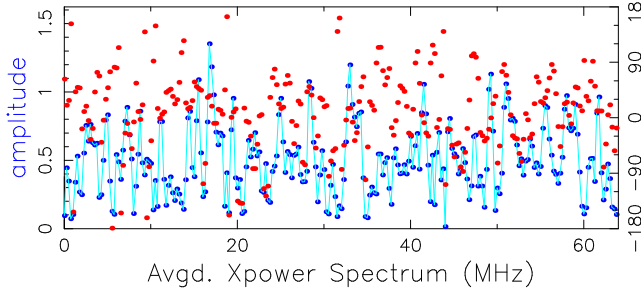
Fringe quality 9



SNR 12.7
 Int time 149.837
 Amp 0.380
 Phase -108.9
 PFD 1.6e-28
 Delays (us)
 SBD -0.108942
 MBD -0.004528
 Fringe rate (Hz)
 0.060803
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

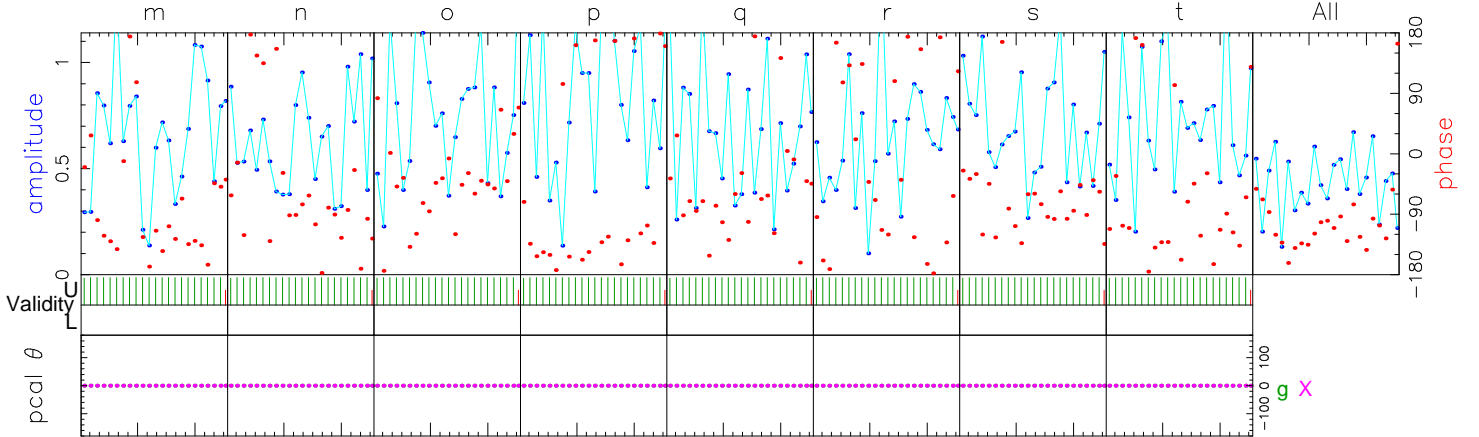


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143507
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-121.3	-106.1	-45.8	-151.4	-77.5	-163.9	-80.5	-121.3	Phase	-108.9
	0.4	0.4	0.5	0.7	0.4	0.3	0.6	0.5	Ampl.	0.5
	230.3	229.1	228.7	229.1	228.8	228.2	228.8	229.6	Sbd box	229.1
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -7.27247460559E+03 Apriori delay (usec) -7.27236070258E+03 Resid mbdelay (usec) -4.52801E-03 +/- 8.5E-05
 Sband delay (usec) -7.27246964458E+03 Apriori clock (usec) -1.1223405E+02 Resid sbdelay (usec) -1.08942E-01 +/- 6.8E-04
 Phase delay (usec) -7.27236070609E+03 Apriori clockrate (us/s) -1.1366622E-02 Resid phdelay (usec) -3.51096E-06 +/- 2.9E-07
 Delay rate (us/s) 9.82312128870E-02 Apriori rate (us/s) 9.82305070191E-02 Resid rate (us/s) 7.05868E-07 +/- 3.4E-09
 Total phase (deg) -80.1 Apriori accel (us/s/s) 4.75027050248E-05 Resid phase (deg) -108.9 +/- 9.0

ph/seg (deg) RMS 31.4 Theor. 21.6 Amplitude 0.380 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.8 37.8 Search (1024X32) 0.369 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.7 12.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.2 22.3 Inc. seg. avg. 0.408 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 X: az 141.9 el 69.4 pa -25.3 u,v (fr/asec) -693.967 3998.513 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gX..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gX.W.23.3MP28E

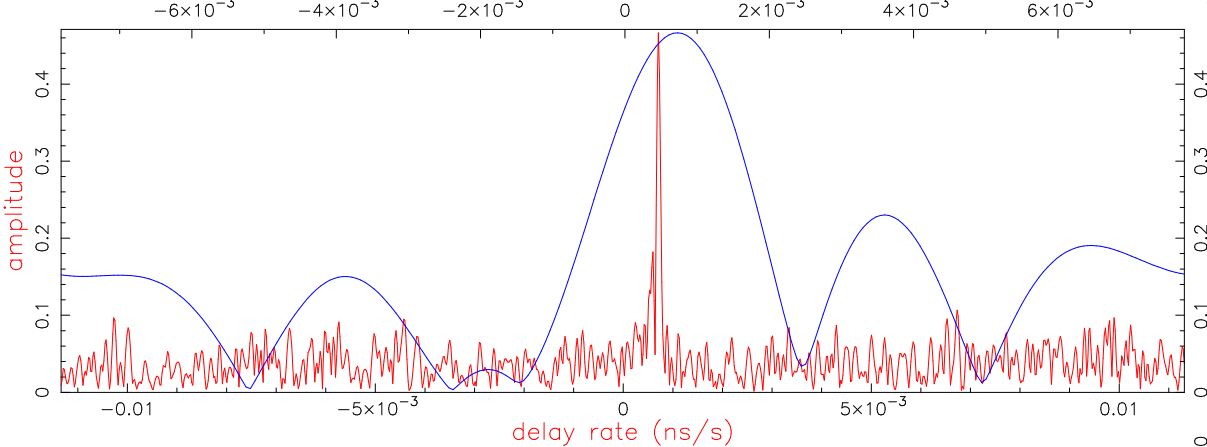
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gX

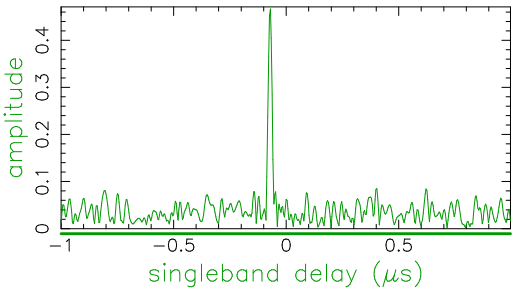
GLT - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

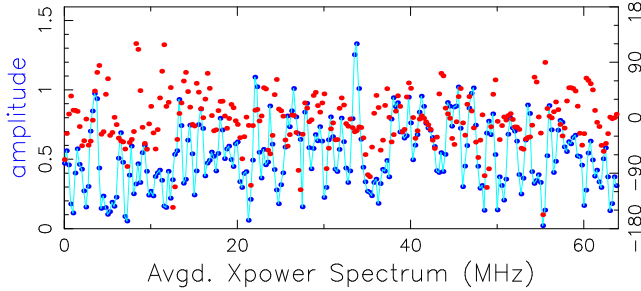


Fringe quality 8

SNR 15.7
 Int time 149.835
 Amp 0.471
 Phase -114.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.071504
 MBD 0.000709
 Fringe rate (Hz)
 0.061500
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

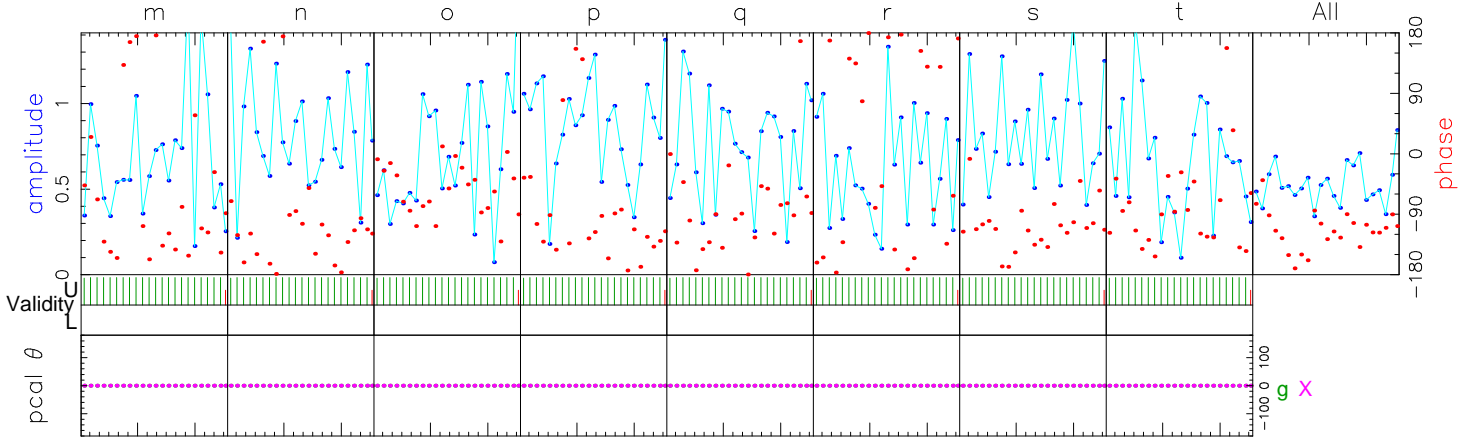


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143510
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-134.1	-128.3	-56.9	-124.5	-92.8	-178.3	-107.4	-106.4	Phase	-114.7
	0.4	0.7	0.6	0.6	0.5	0.5	0.6	0.5	Ampl.	0.5
	239.1	238.3	237.9	238.3	237.8	238.4	238.9	239.7	Sbd box	238.7
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -7.27243811856E+03 Apriori delay (usec) -7.27236070258E+03 Resid mbdelay (usec) 7.09023E-04 +/- 6.9E-05
 Sband delay (usec) -7.27243220633E+03 Apriori clock (usec) -1.1223405E+02 Resid sbdelay (usec) -7.15038E-02 +/- 5.5E-04
 Phase delay (usec) -7.27236070628E+03 Apriori clockrate (us/s) -1.1366622E-02 Resid phdelay (usec) -3.69760E-06 +/- 2.3E-07
 Delay rate (us/s) 9.82312209674E-02 Apriori rate (us/s) 9.82305070191E-02 Resid rate (us/s) 7.13948E-07 +/- 2.7E-09
 Total phase (deg) -85.9 Apriori accel (us/s/s) 4.75027050248E-05 Resid phase (deg) -114.7 +/- 7.3

RMS Theor. Amplitude 0.471 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.9 17.5 Search (1024X32) 0.455 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 26.4 30.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 38.0 10.3 Inc. seg. avg. 0.501 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.1 18.0 Inc. frq. avg. 0.536 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 72.5 el 36.9 pa -16.8 X: az 141.9 el 69.4 pa -25.3 u,v (fr/asec) -693.967 3998.513 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gX...3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gX.W.45.3MP28E

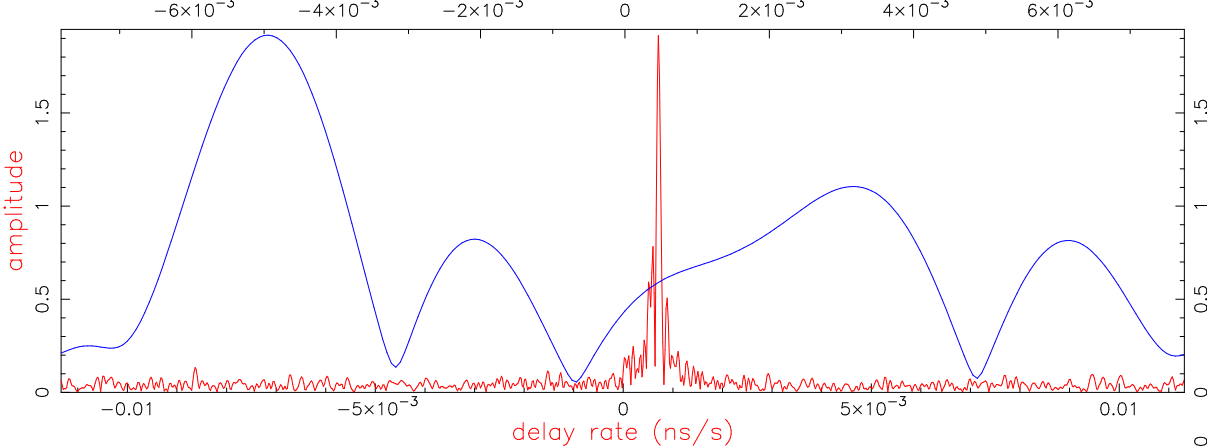
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gX

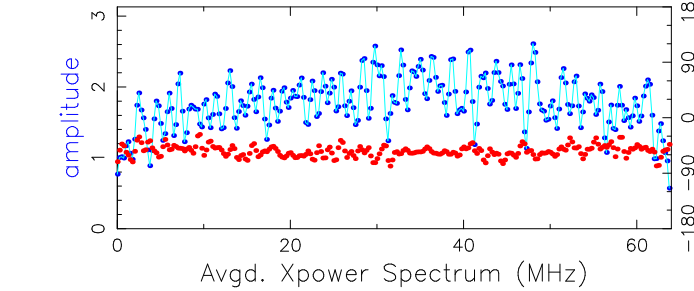
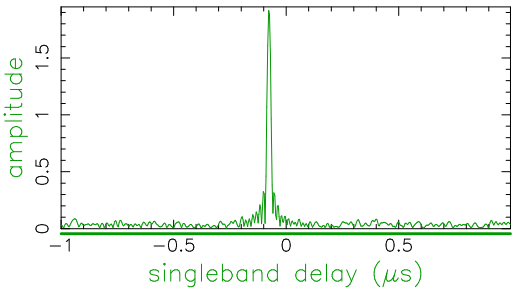
GLT - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



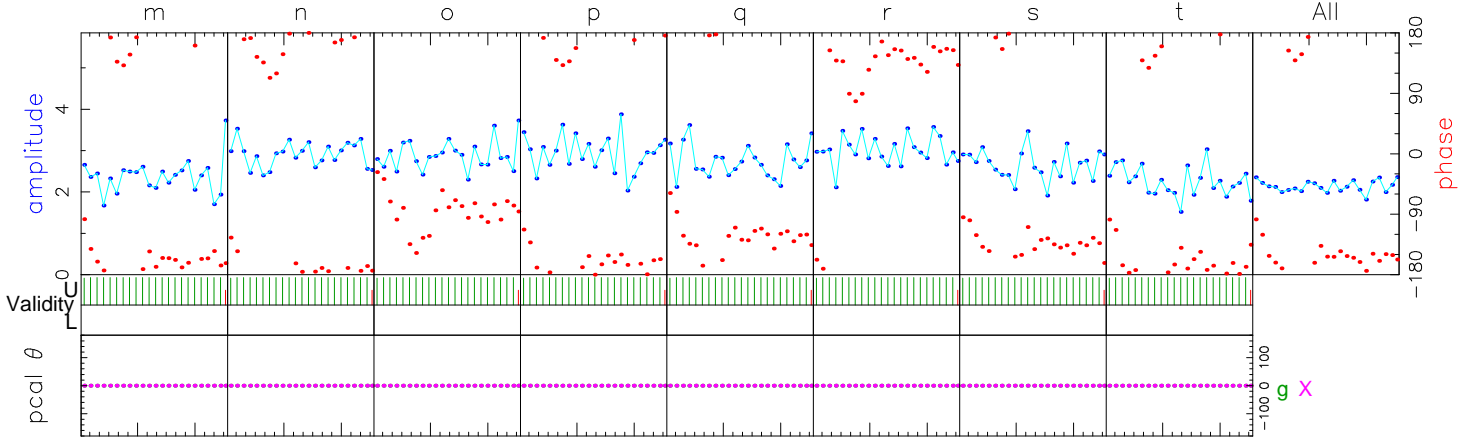
Fringe quality 4

SNR 65.1
 Int time 149.837
 Amp 1.949
 Phase -159.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.076531
 MBD -0.004909
 Fringe rate (Hz)
 0.061162
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143512
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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	175.9	-85.4	-172.1	-127.7	142.2	-138.2	-170.2	Phase	-159.4
	2.1	2.6	2.6	2.6	2.5	2.7	2.4	2.0	Ampl.	2.4
	238.2	237.5	237.0	236.7	236.6	236.9	237.1	238.2	Sbd box	237.4
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -7.27244373668E+03 Apriori delay (usec) -7.27236070258E+03 Resid mbdelay (usec) -4.90910E-03 +/- 1.7E-05
 Sband delay (usec) -7.27243723308E+03 Apriori clock (usec) -1.1223405E+02 Resid sbdelay (usec) -7.65305E-02 +/- 1.3E-04
 Phase delay (usec) -7.27236070772E+03 Apriori clockrate (us/s) -1.1366622E-02 Resid phdelay (usec) -5.13930E-06 +/- 5.7E-08
 Delay rate (us/s) 9.82312170519E-02 Apriori rate (us/s) 9.82305070191E-02 Resid rate (us/s) 7.10033E-07 +/- 6.6E-10
 Total phase (deg) -130.6 Apriori accel (us/s/s) 4.75027050248E-05 Resid phase (deg) -159.4 +/- 1.8

RMS Theor. Amplitude 1.949 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 26.9 4.2 Search (1024X32) 1.893 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 12.0 7.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.4 2.5 Inc. seg. avg. 2.134 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.3 4.3 Inc. frq. avg. 2.420 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 X: az 141.9 el 69.4 pa -25.3 u,v (fr/asec) -693.967 3998.513 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gX..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gX.W.63.3MP28E

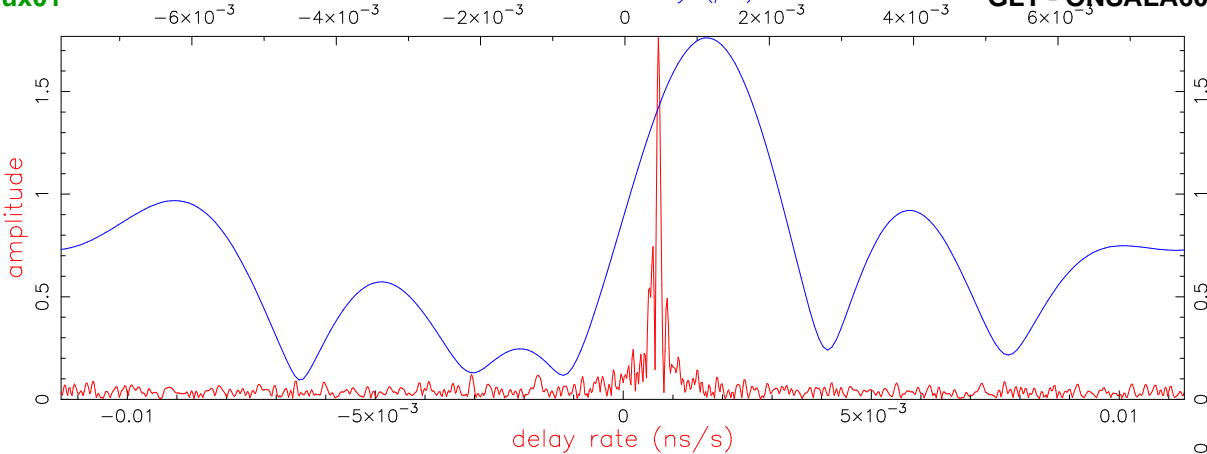
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gX

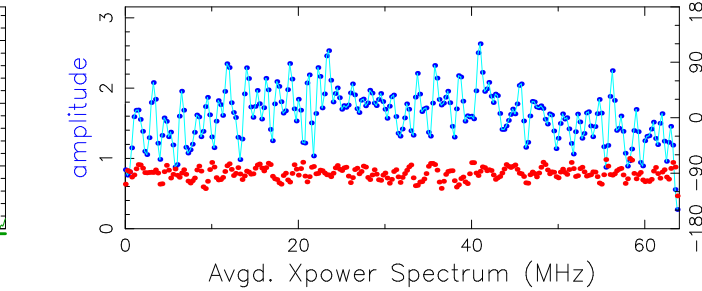
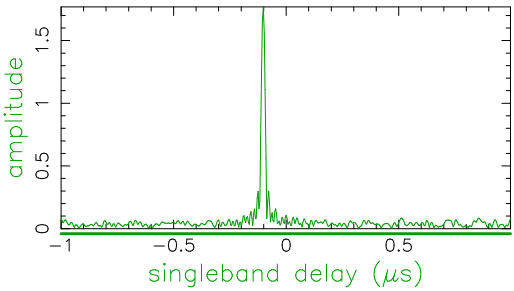
GLT - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



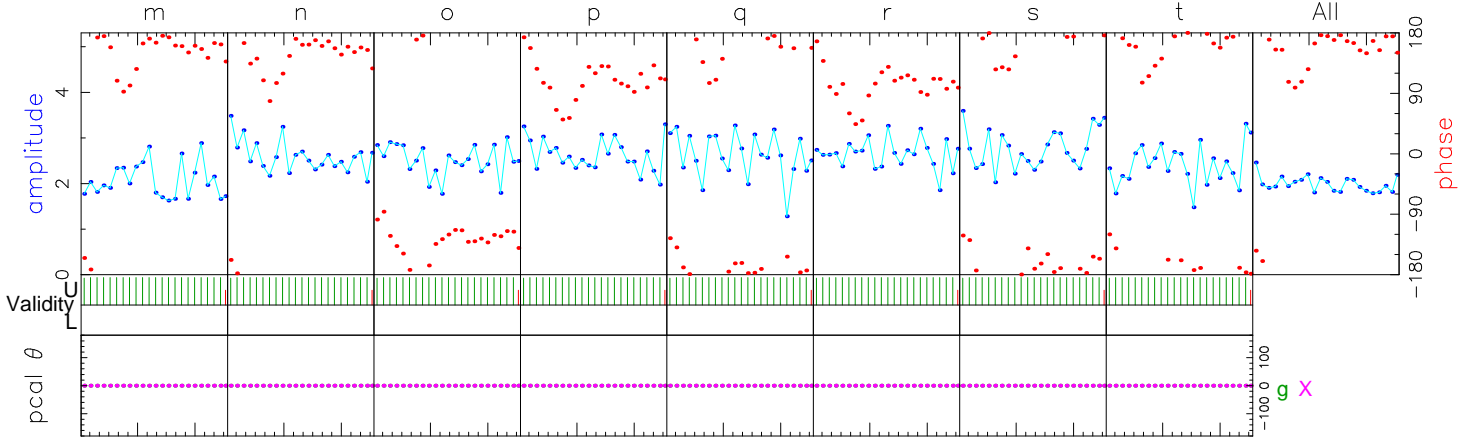
Fringe quality 4

SNR 59.1
 Int time 149.835
 Amp 1.769
 Phase 159.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.102184
 MBD 0.001121
 Fringe rate (Hz)
 0.061160
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143515
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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

Group delay (usec) (SBD) -7.27246895699E+03 Apriori delay (usec) -7.27236070258E+03 Resid mbdelay (usec) 1.12059E-03 +/- 1.8E-05
 Sband delay (usec) -7.27246288658E+03 Apriori clock (usec) -1.1223405E+02 Resid sbdelay (usec) -1.02184E-01 +/- 1.5E-04
 Phase delay (usec) -7.27236069743E+03 Apriori clockrate (us/s) -1.1366622E-02 Resid phdelay (usec) 5.14990E-06 +/- 6.3E-08
 Delay rate (us/s) 9.82312170264E-02 Apriori rate (us/s) 9.82305070191E-02 Resid rate (us/s) 7.10007E-07 +/- 7.2E-10
 Total phase (deg) -171.5 Apriori accel (us/s/s) 4.75027050248E-05 Resid phase (deg) 159.7 +/- 1.9

ph/seg (deg) 27.5 4.6 Search (1024X32) 1.742 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 15.6 8.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.4 2.7 Inc. seg. avg. 1.986 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.4 4.8 Inc. frq. avg. 2.241 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 X: az 141.9 el 69.4 pa -25.3 u,v (fr/asec) -693.967 3998.513 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gX...3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gX.W.87.3MP28E simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

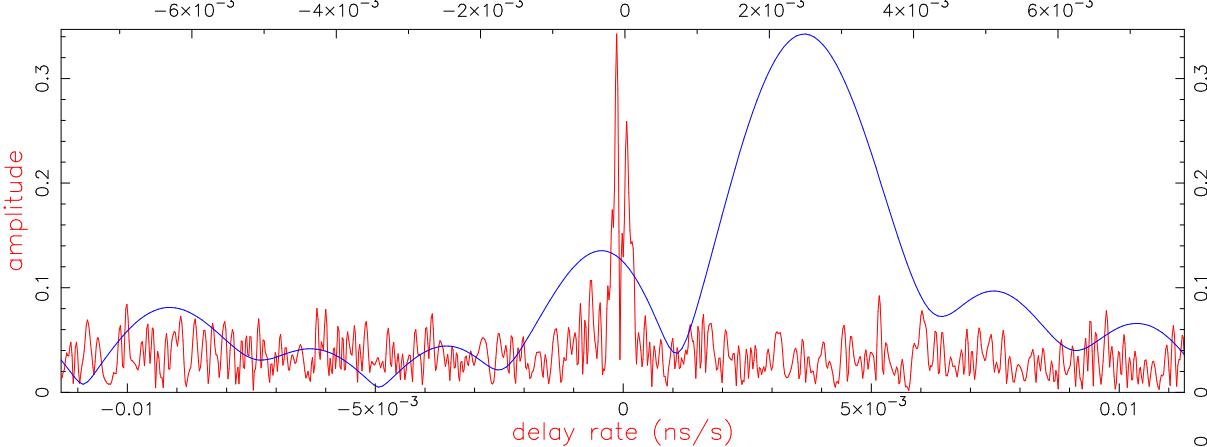
aux01

3C345.3MP28E, No1250, gy

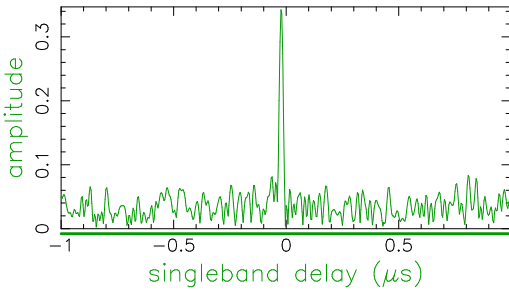
GLT - KVNYS, fgroup W, pol LL

multiband delay (μ s)

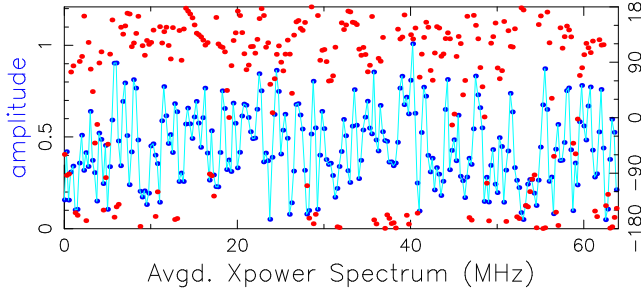
Fringe quality 9



SNR 11.6
Int time 149.805
Amp 0.347
Phase -143.4
PFD 8.8e-23
Delays (us)
SBD -0.021935
MBD 0.002489
Fringe rate (Hz)
-0.011739
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

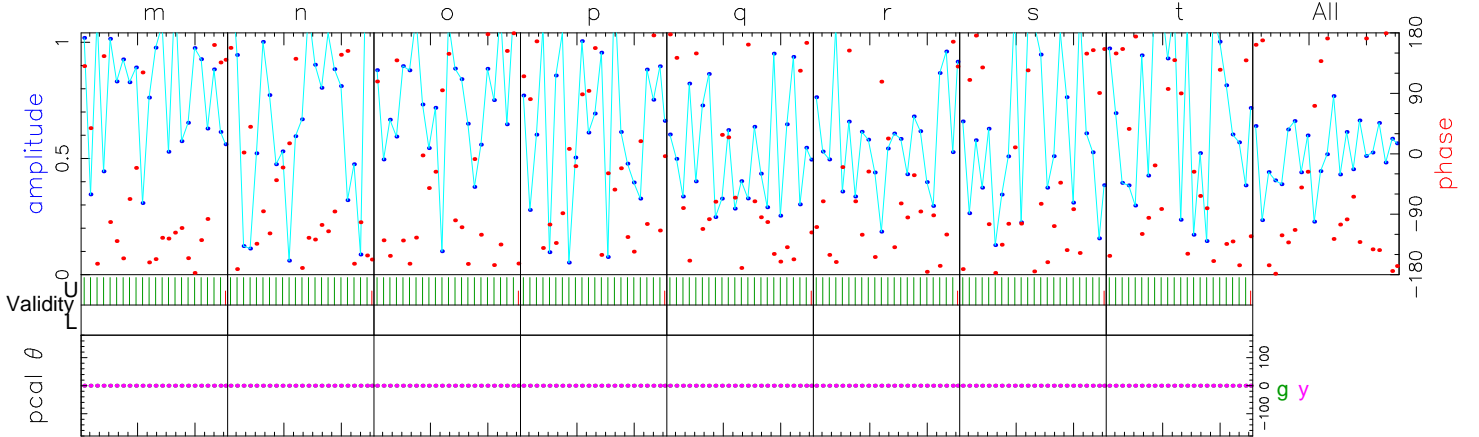


delay rate (ns/s)



Exp. c241a
Exper # 1234
Yr:day 2024:110
Start 010001.00
Stop 010231.02
FRT 010116.00
Corr/FF/build
2025:008:190641
2025:041:143508
2024:113:095956
RA & Dec (J2000)
16h42m58.809971s
+39°48'36.993958"

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
	-146.5	-140.9	-151.4	-131.7	-141.0	-122.2	-149.5	-157.0	Phase	-143.4
	0.5	0.5	0.4	0.2	0.3	0.3	0.3	0.3	Ampl.	0.3
	251.1	251.4	250.9	46.9	250.8	251.9	494.4	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	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.49963465648E+03	Apriori delay (usec)	6.49966341741E+03	Resid mbdelay (usec)	2.48907E-03	+/-	9.3E-05
Sband delay (usec)	6.49964148216E+03	Apriori clock (usec)	-5.9633102E+08	Resid sbdelay (usec)	-2.19353E-02	+/-	7.4E-04
Phase delay (usec)	6.49966341278E+03	Apriori clockrate (us/s)	8.0399879E-08	Resid phdelay (usec)	-4.62308E-06	+/-	3.2E-07
Delay rate (us/s)	1.21174986747E+00	Apriori rate (us/s)	1.21175000375E+00	Resid rate (us/s)	-1.36274E-07	+/-	3.7E-09
Total phase (deg)	135.8	Apriori accel (us/s/s)	-8.34628094337E-06	Resid phase (deg)	-143.4	+/-	9.9

ph/seg (deg) 57.8 23.7 Search (1024X32) 0.340 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.8 41.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.2 14.0 Inc. seg. avg. 0.475 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.7 24.4 Inc. frq. avg. 0.338 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 y: az 307.2 el 17.4 pa 55.2 u,v (fr/asec) -9026.181 1989.351 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gy..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gy.W.27.3MP28E

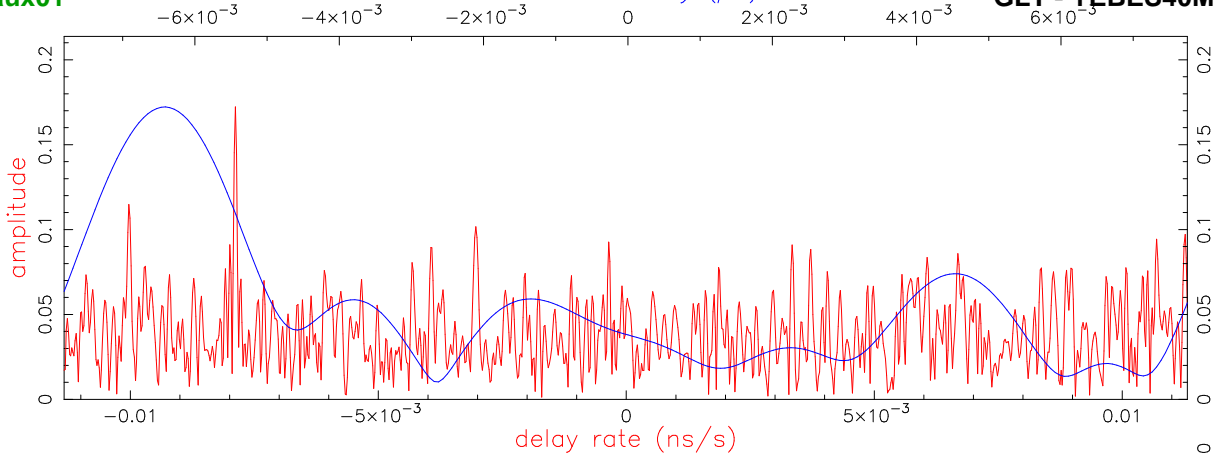
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gY

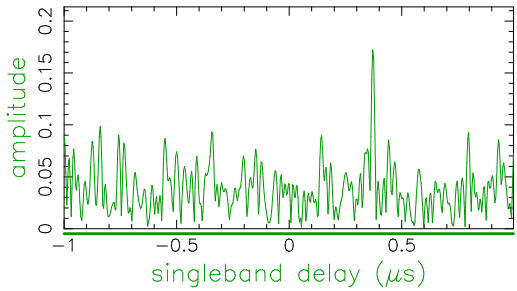
GLT - YEBES40M, fgroup W, pol LL

multiband delay (μ s)

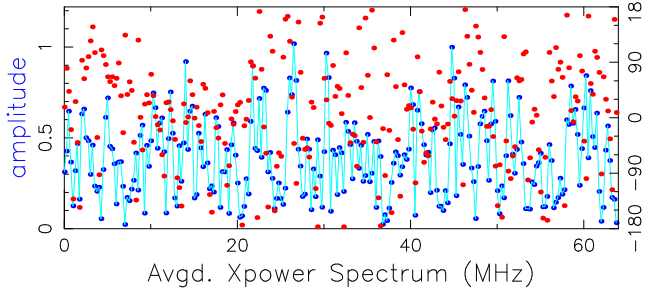


Fringe quality 0

SNR 5.8
 Int time 149.852
 Amp 0.214
 Phase 64.9
 PFD 5.4e-01
 Delays (us)
 SBD 0.372125
 MBD -0.006422
 Fringe rate (Hz)
 -0.680559
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

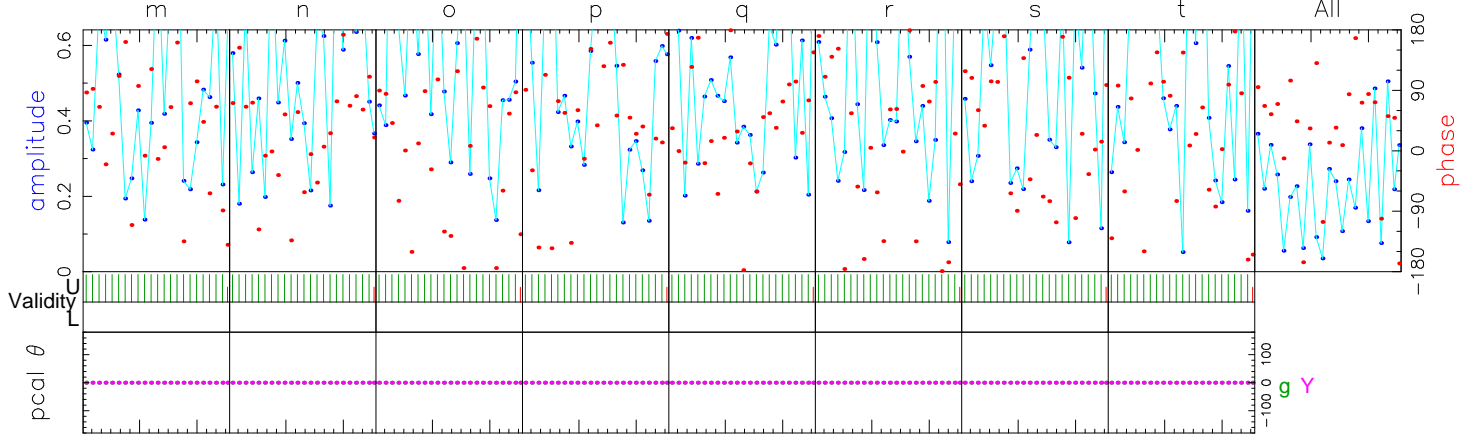


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143509
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	63.5	48.0	97.7	86.1	51.0	85.9	24.0	69.7		64.9
	0.2	0.4	0.2	0.3	0.3	0.1	0.1	0.2		0.2
	200.5	352.8	167.1	404.4	431.2	302.0	224.5	357.6		352.3
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	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: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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-6.60575090544E+03	Apriori delay (usec)	-6.60611948319E+03	Resid mbdelay (usec)	-6.42225E-03	+/-	1.9E-04
Sband delay (usec)	-6.60574735794E+03	Apriori clock (usec)	1.1104864E+02	Resid sbdelay (usec)	3.72125E-01	+/-	1.5E-03
Phase delay (usec)	-6.60611948110E+03	Apriori clockrate (us/s)	1.2936299E-02	Resid phdelay (usec)	2.09373E-06	+/-	6.4E-07
Delay rate (us/s)	-1.92267145176E-01	Apriori rate (us/s)	-1.92259244559E-01	Resid rate (us/s)	-7.90062E-06	+/-	7.3E-09
Total phase (deg)	-36.6	Apriori accel (us/s/s)	5.90637299821E-05	Resid phase (deg)	64.9	+/-	19.7

ph/seg (deg)	71.4	Theor.	47.3	Amplitude	0.214 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.9	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)	26.3	Inc. seg. avg.	0.212	Inc. frq. avg.	0.201	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.9	Inc. frq. avg.	0.201			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 72.5 el 36.9 pa -16.8 Y: az 81.5 el 66.1 pa -78.2 u, v (fr/asec) 1482.352 6053.748 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gY...3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gY.W.39.3MP28E

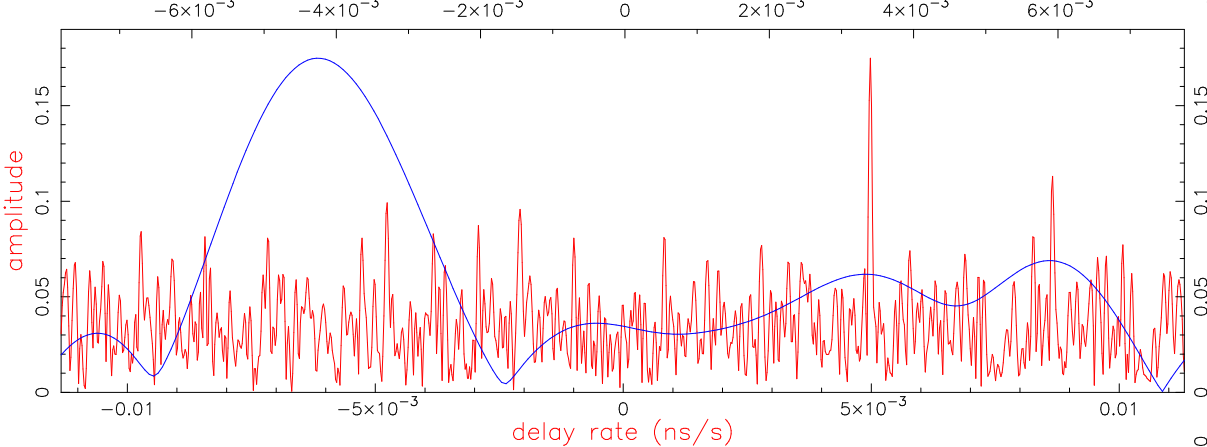
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gy

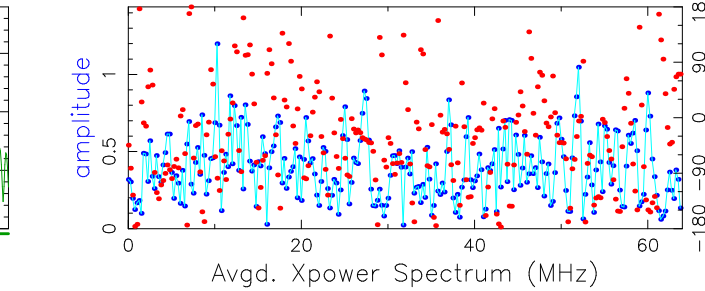
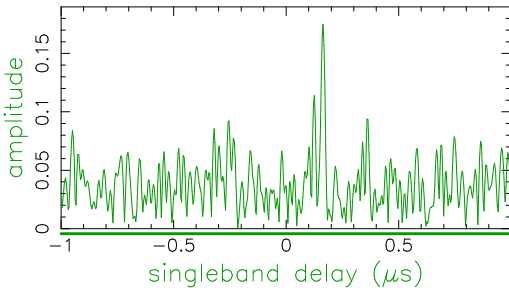
GLT - KVNYS, fgroup W, pol RR

multiband delay (μ s)



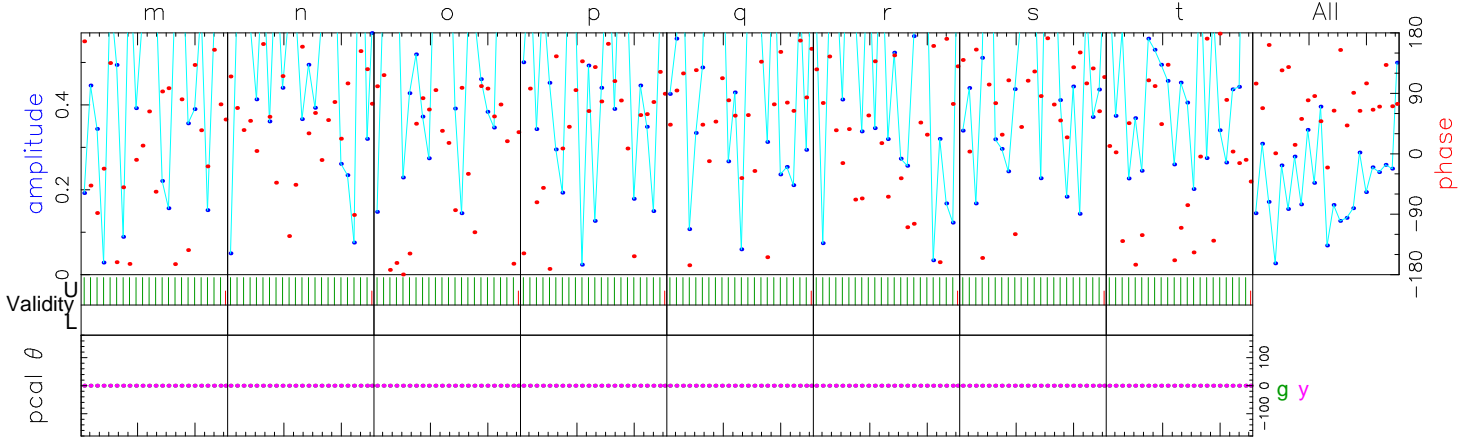
Fringe quality 0

SNR 5.9
 Int time 149.803
 Amp 0.190
 Phase 78.6
 PFD 4.4e-01
 Delays (us)
 SBD 0.163431
 MBD -0.004234
 Fringe rate (Hz)
 0.428984
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143510
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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	
	96.2	62.6	78.3	88.6	81.8	45.3	105.0	-14.9	Phase	78.6	
	0.1	0.2	0.2	0.2	0.3	0.2	0.4	0.1	Ampl.	0.2	
	25.8	333.3	294.7	344.5	450.7	376.1	298.3	170.8	Sbd box	298.8	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	6.49983105794E+03		Apriori delay (usec)		6.49966341741E+03		Resid mbdelay (usec)		-4.23447E-03	+/- 1.9E-04	
Sband delay (usec)	6.49982684816E+03		Apriori clock (usec)		-5.9633102E+08		Resid sbdelay (usec)		1.63431E-01	+/- 1.5E-03	
Phase delay (usec)	6.49966341994E+03		Apriori clockrate (us/s)		8.0399879E-08		Resid phdelay (usec)		2.53452E-06	+/- 6.3E-07	
Delay rate (us/s)	1.21175498382E+00		Apriori rate (us/s)		1.21175000375E+00		Resid rate (us/s)		4.98008E-06	+/- 7.3E-09	
Total phase (deg)			Apriori accel (us/s/s)		-8.34628094337E-06		Resid phase (deg)		78.6	+/- 19.5	
	RMS	Theor.	Amplitude	0.190 +/- 0.032		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	45.1	46.9	Search (1024X32)	0.171		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	59.2	81.8	Interp.	0.000		SampCntNorm: enabled		mb window (us)		-0.008 0.008	
ph/frq (deg)	43.3	27.6	Inc. seg. avg.	0.175		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	45.4	48.2	Inc. frq. avg.	0.190		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
g: az 72.5 el 36.9 pa -16.8	y: az 307.2 el 17.4 pa 55.2		u, v (fr/asec) -9026.181 1989.351						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No1250/gy..3MP28E		Output file: /Exps/c241a/v2/3mm/1234/No1250/gy.W.44.3MP28E								

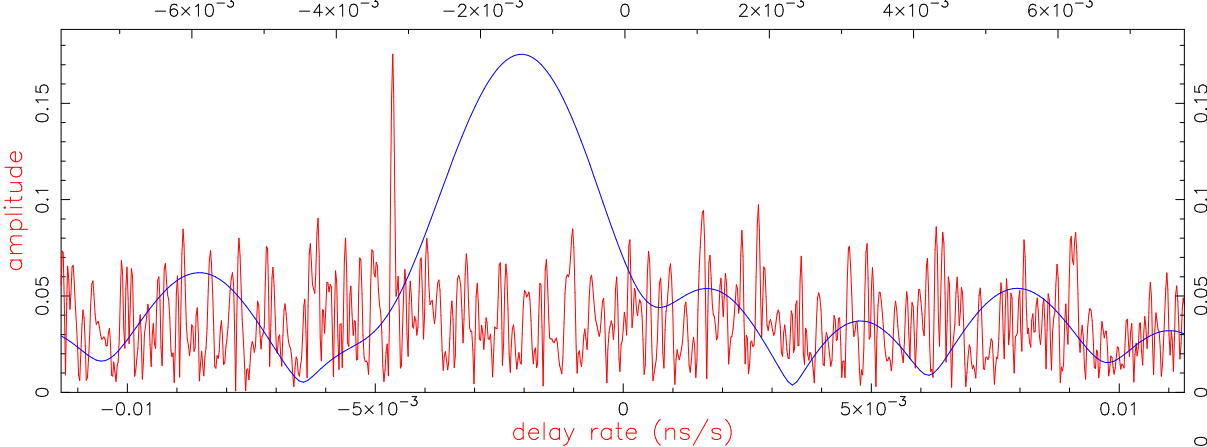
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gY

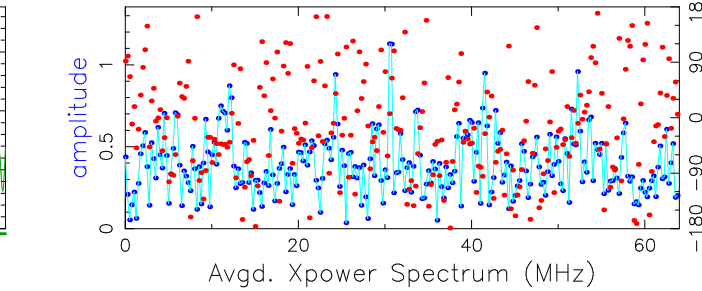
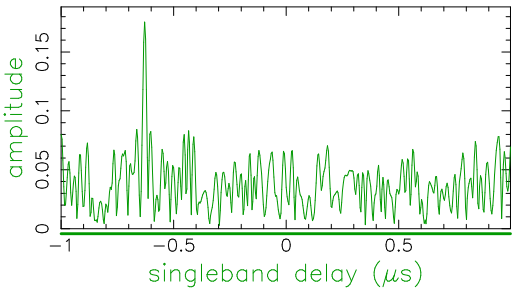
GLT - YEBES40M, fgroup W, pol RR

multiband delay (μ s)



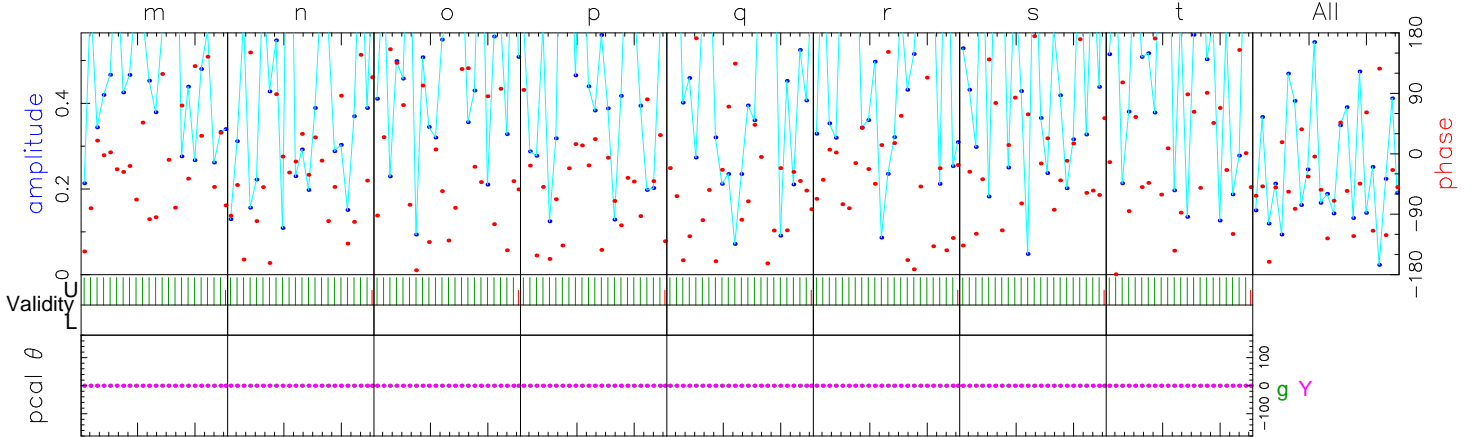
Fringe quality 0

SNR 5.9
 Int time 149.850
 Amp 0.188
 Phase -47.5
 PFD 4.2e-01
 Delays (us)
 SBD -0.628681
 MBD -0.001432
 Fringe rate (Hz)
 -0.401505
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143511
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-28.9	-45.1	-60.3	-42.0	-76.4	-59.5	-52.5	-15.7		-47.5
	0.2	0.1	0.1	0.2	0.3	0.2	0.1	0.2		0.2
	270.4	284.9	149.0	277.0	368.5	381.0	503.1	146.0		96.1
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	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: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		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	-6.60674591484E+03	Apriori delay (usec)	-6.60611948319E+03	Resid mbdelay (usec)	-1.43165E-03	+/-	1.8E-04
Sband delay (usec)	-6.60674816394E+03	Apriori clock (usec)	1.1104864E+02	Resid sbdelay (usec)	-6.28681E-01	+/-	1.5E-03
Phase delay (usec)	-6.60611948472E+03	Apriori clockrate (us/s)	1.2936299E-02	Resid phdelay (usec)	-1.53219E-06	+/-	6.3E-07
Delay rate (us/s)	-1.92263905633E-01	Apriori rate (us/s)	-1.92259244559E-01	Resid rate (us/s)	-4.66107E-06	+/-	7.3E-09
Total phase (deg)	-149.0	Apriori accel (us/s/s)	5.90637299821E-05	Resid phase (deg)	-47.5	+/-	19.5

ph/seg (deg)	67.1	Theor.	46.8	Amplitude	0.188 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	92.0		81.6	Search (1024X32)	0.169	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	20.6		27.6	Inc. seg. avg.	0.206	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.8		48.1	Inc. frq. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

g: az 72.5 el 36.9 pa -16.8 Y: az 81.5 el 66.1 pa -78.2 u,v (fr/asec) 1482.352 6053.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gY..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gY.W.60.3MP28E

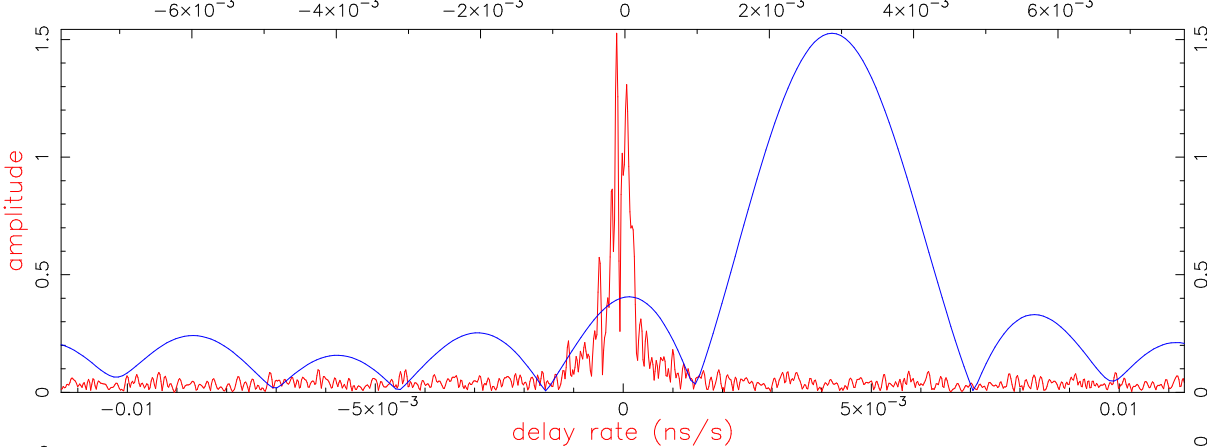
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gy

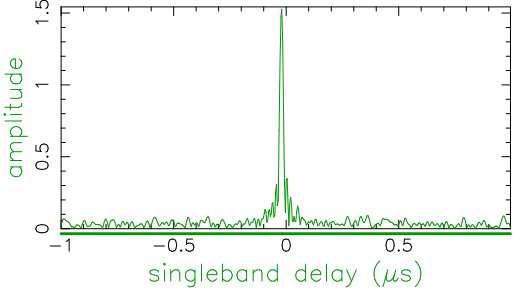
GLT - KVNYS, fgroup W, pol LR

multiband delay (μ s)

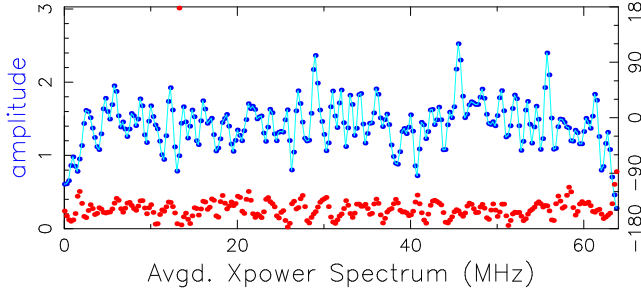


Fringe quality 5

SNR 51.6
 Int time 149.805
 Amp 1.543
 Phase -61.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.020826
 MBD 0.002863
 Fringe rate (Hz)
 -0.011576
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

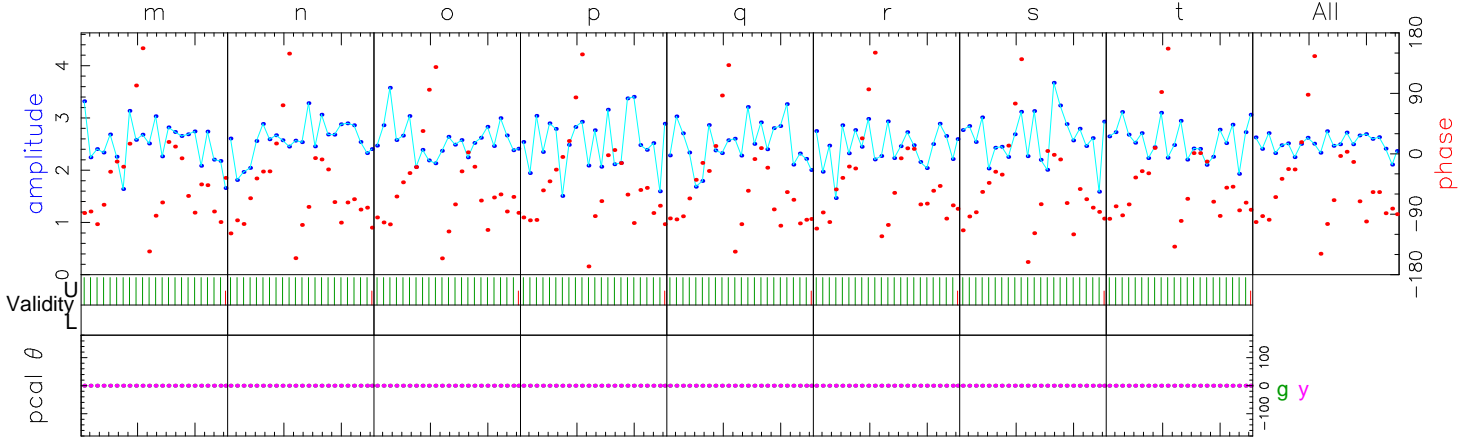


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143512
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-56.2	-65.2	-66.9	-59.8	-65.1	-56.2	-63.4	-60.6	Phase	-61.8
	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.7	Ampl.	1.5
	251.3	251.8	251.8	251.6	251.7	251.6	251.8	251.7	Sbd box	251.7
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) 6.49963503016E+03 Apriori delay (usec) 6.49966341741E+03 Resid mbdelay (usec) 2.86276E-03 +/- 2.1E-05
 Sband delay (usec) 6.49964259116E+03 Apriori clock (usec) -5.9633102E+00 Resid sbdelay (usec) -2.08263E-02 +/- 1.7E-04
 Phase delay (usec) 6.49966341541E+03 Apriori clockrate (us/s) 8.0399879E-08 Resid phdelay (usec) -1.99256E-06 +/- 7.2E-08
 Delay rate (us/s) 1.21174986937E+00 Apriori rate (us/s) 1.21175000375E+00 Resid rate (us/s) -1.34381E-07 +/- 8.3E-10
 Total phase (deg) 217.4 Apriori accel (us/s/s) -8.34628094337E-06 Resid phase (deg) -61.8 +/- 2.2

RMS Theor. Amplitude 1.543 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 60.4 5.3 Search (1024X32) 1.521 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 63.6 9.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 4.4 3.1 Inc. seg. avg. 2.501 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 4.9 5.5 Inc. frq. avg. 1.528 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 y: az 307.2 el 17.4 pa 55.2 u,v (fr/asec) -9026.181 1989.351 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gy..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gy.W.64.3MP28E

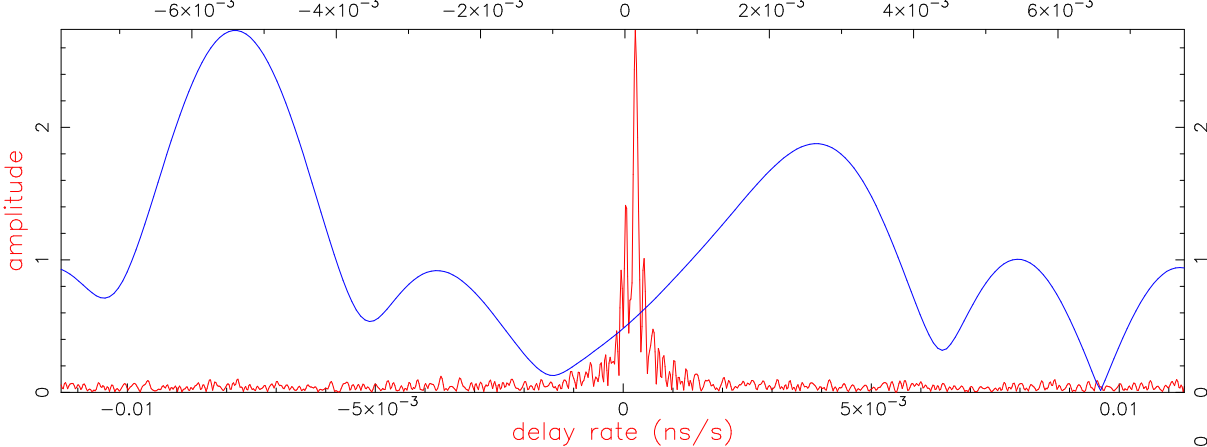
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gY

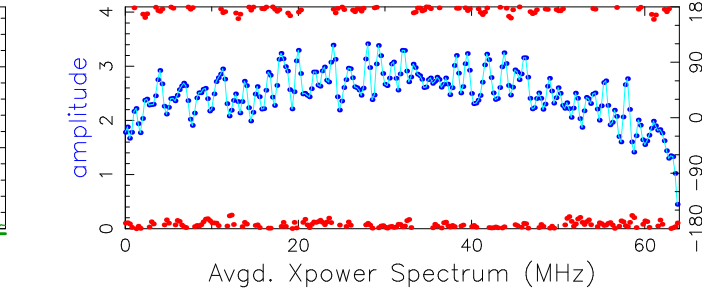
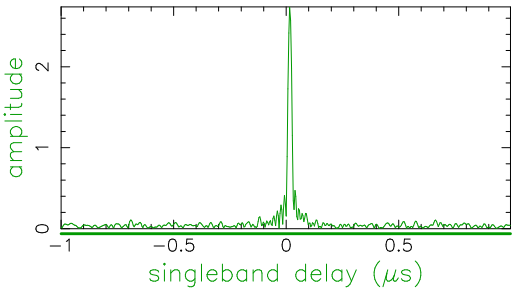
GLT - YEBES40M, fgroup W, pol LR

multiband delay (μ s)



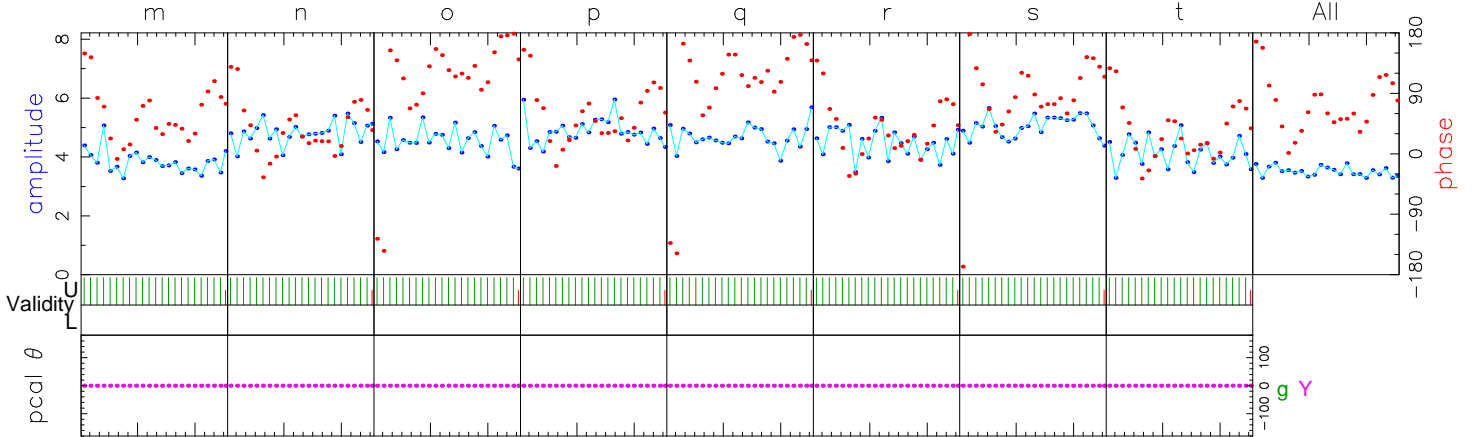
Fringe quality 3

SNR 91.7
 Int time 149.852
 Amp 2.740
 Phase 71.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.016270
 MBD -0.005390
 Fringe rate (Hz)
 0.020808
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143513
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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	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: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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -6.60610924777E+03 Apriori delay (usec) -6.60611948319E+03 Resid mbdelay (usec) -5.38958E-03 +/- 1.2E-05
 Sband delay (usec) -6.60610321294E+03 Apriori clock (usec) 1.1104864E+02 Resid sbdelay (usec) 1.62703E-02 +/- 9.4E-05
 Phase delay (usec) -6.60611948089E+03 Apriori clockrate (us/s) 1.2936299E-02 Resid phdelay (usec) 2.30426E-06 +/- 4.0E-08
 Delay rate (us/s) -1.92259003003E-01 Apriori rate (us/s) -1.92259244559E-01 Resid rate (us/s) 2.41556E-07 +/- 4.7E-10
 Total phase (deg) -30.1 Apriori accel (us/s/s) 5.90637299821E-05 Resid phase (deg) 71.5 +/- 1.2

ph/seg (deg) 40.7 3.0 Search (1024X32) 2.720 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.0 5.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.1 1.8 Inc. seg. avg. 3.514 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.2 3.1 Inc. frq. avg. 3.537 Data rate(Mb/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 72.5 el 36.9 pa -16.8 Y: az 81.5 el 66.1 pa -78.2 u,v (fr/asec) 1482.352 6053.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gY...3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gY.W.75.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

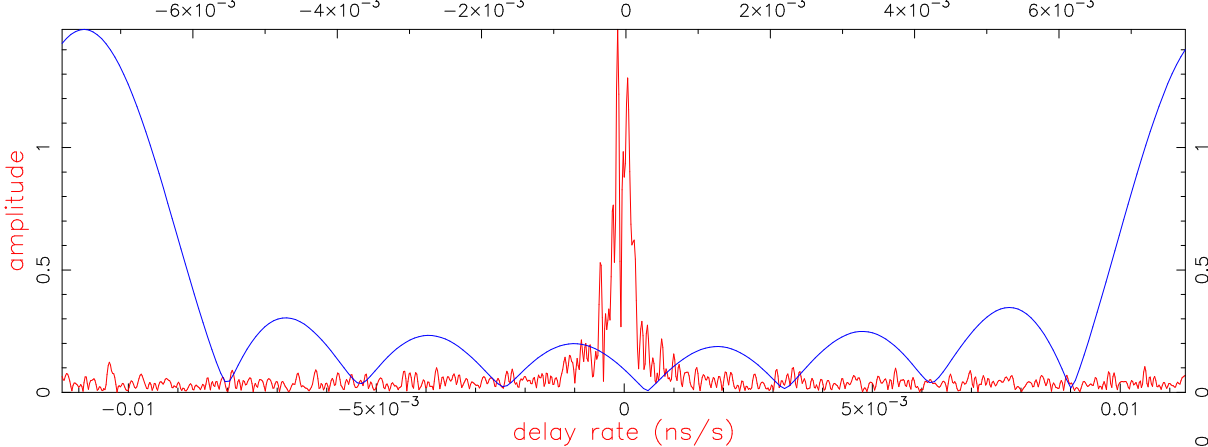
aux01

3C345.3MP28E, No1250, gy

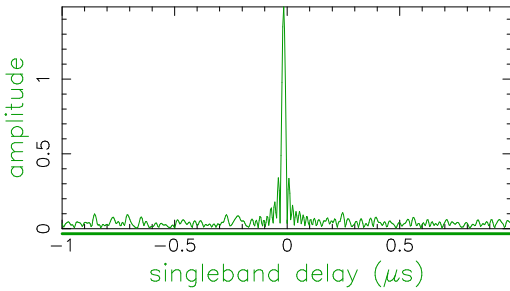
GLT - KVNYS, fgroup W, pol RL

multiband delay (μ s)

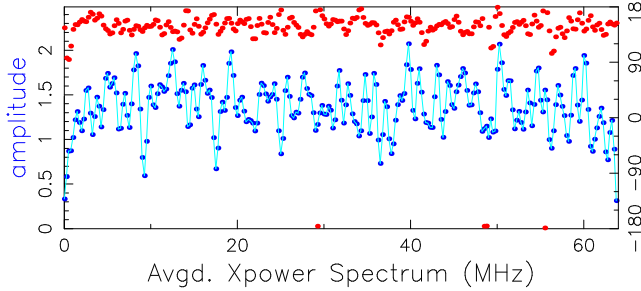
Fringe quality 5



SNR 49.6
Int time 149.803
Amp 1.483
Phase 54.6
PFD 0.0e+00
Delays (us)
SBD -0.015746
MBD -0.007510
Fringe rate (Hz)
-0.011569
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

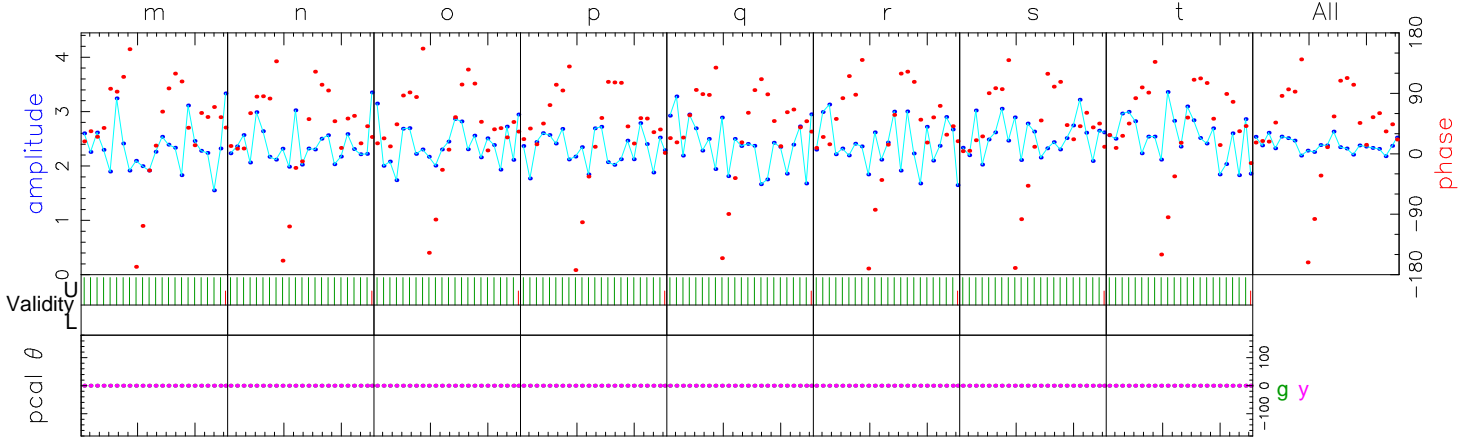


delay rate (ns/s)



Exp. c241a
Exper # 1234
Yr:day 2024:110
Start 010001.00
Stop 010231.02
FRT 010116.00
Corr/FF/build
2025:008:190641
2025:041:143515
2024:113:095956
RA & Dec (J2000)
16h42m58.809971s
+39°48'36.993958"

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
	60.8	50.9	51.0	54.1	54.2	54.9	53.0	57.7	Phase	54.6
	1.5	1.4	1.4	1.5	1.6	1.5	1.5	1.5	Ampl.	1.5
	252.9	253.0	252.8	253.1	253.0	253.0	253.0	253.1	Sbd box	253.0
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	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)	6.49964028260E+03		Apriori delay (usec)		6.49966341741E+03		Resid mbdelay (usec)		-7.50981E-03	+/- 2.2E-05
Sband delay (usec)	6.49964767116E+03		Apriori clock (usec)		-5.9633102E+00		Resid sbdelay (usec)		-1.57463E-02	+/- 1.7E-04
Phase delay (usec)	6.49966341917E+03		Apriori clockrate (us/s)		8.0399879E-08		Resid phdelay (usec)		1.76128E-06	+/- 7.4E-08
Delay rate (us/s)	1.21174986945E+00		Apriori rate (us/s)		1.21175000375E+00		Resid rate (us/s)		-1.34300E-07	+/- 8.6E-10
Total phase (deg)	333.8		Apriori accel (us/s/s)		-8.34628094337E-06		Resid phase (deg)		54.6	+/- 2.3

ph/seg (deg) 59.8 5.5 Search (1024X32) 1.460 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.1 9.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 3.6 3.3 Inc. seg. avg. 2.370 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 2.3 5.7 Inc. frq. avg. 1.482 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
g: az 72.5 el 36.9 pa -16.8 y: az 307.2 el 17.4 pa 55.2 u,v (fr/asec) -9026.181 1989.351 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gy..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gy.W.85.3MP28E simultaneous interpolator

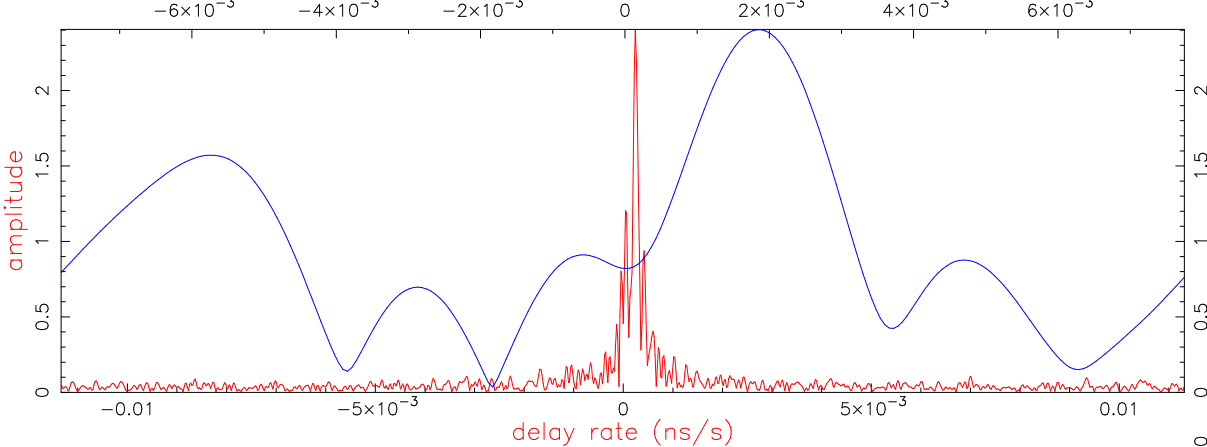
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gY

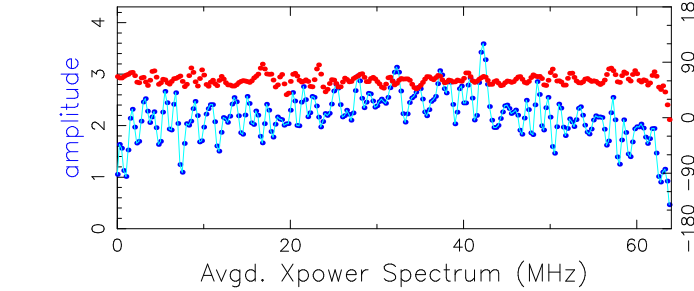
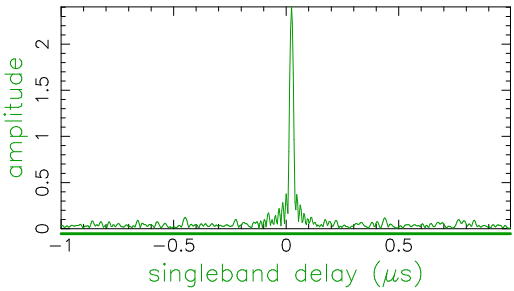
GLT - YEBES40M, fgroup W, pol RL

multiband delay (μ s)



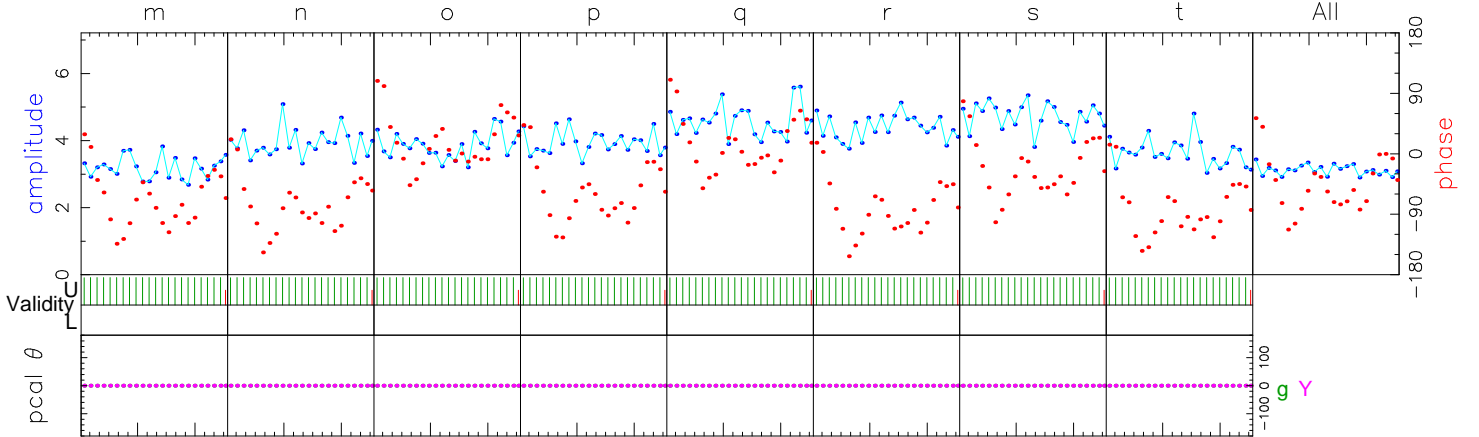
Fringe quality 3

SNR 80.5
 Int time 149.850
 Amp 2.405
 Phase -46.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.023745
 MBD 0.001866
 Fringe rate (Hz) 0.020731
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143516
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-70.9	-77.5	17.3	-61.4	12.3	-82.2	-23.5	-85.8	Phase	-46.6
	2.5	3.1	3.0	2.9	3.6	3.4	3.6	2.8	Ampl.	3.1
	264.7	263.2	262.6	262.6	262.5	262.3	262.7	262.2	Sbd box	263.1
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	0	0	0	0	0	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	

Group delay (usec) (SBD) -6.60610199220E+03 Apriori delay (usec) -6.60611948319E+03 Resid mbdelay (usec) 1.86599E-03 +/- 1.3E-05
 Sband delay (usec) -6.60609573769E+03 Apriori clock (usec) 1.1104864E+02 Resid sbdelay (usec) 2.37455E-02 +/- 1.1E-04
 Phase delay (usec) -6.60611948469E+03 Apriori clockrate (us/s) 1.2936299E-06 Resid phdelay (usec) -1.50161E-06 +/- 4.6E-08
 Delay rate (us/s) -1.92259003893E-01 Apriori rate (us/s) -1.92259244559E-01 Resid rate (us/s) 2.40666E-07 +/- 5.3E-10
 Total phase (deg) -148.1 Apriori accel (us/s/s) 5.90637299821E-05 Resid phase (deg) -46.6 +/- 1.4

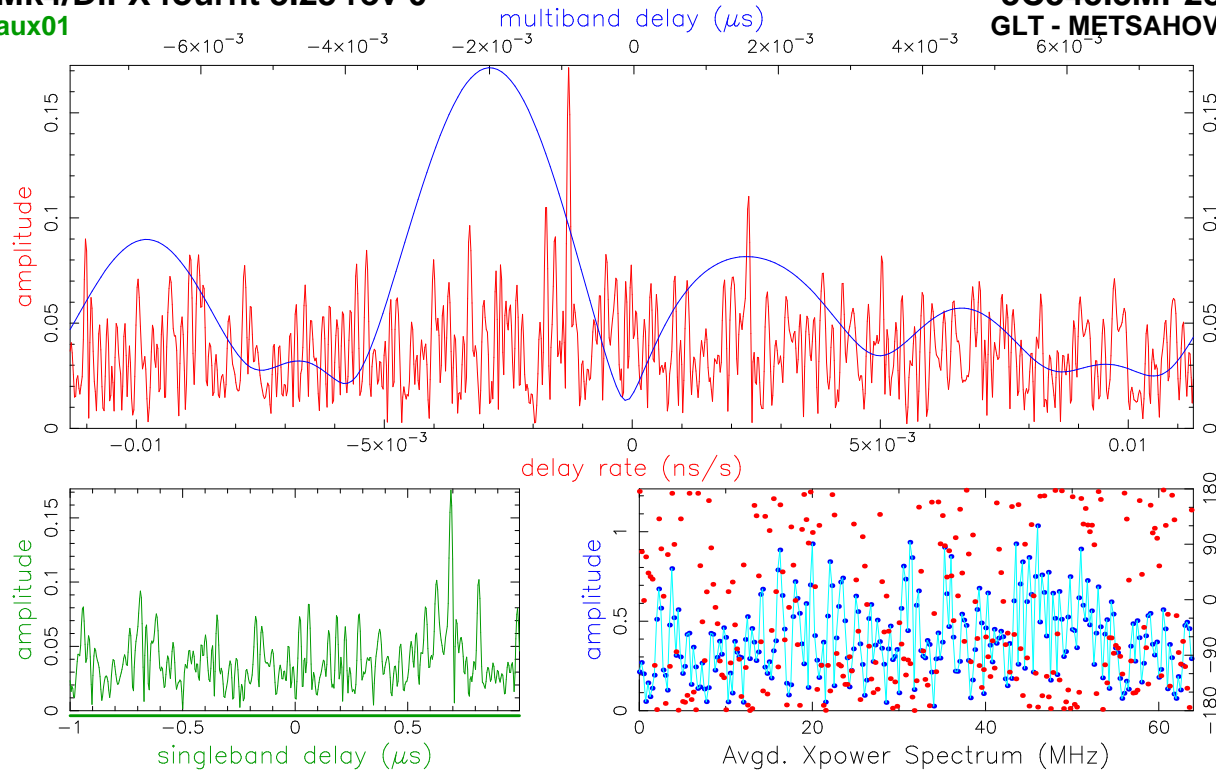
RMS Theor. Amplitude 2.405 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 41.4 3.4 Search (1024X32) 2.379 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 30.6 6.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 45.9 2.0 Inc. seg. avg. 3.120 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.5 3.5 Inc. frq. avg. 3.120 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 72.5 el 36.9 pa -16.8 Y: az 81.5 el 66.1 pa -78.2 u, v (fr/asec) 1482.352 6053.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gY...3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gY.W.90.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gZ

GLT - METSAHOV, fgroup W, pol LL

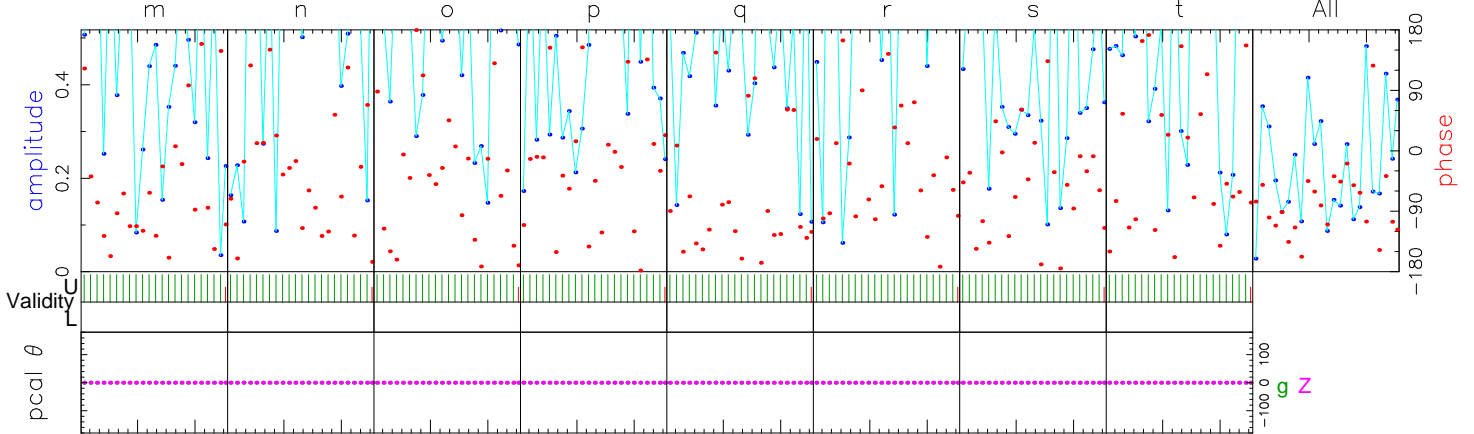


Fringe quality 0

SNR 5.7
 Int time 149.929
 Amp 0.173
 Phase -80.0
 PFD 6.8e-01
 Delays (us)
 SBD 0.691845
 MBD -0.001994
 Fringe rate (Hz)
 -0.111164
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143507
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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
	-100.1	-66.1	-47.5	-56.4	-130.0	-53.4	-49.7	-119.0	Phase	-80.0
	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	221.8	306.1	296.6	378.3	433.4	56.5	278.0	189.0	Sbd box	434.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
N _{sig}	0	0	0	0	0	0	0	0	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -7.14654969904E+03 Apriori delay (usec) -7.14723520551E+03 Resid mbdelay (usec) -1.99352E-03 +/- 1.9E-04
 Sband delay (usec) -7.14654336101E+03 Apriori clock (usec) 3.3341217E-01 Resid sbdelay (usec) 6.91845E-01 +/- 1.5E-03
 Phase delay (usec) -7.14723520809E+03 Apriori clockrate (us/s) -5.2989904E-07 Resid phdelay (usec) -2.58089E-06 +/- 6.4E-07
 Delay rate (us/s) 2.39222453123E-01 Apriori rate (us/s) 2.39223743627E-01 Resid rate (us/s) -1.29050E-06 +/- 7.4E-09
 Total phase (deg) -297.1 Apriori accel (us/s/s) 4.55890061359E-05 Resid phase (deg) -80.0 +/- 19.9

ph/seg (deg) RMS Theor. Amplitude 0.173 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.3 47.8 Search (1024X32) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 76.4 83.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.2 28.2 Inc. seg. 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
 g: az 72.5 el 36.9 pa -16.8 Z: az 171.4 el 69.4 pa -5.2 u,v (fr/asec) -1746.209 3705.813 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gZ..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gZ.W.25.3MP28E

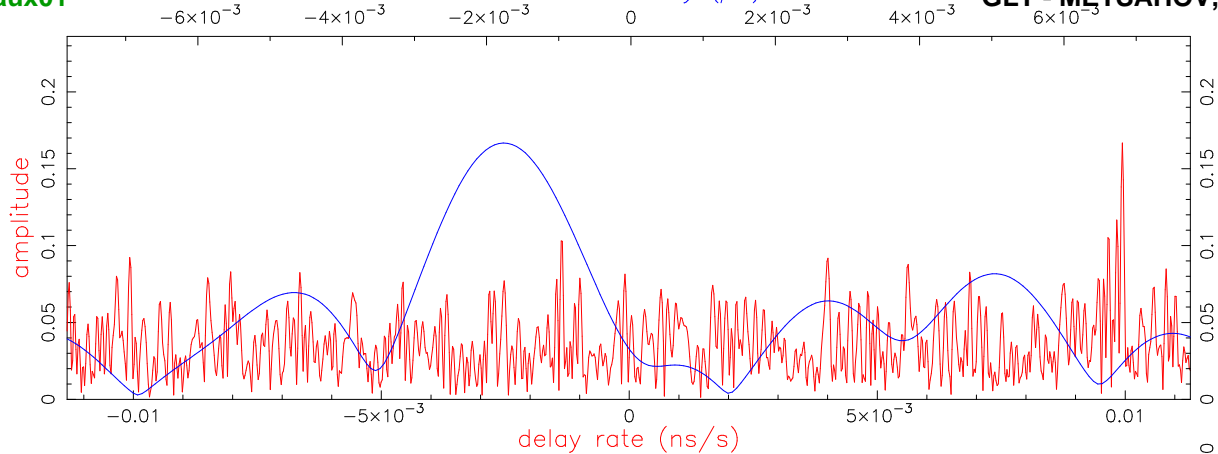
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gZ

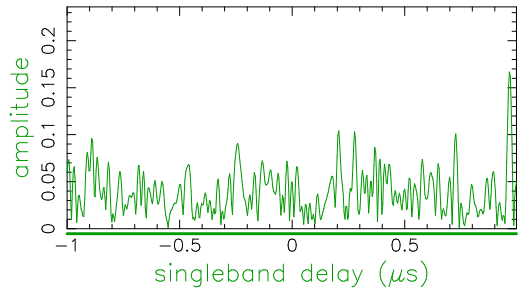
GLT - METSAHOV, fgroup W, pol RR

multiband delay (μ s)

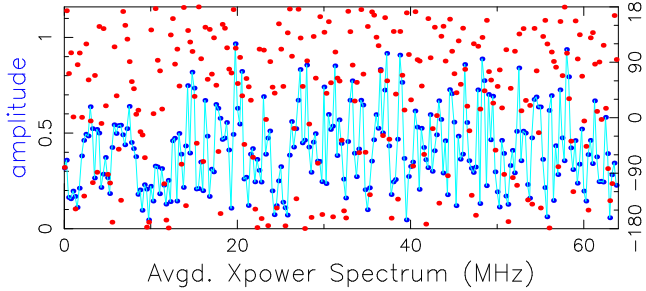


Fringe quality 0

SNR 5.6
 Int time 149.927
 Amp 0.236
 Phase 99.1
 PFD 9.0e-01
 Delays (us)
 SBD 0.966054
 MBD -0.001757
 Fringe rate (Hz)
 0.858316
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

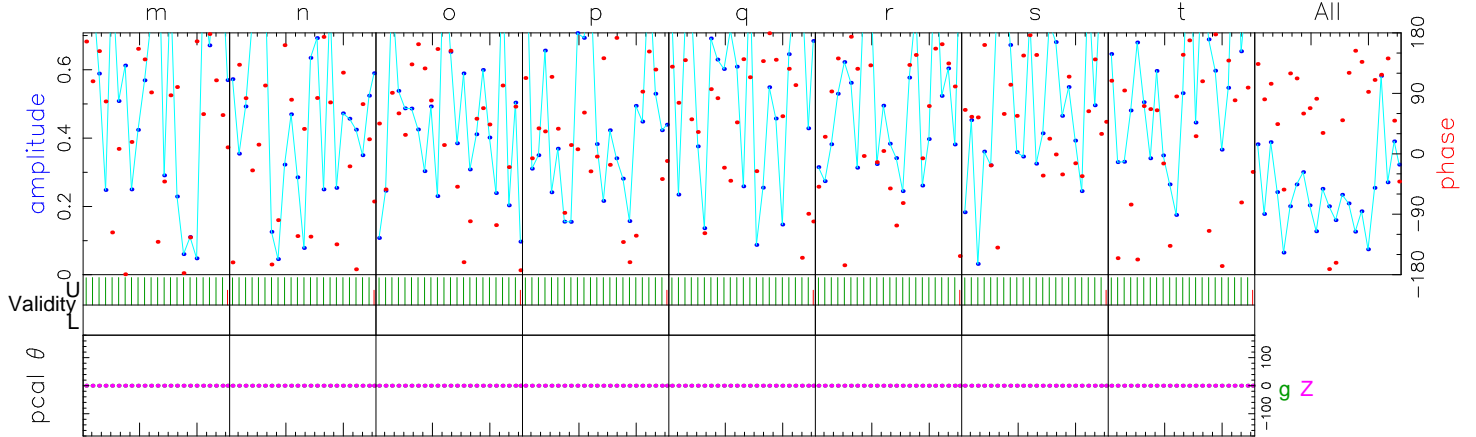


delay rate (ns/s)



Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143510
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

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:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-7.14626821295E+03	Apriori delay (usec)	-7.14723520551E+03	Resid mbdelay (usec)	-1.75743E-03	+/-	1.9E-04
Sband delay (usec)	-7.14626915101E+03	Apriori clock (usec)	3.3341217E-01	Resid sbdelay (usec)	9.66054E-01	+/-	1.5E-03
Phase delay (usec)	-7.14723520232E+03	Apriori clockrate (us/s)	-5.2989904E-07	Resid phdelay (usec)	3.19485E-06	+/-	6.6E-07
Delay rate (us/s)	2.39233707829E-01	Apriori rate (us/s)	2.39223743627E-01	Resid rate (us/s)	9.96420E-06	+/-	7.6E-09
Total phase (deg)	-118.0	Apriori accel (us/s/s)	4.55890061359E-05	Resid phase (deg)	99.1	+/-	20.4

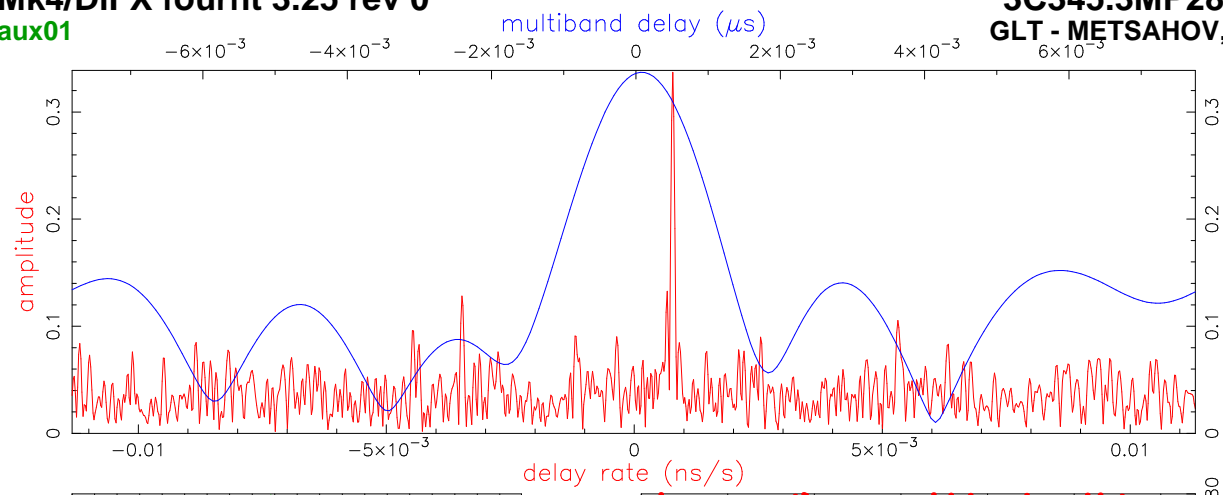
ph/seg (deg) 58.1 48.9 Search (1024X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.1 85.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.7 28.8 Inc. seg. avg. 0.250 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.7 50.3 Inc. frq. avg. 0.238 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 Z: az 171.4 el 69.4 pa -5.2 u,v (fr/asec) -1746.209 3705.813 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gZ..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gZ.W.46.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gZ

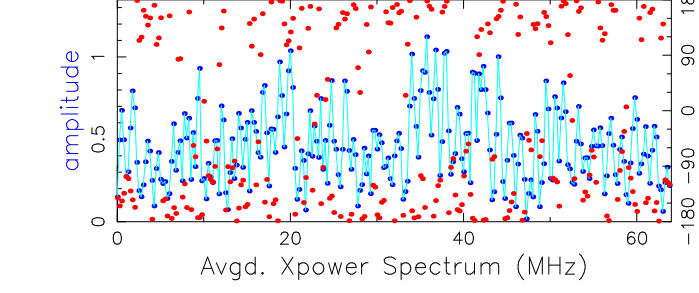
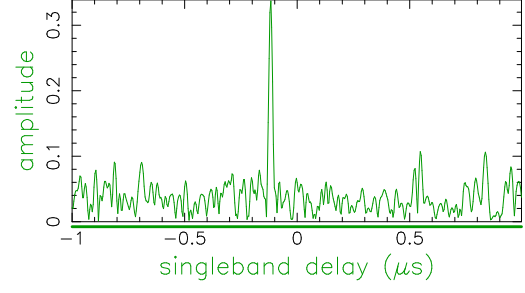
GLT - METSAHOV, fgroup W, pol LR



Fringe quality 9

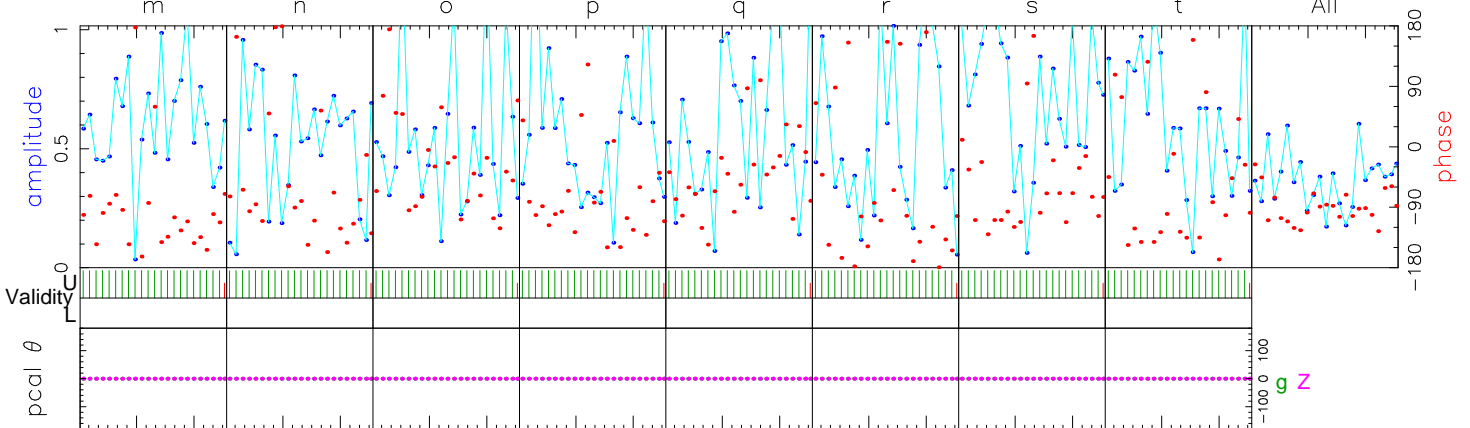
SNR 11.3
 Int time 149.929
 Amp 0.339
 Phase -92.1
 PFD 2.4e-21
 Delays (us)
 SBD -0.117947
 MBD 0.000058
 Fringe rate (Hz) 0.065963
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build 2025:008:190641
 2025:041:143512
 2024:113:095956
 RA & Dec (J2000) 16h42m58.809971s
 +39°48'36.993958"



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
	-115.1	-104.6	-30.6	-102.4	-47.3	-143.6	-78.7	-117.4	Phase	-92.1
	0.5	0.4	0.4	0.5	0.4	0.3	0.5	0.3	Ampl.	0.4
	228.0	227.4	227.2	225.6	226.2	226.4	226.0	285.8	Sbd box	226.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
N _{sig}	0	0	0	0	0	0	0	0	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-7.14736014771E+03	Apriori delay (usec)	-7.14723520551E+03	Resid mbdelay (usec)	5.78005E-05	+/-	9.6E-05
Sband delay (usec)	-7.14735315226E+03	Apriori clock (usec)	3.3341217E-01	Resid sbdelay (usec)	-1.17947E-01	+/-	7.6E-04
Phase delay (usec)	-7.14723520848E+03	Apriori clockrate (us/s)	-5.2989904E-07	Resid phdelay (usec)	-2.96981E-06	+/-	3.3E-07
Delay rate (us/s)	2.39224509389E-01	Apriori rate (us/s)	2.39223743627E-01	Resid rate (us/s)	7.65762E-07	+/-	3.8E-09
Total phase (deg)	-309.2	Apriori accel (us/s/s)	4.55890061359E-05	Resid phase (deg)	-92.1	+/-	10.1

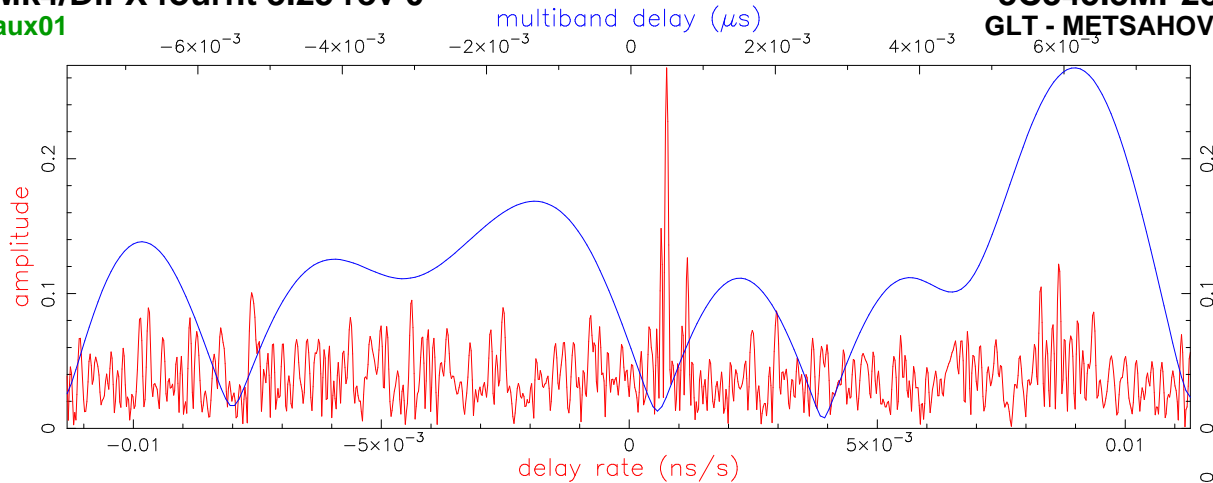
ph/seg (deg) 25.0 24.3 Amplitude 0.339 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.1 42.3 Search (1024X32) 0.328 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.9 14.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.7 25.0 Inc. seg. avg. 0.340 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 72.5 el 36.9 pa -16.8 Z: az 171.4 el 69.4 pa -5.2 u,v (fr/asec) -1746.209 3705.813 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gZ..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gZ.W.67.3MP28E

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP28E, No1250, gZ

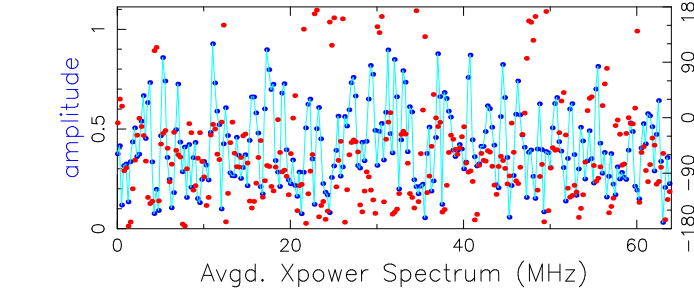
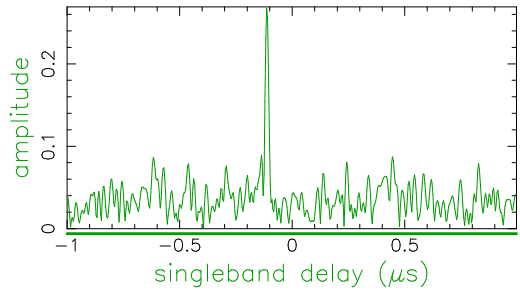
GLT - METSAHOV, fgroup W, pol RL



Fringe quality 9

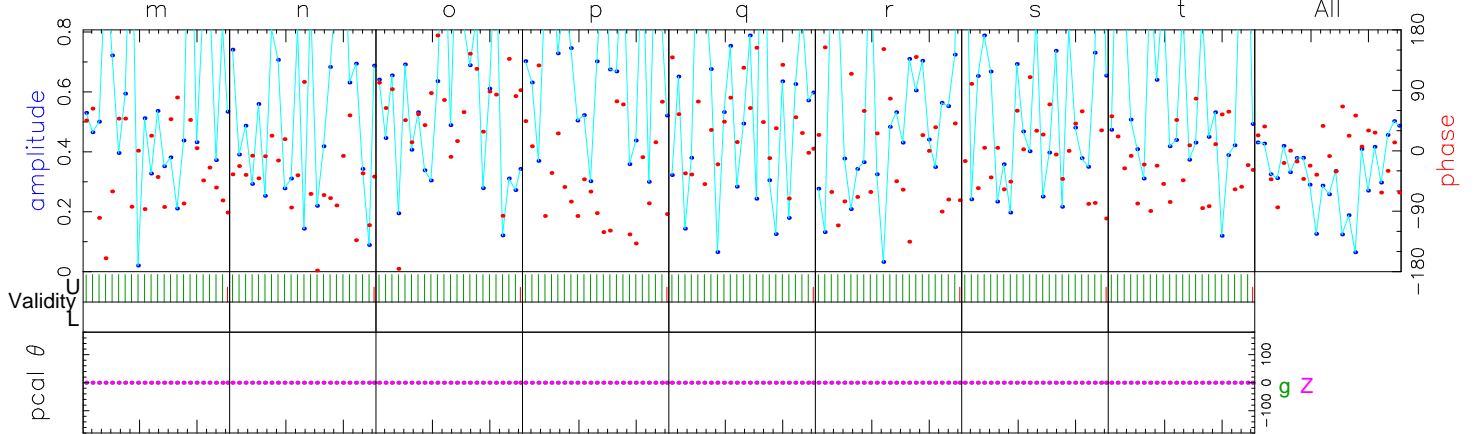
SNR 9.0
 Int time 149.927
 Amp 0.269
 Phase -7.9
 PFD 4.4e-11
 Delays (us)
 SBD -0.112379
 MBD 0.006174
 Fringe rate (Hz) 0.065752
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241a
 Exper # 1234
 Yr:day 2024:110
 Start 010001.00
 Stop 010231.02
 FRT 010116.00
 Corr/FF/build
 2025:008:190641
 2025:041:143514
 2024:113:095956
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



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
	-34.4	-36.2	75.8	-37.2	43.5	-48.9	0.6	-28.8	Phase	-7.9
	0.3	0.4	0.4	0.3	0.4	0.2	0.4	0.5	Ampl.	0.3
	230.3	228.9	227.9	226.6	228.1	88.3	228.0	228.5	Sbd box	228.2
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-7.14735403146E+03	Apriori delay (usec)	-7.14723520551E+03	Resid mbdelay (usec)	6.17405E-03	+/-	1.2E-04
Sband delay (usec)	-7.14734758476E+03	Apriori clock (usec)	3.3341217E-01	Resid sbdelay (usec)	-1.12379E-01	+/-	9.6E-04
Phase delay (usec)	-7.14723520577E+03	Apriori clockrate (us/s)	-5.2989904E-07	Resid phdelay (usec)	-2.53777E-07	+/-	4.1E-07
Delay rate (us/s)	2.39224506939E-01	Apriori rate (us/s)	2.39223743627E-01	Resid rate (us/s)	7.63312E-07	+/-	4.7E-09
Total phase (deg)	-224.9	Apriori accel (us/s/s)	4.55890061359E-05	Resid phase (deg)	-7.9	+/-	12.7

ph/seg (deg)	RMS 38.3	Theor. 30.5	Amplitude Search (1024X32)	0.269 +/- 0.030	0.251	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	47.1	53.3	Interp.	0.000	0.284	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	48.6	18.0	Inc. seg. avg.	0.284	0.341	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.0	31.4	Inc. frq. avg.	0.341		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

g: az 72.5 el 36.9 pa -16.8 Z: az 171.4 el 69.4 pa -5.2 u,v (fr/asec) -1746.209 3705.813 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241a/v2/3mm/1234/No1250/gZ..3MP28E Output file: /Exps/c241a/v2/3mm/1234/No1250/gZ.W.79.3MP28E