

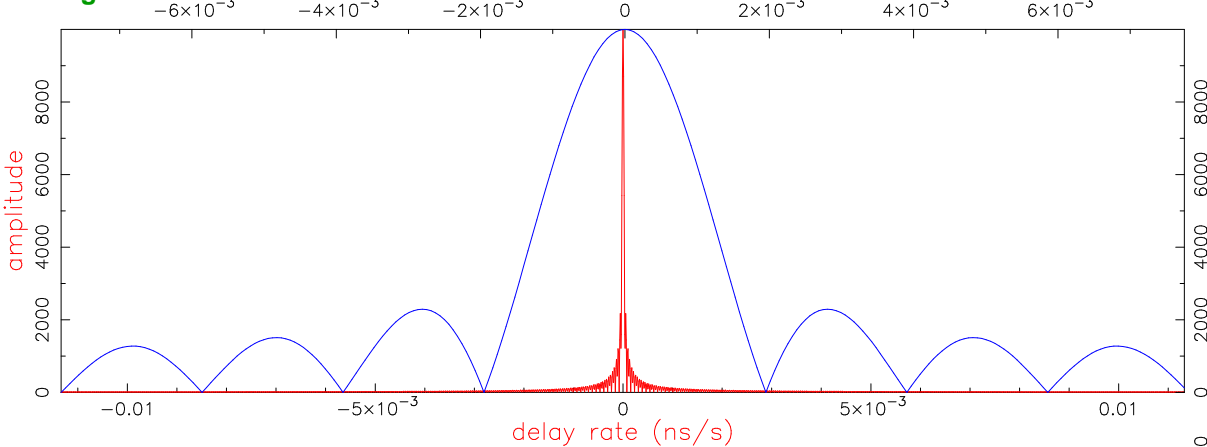
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BB

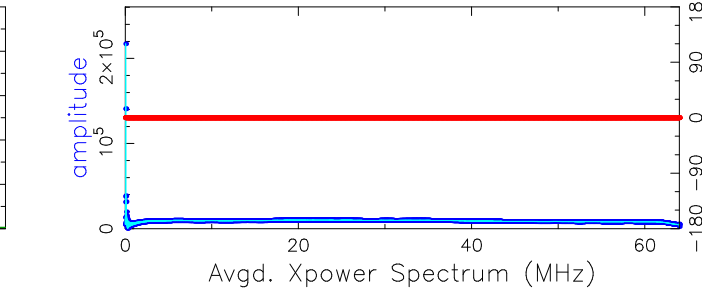
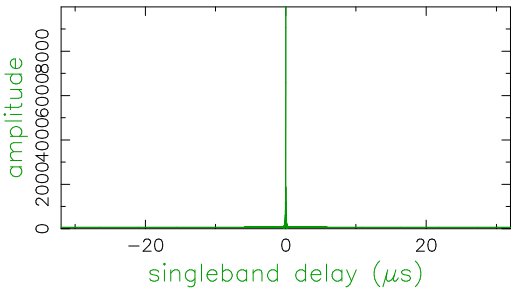
EFLSBERG - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)



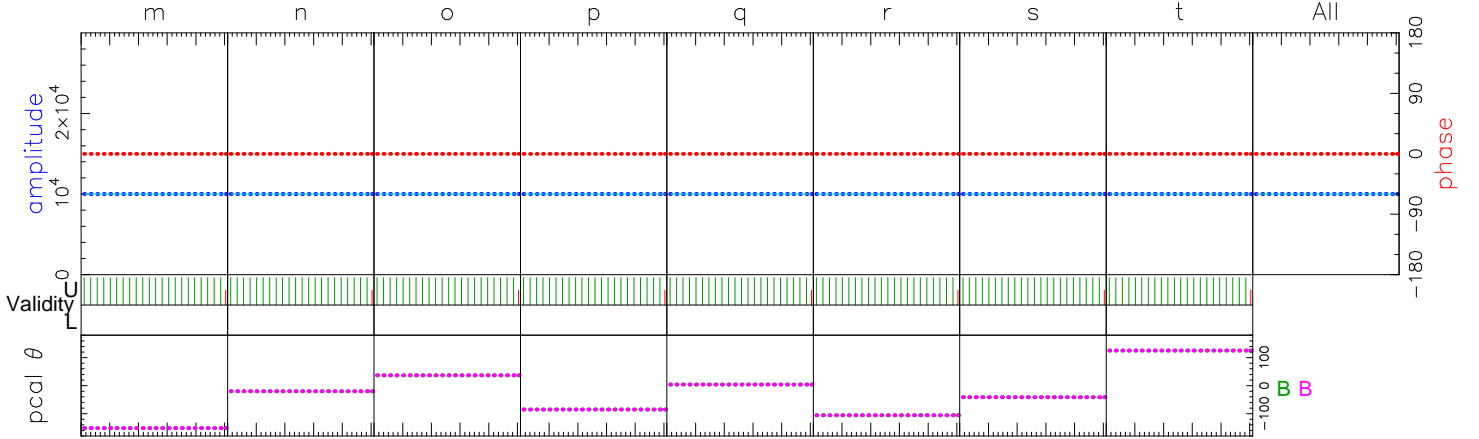
Fringe quality 9

SNR 473629.1
 Int time 299.973
 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. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:105403
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
B	0	0	0	0	0	0	0	0		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:B	-151:-151	-20:-20	37:37	-85:-85	4:4	-106:-106	-41:-41	125:125		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.3E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.8E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	7.8E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.998 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 291.0 el 40.5 pa 53.4 B: az 291.0 el 40.5 pa 53.4 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BB..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BB.W.13.37F3IX simultaneous interpolator

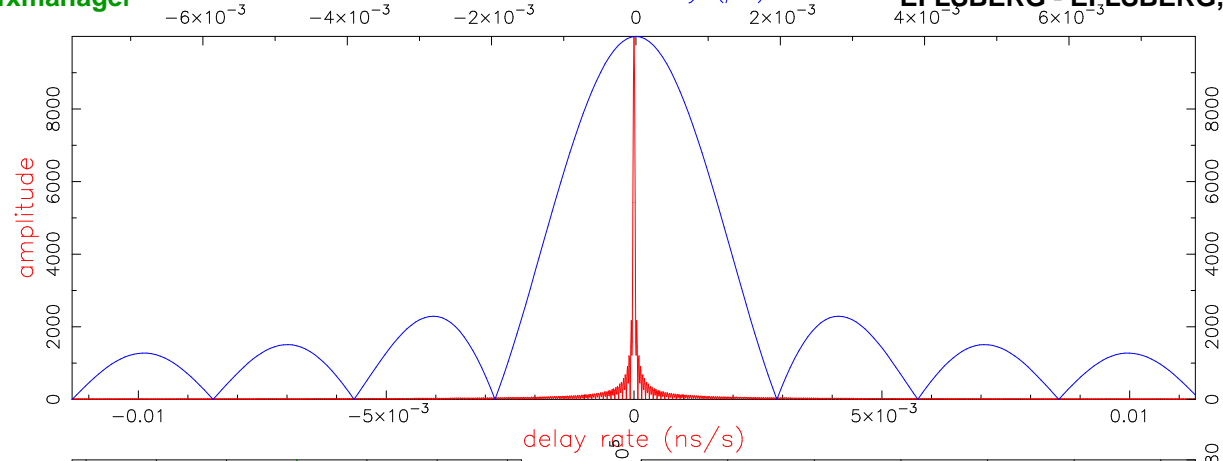
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

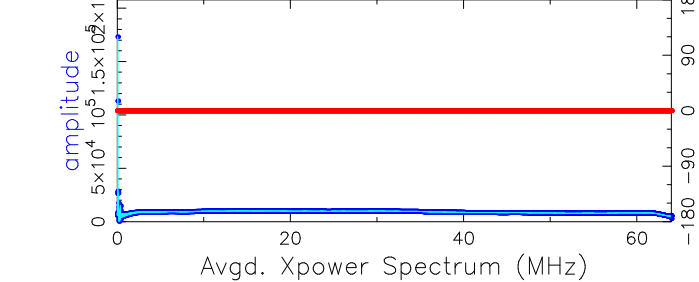
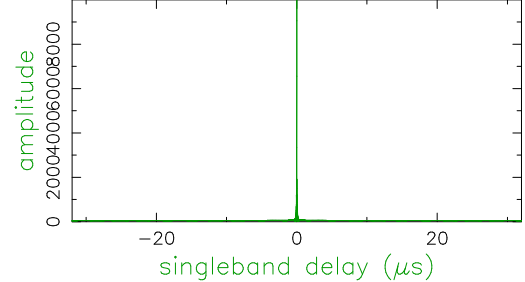
BLLAC.37F3IX, No0004, BB

EFLSBERG - EFLSBERG, fgroup W, pol RR

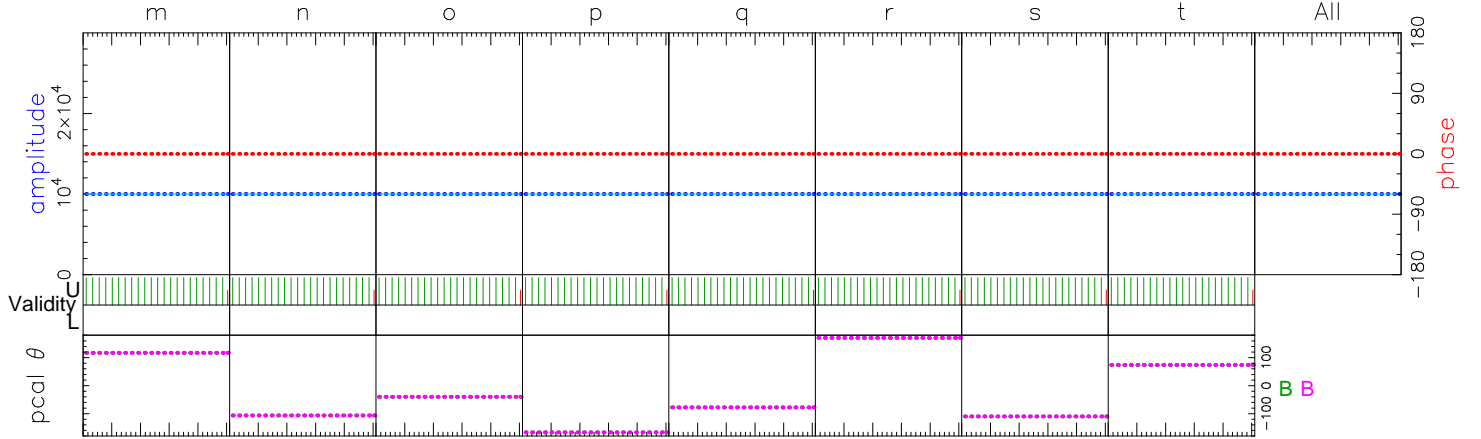
multiband delay (μ s)



Fringe quality 9
 SNR 473629.1
 Int time 299.973
 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. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:105518
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
B	0	0	0	0	0	0	0	0		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:B	118:118	-106:-106	-40:-40	-167:-167	-77:-77	171:171	-110:-110	74:74		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.3E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.8E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	7.8E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.998 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 291.0 el 40.5 pa 53.4 B: az 291.0 el 40.5 pa 53.4 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BB..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BB.W.14.37F3IX simultaneous interpolator

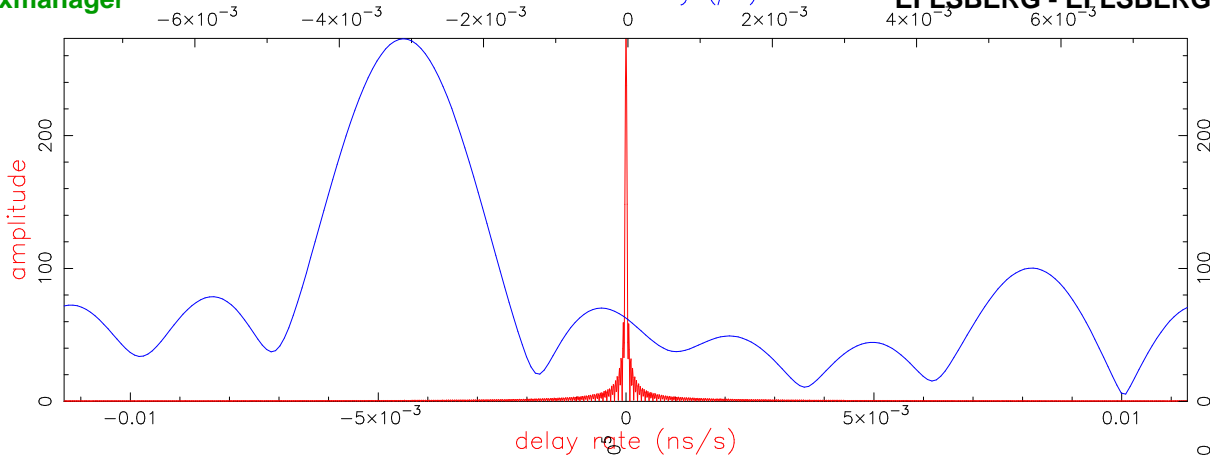
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

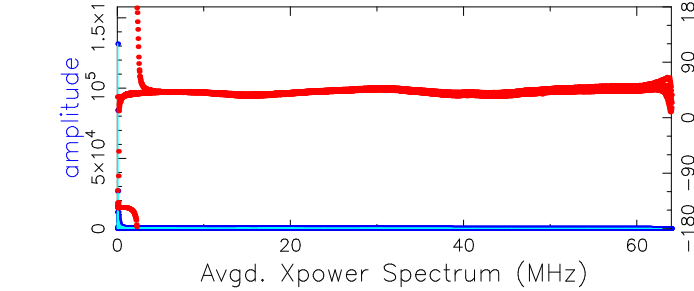
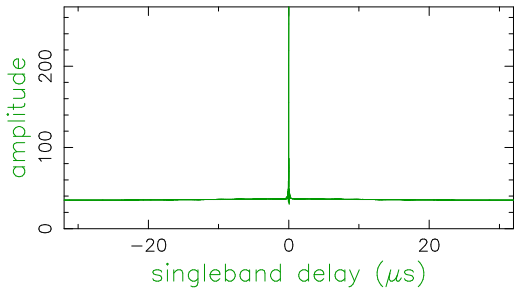
BLLAC.37F3IX, No0004, BB

EFLSBERG - EFLSBERG, fgroup W, pol LR

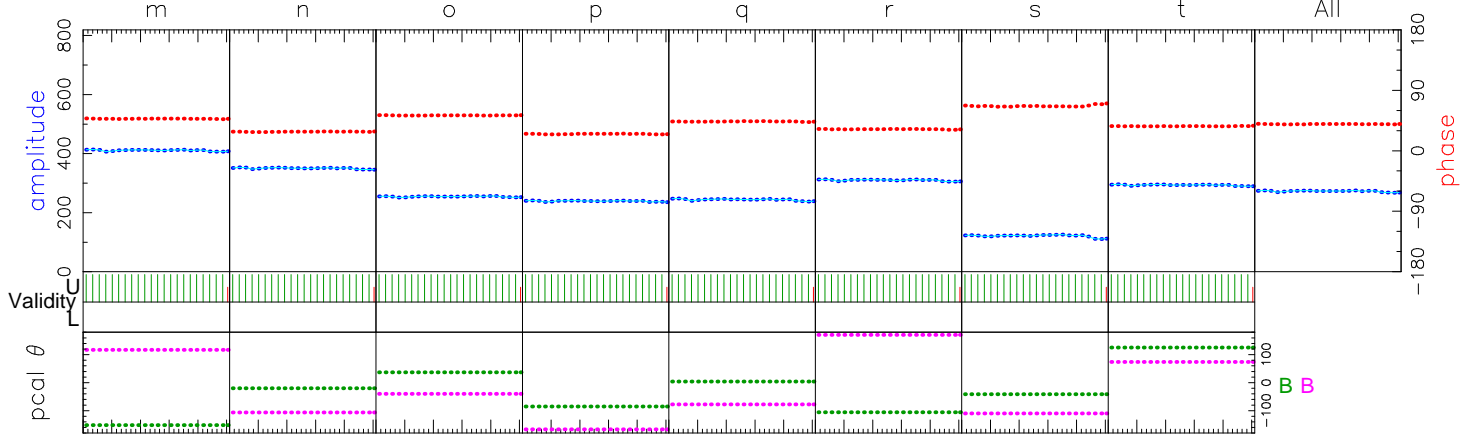
multiband delay (μ s)



Fringe quality 7
 Error code G
 SNR 12933.7
 Int time 299.973
 Amp 273.077
 Phase 39.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003368
 MBD -0.003099
 Fringe rate (Hz)
 -0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:105635
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	47.7	28.3	52.7	25.0	43.6	32.1	66.7	36.6	Phase	39.7
B	410.9	350.4	254.6	239.2	244.1	310.0	121.5	293.5	Ampl.	278.0
B	8192.6	8191.6	8191.8	8193.3	8191.5	8191.7	8189.6	8194.3	Sbd box	8192.1
B	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:B	-151:118	-20:-106	37:-40	-85:-167	4:-77	-106:171	-41:-110	125:74	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -3.09893750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -3.09894E-03 +/- 8.4E-08
 Sband delay (usec) -3.36825000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -3.36825E-03 +/- 6.7E-07
 Phase delay (usec) 1.27937669860E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.27938E-06 +/- 2.9E-10
 Delay rate (us/s) -5.17247062296E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -5.17247E-11 +/- 1.6E-12
 Total phase (deg) 39.7 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 39.7 +/- 0.0

RMS Theor. Amplitude 273.077 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (2048X32) 268.745 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 0.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.2 0.0 Inc. seg. avg. 272.768 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 29.5 0.0 Inc. frq. avg. 278.025 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 291.0 el 40.5 pa 53.4 B: az 291.0 el 40.5 pa 53.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BB..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BB.W.15.37F3IX

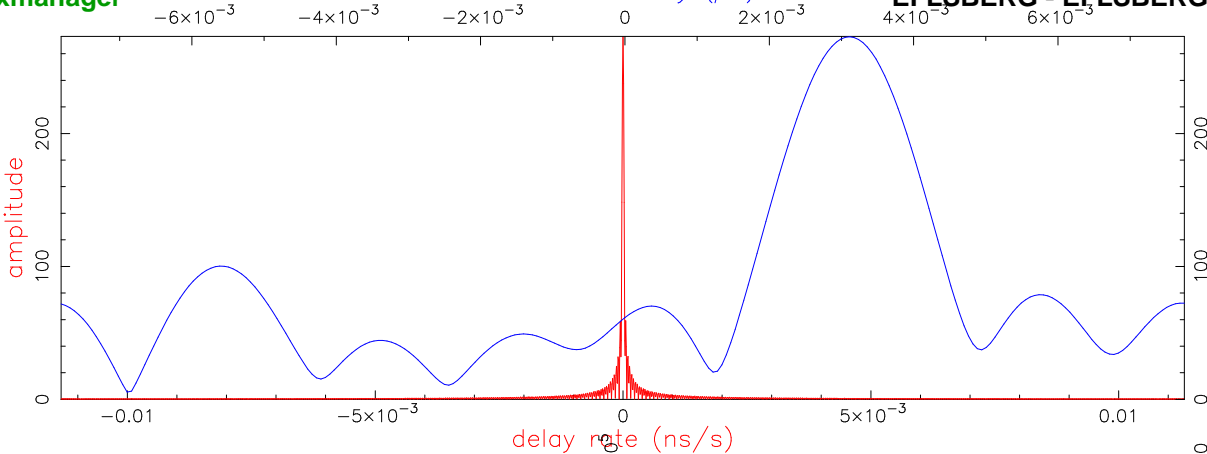
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

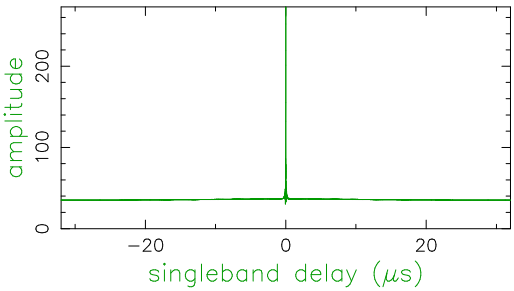
BLLAC.37F3IX, No0004, BB

EFLSBERG - EFLSBERG, fgroup W, pol RL

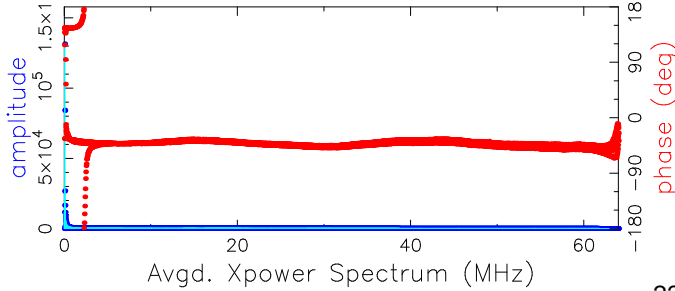
multiband delay (μs)



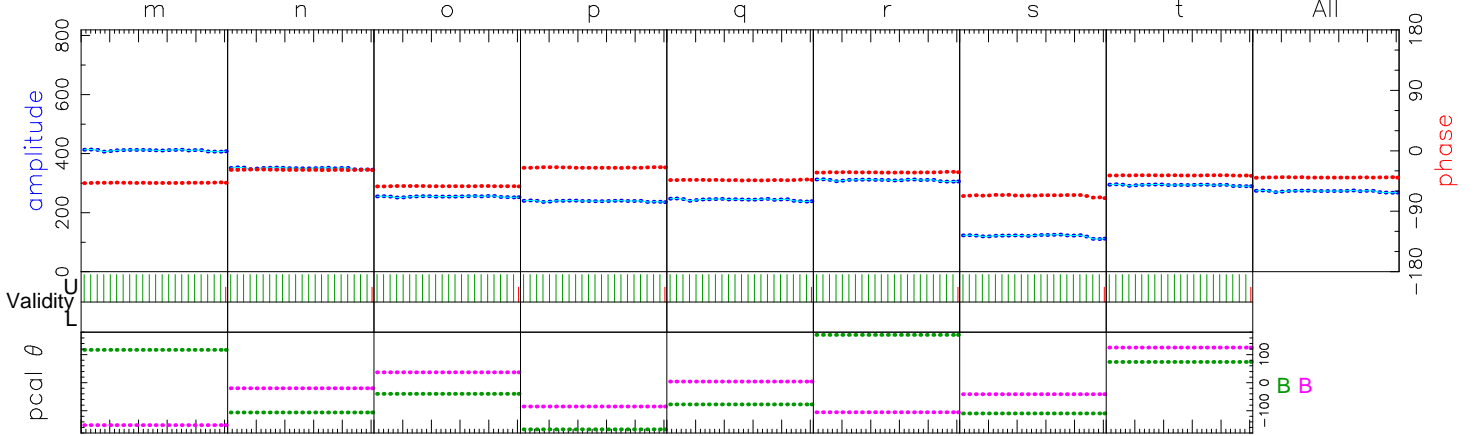
Fringe quality 7
 Error code G
 SNR 12933.7
 Int time 299.973
 Amp 273.077
 Phase -39.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.003368
 MBD 0.003099
 Fringe rate (Hz)
 0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:105752
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

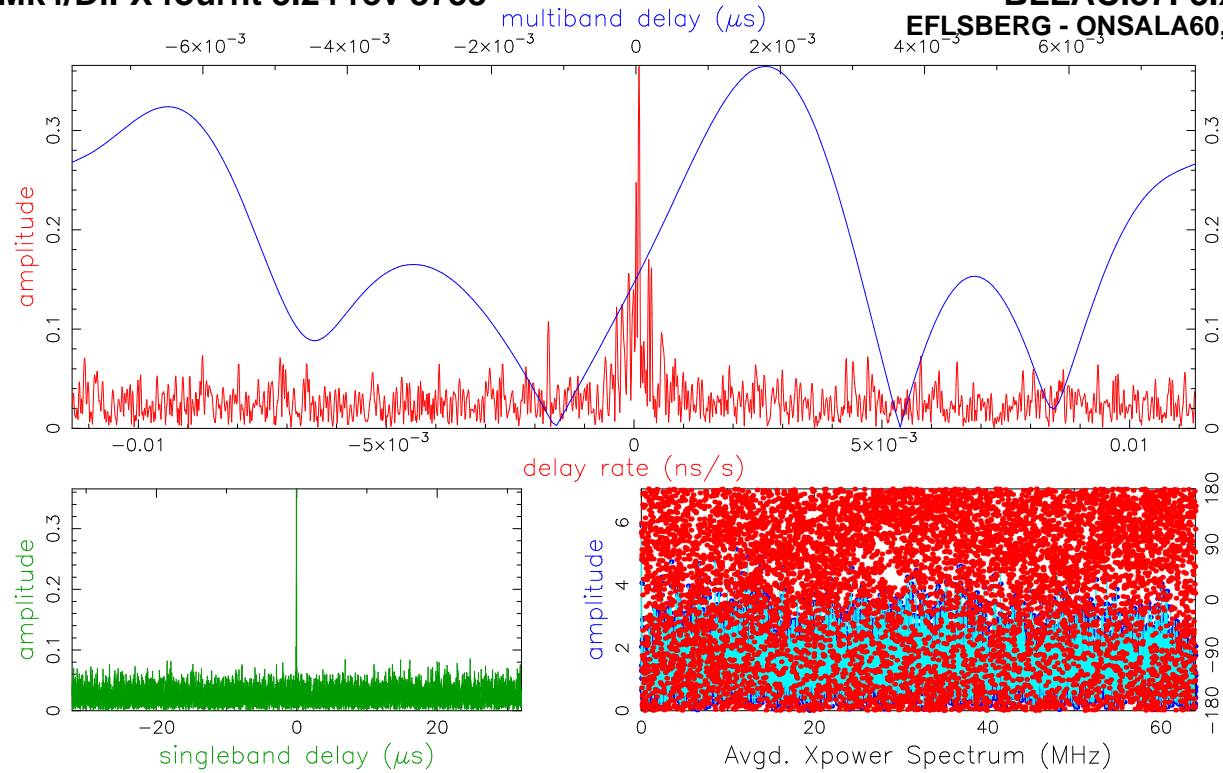


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-47.7	-28.3	-52.7	-25.0	-43.6	-32.1	-66.7	-36.6	Phase	-39.7
	410.9	350.4	254.6	239.2	244.1	310.0	121.5	293.5	Ampl.	278.0
	8193.4	8194.4	8194.2	8192.7	8194.5	8194.3	8196.4	8191.7	Sbd box	8193.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
B	0	0	0	0	0	0	0	0	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	118:-151	-106:-20	-40:37	-167:-85	-77:4	171:-106	-110:-41	74:125	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	

Group delay (usec) (SBD) 3.09893750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 3.09894E-03 +/- 8.4E-08
 Sband delay (usec) 3.36825000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 3.36825E-03 +/- 6.7E-07
 Phase delay (usec) -1.27937669858E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.27938E-06 +/- 2.9E-10
 Delay rate (us/s) 5.17247062296E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 5.17247E-11 +/- 1.6E-12
 Total phase (deg) -39.7 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -39.7 +/- 0.0

RMS Theor. Amplitude 273.077 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (2048X32) 268.745 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 0.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.2 0.0 Inc. seg. avg. 272.768 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 29.5 0.0 Inc. frq. avg. 278.025 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 291.0 el 40.5 pa 53.4 B: az 291.0 el 40.5 pa 53.4 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BB..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BB.W.16.37F3IX

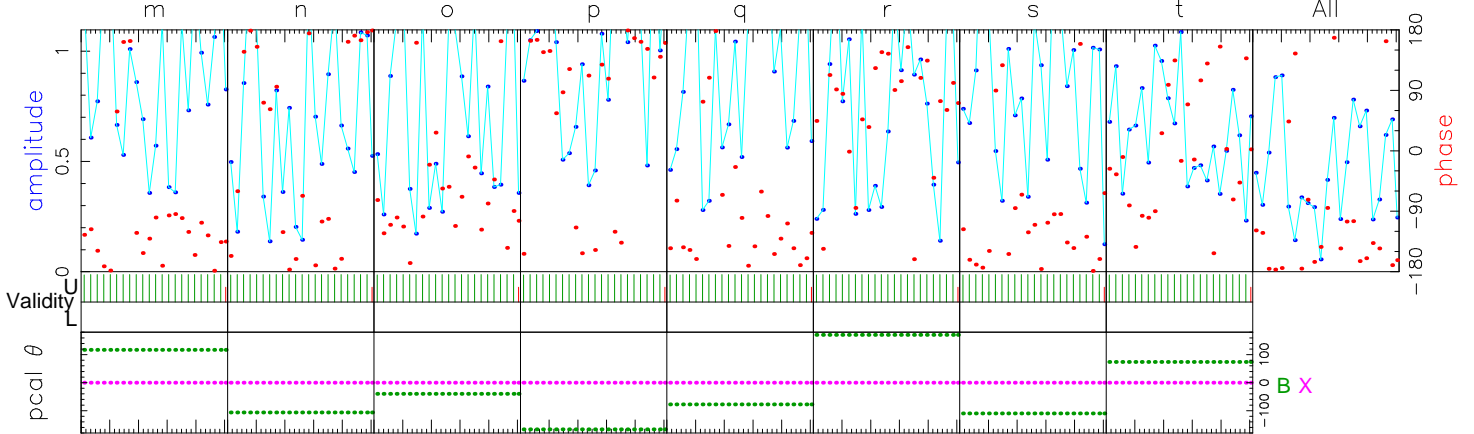


Fringe quality 7

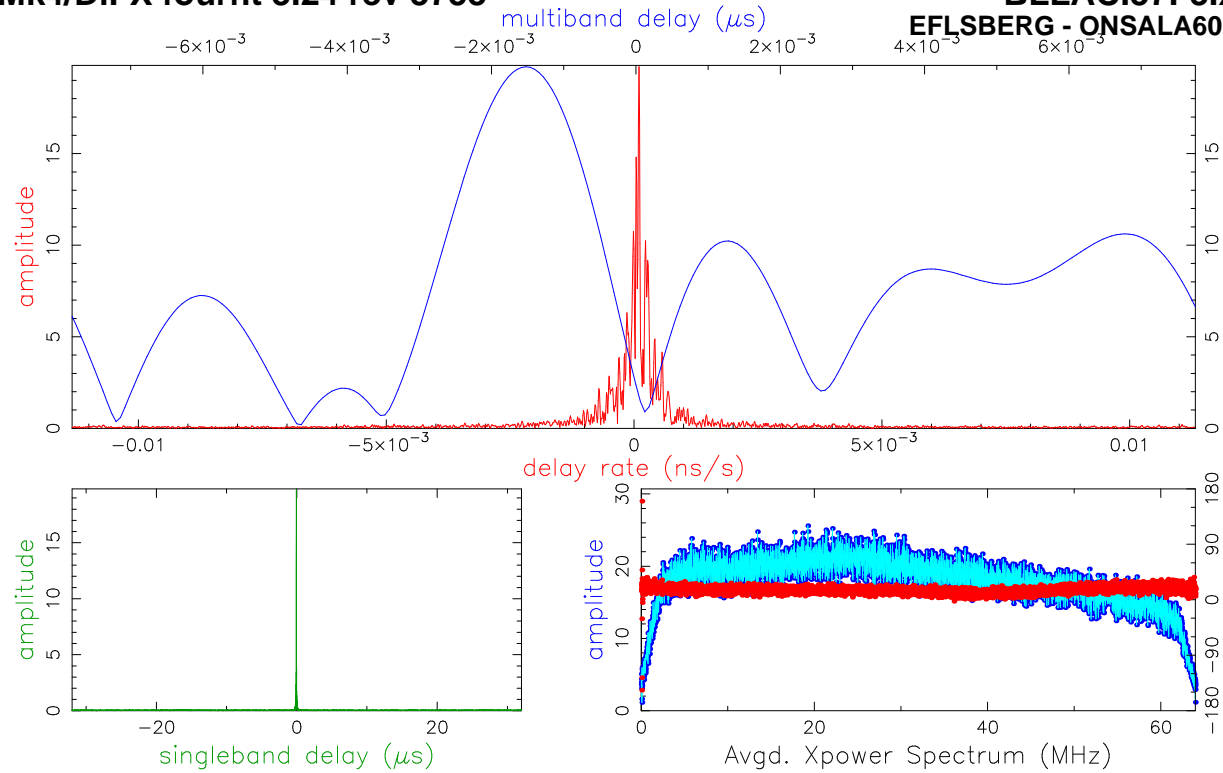
SNR 17.3
Int time 299.812
Amp 0.366
Phase -155.8
PFD 0.0e+00
Delays (us)
SBD -0.053900
MBD 0.001779
Fringe rate (Hz) 0.008234
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095536
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-144.8	178.7	-88.1	160.1	-135.2	98.1	-140.5	-42.7	Phase	-155.8
	0.7	0.5	0.5	0.7	0.7	0.6	0.6	0.2	Ampl.	0.6
	8178.3	8177.8	8186.9	8179.3	8178.2	8178.5	8179.4	8183.4	Sbd box	8179.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.44522944571E+01								Resid mbdelay (usec)	1.77855E-03 +/- 6.3E-05
Sband delay (usec)	-3.44454725028E+01								Resid sbdelay (usec)	-5.38995E-02 +/- 5.0E-04
Phase delay (usec)	-3.43915780266E+01								Resid phdelay (usec)	-5.02387E-06 +/- 2.1E-07
Delay rate (us/s)	-9.54659112024E-02								Resid rate (us/s)	9.55922E-08 +/- 1.2E-09
Total phase (deg)			-191.2						Resid phase (deg)	-155.8 +/- 6.6
	RMS	Theor.	Amplitude	0.366 +/- 0.021					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.2	15.9	Search (2048X32)	0.353					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	70.0	27.7	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	73.0	9.4	Inc. seg. avg.	0.450					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	68.7	16.3	Inc. frq. avg.	0.552					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 8192 t_cohere infinite	
B: az 291.0 el 40.5 pa 53.4			X: az 288.7 el 40.0 pa 43.6						u,v (fr/asec) 728.958 -899.688	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX						Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.10.37F3IX	

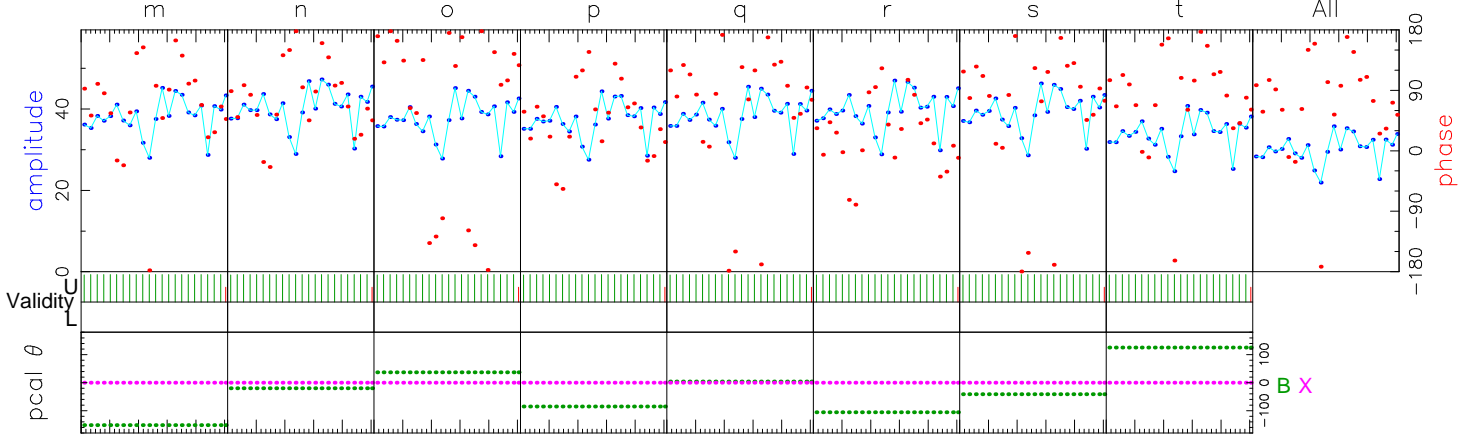


Fringe quality 2

SNR 938.3
Int time 299.812
Amp 19.817
Phase 86.8
PFD 0.0e+00
Delays (us)
SBD -0.057782
MBD -0.001505
Fringe rate (Hz) 0.008667
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

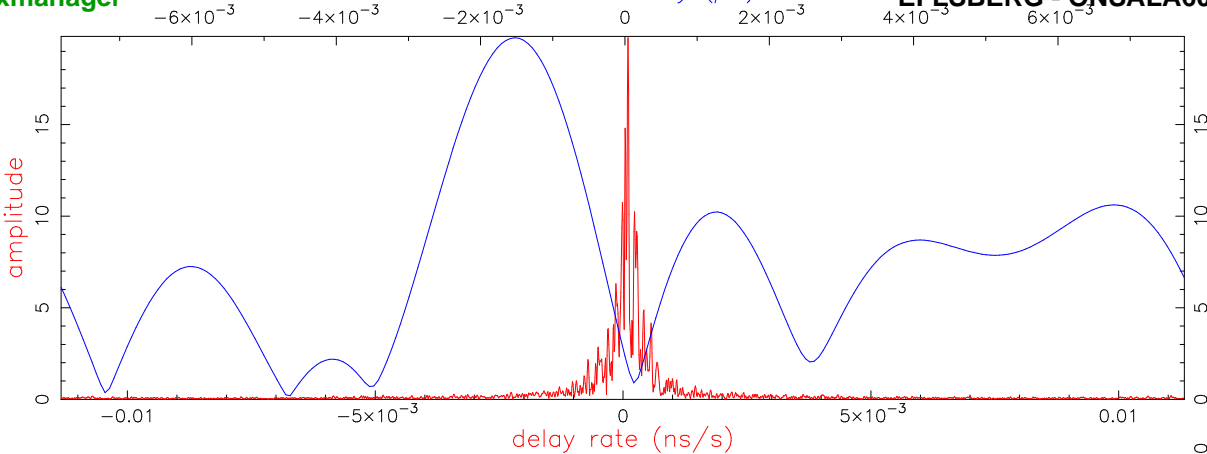
Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095202
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



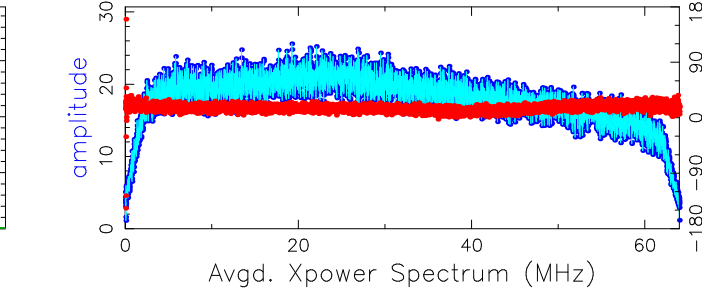
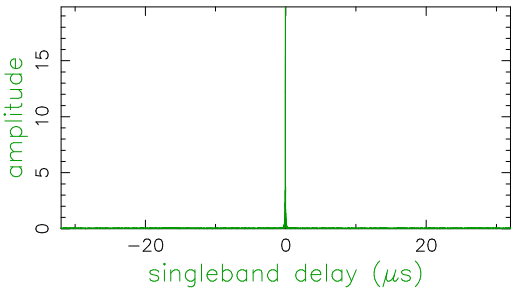
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	81.4	78.5	159.5	46.7	109.2	23.2	107.4	94.4	Phase	86.8
	25.0	26.4	24.8	24.4	25.2	26.0	25.6	22.1	Ampl.	25.0
	8178.0	8177.6	8178.1	8177.8	8178.3	8178.0	8178.1	8177.4	Sbd box	8178.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.44555782384E+01					-3.43915730028E+01			Resid mbdelay (usec)	-1.50524E-03 +/- 1.2E-06
Sband delay (usec)	-3.44493550028E+01					-1.4802235E+02			Resid sbdelay (usec)	-5.77820E-02 +/- 9.2E-06
Phase delay (usec)	-3.43915702029E+01					-1.0578921E-06			Resid phdelay (usec)	2.79982E-06 +/- 3.9E-09
Delay rate (us/s)	-9.54659061830E-02					-9.54660067946E-02			Resid rate (us/s)	1.00612E-07 +/- 2.3E-11
Total phase (deg)			51.4			-5.97812451515E-06			Resid phase (deg)	86.8 +/- 0.1
	RMS	Theor.	Amplitude	19.817 +/- 0.021					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.6	0.3	Search (2048X32)	19.623					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	54.7	0.5	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	44.8	0.2	Inc. seg. avg.	30.088					SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
amp/frq (%)	26.7	0.3	Inc. frq. avg.	24.961					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite
B: az 291.0 el 40.5 pa 53.4			X: az 288.7 el 40.0 pa 43.6			u,v (fr/asec) 728.958 -899.688				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX							Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.1.37F3IX

multiband delay (μ s)



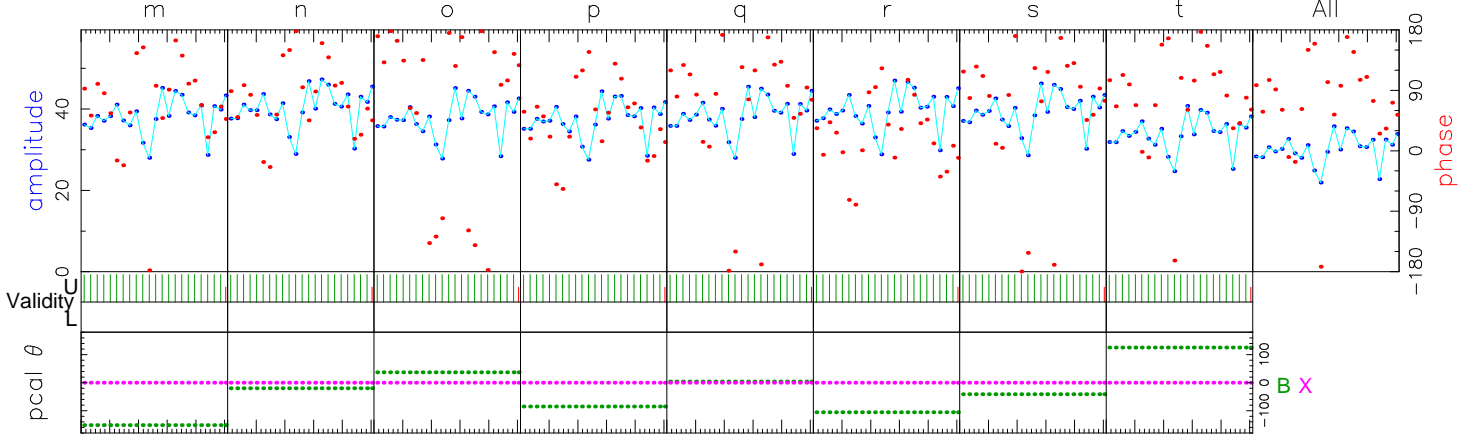
Fringe quality 2

SNR 938.3
 Int time 299.812
 Amp 19.817
 Phase 86.8
 PFD 0.0e+00
 Delays (μ s)
 SBD -0.057782
 MBD -0.001505
 Fringe rate (Hz) 0.008667
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110436
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	81.4	78.5	159.5	46.7	109.2	23.2	107.4	94.4	Phase	86.8
	25.0	26.4	24.8	24.4	25.2	26.0	25.6	22.1	Ampl.	25.0
	8178.0	8177.6	8178.1	8177.8	8178.3	8178.0	8178.1	8177.4	Sbd box	8178.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.44555782384E+01	Apriori delay (usec)	-3.43915730028E+01	Resid mbdelay (usec)	-1.50524E-03	+/-	1.2E-06
Sband delay (usec)	-3.44493550028E+01	Apriori clock (usec)	-1.4802235E+02	Resid sbdelay (usec)	-5.77820E-02	+/-	9.2E-06
Phase delay (usec)	-3.43915702029E+01	Apriori clockrate (us/s)	-1.0578921E-02	Resid phdelay (usec)	2.79982E-06	+/-	3.9E-09
Delay rate (us/s)	-9.54659061830E-02	Apriori rate (us/s)	-9.54660067946E-02	Resid rate (us/s)	1.00612E-07	+/-	2.3E-11
Total phase (deg)		Apriori accel (us/s/s)	-5.97812451515E-06	Resid phase (deg)	86.8	+/-	0.1

ph/seg (deg)	RMS 52.6	Theor. 0.3	Amplitude Search (2048X32)	19.817 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	54.7	0.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	44.8	0.2	Inc. seg. avg.	30.088	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 8192 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.7	0.3	Inc. frq. avg.	24.961	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

B: az 291.0 el 40.5 pa 53.4 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 728.958 -899.688 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.21.37F3IX

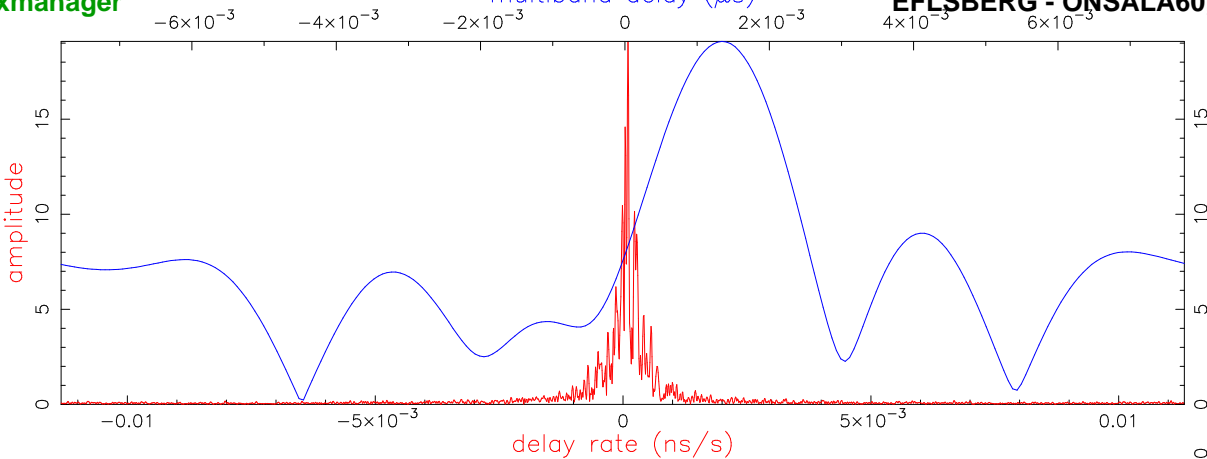
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BX

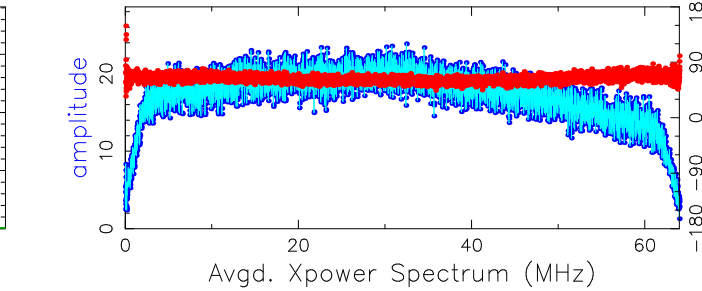
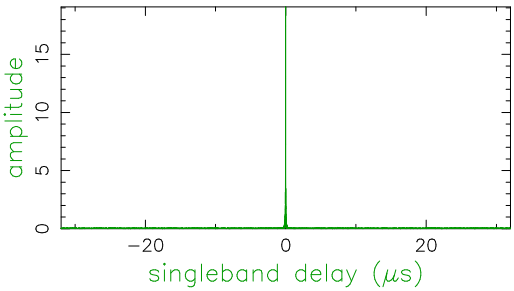
EFLSBERG - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



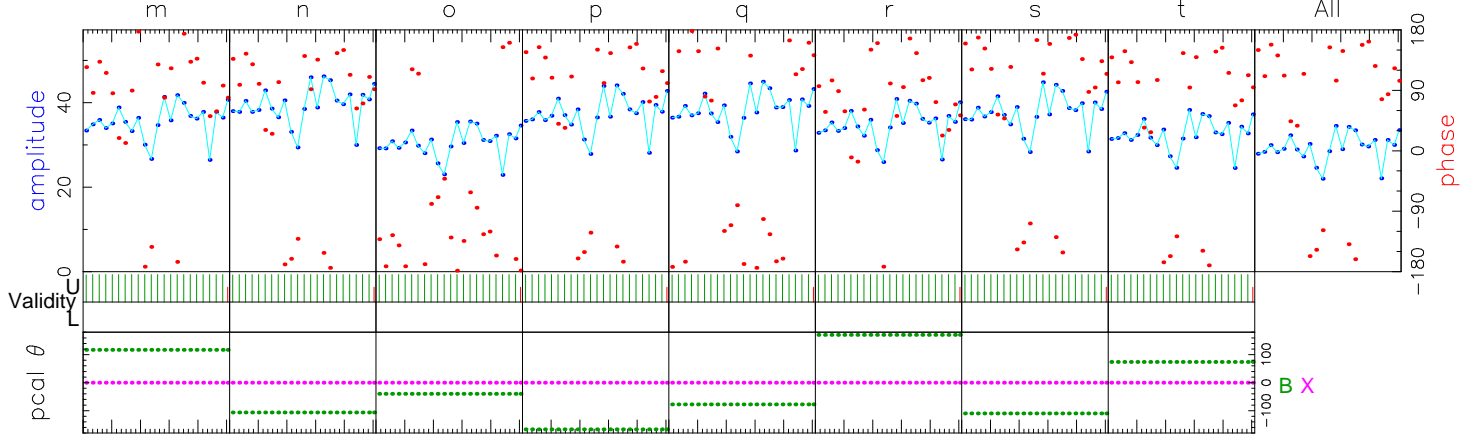
Fringe quality 2

SNR 903.8
 Int time 299.812
 Amp 19.088
 Phase 138.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.023373
 MBD 0.001348
 Fringe rate (Hz)
 0.008675
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110559
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	113.1	125.8	-144.1	134.9	175.9	85.2	148.8	128.7	Phase	138.5
	23.2	25.6	19.8	24.3	24.8	22.7	24.6	21.1	Ampl.	23.2
	8186.3	8186.8	8187.0	8186.5	8186.7	8186.9	8187.0	8186.3	Sbd box	8187.0
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.44214751759E+01		Apriori delay (usec)	-3.43915730028E+01	Resid mbdelay (usec)	1.34783E-03	+/-	1.2E-06		
Sband delay (usec)	-3.44149462528E+01		Apriori clock (usec)	-1.4802235E+02	Resid sbdelay (usec)	-2.33732E-02	+/-	9.5E-06		
Phase delay (usec)	-3.43915685370E+01		Apriori clockrate (us/s)	-1.0578921E-02	Resid phdelay (usec)	4.46577E-06	+/-	4.1E-09		
Delay rate (us/s)	-9.54659060902E-02		Apriori rate (us/s)	-9.54660067946E-02	Resid rate (us/s)	1.00704E-07	+/-	2.4E-11		
Total phase (deg)		103.0	Apriori accel (us/s/s)	-5.97812451515E-06	Resid phase (deg)	138.5	+/-	0.1		

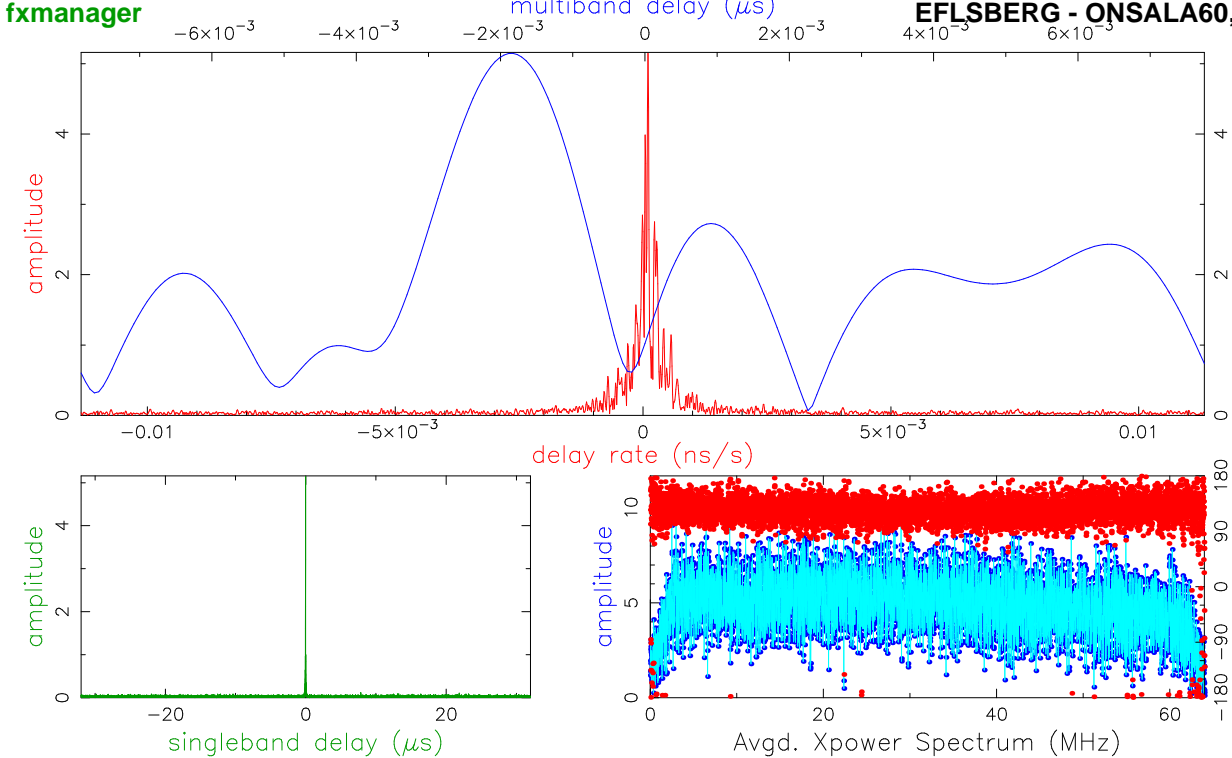
RMS Theor. Amplitude 19.088 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.8 0.3 Search (2048X32) 18.860 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 56.3 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.3 0.2 Inc. seg. avg. 29.333 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.9 0.3 Inc. frq. avg. 23.249 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 291.0 el 40.5 pa 53.4 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 728.958 -899.688 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.22.37F3IX

Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BX

EFLSBERG - ONSALA60, fgroup W, pol LR

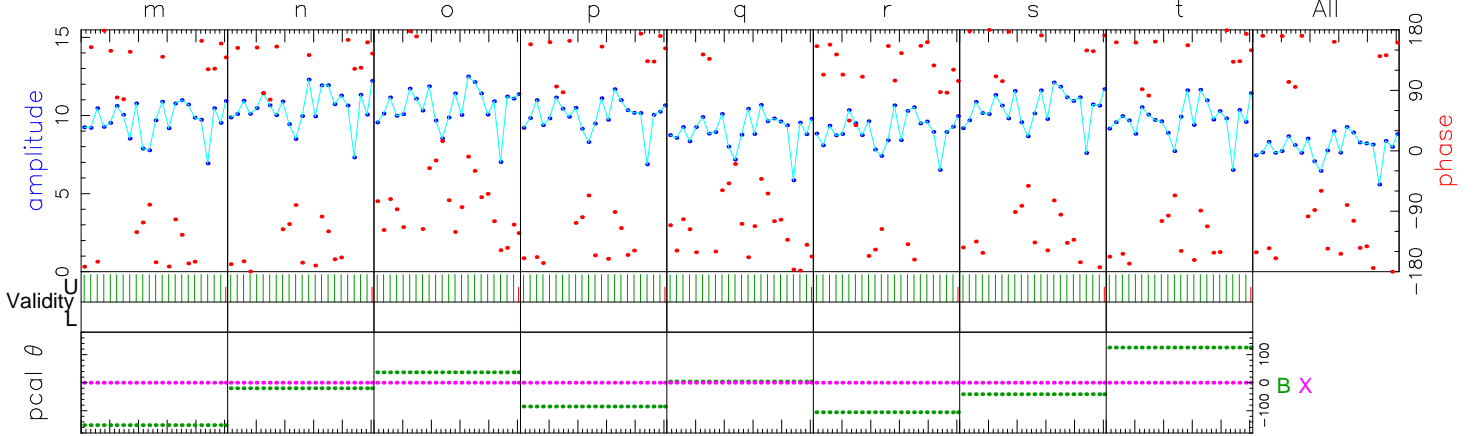


Fringe quality 2

SNR 244.3
 Int time 299.812
 Amp 5.160
 Phase -162.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.026669
 MBD -0.001835
 Fringe rate (Hz) 0.008693
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110721
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



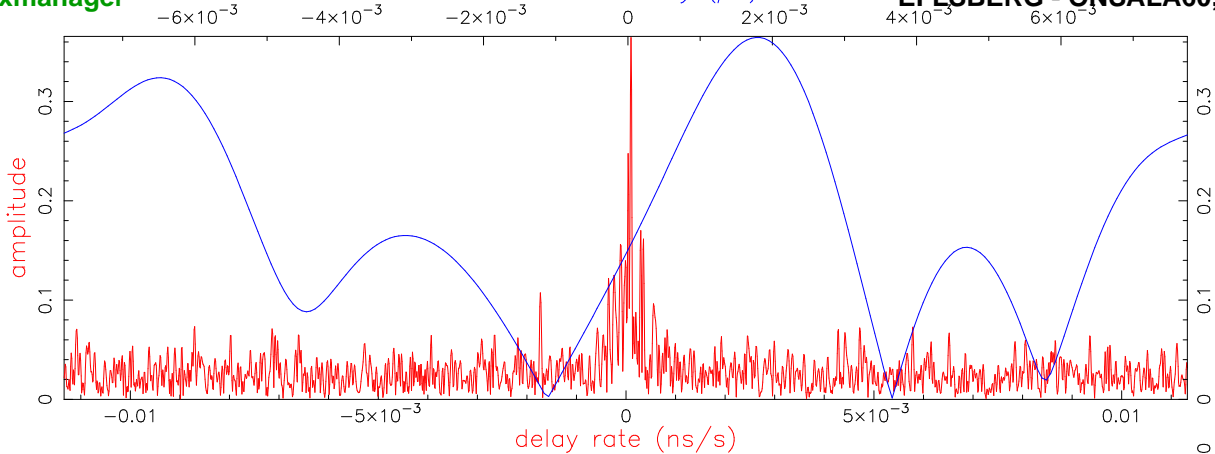
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	176.2	179.1	-88.8	-171.8	-121.8	139.6	-154.0	-170.1	Phase	-162.4
B	6.3	6.8	6.8	6.5	5.9	5.9	6.8	6.2	Ampl.	6.4
X	8185.8	8185.7	8186.0	8186.1	8185.8	8185.9	8186.1	8185.6	Sbd box	8186.2
B	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -3.4424657196E+01 Apriori delay (usec) -3.43915730028E+01 Resid mbdelay (usec) -1.83452E-03 +/- 4.4E-06
 Sband delay (usec) -3.44182420028E+01 Apriori clock (usec) -1.4802235E+02 Resid sbdelay (usec) -2.66690E-02 +/- 3.5E-05
 Phase delay (usec) -3.43915782381E+01 Apriori clockrate (us/s) -1.0578921E-02 Resid phdelay (usec) -5.23534E-06 +/- 1.5E-08
 Delay rate (us/s) -9.54659058826E-02 Apriori rate (us/s) -9.54660067946E-02 Resid rate (us/s) 1.00912E-07 +/- 8.7E-11
 Total phase (deg) -197.8 Apriori accel (us/s/s) -5.97812451515E-06 Resid phase (deg) -162.4 +/- 0.5

RMS Theor. Amplitude 5.160 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.6 1.1 Search (2048X32) 5.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 56.2 2.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.7 0.7 Inc. seg. avg. 7.942 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.1 1.2 Inc. frq. avg. 6.405 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00

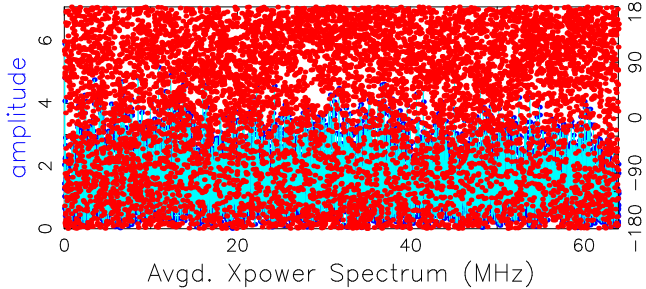
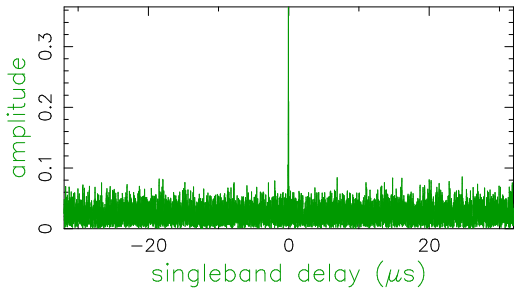
B: az 291.0 el 40.5 pa 53.4 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 728.958 -899.688 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.23.37F3IX

multiband delay (μ s)



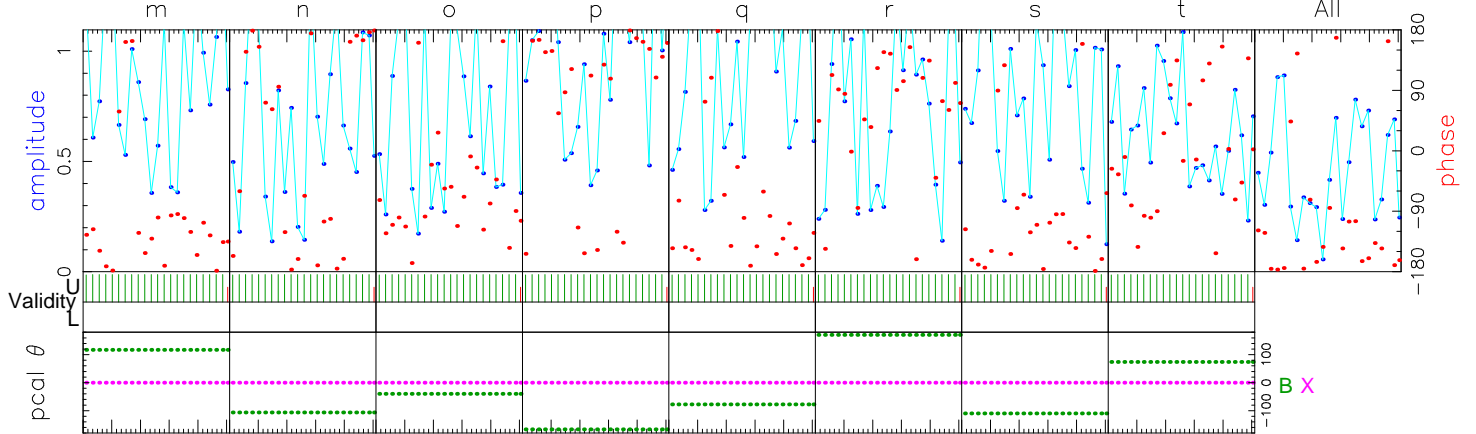
Fringe quality 7

SNR 17.3
 Int time 299.812
 Amp 0.366
 Phase -155.8
 PFD 0.0e+00
 Delays (μ s)
 SBD -0.053900
 MBD 0.001779
 Fringe rate (Hz)
 0.008234
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



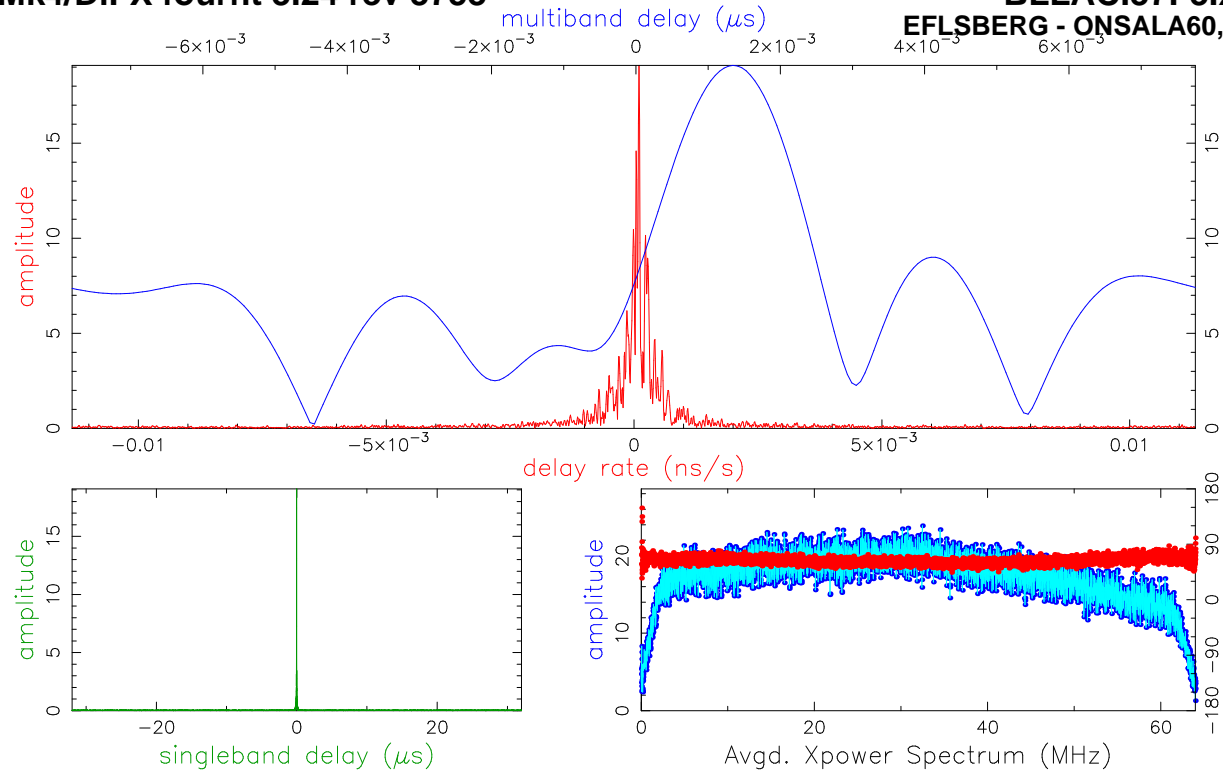
Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110842
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



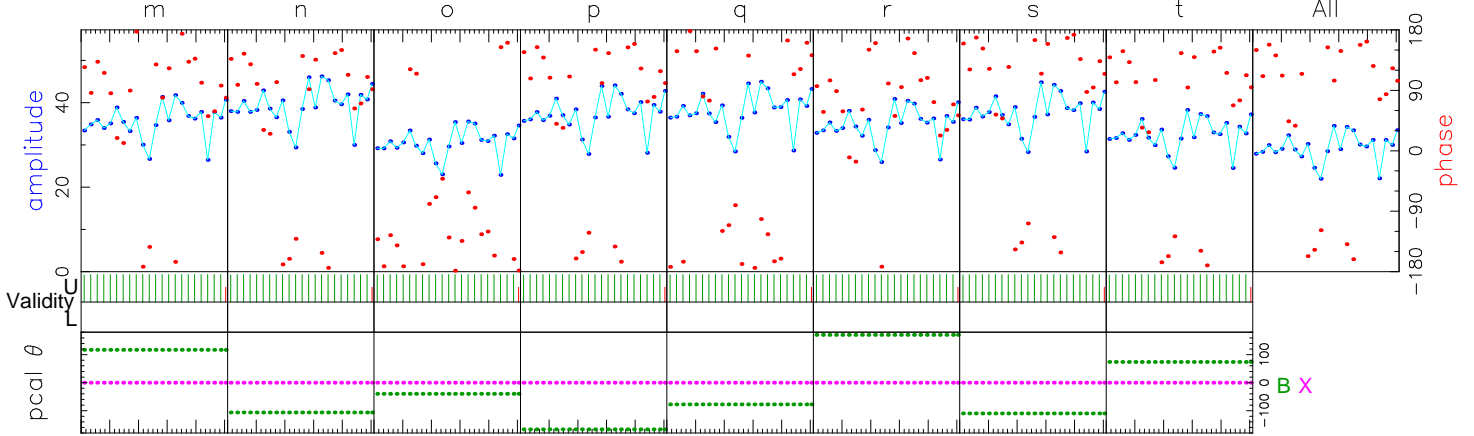
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-144.8	178.7	-88.1	160.1	-135.2	98.1	-140.5	-42.7	Phase	-155.8
	0.7	0.5	0.5	0.7	0.7	0.6	0.6	0.2	Ampl.	0.6
	8178.3	8177.8	8186.9	8179.3	8178.2	8178.5	8179.4	8183.4	Sbd box	8179.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.44522944571E+01		Apriori delay (usec)	-3.43915730028E+01	Resid mbdelay (usec)	1.77855E-03	+/-	6.3E-05		
Sband delay (usec)	-3.44454725028E+01		Apriori clock (usec)	-1.4802235E+02	Resid sbdelay (usec)	-5.38995E-02	+/-	5.0E-04		
Phase delay (usec)	-3.43915780266E+01		Apriori clockrate (us/s)	-1.0578921E-02	Resid phdelay (usec)	-5.02387E-06	+/-	2.1E-07		
Delay rate (us/s)	-9.54659112024E-02		Apriori rate (us/s)	-9.54660067946E-02	Resid rate (us/s)	9.55922E-08	+/-	1.2E-09		
Total phase (deg)		-191.2	Apriori accel (us/s/s)	-5.97812451515E-06	Resid phase (deg)	-155.8	+/-	6.6		

ph/seg (deg) 49.2 15.9 Theor. Amplitude 0.366 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.0 27.7 Search (2048X32) 0.353 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 73.0 9.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 68.7 16.3 Inc. seg. avg. 0.450 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 291.0 el 40.5 pa 53.4 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 728.958 -899.688 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.24.37F3IX

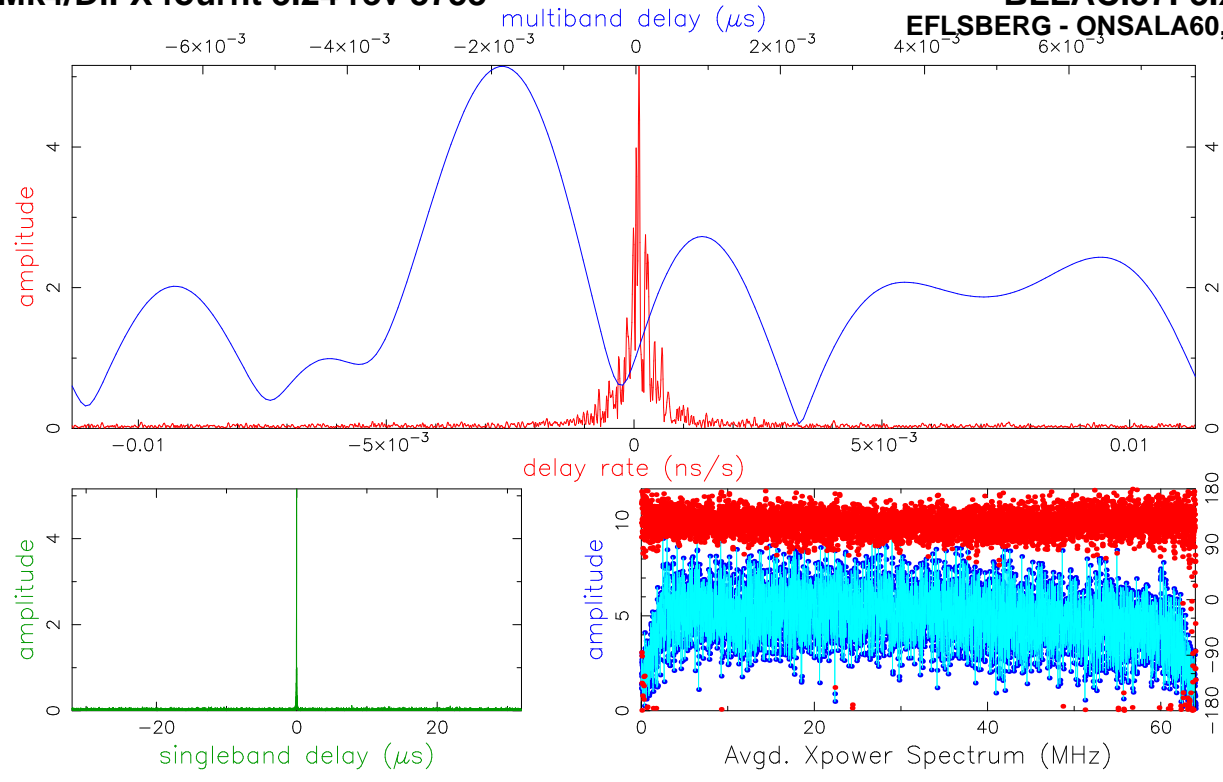


Fringe quality 2
 SNR 903.8
 Int time 299.812
 Amp 19.088
 Phase 138.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.023373
 MBD 0.001348
 Fringe rate (Hz) 0.008675
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:095314
 2023:314:152938
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

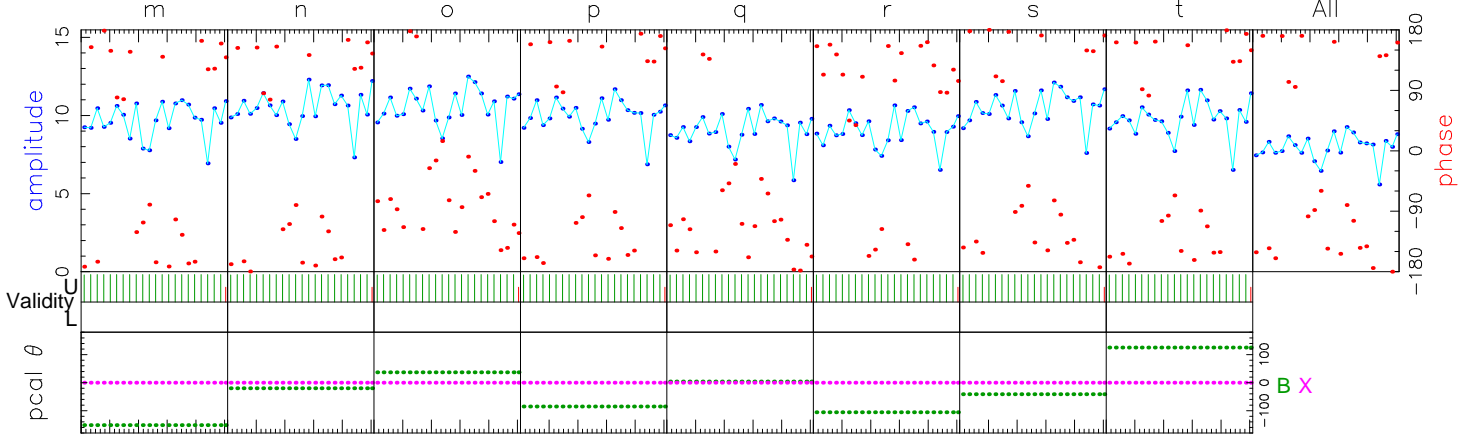


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	113.1	125.8	-144.1	134.9	175.9	85.2	148.8	128.7	Phase	138.5	
	23.2	25.6	19.8	24.3	24.8	22.7	24.6	21.1	Ampl.	23.2	
	8186.3	8186.8	8187.0	8186.5	8186.7	8186.9	8187.0	8186.3	Sbd box	8187.0	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used		
B	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-3.44214751759E+01		Apriori delay (usec)		-3.43915730028E+01		Resid mbdelay (usec)		1.34783E-03	+/- 1.2E-06	
Sband delay (usec)	-3.44149462528E+01		Apriori clock (usec)		-1.4802235E+02		Resid sbdelay (usec)		-2.33732E-02	+/- 9.5E-06	
Phase delay (usec)	-3.43915685370E+01		Apriori clockrate (us/s)		-1.0578921E-02		Resid phdelay (usec)		4.46577E-06	+/- 4.1E-09	
Delay rate (us/s)	-9.54659060902E-02		Apriori rate (us/s)		-9.54660067946E-02		Resid rate (us/s)		1.00704E-07	+/- 2.4E-11	
Total phase (deg)	103.0		Apriori accel (us/s/s)		-5.97812451515E-06		Resid phase (deg)		138.5	+/- 0.1	
RMS	Theor.	Amplitude	19.088 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	52.8	0.3	Search (2048X32)		18.860		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-32.000 32.000	
amp/seg (%)	56.3	0.5	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	43.3	0.2	Inc. seg. avg.		29.333		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	23.9	0.3	Inc. frq. avg.		23.249		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 291.0 el 40.5 pa 53.4		X: az 288.7 el 40.0 pa 43.6		u,v (fr/asec) 728.958 -899.688		simultaneous interpolator					
Control file: cf_1234_gmva		Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.4.37F3IX							

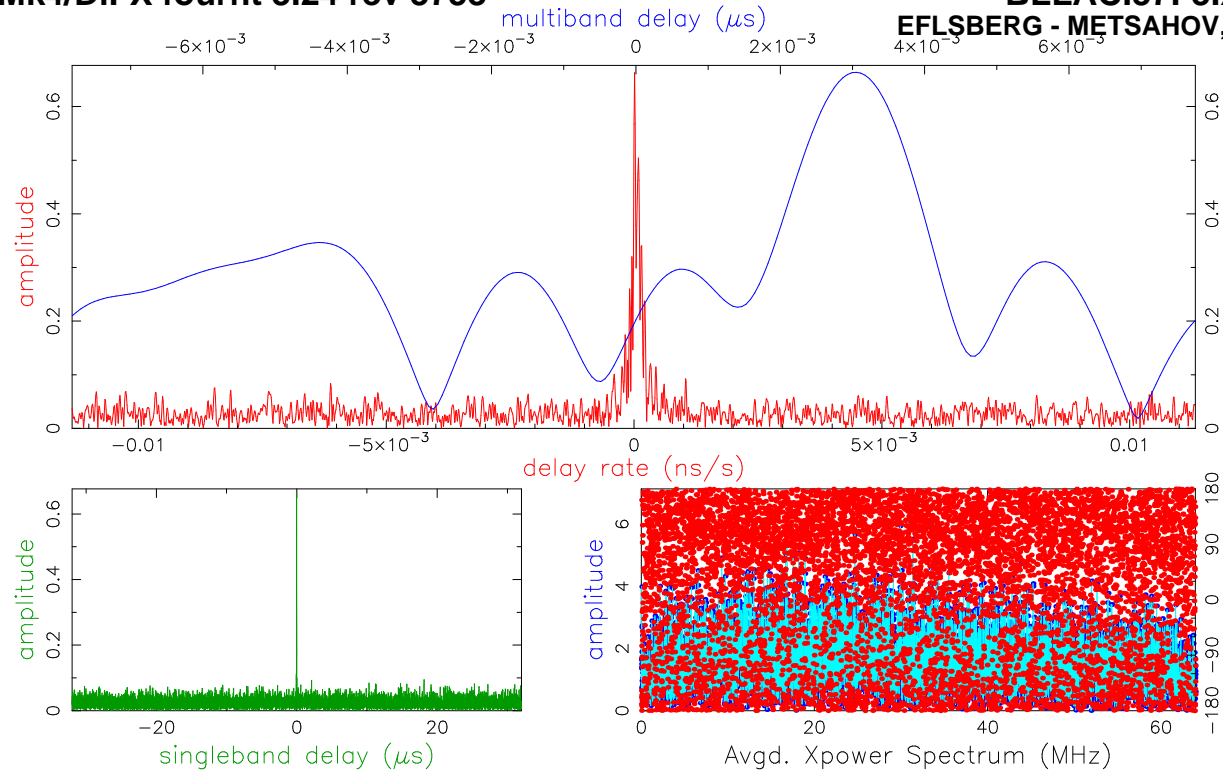


Fringe quality 2
SNR 244.3
Int time 299.812
Amp 5.160
Phase -162.4
PFD 0.0e+00
Delays (us)
SBD -0.026669
MBD -0.001835
Fringe rate (Hz) 0.008693
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095425
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

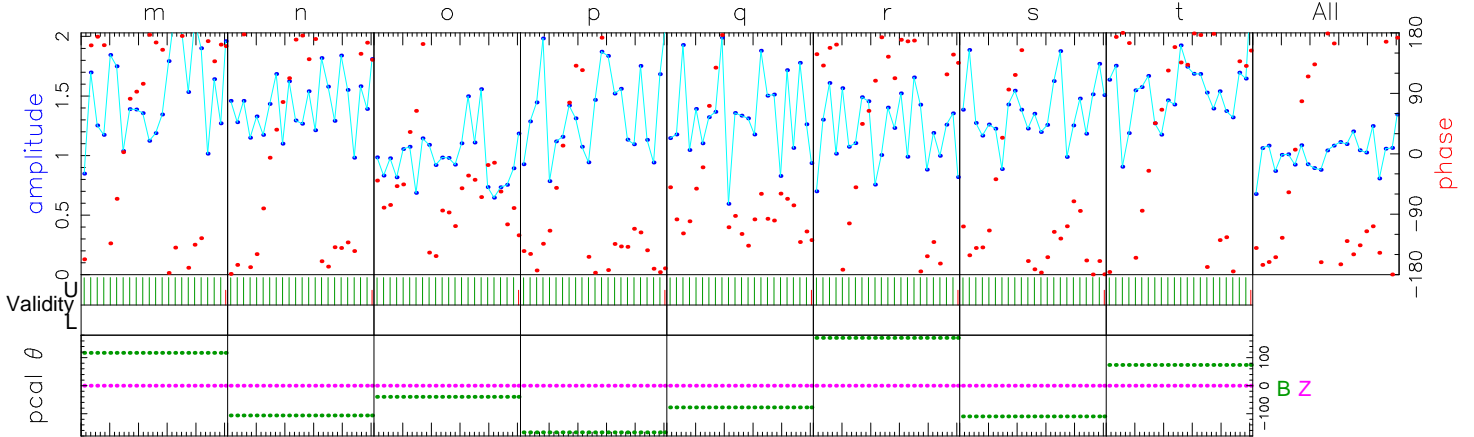


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	176.2	179.1	-88.8	-171.8	-121.8	139.6	-154.0	-170.1	Phase	-162.4	
	6.3	6.8	6.8	6.5	5.9	5.9	6.8	6.2	Ampl.	6.4	
	8185.8	8185.7	8186.0	8186.1	8185.8	8185.9	8186.1	8185.6	Sbd box	8186.2	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used		
B	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:X	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-3.44246575196E+01		Apriori delay (usec)		-3.43915730028E+01		Resid mbdelay (usec)		-1.83452E-03	+/- 4.4E-06	
Sband delay (usec)	-3.44182420028E+01		Apriori clock (usec)		-1.4802235E+02		Resid sbdelay (usec)		-2.66690E-02	+/- 3.5E-05	
Phase delay (usec)	-3.43915782381E+01		Apriori clockrate (us/s)		-1.0578921E-02		Resid phdelay (usec)		-5.23534E-06	+/- 1.5E-08	
Delay rate (us/s)	-9.54659058826E-02		Apriori rate (us/s)		-9.54660067946E-02		Resid rate (us/s)		1.00912E-07	+/- 8.7E-11	
Total phase (deg)			Apriori accel (us/s/s)		-5.97812451515E-06		Resid phase (deg)		-162.4	+/- 0.5	
	RMS	Theor.	Amplitude	5.160 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	52.6	1.1	Search (2048X32)	5.107		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-32.000 32.000	
amp/seg (%)	56.2	2.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	43.7	0.7	Inc. seg. avg.	7.942		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	25.1	1.2	Inc. frq. avg.	6.405		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite		ion window (TEC)	0.00 0.00
B: az 291.0 el 40.5 pa 53.4	X: az 288.7 el 40.0 pa 43.6		u, v (fr/asec) 728.958 -899.688						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/BX..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BX.W.7.37F3IX								



Fringe quality 4
SNR 32.1
Int time 299.882
Amp 0.677
Phase -159.9
PFD 0.0e+00
Delays (us)
SBD -0.021542
MBD 0.003095
Fringe rate (Hz)
0.001250
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095624
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	179.5	-178.9	-67.1	-157.4	-99.3	158.0	-146.4	169.0	Phase	-159.9
	1.0	0.9	0.6	0.9	0.9	0.8	0.9	1.0	Ampl.	0.9
	8186.8	8187.7	8187.2	8187.1	8187.1	8187.2	8187.2	8186.4	Sbd box	8187.5
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.52248097114E+03		Apriori delay (usec)		1.52250912651E+03		Resid mbdelay (usec)		3.09463E-03 +/- 3.4E-05	
Sband delay (usec)	1.52248758501E+03		Apriori clock (usec)		-3.5526623E+01		Resid sbdelay (usec)		-2.15415E-02 +/- 2.7E-04	
Phase delay (usec)	1.52250912135E+03		Apriori clockrate (us/s)		-3.3620003E-07		Resid phdelay (usec)		-5.15776E-06 +/- 1.2E-07	
Delay rate (us/s)	-1.34900013714E-01		Apriori rate (us/s)		-1.34900028225E-01		Resid rate (us/s)		1.45106E-08 +/- 6.7E-10	
Total phase (deg)			Apriori accel (us/s/s)		-1.56055842122E-05		Resid phase (deg)		-159.9 +/- 3.6	
RMS	58.3	8.6	Amplitude		0.677 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	58.3	8.6	Search (2048X32)		0.652		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -32.000 32.000	
amp/seg (%)	54.2	15.0	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled mb window (us) -0.008 0.008	
ph/frq (deg)	51.7	5.1	Inc. seg. avg.		1.007		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.011 0.011	
amp/frq (%)	31.4	8.8	Inc. frq. avg.		0.858		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00	
B: az 291.0 el 40.5 pa 53.4	Z: az 295.5 el 35.1 pa 37.3		u, v (fr/asec) 1017.668 -1760.917						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.11.37F3IX							

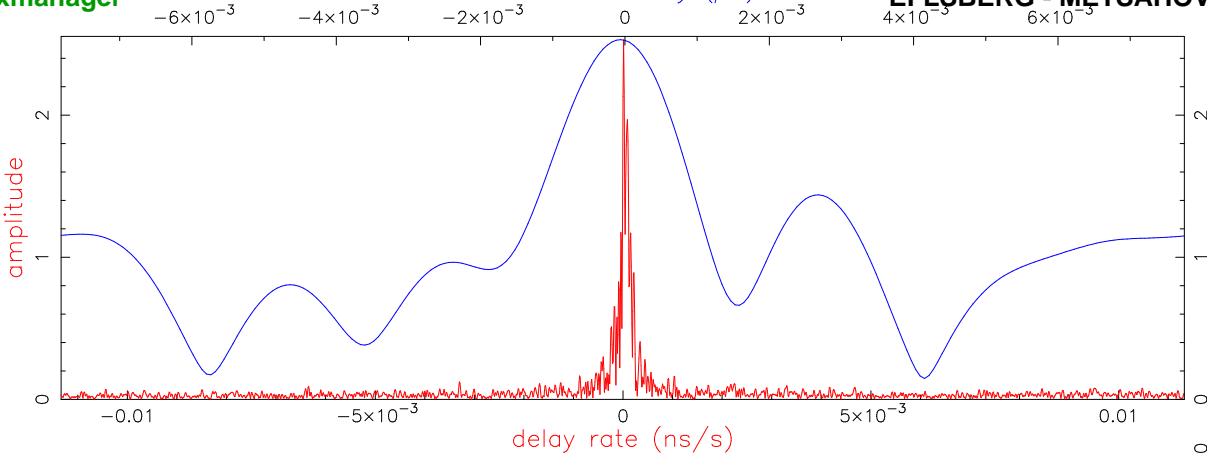
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BZ

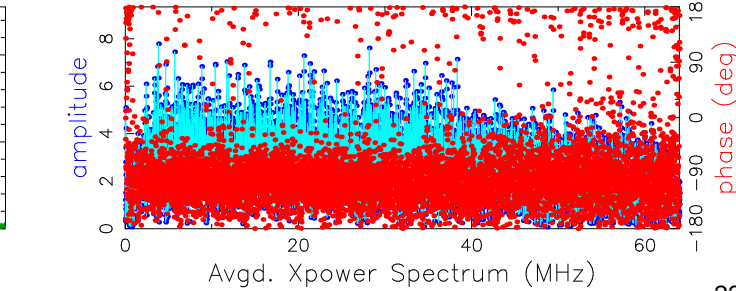
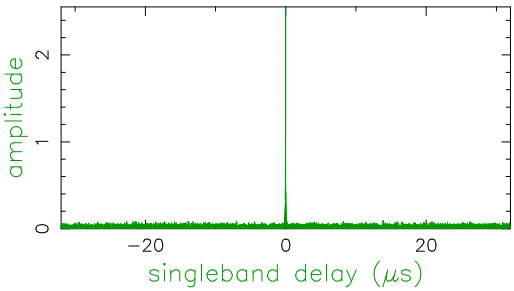
EFLSBERG - METSAHOV, fgroup W, pol LL

multiband delay (μ s)



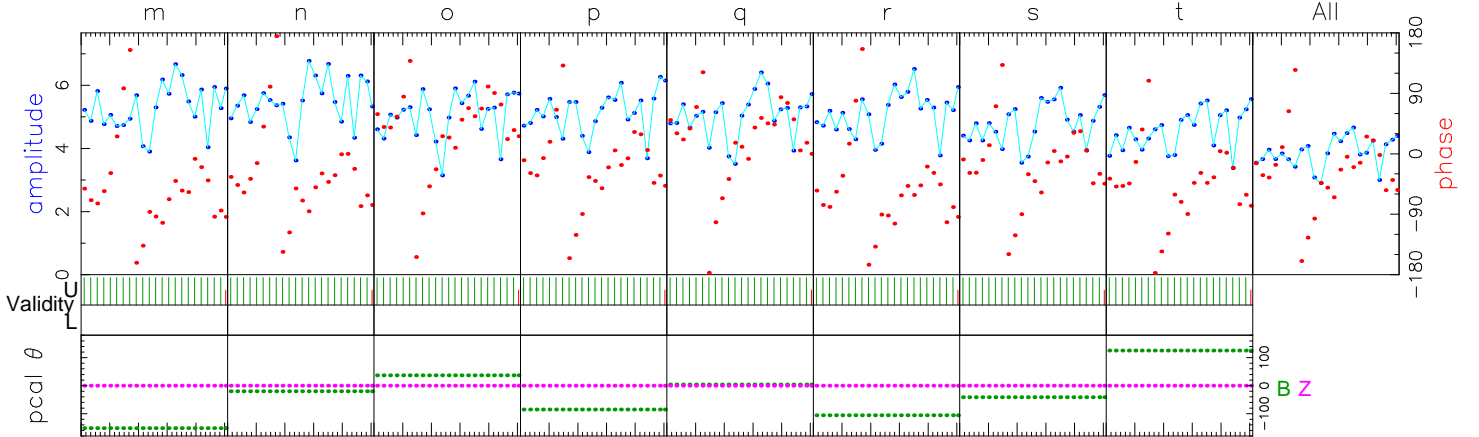
Fringe quality 2

SNR 121.0
 Int time 299.882
 Amp 2.555
 Phase -26.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.024729
 MBD -0.000086
 Fringe rate (Hz)
 0.001134
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:105912
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.6	-47.0	47.2	-19.7	32.9	-68.7	-18.7	-48.6	Phase	-26.7
	3.4	3.6	3.2	3.4	3.3	3.4	3.1	3.0	Ampl.	3.3
	8186.6	8186.3	8186.7	8186.5	8186.3	8186.3	8186.1	8185.7	Sbd box	8186.7
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.52247779067E+03	Apriori delay (usec)	1.52250912651E+03	Resid mbdelay (usec)	-8.58422E-05	+/-	9.0E-06
Sband delay (usec)	1.52248439776E+03	Apriori clock (usec)	-3.5526623E+01	Resid sbdelay (usec)	-2.47288E-02	+/-	7.1E-05
Phase delay (usec)	1.52250912565E+03	Apriori clockrate (us/s)	-3.3620003E-07	Resid phdelay (usec)	-8.61600E-07	+/-	3.1E-08
Delay rate (us/s)	-1.34900015056E-01	Apriori rate (us/s)	-1.34900028225E-01	Resid rate (us/s)	1.31685E-08	+/-	1.8E-10
Total phase (deg)	30.0	Apriori accel (us/s/s)	-1.56055842122E-05	Resid phase (deg)	-26.7	+/-	0.9

ph/seg (deg)	57.6	2.3	Search (2048X32)	2.511	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	54.6	4.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	47.2	1.3	Inc. seg. avg.	3.866	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.8	2.3	Inc. frq. avg.	3.295	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
					Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite			
B: az 291.0 el 40.5 pa 53.4	Z: az 295.5 el 35.1 pa 37.3	u, v (fr/asec)	1017.668 -1760.917						simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.17.37F3IX

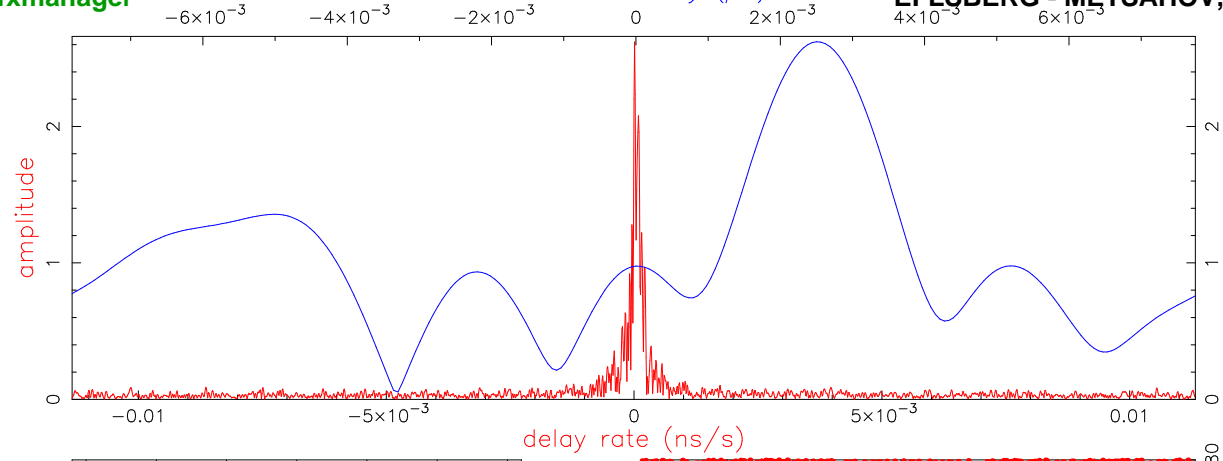
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol RR

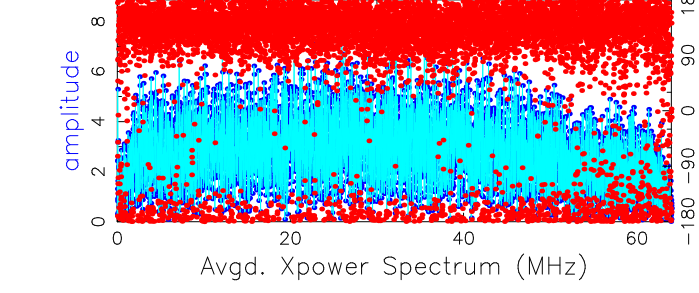
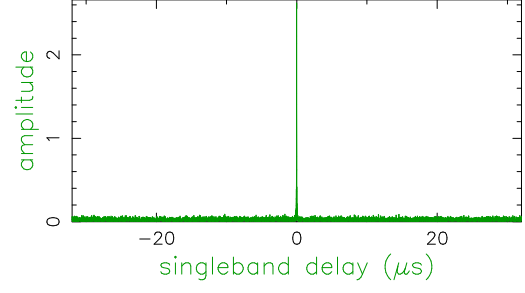
multiband delay (μ s)



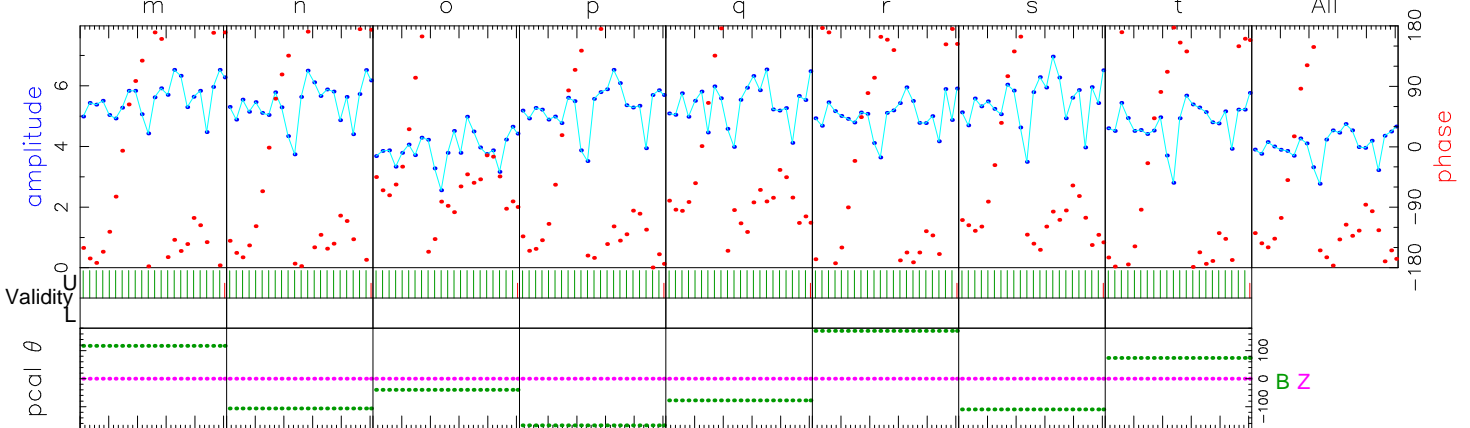
Fringe quality 2

SNR 126.0
 Int time 299.882
 Amp 2.660
 Phase -141.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.021779
 MBD 0.002551
 Fringe rate (Hz) 0.001149
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110033
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.0	-156.1	-64.6	-147.2	-89.1	-178.7	-118.5	178.9	Phase	-141.4
	3.6	3.5	2.5	3.4	3.5	3.2	3.4	3.2	Ampl.	3.3
	8187.0	8187.3	8187.5	8186.9	8187.2	8187.2	8187.0	8186.3	Sbd box	8187.4
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.52248042726E+03	Apriori delay (usec)	1.52250912651E+03	Resid mbdelay (usec)	2.55075E-03	+/-	8.6E-06
Sband delay (usec)	1.52248734701E+03	Apriori clock (usec)	-3.5526623E+01	Resid sbdelay (usec)	-2.17795E-02	+/-	6.8E-05
Phase delay (usec)	1.52250912195E+03	Apriori clockrate (us/s)	-3.3620003E-07	Resid phdelay (usec)	-4.55987E-06	+/-	2.9E-08
Delay rate (us/s)	-1.34900014886E-01	Apriori rate (us/s)	-1.34900028225E-01	Resid rate (us/s)	1.33386E-08	+/-	1.7E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.56055842122E-05	Resid phase (deg)	-141.4	+/-	0.9

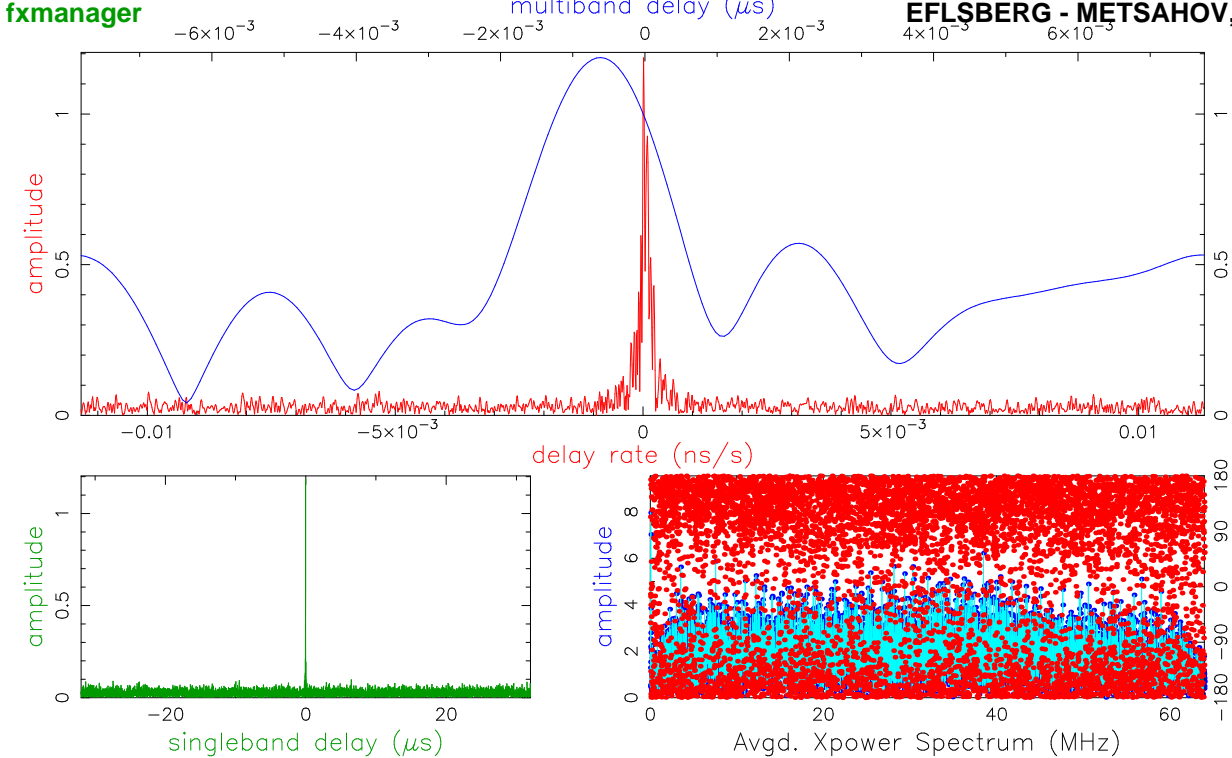
ph/seg (deg) 58.1 2.2 Search (2048X32) 2.597 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.5 3.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 46.4 1.3 Inc. seg. avg. 4.030 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.8 2.2 Inc. frq. avg. 3.291 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 291.0 el 40.5 pa 53.4 Z: az 295.5 el 35.1 pa 37.3 u,v (fr/asec) 1017.668 -1760.917 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.18.37F3IX simultaneous interpolator

Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol LR

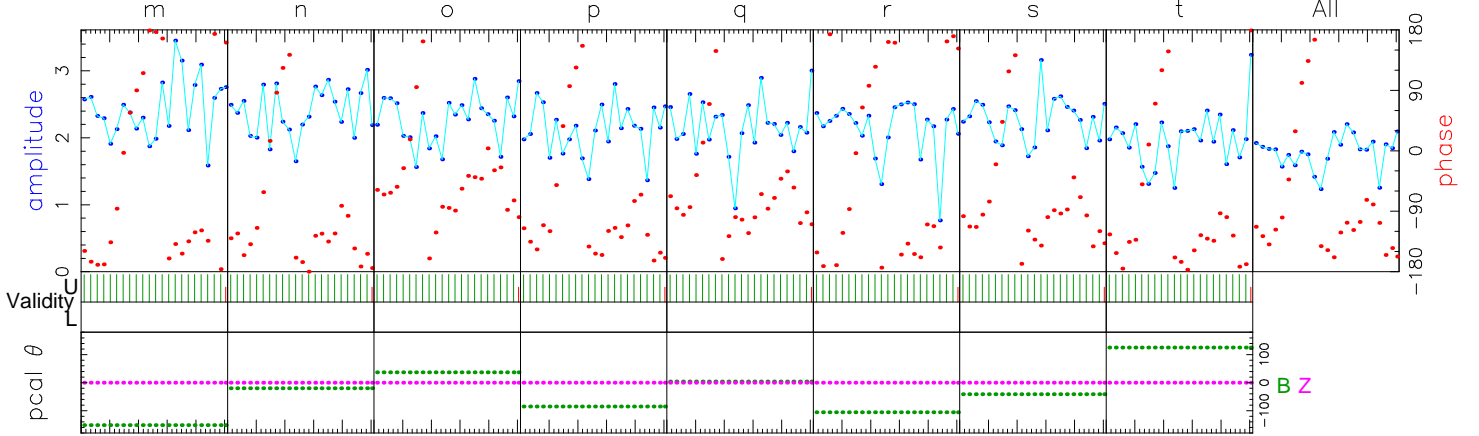


Fringe quality 2

SNR 57.0
 Int time 299.882
 Amp 1.204
 Phase -126.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.025053
 MBD -0.000656
 Fringe rate (Hz) 0.001108
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:110153
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.0	-142.1	-59.9	-131.9	-83.4	-166.9	-107.4	-148.9	Phase	-126.3
	1.6	1.6	1.6	1.4	1.4	1.3	1.5	1.3	Ampl.	1.5
	8186.4	8186.2	8186.6	8186.2	8186.3	8186.2	8185.9	8185.6	Sbd box	8186.6
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 1.52247722051E+03 Apriori delay (usec) 1.52250912651E+03 Resid mbdelay (usec) -6.55998E-04 +/- 1.9E-05
 Sband delay (usec) 1.52248407301E+03 Apriori clock (usec) -3.5526623E+01 Resid sbdelay (usec) -2.50535E-02 +/- 1.5E-04
 Phase delay (usec) 1.52250912244E+03 Apriori clockrate (us/s) -3.3620003E-07 Resid phdelay (usec) -4.07151E-06 +/- 6.5E-08
 Delay rate (us/s) -1.34900015357E-01 Apriori rate (us/s) -1.34900028225E-01 Resid rate (us/s) 1.28681E-08 +/- 3.7E-10
 Total phase (deg) -69.6 Apriori accel (us/s/s) -1.56055842122E-05 Resid phase (deg) -126.3 +/- 2.0

RMS Theor. Amplitude 1.204 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.4 4.8 Search (2048X32) 1.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 52.2 8.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 41.4 2.8 Inc. seg. avg. 1.779 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 22.6 5.0 Inc. frq. avg. 1.457 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00

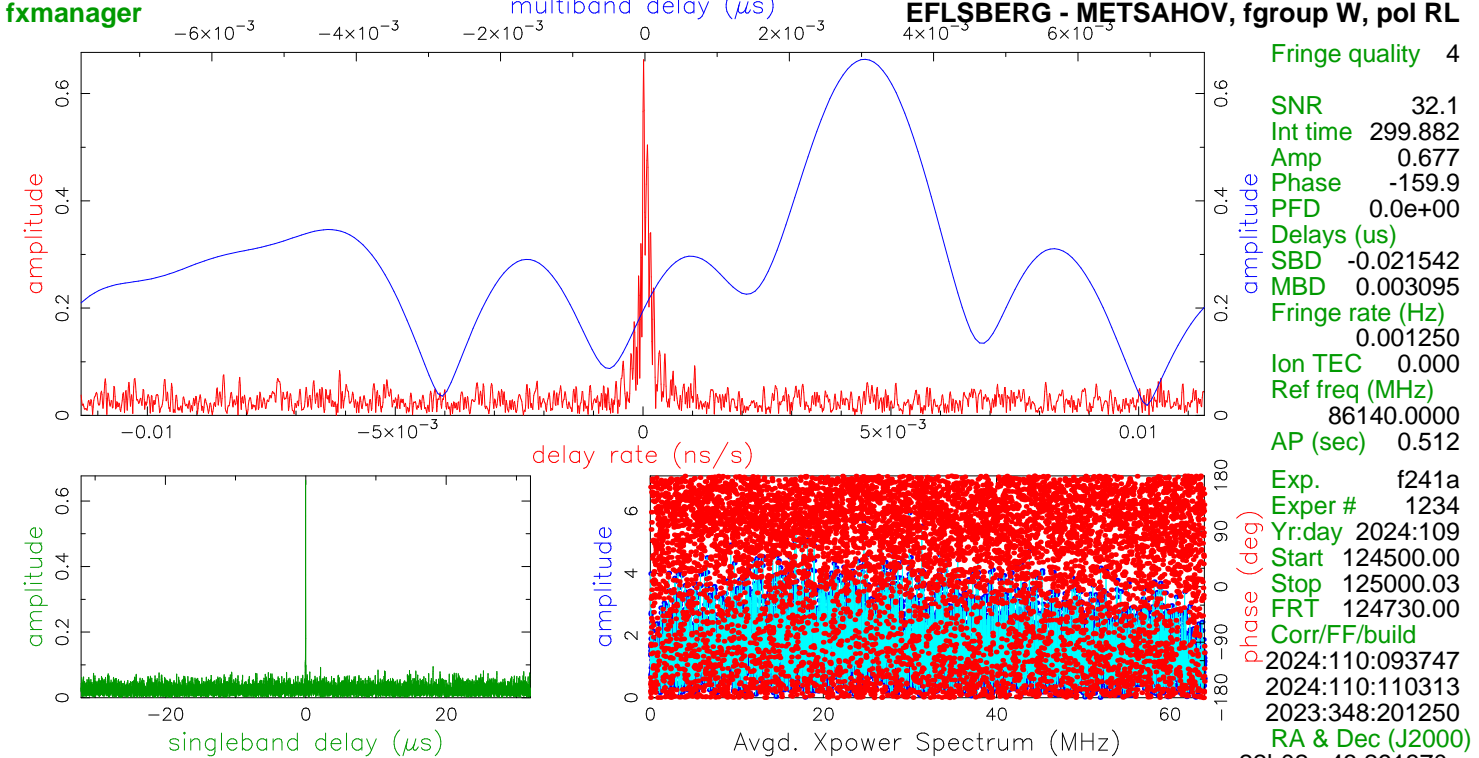
B: az 291.0 el 40.5 pa 53.4 Z: az 295.5 el 35.1 pa 37.3 u,v (fr/asec) 1017.668 -1760.917 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.19.37F3IX

Mk4/DiFX fourfit 3.24 rev 3753

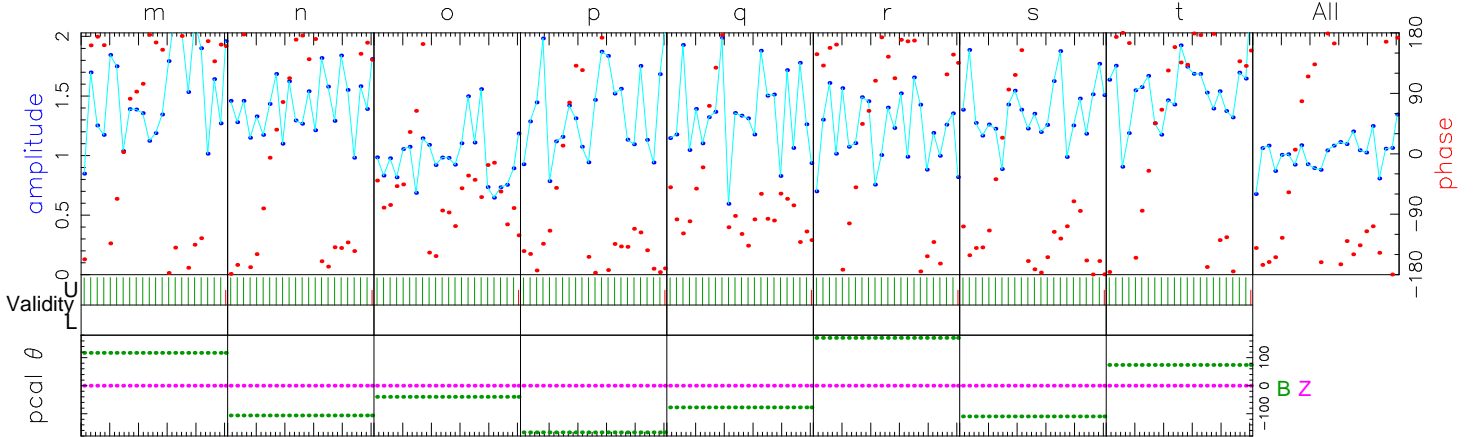
fxmanager

BLLAC.37F3IX, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol RL



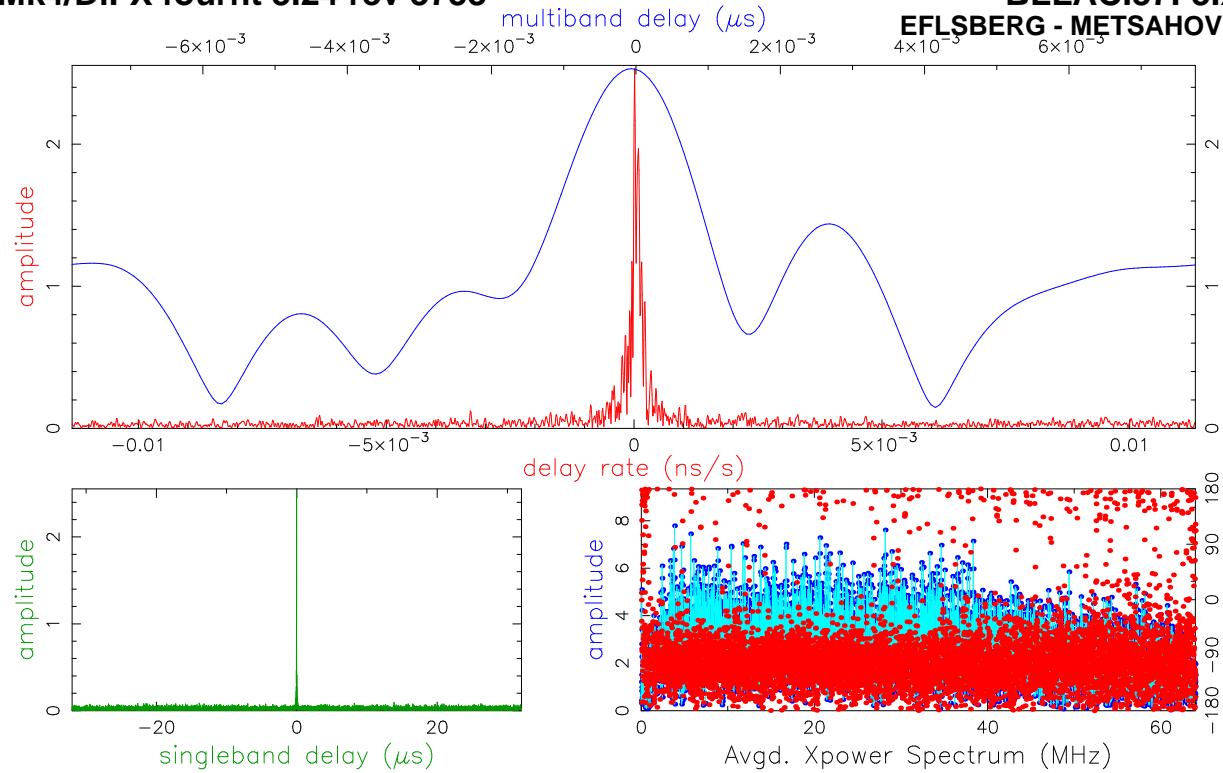
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	179.5	-178.9	-67.1	-157.4	-99.3	158.0	-146.4	169.0	Phase	-159.9
	1.0	0.9	0.6	0.9	0.9	0.8	0.9	1.0	Ampl.	0.9
	8186.8	8187.7	8187.2	8187.1	8187.1	8187.2	8187.2	8186.4	Sbd box	8187.5
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.52248097114E+03	Apriori delay (usec)	1.52250912651E+03	Resid mbdelay (usec)	3.09463E-03	+/-	3.4E-05
Sband delay (usec)	1.52248758501E+03	Apriori clock (usec)	-3.5526623E+01	Resid sbdelay (usec)	-2.15415E-02	+/-	2.7E-04
Phase delay (usec)	1.52250912135E+03	Apriori clockrate (us/s)	-3.3620003E-07	Resid phdelay (usec)	-5.15776E-06	+/-	1.2E-07
Delay rate (us/s)	-1.34900013714E-01	Apriori rate (us/s)	-1.34900028225E-01	Resid rate (us/s)	1.45106E-08	+/-	6.7E-10
Total phase (deg)	-103.2	Apriori accel (us/s/s)	-1.56055842122E-05	Resid phase (deg)	-159.9	+/-	3.6

ph/seg (deg)	58.3	RMS	8.6	Theor.	0.677 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.2	Search (2048X32)	0.652	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	51.7	Inc. seg. avg.	1.007	Inc. frq. avg.	0.858	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.4	Inc. frq. avg.	0.858			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
B: az 291.0 el 40.5 pa 53.4	Z: az 295.5 el 35.1 pa 37.3	u, v (fr/asec)	1017.668 -1760.917			Data rate(Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX	Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.20.37F3IX							simultaneous interpolator	



Fringe quality 2

SNR 121.0

Int time 299.882

Amp 2.555

Phase -26.7

PFD 0.0e+00

Delays (us)

SBD -0.024729

MBD -0.000086

Fringe rate (Hz)

0.001134

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. f241a

Exper # 1234

Yr:day 2024:109

Start 124500.00

Stop 125000.03

FRT 124730.00

Corr/FF/build

2024:110:093747

2024:110:095215

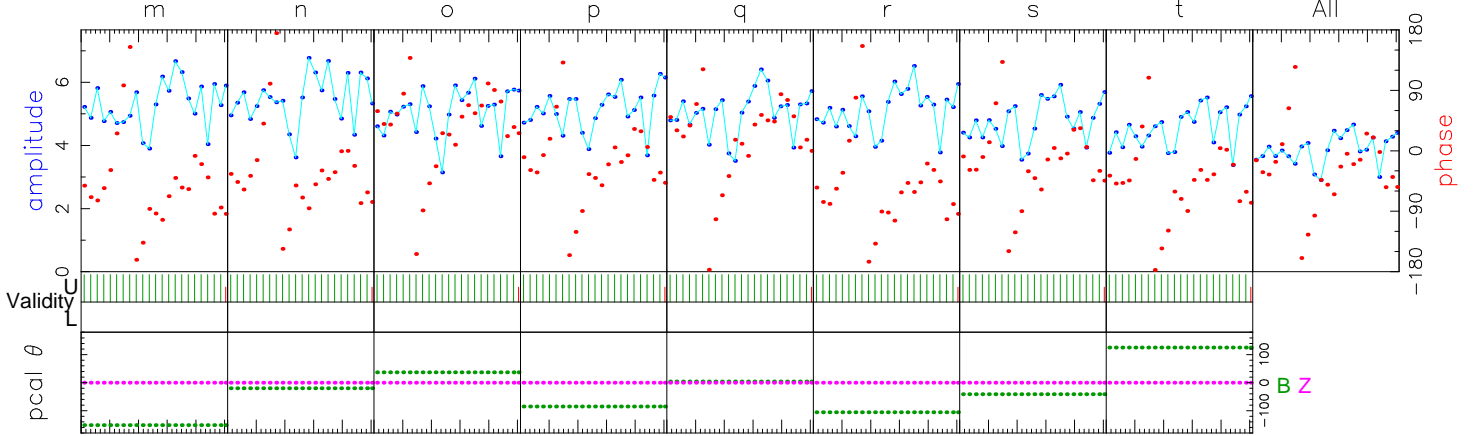
2023:314:152938

RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979897"

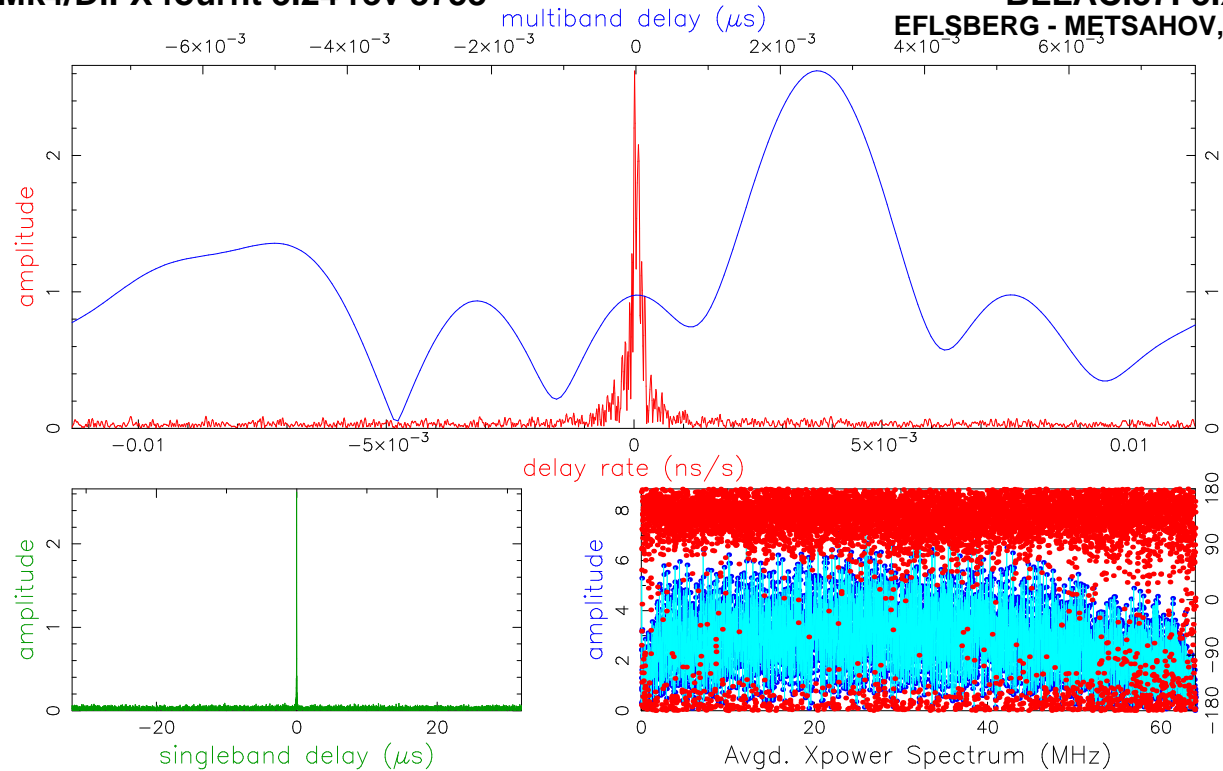
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.6	-47.0	47.2	-19.7	32.9	-68.7	-18.7	-48.6	Phase	-26.7
	3.4	3.6	3.2	3.4	3.3	3.4	3.1	3.0	Ampl.	3.3
	8186.6	8186.3	8186.7	8186.5	8186.3	8186.3	8186.1	8185.7	Sbd box	8186.7
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.52247779067E+03	Apriori delay (usec)	1.52250912651E+03	Resid mbdelay (usec)	-8.58422E-05	+/-	9.0E-06
Sband delay (usec)	1.52248439776E+03	Apriori clock (usec)	-3.5526623E+01	Resid sbdelay (usec)	-2.47288E-02	+/-	7.1E-05
Phase delay (usec)	1.52250912565E+03	Apriori clockrate (us/s)	-3.3620003E-07	Resid phdelay (usec)	-8.61600E-07	+/-	3.1E-08
Delay rate (us/s)	-1.34900015056E-01	Apriori rate (us/s)	-1.34900028225E-01	Resid rate (us/s)	1.31685E-08	+/-	1.8E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.56055842122E-05	Resid phase (deg)	-26.7	+/-	0.9

ph/seg (deg)	57.6	2.3	Search (2048X32)	2.511	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	54.6	4.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000	32.000	
ph/frq (deg)	47.2	1.3	Inc. seg. avg.	3.866	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	29.8	2.3	Inc. frq. avg.	3.295	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 8192 t_cohere infinite	dr window (ns/s)	-0.011	0.011
B: az 291.0 el 40.5 pa 53.4		Z: az 295.5 el 35.1 pa 37.3		u, v (fr/asec) 1017.668 -1760.917	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	
Control file: cf_1234_gmva		Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.2.37F3IX					

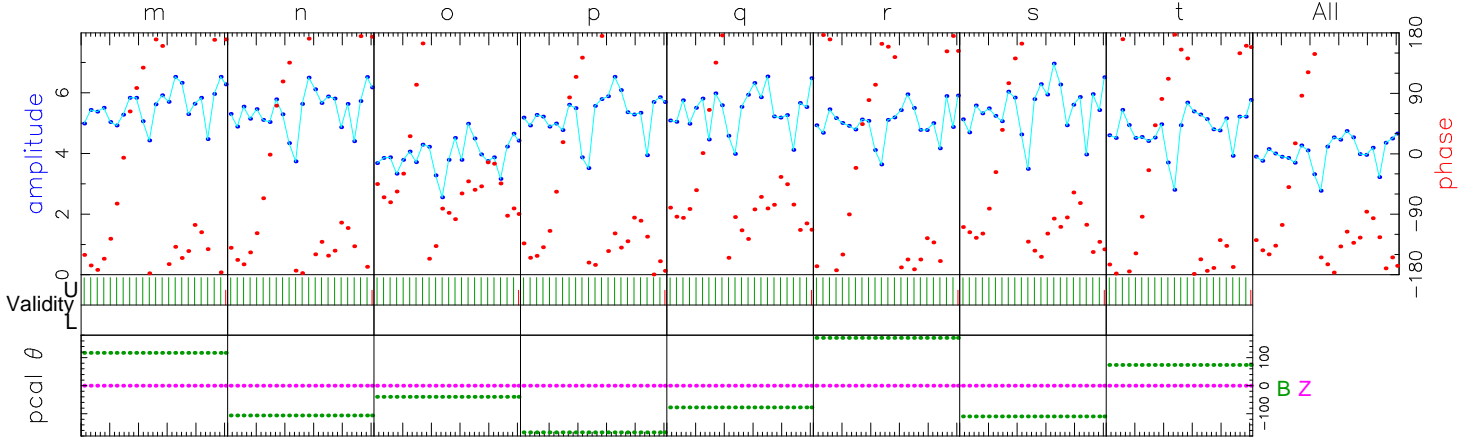


Fringe quality 2

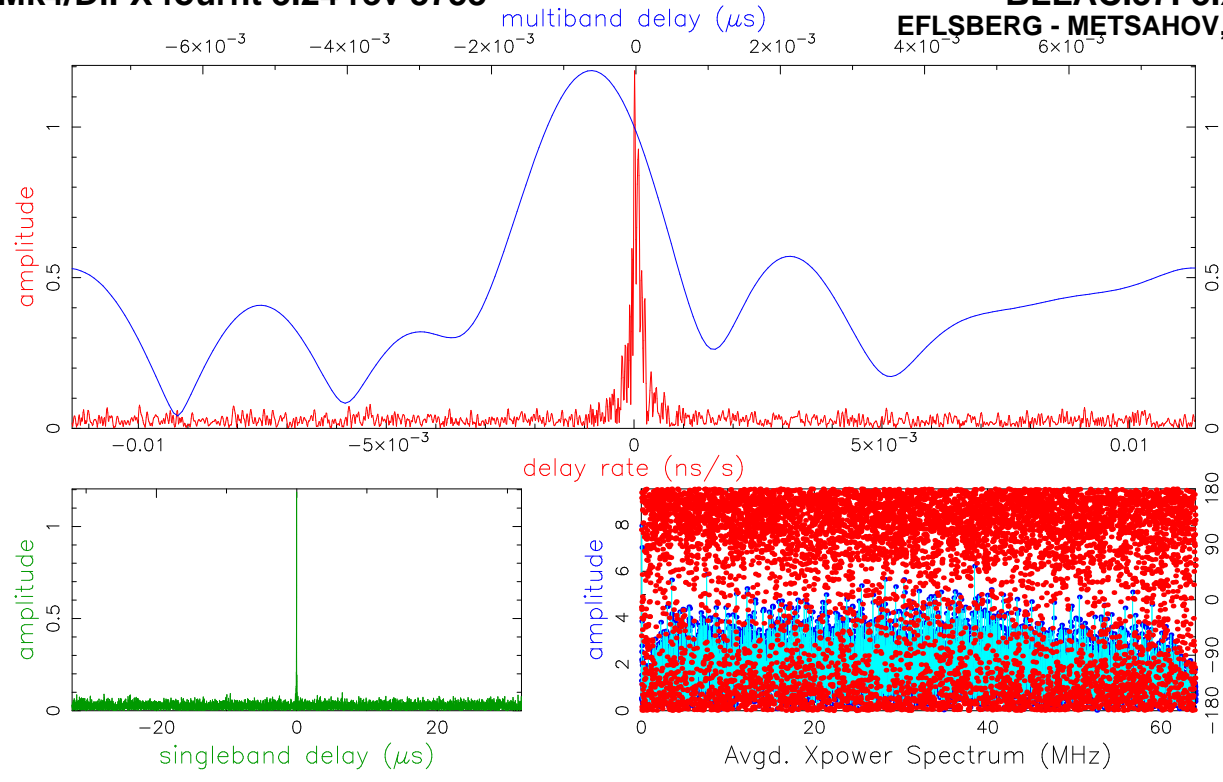
SNR 126.0
Int time 299.882
Amp 2.660
Phase -141.4
PFD 0.0e+00
Delays (us)
SBD -0.021779
MBD 0.002551
Fringe rate (Hz)
0.001149
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095338
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-164.0	-156.1	-64.6	-147.2	-89.1	-178.7	-118.5	178.9	Phase	-141.4	
	3.6	3.5	2.5	3.4	3.5	3.2	3.4	3.2	Ampl.	3.3	
	8187.0	8187.3	8187.5	8186.9	8187.2	8187.2	8187.0	8186.3	Sbd box	8187.4	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used		
B	0	0	0	0	0	0	0	0	PC freqs		
Z	0	0	0	0	0	0	0	0	PC freqs		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:Z	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Z	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	1.52248042726E+03		Apriori delay (usec)		1.52250912651E+03		Resid mbdelay (usec)		2.55075E-03	+/- 8.6E-06	
Sband delay (usec)	1.52248734701E+03		Apriori clock (usec)		-3.5526623E+01		Resid sbdelay (usec)		-2.17795E-02	+/- 6.8E-05	
Phase delay (usec)	1.52250912195E+03		Apriori clockrate (us/s)		-3.3620003E-07		Resid phdelay (usec)		-4.55987E-06	+/- 2.9E-08	
Delay rate (us/s)	-1.34900014886E-01		Apriori rate (us/s)		-1.34900028225E-01		Resid rate (us/s)		1.33386E-08	+/- 1.7E-10	
Total phase (deg)			Apriori accel (us/s/s)		-1.56055842122E-05		Resid phase (deg)		-141.4	+/- 0.9	
RMS	58.1	2.2	Amplitude		2.660 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	58.1	2.2	Search (2048X32)		2.597		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-32.000 32.000	
amp/seg (%)	54.5	3.8	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	46.4	1.3	Inc. seg. avg.		4.030		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	26.8	2.2	Inc. frq. avg.		3.291		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 291.0 el 40.5 pa 53.4	Z: az 295.5 el 35.1 pa 37.3		u, v (fr/asec)		1017.668 -1760.917				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.5.37F3IX								

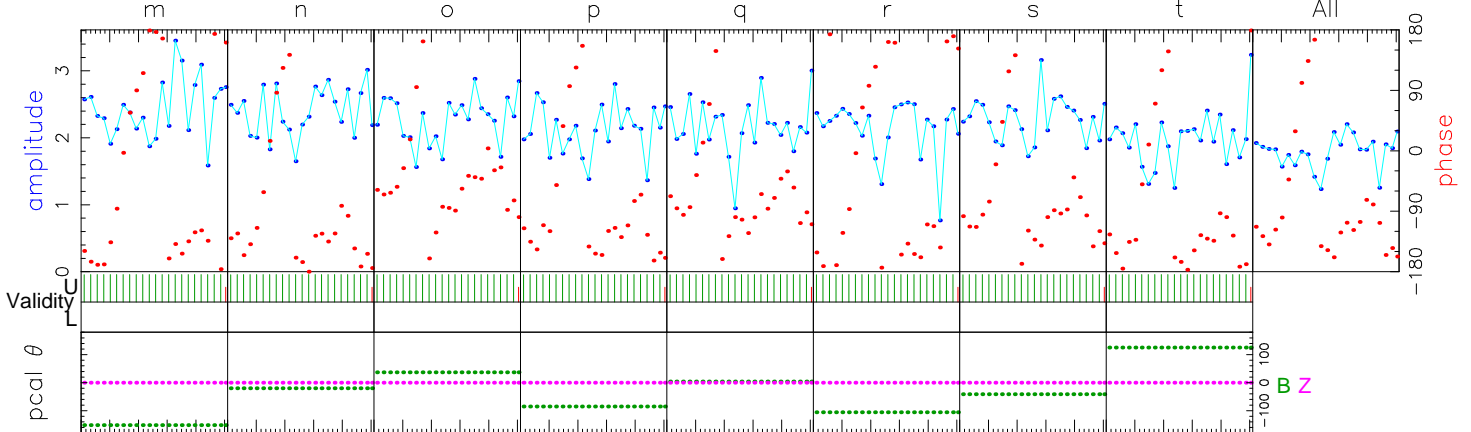


Fringe quality 2

SNR 57.0
Int time 299.882
Amp 1.204
Phase -126.3
PFD 0.0e+00
Delays (us)
SBD -0.025053
MBD -0.000656
Fringe rate (Hz) 0.001108
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095501
2023:314:152938
RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-162.0	-142.1	-59.9	-131.9	-83.4	-166.9	-107.4	-148.9	Phase	-126.3	
	1.6	1.6	1.6	1.4	1.4	1.3	1.5	1.3	Ampl.	1.5	
	8186.4	8186.2	8186.6	8186.2	8186.3	8186.2	8185.9	8185.6	Sbd box	8186.6	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used		
B	0	0	0	0	0	0	0	0	PC freqs		
Z	0	0	0	0	0	0	0	0	PC freqs		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:Z	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Z	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	1.52247722051E+03		Apriori delay (usec)		1.52250912651E+03		Resid mbdelay (usec)		-6.55998E-04	+/- 1.9E-05	
Sband delay (usec)	1.52248407301E+03		Apriori clock (usec)		-3.5526623E+01		Resid sbdelay (usec)		-2.50535E-02	+/- 1.5E-04	
Phase delay (usec)	1.52250912244E+03		Apriori clockrate (us/s)		-3.3620003E-07		Resid phdelay (usec)		-4.07151E-06	+/- 6.5E-08	
Delay rate (us/s)	-1.34900015357E-01		Apriori rate (us/s)		-1.34900028225E-01		Resid rate (us/s)		1.28681E-08	+/- 3.7E-10	
Total phase (deg)			Apriori accel (us/s/s)		-1.56055842122E-05		Resid phase (deg)		-126.3	+/- 2.0	
	RMS	Theor.	Amplitude	1.204 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	57.4	4.8	Search (2048X32)	1.172		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-32.000 32.000	
amp/seg (%)	52.2	8.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	41.4	2.8	Inc. seg. avg.	1.779		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	22.6	5.0	Inc. frq. avg.	1.457		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite		ion window (TEC)	0.00 0.00
B: az 291.0 el 40.5 pa 53.4	Z: az 295.5 el 35.1 pa 37.3		u,v (fr/asec) 1017.668 -1760.917						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/BZ..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/BZ.W.8.37F3IX								

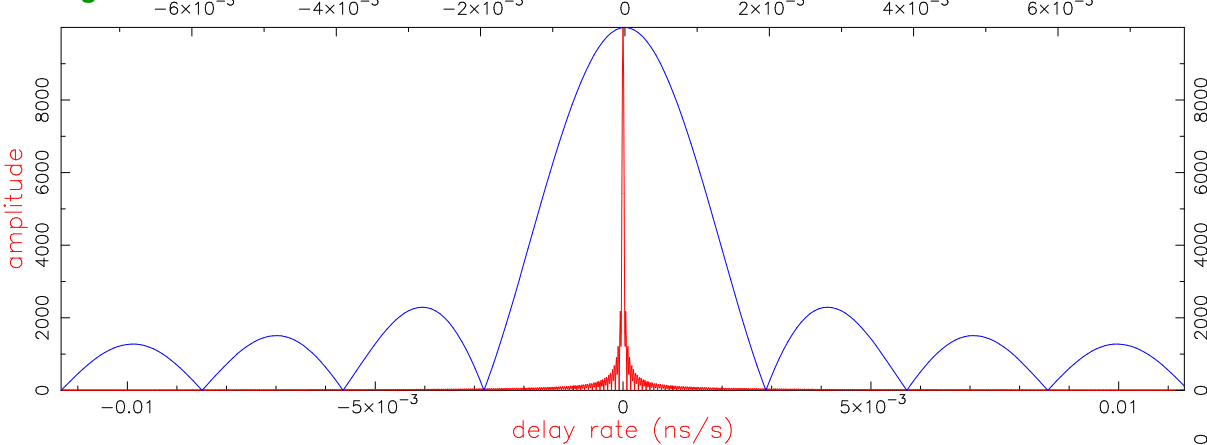
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, XX

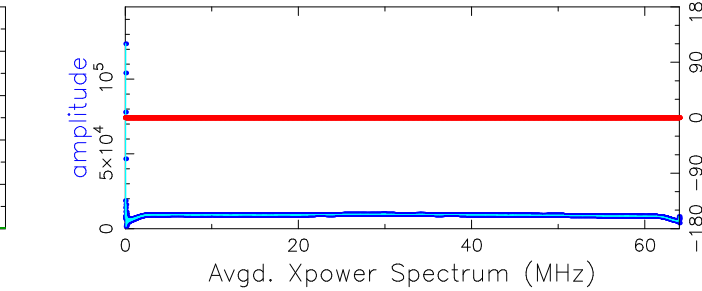
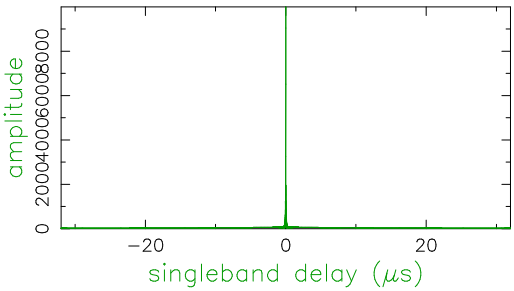
ONSALA60 - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



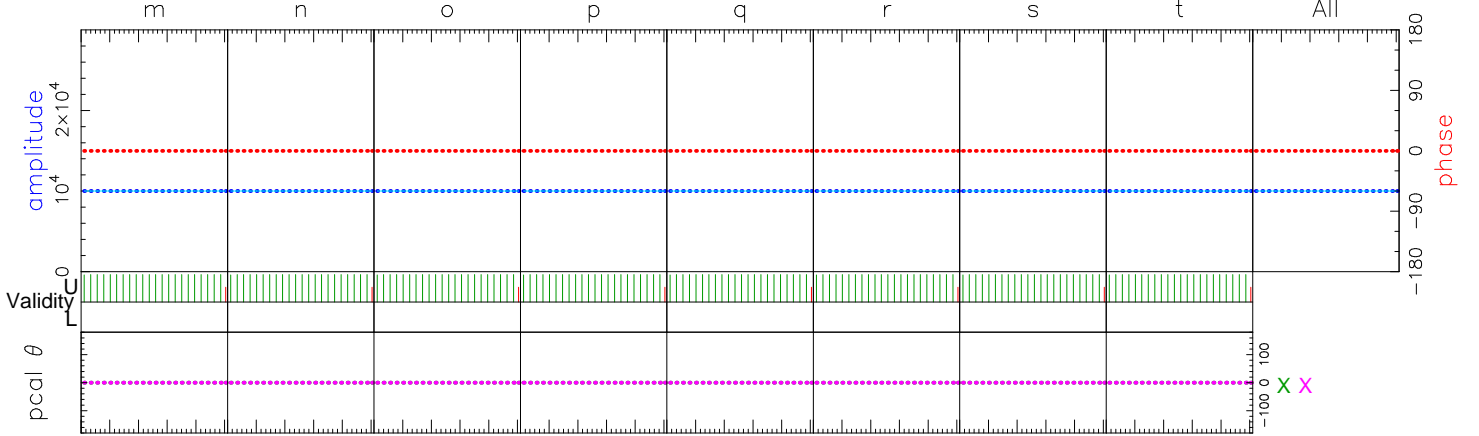
Fringe quality 9

SNR 473502.1
 Int time 299.812
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:112044
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
X	0	0	0	0	0	0	0	0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.3E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.8E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 7.8E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 4.5E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 288.7 el 40.0 pa 43.6 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/XX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/XX.W.33.37F3IX

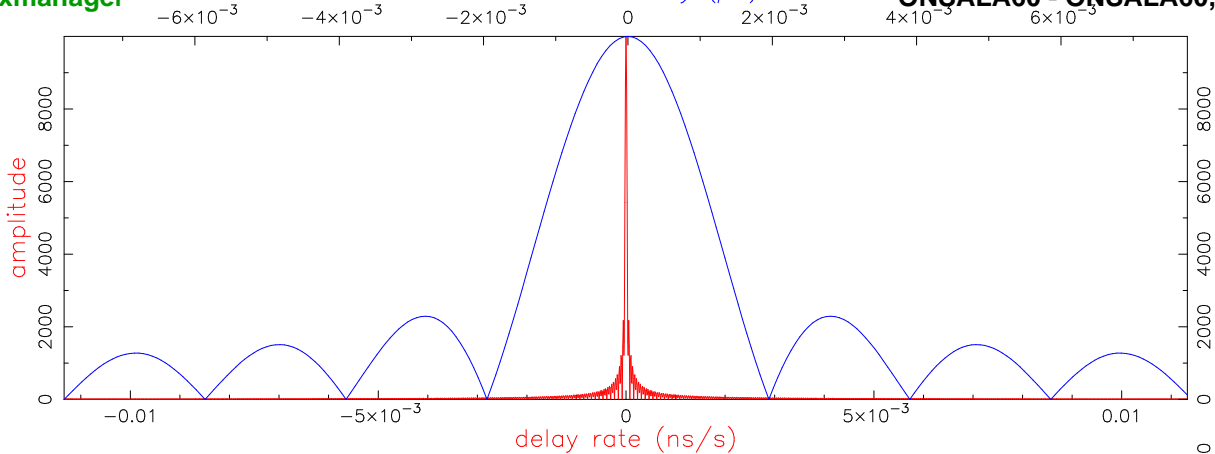
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, XX

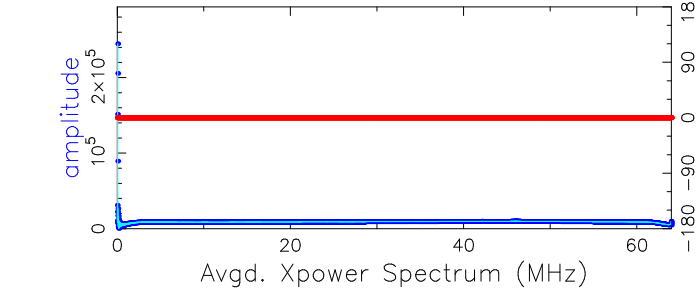
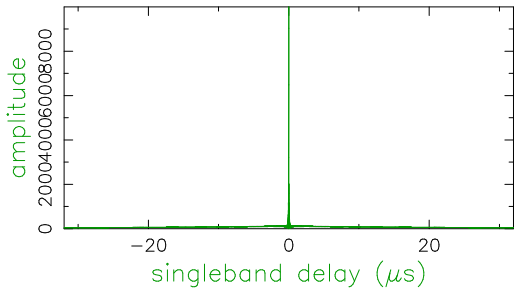
ONŞALA60 - ONŞALA60, fgroup W, pol RR

multiband delay (μ s)



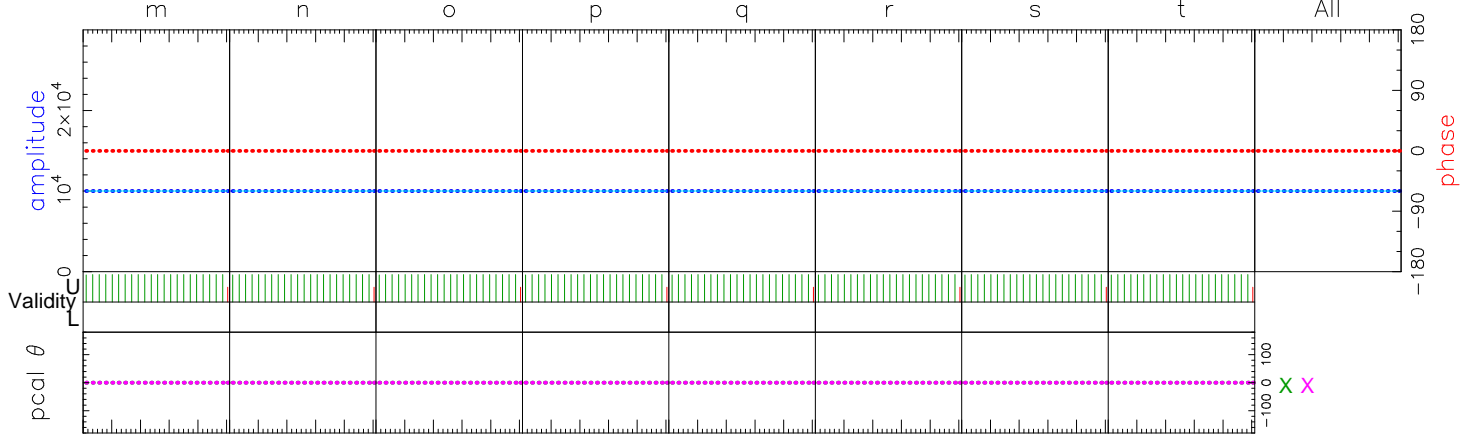
Fringe quality 9

SNR 473502.1
 Int time 299.812
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:112159
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
X	0	0	0	0	0	0	0	0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.3E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.8E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 7.8E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 4.5E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 288.7 el 40.0 pa 43.6 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/XX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/XX.W.34.37F3IX

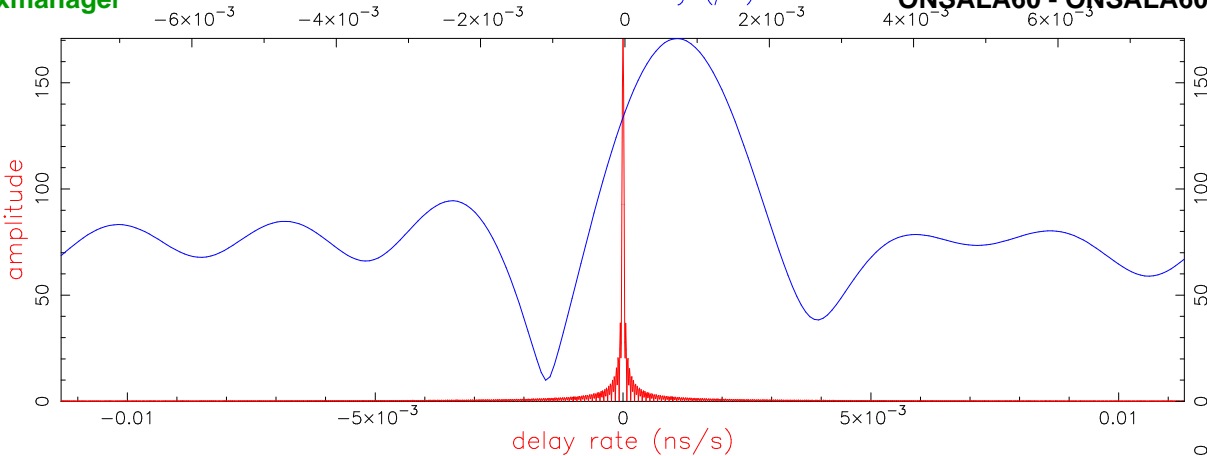
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

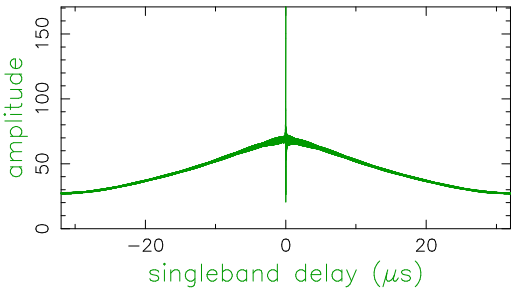
BLLAC.37F3IX, No0004, XX

ONSALA60 - ONSALA60, fgroup W, pol LR

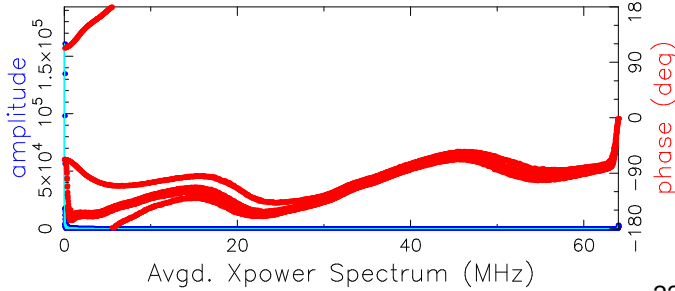
multiband delay (μ s)



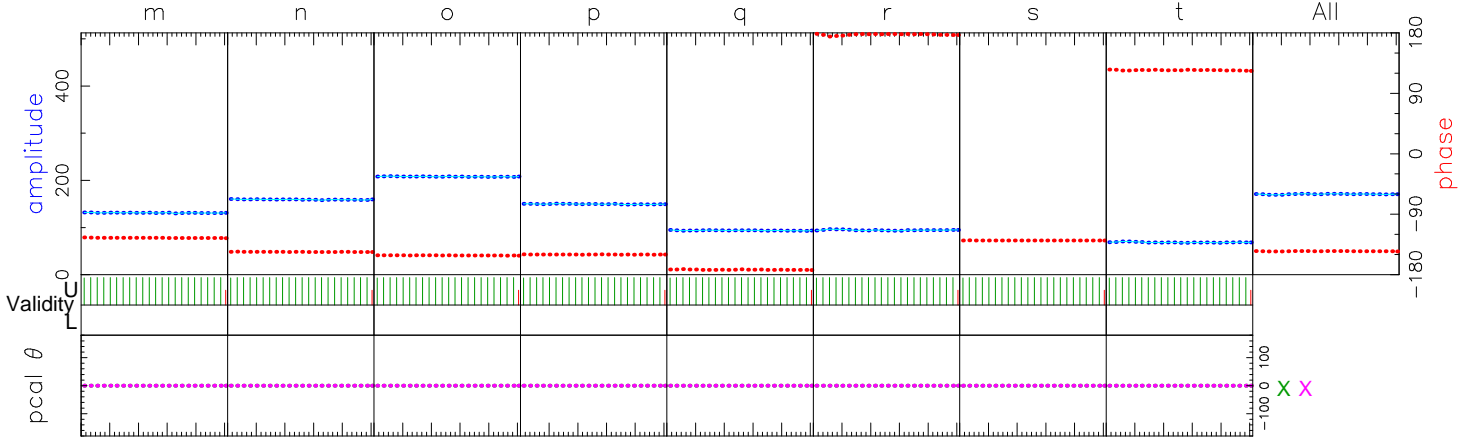
Fringe quality 5
 Error code G
 SNR 8092.3
 Int time 299.812
 Amp 170.903
 Phase -145.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.003665
 MBD 0.000742
 Fringe rate (Hz)
 0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:112314
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

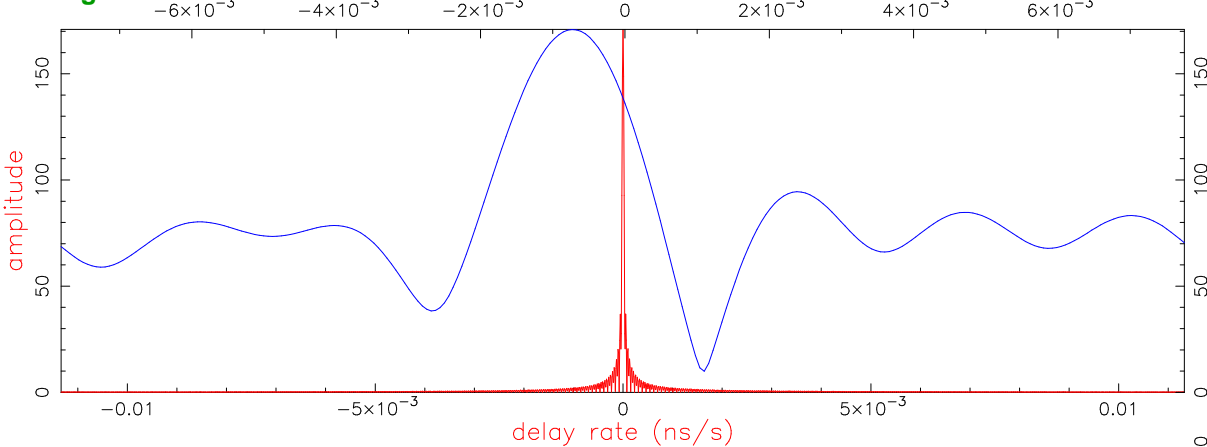


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-125.1	-146.0	-151.2	-149.9	-172.5	177.3	-129.0	124.3	Phase	-145.0
	131.2	159.3	208.0	149.8	93.9	94.6	593.5	68.7	Ampl.	187.4
	8192.2	8202.3	8202.2	8192.9	8201.3	8201.8	8197.4	8199.3	Sbd box	8192.1
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	

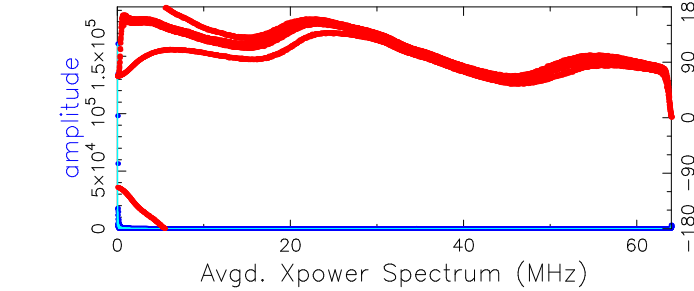
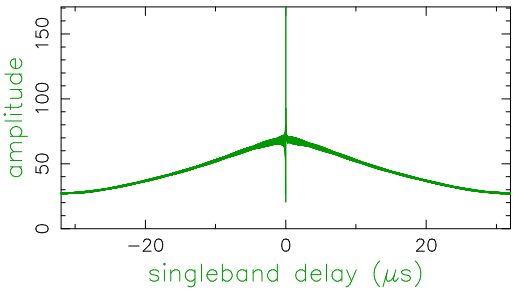
Group delay (usec) (SBD)	7.418125000000E-04	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	7.41813E-04	+/-	1.3E-07
Sband delay (usec)	-3.665250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	-3.66525E-03	+/-	1.1E-06
Phase delay (usec)	-4.67477336943E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	-4.67477E-06	+/-	4.6E-10
Delay rate (us/s)	4.39305724142E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	4.39306E-11	+/-	2.6E-12
Total phase (deg)	-145.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	-145.0	+/-	0.0

ph/seg (deg) 0.2 0.0 Search (2048X32) 170.903 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.4 0.1 Interp. 167.079 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 43.0 0.0 Inc. seg. avg. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 93.5 0.0 Inc. frq. avg. 170.814 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 X: az 288.7 el 40.0 pa 43.6 X: az 288.7 el 40.0 pa 43.6 u, v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/XX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/XX.W.35.37F3IX simultaneous interpolator

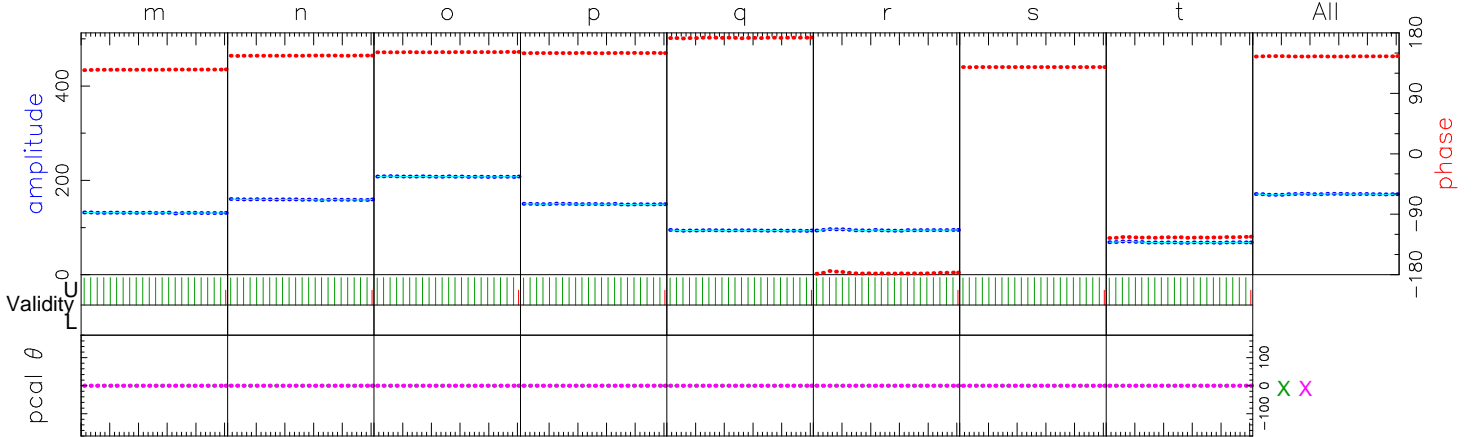
multiband delay (μ s)



Fringe quality 5
 Error code G
 SNR 8092.3
 Int time 299.812
 Amp 170.903
 Phase 145.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003665
 MBD -0.000742
 Fringe rate (Hz)
 -0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:112431
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

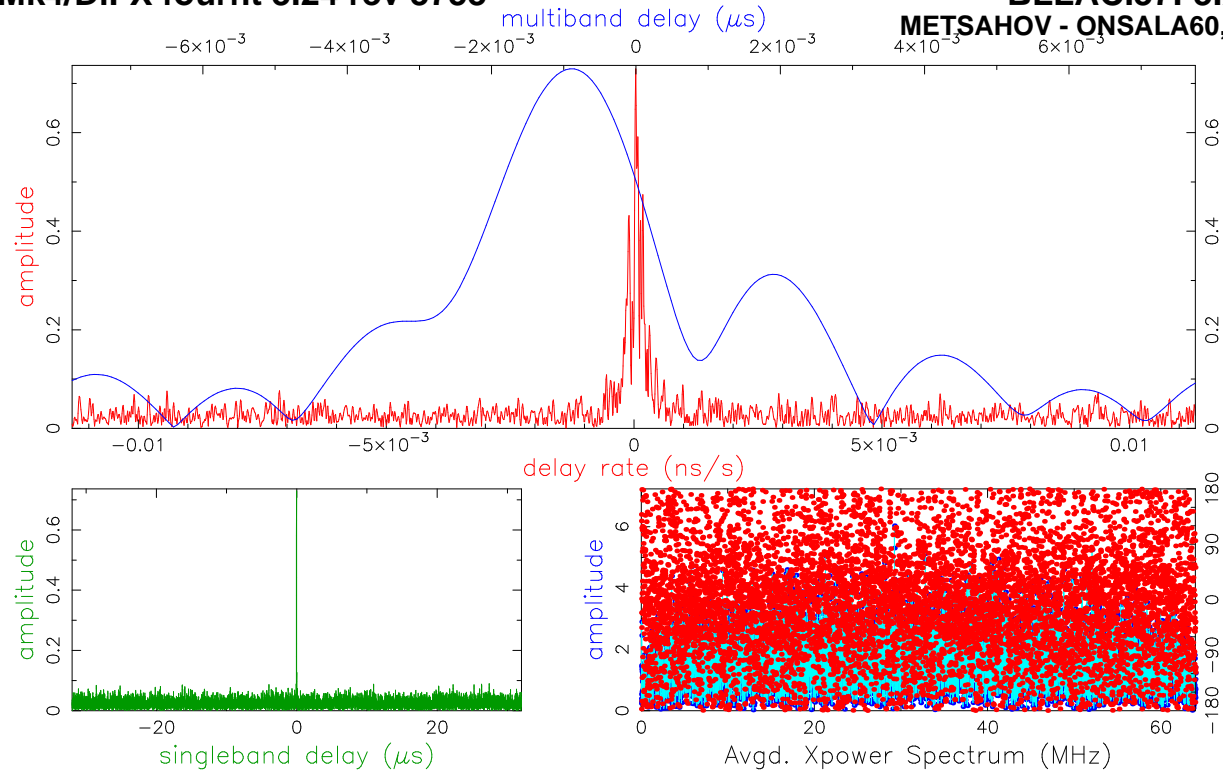


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	125.1	146.0	151.2	149.9	172.5	-177.3	129.0	-124.3	Phase	145.0
	131.2	159.3	208.0	149.8	93.9	94.6	593.5	68.7	Ampl.	187.4
	8193.8	8183.7	8183.8	8193.1	8184.7	8184.2	8188.6	8186.7	Sbd box	8193.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-7.41812500000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-7.41813E-04	+/-	1.3E-07
Sband delay (usec)	3.66525000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.66525E-03	+/-	1.1E-06
Phase delay (usec)	4.67477336947E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.67477E-06	+/-	4.6E-10
Delay rate (us/s)	-4.39305724142E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-4.39306E-11	+/-	2.6E-12
Total phase (deg)	145.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	145.0	+/-	0.0

ph/seg (deg)	RMS 0.2	Theor. 0.0	Amplitude	170.903 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.4	0.1	Search (2048X32)	167.079	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	43.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	93.5	0.0	Inc. seg. avg.	170.814	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
X: az 288.7 el 40.0 pa 43.6			Inc. frq. avg.	187.379	Data rate(Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva			u, v (fr/asec)	0.000 0.000				simultaneous interpolator	

Input file: /Exps/f241a/FRINGE/1234/No0004/XX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/XX.W.36.37F3IX

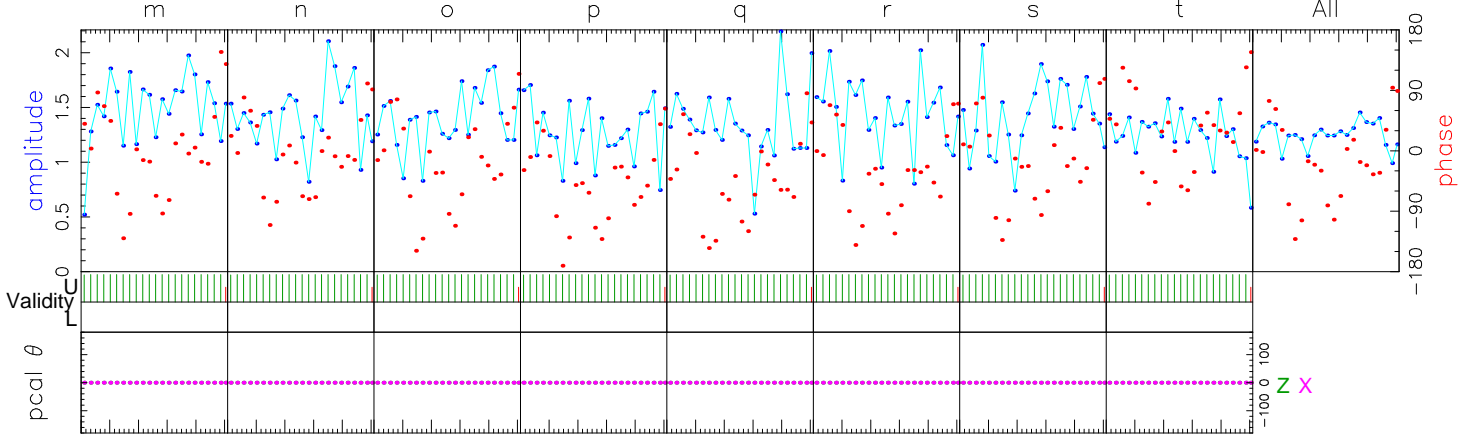


Fringe quality 5

SNR 34.9
Int time 299.812
Amp 0.737
Phase -18.2
PFD 0.0e+00
Delays (us)
SBD -0.032570
MBD -0.000919
Fringe rate (Hz) 0.003152
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. f241a
Exper # 1234
Yr:day 2024:109
Start 124500.00
Stop 125000.03
FRT 124730.00
Corr/FF/build
2024:110:093747
2024:110:095655
2023:314:152938
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.4	-4.6	-14.9	-46.1	-46.7	-36.1	-14.6	24.4	Phase	-18.2
	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.7	Ampl.	0.8
	8184.5	8184.3	8184.3	8184.9	8185.3	8184.7	8185.1	8185.3	Sbd box	8184.7
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.55693286826E+03					-1.55690069951E+03			Resid mbdelay (usec)	-9.18745E-04 +/- 3.1E-05
Sband delay (usec)	-1.55693327001E+03					-1.1249574E+02			Resid sbdelay (usec)	-3.25705E-02 +/- 2.5E-04
Phase delay (usec)	-1.55690070010E+03					-7.2169202E-07			Resid phdelay (usec)	-5.86935E-07 +/- 1.1E-07
Delay rate (us/s)	3.94340580216E-02					3.94340214303E-02			Resid rate (us/s)	3.65913E-08 +/- 6.1E-10
Total phase (deg)			-110.3			9.62745969708E-06			Resid phase (deg)	-18.2 +/- 3.3

ph/seg (deg) 59.2 7.9 Search (2048X32) 0.720 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.8 13.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 26.1 4.6 Inc. seg. avg. 1.242 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.9 8.1 Inc. frq. avg. 0.785 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 295.5 el 35.1 pa 37.3 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) -288.710 861.228 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.12.37F3IX simultaneous interpolator

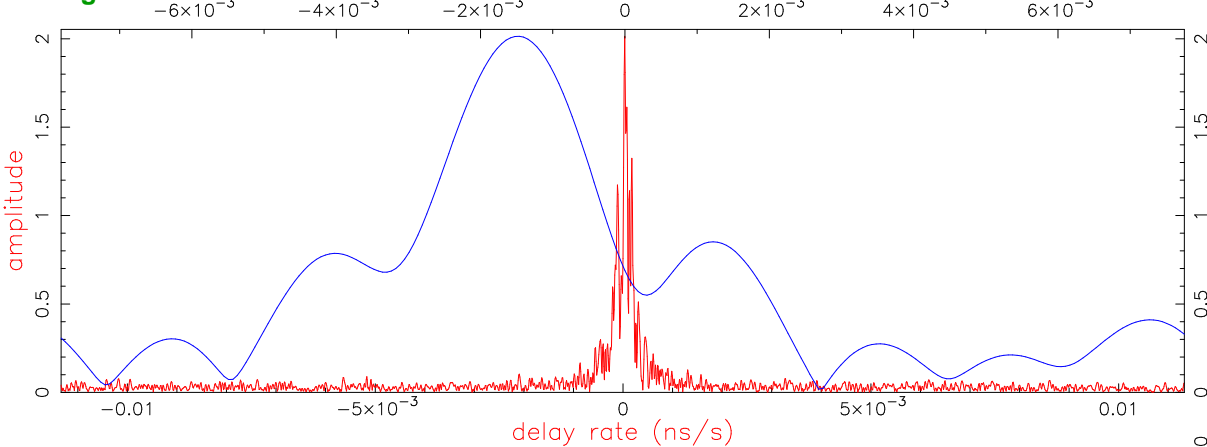
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, ZX

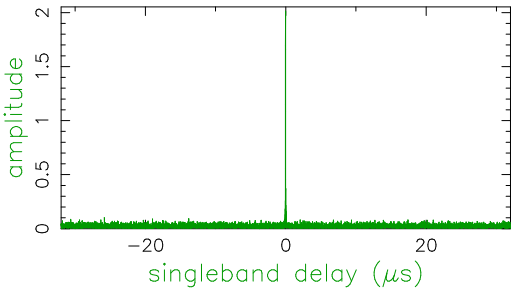
METSAHOV - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

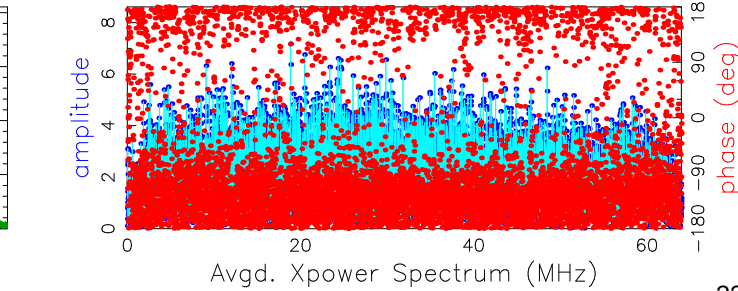


Fringe quality 3

SNR 97.2
 Int time 299.812
 Amp 2.053
 Phase -141.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.033307
 MBD -0.001449
 Fringe rate (Hz)
 0.003182
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



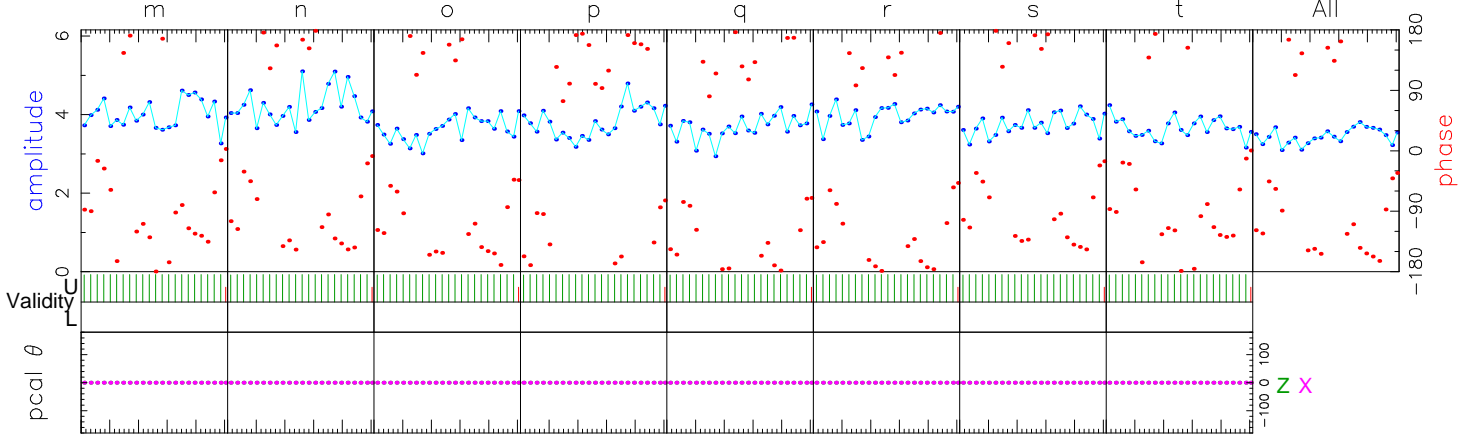
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111517
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.4	-130.3	-141.4	175.3	-170.0	-162.0	-126.1	-111.5	Phase	-141.7
	2.4	2.4	2.2	2.2	2.1	2.2	2.2	2.1	Ampl.	2.2
	8184.4	8184.3	8184.3	8184.3	8185.1	8184.7	8185.1	8184.8	Sbd box	8184.5
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.55693339876E+03	Apriori delay (usec)	-1.55690069951E+03	Resid mbdelay (usec)	-1.44925E-03	+/-	1.1E-05
Sband delay (usec)	-1.55693400676E+03	Apriori clock (usec)	-1.1249574E+02	Resid sbdelay (usec)	-3.33073E-02	+/-	8.9E-05
Phase delay (usec)	-1.55690070408E+03	Apriori clockrate (us/s)	-7.2169202E-07	Resid phdelay (usec)	-4.56977E-06	+/-	3.8E-08
Delay rate (us/s)	3.94340583752E-02	Apriori rate (us/s)	3.94340214303E-02	Resid rate (us/s)	3.69449E-08	+/-	2.2E-10
Total phase (deg)	-233.9	Apriori accel (us/s/s)	9.62745969708E-06	Resid phase (deg)	-141.7	+/-	1.2

ph/seg (deg)	58.0	2.8	Search (2048X32)	1.988	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	68.8	4.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.6	1.7	Inc. seg. avg.	3.449	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	10.0	2.9	Inc. frq. avg.	2.229	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 295.5 el 35.1 pa 37.3 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) -288.710 861.228 simultaneous interpolator

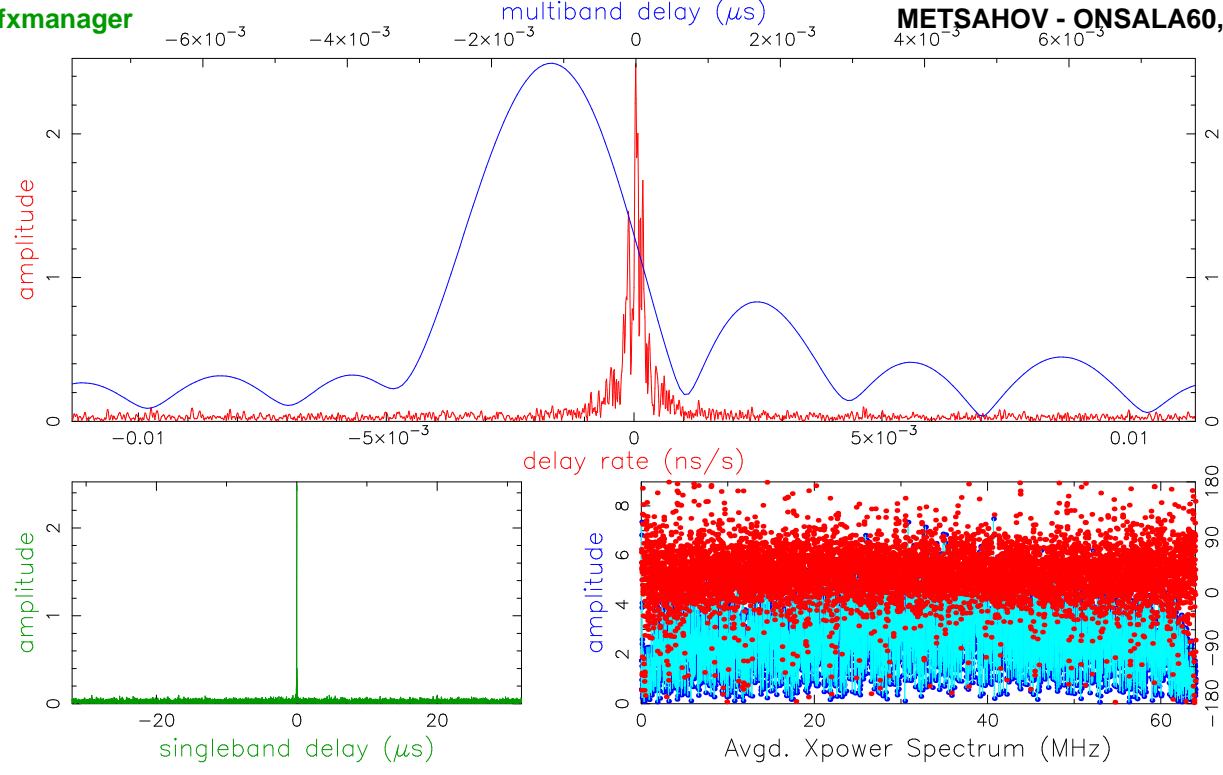
Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.29.37F3IX

Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol RR

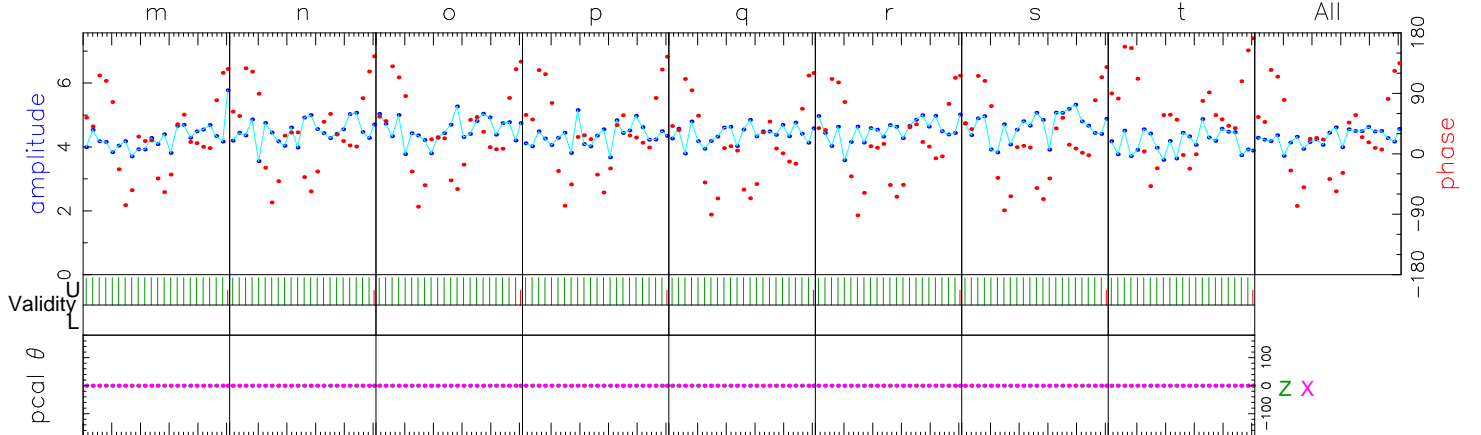


Fringe quality 4

SNR 119.6
 Int time 299.812
 Amp 2.525
 Phase 27.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.001583
 MBD -0.001215
 Fringe rate (Hz) 0.003227
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build 2024:110:093747
 2024:110:111637
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	27.9	30.7	28.9	30.8	11.4	17.2	19.2	58.5	Phase	27.6
	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.3	Ampl.	2.6
	8192.2	8192.4	8192.5	8192.7	8192.6	8192.7	8193.0	8193.0	Sbd box	8192.6
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.55690191407E+03 Apriori delay (usec) -1.55690069951E+03 Resid mbdelay (usec) -1.21456E-03 +/- 9.1E-06
 Sband delay (usec) -1.55690228251E+03 Apriori clock (usec) -1.1249574E+02 Resid sbdelay (usec) -1.58300E-03 +/- 7.2E-05
 Phase delay (usec) -1.55690069862E+03 Apriori clockrate (us/s) -7.2169202E-07 Resid phdelay (usec) 8.89024E-07 +/- 3.1E-08
 Delay rate (us/s) 3.94340588889E-02 Apriori rate (us/s) 3.94340214303E-02 Resid rate (us/s) 3.74586E-08 +/- 1.8E-10
 Total phase (deg) -64.6 Apriori accel (us/s/s) 9.62745969708E-06 Resid phase (deg) 27.6 +/- 1.0

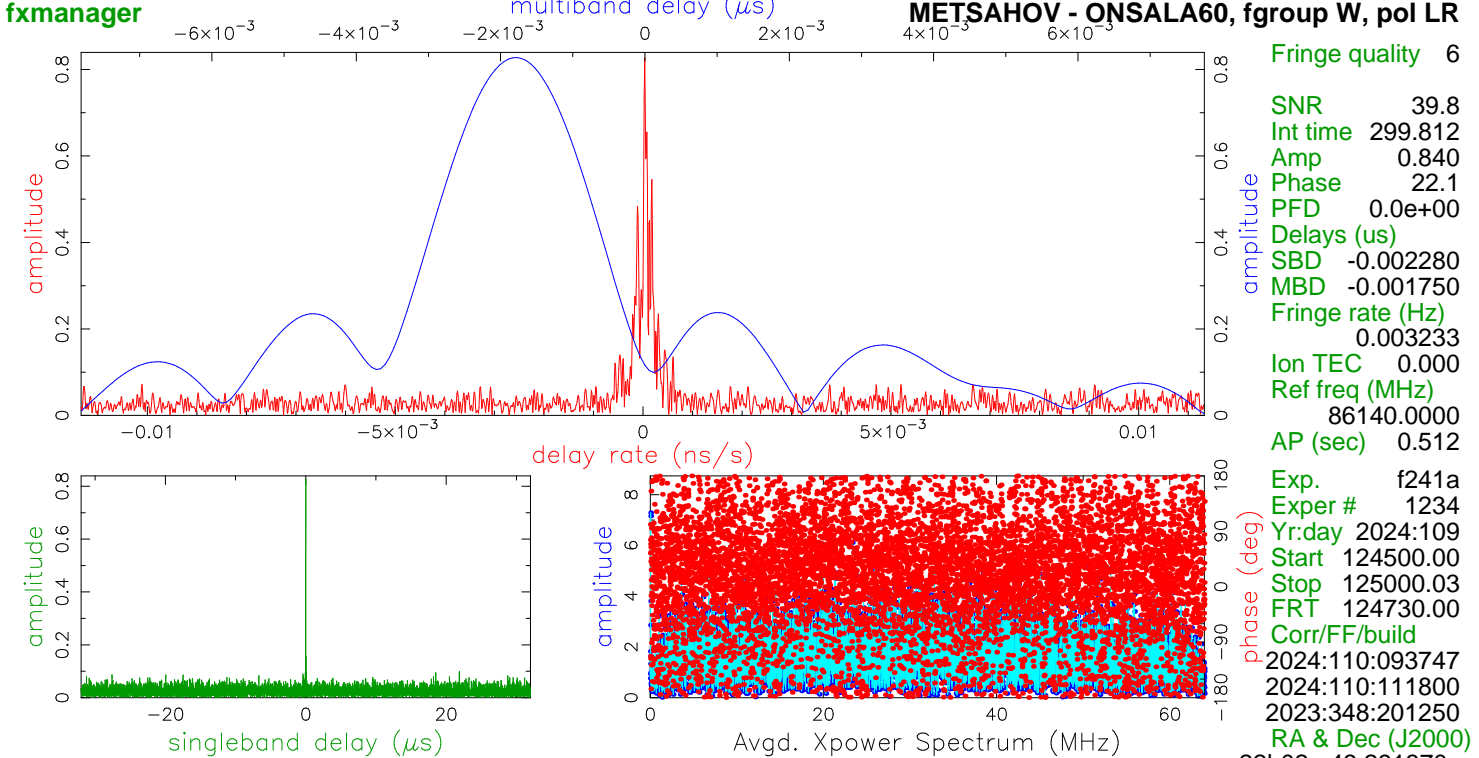
RMS Theor. Amplitude 2.525 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.9 2.3 Search (2048X32) 2.406 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 amp/seg (%) 70.6 4.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.4 1.4 Inc. seg. avg. 4.290 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 3.5 2.4 Inc. frq. avg. 2.553 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 295.5 el 35.1 pa 37.3 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) -288.710 861.228 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.30.37F3IX

Mk4/DiFX fourfit 3.24 rev 3753

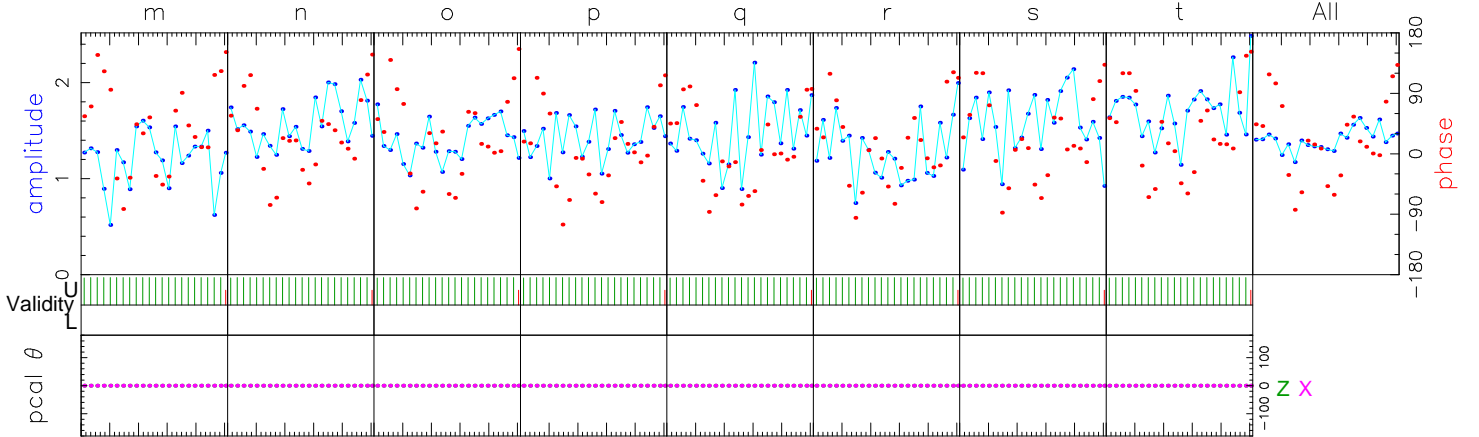
fxmanager

BLLAC.37F3IX, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



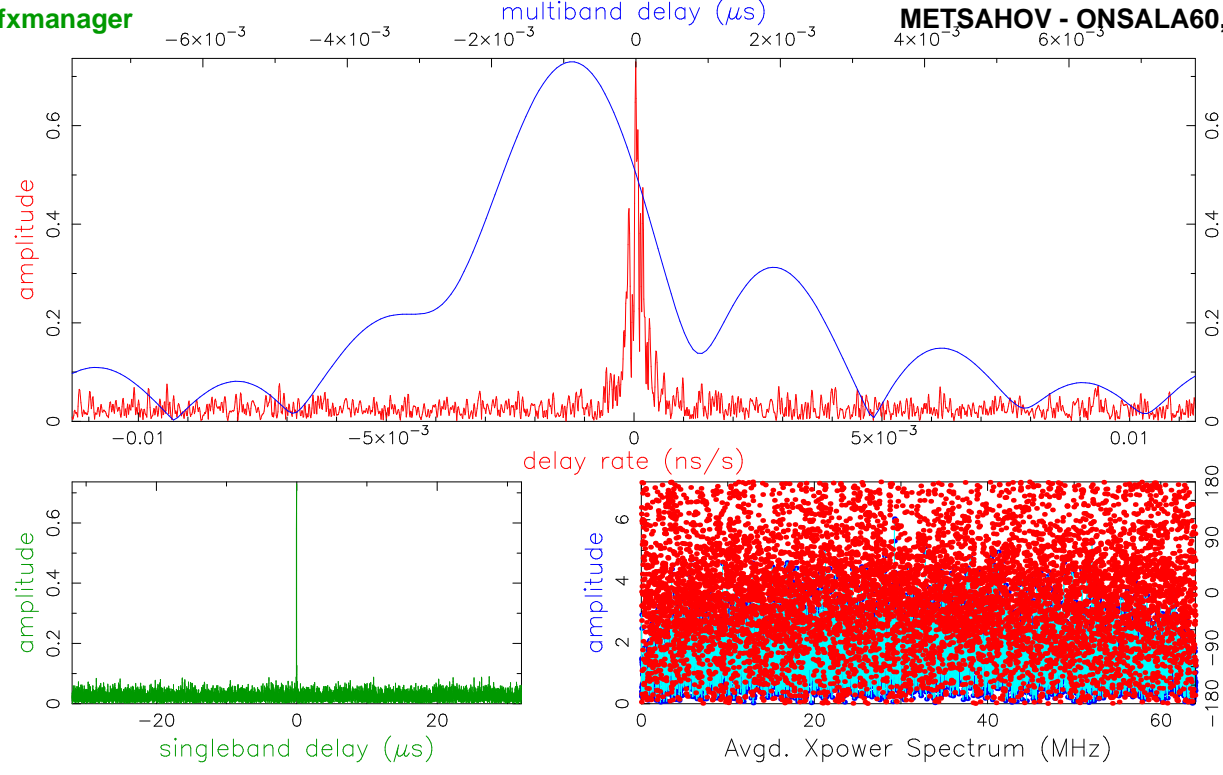
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	37.9	29.7	26.6	3.6	8.5	16.2	21.5	33.0	Phase	22.1
	0.7	1.0	0.8	0.8	0.9	0.7	0.9	0.9	Ampl.	0.8
	8192.0	8192.3	8192.3	8192.8	8192.1	8193.1	8192.5	8192.7	Sbd box	8192.4
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.55690244982E+03					-1.55690069951E+03			Resid mbdelay (usec)	-1.75031E-03 +/- 2.7E-05
Sband delay (usec)	-1.55690297926E+03					-1.1249574E+02			Resid sbdelay (usec)	-2.27975E-03 +/- 2.2E-04
Phase delay (usec)	-1.55690069880E+03					-7.2169202E-07			Resid phdelay (usec)	7.11236E-07 +/- 9.3E-08
Delay rate (us/s)	3.94340589647E-02					3.94340214303E-02			Resid rate (us/s)	3.75344E-08 +/- 5.4E-10
Total phase (deg)			-70.1			9.62745969708E-06			Resid phase (deg)	22.1 +/- 2.9
	RMS	Theor.	Amplitude	0.840 +/- 0.021					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.0	6.9	Search (2048X32)	0.804					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	69.1	12.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	13.0	4.1	Inc. seg. avg.	1.400					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	mb window (us) -0.008 0.008
amp/frq (%)	13.4	7.1	Inc. frq. avg.	0.841					Data rate(Mb/s): 2048	nlags: 8192_t_cohere infinite
Z: az 295.5 el 35.1 pa 37.3			X: az 288.7 el 40.0 pa 43.6			u,v (fr/asec) -288.710 861.228				ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX			Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.31.37F3IX				simultaneous interpolator

Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol RL

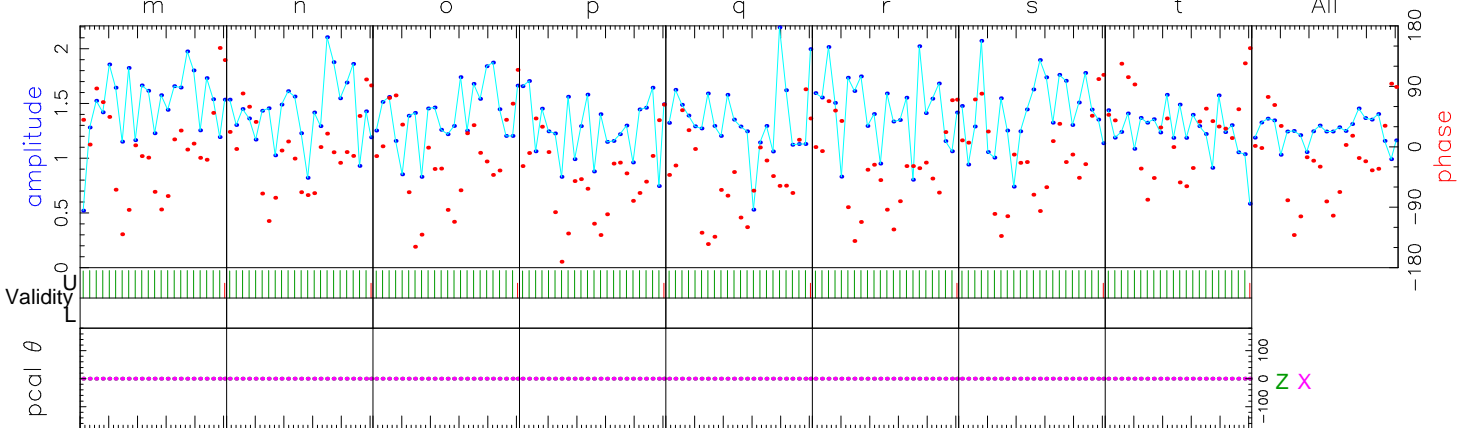


Fringe quality 5

SNR 34.9
 Int time 299.812
 Amp 0.737
 Phase -18.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.032570
 MBD -0.000919
 Fringe rate (Hz) 0.003152
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111923
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

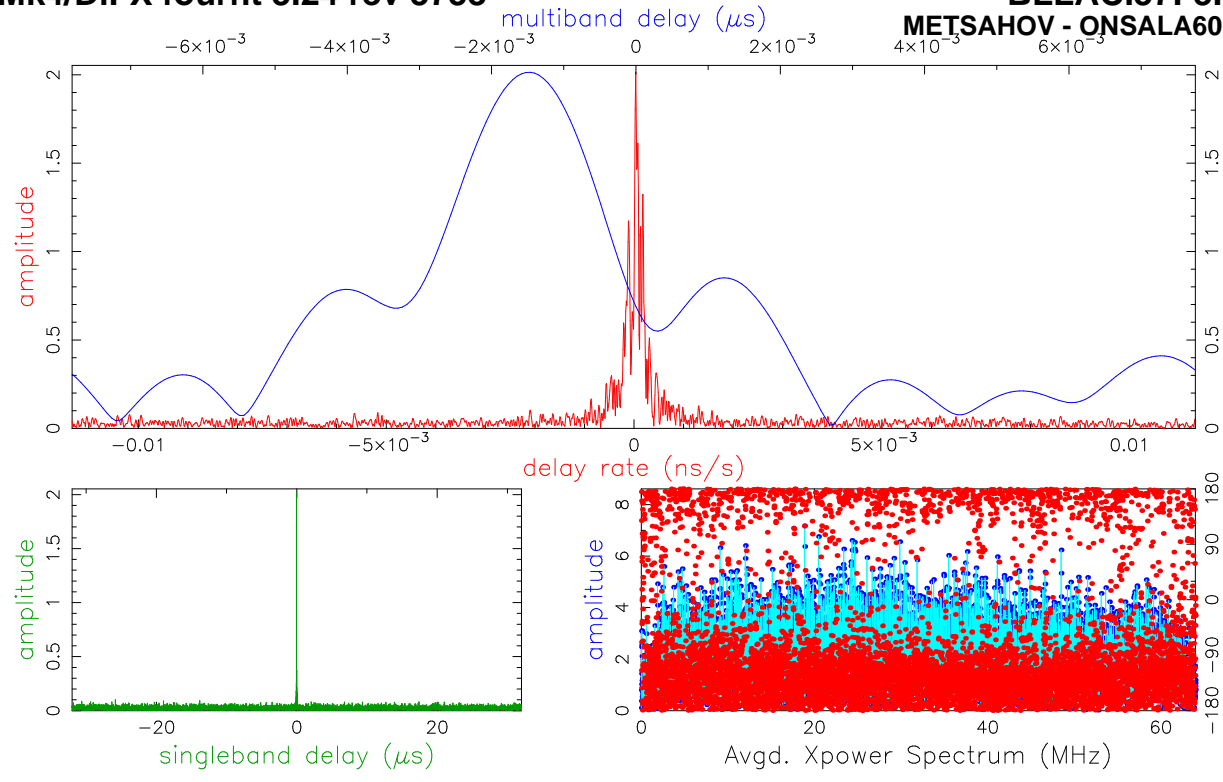


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.4	-4.6	-14.9	-46.1	-46.7	-36.1	-14.6	24.4	Phase	-18.2
	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.7	Ampl.	0.8
	8184.5	8184.3	8184.3	8184.9	8185.3	8184.7	8185.1	8185.3	Sbd box	8184.7
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.55693286826E+03		Apriori delay (usec)		-1.55690069951E+03		Resid mbdelay (usec)		-9.18745E-04	+/- 3.1E-05
Sband delay (usec)	-1.55693327001E+03		Apriori clock (usec)		-1.1249574E+02		Resid sbdelay (usec)		-3.25705E-02	+/- 2.5E-04
Phase delay (usec)	-1.55690070010E+03		Apriori clockrate (us/s)		-7.2169202E-07		Resid phdelay (usec)		-5.86935E-07	+/- 1.1E-07
Delay rate (us/s)	3.94340580216E-02		Apriori rate (us/s)		3.94340214303E-02		Resid rate (us/s)		3.65913E-08	+/- 6.1E-10
Total phase (deg)			Apriori accel (us/s/s)		9.62745969708E-06		Resid phase (deg)		-18.2	+/- 3.3

ph/seg (deg) 59.2 7.9 Search (2048X32) 0.720 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.8 13.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 26.1 4.6 Inc. seg. avg. 1.242 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.9 8.1 Inc. frq. avg. 0.785 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 295.5 el 35.1 pa 37.3 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) -288.710 861.228 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.32.37F3IX

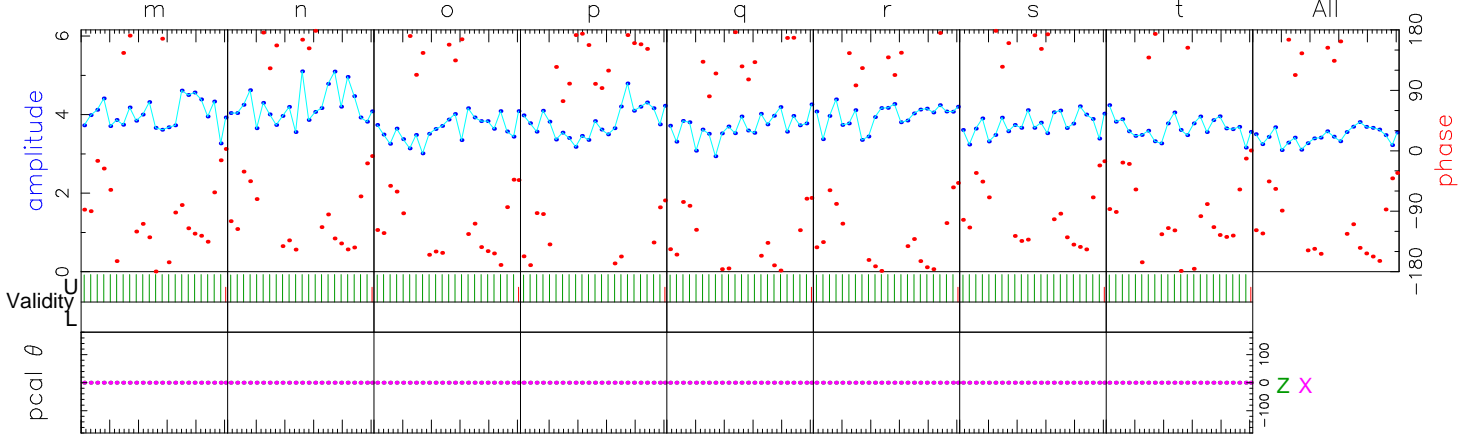
Mk4/DiFX fourfit 3.24 rev 3753

BLLAC.37F3IX, No0004, ZX
 METSAHOV - ONSALA60, fgroup W, pol LL



Fringe quality 3
 SNR 97.2
 Int time 299.812
 Amp 2.053
 Phase -141.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.033307
 MBD -0.001449
 Fringe rate (Hz) 0.003182
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:095223
 2023:314:152938
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

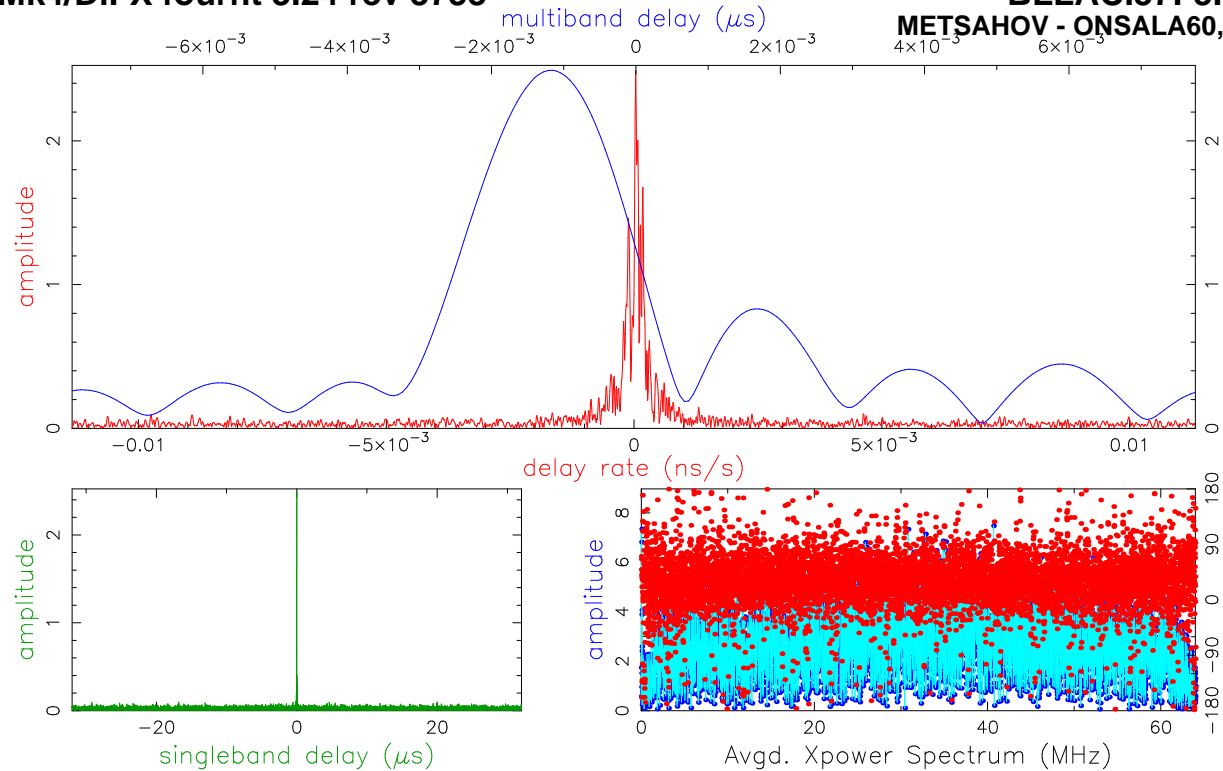


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All				
	-111.4	-130.3	-141.4	175.3	-170.0	-162.0	-126.1	-111.5	Phase	-141.7				
	2.4	2.4	2.2	2.2	2.1	2.2	2.2	2.1	Ampl.	2.2				
	8184.4	8184.3	8184.3	8184.3	8185.1	8184.7	8185.1	8184.8	Sbd box	8184.5				
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used					
Z	0	0	0	0	0	0	0	0	PC freqs					
X	0	0	0	0	0	0	0	0	PC freqs					
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000						
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.55693339876E+03								Apriori delay (usec)	-1.55690069951E+03	Resid mbdelay (usec)	-1.44925E-03	+/-	1.1E-05
Sband delay (usec)	-1.55693400676E+03								Apriori clock (usec)	-1.1249574E+02	Resid sbdelay (usec)	-3.33073E-02	+/-	8.9E-05
Phase delay (usec)	-1.55690070408E+03								Apriori clockrate (us/s)	-7.2169202E-07	Resid phdelay (usec)	-4.56977E-06	+/-	3.8E-08
Delay rate (us/s)	3.94340583752E-02								Apriori rate (us/s)	3.94340214303E-02	Resid rate (us/s)	3.69449E-08	+/-	2.2E-10
Total phase (deg)			-233.9						Apriori accel (us/s/s)	9.62745969708E-06	Resid phase (deg)	-141.7	+/-	1.2

ph/seg (deg) 58.0 2.8 Search (2048X32) 1.988 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.8 4.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 29.6 1.7 Inc. seg. avg. 3.449 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.0 2.9 Inc. frq. avg. 2.229 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 295.5 el 35.1 pa 37.3 X: az 288.7 el 40.0 pa 43.6 u,v (fr/asec) -288.710 861.228 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.3.37F3IX simultaneous interpolator

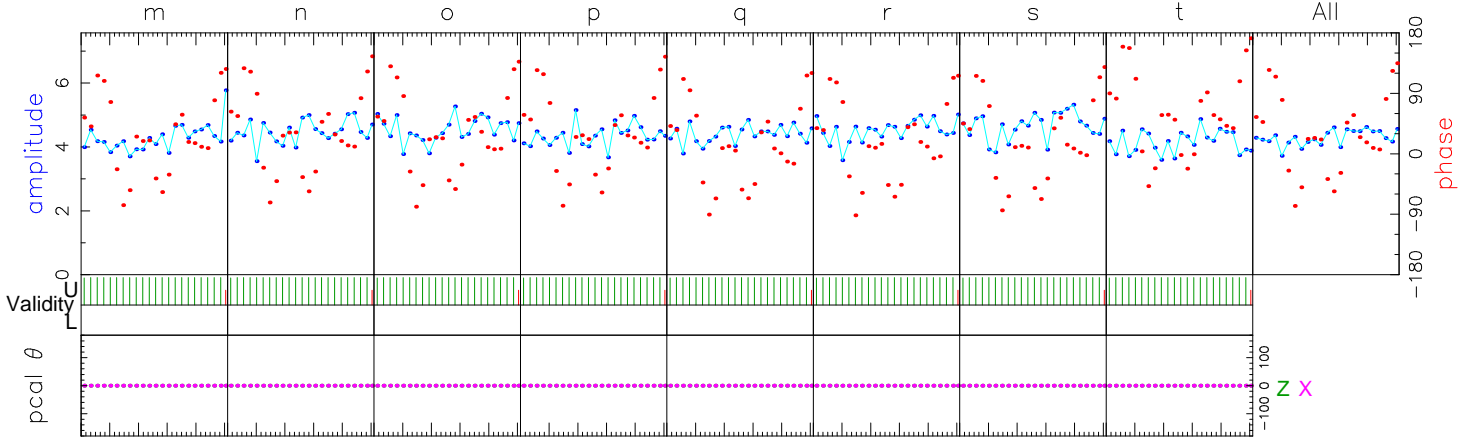
Mk4/DiFX fourfit 3.24 rev 3753

BLLAC.37F3IX, No0004, ZX
 METSAHOV - ONSALA60, fgroup W, pol RR

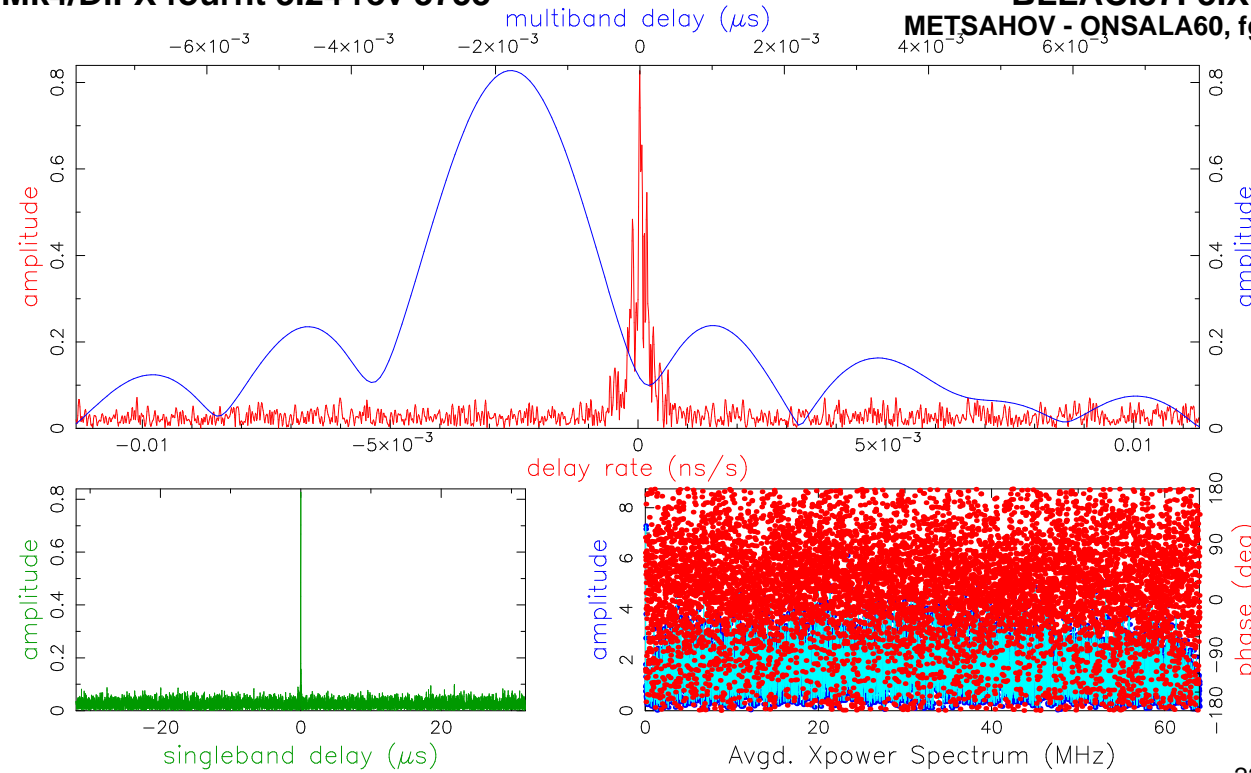


Fringe quality 4
 SNR 119.6
 Int time 299.812
 Amp 2.525
 Phase 27.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.001583
 MBD -0.001215
 Fringe rate (Hz)
 0.003227
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:095354
 2023:314:152938
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

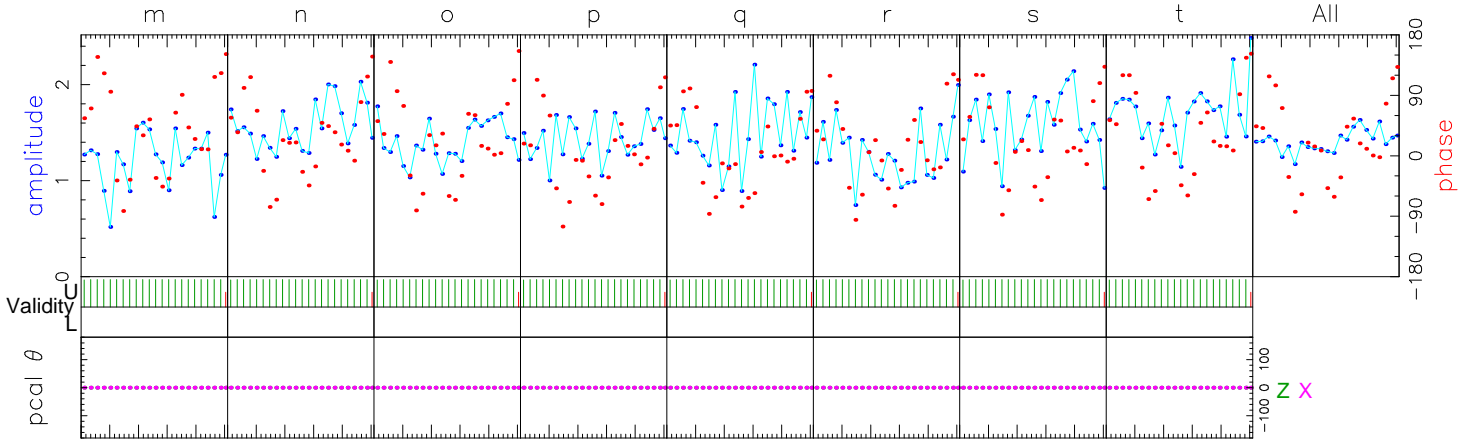


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	27.9	30.7	28.9	30.8	11.4	17.2	19.2	58.5	Phase	27.6	
	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.3	Ampl.	2.6	
	8192.2	8192.4	8192.5	8192.7	8192.6	8192.7	8193.0	8193.0	Sbd box	8192.6	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used		
Z	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.55690191407E+03		Apriori delay (usec)		-1.55690069951E+03		Resid mbdelay (usec)		-1.21456E-03	+/- 9.1E-06	
Sband delay (usec)	-1.55690228251E+03		Apriori clock (usec)		-1.1249574E+02		Resid sbdelay (usec)		-1.58300E-03	+/- 7.2E-05	
Phase delay (usec)	-1.55690069862E+03		Apriori clockrate (us/s)		-7.2169202E-07		Resid phdelay (usec)		8.89024E-07	+/- 3.1E-08	
Delay rate (us/s)	3.94340588889E-02		Apriori rate (us/s)		3.94340214303E-02		Resid rate (us/s)		3.74586E-08	+/- 1.8E-10	
Total phase (deg)			Apriori accel (us/s/s)		9.62745969708E-06		Resid phase (deg)		27.6	+/- 1.0	
	RMS	Theor.	Amplitude	2.525 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	57.9	2.3	Search (2048X32)	2.406		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-32.000 32.000	
amp/seg (%)	70.6	4.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	15.4	1.4	Inc. seg. avg.	4.290		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	3.5	2.4	Inc. frq. avg.	2.553		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite		ion window (TEC)	0.00 0.00
Z: az 295.5 el 35.1 pa 37.3	X: az 288.7 el 40.0 pa 43.6		u,v (fr/asec)		-288.710 861.228		simultaneous interpolator				
Control file: cf_1234_gmva	Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX		Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.6.37F3IX								



Fringe quality 6
 SNR 39.8
 Int time 299.812
 Amp 0.840
 Phase 22.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.002280
 MBD -0.001750
 Fringe rate (Hz)
 0.003233
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:095524
 2023:314:152938
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



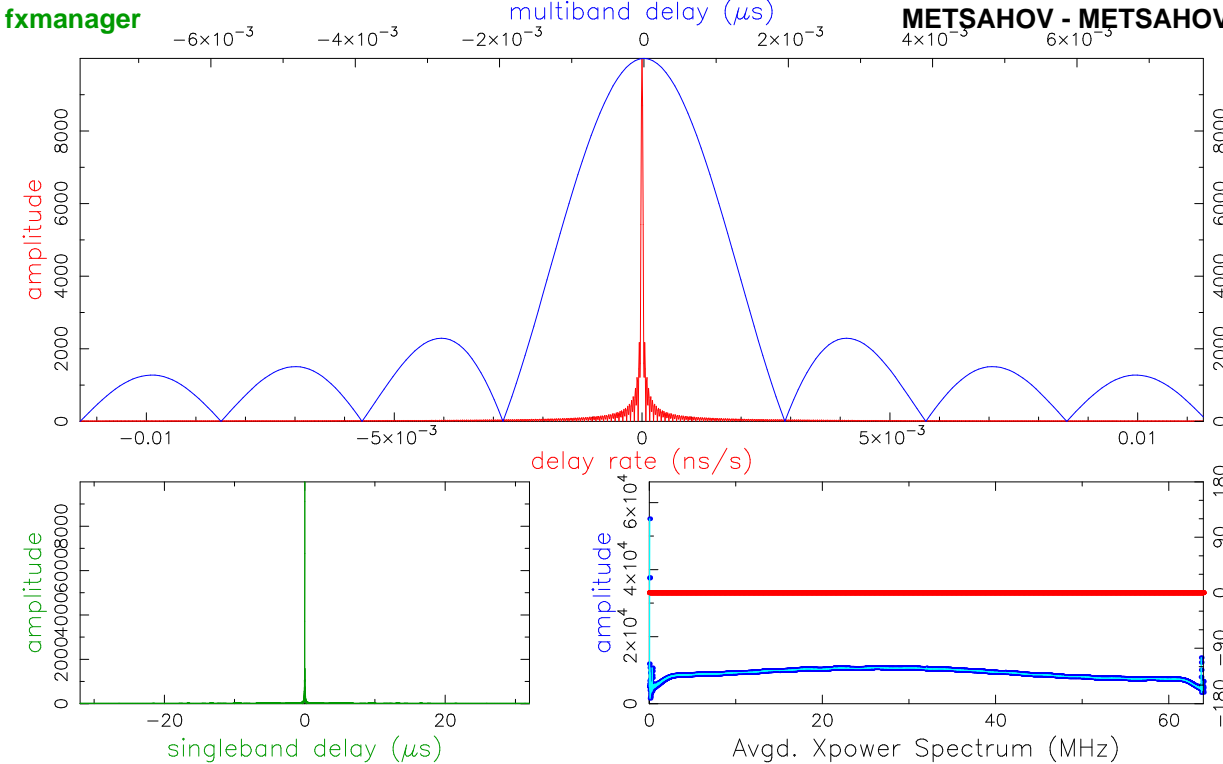
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	37.9	29.7	26.6	3.6	8.5	16.2	21.5	33.0	Phase	22.1
	0.7	1.0	0.8	0.8	0.9	0.7	0.9	0.9	Ampl.	0.8
	8192.0	8192.3	8192.3	8192.8	8192.1	8193.1	8192.5	8192.7	Sbd box	8192.4
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.55690244982E+03					-1.55690069951E+03			Resid mbdelay (usec)	-1.75031E-03 +/- 2.7E-05
Sband delay (usec)	-1.55690297926E+03					-1.1249574E+02			Resid sbdelay (usec)	-2.27975E-03 +/- 2.2E-04
Phase delay (usec)	-1.55690069880E+03					-7.2169202E-07			Resid phdelay (usec)	7.11236E-07 +/- 9.3E-08
Delay rate (us/s)	3.94340589647E-02					3.94340214303E-02			Resid rate (us/s)	3.75344E-08 +/- 5.4E-10
Total phase (deg)			-70.1			9.62745969708E-06			Resid phase (deg)	22.1 +/- 2.9
	RMS	Theor.	Amplitude	0.840 +/- 0.021					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.0	6.9	Search (2048X32)	0.804					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	69.1	12.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	13.0	4.1	Inc. seg. avg.	1.400					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	mb window (us) -0.008 0.008
amp/frq (%)	13.4	7.1	Inc. frq. avg.	0.841					Data rate(Mb/s): 2048	nlags: 8192_t_cohere infinite
Z: az 295.5 el 35.1 pa 37.3			X: az 288.7 el 40.0 pa 43.6						u,v (fr/asec) -288.710 861.228	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/f241a/FRINGE/1234/No0004/ZX..37F3IX						Output file: /Exps/f241a/FRINGE/1234/No0004/ZX.W.9.37F3IX	simultaneous interpolator

Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

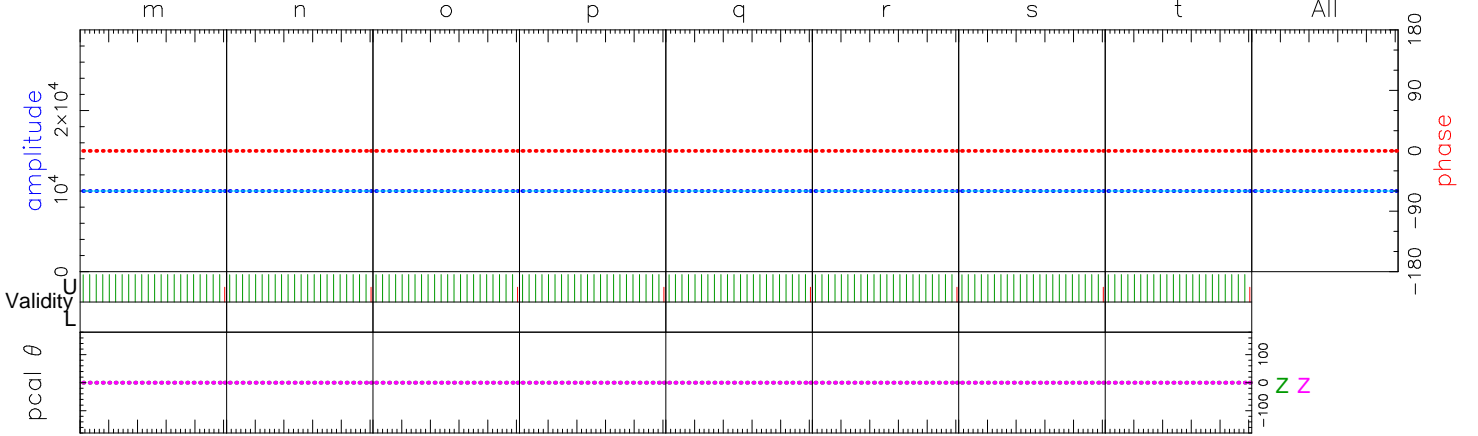
BLLAC.37F3IX, No0004, ZZ

METŜAHOV - MET̂SAHOV, fgroup W, pol LL



Fringe quality 9
 SNR 473557.2
 Int time 299.882
 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. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111002
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
Z	0	0	0	0	0	0	0	0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.3E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.8E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 7.8E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 4.5E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 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: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 295.5 el 35.1 pa 37.3 Z: az 295.5 el 35.1 pa 37.3 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZZ.W.25.37F3IX

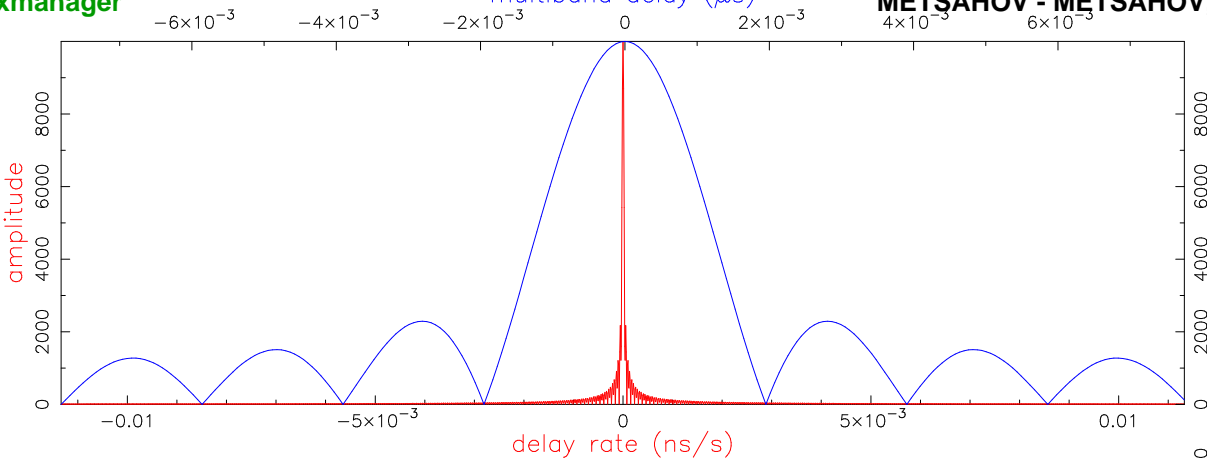
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

BLLAC.37F3IX, No0004, ZZ

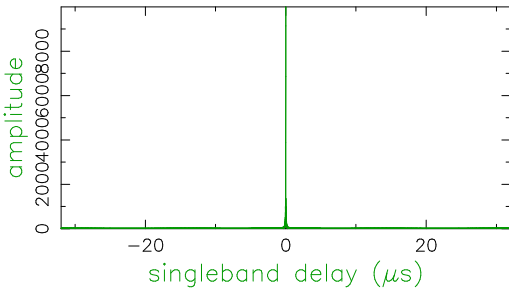
METŜAHOV - MET̂SAHOV, fgroup W, pol RR

multiband delay (μ s)

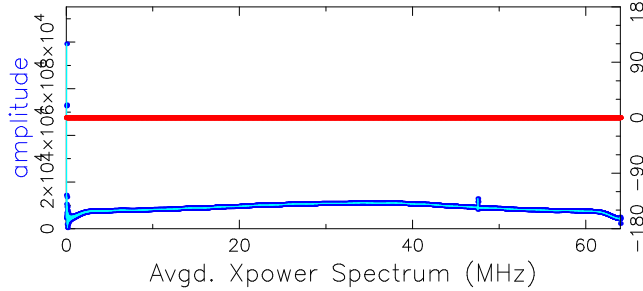


Fringe quality 9

SNR 473557.2
 Int time 299.882
 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

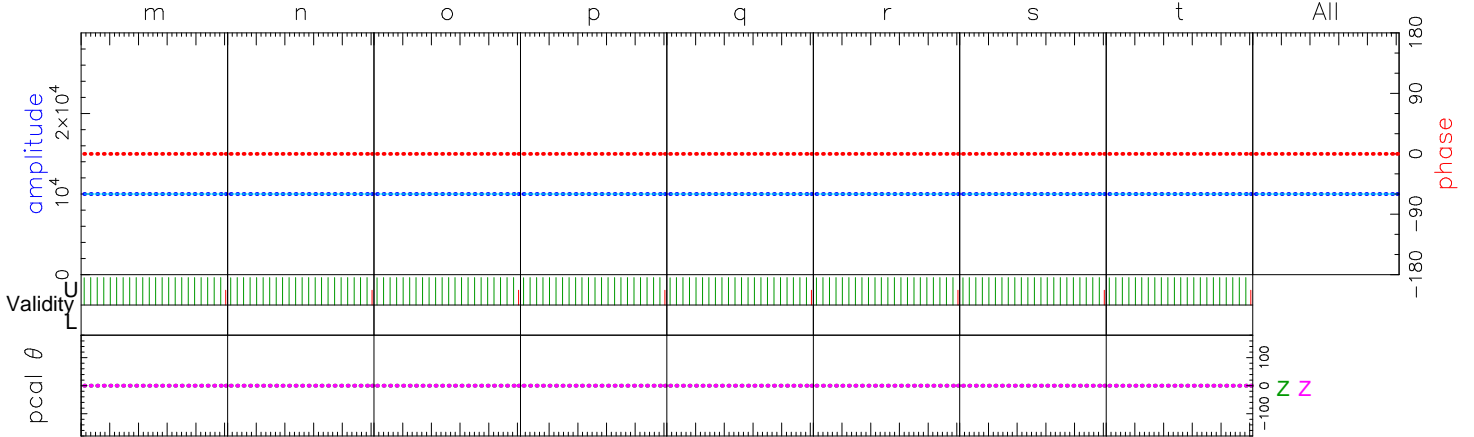


delay rate (ns/s)



Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111119
 2023:348:201250
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / 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	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
Z	0	0	0	0	0	0	0	0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.3E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.8E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	7.8E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	4.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

RMS Theor. Amplitude 9999.998 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 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: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 295.5 el 35.1 pa 37.3 Z: az 295.5 el 35.1 pa 37.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZZ.W.26.37F3IX

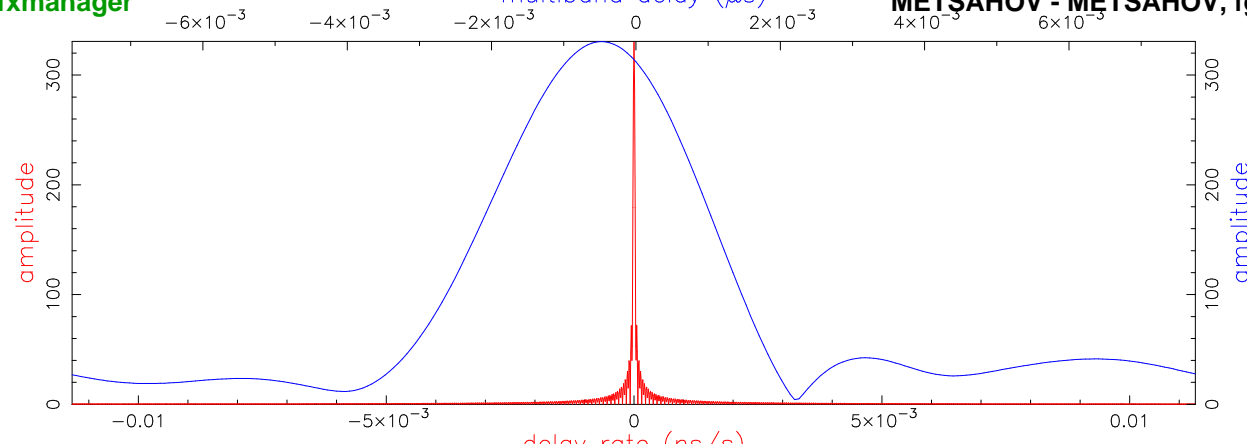
Mk4/DiFX fourfit 3.24 rev 3753

fxmanager

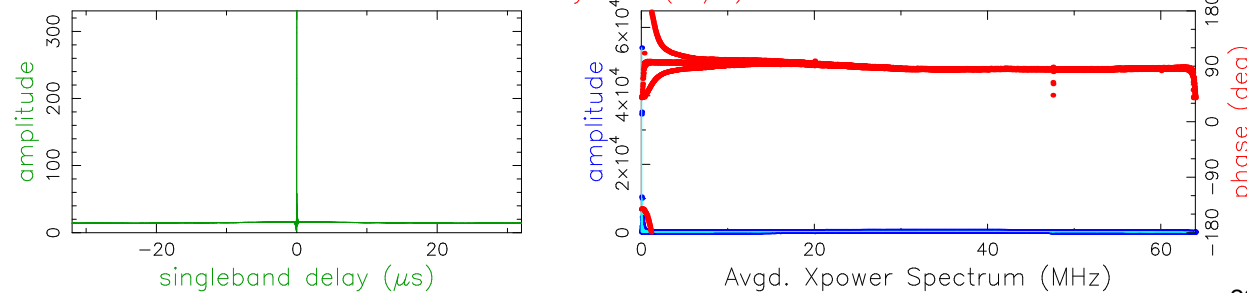
BLLAC.37F3IX, No0004, ZZ

METŜAHOV - MET̂SAHOV, fgroup W, pol LR

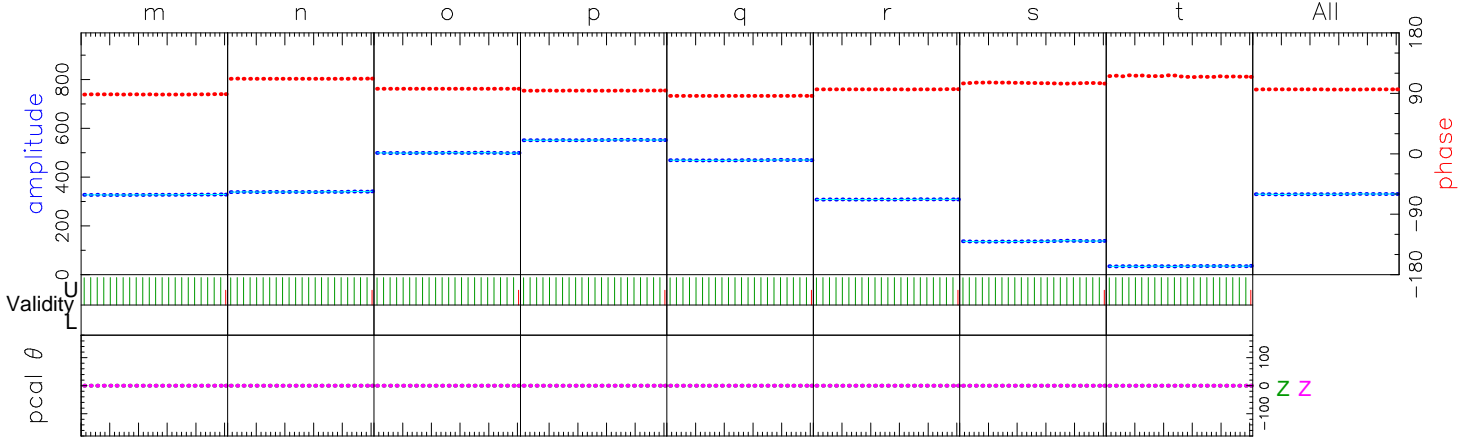
multiband delay (μ s)



Fringe quality 6
 Error code G
 SNR 15659.7
 Int time 299.882
 Amp 330.682
 Phase 95.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000300
 MBD -0.000468
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111238
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

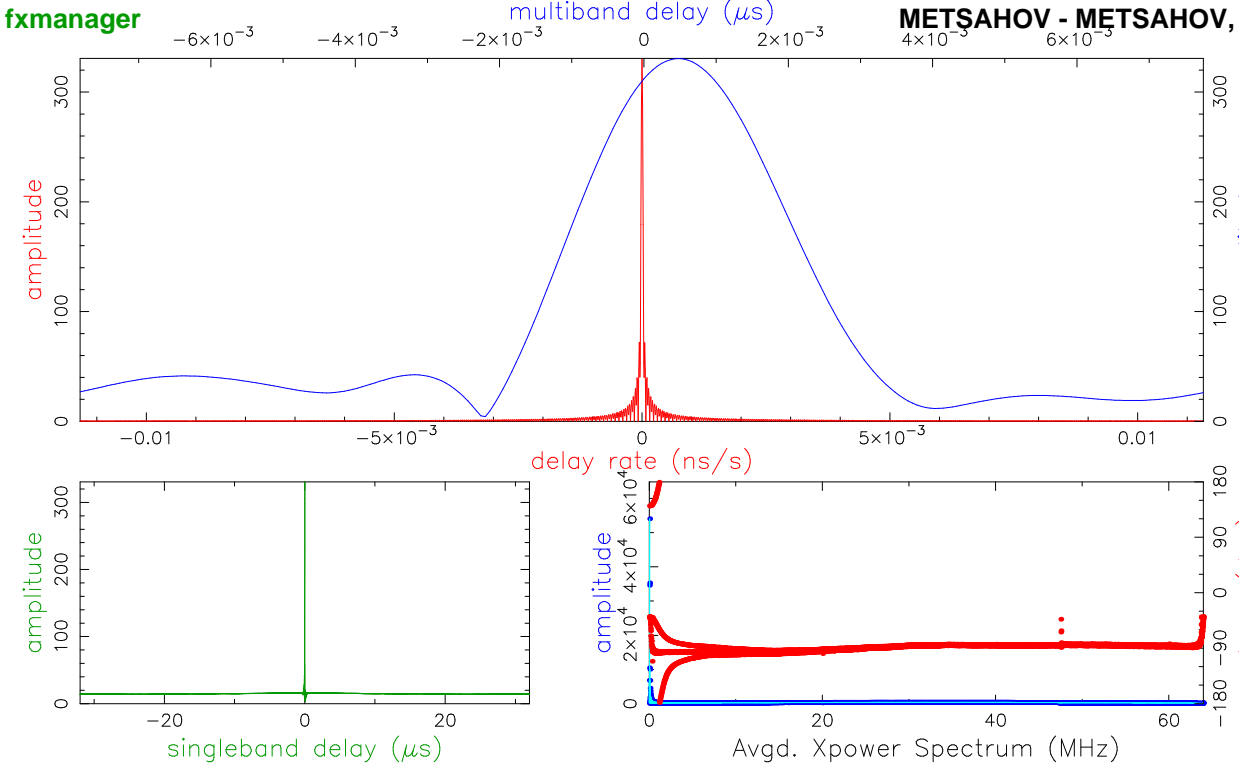


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



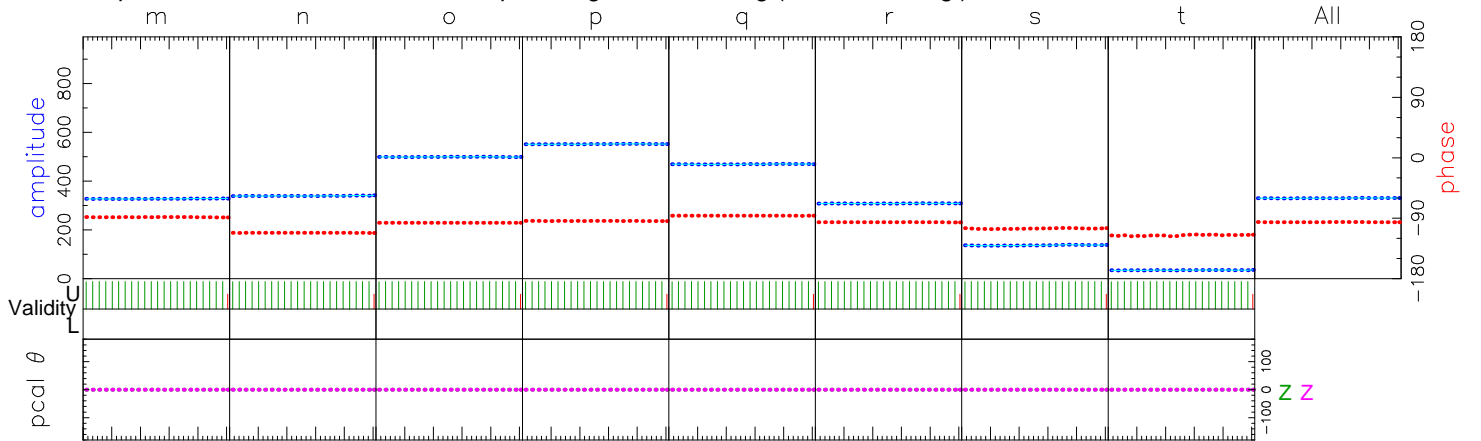
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	88.3	111.7	96.7	94.0	86.2	95.9	105.2	115.3	Phase	95.8
	327.9	339.8	499.6	552.2	469.8	308.8	137.4	35.3	Ampl.	333.8
	8192.9	8193.1	8192.8	8192.9	8192.9	8193.4	8194.4	8198.1	Sbd box	8193.1
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-4.67968750000E-04		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-4.67969E-04	+/- 6.9E-08
Sband delay (usec)	2.99500000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.99500E-04	+/- 5.5E-07
Phase delay (usec)	3.08775714604E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.08776E-06	+/- 2.4E-10
Delay rate (us/s)	-7.08557619584E-13		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-7.08558E-13	+/- 1.4E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		95.8	+/- 0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 330.682 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.0 Search (2048X32) 330.504 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
 ph/frq (deg) 12.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.4 0.0 Inc. seg. avg. 330.509 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 295.5 el 35.1 pa 37.3 Z: az 295.5 el 35.1 pa 37.3 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZZ.W.27.37F3IX simultaneous interpolator



Fringe quality 6
 Error code G
 SNR 15659.7
 Int time 299.882
 Amp 330.682
 Phase -95.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000300
 MBD 0.000468
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f241a
 Exper # 1234
 Yr:day 2024:109
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2024:110:093747
 2024:110:111356
 2023:348:201250
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979897"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-88.3	-111.7	-96.7	-94.0	-86.2	-95.9	-105.2	-115.3	Phase	-95.8
	327.9	339.8	499.6	552.2	469.8	308.8	137.4	35.3	Ampl.	333.8
	8193.1	8192.9	8193.2	8193.1	8193.1	8192.6	8191.6	8187.9	Sbd box	8192.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.67968750000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	4.67969E-04	+/-	6.9E-08
Sband delay (usec)	-2.99500000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.99500E-04	+/-	5.5E-07
Phase delay (usec)	-3.08775714599E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.08776E-06	+/-	2.4E-10
Delay rate (us/s)	7.08557619584E-13	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.08558E-13	+/-	1.4E-12
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-95.8	+/-	0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 330.682 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.0 Search (2048X32) 330.504 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000
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 Z: az 295.5 el 35.1 pa 37.3 Z: az 295.5 el 35.1 pa 37.3 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f241a/FRINGE/1234/No0004/ZZ..37F3IX Output file: /Exps/f241a/FRINGE/1234/No0004/ZZ.W.28.37F3IX simultaneous interpolator