

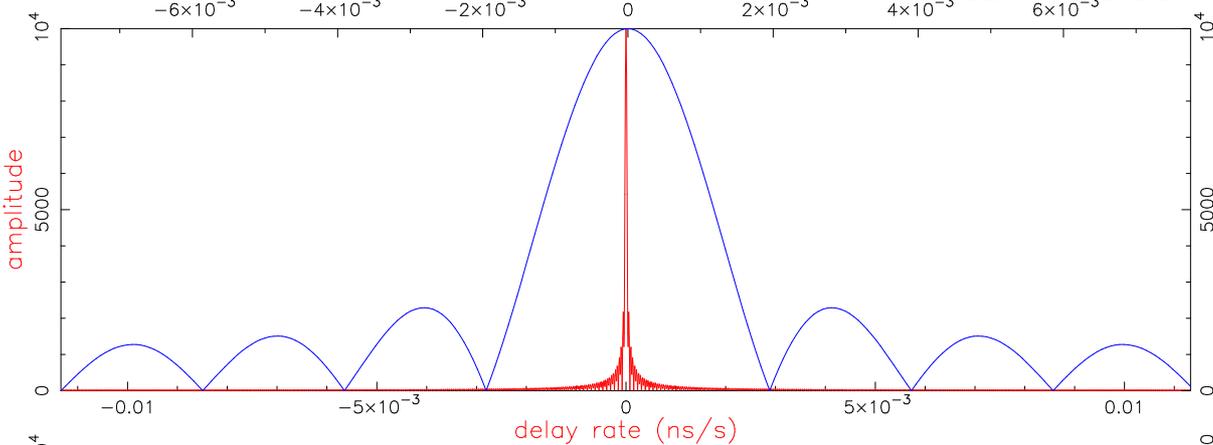
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BB

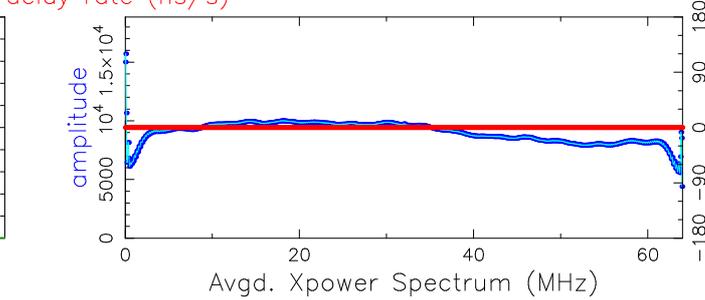
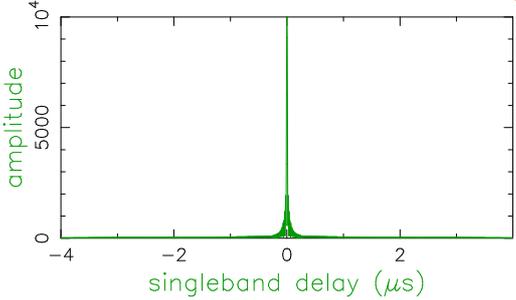
EFLSBERG - EFLSBERG, fgroup W, pol RR

multiband delay (μ s)



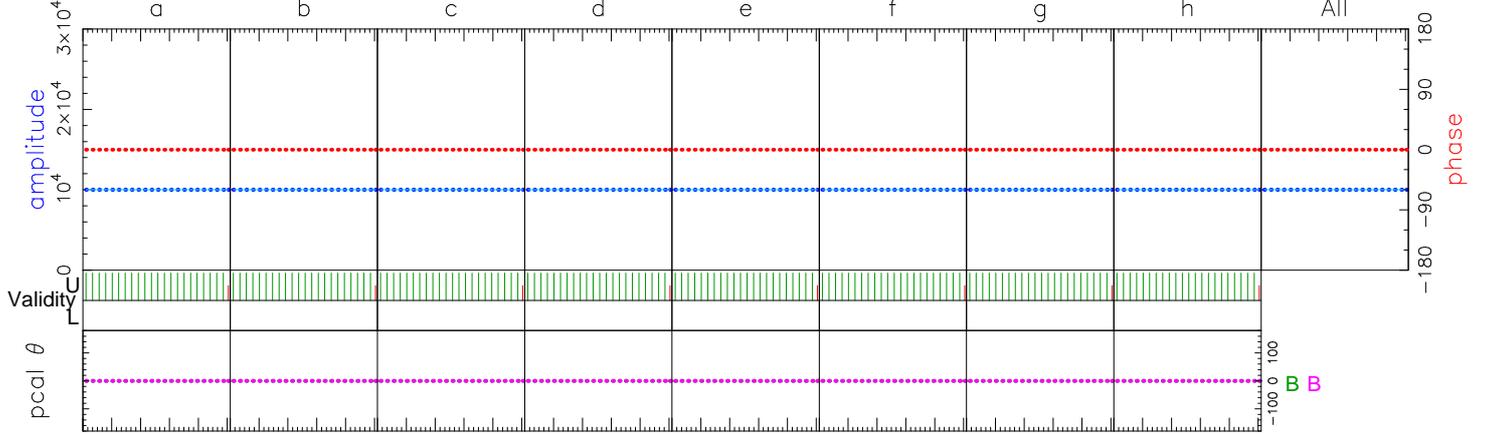
Fringe quality 9

SNR 473625.8
 Int time 299.968
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MB 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145438
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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	10000.0	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1025.0	1025.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1025.0	1025.0
B	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	1025.0	1025.0
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	1025.0	1025.0

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

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 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 280.1 el 51.6 pa 57.8 B: az 280.1 el 51.6 pa 57.8 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BB..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BB.W.17.24ULKL simultaneous interpolator

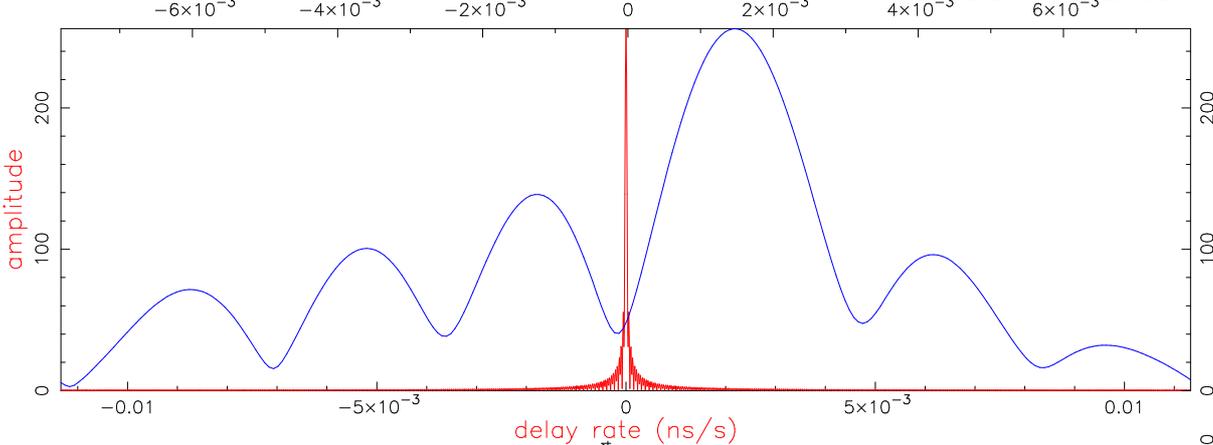
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BB

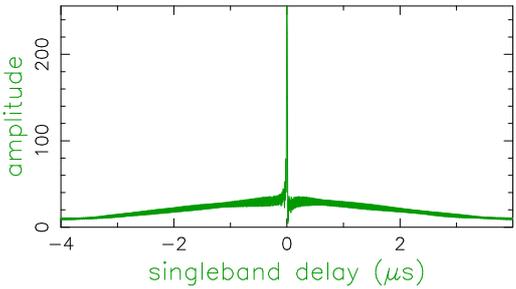
EFLSBERG - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)

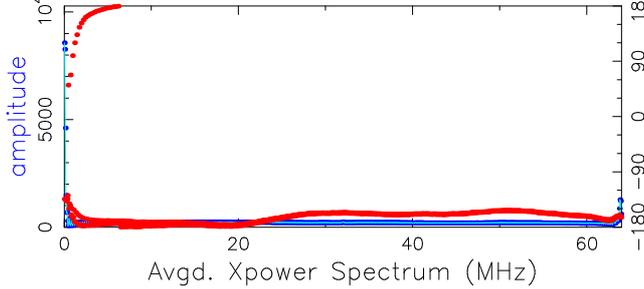


Fringe quality 6

SNR 12126.4
 Int time 299.968
 Amp 256.034
 Phase -179.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000115
 MBD 0.001470
 Fringe rate (Hz)
 -0.000006
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

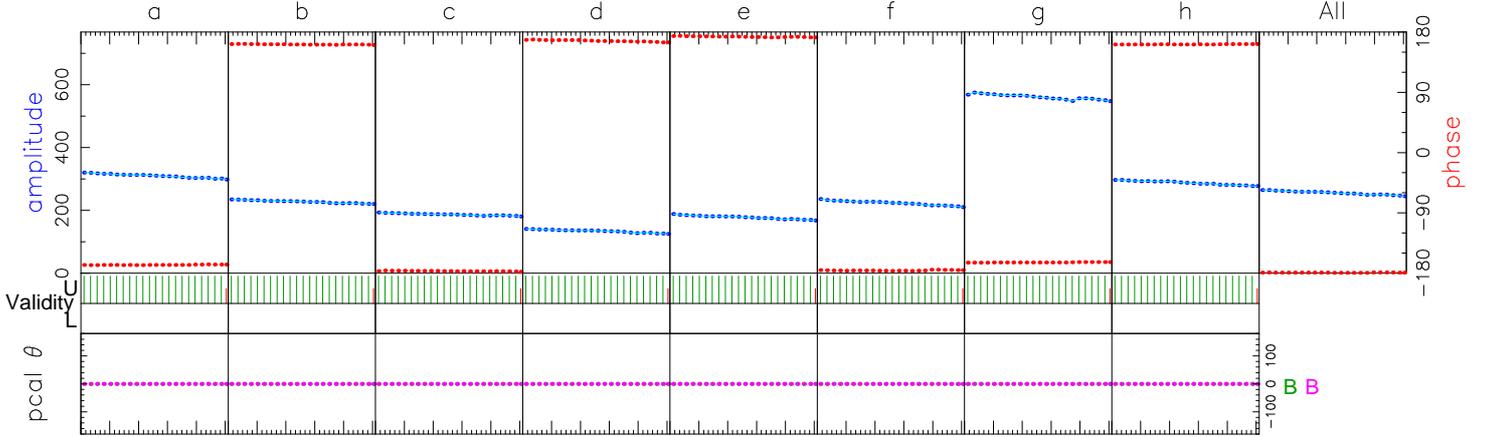


delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145450
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-167.5	161.4	-176.7	166.8	172.9	-175.8	-163.8	161.5	Phase	-179.0
	310.2	227.8	187.1	134.1	178.1	223.7	561.2	287.9	Ampl.	263.8
	1025.7	1025.0	1024.8	1026.0	1024.3	1024.4	1024.8	1025.1	Sbd box	1025.0
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	1.47021875000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.47022E-03	+/-	9.0E-08
Sband delay (usec)	-1.15000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.15000E-04	+/-	7.1E-07
Phase delay (usec)	-5.77336582149E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.77337E-06	+/-	3.0E-10
Delay rate (us/s)	-7.43985500563E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-7.43985E-11	+/-	1.8E-12
Total phase (deg)	-179.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-179.0	+/-	0.0

ph/seg (deg)	0.2	0.0	Amplitude	256.034 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	2.2	0.0	Search (2048X32)	255.997	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	15.3	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.7	0.0	Inc. seg. avg.	256.009	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	263.762	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite			
B: az 280.1 el 51.6 pa 57.8		B: az 280.1 el 51.6 pa 57.8		u, v (fr/asec) 0.000	0.000				simultaneous interpolator

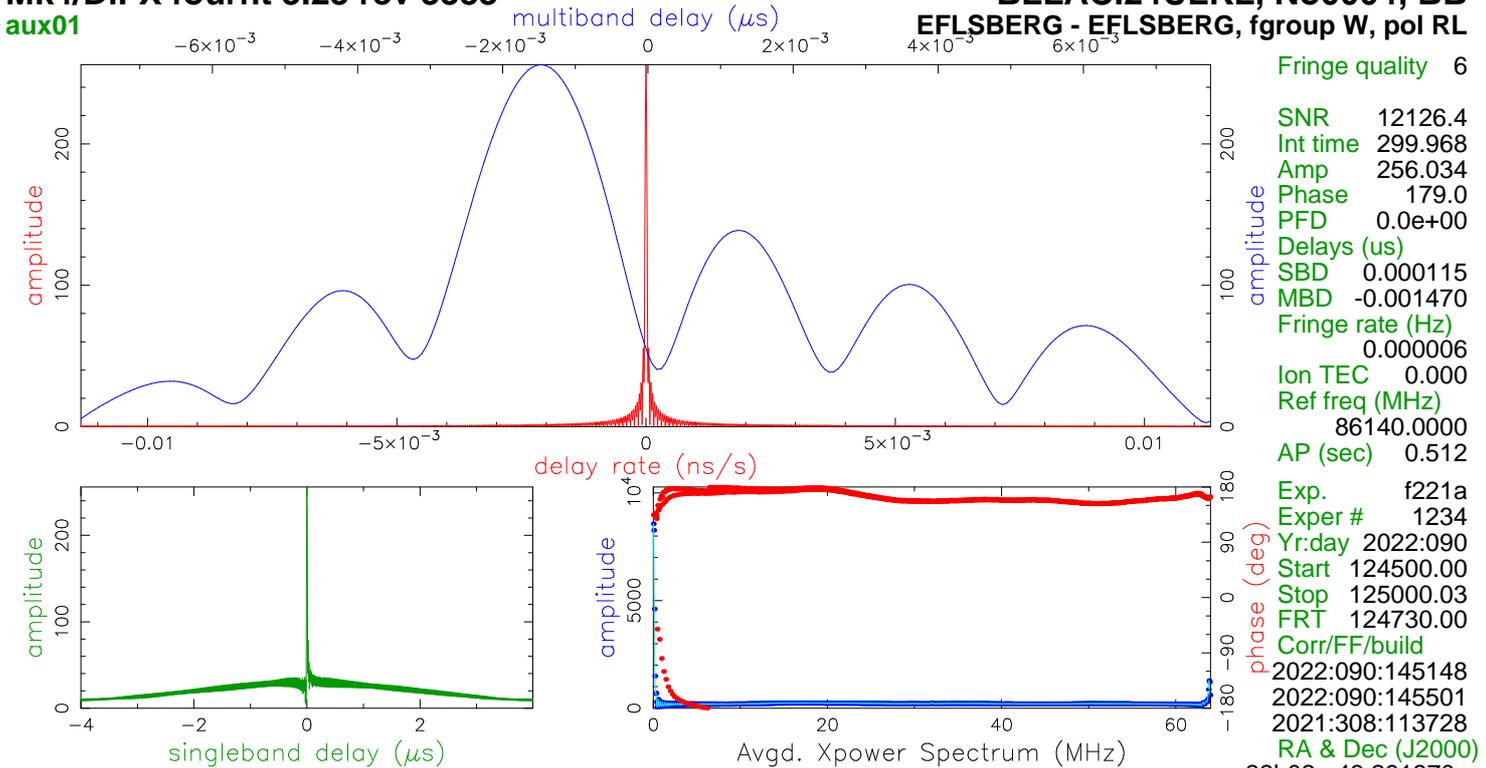
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BB..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BB.W.35.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BB

EFLSBERG - EFLSBERG, fgroup W, pol RL

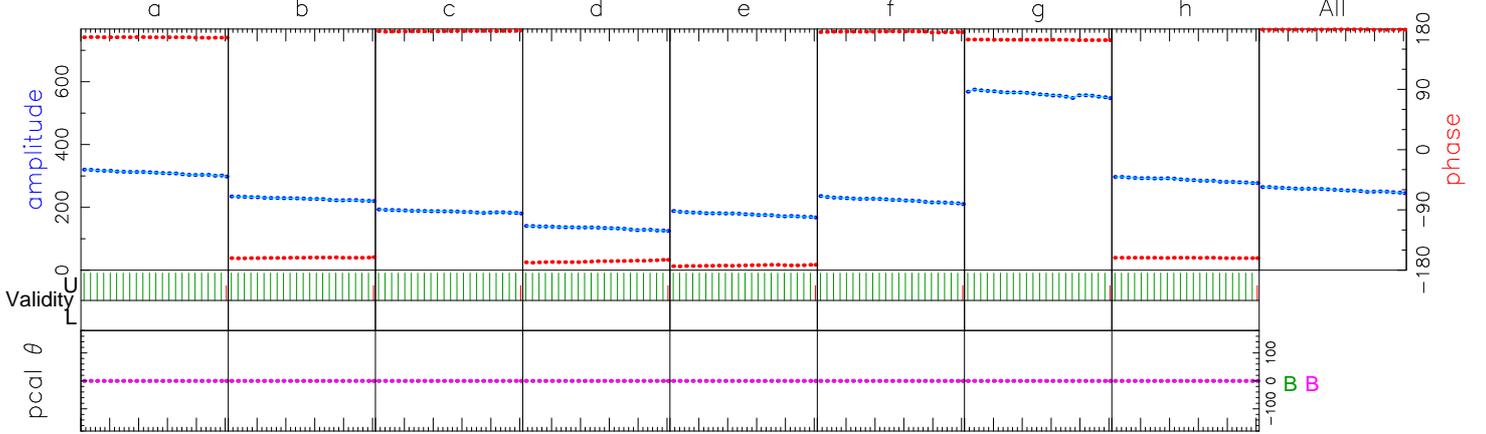


Fringe quality 6

SNR 12126.4
 Int time 299.968
 Amp 256.034
 Phase 179.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000115
 MBD -0.001470
 Fringe rate (Hz) 0.000006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145501
 2021:308:113728
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979885"

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
	167.5	-161.4	176.7	-166.8	-172.9	175.8	163.8	-161.5	Phase	179.0
	310.2	227.8	187.1	134.1	178.1	223.7	561.2	287.9	Ampl.	263.8
	1024.3	1025.0	1025.2	1024.0	1025.7	1025.6	1025.2	1024.9	Sbd box	1025.0
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.47021875000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.47022E-03	+/-	9.0E-08
Sband delay (usec)	1.15000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.15000E-04	+/-	7.1E-07
Phase delay (usec)	5.77336582149E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.77337E-06	+/-	3.0E-10
Delay rate (us/s)	7.43985500563E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.43985E-11	+/-	1.8E-12
Total phase (deg)	179.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	179.0	+/-	0.0

ph/seg (deg)	0.2	0.0	RMS	256.034 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.2	0.0	Theor.	255.997	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000
ph/frq (deg)	15.3	0.0	Search (2048X32)	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.7	0.0	Interp.	0.000	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	mb window (us) -0.008 0.008
			Inc. seg. avg.	256.009	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite
			Inc. frq. avg.	263.762		ion window (TEC) 0.00 0.00

B: az 280.1 el 51.6 pa 57.8 B: az 280.1 el 51.6 pa 57.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BB..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BB.W.49.24ULKL

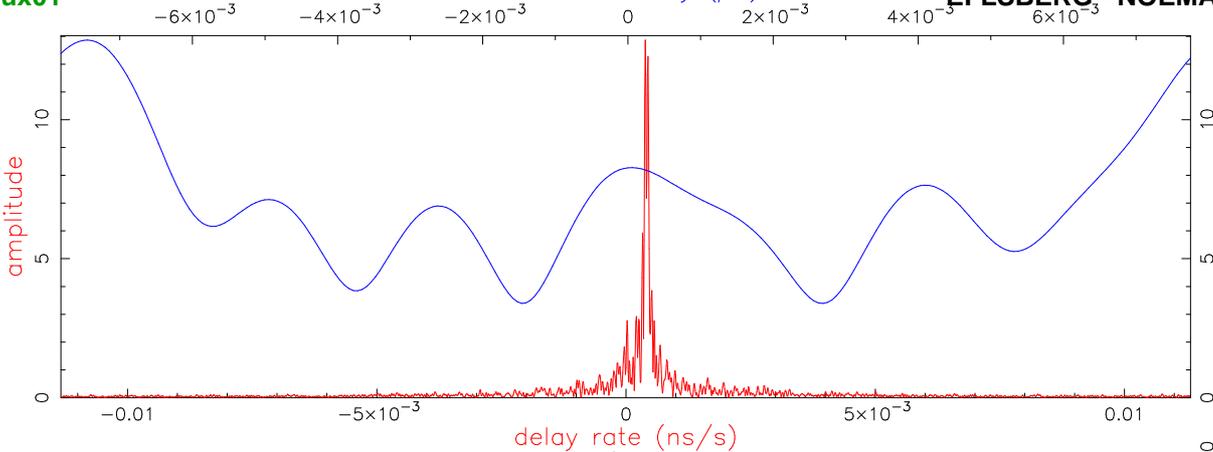
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BN

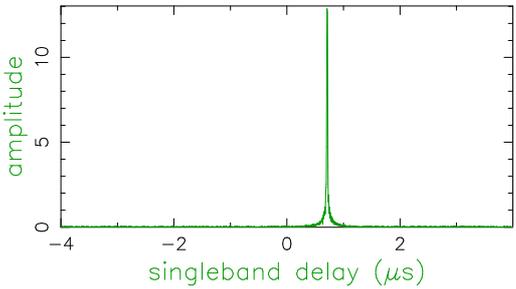
EFLSBERG₃- NOEMA, fgroup W, pol LL

multiband delay (μ s)

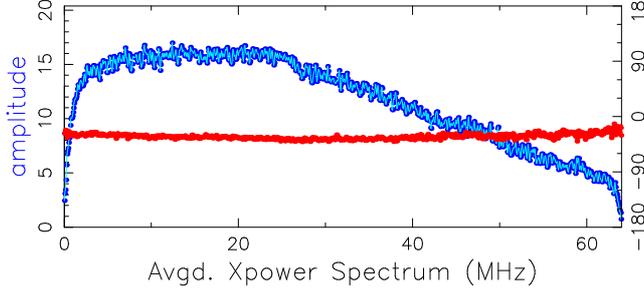


Fringe quality 1

SNR 616.7
 Int time 299.968
 Amp 13.028
 Phase -23.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.712439
 MBD -0.007450
 Fringe rate (Hz)
 0.033689
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

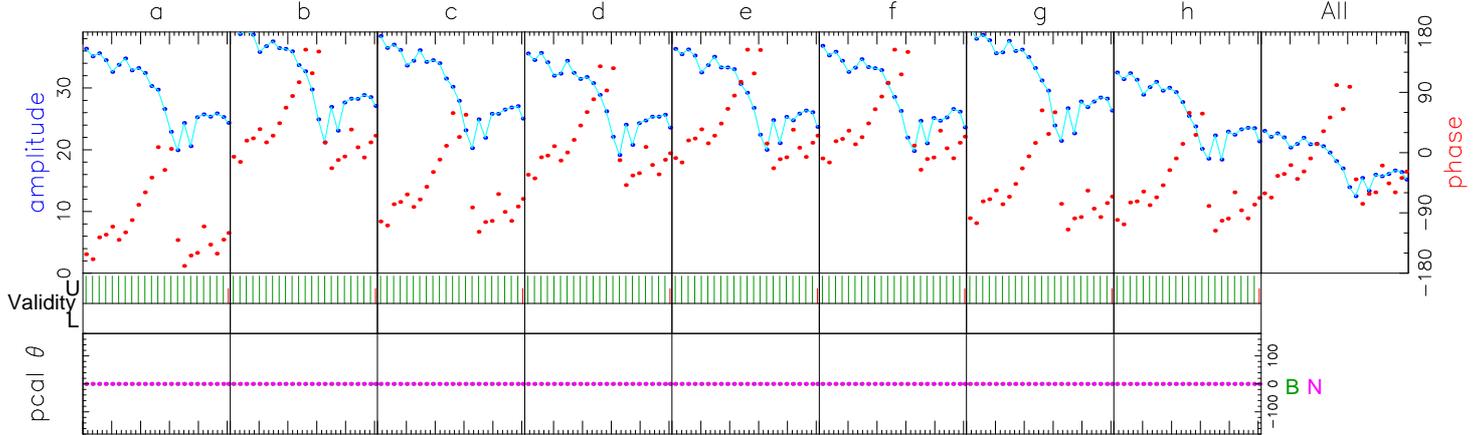


delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145428
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-114.1	30.5	-65.2	4.8	29.7	28.5	-60.6	-62.8	Phase	-23.1
	20.3	22.5	21.1	20.0	20.4	20.4	22.2	18.4	Ampl.	20.6
	1206.0	1207.1	1208.0	1208.1	1208.2	1208.0	1207.6	1206.5	Sbd box	1207.4
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.59261693178E+02	Apriori delay (usec)	1.58550393560E+02	Resid mbdelay (usec)	-7.45038E-03	+/-	1.8E-06
Sband delay (usec)	1.59262832560E+02	Apriori clock (usec)	-1.6620516E+01	Resid sbdelay (usec)	7.12439E-01	+/-	1.4E-05
Phase delay (usec)	1.58550392815E+02	Apriori clockrate (us/s)	-1.8100002E-07	Resid phdelay (usec)	-7.44813E-07	+/-	6.0E-09
Delay rate (us/s)	6.50950803400E-02	Apriori rate (us/s)	6.50946892453E-02	Resid rate (us/s)	3.91095E-07	+/-	3.5E-11
Total phase (deg)	301.4	Apriori accel (us/s/s)	4.32952971250E-06	Resid phase (deg)	-23.1	+/-	0.2

ph/seg (deg)	51.5	0.4	Search (2048X32)	12.439	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	48.0	0.8	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)	60.7	0.3	Inc. seg. avg.	18.399	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	59.2	0.5	Inc. frq. avg.	20.648	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 280.1 el 51.6 pa 57.8 N: az 286.7 el 50.9 pa 67.1 u,v (fr/asec) -496.429 768.985 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BN.24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BN.W.13.24ULKL

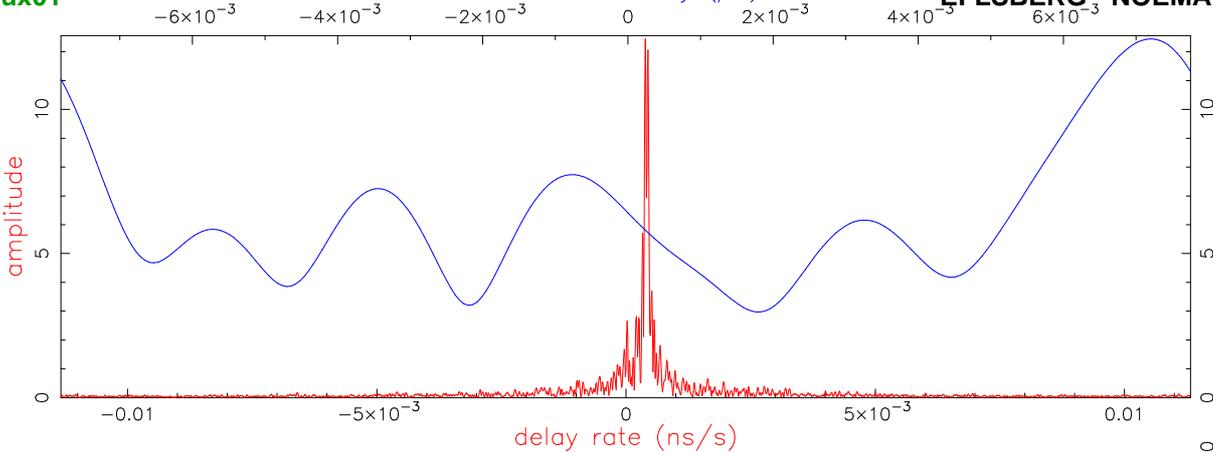
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BN

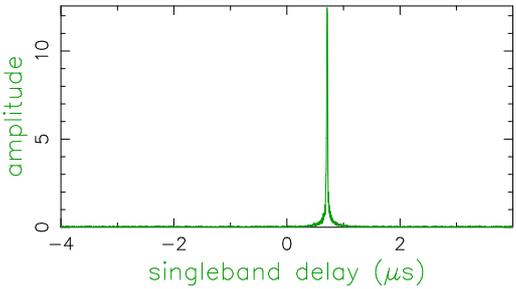
EFLSBERG - NOEMA, fgroup W, pol RR

multiband delay (μ s)



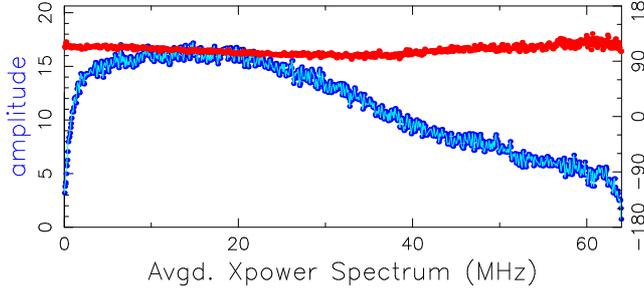
Fringe quality 1

SNR 594.6
 Int time 299.968
 Amp 12.560
 Phase -53.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.712222
 MBD 0.007178
 Fringe rate (Hz)
 0.033676
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



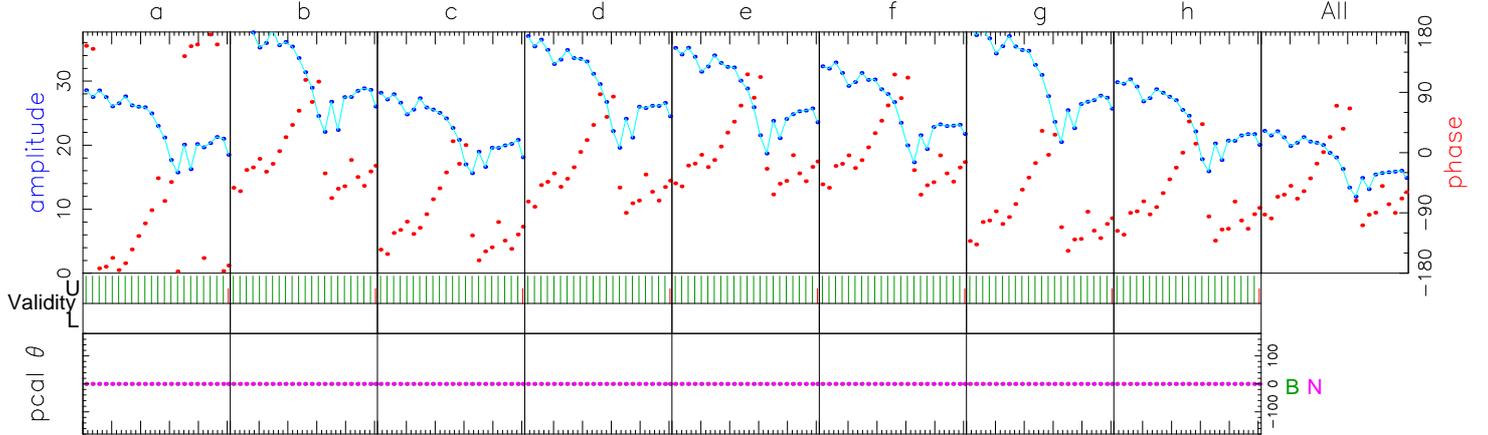
singleband delay (μ s)

delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145440
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-161.0	-13.4	-106.9	-35.6	-6.9	-7.8	-92.0	-77.2	Phase	-53.6
	16.1	22.2	15.8	20.6	19.8	18.2	21.5	16.8	Ampl.	18.9
	1205.2	1207.1	1207.9	1207.7	1208.0	1207.8	1207.6	1206.1	Sbd box	1207.3
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.59260696335E+02	Apriori delay (usec)	1.58550393560E+02	Resid mbdelay (usec)	7.17777E-03	+/-	1.8E-06
Sband delay (usec)	1.59262615560E+02	Apriori clock (usec)	-1.6620516E+01	Resid sbdelay (usec)	7.12222E-01	+/-	1.4E-05
Phase delay (usec)	1.58550391832E+02	Apriori clockrate (us/s)	-1.8100002E-07	Resid phdelay (usec)	-1.72795E-06	+/-	6.2E-09
Delay rate (us/s)	6.50950801877E-02	Apriori rate (us/s)	6.50946892453E-02	Resid rate (us/s)	3.90942E-07	+/-	3.6E-11
Total phase (deg)	270.9	Apriori accel (us/s/s)	4.32952971250E-06	Resid phase (deg)	-53.6	+/-	0.2

ph/seg (deg)	51.7	RMS	12.560 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	49.1	Theor.	12.071	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	61.4	Search (2048X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.5	Interp.	17.882	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	18.871	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 280.1 el 51.6 pa 57.8 N: az 286.7 el 50.9 pa 67.1 u,v (fr/asec) -496.429 768.985 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BN..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BN.W.29.24ULKL

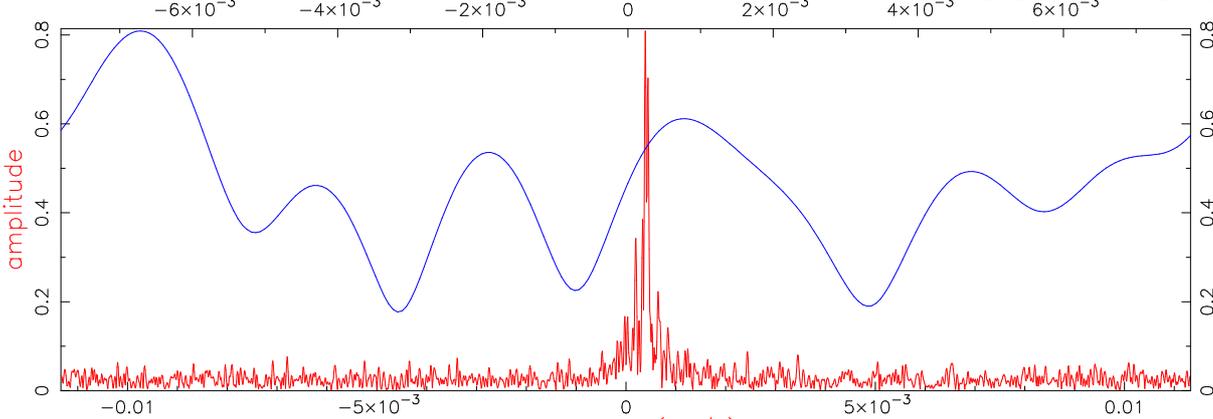
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BN

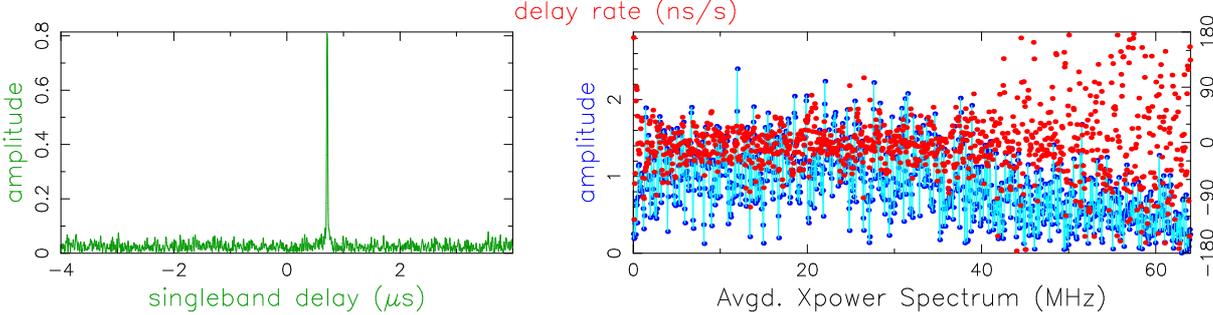
EFLSBERG - NOEMA, fgroup W, pol LR

multiband delay (μ s)



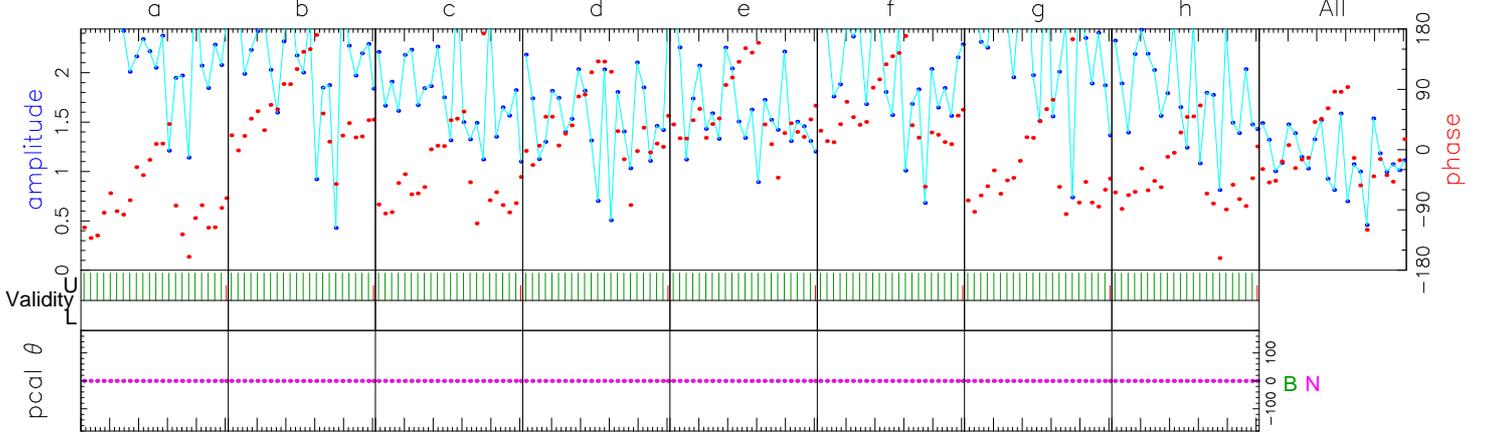
Fringe quality 3

SNR 38.5
 Int time 299.968
 Amp 0.814
 Phase -6.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.712088
 MBD -0.006723
 Fringe rate (Hz)
 0.033659
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145452
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-83.7	51.6	-50.8	31.1	49.8	51.5	-45.3	-45.3	Phase	-6.6
	1.6	1.5	1.2	1.1	1.2	1.4	1.1	1.3	Ampl.	1.3
	1206.1	1207.4	1208.1	1208.4	1208.5	1208.0	1207.7	1206.9	Sbd box	1207.3
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 1.59262420928E+02 Apriori delay (usec) 1.58550393560E+02 Resid mbdelay (usec) -6.72263E-03 +/- 2.8E-05
 Sband delay (usec) 1.59262481810E+02 Apriori clock (usec) -1.6620516E+01 Resid sbdelay (usec) 7.12088E-01 +/- 2.2E-04
 Phase delay (usec) 1.58550393346E+02 Apriori clockrate (us/s) -1.8100002E-07 Resid phdelay (usec) -2.13969E-07 +/- 9.6E-08
 Delay rate (us/s) 6.50950799978E-02 Apriori rate (us/s) 6.50946892453E-02 Resid rate (us/s) 3.90753E-07 +/- 5.5E-10
 Total phase (deg) 317.8 Apriori accel (us/s/s) 4.32952971250E-06 Resid phase (deg) -6.6 +/- 3.0

RMS Theor. Amplitude 0.814 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.0 7.1 Search (2048X32) 0.793 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 53.1 12.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 60.9 4.2 Inc. seg. avg. 1.134 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 70.1 7.3 Inc. frq. avg. 1.348 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 280.1 el 51.6 pa 57.8 N: az 286.7 el 50.9 pa 67.1 u,v (fr/asec) -496.429 768.985 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BN..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BN.W.43.24ULKL

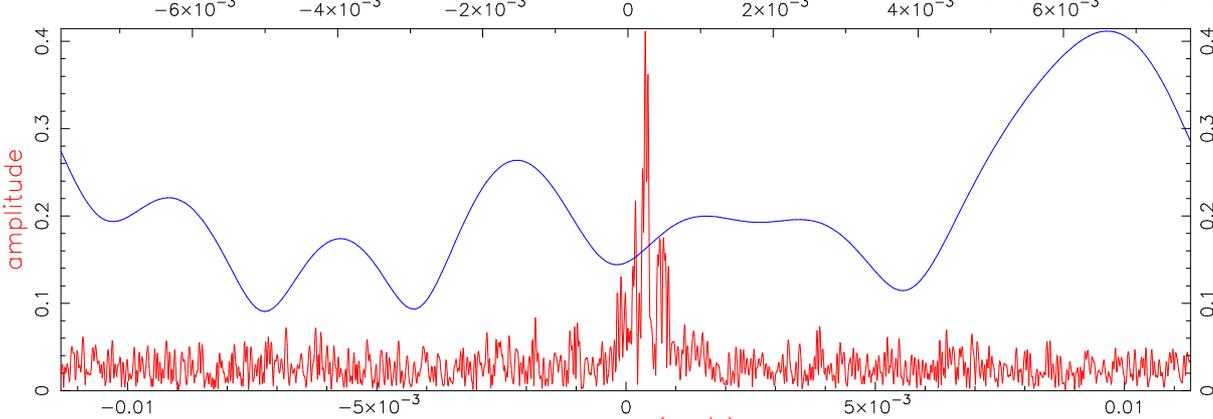
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BN

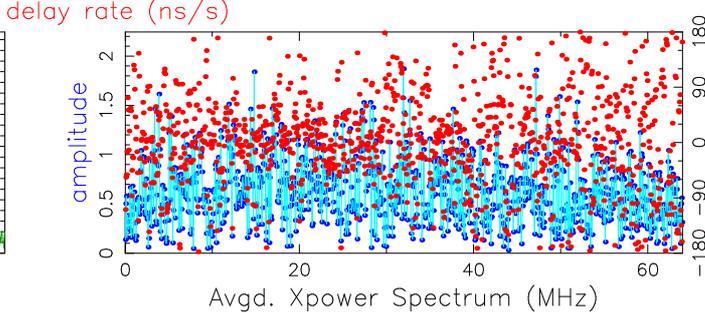
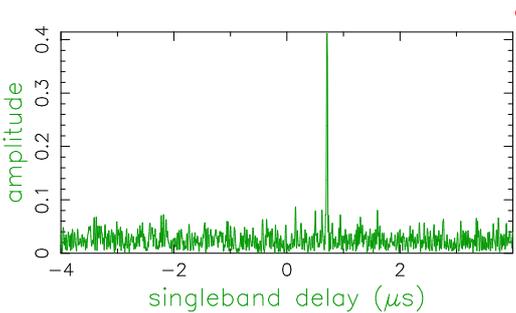
EFLSBERG - NOEMA, fgroup W, pol RL

multiband delay (μ s)



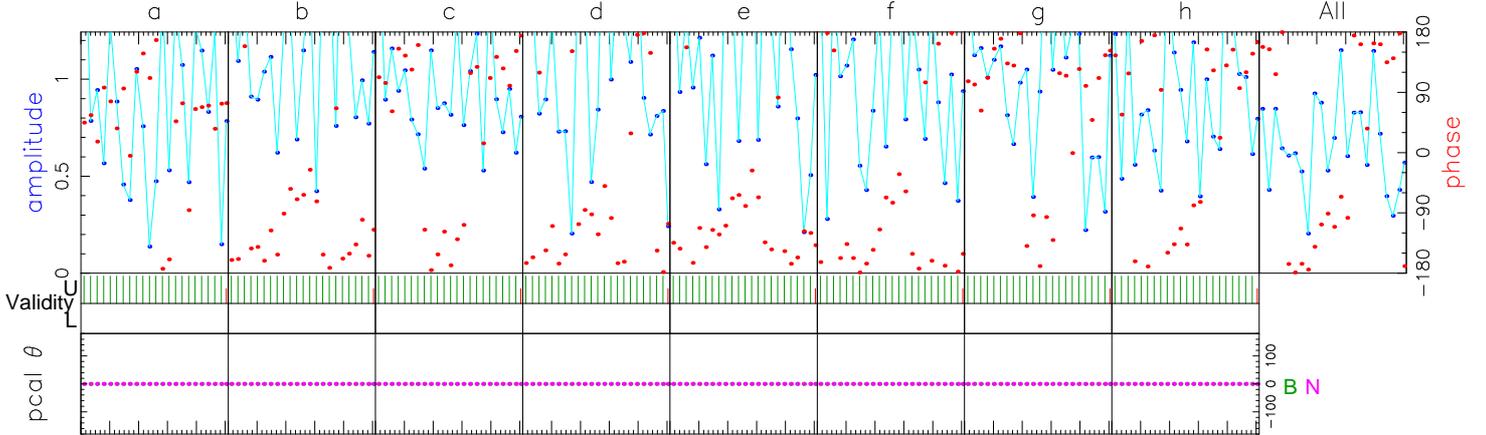
Fringe quality 7

SNR 19.6
 Int time 299.968
 Amp 0.415
 Phase -169.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.709715
 MBD 0.006659
 Fringe rate (Hz)
 0.033705
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145503
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	71.3	-133.8	145.8	-141.1	-122.5	-150.5	138.8	161.5	Phase	-169.8
	0.6	0.8	0.6	0.7	0.8	0.6	0.5	0.6	Ampl.	0.6
	1205.5	1206.8	1206.8	1207.4	1207.6	1207.6	1207.5	1205.8	Sbd box	1206.7
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.59260177835E+02	Apriori delay (usec)	1.58550393560E+02	Resid mbdelay (usec)	6.65927E-03	+/-	5.5E-05
Sband delay (usec)	1.59260108560E+02	Apriori clock (usec)	-1.6620516E+01	Resid sbdelay (usec)	7.09715E-01	+/-	4.4E-04
Phase delay (usec)	1.58550388083E+02	Apriori clockrate (us/s)	-1.8100002E-07	Resid phdelay (usec)	-5.47713E-06	+/-	1.9E-07
Delay rate (us/s)	6.50950805250E-02	Apriori rate (us/s)	6.50946892453E-02	Resid rate (us/s)	3.91280E-07	+/-	1.1E-09
Total phase (deg)	154.6	Apriori accel (us/s/s)	4.32952971250E-06	Resid phase (deg)	-169.8	+/-	5.8

ph/seg (deg)	56.0	RMS	14.0	Theor.	14.0	Amplitude	0.415 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	84.0	Search (2048X32)	0.400	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000	
ph/frq (deg)	63.6	Inc. seg. avg.	0.647	Inc. frq. avg.	0.628	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	57.8	Inc. frq. avg.	0.628	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 1024 t_cohere infinite	dr window (ns/s)	-0.011	0.011
B: az 280.1 el 51.6 pa 57.8	N: az 286.7 el 50.9 pa 67.1	u,v (fr/asec)	-496.429 768.985	ion window (TEC)	0.00	0.00	0.00	simultaneous interpolator			

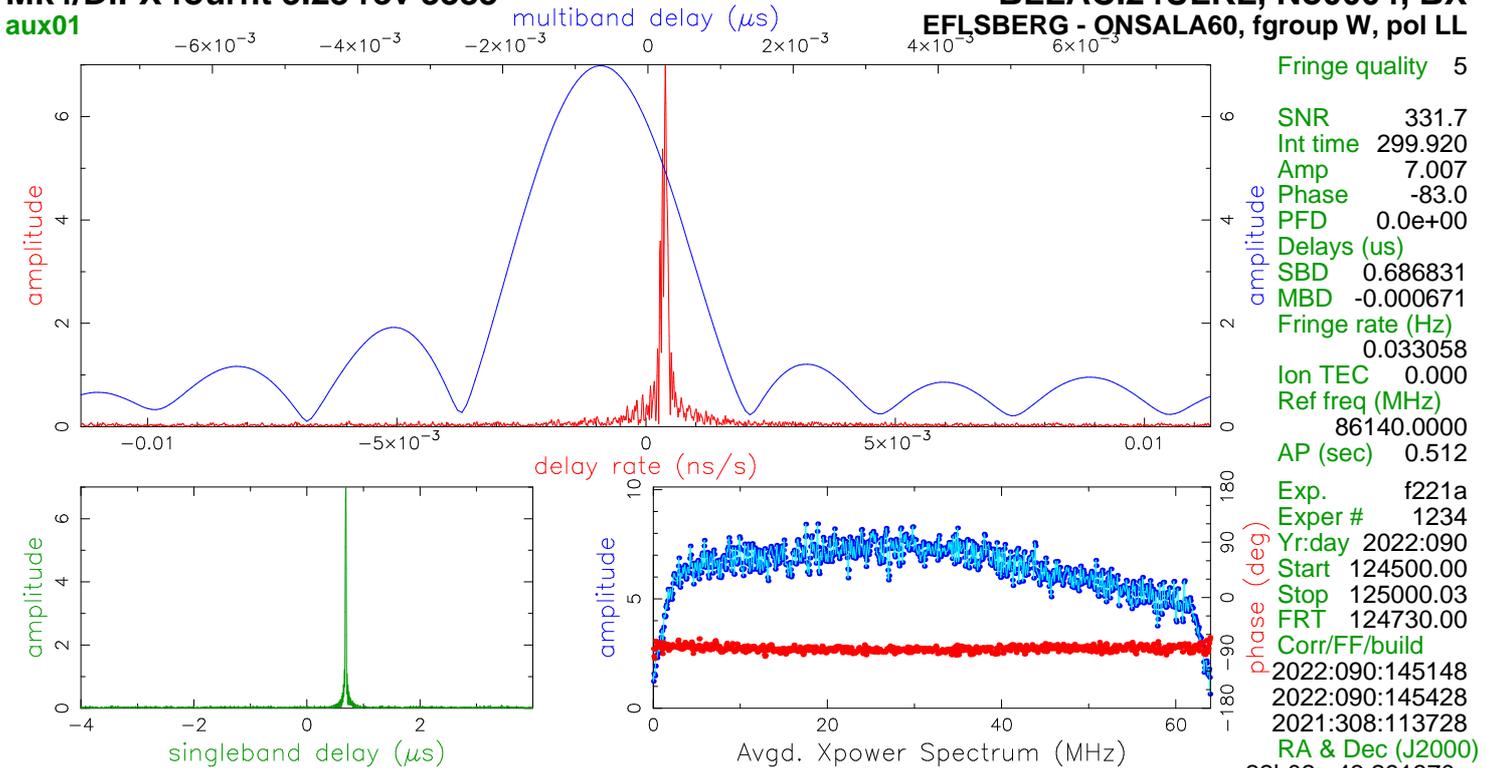
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Mk4/DiFX fourfit 3.23 rev 3383

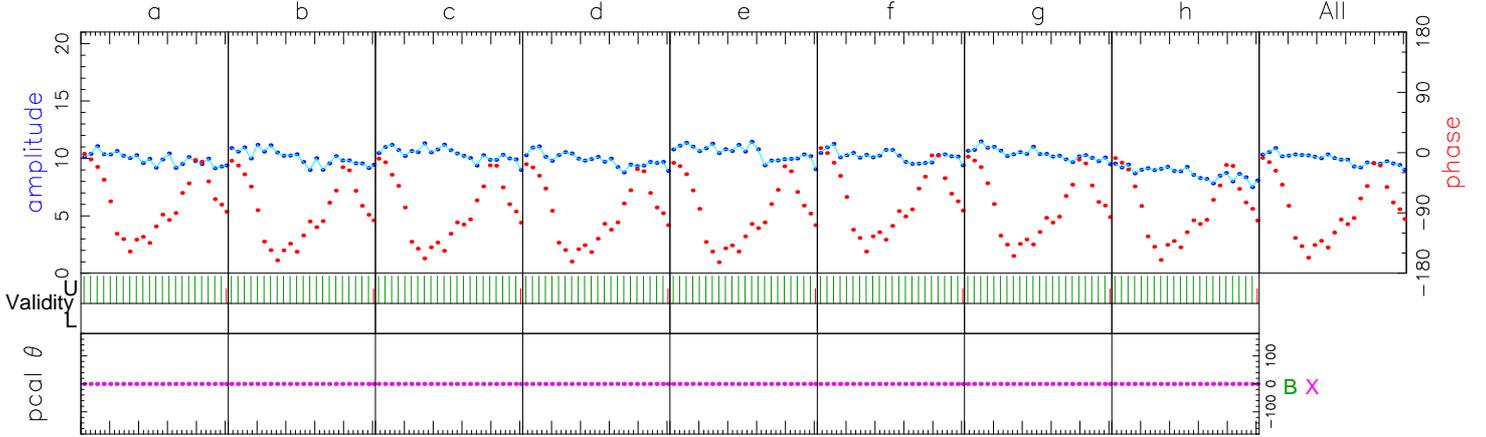
aux01

BLLAC.24ULKL, No0004, BX

EFLSBERG - ONSALA60, fgroup W, pol LL



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
	-75.6	-88.3	-86.2	-90.3	-89.9	-70.0	-80.0	-83.8	Phase	-83.0
	7.1	7.1	7.2	7.0	7.4	7.1	7.3	6.1	Ampl.	7.0
	1200.8	1200.3	1201.1	1200.7	1201.1	1200.8	1200.8	1200.3	Sbd box	1200.8
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	3.64607746233E+02	Apriori delay (usec)	3.63920917427E+02	Resid mbdelay (usec)	-6.71194E-04	+/-	3.3E-06
Sband delay (usec)	3.64607747927E+02	Apriori clock (usec)	-1.0322331E+02	Resid sbdelay (usec)	6.86831E-01	+/-	2.6E-05
Phase delay (usec)	3.63920914749E+02	Apriori clockrate (us/s)	-8.1200004E-07	Resid phdelay (usec)	-2.67765E-06	+/-	1.1E-08
Delay rate (us/s)	-6.50408375744E-02	Apriori rate (us/s)	-6.50412213405E-02	Resid rate (us/s)	3.83766E-07	+/-	6.4E-11
Total phase (deg)	214.7	Apriori accel (us/s/s)	-7.85691515601E-06	Resid phase (deg)	-83.0	+/-	0.3

ph/seg (deg)	46.0	RMS	46.0	Theor.	0.8	Amplitude	7.007 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	42.7		1.4			Search (2048X32)	6.711	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	7.9		0.5			Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	5.4		0.9			Inc. seg. avg.	9.961	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	7.039	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 280.1 el 51.6 pa 57.8 X: az 275.4 el 49.6 pa 46.5 u,v (fr/asec) 489.894 -1031.360 simultaneous interpolator

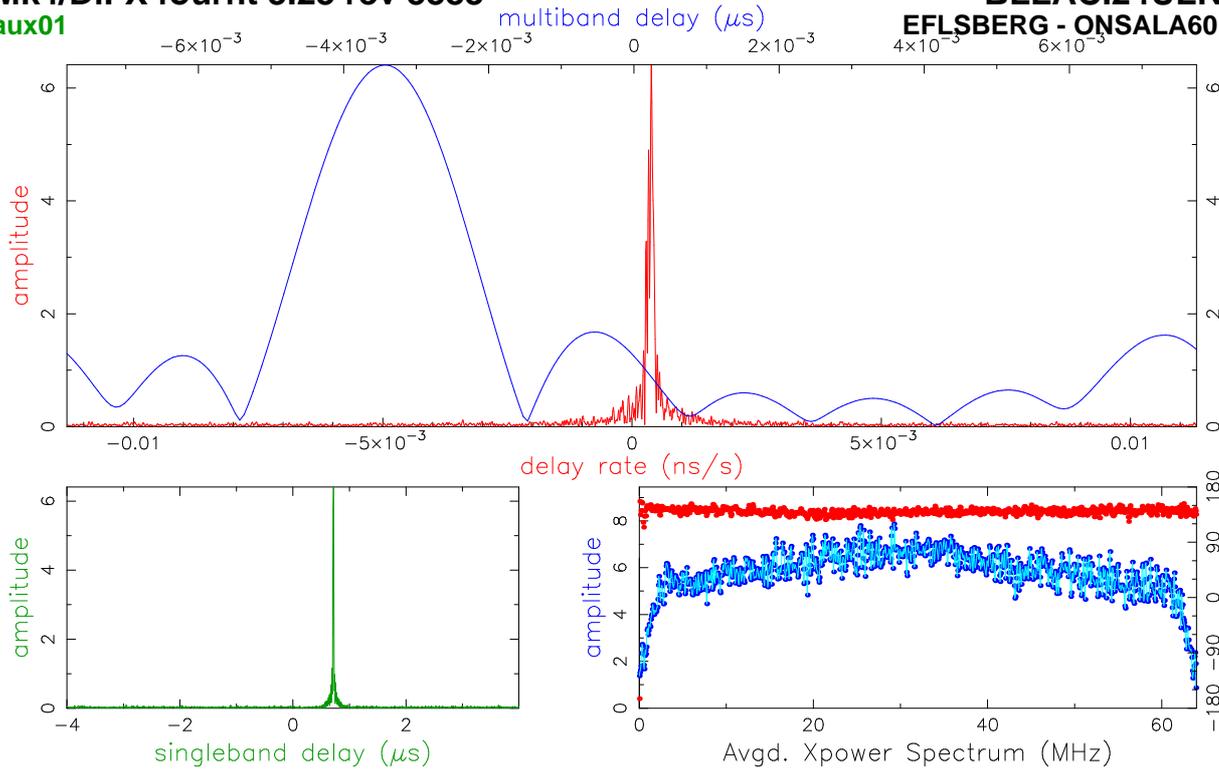
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Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BX

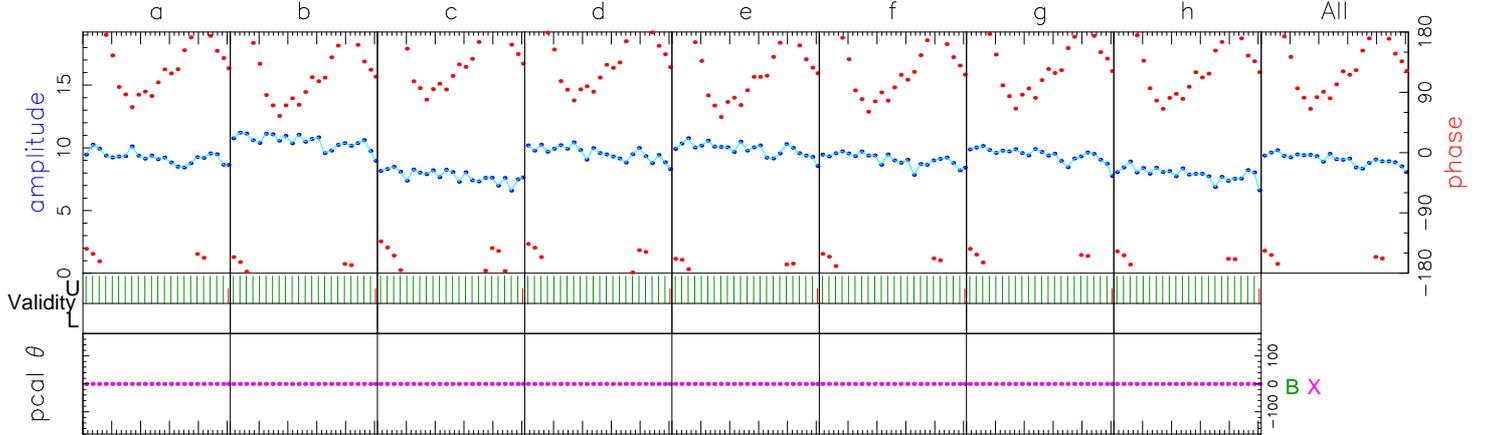
EFLSBERG - ONSALA60, fgroup W, pol RR



Fringe quality 5

SNR 303.6
 Int time 299.920
 Amp 6.414
 Phase 138.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.715213
 MBD -0.003419
 Fringe rate (Hz)
 0.033055
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145440
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



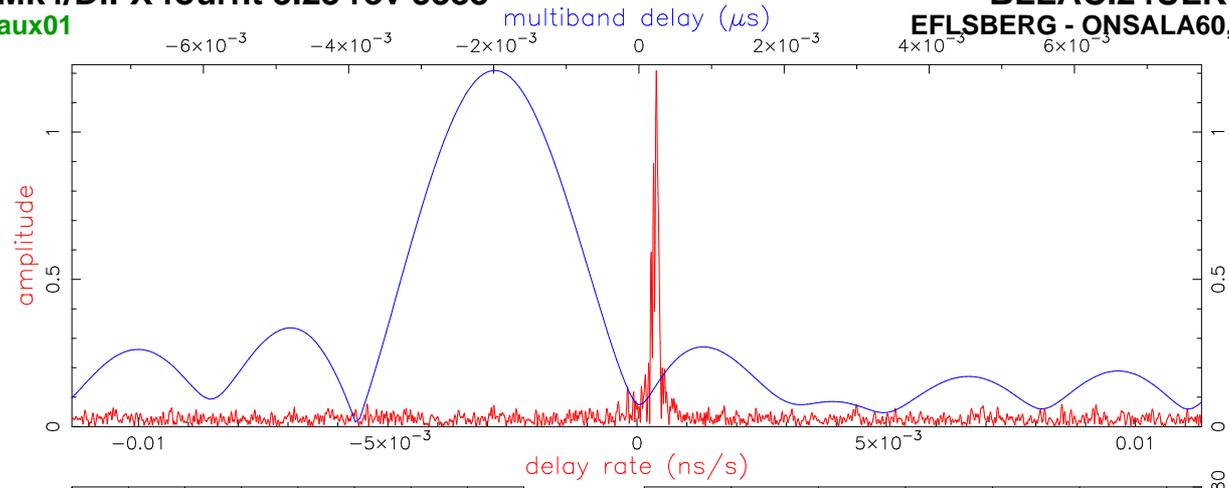
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	141.6	127.8	150.5	148.7	130.2	134.3	141.6	136.1	Phase	138.5
	6.5	7.4	5.5	6.8	7.0	6.4	6.7	5.6	Ampl.	6.5
	1207.5	1208.1	1208.5	1207.9	1208.0	1208.3	1208.3	1207.6	Sbd box	1208.1
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	3.64636248264E+02		Apriori delay (usec)		3.63920917427E+02		Resid mbdelay (usec)		-3.41916E-03	+/- 3.6E-06
Sband delay (usec)	3.64636130927E+02		Apriori clock (usec)		-1.0322331E+02		Resid sbdelay (usec)		7.15213E-01	+/- 2.8E-05
Phase delay (usec)	3.63920921893E+02		Apriori clockrate (us/s)		-8.1200004E-07		Resid phdelay (usec)		4.46603E-06	+/- 1.2E-08
Delay rate (us/s)	-6.50408375999E-02		Apriori rate (us/s)		-6.50412213405E-02		Resid rate (us/s)		3.83741E-07	+/- 7.0E-11
Total phase (deg)			Apriori accel (us/s/s)		-7.85691515601E-06		Resid phase (deg)		138.5	+/- 0.4
	RMS	Theor.	Amplitude		6.414 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	45.7	0.9	Search (2048X32)		6.267		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -4.000 4.000	
amp/seg (%)	42.4	1.6	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	8.9	0.5	Inc. seg. avg.		9.102		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		mb window (us) -0.008 0.008	
amp/frq (%)	9.7	0.9	Inc. frq. avg.		6.468		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite	
B: az 280.1 el 51.6 pa 57.8	X: az 275.4 el 49.6 pa 46.5		u, v (fr/asec) 489.894 -1031.360						ion window (TEC) 0.00 0.00	
Control file: cf_1234_gmva	Input file: /Exps/f221a/FRINGE/1234/No0004/BX..24ULKL		Output file: /Exps/f221a/FRINGE/1234/No0004/BX.W.30.24ULKL						simultaneous interpolator	

Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BX

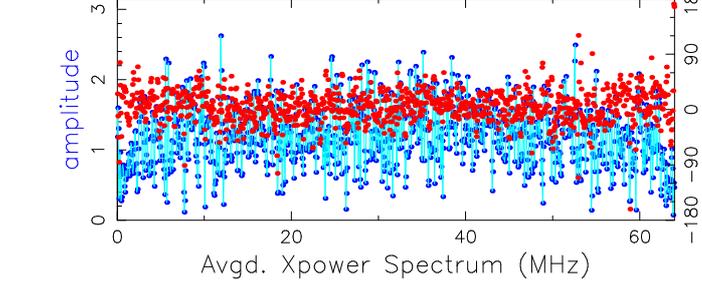
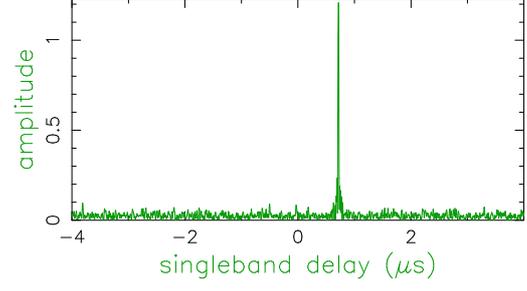
EFLSBERG - ONSALA60, fgroup W, pol LR



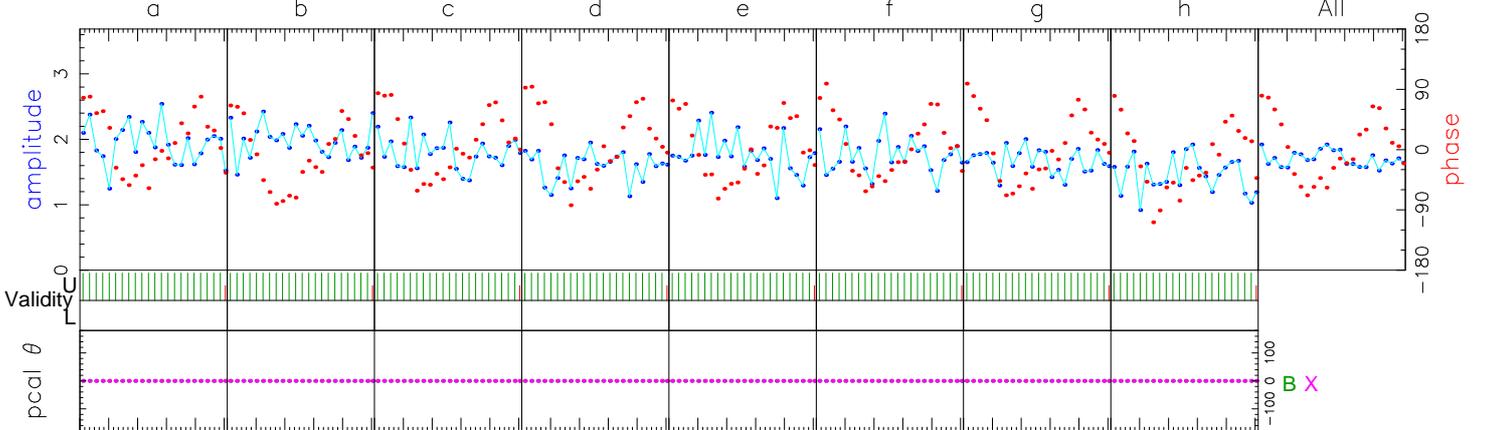
Fringe quality 6

SNR 58.2
 Int time 299.920
 Amp 1.229
 Phase 1.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.716515
 MBD -0.001931
 Fringe rate (Hz)
 0.033137
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145452
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



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



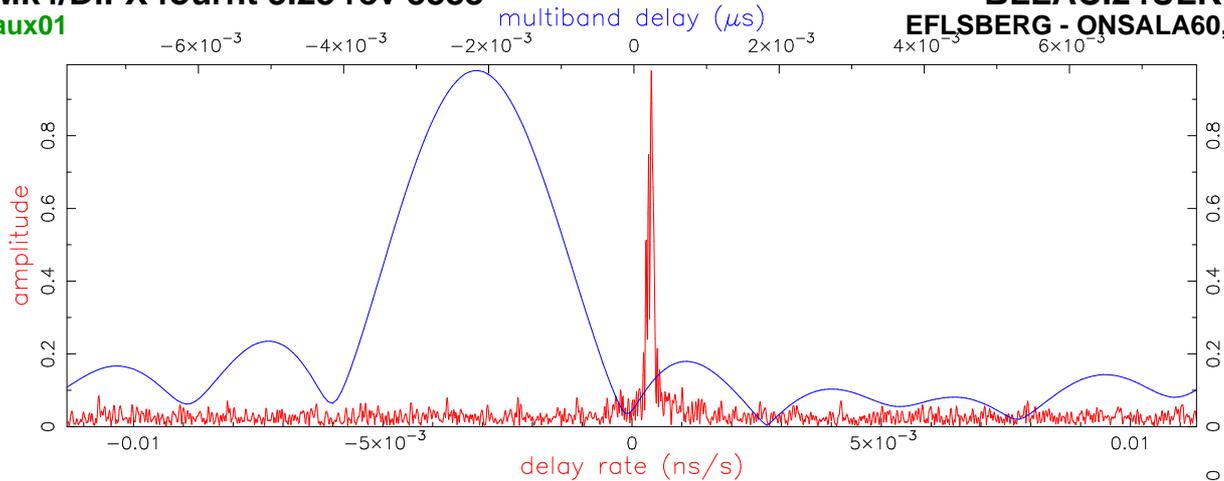
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	10.8	-11.6	9.5	11.1	-1.9	3.6	3.5	-13.1		1.6	
	1.4	1.4	1.3	1.0	1.3	1.3	1.1	1.0		1.2	
	1208.1	1208.6	1208.5	1208.6	1208.3	1208.5	1208.4	1208.0		1208.4	
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0			
B	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000			
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
B	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec) (SBD)	3.64637736202E+02		Apriori delay (usec)		3.63920917427E+02		Resid mbdelay (usec)		-1.93123E-03	+/- 1.9E-05	
Sband delay (usec)	3.64637431927E+02		Apriori clock (usec)		-1.0322331E+02		Resid sbdelay (usec)		7.16515E-01	+/- 1.5E-04	
Phase delay (usec)	3.63920917479E+02		Apriori clockrate (us/s)		-8.1200004E-07		Resid phdelay (usec)		5.19928E-08	+/- 6.4E-08	
Delay rate (us/s)	-6.50408366561E-02		Apriori rate (us/s)		-6.50412213405E-02		Resid rate (us/s)		3.84684E-07	+/- 3.7E-10	
Total phase (deg)	299.4		Apriori accel (us/s/s)		-7.85691515601E-06		Resid phase (deg)		1.6	+/- 2.0	
RMS	45.5	4.7	Amplitude		1.229 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	45.5	4.7	Search (2048X32)		1.189		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000 4.000	
amp/seg (%)	39.8	8.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	10.4	2.8	Inc. seg. avg.		1.699		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	12.0	4.9	Inc. frq. avg.		1.222		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 280.1 el 51.6 pa 57.8	X: az 275.4 el 49.6 pa 46.5		u,v (fr/asec)		489.894 -1031.360				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f221a/FRINGE/1234/No0004/BX..24ULKL		Output file: /Exps/f221a/FRINGE/1234/No0004/BX.W.44.24ULKL								

Mk4/DiFX fourfit 3.23 rev 3383

aux01

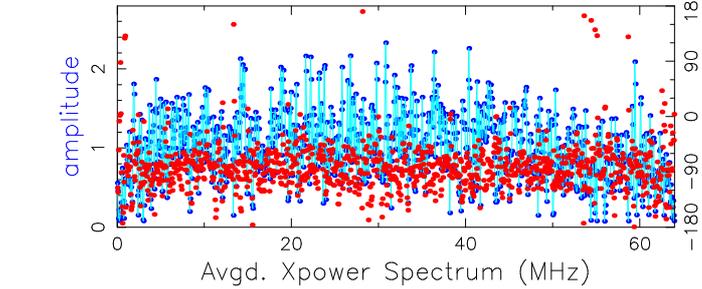
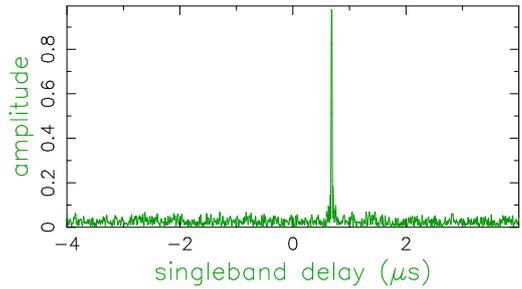
BLLAC.24ULKL, No0004, BX

EFLSBERG - ONSALA60, fgroup W, pol RL



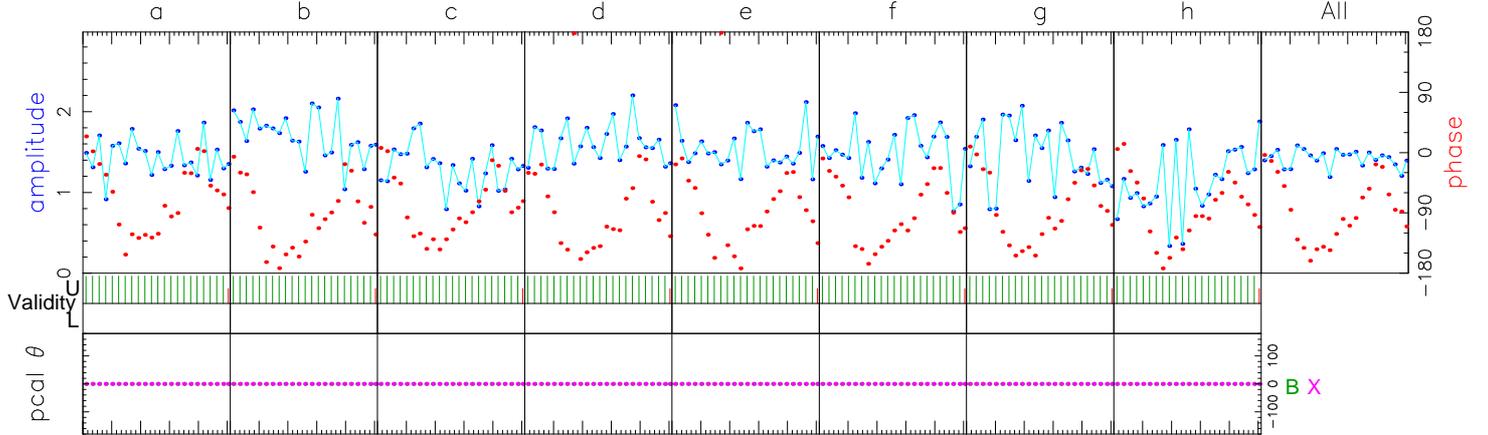
Fringe quality 7

SNR 47.1
 Int time 299.920
 Amp 0.995
 Phase -87.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.685286
 MBD -0.002137
 Fringe rate (Hz)
 0.033076
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124500.00
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145504
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-68.4	-96.3	-83.7	-94.2	-90.3	-86.2	-89.0	-83.5	Phase	-87.0
	0.9	1.2	0.9	1.0	1.1	1.0	1.0	0.8	Ampl.	1.0
	1199.9	1200.1	1200.8	1200.2	1200.7	1200.5	1200.9	1200.4	Sbd box	1200.4
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.64606280483E+02	Apriori delay (usec)	3.63920917427E+02	Resid mbdelay (usec)	-2.13694E-03	+/-	2.3E-05
Sband delay (usec)	3.64606202927E+02	Apriori clock (usec)	-1.0322331E+02	Resid sbdelay (usec)	6.85286E-01	+/-	1.8E-04
Phase delay (usec)	3.63920914623E+02	Apriori clockrate (us/s)	-8.1200004E-02	Resid phdelay (usec)	-2.80402E-06	+/-	7.8E-08
Delay rate (us/s)	-6.50408373561E-02	Apriori rate (us/s)	-6.50412213405E-02	Resid rate (us/s)	3.83984E-07	+/-	4.5E-10
Total phase (deg)	210.8	Apriori accel (us/s/s)	-7.85691515601E-06	Resid phase (deg)	-87.0	+/-	2.4

ph/seg (deg)	47.4	5.8	Search (2048X32)	0.947	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	43.9	10.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.3	3.4	Inc. seg. avg.	1.413	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	9.9	6.0	Inc. frq. avg.	0.987	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 280.1 el 51.6 pa 57.8 X: az 275.4 el 49.6 pa 46.5 u,v (fr/asec) 489.894 -1031.360 simultaneous interpolator

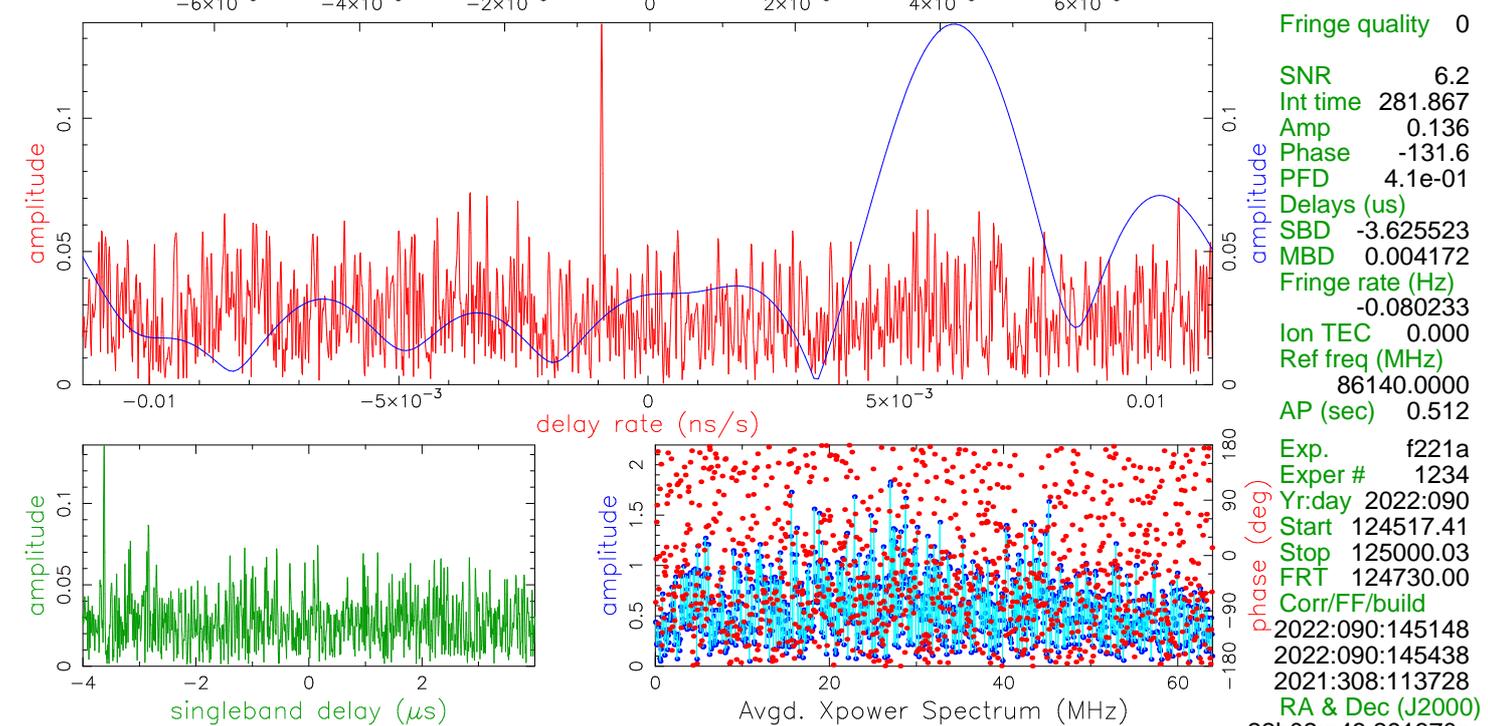
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BX..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BX.W.58.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BY

EFLSBERG - YEBES40M, fgroup W, pol RR



Fringe quality 0

SNR 6.2

Int time 281.867

Amp 0.136

Phase -131.6

PFD 4.1e-01

Delays (us)

SBD -3.625523

MBD 0.004172

Fringe rate (Hz)

-0.080233

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. f221a

Exper # 1234

Yr:day 2022:090

Start 124517.41

Stop 125000.03

FRT 124730.00

Corr/FF/build

2022:090:145148

2022:090:145438

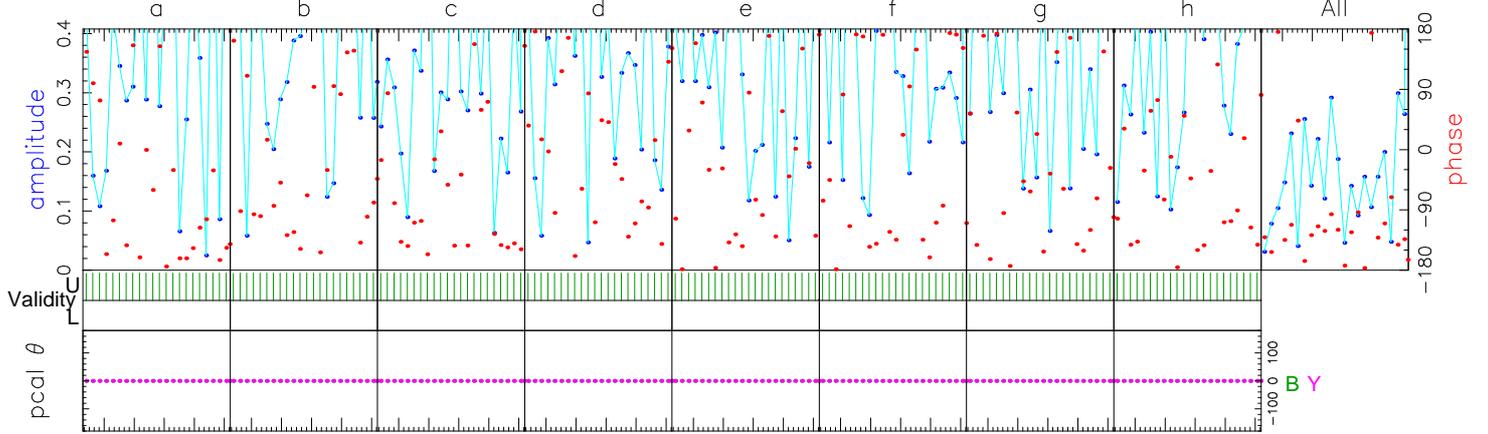
2021:308:113728

RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 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
	-124.2	-135.5	-136.9	-94.7	-148.6	-146.8	-147.3	-98.8	Phase	-131.6
	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
	966.2	939.6	360.8	1157.7	163.9	1833.8	833.8	1061.4	Sbd box	96.9
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -9.90697155921E+02 Apriori delay (usec) -9.87076327945E+02 Resid mbdelay (usec) 4.17202E-03 +/- 1.7E-04

Sband delay (usec) -9.90701851195E+02 Apriori clock (usec) -3.0578297E+01 Resid sbdelay (usec) -3.62552E+00 +/- 1.4E-03

Phase delay (usec) -9.87076332188E+02 Apriori clockrate (us/s) 1.2990001E-06 Resid phdelay (usec) -4.24338E-06 +/- 5.9E-07

Delay rate (us/s) 2.51849256758E-02 Apriori rate (us/s) 2.51858571024E-02 Resid rate (us/s) -9.31427E-07 +/- 3.6E-09

Total phase (deg) -91.7 Apriori accel (us/s/s) 1.43798384872E-05 Resid phase (deg) -131.6 +/- 18.4

RMS Theor. Amplitude 0.136 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 47.5 44.2 Search (2048X32) 0.134 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000

amp/seg (%) 65.4 77.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

ph/frq (deg) 23.4 26.0 Inc. seg. avg. 0.120 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011

amp/frq (%) 33.4 45.5 Inc. frq. avg. 0.130 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 280.1 el 51.6 pa 57.8 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -169.158 1832.544 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BY.W.22.24ULKL

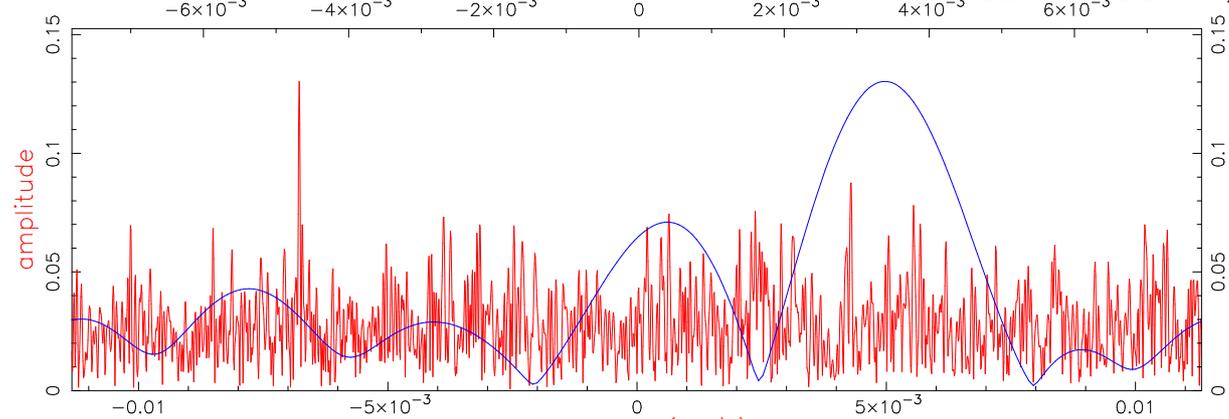
Mk4/DiFX fourfit 3.23 rev 3383

aux01

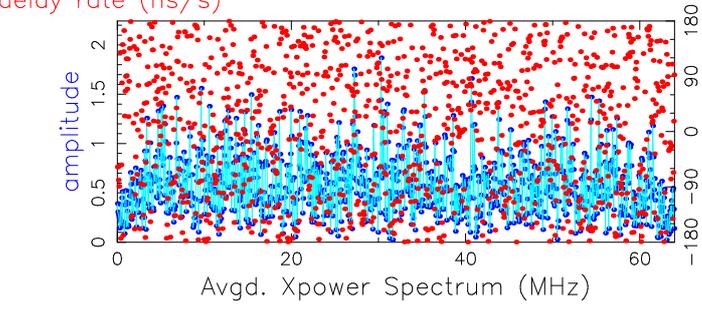
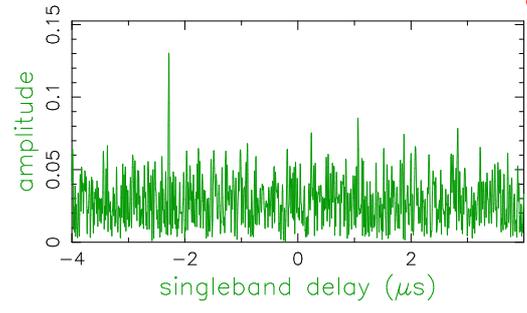
BLLAC.24ULKL, No0004, BY

EFLSBERG - YEBES40M, fgroup W, pol LR

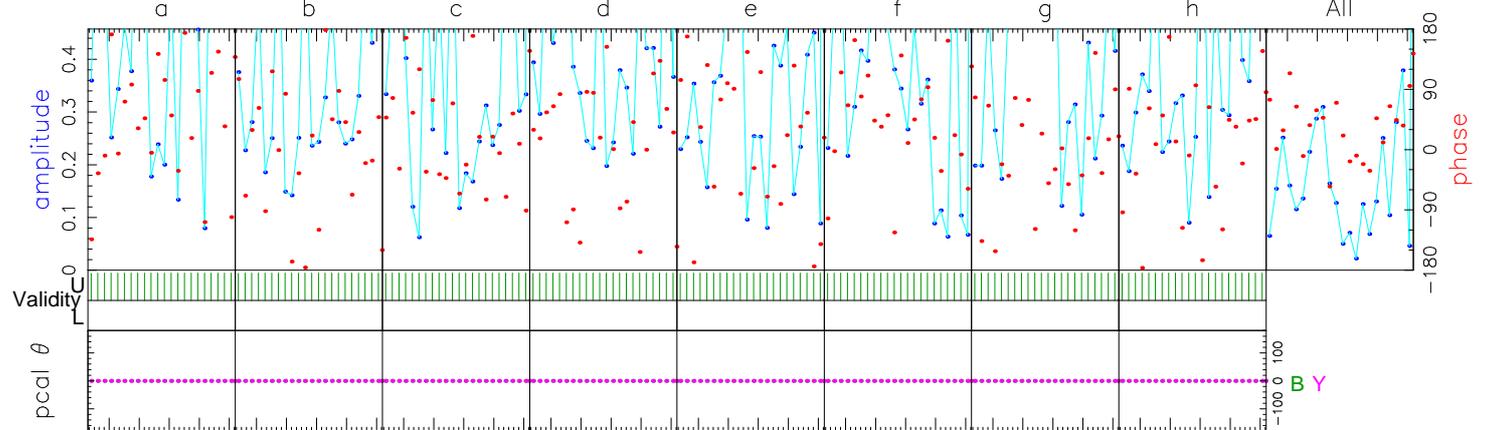
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 281.867
 Amp 0.153
 Phase 34.9
 PFD 8.5e-01
 Delays (us)
 SBD -2.284168
 MBD 0.003427
 Fringe rate (Hz)
 -0.584824
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124517.41
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145450
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 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	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-9.89354150626E+02	Apriori delay (usec)	-9.87076327945E+02	Resid mbdelay (usec)	3.42732E-03	+/-	1.8E-04
Sband delay (usec)	-9.89360495695E+02	Apriori clock (usec)	-3.0578297E+01	Resid sbdelay (usec)	-2.28417E+00	+/-	1.4E-03
Phase delay (usec)	-9.87076326820E+02	Apriori clockrate (us/s)	1.2990001E-06	Resid phdelay (usec)	1.12448E-06	+/-	6.1E-07
Delay rate (us/s)	2.51790678776E-02	Apriori rate (us/s)	2.51858571024E-02	Resid rate (us/s)	-6.78922E-06	+/-	3.8E-09
Total phase (deg)	-285.2	Apriori accel (us/s/s)	1.43798384872E-05	Resid phase (deg)	34.9	+/-	19.1

ph/seg (deg) 42.7 45.7 Search (2048X32) 0.128 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.4 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 23.4 26.9 Inc. seg. avg. 0.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.3 47.0 Inc. frq. avg. 0.147 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 280.1 el 51.6 pa 57.8 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -169.158 1832.544 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BY.W.36.24ULKL

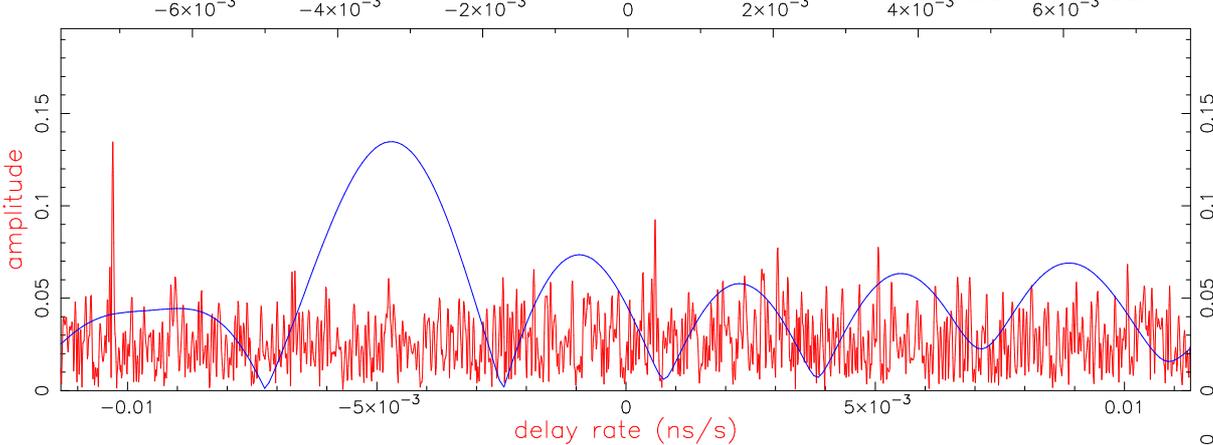
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BY

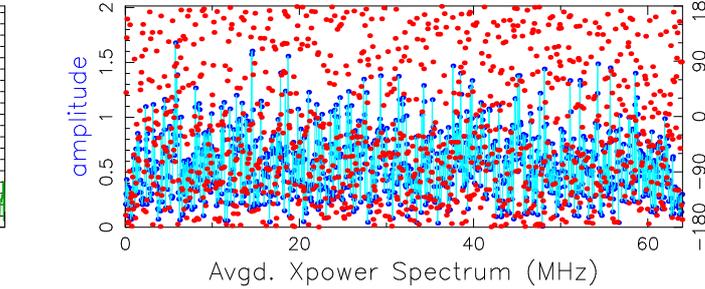
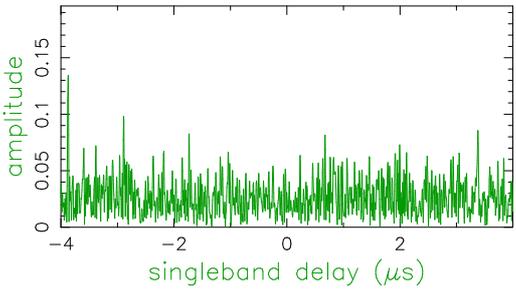
EFLSBERG - YEBES40M, fgroup W, pol RL

multiband delay (μ s)



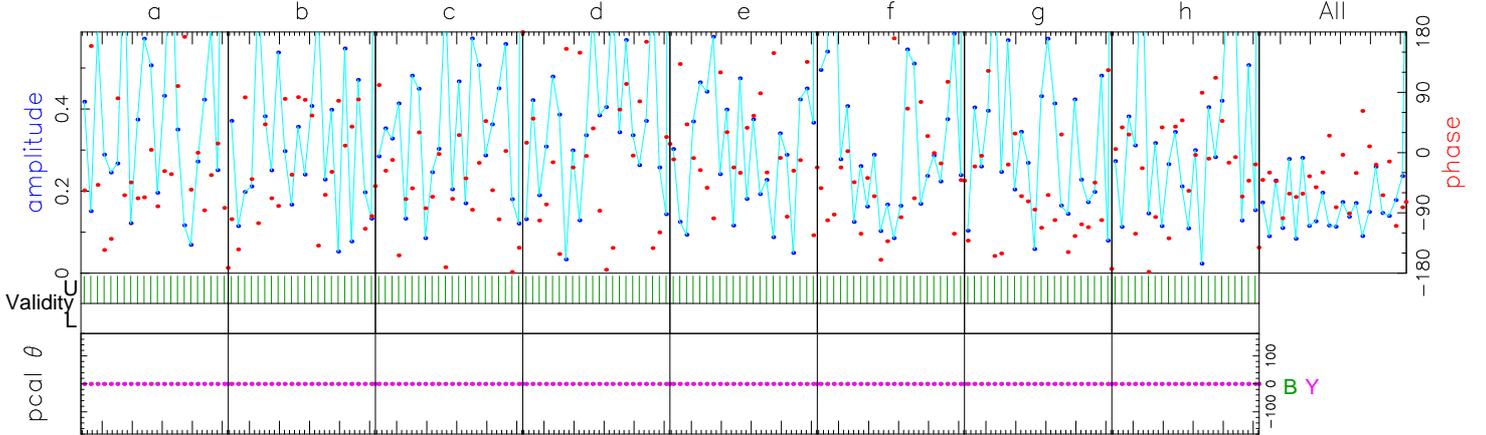
Fringe quality 0

SNR 6.2
 Int time 281.867
 Amp 0.196
 Phase -45.7
 PFD 4.0e-01
 Delays (us)
 SBD -3.872417
 MBD -0.003320
 Fringe rate (Hz)
 -0.888641
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124517.41
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145502
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



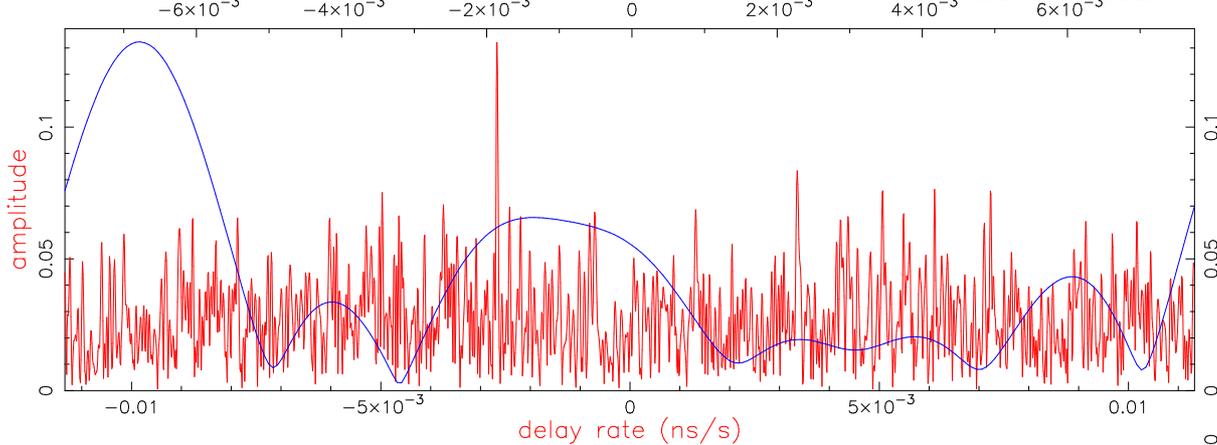
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.5	-32.9	-43.3	-59.4	-17.2	-60.3	-89.8	-10.7	Phase	-45.7
	0.4	0.1	0.2	0.0	0.2	0.2	0.2	0.3	Ampl.	0.2
	32.9	159.3	445.8	254.0	299.2	765.8	131.0	453.9	Sbd box	33.7
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-9.90954648155E+02	Apriori delay (usec)	-9.87076327945E+02	Resid mbdelay (usec)	-3.32021E-03	+/-	1.7E-04
Sband delay (usec)	-9.90948745445E+02	Apriori clock (usec)	-3.0578297E+01	Resid sbdelay (usec)	-3.87242E+00	+/-	1.4E-03
Phase delay (usec)	-9.87076329419E+02	Apriori clockrate (us/s)	1.2990001E-06	Resid phdelay (usec)	-1.47486E-06	+/-	5.9E-07
Delay rate (us/s)	2.51755408620E-02	Apriori rate (us/s)	2.51858571024E-02	Resid rate (us/s)	-1.03162E-05	+/-	3.6E-09
Total phase (deg)	-5.8	Apriori accel (us/s/s)	1.43798384872E-05	Resid phase (deg)	-45.7	+/-	18.4

ph/seg (deg)	40.9	RMS	44.1	Theor.	44.1	Amplitude	0.196 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	53.0	Search (2048X32)	0.133	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	27.8	Inc. seg. avg.	0.183	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate(Mb/s):	2048	nlags:	1024 t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	53.8	Inc. frq. avg.	0.194	u,v (fr/asec)	-169.158 1832.544	simultaneous interpolator							

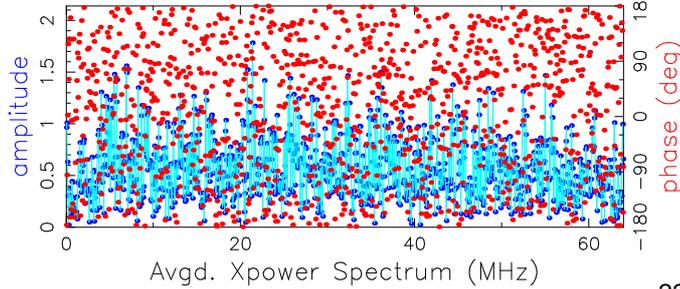
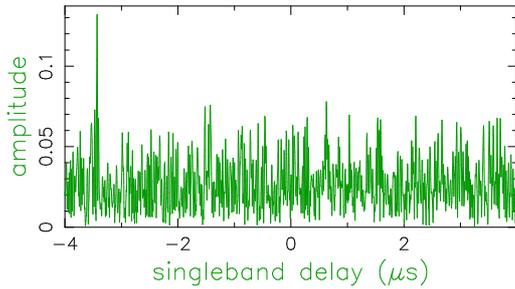
B: az 280.1 el 51.6 pa 57.8 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -169.158 1832.544 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BY.W.50.24ULKL

multiband delay (μs)



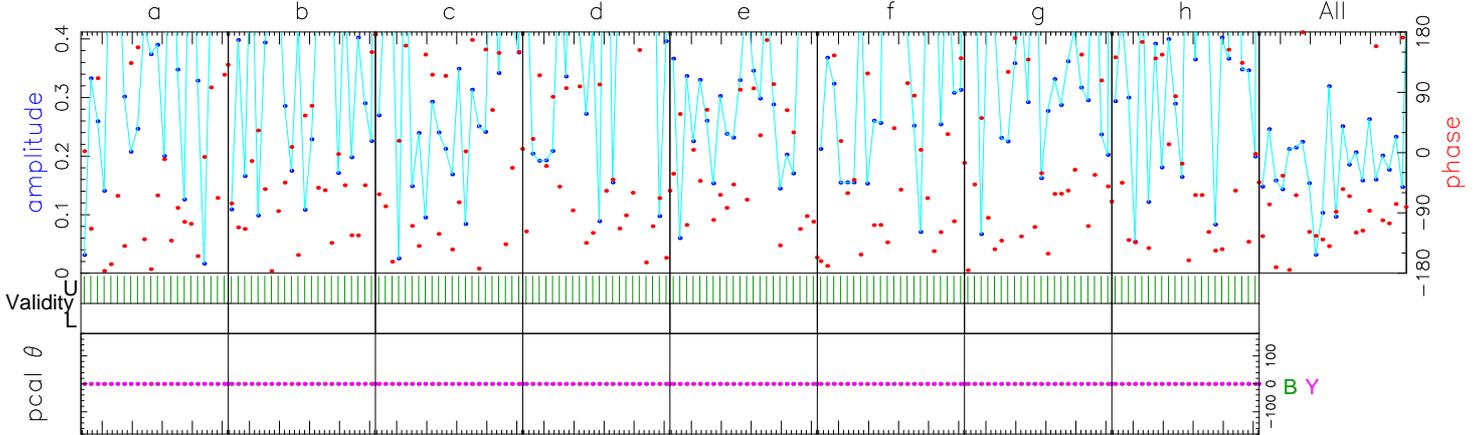
Fringe quality 0

SNR 6.2
 Int time 281.867
 Amp 0.137
 Phase -111.4
 PFD 5.3e-01
 Delays (us)
 SBD -3.431274
 MBD -0.006849
 Fringe rate (Hz)
 -0.229734
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124517.41
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145427
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-134.1	-79.9	-167.4	-103.0	-71.1	-123.2	-99.9	-121.0	Phase	-111.4
	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	1291.9	1191.9	2002.3	1983.4	1454.9	1464.5	30.6	714.2	Sbd box	146.6
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-9.90505052039E+02	Apriori delay (usec)	-9.87076327945E+02	Resid mbdelay (usec)	-6.84909E-03	+/-	1.8E-04
Sband delay (usec)	-9.90507601695E+02	Apriori clock (usec)	-3.0578297E+01	Resid sbdelay (usec)	-3.43127E+00	+/-	1.4E-03
Phase delay (usec)	-9.87076331536E+02	Apriori clockrate (us/s)	1.2990001E-06	Resid phdelay (usec)	-3.59108E-06	+/-	6.0E-07
Delay rate (us/s)	2.51831901192E-02	Apriori rate (us/s)	2.51858571024E-02	Resid rate (us/s)	-2.66698E-06	+/-	3.7E-09
Total phase (deg)	-71.5	Apriori accel (us/s/s)	1.43798384872E-05	Resid phase (deg)	-111.4	+/-	18.6

ph/seg (deg)	45.4	Theor.	44.6	Amplitude	0.137 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	59.6	Search (2048X32)	0.131	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000
ph/frq (deg)	33.4	Inc. seg. avg.	0.144	Inc. frq. avg.	0.136	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	29.9	Inc. frq. avg.	0.136			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite
							ion window (TEC) 0.00 0.00

B: az 280.1 el 51.6 pa 57.8 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -169.158 1832.544 simultaneous interpolator

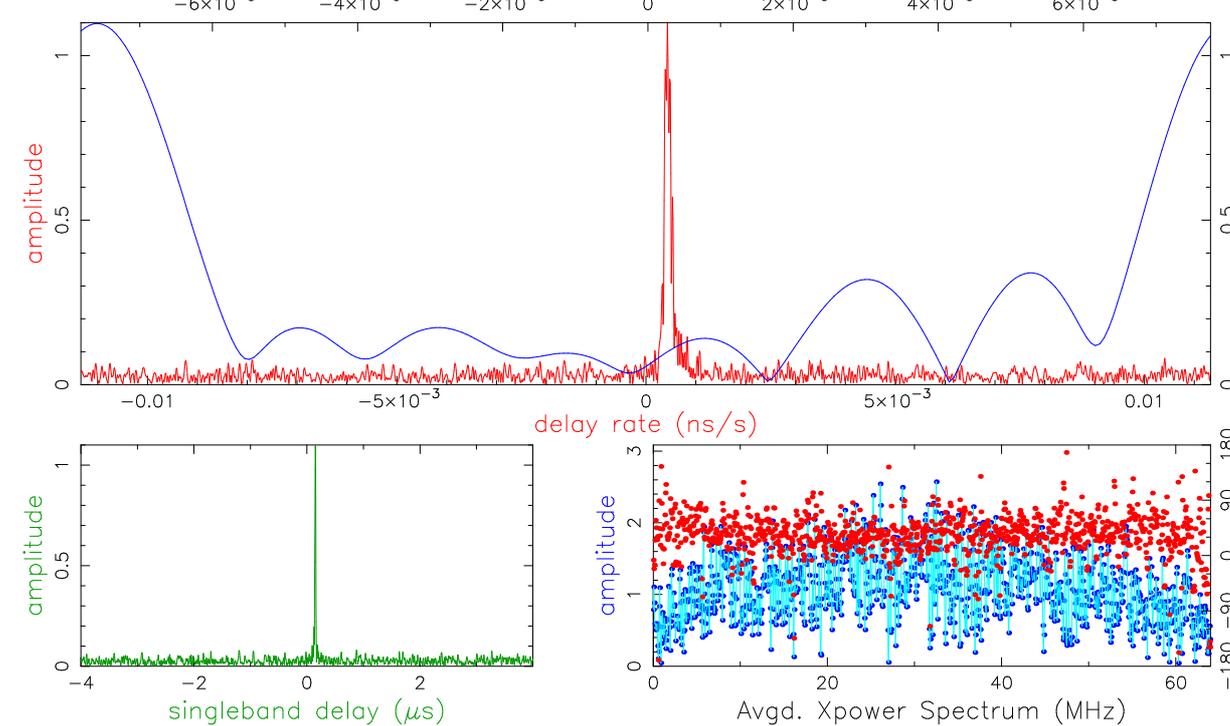
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BY.W.5.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

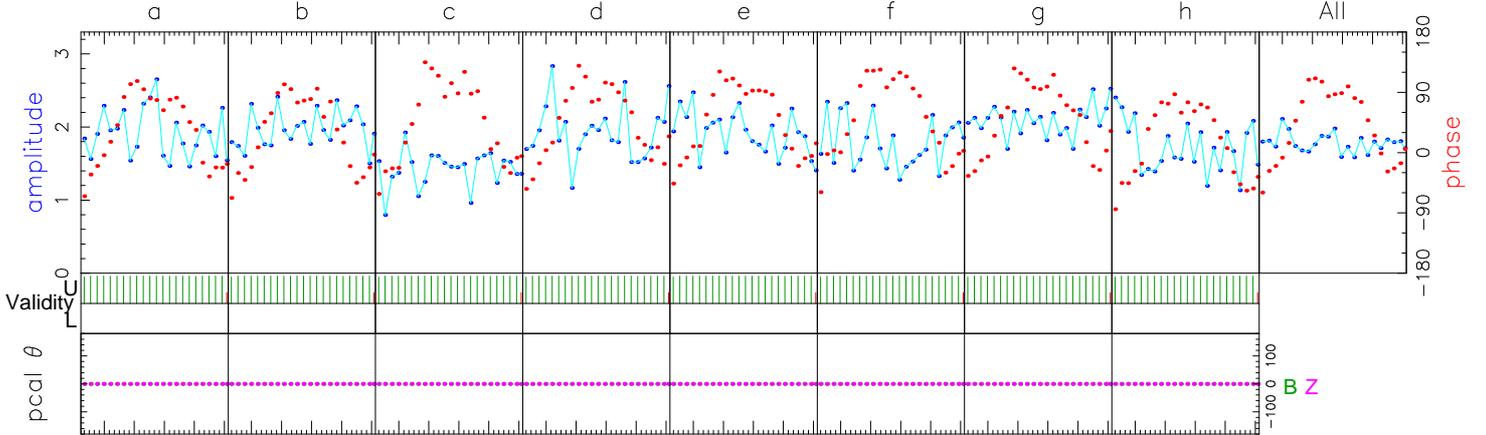
BLLAC.24ULKL, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol RR



Fringe quality 4
 SNR 50.8
 Int time 285.841
 Amp 1.100
 Phase 39.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.149067
 MBD -0.007574
 Fringe rate (Hz)
 0.037034
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145439
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 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	
	37.2	31.0	43.9	44.8	47.7	49.1	48.6	11.7	Phase	39.7	
	1.2	1.2	0.8	1.2	1.2	1.0	1.3	1.0	Ampl.	1.1	
	1062.9	1063.4	1063.5	1063.0	1063.1	1063.4	1063.0	1062.3	Sbd box	1063.2	
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
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		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	1.96070534172E+03		Apriori delay (usec)		1.96055666603E+03		Resid mbdelay (usec)		-7.57431E-03	+/- 2.1E-05	
Sband delay (usec)	1.96070573303E+03		Apriori clock (usec)		-2.9660038E+01		Resid sbdelay (usec)		1.49067E-01	+/- 1.7E-04	
Phase delay (usec)	1.96055666731E+03		Apriori clockrate (us/s)		-3.6400001E-07		Resid phdelay (usec)		1.28062E-06	+/- 7.3E-08	
Delay rate (us/s)	-6.11972029667E-02		Apriori rate (us/s)		-6.11976328989E-02		Resid rate (us/s)		4.29932E-07	+/- 4.4E-10	
Total phase (deg)	116.0		Apriori accel (us/s/s)		-1.79023214285E-05		Resid phase (deg)		39.7	+/- 2.3	
	RMS	Theor.	Amplitude	1.100 +/- 0.022		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	53.2	5.4	Search (2048X32)	1.077		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-4.000 4.000	
amp/seg (%)	63.5	9.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	13.8	3.2	Inc. seg. avg.	1.780		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	15.4	5.6	Inc. frq. avg.	1.119		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite		ion window (TEC)	0.00 0.00
B: az 280.1 el 51.6 pa 57.8	Z: az 282.1 el 43.6 pa 41.0		u, v (fr/asec) 442.485 -1918.331						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f221a/FRINGE/1234/No0004/BZ..24ULKL		Output file: /Exps/f221a/FRINGE/1234/No0004/BZ.W.24.24ULKL								

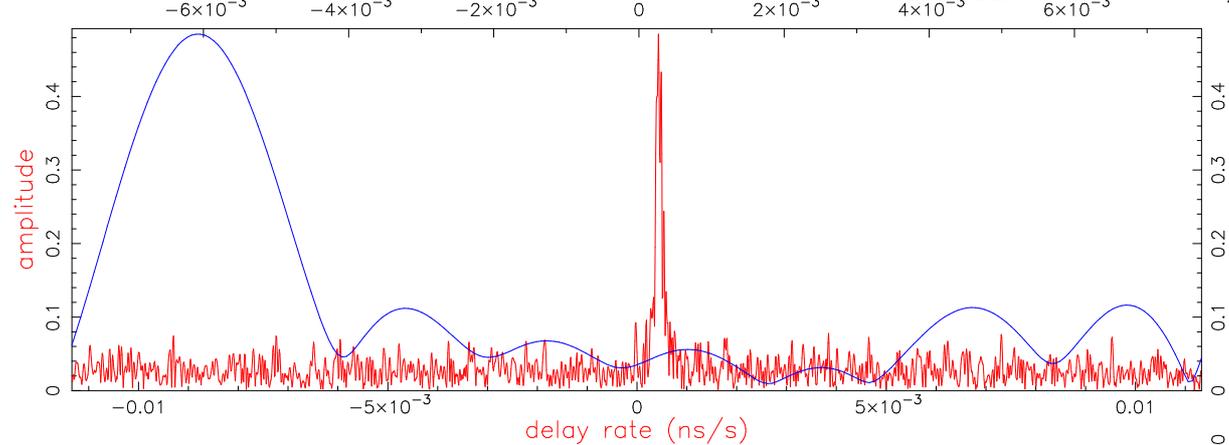
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

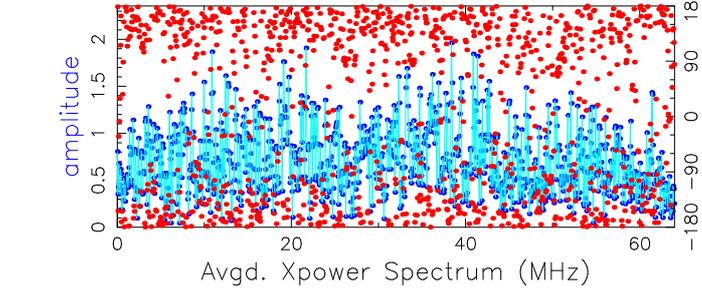
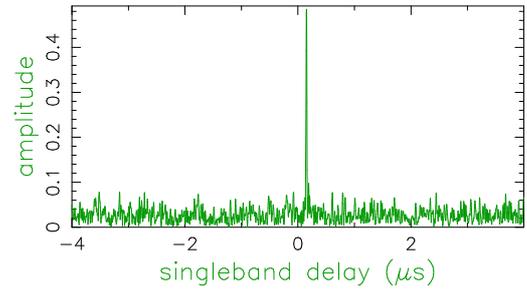
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



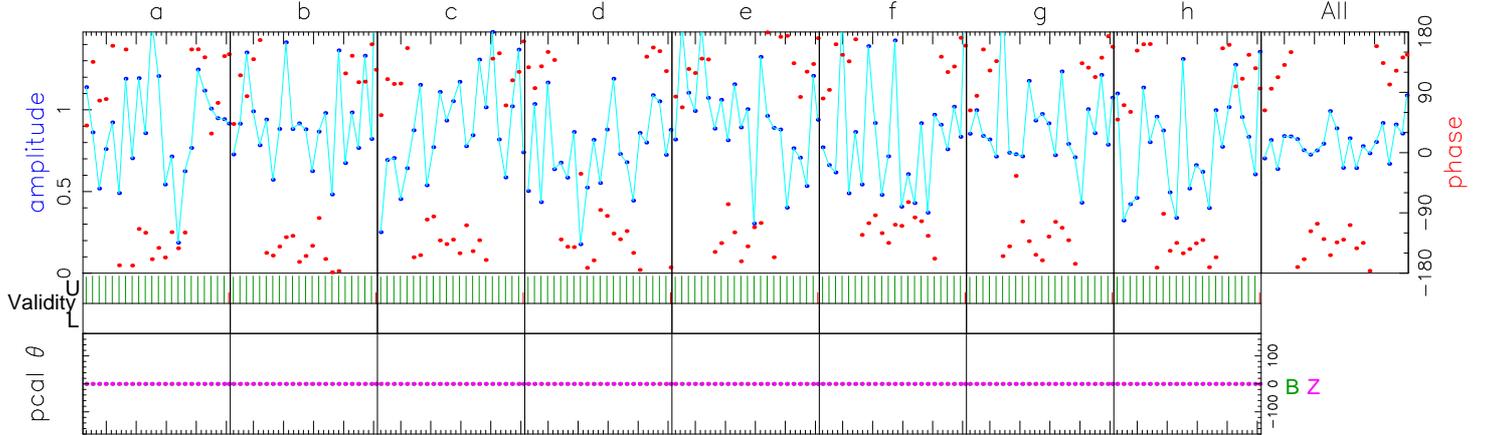
Fringe quality 9

SNR 22.7
 Int time 285.841
 Amp 0.492
 Phase 177.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.150742
 MBD -0.006109
 Fringe rate (Hz)
 0.036851
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145451
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 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	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.96070680663E+03	Apriori delay (usec)	1.96055666603E+03	Resid mbdelay (usec)	-6.10940E-03	+/-	4.8E-05
Sband delay (usec)	1.96070740803E+03	Apriori clock (usec)	-2.9660038E+01	Resid sbdelay (usec)	1.50742E-01	+/-	3.8E-04
Phase delay (usec)	1.96055667176E+03	Apriori clockrate (us/s)	-3.6400001E-07	Resid phdelay (usec)	5.72587E-06	+/-	1.6E-07
Delay rate (us/s)	-6.11972051002E-02	Apriori rate (us/s)	-6.11976328989E-02	Resid rate (us/s)	4.27799E-07	+/-	9.8E-10
Total phase (deg)	253.8	Apriori accel (us/s/s)	-1.79023214285E-05	Resid phase (deg)	177.6	+/-	5.0

ph/seg (deg)	RMS 55.3	Theor. 12.1	Amplitude Search (2048X32)	0.492 +/- 0.022	0.467	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	64.6	21.1	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000	
ph/frq (deg)	12.6	7.1	Inc. seg. avg.	0.777	0.777	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	8.4	12.4	Inc. frq. avg.	0.490	0.490	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 1024 t_cohere infinite	dr window (ns/s)	-0.011	0.011

B: az 280.1 el 51.6 pa 57.8 Z: az 282.1 el 43.6 pa 41.0 u,v (fr/asec) 442.485 -1918.331 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BZ.W.38.24ULKL

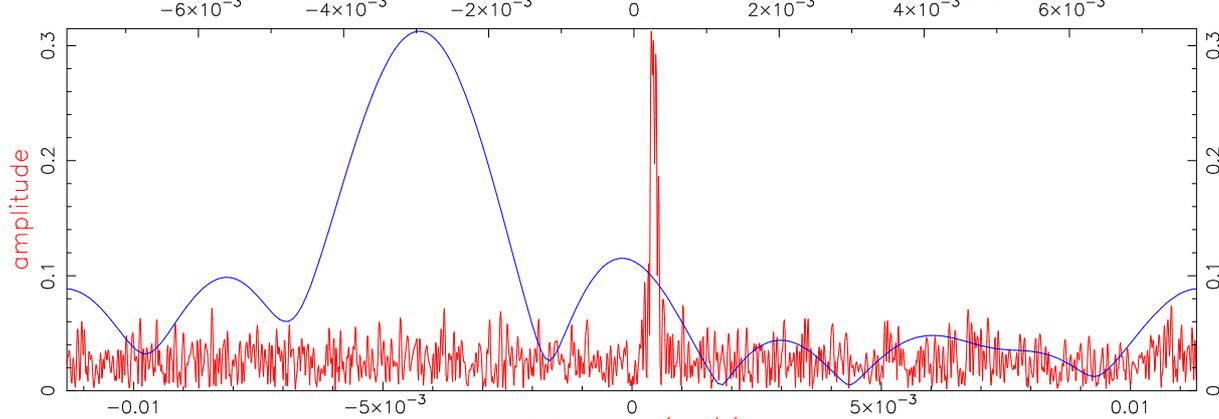
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol RL

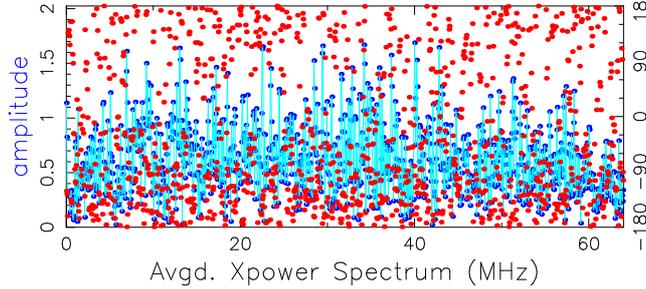
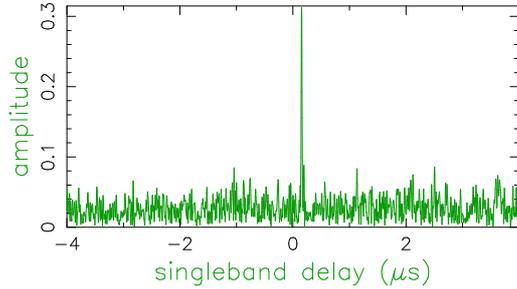
multiband delay (μ s)



Fringe quality 9

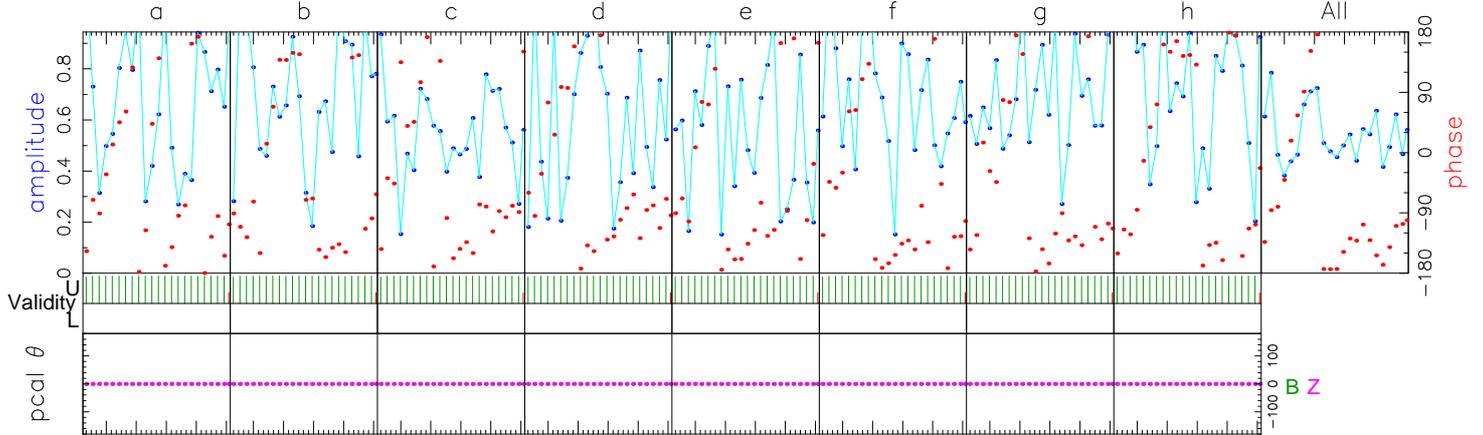
SNR 14.5
 Int time 285.841
 Amp 0.315
 Phase -140.7
 PFD 1.4e-38
 Delays (us)
 SBD 0.153472
 MBD -0.002920
 Fringe rate (Hz)
 0.033573
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145502
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 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
	-156.4	-148.2	-122.9	-119.6	-136.6	-136.4	-137.3	-159.4	Phase	-140.7
	0.3	0.4	0.3	0.3	0.2	0.3	0.4	0.4	Ampl.	0.3
	1065.0	1064.6	1665.9	1064.2	1065.0	1063.6	1064.2	1064.0	Sbd box	1064.3
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	1.96070999558E+03	Apriori delay (usec)	1.96055666603E+03	Resid mbdelay (usec)	-2.92045E-03	+/-	7.5E-05
Sband delay (usec)	1.96071013853E+03	Apriori clock (usec)	-2.9660038E+01	Resid sbdelay (usec)	1.53472E-01	+/-	5.9E-04
Phase delay (usec)	1.96055666149E+03	Apriori clockrate (us/s)	-3.6400001E-07	Resid phdelay (usec)	-4.53852E-06	+/-	2.5E-07
Delay rate (us/s)	-6.11972431497E-02	Apriori rate (us/s)	-6.11976328989E-02	Resid rate (us/s)	3.89749E-07	+/-	1.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.79023214285E-05	Resid phase (deg)	-140.7	+/-	7.9

ph/seg (deg)	66.8	RMS	18.9	Theor.	0.315 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	79.7	Search (2048X32)	0.308	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	15.6	Inc. seg. avg.	0.514	Inc. frq. avg.	0.316	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	22.9	Inc. frq. avg.	0.316			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 280.1 el 51.6 pa 57.8 Z: az 282.1 el 43.6 pa 41.0 u,v (fr/asec) 442.485 -1918.331 simultaneous interpolator

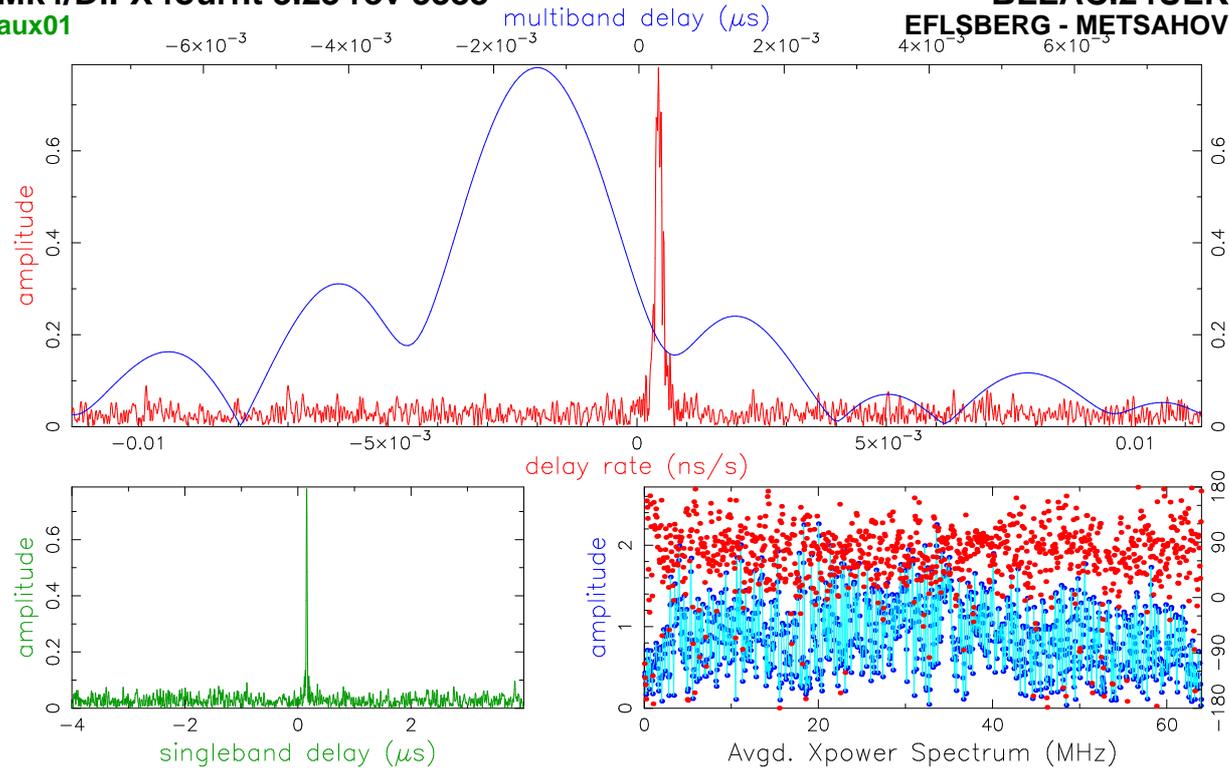
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/BZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/BZ.W.52.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

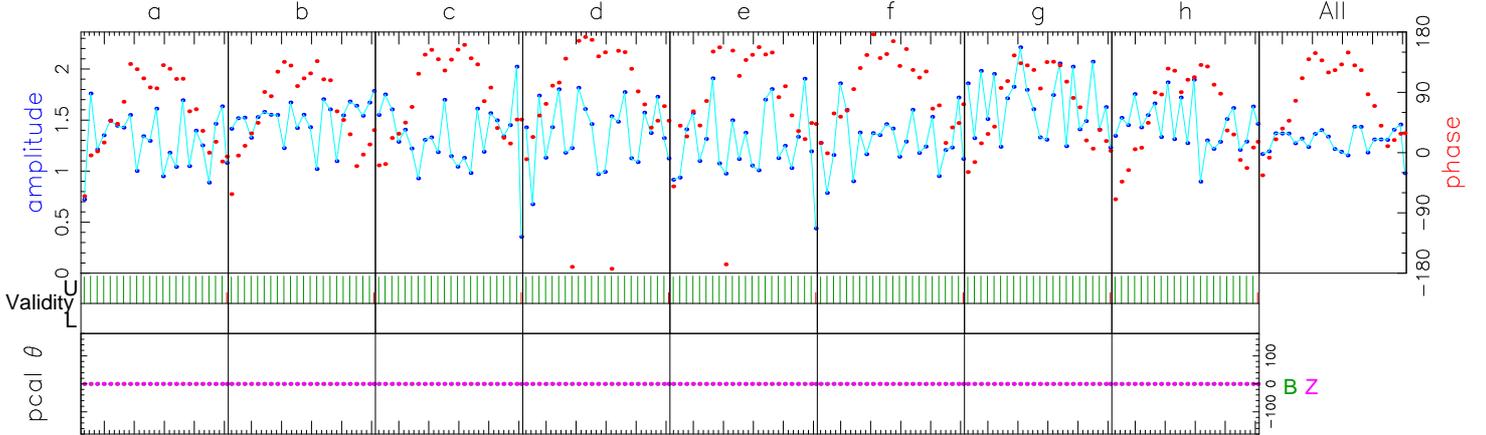
EFLSBERG - METSAHOV, fgroup W, pol LL



Fringe quality 6

SNR 36.4
 Int time 285.841
 Amp 0.787
 Phase 80.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.155054
 MBD -0.001431
 Fringe rate (Hz)
 0.036891
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145427
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	61.7	65.3	78.5	113.9	98.2	95.6	75.3	55.0	Phase	80.0
	0.8	0.9	0.7	0.8	0.7	0.8	1.0	0.8	Ampl.	0.8
	1064.8	1065.0	1065.0	1064.6	1064.7	1064.6	1064.4	1063.9	Sbd box	1064.7
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.96071148485E+03					1.96055666603E+03			Resid mbdelay (usec)	-1.43119E-03 +/- 3.0E-05
Sband delay (usec)	1.96071172053E+03					-2.9660038E+01			Resid sbdelay (usec)	1.55054E-01 +/- 2.4E-04
Phase delay (usec)	1.96055666861E+03					-3.6400001E-07			Resid phdelay (usec)	2.57890E-06 +/- 1.0E-07
Delay rate (us/s)	-6.11972046311E-02					-6.11976328989E-02			Resid rate (us/s)	4.28268E-07 +/- 6.1E-10
Total phase (deg)		156.3				-1.79023214285E-05			Resid phase (deg)	80.0 +/- 3.1
	RMS	Theor.	Amplitude	0.787 +/- 0.022					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.4	7.6	Search (2048X32)	0.770					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000
amp/seg (%)	66.9	13.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	22.1	4.5	Inc. seg. avg.	1.293					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	10.8	7.8	Inc. frq. avg.	0.823					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 1024 t_cohere infinite	
B: az 280.1 el 51.6 pa 57.8		Z: az 282.1 el 43.6 pa 41.0				u,v (fr/asec) 442.485 -1918.331				simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/f221a/FRINGE/1234/No0004/BZ..24ULKL				Output file: /Exps/f221a/FRINGE/1234/No0004/BZ.W.9.24ULKL				