

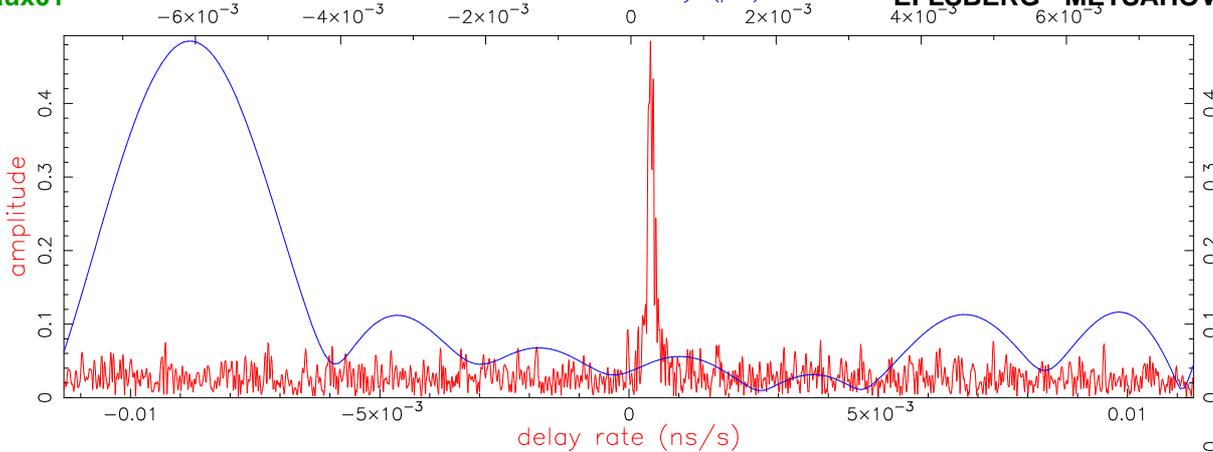
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

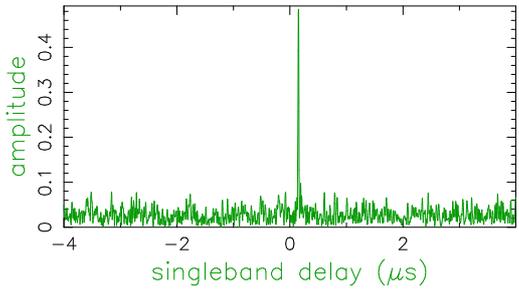
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

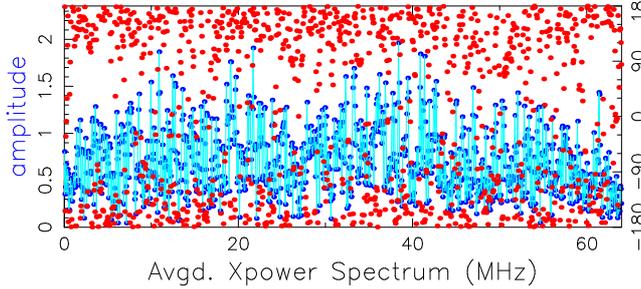


Fringe quality 9

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

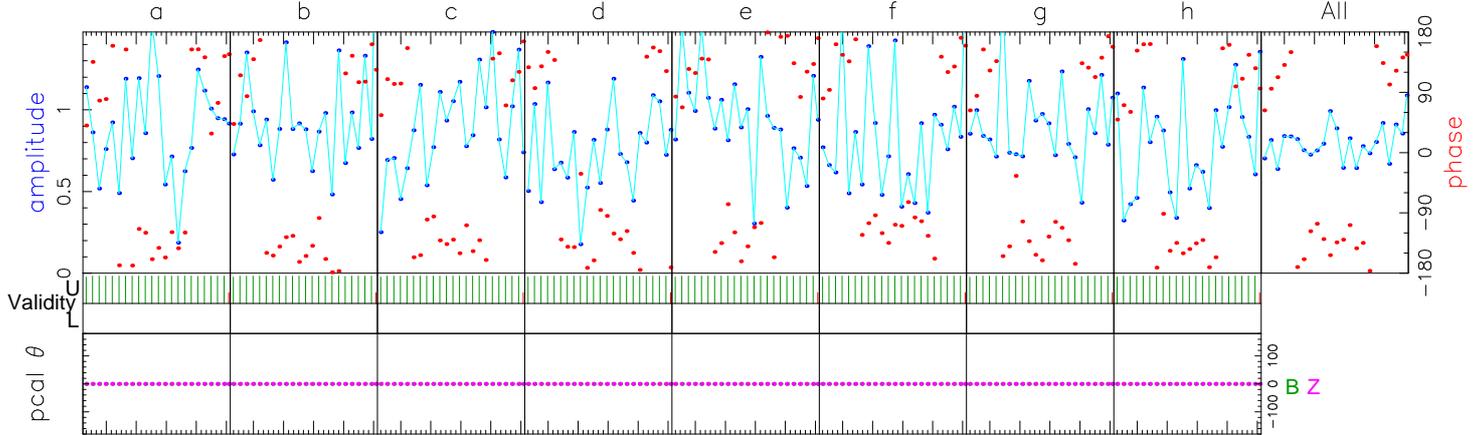


delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145451
 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
	167.1	170.6	-174.2	-174.4	166.9	-164.6	-174.2	164.7	Phase	177.6
	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.5	Ampl.	0.5
	1063.5	1063.1	1064.2	1063.6	1063.8	1063.1	1063.2	1062.5	Sbd box	1063.6
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	Mani 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)	1.96070680663E+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	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.38.24ULKL

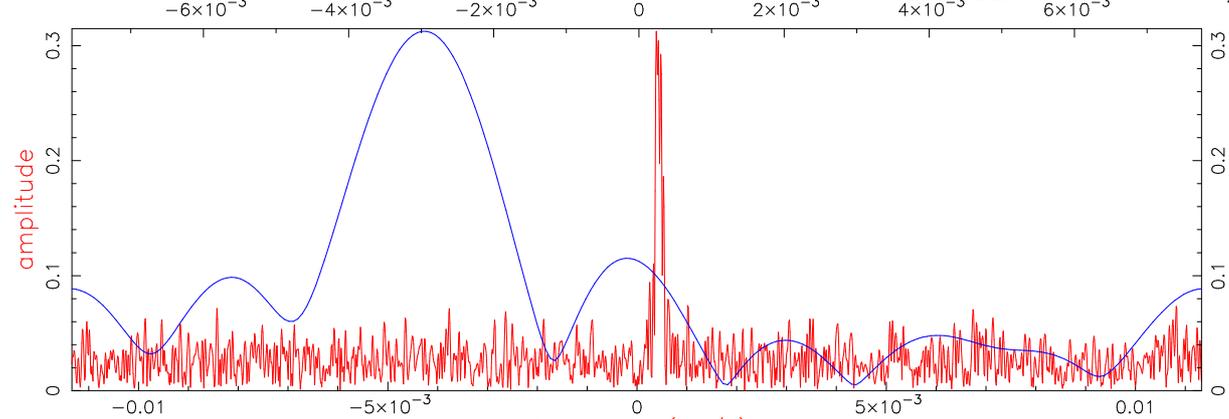
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

EFLSBERG - METSAHOV, fgroup W, pol RL

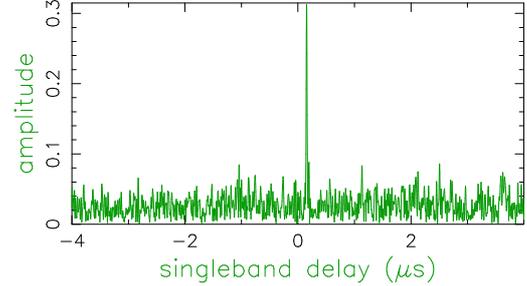
multiband delay (μ s)



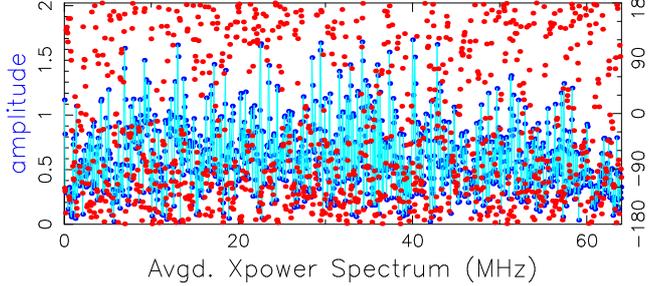
Fringe quality 9

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)

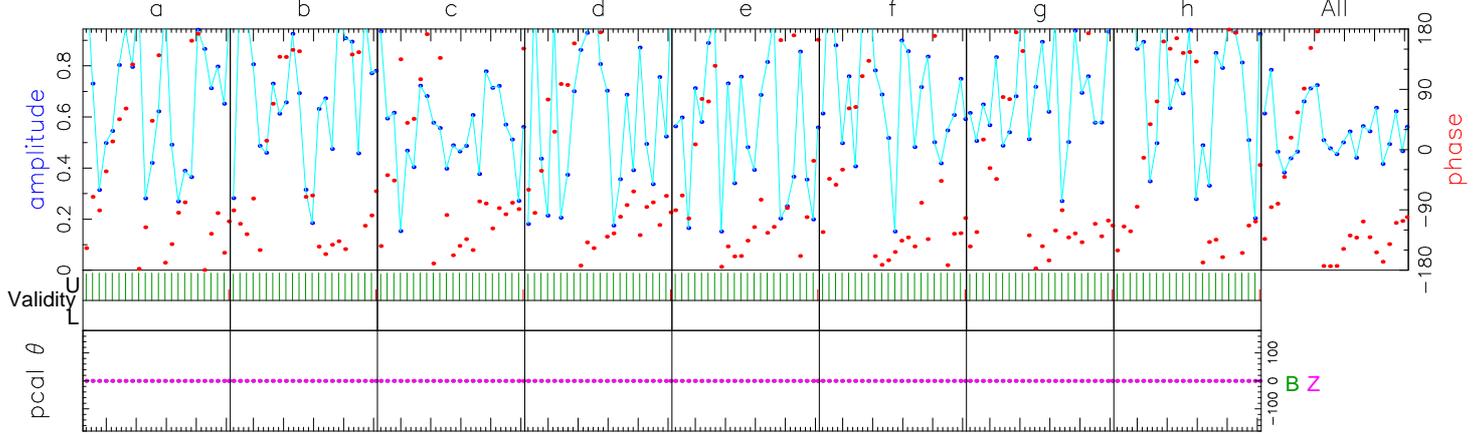


singleband delay (μ s)



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

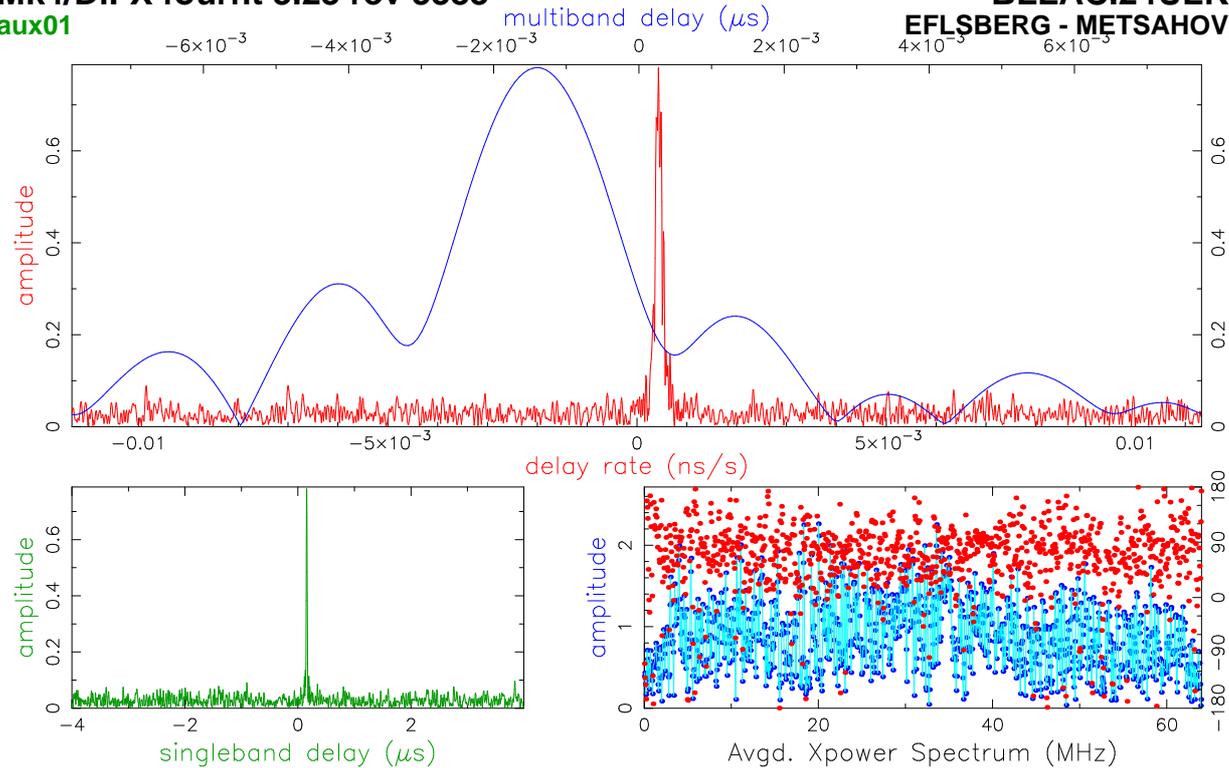
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Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, BZ

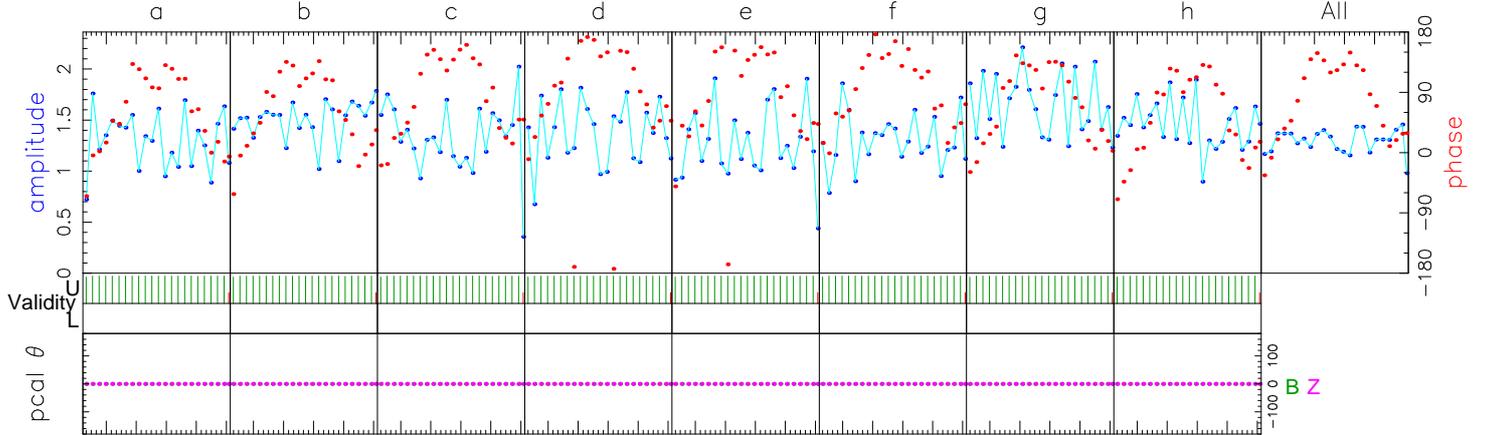
EFLSBERG - METSAHOV, fgroup W, pol LL



Fringe quality 6

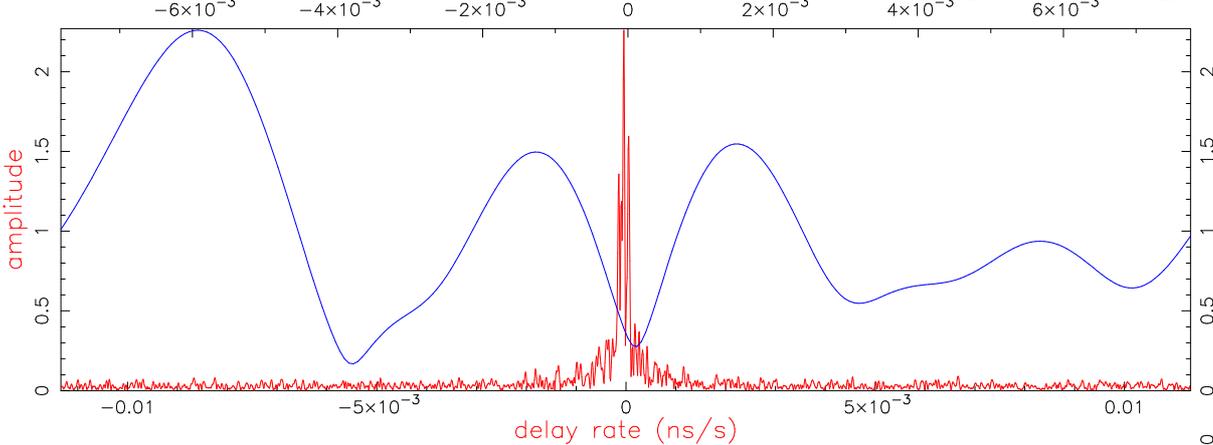
SNR 36.4
 Int time 285.841
 Amp 0.787
 Phase 80.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.155054
 MBD -0.001431
 Fringe rate (Hz)
 0.036891
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 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		Apriori delay (usec)		1.96055666603E+03		Resid mbdelay (usec)		-1.43119E-03	+/- 3.0E-05	
Sband delay (usec)	1.96071172053E+03		Apriori clock (usec)		-2.9660038E+01		Resid sbdelay (usec)		1.55054E-01	+/- 2.4E-04	
Phase delay (usec)	1.96055666861E+03		Apriori clockrate (us/s)		-3.6400001E-07		Resid phdelay (usec)		2.57890E-06	+/- 1.0E-07	
Delay rate (us/s)	-6.11972046311E-02		Apriori rate (us/s)		-6.11976328989E-02		Resid rate (us/s)		4.28268E-07	+/- 6.1E-10	
Total phase (deg)	156.3		Apriori accel (us/s/s)		-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		SampCntNorm: enabled	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		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.9.24ULKL								

multiband delay (μ s)



Fringe quality 1

SNR 104.9

Int time 285.841

Amp 2.270

Phase -74.2

PFD 0.0e+00

Delays (us)

SBD 0.557720

MBD -0.005930

Fringe rate (Hz)

-0.003440

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

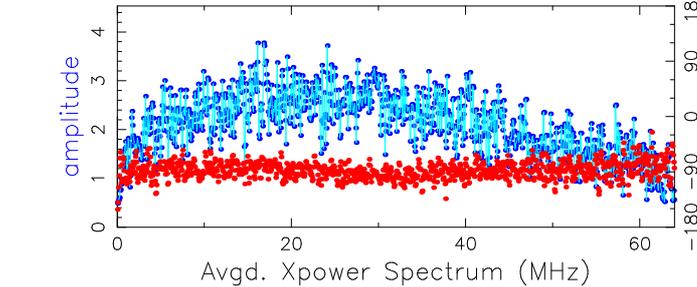
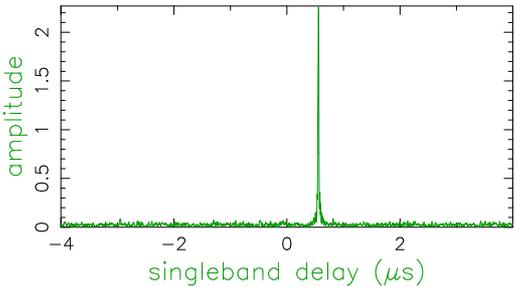
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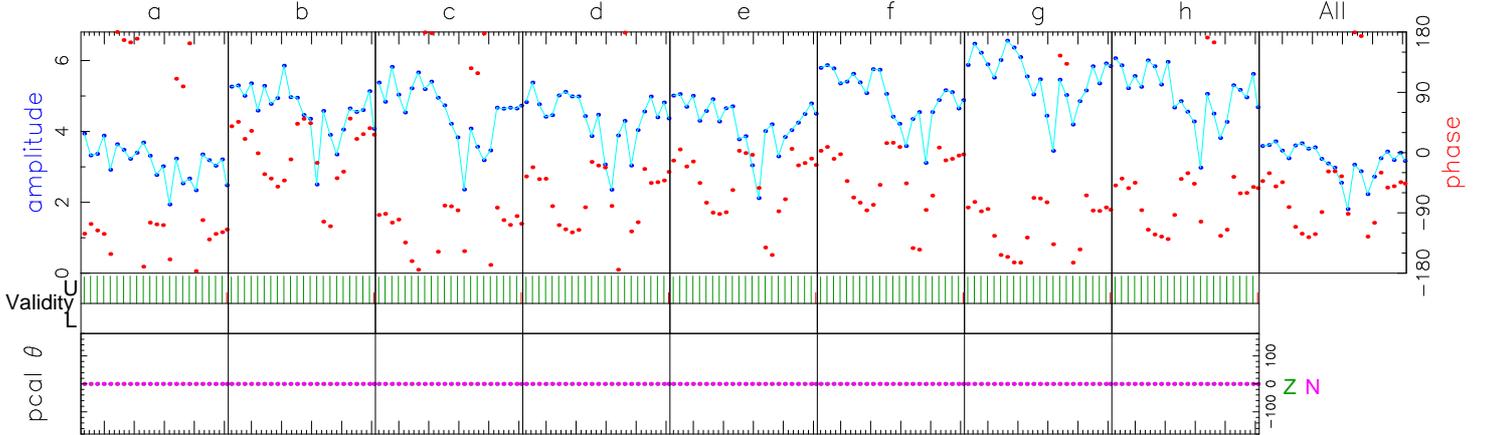
RA & Dec (J2000)

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
	-147.1	4.1	-128.2	-67.7	-41.3	-32.2	-114.1	-80.2	Phase	-74.2
	2.3	3.4	3.2	3.0	3.1	3.6	3.9	3.6	Ampl.	3.3
	1165.9	1167.4	1168.0	1168.5	1168.7	1168.4	1168.3	1167.6	Sbd box	1167.8
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	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	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.80144970242E+03	Apriori delay (usec)	-1.80200627247E+03	Resid mbdelay (usec)	-5.92995E-03	+/-	1.0E-05
Sband delay (usec)	-1.80144855297E+03	Apriori clock (usec)	1.3039521E+01	Resid sbdelay (usec)	5.57720E-01	+/-	8.2E-05
Phase delay (usec)	-1.80200627486E+03	Apriori clockrate (us/s)	1.8299999E-07	Resid phdelay (usec)	-2.39200E-06	+/-	3.5E-08
Delay rate (us/s)	1.26292282210E-01	Apriori rate (us/s)	1.26292322144E-01	Resid rate (us/s)	-3.99343E-08	+/-	2.1E-10
Total phase (deg)	-186.0	Apriori accel (us/s/s)	2.22318511411E-05	Resid phase (deg)	-74.2	+/-	1.1

ph/seg (deg)	47.6	RMS	2.6	Theor.	2.270 +/- 0.022	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	45.0	Search (2048X32)	2.205	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	56.1	Inc. seg. avg.	3.171	Inc. frq. avg.	3.256	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.9	Inc. frq. avg.	3.256			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
Z: az 282.1 el 43.6 pa 41.0		N: az 286.7 el 50.9 pa 67.1		u,v (fr/asec)	-938.914 2687.316	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

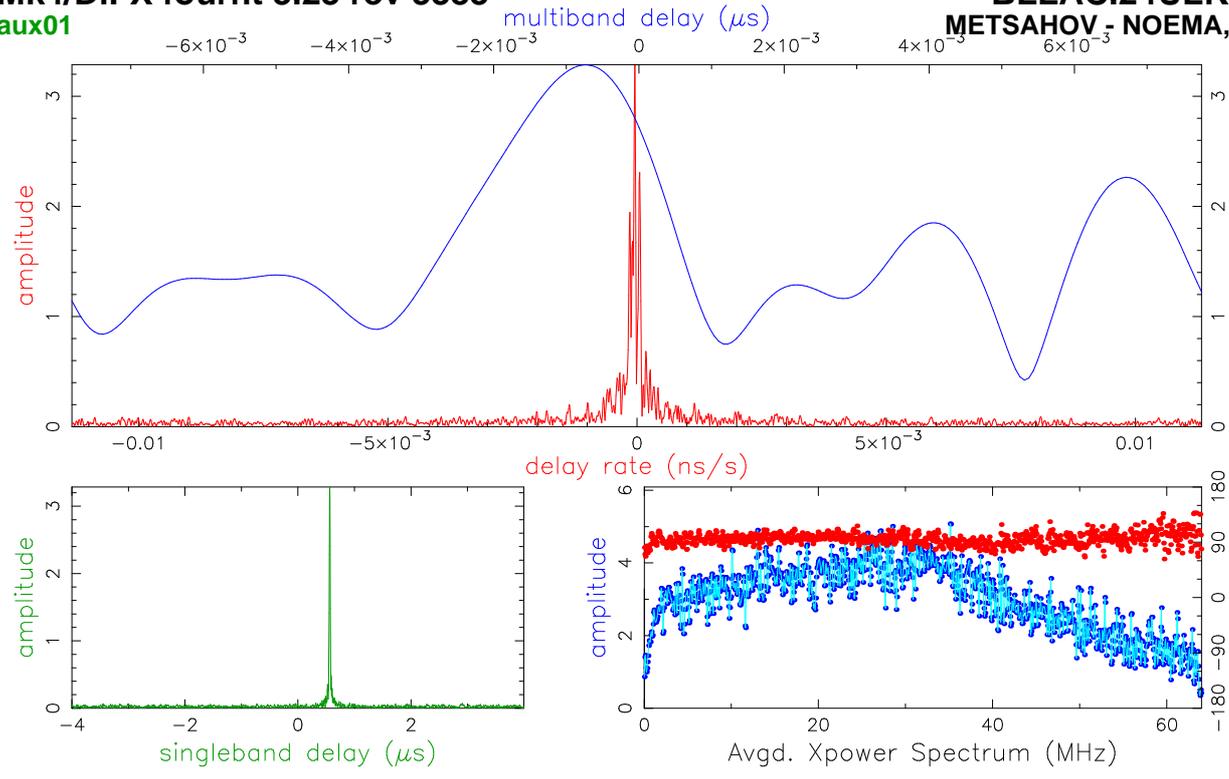
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Mk4/DiFX fourfit 3.23 rev 3383

aux01

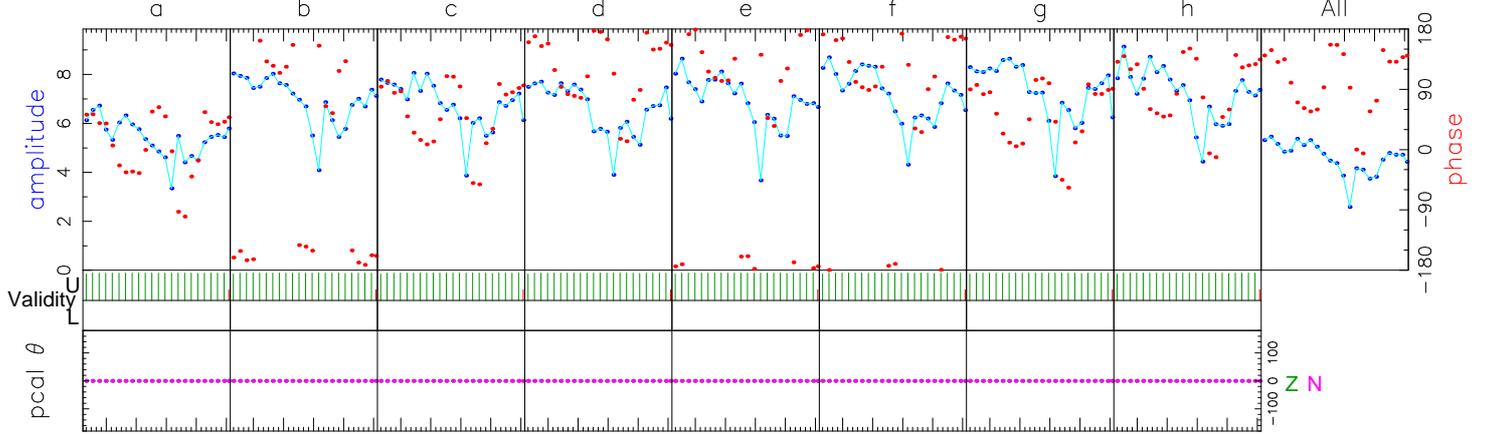
BLLAC.24ULKL, No0004, ZN

METSAHOV - NOEMA, fgroup W, pol RR



Fringe quality 1
 SNR 152.0
 Int time 285.841
 Amp 3.287
 Phase 107.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.562860
 MBD -0.000740
 Fringe rate (Hz)
 -0.003462
 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
 2022:090:145440
 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
	13.7	168.4	60.2	127.5	152.1	138.8	58.1	98.2	Phase	107.2
	3.9	4.9	4.8	4.6	5.0	5.2	5.3	5.2	Ampl.	4.9
	1167.5	1168.9	1169.4	1169.8	1169.9	1169.6	1169.6	1168.7	Sbd box	1169.1
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	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	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.80144451204E+03		Apriori delay (usec)		-1.80200627247E+03		Resid mbdelay (usec)		-7.39573E-04	+/- 7.1E-06
Sband delay (usec)	-1.80144341272E+03		Apriori clock (usec)		1.3039521E+01		Resid sbdelay (usec)		5.62860E-01	+/- 5.7E-05
Phase delay (usec)	-1.80200626901E+03		Apriori clockrate (us/s)		1.8299999E-07		Resid phdelay (usec)		3.45570E-06	+/- 2.4E-08
Delay rate (us/s)	1.26292281953E-01		Apriori rate (us/s)		1.26292322144E-01		Resid rate (us/s)		-4.01908E-08	+/- 1.5E-10
Total phase (deg)			Apriori accel (us/s/s)		2.22318511411E-05		Resid phase (deg)		107.2	+/- 0.8
ph/seg (deg)	RMS	Theor.	Amplitude		3.287 +/- 0.022		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
amp/seg (%)	47.7	1.8	Search (2048X32)		3.163		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -4.000 4.000	
ph/frq (deg)	44.7	3.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
amp/frq (%)	58.6	1.1	Inc. seg. avg.		4.594		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.011 0.011	
	49.5	1.9	Inc. frq. avg.		4.855		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite	
Z: az 282.1 el 43.6 pa 41.0	N: az 286.7 el 50.9 pa 67.1		u,v (fr/asec) -938.914 2687.316						ion window (TEC) 0.00 0.00	
Control file: cf_1234_gmva	Input file: /Exps/f221a/FRINGE/1234/No0004//ZN..24ULKL		Output file: /Exps/f221a/FRINGE/1234/No0004//ZN.W.28.24ULKL						simultaneous interpolator	

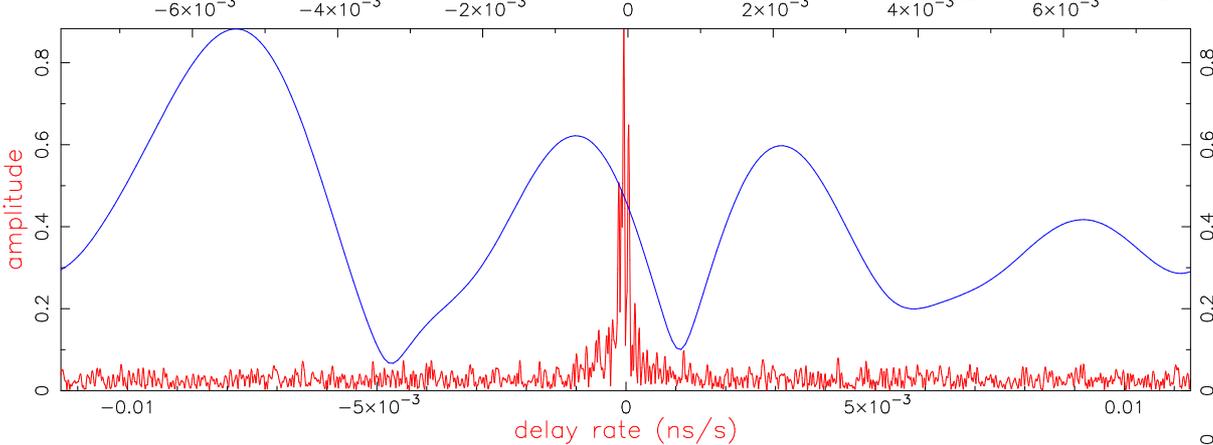
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, ZN

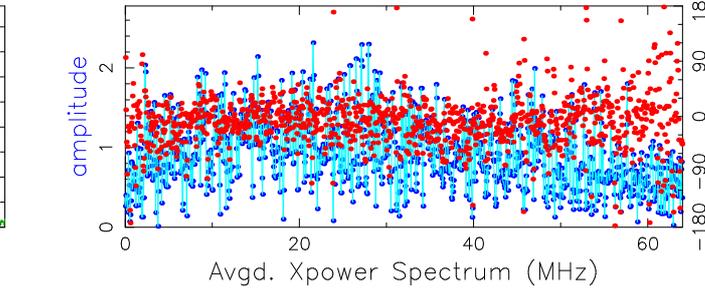
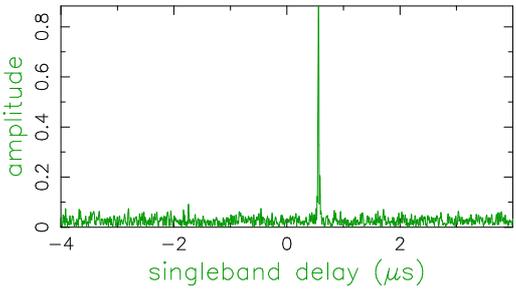
METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)



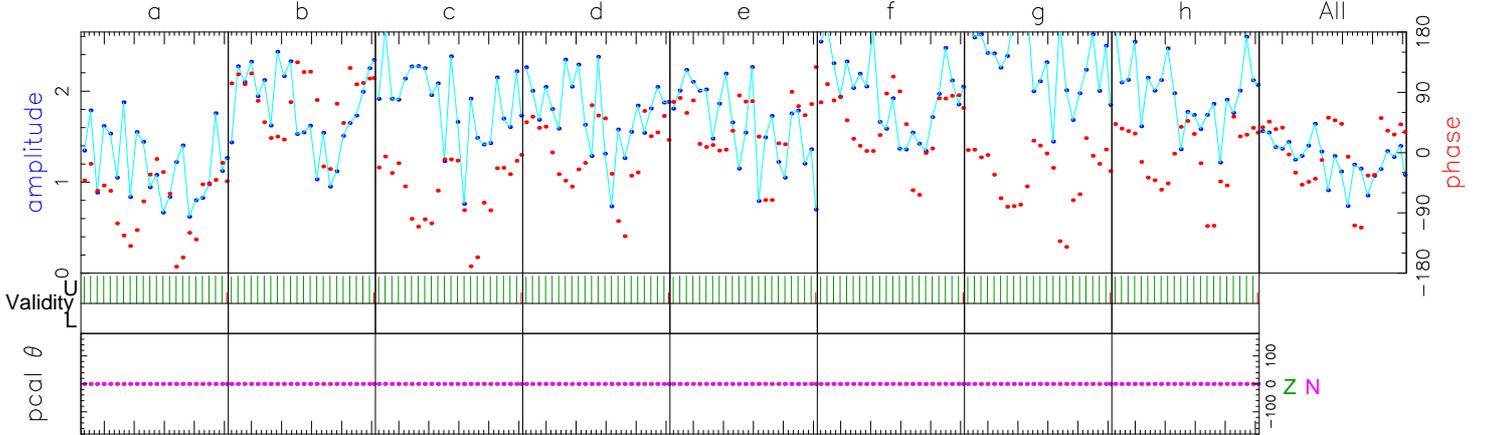
Fringe quality 3

SNR 40.8
 Int time 285.841
 Amp 0.883
 Phase 6.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.558221
 MBD -0.005400
 Fringe rate (Hz)
 -0.003504
 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
	-69.6	82.8	-50.7	9.5	43.2	53.5	-32.7	1.4	Phase	6.5
	0.8	1.3	1.3	1.2	1.2	1.4	1.7	1.4	Ampl.	1.3
	1165.9	1167.7	1168.2	1168.6	1168.9	1168.6	1168.4	1167.6	Sbd box	1167.9
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	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	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.80144917295E+03 Apriori delay (usec) -1.80200627247E+03 Resid mbdelay (usec) -5.40048E-03 +/- 2.7E-05
 Sband delay (usec) -1.80144805172E+03 Apriori clock (usec) 1.3039521E+01 Resid sbdelay (usec) 5.58221E-01 +/- 2.1E-04
 Phase delay (usec) -1.80200627226E+03 Apriori clockrate (us/s) 1.8299999E-07 Resid phdelay (usec) 2.09136E-07 +/- 9.0E-08
 Delay rate (us/s) 1.26292281471E-01 Apriori rate (us/s) 1.26292322144E-01 Resid rate (us/s) -4.06733E-08 +/- 5.5E-10
 Total phase (deg) -105.3 Apriori accel (us/s/s) 2.22318511411E-05 Resid phase (deg) 6.5 +/- 2.8

RMS Theor. Amplitude 0.883 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 49.2 6.7 Search (2048X32) 0.868 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 49.0 11.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 57.7 4.0 Inc. seg. avg. 1.247 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 53.7 6.9 Inc. frq. avg. 1.294 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 282.1 el 43.6 pa 41.0 N: az 286.7 el 50.9 pa 67.1 u,v (fr/asec) -938.914 2687.316 simultaneous interpolator

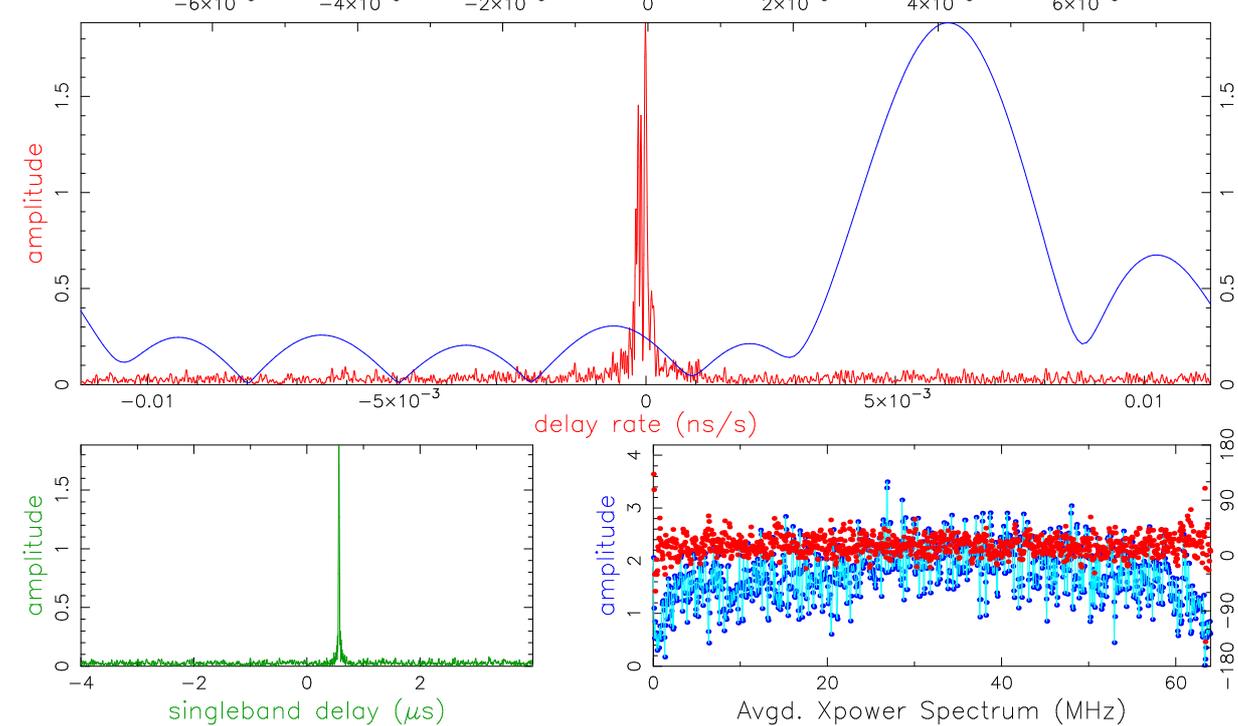
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Mk4/DiFX fourfit 3.23 rev 3383

aux01

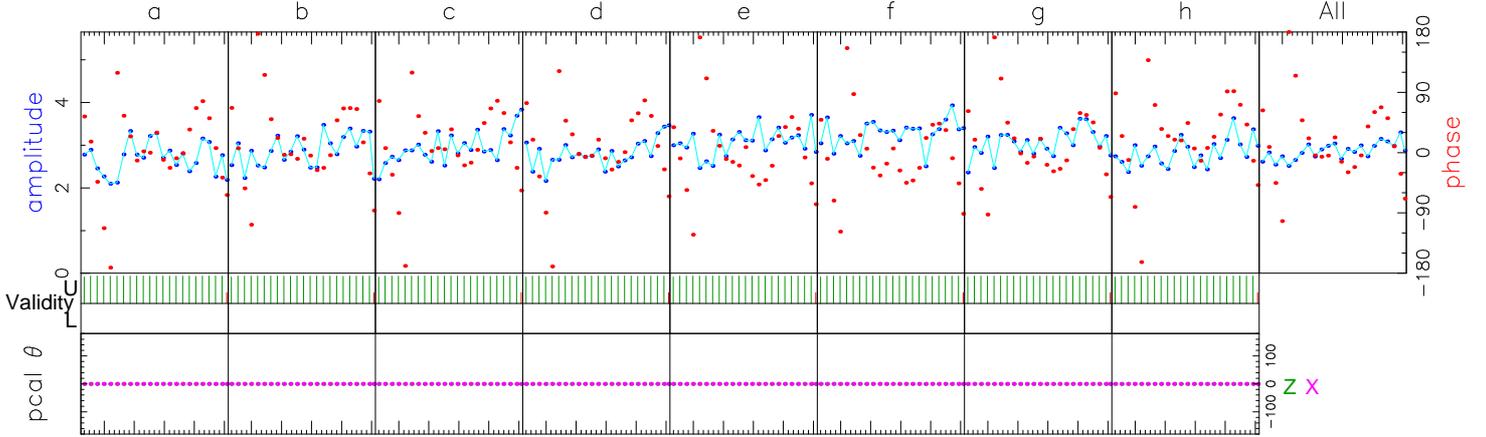
BLLAC.24ULKL, No0004, ZX

METS/SAHOV - ONSALA60, fgroup W, pol RR



Fringe quality 4
 SNR 87.1
 Int time 285.841
 Amp 1.884
 Phase 11.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.566188
 MBD 0.004131
 Fringe rate (Hz)
 -0.000527
 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
 2022:090:145438
 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
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.59606911777E+03	Apriori delay (usec)	-1.59663574860E+03	Resid mbdelay (usec)	4.13083E-03	+/-	1.2E-05
Sband delay (usec)	-1.59606956060E+03	Apriori clock (usec)	-7.3563278E+01	Resid sbdelay (usec)	5.66188E-01	+/-	9.9E-05
Phase delay (usec)	-1.59663574824E+03	Apriori clockrate (us/s)	-4.4800001E-07	Resid phdelay (usec)	3.62755E-07	+/-	4.2E-08
Delay rate (us/s)	-3.84359455997E-03	Apriori rate (us/s)	-3.84358844157E-03	Resid rate (us/s)	-6.11840E-09	+/-	2.6E-10
Total phase (deg)	-127.2	Apriori accel (us/s/s)	1.00454062725E-05	Resid phase (deg)	11.2	+/-	1.3

ph/seg (deg)	58.3	RMS	3.2	Theor.	3.2	Amplitude	1.884 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.2		5.5		5.5	Search (2048X32)	1.806	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	15.0		1.9		1.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	7.0		3.2		3.2	Inc. seg. avg.	2.863	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	1.933	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 282.1 el 43.6 pa 41.0 X: az 275.4 el 49.6 pa 46.5 u,v (fr/asec) 47.409 886.971 simultaneous interpolator

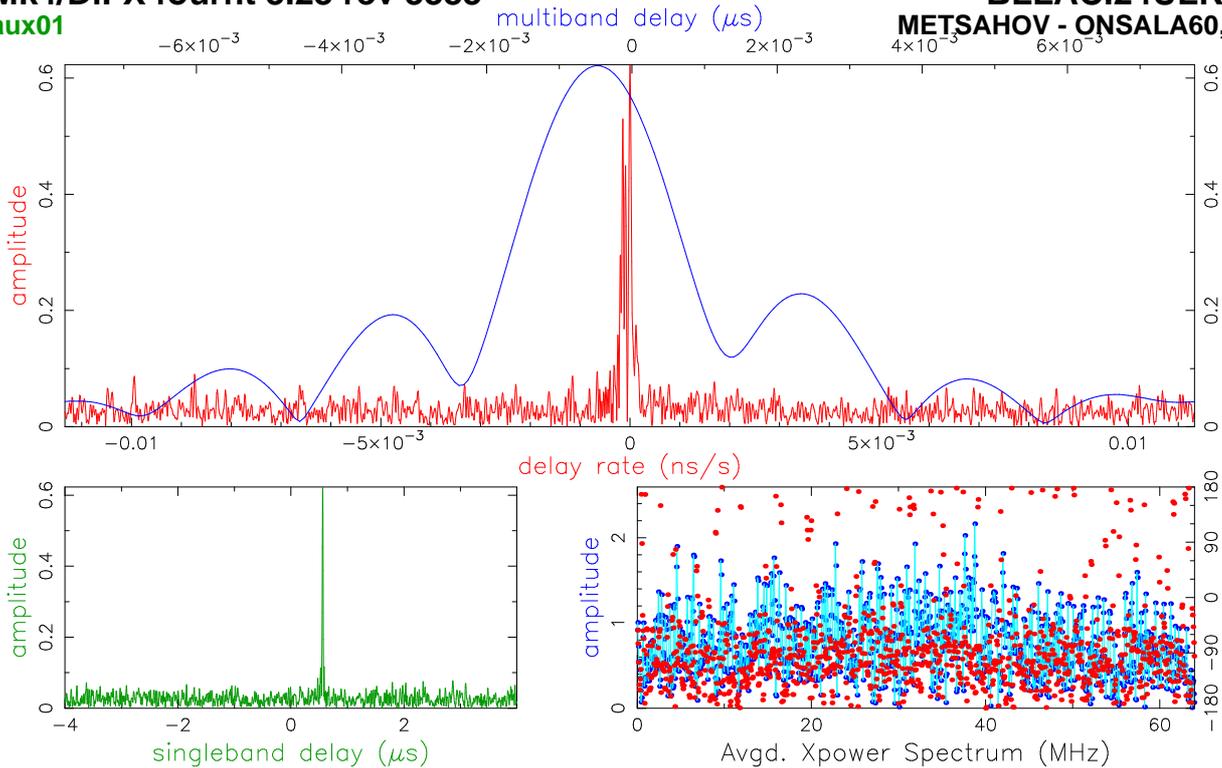
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZX..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZX.W.19.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

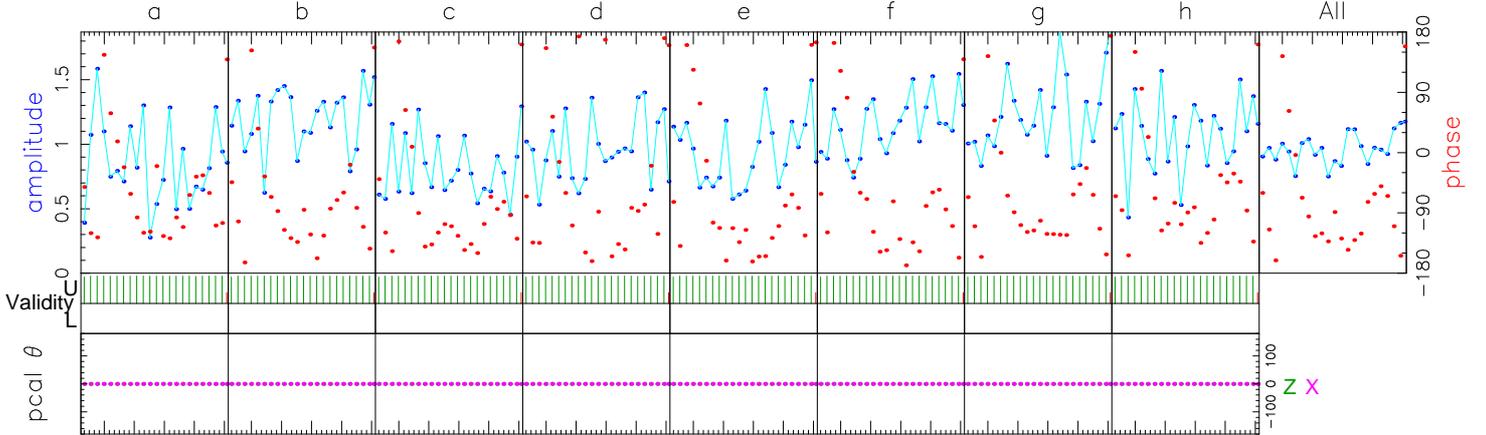
BLLAC.24ULKL, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol LR



Fringe quality 6
 SNR 28.8
 Int time 285.841
 Amp 0.623
 Phase -108.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.561792
 MBD -0.000496
 Fringe rate (Hz)
 -0.000477
 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
 2022:090:145449
 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



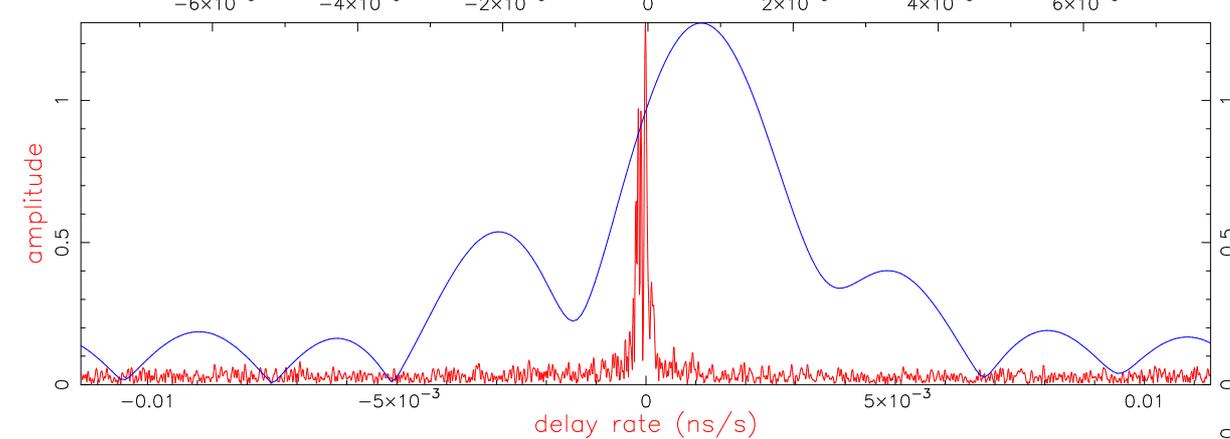
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.8	-101.7	-117.0	-121.2	-134.3	-114.8	-102.2	-89.9	Phase	-108.7
	0.5	0.8	0.5	0.5	0.6	0.7	0.8	0.7	Ampl.	0.6
	1168.1	1168.9	1168.3	1168.9	1168.7	1169.1	1169.1	1169.6	Sbd box	1168.8
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-1.59607374433E+03		Apriori delay (usec)	-1.59663574860E+03		Resid mbdelay (usec)	-4.95729E-04	+/-	3.8E-05	
Sband delay (usec)	-1.59607395685E+03		Apriori clock (usec)	-7.3563278E+01		Resid sbdelay (usec)	5.61792E-01	+/-	3.0E-04	
Phase delay (usec)	-1.59663575211E+03		Apriori clockrate (us/s)	-4.4800001E-07		Resid phdelay (usec)	-3.50435E-06	+/-	1.3E-07	
Delay rate (us/s)	-3.84359397612E-03		Apriori rate (us/s)	-3.84358844157E-03		Resid rate (us/s)	-5.53454E-09	+/-	7.7E-10	
Total phase (deg)		-247.2	Apriori accel (us/s/s)	1.00454062725E-05		Resid phase (deg)	-108.7	+/-	4.0	
	RMS	Theor.	Amplitude	0.623 +/- 0.022		Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	58.5	9.5	Search (2048X32)	0.606		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000	
amp/seg (%)	57.1	16.6	Interp.	0.000		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	16.1	5.6	Inc. seg. avg.	0.948		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	17.3	9.8	Inc. frq. avg.	0.636		Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 282.1 el 43.6 pa 41.0			X: az 275.4 el 49.6 pa 46.5			u,v (fr/asec) 47.409 886.971				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/f221a/FRINGE/1234/No0004/ZX..24ULKL			Output file: /Exps/f221a/FRINGE/1234/No0004/ZX.W.32.24ULKL				

Mk4/DiFX fourfit 3.23 rev 3383

aux01

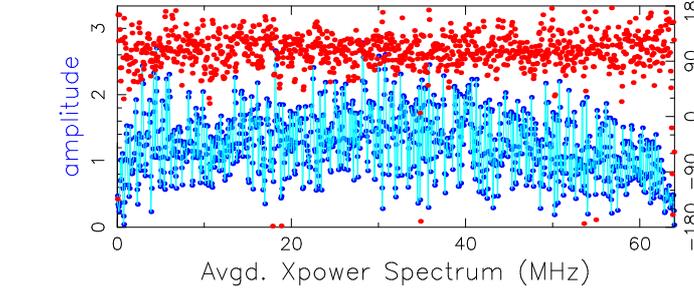
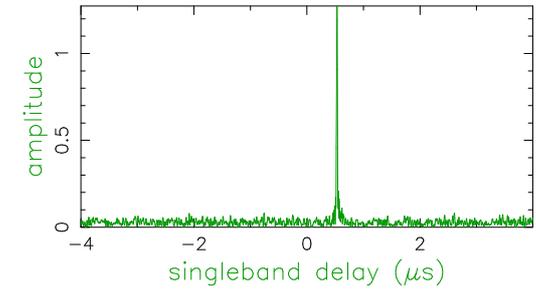
BLLAC.24ULKL, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol LL



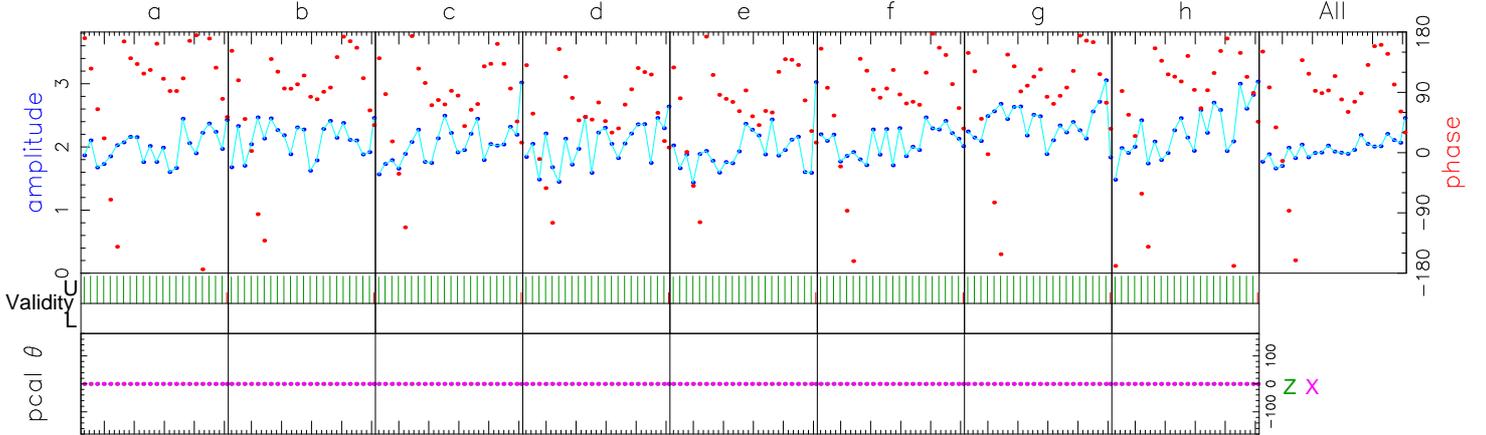
Fringe quality 3

SNR 58.9
 Int time 285.841
 Amp 1.274
 Phase 105.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.531698
 MBD 0.000745
 Fringe rate (Hz)
 -0.000607
 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
 2022:090:145426
 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
	134.7	114.1	91.4	67.3	83.9	107.3	115.0	119.0	Phase	105.0
	1.3	1.3	1.3	1.3	1.2	1.4	1.5	1.4	Ampl.	1.4
	1160.8	1160.5	1160.9	1161.0	1161.7	1161.0	1161.5	1161.4	Sbd box	1161.1
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	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)	-1.59610375380E+03	Apriori delay (usec)	-1.59663574860E+03	Resid mbdelay (usec)	7.44802E-04	+/-	1.8E-05
Sband delay (usec)	-1.59610405060E+03	Apriori clock (usec)	-7.3563278E+01	Resid sbdelay (usec)	5.31698E-01	+/-	1.5E-04
Phase delay (usec)	-1.59663574522E+03	Apriori clockrate (us/s)	-4.4800001E-07	Resid phdelay (usec)	3.38461E-06	+/-	6.3E-08
Delay rate (us/s)	-3.84359549101E-03	Apriori rate (us/s)	-3.84358844157E-03	Resid rate (us/s)	-7.04944E-09	+/-	3.8E-10
Total phase (deg)	-33.5	Apriori accel (us/s/s)	1.00454062725E-05	Resid phase (deg)	105.0	+/-	1.9

ph/seg (deg)	58.2	Theor.	4.7	Amplitude	1.274 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.0		4.7	Search (2048X32)	1.226	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000
ph/frq (deg)	23.5		2.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.3		4.8	Inc. seg. avg.	1.950	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	1.352	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite
Z: az 282.1 el 43.6 pa 41.0		X: az 275.4 el 49.6 pa 46.5		u, v (fr/asec)	47.409 886.971	ion window (TEC)	0.00 0.00

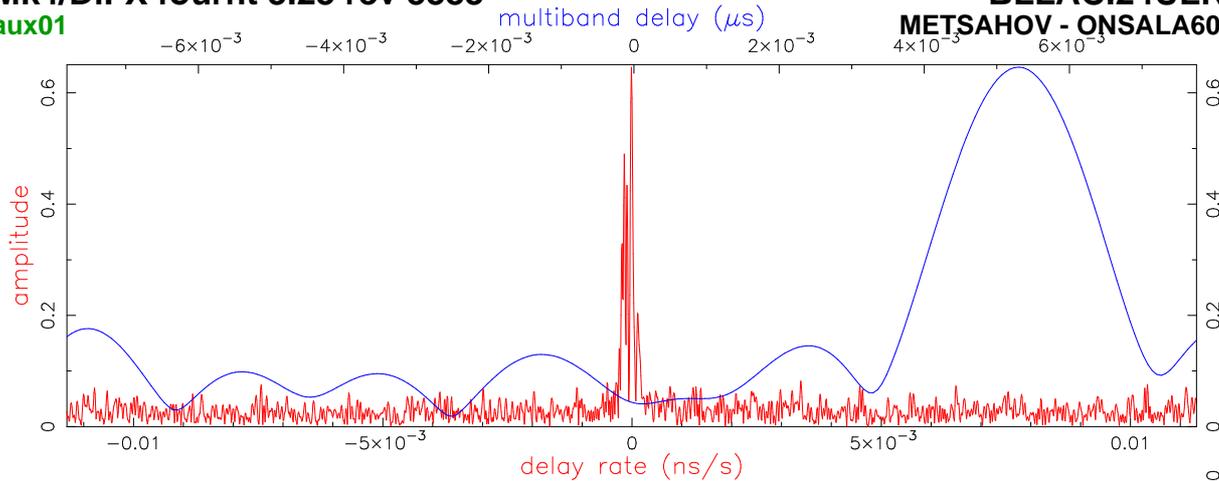
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZX..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZX.W.4.24ULKL simultaneous interpolator

Mk4/DiFX fourfit 3.23 rev 3383

aux01

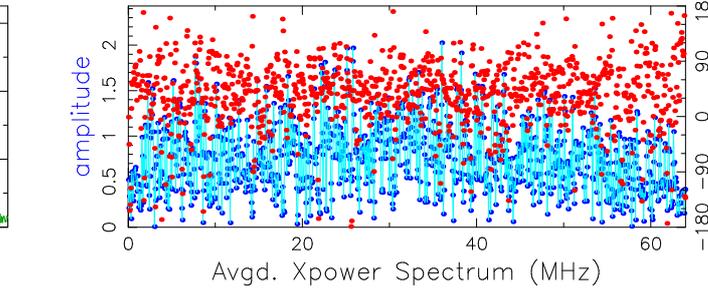
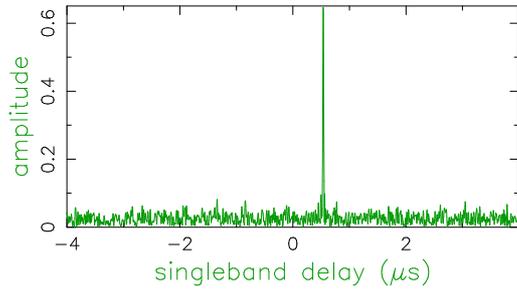
BLLAC.24ULKL, No0004, ZX

METSAHOV - ONSALA60, fgroup W, pol RL



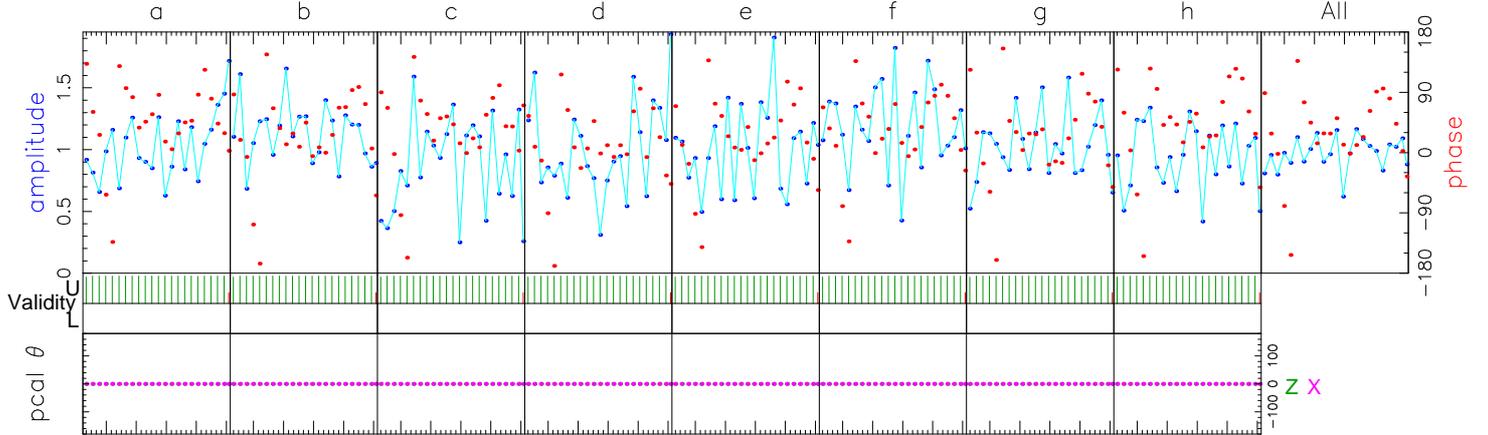
Fringe quality 6

SNR 30.1
 Int time 285.841
 Amp 0.651
 Phase 40.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.536320
 MBD 0.005328
 Fringe rate (Hz)
 -0.000526
 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
 2022:090:145501
 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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.59609917068E+03	Apriori delay (usec)	-1.59663574860E+03	Resid mbdelay (usec)	5.32793E-03	+/-	3.6E-05
Sband delay (usec)	-1.59609942835E+03	Apriori clock (usec)	-7.3563278E+01	Resid sbdelay (usec)	5.36320E-01	+/-	2.9E-04
Phase delay (usec)	-1.59663574731E+03	Apriori clockrate (us/s)	-4.4800001E-07	Resid phdelay (usec)	1.29251E-06	+/-	1.2E-07
Delay rate (us/s)	-3.84359454225E-03	Apriori rate (us/s)	-3.84358844157E-03	Resid rate (us/s)	-6.10068E-09	+/-	7.4E-10
Total phase (deg)	-98.4	Apriori accel (us/s/s)	1.00454062725E-05	Resid phase (deg)	40.1	+/-	3.8

ph/seg (deg) 57.2 9.1 Search (2048X32) 0.631 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.5 15.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 16.1 5.4 Inc. seg. avg. 0.962 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.3 9.4 Inc. frq. avg. 0.662 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 282.1 el 43.6 pa 41.0 X: az 275.4 el 49.6 pa 46.5 u,v (fr/asec) 47.409 886.971 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZX..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZX.W.47.24ULKL

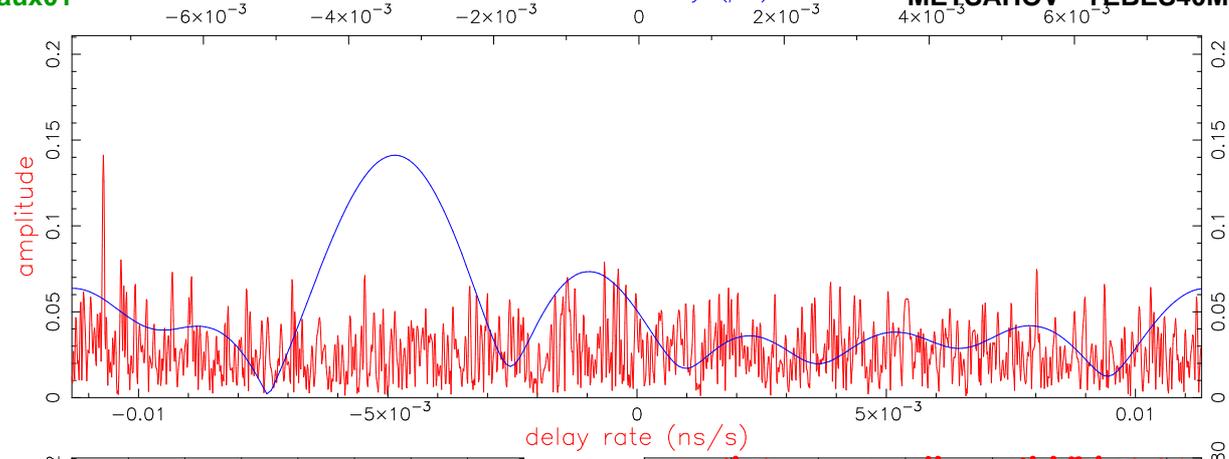
Mk4/DiFX fourfit 3.23 rev 3383

aux01

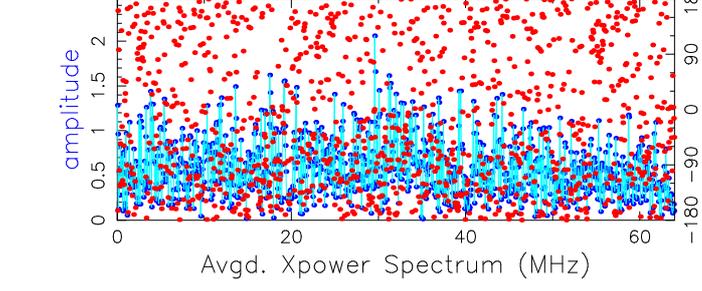
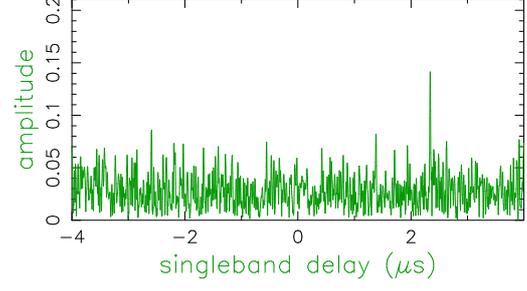
BLLAC.24ULKL, No0004, ZY

METSAHOV - YEBES40M, fgroup W, pol LL

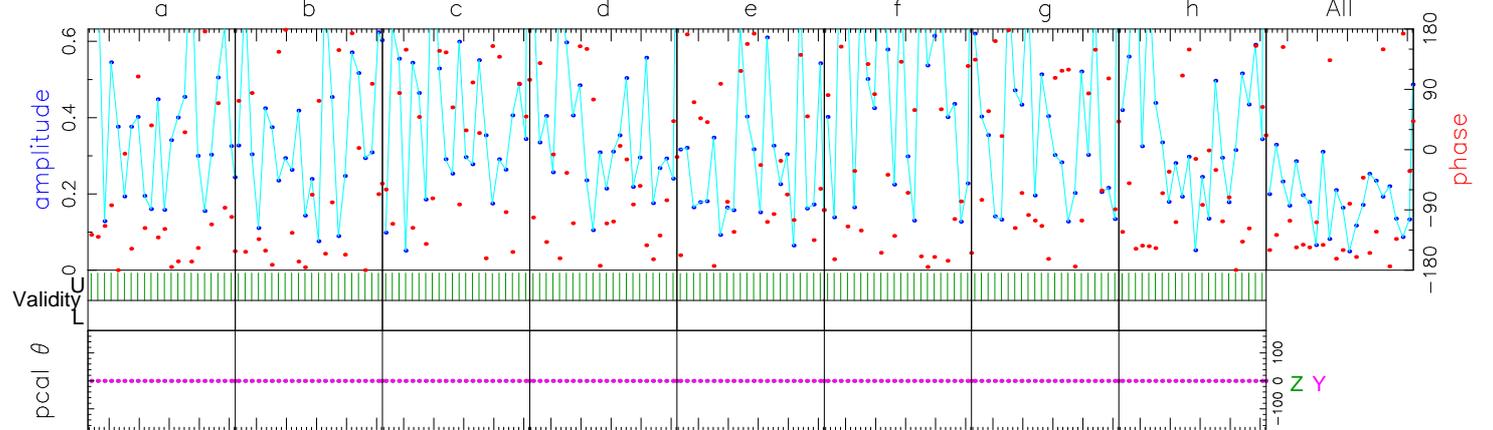
multiband delay (μ s)



Fringe quality 0
 SNR 6.5
 Int time 281.594
 Amp 0.211
 Phase -146.4
 PFD 9.1e-02
 Delays (us)
 SBD 2.340425
 MBD -0.003351
 Fringe rate (Hz)
 -0.923480
 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
	-136.0	-157.6	175.7	-112.1	-164.0	-171.4	-157.9	-125.7	Phase	-146.4
	0.3	0.3	0.0	0.2	0.1	0.3	0.2	0.3	Ampl.	0.2
	140.2	539.7	639.6	361.1	366.8	1685.7	251.7	1163.2	Sbd box	1624.1
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.94529259462E+03	Apriori delay (usec)	-2.94763299398E+03	Resid mbdelay (usec)	-3.35064E-03	+/-	1.7E-04
Sband delay (usec)	-2.94529256848E+03	Apriori clock (usec)	-9.1826057E-01	Resid sbdelay (usec)	2.34043E+00	+/-	1.3E-03
Phase delay (usec)	-2.94763299870E+03	Apriori clockrate (us/s)	1.6630000E-06	Resid phdelay (usec)	-4.72251E-06	+/-	5.7E-07
Delay rate (us/s)	8.63727693156E-02	Apriori rate (us/s)	8.63834900014E-02	Resid rate (us/s)	-1.07207E-05	+/-	3.5E-09
Total phase (deg)	-182.8	Apriori accel (us/s/s)	3.22821599157E-05	Resid phase (deg)	-146.4	+/-	17.7

ph/seg (deg) 48.1 42.3 Search (2048X32) 0.139 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.1 73.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 26.9 25.0 Inc. seg. avg. 0.215 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.2 43.6 Inc. frq. avg. 0.206 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 282.1 el 43.6 pa 41.0 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -611.643 3750.875 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZY.W.11.24ULKL

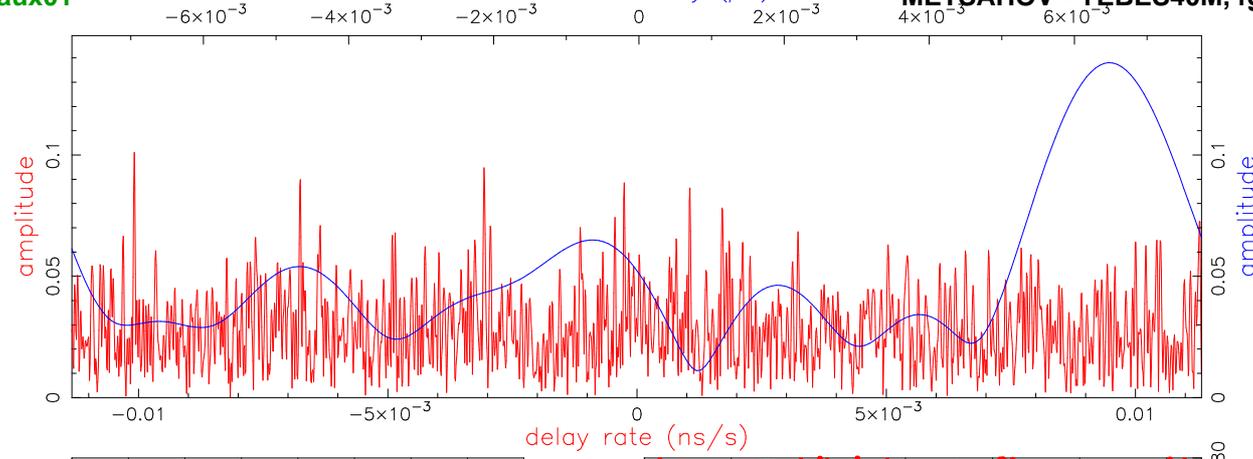
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, ZY

METSAHOV - YEBES40M, fgroup W, pol RR

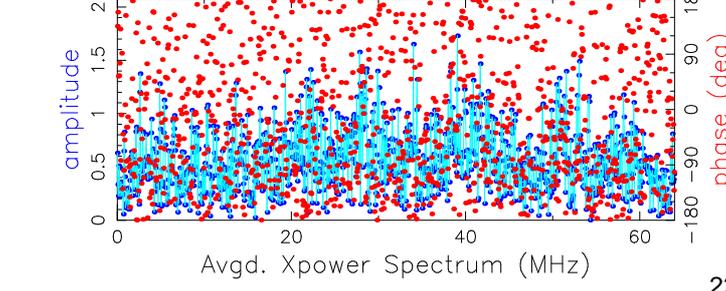
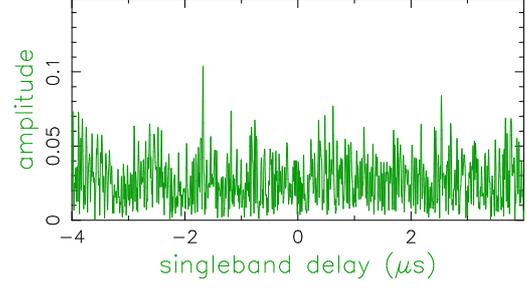
multiband delay (μ s)



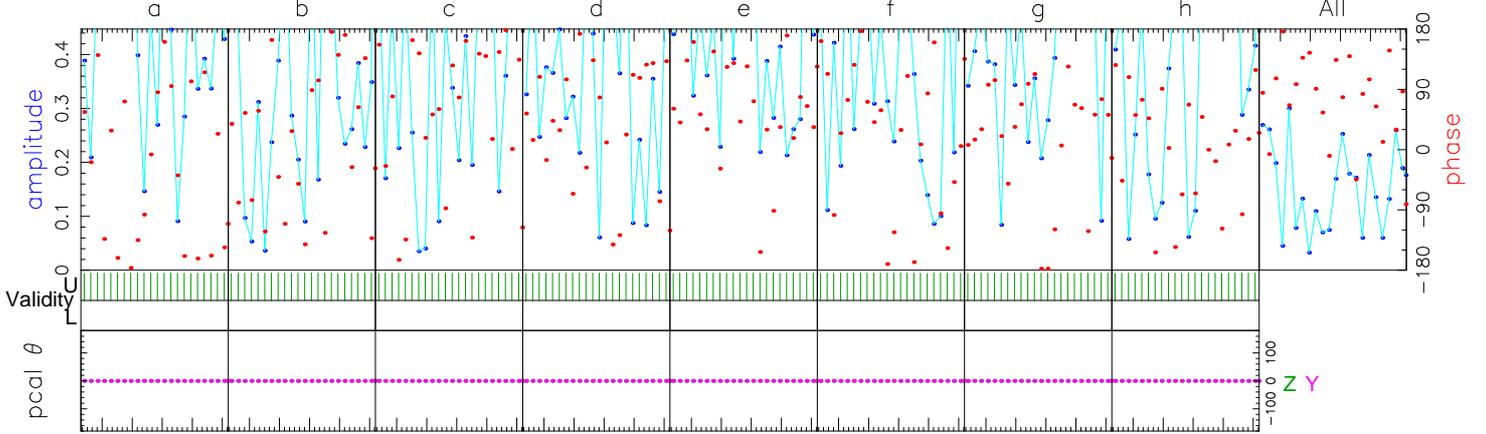
Fringe quality 0

SNR 4.8
 Int time 281.594
 Amp 0.149
 Phase 79.6
 PFD 1.0e+00
 Delays (us)
 SBD -1.681062
 MBD -0.008301
 Fringe rate (Hz)
 -0.870431
 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
 2022:090:145439
 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
U/L	155.8	-162.2	132.8	46.6	78.9	94.6	56.3	7.7	Phase	79.6
Z	0.2	0.0	0.2	0.2	0.4	0.1	0.3	0.3	Ampl.	0.2
Y	1284.5	1145.9	2028.7	1575.4	594.0	1475.0	316.1	1523.2	Sbd box	594.6
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.94931316976E+03	Apriori delay (usec)	-2.94763299398E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.3E-04
Sband delay (usec)	-2.94931405598E+03	Apriori clock (usec)	-9.1826057E-01	Resid sbdelay (usec)	-1.68106E+00	+/-	1.8E-03
Phase delay (usec)	-2.94763299141E+03	Apriori clockrate (us/s)	1.6630000E-06	Resid phdelay (usec)	2.56709E-06	+/-	7.7E-07
Delay rate (us/s)	8.63733851591E-02	Apriori rate (us/s)	8.63834900014E-02	Resid rate (us/s)	-1.01048E-05	+/-	4.7E-09
Total phase (deg)	43.2	Apriori accel (us/s/s)	3.22821599157E-05	Resid phase (deg)	79.6	+/-	23.8

ph/seg (deg)	56.4	Theor.	57.0	Amplitude	0.149 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.6	Search (2048X32)	0.136	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	70.3	Inc. seg. avg.	0.147	Inc. frq. avg.	0.181	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	80.5	Inc. frq. avg.	0.181			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

Z: az 282.1 el 43.6 pa 41.0 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -611.643 3750.875 simultaneous interpolator

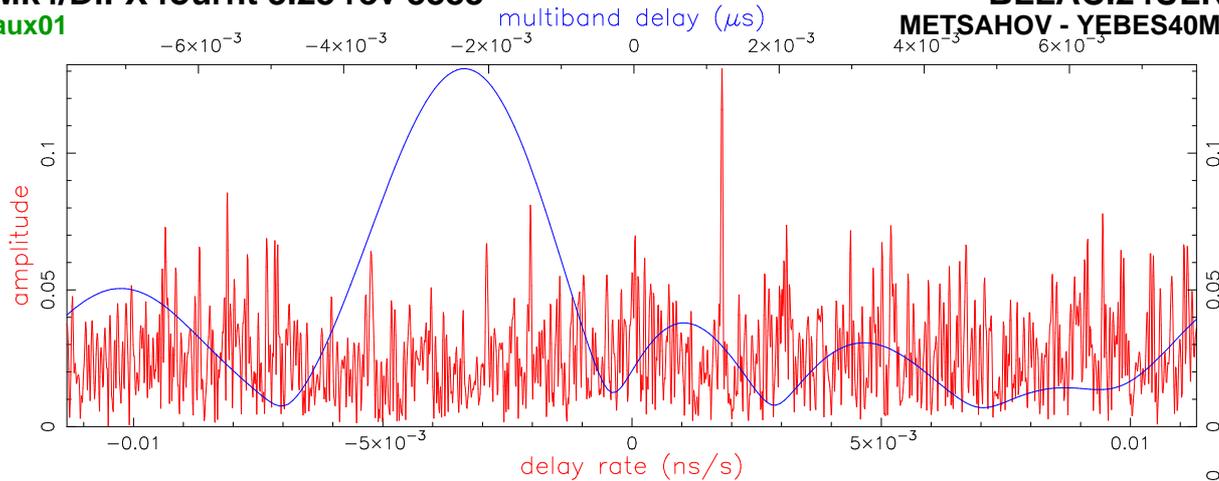
Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZY..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZY.W.27.24ULKL

Mk4/DiFX fourfit 3.23 rev 3383

aux01

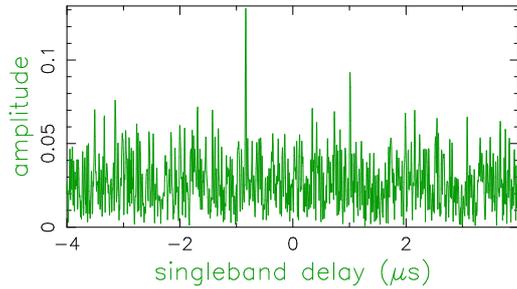
BLLAC.24ULKL, No0004, ZY

METSAHOV - YEBES40M, fgroup W, pol LR

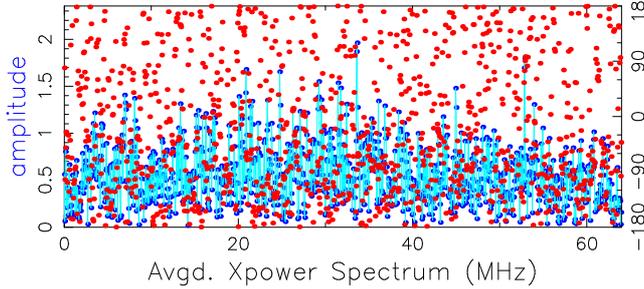


Fringe quality 0

SNR 6.0
 Int time 281.594
 Amp 0.132
 Phase 20.3
 PFD 8.5e-01
 Delays (us)
 SBD -0.835570
 MBD -0.002337
 Fringe rate (Hz)
 0.155554
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

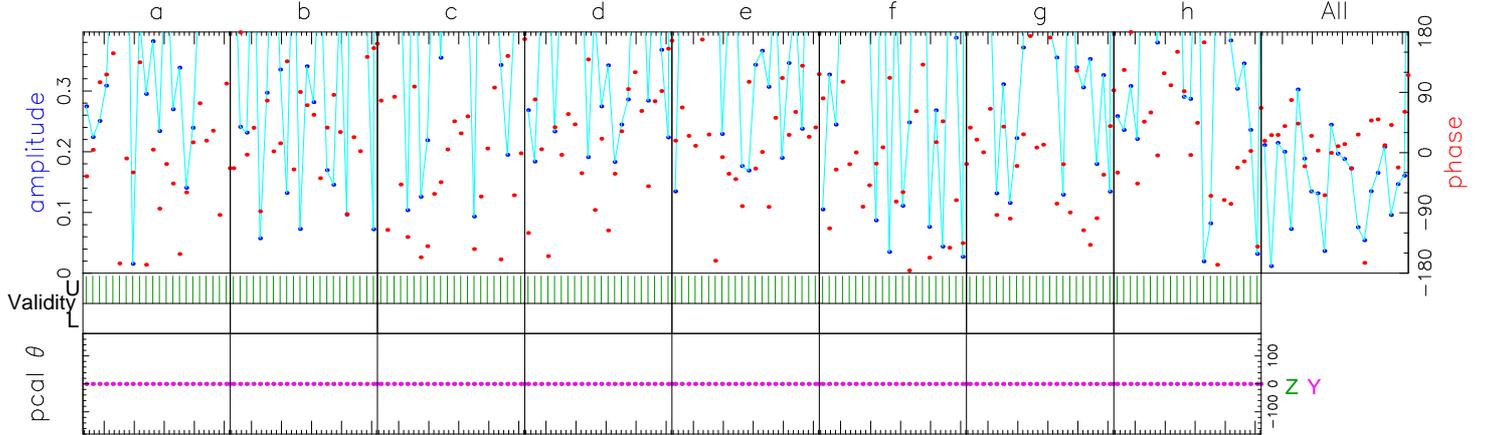


delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124517.41
 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
	30.2	20.1	4.9	44.0	25.9	-12.0	-2.4	53.9	Phase	20.3
	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	1451.2	810.2	480.1	1031.8	976.5	270.4	476.1	689.0	Sbd box	811.1
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.94846345619E+03	Apriori delay (usec)	-2.94763299398E+03	Resid mbdelay (usec)	-2.33722E-03	+/-	1.8E-04
Sband delay (usec)	-2.94846856348E+03	Apriori clock (usec)	-9.1826057E-01	Resid sbdelay (usec)	-8.35570E-01	+/-	1.4E-03
Phase delay (usec)	-2.94763299332E+03	Apriori clockrate (us/s)	1.6630000E-06	Resid phdelay (usec)	6.54045E-07	+/-	6.1E-07
Delay rate (us/s)	8.63852958256E-02	Apriori rate (us/s)	8.63834900014E-02	Resid rate (us/s)	1.80582E-06	+/-	3.8E-09
Total phase (deg)	-16.1	Apriori accel (us/s/s)	3.22821599157E-05	Resid phase (deg)	20.3	+/-	19.1

ph/seg (deg)	48.9	RMS	45.7	Theor.	45.7	Amplitude	0.132 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.8	Search (2048X32)	0.129	Inc. seg. avg.	0.118	Inc. frq. avg.	0.126	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	24.6	Interp.	0.000	Inc. seg. avg.	0.118	Inc. frq. avg.	0.126	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.3	Inc. seg. avg.	0.118	Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
Z: az 282.1 el 43.6 pa 41.0		Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Data rate (Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva		Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Inc. frq. avg.	0.126					simultaneous interpolator
Input file: /Exps/f221a/FRINGE/1234/No0004/ZY..24ULKL		Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Inc. frq. avg.	0.126					
Output file: /Exps/f221a/FRINGE/1234/No0004/ZY.W.40.24ULKL		Inc. frq. avg.	0.126	Inc. frq. avg.	0.126	Inc. frq. avg.	0.126					

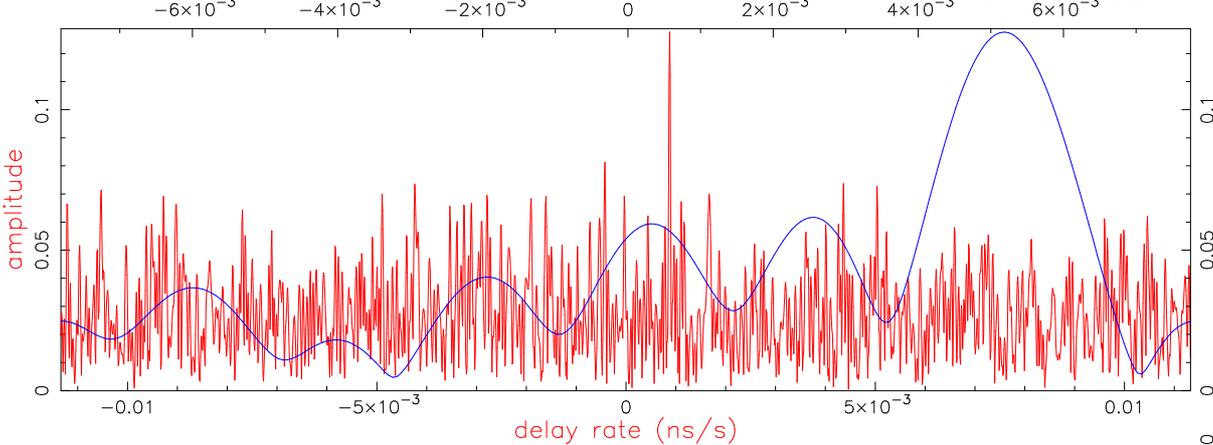
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, ZY

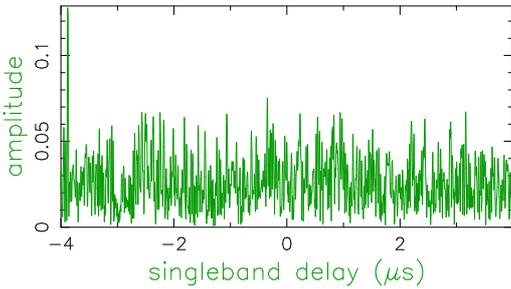
METSAHOV - YEBES40M, fgroup W, pol RL

multiband delay (μ s)

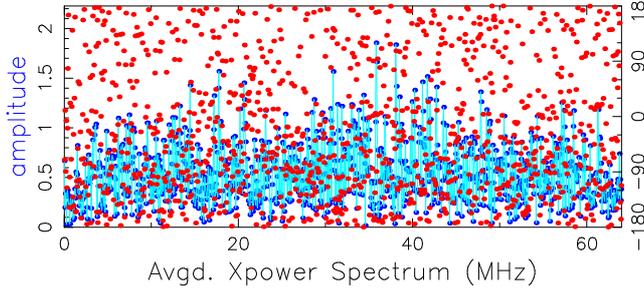


Fringe quality 0

SNR 5.9
 Int time 281.594
 Amp 0.129
 Phase 158.4
 PFD 9.8e-01
 Delays (us)
 SBD -3.877767
 MBD 0.005194
 Fringe rate (Hz)
 0.075234
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

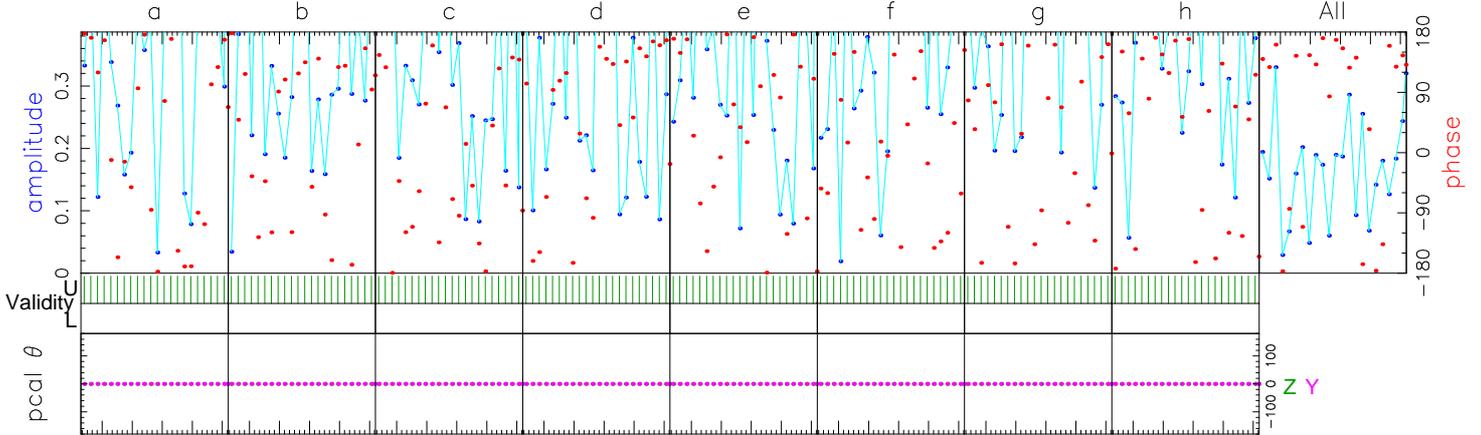


delay rate (ns/s)



Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124517.41
 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, 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
	-177.7	138.0	164.6	144.9	137.3	-148.8	174.5	154.2	Phase	158.4
	0.2	0.2	0.1	0.2	0.1	0.0	0.1	0.2	Ampl.	0.1
	1709.9	791.6	502.5	32.7	1536.0	1939.2	569.6	1342.9	Sbd box	32.3
U/L	552/0	552/0	552/0	552/0	552/0	552/0	552/0	552/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.95151842457E+03	Apriori delay (usec)	-2.94763299398E+03	Resid mbdelay (usec)	5.19440E-03	+/-	1.8E-04
Sband delay (usec)	-2.95151076123E+03	Apriori clock (usec)	-9.1826057E-01	Resid sbdelay (usec)	-3.87777E+00	+/-	1.5E-03
Phase delay (usec)	-2.94763298887E+03	Apriori clockrate (us/s)	1.6630000E-06	Resid phdelay (usec)	5.10911E-06	+/-	6.3E-07
Delay rate (us/s)	8.63843633893E-02	Apriori rate (us/s)	8.63834900014E-02	Resid rate (us/s)	8.73388E-07	+/-	3.8E-09
Total phase (deg)	122.1	Apriori accel (us/s/s)	3.22821599157E-05	Resid phase (deg)	158.4	+/-	19.4

ph/seg (deg)	RMS 49.7	Theor. 46.6	Amplitude Search (2048X32)	0.129 +/- 0.022	0.125	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	65.5	81.3	Interp.	0.000	0.125	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000	
ph/frq (deg)	28.1	27.5	Inc. seg. avg.	0.122	0.122	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	42.4	48.0	Inc. frq. avg.	0.121	0.121	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

Z: az 282.1 el 43.6 pa 41.0 Y: az 288.6 el 56.0 pa 76.9 u,v (fr/asec) -611.643 3750.875 simultaneous interpolator

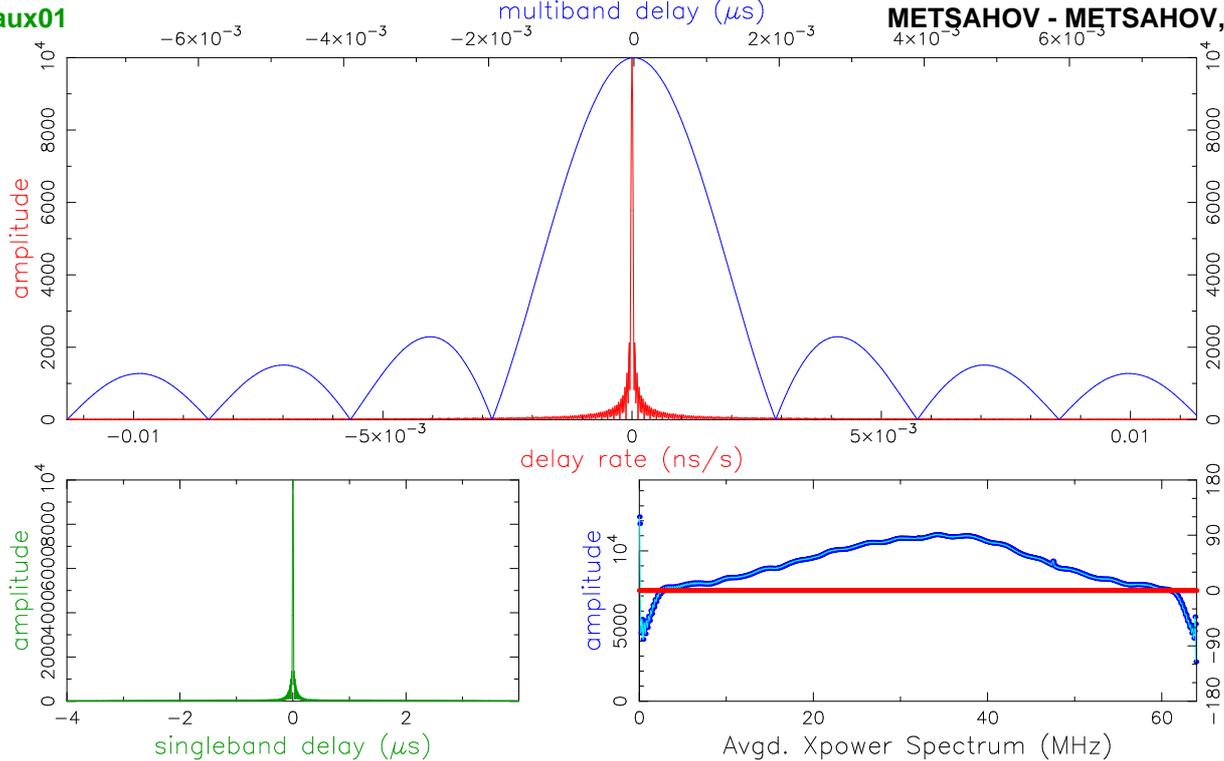
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Mk4/DiFX fourfit 3.23 rev 3383

aux01

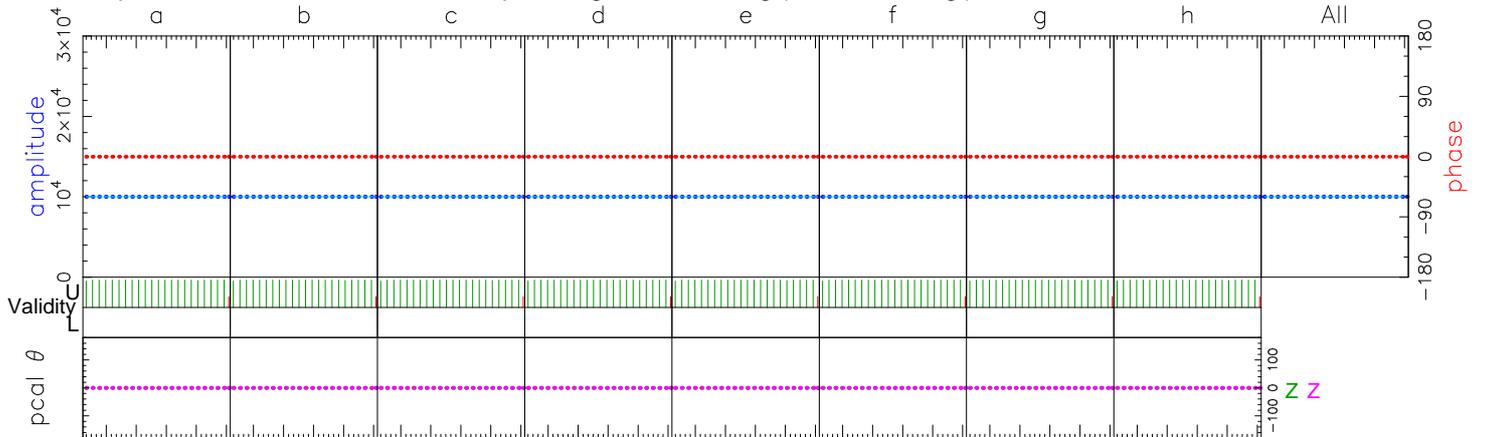
BLLAC.24ULKL, No0004, ZZ

METŜAHOV - MET̂SAHOV, fgroup W, pol RR



Fringe quality 9
 SNR 462338.7
 Int time 285.841
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 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
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
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) 0.0000000000E+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 +/- 1.9E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 8.0E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 4.8E-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 10000.000 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 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
 Z: az 282.1 el 43.6 pa 41.0 Z: az 282.1 el 43.6 pa 41.0 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//ZZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004//ZZ.W.20.24ULKL simultaneous interpolator

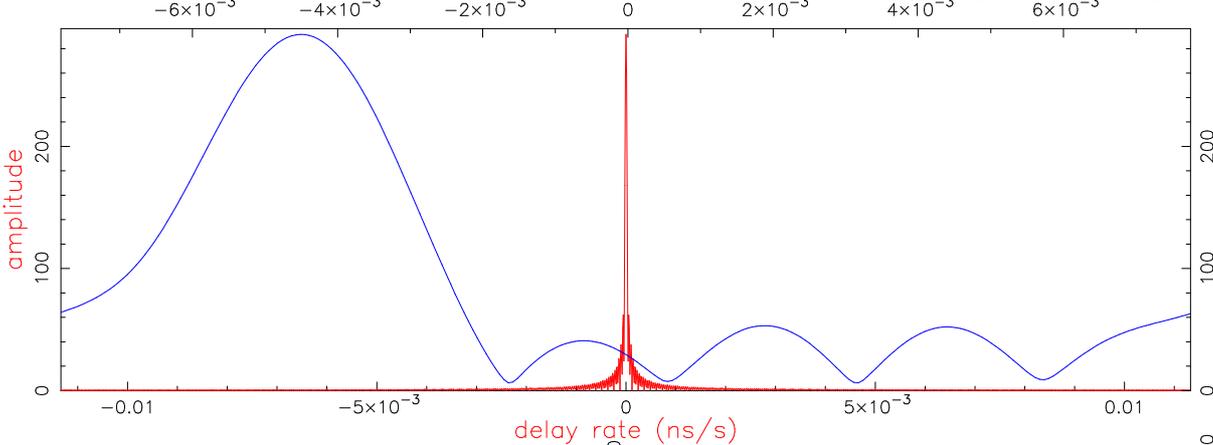
Mk4/DiFX fourfit 3.23 rev 3383

aux01

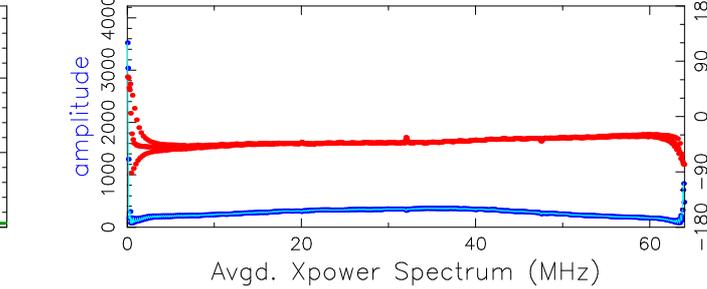
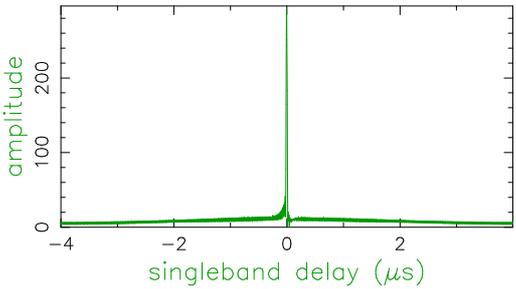
BLLAC.24ULKL, No0004, ZZ

METSAHOV - METSAHOV, fgroup W, pol LR

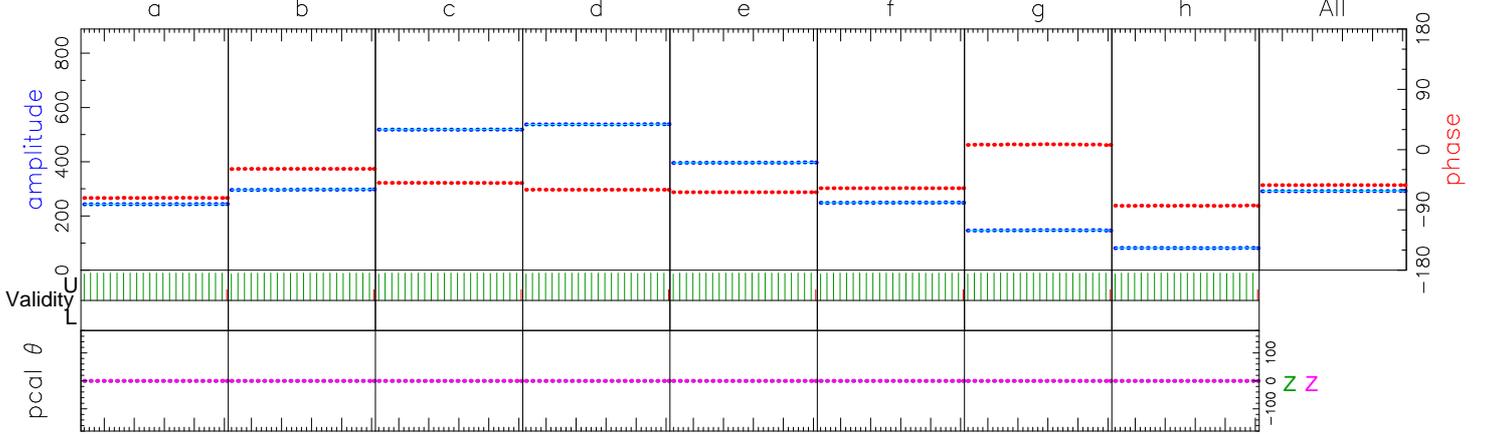
multiband delay (μ s)



Fringe quality 5
 Error code G
 SNR 13707.5
 Int time 285.841
 Amp 296.481
 Phase -52.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.005702
 MBD -0.004526
 Fringe rate (Hz)
 0.000002
 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
 2022:090:145450
 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
	-72.1	-28.8	-49.7	-59.8	-63.5	-57.6	7.5	-83.7	Phase	-52.9
	243.4	296.9	518.4	537.8	396.5	249.3	147.2	81.9	Ampl.	308.9
	1024.0	1024.0	1023.6	1023.5	1023.9	1024.0	1022.5	1023.4	Sbd box	1023.5
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	PC amp	
Z	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) -4.52621875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -4.52622E-03 +/- 7.9E-08
 Sband delay (usec) -5.70225000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -5.70225E-03 +/- 6.3E-07
 Phase delay (usec) -1.70702582089E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.70703E-06 +/- 2.7E-10
 Delay rate (us/s) 2.19652862071E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 2.19653E-11 +/- 1.6E-12
 Total phase (deg) -52.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -52.9 +/- 0.0

RMS Theor. Amplitude 296.481 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 290.972 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 1.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 30.9 0.0 Inc. seg. avg. 291.698 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 52.1 0.0 Inc. frq. avg. 308.938 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 282.1 el 43.6 pa 41.0 Z: az 282.1 el 43.6 pa 41.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f221a/FRINGE/1234/No0004/ZZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZZ.W.34.24ULKL

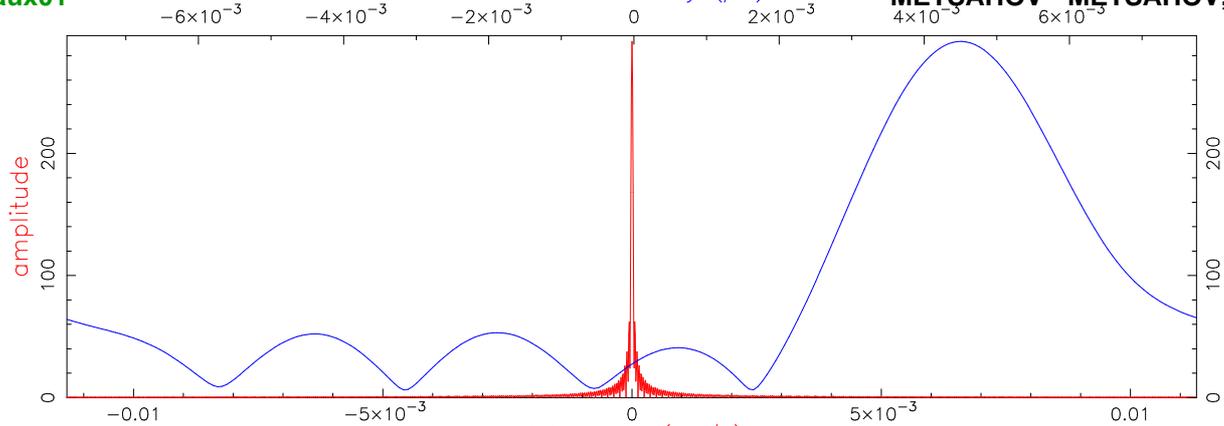
Mk4/DiFX fourfit 3.23 rev 3383

aux01

BLLAC.24ULKL, No0004, ZZ

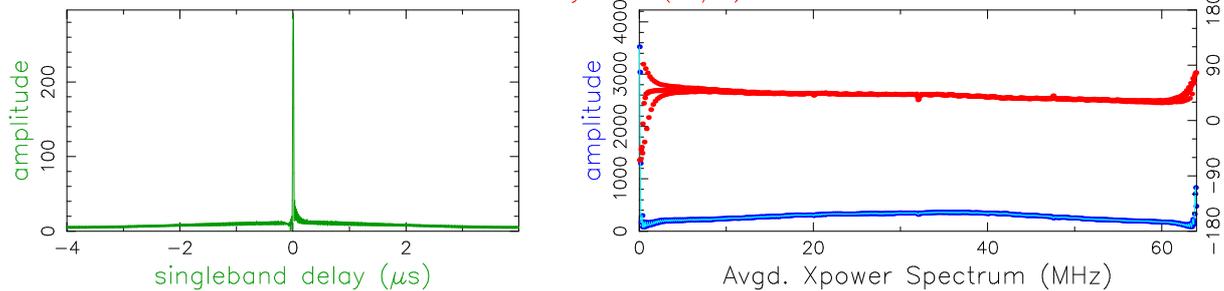
METSAHOV - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

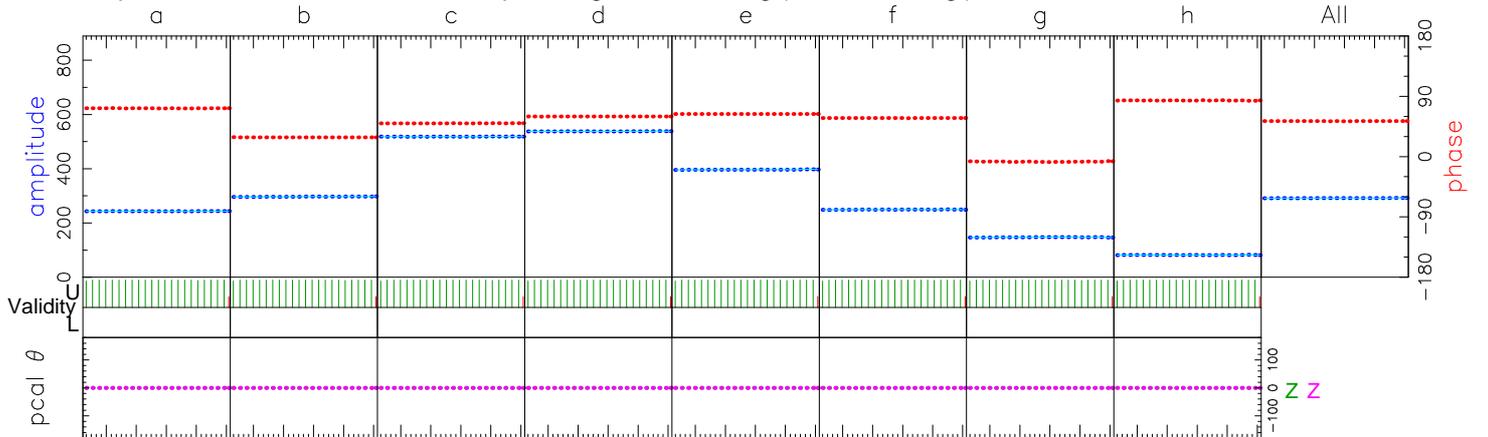


Fringe quality 5
 Error code G
 SNR 13707.5
 Int time 285.841
 Amp 296.481
 Phase 52.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.005702
 MBD 0.004526
 Fringe rate (Hz)
 -0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f221a
 Exper # 1234
 Yr:day 2022:090
 Start 124513.31
 Stop 125000.03
 FRT 124730.00
 Corr/FF/build
 2022:090:145148
 2022:090:145501
 2021:308:113728
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

delay rate (ns/s)



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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 4.52621875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 4.52622E-03 +/- 7.9E-08
 Sband delay (usec) 5.70225000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 5.70225E-03 +/- 6.3E-07
 Phase delay (usec) 1.70702582088E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.70703E-06 +/- 2.7E-10
 Delay rate (us/s) -2.19652862071E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -2.19653E-11 +/- 1.6E-12
 Total phase (deg) 52.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 52.9 +/- 0.0

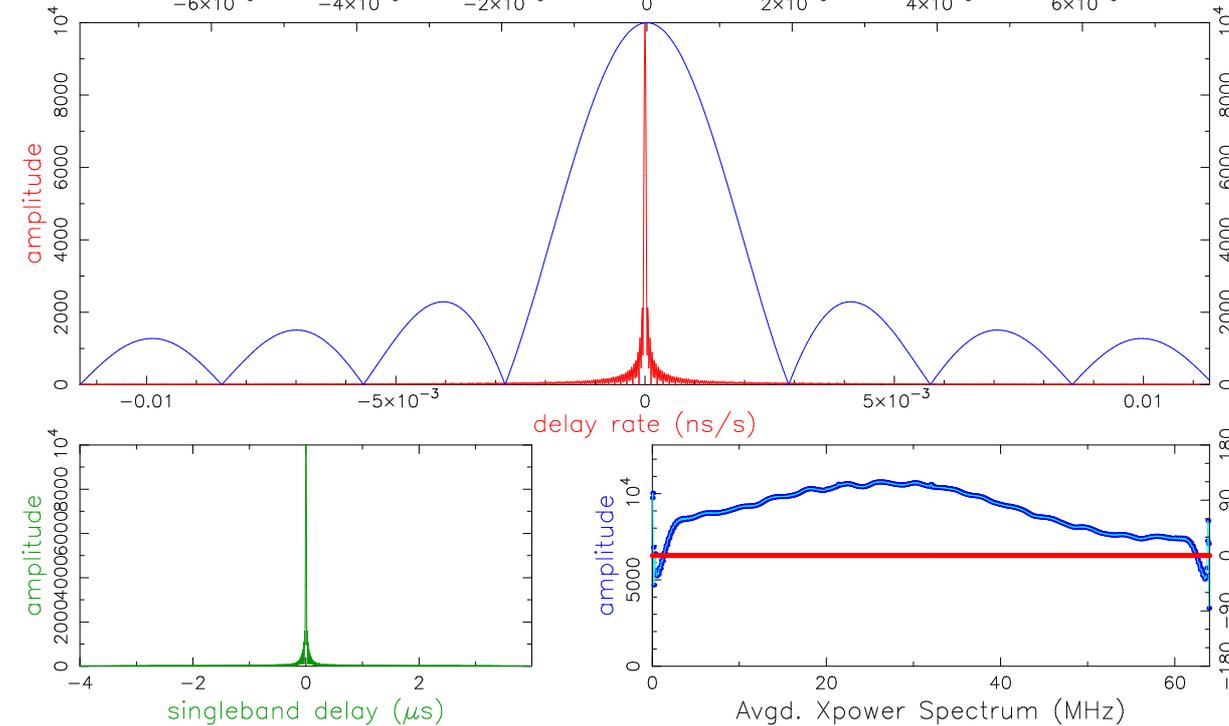
ph/seg (deg) 0.0 0.0 Theor. Amplitude 296.481 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.6 0.0 Search (2048X32) 290.972 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 30.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.1 0.0 Inc. seg. avg. 291.698 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Z: az 282.1 el 43.6 pa 41.0 Z: az 282.1 el 43.6 pa 41.0 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/ZZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZZ.W.48.24ULKL simultaneous interpolator

Mk4/DiFX fourfit 3.23 rev 3383

aux01

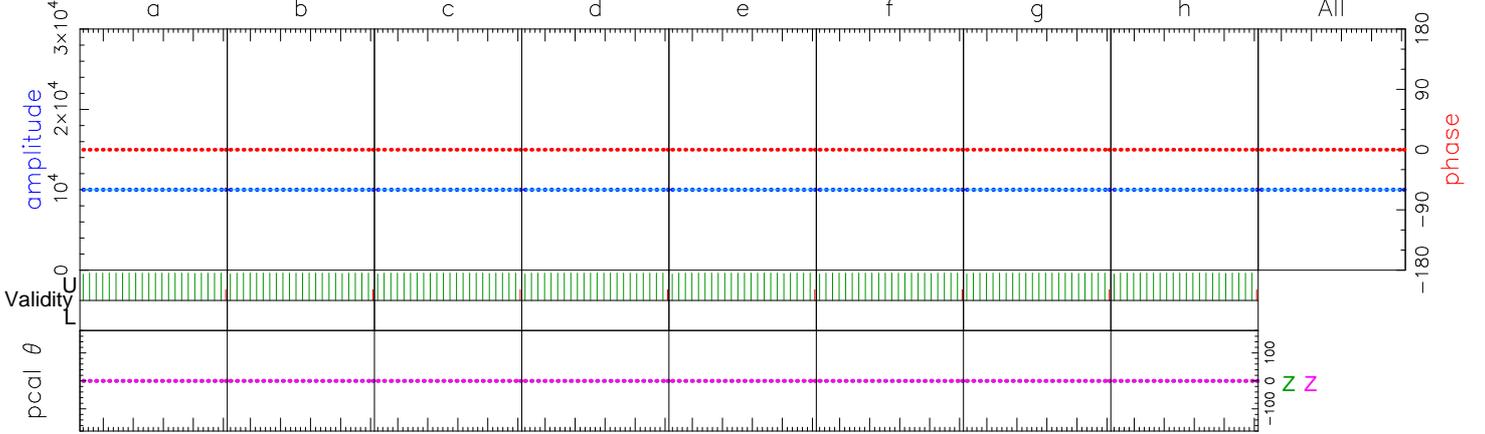
BLLAC.24ULKL, No0004, ZZ

METSAHOV - METSAHOV, fgroup W, pol LL



Fringe quality 9
 SNR 462338.7
 Int time 285.841
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. 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
U/L	560/0	560/0	560/0	560/0	560/0	560/0	560/0	560/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
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) 0.000000000000E+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 +/- 1.9E-08
 Phase delay (usec) 0.000000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 8.0E-12
 Delay rate (us/s) 0.000000000000E+00 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 4.8E-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 10000.000 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 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
 Z: az 282.1 el 43.6 pa 41.0 Z: az 282.1 el 43.6 pa 41.0 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/ZZ..24ULKL Output file: /Exps/f221a/FRINGE/1234/No0004/ZZ.W.6.24ULKL simultaneous interpolator