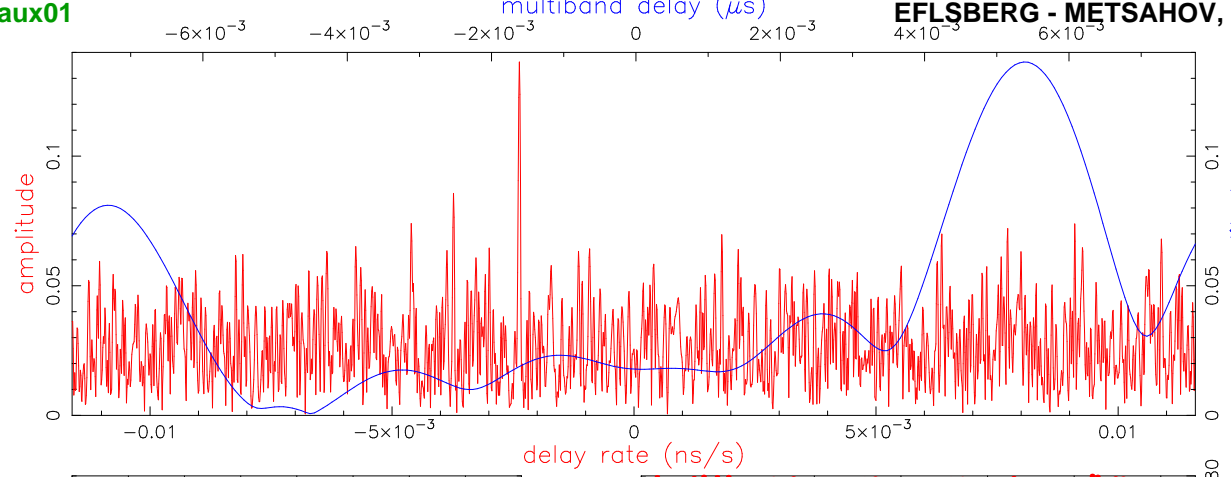


Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, BZ

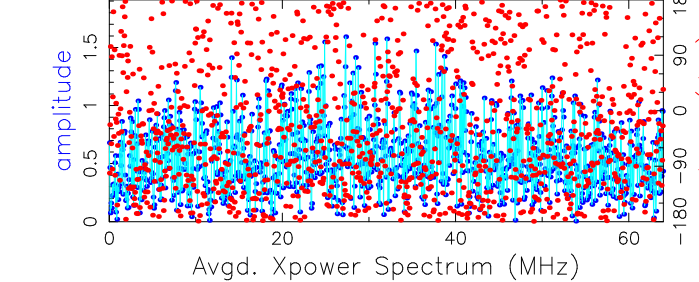
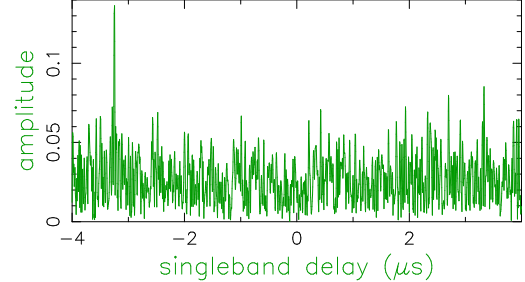
EFLSBERG - METSAHOV, fgroup W, pol RR



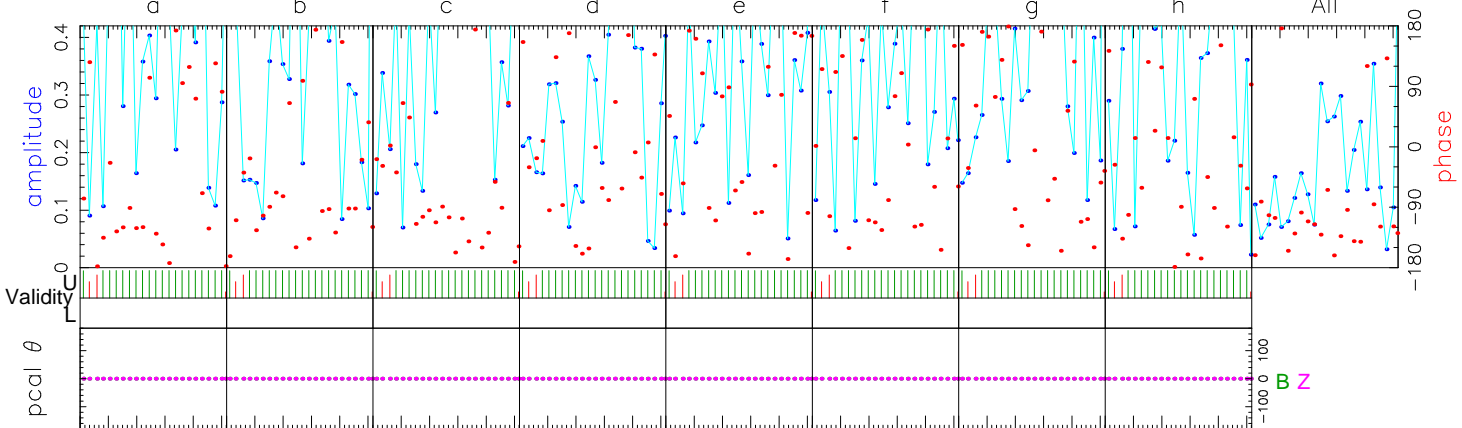
Fringe quality 0

SNR 6.4
 Int time 292.255
 Amp 0.140
 Phase -123.7
 PFD 1.3e-01
 Delays (us)
 SBD -3.247285
 MBD 0.005375
 Fringe rate (Hz)
 -0.204759
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500

Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071726
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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
	-135.7	-121.2	-118.5	-76.3	-131.1	-150.3	-124.4	-108.5	Phase	-123.7
	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	110.3	368.1	194.8	6.8	2034.0	1724.0	1630.7	1960.1	Sbd box	193.7
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-5.80260914668E+02	Apriori delay (usec)	-5.77016289900E+02	Resid mbdelay (usec)	5.37523E-03	+/-	1.7E-04
Sband delay (usec)	-5.80263574650E+02	Apriori clock (usec)	-3.1283817E+01	Resid sbdelay (usec)	-3.24728E+00	+/-	1.3E-03
Phase delay (usec)	-5.77016293888E+02	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	-3.98784E-06	+/-	5.7E-07
Delay rate (us/s)	2.57359288103E-01	Apriori rate (us/s)	2.57361665152E-01	Resid rate (us/s)	-2.37705E-06	+/-	3.4E-09
Total phase (deg)	-200.0	Apriori accel (us/s/s)	-4.04439307988E-06	Resid phase (deg)	-123.7	+/-	17.8

ph/seg (deg)	43.7	Theor.	42.4	Amplitude	0.140 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.1		74.0	Search (2048X32)	0.134	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	23.9		25.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.2		44.0	Inc. seg. avg.	0.132	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
				Inc. frq. avg.	0.132	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 99.5 el 62.9 pa -54.7 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) -1924.578 -900.951 simultaneous interpolator

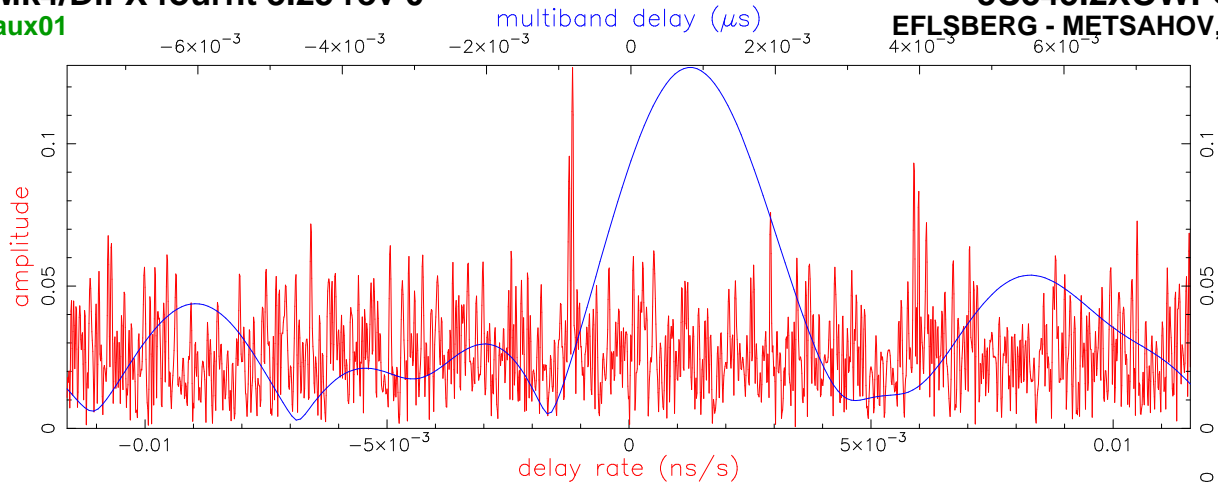
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BZ.W.21.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, BZ

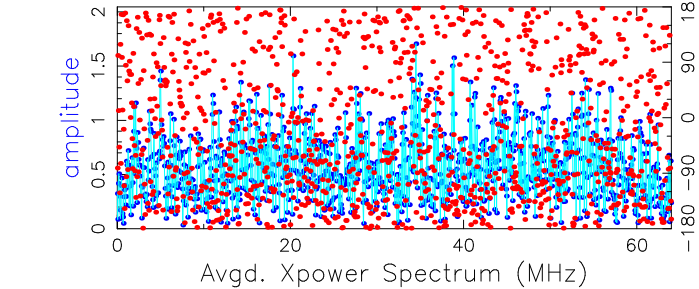
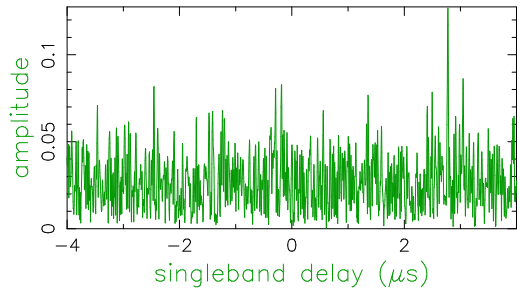
EFLSBERG - METSAHOV, fgroup W, pol LR



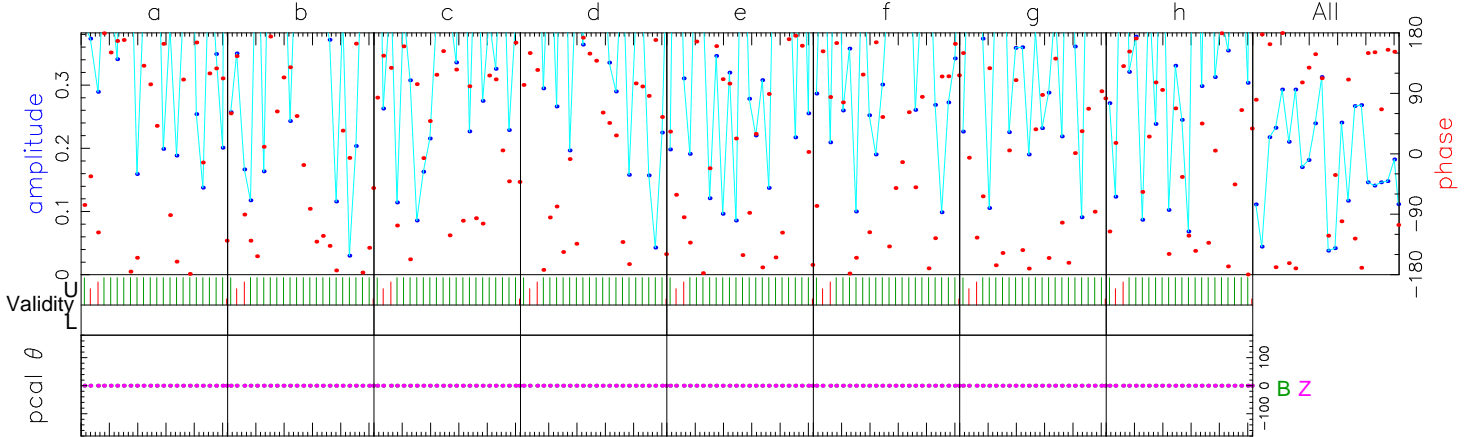
Fringe quality 0

SNR 5.9
 Int time 292.255
 Amp 0.128
 Phase 165.5
 PFD 9.5e-01
 Delays (us)
 SBD 2.776688
 MBD 0.000827
 Fringe rate (Hz)
 -0.100429
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500

Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071738
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0		
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)	-5.74234213233E+02	Apriori delay (usec)	-5.77016289900E+02	Resid mbdelay (usec)	8.26668E-04	+/-	1.8E-04
Sband delay (usec)	-5.74239601900E+02	Apriori clock (usec)	-3.1283817E+01	Resid sbdelay (usec)	2.77669E+00	+/-	1.5E-03
Phase delay (usec)	-5.77016284564E+02	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	5.33639E-06	+/-	6.2E-07
Delay rate (us/s)	2.57360499275E-01	Apriori rate (us/s)	2.57361665152E-01	Resid rate (us/s)	-1.16588E-06	+/-	3.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.04439307988E-06	Resid phase (deg)	165.5	+/-	19.3

ph/seg (deg)	60.4	Theor.	46.0	Amplitude	0.128 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.2		80.2	Search (2048X32)	0.126	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	19.8		27.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.1		47.6	Inc. seg. avg.	0.140	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
				Inc. frq. avg.	0.120	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 99.5 el 62.9 pa -54.7 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) -1924.578 -900.951 simultaneous interpolator

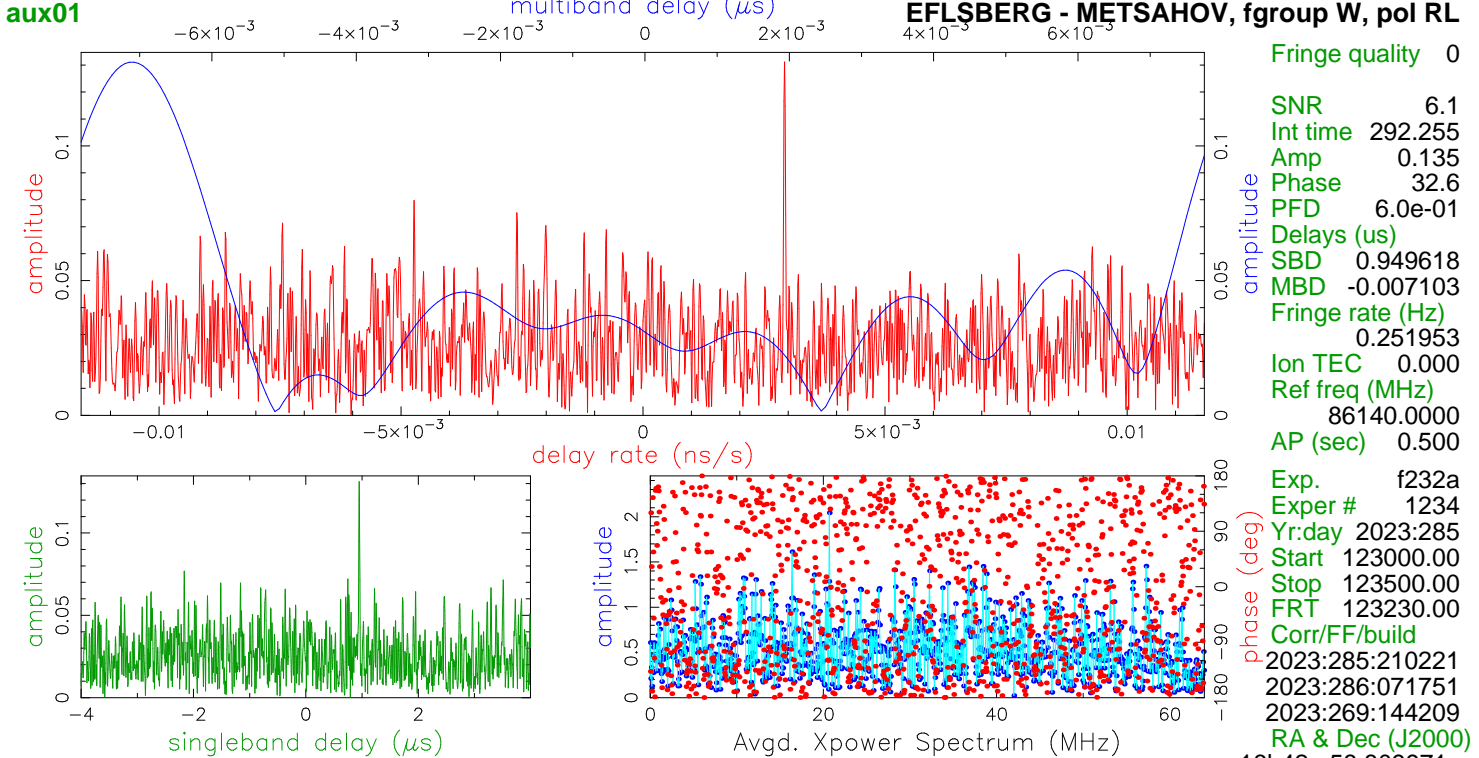
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BZ.W.31.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, BZ

EFLSBERG - METSAHOV, fgroup W, pol RL



Fringe quality 0

SNR 6.1

Int time 292.255

Amp 0.135

Phase 32.6

PFD 6.0e-01

Delays (us)

SBD 0.949618

MBD -0.007103

Fringe rate (Hz) 0.251953

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. f232a

Exper # 1234

Yr:day 2023:285

Start 123000.00

Stop 123500.00

FRT 123230.00

Corr/FF/build

2023:285:210221

2023:286:071751

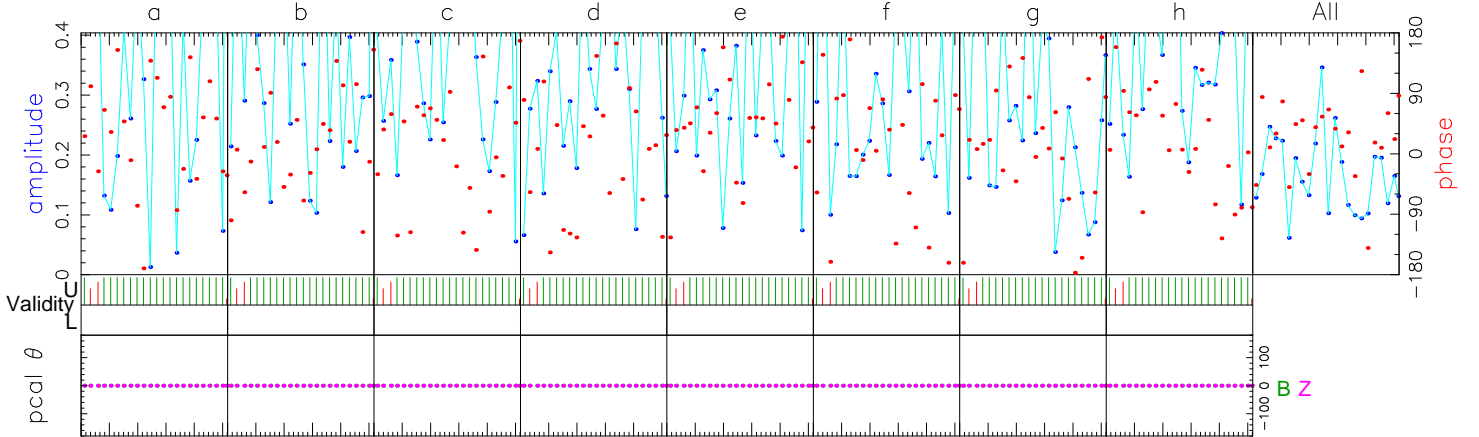
2023:269:144209

RA & Dec (J2000)

16h42m58.809971s

+39°48'36.993958"

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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
	53.6	13.7	25.6	-4.8	39.5	66.0	28.0	31.9	Phase	32.6
	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	1049.8	504.1	546.2	1216.6	1221.0	315.2	1397.5	472.6	Sbd box	1268.1
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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)	-5.76070268299E+02	Apriori delay (usec)	-5.77016289900E+02	Resid mbdelay (usec)	-7.10340E-03	+/-	1.8E-04
Sband delay (usec)	-5.76066671900E+02	Apriori clock (usec)	-3.1283817E+01	Resid sbdelay (usec)	9.49618E-01	+/-	1.4E-03
Phase delay (usec)	-5.77016288848E+02	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	1.05232E-06	+/-	6.0E-07
Delay rate (us/s)	2.57364590075E-01	Apriori rate (us/s)	2.57361665152E-01	Resid rate (us/s)	2.92492E-06	+/-	3.5E-09
Total phase (deg)	-43.7	Apriori accel (us/s/s)	-4.04439307988E-06	Resid phase (deg)	32.6	+/-	18.7

ph/seg (deg)	56.1	Theor.	44.5	Amplitude	0.135 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	58.6	Search (2048X32)	0.127	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000	
ph/frq (deg)	23.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	35.2	Inc. seg. avg.	0.133	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012	0.012	
		Inc. frq. avg.	0.128	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 99.5 el 62.9 pa -54.7 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) -1924.578 -900.951 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BZ.W.39.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

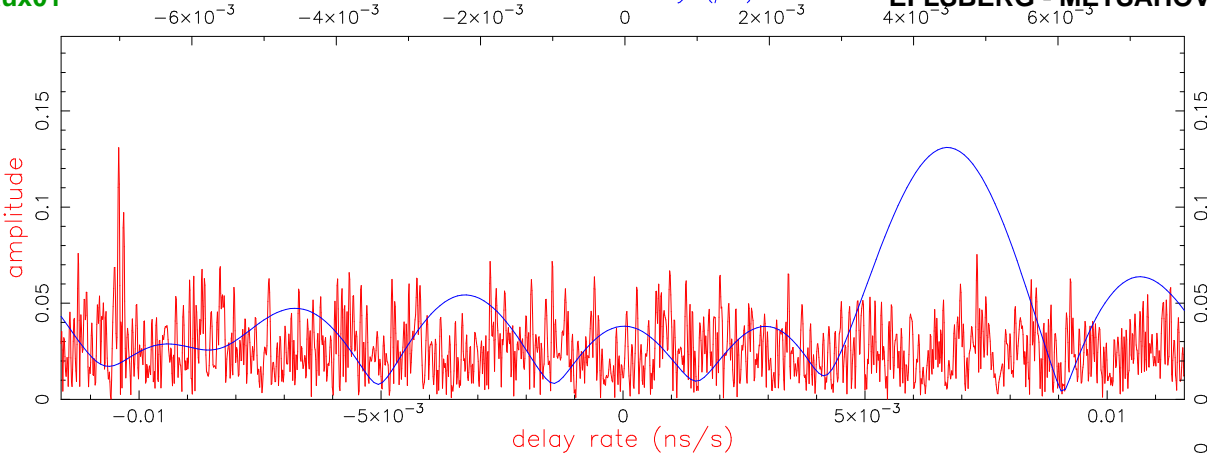
aux01

3C345.2XOWFQ, No0003, BZ

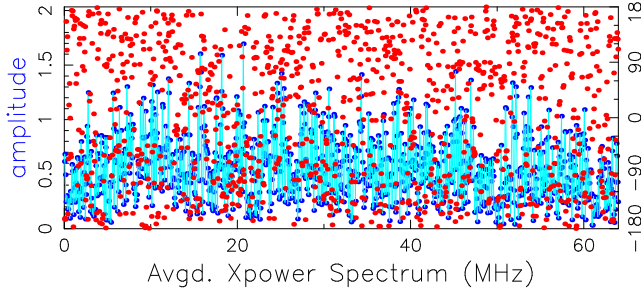
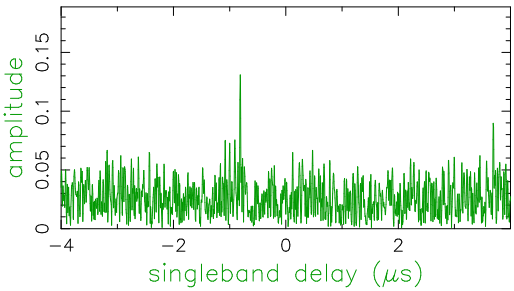
EFLSBERG - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

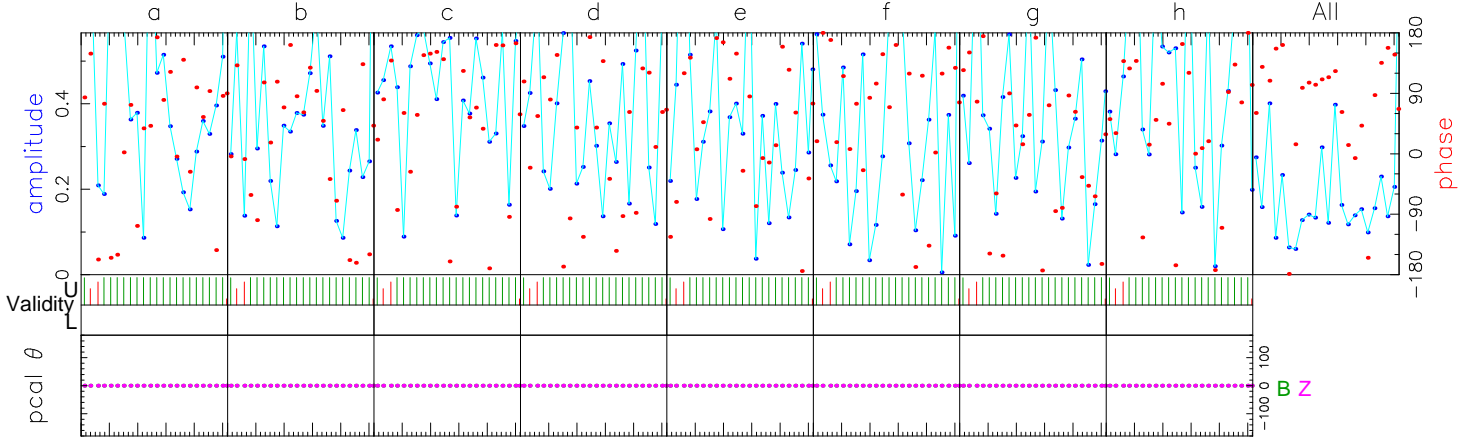
Fringe quality 0



SNR 6.2
 Int time 292.255
 Amp 0.189
 Phase 107.1
 PFD 5.1e-01
 Delays (us)
 SBD -0.811406
 MBD 0.004499
 Fringe rate (Hz)
 -0.898444
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071714
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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
	103.7	85.4	126.1	128.3	113.9	95.4	91.3	106.4	Phase	107.1
	0.2	0.1	0.3	0.1	0.2	0.1	0.2	0.4	Ampl.	0.2
	86.1	1137.4	819.1	538.2	977.5	1481.4	865.2	517.7	Sbd box	817.3
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	

Group delay (usec) (SBD)	-5.77824290820E+02	Apriori delay (usec)	-5.77016289900E+02	Resid mbdelay (usec)	4.49908E-03	+/-	1.8E-04
Sband delay (usec)	-5.77827695900E+02	Apriori clock (usec)	-3.1283817E+01	Resid sbdelay (usec)	-8.11406E-01	+/-	1.4E-03
Phase delay (usec)	-5.77016286445E+02	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	3.45510E-06	+/-	6.0E-07
Delay rate (us/s)	2.57351235114E-01	Apriori rate (us/s)	2.57361665152E-01	Resid rate (us/s)	-1.04300E-05	+/-	3.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.04439307988E-06	Resid phase (deg)	107.1	+/-	18.6

ph/seg (deg)	55.1	Theor.	44.2	Amplitude	0.189 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	88.8		77.2	Search (2048X32)	0.128	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	17.0		26.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.3		45.8	Inc. seg. avg.	0.199	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
				Inc. frq. avg.	0.174	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 99.5 el 62.9 pa -54.7 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) -1924.578 -900.951 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BZ.W.9.2XOWFQ

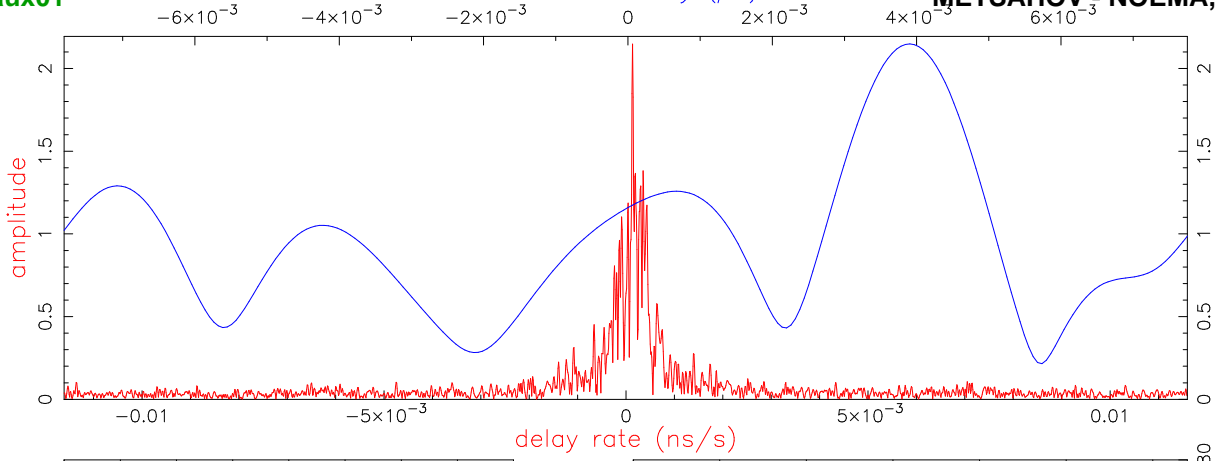
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, ZN

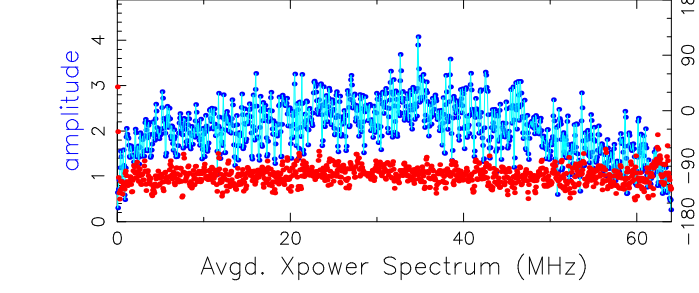
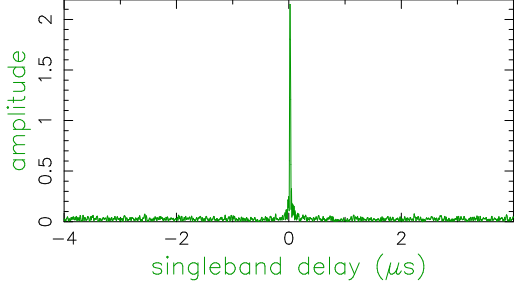
METSAHOV - NOEMA, fgroup W, pol RR

multiband delay (μ s)



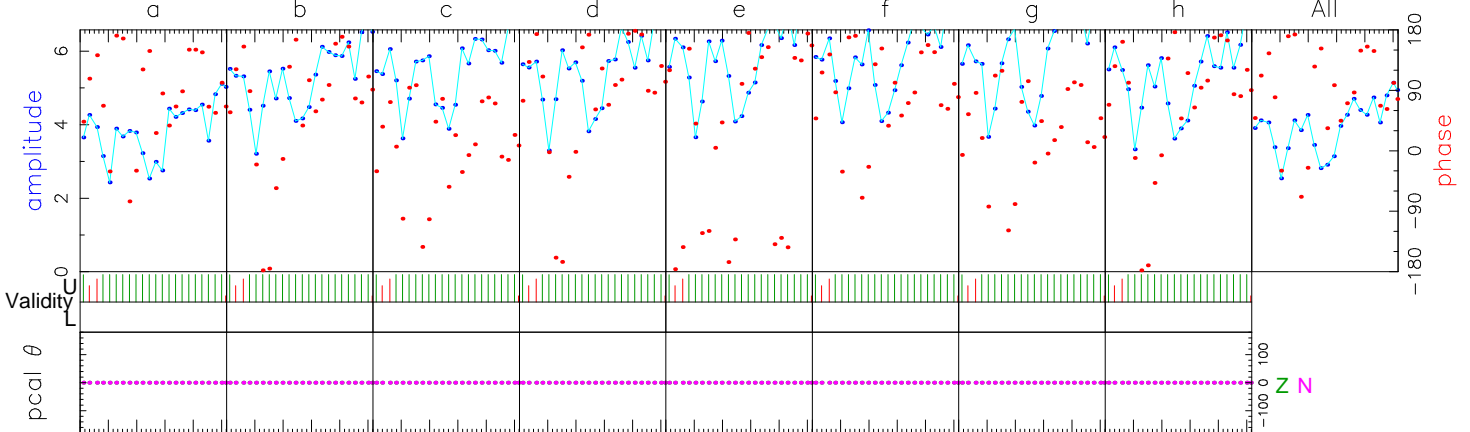
Fringe quality 2

SNR 102.6
 Int time 292.255
 Amp 2.194
 Phase 98.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.021474
 MBD 0.003873
 Fringe rate (Hz) 0.011901
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.500



Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071725
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	5.96698302550E+02	Apriori delay (usec)	5.96678804677E+02	Resid mbdelay (usec)	3.87287E-03	+/-	1.1E-05
Sband delay (usec)	5.96700278177E+02	Apriori clock (usec)	1.3230000E+01	Resid sbdelay (usec)	2.14735E-02	+/-	8.4E-05
Phase delay (usec)	5.96678807860E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.18235E-06	+/-	3.6E-08
Delay rate (us/s)	-3.21277134716E-01	Apriori rate (us/s)	-3.21277272877E-01	Resid rate (us/s)	1.38161E-07	+/-	2.1E-10
Total phase (deg)	183.3	Apriori accel (us/s/s)	8.83684608729E-06	Resid phase (deg)	98.7	+/-	1.1

ph/seg (deg)	67.0	RMS	2.7	Theor.	2.194 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	84.9	Search (2048X32)	2.128	Amplitude	2.194 +/- 0.021	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	50.4	Inc. seg. avg.	3.924	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.9	Inc. frq. avg.	2.940	Inc. seg. avg.	3.924	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
Z: az 142.7 el 66.6 pa -22.5		N: az 87.2 el 62.6 pa -67.7		Inc. frq. avg.	2.940	Data rate(Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 142.7 el 66.6 pa -22.5 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 2408.359 1680.667 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003//ZN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003//ZN.W.18.2XOWFQ

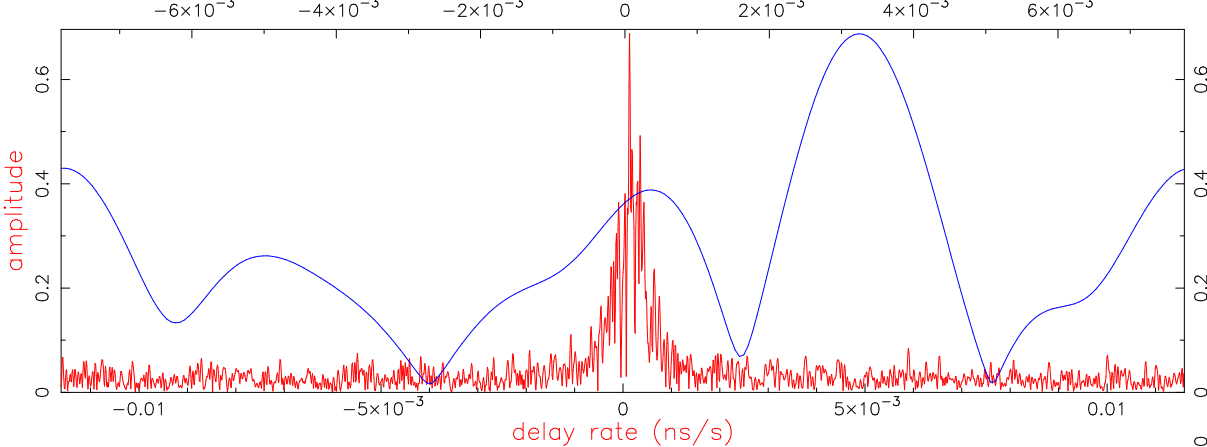
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, ZN

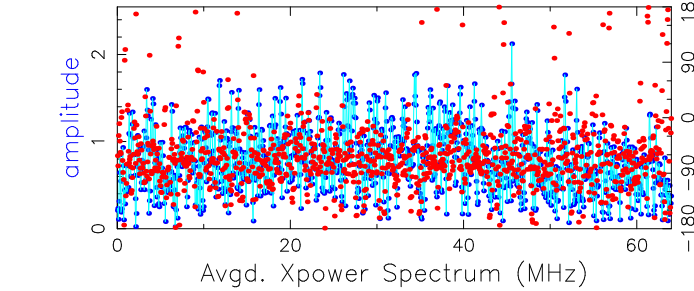
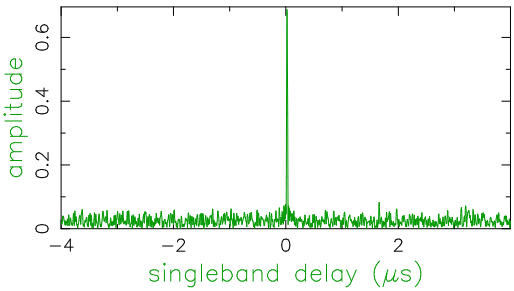
METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)



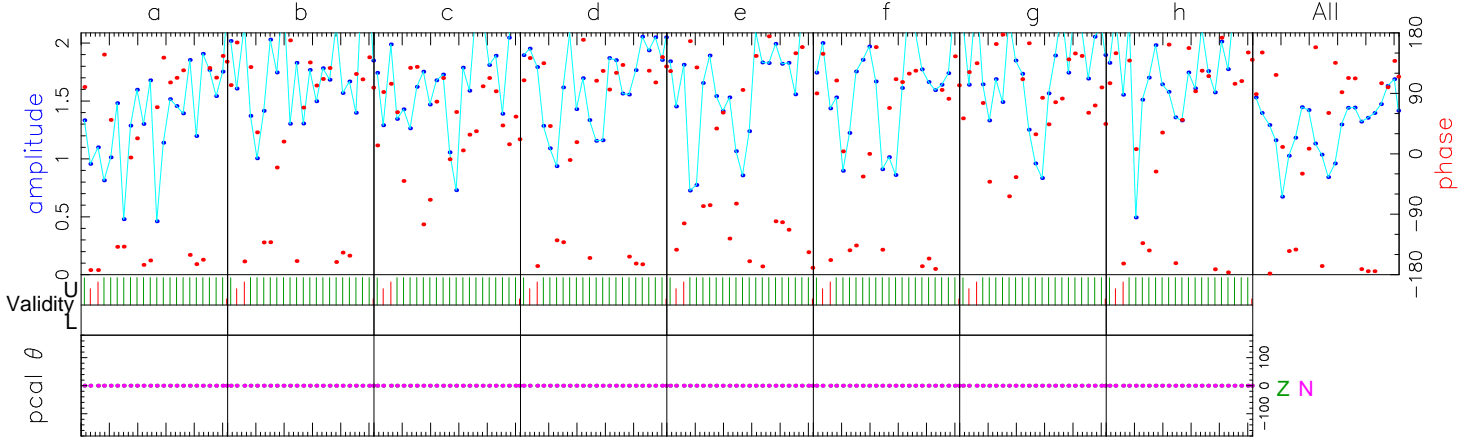
Fringe quality 4

SNR 32.5
 Int time 292.255
 Amp 0.696
 Phase 133.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.021023
 MBD 0.003270
 Fringe rate (Hz)
 0.012024
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500



Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071737
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 5.96697699894E+02 Apriori delay (usec) 5.96678804677E+02 Resid mbdelay (usec) 3.27022E-03 +/- 3.3E-05
 Sband delay (usec) 5.96699827177E+02 Apriori clock (usec) 1.3230000E+01 Resid sbdelay (usec) 2.10225E-02 +/- 2.6E-04
 Phase delay (usec) 5.96678808989E+02 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 4.31190E-06 +/- 1.1E-07
 Delay rate (us/s) -3.21277133296E-01 Apriori rate (us/s) -3.21277272877E-01 Resid rate (us/s) 1.39582E-07 +/- 6.6E-10
 Total phase (deg) 218.3 Apriori accel (us/s/s) 8.83684608729E-06 Resid phase (deg) 133.7 +/- 3.5

RMS Theor. Amplitude 0.696 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 67.5 8.4 Search (2048X32) 0.662 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 91.0 14.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 46.2 5.0 Inc. seg. avg. 1.265 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 29.8 8.7 Inc. frq. avg. 0.873 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 142.7 el 66.6 pa -22.5 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 2408.359 1680.667 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003//ZN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003//ZN.W.28.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

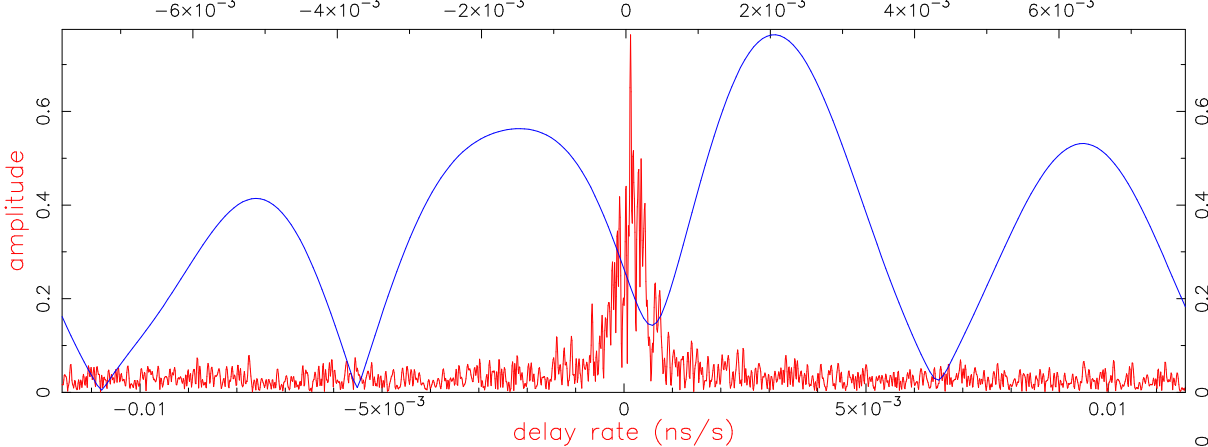
aux01

3C345.2XOWFQ, No0003, ZN

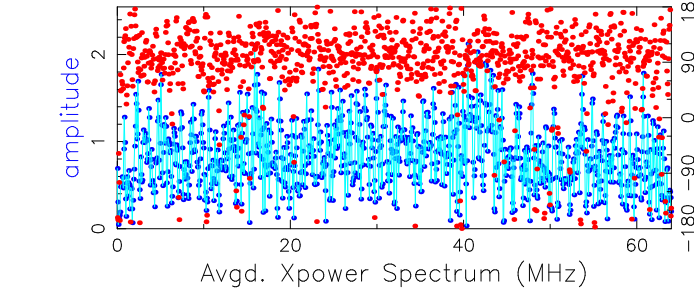
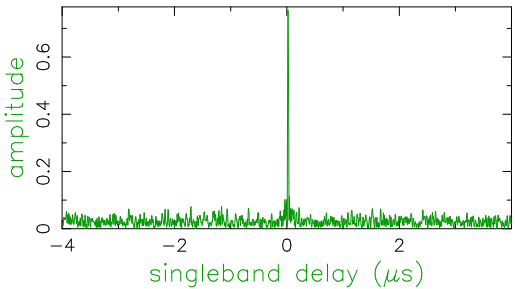
METSAHOV - NOEMA, fgroup W, pol RL

multiband delay (μ s)

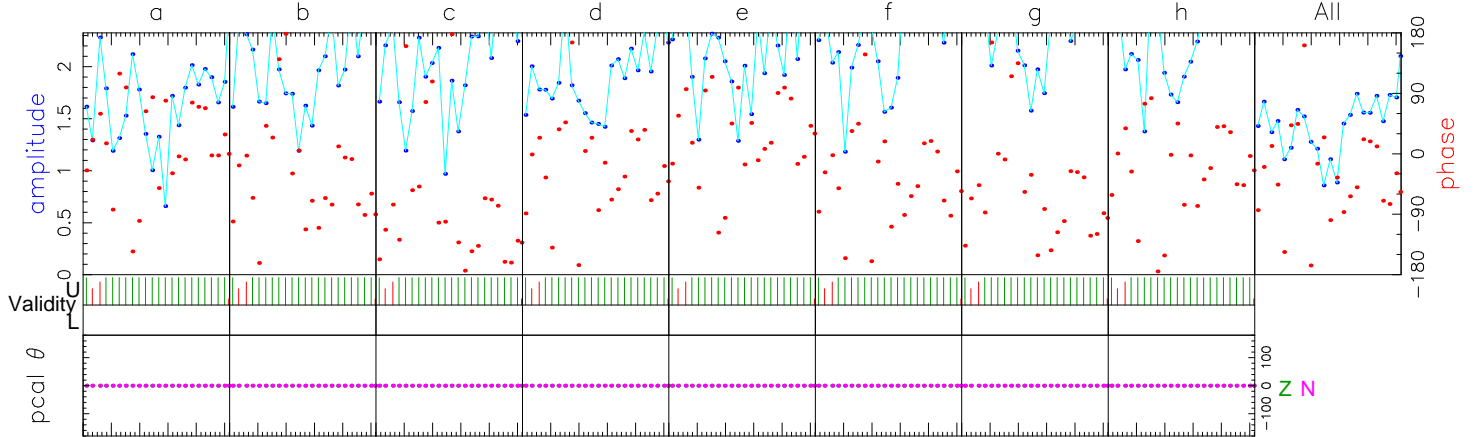
Fringe quality 3



SNR 36.2
 Int time 292.255
 Amp 0.775
 Phase -35.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.021137
 MBD 0.002081
 Fringe rate (Hz)
 0.012015
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071749
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	23.9	-53.2	-123.2	-19.3	34.0	-39.2	-85.8	-12.5		Phase -35.8
	0.8	1.1	1.2	1.0	1.2	1.3	1.3	1.2		Ampl. 1.1
	1028.5	1029.9	1030.7	1030.9	1030.9	1030.8	1030.8	1029.8		Sbd box 1030.4
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0		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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	5.96696510706E+02	Apriori delay (usec)	5.96678804677E+02	Resid mbdelay (usec)	2.08103E-03	+/-	3.0E-05
Sband delay (usec)	5.96699941427E+02	Apriori clock (usec)	1.3230000E+01	Resid sbdelay (usec)	2.11367E-02	+/-	2.4E-04
Phase delay (usec)	5.96678803523E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.15430E-06	+/-	1.0E-07
Delay rate (us/s)	-3.21277133397E-01	Apriori rate (us/s)	-3.21277272877E-01	Resid rate (us/s)	1.39481E-07	+/-	6.0E-10
Total phase (deg)	48.8	Apriori accel (us/s/s)	8.83684608729E-06	Resid phase (deg)	-35.8	+/-	3.2

ph/seg (deg)	66.4	RMS	7.5	Theor.	0.775 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	90.0	Search (2048X32)	0.747	Amplitude		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	57.3	Interp.	0.000	Inc. seg. avg.	1.409	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.2	Inc. frq. avg.	1.138	Inc. frq. avg.	1.138	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
Z: az 142.7 el 66.6 pa -22.5	N: az 87.2 el 62.6 pa -67.7	u, v (fr/asec)	2408.359 1680.667	Data rate(Mb/s):	2048	nlags:	1024 t_cohere infinite	ion window (TEC)	0.00 0.00	

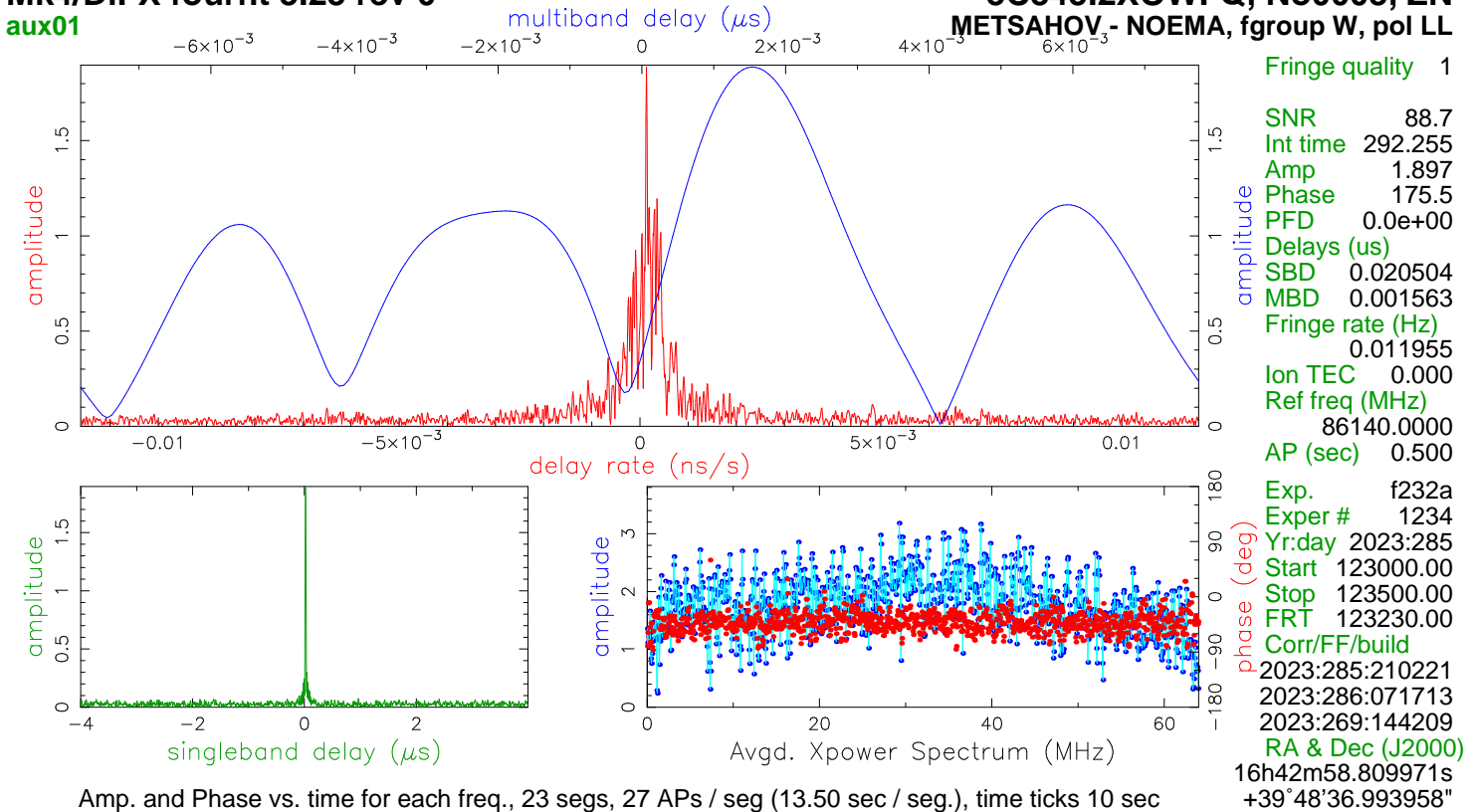
simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003//ZN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003//ZN.W.36.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

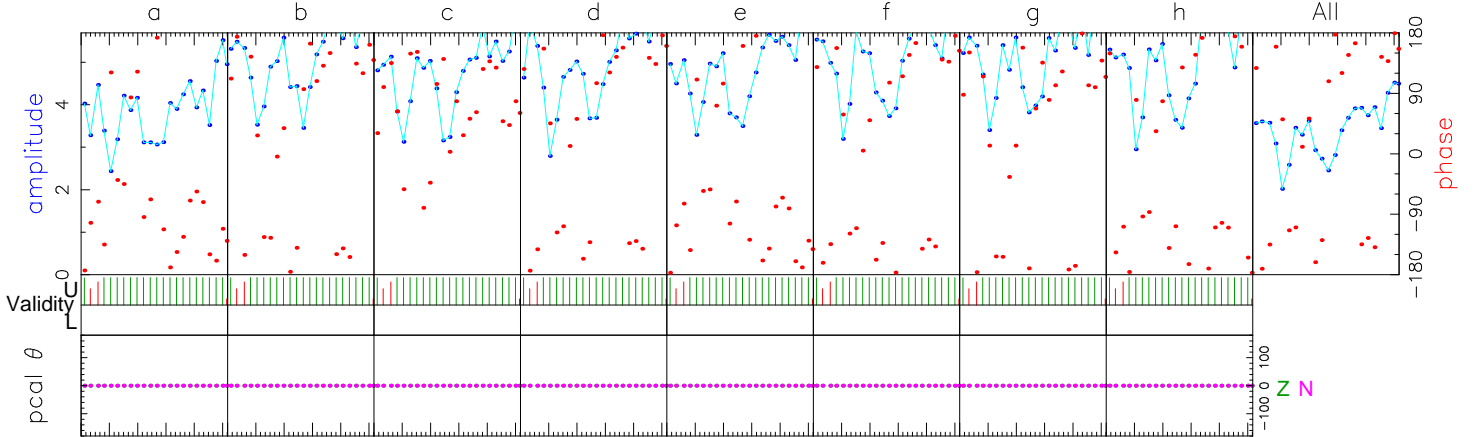
aux01

3C345.2XOWFQ, No0003, ZN

METSAHOV - NOEMA, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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
	-118.1	161.3	79.9	173.5	-129.2	175.2	133.9	-159.4	Phase	175.5
	2.1	2.8	2.5	2.8	2.6	2.8	2.9	2.8	Ampl.	2.7
	1028.2	1029.8	1030.4	1030.5	1030.9	1030.7	1030.7	1029.9	Sbd box	1030.2
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.96695992800E+02	Apriori delay (usec)	5.96678804677E+02	Resid mbdelay (usec)	1.56312E-03	+/-	1.2E-05
Sband delay (usec)	5.96699308677E+02	Apriori clock (usec)	1.3230000E+01	Resid sbdelay (usec)	2.05040E-02	+/-	9.7E-05
Phase delay (usec)	5.96678810337E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.65999E-06	+/-	4.2E-08
Delay rate (us/s)	-3.21277134097E-01	Apriori rate (us/s)	-3.21277272877E-01	Resid rate (us/s)	1.38780E-07	+/-	2.4E-10
Total phase (deg)	260.1	Apriori accel (us/s/s)	8.83684608729E-06	Resid phase (deg)	175.5	+/-	1.3

ph/seg (deg)	66.5	RMS	3.1	Theor.	1.859	Amplitude	1.897 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	85.4		3.1		1.859	Search (2048X32)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	56.5		1.8		3.393	Inc. seg. avg.	2.663	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	42.5		3.2		2.663	Inc. frq. avg.	2.663	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	1024 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 142.7 el 66.6 pa -22.5 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 2408.359 1680.667 simultaneous interpolator

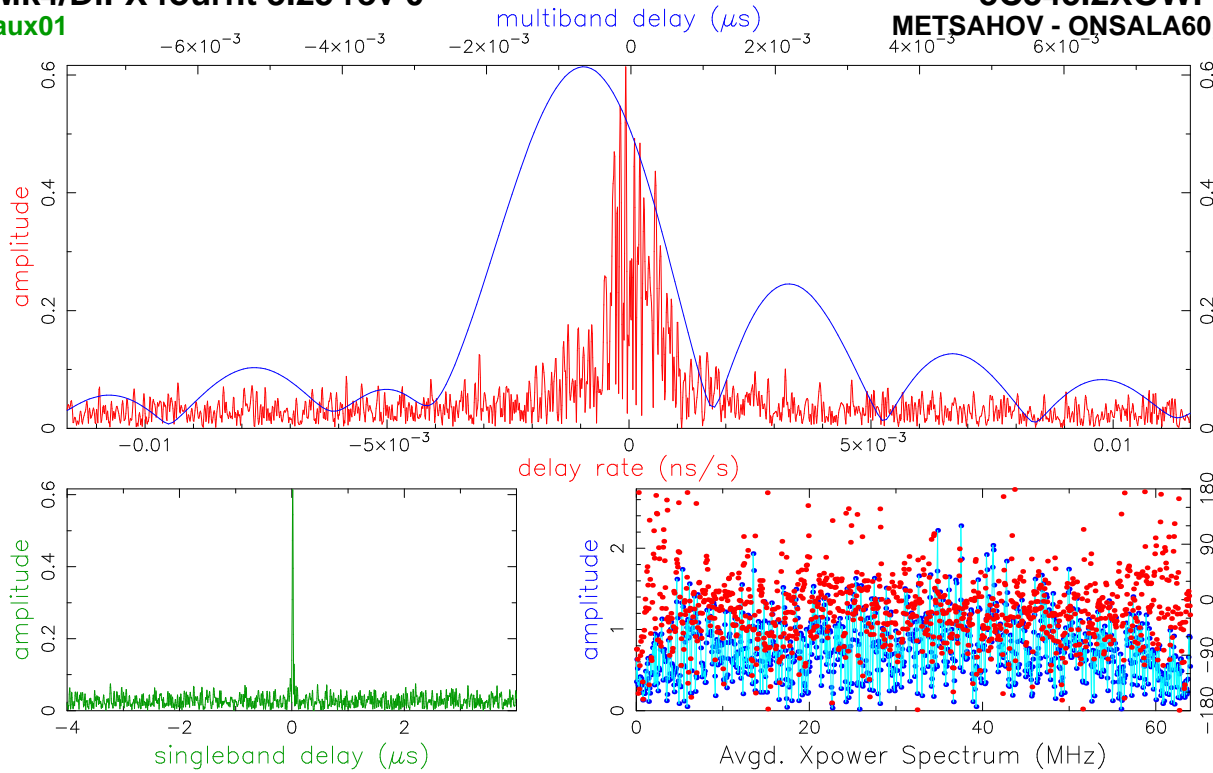
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Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, ZX

METSAHOV - ONSALA60, fgroup W, pol RR

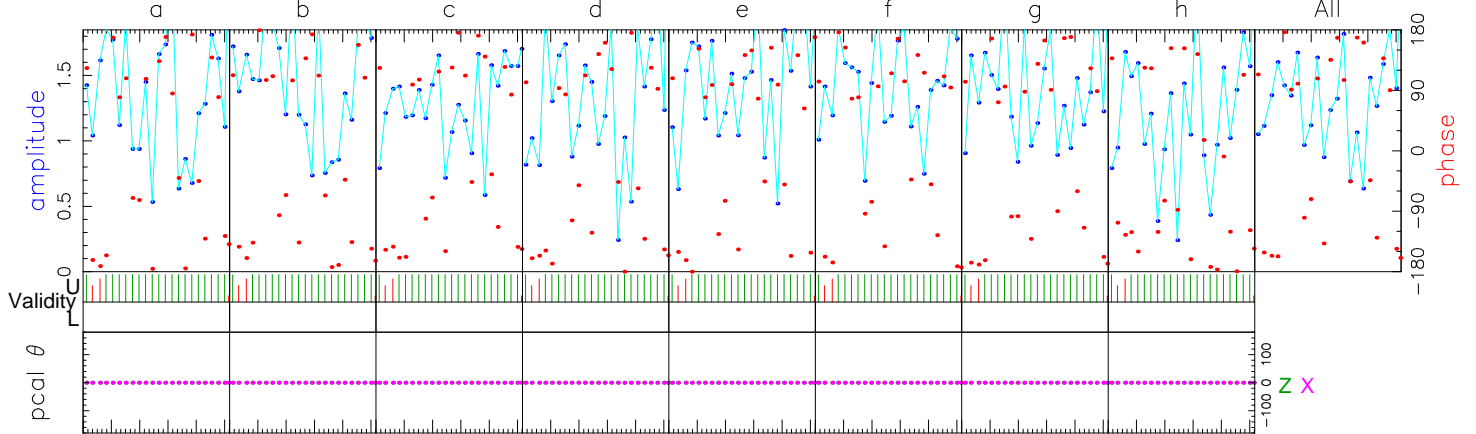


Fringe quality 6

SNR 28.8
 Int time 292.244
 Amp 0.616
 Phase 160.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.014766
 MBD -0.000677
 Fringe rate (Hz)
 -0.006180
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500

Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071725
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	
	154.7	167.7	173.3	164.0	146.3	144.6	153.4	-173.1	Phase	160.8	
	0.7	0.7	0.5	0.6	0.7	0.6	0.6	0.6	Ampl.	0.6	
	1029.1	1028.7	1028.5	1028.6	1028.8	1029.0	1029.2	1029.2	Sbd box	1028.8	
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	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)	3.62928164398E+02		Apriori delay (usec)		3.62913215960E+02		Resid mbdelay (usec)		-6.76561E-04	+/- 3.8E-05	
Sband delay (usec)	3.62927981460E+02		Apriori clock (usec)		-1.0225253E+02		Resid sbdelay (usec)		1.47655E-02	+/- 3.0E-04	
Phase delay (usec)	3.62913221146E+02		Apriori clockrate (us/s)		-6.2999996E-07		Resid phdelay (usec)		5.18612E-06	+/- 1.3E-07	
Delay rate (us/s)	-1.43138736295E-01		Apriori rate (us/s)		-1.43138664549E-01		Resid rate (us/s)		-7.17466E-08	+/- 7.5E-10	
Total phase (deg)	313.0		Apriori accel (us/s/s)		-6.2624533796E-07		Resid phase (deg)		160.8	+/- 4.0	
	RMS	Theor.	Amplitude	0.616 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	72.4	9.5	Search (2048X32)	0.595		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-4.000 4.000	
amp/seg (%)	125.5	16.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	15.6	5.6	Inc. seg. avg.	1.292		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.012 0.012	
amp/frq (%)	9.5	9.8	Inc. frq. avg.	0.628		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite		ion window (TEC)	0.00 0.00
Z: az 142.7 el 66.6 pa -22.5	X: az 118.4 el 63.5 pa -37.8		u,v (fr/asec) 1066.136 122.883						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f232a/FRINGE/1234/No0003/ZX..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/ZX.W.19.2XOWFQ								

Mk4/DiFX fourfit 3.25 rev 0

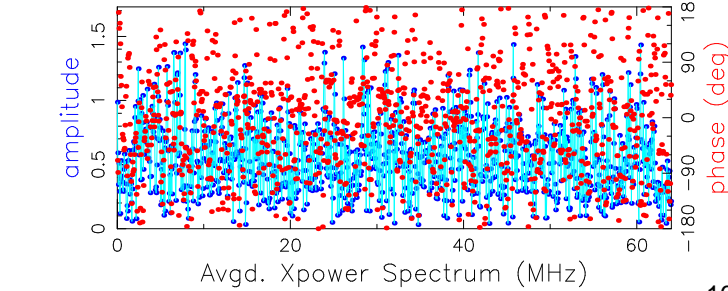
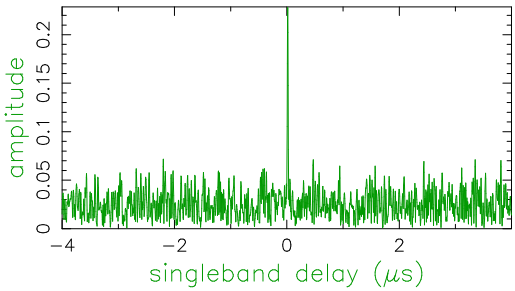
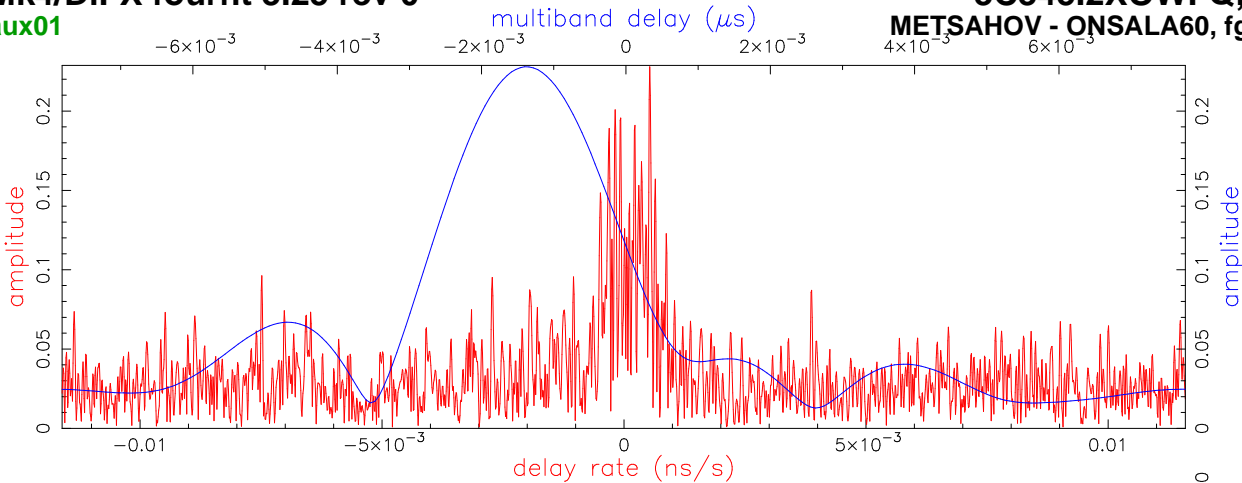
aux01

3C345.2XOWFQ, No0003, ZX

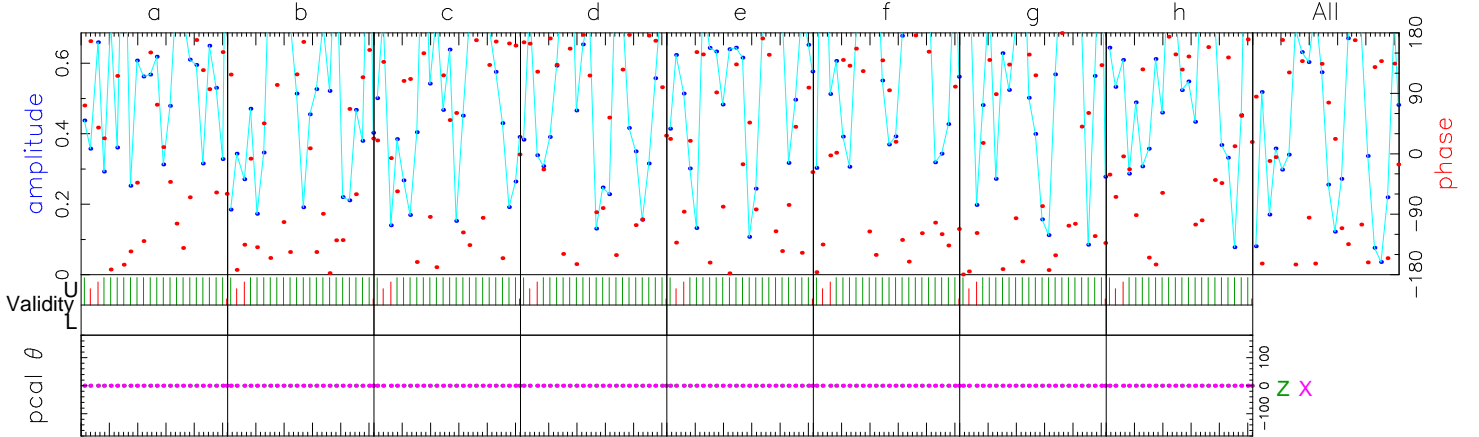
METSAHOV - ONSALA60, fgroup W, pol LR

Fringe quality 9

SNR 10.7
 Int time 292.244
 Amp 0.229
 Phase -174.6
 PFD 2.2e-17
 Delays (us)
 SBD 0.014906
 MBD -0.001398
 Fringe rate (Hz)
 0.045986
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071738
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec

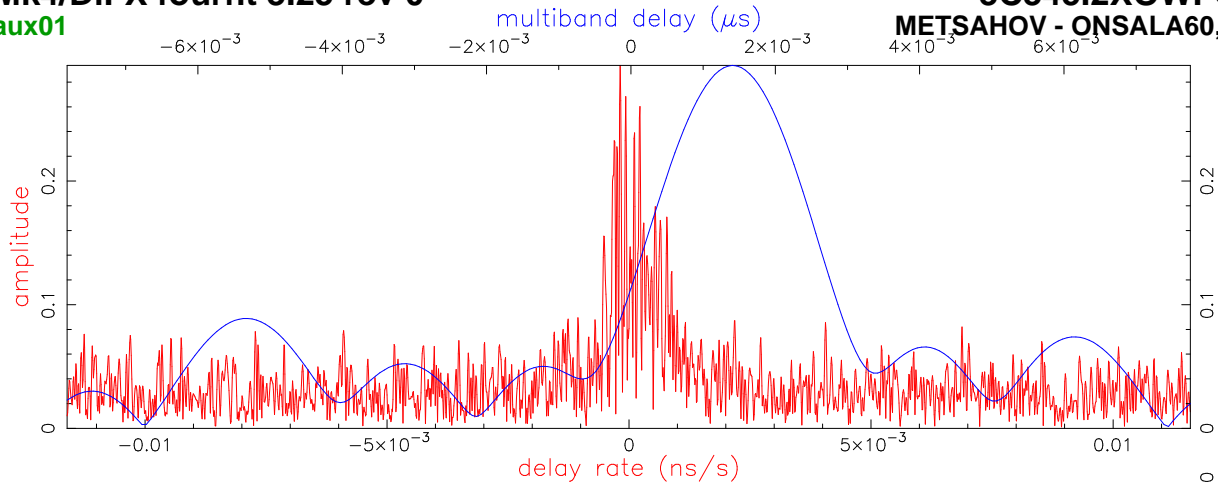


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-159.7	-157.6	175.8	164.5	-177.0	-171.8	-173.1	-154.7	Phase	-174.6
	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.1	Ampl.	0.2
	1929.3	1028.0	1027.3	1028.8	1644.8	1029.0	1029.4	1828.1	Sbd box	1028.8
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	

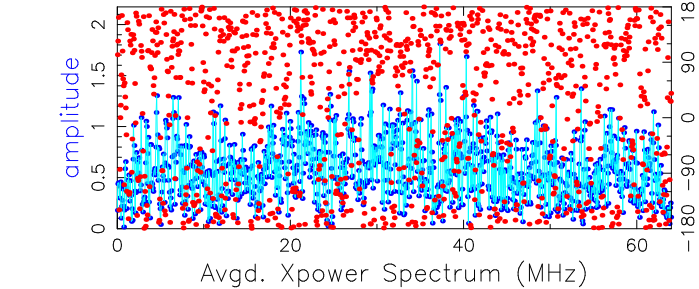
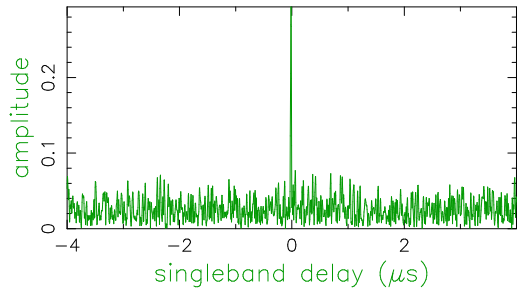
Group delay (usec) (SBD)	3.62927443002E+02	Apriori delay (usec)	3.62913215960E+02	Resid mbdelay (usec)	-1.39796E-03	+/-	1.0E-04
Sband delay (usec)	3.62928121460E+02	Apriori clock (usec)	-1.0225253E+02	Resid sbdelay (usec)	1.49055E-02	+/-	8.1E-04
Phase delay (usec)	3.62913210328E+02	Apriori clockrate (us/s)	-6.2999996E-07	Resid phdelay (usec)	-5.63174E-06	+/-	3.5E-07
Delay rate (us/s)	-1.43138130693E-01	Apriori rate (us/s)	-1.43138664549E-01	Resid rate (us/s)	5.33855E-07	+/-	2.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.2624533796E-07	Resid phase (deg)	-174.6	+/-	10.7

ph/seg (deg)	80.7	Theor.	25.5	Search (2048X32)	0.226	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	136.0		44.6	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)	15.6		15.2	Inc. seg. avg.	0.382	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 1024 t_cohere infinite	dr window (ns/s)	-0.012	0.012
amp/frq (%)	35.1		26.5	Inc. frq. avg.	0.226	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

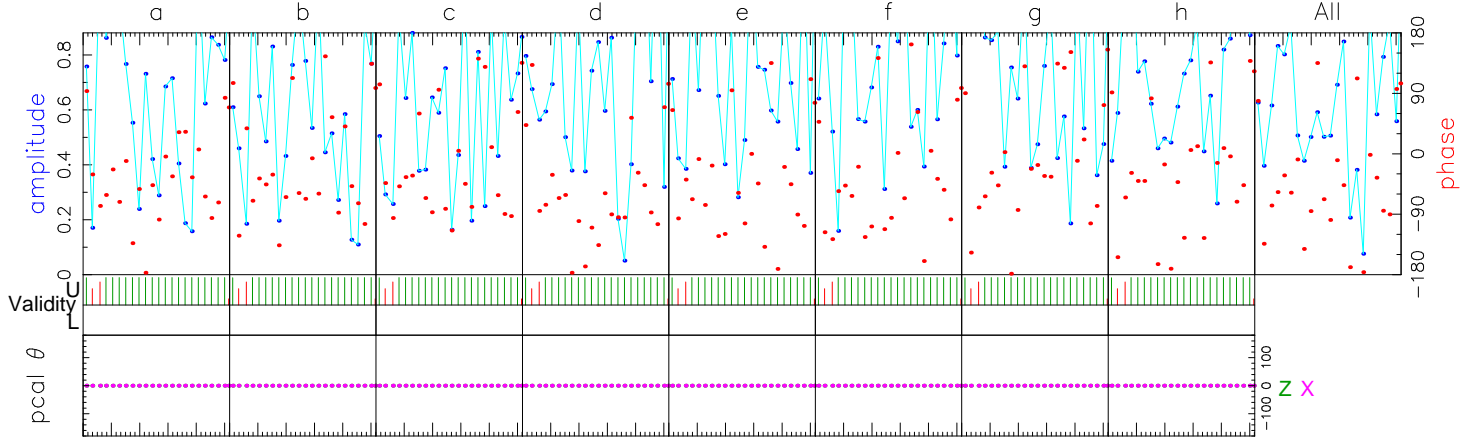
Z: az 142.7 el 66.6 pa -22.5 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) 1066.136 122.883 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/ZX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/ZX.W.29.2XOWFQ



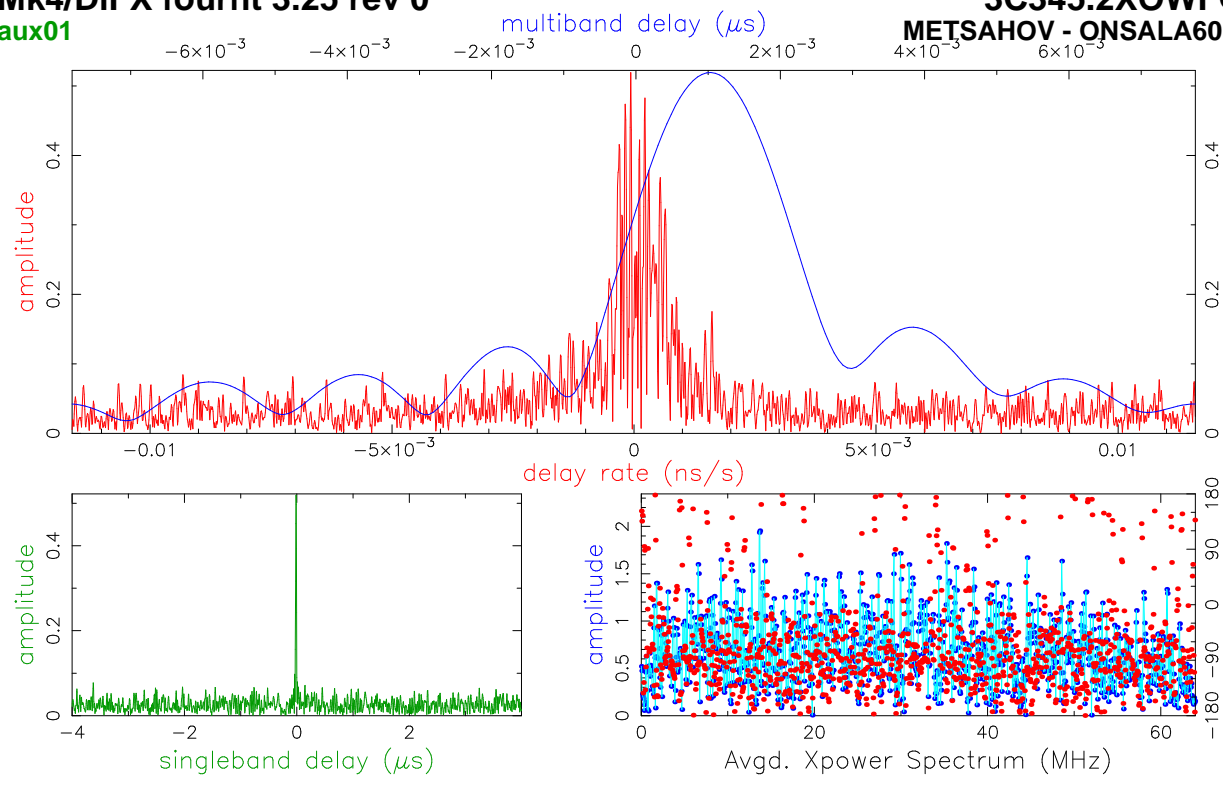
Fringe quality 9
SNR 13.7
Int time 292.244
Amp 0.294
Phase -52.8
PFD 1.8e-33
Delays (us)
SBD -0.015693
MBD 0.001407
Fringe rate (Hz)
-0.015868
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.500
Exp. f232a
Exper # 1234
Yr:day 2023:285
Start 123000.00
Stop 123500.00
FRT 123230.00
Corr/FF/build
2023:285:210221
2023:286:071750
2023:269:144209
RA & Dec (J2000)
16h42m58.809971s
+39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-41.7	-49.0	-41.8	-75.8	-57.6	-60.7	-48.6	-36.1	Phase	-52.8	
	0.4	0.2	0.3	0.4	0.3	0.3	0.2	0.3	Ampl.	0.3	
	1020.4	1133.9	1021.2	1021.6	1021.1	1020.9	1245.3	1020.9	Sbd box	1021.0	
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	3.62898997796E+02		Apriori delay (usec)		3.62913215960E+02		Resid mbdelay (usec)		1.40684E-03	+/- 7.9E-05	
Sband delay (usec)	3.62897522710E+02		Apriori clock (usec)		-1.0225253E+02		Resid sbdelay (usec)		-1.56932E-02	+/- 6.3E-04	
Phase delay (usec)	3.62913214257E+02		Apriori clockrate (us/s)		-6.2999996E-07		Resid phdelay (usec)		-1.70209E-06	+/- 2.7E-07	
Delay rate (us/s)	-1.43138848761E-01		Apriori rate (us/s)		-1.43138664549E-01		Resid rate (us/s)		-1.84212E-07	+/- 1.6E-09	
Total phase (deg)	99.4		Apriori accel (us/s/s)		-6.2624533796E-07		Resid phase (deg)		-52.8	+/- 8.4	
	RMS	Theor.	Amplitude	0.294 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	84.8	19.9	Search (2048X32)	0.291		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	133.4	34.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	14.0	11.8	Inc. seg. avg.	0.575		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.012	0.012	
amp/frq (%)	22.2	20.6	Inc. frq. avg.	0.295		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 142.7 el 66.6 pa -22.5	X: az 118.4 el 63.5 pa -37.8		u, v (fr/asec) 1066.136 122.883						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f232a/FRINGE/1234/No0003/ZX..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/ZX.W.37.2XOWFQ								

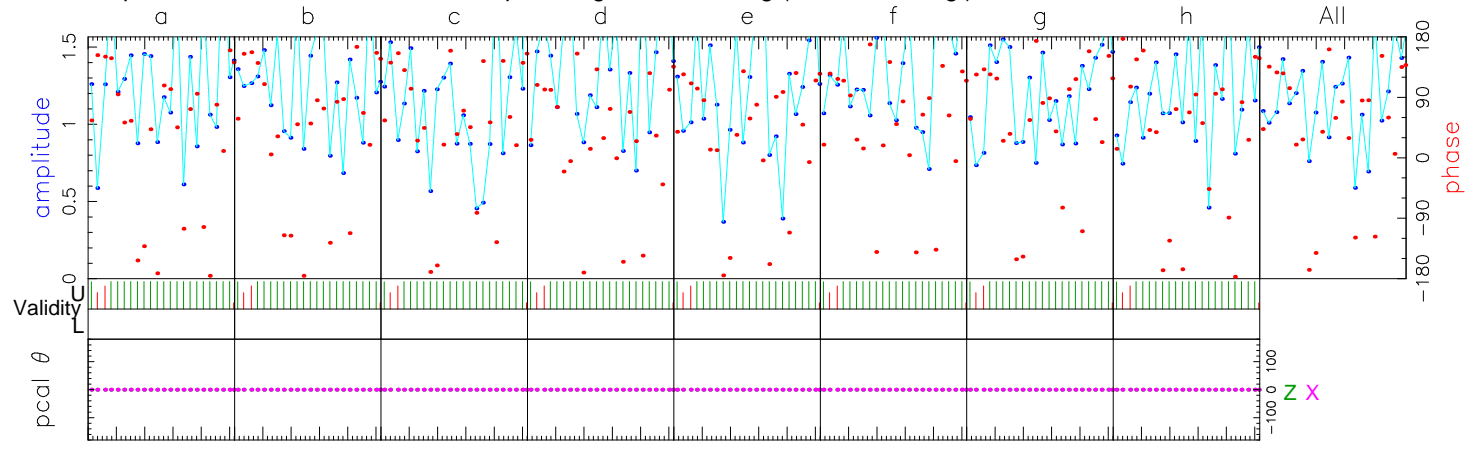


Fringe quality 7

SNR 24.4
Int time 292.244
Amp 0.522
Phase 85.6
PFD 0.0e+00
Delays (us)
SBD -0.014616
MBD 0.001048
Fringe rate (Hz)
-0.006092
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.500

Exp. f232a
Exper # 1234
Yr:day 2023:285
Start 123000.00
Stop 123500.00
FRT 123230.00
Corr/FF/build
2023:285:210221
2023:286:071713
2023:269:144209
RA & Dec (J2000)
16h42m58.809971s
+39°48'36.993958"

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec



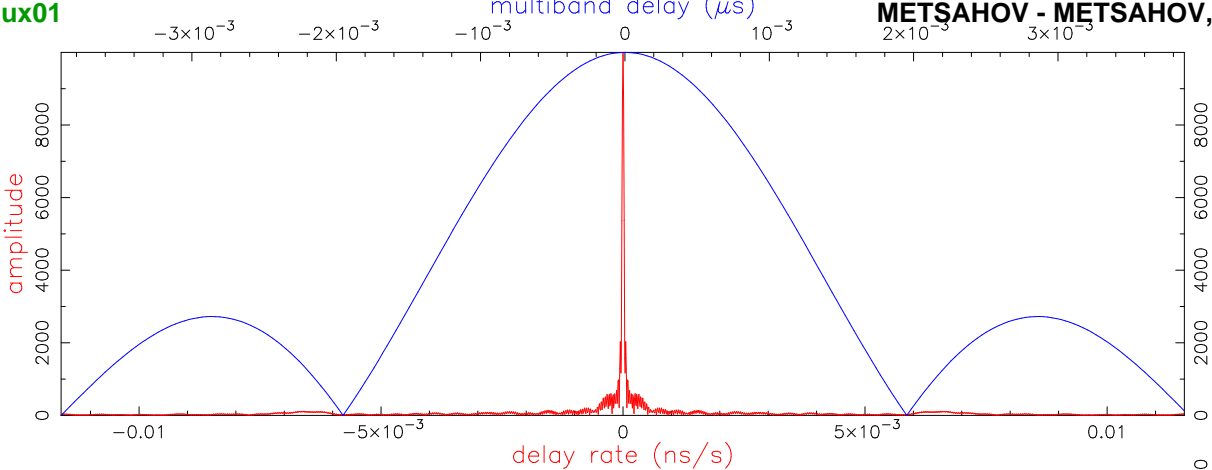
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	99.0	90.4	98.1	59.4	68.3	86.7	94.4	93.9	Phase	85.6	
	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	Ampl.	0.5	
	1020.8	1020.8	1021.0	1021.0	1021.4	1022.2	1021.5	1021.1	Sbd box	1021.3	
U/L	592/0	592/0	592/0	592/0	592/0	592/0	592/0	592/0	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		
									Tracks		
Group delay (usec) (SBD)	3.62898638617E+02		Apriori delay (usec)		3.62913215960E+02		Resid mbdelay (usec)		1.04766E-03	+/- 4.4E-05	
Sband delay (usec)	3.62898599710E+02		Apriori clock (usec)		-1.0225253E+02		Resid sbdelay (usec)		-1.46163E-02	+/- 3.5E-04	
Phase delay (usec)	3.62913218719E+02		Apriori clockrate (us/s)		-6.2999996E-07		Resid phdelay (usec)		2.75974E-06	+/- 1.5E-07	
Delay rate (us/s)	-1.43138735275E-01		Apriori rate (us/s)		-1.43138664549E-01		Resid rate (us/s)		-7.07257E-08	+/- 8.9E-10	
Total phase (deg)	237.8		Apriori accel (us/s/s)		-6.2624533796E-07		Resid phase (deg)		85.6	+/- 4.7	
	RMS	Theor.	Amplitude	0.522 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	74.1	11.2	Search (2048X32)	0.514		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	136.2	19.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	15.8	6.6	Inc. seg. avg.	1.154		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.012	0.012	
amp/frq (%)	9.8	11.6	Inc. frq. avg.	0.531		Data rate(Mb/s): 2048		nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 142.7 el 66.6 pa -22.5	X: az 118.4 el 63.5 pa -37.8		u, v (fr/asec) 1066.136 122.883						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f232a/FRINGE/1234/No0003/ZX..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/ZX.W.8.2XOWFQ								

Mk4/DiFX fourfit 3.25 rev 0

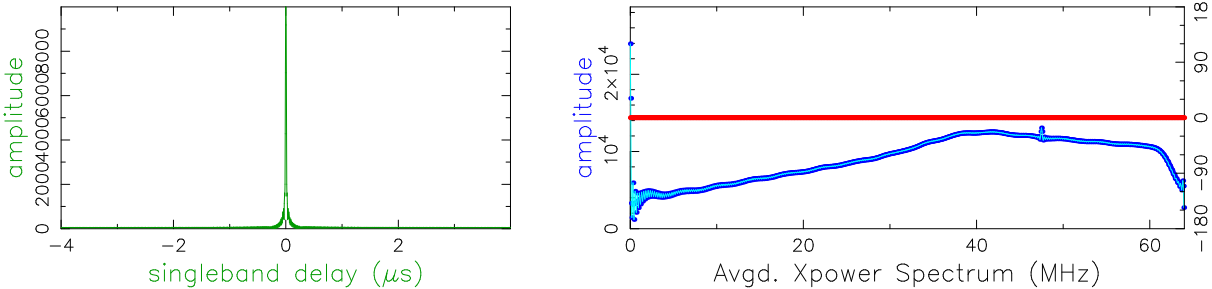
aux01

3C345.2XOWFQ, No0003, ZZ

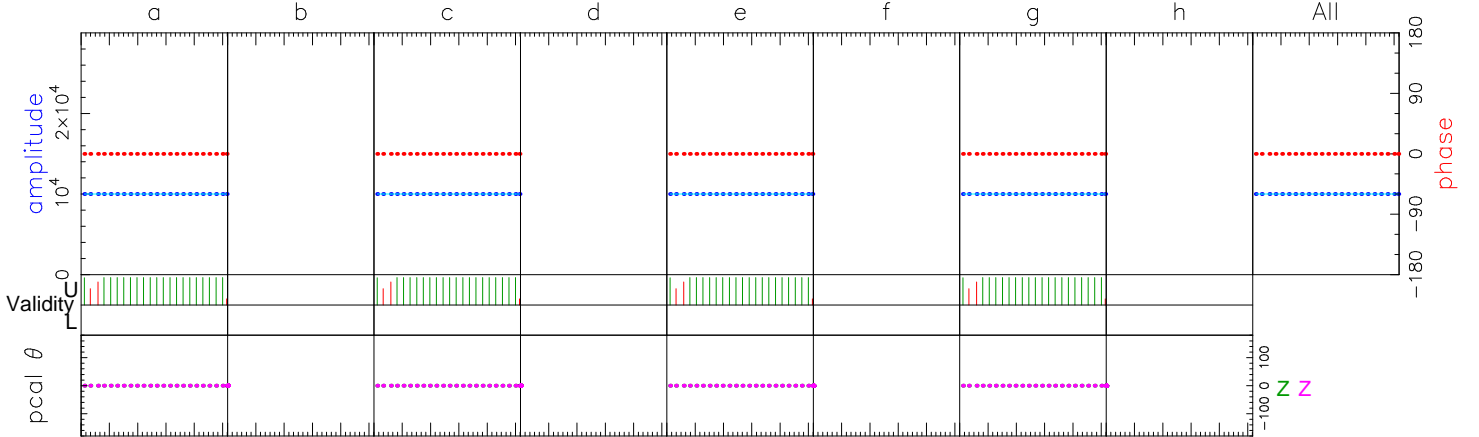
METSAHOV - METSAHOV, fgroup W, pol RR



Fringe quality 7
 Error code D
 SNR 330570.2
 Int time 146.128
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071716
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	592/0	0/0	592/0	0/0	592/0	0/0	592/0	0/0		
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	+/-	2.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.6E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.1E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

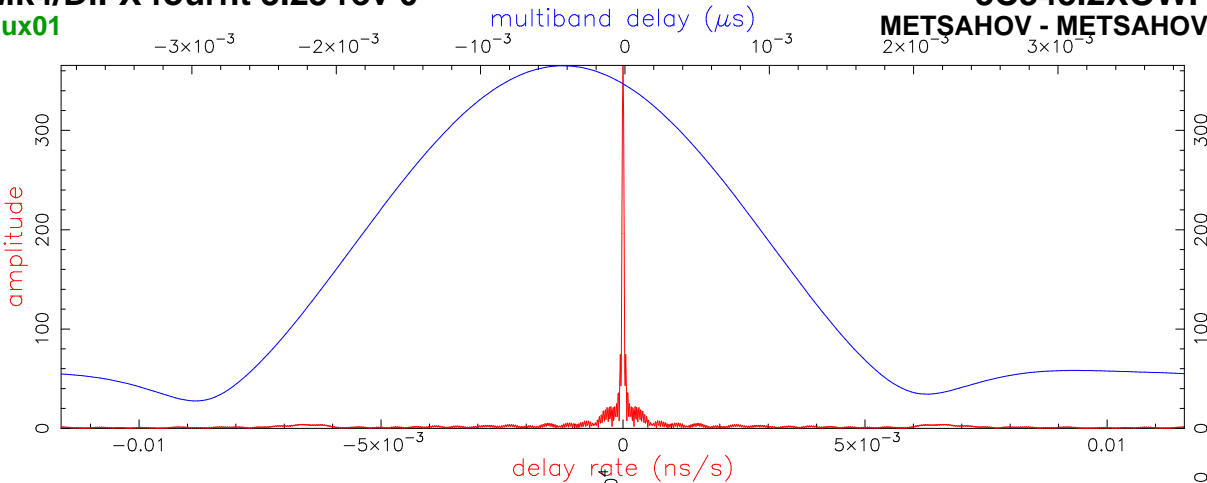
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X16) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 70.7 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us dr window (ns/s) -0.012 0.012
 Z: az 142.7 el 66.6 pa -22.5 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 1024 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/ZZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/ZZ.W.10.2XOWFQ simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

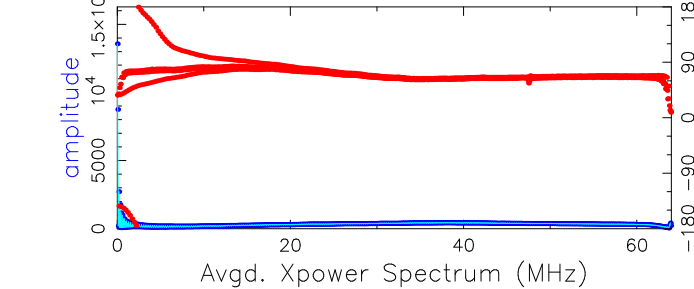
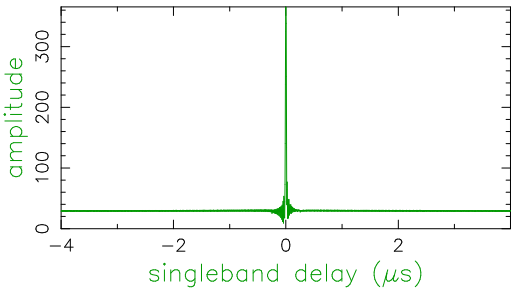
aux01

3C345.2XOWFQ, No0003, ZZ

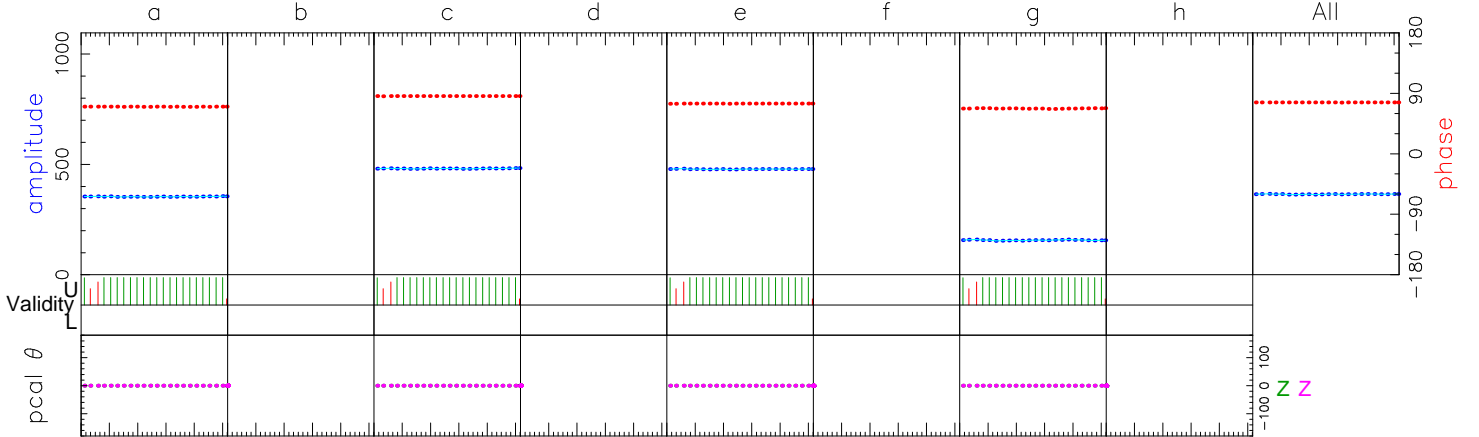
METSAHOV - METSAHOV, fgroup W, pol LR



Fringe quality 5
 Error code D
 SNR 12080.6
 Int time 146.128
 Amp 365.447
 Phase 76.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000444
 MBD -0.000406
 Fringe rate (Hz)
 -0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071724
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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
Validity	U	U	U	U	U	U	U	U		
pcal θ										
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00		
	70.0	0.0	85.8	0.0	74.6	0.0	67.4	0.0	Phase	76.4
	354.1	0.0	481.4	0.0	478.7	0.0	156.7	0.0	Ampl.	367.7
	1024.6	0.0	1024.9	0.0	1025.0	0.0	1026.3	0.0	Sbd box	1025.1
U/L	592/0	0/0	592/0	0/0	592/0	0/0	592/0	0/0	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		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-4.05750000000E-04					0.00000000000E+00			Resid mbdelay (usec)	-4.05750E-04 +/- 7.9E-08
Sband delay (usec)	4.44000000000E-04					0.0000000E+00			Resid sbdelay (usec)	4.44000E-04 +/- 7.1E-07
Phase delay (usec)	2.46414898168E-06					0.0000000E+00			Resid phdelay (usec)	2.46415E-06 +/- 3.1E-10
Delay rate (us/s)	-3.48270257720E-11					0.00000000000E+00			Resid rate (us/s)	-3.48270E-11 +/- 3.6E-12
Total phase (deg)			76.4			0.00000000000E+00			Resid phase (deg)	76.4 +/- 0.0

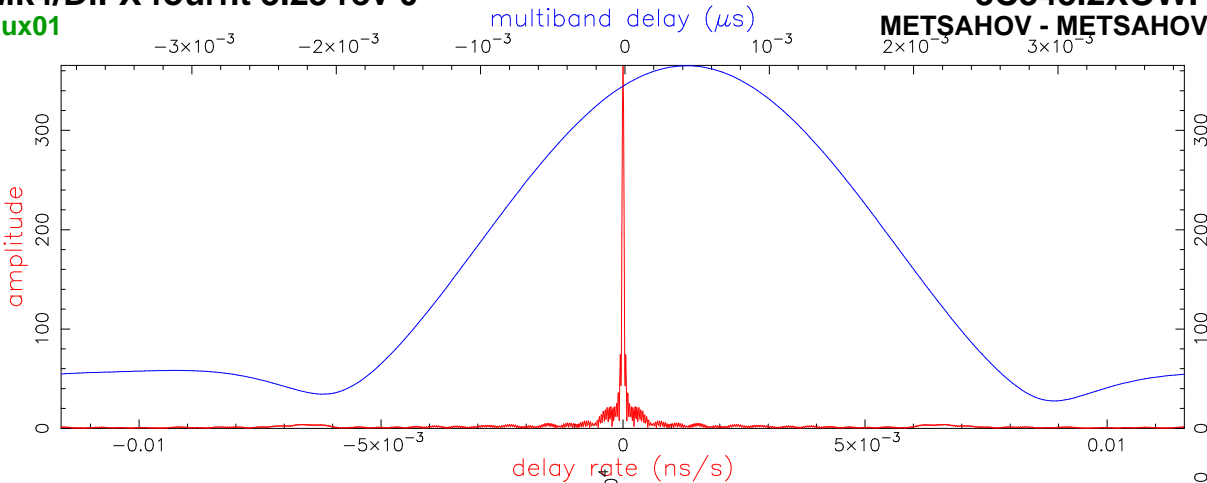
RMS Theor. Amplitude 365.447 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X16) 364.679 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 ph/frq (deg) 62.7 0.0 Inc. seg. avg. 364.998 Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 75.2 0.0 Inc. frq. avg. 367.704 Data rate(Mb/s): 1024 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 142.7 el 66.6 pa -22.5 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/ZZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/ZZ.W.15.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

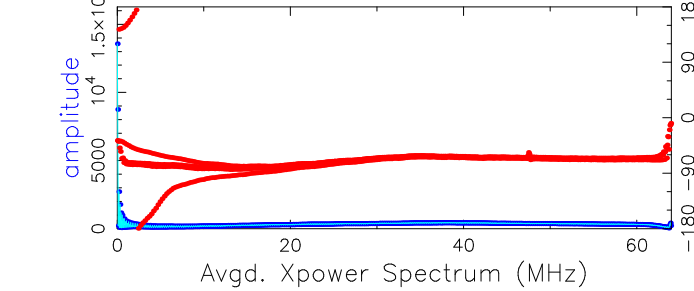
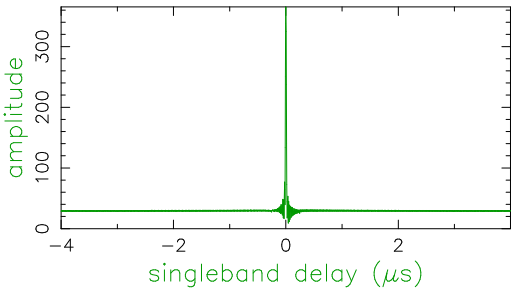
aux01

3C345.2XOWFQ, No0003, ZZ

METSAHOV - METSAHOV, fgroup W, pol RL

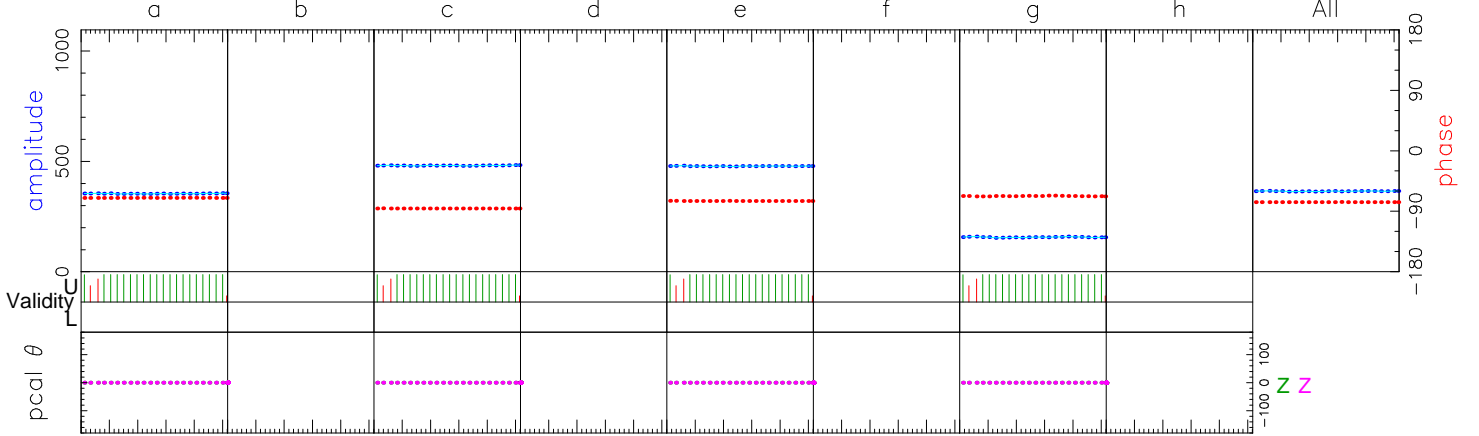


Fringe quality 5
 Error code D
 SNR 12080.6
 Int time 146.128
 Amp 365.447
 Phase -76.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000444
 MBD 0.000406
 Fringe rate (Hz)
 0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071731
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-70.0	0.0	-85.8	0.0	-74.6	0.0	-67.4	0.0	Phase	-76.4
	354.1	0.0	481.4	0.0	478.7	0.0	156.7	0.0	Ampl.	367.7
	1025.4	0.0	1025.1	0.0	1025.0	0.0	1023.7	0.0	Sbd box	1024.9
U/L	592/0	0/0	592/0	0/0	592/0	0/0	592/0	0/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 4.05750000000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 4.05750E-04 +/- 7.9E-08
 Sband delay (usec) -4.44000000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -4.44000E-04 +/- 7.1E-07
 Phase delay (usec) -2.46414898172E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.46415E-06 +/- 3.1E-10
 Delay rate (us/s) 3.48270257720E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 3.48270E-11 +/- 3.6E-12
 Total phase (deg) -76.4 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -76.4 +/- 0.0

RMS Theor. Amplitude 365.447 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X16) 364.679 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 ph/frq (deg) 62.7 0.0 Inc. seg. avg. 364.998 Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 75.2 0.0 Inc. frq. avg. 367.704 Data rate(Mb/s): 1024 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

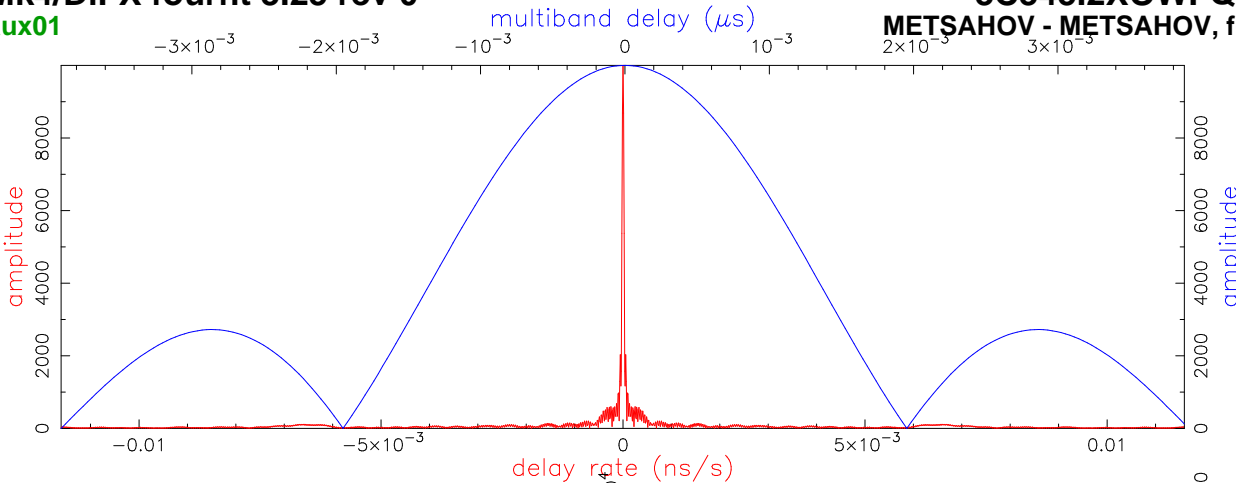
Z: az 142.7 el 66.6 pa -22.5 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/ZZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/ZZ.W.23.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

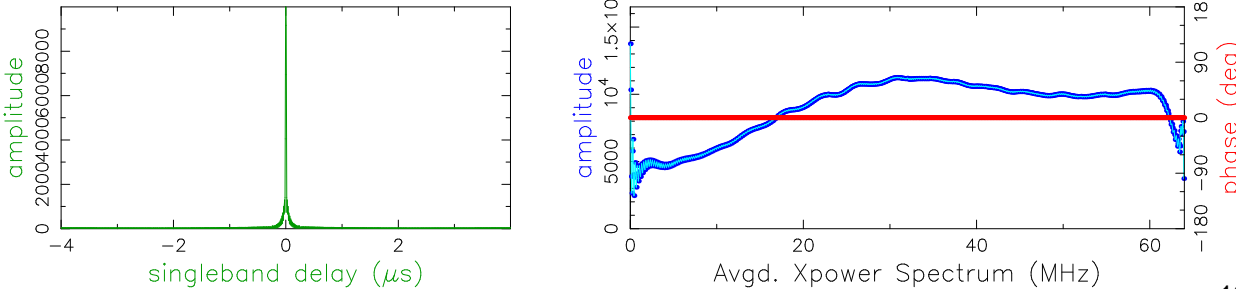
aux01

3C345.2XOWFQ, No0003, ZZ

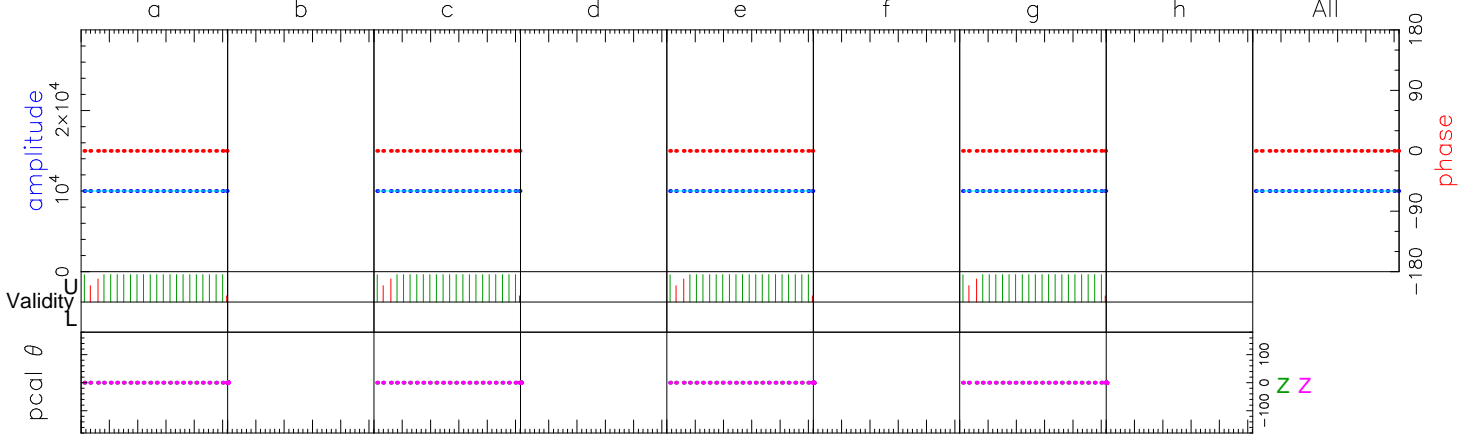
METSAHOV - METSAHOV, fgroup W, pol LL



Fringe quality 7
 Error code D
 SNR 330570.2
 Int time 146.128
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071709
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 23 segs, 27 APs / seg (13.50 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	592/0	0/0	592/0	0/0	592/0	0/0	592/0	0/0		
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	+/-	2.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.6E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.1E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	1.3E-13
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 9999.999 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X16) 9999.999 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) -0.004 0.004
 amp/frq (%) 70.7 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us dr window (ns/s) -0.012 0.012
 Z: az 142.7 el 66.6 pa -22.5 Z: az 142.7 el 66.6 pa -22.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 1024 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003//ZZ..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003//ZZ.W.3.2XOWFQ simultaneous interpolator