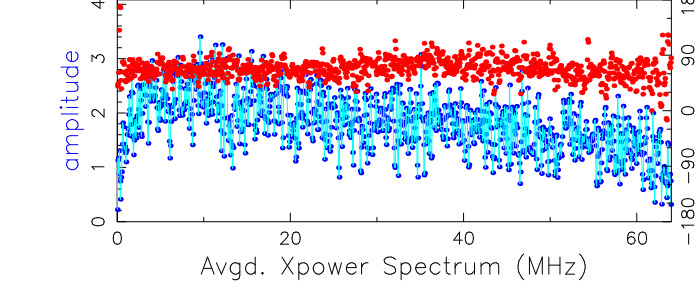
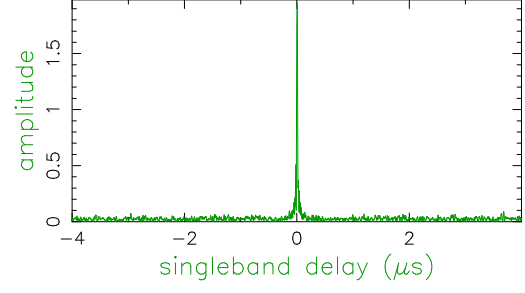


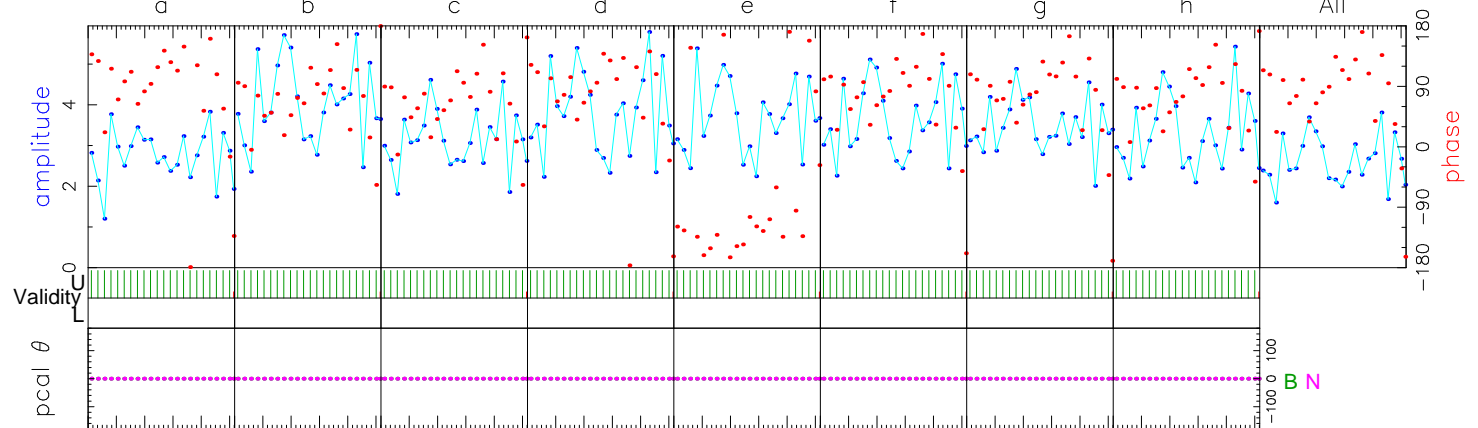
Fringe quality 2

SNR 92.5
Int time 299.973
Amp 1.979
Phase 88.2
PFD 0.0e+00
Delays (us)
SBD 0.004162
MBD 0.002439
Fringe rate (Hz)
-0.176962
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



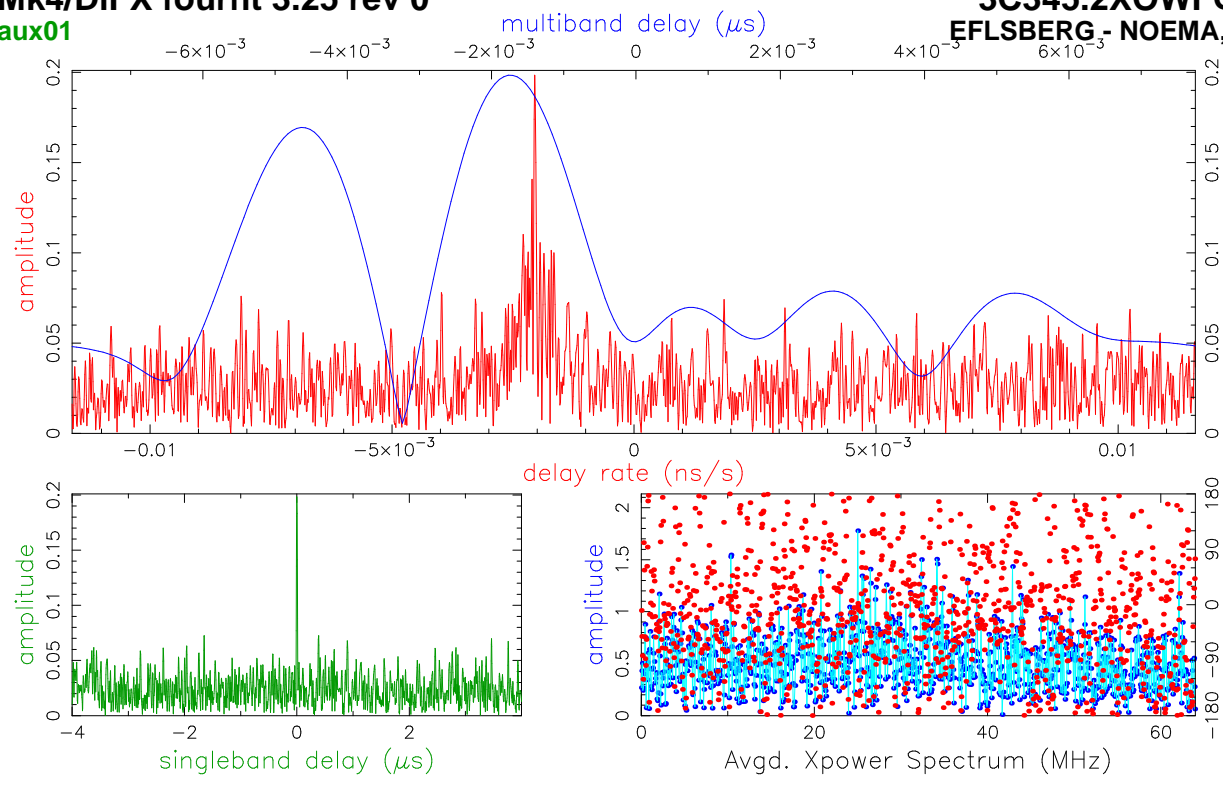
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	106.1	69.6	65.2	90.8	-143.5	81.7	84.2	75.1	Phase	88.2	
	2.1	3.0	2.3	2.9	2.7	2.7	2.6	2.5	Ampl.	2.6	
	1023.7	1026.0	1025.7	1026.3	1026.2	1026.6	1025.9	1024.7	Sbd box	1026.1	
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
N	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	1.96649533363E+01		Apriori delay (usec)		1.96625147770E+01		Resid mbdelay (usec)		2.43856E-03	+/- 1.2E-05	
Sband delay (usec)	1.96666765270E+01		Apriori clock (usec)		-1.8053818E+01		Resid sbdelay (usec)		4.16175E-03	+/- 9.3E-05	
Phase delay (usec)	1.96625176225E+01		Apriori clockrate (us/s)		2.0100000E-02		Resid phdelay (usec)		2.84556E-06	+/- 4.0E-08	
Delay rate (us/s)	-6.39176620742E-02		Apriori rate (us/s)		-6.39156077252E-02		Resid rate (us/s)		-2.05435E-06	+/- 2.3E-10	
Total phase (deg)	96.5		Apriori accel (us/s/s)		4.79245300741E-06		Resid phase (deg)		88.2	+/- 1.2	
	RMS	Theor.	Amplitude	1.979 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	45.7	3.0	Search (2048X32)	1.900		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	46.7	5.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	54.6	1.8	Inc. seg. avg.	2.681		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.012	0.012	
amp/frq (%)	34.3	3.1	Inc. frq. avg.	2.600		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	N: az 87.2 el 62.6 pa -67.7		u,v (fr/asec) 483.781 779.717						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f232a/FRINGE/1234/No0003/BN..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/BN.W.20.2XOWFQ								

Mk4/DiFX fourfit 3.25 rev 0

aux01

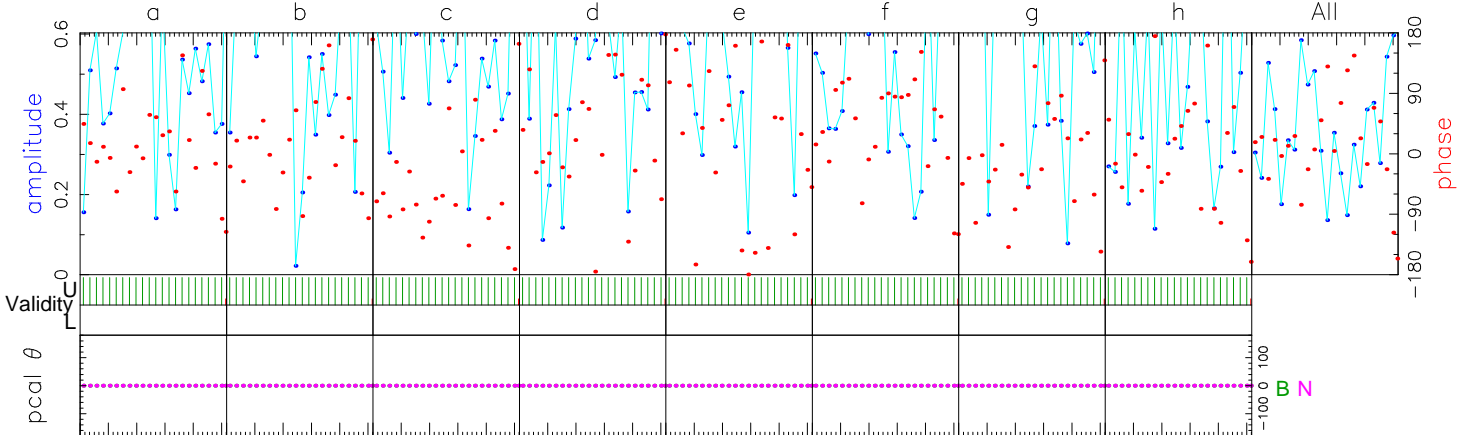
3C345.2XOWFQ, No0003, BN

EFLSBERG - NOEMA, fgroup W, pol LR



Fringe quality 9
 SNR 9.4
 Int time 299.973
 Amp 0.201
 Phase 2.9
 PFD 8.9e-12
 Delays (us)
 SBD 0.000117
 MBD -0.001740
 Fringe rate (Hz)
 -0.177416
 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	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.96607748886E+01	Apriori delay (usec)	1.96625147770E+01	Resid mbdelay (usec)	-1.73989E-03	+/-	1.2E-04
Sband delay (usec)	1.96626315270E+01	Apriori clock (usec)	-1.8053818E+01	Resid sbdelay (usec)	1.16750E-04	+/-	9.2E-04
Phase delay (usec)	1.96625148690E+01	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	9.20677E-08	+/-	3.9E-07
Delay rate (us/s)	-6.39176673519E-02	Apriori rate (us/s)	-6.39156077252E-02	Resid rate (us/s)	-2.05963E-06	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	4.79245300741E-06	Resid phase (deg)	2.9	+/-	12.2

ph/seg (deg)	66.0	Theor.	29.2	Amplitude	0.201 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	107.0		51.0	Search (2048X32)	0.195	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	53.3		17.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.6		30.1	Inc. seg. avg.	0.323	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
				Inc. frq. avg.	0.253	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 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 483.781 779.717 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BN.W.30.2XOWFQ

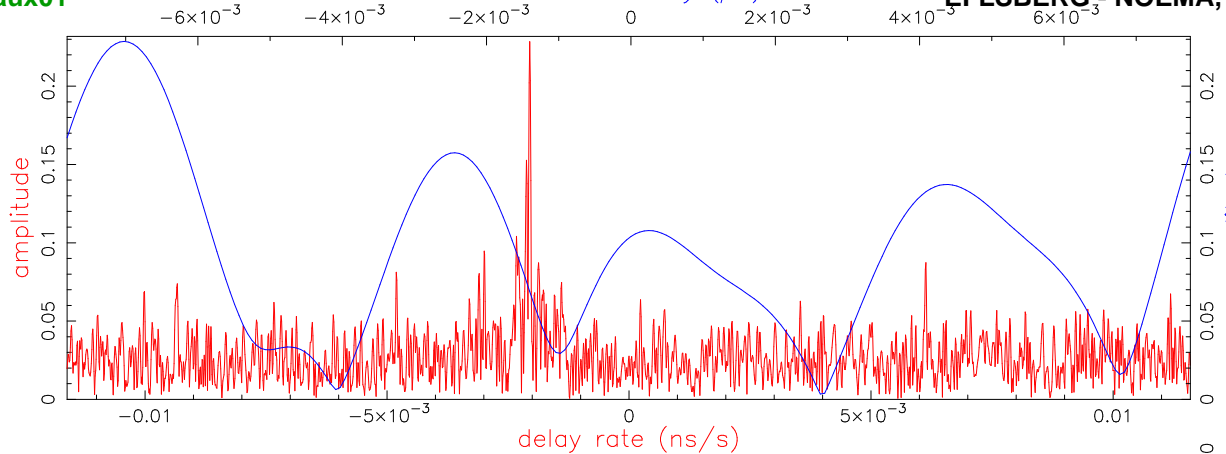
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, BN

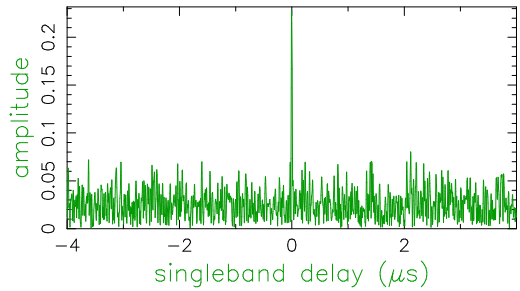
EFLSBERG - NOEMA, fgroup W, pol RL

multiband delay (μ s)

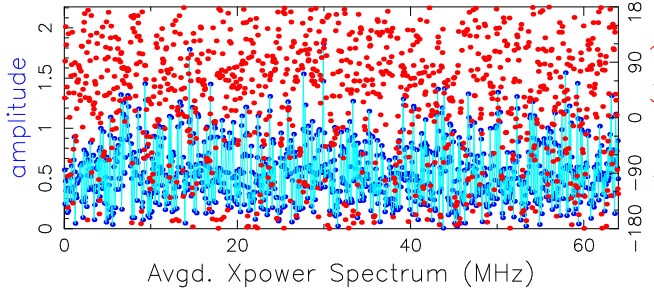


Fringe quality 9

SNR 10.8
 Int time 299.973
 Amp 0.232
 Phase 119.2
 PFD 4.2e-18
 Delays (us)
 SBD -0.003424
 MBD -0.007003
 Fringe rate (Hz) -0.176745
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.500

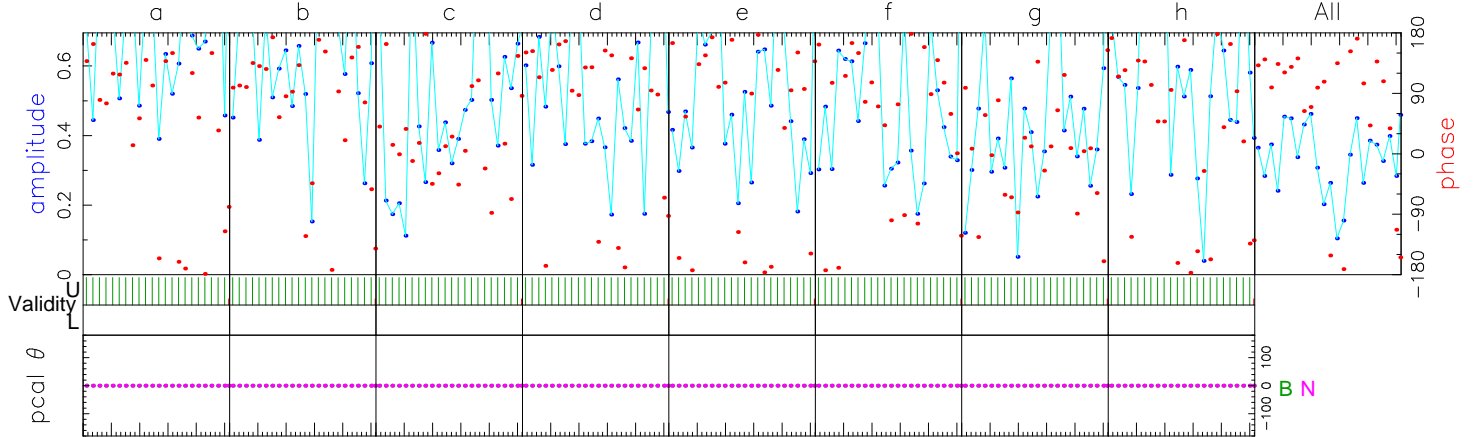


delay rate (ns/s)



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
	123.0	128.6	11.0	132.8	143.3	126.1	15.9	130.2	Phase	119.2
	0.4	0.4	0.2	0.3	0.4	0.2	0.2	0.3	Ampl.	0.3
	1023.0	1025.5	1024.4	1025.2	1025.6	1026.3	1025.6	1024.7	Sbd box	1024.1
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.96555119300E+01	Apriori delay (usec)	1.96625147770E+01	Resid mbdelay (usec)	-7.00285E-03	+/-	1.0E-04
Sband delay (usec)	1.96590910270E+01	Apriori clock (usec)	-1.8053818E+01	Resid sbdelay (usec)	-3.42375E-03	+/-	7.9E-04
Phase delay (usec)	1.96625186195E+01	Apriori clockrate (us/s)	2.0100000E-06	Resid phdelay (usec)	3.84254E-06	+/-	3.4E-07
Delay rate (us/s)	-6.39176595565E-02	Apriori rate (us/s)	-6.39156077252E-02	Resid rate (us/s)	-2.05183E-06	+/-	2.0E-09
Total phase (deg)	127.4	Apriori accel (us/s/s)	4.79245300741E-06	Resid phase (deg)	119.2	+/-	10.6

ph/seg (deg)	50.2	Theor.	25.4	Amplitude	0.232 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	61.6	Search (2048X32)	0.226	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000 4.000
ph/frq (deg)	62.4	Inc. seg. avg.	0.306	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	45.4	Inc. frq. avg.	0.294	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.012 0.012
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

B: az 99.5 el 62.9 pa -54.7 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 483.781 779.717 simultaneous interpolator

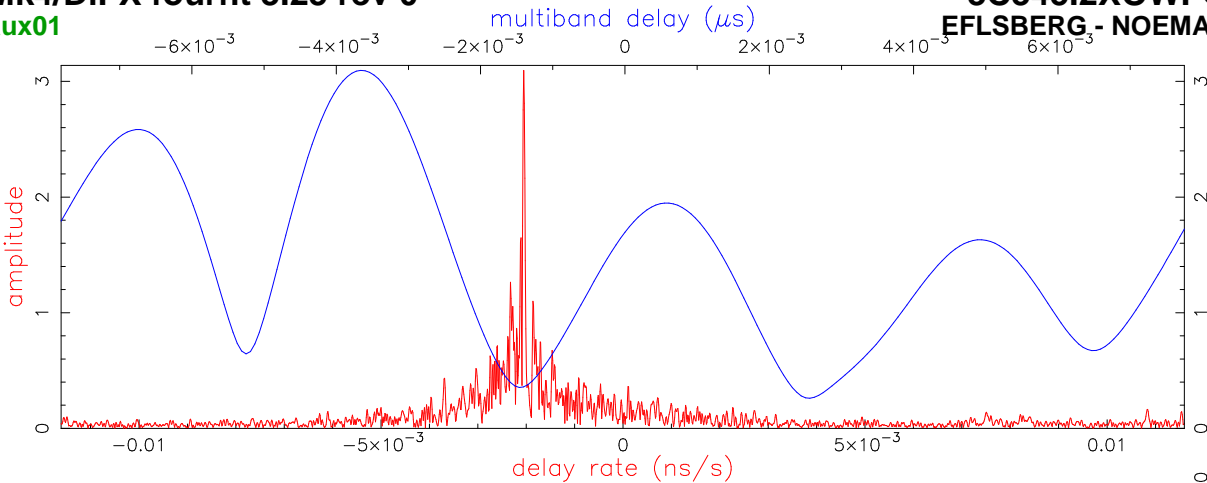
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BN.W.38.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

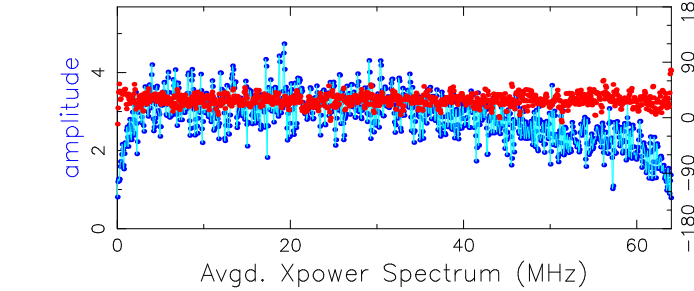
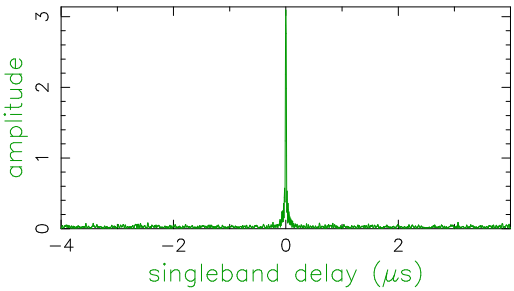
3C345.2XOWFQ, No0003, BN

EFLSBERG₃- NOEMA, fgroup W, pol LL



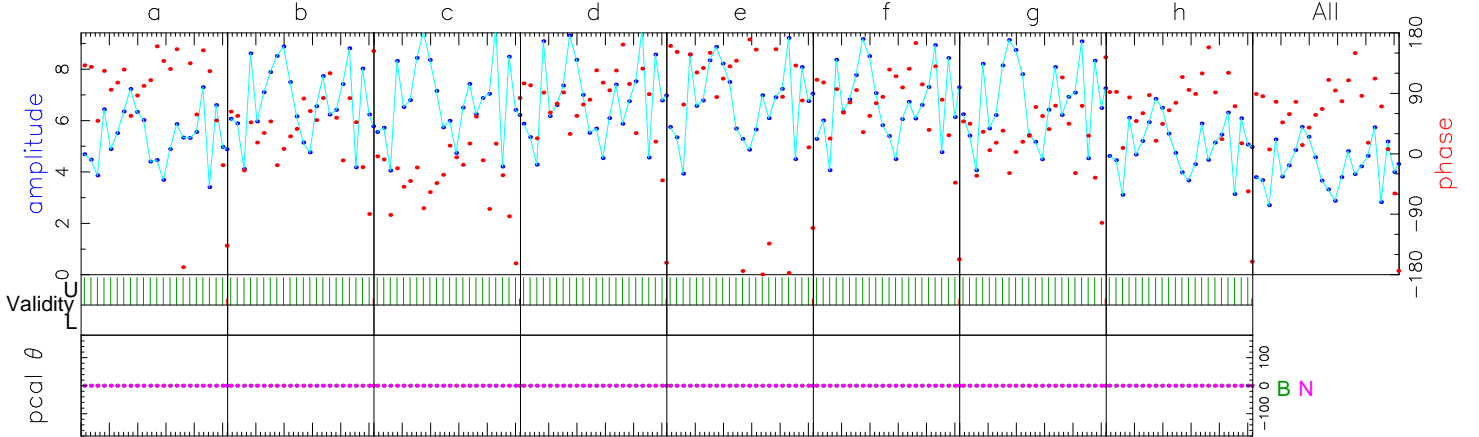
Fringe quality 1

SNR 146.8
 Int time 299.973
 Amp 3.139
 Phase 66.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000434
 MBD -0.003665
 Fringe rate (Hz)
 -0.176929
 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
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	1.96588495863E+01	Apriori delay (usec)	1.96625147770E+01	Resid mbdelay (usec)	-3.66519E-03	+/-	7.4E-06
Sband delay (usec)	1.96620807770E+01	Apriori clock (usec)	-1.8053818E+01	Resid sbdelay (usec)	-4.34000E-04	+/-	5.9E-05
Phase delay (usec)	1.96625169055E+01	Apriori clockrate (us/s)	2.0100000E-02	Resid phdelay (usec)	2.12849E-06	+/-	2.5E-08
Delay rate (us/s)	-6.39176617005E-02	Apriori rate (us/s)	-6.39156077252E-02	Resid rate (us/s)	-2.05398E-06	+/-	1.5E-10
Total phase (deg)	74.2	Apriori accel (us/s/s)	4.79245300741E-06	Resid phase (deg)	66.0	+/-	0.8

ph/seg (deg)	46.4	1.9	Amplitude	3.139 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	46.2	3.3	Search (2048X32)	3.062	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	57.1	1.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.4	1.9	Inc. seg. avg.	4.284	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
			Inc. frq. avg.	4.671	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 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 483.781 779.717 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BN.W.7.2XOWFQ

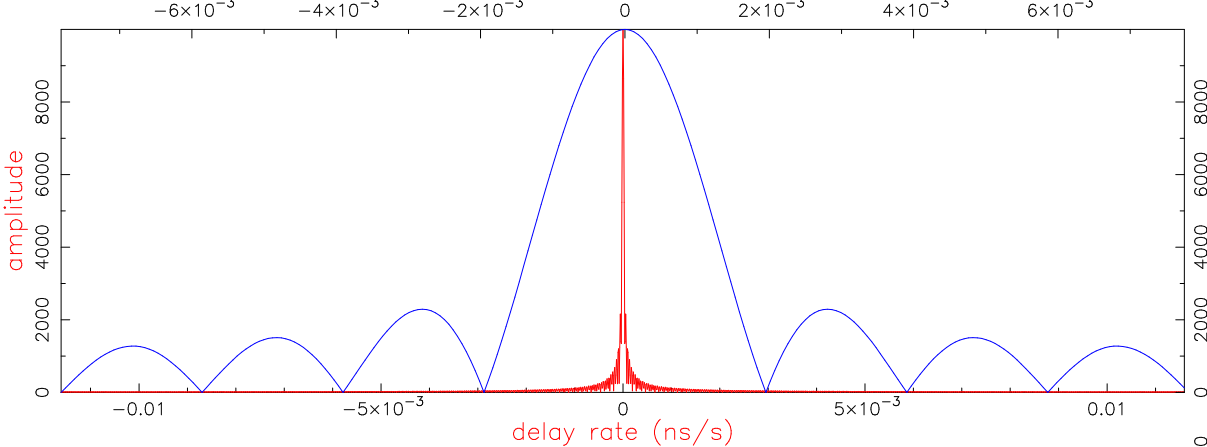
Mk4/DiFX fourfit 3.25 rev 0

aux01

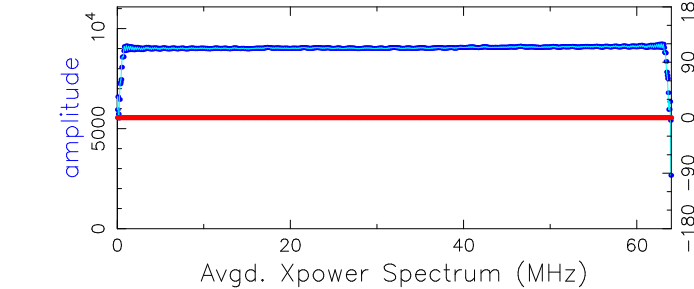
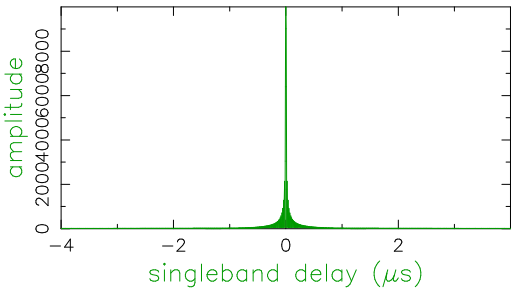
3C345.2XOWFQ, No0003, NN

NOEMA - NOEMA, fgroup W, pol LL

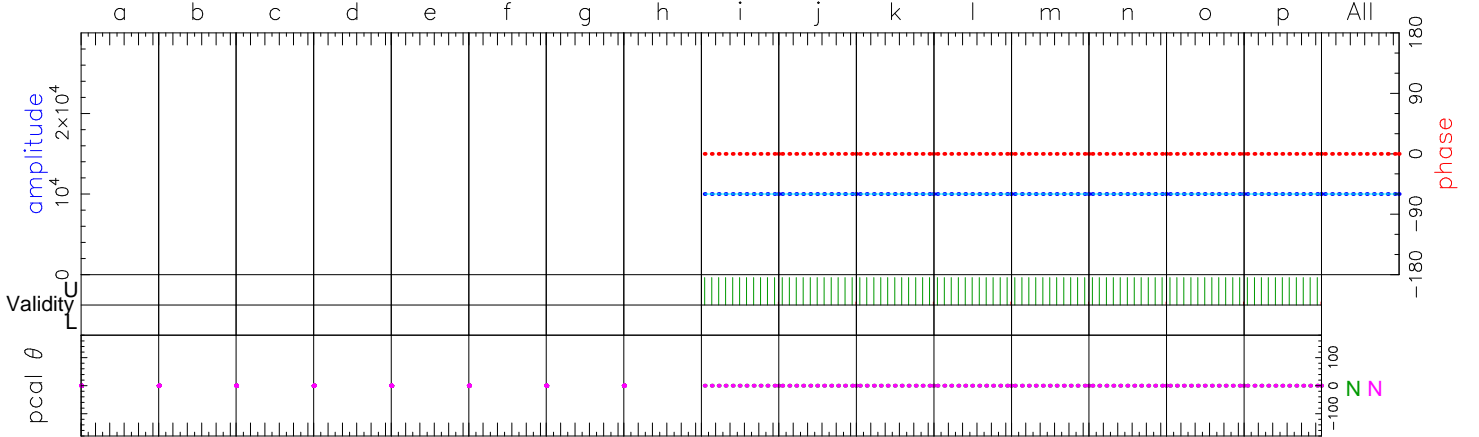
multiband delay (μ s)



Fringe quality 7
 Error code D
 SNR 473635.9
 Int time 149.991
 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
 2023:286:071717
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 12 segs, 54 APs / seg (27.00 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	86524.00	86588.00	86652.00	86716.00	86780.00	86844.00	86908.00	86972.00	Freq (MHz)	All	
U/L	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0.0	Phase	0.0
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	Ampl.	10000.0
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1025.0	Sbd box	1025.0
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	APs used	10000.0
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	PC freqs	10000.0
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	PC phase	10000.0
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		ManI PC	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		PC amp	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 8.6E-10
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 1.8E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 7.8E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 9.0E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 70.7 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 87.2 el 62.6 pa -67.7 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NN.W.11.2XOWFQ

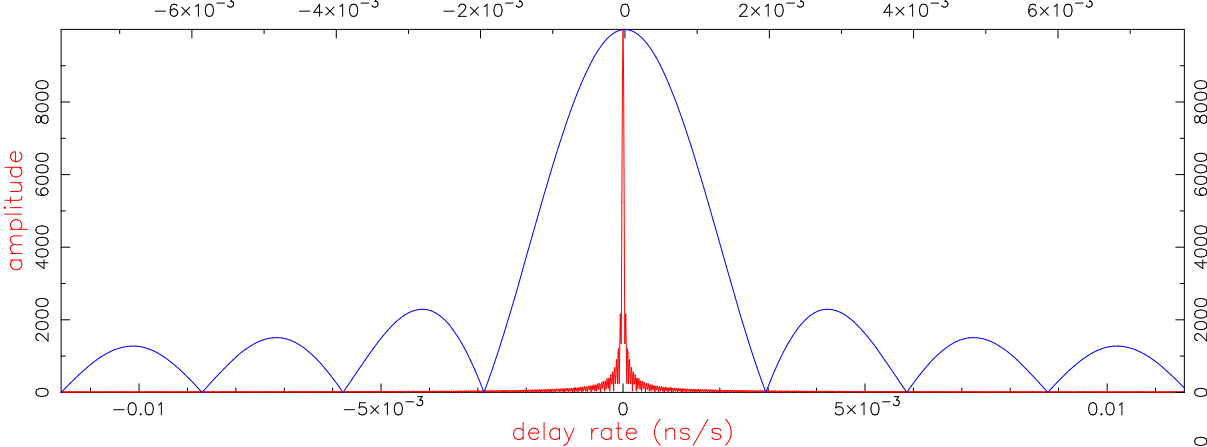
Mk4/DiFX fourfit 3.25 rev 0

aux01

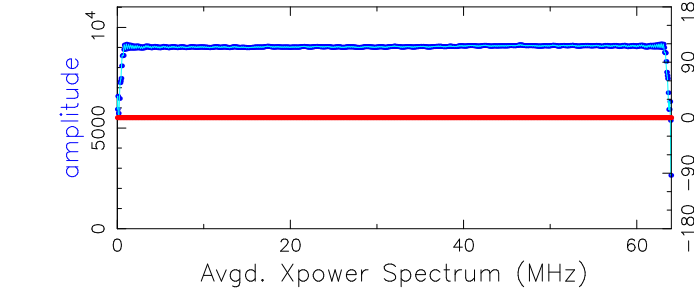
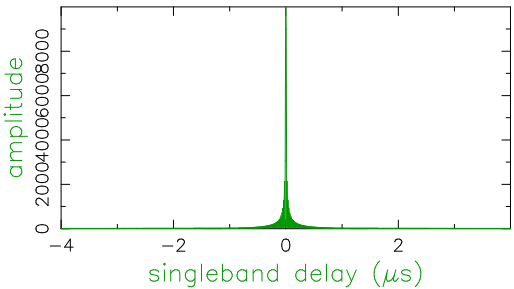
3C345.2XOWFQ, No0003, NN

NOEMA - NOEMA, fgroup W, pol RR

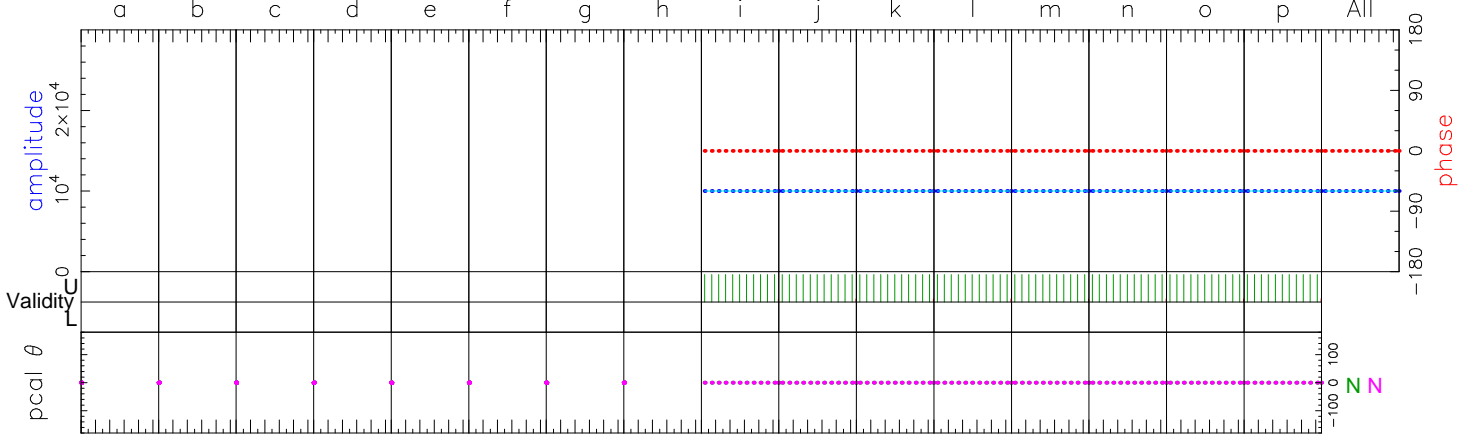
multiband delay (μ s)



Fringe quality 7
 Error code D
 SNR 473635.9
 Int time 149.991
 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
 2023:286:071732
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 12 segs, 54 APs / seg (27.00 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	86524.00	86588.00	86652.00	86716.00	86780.00	86844.00	86908.00	86972.00	Freq (MHz)	All
U/L	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 8.6E-10
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 1.8E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 7.8E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 9.0E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 70.7 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 87.2 el 62.6 pa -67.7 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NN.W.24.2XOWFQ

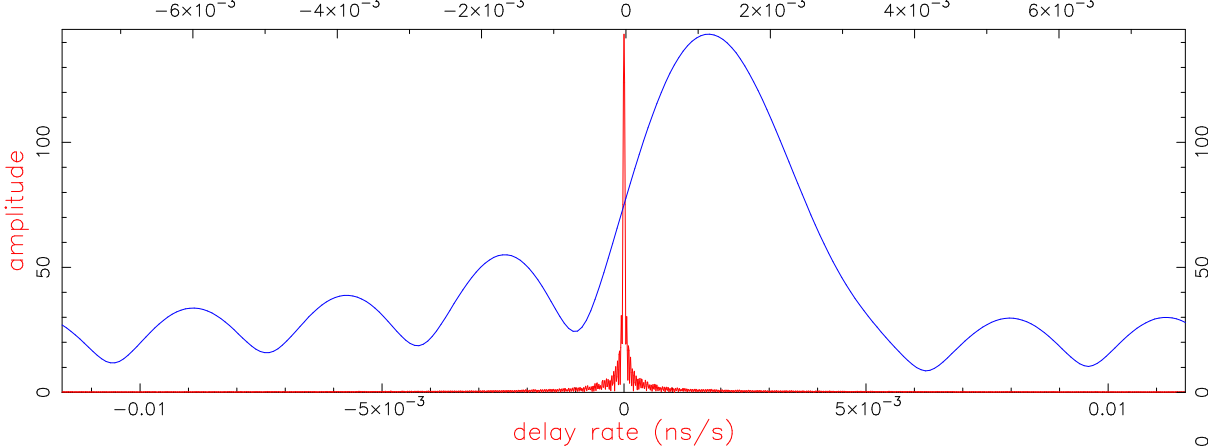
Mk4/DiFX fourfit 3.25 rev 0

aux01

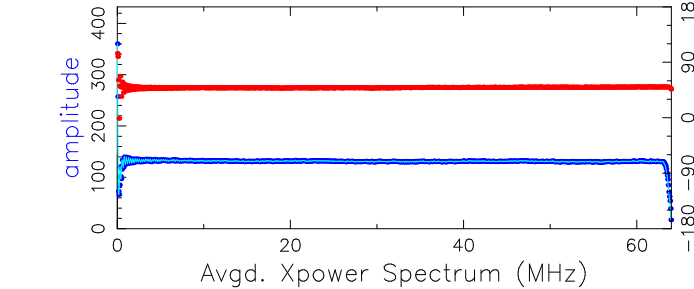
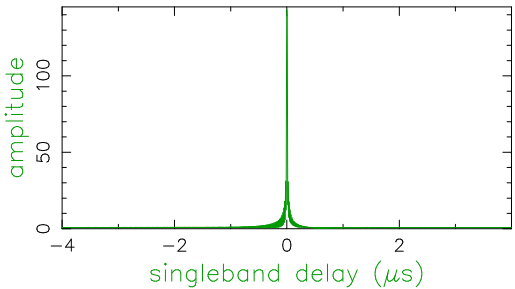
3C345.2XOWFQ, No0003, NN

NOEMA - NOEMA, fgroup W, pol LR

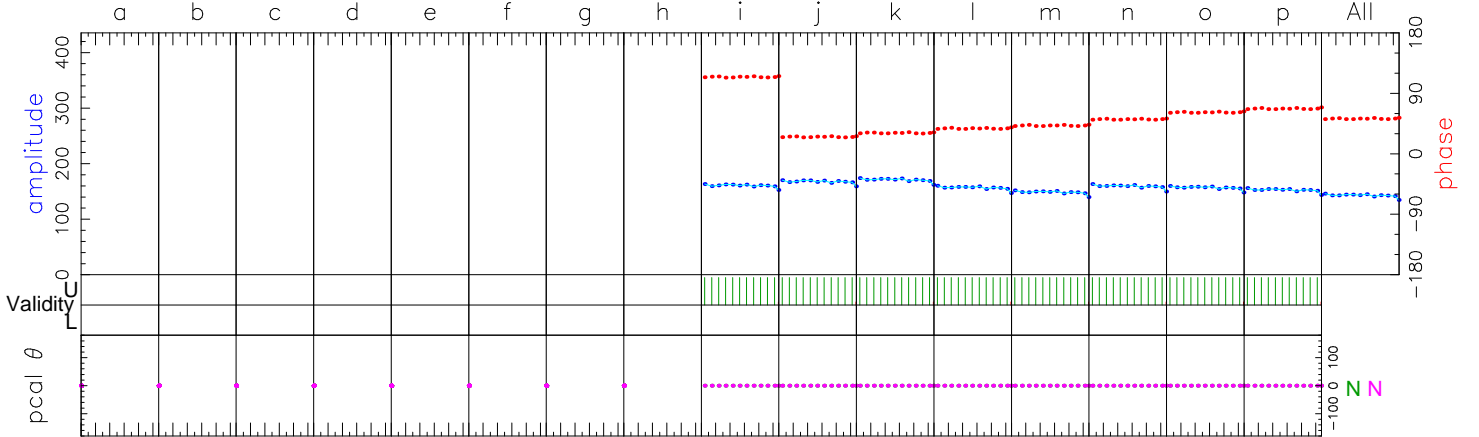
multiband delay (μ s)



Fringe quality 5
 Error code D
 SNR 6877.1
 Int time 149.991
 Amp 145.197
 Phase 52.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001411
 MBD 0.001148
 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
 2023:286:071749
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 12 segs, 54 APs / seg (27.00 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	86524.00	86588.00	86652.00	86716.00	86780.00	86844.00	86908.00	86972.00	Freq (MHz)	All
U/L	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

Group delay (usec) (SBD) 1.1481250000E-03 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 1.14813E-03 +/- 5.9E-08
 Sband delay (usec) 1.4105000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.41050E-03 +/- 1.3E-06
 Phase delay (usec) 1.6832627060E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.68326E-06 +/- 5.4E-10
 Delay rate (us/s) 3.84548409566E-11 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 3.84548E-11 +/- 6.2E-12
 Total phase (deg) 52.2 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 52.2 +/- 0.0

RMS Theor. Amplitude 145.197 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.0 Search (2048X32) 141.737 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 1.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 44.3 0.0 Inc. seg. avg. 143.288 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 71.1 0.1 Inc. frq. avg. 159.551 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 87.2 el 62.6 pa -67.7 N: az 87.2 el 62.6 pa -67.7 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NN.W.34.2XOWFQ

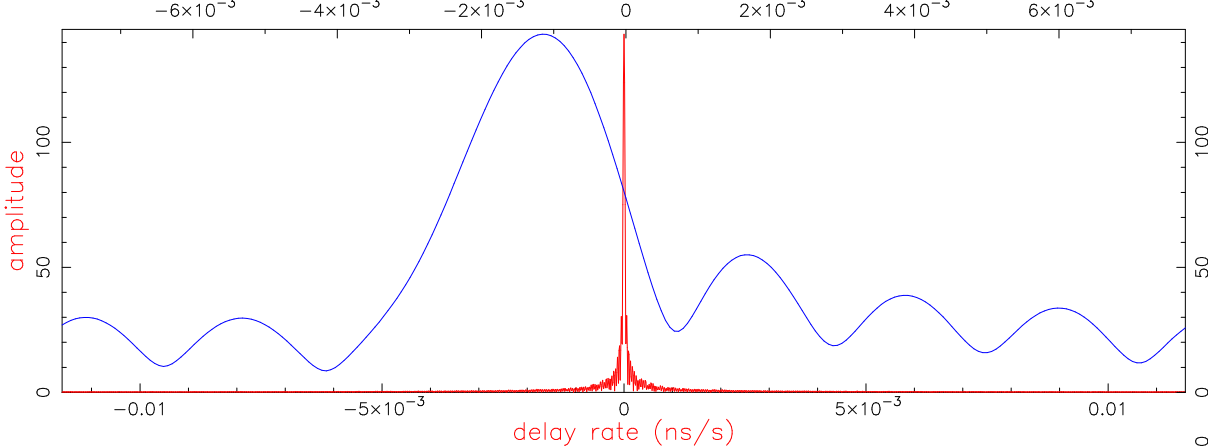
Mk4/DiFX fourfit 3.25 rev 0

aux01

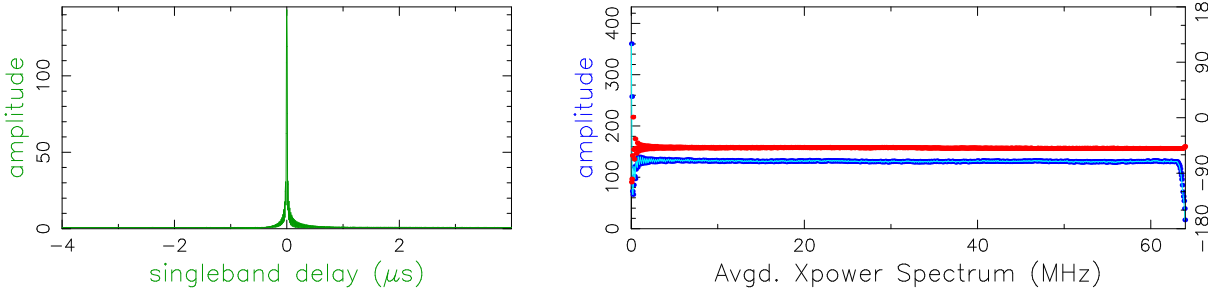
3C345.2XOWFQ, No0003, NN

NOEMA - NOEMA, fgroup W, pol RL

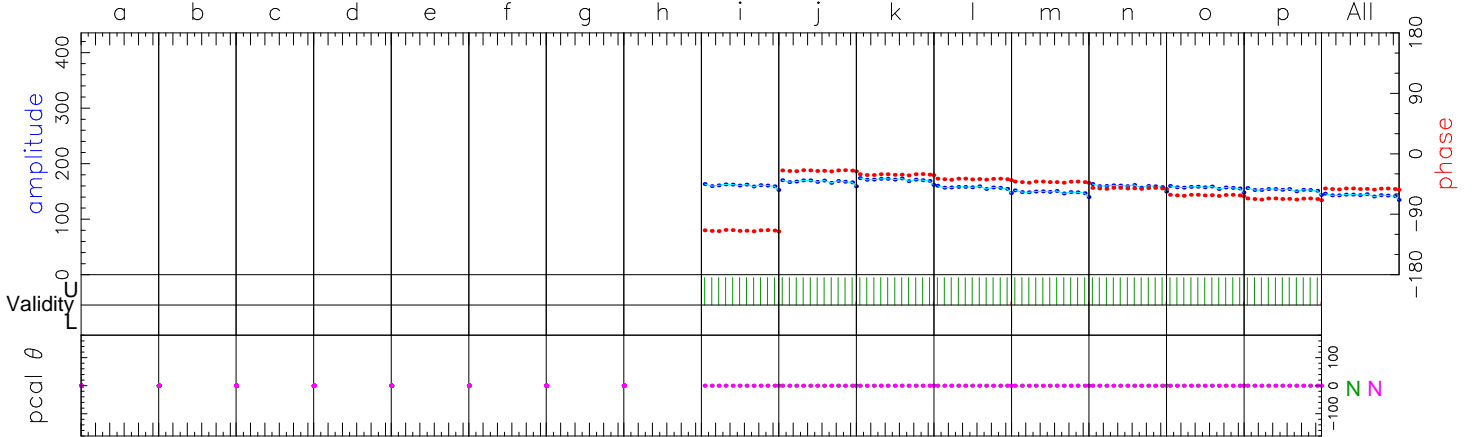
multiband delay (μ s)



Fringe quality 5
 Error code D
 SNR 6877.1
 Int time 149.991
 Amp 145.197
 Phase -52.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001411
 MBD -0.001148
 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
 2023:286:071805
 2023:269:144209
 RA & Dec (J2000)
 16h42m58.809971s
 +39°48'36.993958"



Amp. and Phase vs. time for each freq., 12 segs, 54 APs / seg (27.00 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	86524.00	86588.00	86652.00	86716.00	86780.00	86844.00	86908.00	86972.00	Freq (MHz)	All
U/L	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec) (SBD) -1.14812500000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.14813E-03 +/- 5.9E-08
 Sband delay (usec) -1.41050000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.41050E-03 +/- 1.3E-06
 Phase delay (usec) -1.68326270594E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.68326E-06 +/- 5.4E-10
 Delay rate (us/s) -3.84548409566E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -3.84548E-11 +/- 6.2E-12
 Total phase (deg) -52.2 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -52.2 +/- 0.0

RMS Theor. Amplitude 145.197 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.0 Search (2048X32) 141.737 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 1.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 44.3 0.0 Inc. seg. avg. 143.288 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 71.1 0.1 Inc. frq. avg. 159.551 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

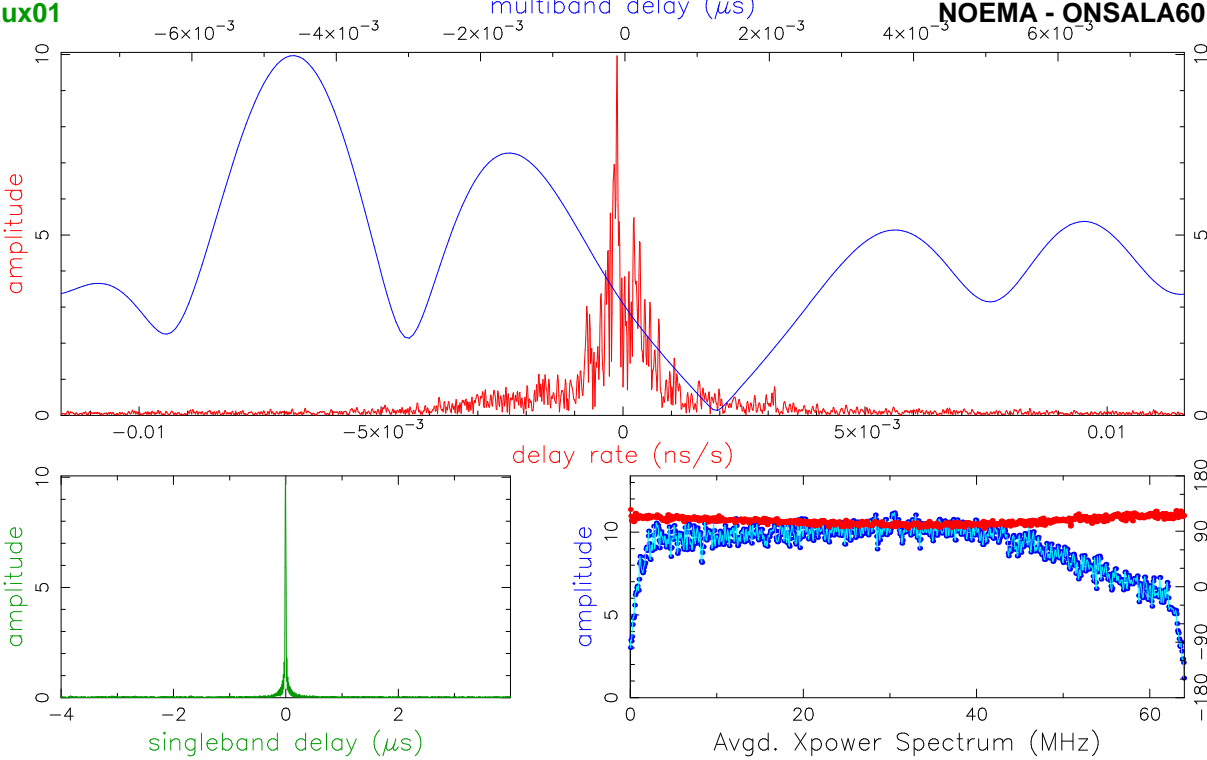
N: az 87.2 el 62.6 pa -67.7 N: az 87.2 el 62.6 pa -67.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NN..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NN.W.40.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol RR

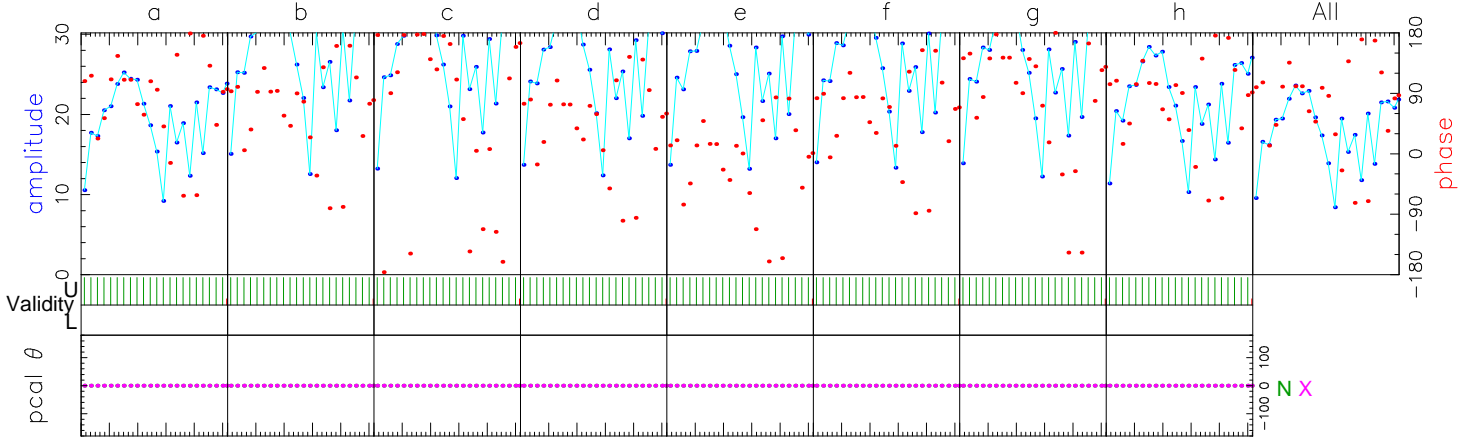


Fringe quality 1

SNR 476.5
 Int time 299.930
 Amp 10.061
 Phase 82.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.006546
 MBD -0.004561
 Fringe rate (Hz)
 -0.010475
 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



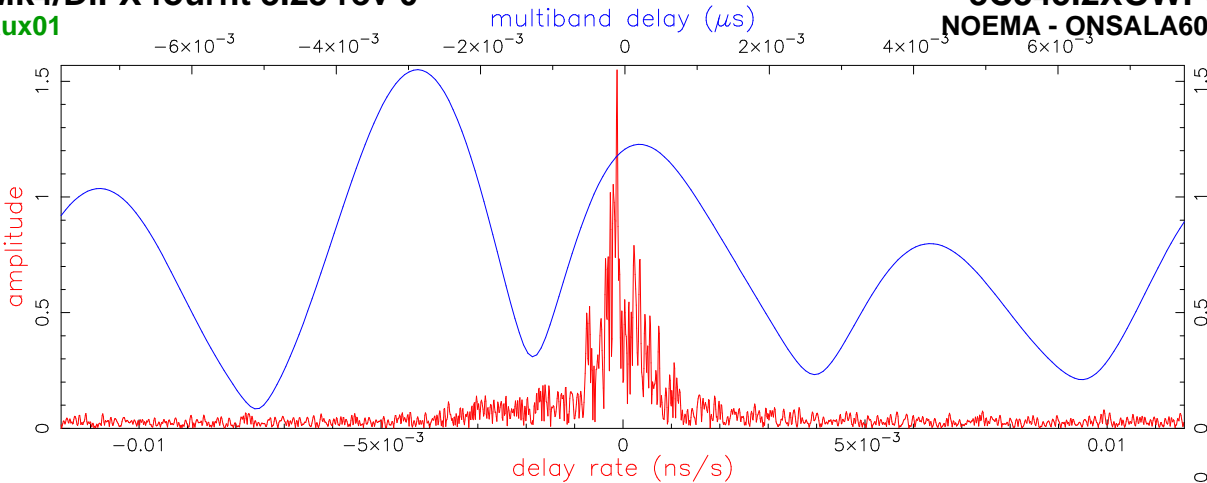
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.6	75.4	160.1	55.7	-4.1	65.9	125.1	86.4	Phase	82.6
	10.8	15.4	15.1	14.6	14.4	14.7	14.4	12.1	Ampl.	13.9
	1024.5	1023.2	1022.7	1022.5	1022.3	1022.7	1023.0	1024.0	Sbd box	1023.3
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	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)	-2.33770149736E+02		Apriori delay (usec)	-2.33765588718E+02	Resid mbdelay (usec)	-4.56102E-03	+/-	2.3E-06		
Sband delay (usec)	-2.33772134968E+02		Apriori clock (usec)	-1.1548253E+02	Resid sbdelay (usec)	-6.54625E-03	+/-	1.8E-05		
Phase delay (usec)	-2.33765586055E+02		Apriori clockrate (us/s)	-6.2999996E-07	Resid phdelay (usec)	2.66256E-06	+/-	7.8E-09		
Delay rate (us/s)	1.78138486730E-01		Apriori rate (us/s)	1.78138608329E-01	Resid rate (us/s)	-1.21599E-07	+/-	4.5E-11		
Total phase (deg)		-209.8	Apriori accel (us/s/s)	-9.46309142109E-06	Resid phase (deg)	82.6	+/-	0.2		
	RMS	Theor.	Amplitude	10.061 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	66.0	0.6	Search (2048X32)	9.683	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000		
amp/seg (%)	88.7	1.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	52.4	0.3	Inc. seg. avg.	17.931	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012	0.012		
amp/frq (%)	41.2	0.6	Inc. frq. avg.	13.926	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00	
N: az 87.2 el 62.6 pa -67.7			X: az 118.4 el 63.5 pa -37.8		u,v (fr/asec) -1342.223 -1557.784					simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.17.2XOWFQ					

Mk4/DiFX fourfit 3.25 rev 0

aux01

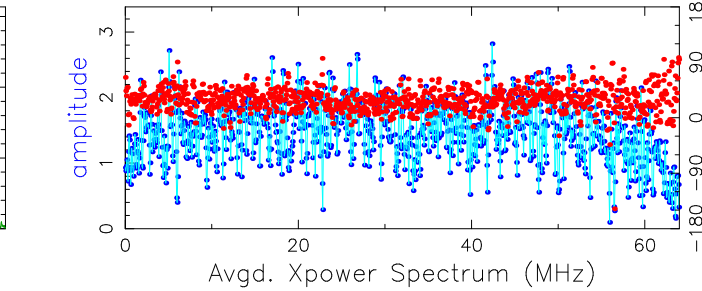
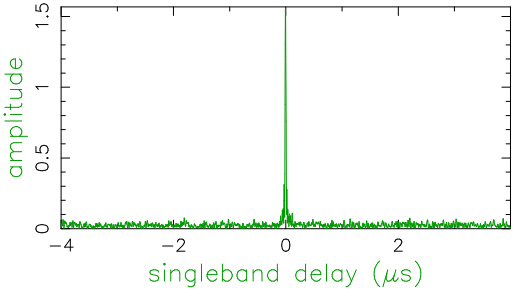
3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol LR



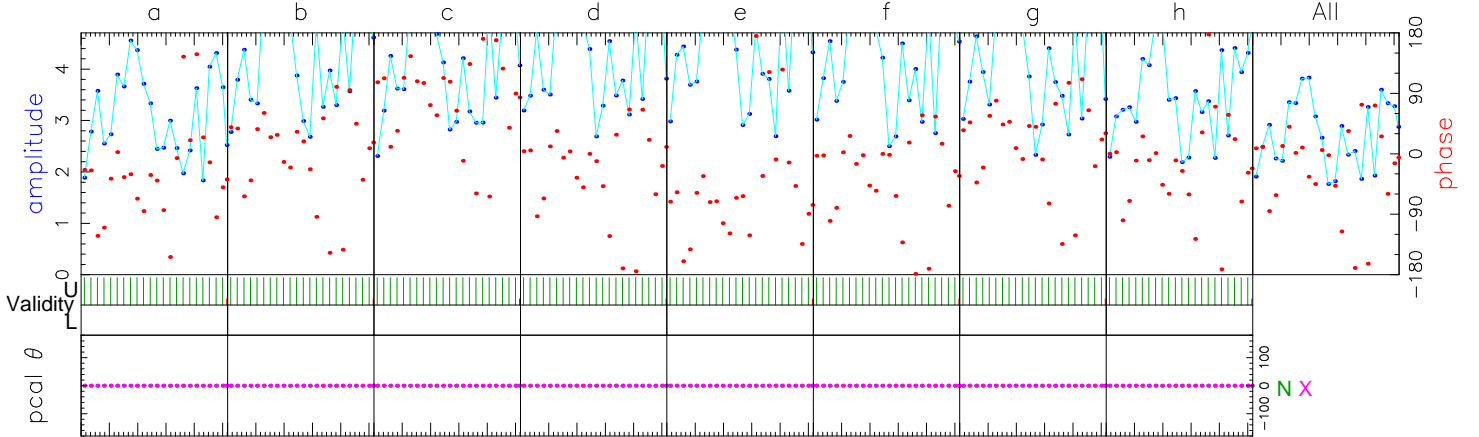
Fringe quality 1

SNR 74.3
 Int time 299.930
 Amp 1.569
 Phase -12.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.006355
 MBD -0.002828
 Fringe rate (Hz)
 -0.010526
 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
	-49.9	11.5	90.2	-16.5	-86.4	-25.8	24.9	-24.0	Phase	-12.7
	1.9	2.3	2.3	2.5	2.6	2.3	2.5	1.9	Ampl.	2.3
	1024.7	1023.9	1023.0	1023.0	1022.8	1023.1	1023.3	1024.5	Sbd box	1023.4
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.33768417080E+02	Apriori delay (usec)	-2.33765588718E+02	Resid mbdelay (usec)	-2.82836E-03	+/-	1.5E-05
Sband delay (usec)	-2.33771943218E+02	Apriori clock (usec)	-1.1548253E+02	Resid sbdelay (usec)	-6.35450E-03	+/-	1.2E-04
Phase delay (usec)	-2.33765589127E+02	Apriori clockrate (us/s)	-6.2999996E-07	Resid phdelay (usec)	-4.09537E-07	+/-	5.0E-08
Delay rate (us/s)	1.78138486136E-01	Apriori rate (us/s)	1.78138608329E-01	Resid rate (us/s)	-1.22193E-07	+/-	2.9E-10
Total phase (deg)	-305.1	Apriori accel (us/s/s)	-9.46309142109E-06	Resid phase (deg)	-12.7	+/-	1.5

ph/seg (deg)	65.1	RMS	3.7	Theor.	1.533	Amplitude	1.569 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	86.0	Search (2048X32)	1.533	Search	1.533	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	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	48.2	Inc. seg. avg.	2.740	Inc. seg. avg.	2.740	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012	0.012	
		Inc. frq. avg.	2.282	Inc. frq. avg.	2.282	Data rate (Mb/s):	2048	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 87.2 el 62.6 pa -67.7 X: az 118.4 el 63.5 pa -37.8 u, v (fr/asec) -1342.223 -1557.784 simultaneous interpolator

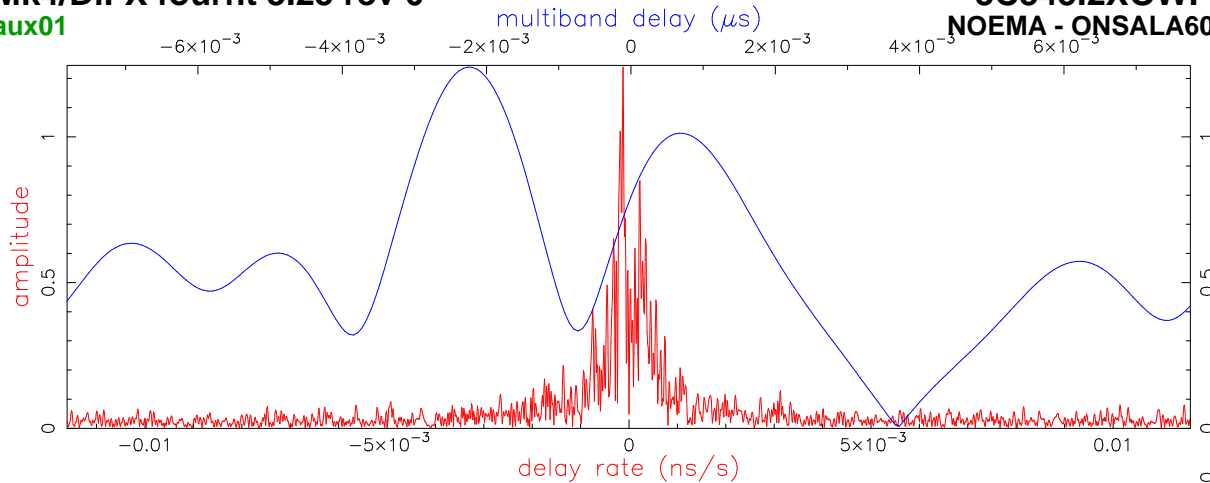
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.27.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, NX

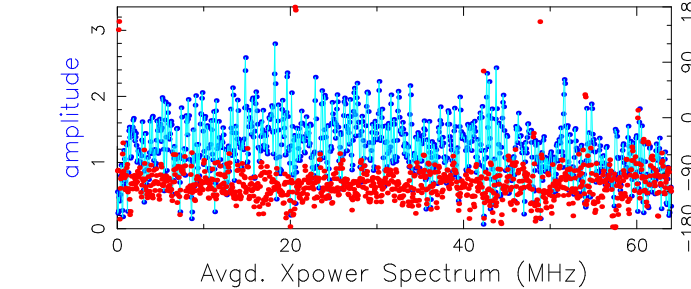
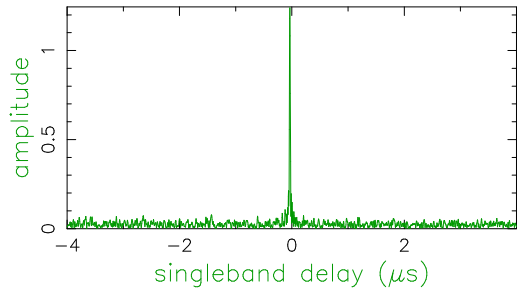
NOEMA - ONSALA60, fgroup W, pol RL



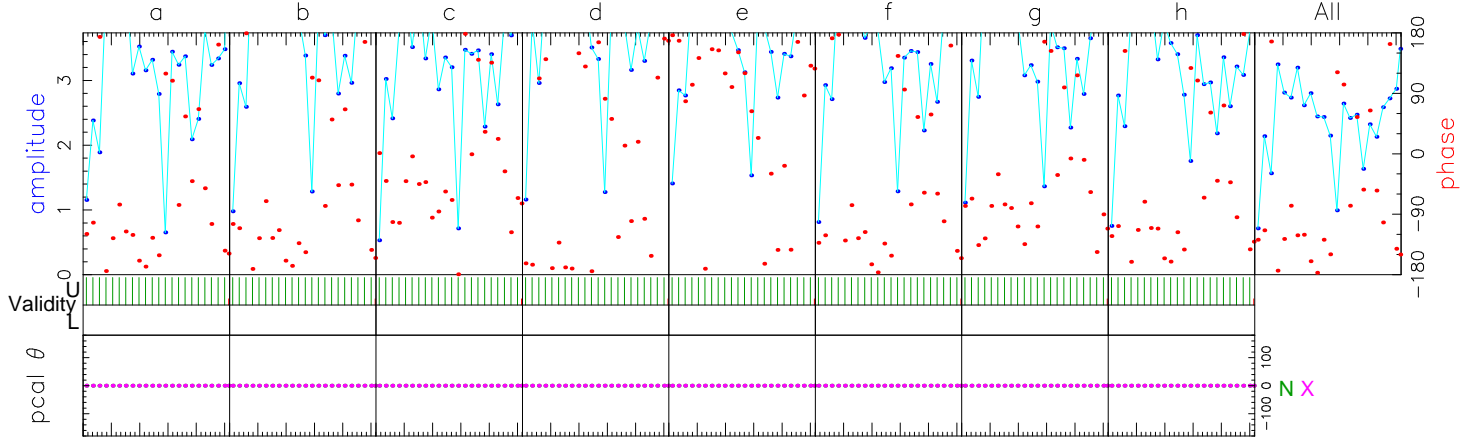
Fringe quality 1

SNR 59.0
 Int time 299.930
 Amp 1.245
 Phase -138.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.036036
 MBD -0.002258
 Fringe rate (Hz)
 -0.010354
 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
	-132.8	-135.5	-59.0	173.4	137.6	-140.6	-91.7	-130.3	Phase	-138.2
	1.6	1.9	1.7	1.9	2.0	1.8	1.9	1.6	Ampl.	1.8
	1017.5	1015.6	1015.3	1015.0	1015.2	1015.1	1015.4	1016.2	Sbd box	1015.8
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.33799096518E+02	Apriori delay (usec)	-2.33765588718E+02	Resid mbdelay (usec)	-2.25780E-03	+/-	1.8E-05
Sband delay (usec)	-2.33801625218E+02	Apriori clock (usec)	-1.1548253E+02	Resid sbdelay (usec)	-3.60365E-02	+/-	1.5E-04
Phase delay (usec)	-2.33765593176E+02	Apriori clockrate (us/s)	-6.2999996E-07	Resid phdelay (usec)	-4.45805E-06	+/-	6.3E-08
Delay rate (us/s)	1.78138488127E-01	Apriori rate (us/s)	1.78138608329E-01	Resid rate (us/s)	-1.20201E-07	+/-	3.6E-10
Total phase (deg)	-70.6	Apriori accel (us/s/s)	-9.46309142109E-06	Resid phase (deg)	-138.2	+/-	1.9

ph/seg (deg)	RMS 70.8	Theor. 4.7	Amplitude 1.245 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	70.8	4.7	Search (2048X32) 1.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	102.8	8.1	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	54.7	2.7	Inc. seg. avg. 2.352	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
	45.1	4.8	Inc. frq. avg. 1.787	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite			

N: az 87.2 el 62.6 pa -67.7 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) -1342.223 -1557.784 simultaneous interpolator

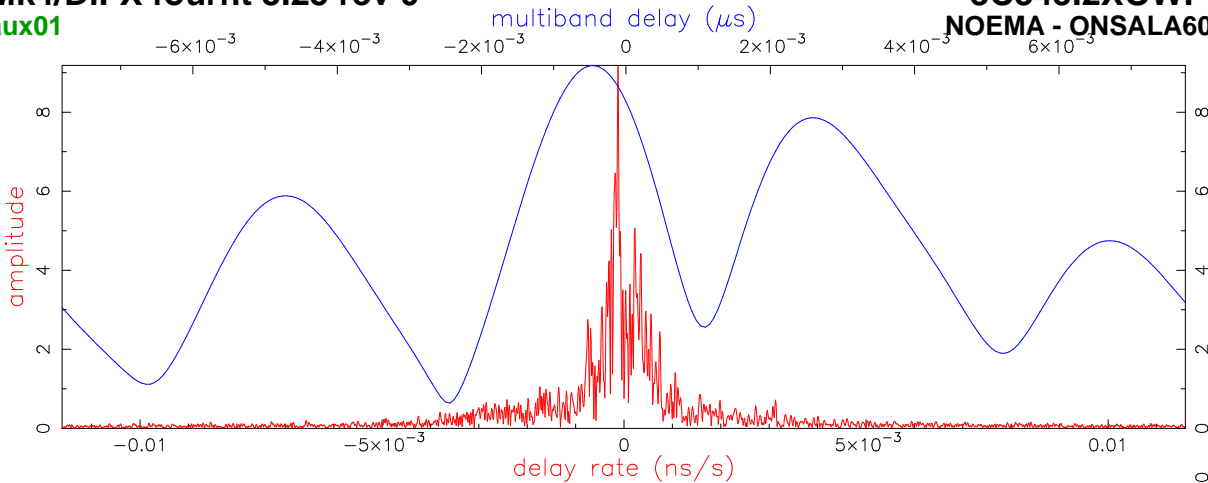
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.35.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

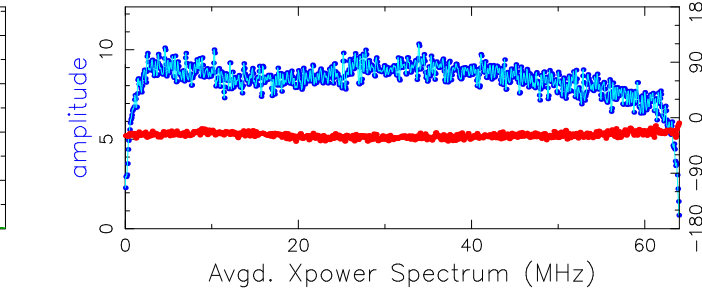
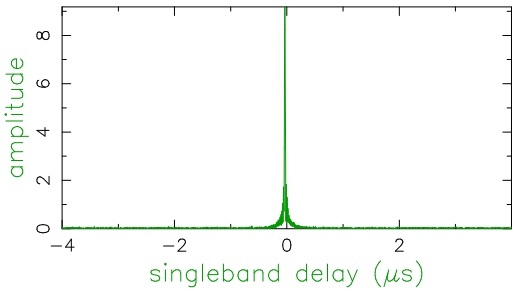
3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol LL



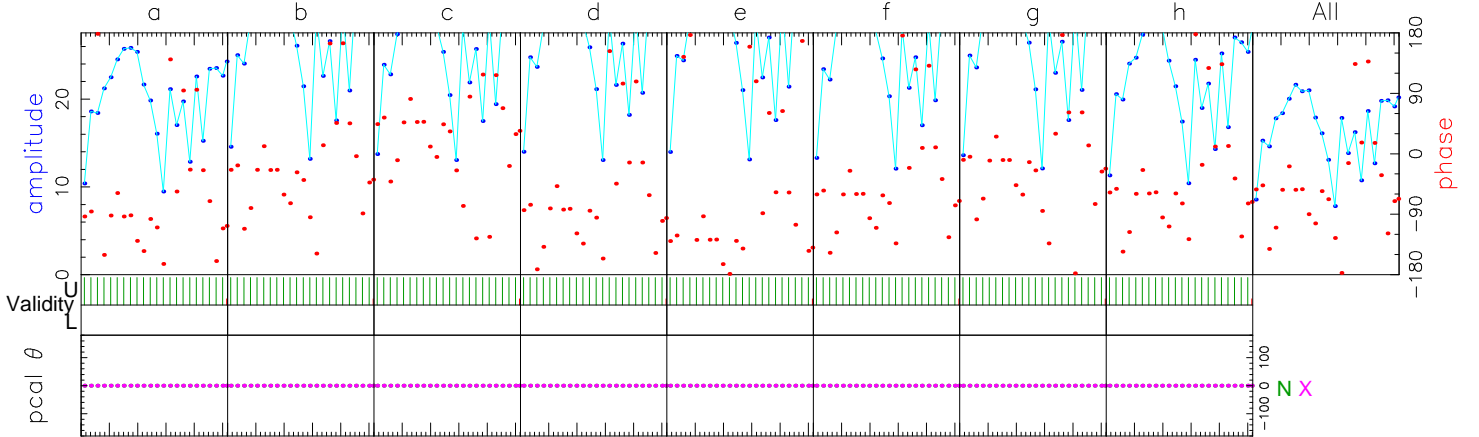
Fringe quality 1

SNR 434.9
 Int time 299.930
 Amp 9.184
 Phase -70.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.035381
 MBD -0.000468
 Fringe rate (Hz)
 -0.010497
 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
	-110.4	-41.7	29.4	-99.8	-145.2	-76.9	-27.0	-75.5	Phase	-70.6
	11.0	15.1	14.3	14.8	15.2	14.3	14.8	12.4	Ampl.	14.0
	1017.8	1016.2	1015.6	1015.5	1015.7	1015.5	1016.0	1016.6	Sbd box	1015.9
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -2.33797306361E+02 Apriori delay (usec) -2.33765588718E+02 Resid mbdelay (usec) -4.67643E-04 +/- 2.5E-06
 Sband delay (usec) -2.33800969718E+02 Apriori clock (usec) -1.1548253E+02 Resid sbdelay (usec) -3.53810E-02 +/- 2.0E-05
 Phase delay (usec) -2.33765590995E+02 Apriori clockrate (us/s) -6.2999996E-07 Resid phdelay (usec) -2.27751E-06 +/- 8.5E-09
 Delay rate (us/s) 1.78138486467E-01 Apriori rate (us/s) 1.78138608329E-01 Resid rate (us/s) -1.21862E-07 +/- 4.9E-11
 Total phase (deg) -3.0 Apriori accel (us/s/s) -9.46309142109E-06 Resid phase (deg) -70.6 +/- 0.3

RMS Theor. Amplitude 9.184 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.0 0.6 Search (2048X32) 9.072 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 90.1 1.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 58.9 0.4 Inc. seg. avg. 16.494 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.012 0.012
 amp/frq (%) 54.5 0.7 Inc. frq. avg. 13.990 Data rate(Mb/s): 2048 nlags: 1024 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 87.2 el 62.6 pa -67.7 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) -1342.223 -1557.784 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.5.2XOWFQ

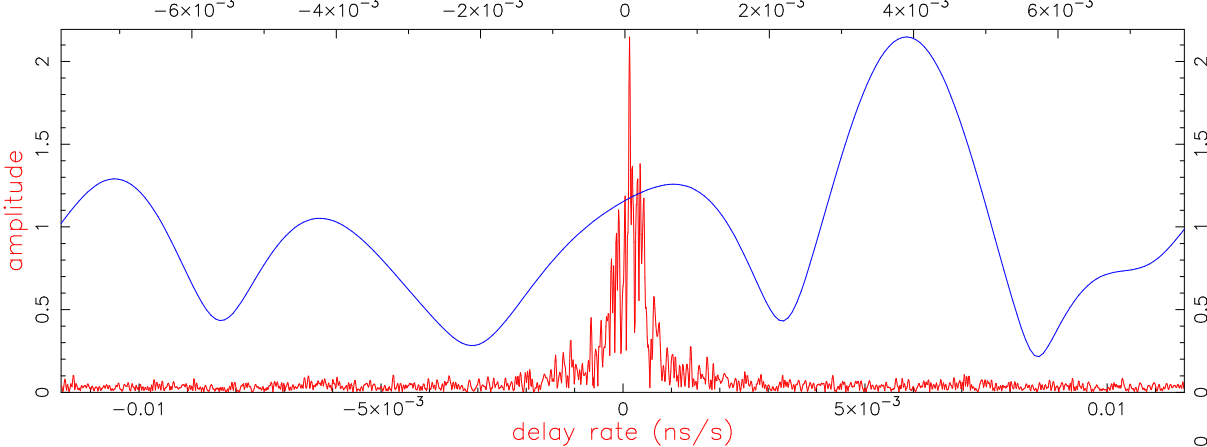
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, ZN

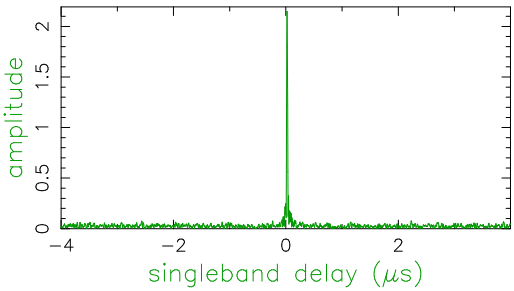
METSAHOV - NOEMA, fgroup W, pol RR

multiband delay (μ s)

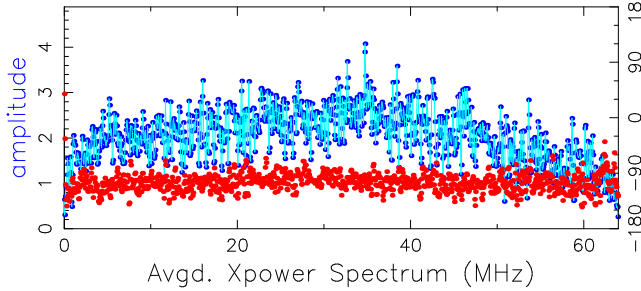


Fringe quality 2

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

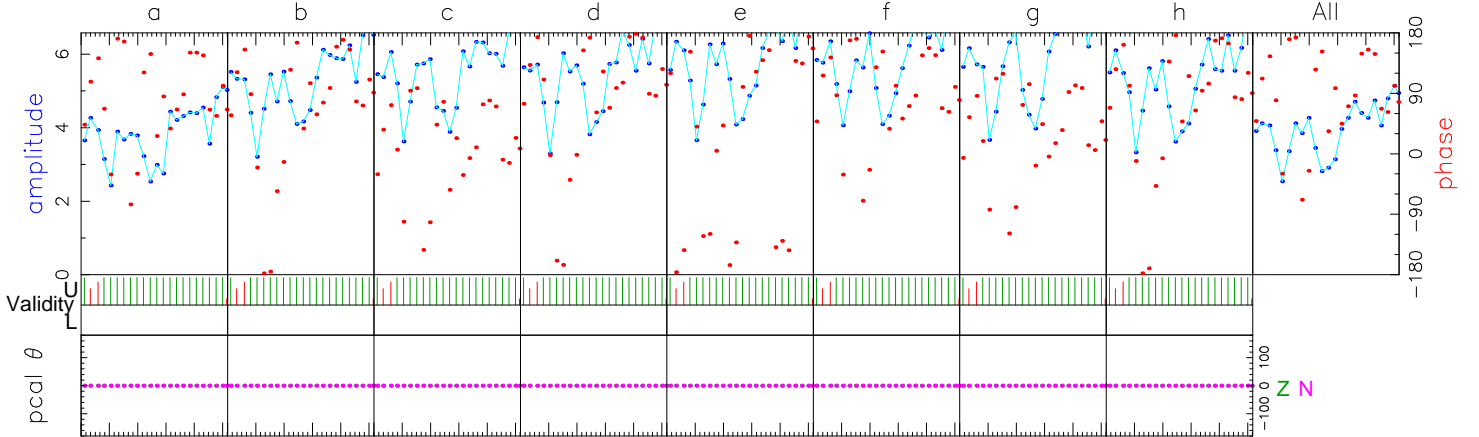


delay rate (ns/s)



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	
				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

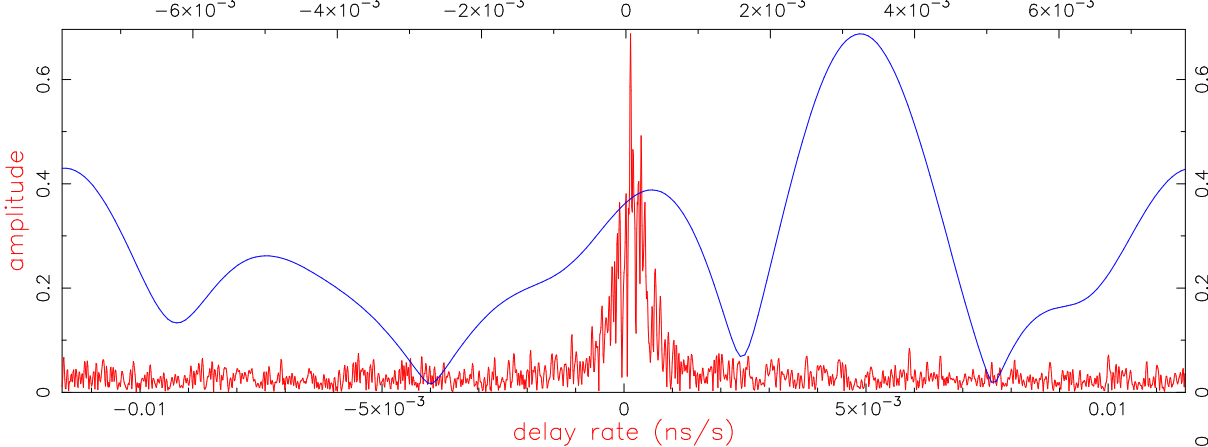
aux01

3C345.2XOWFQ, No0003, ZN

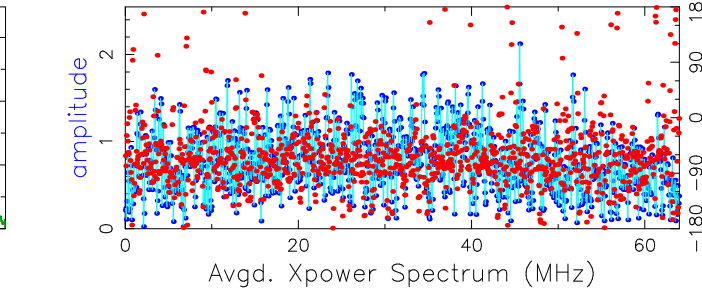
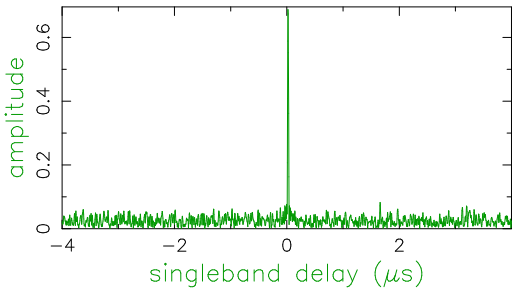
METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 4

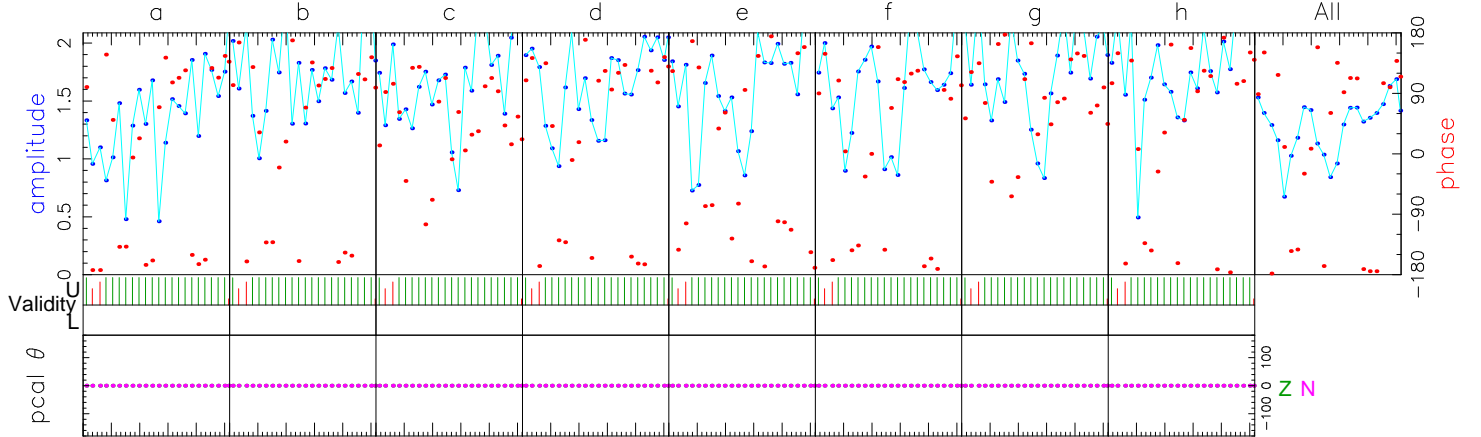


SNR 32.5
 Int time 292.255
 Amp 0.696
 Phase 133.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.021023
 MBD 0.003270
 Fringe rate (Hz)
 0.012024
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500



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

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

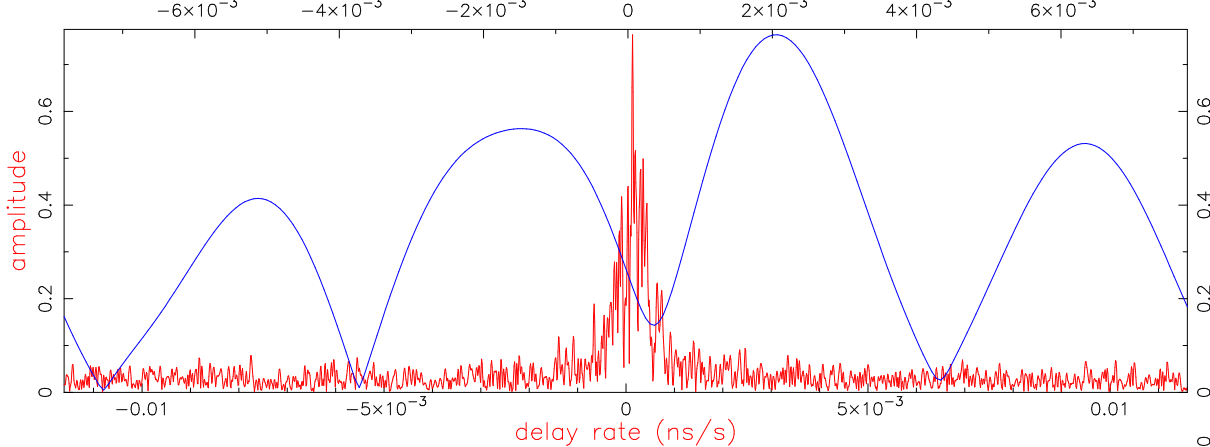
aux01

3C345.2XOWFQ, No0003, ZN

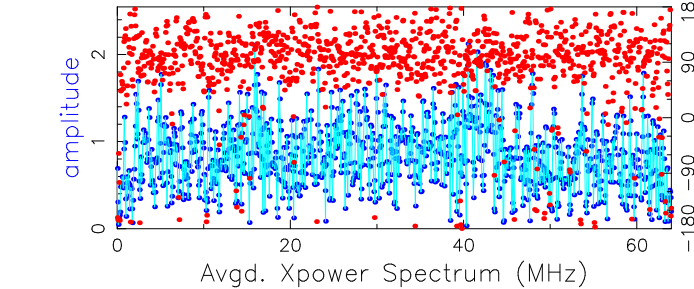
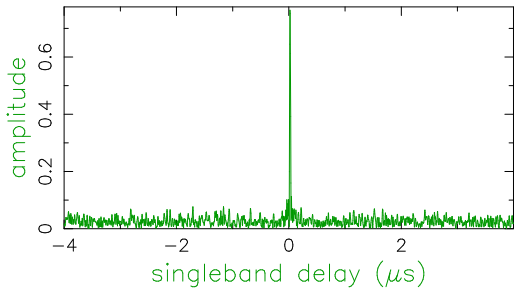
METSAHOV - NOEMA, fgroup W, pol RL

multiband delay (μ s)

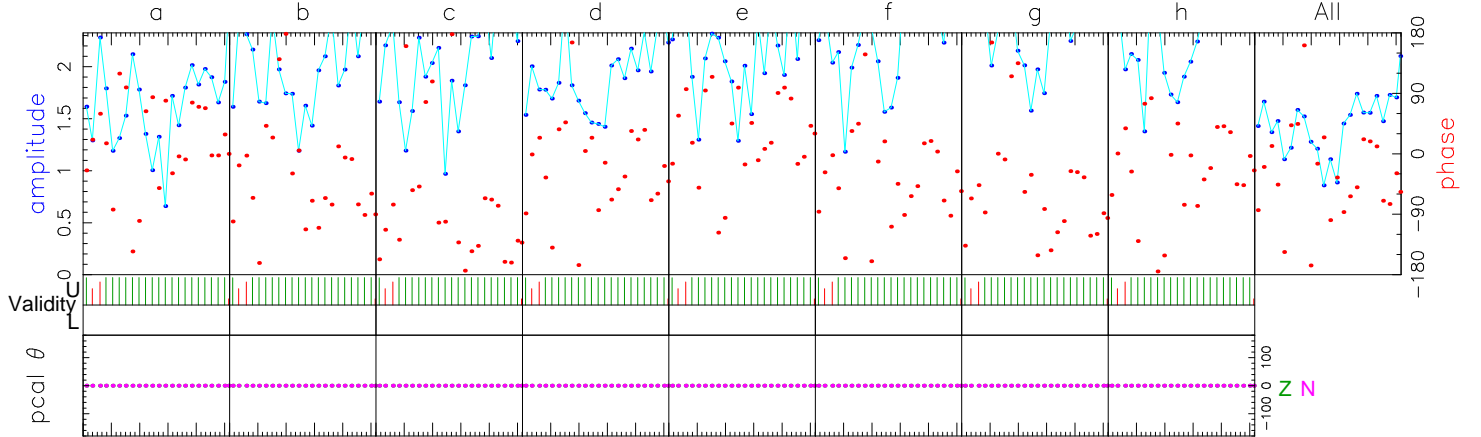
Fringe quality 3



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	Theor.	7.5	Search (2048X32)	0.747	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	90.0		13.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	57.3		4.5	Inc. seg. avg.	1.409	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	51.2		7.8	Inc. frq. avg.	1.138	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

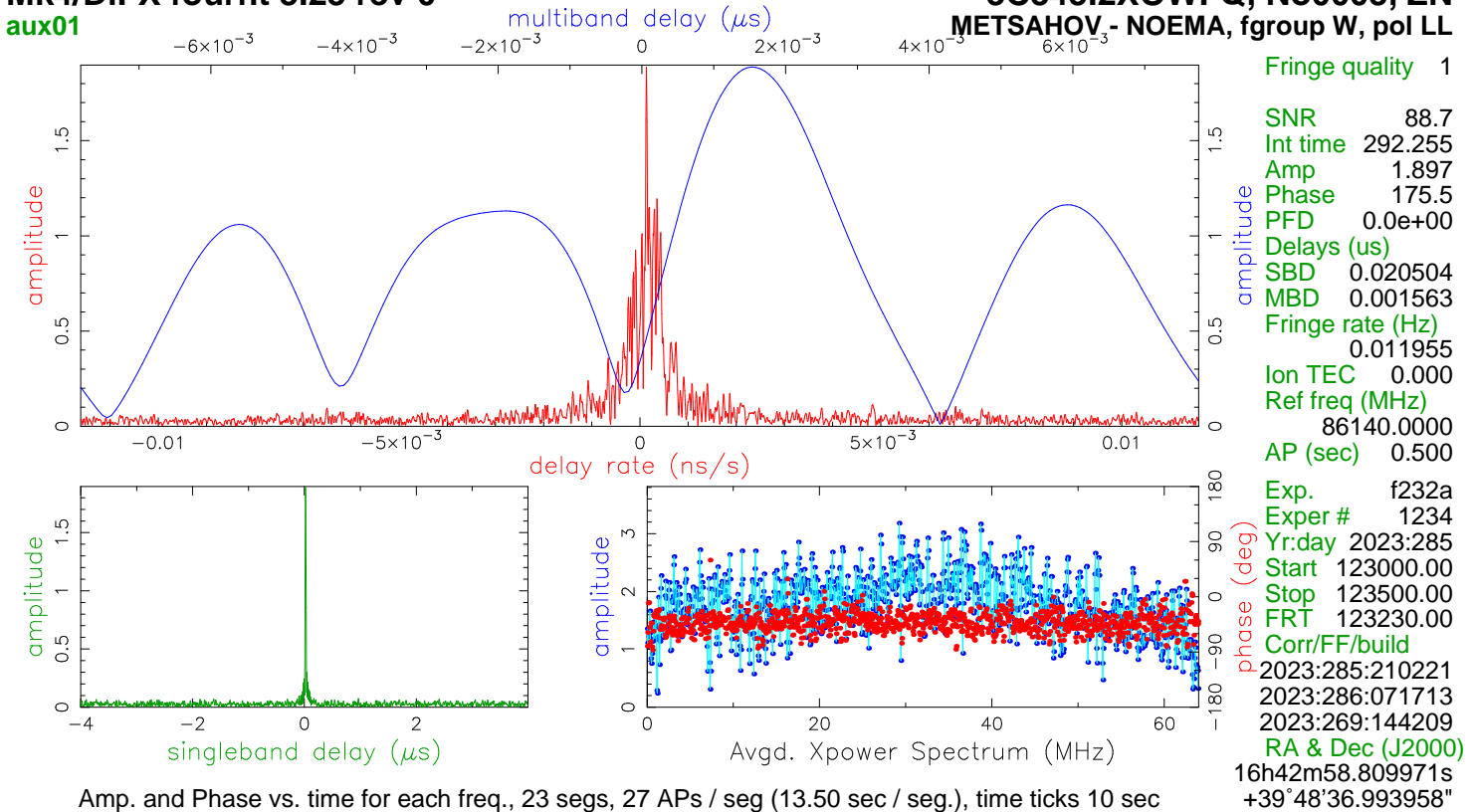
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Mk4/DiFX fourfit 3.25 rev 0

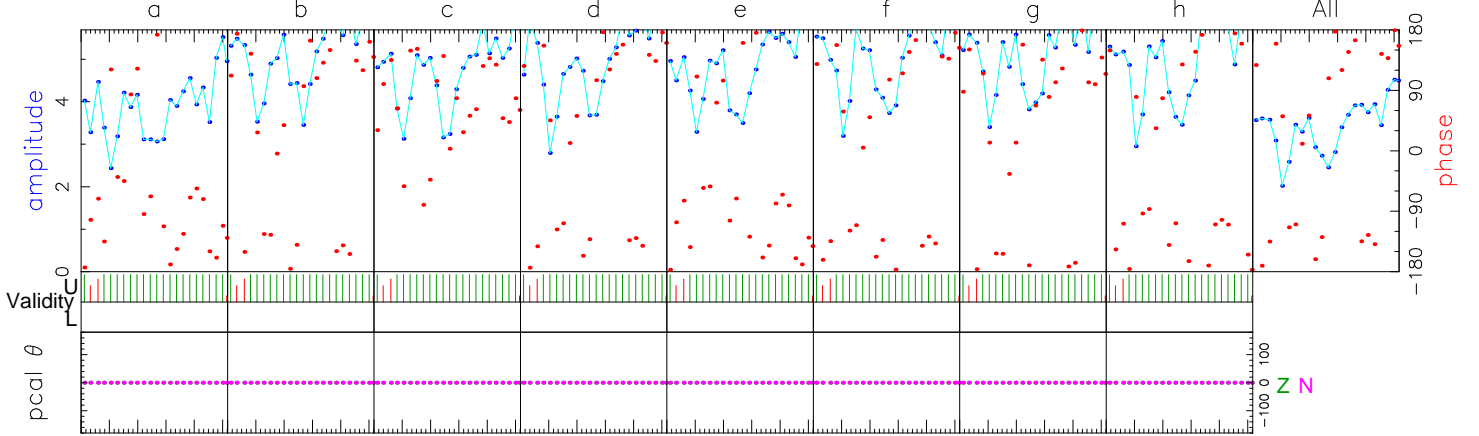
aux01

3C345.2XOWFQ, No0003, 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		
									Chan ids		
									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	
	RMS	Theor.	Amplitude	1.897 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	66.5	3.1	Search (2048X32)	1.859		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	85.4	5.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	56.5	1.8	Inc. seg. avg.	3.393		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.012	0.012	
amp/frq (%)	42.5	3.2	Inc. frq. avg.	2.663		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.6.2XOWFQ								