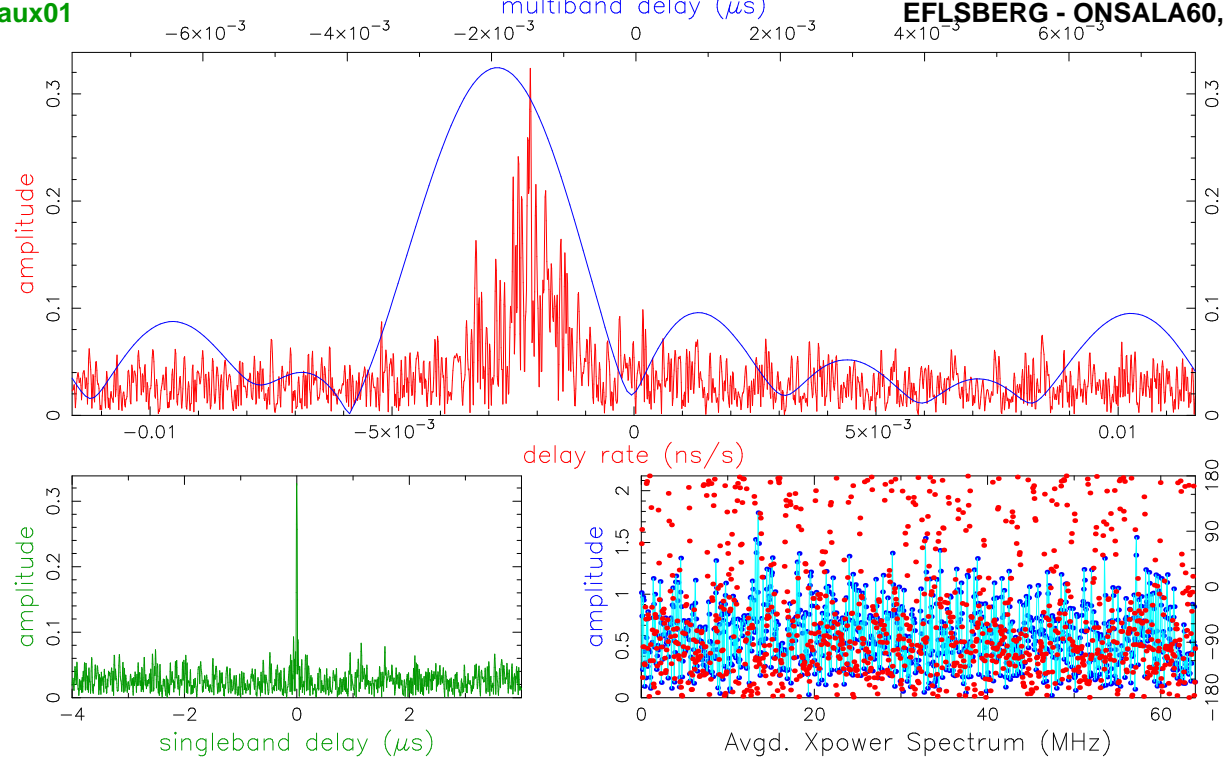


Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.2XOWFQ, No0003, BX

EFLSBERG - ONSALA60, fgroup W, pol RR

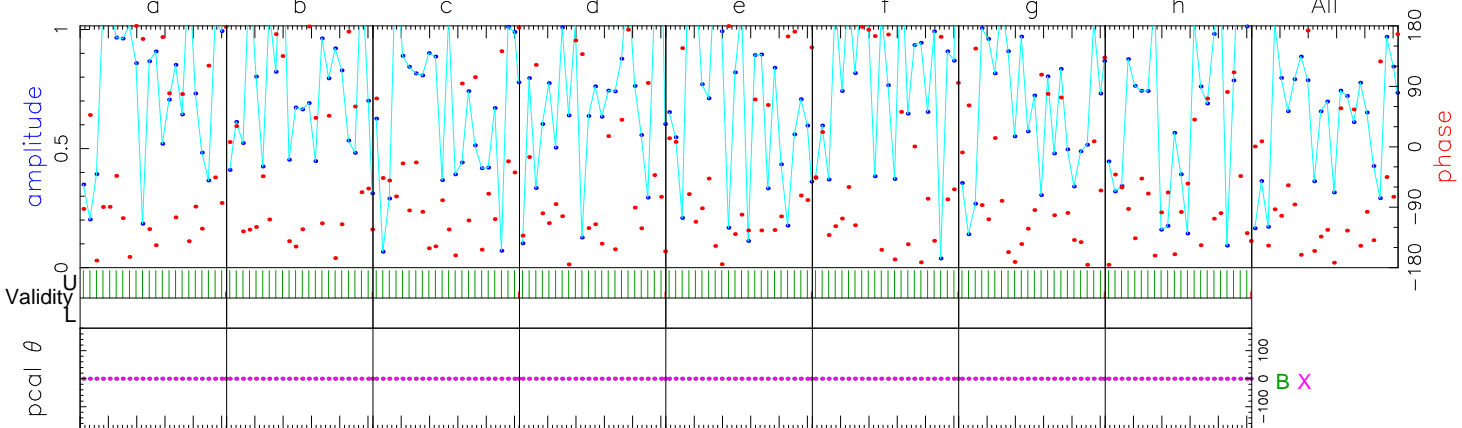


Fringe quality 9

SNR 15.8
 Int time 299.930
 Amp 0.339
 Phase -111.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002122
 MBD -0.001986
 Fringe rate (Hz)
 -0.184610
 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
 2023:286:071721
 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
	-119.2	-130.2	-86.7	-111.6	-108.9	-126.6	-106.2	-102.0	Phase	-111.8
	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3	Ampl.	0.3
	1024.5	1024.7	1023.6	1023.3	1022.7	1025.0	1022.9	1022.4	Sbd box	1024.5
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.14105060057E+02	Apriori delay (usec)	-2.14103073941E+02	Resid mbdelay (usec)	-1.98612E-03	+/-	6.9E-05
Sband delay (usec)	-2.14105195691E+02	Apriori clock (usec)	-1.3353635E+02	Resid sbdelay (usec)	-2.12175E-03	+/-	5.4E-04
Phase delay (usec)	-2.14103077546E+02	Apriori clockrate (us/s)	1.3800001E-06	Resid phdelay (usec)	-3.60546E-06	+/-	2.3E-07
Delay rate (us/s)	1.14220857460E-01	Apriori rate (us/s)	1.14223000603E-01	Resid rate (us/s)	-2.14314E-06	+/-	1.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.67063841367E-06	Resid phase (deg)	-111.8	+/-	7.2

ph/seg (deg)	RMS 75.7	Theor. 17.4	Amplitude 0.339 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	114.0	30.3	Search (2048X32) 0.320	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000	
ph/frq (deg)	15.1	10.2	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	15.5	17.9	Inc. seg. avg. 0.606	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.012 0.012	
			Inc. frq. avg. 0.332	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 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) -858.442 -778.068 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BX.W.14.2XOWFQ

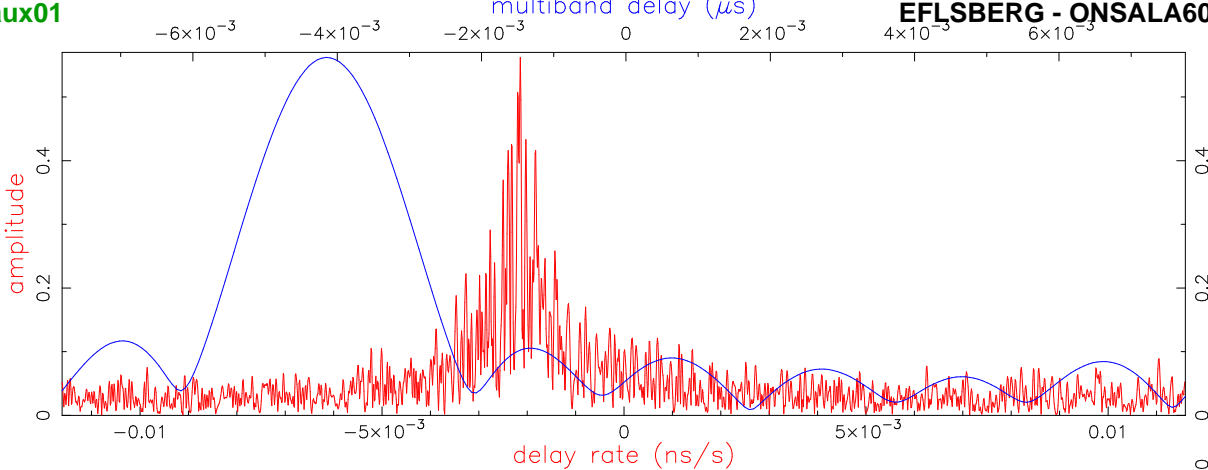
Mk4/DiFX fourfit 3.25 rev 0

aux01

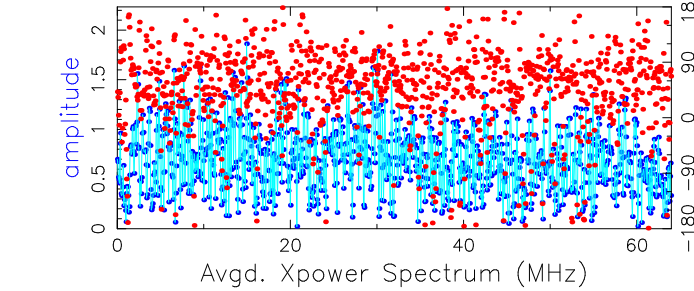
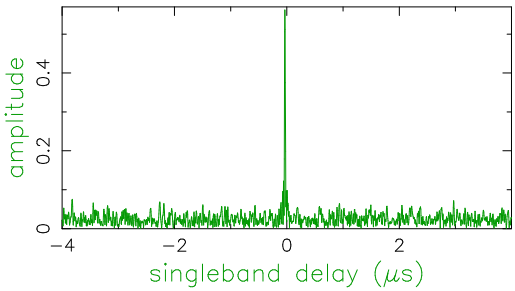
3C345.2XOWFQ, No0003, BX

EFLSBERG - ONSALA60, fgroup W, pol LL

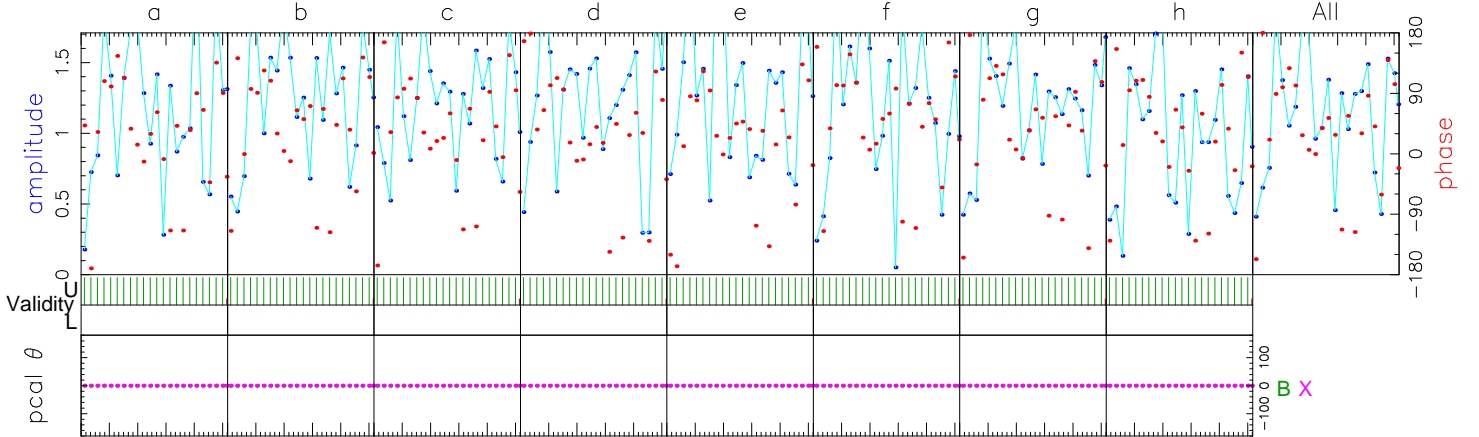
Fringe quality 7



SNR 26.6
 Int time 299.930
 Amp 0.570
 Phase 65.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.035047
 MBD -0.004144
 Fringe rate (Hz)
 -0.184564
 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
 2023:286:071708
 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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-2.14138467557E+02	Apriori delay (usec)	-2.14103073941E+02	Resid mbdelay (usec)	-4.14362E-03	+/-	4.1E-05
Sband delay (usec)	-2.14138120691E+02	Apriori clock (usec)	-1.3353635E+02	Resid sbdelay (usec)	-3.50467E-02	+/-	3.2E-04
Phase delay (usec)	-2.14103071832E+02	Apriori clockrate (us/s)	1.3800001E-06	Resid phdelay (usec)	2.10897E-06	+/-	1.4E-07
Delay rate (us/s)	1.14220858002E-01	Apriori rate (us/s)	1.14223000603E-01	Resid rate (us/s)	-2.14260E-06	+/-	8.0E-10
Total phase (deg)	-218.7	Apriori accel (us/s/s)	-4.67063841367E-06	Resid phase (deg)	65.4	+/-	4.3

ph/seg (deg)	80.1	Theor.	10.3	Amplitude	0.570 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	127.9	Search (2048X32)	0.558	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	6.7	Inc. seg. avg.	1.140	Inc. frq. avg.	0.570	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.2	Inc. frq. avg.	0.570			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
						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 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) -858.442 -778.068 simultaneous interpolator

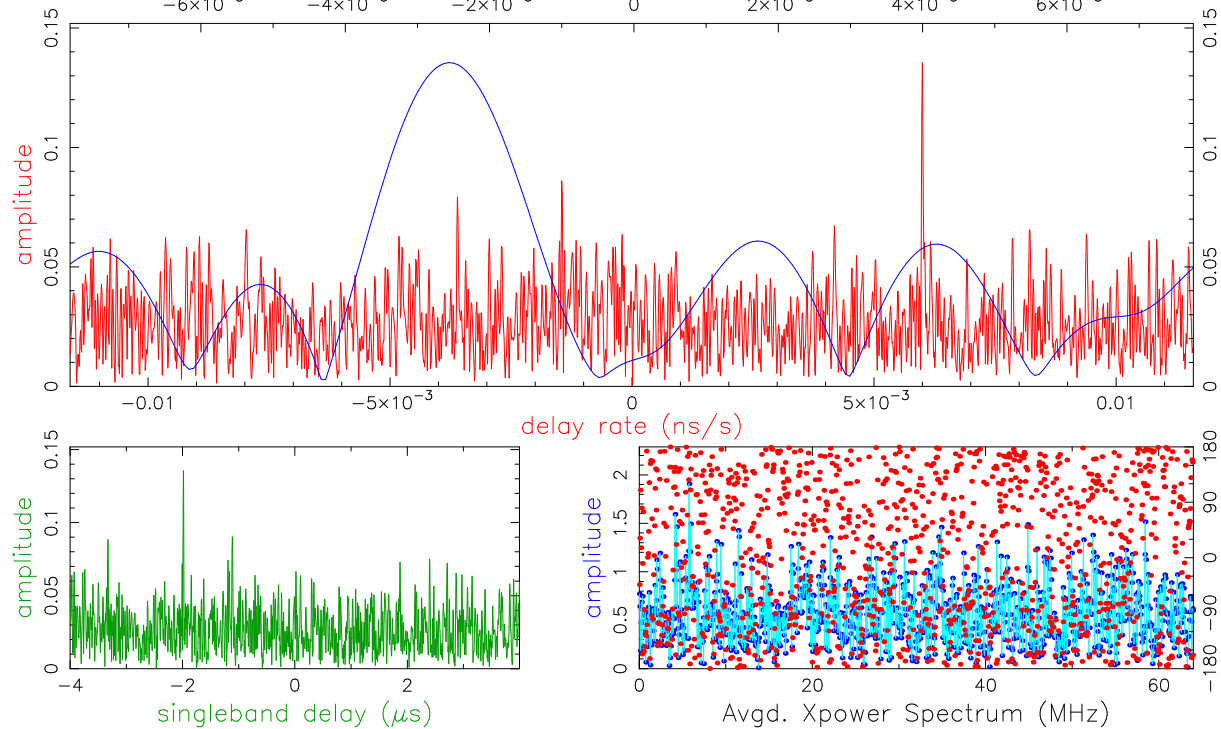
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BX.W.2.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

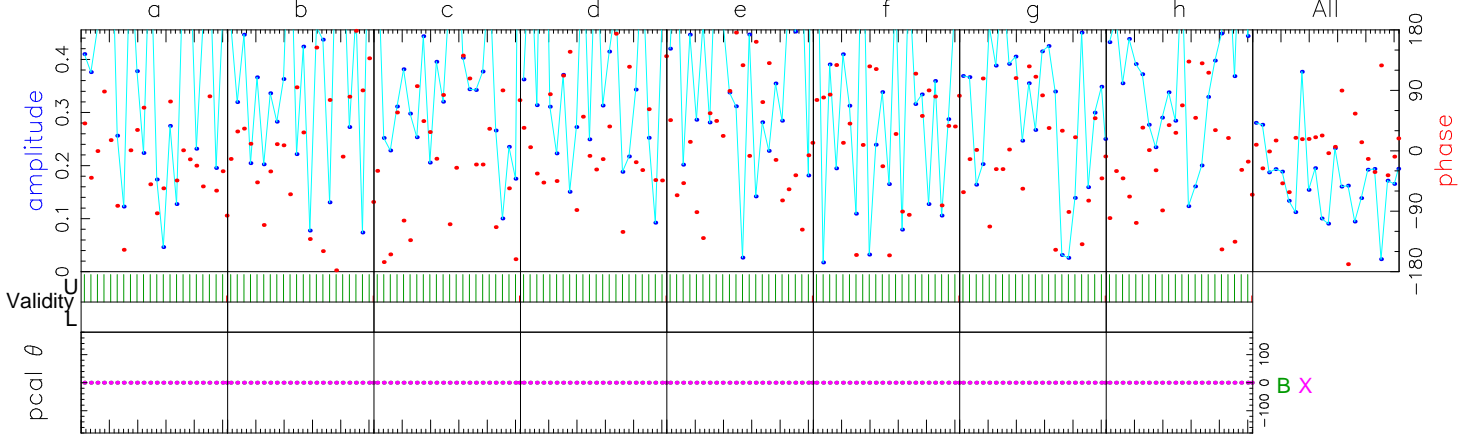
3C345.2XOWFQ, No0003, BX

EFLSBERG - ONSALA60, fgroup W, pol LR



Fringe quality 0
 SNR 6.4
 Int time 299.930
 Amp 0.152
 Phase 0.6
 PFD 1.3e-01
 Delays (us)
 SBD -1.983868
 MBD -0.002540
 Fringe rate (Hz) 0.517232
 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
 2023:286:071733
 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



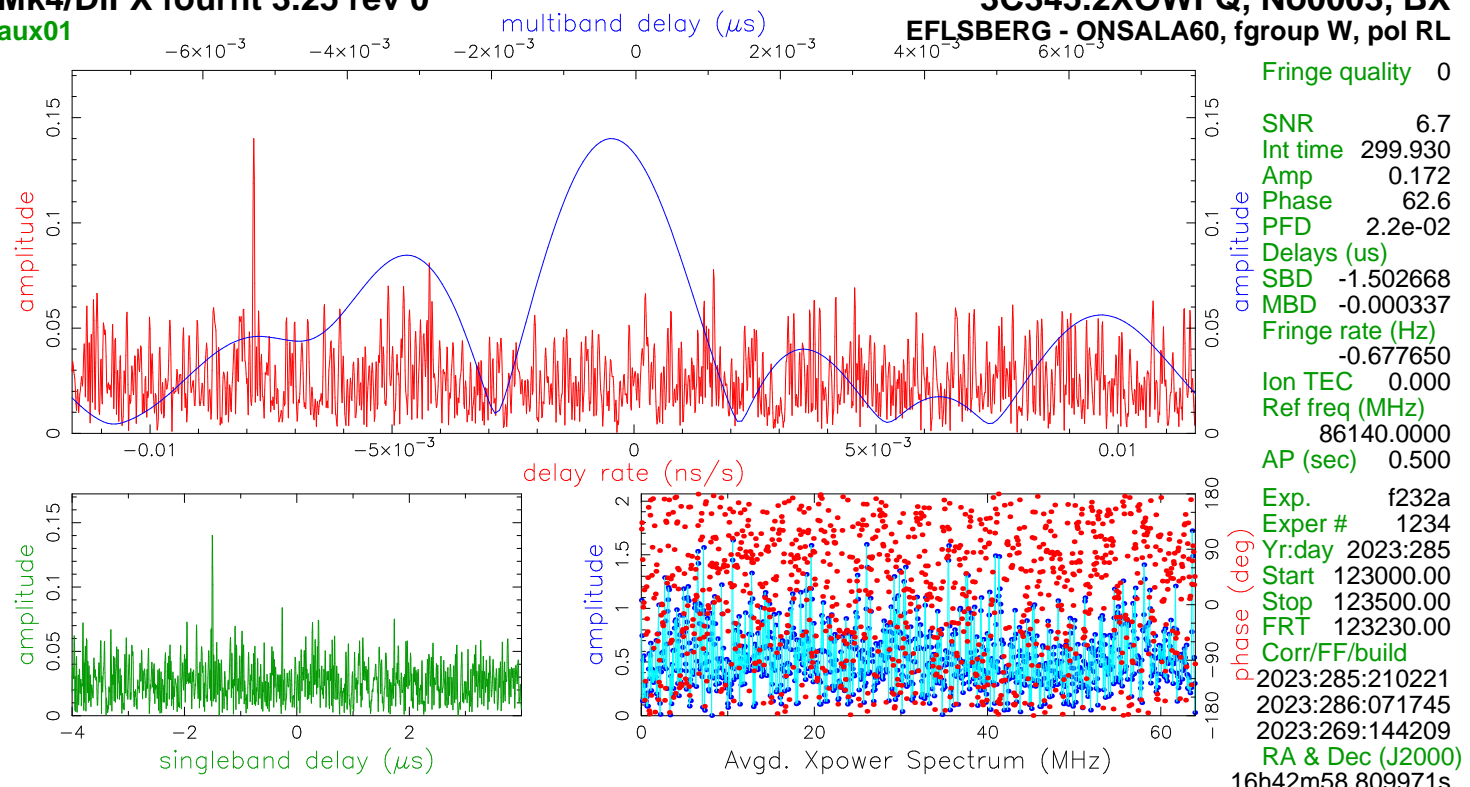
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	0.6	12.2	-7.2	-5.4	-16.1	46.7	-8.8	-17.8	Phase	0.6	
	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1	
	718.3	869.7	700.9	200.9	638.8	1903.0	1716.2	1583.8	Sbd box	517.1	
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-2.16089989001E+02		Apriori delay (usec)		-2.14103073941E+02		Resid mbdelay (usec)		-2.54006E-03	+/- 1.7E-04	
Sband delay (usec)	-2.16086941941E+02		Apriori clock (usec)		-1.3353635E+02		Resid sbdelay (usec)		-1.98387E+00	+/- 1.3E-03	
Phase delay (usec)	-2.14103073922E+02		Apriori clockrate (us/s)		1.3800001E-06		Resid phdelay (usec)		1.90868E-08	+/- 5.7E-07	
Delay rate (us/s)	1.14229005151E-01		Apriori rate (us/s)		1.14223000603E-01		Resid rate (us/s)		6.00455E-06	+/- 3.3E-09	
Total phase (deg)			Apriori accel (us/s/s)		-4.67063841367E-06		Resid phase (deg)		0.6	+/- 17.8	
	RMS	Theor.	Amplitude	0.152 +/- 0.024		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	55.1	42.7	Search (2048X32)	0.132		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-4.000 4.000	
amp/seg (%)	60.5	74.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	22.6	25.2	Inc. seg. avg.	0.152		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.012 0.012	
amp/frq (%)	44.4	44.0	Inc. frq. avg.	0.147		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	X: az 118.4 el 63.5 pa -37.8		u,v (fr/asec) -858.442 -778.068						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/f232a/FRINGE/1234/No0003/BX..2XOWFQ		Output file: /Exps/f232a/FRINGE/1234/No0003/BX.W.26.2XOWFQ								

Mk4/DiFX fourfit 3.25 rev 0

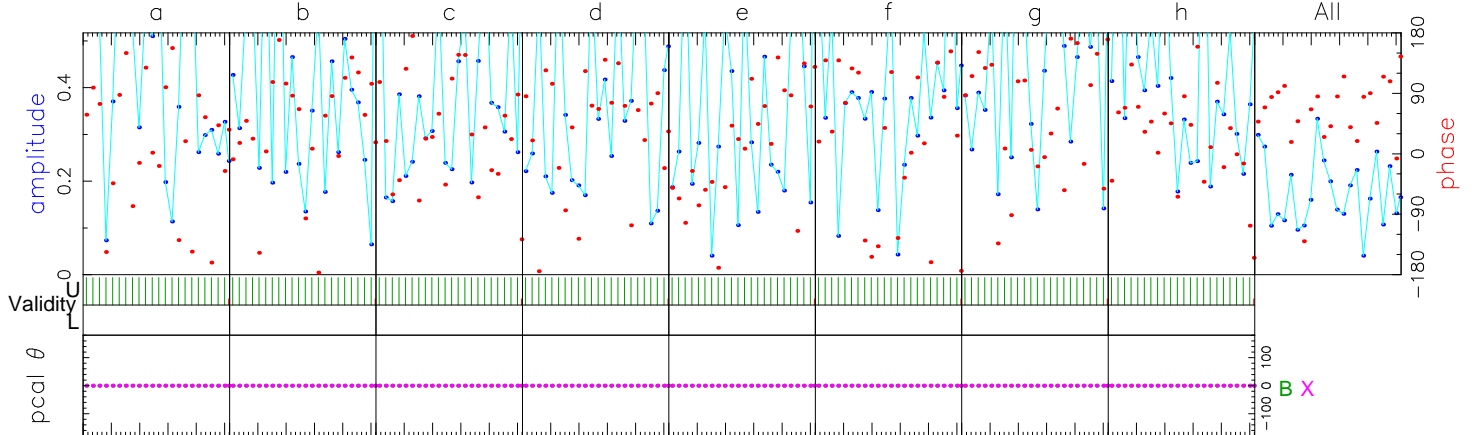
aux01

3C345.2XOWFQ, No0003, BX

EFLSBERG - ONSALA60, fgroup W, pol RL



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
56.7	73.3	43.3	69.2	-14.8	98.3	86.0	39.8	Phase	62.6
0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	Ampl.	0.2
567.3	146.5	516.0	564.6	555.0	1977.7	1287.8	635.0	Sbd box	640.3
U/L	600/0	600/0	600/0	600/0	600/0	600/0	600/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	Tracks	
								Chan ids	
								Tracks	

Group delay (usec) (SBD)	-2.15603411023E+02	Apriori delay (usec)	-2.14103073941E+02	Resid mbdelay (usec)	-3.37082E-04	+/-	1.6E-04
Sband delay (usec)	-2.15605741691E+02	Apriori clock (usec)	-1.3353635E+02	Resid sbdelay (usec)	-1.50267E+00	+/-	1.3E-03
Phase delay (usec)	-2.14103071923E+02	Apriori clockrate (us/s)	1.3800001E-06	Resid phdelay (usec)	2.01795E-06	+/-	5.5E-07
Delay rate (us/s)	1.14215133759E-01	Apriori rate (us/s)	1.14223000603E-01	Resid rate (us/s)	-7.86684E-06	+/-	3.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.67063841367E-06	Resid phase (deg)	62.6	+/-	17.1

ph/seg (deg)	49.3	Theor.	41.0	Amplitude	0.172 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	57.7	Search (2048X32)	0.138	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	38.5	Inc. seg. avg.	0.172	Inc. seg. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.0	Inc. frq. avg.	0.174	Inc. frq. avg.	0.174	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
						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 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) -858.442 -778.068 simultaneous interpolator

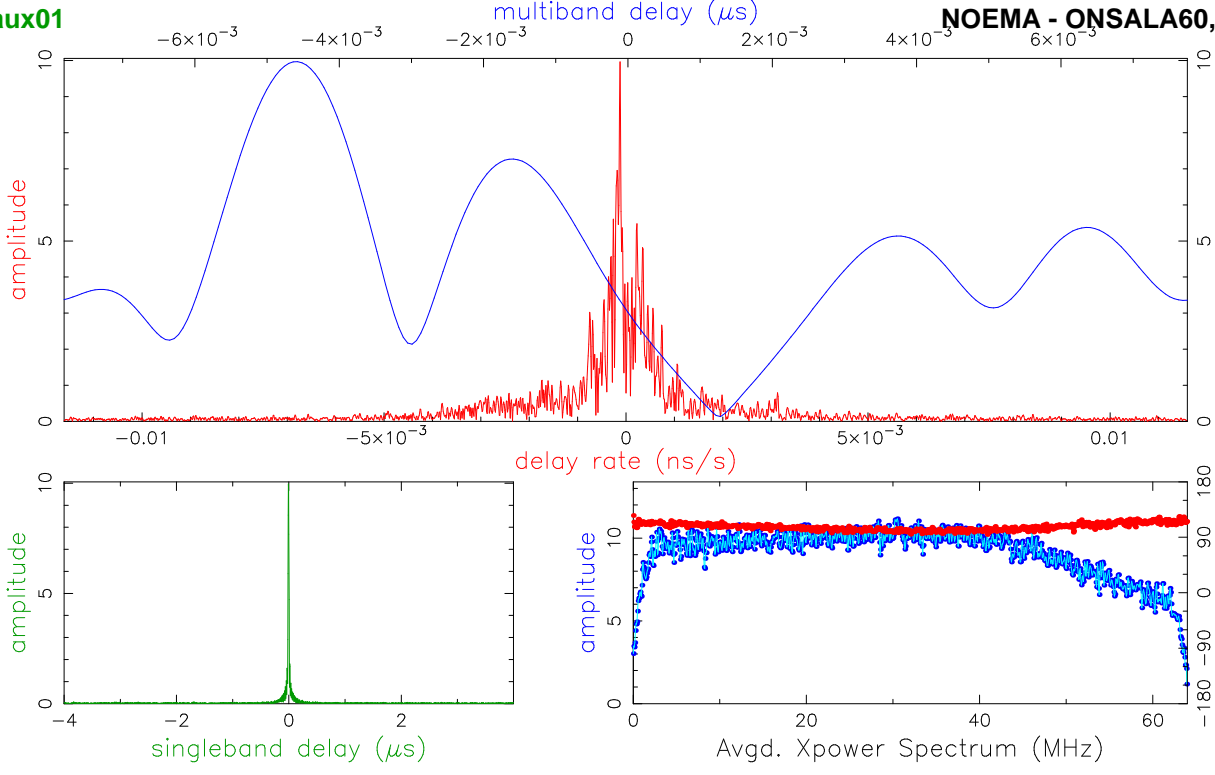
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/BX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/BX.W.33.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

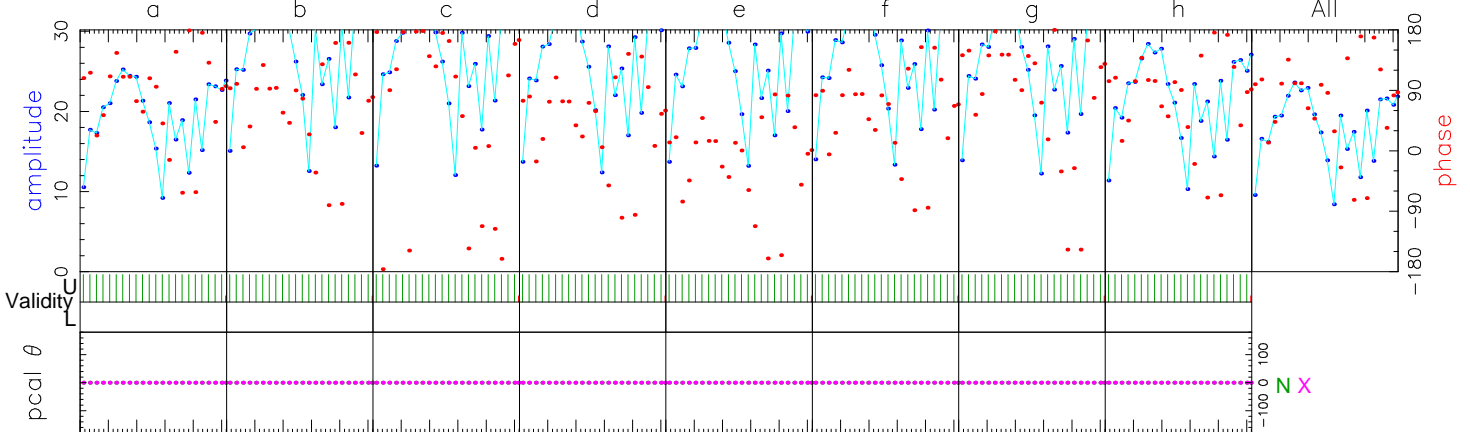
3C345.2XOWFQ, No0003, NX

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



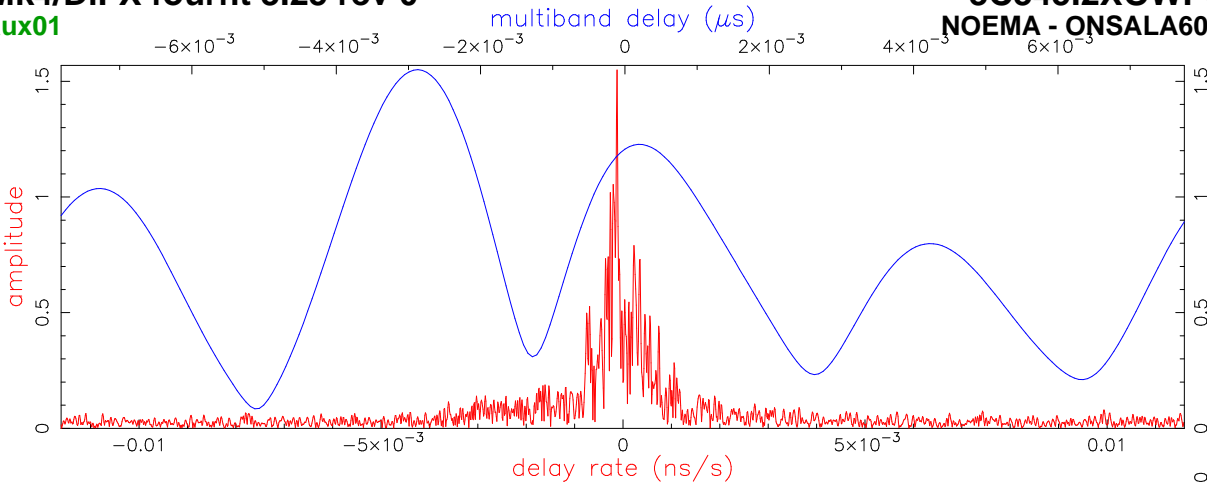
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	92.6	75.4	160.1	55.7	-4.1	65.9	125.1	86.4	Phase	82.6	
	10.8	15.4	15.1	14.6	14.4	14.7	14.4	12.1	Ampl.	13.9	
	1024.5	1023.2	1022.7	1022.5	1022.3	1022.7	1023.0	1024.0	Sbd box	1023.3	
U/L	600/0	600/0	600/0	600/0	600/0	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)			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

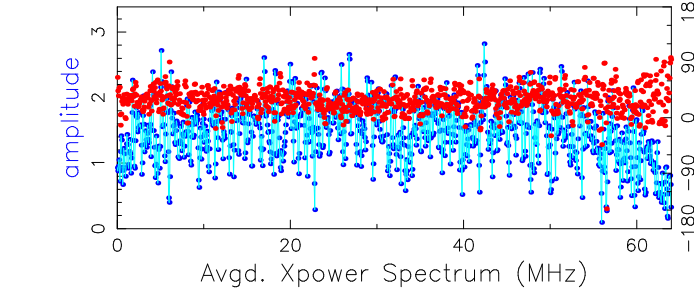
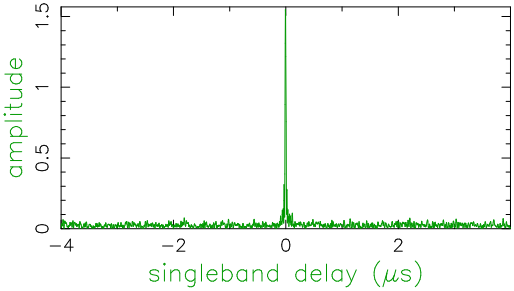
3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol LR



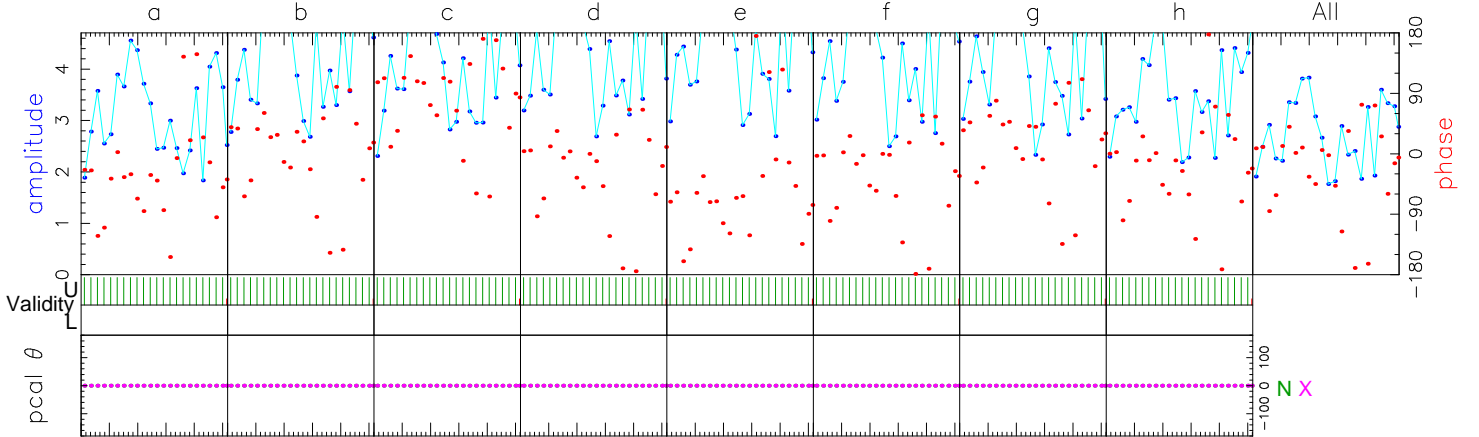
Fringe quality 1

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	Theor.	Amplitude	1.569 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	86.0	65.1	3.7	Search (2048X32)	1.533	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000	
ph/frq (deg)	57.3	86.0	6.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.2	57.3	2.2	Inc. seg. avg.	2.740	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012 0.012	
		48.2	3.8	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

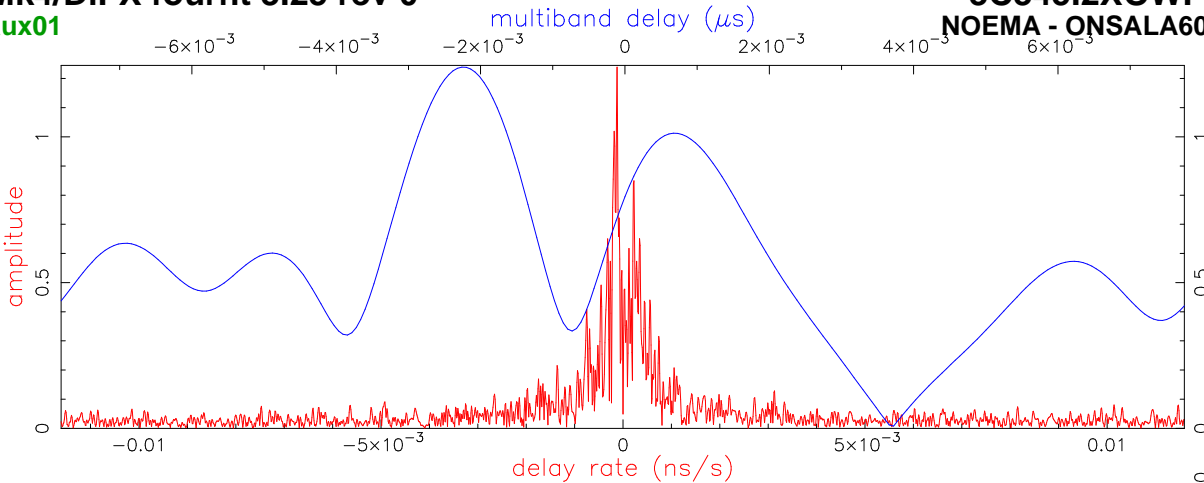
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.27.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

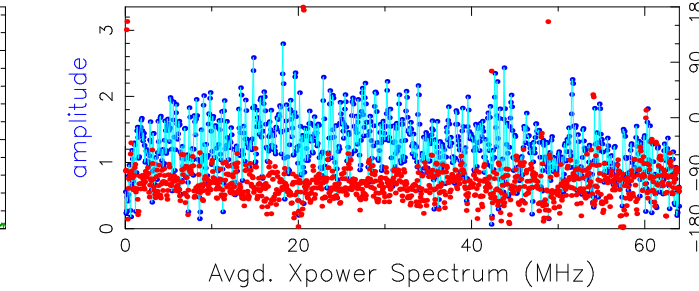
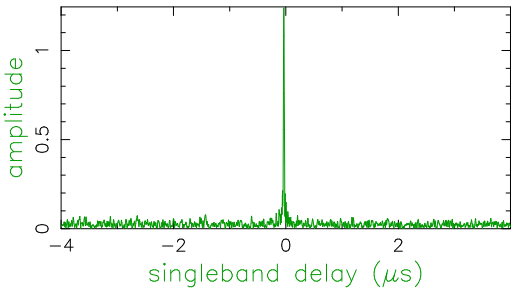
3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol RL



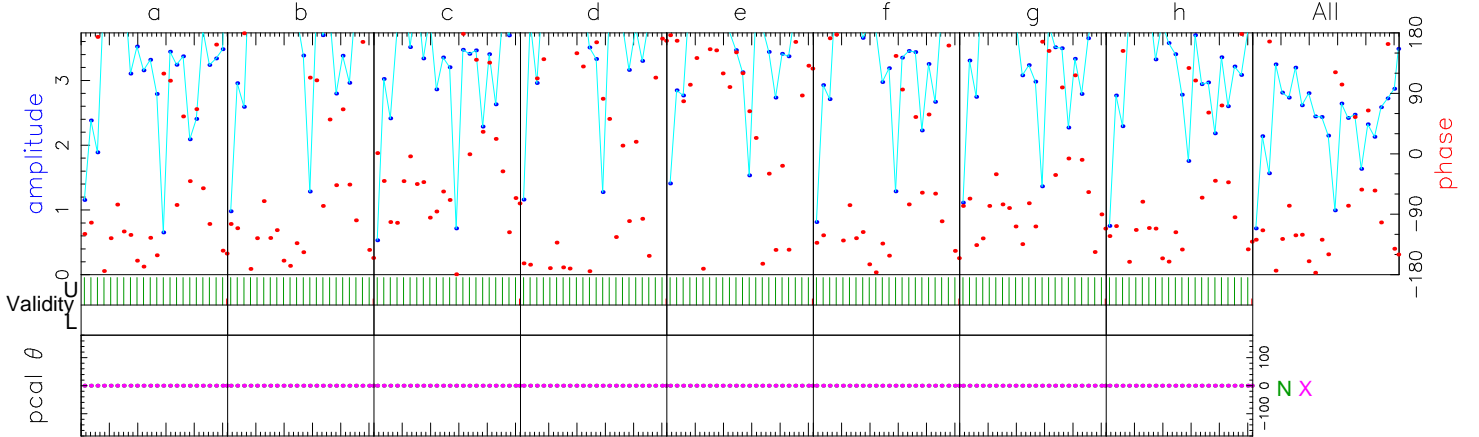
Fringe quality 1

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 Search (2048X32)	1.180	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	102.8	8.1	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)	54.7	2.7	Inc. seg. avg.	2.352	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 (%)	45.1	4.8	Inc. frq. avg.	1.787	Data rate(Mb/s): 2048		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

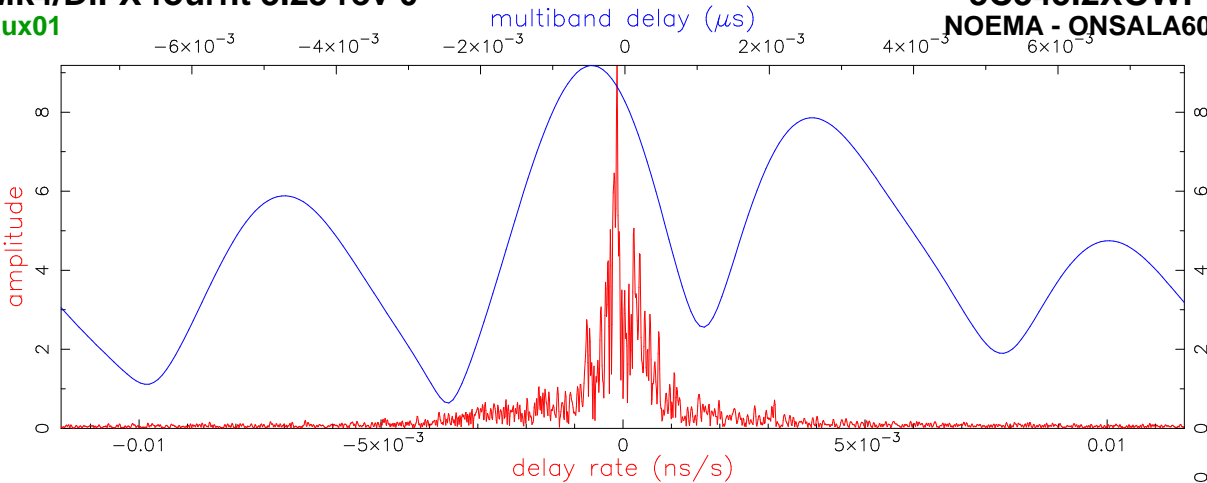
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/NX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/NX.W.35.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

aux01

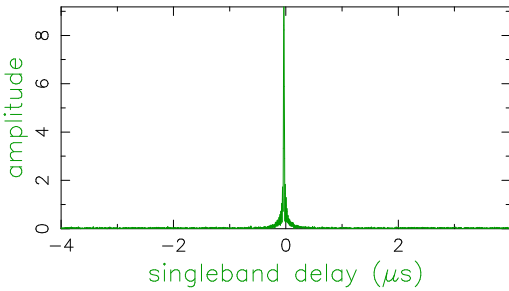
3C345.2XOWFQ, No0003, NX

NOEMA - ONSALA60, fgroup W, pol LL

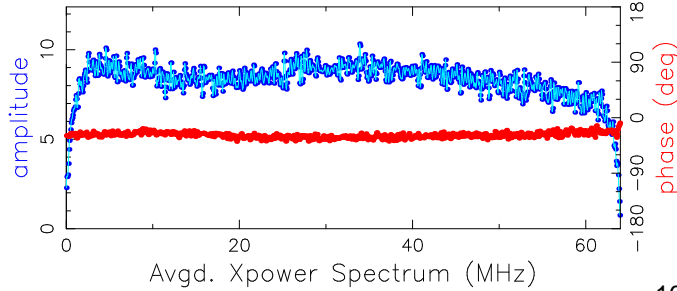


Fringe quality 1

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

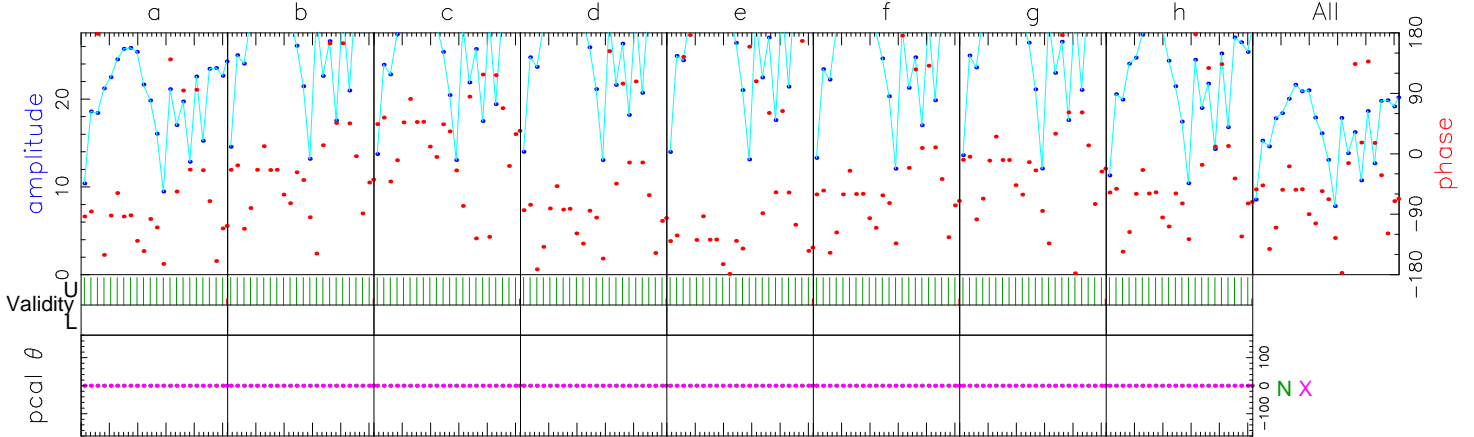


delay rate (ns/s)



Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071713
 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	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	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

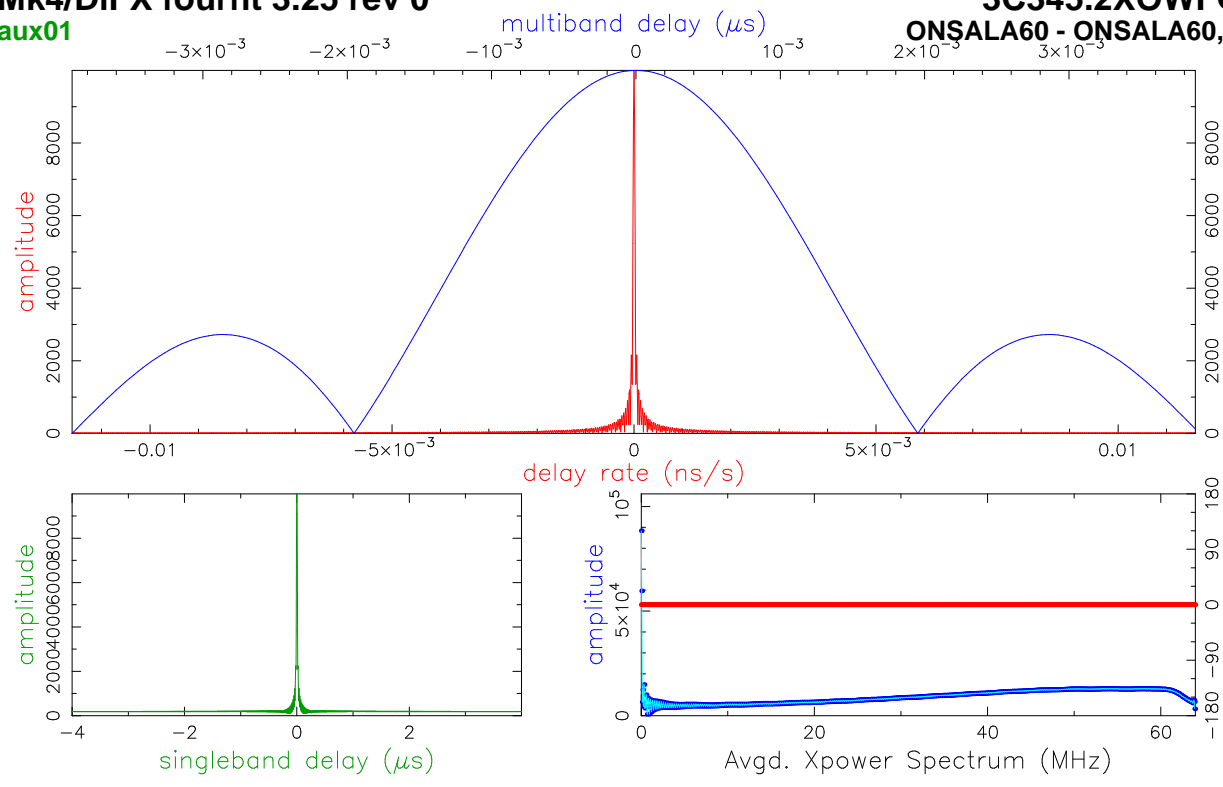
ph/seg (deg)	66.0	Theor.	Amplitude	9.184 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	90.1	0.6	Search (2048X32)	9.072	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	58.9	1.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	54.5	0.4	Inc. seg. avg.	16.494	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
		0.7	Inc. frq. avg.	13.990	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.5.2XOWFQ

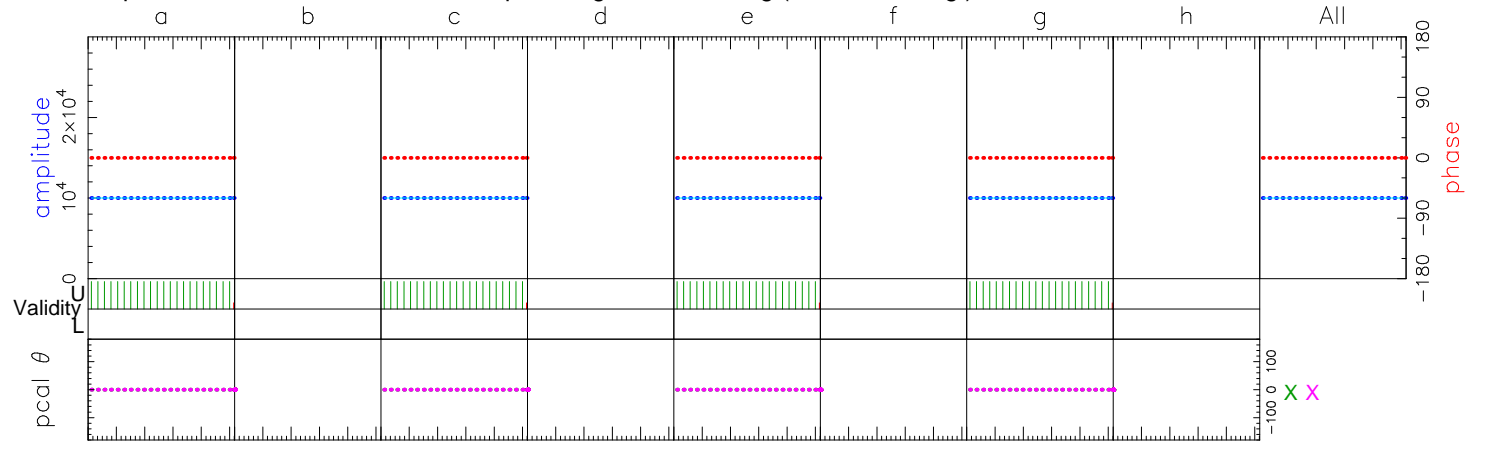
Mk4/DiFX fourfit 3.25 rev 0
aux01

3C345.2XOWFQ, No0003, XX
ON\$ALA60 - ON\$ALA60, fgroup W, pol RR



Fringe quality 7
Error code D
SNR 334882.8
Int time 149.965
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., 23 segs, 27 APs / seg (13.50 sec / seg.), time ticks 10 sec



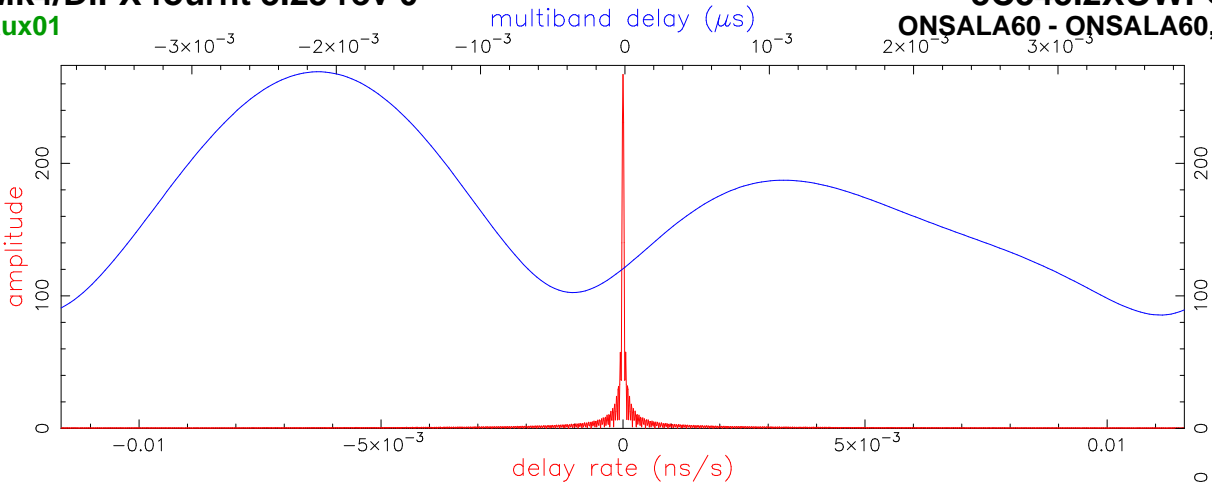
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
Validity	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0	
U/L	600/0	0/0	600/0	0/0	600/0	0/0	600/0	0/0	Sbd box	1025.0	
X	1000	1000	1000	1000	1000	1000	1000	1000	APs used		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
X	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec) (SBD)	0.000000000000E+00								Resid mbdelay (usec)	0.00000E+00 +/- 2.8E-09	
Sband delay (usec)	0.000000000000E+00								Resid sbdelay (usec)	0.00000E+00 +/- 2.6E-08	
Phase delay (usec)	0.000000000000E+00								Resid phdelay (usec)	0.00000E+00 +/- 1.1E-11	
Delay rate (us/s)	0.000000000000E+00								Resid rate (us/s)	0.00000E+00 +/- 1.3E-13	
Total phase (deg)		0.0							Resid phase (deg)	0.0 +/- 0.0	
ph/seg (deg)	0.0	0.0	Search (2048X16)	10000.000	9999.999 +/- 0.030	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	0.0	0.0	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-4.000 4.000	
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.004 0.004
amp/frq (%)	70.7	0.0	Inc. frq. avg.	10000.000		Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us		dr window (ns/s)		-0.012 0.012	
X: az 118.4 el 63.5 pa -37.8	X: az 118.4 el 63.5 pa -37.8		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
simultaneous interpolator											
Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/XX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/XX.W.12.2XOWFQ											

Mk4/DiFX fourfit 3.25 rev 0

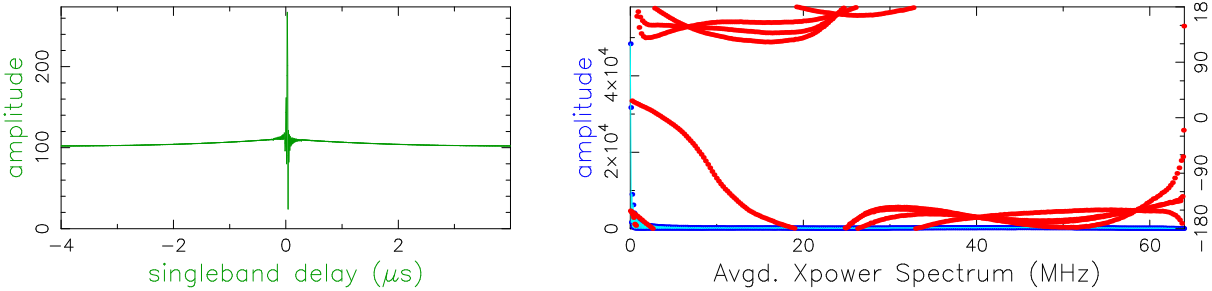
aux01

3C345.2XOWFQ, No0003, XX

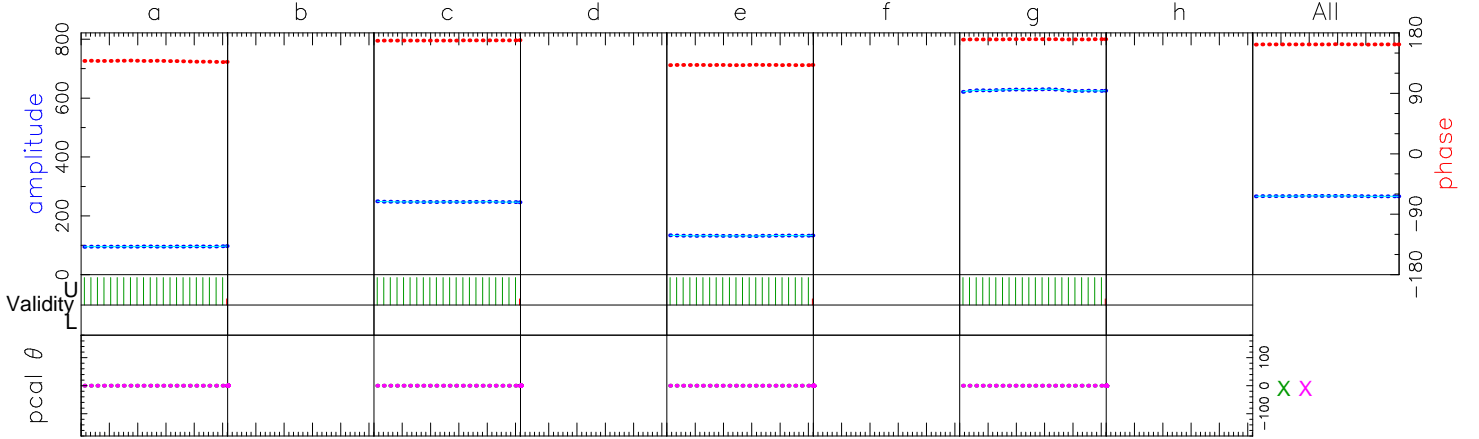
ONSALA60 - ONSALA60, fgroup W, pol LR



Fringe quality 5
 Error code D
 SNR 9174.0
 Int time 149.965
 Amp 273.948
 Phase 162.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.025682
 MBD -0.002269
 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
 2023:286:071725
 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	600/0	0/0	600/0	0/0	600/0	0/0	600/0	0/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	2.89807187500E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.26928E-03	+/-	1.0E-07
Sband delay (usec)	2.56817500000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.56818E-02	+/-	9.4E-07
Phase delay (usec)	5.24715587888E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.24716E-06	+/-	4.0E-10
Delay rate (us/s)	-3.70037148827E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.70037E-11	+/-	4.7E-12
Total phase (deg)	162.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	162.7	+/-	0.0

ph/seg (deg)	0.1	0.0	Amplitude	273.948 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.5	0.0	Search (2048X16)	266.218	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -4.000 4.000
ph/frq (deg)	133.9	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	89.1	0.0	Inc. seg. avg.	267.127	Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.012 0.012
			Inc. frq. avg.	275.667	Data rate(Mb/s): 1024	nlags: 1024 t_cohere infinite

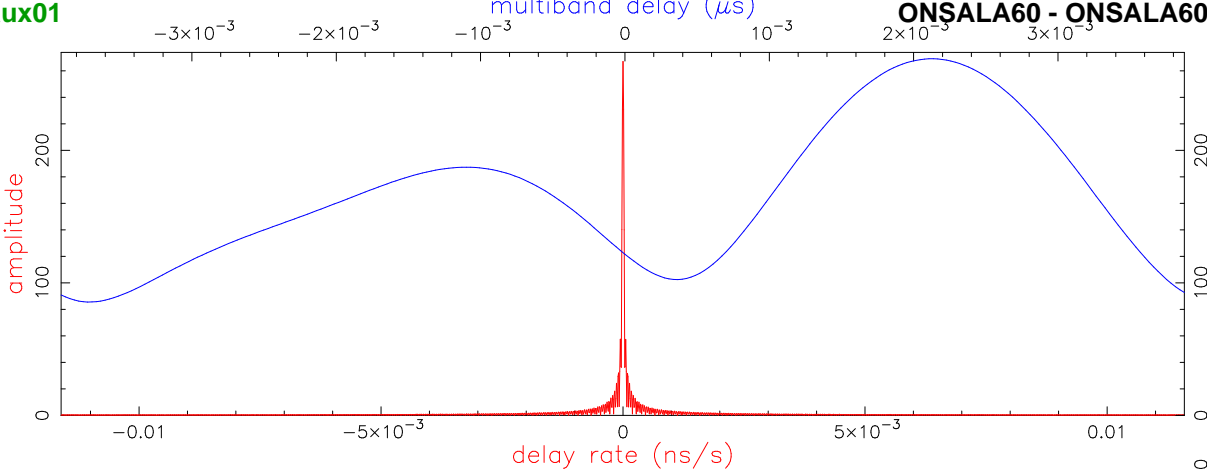
X: az 118.4 el 63.5 pa -37.8 X: az 118.4 el 63.5 pa -37.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/XX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/XX.W.16.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

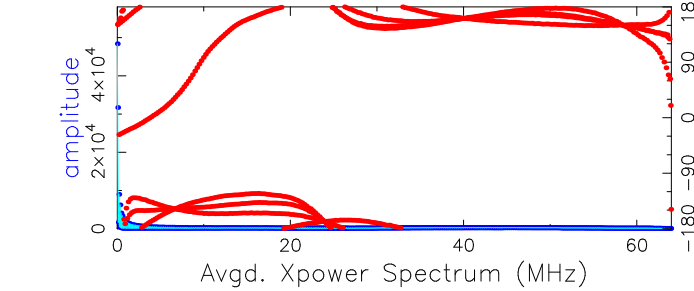
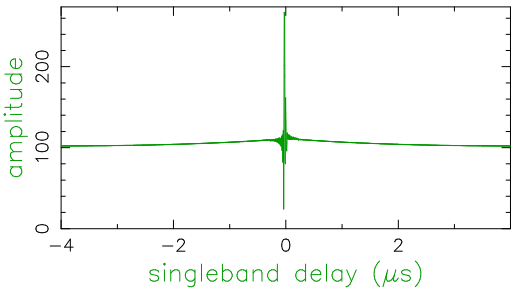
aux01

3C345.2XOWFQ, No0003, XX

ONSALA60 - ONSALA60, fgroup W, pol RL

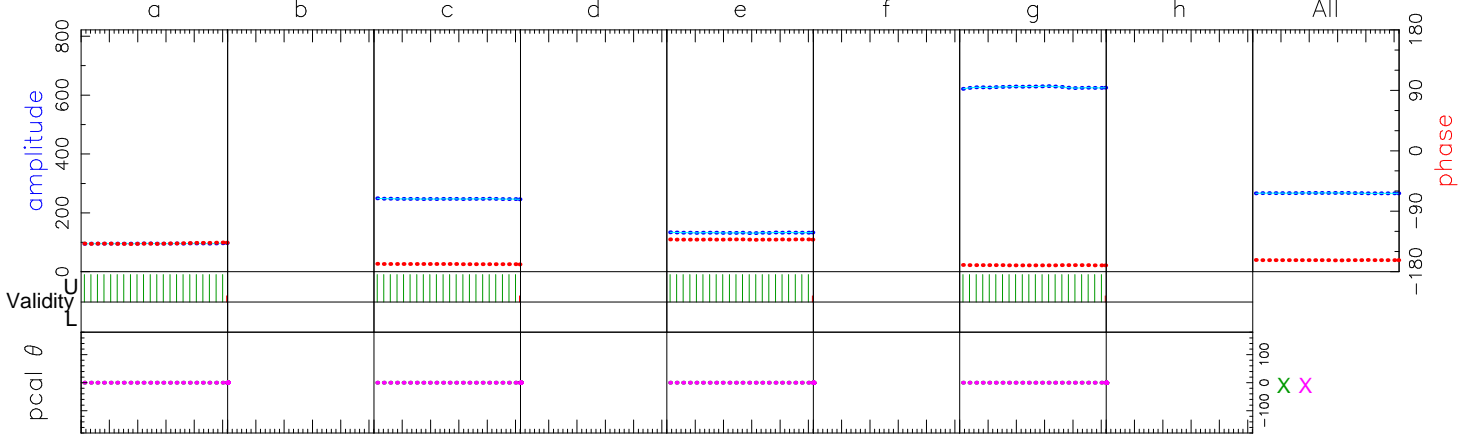


Fringe quality 5
 Error code D
 SNR 9174.0
 Int time 149.965
 Amp 273.948
 Phase -162.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.025682
 MBD 0.002269
 Fringe rate (Hz)
 0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.500
 Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071732
 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
	-137.9	0.0	-168.6	0.0	-132.1	0.0	-170.3	0.0	Phase	-162.7
	95.8	0.0	247.5	0.0	132.6	0.0	626.7	0.0	Ampl.	275.7
	1017.0	0.0	1017.4	0.0	1024.2	0.0	1018.8	0.0	Sbd box	1018.4
U/L	600/0	0/0	600/0	0/0	600/0	0/0	600/0	0/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.89807187500E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.26928E-03	+/-	1.0E-07
Sband delay (usec)	-2.56817500000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.56818E-02	+/-	9.4E-07
Phase delay (usec)	-5.24715587890E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.24716E-06	+/-	4.0E-10
Delay rate (us/s)	3.70037148827E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.70037E-11	+/-	4.7E-12
Total phase (deg)	-162.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-162.7	+/-	0.0

ph/seg (deg)	0.1	0.0	Search (2048X16)	273.948 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
amp/seg (%)	2.5	0.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	133.9	0.0	Inc. seg. avg.	267.127	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.012	0.012
amp/frq (%)	89.1	0.0	Inc. frq. avg.	275.667	Data rate(Mb/s): 1024	nlags: 1024 t_cohere infinite	ion window (TEC)	0.00	0.00

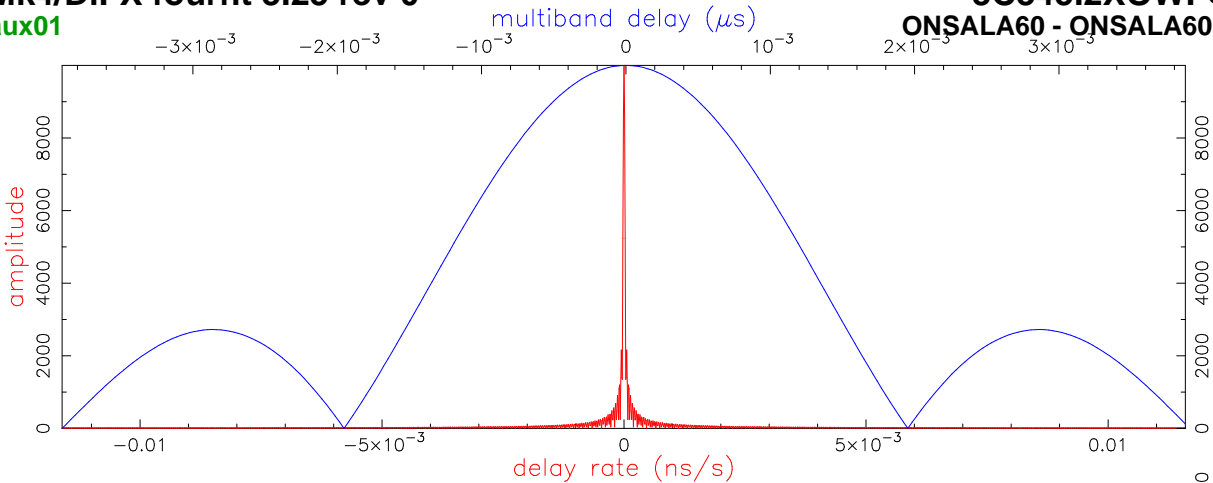
X: az 118.4 el 63.5 pa -37.8 X: az 118.4 el 63.5 pa -37.8 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/f232a/FRINGE/1234/No0003/XX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/XX.W.25.2XOWFQ

Mk4/DiFX fourfit 3.25 rev 0

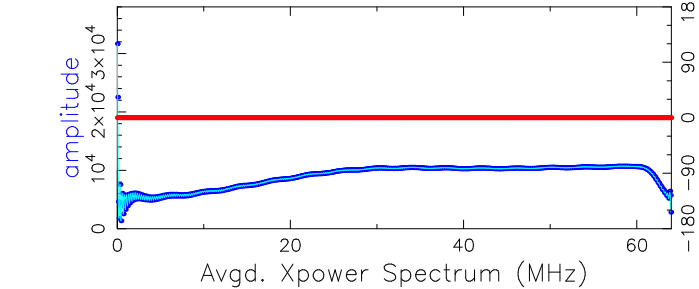
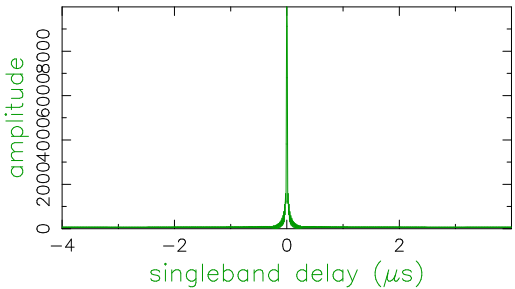
aux01

3C345.2XOWFQ, No0003, XX

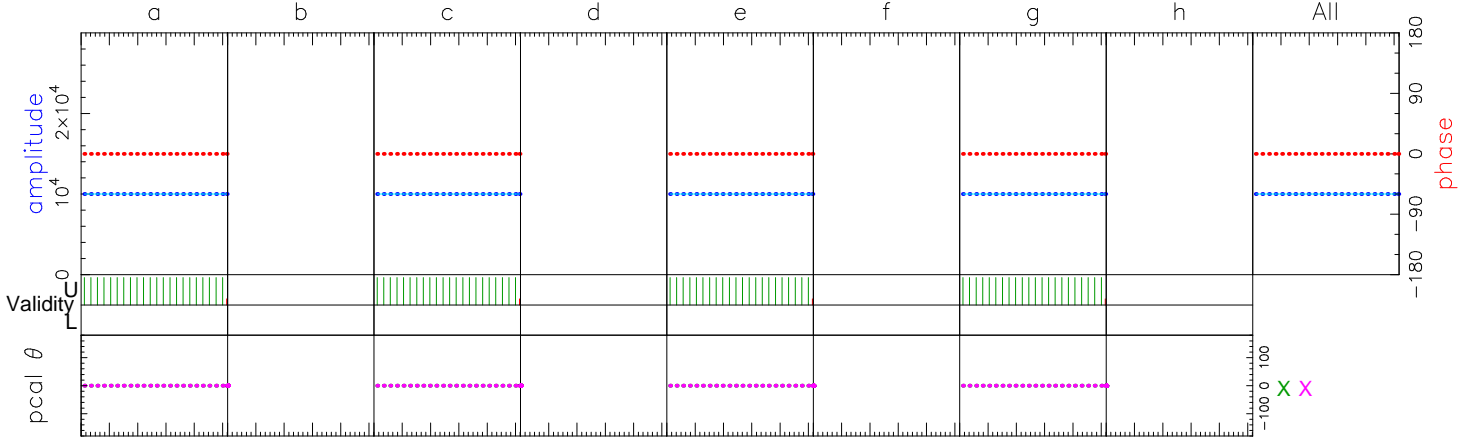
ONSALA60 - ONSALA60, fgroup W, pol LL



Fringe quality 7
 Error code D
 SNR 334882.8
 Int time 149.965
 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
 2023:286:071710
 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	0/0	600/0	0/0	600/0	0/0	600/0	0/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.8E-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

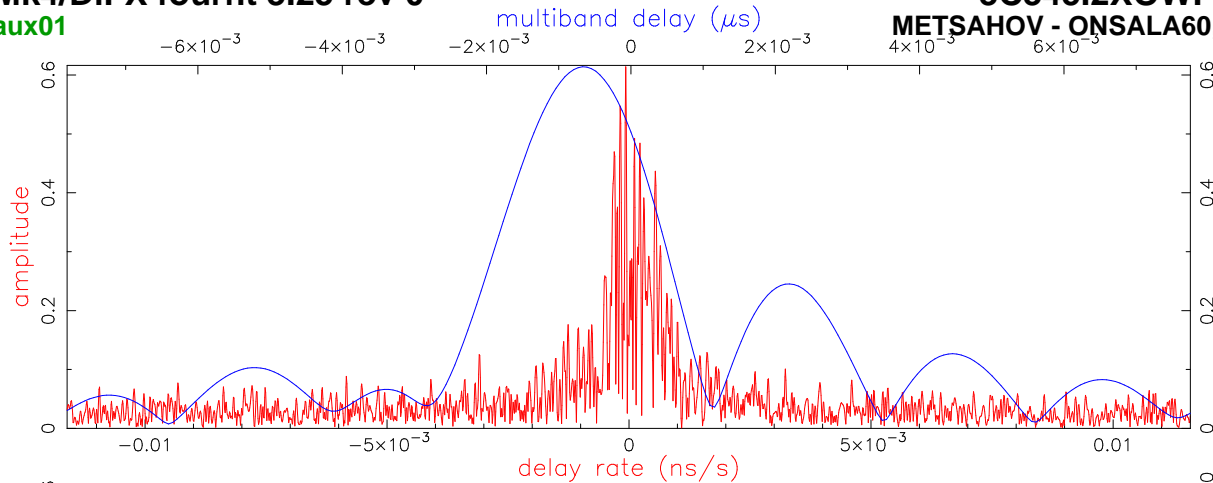
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X16) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 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
 X: az 118.4 el 63.5 pa -37.8 X: az 118.4 el 63.5 pa -37.8 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/XX..2XOWFQ Output file: /Exps/f232a/FRINGE/1234/No0003/XX.W.4.2XOWFQ simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

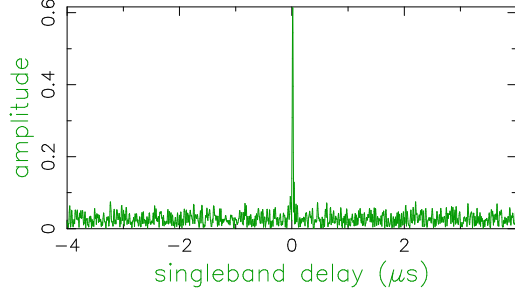
3C345.2XOWFQ, No0003, ZX

METSAHOV - ONSALA60, fgroup W, pol RR

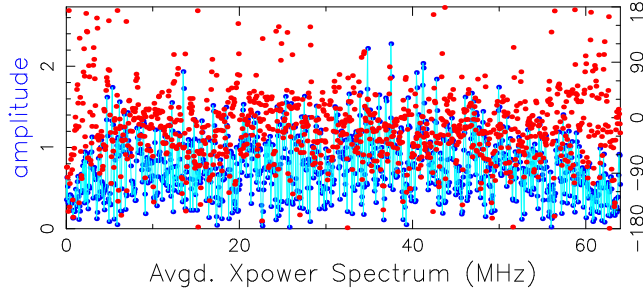


Fringe quality 6

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

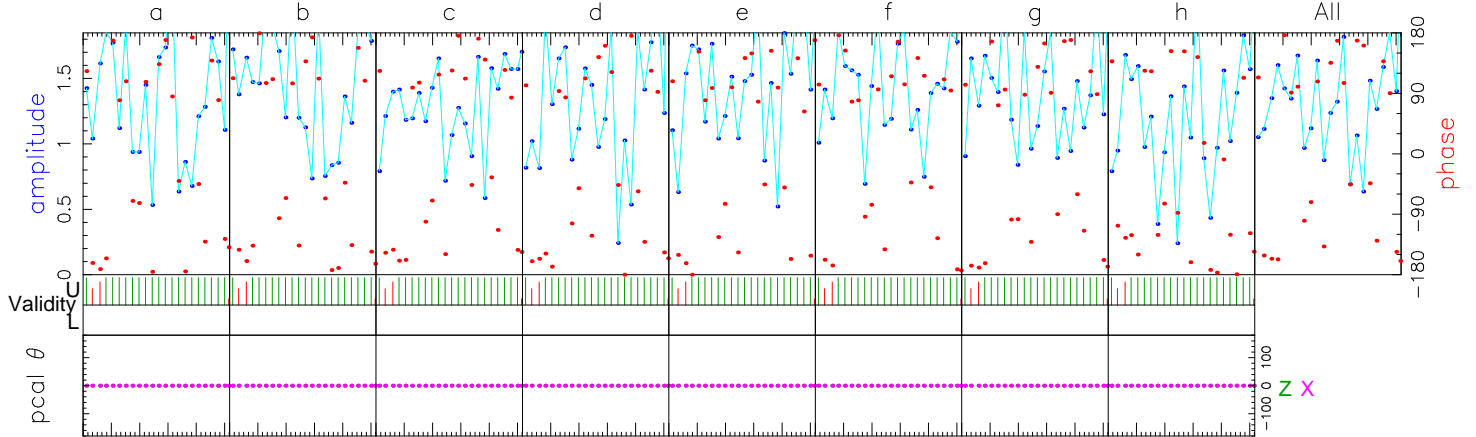


delay rate (ns/s)



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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		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)	-6.26245333796E-07	Resid phase (deg)	160.8	+/-	4.0

ph/seg (deg)	72.4	Theor.	9.5	Amplitude	0.616 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	125.5	Search (2048X32)	0.595	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000	4.000	
ph/frq (deg)	15.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	9.5	Inc. seg. avg.	1.292	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.012	0.012	
		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

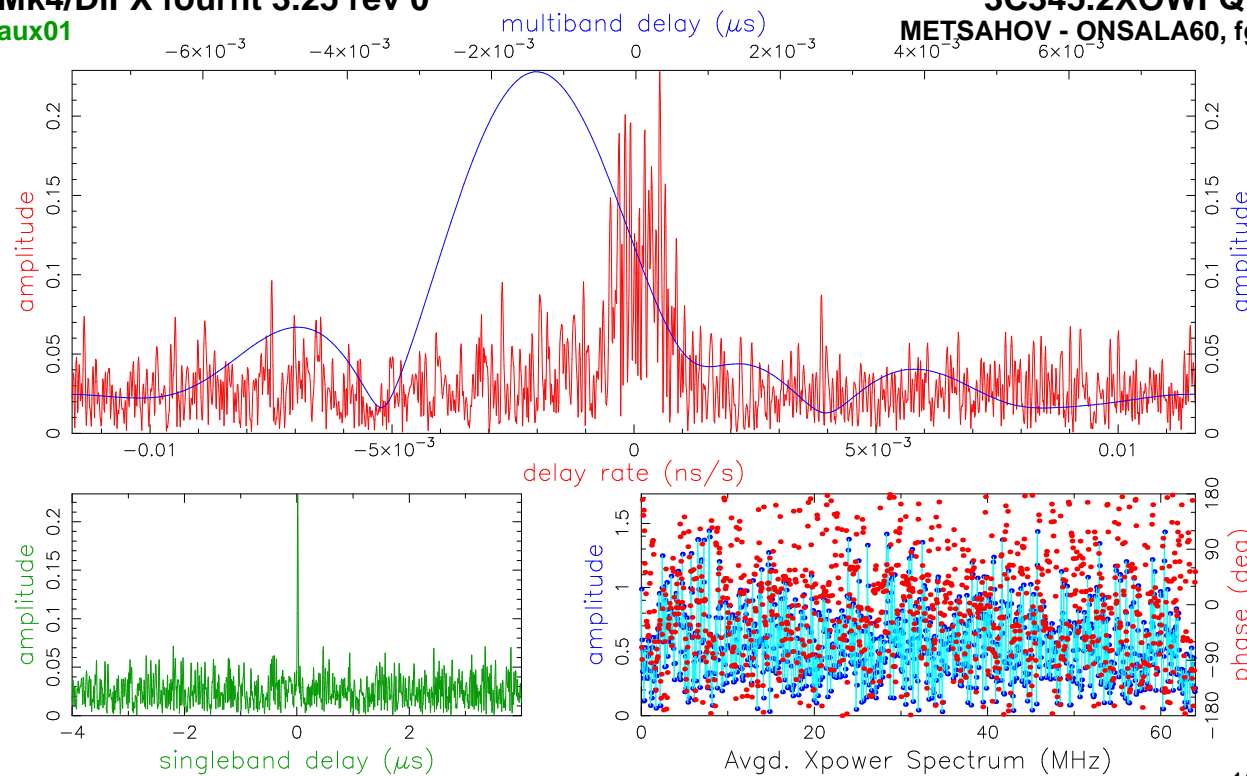
aux01

3C345.2XOWFQ, No0003, ZX

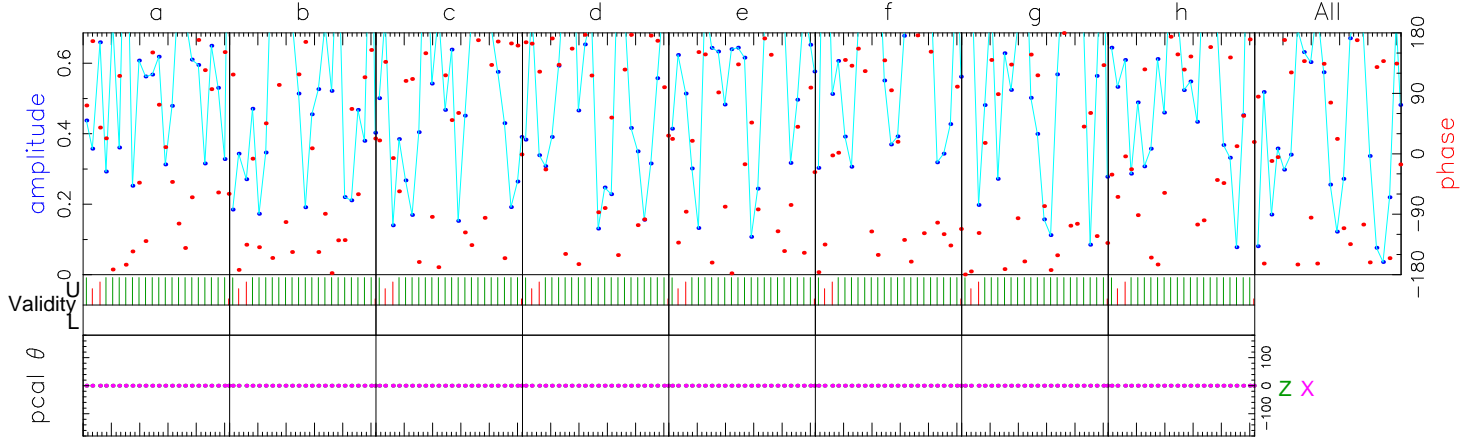
METSAHOV - ONSALA60, fgroup W, pol LR

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



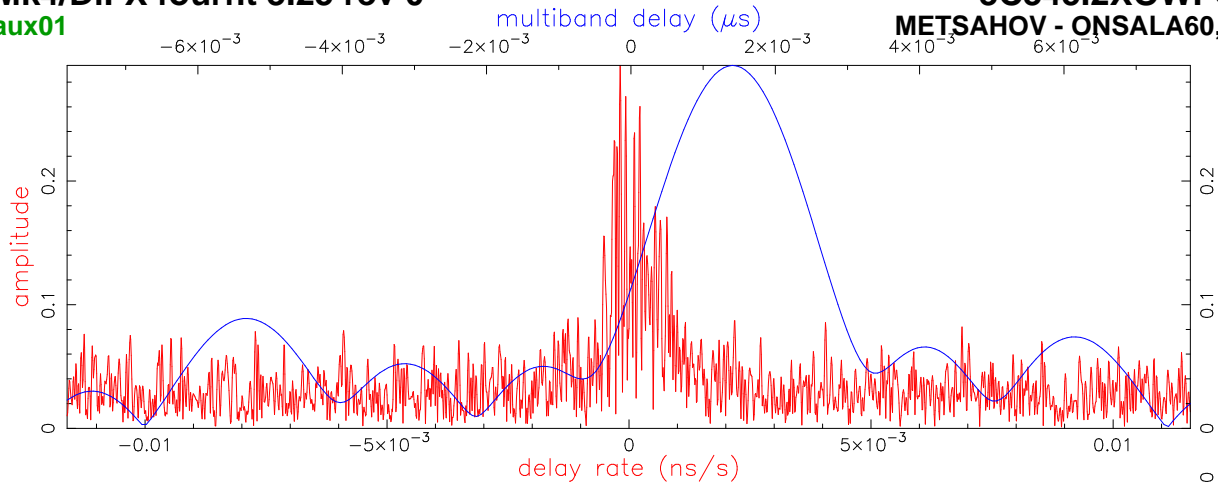
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-159.7	-157.6	175.8	164.5	-177.0	-171.8	-173.1	-154.7	Phase	-174.6	
	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.1	Ampl.	0.2	
	1929.3	1028.0	1027.3	1028.8	1644.8	1029.0	1029.4	1828.1	Sbd box	1028.8	
U/L	592/0	592/0	592/0	592/0	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		
									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	
	RMS	Theor.	Amplitude	0.229 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	80.7	25.5	Search (2048X32)	0.226		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	136.0	44.6	Interp.	0.000		Bits/sample: 2x2		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		dr window (ns/s)	-0.012	0.012	
amp/frq (%)	35.1	26.5	Inc. frq. avg.	0.226		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.29.2XOWFQ								

Mk4/DiFX fourfit 3.25 rev 0

aux01

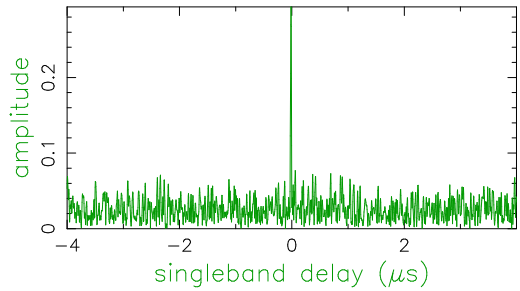
3C345.2XOWFQ, No0003, ZX

METSAHOV - ONSALA60, fgroup W, pol RL

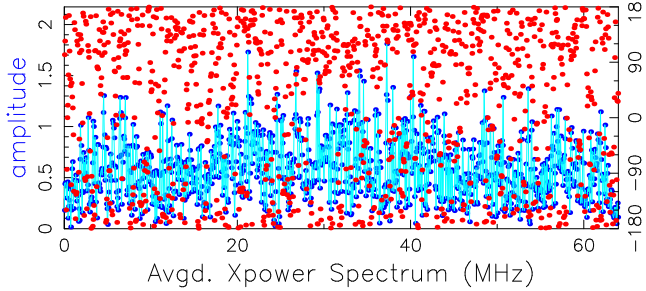


Fringe quality 9

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

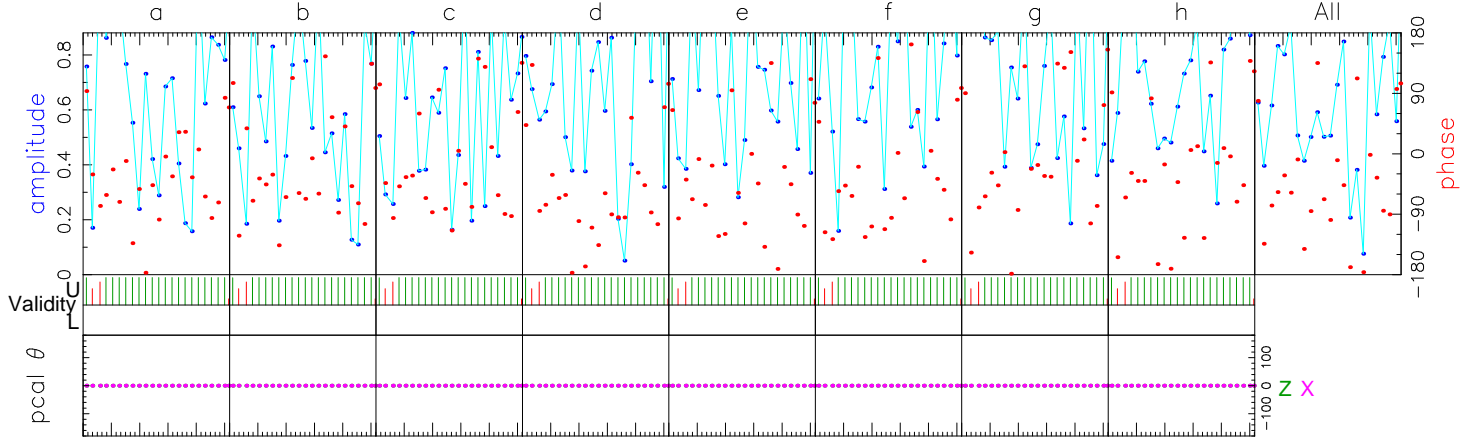


delay rate (ns/s)



Exp. f232a
 Exper # 1234
 Yr:day 2023:285
 Start 123000.00
 Stop 123500.00
 FRT 123230.00
 Corr/FF/build
 2023:285:210221
 2023:286:071750
 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



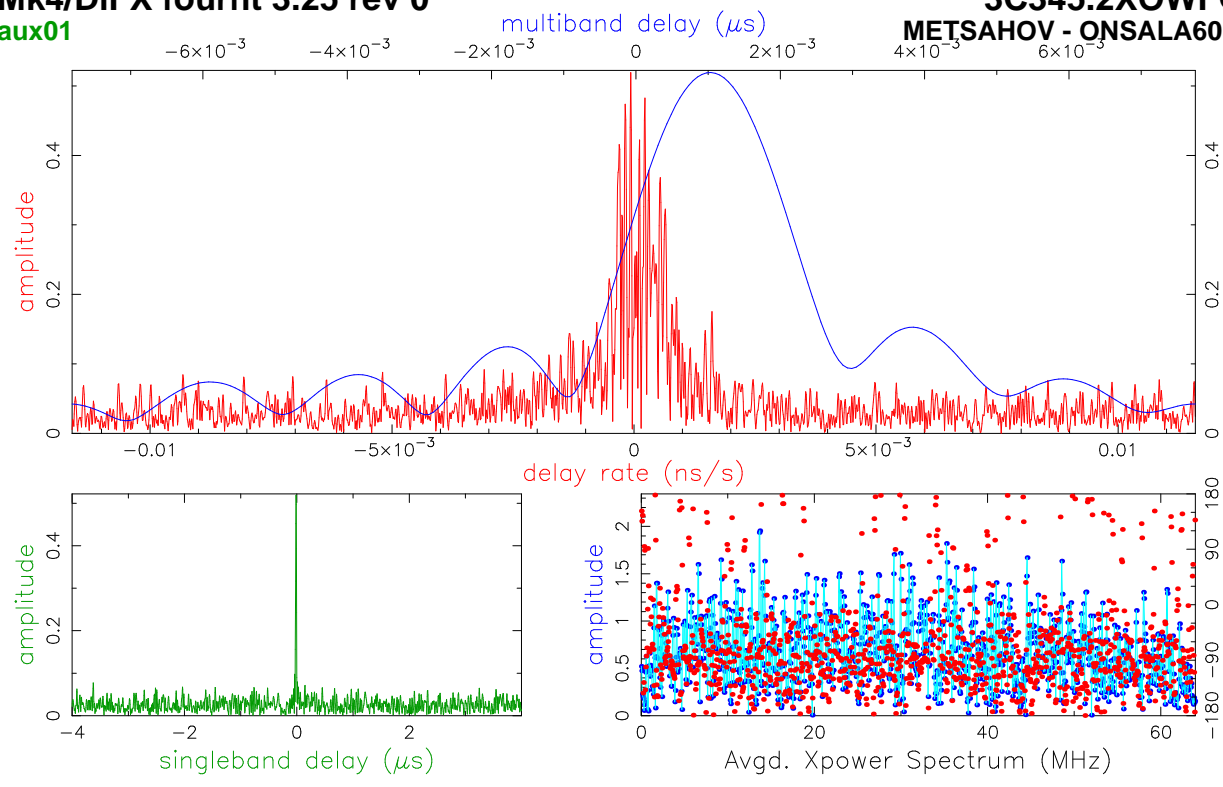
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.7	-49.0	-41.8	-75.8	-57.6	-60.7	-48.6	-36.1	Phase	-52.8
	0.4	0.2	0.3	0.4	0.3	0.3	0.2	0.3	Ampl.	0.3
	1020.4	1133.9	1021.2	1021.6	1021.1	1020.9	1245.3	1020.9	Sbd box	1021.0
U/L	592/0	592/0	592/0	592/0	592/0	592/0	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	

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	sb window (us)	-4.000	4.000
ph/seg (deg)	84.8	19.9	Search (2048X32)	0.291	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	133.4	34.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
ph/frq (deg)	14.0	11.8	Inc. seg. avg.	0.575	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	22.2	20.6	Inc. frq. avg.	0.295	Data rate(Mb/s): 2048	nlags: 1024 t_cohere infinite			

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

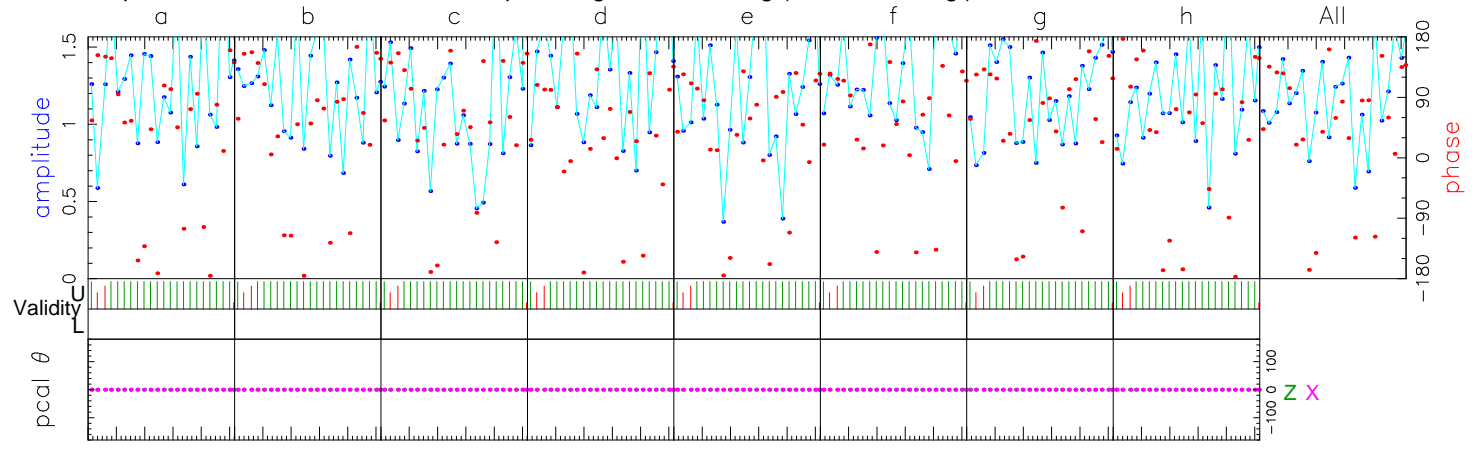


Fringe quality 7

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	Mani PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	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							