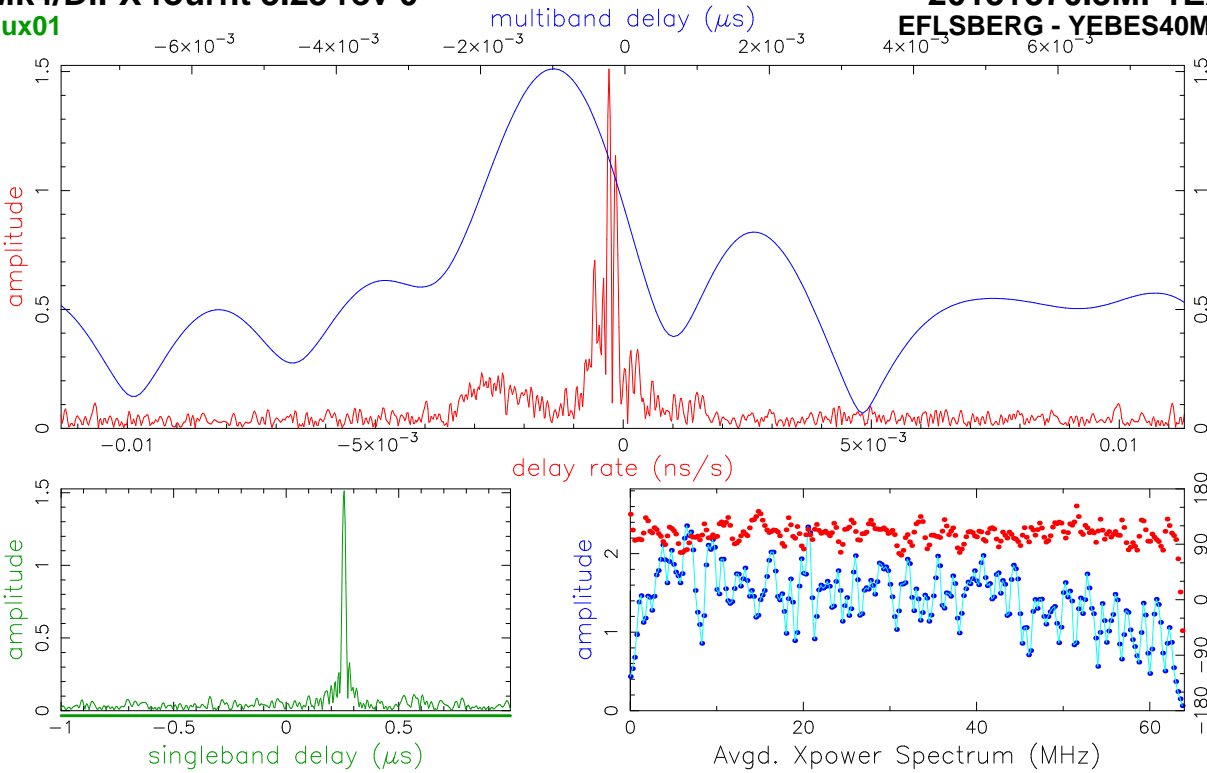


Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, BY

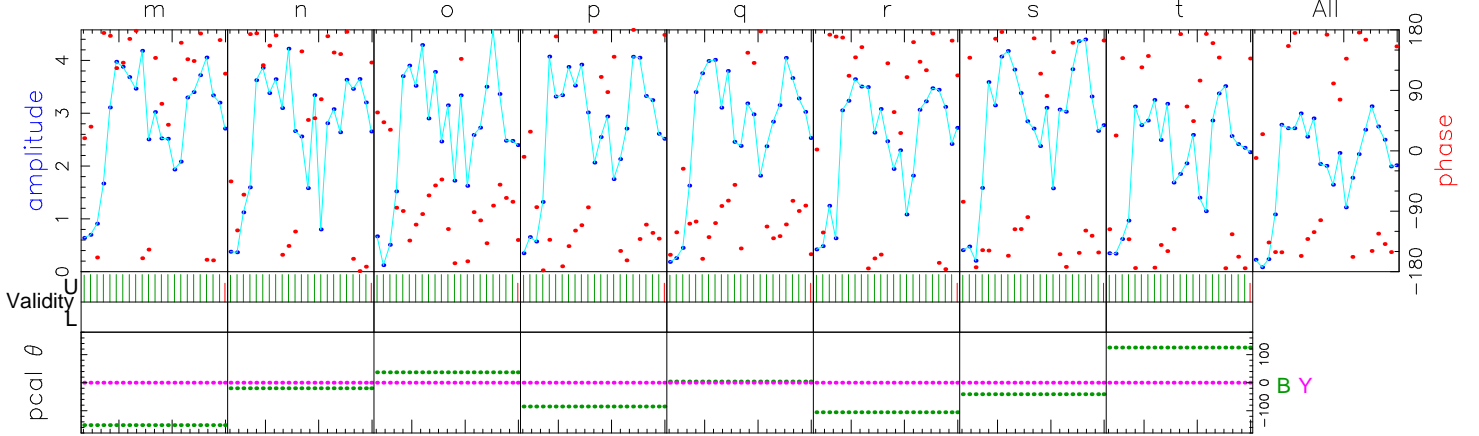
EFLSBERG - YEBES40M, fgroup W, pol LL



Fringe quality 2

SNR 53.2
 Int time 162.292
 Amp 1.526
 Phase -164.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.256535
 MBD -0.001027
 Fringe rate (Hz)
 -0.024020
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102648
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	156.2	170.5	-96.5	-150.0	-116.2	154.7	-160.7	172.6	Phase	-164.4
	2.1	1.9	2.0	1.9	2.0	1.8	2.1	1.5	Ampl.	1.9
	322.5	322.2	322.5	322.7	322.4	322.1	322.4	321.2	Sbd box	322.7
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.40071540414E+03	Apriori delay (usec)	3.40046643065E+03	Resid mbdelay (usec)	-1.02651E-03	+/-	2.0E-05
Sband delay (usec)	3.40072296565E+03	Apriori clock (usec)	7.5212791E+01	Resid sbdelay (usec)	2.56535E-01	+/-	1.6E-04
Phase delay (usec)	3.40046642535E+03	Apriori clockrate (us/s)	1.2662300E-06	Resid phdelay (usec)	-5.30196E-06	+/-	7.0E-08
Delay rate (us/s)	-1.71747849483E-01	Apriori rate (us/s)	-1.71747570637E-01	Resid rate (us/s)	-2.78846E-07	+/-	7.4E-10
Total phase (deg)	-43.4	Apriori accel (us/s/s)	-9.33566500734E-06	Resid phase (deg)	-164.4	+/-	2.2

ph/seg (deg)	64.7	RMS	5.2	Theor.	1.526 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.8	Search (1024X32)	1.472	Amplitude		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.8	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.0	Inc. seg. avg.	2.018	Inc. frq. avg.	1.905	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	1.905			Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

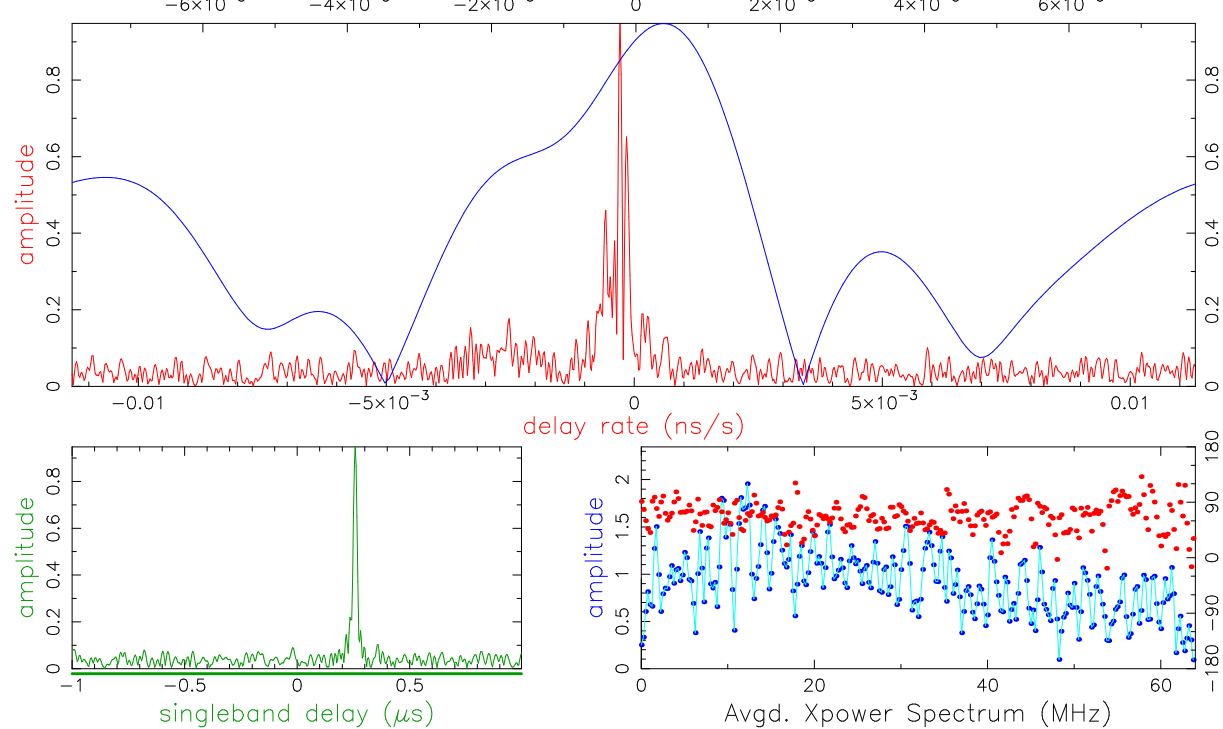
B: az 72.0 el 35.1 pa -49.5 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) 1230.360 296.325 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BY.W.40.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

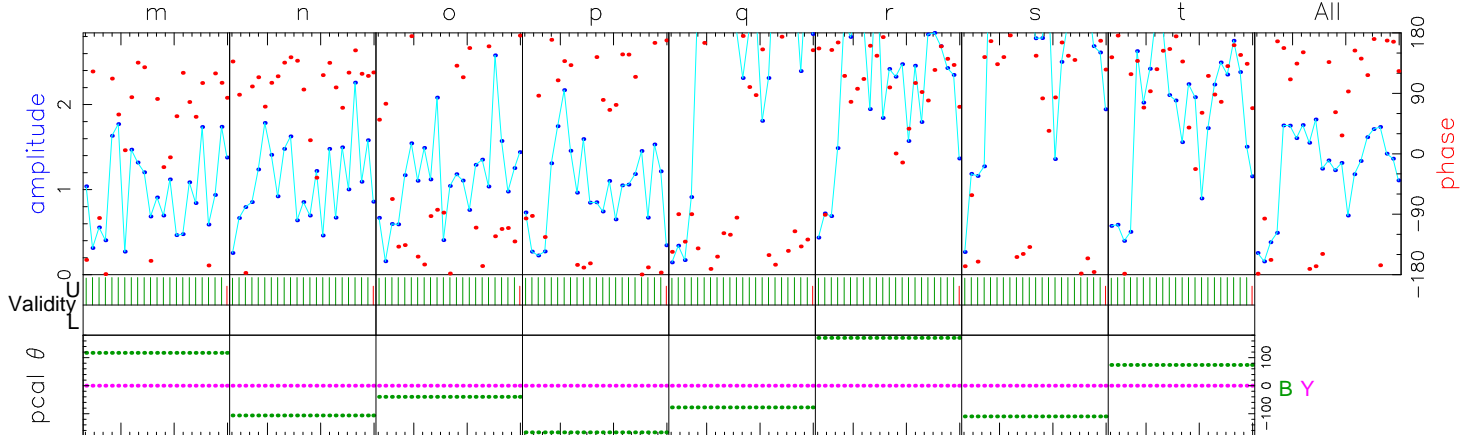
2013+370.3MP1EA, No0232, BY

EFLSBERG - YEBES40M, fgroup W, pol RR



Fringe quality 3
 Error code G
 SNR 33.0
 Int time 162.292
 Amp 0.948
 Phase 152.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.257763
 MBD 0.000379
 Fringe rate (Hz)
 -0.023912
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



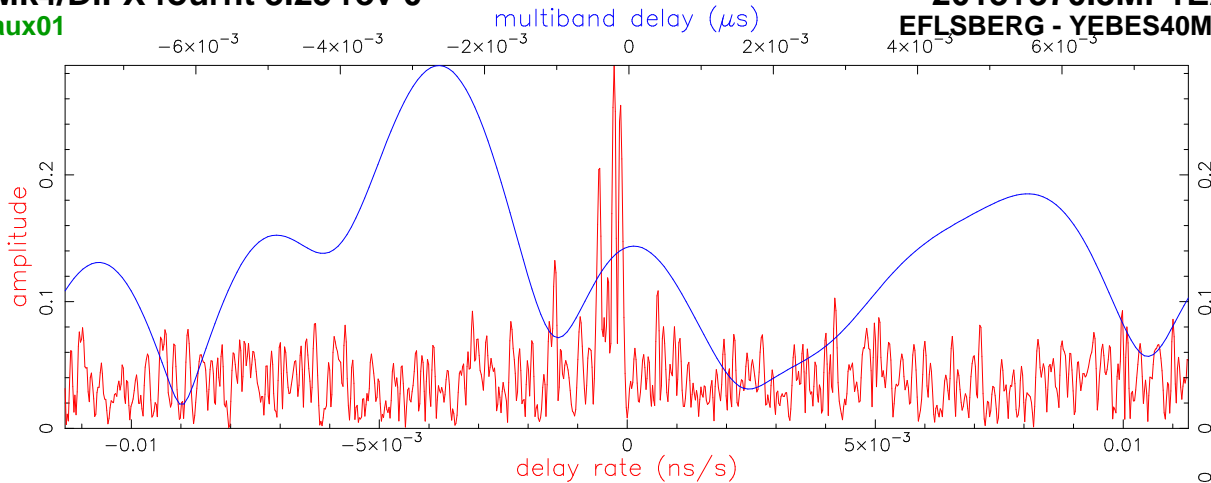
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	99.9	114.1	-145.1	152.4	-156.4	112.8	165.9	120.6	Phase	152.2	
	0.6	0.9	0.8	0.8	1.9	1.5	2.0	1.3	Ampl.	1.2	
	322.2	322.2	322.6	323.0	322.8	322.3	322.9	321.5	Sbd box	323.0	
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used		
B	0	0	0	0	0	0	0	0	PC freqs		
Y	0	0	0	0	0	0	0	0	PC freqs		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:Y	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	3.40071680964E+03		Apriori delay (usec)		3.40046643065E+03		Resid mbdelay (usec)		3.78990E-04	+/- 3.3E-05	
Sband delay (usec)	3.40072419390E+03		Apriori clock (usec)		7.5212791E+01		Resid sbdelay (usec)		2.57763E-01	+/- 2.6E-04	
Phase delay (usec)	3.40046643556E+03		Apriori clockrate (us/s)		1.2662300E-06		Resid phdelay (usec)		4.90659E-06	+/- 1.1E-07	
Delay rate (us/s)	-1.71747848230E-01		Apriori rate (us/s)		-1.71747570637E-01		Resid rate (us/s)		-2.77593E-07	+/- 1.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		-9.33566500734E-06		Resid phase (deg)		152.2	+/- 3.5	
RMS	Theor.	Amplitude	0.948 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	49.9	8.3	Search (1024X32)	0.911	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	62.5	14.5	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	47.4	4.9	Inc. seg. avg.	1.245	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	61.2	8.6	Inc. frq. avg.	1.213	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
B: az 72.0 el 35.1 pa -49.5	Y: az 61.1 el 24.8 pa -56.9		u,v (fr/asec) 1230.360 296.325						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0232/BY..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232/BY.W.49.3MP1EA								

Mk4/DiFX fourfit 3.25 rev 0

aux01

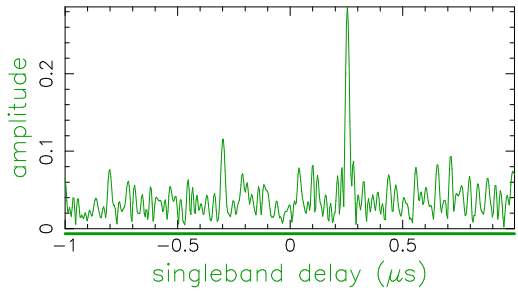
2013+370.3MP1EA, No0232, BY

EFLSBERG - YEYES40M, fgroup W, pol LR

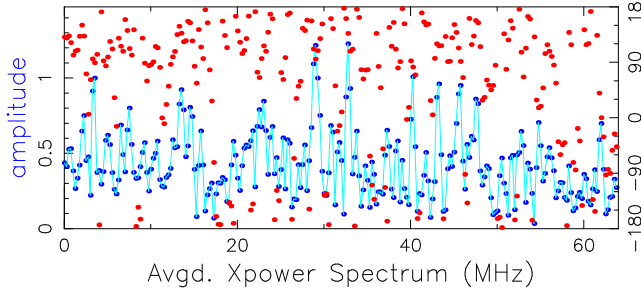


Fringe quality 9

SNR 10.0
 Int time 162.292
 Amp 0.286
 Phase -160.5
 PFD 4.3e-15
 Delays (us)
 SBD 0.254043
 MBD -0.002630
 Fringe rate (Hz)
 -0.023118
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

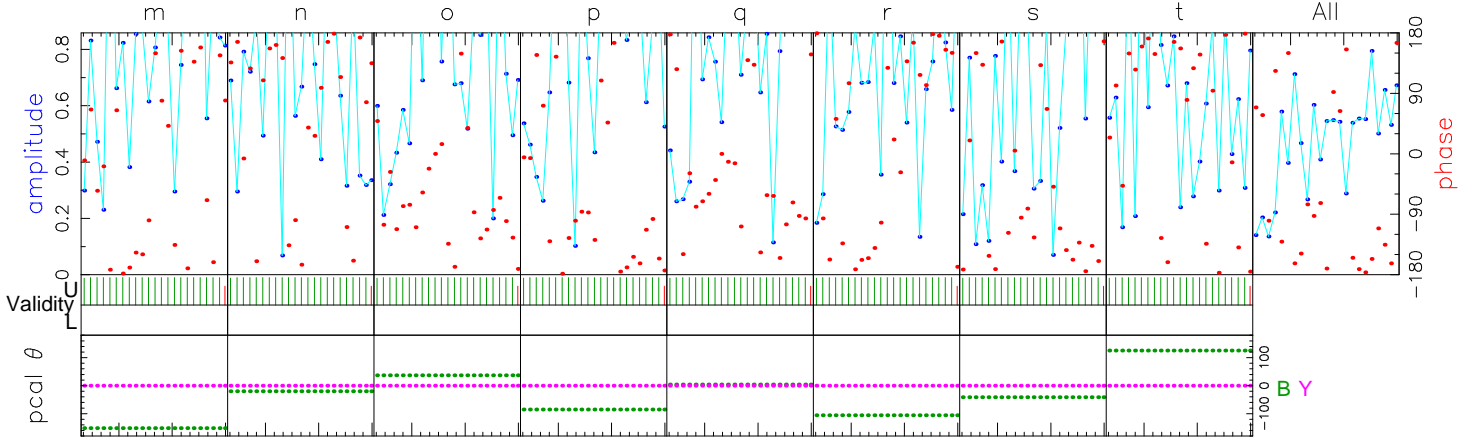


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102654
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	164.3	163.0	-80.1	-160.8	-87.1	171.3	-142.5	159.8	Phase	-160.5
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Ampl.	0.4
	321.4	321.1	323.0	322.5	322.3	322.2	320.8	320.4	Sbd box	322.0
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.40071380027E+03	Apriori delay (usec)	3.40046643065E+03	Resid mbdelay (usec)	-2.63038E-03	+/-	1.1E-04
Sband delay (usec)	3.40072047390E+03	Apriori clock (usec)	7.5212791E+01	Resid sbdelay (usec)	2.54043E-01	+/-	8.6E-04
Phase delay (usec)	3.40046642547E+03	Apriori clockrate (us/s)	1.2662300E-06	Resid phdelay (usec)	-5.17705E-06	+/-	3.7E-07
Delay rate (us/s)	-1.71747839014E-01	Apriori rate (us/s)	-1.71747570637E-01	Resid rate (us/s)	-2.68376E-07	+/-	3.9E-09
Total phase (deg)		Apriori accel (us/s/s)	-9.33566500734E-06	Resid phase (deg)	-160.5	+/-	11.5

ph/seg (deg)	68.3	RMS	27.6	Theor.	0.286 +/- 0.029	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.7	Search (1024X32)	0.280	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	53.4	Inc. seg. avg.	0.421	Inc. frq. avg.	0.388	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.6	Inc. frq. avg.	0.388	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
B: az 72.0 el 35.1 pa -49.5	Y: az 61.1 el 24.8 pa -56.9	u, v (fr/asec)	1230.360 296.325			ion window (TEC)	0.00 0.00		simultaneous interpolator	

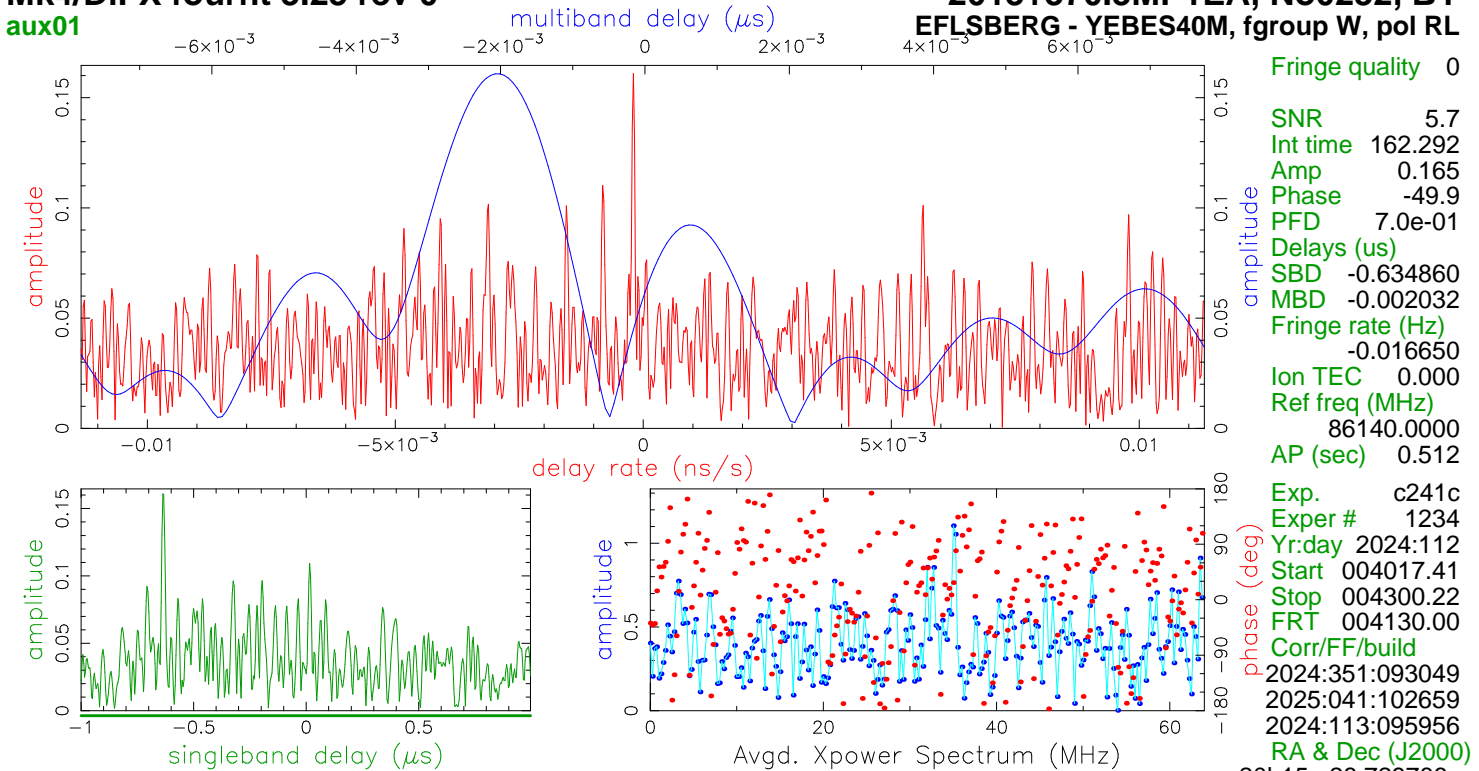
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BY.W.66.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

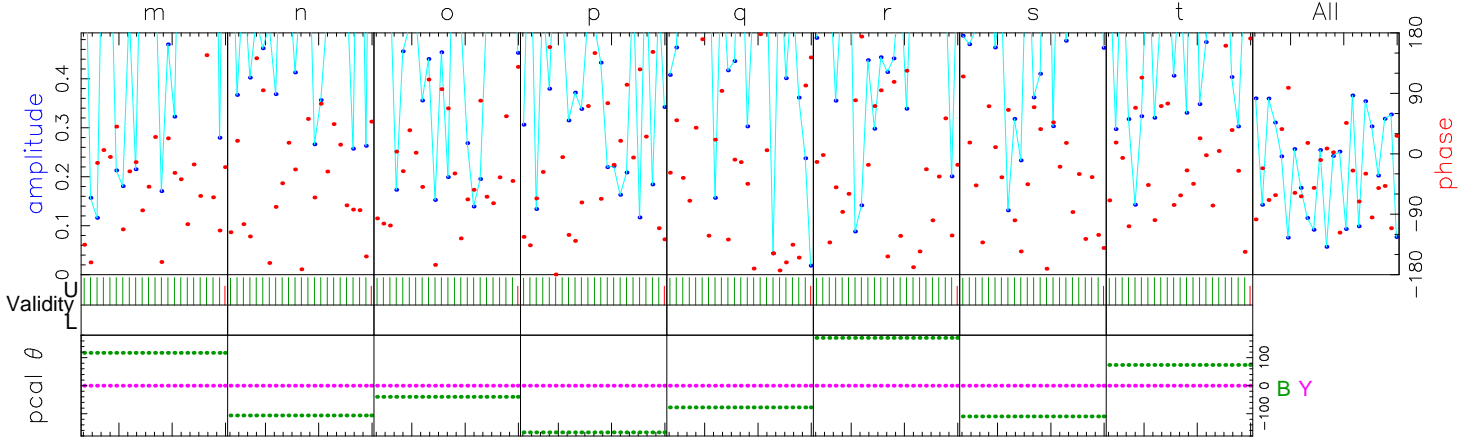
aux01

2013+370.3MP1EA, No0232, BY

EFLSBERG - YEYES40M, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-44.6	-45.2	-42.4	-93.9	-85.4	-70.8	-47.0	-32.5		-49.9
	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2		0.1
	93.7	79.9	92.8	363.5	153.1	135.1	501.1	206.1		94.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
B	0	0	0	0	0	0	0	0		
Y	0	0	0	0	0	0	0	0		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Y	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec) (SBD)	3.39982377320E+03		Apriori delay (usec)	3.40046643065E+03	Resid mbdelay (usec)	-2.03245E-03	+/-	1.9E-04		
Sband delay (usec)	3.39983157040E+03		Apriori clock (usec)	7.5212791E+01	Resid sbdelay (usec)	-6.34860E-01	+/-	1.5E-03		
Phase delay (usec)	3.40046642904E+03		Apriori clockrate (us/s)	1.2662300E-06	Resid phdelay (usec)	-1.60762E-06	+/-	6.4E-07		
Delay rate (us/s)	-1.71747763930E-01		Apriori rate (us/s)	-1.71747570637E-01	Resid rate (us/s)	-1.93293E-07	+/-	6.9E-09		
Total phase (deg)		71.2	Apriori accel (us/s/s)	-9.33566500734E-06	Resid phase (deg)	-49.9	+/-	20.0		
RMS	55.6	Theor. 47.9	Amplitude	0.165 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
ph/seg (deg)	72.4	83.6	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	55.6	47.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	26.0	28.3	Inc. seg. avg.	0.165	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011		
amp/frq (%)	49.6	49.3	Inc. frq. avg.	0.149	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00	
B: az 72.0 el 35.1 pa -49.5		Y: az 61.1 el 24.8 pa -56.9		u, v (fr/asec)	1230.360 296.325			simultaneous interpolator		
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0232/BY..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232/BY.W.76.3MP1EA						

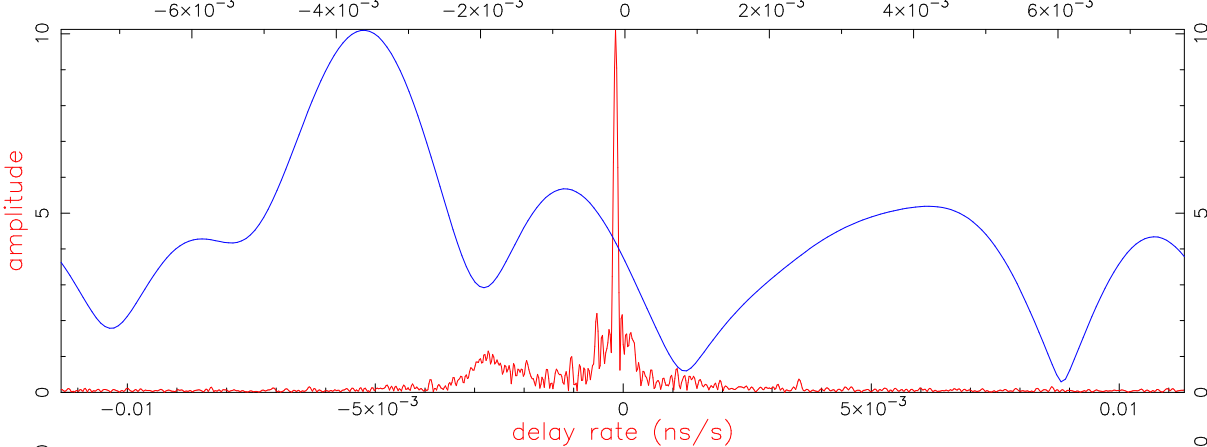
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, NY

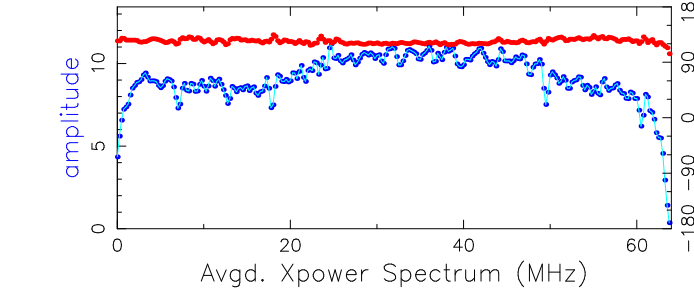
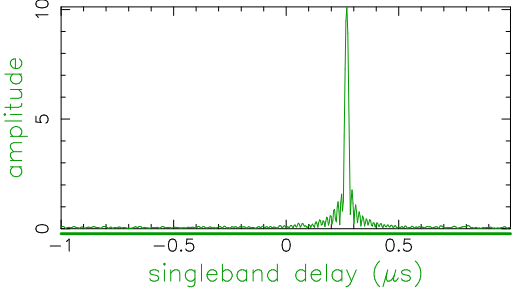
NOEMA - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



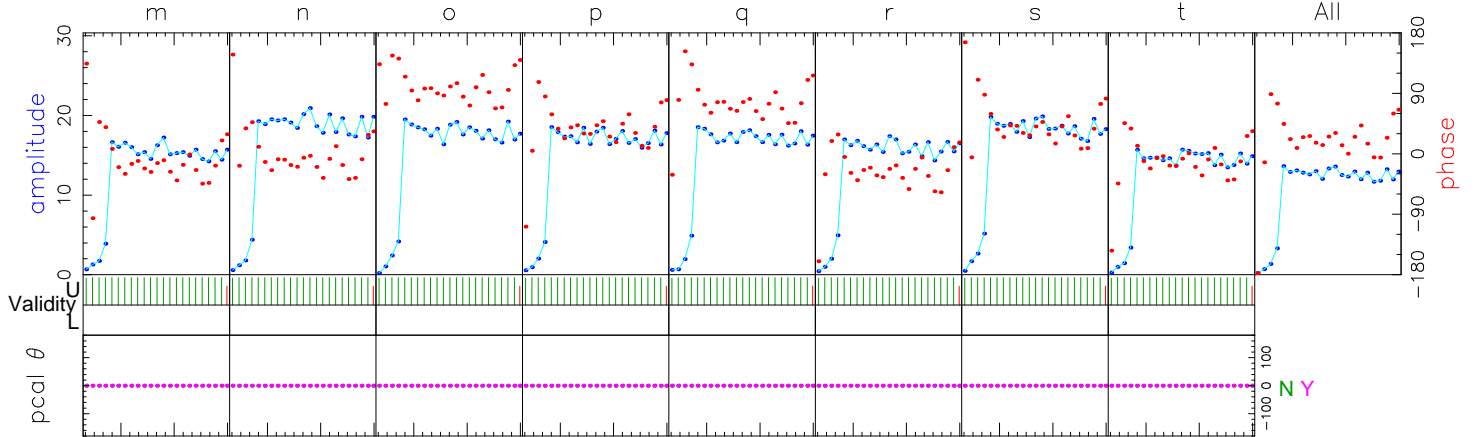
Fringe quality 2

SNR 352.7
 Int time 162.292
 Amp 10.126
 Phase 23.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.268902
 MBD -0.003642
 Fringe rate (Hz)
 -0.013847
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-16.0	-9.1	96.5	39.4	74.8	-25.0	38.7	-9.0		Phase
	12.3	15.1	14.4	13.7	13.7	12.8	14.7	11.7		Ampl.
	327.5	325.9	325.6	325.3	325.0	324.9	325.7	325.3		Sbd box
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used
N	0	0	0	0	0	0	0	0		PC freqs
Y	0	0	0	0	0	0	0	0		PC freqs
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
N:Y	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
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	2.61717883807E+03	Apriori delay (usec)	2.61691685494E+03	Resid mbdelay (usec)	-3.64187E-03	+/-	3.1E-06
Sband delay (usec)	2.61718575669E+03	Apriori clock (usec)	9.7251900E+01	Resid sbdelay (usec)	2.68902E-01	+/-	2.4E-05
Phase delay (usec)	2.61691685571E+03	Apriori clockrate (us/s)	1.4700680E-06	Resid phdelay (usec)	7.64359E-07	+/-	1.0E-08
Delay rate (us/s)	-7.70004209011E-02	Apriori rate (us/s)	-7.70002601548E-02	Resid rate (us/s)	-1.60746E-07	+/-	1.1E-10
Total phase (deg)	342.2	Apriori accel (us/s/s)	-9.77666233625E-06	Resid phase (deg)	23.7	+/-	0.3

ph/seg (deg)	41.5	0.8	Amplitude	10.126 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	43.4	1.4	Search (1024X32)	9.848	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	49.1	0.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	35.7	0.8	Inc. seg. avg.	10.716	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
			Inc. frq. avg.	13.564	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

N: az 67.7 el 32.5 pa -55.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 547.170 -213.510 simultaneous interpolator

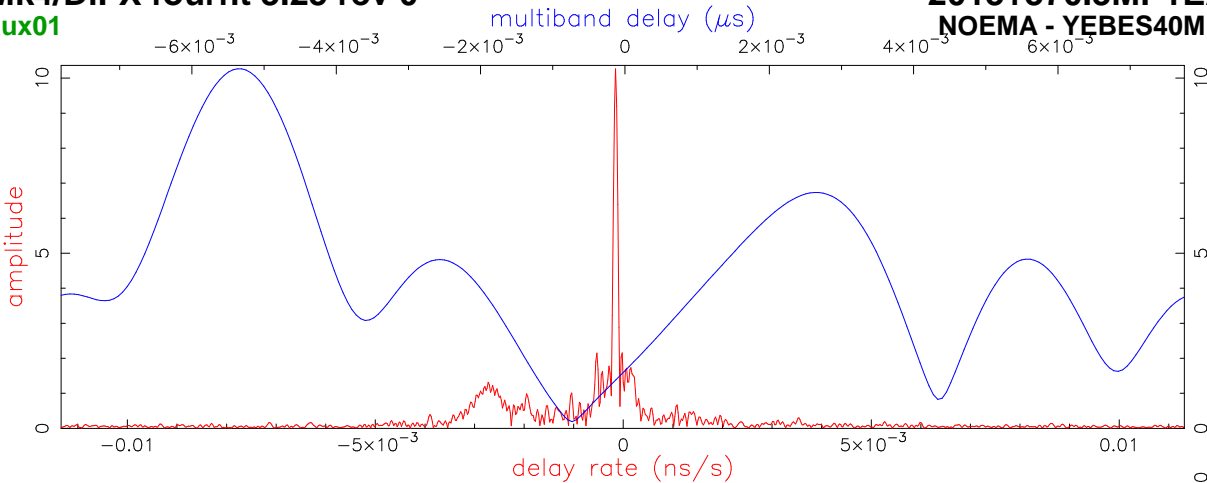
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NY.W.51.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

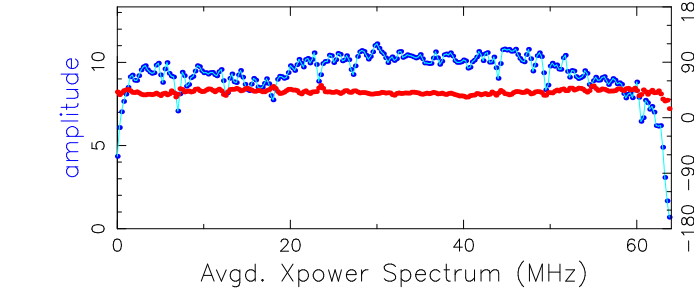
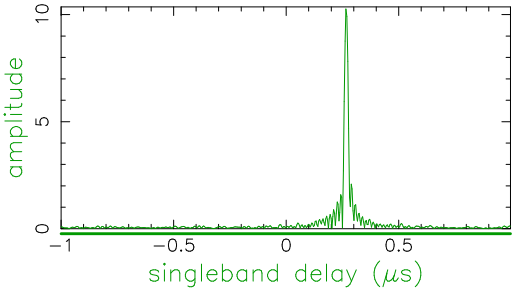
2013+370.3MP1EA, No0232, NY

NOEMA - YEBES40M, fgroup W, pol RR



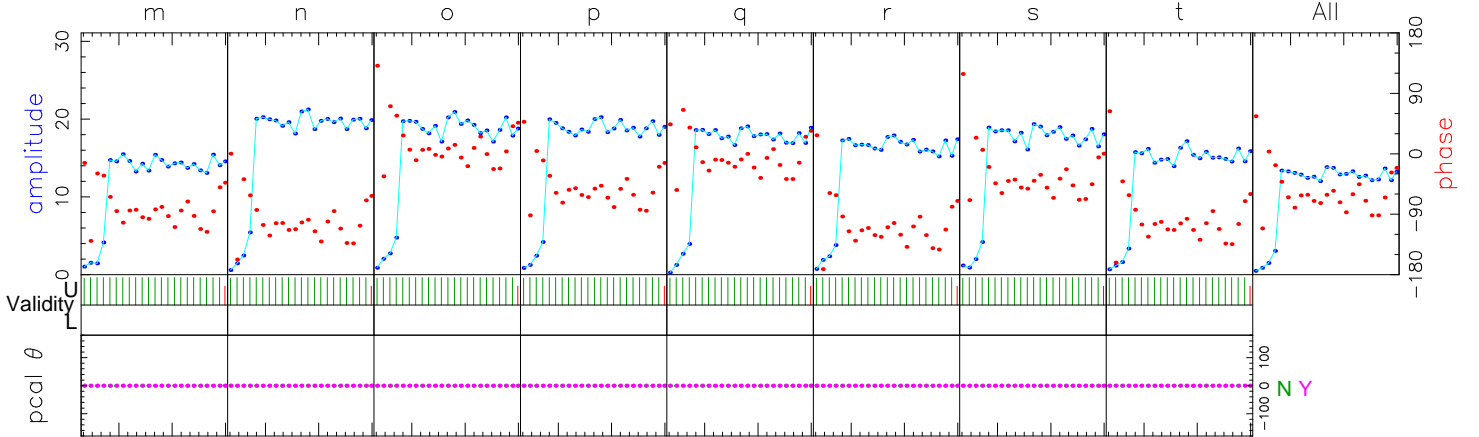
Fringe quality 2

SNR 361.0
 Int time 162.292
 Amp 10.365
 Phase -63.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.266863
 MBD -0.005313
 Fringe rate (Hz)
 -0.013864
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102654
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-85.4	-104.7	5.9	-55.0	-9.7	-112.9	-41.2	-104.8	Phase	-63.0
	11.4	15.7	15.2	15.1	14.3	13.3	14.3	12.2	Ampl.	13.9
	326.9	325.0	325.3	325.0	324.6	324.5	325.1	325.2	Sbd box	325.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.61717716651E+03	Apriori delay (usec)	2.61691685494E+03	Resid mbdelay (usec)	-5.31343E-03	+/-	3.0E-06
Sband delay (usec)	2.61718371744E+03	Apriori clock (usec)	9.7251900E+01	Resid sbdelay (usec)	2.66863E-01	+/-	2.4E-05
Phase delay (usec)	2.61691685291E+03	Apriori clockrate (us/s)	1.4700680E-06	Resid phdelay (usec)	-2.03225E-06	+/-	1.0E-08
Delay rate (us/s)	-7.70004211009E-02	Apriori rate (us/s)	-7.70002601548E-02	Resid rate (us/s)	-1.60946E-07	+/-	1.1E-10
Total phase (deg)	255.5	Apriori accel (us/s/s)	-9.77666233625E-06	Resid phase (deg)	-63.0	+/-	0.3

ph/seg (deg)	35.6	0.8	Search (1024X32)	10.167	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	42.6	1.3	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)	49.3	0.4	Inc. seg. avg.	10.898	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.0	0.8	Inc. frq. avg.	13.927	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 67.7 el 32.5 pa -55.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 547.170 -213.510 simultaneous interpolator

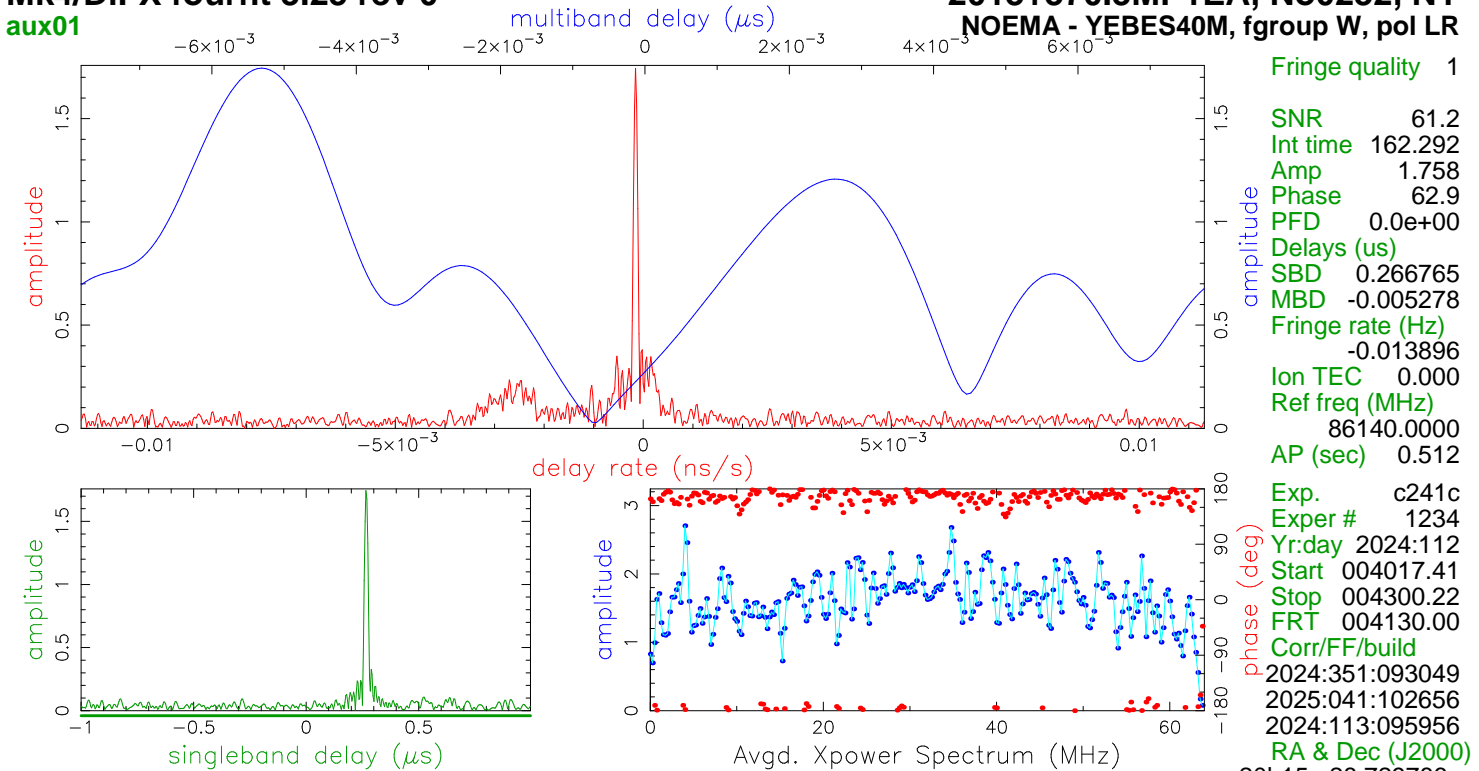
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NY.W.62.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

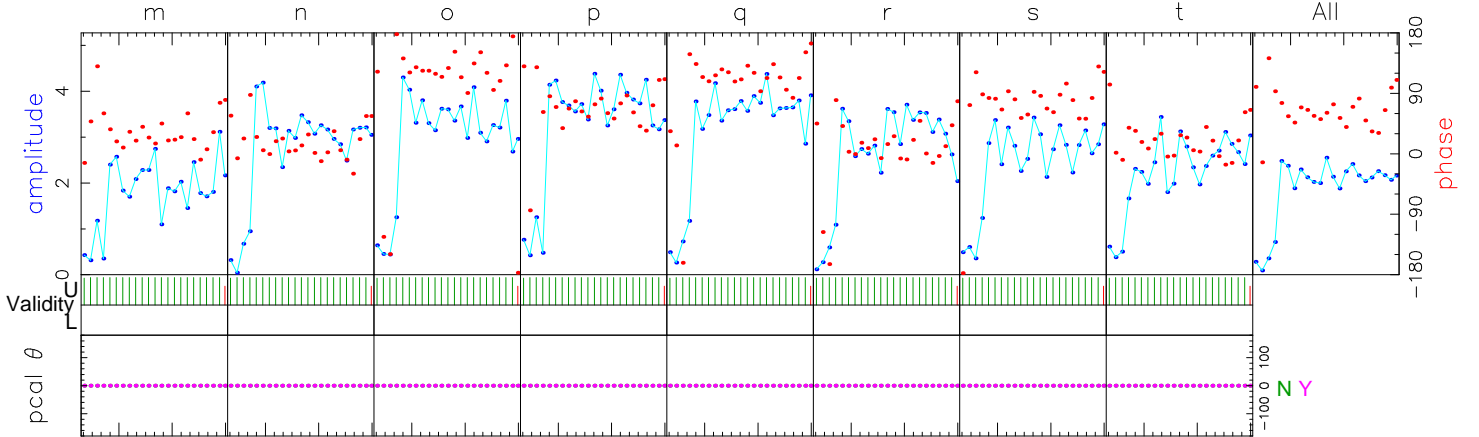
aux01

2013+370.3MP1EA, No0232, NY

NOEMA - YEBES40M, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



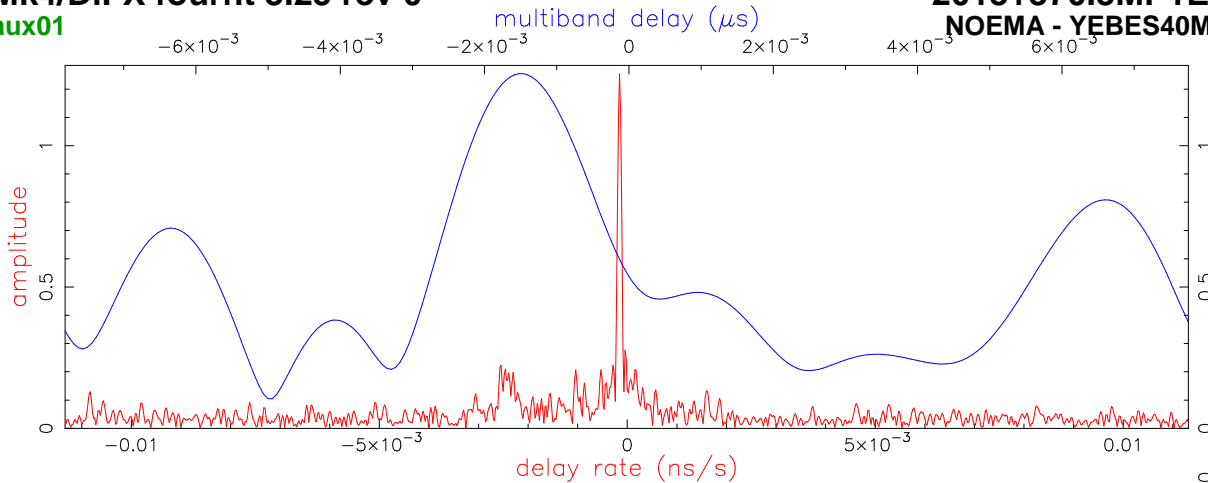
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	31.5	13.6	129.2	69.5	117.5	14.5	81.9	18.5	Phase	62.9
	1.6	2.5	2.7	3.0	2.9	2.4	2.3	2.0	Ampl.	2.4
	327.0	324.9	325.4	324.9	324.6	324.5	324.9	325.0	Sbd box	325.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	2.61717720176E+03		Apriori delay (usec)	2.61691685494E+03	Resid mbdelay (usec)	-5.27818E-03	+/-	1.8E-05		
Sband delay (usec)	2.61718361994E+03		Apriori clock (usec)	9.7251900E+01	Resid sbdelay (usec)	2.66765E-01	+/-	1.4E-04		
Phase delay (usec)	2.61691685697E+03		Apriori clockrate (us/s)	1.4700680E-02	Resid phdelay (usec)	2.02758E-06	+/-	6.0E-08		
Delay rate (us/s)	-7.70004214750E-02		Apriori rate (us/s)	-7.70002601548E-02	Resid rate (us/s)	-1.61320E-07	+/-	6.4E-10		
Total phase (deg)		21.4	Apriori accel (us/s/s)	-9.77666233625E-06	Resid phase (deg)	62.9	+/-	1.9		
RMS	Theor.	Amplitude	1.758 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5					
ph/seg (deg)	30.4	4.5	Search (1024X32)	1.722	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	41.2	7.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	50.8	2.6	Inc. seg. avg.	1.855	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	45.4	4.6	Inc. frq. avg.	2.428	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
N: az 67.7 el 32.5 pa -55.9		Y: az 61.1 el 24.8 pa -56.9		u, v (fr/asec) 547.170 -213.510					simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/3mm/1234/No0232/NY..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232/NY.W.75.3MP1EA						

Mk4/DiFX fourfit 3.25 rev 0

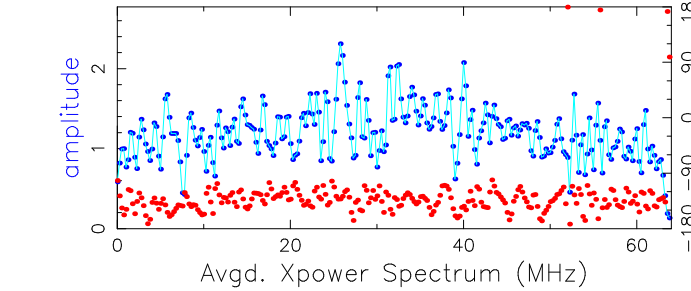
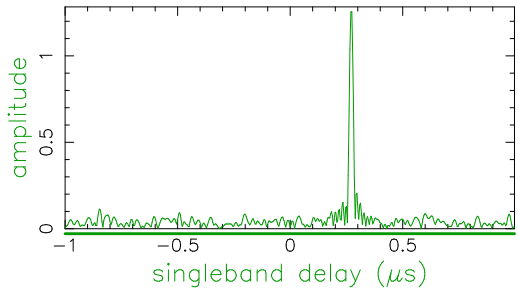
aux01

2013+370.3MP1EA, No0232, NY

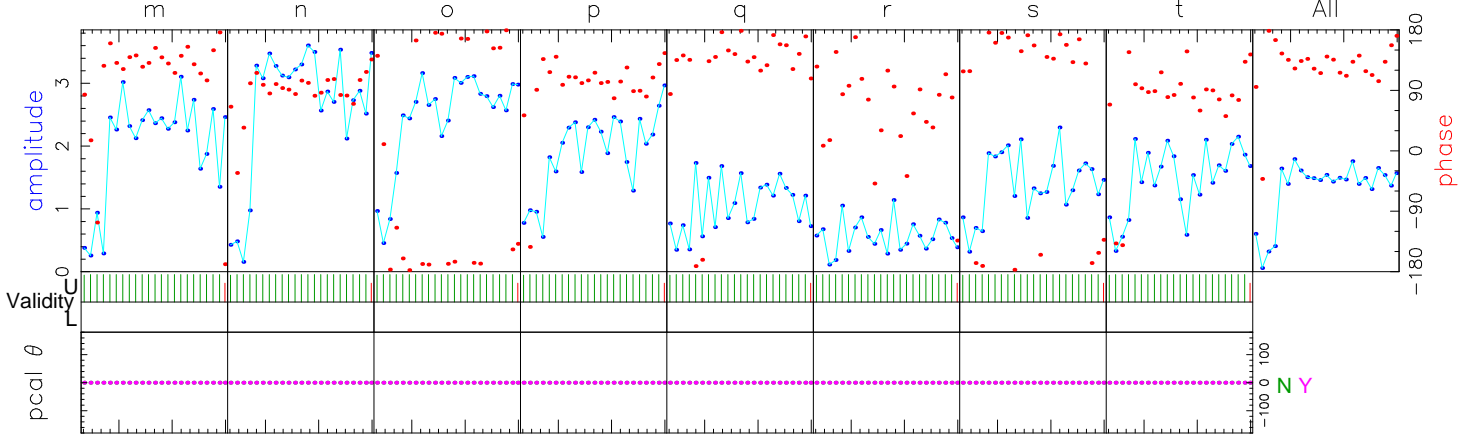
NOEMA - YEBES40M, fgroup W, pol RL



Fringe quality 4
 Error code G
 SNR 44.7
 Int time 162.292
 Amp 1.284
 Phase 130.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.271538
 MBD -0.001450
 Fringe rate (Hz)
 -0.013751
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102701
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	138.3	96.0	-176.3	107.8	150.0	78.9	166.1	92.5	Phase	130.1
	1.8	2.5	2.3	1.7	1.0	0.4	1.3	1.3	Ampl.	1.5
	327.4	326.2	325.8	326.0	325.5	325.8	326.1	325.8	Sbd box	326.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.61718103011E+03	Apriori delay (usec)	2.61691685494E+03	Resid mbdelay (usec)	-1.44984E-03	+/-	2.4E-05
Sband delay (usec)	2.61718839344E+03	Apriori clock (usec)	9.7251900E+01	Resid sbdelay (usec)	2.71538E-01	+/-	1.9E-04
Phase delay (usec)	2.61691685914E+03	Apriori clockrate (us/s)	1.4700680E-02	Resid phdelay (usec)	4.19563E-06	+/-	8.3E-08
Delay rate (us/s)	-7.70004197886E-02	Apriori rate (us/s)	-7.70002601548E-02	Resid rate (us/s)	-1.59634E-07	+/-	8.8E-10
Total phase (deg)	88.6	Apriori accel (us/s/s)	-9.77666233625E-06	Resid phase (deg)	130.1	+/-	2.6

ph/seg (deg)	41.3	Theor.	6.1	Amplitude	1.284 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	36.6		10.7	Search (1024X32)	1.247	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.5		3.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	54.0		6.3	Inc. seg. avg.	1.309	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	1.527	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 67.7 el 32.5 pa -55.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 547.170 -213.510 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NY.W.79.3MP1EA

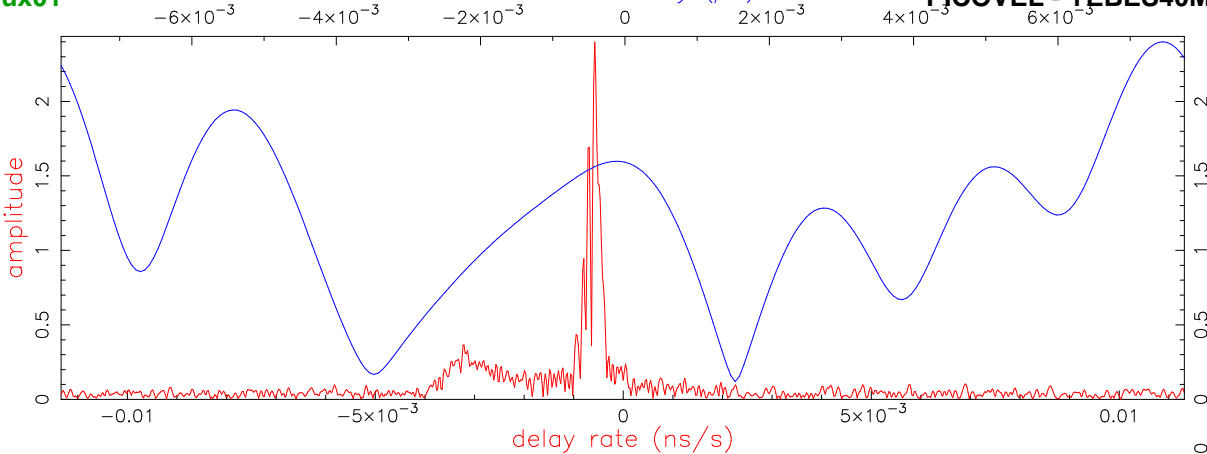
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, PY

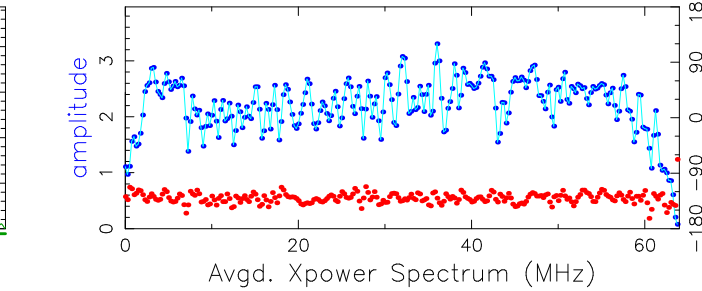
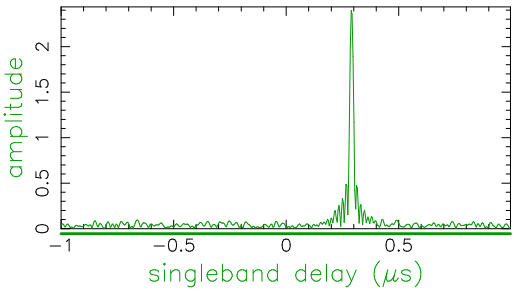
PICOVEL - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



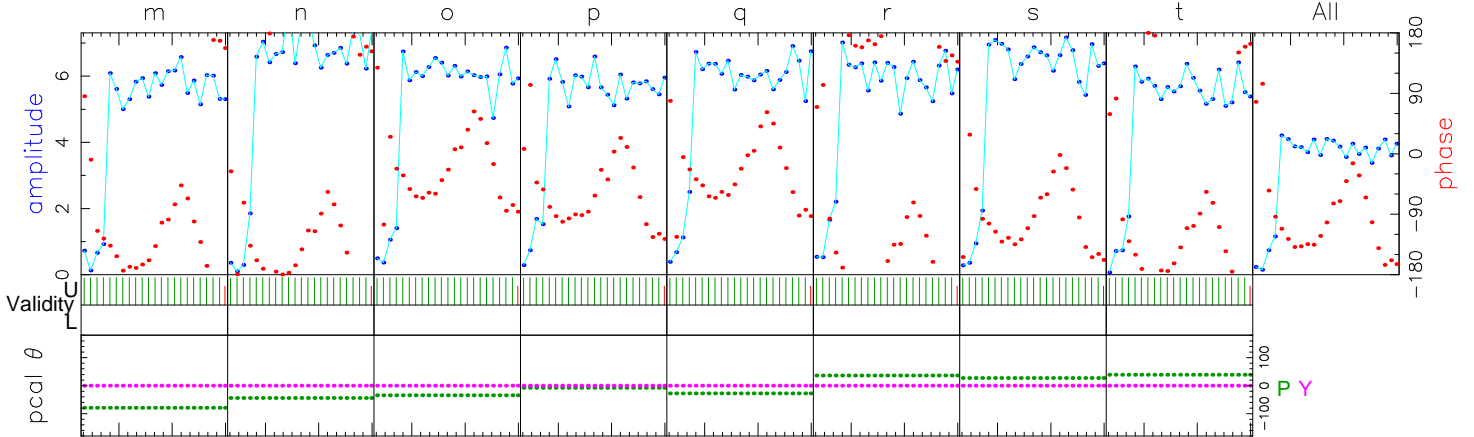
Fringe quality 1

SNR 84.8
 Int time 162.292
 Amp 2.437
 Phase -108.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.290628
 MBD 0.007504
 Fringe rate (Hz)
 -0.049499
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102646
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-138.6	-152.4	-30.6	-69.4	-33.5	-168.6	-99.4	-149.5	Phase	-108.8
	3.5	4.3	3.7	3.6	3.9	3.8	4.0	3.6	Ampl.	3.8
	332.5	331.2	331.0	330.6	330.0	330.1	330.6	330.3	Sbd box	331.4
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	-79:0	-44:0	-34:0	-8:0	-28:0	36:0	27:0	39:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.32834449883E+02	Apriori delay (usec)	-5.33123203864E+02	Resid mbdelay (usec)	7.50398E-03	+/-	1.3E-05
Sband delay (usec)	-5.32832575614E+02	Apriori clock (usec)	1.0969232E+02	Resid sbdelay (usec)	2.90628E-01	+/-	1.0E-04
Phase delay (usec)	-5.33123207373E+02	Apriori clockrate (us/s)	2.0540061E-06	Resid phdelay (usec)	-3.50926E-06	+/-	4.4E-08
Delay rate (us/s)	4.70607321930E-02	Apriori rate (us/s)	4.70613068318E-02	Resid rate (us/s)	-5.74639E-07	+/-	4.6E-10
Total phase (deg)	-29.9	Apriori accel (us/s/s)	2.17839354851E-07	Resid phase (deg)	-108.8	+/-	1.4

ph/seg (deg)	63.3	Theor.	3.2	Amplitude	2.437 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.0		5.7	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	59.8		1.9	Inc. seg. avg.	3.279	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	56.3		3.3	Inc. frq. avg.	3.784	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
P:	az 59.7 el 22.8 pa -60.1	Y:	az 61.1 el 24.8 pa -56.9	u, v (fr/asec)	-339.203 -315.284	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

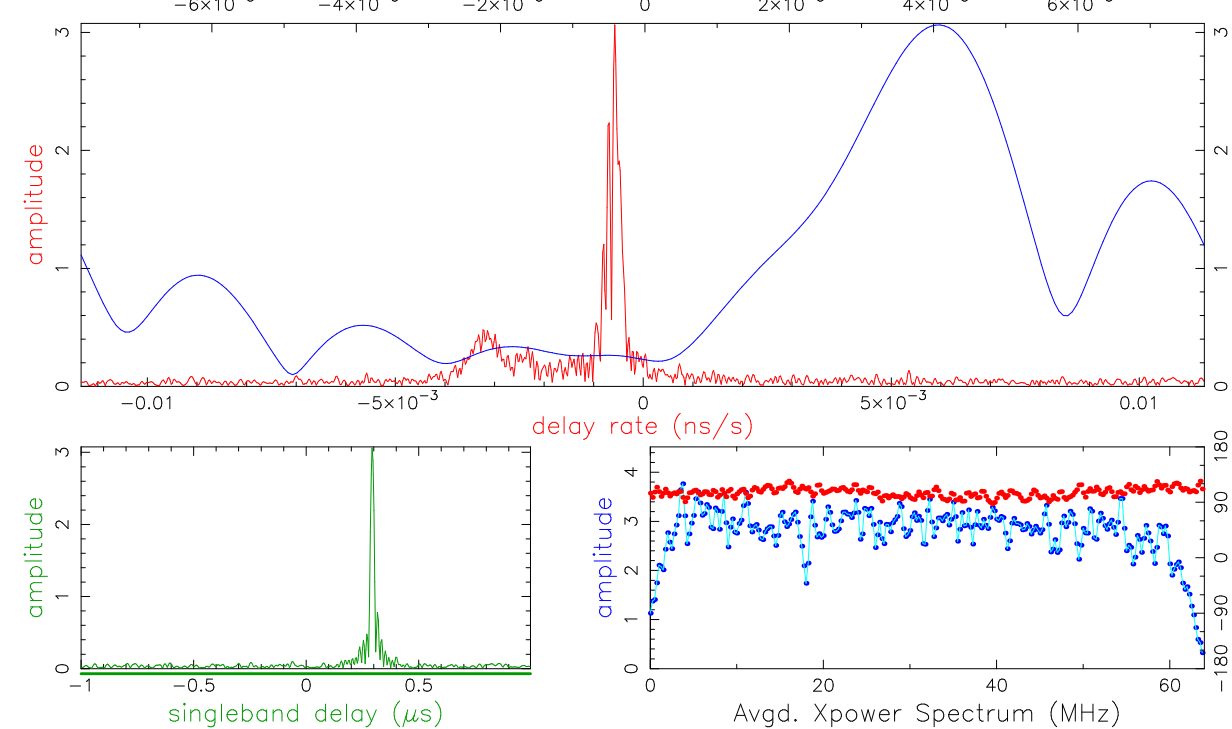
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.32.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

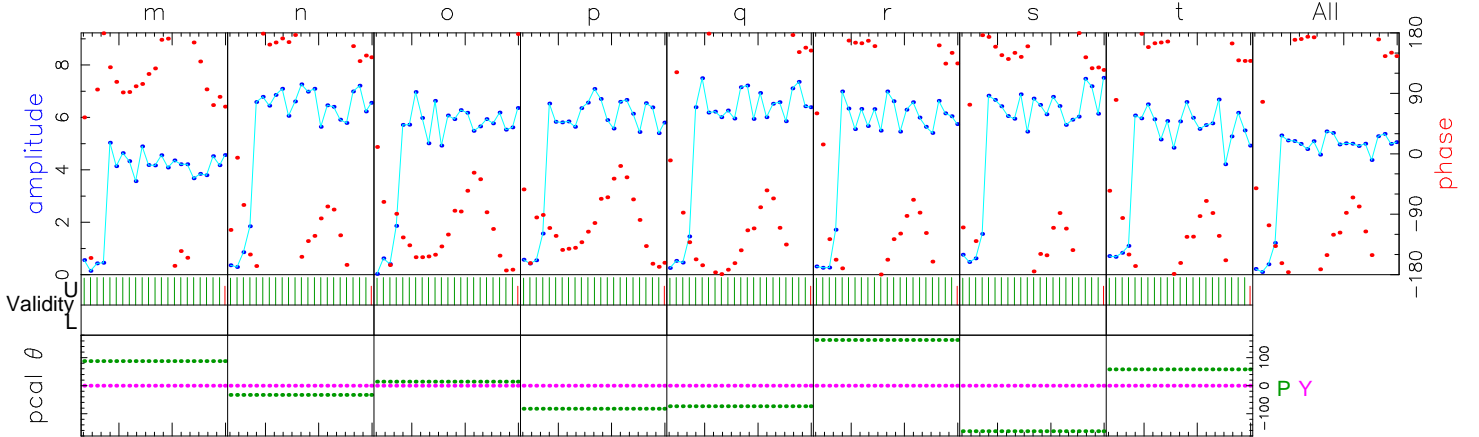
2013+370.3MP1EA, No0232, PY

PICOVEL - YEBES40M, fgroup W, pol RR



Fringe quality 2
 SNR 107.1
 Int time 162.292
 Amp 3.077
 Phase -158.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.293690
 MBD 0.004085
 Fringe rate (Hz)
 -0.049490
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	126.4	-165.5	-122.7	-106.8	-150.2	-166.2	174.1	-164.3	Phase	-158.5
	2.6	4.1	3.7	3.8	4.0	3.6	4.0	3.4	Ampl.	3.6
	334.5	332.4	333.0	332.4	331.9	332.1	332.2	332.3	Sbd box	332.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -5.32822244226E+02 Apriori delay (usec) -5.33123203864E+02 Resid mbdelay (usec) 4.08464E-03 +/- 1.0E-05
 Sband delay (usec) -5.32829513864E+02 Apriori clock (usec) 1.0969232E+02 Resid sbdelay (usec) 2.93690E-01 +/- 8.0E-05
 Phase delay (usec) -5.33123208976E+02 Apriori clockrate (us/s) 2.0540061E-06 Resid phdelay (usec) -5.11254E-06 +/- 3.5E-08
 Delay rate (us/s) 4.70607323049E-02 Apriori rate (us/s) 4.70613068318E-02 Resid rate (us/s) -5.74527E-07 +/- 3.7E-10
 Total phase (deg) -79.6 Apriori accel (us/s/s) 2.17839354851E-07 Resid phase (deg) -158.5 +/- 1.1

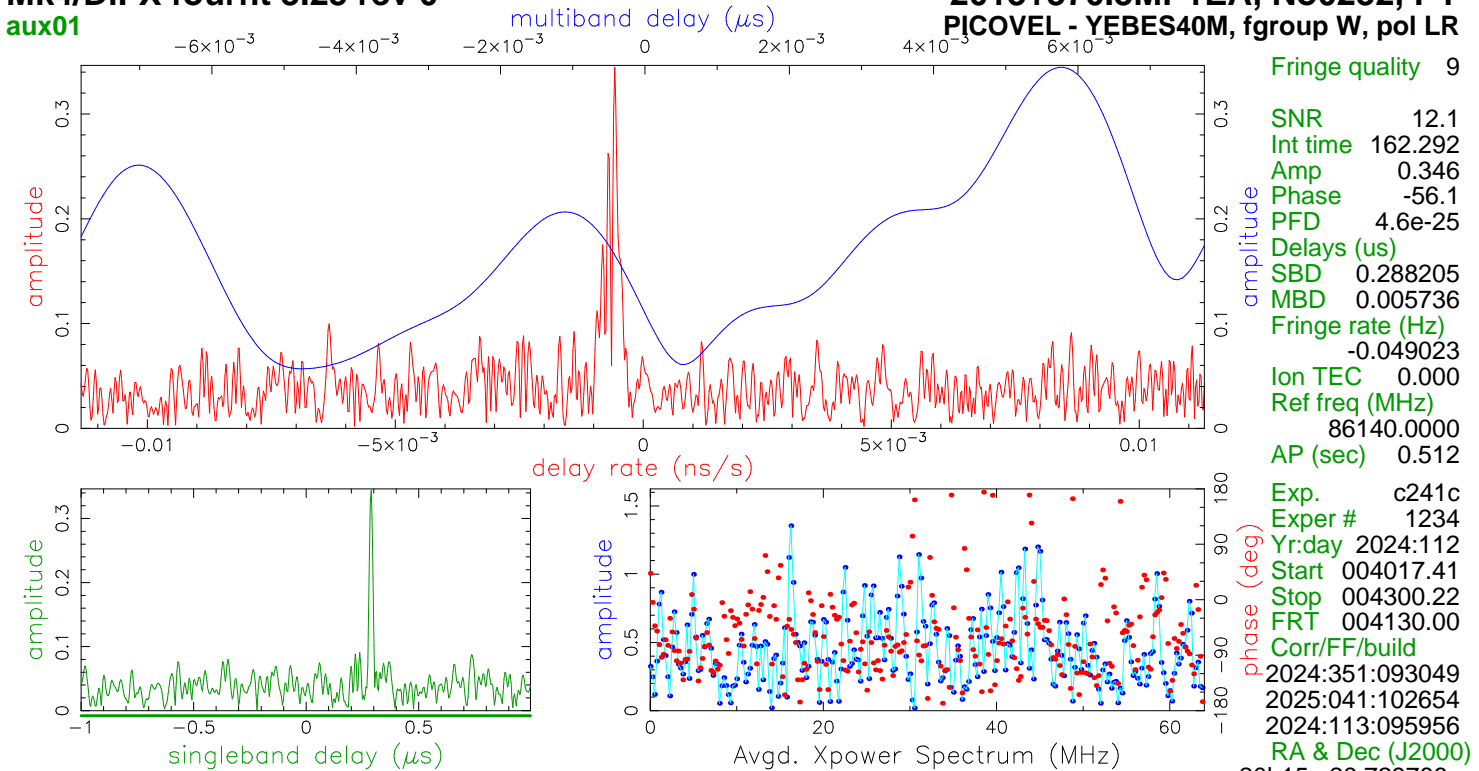
RMS Theor. Amplitude 3.077 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.8 2.6 Search (1024X32) 3.004 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 68.8 4.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 41.9 1.5 Inc. seg. avg. 4.246 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.5 2.6 Inc. frq. avg. 3.649 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 P: az 59.7 el 22.8 pa -60.1 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) -339.203 -315.284 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.49.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

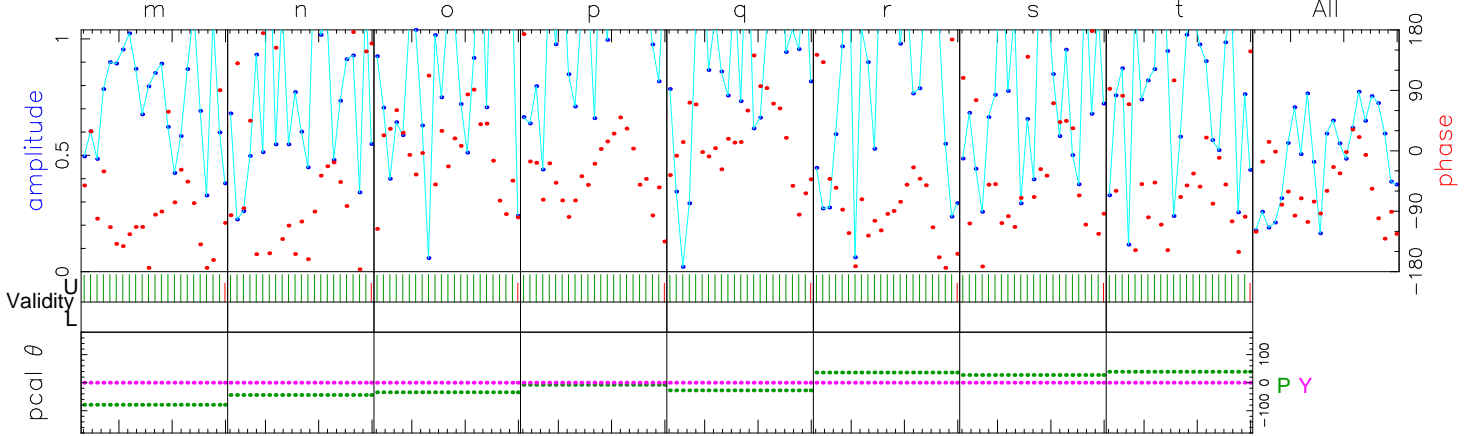
aux01

2013+370.3MP1EA, No0232, PY

PICOVEL - YEBES40M, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-105.6	-126.1	-7.4	-27.7	18.0	-95.5	-76.7	-73.8	Phase	-56.1
	0.4	0.4	0.6	0.7	0.6	0.6	0.3	0.4	Ampl.	0.5
	332.2	329.7	331.1	330.3	329.7	330.2	329.0	329.9	Sbd box	330.8
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	-79:0	-44:0	-34:0	-8:0	-28:0	36:0	27:0	39:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-5.32836217945E+02	Apriori delay (usec)	-5.33123203864E+02	Resid mbdelay (usec)	5.73592E-03	+/-	9.0E-05
Sband delay (usec)	-5.32834998614E+02	Apriori clock (usec)	1.0969232E+02	Resid sbdelay (usec)	2.88205E-01	+/-	7.1E-04
Phase delay (usec)	-5.33123205673E+02	Apriori clockrate (us/s)	2.0540061E-06	Resid phdelay (usec)	-1.80928E-06	+/-	3.1E-07
Delay rate (us/s)	4.70607377240E-02	Apriori rate (us/s)	4.70613068318E-02	Resid rate (us/s)	-5.69108E-07	+/-	3.3E-09
Total phase (deg)	-337.2	Apriori accel (us/s/s)	2.17839354851E-07	Resid phase (deg)	-56.1	+/-	9.5

ph/seg (deg)	48.1	RMS	22.8	Theor.	Amplitude	0.346 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	72.8		39.8		Search (1024X32)	0.339	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	55.2		13.4		Inc. seg. avg.	0.465	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	59.8		23.5		Inc. frq. avg.	0.490	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011		
							Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

P: az 59.7 el 22.8 pa -60.1 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) -339.203 -315.284 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.63.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

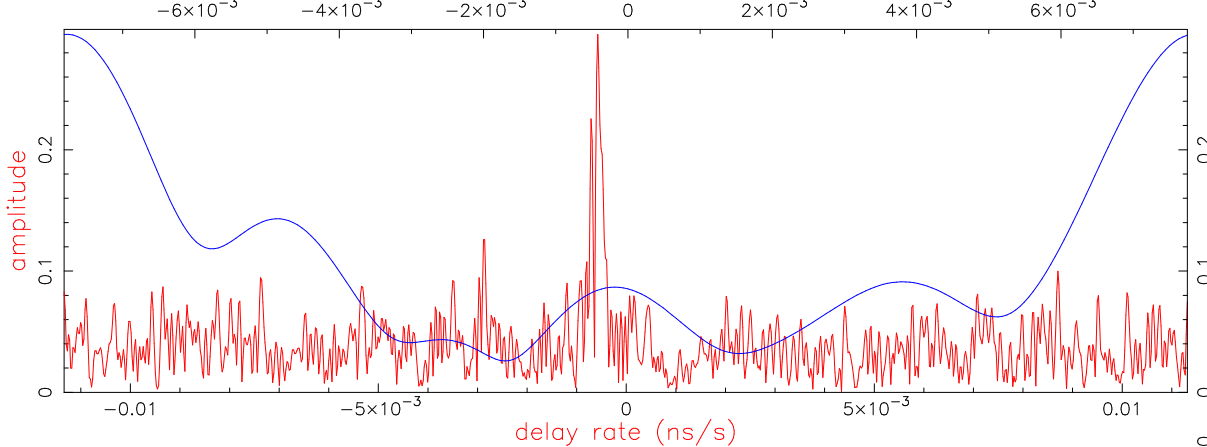
aux01

2013+370.3MP1EA, No0232, PY

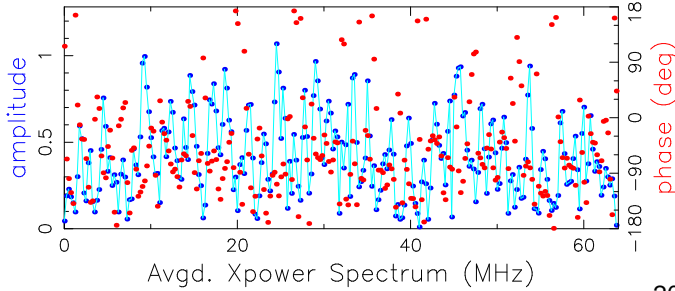
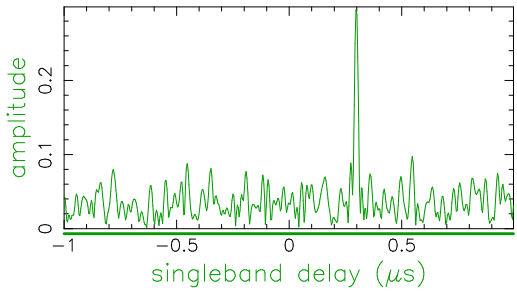
PICOVEL - YEBES40M, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

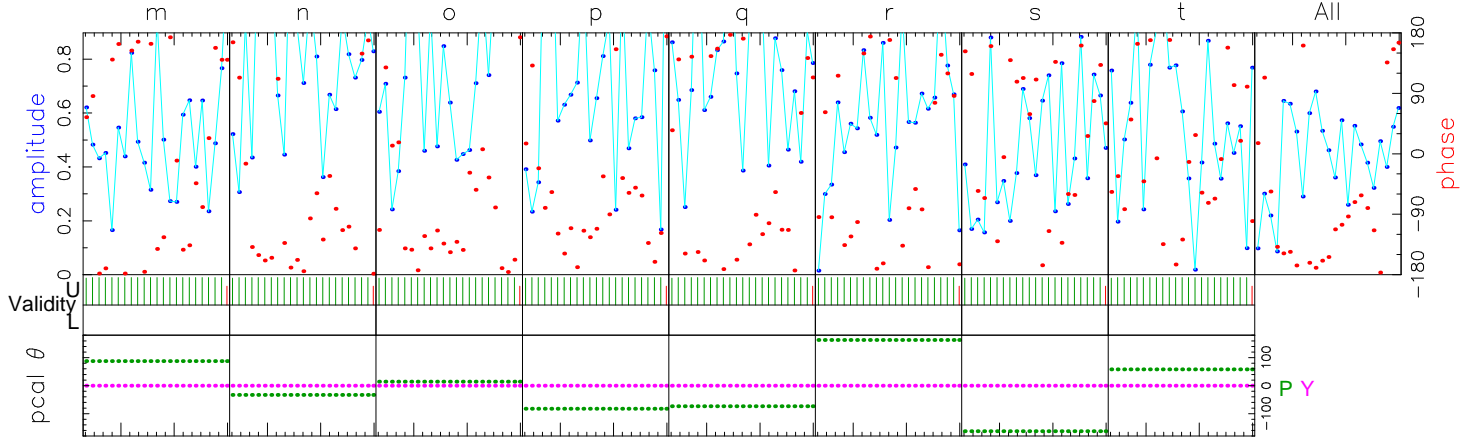


SNR 10.4
 Int time 162.292
 Amp 0.299
 Phase -147.5
 PFD 4.7e-17
 Delays (us)
 SBD 0.298346
 MBD -0.007737
 Fringe rate (Hz)
 -0.049178
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102656
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	178.2	-145.2	-136.0	-98.3	-162.4	-179.0	146.5	-108.7	Phase	-147.5
	0.3	0.5	0.5	0.5	0.5	0.3	0.2	0.1	Ampl.	0.3
	335.2	334.0	334.0	333.7	332.4	118.6	344.6	495.1	Sbd box	333.4
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.32818441207E+02	Apriori delay (usec)	-5.33123203864E+02	Resid mbdelay (usec)	-7.73734E-03	+/-	1.0E-04
Sband delay (usec)	-5.32824858364E+02	Apriori clock (usec)	1.0969232E+02	Resid sbdelay (usec)	2.98346E-01	+/-	8.3E-04
Phase delay (usec)	-5.33123208621E+02	Apriori clockrate (us/s)	2.0540061E-06	Resid phdelay (usec)	-4.75760E-06	+/-	3.5E-07
Delay rate (us/s)	4.70607359285E-02	Apriori rate (us/s)	4.70613068318E-02	Resid rate (us/s)	-5.70903E-07	+/-	3.8E-09
Total phase (deg)	-68.6	Apriori accel (us/s/s)	2.17839354851E-07	Resid phase (deg)	-147.5	+/-	11.0

ph/seg (deg)	61.1	Theor.	26.4	Amplitude	0.299 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.7		46.0	Search (1024X32)	0.293	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	42.4		15.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.6		27.2	Inc. seg. avg.	0.396	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.334	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

P: az 59.7 el 22.8 pa -60.1 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) -339.203 -315.284 simultaneous interpolator

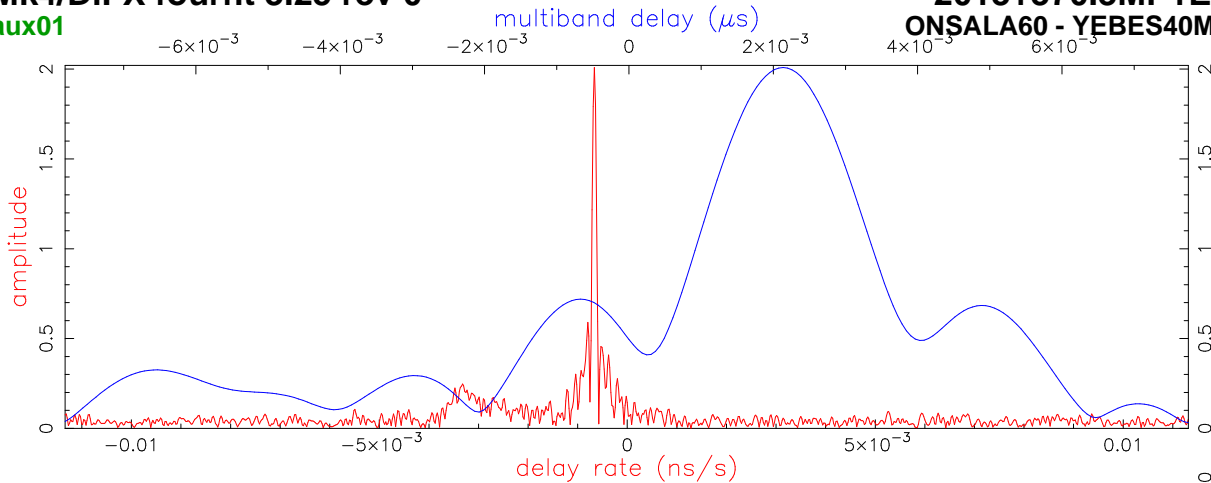
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.74.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

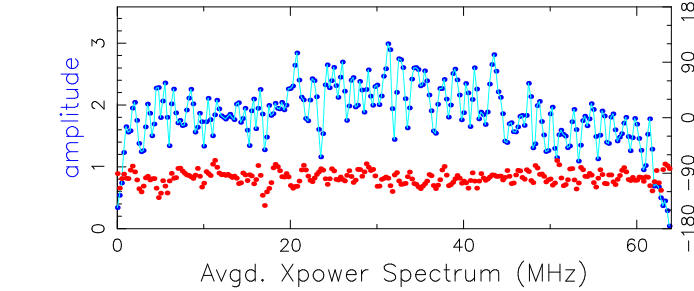
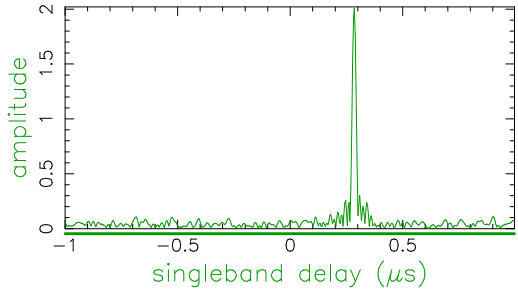
2013+370.3MP1EA, No0232, XY

ONŞALA60 - YEBES40M, fgroup W, pol LL



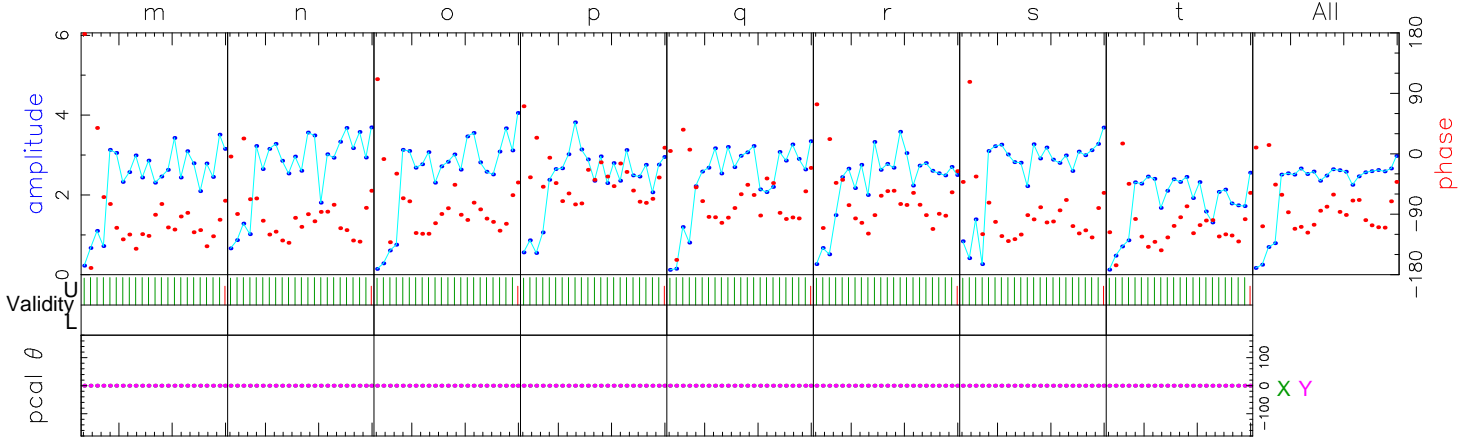
Fringe quality 3

SNR 70.3
 Int time 162.292
 Amp 2.021
 Phase -87.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.284247
 MBD 0.002114
 Fringe rate (Hz)
 -0.057220
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102648
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-107.5	-99.8	-87.7	-43.6	-72.3	-75.7	-98.8	-110.2	Phase	-87.1
	2.1	2.4	2.3	2.1	2.1	2.1	2.4	1.6	Ampl.	2.1
	329.8	329.9	329.8	330.2	329.7	329.2	329.7	329.0	Sbd box	329.8
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 4.87041982423E+03 Apriori delay (usec) 4.87013646062E+03 Resid mbdelay (usec) 2.11361E-03 +/- 1.5E-05
 Sband delay (usec) 4.87042070762E+03 Apriori clock (usec) 2.2346887E+02 Resid sbdelay (usec) 2.84247E-01 +/- 1.2E-04
 Phase delay (usec) 4.87013645781E+03 Apriori clockrate (us/s) 2.6723920E-02 Resid phdelay (usec) -2.80734E-06 +/- 5.3E-08
 Delay rate (us/s) -3.03958517862E-01 Apriori rate (us/s) -3.03957853599E-01 Resid rate (us/s) -6.64263E-07 +/- 5.6E-10
 Total phase (deg) 171.4 Apriori accel (us/s/s) -1.15371779916E-05 Resid phase (deg) -87.1 +/- 1.6

RMS Theor. Amplitude 2.021 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 35.7 3.9 Search (1024X32) 1.953 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 41.0 6.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.1 2.3 Inc. seg. avg. 2.192 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 12.8 4.0 Inc. frq. avg. 2.143 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 80.6 el 39.7 pa -41.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 2181.016 656.965 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XY.W.35.3MP1EA

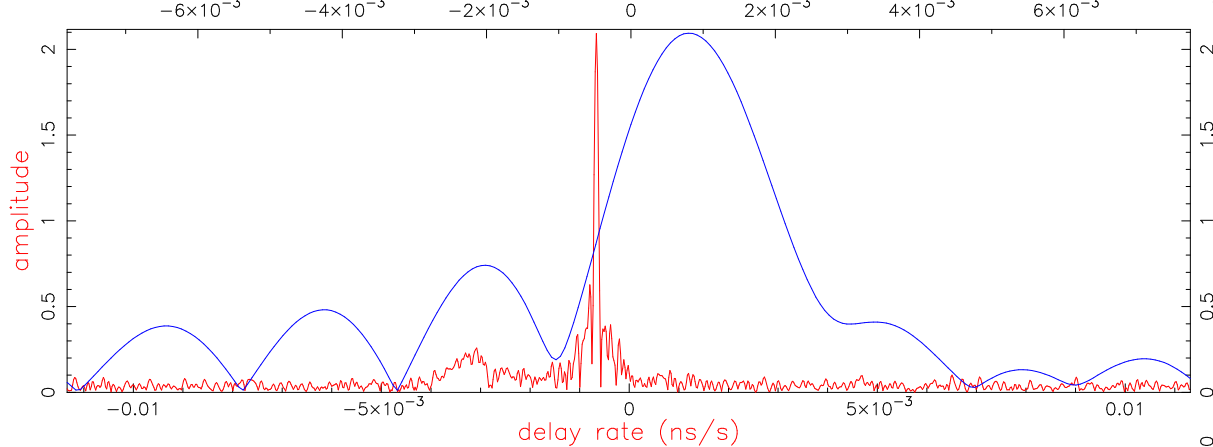
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, XY

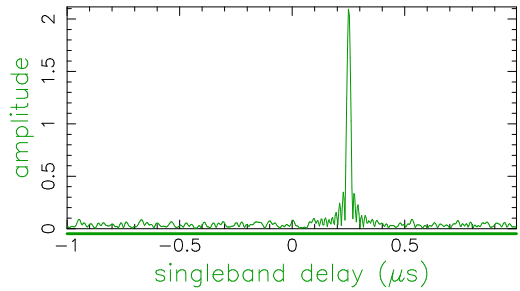
ONŞALA60 - YEŞES40M, fgroup W, pol RR

multiband delay (μ s)

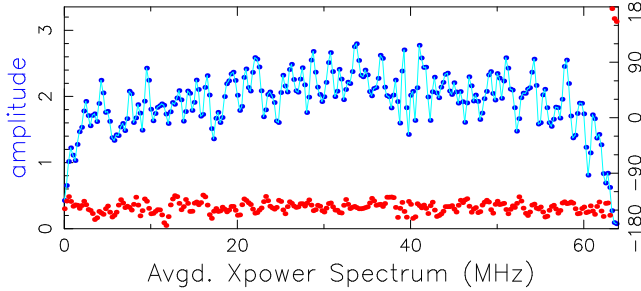


Fringe quality 4

SNR 73.6
 Int time 162.292
 Amp 2.117
 Phase -140.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.251295
 MBD 0.000848
 Fringe rate (Hz)
 -0.057261
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

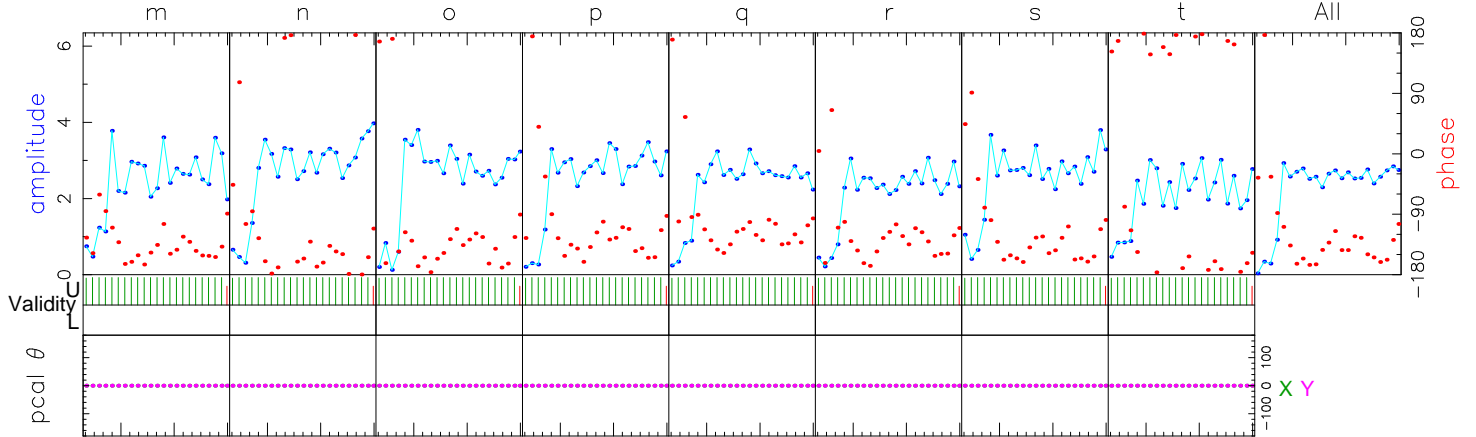


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102653
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-137.1	-157.9	-140.3	-127.8	-119.2	-131.0	-134.8	-176.8	Phase	-140.1
	2.2	2.4	2.3	2.3	2.2	1.9	2.2	1.9	Ampl.	2.2
	321.4	320.9	321.7	321.6	321.3	320.8	321.3	320.3	Sbd box	321.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	4.87038730829E+03				4.87013646062E+03				Resid mbdelay (usec)	8.47668E-04 +/- 1.5E-05
Sband delay (usec)	4.87038775587E+03				2.2346887E+02				Resid sbdelay (usec)	2.51295E-01 +/- 1.2E-04
Phase delay (usec)	4.87013645610E+03				2.6723920E-02				Resid phdelay (usec)	-4.51850E-06 +/- 5.0E-08
Delay rate (us/s)	-3.03958518343E-01				-3.03957853599E-01				Resid rate (us/s)	-6.64743E-07 +/- 5.3E-10
Total phase (deg)		118.3			-1.15371779916E-05				Resid phase (deg)	-140.1 +/- 1.6
	RMS	Theor.	Amplitude	2.117 +/- 0.029					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	38.0	3.7	Search (1024X32)	2.068					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	41.7	6.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	19.9	2.2	Inc. seg. avg.	2.242					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	8.4	3.8	Inc. frq. avg.	2.186					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
X: az 80.6 el 39.7 pa -41.9			Y: az 61.1 el 24.8 pa -56.9						u,v (fr/asec) 2181.016 656.965	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0232//XY..3MP1EA						Output file: /Exps/c241c/v2/3mm/1234/No0232//XY.W.56.3MP1EA	

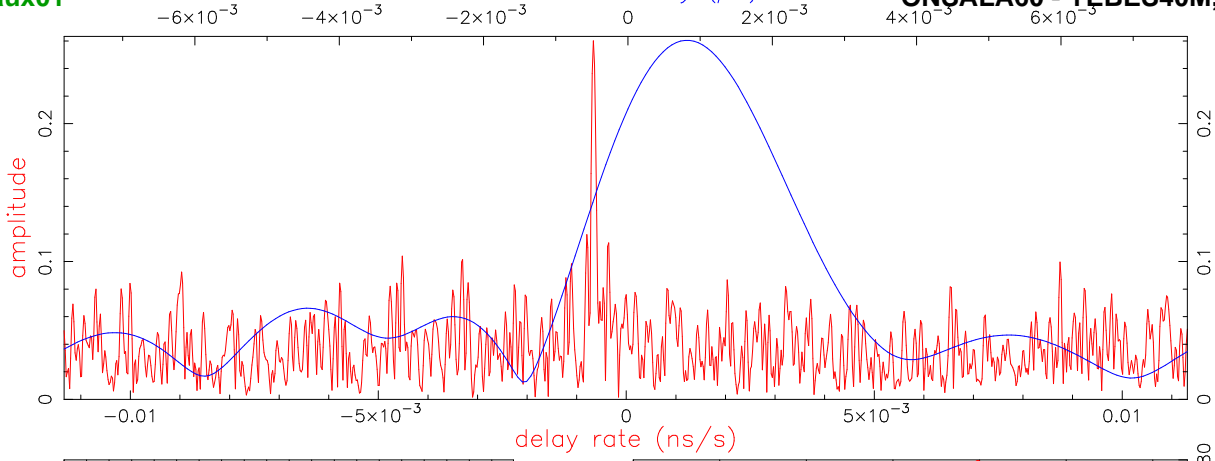
Mk4/DiFX fourfit 3.25 rev 0

aux01

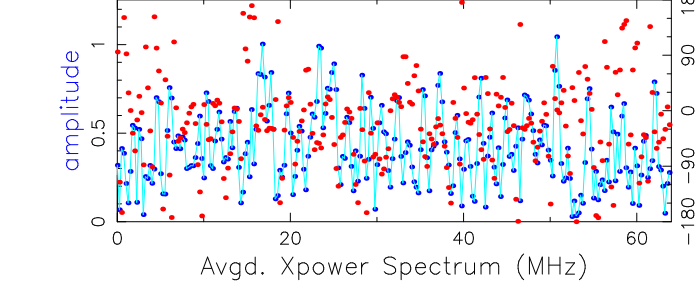
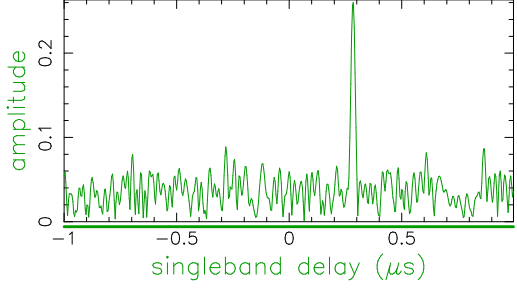
2013+370.3MP1EA, No0232, XY

ONŞALA60 - YEŞES40M, fgroup W, pol LR

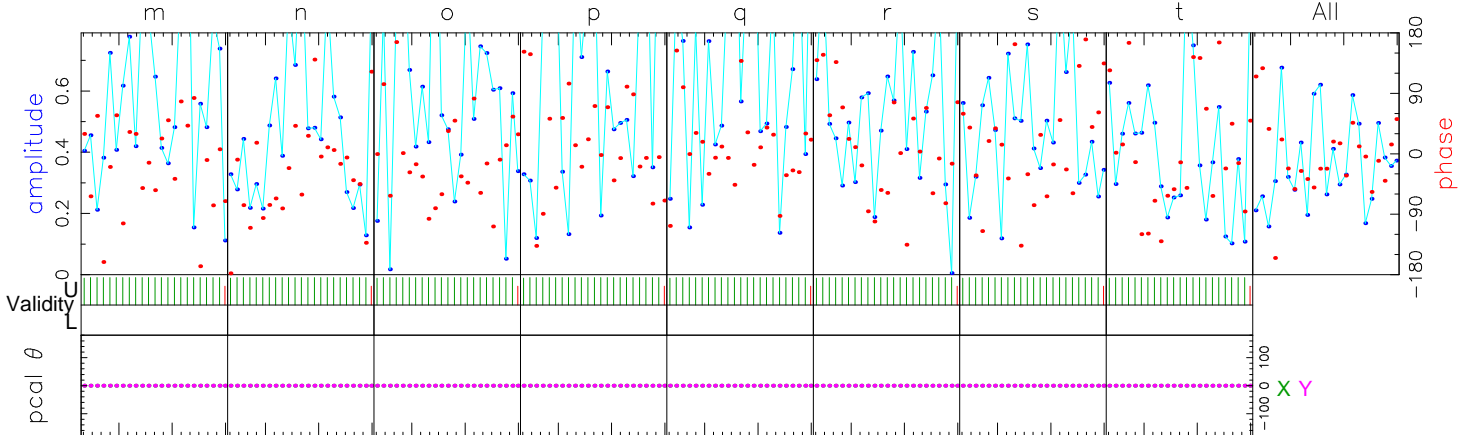
multiband delay (μ s)



Fringe quality 9
 SNR 9.2
 Int time 162.292
 Amp 0.263
 Phase -5.4
 PFD 1.0e-11
 Delays (us)
 SBD 0.283571
 MBD 0.000748
 Fringe rate (Hz) -0.058063
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102655
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-2.4	-24.9	-26.0	7.1	3.4	19.0	-8.1	-60.5		Phase -5.4
	0.3	0.3	0.3	0.4	0.4	0.2	0.2	0.1		Ampl. 0.3
	331.4	328.9	330.3	329.3	329.4	327.0	201.5	206.7		Sbd box 329.6
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used
X	0	0	0	0	0	0	0	0		PC freqs
Y	0	0	0	0	0	0	0	0		PC freqs
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:Y	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
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec) (SBD)	4.87041845816E+03		Apriori delay (usec)		4.87013646062E+03		Resid mbdelay (usec)		7.47543E-04	+/- 1.2E-04
Sband delay (usec)	4.87042003137E+03		Apriori clock (usec)		2.2346887E+02		Resid sbdelay (usec)		2.83571E-01	+/- 9.4E-04
Phase delay (usec)	4.87013646045E+03		Apriori clockrate (us/s)		2.6723920E-06		Resid phdelay (usec)		-1.74037E-07	+/- 4.0E-07
Delay rate (us/s)	-3.03958527656E-01		Apriori rate (us/s)		-3.03957853599E-01		Resid rate (us/s)		-6.74057E-07	+/- 4.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.15371779916E-05		Resid phase (deg)		-5.4	+/- 12.5

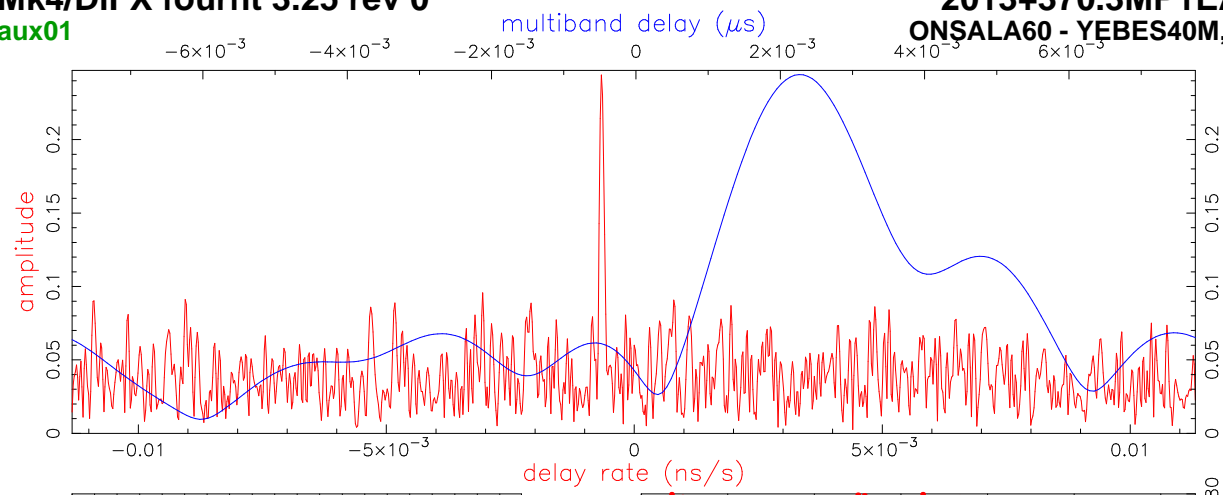
ph/seg (deg) 57.2 30.0 Search (1024X32) 0.253 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.6 52.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.9 17.7 Inc. seg. avg. 0.323 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.8 30.9 Inc. frq. avg. 0.260 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 X: az 80.6 el 39.7 pa -41.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 2181.016 656.965 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XY.W.68.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, XY

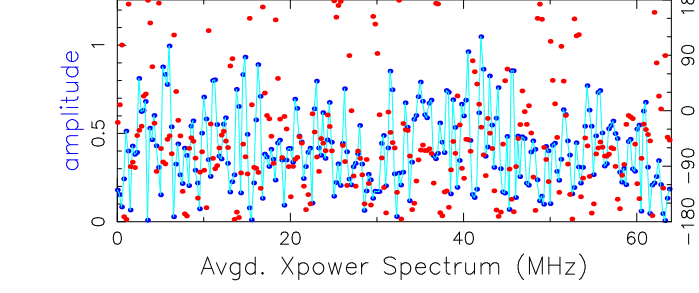
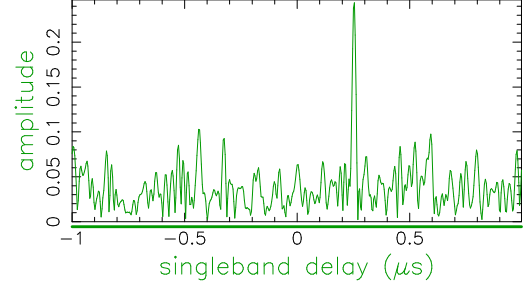
ONŞALA60 - YEŞES40M, fgroup W, pol RL



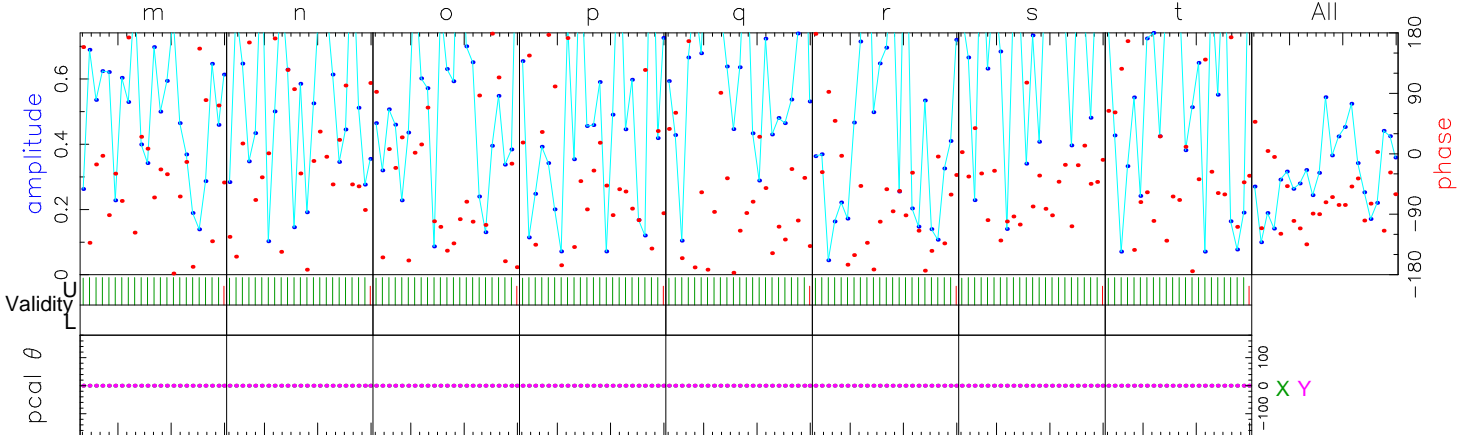
Fringe quality 9

SNR 8.6
 Int time 162.292
 Amp 0.247
 Phase -70.2
 PFD 1.5e-09
 Delays (us)
 SBD 0.252501
 MBD 0.002207
 Fringe rate (Hz)
 -0.058189
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102701
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-70.8	-35.4	-97.8	-73.6	-94.8	-96.6	-50.2	-60.5	Phase	-70.2
	0.2	0.2	0.1	0.2	0.3	0.3	0.5	0.3	Ampl.	0.2
	381.9	172.5	149.5	19.1	321.7	321.1	322.0	319.5	Sbd box	321.6
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	4.87038866785E+03	Apriori delay (usec)		4.87013646062E+03	Resid mbdelay (usec)		2.20723E-03	+/-	1.3E-04	
Sband delay (usec)	4.87038896212E+03	Apriori clock (usec)		2.2346887E+02	Resid sbdelay (usec)		2.52501E-01	+/-	1.0E-03	
Phase delay (usec)	4.87013645836E+03	Apriori clockrate (us/s)		2.6723920E-02	Resid phdelay (usec)		-2.26516E-06	+/-	4.3E-07	
Delay rate (us/s)	-3.03958529113E-01	Apriori rate (us/s)		-3.03957853599E-01	Resid rate (us/s)		-6.75513E-07	+/-	4.6E-09	
Total phase (deg)	188.2		Apriori accel (us/s/s)		-1.15371779916E-05	Resid phase (deg)		-70.2	+/-	13.3

ph/seg (deg)	45.6	Theor.	32.0	Amplitude	0.247 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	53.9	Search (1024X32)	0.237	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	25.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	46.9	Inc. seg. avg.	0.273	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.248	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 80.6 el 39.7 pa -41.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 2181.016 656.965 simultaneous interpolator

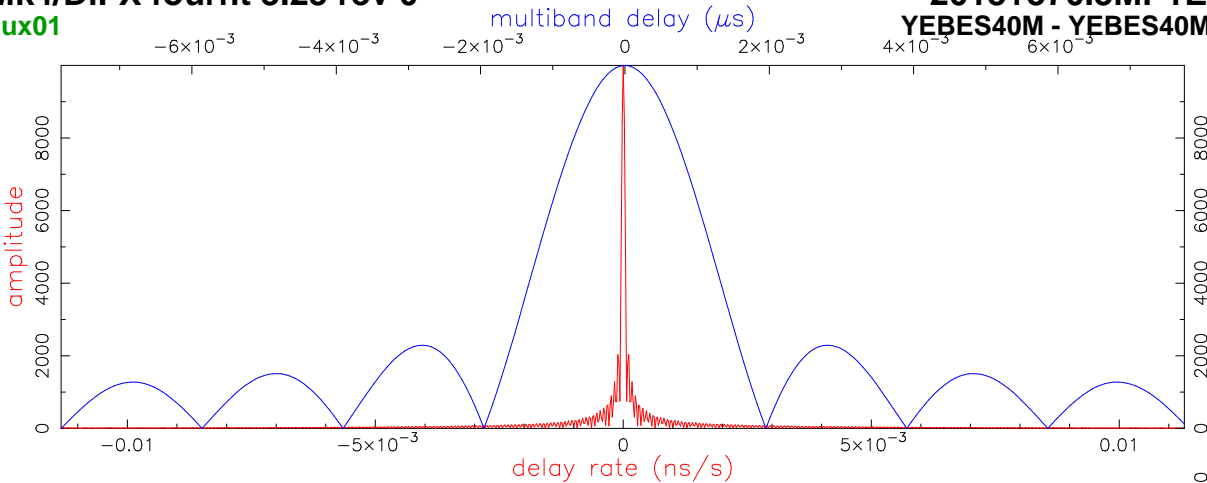
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XY.W.78.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

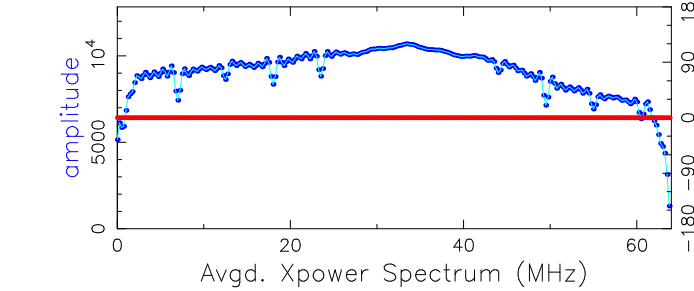
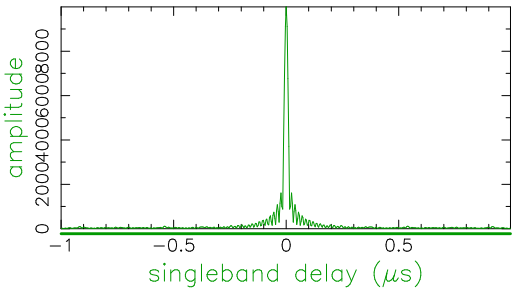
2013+370.3MP1EA, No0232, YY

YEBES40M - YEBES40M, fgroup W, pol LL



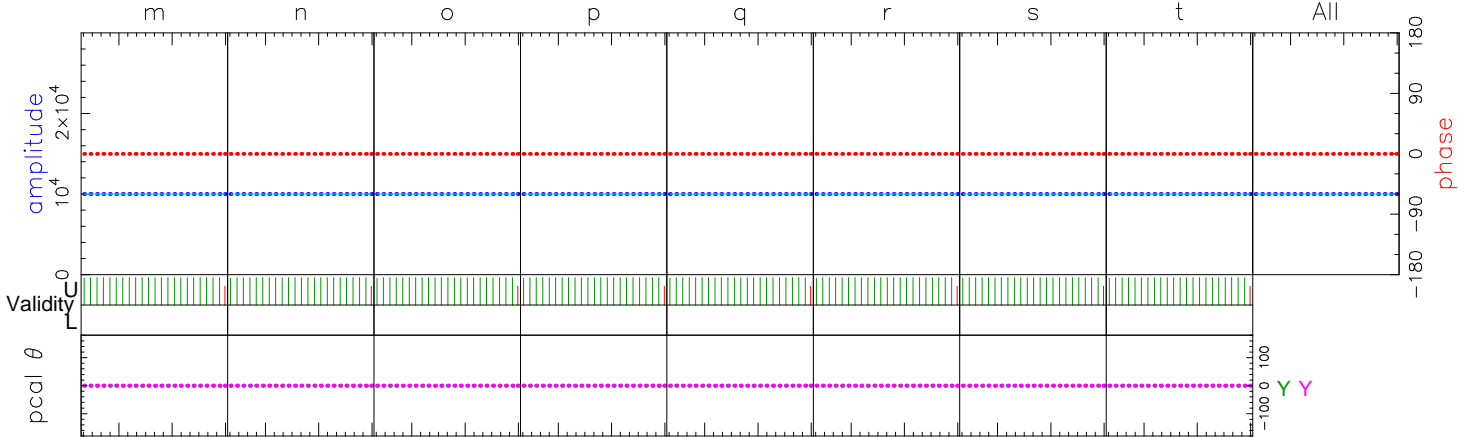
Fringe quality 9

SNR 348374.2
 Int time 162.292
 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) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102646
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
Y	0	0	0	0	0	0	0	0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	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	+/-	3.1E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.5E-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	+/-	1.1E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

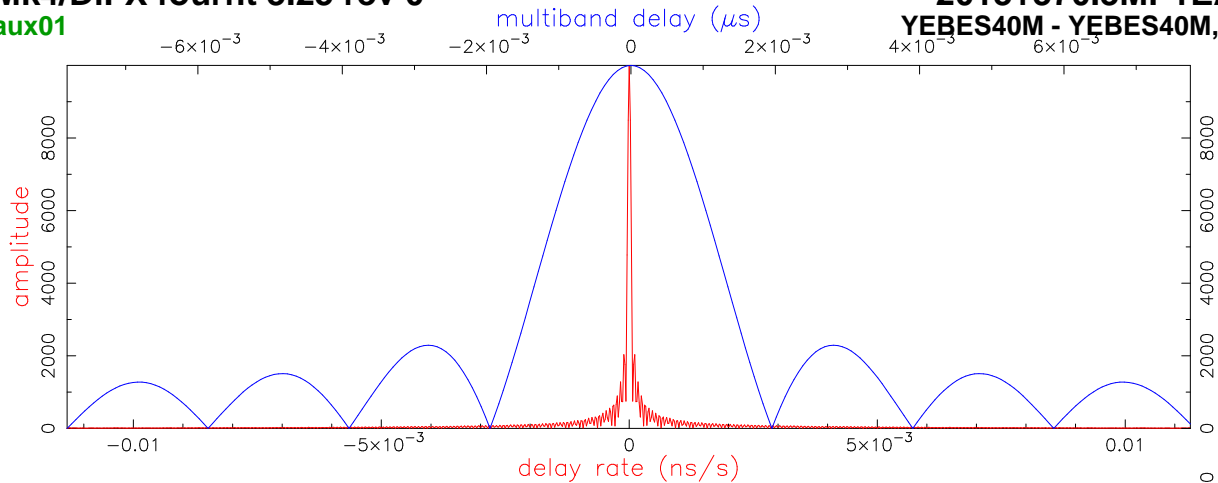
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Y: az 61.1 el 24.8 pa -56.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/YY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/YY.W.31.3MP1EA simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

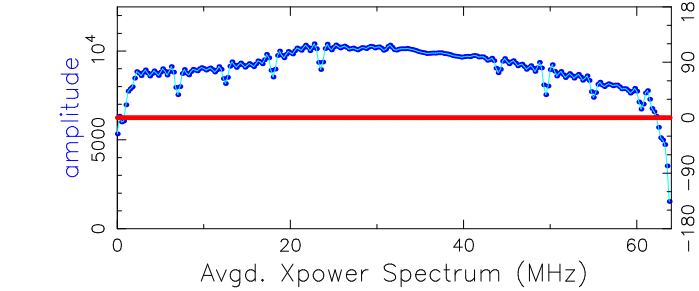
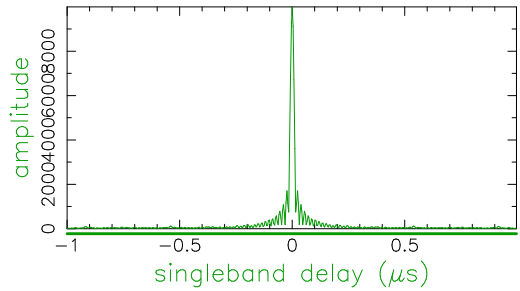
2013+370.3MP1EA, No0232, YY

YEBES40M - YEBES40M, fgroup W, pol RR



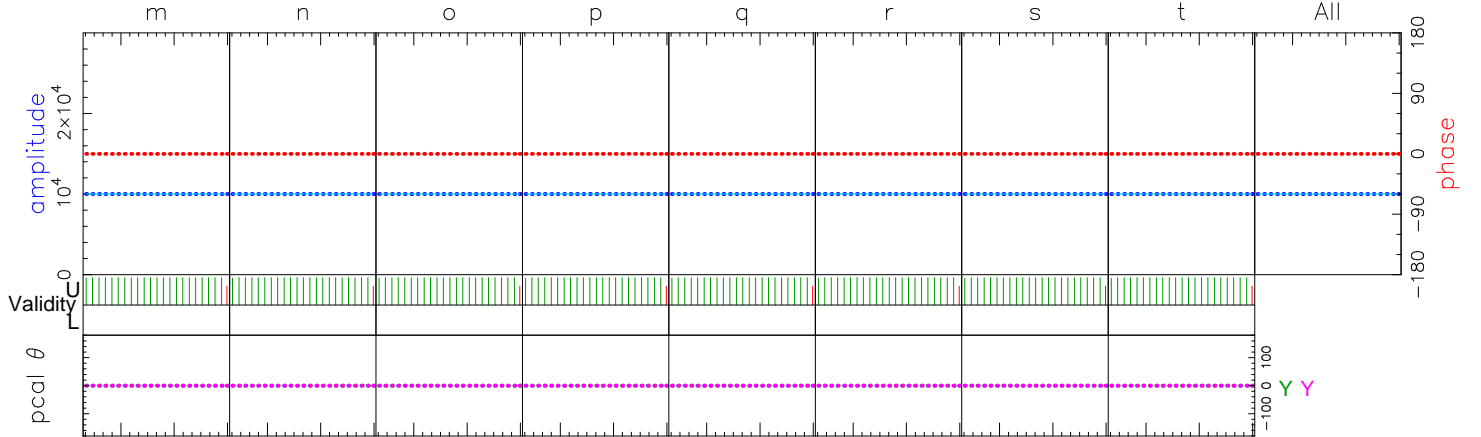
Fringe quality 9

SNR 348374.2
 Int time 162.292
 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) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	10000.0	10000.0
Y	0	0	0	0	0	0	0	0	Ampl.	257.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.5E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.1E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	1.1E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

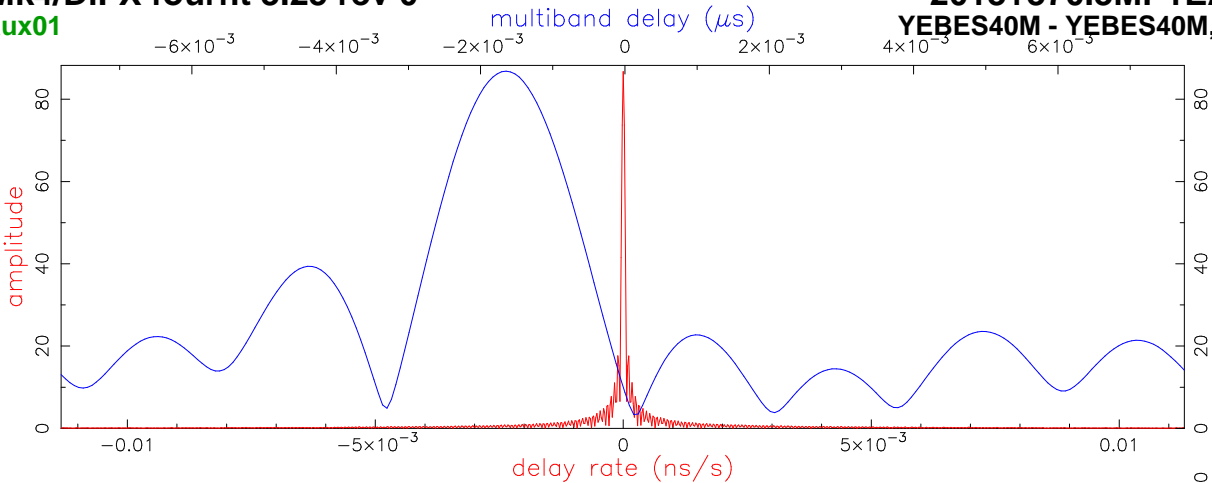
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Y: az 61.1 el 24.8 pa -56.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/YY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/YY.W.48.3MP1EA simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, YY

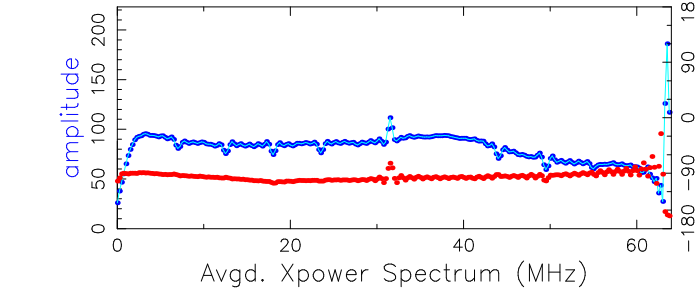
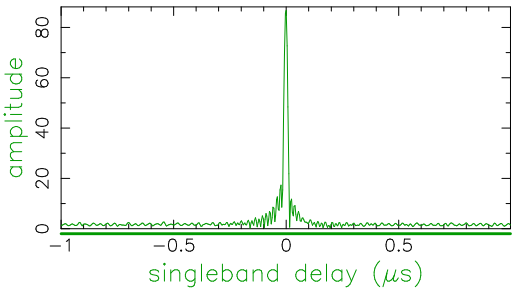
YEBES40M - YEBES40M, fgroup W, pol LR



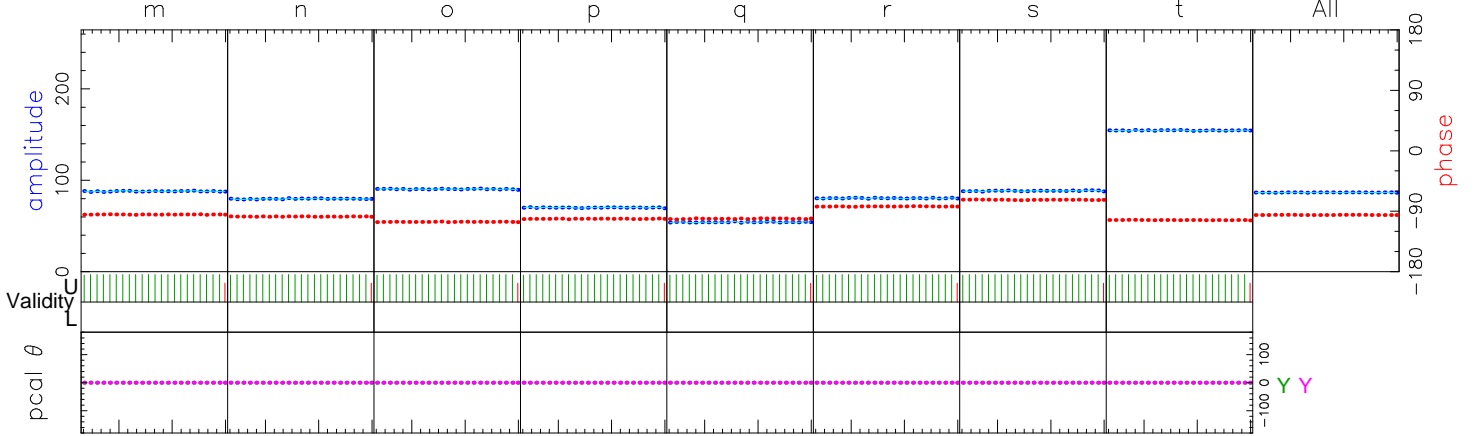
Fringe quality 7

SNR 3073.7
 Int time 162.292
 Amp 88.230
 Phase -95.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001669
 MBD -0.001690
 Fringe rate (Hz) 0.000013
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102654
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
Y	0	0	0	0	0	0	0	0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-1.68971875000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.68972E-03	+/-	3.5E-07
Sband delay (usec)	-1.66900000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.66900E-03	+/-	2.8E-06
Phase delay (usec)	-3.07868814386E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.07869E-06	+/-	1.2E-09
Delay rate (us/s)	1.53048445830E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.53048E-10	+/-	1.3E-11
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-95.5	+/-	0.0

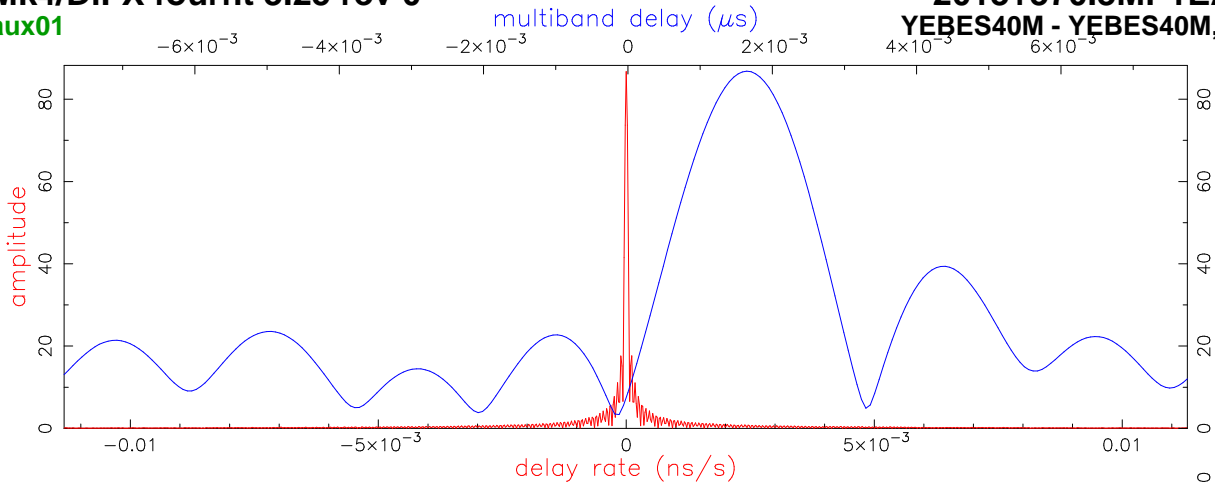
ph/seg (deg) 0.1 0.1 Search (1024X32) 85.357 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.7 0.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.3 0.1 Inc. seg. avg. 86.757 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.1 0.1 Inc. frq. avg. 88.285 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Y: az 61.1 el 24.8 pa -56.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/YY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/YY.W.65.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

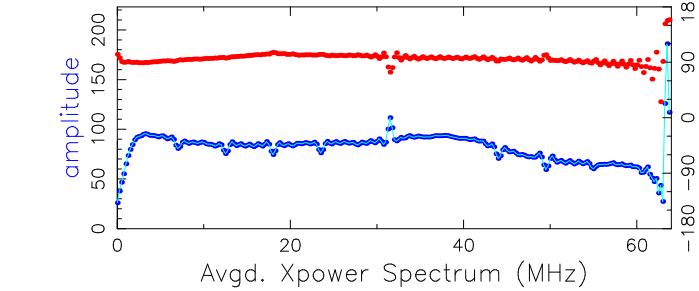
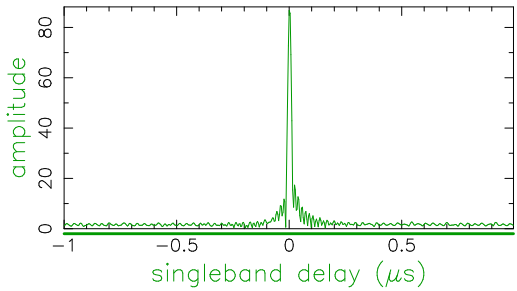
2013+370.3MP1EA, No0232, YY

YEBES40M - YEBES40M, fgroup W, pol RL



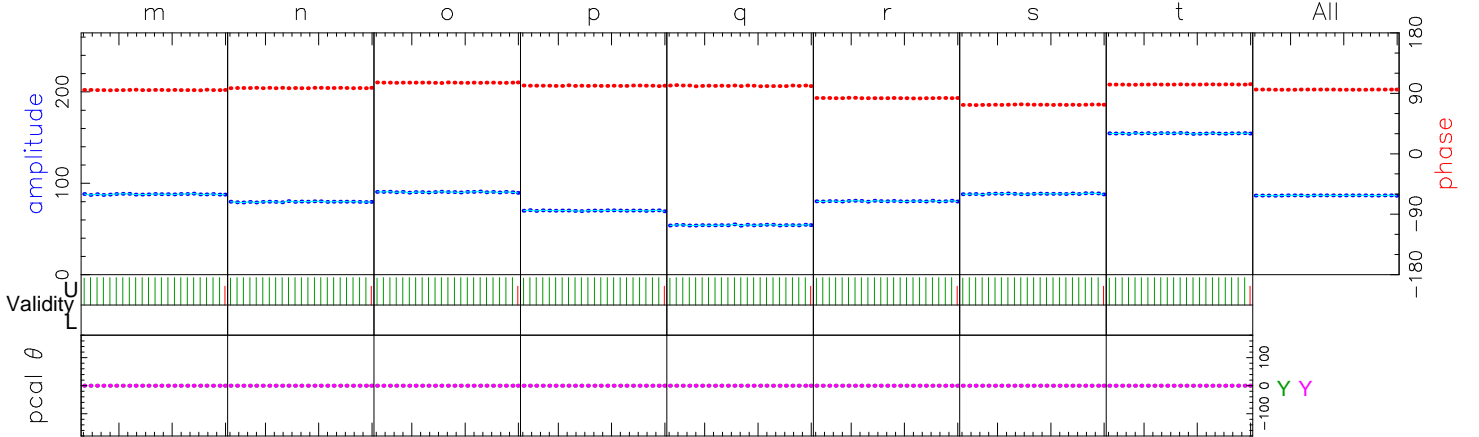
Fringe quality 7

SNR 3073.7
 Int time 162.292
 Amp 88.230
 Phase 95.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001669
 MBD 0.001690
 Fringe rate (Hz)
 -0.000013
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102702
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

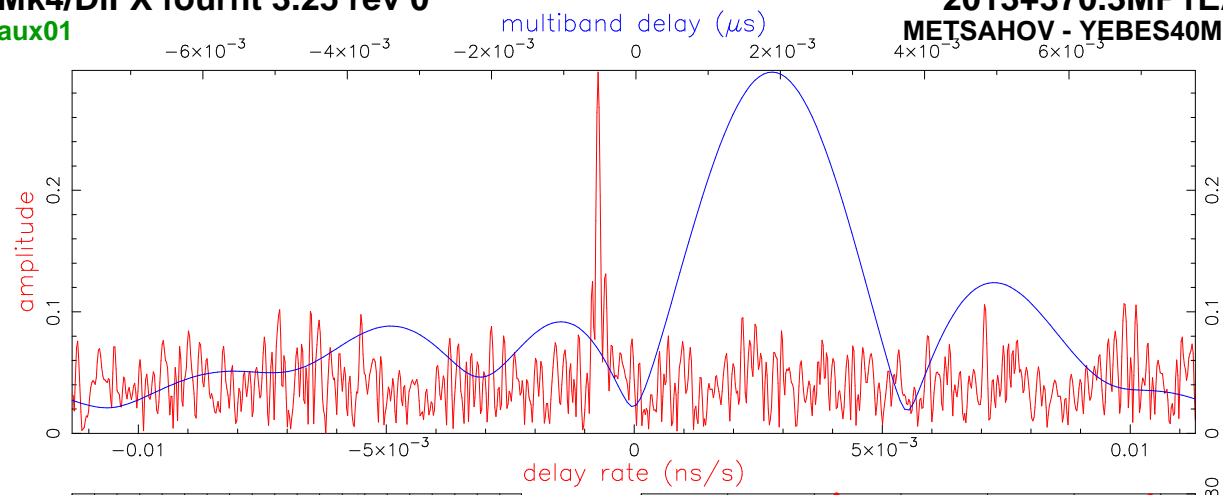
Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



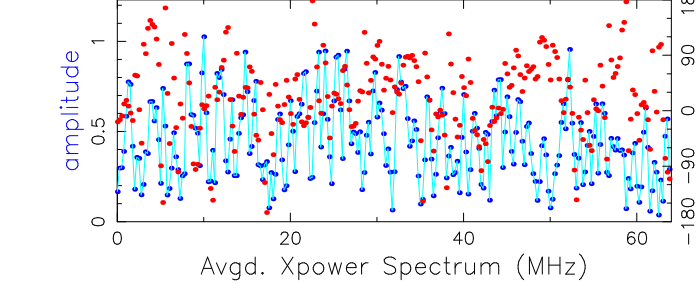
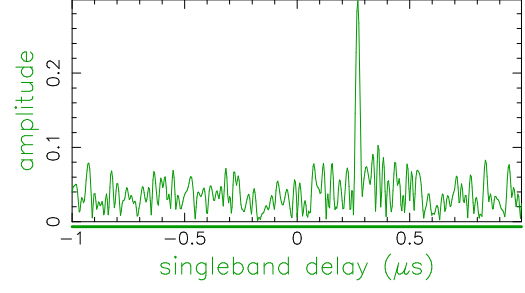
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
Y	0	0	0	0	0	0	0	0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 1.68971875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.68972E-03 +/- 3.5E-07
 Sband delay (usec) 1.66900000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.66900E-03 +/- 2.8E-06
 Phase delay (usec) 3.07868814375E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.07869E-06 +/- 1.2E-09
 Delay rate (us/s) -1.53048445830E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -1.53048E-10 +/- 1.3E-11
 Total phase (deg) 95.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 95.5 +/- 0.0

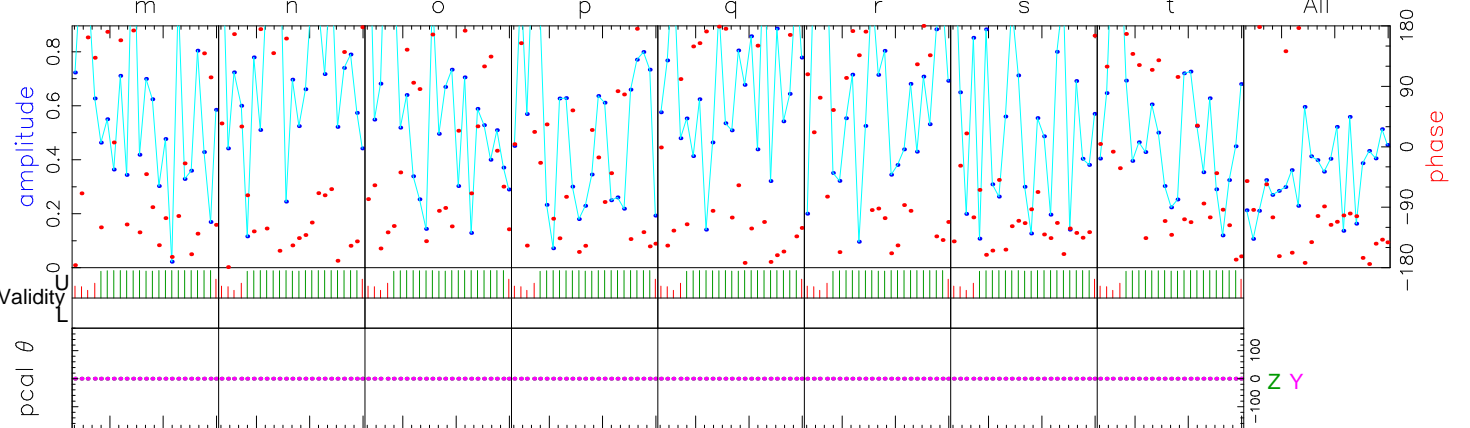
ph/seg (deg) 0.1 0.1 Amplitude 88.230 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.7 0.2 Search (1024X32) 85.357 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.1 0.1 Inc. seg. avg. 86.757 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Y: az 61.1 el 24.8 pa -56.9 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/YY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/YY.W.80.3MP1EA simultaneous interpolator



Fringe quality 9
SNR 9.8
Int time 144.977
Amp 0.299
Phase -135.8
PFD 2.0e-14
Delays (us)
SBD 0.268773
MBD 0.001874
Fringe rate (Hz)
-0.063623
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 004017.41
Stop 004300.22
FRT 004130.00
Corr/FF/build
2024:351:093049
2025:041:102651
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	-138.8	-138.9	-128.7	-97.2	-147.6	-139.4	-127.4	-142.8	Phase	-135.8
	0.3	0.4	0.2	0.1	0.5	0.3	0.4	0.1	Ampl.	0.3
	326.4	326.2	356.2	75.9	325.9	324.8	326.6	234.9	Sbd box	325.8
U/L	300/0	300/0	300/0	300/0	300/0	300/0	300/0	300/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.54091727144E+03	Apriori delay (usec)	6.54064977292E+03	Resid mbdelay (usec)	1.87352E-03	+/-	1.1E-04
Sband delay (usec)	6.54091854617E+03	Apriori clock (usec)	1.1081501E+02	Resid sbdelay (usec)	2.68773E-01	+/-	8.8E-04
Phase delay (usec)	6.54064976854E+03	Apriori clockrate (us/s)	2.0656289E-06	Resid phdelay (usec)	-4.37936E-06	+/-	3.8E-07
Delay rate (us/s)	-4.07898267384E-01	Apriori rate (us/s)	-4.07897528779E-01	Resid rate (us/s)	-7.38605E-07	+/-	4.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.92711004425E-05	Resid phase (deg)	-135.8	+/-	11.7

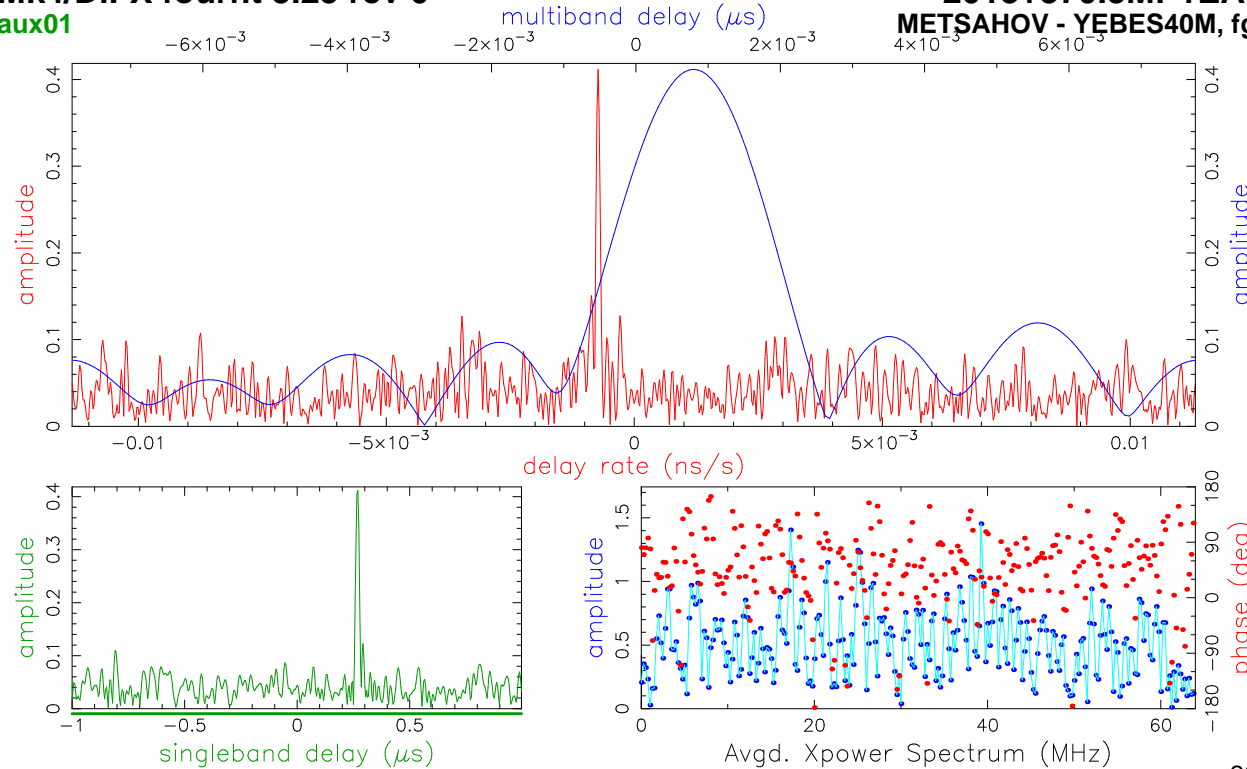
ph/seg (deg) 38.8 27.2 Search (1024X32) 0.291 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 48.2 47.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 17.5 16.5 Inc. seg. avg. 0.326 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 42.6 28.8 Inc. frq. avg. 0.292 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
Z: az 93.6 el 46.2 pa -38.5 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) 2923.117 370.762 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//ZY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//ZY.W.44.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, ZY

METSAHOV - YEBES40M, fgroup W, pol RR

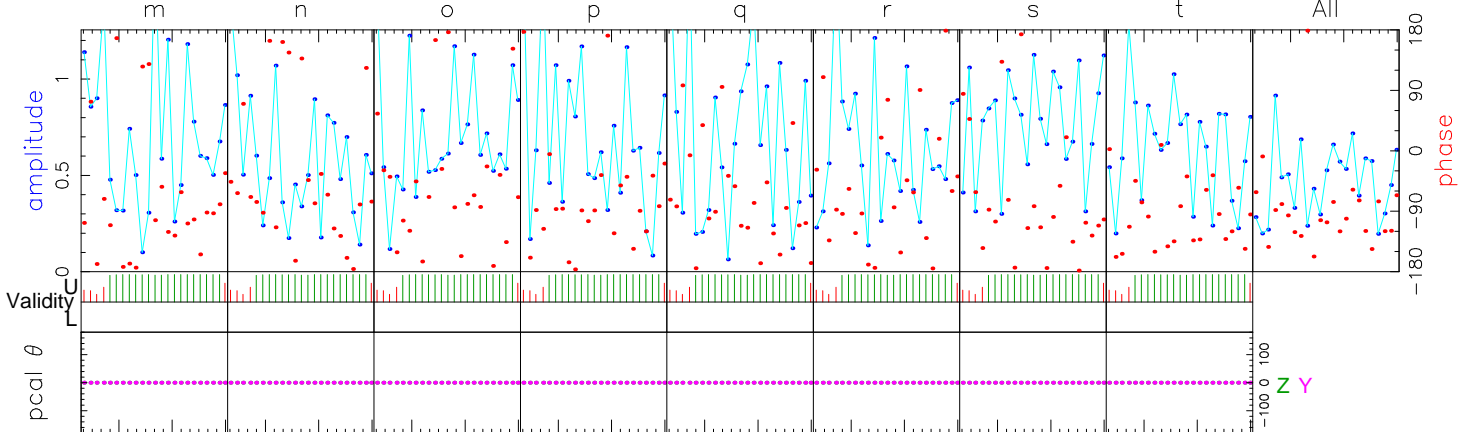


Fringe quality 9

SNR 13.8
 Int time 144.977
 Amp 0.419
 Phase -103.4
 PFD 1.3e-34
 Delays (us)
 SBD 0.267942
 MBD 0.000774
 Fringe rate (Hz)
 -0.063884
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102653
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



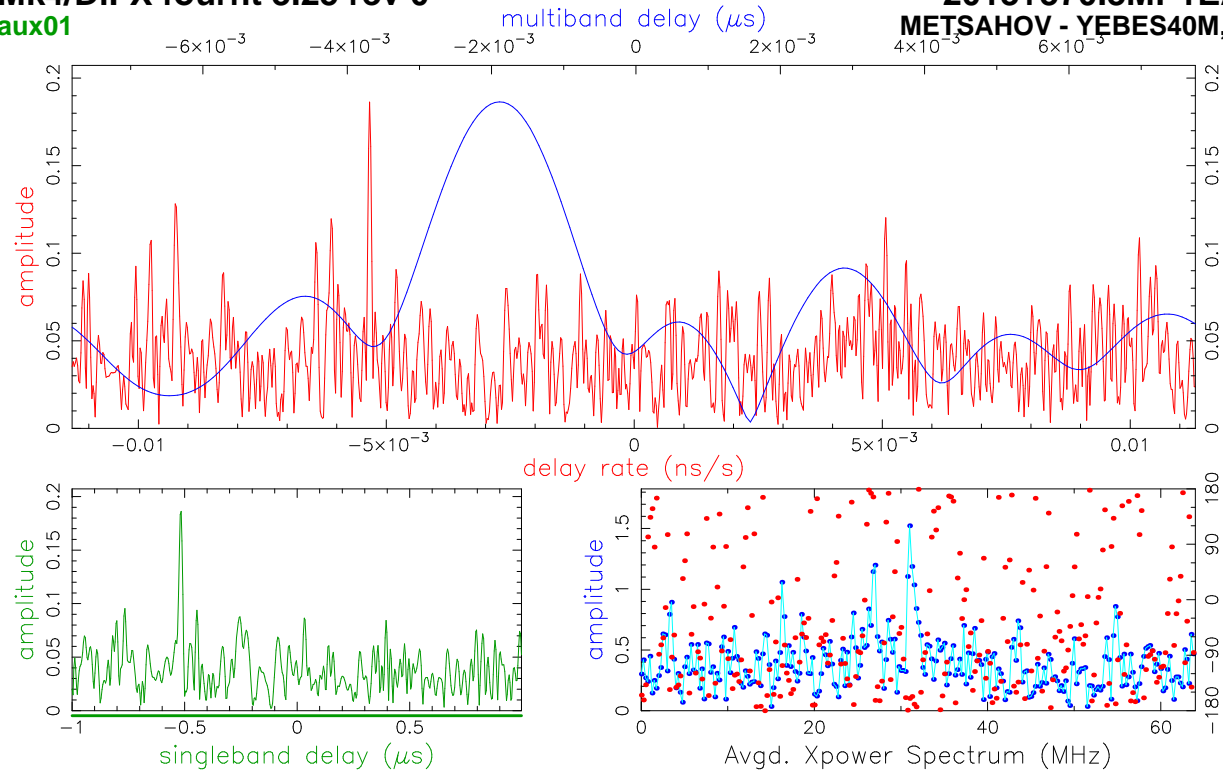
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-110.5	-107.8	-102.2	-99.1	-94.4	-94.9	-115.7	-99.4	Phase	-103.4		
	0.5	0.3	0.4	0.4	0.4	0.3	0.5	0.5	Ampl.	0.4		
	325.6	325.2	326.1	324.6	325.9	325.3	325.8	325.7	Sbd box	325.6		
U/L	300/0	300/0	300/0	300/0	300/0	300/0	300/0	300/0	APs used			
Z	0	0	0	0	0	0	0	0	PC freqs			
Y	0	0	0	0	0	0	0	0	PC freqs			
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
Y	1000	1000	1000	1000	1000	1000	1000	1000				
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	6.54091617241E+03		Apriori delay (usec)		6.54064977292E+03		Resid mbdelay (usec)		7.74488E-04	+/- 7.9E-05		
Sband delay (usec)	6.54091771442E+03		Apriori clock (usec)		1.1081501E+02		Resid sbdelay (usec)		2.67942E-01	+/- 6.3E-04		
Phase delay (usec)	6.54064976959E+03		Apriori clockrate (us/s)		2.0656289E-02		Resid phdelay (usec)		-3.33490E-06	+/- 2.7E-07		
Delay rate (us/s)	-4.07898270407E-01		Apriori rate (us/s)		-4.07897528779E-01		Resid rate (us/s)		-7.41627E-07	+/- 3.0E-09		
Total phase (deg)	54.8		Apriori accel (us/s/s)		-1.92711004425E-05		Resid phase (deg)		-103.4	+/- 8.3		
	RMS	Theor.	Amplitude	0.419 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	34.2	19.4	Search (1024X32)	0.394		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	43.1	33.9	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	8.3	11.8	Inc. seg. avg.	0.450		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	17.3	20.6	Inc. frq. avg.	0.407		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 93.6 el 46.2 pa -38.5	Y: az 61.1 el 24.8 pa -56.9		u, v (fr/asec) 2923.117 370.762						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0232//ZY..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232//ZY.W.58.3MP1EA									

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, ZY

METSAHOV - YEBES40M, fgroup W, pol LR

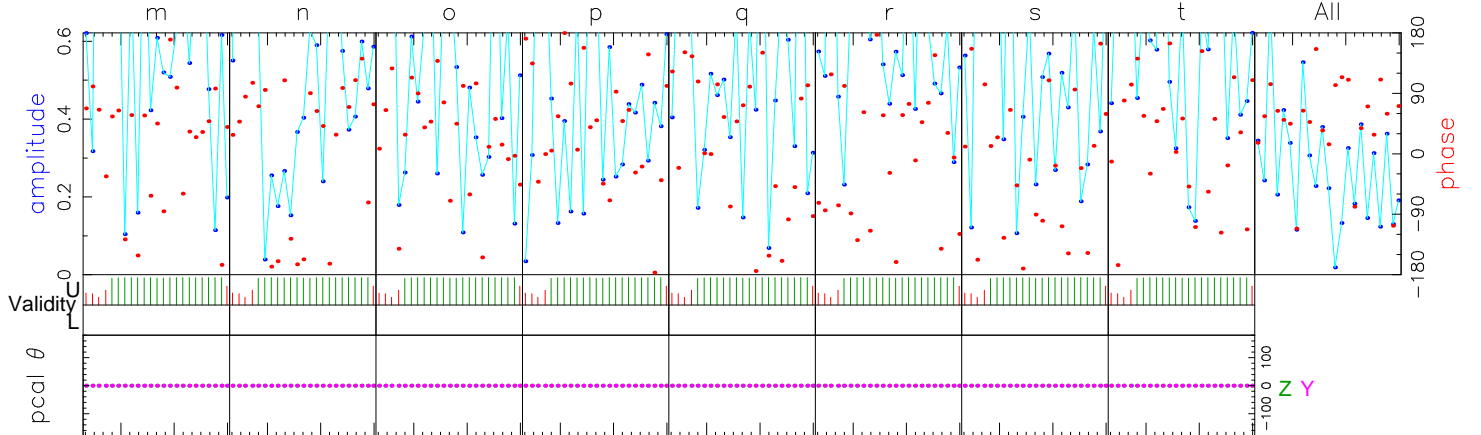


Fringe quality 0

SNR 6.2
 Int time 144.977
 Amp 0.207
 Phase 56.9
 PFD 6.6e-02
 Delays (us)
 SBD -0.517170
 MBD -0.001932
 Fringe rate (Hz)
 -0.460706
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102655
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	43.8	92.9	42.8	24.8	100.0	73.6	37.1	67.4	Phase	56.9
	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	126.5	125.7	293.0	63.0	142.8	345.1	146.7	233.0	Sbd box	124.6
U/L	300/0	300/0	300/0	300/0	300/0	300/0	300/0	300/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.54013221641E+03	Apriori delay (usec)	6.54064977292E+03	Resid mbdelay (usec)	-1.93152E-03	+/-	1.7E-04
Sband delay (usec)	6.54013260292E+03	Apriori clock (usec)	1.1081501E+02	Resid sbdelay (usec)	-5.17170E-01	+/-	1.4E-03
Phase delay (usec)	6.54064977476E+03	Apriori clockrate (us/s)	2.0656289E-06	Resid phdelay (usec)	1.83411E-06	+/-	5.9E-07
Delay rate (us/s)	-4.07902877115E-01	Apriori rate (us/s)	-4.07897528779E-01	Resid rate (us/s)	-5.34834E-06	+/-	6.7E-09
Total phase (deg)	215.1	Apriori accel (us/s/s)	-1.92711004425E-05	Resid phase (deg)	56.9	+/-	18.4

ph/seg (deg)	RMS 70.1	Theor. 42.9	Amplitude Search (1024X32)	0.207 +/- 0.033	0.180	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	82.6	74.9	Interp.	0.000	0.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.8	26.1	Inc. seg. avg.	0.223	0.180	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.1	45.5	Inc. frq. avg.	0.204	0.180	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 93.6 el 46.2 pa -38.5 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) 2923.117 370.762 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//ZY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//ZY.W.71.3MP1EA

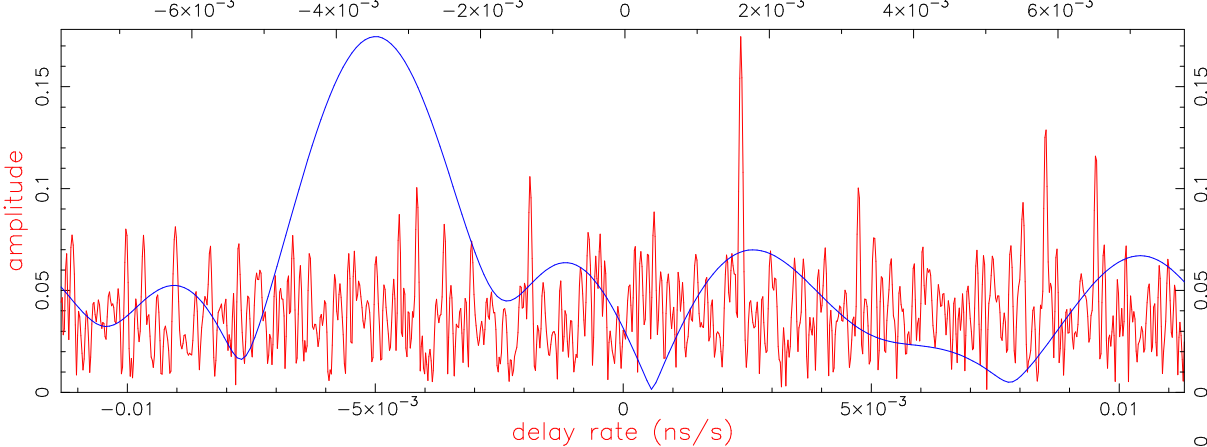
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, ZY

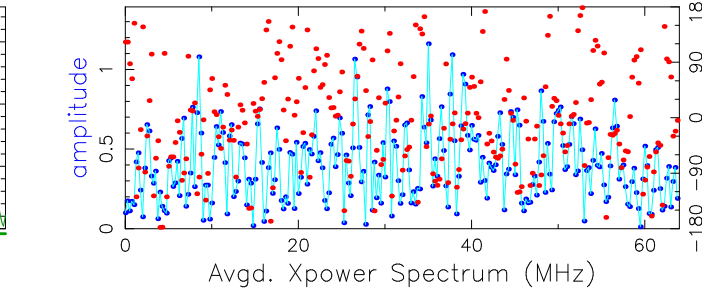
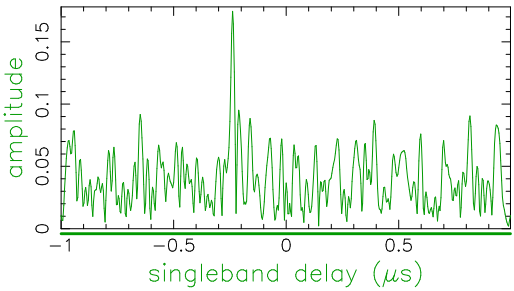
METSAHOV - YEBES40M, fgroup W, pol RL

multiband delay (μ s)



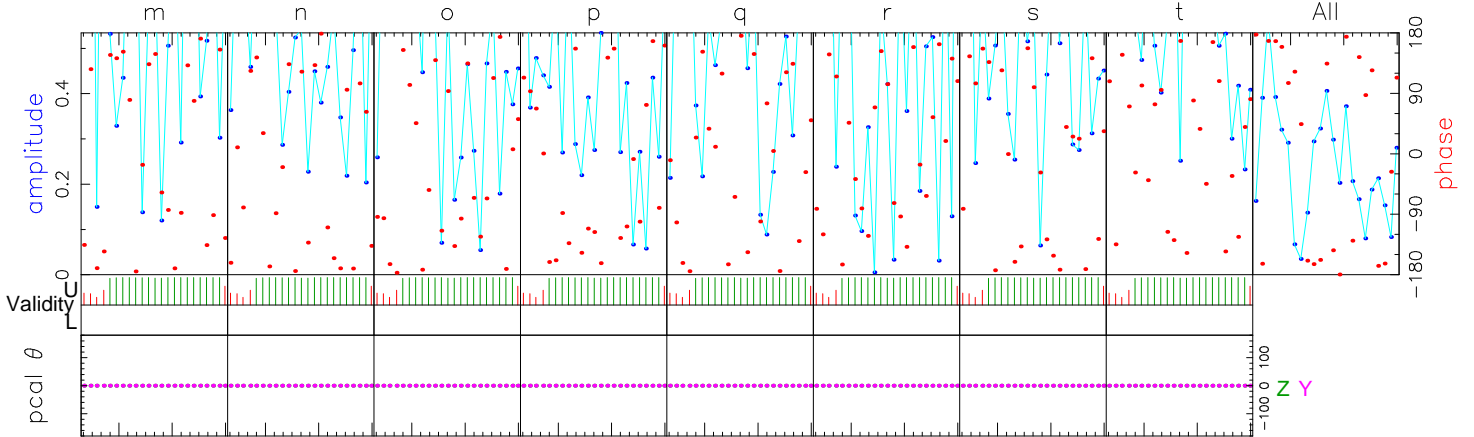
Fringe quality 0

SNR 5.8
 Int time 144.977
 Amp 0.178
 Phase 169.8
 PFD 6.5e-01
 Delays (us)
 SBD -0.237646
 MBD -0.003435
 Fringe rate (Hz)
 0.203506
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102702
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 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
	166.5	170.6	150.5	-167.4	175.1	143.9	164.7	163.3	Phase	169.8
	0.3	0.2	0.1	0.3	0.1	0.1	0.2	0.1	Ampl.	0.2
	195.8	194.4	84.9	196.2	1.5	500.3	32.0	201.5	Sbd box	196.2
U/L	300/0	300/0	300/0	300/0	300/0	300/0	300/0	300/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.54041196271E+03	Apriori delay (usec)	6.54064977292E+03	Resid mbdelay (usec)	-3.43521E-03	+/-	1.9E-04
Sband delay (usec)	6.54041212667E+03	Apriori clock (usec)	1.1081501E+02	Resid sbdelay (usec)	-2.37646E-01	+/-	1.5E-03
Phase delay (usec)	6.54064977840E+03	Apriori clockrate (us/s)	2.0656289E-06	Resid phdelay (usec)	5.47592E-06	+/-	6.4E-07
Delay rate (us/s)	-4.07895166275E-01	Apriori rate (us/s)	-4.07897528779E-01	Resid rate (us/s)	2.36250E-06	+/-	7.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.92711004425E-05	Resid phase (deg)	169.8	+/-	19.9

ph/seg (deg)	59.7	RMS	46.3	Theor.	59.7	Amplitude	0.178 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.4		80.9		72.4	Search (1024X32)	0.169	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.7		28.1		16.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.3		49.1		51.3	Inc. seg. avg.	0.172	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.163	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 93.6 el 46.2 pa -38.5 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) 2923.117 370.762 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//ZY...3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//ZY.W.81.3MP1EA