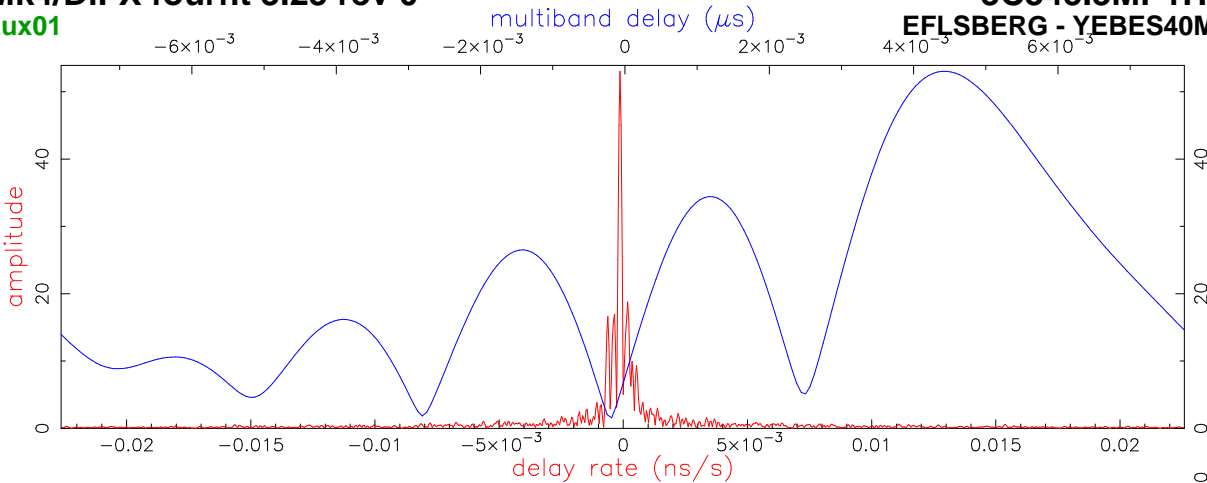


Mk4/DiFX fourfit 3.25 rev 0

aux01

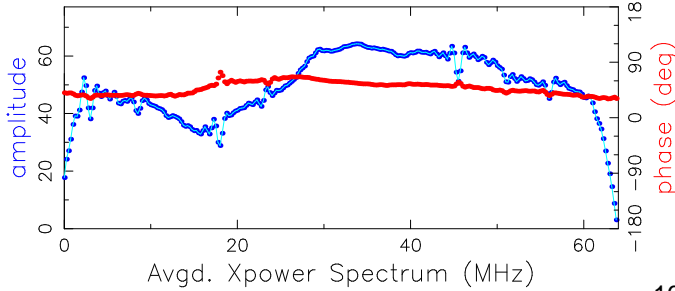
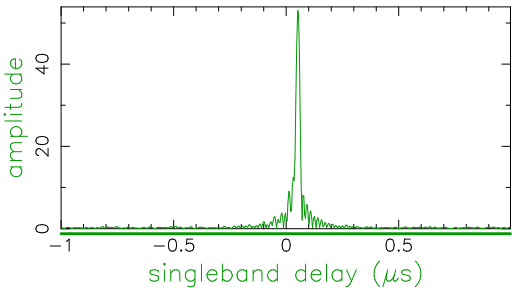
3C345.3MP1HX, No0399, BY

EFLSBERG - YEBES40M, fgroup Q, pol LL



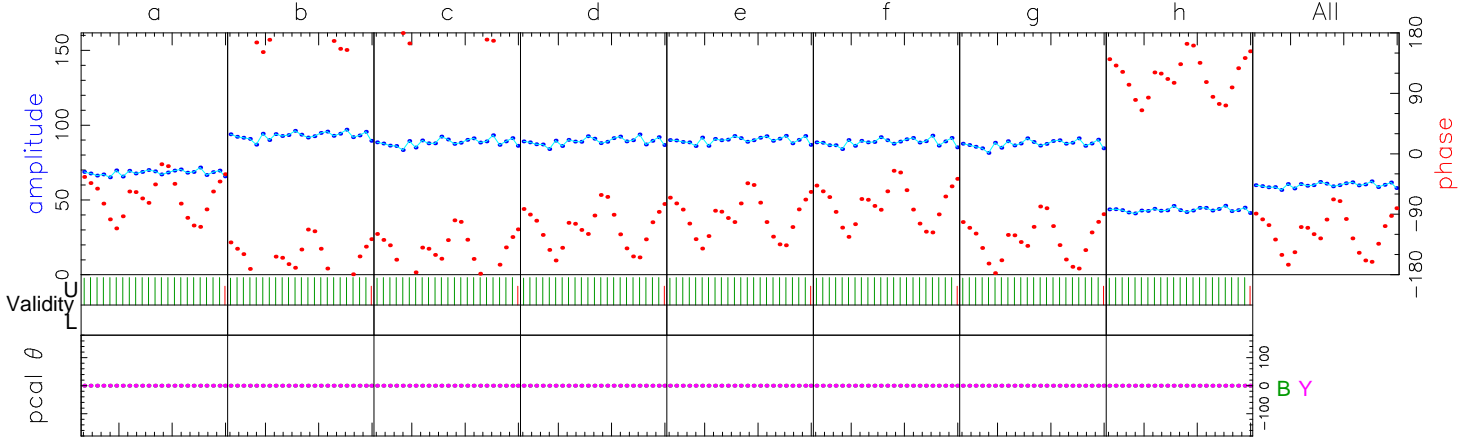
Fringe quality 3

SNR 1878.4  
 Int time 162.327  
 Amp 53.914  
 Phase 130.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.052452  
 MBD 0.004453  
 Fringe rate (Hz)  
 -0.005803  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145505  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-64.7	-161.8	-148.1	-110.9	-93.2	-74.9	-128.2	113.9	Phase	-117.3
	60.5	82.5	78.5	79.1	79.8	78.5	77.4	38.4	Ampl.	71.8
	267.6	269.7	270.7	270.4	270.6	270.2	269.1	264.6	Sbd box	270.4
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	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	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.82827057780E+03	Apriori delay (usec)	2.82821924995E+03	Resid mbdelay (usec)	4.45284E-03	+/-	5.8E-07
Sband delay (usec)	2.82827170170E+03	Apriori clock (usec)	7.5559441E+01	Resid sbdelay (usec)	5.24517E-02	+/-	4.6E-06
Phase delay (usec)	2.82821924240E+03	Apriori clockrate (us/s)	8.1915204E-07	Resid phdelay (usec)	-7.55354E-06	+/-	3.9E-09
Delay rate (us/s)	-1.90871878153E-01	Apriori rate (us/s)	-1.90871743635E-01	Resid rate (us/s)	-1.34518E-07	+/-	4.2E-11
Total phase (deg)	289.7	Apriori accel (us/s/s)	-5.81874571818E-06	Resid phase (deg)	130.2	+/-	0.1

ph/seg (deg)	28.0	0.1	Amplitude	53.914 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	11.4	0.3	Search (1024X32)	52.961	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	64.3	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	42.3	0.2	Inc. seg. avg.	59.891	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	71.823	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 78.3 el 45.3 pa -54.2 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 710.810 221.459 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/BY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/BY.Q.10.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

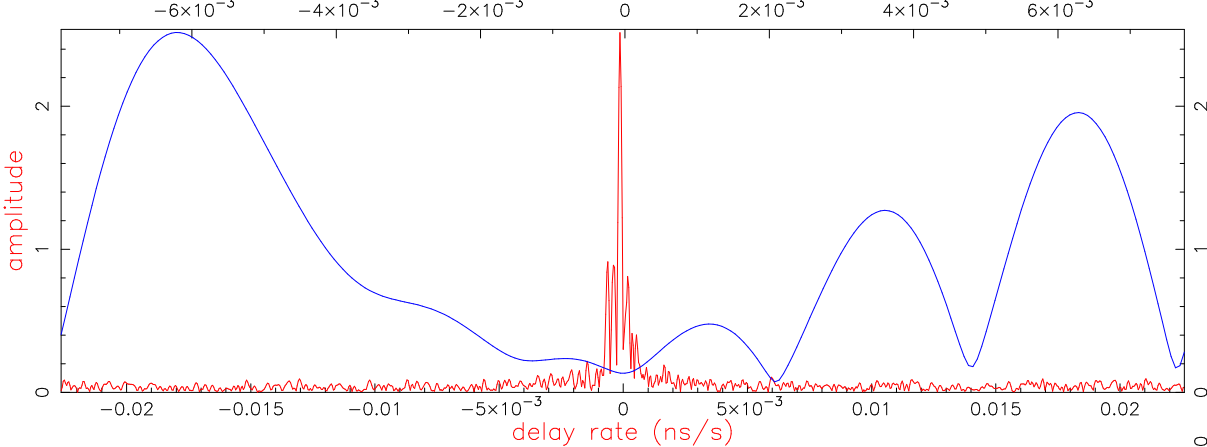
aux01

3C345.3MP1HX, No0399, BY

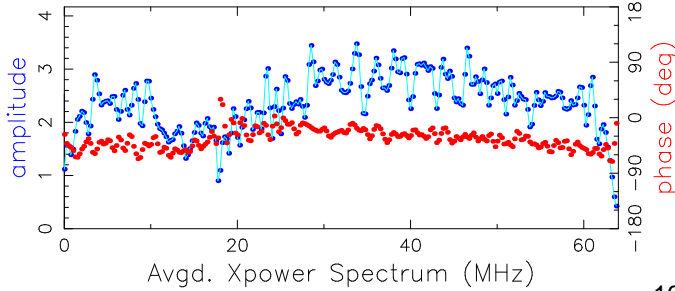
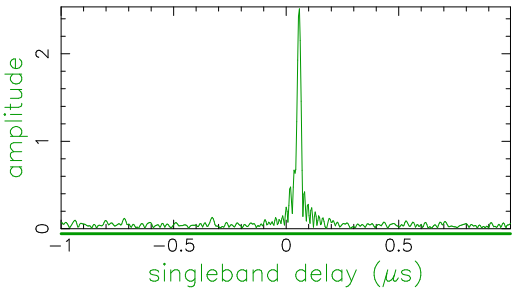
EFLSBERG - YEBES40M, fgroup Q, pol RR

multiband delay ( $\mu$ s)

Fringe quality 2

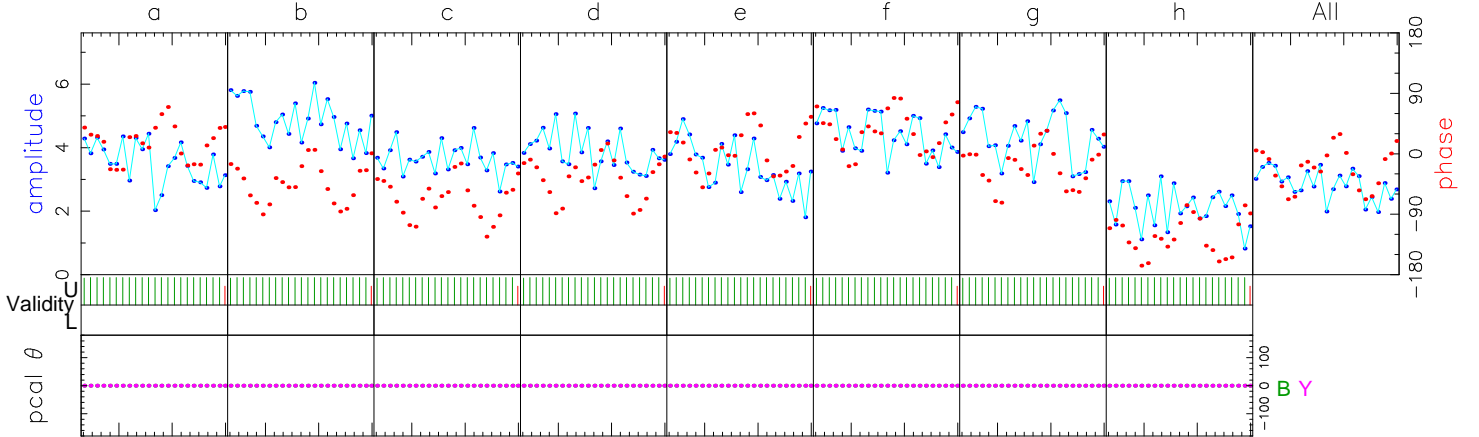


SNR 88.4  
 Int time 162.327  
 Amp 2.538  
 Phase 69.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.057393  
 MBD -0.006227  
 Fringe rate (Hz)  
 -0.005855  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145507  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	15.8	-42.2	-66.8	-35.5	7.3	34.4	-17.8	-124.8	Phase	-20.7
	3.2	4.3	3.2	3.4	2.9	3.9	3.8	1.9	Ampl.	3.3
	268.7	270.6	271.8	271.8	272.1	271.6	270.0	266.0	Sbd box	271.7
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	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	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	2.82827552305E+03	Apriori delay (usec)	2.82821924995E+03	Resid mbdelay (usec)	-6.22691E-03	+/-	1.2E-05
Sband delay (usec)	2.82827664295E+03	Apriori clock (usec)	7.5559441E+01	Resid sbdelay (usec)	5.73930E-02	+/-	9.7E-05
Phase delay (usec)	2.82821924862E+03	Apriori clockrate (us/s)	8.1915204E-07	Resid phdelay (usec)	-1.33032E-06	+/-	8.3E-08
Delay rate (us/s)	-1.90871879356E-01	Apriori rate (us/s)	-1.90871743635E-01	Resid rate (us/s)	-1.35720E-07	+/-	8.9E-10
Total phase (deg)	228.8	Apriori accel (us/s/s)	-5.81874571818E-06	Resid phase (deg)	69.3	+/-	1.3

ph/seg (deg)	29.1	3.1	Amplitude	2.538 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	21.9	5.4	Search (1024X32)	2.492	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	56.0	1.8	Inc. seg. avg.	2.849	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	40.6	3.2	Inc. frq. avg.	3.312	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

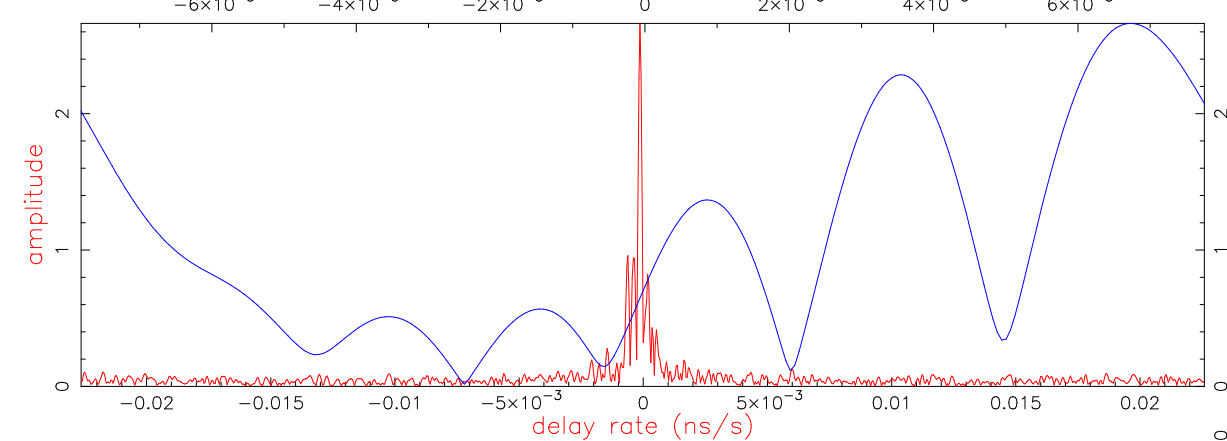
B: az 78.3 el 45.3 pa -54.2 Y: az 64.9 el 35.5 pa -63.8 u, v (fr/asec) 710.810 221.459 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/BY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/BY.Q.27.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

aux01

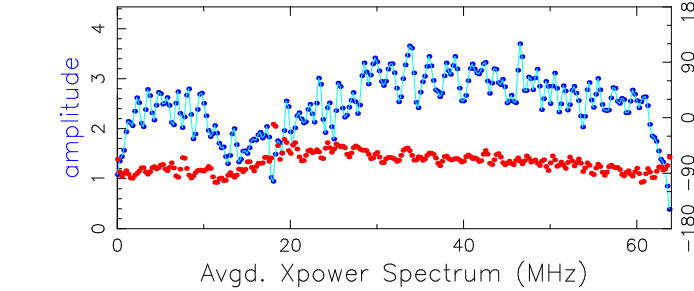
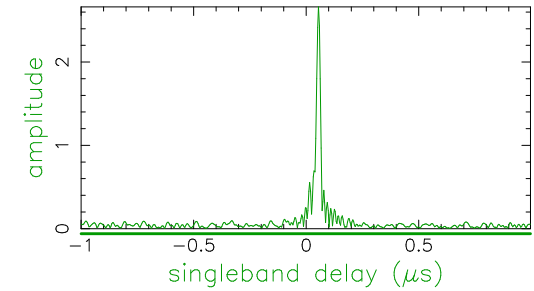
3C345.3MP1HX, No0399, BY

EFLSBERG - YEBES40M, fgroup Q, pol LR



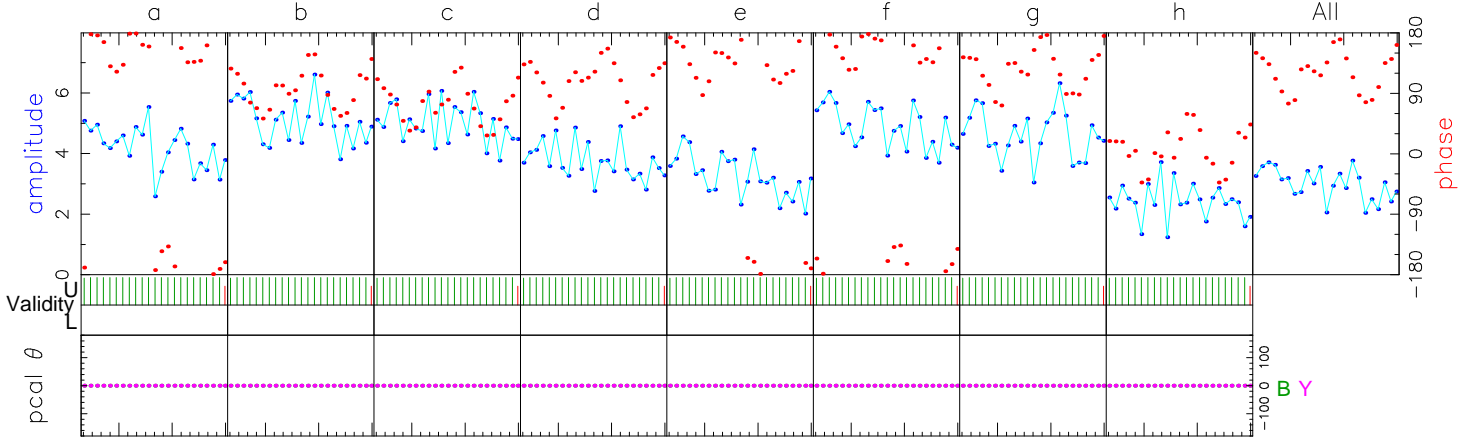
Fringe quality 2

SNR 92.8  
 Int time 162.327  
 Amp 2.662  
 Phase 9.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.054783  
 MBD 0.006731  
 Fringe rate (Hz)  
 -0.005904  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145509  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	168.0	98.8	74.8	108.1	148.5	172.5	127.0	5.6	Phase	121.9
B	3.8	4.5	4.4	3.3	2.8	4.3	4.1	2.1	Ampl.	3.7
Y	268.4	269.7	271.0	271.2	271.4	270.8	269.5	265.0	Sbd box	271.0
B	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	2.82827285636E+03	Apriori delay (usec)	2.82821924995E+03	Resid mbdelay (usec)	6.73141E-03	+/-	1.2E-05
Sband delay (usec)	2.82827403320E+03	Apriori clock (usec)	7.5559441E+01	Resid sbdelay (usec)	5.47833E-02	+/-	9.3E-05
Phase delay (usec)	2.82821925780E+03	Apriori clockrate (us/s)	8.1915204E-07	Resid phdelay (usec)	7.84671E-06	+/-	8.0E-08
Delay rate (us/s)	-1.90871880485E-01	Apriori rate (us/s)	-1.90871743635E-01	Resid rate (us/s)	-1.36849E-07	+/-	8.5E-10
Total phase (deg)	168.8	Apriori accel (us/s/s)	-5.81874571818E-06	Resid phase (deg)	9.4	+/-	1.2

ph/seg (deg)	28.5	RMS	28.5	Theor.	3.0	Amplitude	2.662 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.1		5.2			Search (1024X32)	2.648	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	60.4		1.7			Inc. seg. avg.	3.000	Bits/sample:	2x2	SampCntNorm: enabled		dr window (ns/s)	-0.023	0.023
amp/frq (%)	48.1		3.0			Inc. frq. avg.	3.656	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 78.3 el 45.3 pa -54.2 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 710.810 221.459 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/BY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/BY.Q.41.3MP1HX

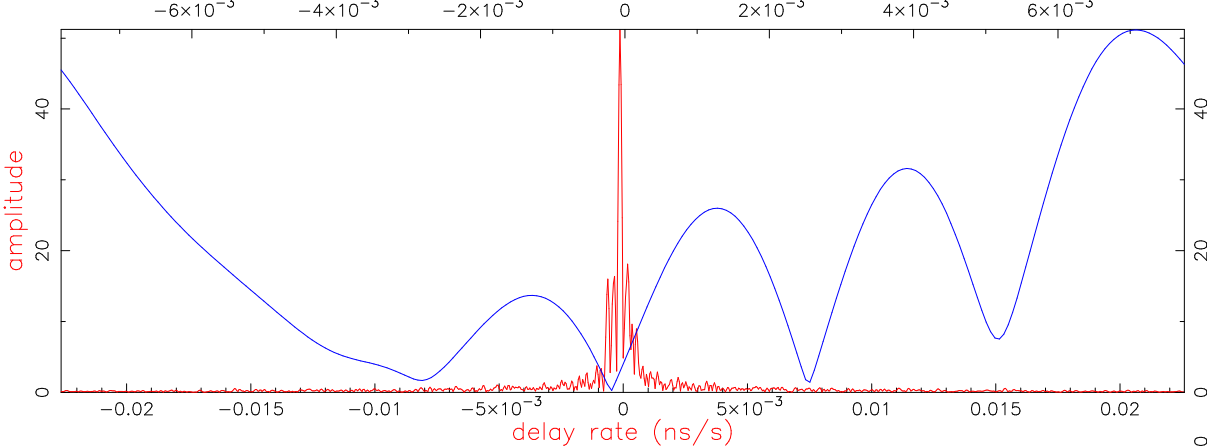
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, BY

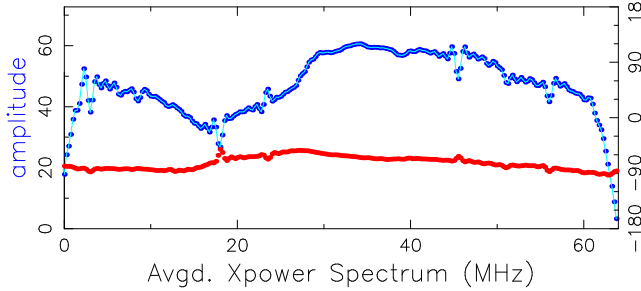
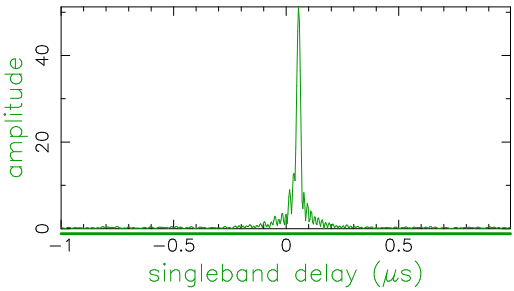
EFLSBERG - YEBES40M, fgroup Q, pol RL

multiband delay ( $\mu\text{s}$ )



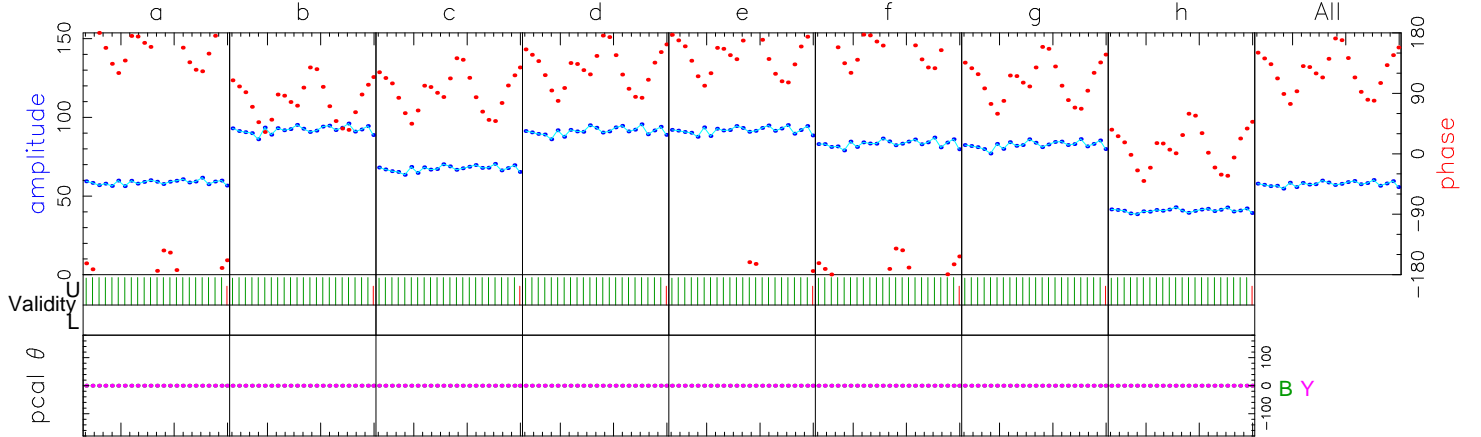
Fringe quality 3

SNR 1785.1  
 Int time 162.327  
 Amp 51.237  
 Phase 9.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.055211  
 MBD 0.007092  
 Fringe rate (Hz)  
 -0.005802  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145511  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	166.9	79.4	92.7	126.7	149.2	169.5	109.0	9.2	Phase	122.1
B	52.1	81.7	59.8	81.0	81.4	73.8	73.0	36.1	Ampl.	67.3
Y	267.9	270.5	271.4	271.0	271.4	270.9	269.8	265.4	Sbd box	271.1
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.82827321670E+03	Apriori delay (usec)	2.82821924995E+03	Resid mbdelay (usec)	7.09175E-03	+/-	6.1E-07
Sband delay (usec)	2.82827446095E+03	Apriori clock (usec)	7.5559441E+01	Resid sbdelay (usec)	5.52110E-02	+/-	4.8E-06
Phase delay (usec)	2.82821925781E+03	Apriori clockrate (us/s)	8.1915204E-07	Resid phdelay (usec)	7.86198E-06	+/-	4.1E-09
Delay rate (us/s)	-1.90871878136E-01	Apriori rate (us/s)	-1.90871743635E-01	Resid rate (us/s)	-1.34501E-07	+/-	4.4E-11
Total phase (deg)	169.1	Apriori accel (us/s/s)	-5.81874571818E-06	Resid phase (deg)	9.6	+/-	0.1

ph/seg (deg)	27.9	RMS	27.9	Theor.	0.2	Amplitude	51.237 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	13.0		13.0		0.3	Search (1024X32)	50.395	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	58.6		58.6		0.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.7		43.7		0.2	Inc. seg. avg.	57.750	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	67.345	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 78.3 el 45.3 pa -54.2 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 710.810 221.459 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/BY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/BY.Q.56.3MP1HX

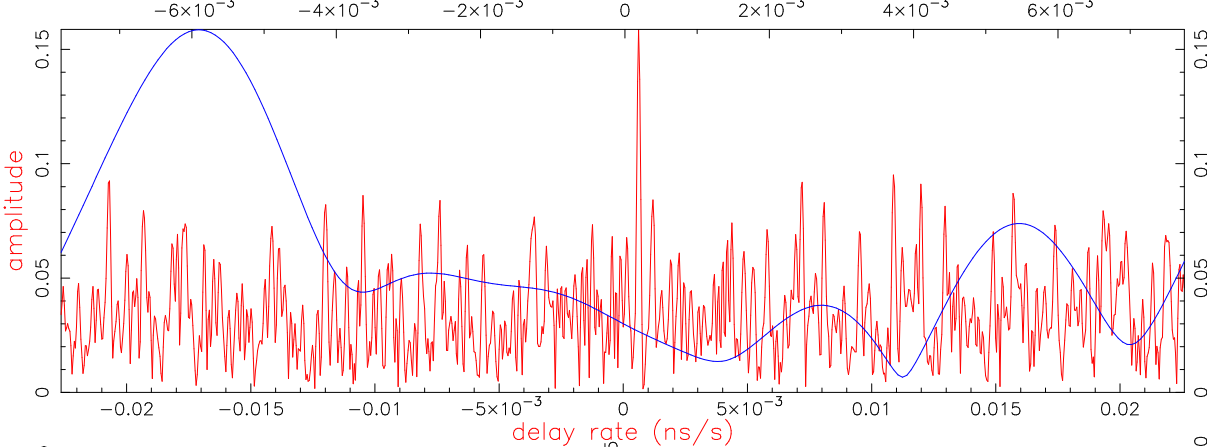
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, LY

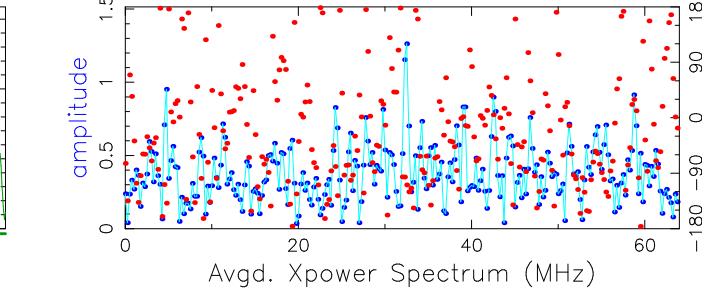
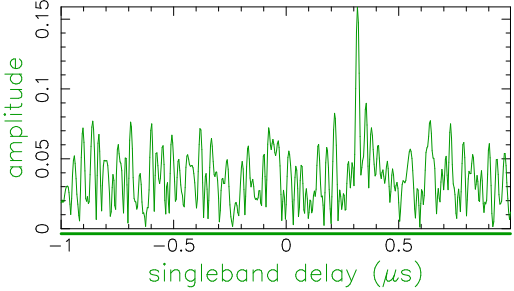
KVNPC - YEBES40M, fgroup Q, pol RR

multiband delay ( $\mu$ s)



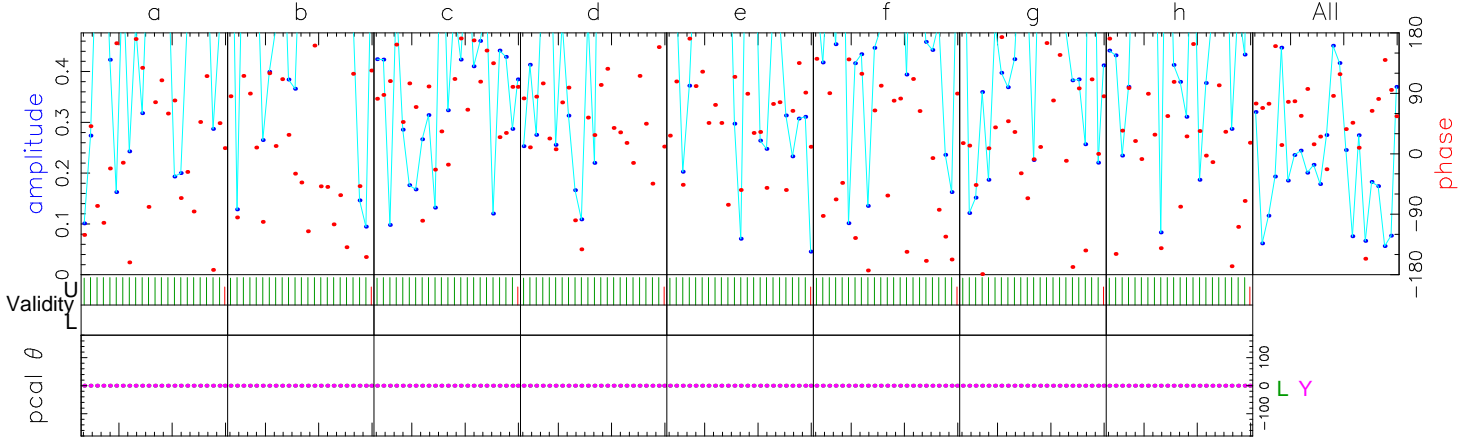
Fringe quality 0

SNR 5.5  
 Int time 162.163  
 Amp 0.159  
 Phase 354.2  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.316860  
 MBD -0.005869  
 Fringe rate (Hz)  
 0.026661  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Yr:day 1234  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145506  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
L	0	24000	0	0	32000	0	0	40000		
Y	0	0	0	0	0	0	0	0		
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	2.75301779503E+03	Apriori delay (usec)	2.75269553891E+03	Resid mbdelay (usec)	-5.86888E-03	+/-	2.0E-04
Sband delay (usec)	2.75301239941E+03	Apriori clock (usec)	8.3337357E+01	Resid sbdelay (usec)	3.16860E-01	+/-	1.6E-03
Phase delay (usec)	2.75269554289E+03	Apriori clockrate (us/s)	-6.3064658E-06	Resid phdelay (usec)	3.97166E-06	+/-	1.3E-06
Delay rate (us/s)	-1.67522334448E+00	Apriori rate (us/s)	-1.67522396250E+00	Resid rate (us/s)	6.18014E-07	+/-	1.4E-08
Total phase (deg)	191.7	Apriori accel (us/s/s)	-1.71240415142E-05	Resid phase (deg)	354.2	+/-	20.7

ph/seg (deg)	51.6	Theor.	49.7	Amplitude	0.159 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	82.7		86.8	Search (1024X32)	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	45.2		29.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	61.8		51.2	Inc. seg. avg.	0.158	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
				Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

L: az 291.7 el 45.5 pa 73.5 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6242.256 -742.643 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/LY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/LY.Q.19.3MP1HX

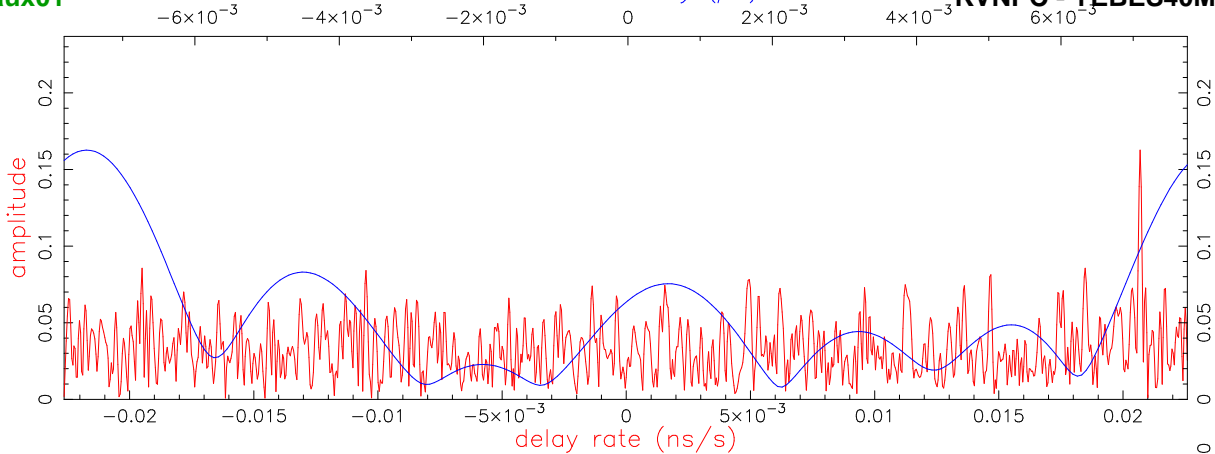
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, LY

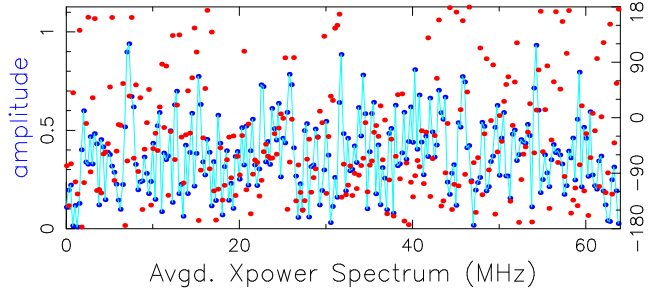
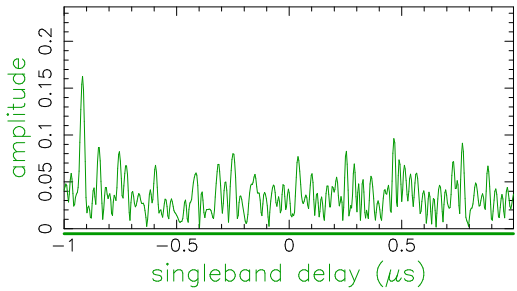
KVNPC - YEBES40M, fgroup Q, pol LR

multiband delay ( $\mu$ s)



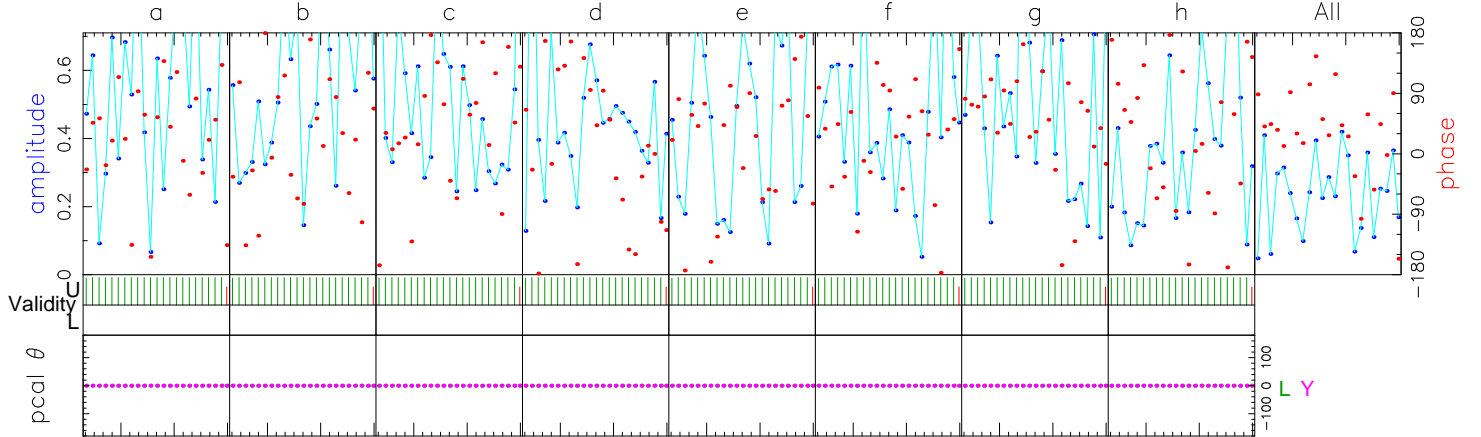
Fringe quality 0

SNR 5.7  
 Int time 162.163  
 Amp 0.237  
 Phase -15.9  
 PFD 8.3e-01  
 Delays (us)  
 SBD -0.918446  
 MBD 0.008114  
 Fringe rate (Hz)  
 0.896981  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145508  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
L	0	24000	0	0	32000	0	0	40000		
Y	0	0	0	0	0	0	0	0		
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	2.75178177804E+03	Apriori delay (usec)	2.75269553891E+03	Resid mbdelay (usec)	8.11412E-03	+/-	1.9E-04
Sband delay (usec)	2.75177709341E+03	Apriori clock (usec)	8.3337357E+01	Resid sbdelay (usec)	-9.18446E-01	+/-	1.5E-03
Phase delay (usec)	2.75269554224E+03	Apriori clockrate (us/s)	-6.3064658E-06	Resid phdelay (usec)	3.32570E-06	+/-	1.3E-06
Delay rate (us/s)	-1.67520317016E+00	Apriori rate (us/s)	-1.67522396250E+00	Resid rate (us/s)	2.07923E-05	+/-	1.4E-08
Total phase (deg)	-178.3	Apriori accel (us/s/s)	-1.71240415142E-05	Resid phase (deg)	-15.9	+/-	20.2

ph/seg (deg)	60.9	RMS	48.5	Theor.	20.27 +/- 0.042	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	84.4	Search (1024X32)	0.156	Amplitude	0.237 +/- 0.042	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.8	Inc. seg. avg.	0.257	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.7	Inc. frq. avg.	0.225	Inc. seg. avg.	0.257	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.225	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 291.7 el 45.5 pa 73.5 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6242.256 -742.643 simultaneous interpolator

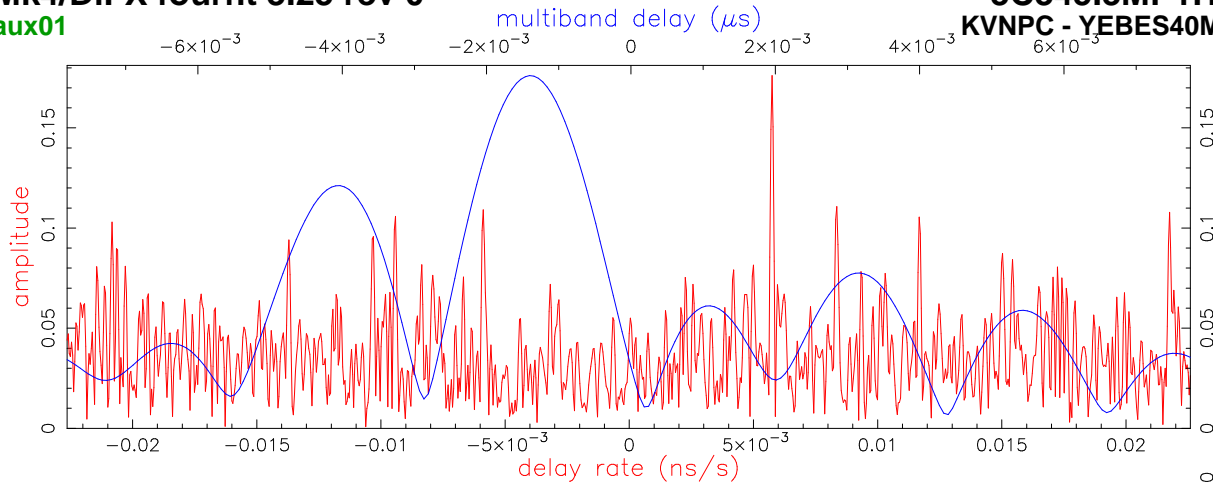
Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/LY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/LY.Q.34.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

aux01

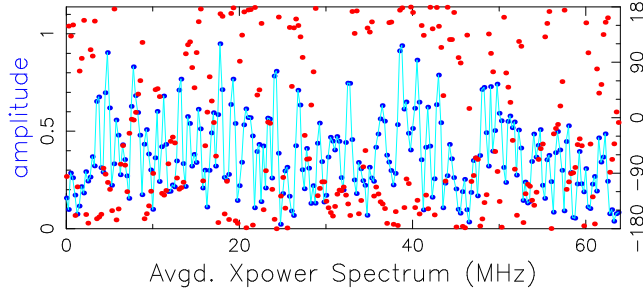
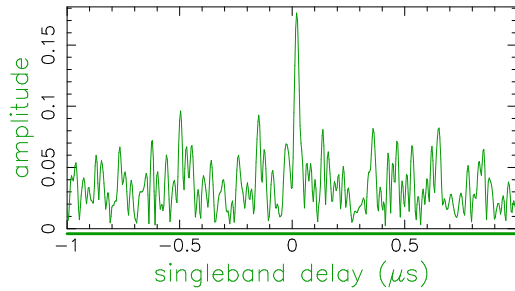
3C345.3MP1HX, No0399, LY

KVNPC - YEBES40M, fgroup Q, pol LL



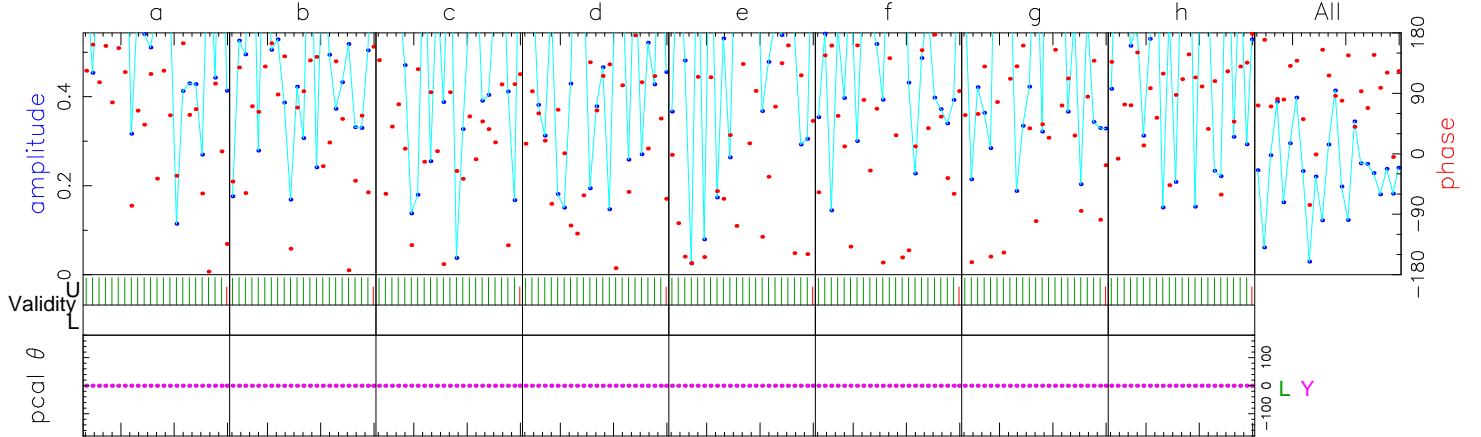
Fringe quality 0

SNR 6.1  
 Int time 162.163  
 Amp 0.181  
 Phase 294.1  
 PFD 1.0e-01  
 Delays (us)  
 SBD 0.020201  
 MBD -0.001391  
 Fringe rate (Hz)  
 0.249533  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145505  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	106.9	102.4	49.9	68.1	126.5	109.8	85.9	94.3	Phase	91.6
	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.3	Ampl.	0.2
	263.0	264.5	262.0	289.5	20.2	243.0	400.3	261.4	Sbd box	262.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
L	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.75270977325E+03	Apriori delay (usec)	2.75269553891E+03	Resid mbdelay (usec)	-1.39066E-03	+/-	1.8E-04
Sband delay (usec)	2.75271574016E+03	Apriori clock (usec)	8.3337357E+01	Resid sbdelay (usec)	2.02013E-02	+/-	1.4E-03
Phase delay (usec)	2.75269554481E+03	Apriori clockrate (us/s)	-6.3064658E-06	Resid phdelay (usec)	5.90076E-06	+/-	1.2E-06
Delay rate (us/s)	-1.67521817824E+00	Apriori rate (us/s)	-1.67522396250E+00	Resid rate (us/s)	5.78426E-06	+/-	1.3E-08
Total phase (deg)	131.7	Apriori accel (us/s/s)	-1.71240415142E-05	Resid phase (deg)	294.1	+/-	18.7

ph/seg (deg)	57.2	Theor.	44.7	Amplitude	0.181 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.6		78.1	Search (1024X32)	0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	26.5		26.4	Inc. seg. avg.	0.183	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	48.1		46.0	Inc. frq. avg.	0.176	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 291.7 el 45.5 pa 73.5 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6242.256 -742.643 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/LY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/LY.Q.4.3MP1HX

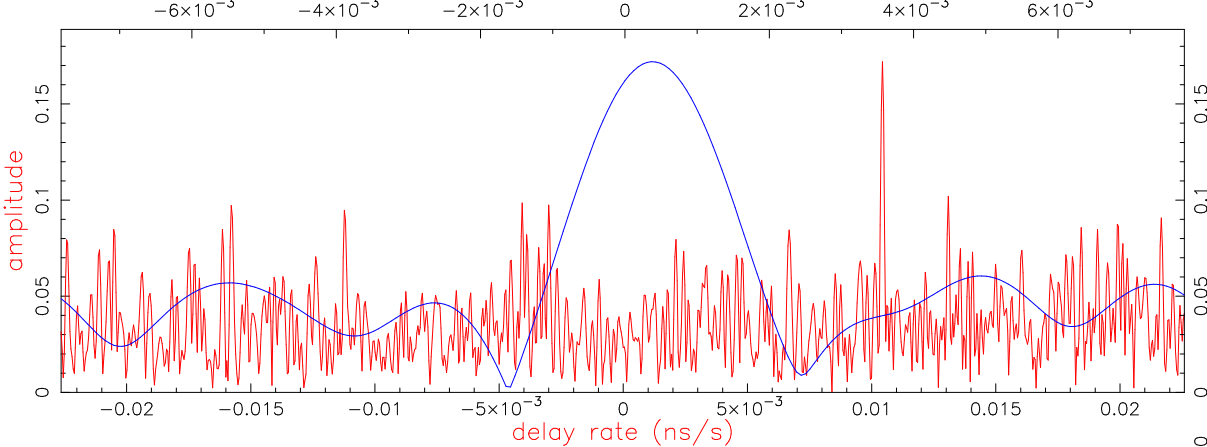
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, LY

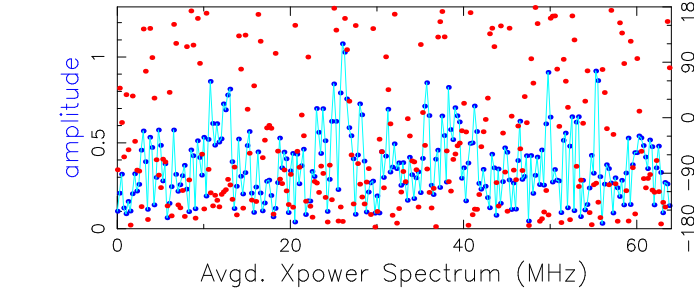
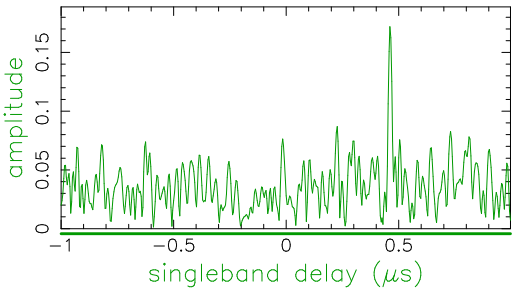
KVNPC - YEBES40M, fgroup Q, pol RL

multiband delay ( $\mu$ s)



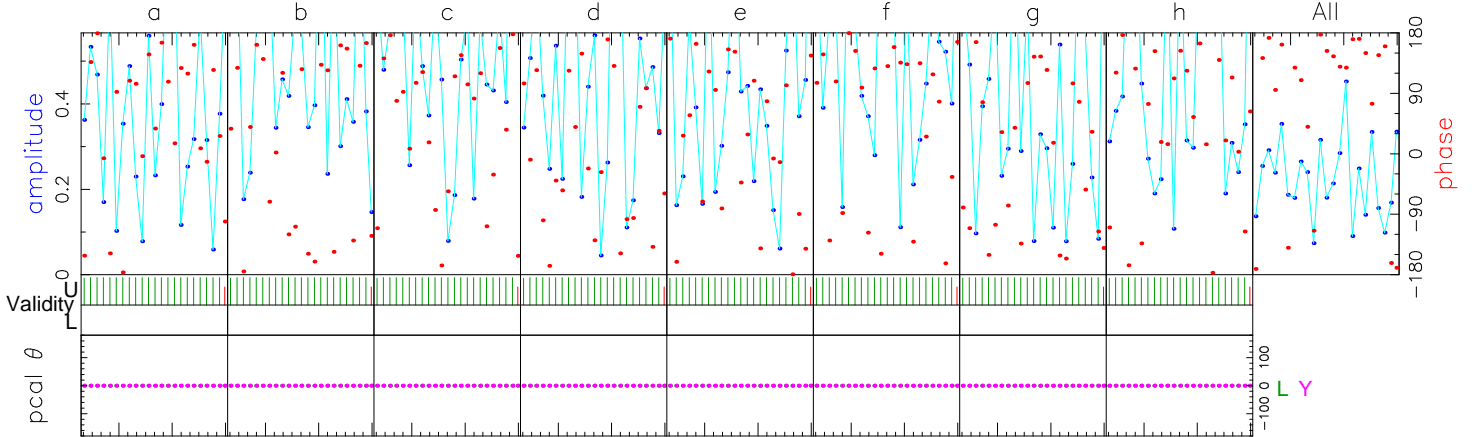
Fringe quality 0

SNR 6.0  
Int time 162.163  
Amp 0.189  
Phase 101.6  
PFD 2.1e-01  
Delays (us)  
SBD 0.461700  
MBD 0.000388  
Fringe rate (Hz) 0.452108  
Ion TEC 0.000  
Ref freq (MHz) 43140.0000  
AP (sec) 0.512



Exp. c241d  
Exper # 1234  
Yr:day 2024:112  
Start 220017.41  
Stop 220300.23  
FRT 220130.00  
Corr/FF/build  
2024:316:155049  
2025:042:145510  
2024:113:095956  
RA & Dec (J2000)  
16h42m58.809971s  
+39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	124.3	161.7	141.9	134.7	148.2	150.8	-160.9	133.3	Phase	146.6
	0.1	0.3	0.2	0.1	0.2	0.3	0.0	0.2	Ampl.	0.2
	362.4	374.7	228.1	307.8	254.0	374.2	452.5	260.5	Sbd box	375.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
L	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.75316467642E+03	Apriori delay (usec)	2.75269553891E+03	Resid mbdelay (usec)	3.87503E-04	+/-	1.8E-04
Sband delay (usec)	2.75315723866E+03	Apriori clock (usec)	8.3337357E+01	Resid sbdelay (usec)	4.61700E-01	+/-	1.4E-03
Phase delay (usec)	2.75269554835E+03	Apriori clockrate (us/s)	-6.3064658E-06	Resid phdelay (usec)	9.43886E-06	+/-	1.2E-06
Delay rate (us/s)	-1.67521348248E+00	Apriori rate (us/s)	-1.67522396250E+00	Resid rate (us/s)	1.04800E-05	+/-	1.3E-08
Total phase (deg)	299.1	Apriori accel (us/s/s)	-1.71240415142E-05	Resid phase (deg)	101.6	+/-	19.1

ph/seg (deg)	44.9	Theor.	45.7	Amplitude	0.189 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.9	Search (1024X32)	0.170	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.3	Inc. seg. avg.	0.188	Inc. frq. avg.	0.175	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.5	Inc. frq. avg.	0.175			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 291.7 el 45.5 pa 73.5 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6242.256 -742.643 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/LY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/LY.Q.49.3MP1HX



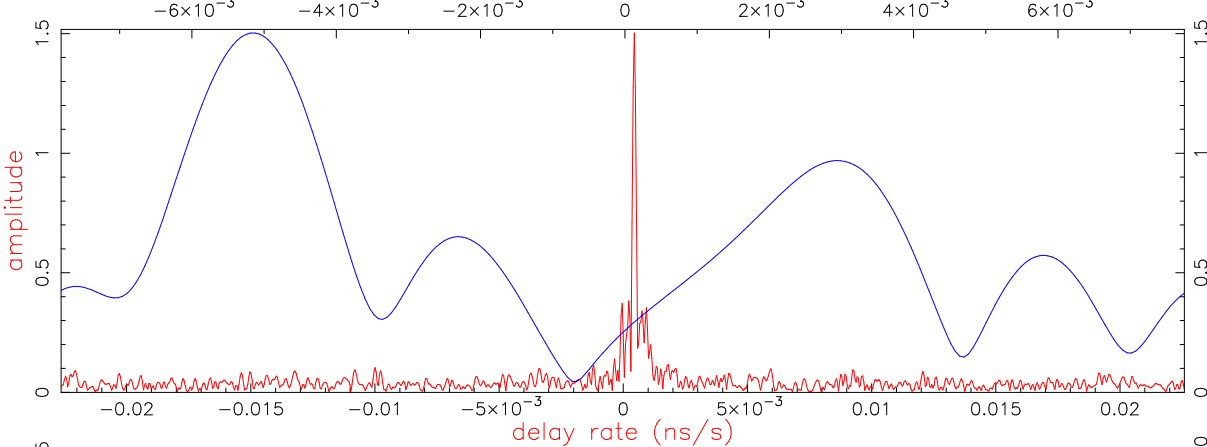
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, uY

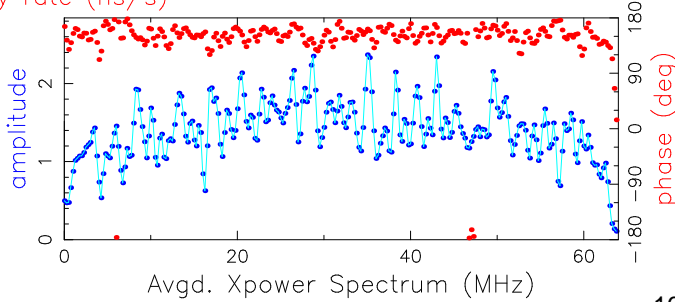
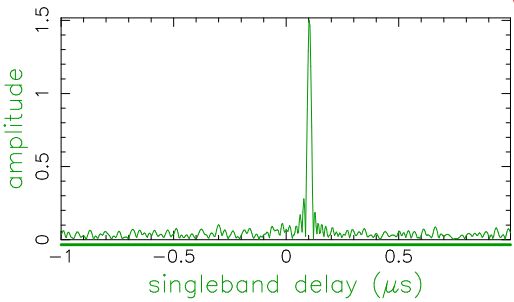
KVNUS - YEBES40M, fgroup Q, pol LL

multiband delay ( $\mu$ s)



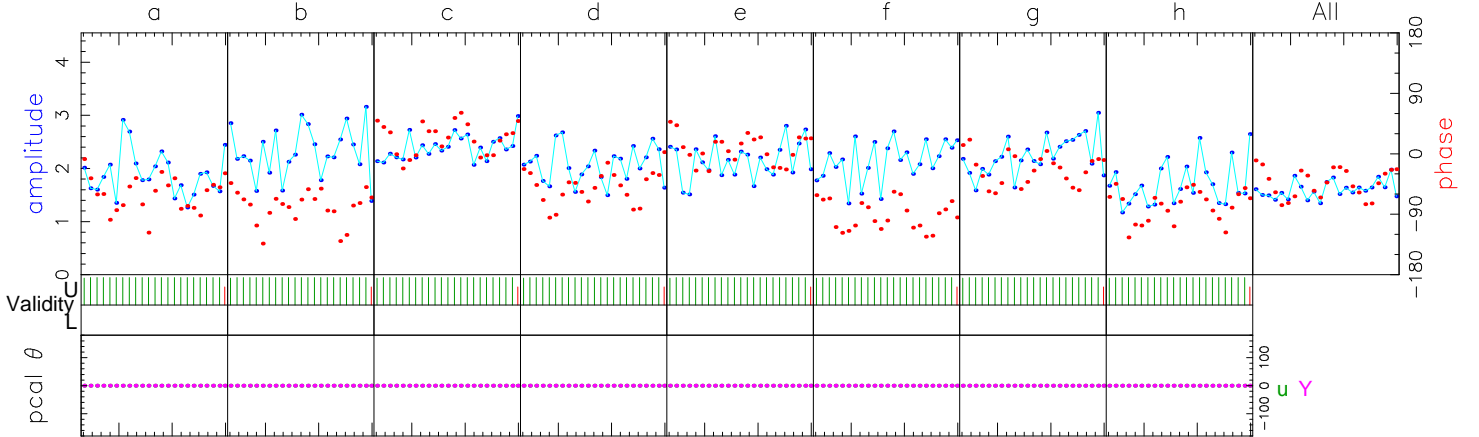
Fringe quality 5

SNR 52.8  
 Int time 162.160  
 Amp 1.518  
 Phase 294.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.102896  
 MBD -0.005118  
 Fringe rate (Hz)  
 0.019262  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145506  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-59.1	-78.2	23.5	-50.1	7.8	-91.2	-23.4	-75.7	Phase	-43.0
	1.7	2.1	2.2	1.9	2.0	2.0	2.1	1.6	Ampl.	1.9
	284.5	283.2	283.0	282.6	282.7	282.9	283.1	282.7	Sbd box	283.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
u	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
u	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 2.42025570879E+03 Apriori delay (usec) 2.42015145187E+03 Resid mbdelay (usec) -5.11808E-03 +/- 2.1E-05  
 Sband delay (usec) 2.42025434837E+03 Apriori clock (usec) 1.1223283E+02 Resid sbdelay (usec) 1.02896E-01 +/- 1.6E-04  
 Phase delay (usec) 2.42015144910E+03 Apriori clockrate (us/s) 1.0884720E-06 Resid phdelay (usec) -2.77129E-06 +/- 1.4E-07  
 Delay rate (us/s) -1.70311601546E+00 Apriori rate (us/s) -1.70311646197E+00 Resid rate (us/s) 4.46505E-07 +/- 1.5E-09  
 Total phase (deg) 162.6 Apriori accel (us/s/s) -1.72152771379E-05 Resid phase (deg) 294.5 +/- 2.2

RMS Theor. Amplitude 1.518 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 20.9 5.2 Search (1024X32) 1.471 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 12.0 9.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 45.3 3.1 Inc. seg. avg. 1.600 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 amp/frq (%) 31.1 5.4 Inc. frq. avg. 1.946 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

u: az 293.7 el 44.1 pa 75.7 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6346.038 -841.523 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/uY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/uY.Q.15.3MP1HX

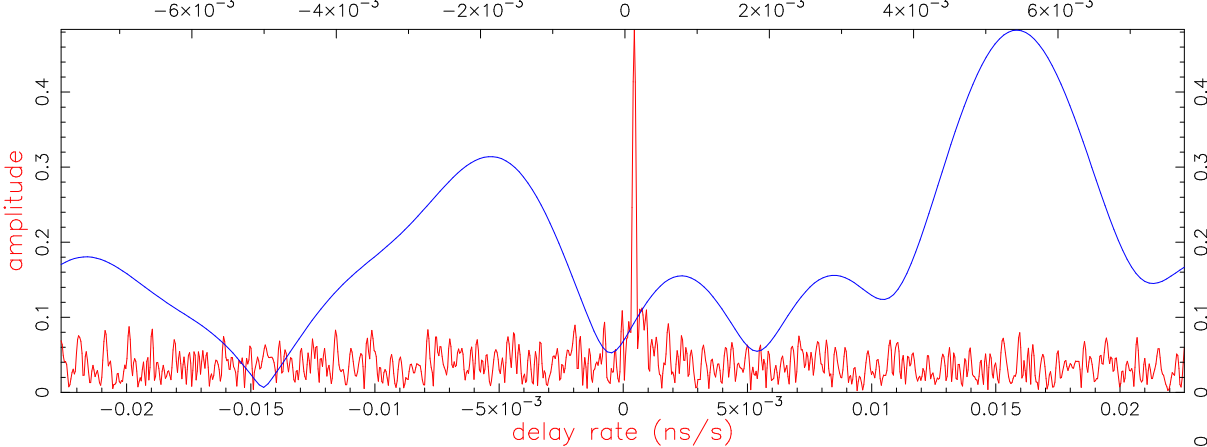
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, uY

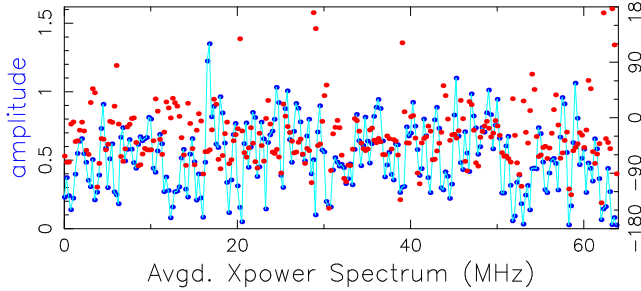
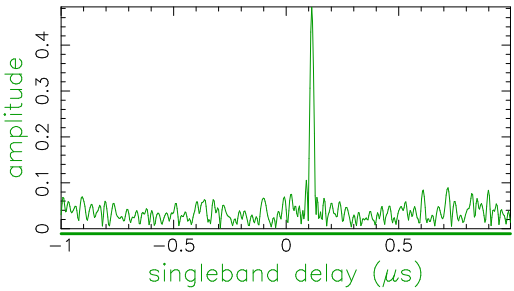
KVNUS - YEBES40M, fgroup Q, pol RR

multiband delay ( $\mu$ s)



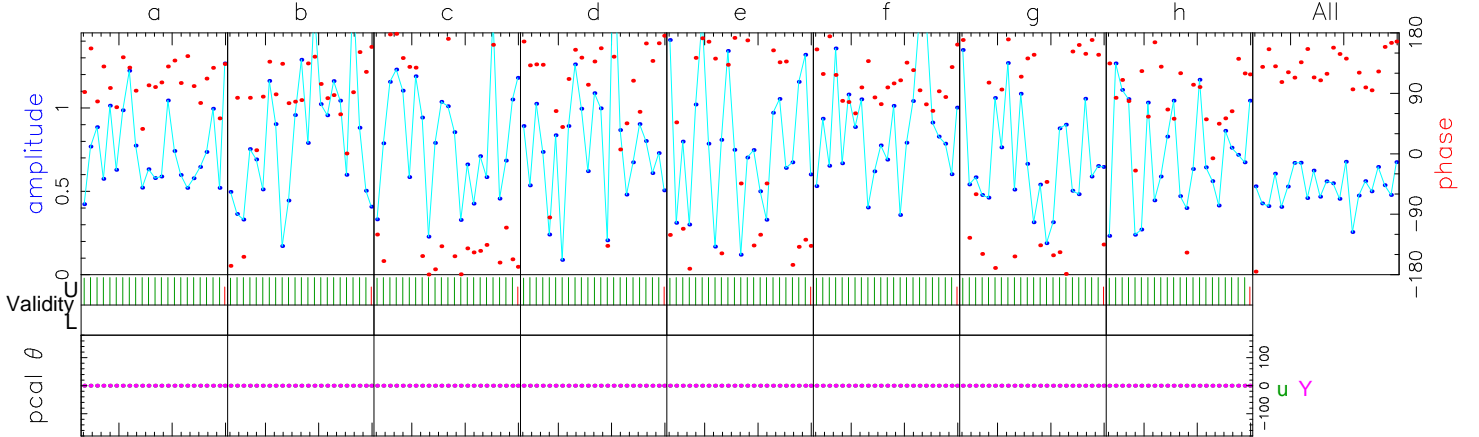
Fringe quality 8

SNR 16.8  
 Int time 162.160  
 Amp 0.484  
 Phase 109.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.113839  
 MBD 0.005440  
 Fringe rate (Hz)  
 0.018771  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145508  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	110.9	99.8	-171.8	131.4	-172.1	101.5	172.2	87.0	Phase	132.3
u	0.7	0.6	0.7	0.6	0.6	0.8	0.5	0.5	Ampl.	0.6
Y	287.5	285.2	285.7	285.2	285.0	285.8	285.7	286.1	Sbd box	286.1
u	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	0	24000	0	0	32000	0	0	40000	PC freqs	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
u	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	2.42026626663E+03	Apriori delay (usec)	2.42015145187E+03	Resid mbdelay (usec)	5.43976E-03	+/-	6.4E-05
Sband delay (usec)	2.42026529062E+03	Apriori clock (usec)	1.1223283E+02	Resid sbdelay (usec)	1.13839E-01	+/-	5.1E-04
Phase delay (usec)	2.42015146039E+03	Apriori clockrate (us/s)	1.0884720E-06	Resid phdelay (usec)	8.51807E-06	+/-	4.4E-07
Delay rate (us/s)	-1.70311602684E+00	Apriori rate (us/s)	-1.70311646197E+00	Resid rate (us/s)	4.35124E-07	+/-	4.7E-09
Total phase (deg)	337.9	Apriori accel (us/s/s)	-1.72152771379E-05	Resid phase (deg)	109.8	+/-	6.8

ph/seg (deg)	24.6	Theor.	16.3	Amplitude	0.484 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	23.2	Search (1024X32)	0.479	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.3	Inc. seg. avg.	0.507	Inc. frq. avg.	0.609	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.5	Inc. frq. avg.	0.609			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
u: az 293.7 el 44.1 pa 75.7		Y: az 64.9 el 35.5 pa -63.8		u, v (fr/asec)	6346.038 -841.523	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

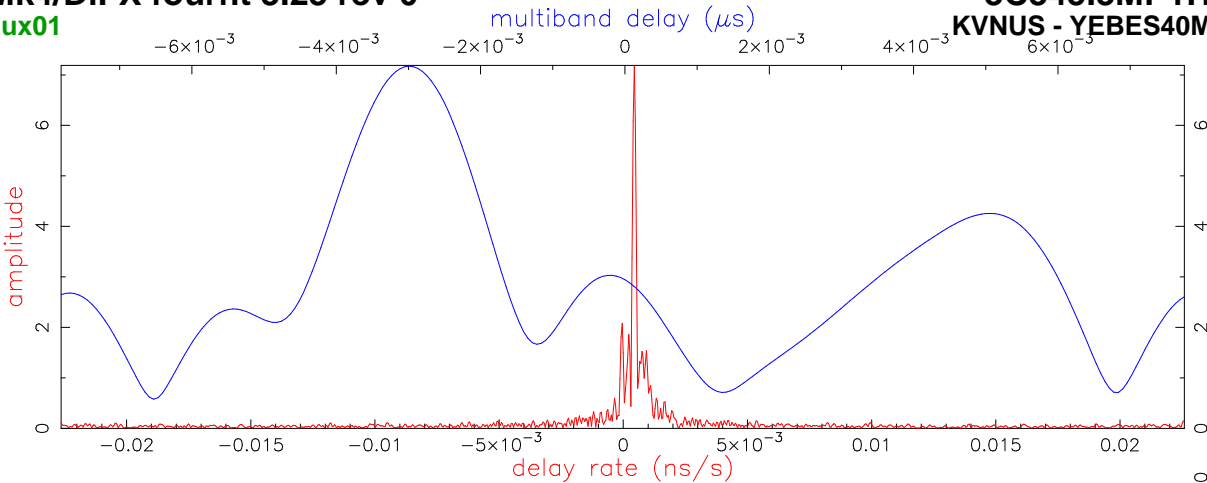
simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/uY...3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/uY.Q.29.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

aux01

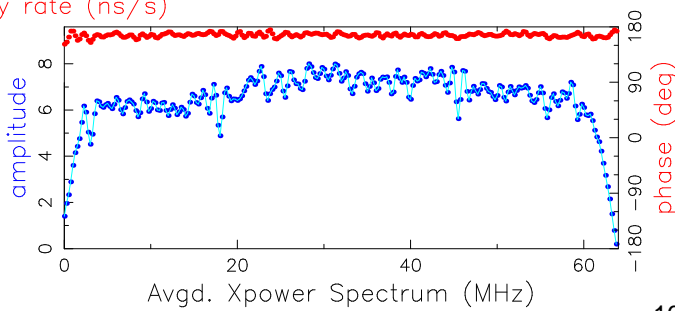
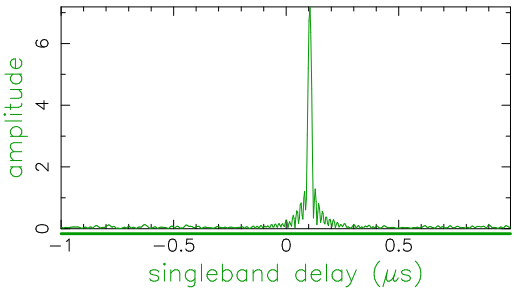
3C345.3MP1HX, No0399, uY

KVNUS - YEBES40M, fgroup Q, pol LR



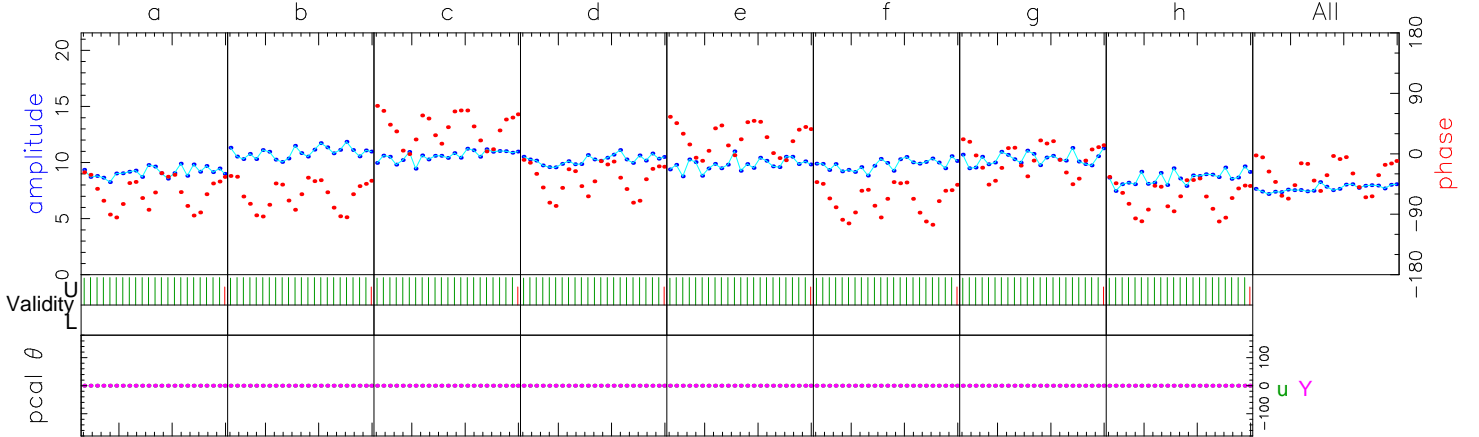
Fringe quality 5

SNR 250.3  
 Int time 162.160  
 Amp 7.189  
 Phase 306.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.104863  
 MBD -0.003003  
 Fringe rate (Hz)  
 0.019189  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Yr:day 1234  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145509  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-57.7	-61.4	38.5	-37.7	22.7	-69.0	-8.2	-64.8	Phase	-30.9
	8.5	10.2	9.8	9.5	9.2	9.1	9.6	8.0	Ampl.	9.2
	285.1	283.7	283.5	283.3	283.1	283.4	283.5	283.7	Sbd box	283.8
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
u	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
u	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	

Group delay (usec) (SBD) 2.42025782382E+03 Apriori delay (usec) 2.42015145187E+03 Resid mbdelay (usec) -3.00305E-03 +/- 4.3E-06  
 Sband delay (usec) 2.42025631487E+03 Apriori clock (usec) 1.1223283E+02 Resid sbdelay (usec) 1.04863E-01 +/- 3.4E-05  
 Phase delay (usec) 2.42015144988E+03 Apriori clockrate (us/s) 1.0884720E-02 Resid phdelay (usec) -1.98659E-06 +/- 2.9E-08  
 Delay rate (us/s) -1.70311601716E+00 Apriori rate (us/s) -1.70311646197E+00 Resid rate (us/s) 4.44810E-07 +/- 3.1E-10  
 Total phase (deg) 174.8 Apriori accel (us/s/s) -1.72152771379E-05 Resid phase (deg) 306.6 +/- 0.5

RMS Theor. Amplitude 7.189 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 21.6 1.1 Search (1024X32) 7.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 8.2 1.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 45.7 0.6 Inc. seg. avg. 7.710 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 amp/frq (%) 30.0 1.1 Inc. frq. avg. 9.243 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

u: az 293.7 el 44.1 pa 75.7 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6346.038 -841.523 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/uY...3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/uY.Q.42.3MP1HX

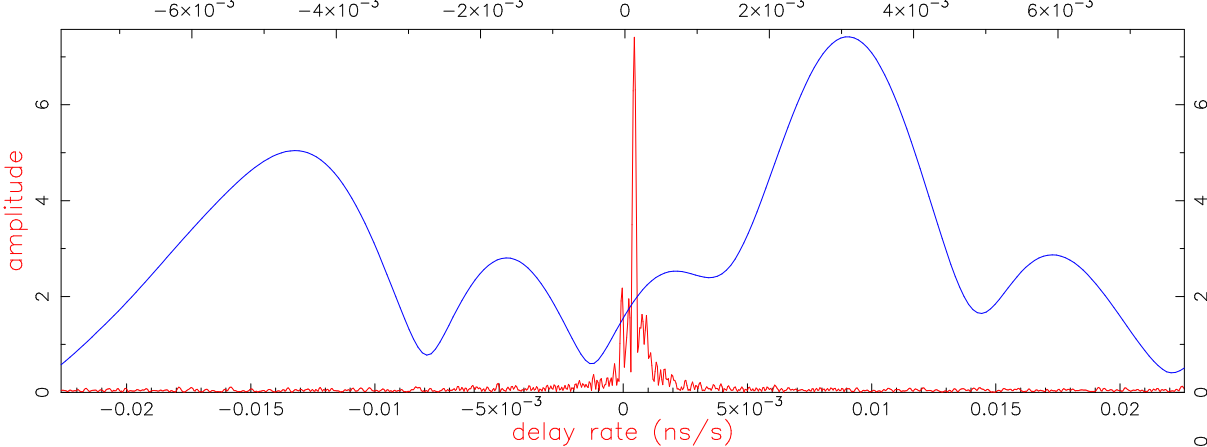
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, uY

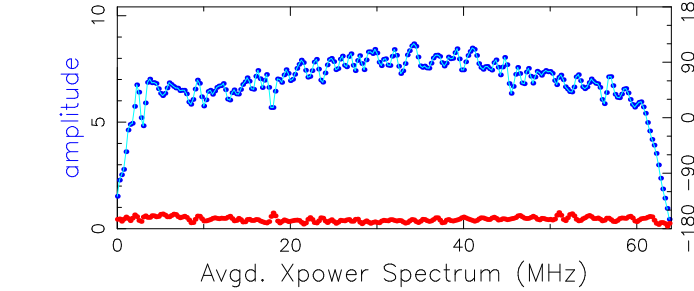
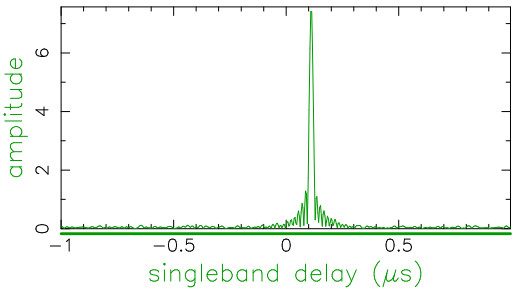
KVNUS - YEBES40M, fgroup Q, pol RL

multiband delay ( $\mu$ s)



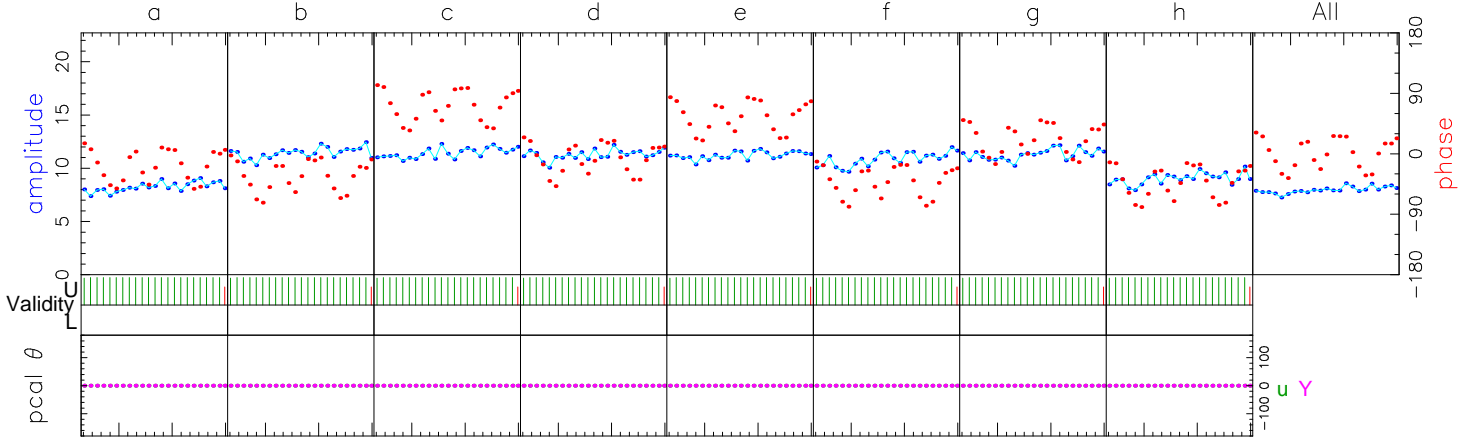
Fringe quality 5

SNR 263.7  
 Int time 162.160  
 Amp 7.573  
 Phase 338.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.111312  
 MBD 0.003147  
 Fringe rate (Hz)  
 0.019163  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145511  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-17.5	-33.5	71.7	-6.6	56.0	-41.4	21.8	-42.2	Phase	1.0
	7.6	10.6	10.6	10.5	10.5	10.1	10.5	8.3	Ampl.	9.8
	286.9	285.6	285.0	284.8	284.8	284.8	285.2	284.8	Sbd box	285.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
u	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
u	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.42026397379E+03	Apriori delay (usec)	2.42015145187E+03	Resid mbdelay (usec)	3.14692E-03	+/-	4.1E-06
Sband delay (usec)	2.42026276337E+03	Apriori clock (usec)	1.1223283E+02	Resid sbdelay (usec)	1.11312E-01	+/-	3.3E-05
Phase delay (usec)	2.42015145193E+03	Apriori clockrate (us/s)	1.0884720E-02	Resid phdelay (usec)	6.12106E-08	+/-	2.8E-08
Delay rate (us/s)	-1.70311601776E+00	Apriori rate (us/s)	-1.70311646197E+00	Resid rate (us/s)	4.44204E-07	+/-	3.0E-10
Total phase (deg)	206.6	Apriori accel (us/s/s)	-1.72152771379E-05	Resid phase (deg)	338.5	+/-	0.4

ph/seg (deg)	21.7	Theor.	1.0	Search (1024X32)	7.339	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	6.6	Interp.	0.000	Inc. seg. avg.	7.964	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	47.8	Inc. frq. avg.	9.845	Inc. frq. avg.	9.845	Bits/sample: 2x2	Data rate(Mb/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	33.3					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

u: az 293.7 el 44.1 pa 75.7 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6346.038 -841.523 simultaneous interpolator

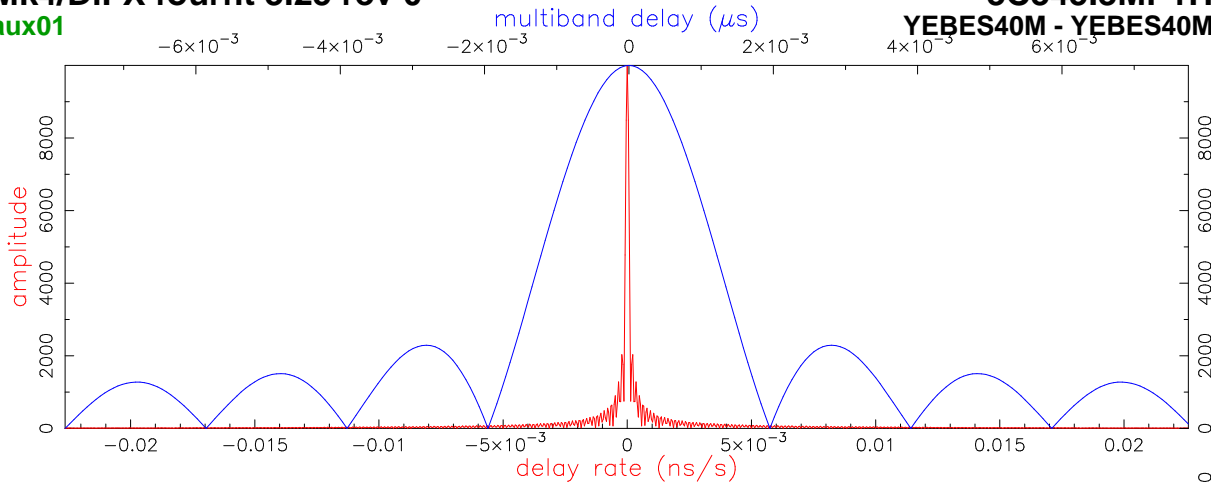
Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/uY...3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/uY.Q.55.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

aux01

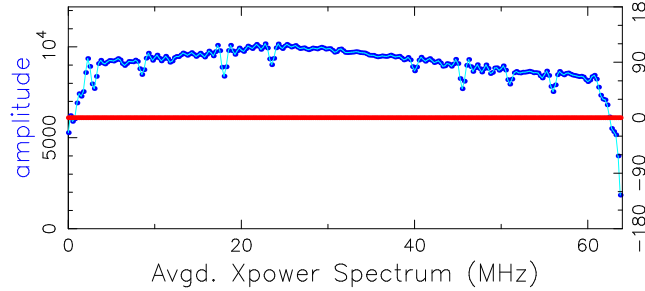
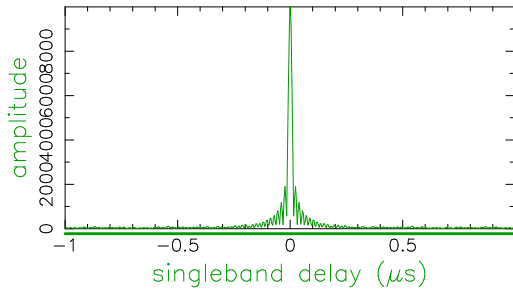
3C345.3MP1HX, No0399, YY

YEBES40M - YEBES40M, fgroup Q, pol RR



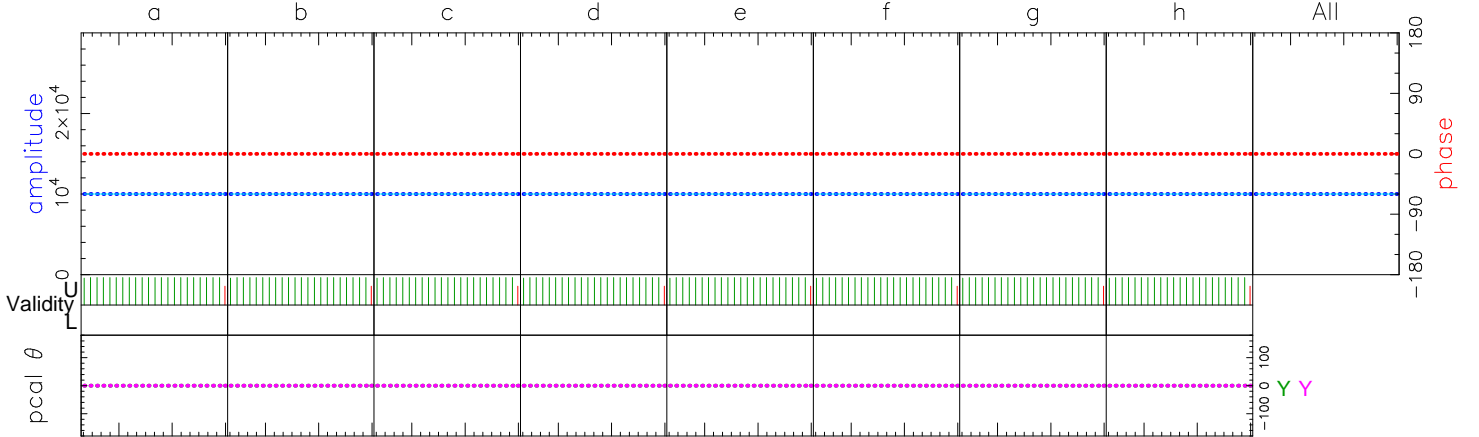
Fringe quality 9

SNR 348411.8  
 Int time 162.327  
 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)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145505  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	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	Ampl.	10000.0
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	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	PC phase	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	

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	+/-	2.1E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

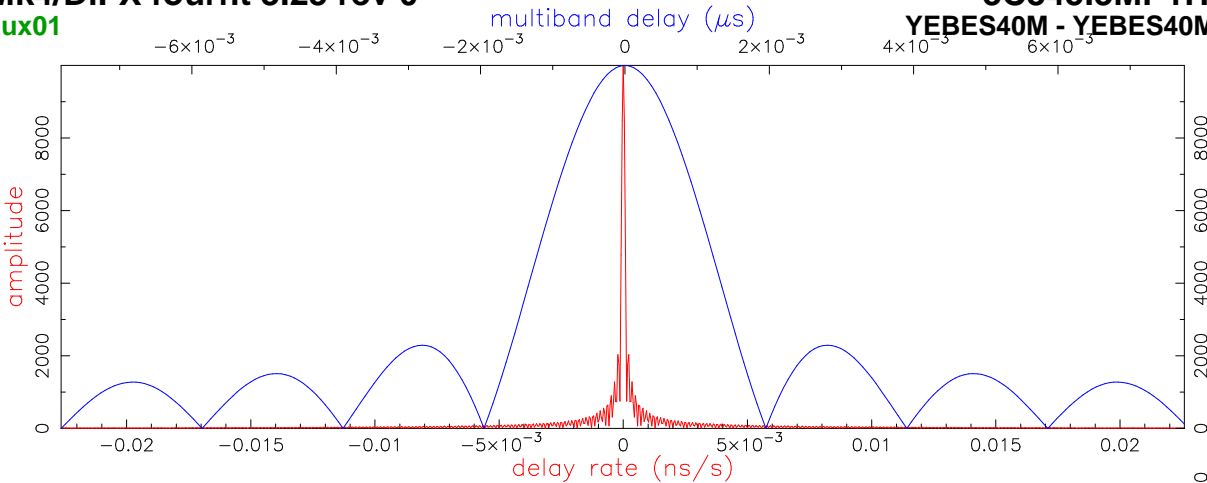
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (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) -0.023 0.023  
 Y: az 64.9 el 35.5 pa -63.8 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 0.000 0.000 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/YY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/YY.Q.12.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

aux01

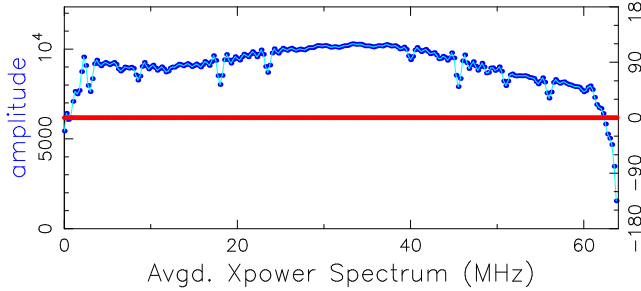
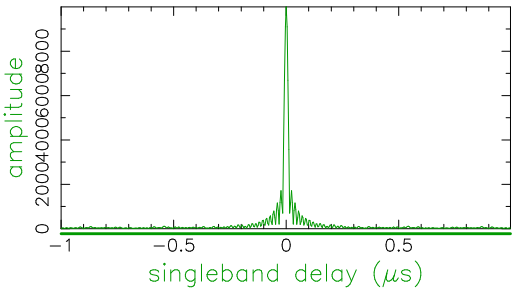
3C345.3MP1HX, No0399, YY

YEBES40M - YEBES40M, fgroup Q, pol LL



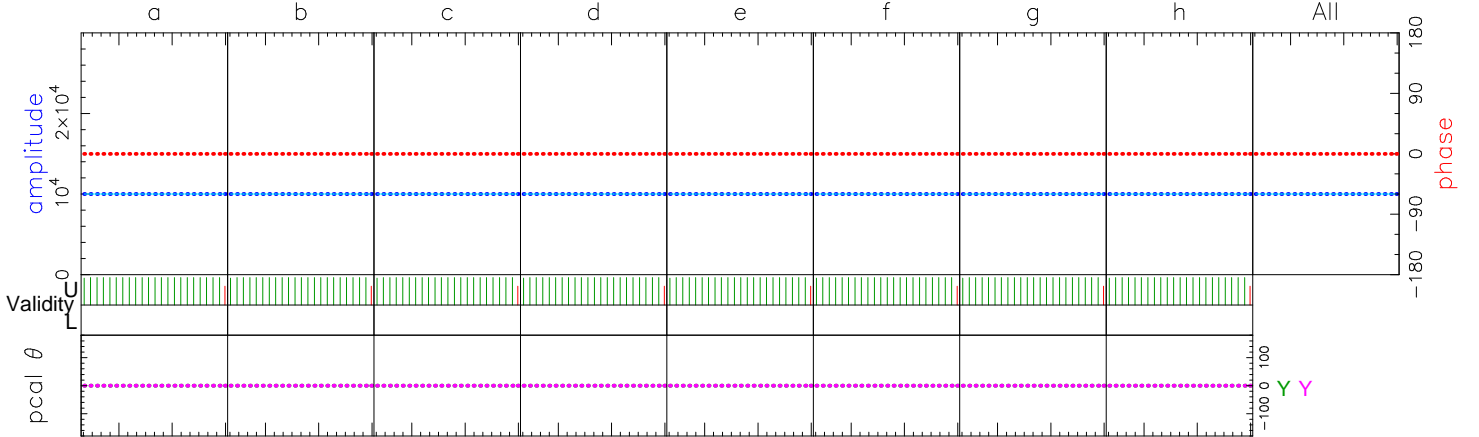
Fringe quality 9

SNR 348411.8  
 Int time 162.327  
 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)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145503  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	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	Ampl.	10000.0
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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	PC phase	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Mani PC	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	PC amp	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
									Tracks	
									Tracks	

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	+/-	2.1E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.3E-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 +/- 0.029 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) -0.023 0.023  
 Y: az 64.9 el 35.5 pa -63.8 Y: az 64.9 el 35.5 pa -63.8 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/c241d/v1/7mm/1234/No0399/YY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/YY.Q.1.3MP1HX simultaneous interpolator

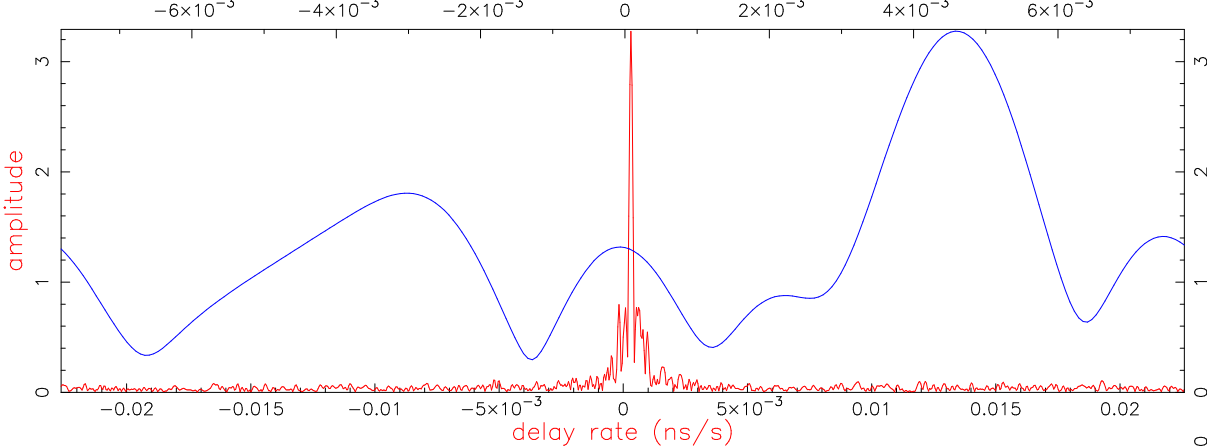
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, yY

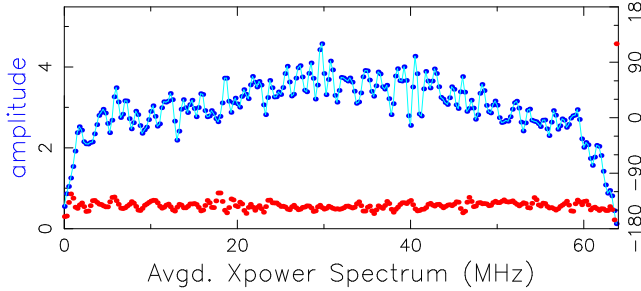
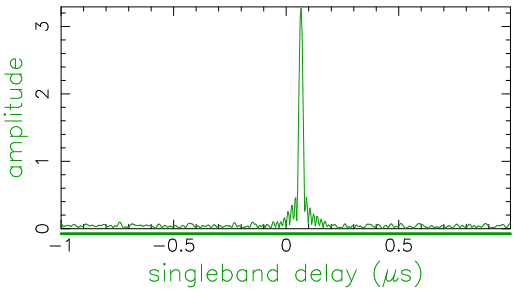
KVNYS - YEBES40M, fgroup Q, pol LL

multiband delay ( $\mu\text{s}$ )



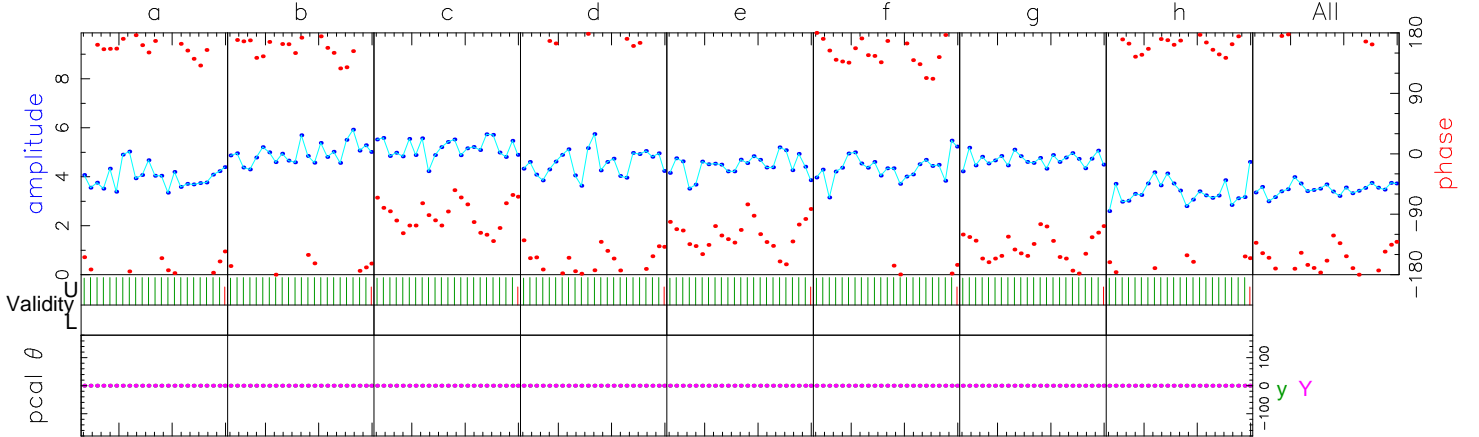
Fringe quality 5

SNR 114.6  
 Int time 162.148  
 Amp 3.292  
 Phase 288.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.065447  
 MBD 0.004565  
 Fringe rate (Hz)  
 0.013647  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145506  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	171.6	166.9	-91.4	-167.1	-121.7	154.8	-139.8	171.8	Phase	-161.4
	3.7	4.6	4.8	4.3	4.1	4.0	4.4	3.2	Ampl.	4.2
	275.3	273.8	273.4	273.1	273.0	273.2	273.6	272.9	Sbd box	273.8
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
y	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	

Group delay (usec) (SBD)	3.07708546671E+03	Apriori delay (usec)	3.07701840201E+03	Resid mbdelay (usec)	4.56470E-03	+/-	9.5E-06
Sband delay (usec)	3.07708384926E+03	Apriori clock (usec)	1.1731601E+02	Resid sbdelay (usec)	6.54472E-02	+/-	7.5E-05
Phase delay (usec)	3.07701839162E+03	Apriori clockrate (us/s)	1.0678721E-06	Resid phdelay (usec)	-1.03896E-05	+/-	6.4E-08
Delay rate (us/s)	-1.66146537443E+00	Apriori rate (us/s)	-1.66146569076E+00	Resid rate (us/s)	3.16333E-07	+/-	6.8E-10
Total phase (deg)	239.2	Apriori accel (us/s/s)	-1.86392025810E-05	Resid phase (deg)	288.6	+/-	1.0

ph/seg (deg)	RMS 20.6	Theor. 2.4	Amplitude Search (1024X32)	3.212	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	9.0	4.2	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)	43.5	1.4	Inc. seg. avg.	3.495	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
amp/frq (%)	30.0	2.5	Inc. frq. avg.	4.152	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

y: az 291.2 el 46.6 pa 74.1      Y: az 64.9 el 35.5 pa -63.8      u, v (fr/asec) 6190.314 -790.506      simultaneous interpolator

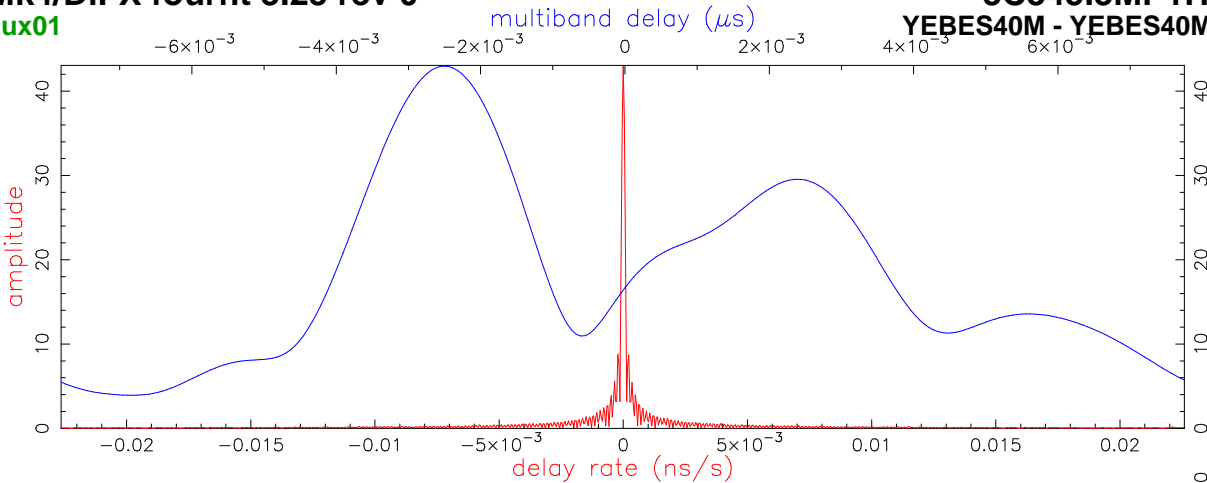
Control file: cf\_1234\_gmva      Input file: /Exps/c241d/v1/7mm/1234/No0399/yY..3MP1HX      Output file: /Exps/c241d/v1/7mm/1234/No0399/yY.Q.16.3MP1HX

Mk4/DiFX fourfit 3.25 rev 0

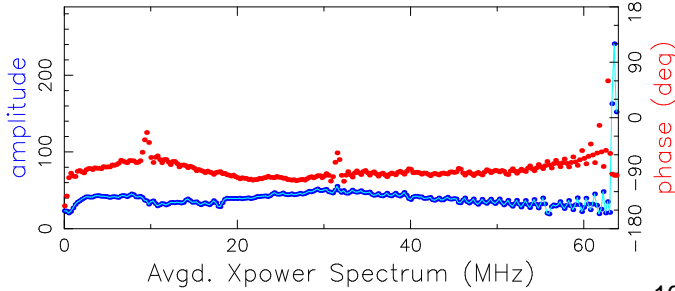
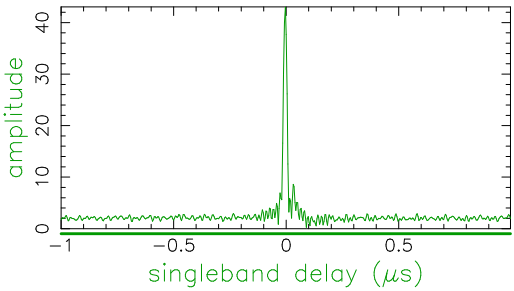
aux01

3C345.3MP1HX, No0399, YY

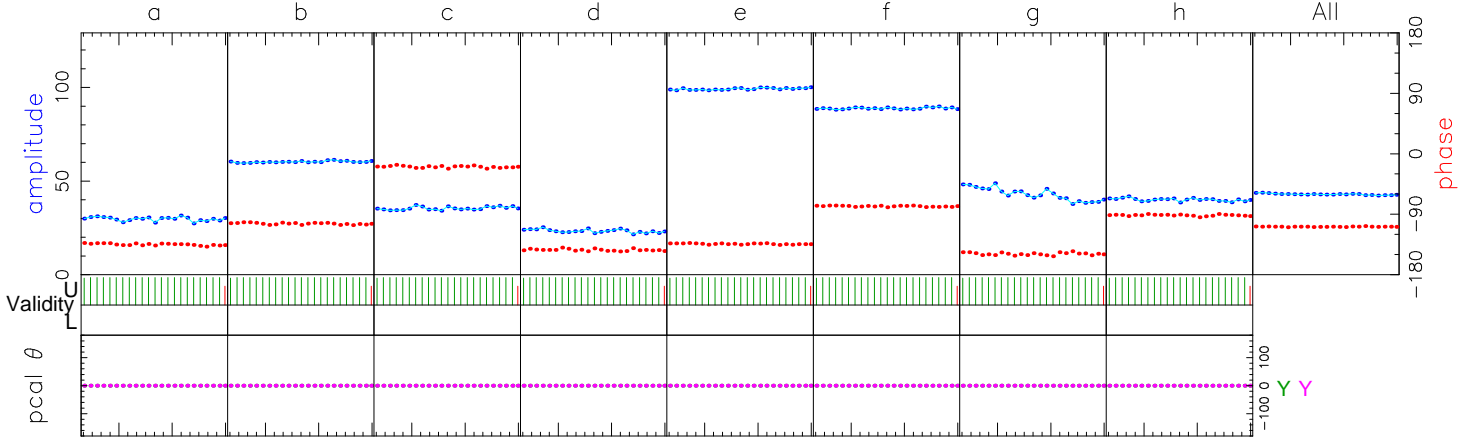
YEBES40M - YEBES40M, fgroup Q, pol LR



Fringe quality 5  
 Error code G  
 SNR 1500.2  
 Int time 162.327  
 Amp 43.058  
 Phase -108.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004453  
 MBD -0.002509  
 Fringe rate (Hz)  
 0.000016  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512  
 Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145507  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-134.8	-103.9	-19.4	-143.0	-134.1	-78.0	-148.9	-91.5	Phase	-108.5
	29.8	60.3	35.5	23.4	99.2	88.8	43.1	40.1	Ampl.	52.5
	256.8	256.8	256.9	255.4	257.2	257.4	256.5	254.8	Sbd box	255.9
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-2.50921875000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.50922E-03	+/-	7.2E-07
Sband delay (usec)	-4.45250000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-4.45250E-03	+/-	5.7E-06
Phase delay (usec)	-6.98747905996E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-6.98748E-06	+/-	4.9E-09
Delay rate (us/s)	3.82000264366E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.82000E-10	+/-	5.2E-11
Total phase (deg)	-108.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-108.5	+/-	0.1

ph/seg (deg) 0.3 0.2 Search (1024X32) 42.920 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.9 0.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 47.2 0.1 Inc. seg. avg. 42.975 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 64.5 0.2 Inc. frq. avg. 52.516 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 Y: az 64.9 el 35.5 pa -63.8 Y: az 64.9 el 35.5 pa -63.8 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/c241d/v1/7mm/1234/No0399/YY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/YY.Q.25.3MP1HX simultaneous interpolator



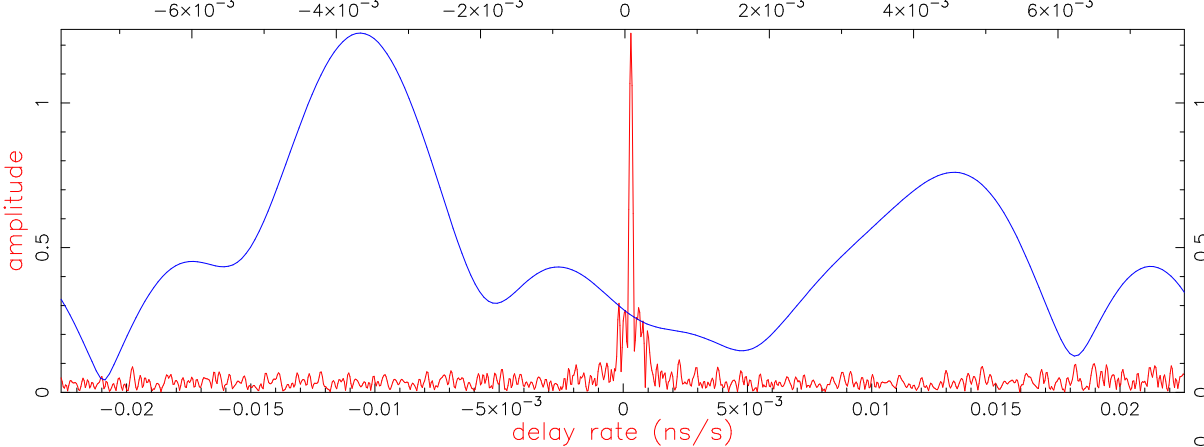
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, yY

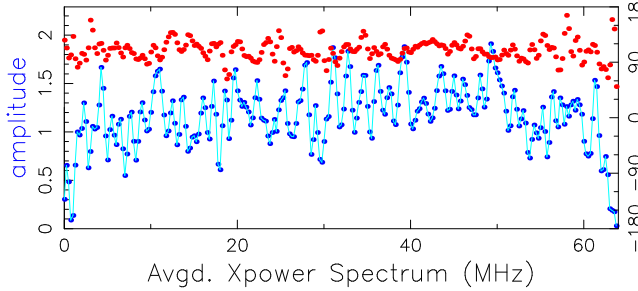
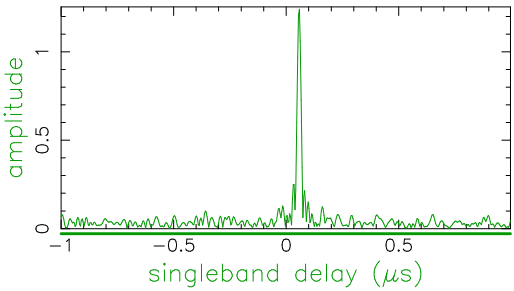
KVNYS - YEBES40M, fgroup Q, pol RR

multiband delay ( $\mu$ s)



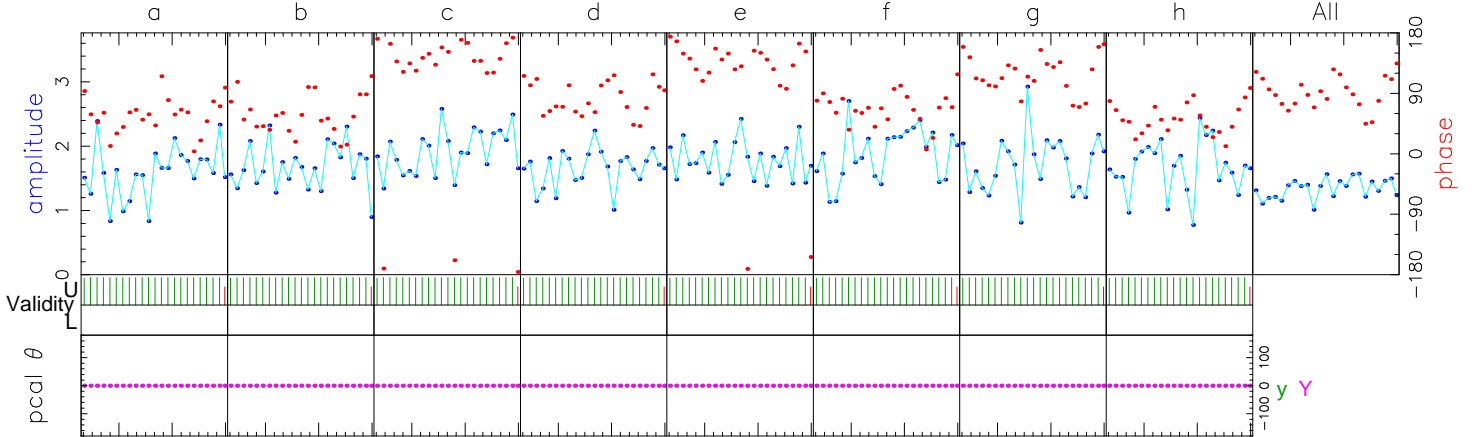
Fringe quality 5

SNR 43.7  
 Int time 162.148  
 Amp 1.254  
 Phase 180.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.057248  
 MBD -0.003704  
 Fringe rate (Hz)  
 0.013696  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145508  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	57.7	55.1	150.7	82.2	142.1	65.8	121.2	50.3	Phase	90.7
	1.5	1.5	1.8	1.5	1.6	1.7	1.6	1.6	Ampl.	1.6
	273.2	271.5	271.3	271.2	270.9	271.2	271.2	271.4	Sbd box	271.7
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
y	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	

Group delay (usec) (SBD)	3.07707719771E+03	Apriori delay (usec)	3.07701840201E+03	Resid mbdelay (usec)	-3.70430E-03	+/-	2.5E-05
Sband delay (usec)	3.07707564976E+03	Apriori clock (usec)	1.1731601E+02	Resid sbdelay (usec)	5.72478E-02	+/-	2.0E-04
Phase delay (usec)	3.07701840785E+03	Apriori clockrate (us/s)	1.0678721E-06	Resid phdelay (usec)	5.83894E-06	+/-	1.7E-07
Delay rate (us/s)	-1.66146537329E+00	Apriori rate (us/s)	-1.66146569076E+00	Resid rate (us/s)	3.17473E-07	+/-	1.8E-09
Total phase (deg)	131.3	Apriori accel (us/s/s)	-1.86392025810E-05	Resid phase (deg)	180.7	+/-	2.6

ph/seg (deg)	23.2	Theor.	6.3	Amplitude	1.254 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	14.1	Search (1024X32)	1.209	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.5	Inc. seg. avg.	1.338	Inc. frq. avg.	1.586	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.1	Inc. frq. avg.	1.586			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 291.2 el 46.6 pa 74.1      Y: az 64.9 el 35.5 pa -63.8      u, v (fr/asec) 6190.314 -790.506      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241d/v1/7mm/1234/No0399/yY..3MP1HX      Output file: /Exps/c241d/v1/7mm/1234/No0399/yY.Q.30.3MP1HX

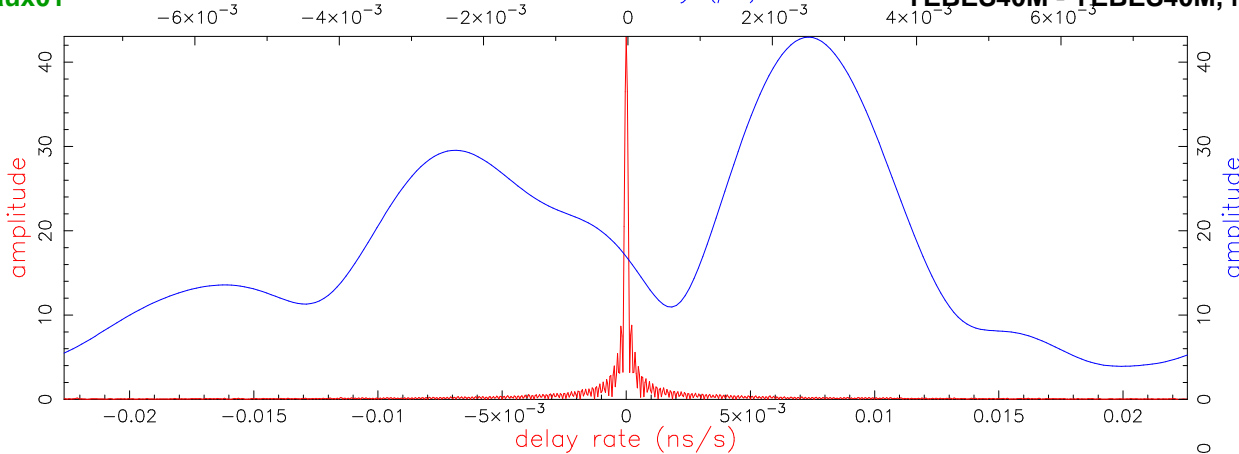
Mk4/DiFX fourfit 3.25 rev 0

aux01

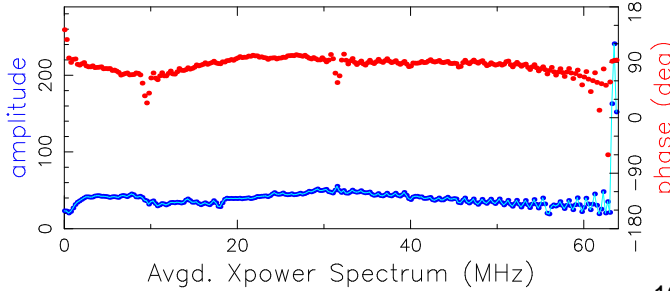
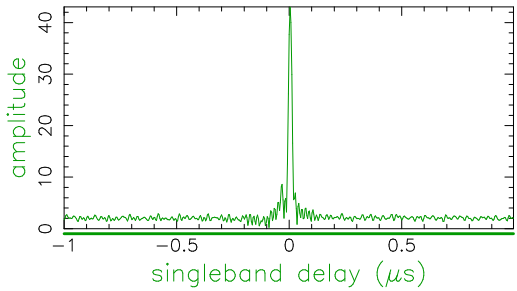
3C345.3MP1HX, No0399, YY

YEBES40M - YEBES40M, fgroup Q, pol RL

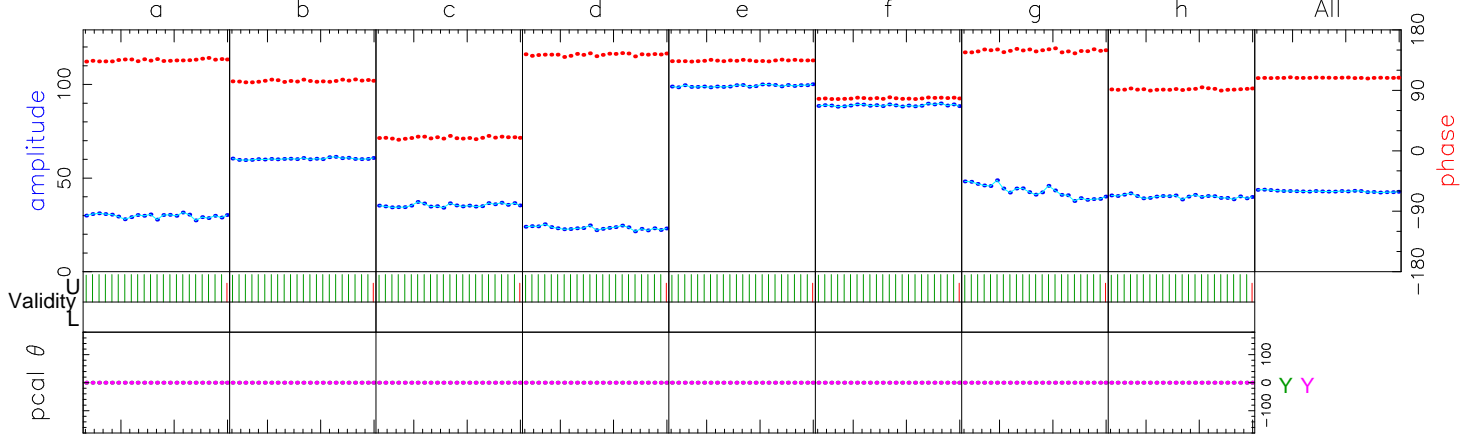
multiband delay ( $\mu$ s)



Fringe quality 5  
 Error code G  
 SNR 1500.2  
 Int time 162.327  
 Amp 43.058  
 Phase 108.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.004453  
 MBD 0.002509  
 Fringe rate (Hz)  
 -0.000016  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512  
 Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145509  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	134.8	103.9	19.4	143.0	134.1	78.0	148.9	91.5	Ampl.	108.5
	29.8	60.3	35.5	23.4	99.2	88.8	43.1	40.1	Ampl.	52.5
	257.2	257.2	257.1	258.6	256.8	256.6	257.5	259.2	Sbd box	258.1
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.50921875000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.50922E-03	+/-	7.2E-07
Sband delay (usec)	4.45250000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	4.45250E-03	+/-	5.7E-06
Phase delay (usec)	6.98747905996E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	6.98748E-06	+/-	4.9E-09
Delay rate (us/s)	-3.82000264366E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.82000E-10	+/-	5.2E-11
Total phase (deg)	108.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	108.5	+/-	0.1

ph/seg (deg) 0.3 0.2 Search (1024X32) 42.920 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.9 0.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 47.2 0.1 Inc. seg. avg. 42.975 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 64.5 0.2 Inc. frq. avg. 52.516 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 Y: az 64.9 el 35.5 pa -63.8 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/YY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/YY.Q.39.3MP1HX

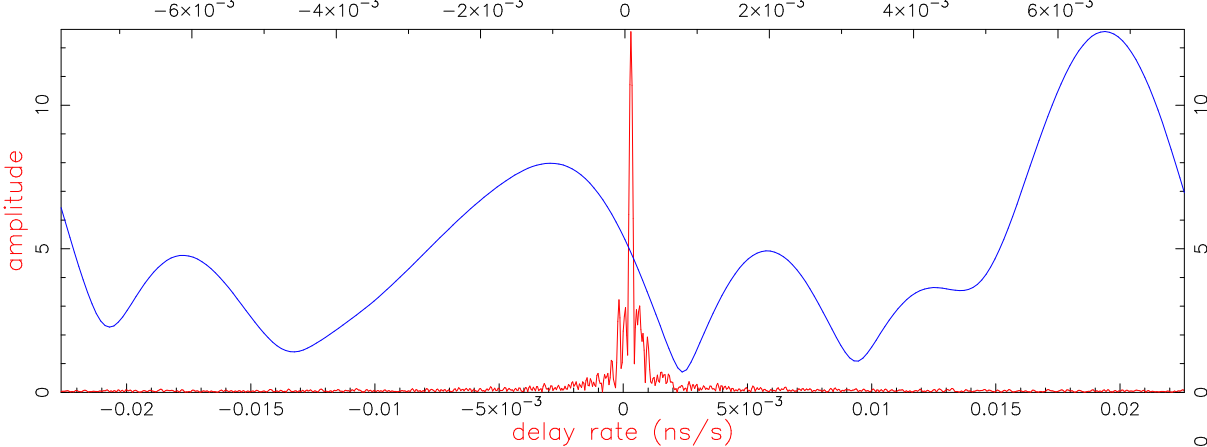
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, yY

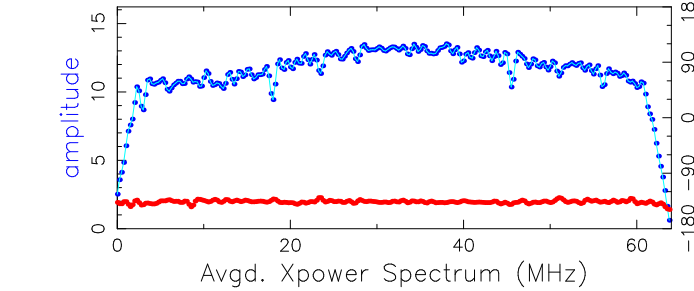
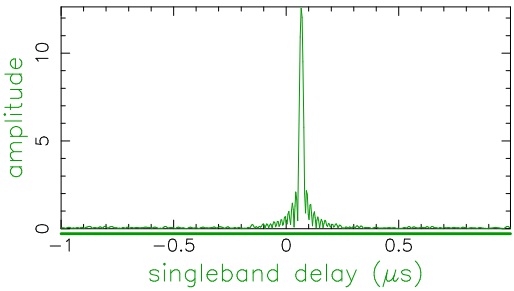
KVNYS - YEBES40M, fgroup Q, pol LR

multiband delay ( $\mu$ s)



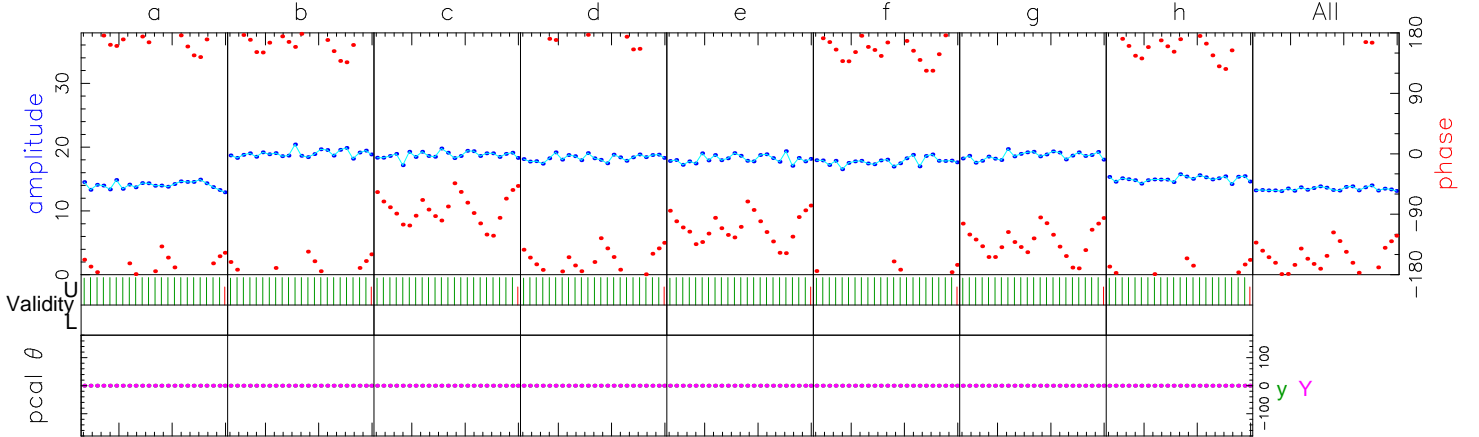
Fringe quality 5

SNR 440.1  
 Int time 162.148  
 Amp 12.640  
 Phase 293.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.067430  
 MBD 0.006674  
 Fringe rate (Hz)  
 0.013709  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145509  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-179.0	174.4	-82.9	-166.6	-110.7	160.3	-130.9	167.5	Phase	-156.4
	13.2	17.7	17.5	17.1	17.0	16.6	17.4	14.0	Ampl.	16.3
	275.7	274.2	273.9	273.7	273.5	273.9	273.9	274.0	Sbd box	274.3
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
y	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 3.07708757590E+03 Apriori delay (usec) 3.07701840201E+03 Resid mbdelay (usec) 6.67389E-03 +/- 2.5E-06  
 Sband delay (usec) 3.07708583201E+03 Apriori clock (usec) 1.1731601E+02 Resid sbdelay (usec) 6.74300E-02 +/- 2.0E-05  
 Phase delay (usec) 3.07701839194E+03 Apriori clockrate (us/s) 1.0678721E-02 Resid phdelay (usec) -1.00691E-05 +/- 1.7E-08  
 Delay rate (us/s) -1.66146537298E+00 Apriori rate (us/s) -1.66146569076E+00 Resid rate (us/s) 3.17785E-07 +/- 1.8E-10  
 Total phase (deg) 244.2 Apriori accel (us/s/s) -1.86392025810E-05 Resid phase (deg) 293.6 +/- 0.3

RMS Theor. Amplitude 12.640 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 21.0 0.6 Search (1024X32) 12.230 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 6.7 1.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 46.2 0.4 Inc. seg. avg. 13.445 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 amp/frq (%) 31.8 0.6 Inc. frq. avg. 16.325 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

y: az 291.2 el 46.6 pa 74.1 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6190.314 -790.506 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/yY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/yY.Q.43.3MP1HX

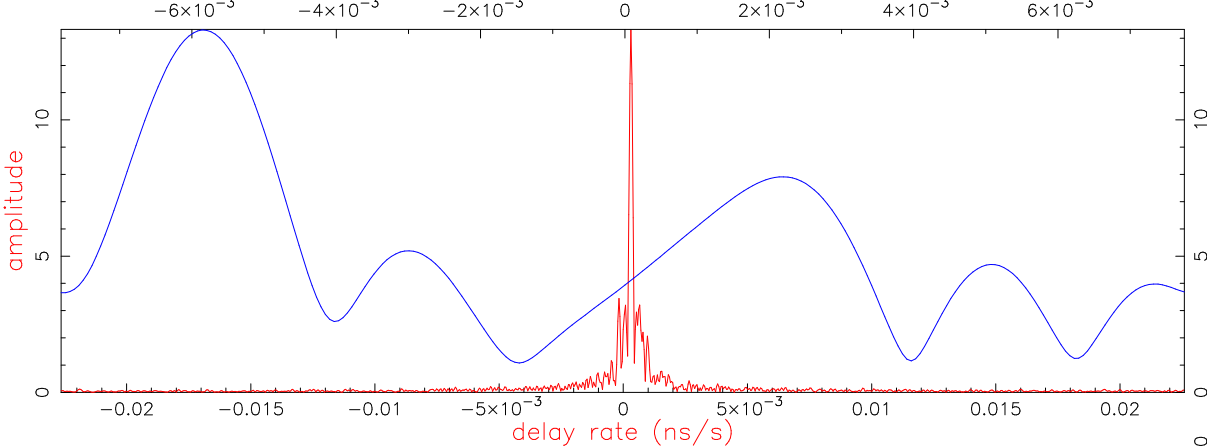
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C345.3MP1HX, No0399, yY

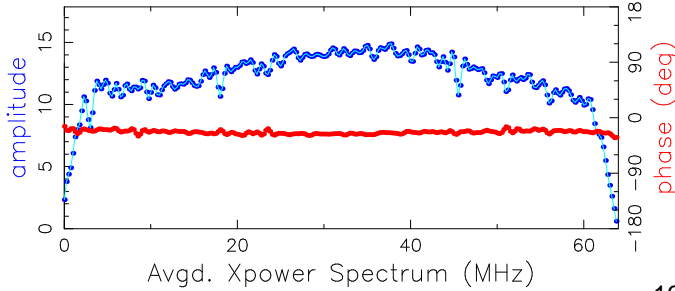
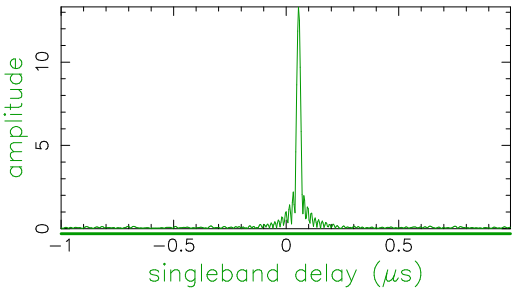
KVNYS - YEBES40M, fgroup Q, pol RL

multiband delay ( $\mu$ s)



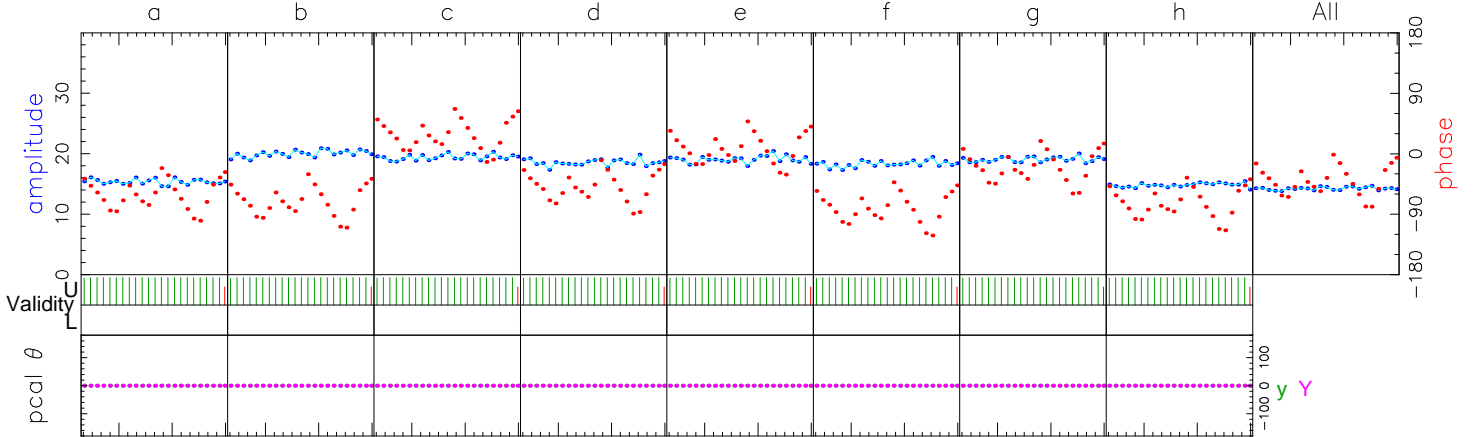
Fringe quality 5

SNR 463.9  
 Int time 162.148  
 Amp 13.323  
 Phase 49.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.055235  
 MBD -0.005825  
 Fringe rate (Hz)  
 0.013683  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241d  
 Exper # 1234  
 Yr:day 2024:112  
 Start 220017.41  
 Stop 220300.23  
 FRT 220130.00  
 Corr/FF/build  
 2024:316:155049  
 2025:042:145511  
 2024:113:095956  
 RA & Dec (J2000)  
 16h42m58.809971s  
 +39°48'36.993958"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-61.3	-71.1	28.1	-48.9	7.5	-80.9	-20.0	-73.9		-40.2
	14.4	18.7	18.2	17.3	17.8	17.1	17.7	13.8	Ampl.	16.9
	272.6	271.2	270.7	270.4	270.5	270.5	270.9	270.4	Sbd box	271.1
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
y	0	24000	0	0	32000	0	0	40000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	3.07707507690E+03	Apriori delay (usec)	3.07701840201E+03	Resid mbdelay (usec)	-5.82511E-03	+/-	2.3E-06
Sband delay (usec)	3.07707363676E+03	Apriori clock (usec)	1.1731601E+02	Resid sbdelay (usec)	5.52347E-02	+/-	1.9E-05
Phase delay (usec)	3.07701839942E+03	Apriori clockrate (us/s)	1.0678721E-02	Resid phdelay (usec)	-2.59125E-06	+/-	1.6E-08
Delay rate (us/s)	-1.66146537358E+00	Apriori rate (us/s)	-1.66146569076E+00	Resid rate (us/s)	3.17185E-07	+/-	1.7E-10
Total phase (deg)	0.3	Apriori accel (us/s/s)	-1.86392025810E-05	Resid phase (deg)	49.8	+/-	0.2

ph/seg (deg) 21.1 0.6 Theor. Amplitude 13.323 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 7.2 1.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.0 0.3 Inc. seg. avg. 14.245 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 29.5 0.6 Inc. frq. avg. 16.876 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023  
 y: az 291.2 el 46.6 pa 74.1 Y: az 64.9 el 35.5 pa -63.8 u,v (fr/asec) 6190.314 -790.506 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241d/v1/7mm/1234/No0399/yY..3MP1HX Output file: /Exps/c241d/v1/7mm/1234/No0399/yY.Q.58.3MP1HX