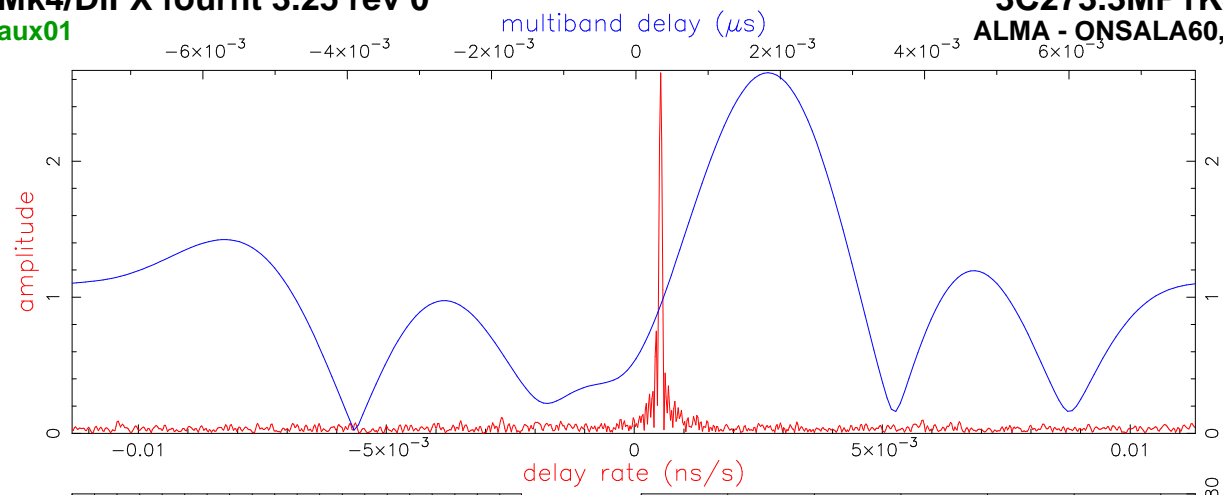


Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, AX

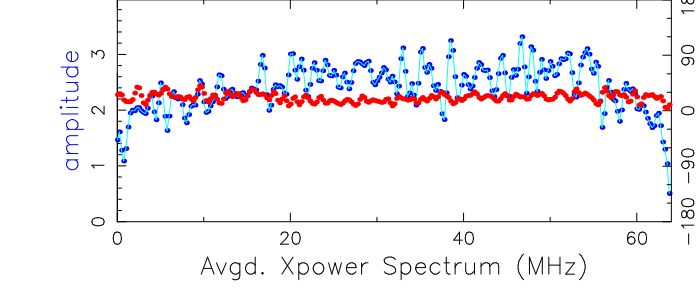
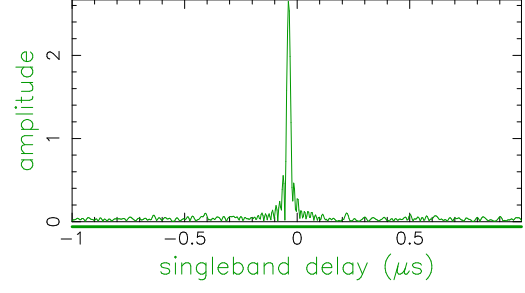
ALMA - ONSALA60, fgroup W, pol YR



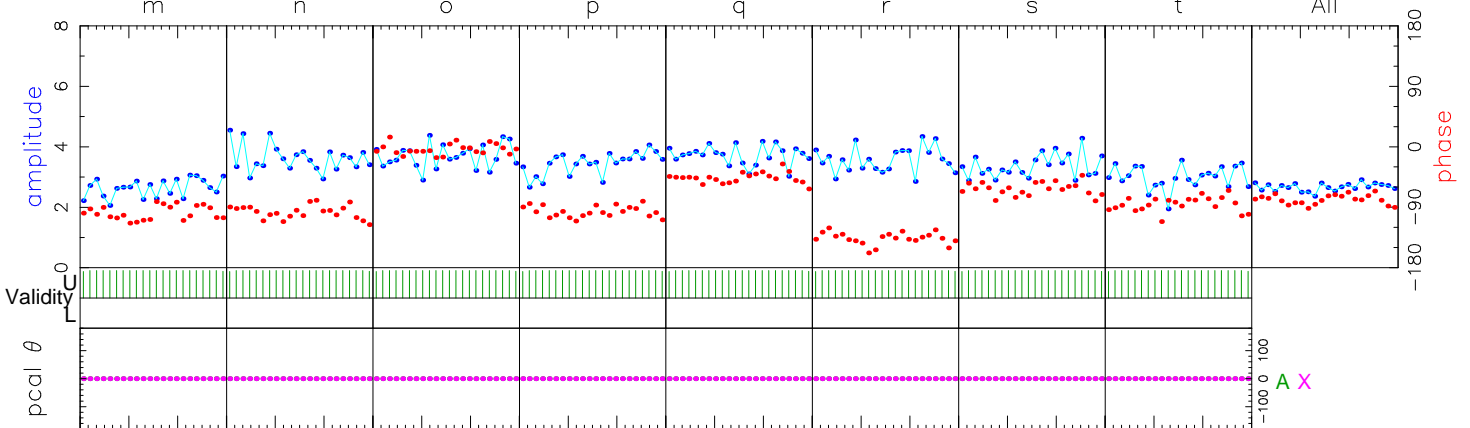
Fringe quality 6

SNR 97.7
 Int time 179.690
 Amp 2.667
 Phase -78.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.038062
 MBD 0.001857
 Fringe rate (Hz)
 0.046418
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171321
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-98.1	-97.0	-3.9	-96.5	-46.2	-136.0	-62.2	-85.7	Phase	-78.5
	2.6	3.6	3.7	3.4	3.7	3.5	3.3	2.9	Ampl.	3.3
	248.2	247.0	246.7	246.6	246.6	246.9	246.8	247.9	Sbd box	247.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-9.81632668609E+02	Apriori delay (usec)	-9.81587650676E+02	Resid mbdelay (usec)	1.85707E-03	+/-	1.1E-05
Sband delay (usec)	-9.81625712426E+02	Apriori clock (usec)	-2.2201655E+03	Resid sbdelay (usec)	-3.80617E-02	+/-	8.8E-05
Phase delay (usec)	-9.81587653207E+02	Apriori clockrate (us/s)	-1.2274550E-06	Resid phdelay (usec)	-2.53023E-06	+/-	3.8E-08
Delay rate (us/s)	1.51345473055E+00	Apriori rate (us/s)	1.51345419168E+00	Resid rate (us/s)	5.38862E-07	+/-	3.6E-10
Total phase (deg)	-161.0	Apriori accel (us/s/s)	-1.12314272565E-05	Resid phase (deg)	-78.5	+/-	1.2

ph/seg (deg) 7.0 2.8 Amplitude 2.667 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.8 4.8 Search (1024X32) 2.540 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.4 1.7 Inc. seg. avg. 2.667 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.8 2.9 Inc. frq. avg. 3.344 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

A: az 70.9 el 33.8 pa -119.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8681.347 -10929.122 simultaneous interpolator

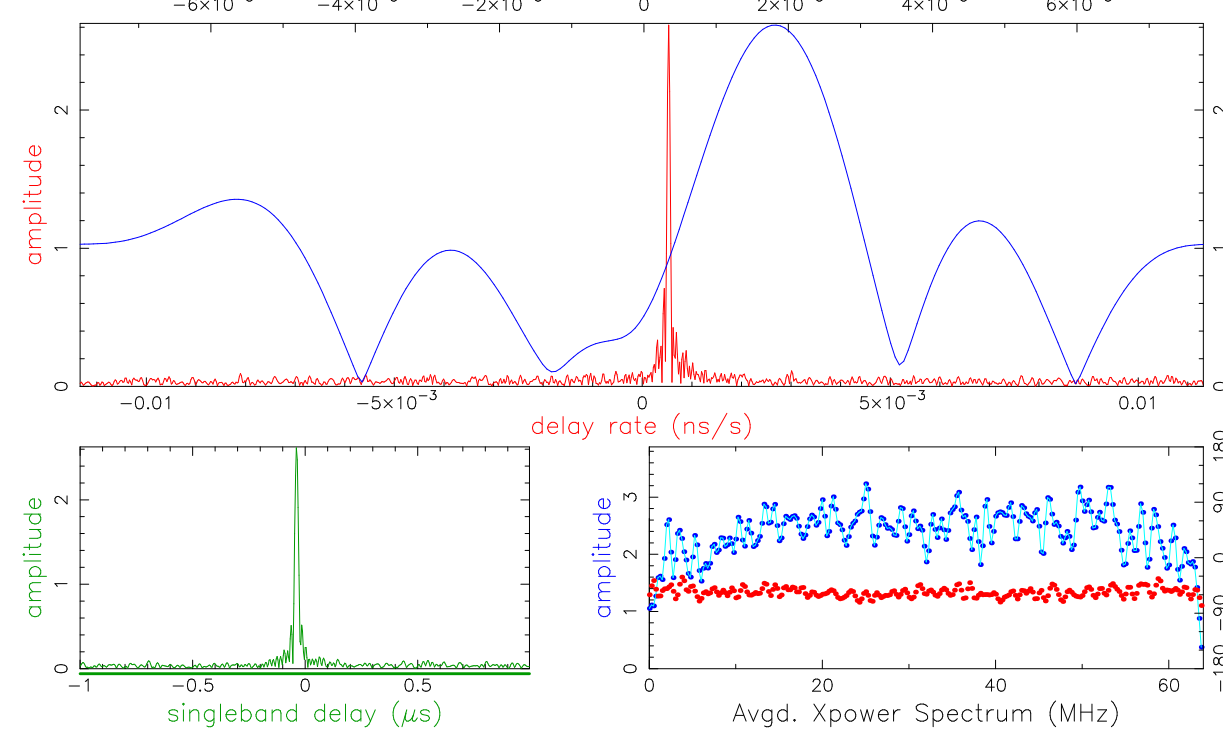
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//AX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//AX.W.10.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, AX

ALMA - ONSALA60, fgroup W, pol XR

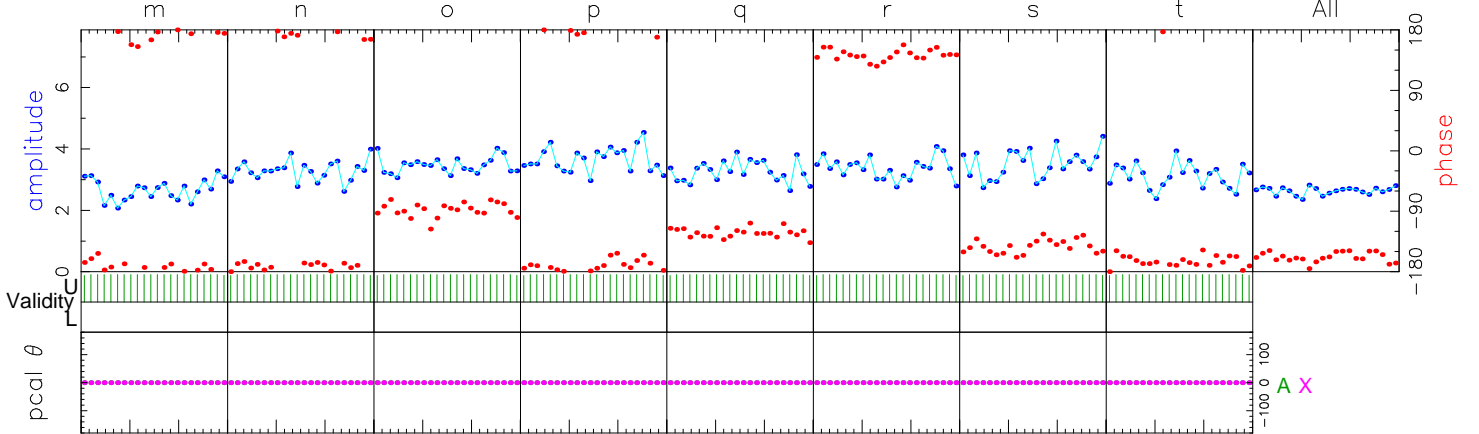


Fringe quality 6

SNR 96.2
 Int time 179.690
 Amp 2.628
 Phase -158.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.038275
 MBD 0.001837
 Fringe rate (Hz) 0.046436
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build 2024:359:200643
 2025:041:171323
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-177.7	-176.9	-87.8	-172.5	-121.8	142.7	-142.4	-165.1	Phase	-158.1
	2.6	3.2	3.4	3.6	3.3	3.4	3.5	3.1	Ampl.	3.3
	248.4	246.9	246.7	246.6	246.5	246.7	246.8	247.8	Sbd box	247.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-9.81632688640E+02	Apriori delay (usec)	-9.81587650676E+02	Resid mbdelay (usec)	1.83704E-03	+/-	1.1E-05
Sband delay (usec)	-9.81625925426E+02	Apriori clock (usec)	-2.2201655E+03	Resid sbdelay (usec)	-3.82748E-02	+/-	9.0E-05
Phase delay (usec)	-9.81587655774E+02	Apriori clockrate (us/s)	-1.2274550E-06	Resid phdelay (usec)	-5.09733E-06	+/-	3.8E-08
Delay rate (us/s)	1.51345473076E+00	Apriori rate (us/s)	1.51345419168E+00	Resid rate (us/s)	5.39076E-07	+/-	3.7E-10
Total phase (deg)	-240.6	Apriori accel (us/s/s)	-1.12314272565E-05	Resid phase (deg)	-158.1	+/-	1.2

ph/seg (deg)	7.2	Theor.	2.8	Amplitude	2.628 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	4.6		4.9	Search (1024X32)	2.499	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	42.8		1.7	Inc. seg. avg.	2.636	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.4		2.9	Inc. frq. avg.	3.257	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

A: az 70.9 el 33.8 pa -119.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8681.347 -10929.122 simultaneous interpolator

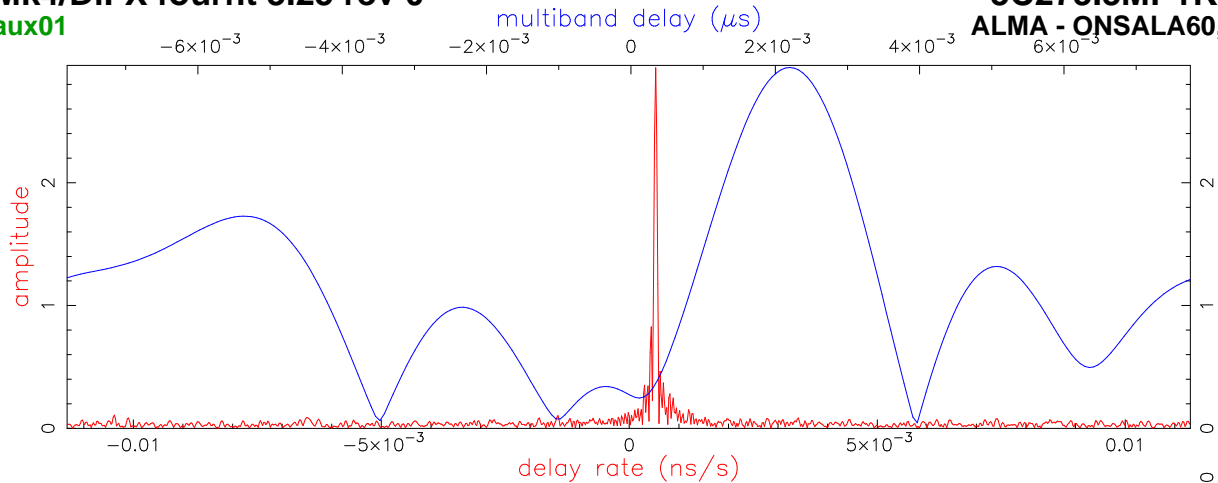
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//AX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//AX.W.18.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

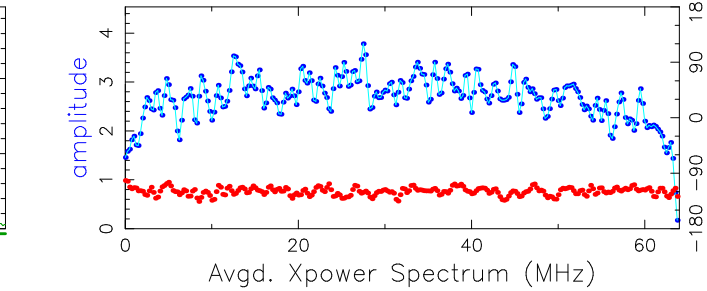
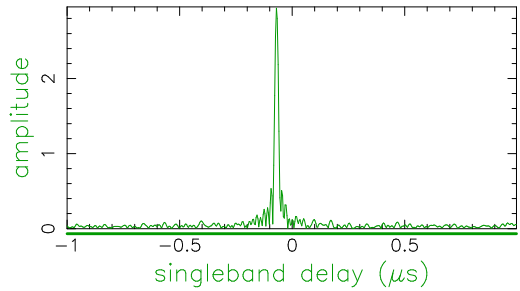
3C273.3MP1KJ, No0618, AX

ALMA - ONSALA60, fgroup W, pol YL



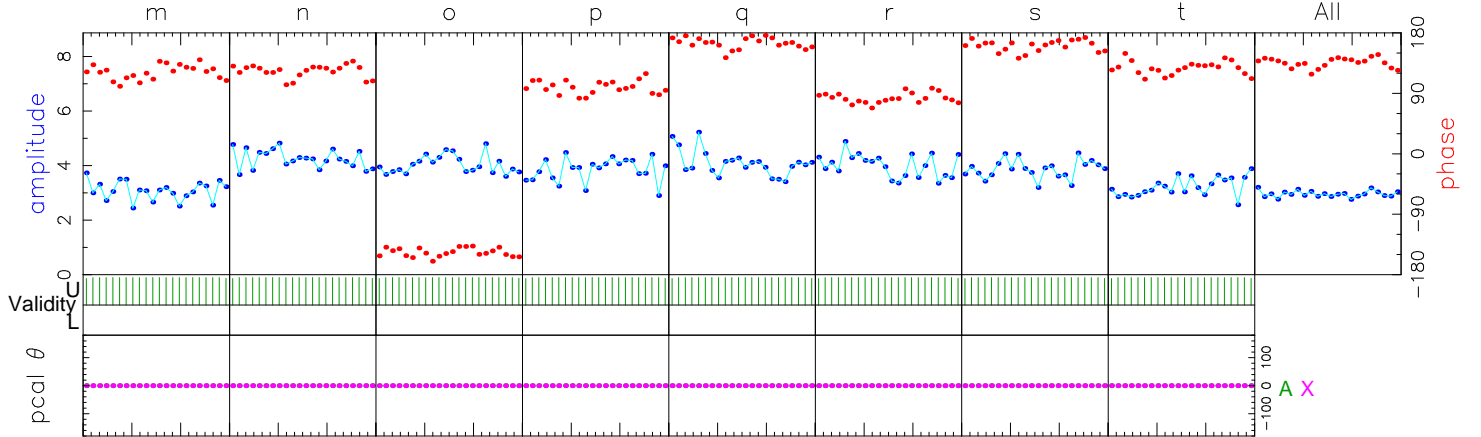
Fringe quality 6

SNR 108.2
 Int time 179.690
 Amp 2.955
 Phase 135.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.069379
 MBD 0.002221
 Fringe rate (Hz)
 0.046423
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171326
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	121.1	123.1	-146.7	99.3	164.7	82.7	160.5	127.4	Phase	135.5
	3.0	4.2	4.0	3.8	4.1	4.0	3.8	3.2	Ampl.	3.8
	240.6	238.8	238.9	238.6	238.9	238.8	238.8	239.5	Sbd box	239.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UY	W12UY	W13UY	W14UY	W15UY	W16UY	W17UY	W18UY	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-9.81663554547E+02	Apriori delay (usec)	-9.81587650676E+02	Resid mbdelay (usec)	2.22113E-03	+/-	1.0E-05
Sband delay (usec)	-9.81657029426E+02	Apriori clock (usec)	-2.2201655E+03	Resid sbdelay (usec)	-6.93787E-02	+/-	8.0E-05
Phase delay (usec)	-9.81587646306E+02	Apriori clockrate (us/s)	-1.2274550E-06	Resid phdelay (usec)	4.37031E-06	+/-	3.4E-08
Delay rate (us/s)	1.51345473061E+00	Apriori rate (us/s)	1.51345419168E+00	Resid rate (us/s)	5.38929E-07	+/-	3.3E-10
Total phase (deg)	53.0	Apriori accel (us/s/s)	-1.12314272565E-05	Resid phase (deg)	135.5	+/-	1.1

ph/seg (deg)	RMS 7.2	Theor. 2.5	Amplitude Search (1024X32)	2.804	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	7.2	2.5	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)	3.9	4.3	Inc. seg. avg.	2.961	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.8	1.5	Inc. frq. avg.	3.761	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

A: az 70.9 el 33.8 pa -119.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8681.347 -10929.122 simultaneous interpolator

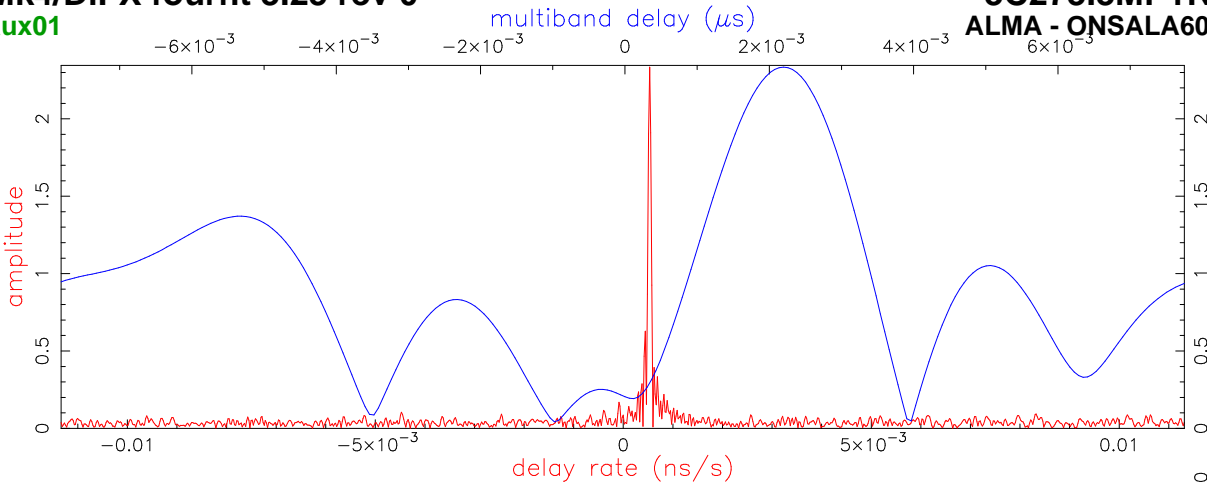
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//AX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//AX.W.26.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

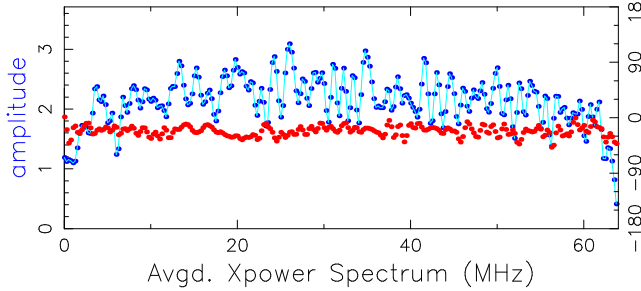
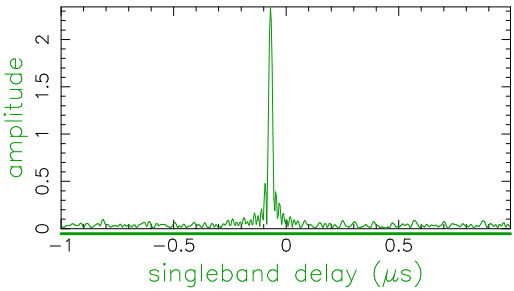
3C273.3MP1KJ, No0618, AX

ALMA - ONSALA60, fgroup W, pol XL



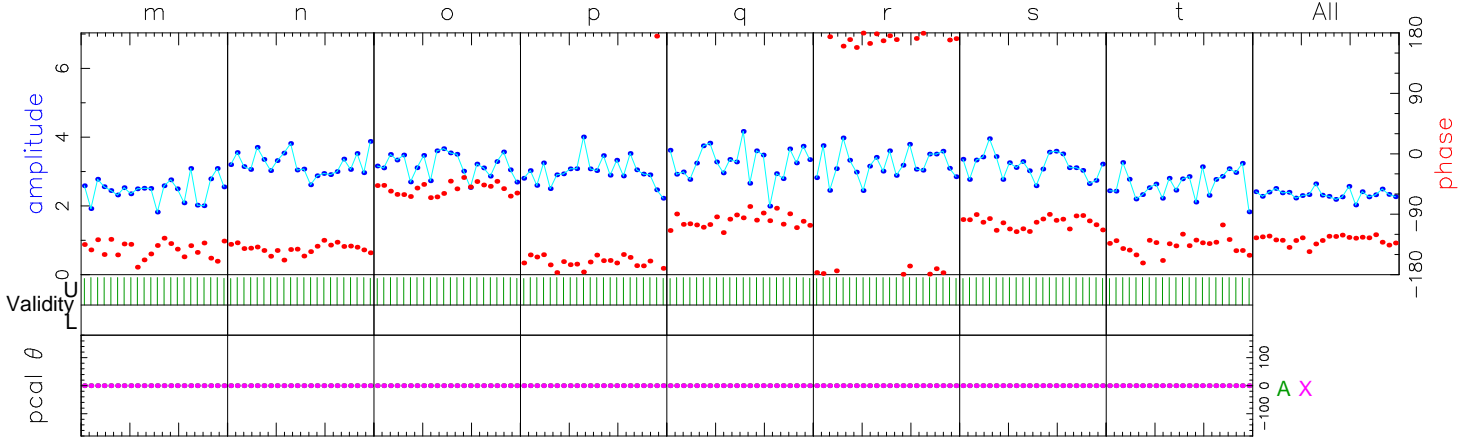
Fringe quality 6

SNR 85.9
 Int time 179.690
 Amp 2.346
 Phase -128.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.069515
 MBD 0.002218
 Fringe rate (Hz) 0.046410
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171319
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-142.3	-141.3	-52.1	-162.0	-99.5	175.9	-102.4	-136.0	Phase	-128.1
	2.4	3.2	3.2	3.0	3.2	3.2	3.1	2.6	Ampl.	3.0
	240.6	238.9	238.8	238.6	238.8	238.8	238.8	239.3	Sbd box	239.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
A	W11UX	W12UX	W13UX	W14UX	W15UX	W16UX	W17UX	W18UX	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-9.81663557672E+02	Apriori delay (usec)	-9.81587650676E+02	Resid mbdelay (usec)	2.21800E-03	+/-	1.3E-05
Sband delay (usec)	-9.81657165426E+02	Apriori clock (usec)	-2.2201655E+03	Resid sbdelay (usec)	-6.95148E-02	+/-	1.0E-04
Phase delay (usec)	-9.81587654807E+02	Apriori clockrate (us/s)	-1.2274550E-06	Resid phdelay (usec)	-4.13053E-06	+/-	4.3E-08
Delay rate (us/s)	1.51345473046E+00	Apriori rate (us/s)	1.51345419168E+00	Resid rate (us/s)	5.38777E-07	+/-	4.1E-10
Total phase (deg)	-210.6	Apriori accel (us/s/s)	-1.12314272565E-05	Resid phase (deg)	-128.1	+/-	1.3

ph/seg (deg)	6.2	Theor.	3.1	Amplitude	2.346 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	5.6		5.5	Search (1024X32)	2.232	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.7		1.9	Inc. seg. avg.	2.347	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.9		3.3	Inc. frq. avg.	2.983	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
A:	az 70.9 el 33.8 pa -119.7	X:	az 212.8 el 30.3 pa 17.1	u,v (fr/asec)	-8681.347 -10929.122	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

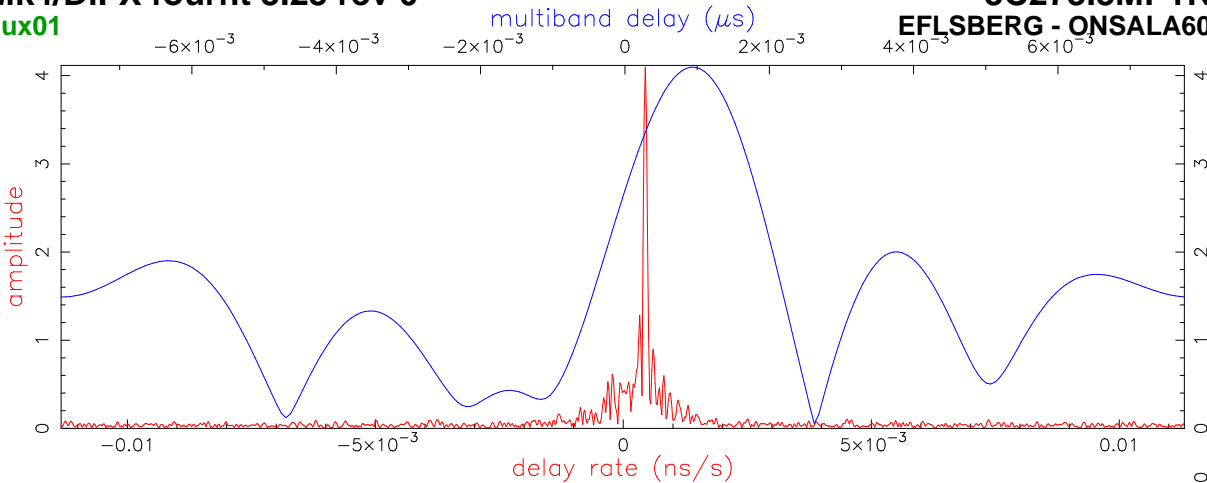
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//AX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//AX.W.4.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

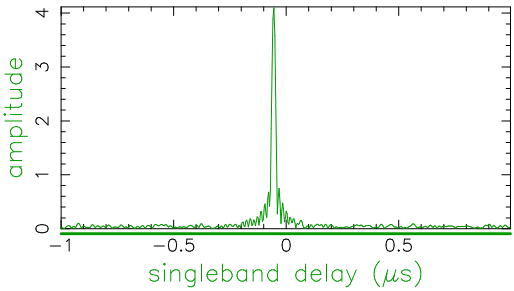
3C273.3MP1KJ, No0618, BX

EFLSBERG - ONSALA60, fgroup W, pol LL

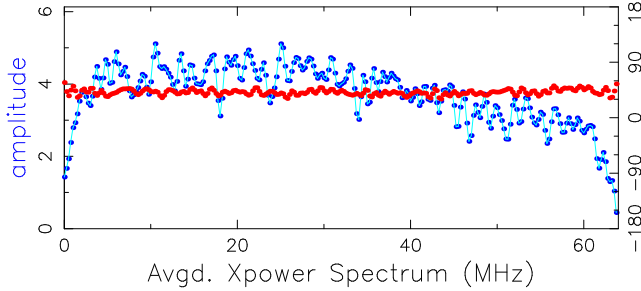


Fringe quality 4

SNR 150.8
 Int time 179.690
 Amp 4.117
 Phase 111.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.055547
 MBD 0.000917
 Fringe rate (Hz)
 0.037355
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

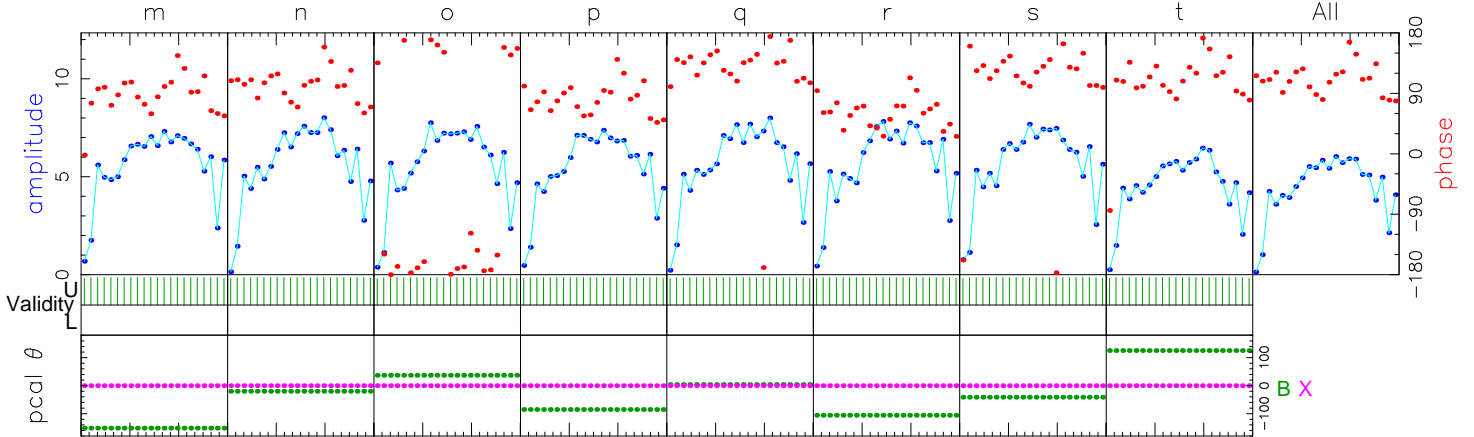


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171328
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.3	102.8	-175.8	82.7	137.5	59.6	128.5	115.8	Phase	111.6
	5.1	5.1	5.1	5.0	5.2	5.2	5.2	4.1	Ampl.	5.0
	242.4	242.2	242.8	242.5	242.9	242.5	242.5	241.9	Sbd box	242.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.13476853687E+03	Apriori delay (usec)	2.13483011995E+03	Resid mbdelay (usec)	9.16921E-04	+/-	7.2E-06
Sband delay (usec)	2.13477457245E+03	Apriori clock (usec)	-1.4814394E+02	Resid sbdelay (usec)	-5.55475E-02	+/-	5.7E-05
Phase delay (usec)	2.13483012355E+03	Apriori clockrate (us/s)	-1.4061621E-02	Resid phdelay (usec)	3.59890E-06	+/-	2.5E-08
Delay rate (us/s)	7.04604181413E-03	Apriori rate (us/s)	7.04560815420E-03	Resid rate (us/s)	4.33660E-07	+/-	2.4E-10
Total phase (deg)	303.2	Apriori accel (us/s/s)	-1.24062556083E-05	Resid phase (deg)	111.6	+/-	0.8

ph/seg (deg)	21.7	1.8	Search (1024X32)	3.966	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	38.1	3.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	41.3	1.1	Inc. seg. avg.	4.443	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	23.4	1.9	Inc. frq. avg.	5.015	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011

B: az 209.4 el 37.7 pa 18.4 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -47.184 -658.331 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/BX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/BX.W.32.3MP1KJ

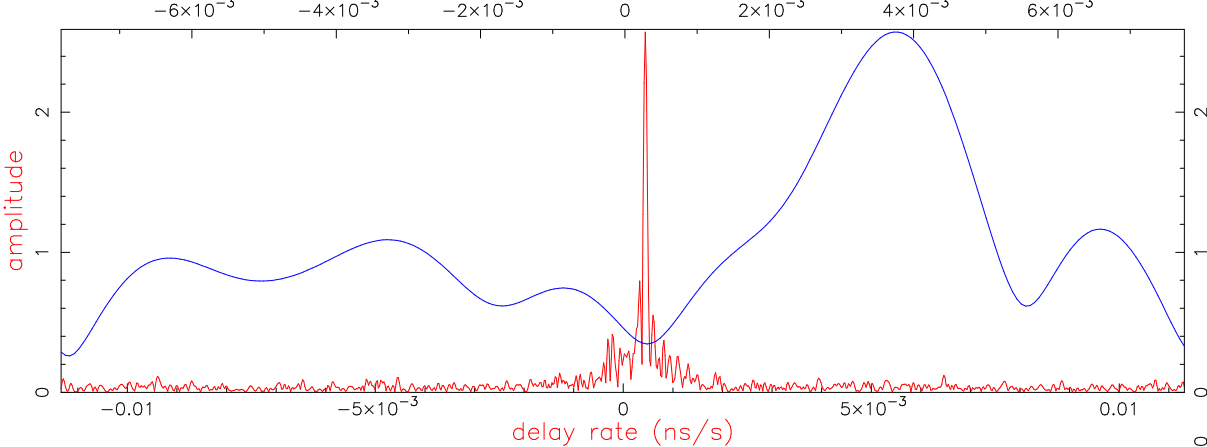
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, BX

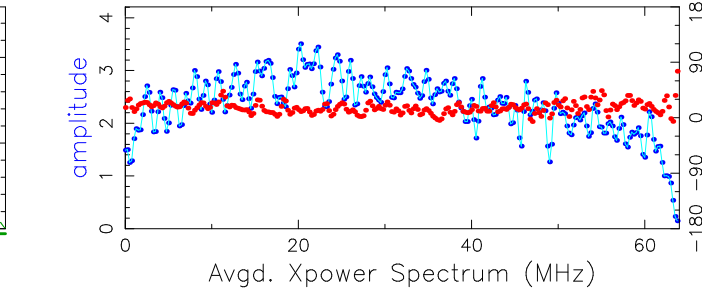
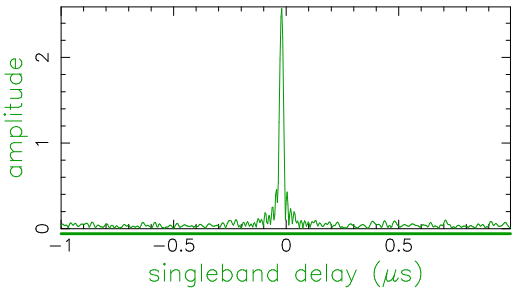
EFLSBERG - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



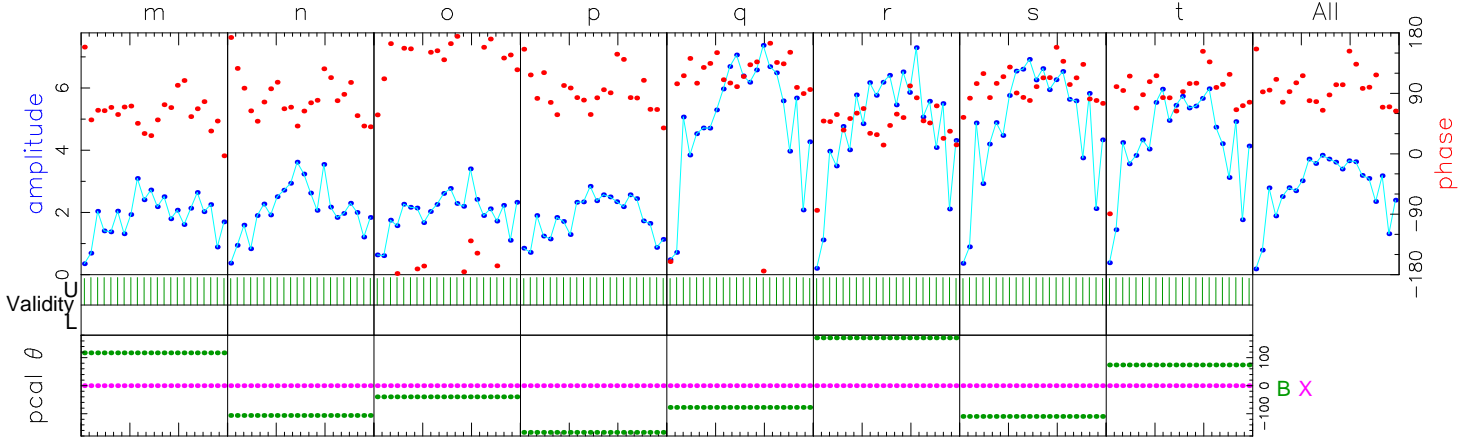
Fringe quality 2

SNR 94.9
 Int time 179.690
 Amp 2.592
 Phase 96.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.020637
 MBD 0.003719
 Fringe rate (Hz)
 0.037391
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171330
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.13480258846E+03	Apriori delay (usec)	2.13483011995E+03	Resid mbdelay (usec)	3.71851E-03	+/-	1.1E-05
Sband delay (usec)	2.13480948245E+03	Apriori clock (usec)	-1.4814394E+02	Resid sbdelay (usec)	-2.06375E-02	+/-	9.1E-05
Phase delay (usec)	2.13483012305E+03	Apriori clockrate (us/s)	-1.4061621E-02	Resid phdelay (usec)	3.10187E-06	+/-	3.9E-08
Delay rate (us/s)	7.0460422226E-03	Apriori rate (us/s)	7.04560815420E-03	Resid rate (us/s)	4.34068E-07	+/-	3.7E-10
Total phase (deg)	287.8	Apriori accel (us/s/s)	-1.24062556083E-05	Resid phase (deg)	96.2	+/-	1.2

ph/seg (deg)	25.1	RMS	25.1	Theor.	2.8	Amplitude	2.592 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	38.0		4.9			Search (1024X32)	2.466	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.5		1.7			Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.8		3.0			Inc. seg. avg.	2.794	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	3.051	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 209.4 el 37.7 pa 18.4 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -47.184 -658.331 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/BX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/BX.W.41.3MP1KJ

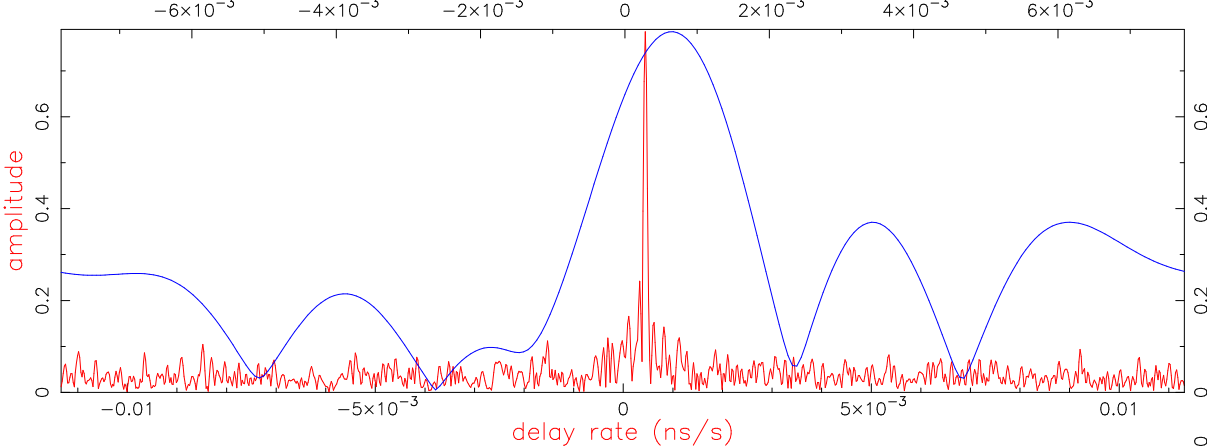
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, BX

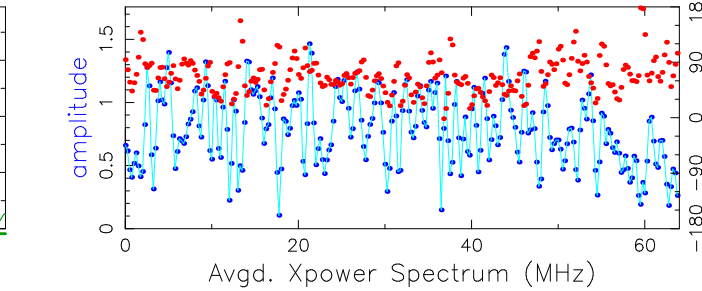
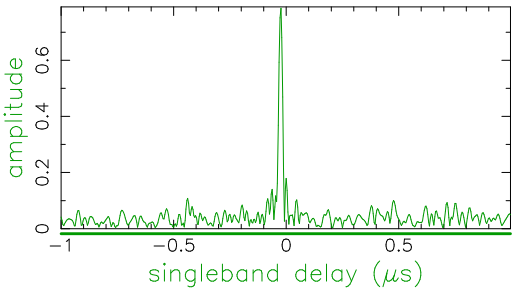
EFLSBERG - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



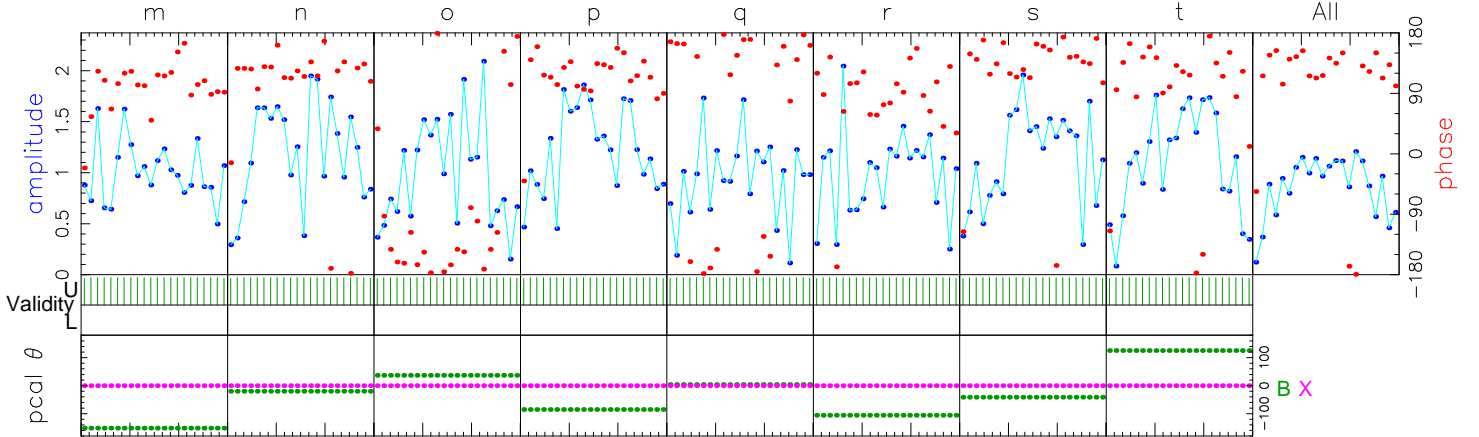
Fringe quality 5

SNR 29.0
 Int time 179.690
 Amp 0.790
 Phase 136.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.024443
 MBD 0.000615
 Fringe rate (Hz)
 0.037319
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2025:041:171332
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	105.5	133.3	-154.5	120.2	173.1	89.5	143.4	138.2	Phase	136.6
	0.9	1.1	0.8	1.1	0.8	1.0	0.8	0.9	Ampl.	0.9
	250.4	250.4	250.0	250.6	250.7	250.2	250.6	249.2	Sbd box	250.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.13479948493E+03	Apriori delay (usec)	2.13483011995E+03	Resid mbdelay (usec)	6.14983E-04	+/-	3.7E-05
Sband delay (usec)	2.13480567720E+03	Apriori clock (usec)	-1.4814394E+02	Resid sbdelay (usec)	-2.44427E-02	+/-	3.0E-04
Phase delay (usec)	2.13483012435E+03	Apriori clockrate (us/s)	-1.4061621E-02	Resid phdelay (usec)	4.40651E-06	+/-	1.3E-07
Delay rate (us/s)	7.04604138758E-03	Apriori rate (us/s)	7.04560815420E-03	Resid rate (us/s)	4.33233E-07	+/-	1.2E-09
Total phase (deg)	328.2	Apriori accel (us/s/s)	-1.24062556083E-05	Resid phase (deg)	136.6	+/-	4.0

	RMS	Theor.	Amplitude	0.790 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	41.7	9.3	Search (1024X32)	0.756	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	37.0	16.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	40.0	5.6	Inc. seg. avg.	0.854	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	22.5	9.8	Inc. frq. avg.	0.922	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite

B: az 209.4 el 37.7 pa 18.4 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -47.184 -658.331 simultaneous interpolator

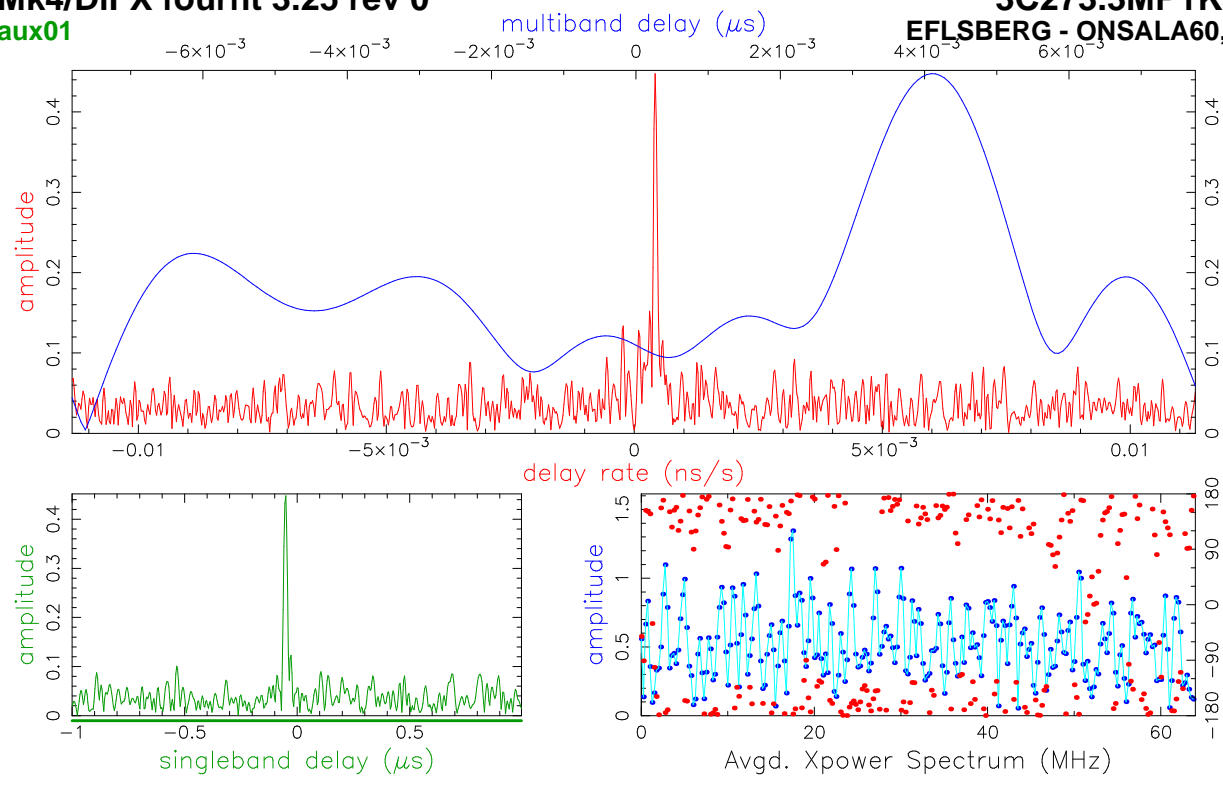
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/BX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/BX.W.53.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

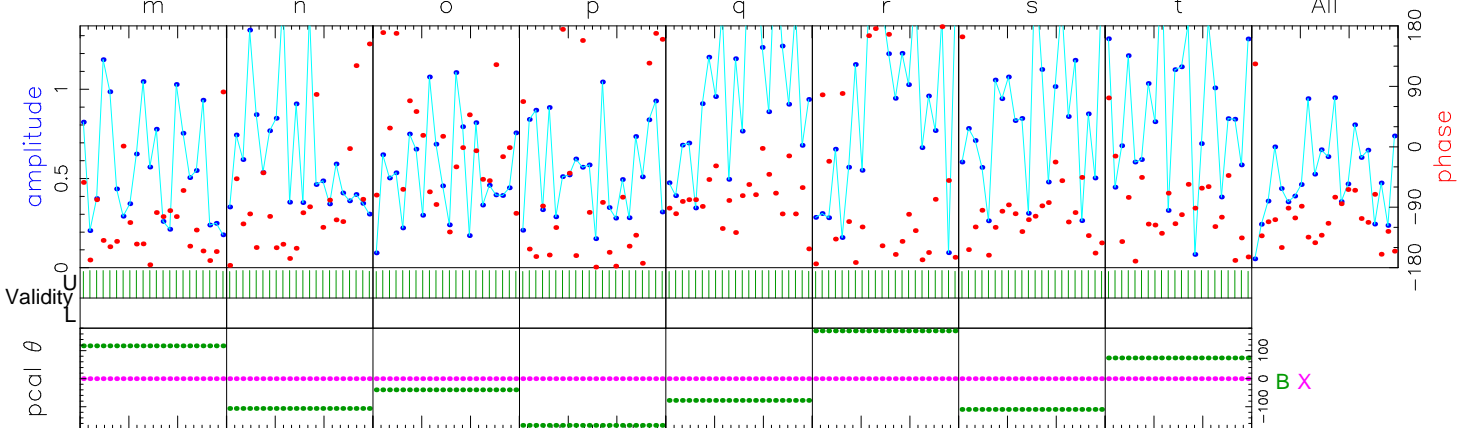
3C273.3MP1KJ, No0618, BX

EFLSBERG - ONSALA60, fgroup W, pol RL



Fringe quality 7
 SNR 16.5
 Int time 179.690
 Amp 0.452
 Phase -111.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.051991
 MBD 0.004076
 Fringe rate (Hz) 0.037243
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build 2024:359:200643
 2025:041:171335
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-125.4	-116.9	-21.2	-153.3	-74.7	-155.8	-105.7	-102.0	Phase	-111.2
	0.4	0.4	0.2	0.4	0.8	0.7	0.7	0.6	Ampl.	0.5
	243.7	243.3	242.5	243.3	243.6	243.5	243.2	243.2	Sbd box	243.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.13477169552E+03	Apriori delay (usec)	2.13483011995E+03	Resid mbdelay (usec)	4.07558E-03	+/-	6.6E-05
Sband delay (usec)	2.13477812870E+03	Apriori clock (usec)	-1.4814394E+02	Resid sbdelay (usec)	-5.19913E-02	+/-	5.2E-04
Phase delay (usec)	2.13483011636E+03	Apriori clockrate (us/s)	-1.4061621E-06	Resid phdelay (usec)	-3.58739E-06	+/-	2.2E-07
Delay rate (us/s)	7.04604051322E-03	Apriori rate (us/s)	7.04560815420E-03	Resid rate (us/s)	4.32359E-07	+/-	2.1E-09
Total phase (deg)	80.3	Apriori accel (us/s/s)	-1.24062556083E-05	Resid phase (deg)	-111.2	+/-	6.9

ph/seg (deg)	RMS 38.5	Theor. 16.2	Amplitude Search (1024X32)	0.452 +/- 0.027	0.429	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	52.0	28.3	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	sb window (us) -1.000 1.000
ph/frq (deg)	47.5	9.8	Inc. seg. avg.	0.496	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	mb window (us) -0.008 0.008
amp/frq (%)	45.9	17.1	Inc. frq. avg.	0.531	Data rate(Mb/s): 2048		dr window (ns/s) -0.011 0.011
							ion window (TEC) 0.00 0.00

B: az 209.4 el 37.7 pa 18.4 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -47.184 -658.331 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/BX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/BX.W.66.3MP1KJ

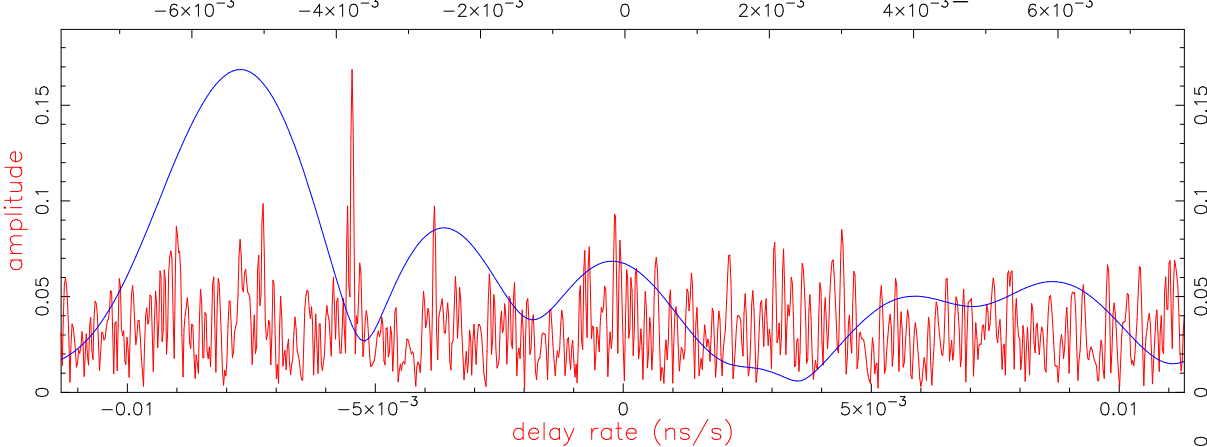
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, GX

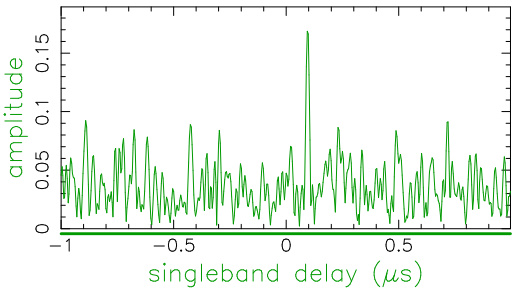
GBT_COLD - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

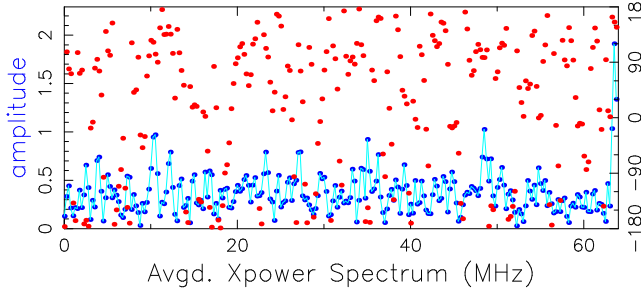


Fringe quality 0

SNR 6.1
 Int time 170.784
 Amp 0.190
 Phase -165.4
 PFD 1.0e-01
 Delays (us)
 SBD 0.095459
 MBD -0.005330
 Fringe rate (Hz)
 -0.470867
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

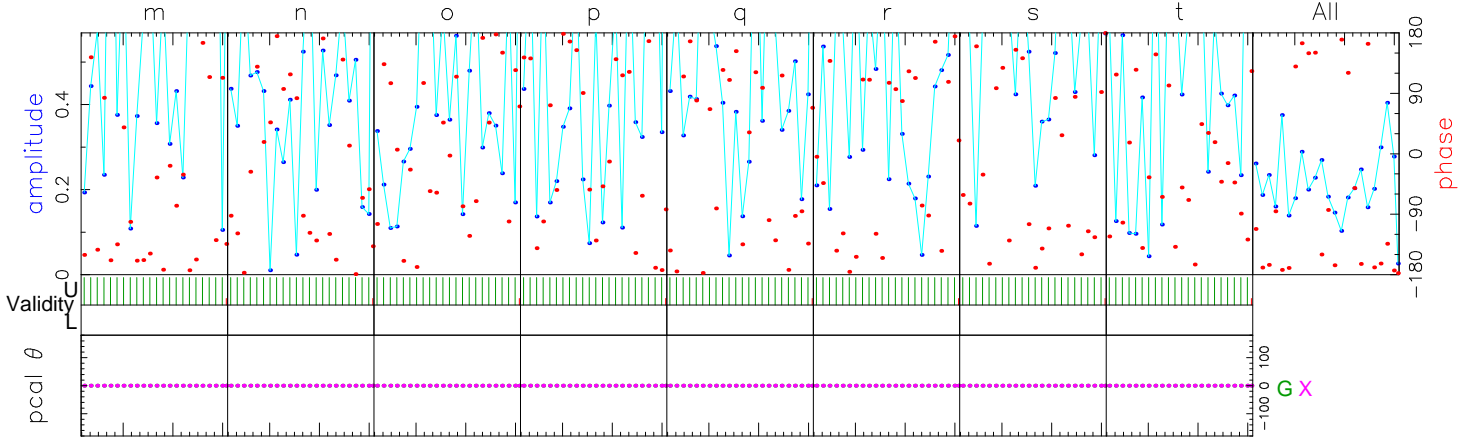


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234009.22
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171346
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	-158.4	-154.1	-109.4	177.7	174.8	173.8	-157.9	-111.9	Phase	-165.4
	0.4	0.2	0.0	0.3	0.2	0.2	0.2	0.1	Ampl.	0.2
	281.2	225.0	99.3	282.0	146.3	414.6	269.7	291.3	Sbd box	281.4
U/L	334/0	334/0	334/0	334/0	334/0	334/0	334/0	334/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.94998523479E+03	Apriori delay (usec)	-2.95007365508E+03	Resid mbdelay (usec)	-5.32970E-03	+/-	1.8E-04
Sband delay (usec)	-2.94997819583E+03	Apriori clock (usec)	-1.2737885E+02	Resid sbdelay (usec)	9.54593E-02	+/-	1.4E-03
Phase delay (usec)	-2.95007366041E+03	Apriori clockrate (us/s)	-1.1462400E-06	Resid phdelay (usec)	-5.33287E-06	+/-	6.0E-07
Delay rate (us/s)	1.48519656264E+00	Apriori rate (us/s)	1.48520202894E+00	Resid rate (us/s)	-5.46630E-06	+/-	6.1E-09
Total phase (deg)		Apriori accel (us/s/s)	1.41750391645E-05	Resid phase (deg)	-165.4	+/-	18.6

ph/seg (deg)	45.8	Theor.	44.7	Amplitude	0.190 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	52.6		78.0	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	35.0		26.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	50.3		46.0	Inc. seg. avg.	0.188	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.181	Data rate(Mb/s): 2048				

G: az 105.4 el 21.4 pa -49.1 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8503.529 -1916.253 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/GX...3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/GX.W.126.3MP1KJ

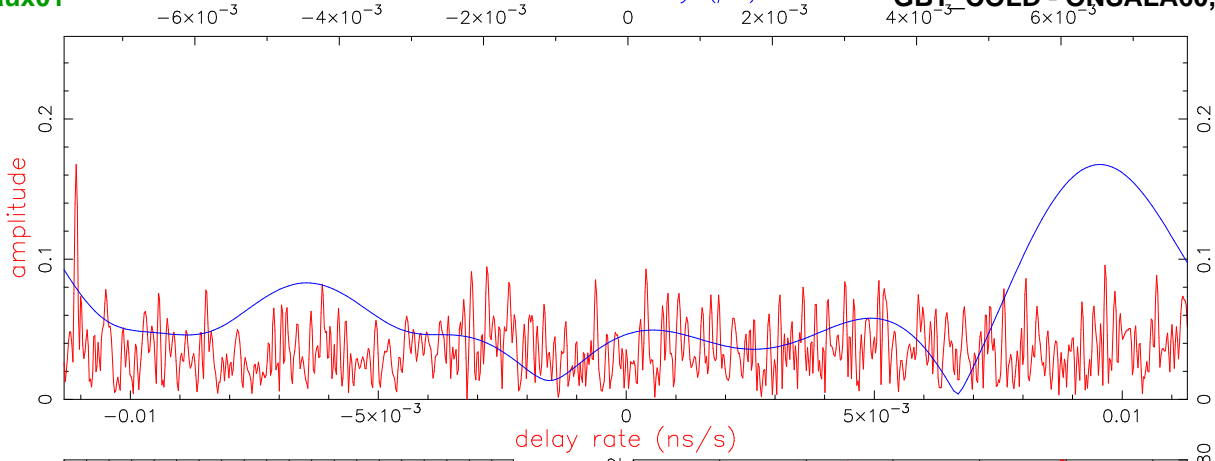
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, GX

GBT_COLD - ONSALA60, fgroup W, pol RR

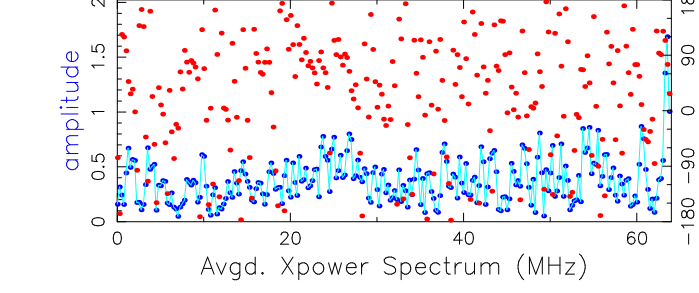
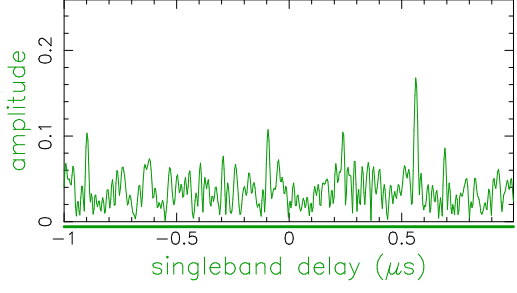
multiband delay (μ s)



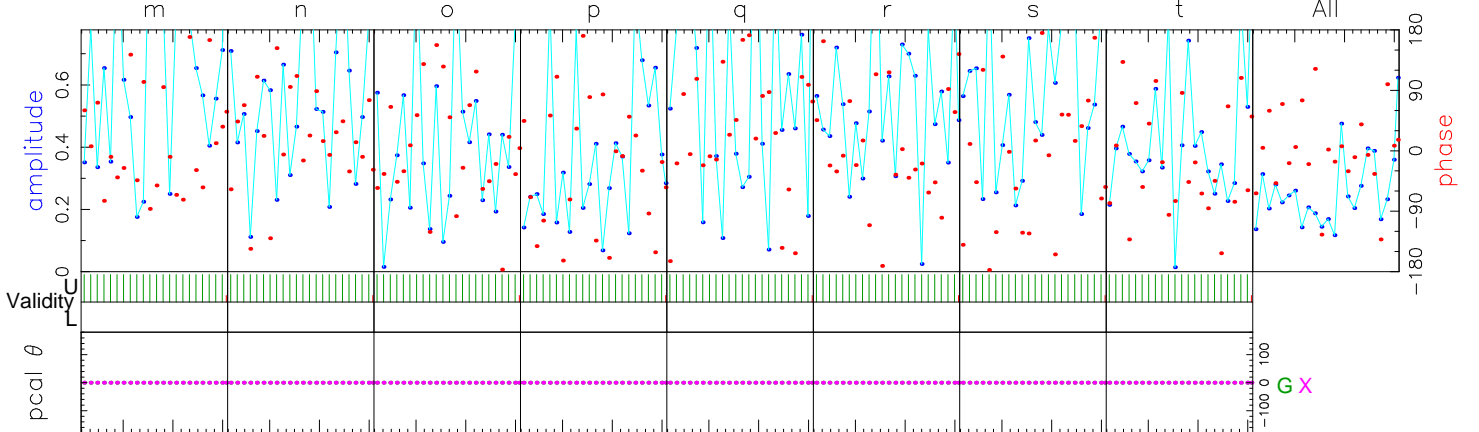
Fringe quality 0

SNR 6.0
 Int time 170.784
 Amp 0.259
 Phase 1.8
 PFD 2.2e-01
 Delays (us)
 SBD 0.563159
 MBD 0.006520
 Fringe rate (Hz) -0.957663
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234009.22
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171348
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



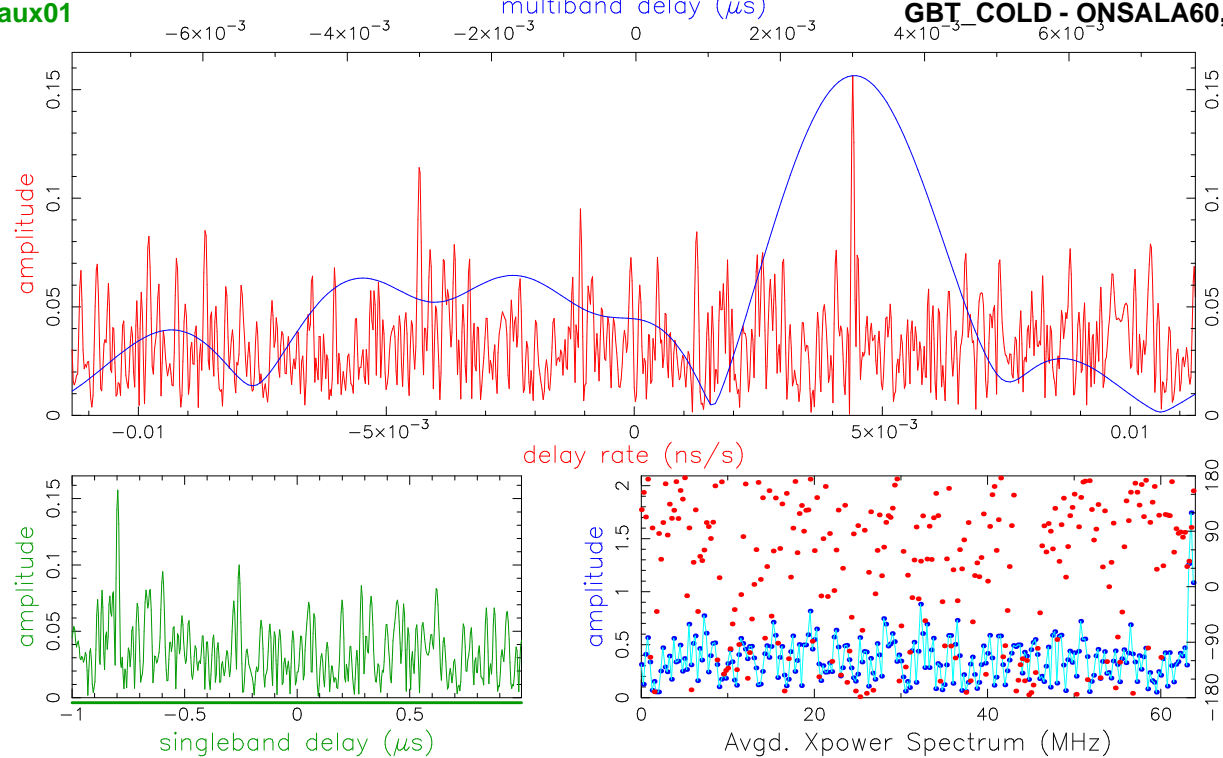
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-31.0	24.8	-10.9	-10.3	32.7	0.2	-19.6	-27.3	Phase	1.8	
	0.4	0.5	0.2	0.2	0.4	0.3	0.1	0.1	Ampl.	0.3	
	401.4	402.0	39.3	337.6	399.8	344.1	97.2	57.2	Sbd box	401.2	
U/L	334/0	334/0	334/0	334/0	334/0	334/0	334/0	334/0	APs used		
G	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-2.94950463515E+03				-2.95007365508E+03				Resid mbdelay (usec)	6.51993E-03 +/- 1.8E-04	
Sband delay (usec)	-2.94951049658E+03				-1.2737885E+02				Resid sbdelay (usec)	5.63159E-01 +/- 1.4E-03	
Phase delay (usec)	-2.95007365502E+03				-1.1462400E-02				Resid phdelay (usec)	5.65182E-08 +/- 6.2E-07	
Delay rate (us/s)	1.48519091143E+00				1.48520202894E+00				Resid rate (us/s)	-1.11175E-05 +/- 6.2E-09	
Total phase (deg)			-231.8		1.41750391645E-05				Resid phase (deg)	1.8 +/- 19.1	
	RMS	Theor.	Amplitude	0.259 +/- 0.043	Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			
ph/seg (deg)	61.1	45.8	Search (1024X32)	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us) -1.000 1.000			
amp/seg (%)	76.0	79.9	Interp.	0.000	Bits/sample: 2x2			SampCntNorm: enabled mb window (us) -0.008 0.008			
ph/frq (deg)	26.4	27.0	Inc. seg. avg.	0.290	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us			dr window (ns/s) -0.011 0.011			
amp/frq (%)	57.5	47.1	Inc. frq. avg.	0.255	Data rate(Mb/s): 2048			nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00			
G: az 105.4 el 21.4 pa -49.1			X: az 212.8 el 30.3 pa 17.1			u,v (fr/asec) -8503.529 -1916.253			simultaneous interpolator		
Control file: cf_1234_gmva			Input file: /Exps/c241b/v2/3mm/1234/No0618//GX..3MP1KJ			Output file: /Exps/c241b/v2/3mm/1234/No0618//GX.W.131.3MP1KJ					

Mk4/DiFX fourfit 3.25 rev 0

aux01

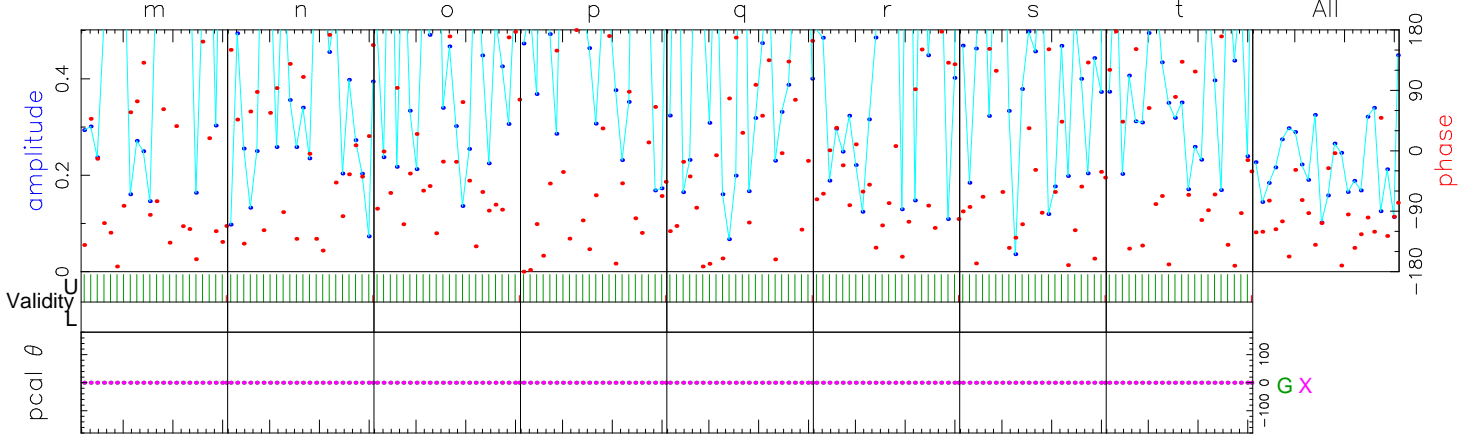
3C273.3MP1KJ, No0618, GX

GBT_COLD - ONSALA60, fgroup W, pol LR



Fringe quality 0
 SNR 5.6
 Int time 170.784
 Amp 0.167
 Phase -105.2
 PFD 9.2e-01
 Delays (us)
 SBD -0.797455
 MBD 0.003018
 Fringe rate (Hz)
 0.380164
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234009.22
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171352
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	-115.7	-114.1	-88.3	-123.6	-50.6	-97.8	-86.4	-136.8	Phase	-105.2
	0.2	0.1	0.3	0.3	0.0	0.2	0.2	0.1	Ampl.	0.2
	328.8	496.0	195.4	86.6	417.2	474.9	217.7	195.3	Sbd box	52.9
U/L	334/0	334/0	334/0	334/0	334/0	334/0	334/0	334/0	APs used	
G	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.95086751256E+03	Apriori delay (usec)	-2.95007365508E+03	Resid mbdelay (usec)	3.01752E-03	+/-	1.9E-04
Sband delay (usec)	-2.95087111008E+03	Apriori clock (usec)	-1.2737885E+02	Resid sbdelay (usec)	-7.97455E-01	+/-	1.5E-03
Phase delay (usec)	-2.95007365847E+03	Apriori clockrate (us/s)	-1.1462400E-06	Resid phdelay (usec)	-3.39244E-06	+/-	6.6E-07
Delay rate (us/s)	1.48520644227E+00	Apriori rate (us/s)	1.48520202894E+00	Resid rate (us/s)	4.41333E-06	+/-	6.7E-09
Total phase (deg)	-338.7	Apriori accel (us/s/s)	1.41750391645E-05	Resid phase (deg)	-105.2	+/-	20.4

ph/seg (deg)	52.1	Theor.	49.0	Amplitude	0.167 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.2	Search (1024X32)	0.150	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.5	Inc. seg. avg.	0.171	Inc. frq. avg.	0.157	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.4	Inc. frq. avg.	0.157	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
				G: az 105.4 el 21.4 pa -49.1	X: az 212.8 el 30.3 pa 17.1	u, v (fr/asec)	-8503.529 -1916.253		ion window (TEC)	0.00 0.00

simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//GX...3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//GX.W.134.3MP1KJ

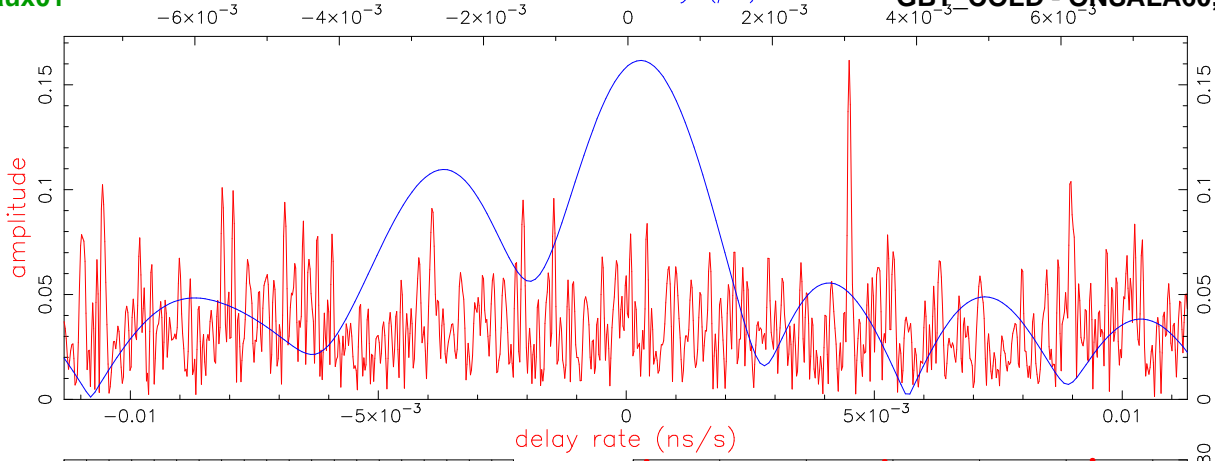
Mk4/DiFX fourfit 3.25 rev 0

aux01

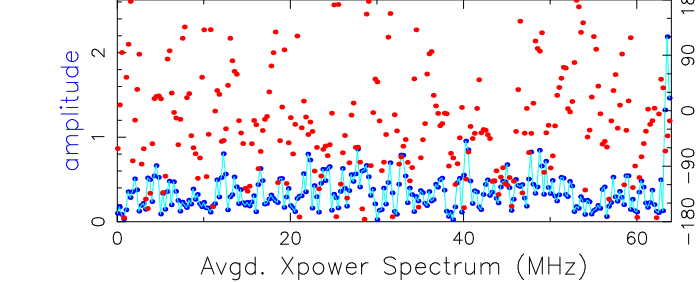
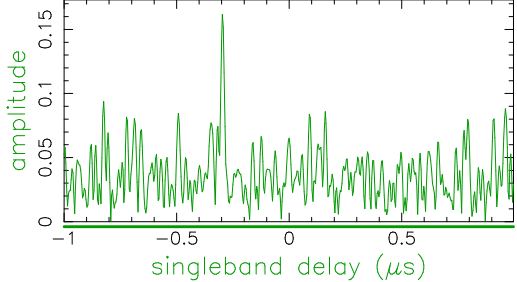
3C273.3MP1KJ, No0618, GX

GBT_COLD - ONSALA60, fgroup W, pol RL

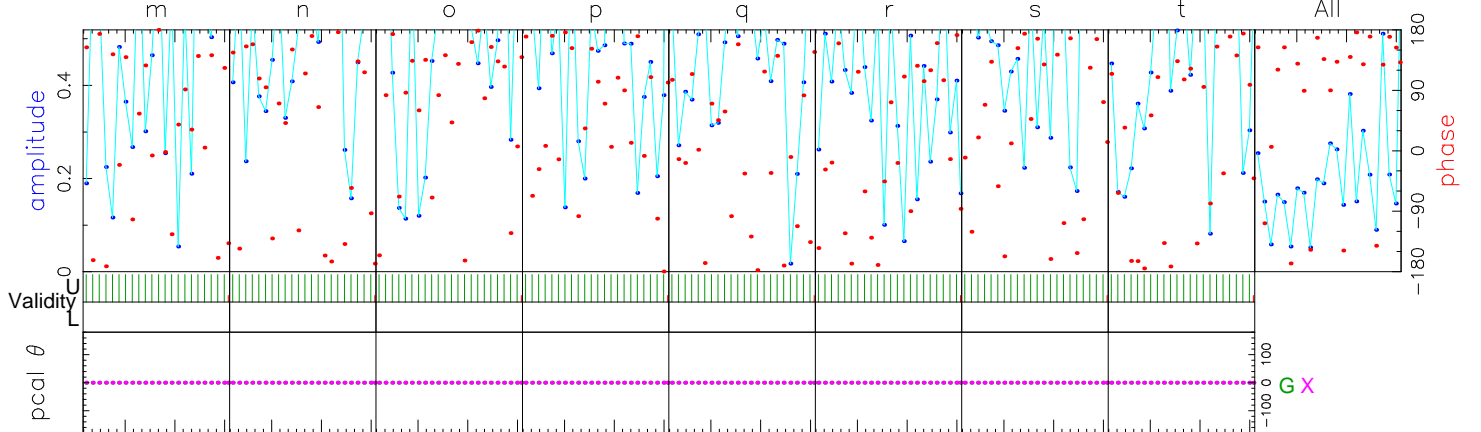
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 170.784
 Amp 0.173
 Phase 144.4
 PFD 5.8e-01
 Delays (us)
 SBD -0.296221
 MBD 0.000156
 Fringe rate (Hz) 0.388341
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234009.22
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build 2024:359:200643
 2025:041:171354
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	334/0	334/0	334/0	334/0	334/0	334/0	334/0	334/0		
G	0	0	0	0	0	0	0	0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.95037037458E+03	Apriori delay (usec)	-2.95007365508E+03	Resid mbdelay (usec)	1.55505E-04	+/-	1.9E-04
Sband delay (usec)	-2.95036987583E+03	Apriori clock (usec)	-1.2737885E+02	Resid sbdelay (usec)	-2.96221E-01	+/-	1.5E-03
Phase delay (usec)	-2.95007365043E+03	Apriori clockrate (us/s)	-1.1462400E-06	Resid phdelay (usec)	4.65493E-06	+/-	6.4E-07
Delay rate (us/s)	1.48520653719E+00	Apriori rate (us/s)	1.48520202894E+00	Resid rate (us/s)	4.50825E-06	+/-	6.5E-09
Total phase (deg)	-89.2	Apriori accel (us/s/s)	1.41750391645E-05	Resid phase (deg)	144.4	+/-	19.8

ph/seg (deg) 51.3 47.4 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.3 82.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.3 28.0 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.7 48.8 Inc. frq. avg. 0.167 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
 G: az 105.4 el 21.4 pa -49.1 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8503.529 -1916.253 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/GX...3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/GX.W.138.3MP1KJ

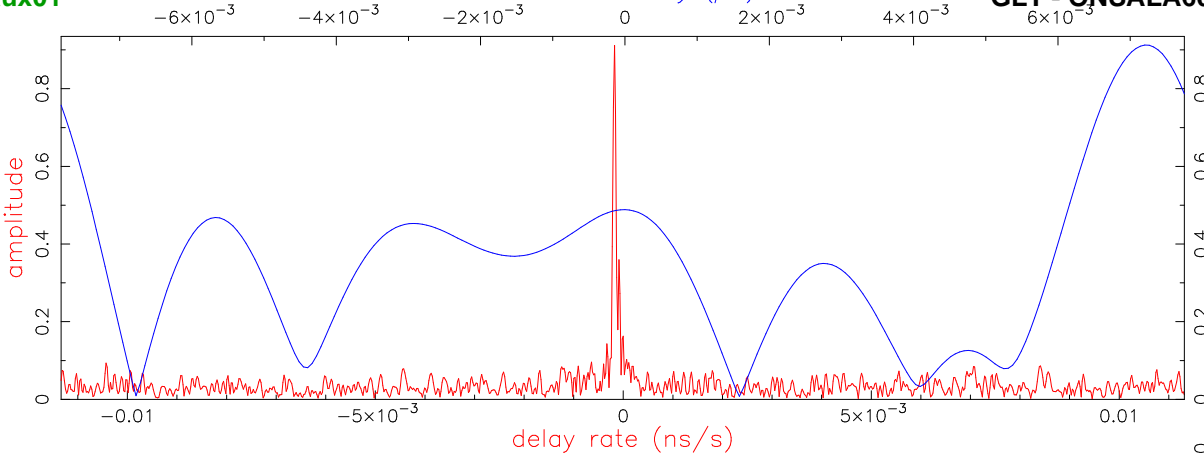
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, gX

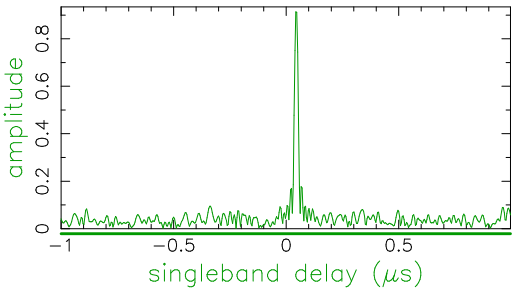
GLT - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

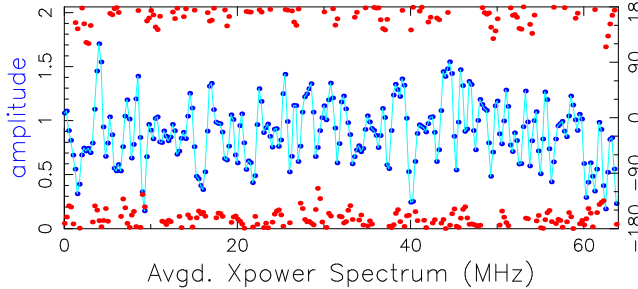


Fringe quality 6

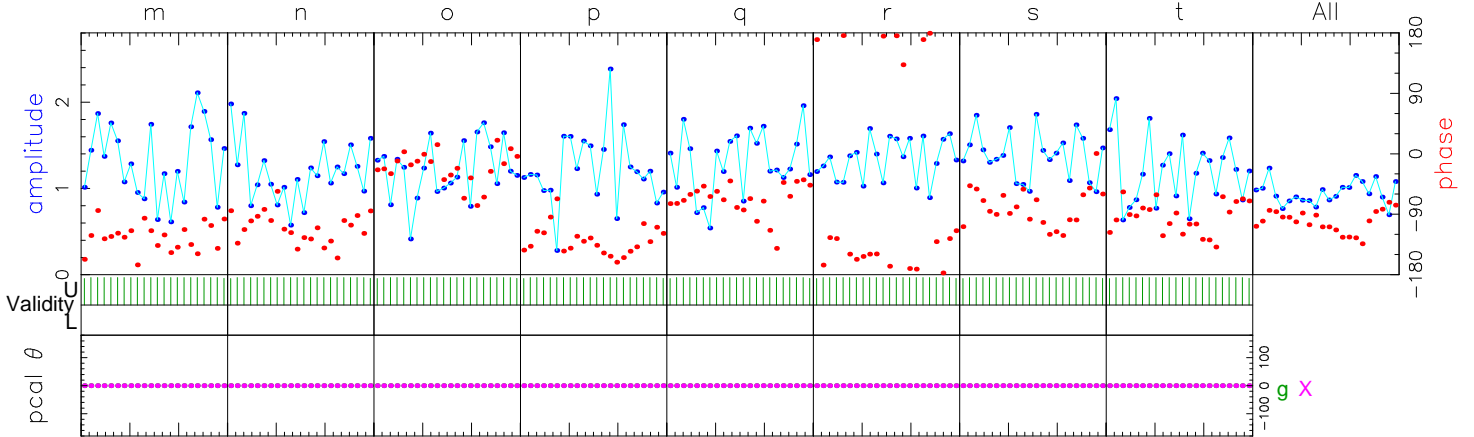
SNR 34.3
 Int time 179.687
 Amp 0.935
 Phase -100.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.044872
 MBD 0.007174
 Fringe rate (Hz)
 -0.015847
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171329
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-121.4	-109.8	-22.9	-133.5	-66.7	-162.0	-79.9	-96.4	Phase	-100.9
	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.1	Ampl.	1.2
	269.7	268.2	267.8	268.0	267.9	268.0	268.3	268.7	Sbd box	268.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-7.09753797227E+03	Apriori delay (usec)	-7.09757639623E+03	Resid mbdelay (usec)	7.17396E-03	+/-	3.2E-05
Sband delay (usec)	-7.09753152448E+03	Apriori clock (usec)	-1.1242726E+02	Resid sbdelay (usec)	4.48718E-02	+/-	2.5E-04
Phase delay (usec)	-7.09757639948E+03	Apriori clockrate (us/s)	-4.3230111E-07	Resid phdelay (usec)	-3.25533E-06	+/-	1.1E-07
Delay rate (us/s)	6.83536641686E-01	Apriori rate (us/s)	6.83536825658E-01	Resid rate (us/s)	-1.83973E-07	+/-	1.0E-09
Total phase (deg)	-18.5	Apriori accel (us/s/s)	3.76359846958E-05	Resid phase (deg)	-100.9	+/-	3.3

ph/seg (deg) 16.4 7.8 Search (1024X32) 0.889 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.0 13.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.6 4.7 Inc. seg. avg. 0.943 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.6 8.3 Inc. frq. avg. 1.164 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 g: az 126.1 el 10.0 pa -10.8 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -3896.392 1258.174 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/c241b/v2/3mm/1234/No0618/gX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/gX.W.37.3MP1KJ simultaneous interpolator

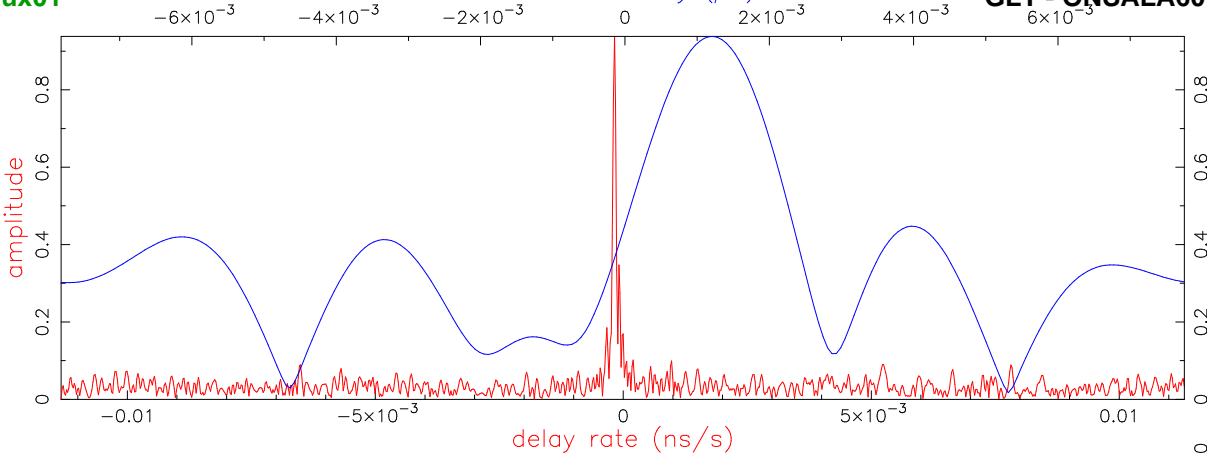
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, gX

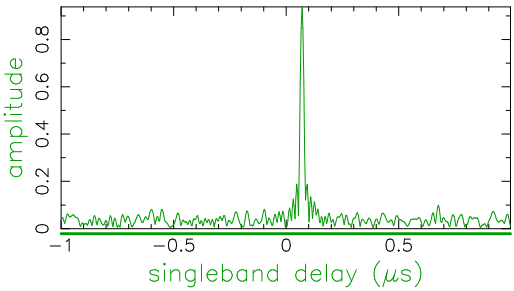
GLT - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

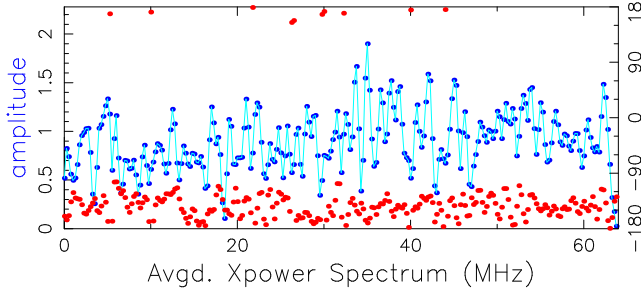


Fringe quality 6

SNR 34.4
 Int time 179.690
 Amp 0.938
 Phase -69.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.070315
 MBD 0.001205
 Fringe rate (Hz)
 -0.015814
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

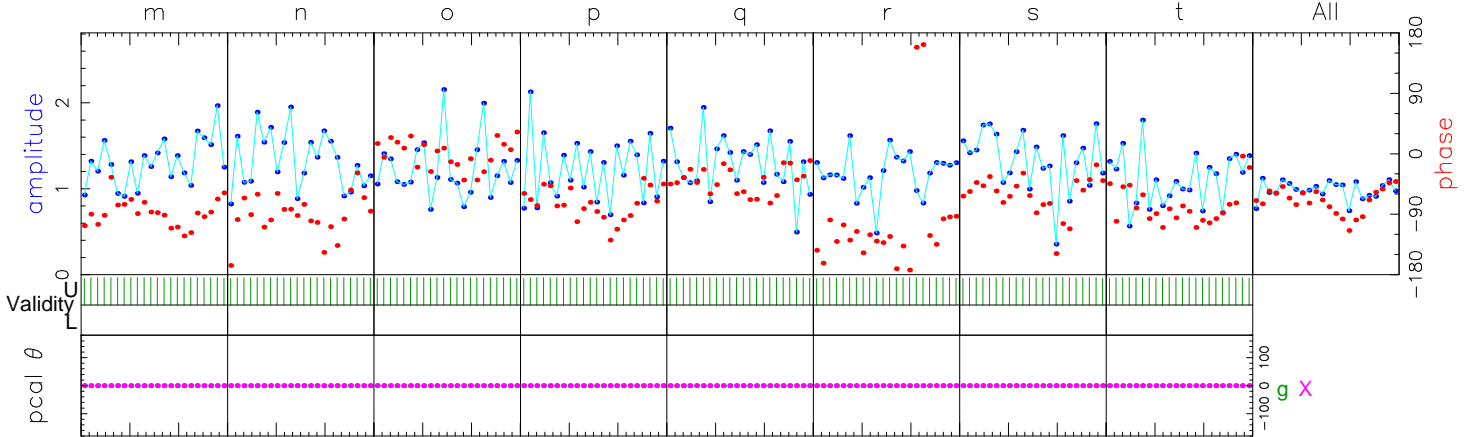


delay rate (ns/s)



Exp. c241b
 Yr:day 1234
 Start 2024:110
 Stop 2024:110
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171331
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-87.0	-90.8	0.3	-73.9	-40.6	-132.6	-56.4	-75.8	Phase	-69.3
	1.2	1.2	1.2	1.1	1.2	1.0	1.2	1.0	Ampl.	1.1
	275.7	274.8	274.4	274.2	274.1	274.4	275.0	275.7	Sbd box	275.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	

Group delay (usec) (SBD) -7.09751269093E+03 Apriori delay (usec) -7.09757639623E+03 Resid mbdelay (usec) 1.20530E-03 +/- 3.2E-05
 Sband delay (usec) -7.09750608123E+03 Apriori clock (usec) -1.1242726E+02 Resid sbdelay (usec) 7.03150E-02 +/- 2.5E-04
 Phase delay (usec) -7.09757639846E+03 Apriori clockrate (us/s) -4.3230111E-07 Resid phdelay (usec) -2.23352E-06 +/- 1.1E-07
 Delay rate (us/s) 6.83536642077E-01 Apriori rate (us/s) 6.83536825658E-01 Resid rate (us/s) -1.83582E-07 +/- 1.0E-09
 Total phase (deg) -346.9 Apriori accel (us/s/s) 3.76359846958E-05 Resid phase (deg) -69.3 +/- 3.3

RMS Theor. Amplitude 0.938 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 18.7 7.8 Search (1024X32) 0.897 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 11.8 13.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 42.2 4.7 Inc. seg. avg. 0.979 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.8 8.2 Inc. frq. avg. 1.141 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

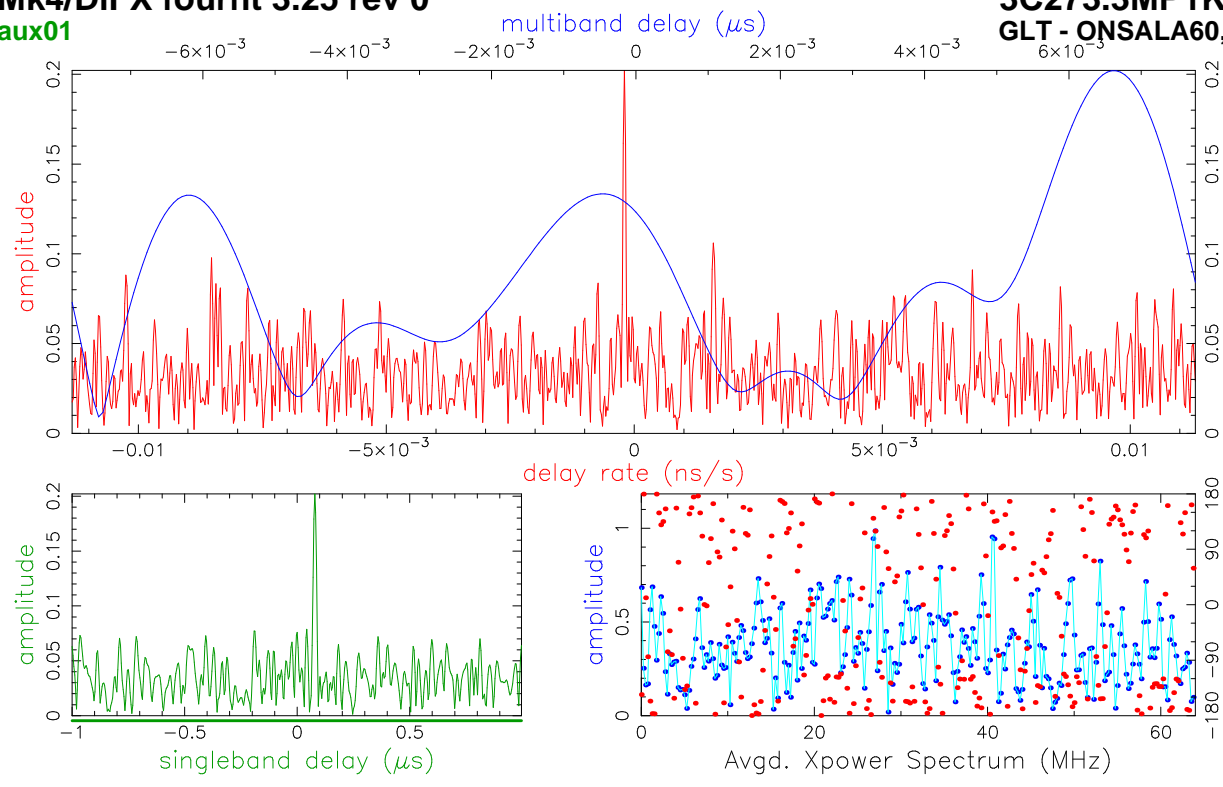
g: az 126.1 el 10.0 pa -10.8 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -3896.392 1258.174 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/gX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/gX.W.47.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

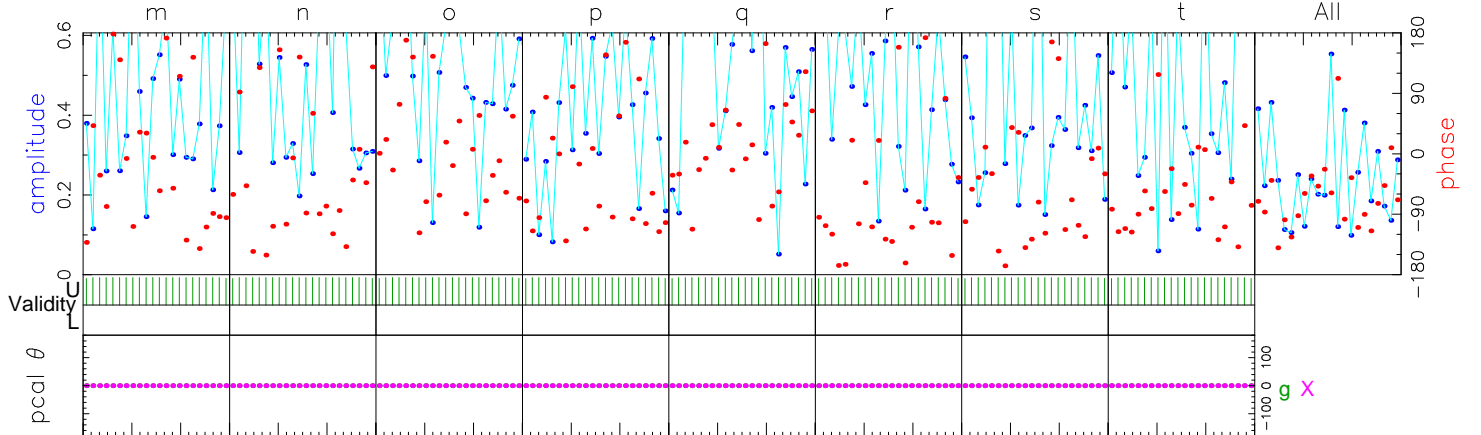
3C273.3MP1KJ, No0618, gX

GLT - ONSALA60, fgroup W, pol LR



Fringe quality 9
 SNR 7.4
 Int time 179.687
 Amp 0.202
 Phase -72.3
 PFD 2.0e-05
 Delays (us)
 SBD 0.078438
 MBD 0.006639
 Fringe rate (Hz) -0.016421
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171333
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	
	-98.3	-98.9	-15.1	-85.9	1.9	-114.2	-75.6	-78.4	Phase	-72.3	
	0.2	0.3	0.2	0.1	0.3	0.3	0.2	0.4	Ampl.	0.2	
	278.8	276.4	71.0	379.6	276.1	275.5	276.0	277.7	Sbd box	277.1	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
g	0	0	0	0	0	0	0	0	PC freqs		
X	0	0	0	0	0	0	0	0	PC freqs		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
g	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-7.09749163207E+03		Apriori delay (usec)		-7.09757639623E+03		Resid mbdelay (usec)		6.63916E-03	+/- 1.5E-04	
Sband delay (usec)	-7.09749795773E+03		Apriori clock (usec)		-1.1242726E+02		Resid sbdelay (usec)		7.84385E-02	+/- 1.2E-03	
Phase delay (usec)	-7.09757639856E+03		Apriori clockrate (us/s)		-4.3230111E-07		Resid phdelay (usec)		-2.33237E-06	+/- 5.0E-07	
Delay rate (us/s)	6.83536635025E-01		Apriori rate (us/s)		6.83536825658E-01		Resid rate (us/s)		-1.90633E-07	+/- 4.8E-09	
Total phase (deg)			Apriori accel (us/s/s)		3.76359846958E-05		Resid phase (deg)		-72.3	+/- 15.5	
	RMS	Theor.	Amplitude	0.202 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	51.4	36.3	Search (1024X32)	0.190		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	64.3	63.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	45.0	21.9	Inc. seg. avg.	0.206		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	48.2	38.2	Inc. frq. avg.	0.245		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
g: az 126.1 el 10.0 pa -10.8	X: az 212.8 el 30.3 pa 17.1		u, v (fr/asec) -3896.392 1258.174						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0618/gX..3MP1KJ		Output file: /Exps/c241b/v2/3mm/1234/No0618/gX.W.59.3MP1KJ								

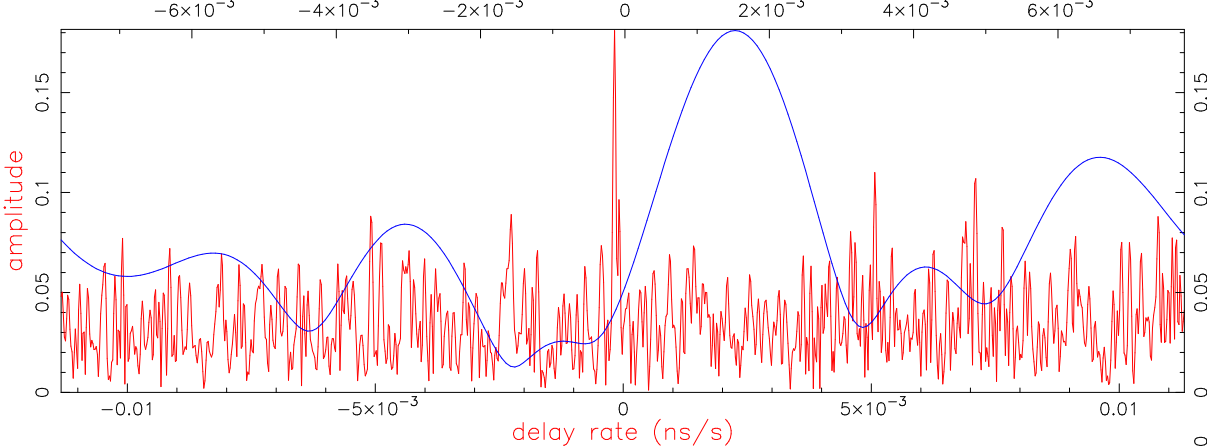
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, gX

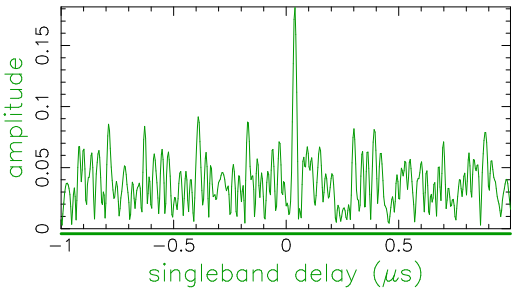
GLT - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

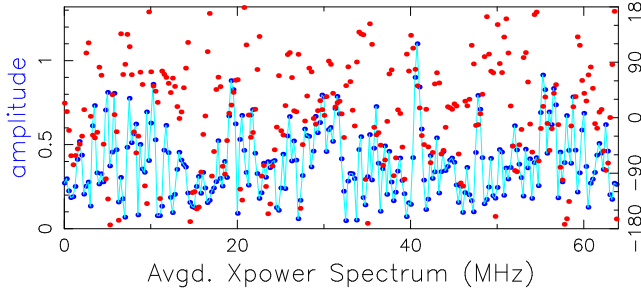


Fringe quality 0

SNR 6.7
 Int time 179.690
 Amp 0.182
 Phase 80.1
 PFD 4.0e-03
 Delays (us)
 SBD 0.038327
 MBD 0.001508
 Fringe rate (Hz)
 -0.015123
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

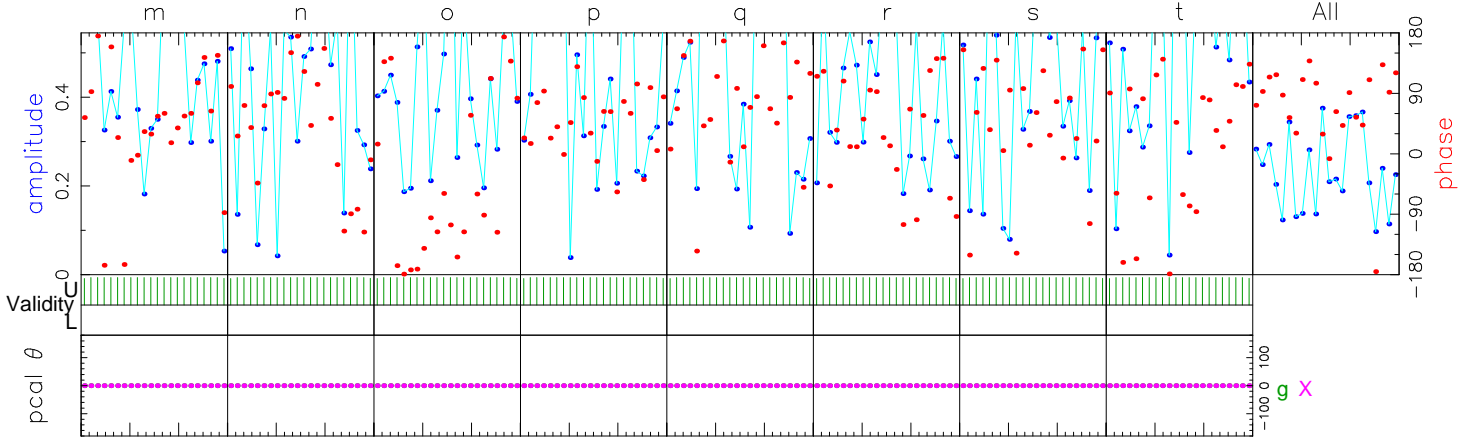


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171335
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	68.3	85.2	-154.7	52.2	97.2	49.4	90.9	83.2	Phase	80.1
	0.3	0.2	0.2	0.4	0.3	0.2	0.2	0.2	Ampl.	0.2
	223.6	310.1	265.0	267.3	427.4	264.9	157.6	460.8	Sbd box	266.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-7.09754363783E+03	Apriori delay (usec)	-7.09757639623E+03	Resid mbdelay (usec)	1.50839E-03	+/-	1.6E-04
Sband delay (usec)	-7.09753806948E+03	Apriori clock (usec)	-1.1242726E+02	Resid sbdelay (usec)	3.83268E-02	+/-	1.3E-03
Phase delay (usec)	-7.09757639365E+03	Apriori clockrate (us/s)	-4.3230111E-07	Resid phdelay (usec)	2.58194E-06	+/-	5.5E-07
Delay rate (us/s)	6.83536650096E-01	Apriori rate (us/s)	6.83536825658E-01	Resid rate (us/s)	-1.75562E-07	+/-	5.3E-09
Total phase (deg)	-197.5	Apriori accel (us/s/s)	3.76359846958E-05	Resid phase (deg)	80.1	+/-	17.2

ph/seg (deg)	43.4	Theor.	40.4	Amplitude	0.182 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	55.9		70.4	Search (1024X32)	0.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	54.8		24.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.5		42.5	Inc. seg. avg.	0.187	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.211	Data rate(Mb/s): 2048				

g: az 126.1 el 10.0 pa -10.8 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -3896.392 1258.174 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/gX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/gX.W.71.3MP1KJ

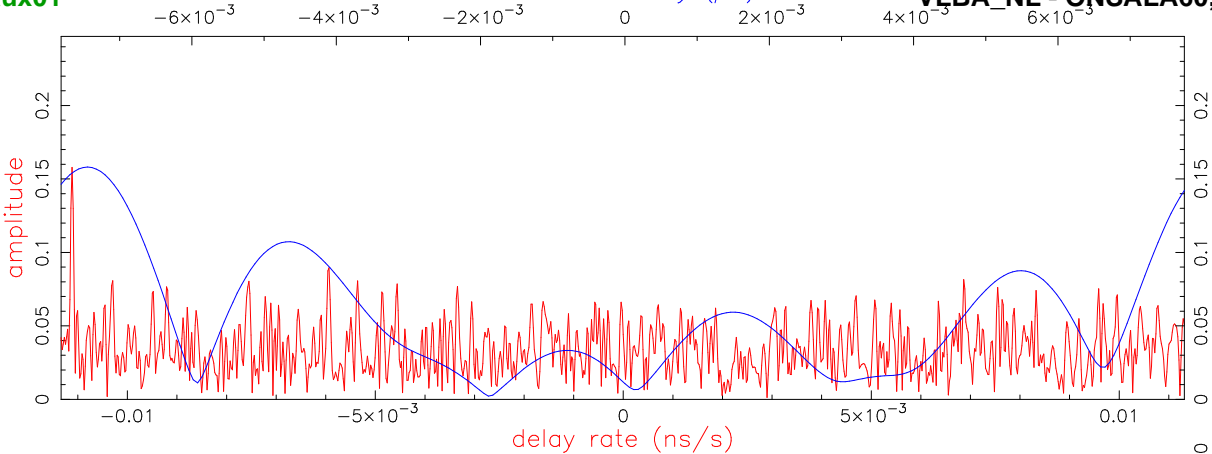
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, nX

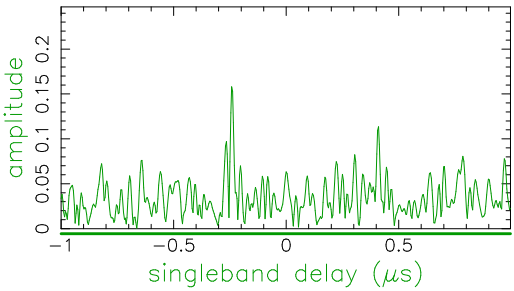
VLBA_NL - ONSALA60, fgroup W, pol RL

multiband delay (μs)

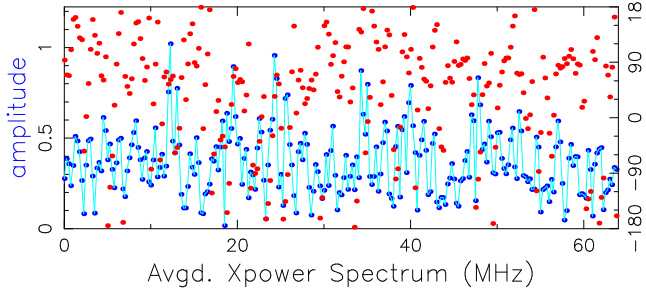


Fringe quality 0

SNR 5.9
Int time 179.400
Amp 0.247
Phase -89.4
PFD 4.4e-01
Delays (us)
SBD -0.240817
MBD -0.007402
Fringe rate (Hz)
-0.958886
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

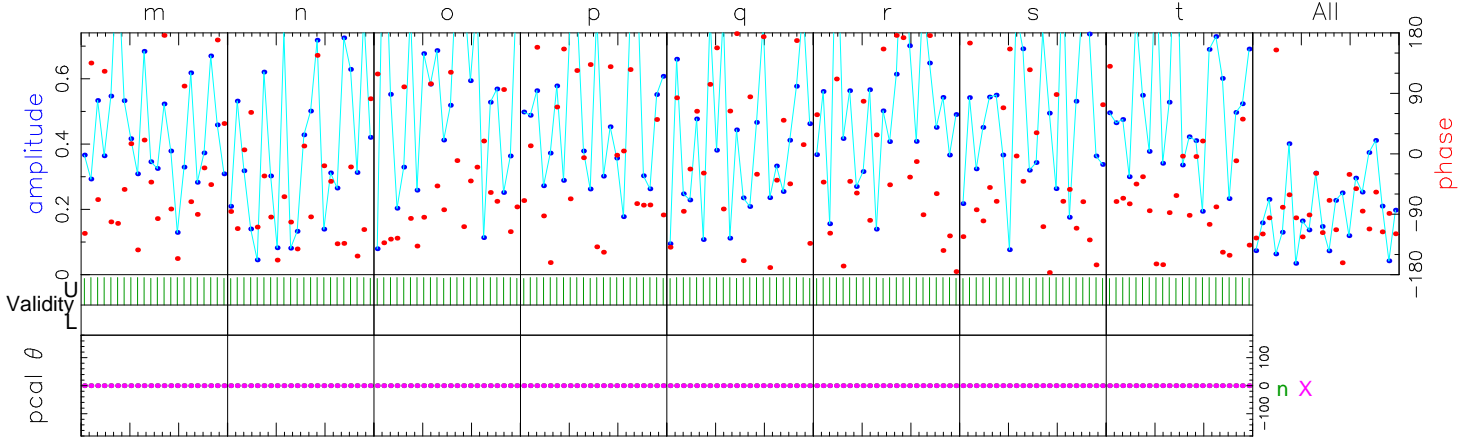


delay rate (ns/s)



Exp. c241b
Exper # 1234
Yr:day 2024:110
Start 234000.00
Stop 234300.23
FRT 234134.00
Corr/FF/build
2024:359:200643
2025:041:171341
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-79.1	-84.4	-81.9	-117.6	132.1	-132.1	-84.6	-81.6	Phase	-89.4
	0.3	0.3	0.4	0.1	0.0	0.2	0.3	0.4	Ampl.	0.2
	419.6	346.8	195.3	426.9	443.8	80.6	205.3	185.9	Sbd box	195.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.29890836070E+03	Apriori delay (usec)	-6.29866658393E+03	Resid mbdelay (usec)	-7.40177E-03	+/-	1.9E-04
Sband delay (usec)	-6.29890740093E+03	Apriori clock (usec)	-1.1304459E+02	Resid sbdelay (usec)	-2.40817E-01	+/-	1.5E-03
Phase delay (usec)	-6.29866658681E+03	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-2.88396E-06	+/-	6.3E-07
Delay rate (us/s)	1.51667240336E+00	Apriori rate (us/s)	1.51668353507E+00	Resid rate (us/s)	-1.11317E-05	+/-	6.1E-09
Total phase (deg)	-283.6	Apriori accel (us/s/s)	3.22219414282E-05	Resid phase (deg)	-89.4	+/-	19.5

ph/seg (deg)	40.8	Theor.	45.8	Amplitude	0.247 +/- 0.042	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.6	Search (1024X32)	0.155	Search	0.155	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	60.6	Inc. seg. avg.	0.229	Inc. seg. avg.	0.229	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	56.0	Inc. frq. avg.	0.236	Inc. frq. avg.	0.236	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

n: az 98.3 el 12.0 pa -47.6 X: az 212.8 el 30.3 pa 17.1 u, v (fr/asec) -8674.127 -1474.470 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/nX...3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/nX.W.101.3MP1KJ

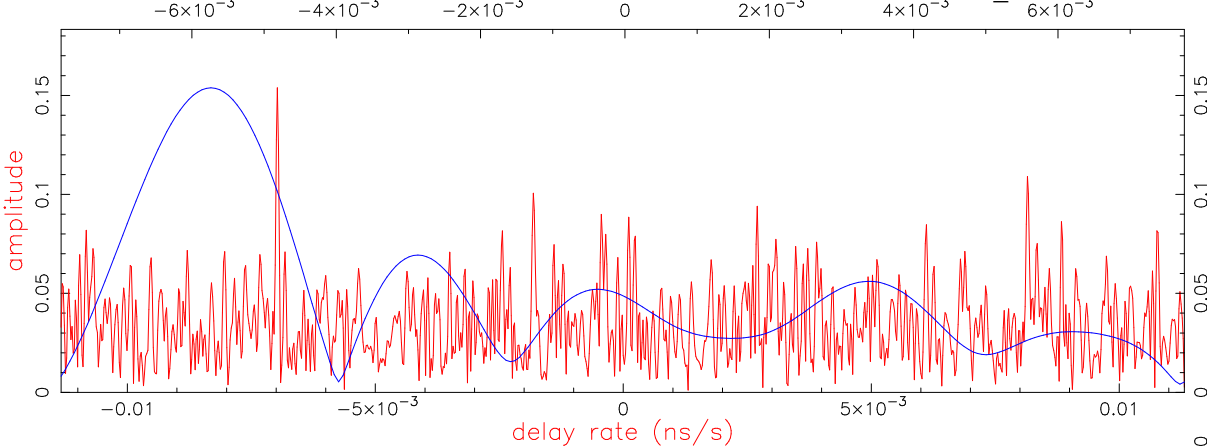
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, nX

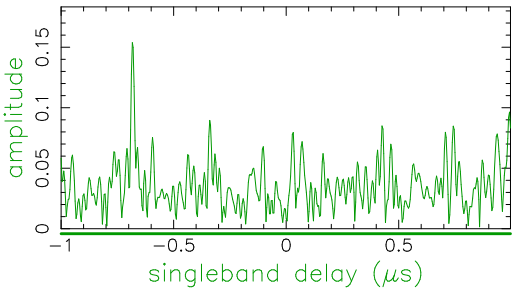
VLBA_NL - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

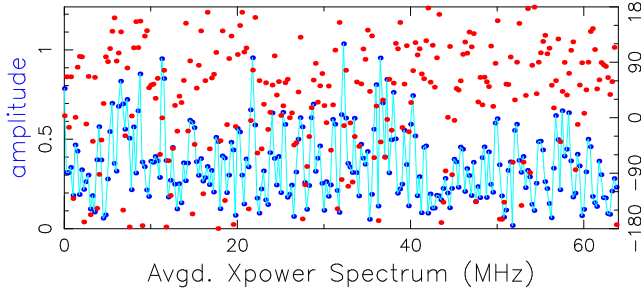


Fringe quality 0

SNR 5.7
 Int time 179.400
 Amp 0.183
 Phase -159.3
 PFD 7.5e-01
 Delays (us)
 SBD -0.682134
 MBD -0.005733
 Fringe rate (Hz)
 -0.602114
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

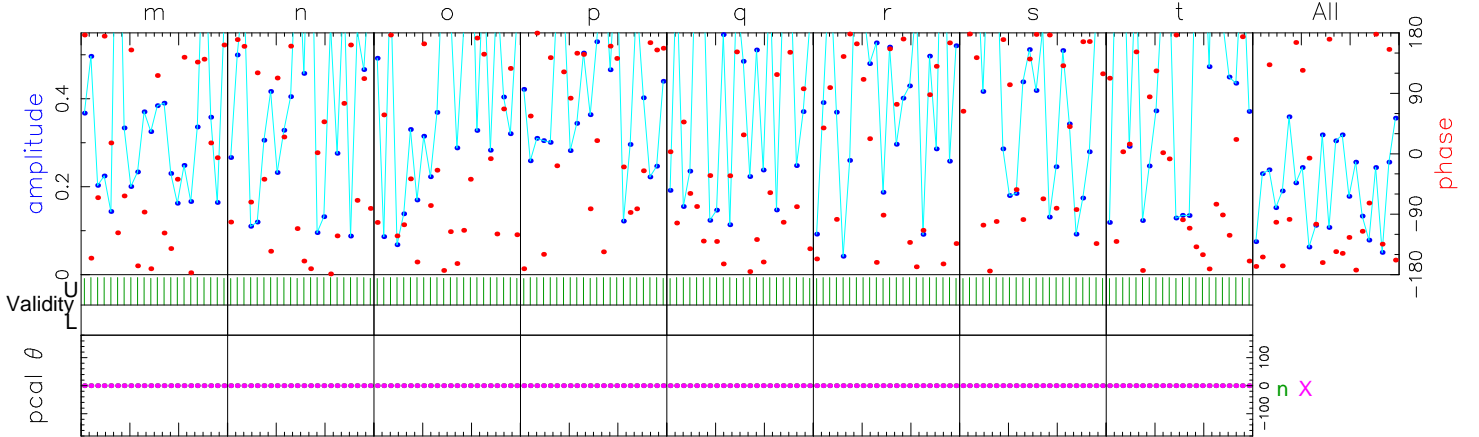


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171336
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-163.9	-161.6	-131.9	170.2	-123.5	163.7	-177.7	-120.0	Phase	-159.3
	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	104.0	76.2	169.2	162.9	148.9	477.5	360.9	364.8	Sbd box	82.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.29934419242E+03	Apriori delay (usec)	-6.29866658393E+03	Resid mbdelay (usec)	-5.73349E-03	+/-	1.9E-04
Sband delay (usec)	-6.29934871768E+03	Apriori clock (usec)	-1.1304459E+02	Resid sbdelay (usec)	-6.82134E-01	+/-	1.5E-03
Phase delay (usec)	-6.29866658906E+03	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-5.13662E-06	+/-	6.5E-07
Delay rate (us/s)	1.51667654513E+00	Apriori rate (us/s)	1.51668353507E+00	Resid rate (us/s)	-6.98995E-06	+/-	6.2E-09
Total phase (deg)	-353.4	Apriori accel (us/s/s)	3.22219414282E-05	Resid phase (deg)	-159.3	+/-	20.1

ph/seg (deg)	52.5	Theor.	47.0	Amplitude	0.183 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.5		82.1	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	32.2		28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.7		49.5	Inc. seg. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
n: az 98.3 el 12.0 pa -47.6		X: az 212.8 el 30.3 pa 17.1		Inc. frq. avg.	0.182	Data rate(Mb/s): 2048				
Control file: cf_1234_gmva		Input file: /Exps/c241b/v2/3mm/1234/No0618/nX...3MP1KJ		u,v (fr/asec)	-8674.127 -1474.470					simultaneous interpolator
						Output file: /Exps/c241b/v2/3mm/1234/No0618/nX.W.74.3MP1KJ				

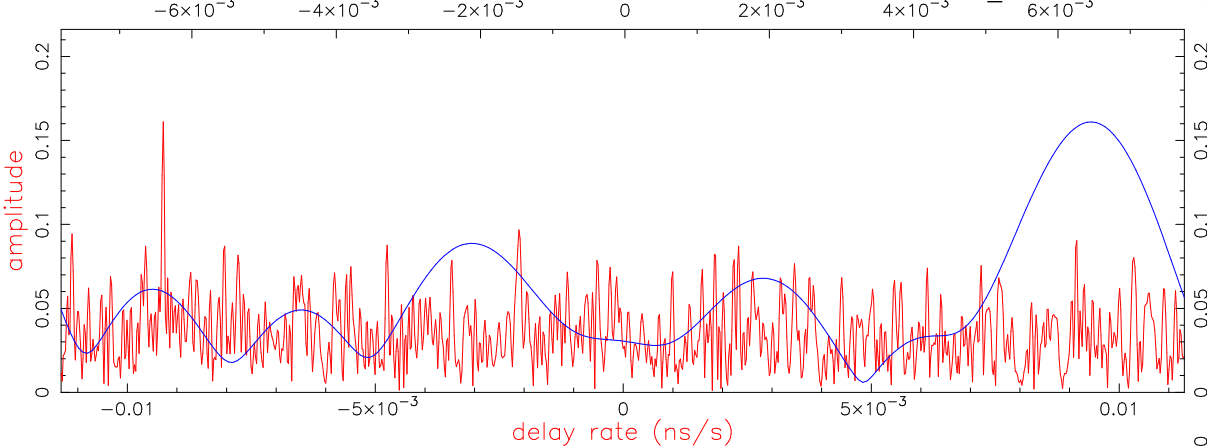
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, nX

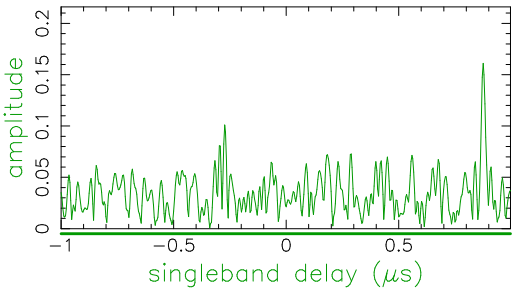
VLBA_NL - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

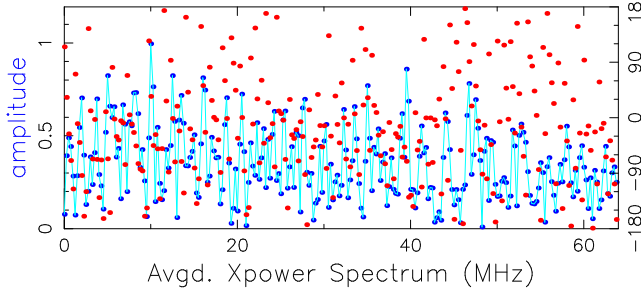


Fringe quality 0

SNR 5.9
Int time 179.400
Amp 0.216
Phase -103.2
PFD 3.7e-01
Delays (us)
SBD 0.875130
MBD 0.006461
Fringe rate (Hz)
-0.801242
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

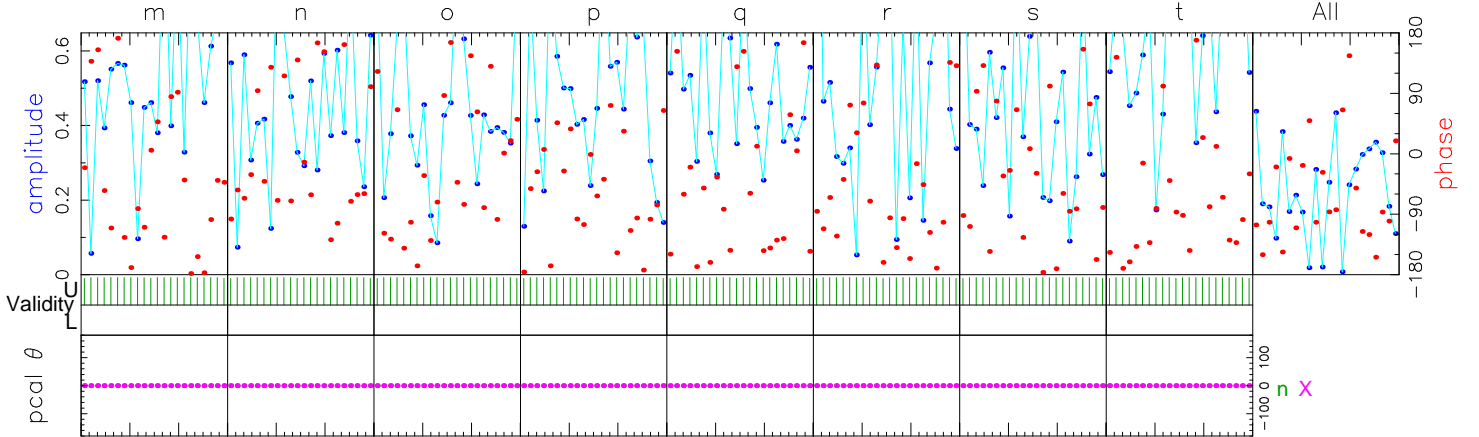


delay rate (ns/s)



Exp. c241b
Exper # 1234
Yr:day 2024:110
Start 234000.00
Stop 234300.23
FRT 234134.00
Corr/FF/build
2024:359:200643
2025:041:171338
2024:113:095956
RA & Dec (J2000)
12h29m06.699742s
+02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-124.0	-87.8	-87.5	-67.3	-128.0	-106.8	-92.9	-104.3	Phase	-103.2
	0.2	0.2	0.0	0.2	0.3	0.3	0.1	0.5	Ampl.	0.2
	209.1	272.1	110.2	165.0	239.2	220.4	177.6	481.7	Sbd box	481.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-6.29778512317E+03	Apriori delay (usec)	-6.29866658393E+03	Resid mbdelay (usec)	6.46076E-03	+/-	1.8E-04
Sband delay (usec)	-6.29779145418E+03	Apriori clock (usec)	-1.1304459E+02	Resid sbdelay (usec)	8.75130E-01	+/-	1.5E-03
Phase delay (usec)	-6.29866658725E+03	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-3.32950E-06	+/-	6.3E-07
Delay rate (us/s)	1.51667423345E+00	Apriori rate (us/s)	1.51668353507E+00	Resid rate (us/s)	-9.30162E-06	+/-	6.0E-09
Total phase (deg)		Apriori accel (us/s/s)	3.22219414282E-05	Resid phase (deg)	-103.2	+/-	19.4

ph/seg (deg)	RMS 73.5	Theor. 45.6	Amplitude Search (1024X32)	0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	87.7	79.5	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)	22.1	27.5	Inc. seg. avg.	0.232	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.4	47.9	Inc. frq. avg.	0.204	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00
n: az 98.3 el 12.0 pa -47.6	X: az 212.8 el 30.3 pa 17.1		u, v (fr/asec) -8674.127 -1474.470		simultaneous interpolator				
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0618/nX..3MP1KJ		Output file: /Exps/c241b/v2/3mm/1234/No0618/nX.W.81.3MP1KJ						

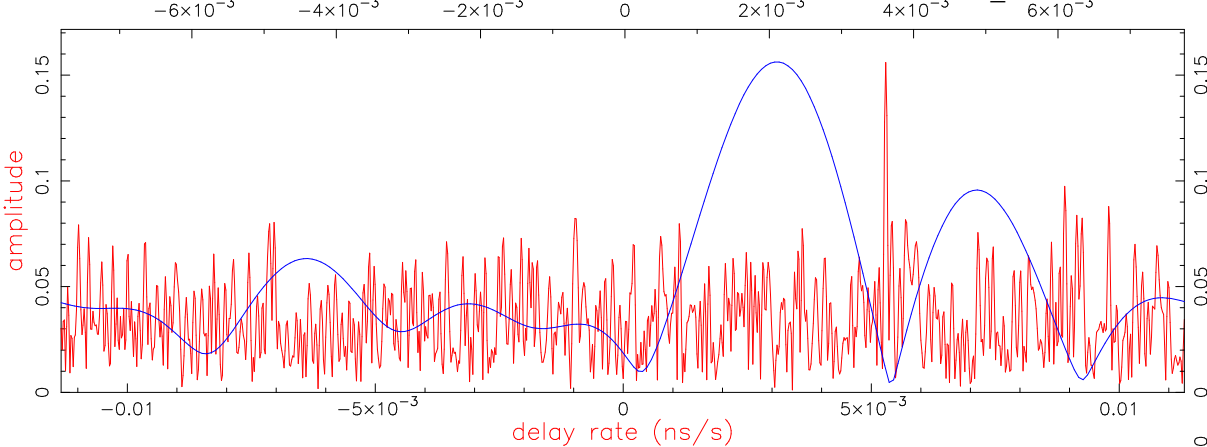
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, nX

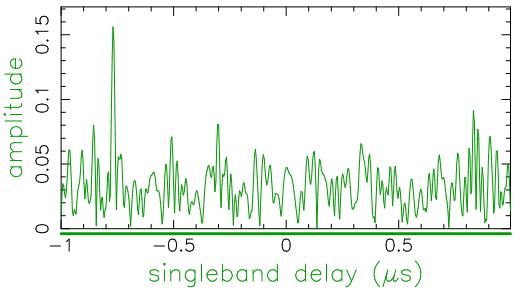
VLBA_NL - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

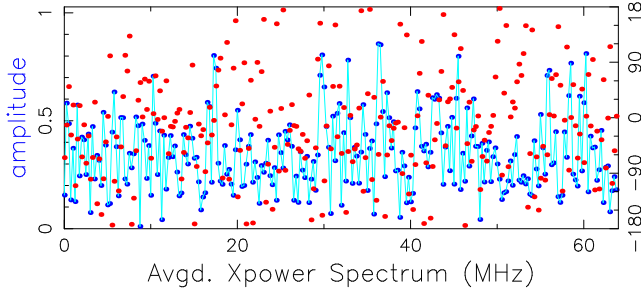


Fringe quality 0

SNR 5.7
 Int time 179.400
 Amp 0.172
 Phase 98.1
 PFD 7.0e-01
 Delays (us)
 SBD -0.768791
 MBD 0.002162
 Fringe rate (Hz)
 0.455845
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

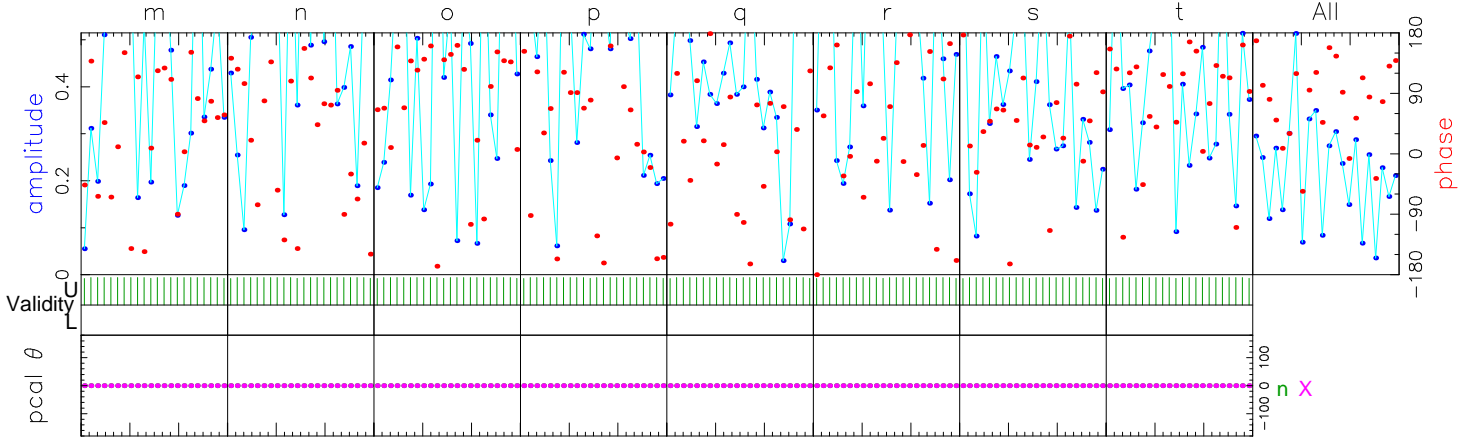


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171340
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	90.4	91.8	141.2	88.8	45.5	92.2	65.7	111.9	Phase	98.1
	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.3	Ampl.	0.2
	133.1	340.9	428.3	301.7	210.5	221.0	22.3	61.0	Sbd box	60.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-6.29943004714E+03	Apriori delay (usec)	-6.29866658393E+03	Resid mbdelay (usec)	2.16178E-03	+/-	1.9E-04
Sband delay (usec)	-6.29943537493E+03	Apriori clock (usec)	-1.1304459E+02	Resid sbdelay (usec)	-7.68791E-01	+/-	1.5E-03
Phase delay (usec)	-6.29866658076E+03	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	3.16339E-06	+/-	6.4E-07
Delay rate (us/s)	1.51668882698E+00	Apriori rate (us/s)	1.51668353507E+00	Resid rate (us/s)	5.29191E-06	+/-	6.2E-09
Total phase (deg)	-96.1	Apriori accel (us/s/s)	3.22219414282E-05	Resid phase (deg)	98.1	+/-	20.0

ph/seg (deg)	63.3	Theor.	46.8	Amplitude	0.172 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.0		81.7	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	31.9		28.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.5		49.3	Inc. seg. avg.	0.184	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.170	Data rate(Mb/s): 2048	t_cohere infinite			

n: az 98.3 el 12.0 pa -47.6 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) -8674.127 -1474.470 simultaneous interpolator

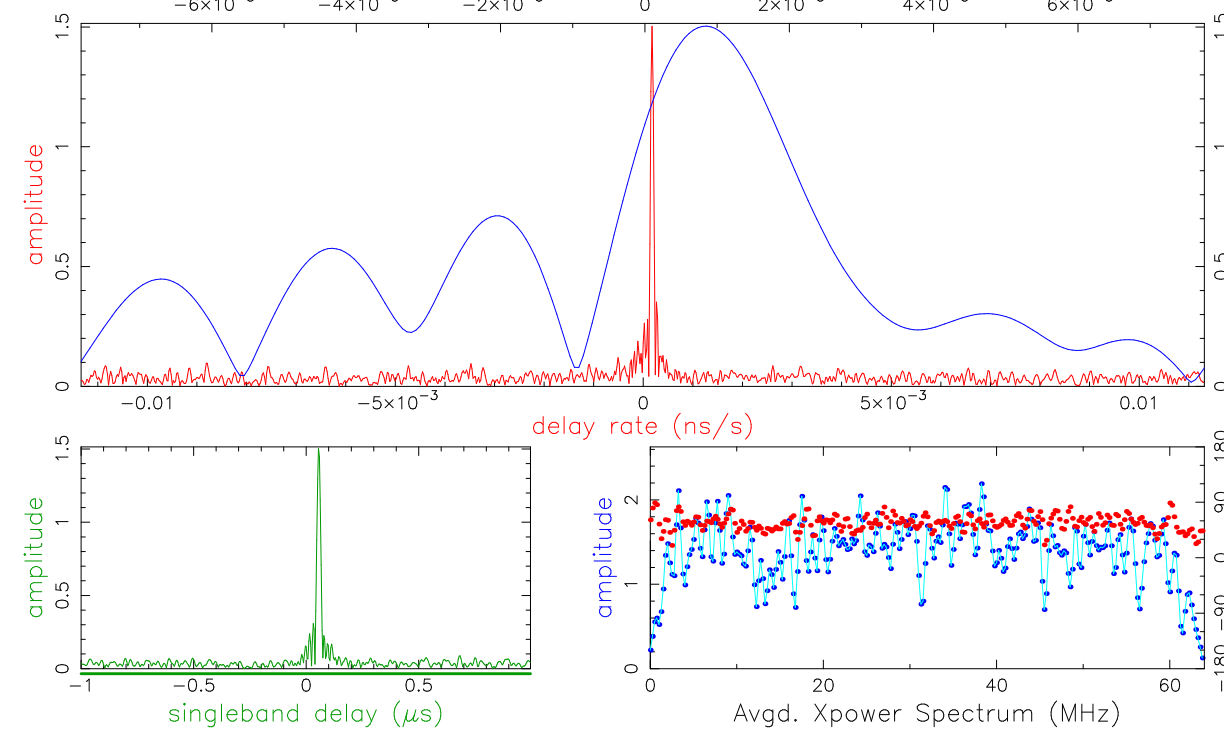
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/nX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/nX.W.92.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, XP

ONSALA60 - PICOVEL, fgroup W, pol LR

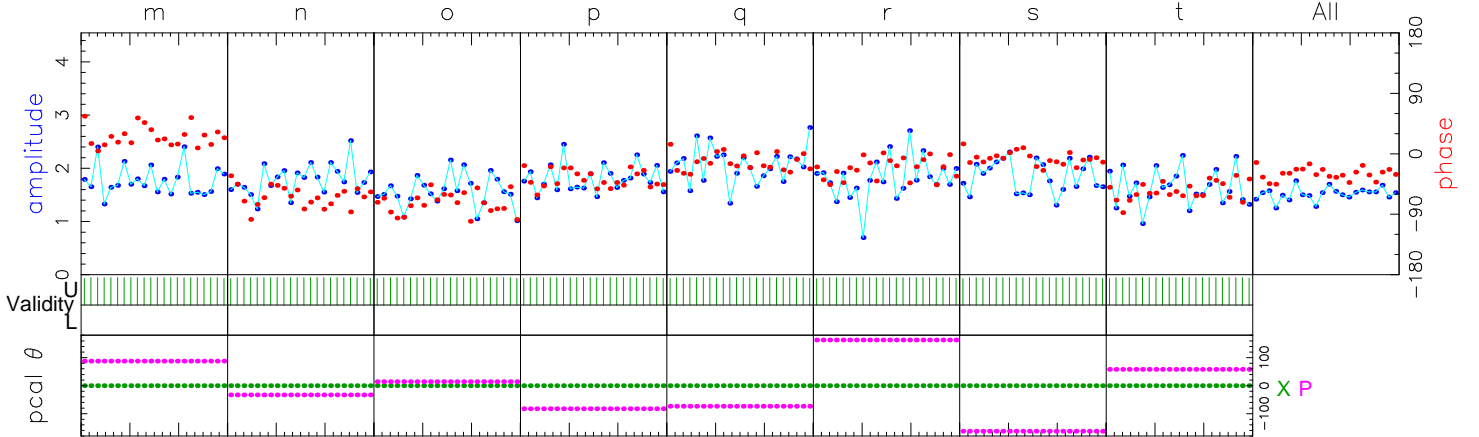


Fringe quality 7

SNR 55.5
 Int time 179.690
 Amp 1.515
 Phase -29.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.055853
 MB 0.000881
 Fringe rate (Hz) 0.015689
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build 2024:359:200643
 2025:041:171343
 2024:113:095956
 RA & Dec (J2000) 12h29m06.699742s +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



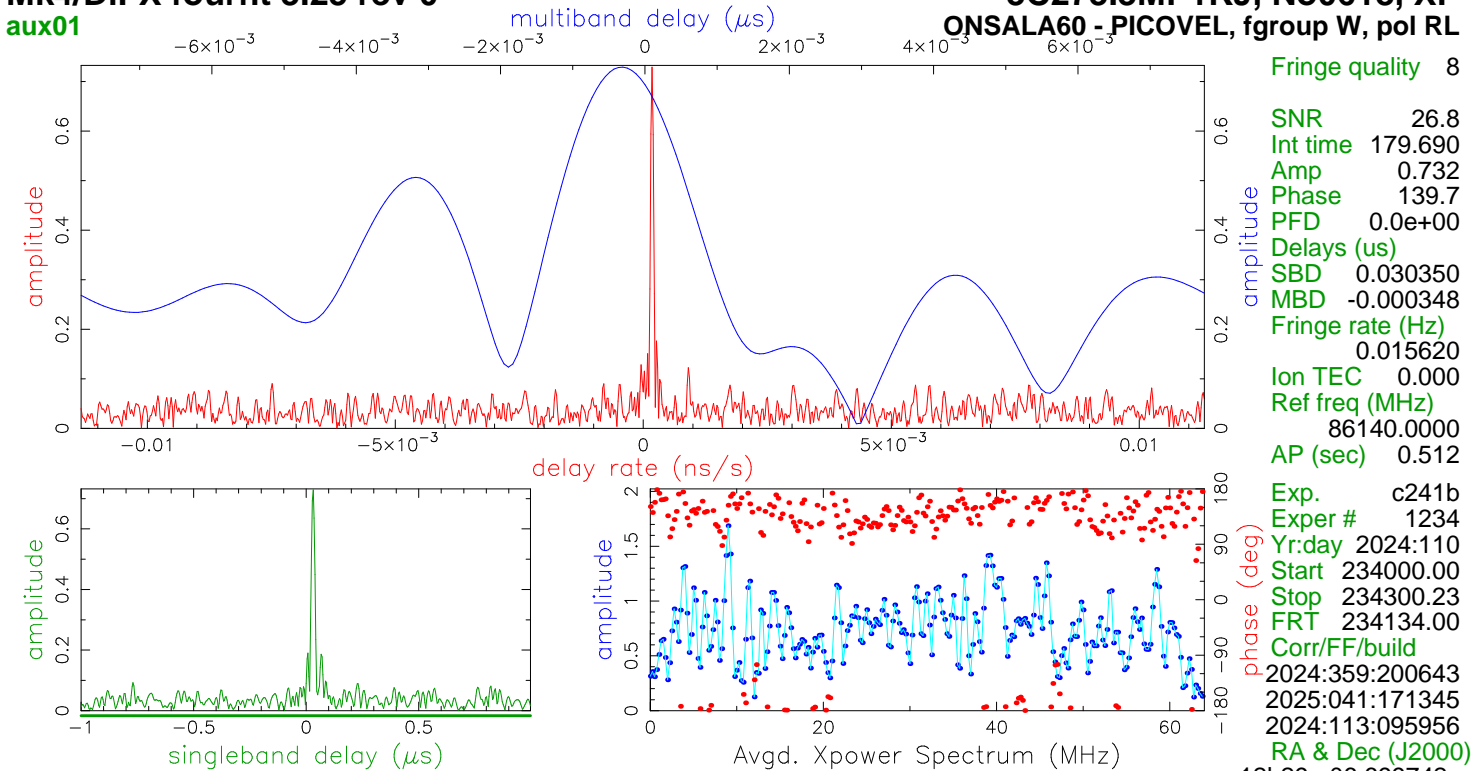
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	26.0	-63.9	-73.2	-36.7	-12.0	-22.8	-7.1	-55.4	Phase	-29.6	
	1.7	1.7	1.5	1.8	2.0	1.7	1.8	1.6	Ampl.	1.7	
	269.4	270.6	271.0	271.5	271.6	271.0	271.3	270.5	Sbd box	271.3	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
X	0	0	0	0	0	0	0	0	PC freqs		
P	0	0	0	0	0	0	0	0	PC freqs		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000			
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-6.16465646365E+03		Apriori delay (usec)		-6.16471984457E+03		Resid mbdelay (usec)		8.80918E-04	+/- 2.0E-05	
Sband delay (usec)	-6.16466399182E+03		Apriori clock (usec)		1.1364569E+02		Resid sbdelay (usec)		5.58527E-02	+/- 1.6E-04	
Phase delay (usec)	-6.16471984552E+03		Apriori clockrate (us/s)		6.1838598E-07		Resid phdelay (usec)		-9.55215E-07	+/- 6.7E-08	
Delay rate (us/s)	-1.18774477682E-01		Apriori rate (us/s)		-1.18774659811E-01		Resid rate (us/s)		1.82129E-07	+/- 6.4E-10	
Total phase (deg)			Apriori accel (us/s/s)		3.42896130685E-05		Resid phase (deg)		-29.6	+/- 2.1	
	RMS	Theor.	Amplitude	1.515 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	8.8	4.8	Search (1024X32)	1.473		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	7.7	8.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	35.9	2.9	Inc. seg. avg.	1.515		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	17.4	5.1	Inc. frq. avg.	1.736		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
X: az 212.8 el 30.3 pa 17.1	P: az 201.2 el 53.0 pa 17.1		u, v (fr/asec) 699.518 2212.918						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241b/v2/3mm/1234/No0618/XP..3MP1KJ		Output file: /Exps/c241b/v2/3mm/1234/No0618/XP.W.108.3MP1KJ								

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, XP

ONSALA60 - PICOVEL, fgroup W, pol RL



Fringe quality 8

SNR 26.8

Int time 179.690

Amp 0.732

Phase 139.7

PFD 0.0e+00

Delays (us)

SBD 0.030350

MBD -0.000348

Fringe rate (Hz)

0.015620

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c241b

Exper # 1234

Yr:day 2024:110

Start 234000.00

Stop 234300.23

FRT 234134.00

Corr/FF/build

2024:359:200643

2025:041:171345

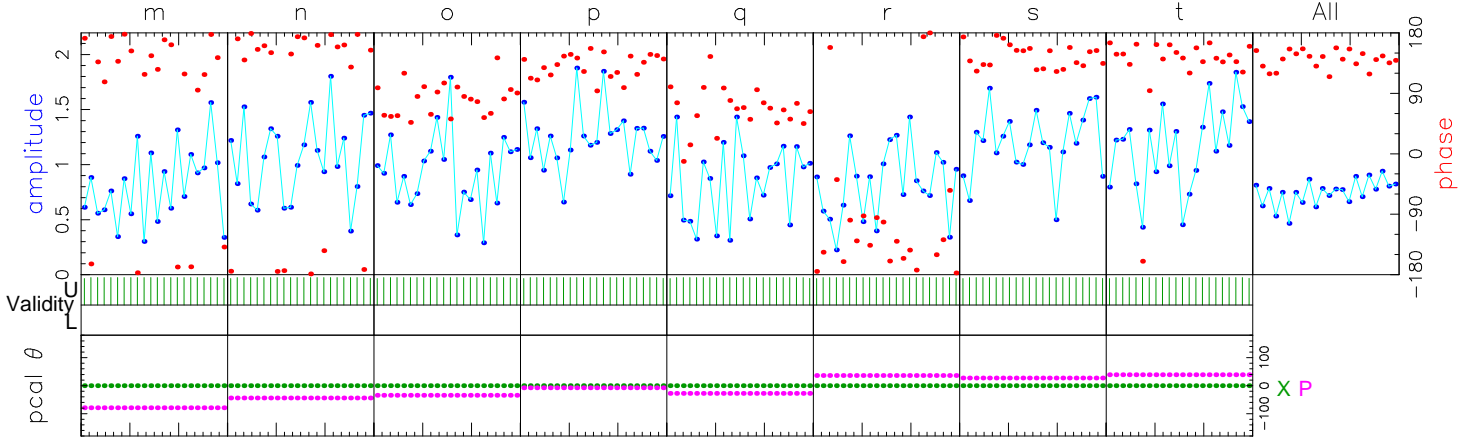
2024:113:095956

RA & Dec (J2000)

12h29m06.699742s

+02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	159.7	169.6	80.2	130.5	70.9	-143.1	145.2	144.7	Phase	139.7
	0.7	1.0	0.9	1.2	0.7	0.7	1.2	1.1	Ampl.	0.9
	264.0	265.0	265.2	265.2	266.3	265.6	265.2	263.8	Sbd box	264.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.16468894252E+03	Apriori delay (usec)	-6.16471984457E+03	Resid mbdelay (usec)	-3.47957E-04	+/-	4.0E-05
Sband delay (usec)	-6.16468949432E+03	Apriori clock (usec)	1.1364569E+02	Resid sbdelay (usec)	3.03502E-02	+/-	3.2E-04
Phase delay (usec)	-6.16471984006E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	4.50441E-06	+/-	1.4E-07
Delay rate (us/s)	-1.18774478480E-01	Apriori rate (us/s)	-1.18774659811E-01	Resid rate (us/s)	1.81331E-07	+/-	1.3E-09
Total phase (deg)	-8.3	Apriori accel (us/s/s)	3.42896130685E-05	Resid phase (deg)	139.7	+/-	4.3

ph/seg (deg)	13.0	Theor.	10.0	Amplitude	0.732 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	15.9	Search (1024X32)	0.713	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	51.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.2	Inc. seg. avg.	0.736	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.931	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 212.8 el 30.3 pa 17.1 P: az 201.2 el 53.0 pa 17.1 u,v (fr/asec) 699.518 2212.918 simultaneous interpolator

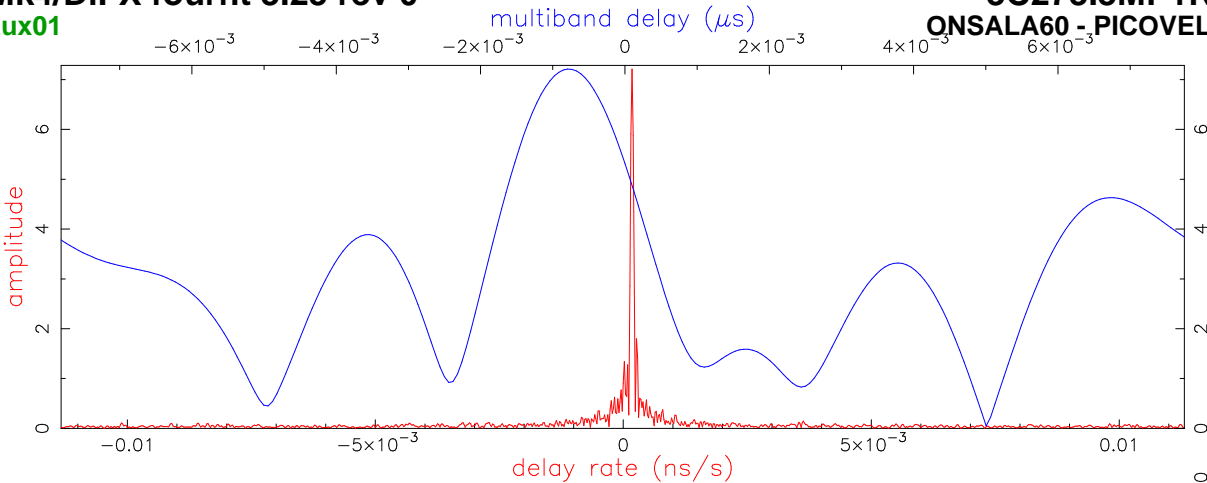
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/XP..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XP.W.118.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

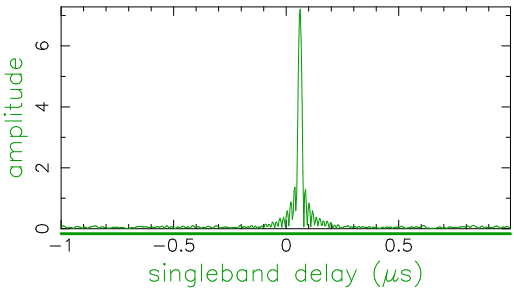
3C273.3MP1KJ, No0618, XP

ONSALA60 - PICOVEL, fgroup W, pol LL

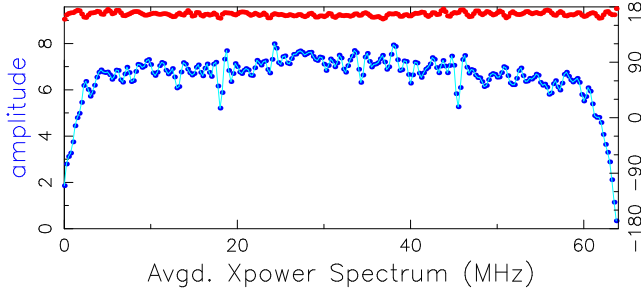


Fringe quality 6

SNR 267.0
 Int time 179.690
 Amp 7.285
 Phase 162.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.061195
 MBD -0.000810
 Fringe rate (Hz)
 0.015555
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

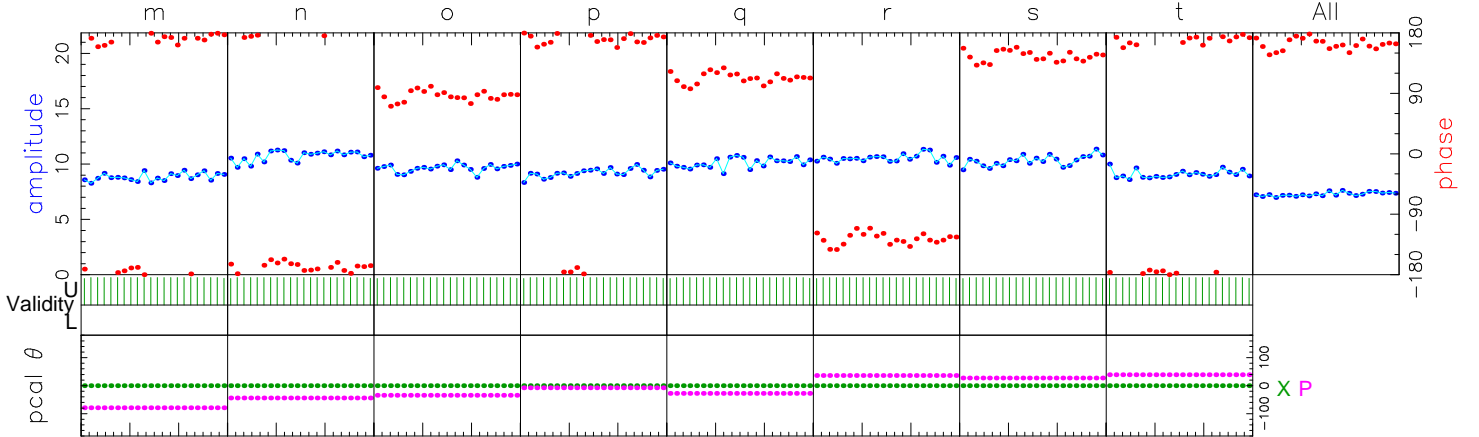


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171339
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-6.16465815421E+03	Apriori delay (usec)	-6.16471984457E+03	Resid mbdelay (usec)	-8.09644E-04	+/-	4.1E-06
Sband delay (usec)	-6.16465865007E+03	Apriori clock (usec)	1.1364569E+02	Resid sbdelay (usec)	6.11945E-02	+/-	3.2E-05
Phase delay (usec)	-6.16471983932E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	5.24651E-06	+/-	1.4E-08
Delay rate (us/s)	-1.18774479234E-01	Apriori rate (us/s)	-1.18774659811E-01	Resid rate (us/s)	1.80577E-07	+/-	1.3E-10
Total phase (deg)	14.8	Apriori accel (us/s/s)	3.42896130685E-05	Resid phase (deg)	162.7	+/-	0.4

ph/seg (deg)	8.1	Theor.	7.285 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	2.3	Search (1024X32)	7.048	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	49.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.5	Inc. seg. avg.	7.282	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	9.708	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 212.8 el 30.3 pa 17.1 P: az 201.2 el 53.0 pa 17.1 u, v (fr/asec) 699.518 2212.918 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/XP..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XP.W.85.3MP1KJ

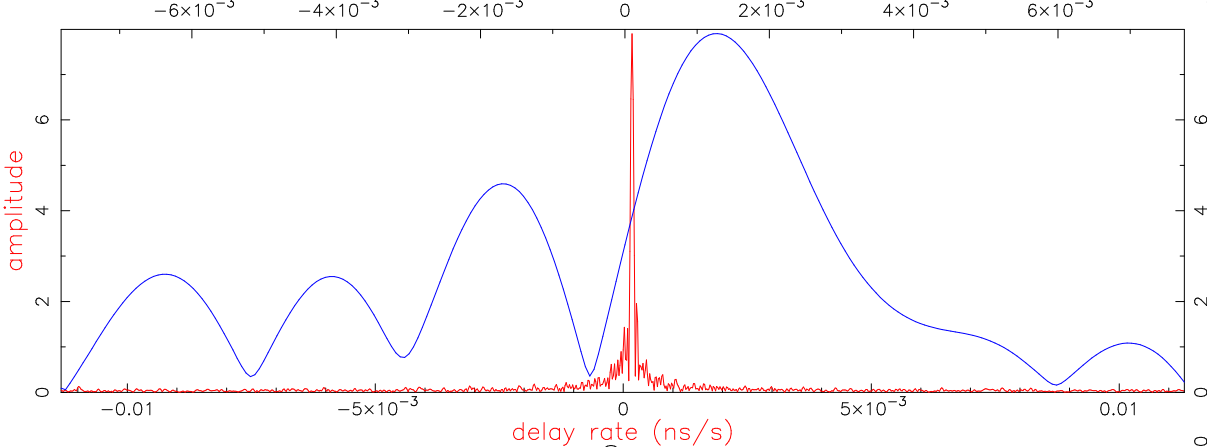
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, XP

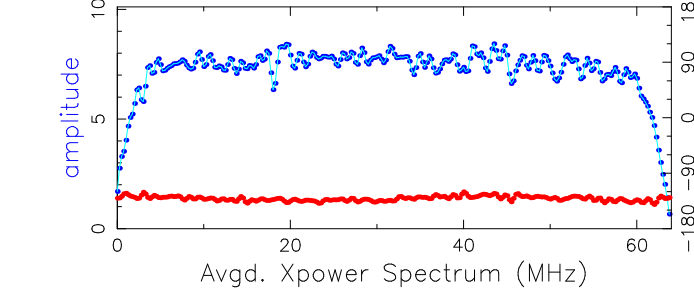
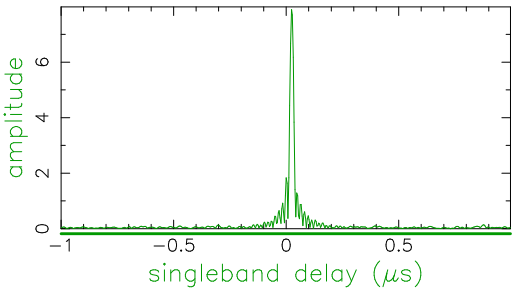
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



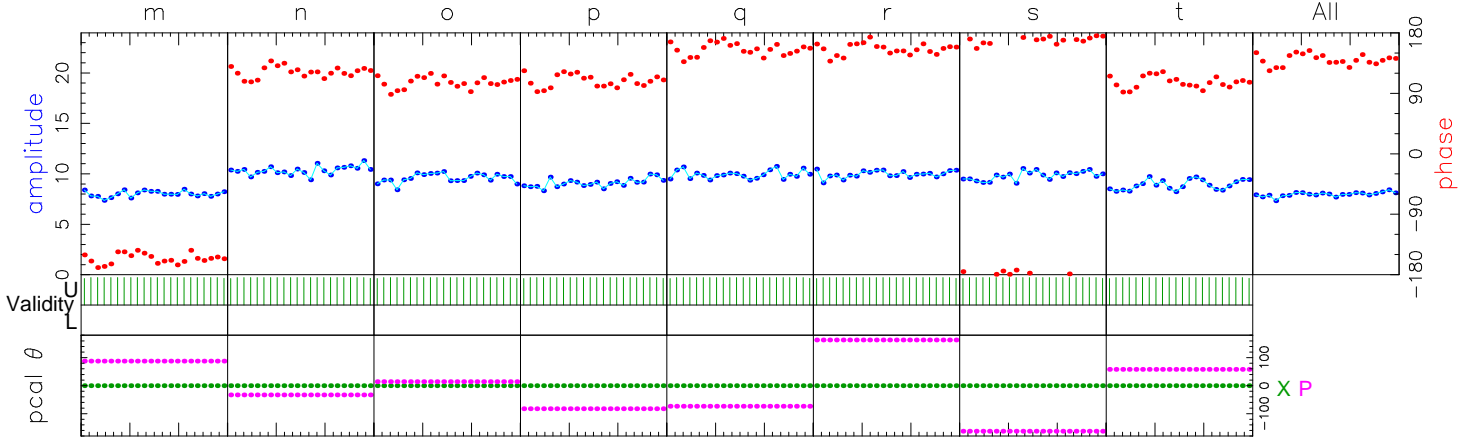
Fringe quality 7

SNR 293.0
 Int time 179.690
 Amp 7.992
 Phase 139.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.024855
 MBD 0.001312
 Fringe rate (Hz)
 0.015577
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171341
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-155.7	122.0	106.0	108.7	155.3	155.8	173.6	106.5	Phase	139.8
	8.0	10.2	9.5	9.0	9.8	9.9	9.7	8.8	Ampl.	9.4
	261.6	262.6	262.9	263.5	263.8	263.0	263.3	262.4	Sbd box	263.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-6.16468728299E+03	Apriori delay (usec)	-6.16471984457E+03	Resid mbdelay (usec)	1.31157E-03	+/-	3.7E-06
Sband delay (usec)	-6.16469498982E+03	Apriori clock (usec)	1.1364569E+02	Resid sbdelay (usec)	2.48547E-02	+/-	2.9E-05
Phase delay (usec)	-6.16471984006E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	4.50919E-06	+/-	1.3E-08
Delay rate (us/s)	-1.18774478979E-01	Apriori rate (us/s)	-1.18774659811E-01	Resid rate (us/s)	1.80832E-07	+/-	1.2E-10
Total phase (deg)	-8.1	Apriori accel (us/s/s)	3.42896130685E-05	Resid phase (deg)	139.8	+/-	0.4

ph/seg (deg)	8.1	Theor.	7.992 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	2.7	Search (1024X32)	7.713	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	19.2	Inc. seg. avg.	7.974	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	9.364	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 212.8 el 30.3 pa 17.1 P: az 201.2 el 53.0 pa 17.1 u,v (fr/asec) 699.518 2212.918 simultaneous interpolator

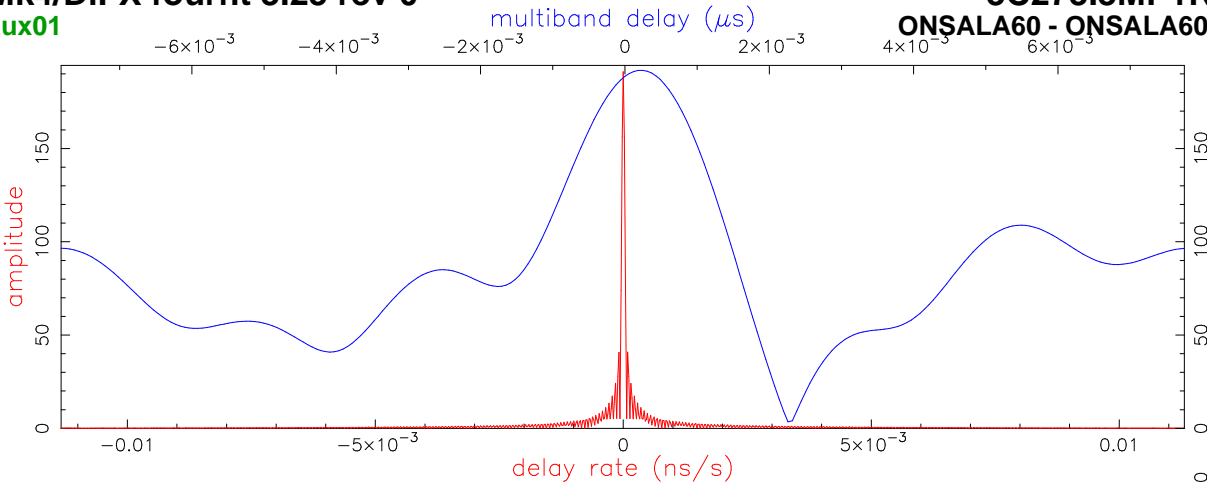
Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618//XP..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618//XP.W.96.3MP1KJ

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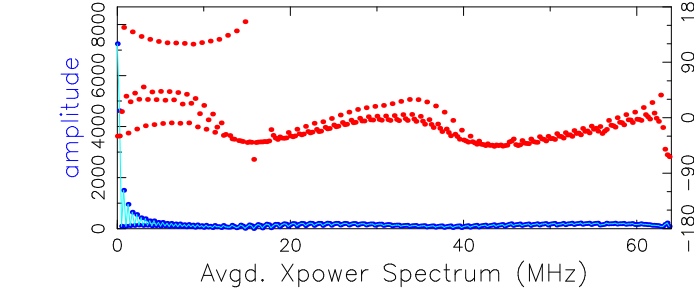
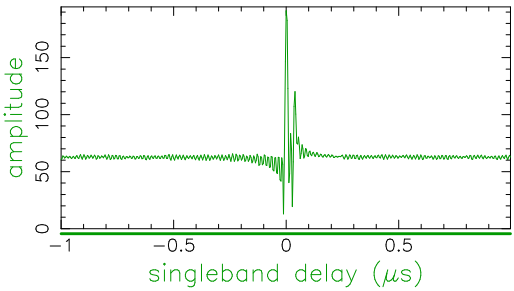
aux01

3C273.3MP1KJ, No0618, XX

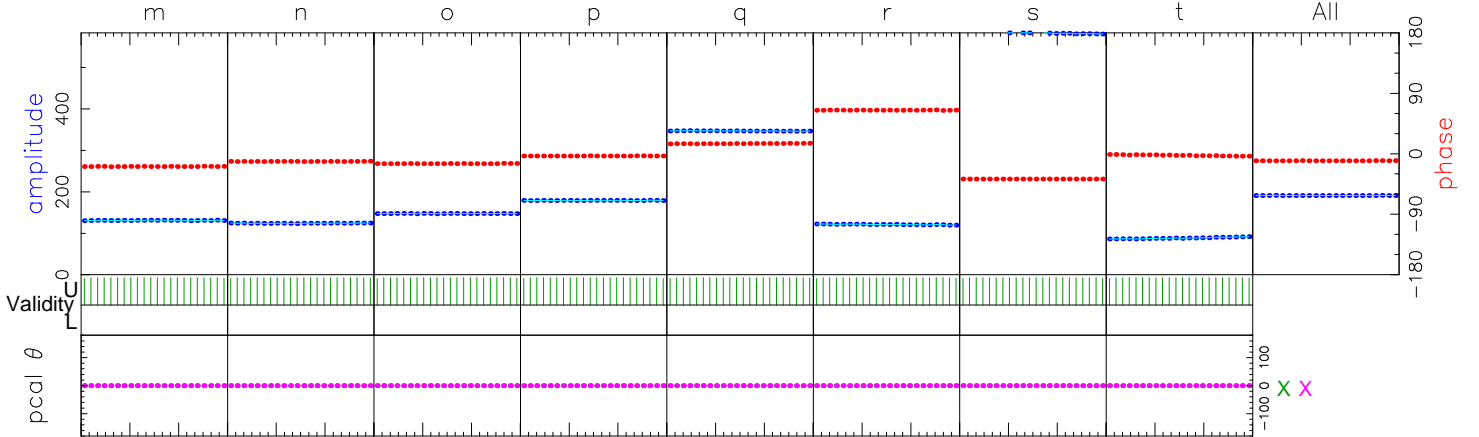
ONŞALA60 - ONŞALA60, fgroup W, pol LR



Fringe quality 5
 Error code G
 SNR 7131.7
 Int time 179.690
 Amp 194.551
 Phase -10.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.001353
 MBD 0.000328
 Fringe rate (Hz)
 -0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171343
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-18.9	-11.4	-14.6	-3.2	15.1	64.9	-37.6	-2.3	Phase	-10.3
	131.1	124.3	147.7	179.3	346.8	121.2	583.4	88.5	Ampl.	215.3
	257.3	266.4	265.3	257.3	258.1	255.6	266.1	265.2	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.280625000000E-04	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	3.28063E-04	+/-	1.5E-07
Sband delay (usec)	1.353250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	1.35325E-03	+/-	1.2E-06
Phase delay (usec)	-3.33056923996E-07	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	-3.33057E-07	+/-	5.2E-10
Delay rate (us/s)	-1.98396133484E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	-1.98396E-11	+/-	5.0E-12
Total phase (deg)		Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	-10.3	+/-	0.0

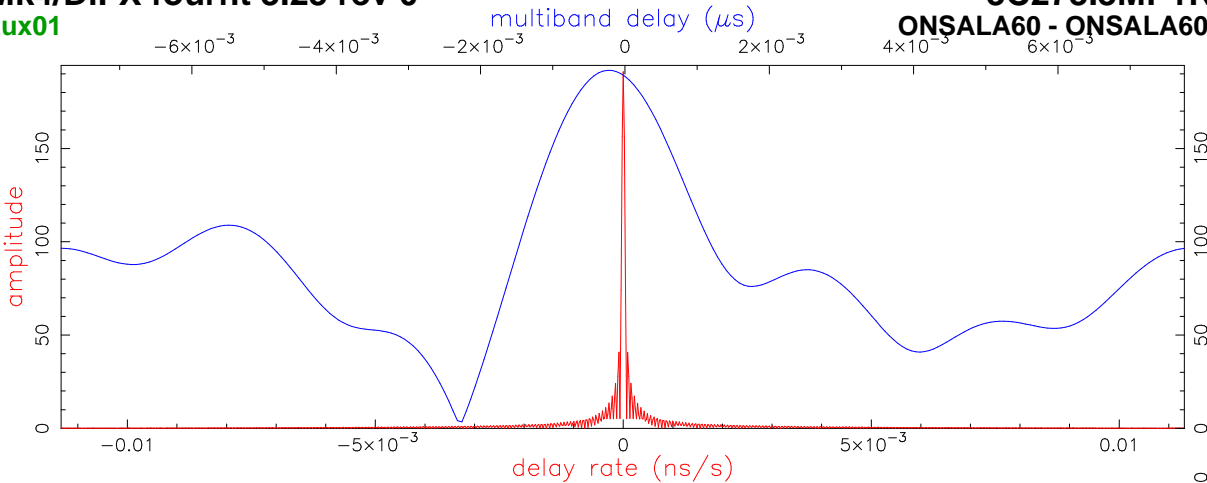
RMS Theor. Amplitude 194.551 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 188.663 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.7 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 34.8 0.0 Inc. seg. avg. 191.154 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 81.8 0.0 Inc. frq. avg. 215.300 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 212.8 el 30.3 pa 17.1 X: az 212.8 el 30.3 pa 17.1 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/XX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XX.W.107.3MP1KJ

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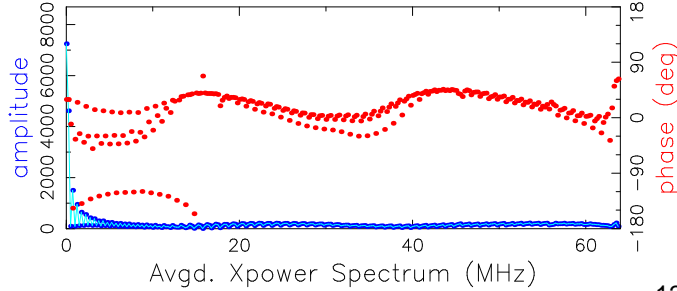
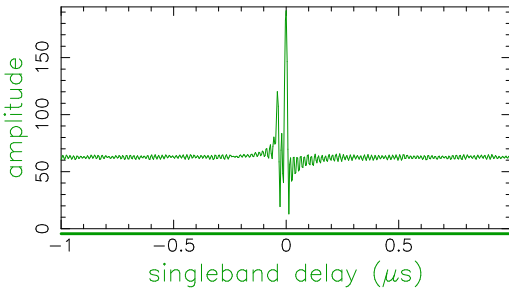
aux01

3C273.3MP1KJ, No0618, XX

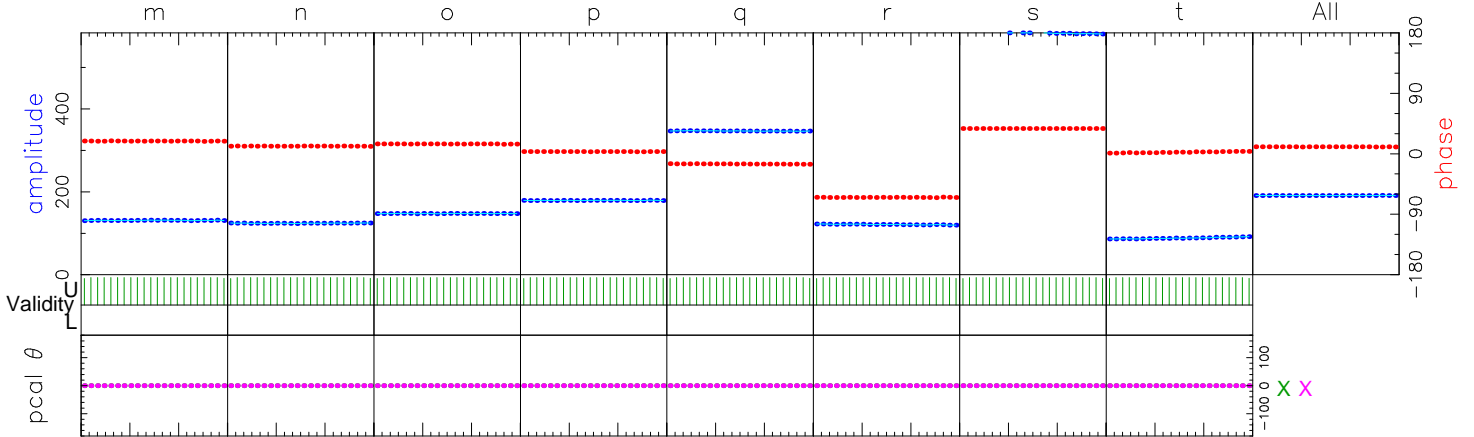
ONSALA60 - ONSALA60, fgroup W, pol RL



Fringe quality 5
 Error code G
 SNR 7131.7
 Int time 179.690
 Amp 194.551
 Phase 10.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001353
 MBD -0.000328
 Fringe rate (Hz)
 0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171345
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	18.9	11.4	14.6	3.2	-15.1	-64.9	37.6	2.3	Phase	10.3
	131.1	124.3	147.7	179.3	346.8	121.2	583.4	88.5	Ampl.	215.3
	256.7	247.6	248.7	256.7	255.9	258.4	247.9	248.8	Sbd box	256.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.280625000000E-04	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	-3.28063E-04	+/-	1.5E-07
Sband delay (usec)	-1.353250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	-1.35325E-03	+/-	1.2E-06
Phase delay (usec)	3.33056923675E-07	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	3.33057E-07	+/-	5.2E-10
Delay rate (us/s)	1.98396133484E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	1.98396E-11	+/-	5.0E-12
Total phase (deg)	10.3	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	10.3	+/-	0.0

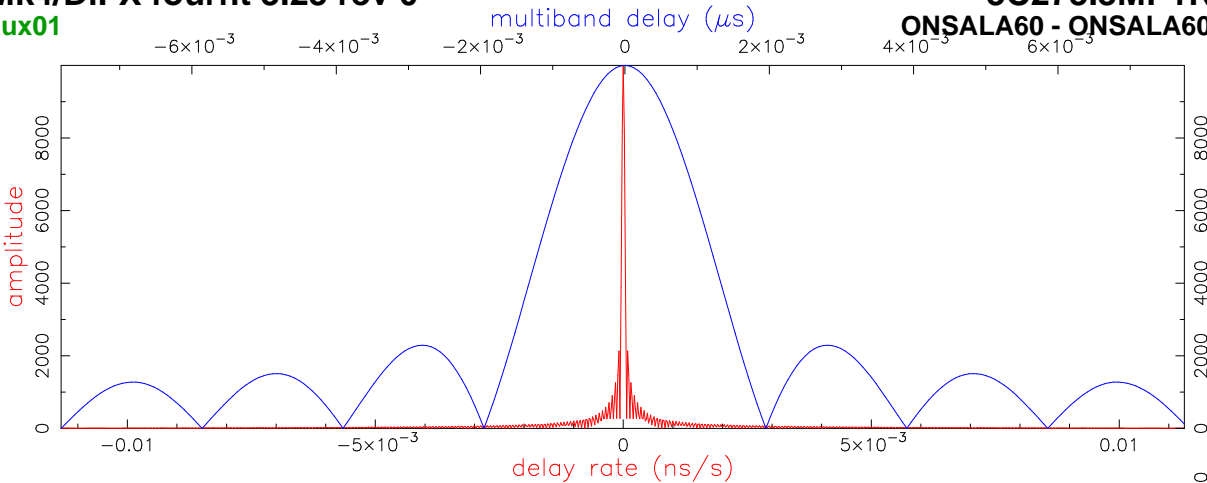
RMS Theor. Amplitude 194.551 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 188.663 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.7 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 34.8 0.0 Inc. seg. avg. 191.154 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 81.8 0.0 Inc. frq. avg. 215.300 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 212.8 el 30.3 pa 17.1 X: az 212.8 el 30.3 pa 17.1 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/XX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XX.W.117.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

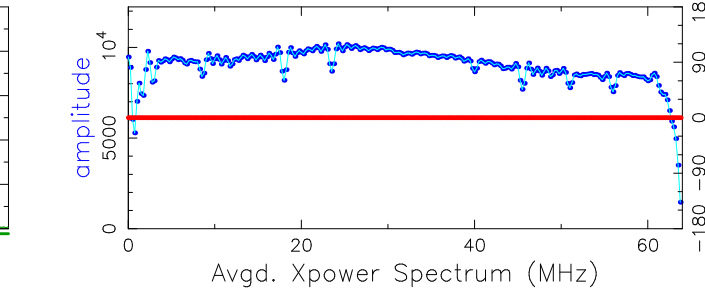
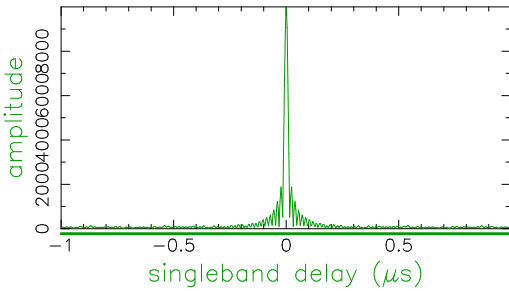
3C273.3MP1KJ, No0618, XX

ONSALA60 - ONSALA60, fgroup W, pol LL



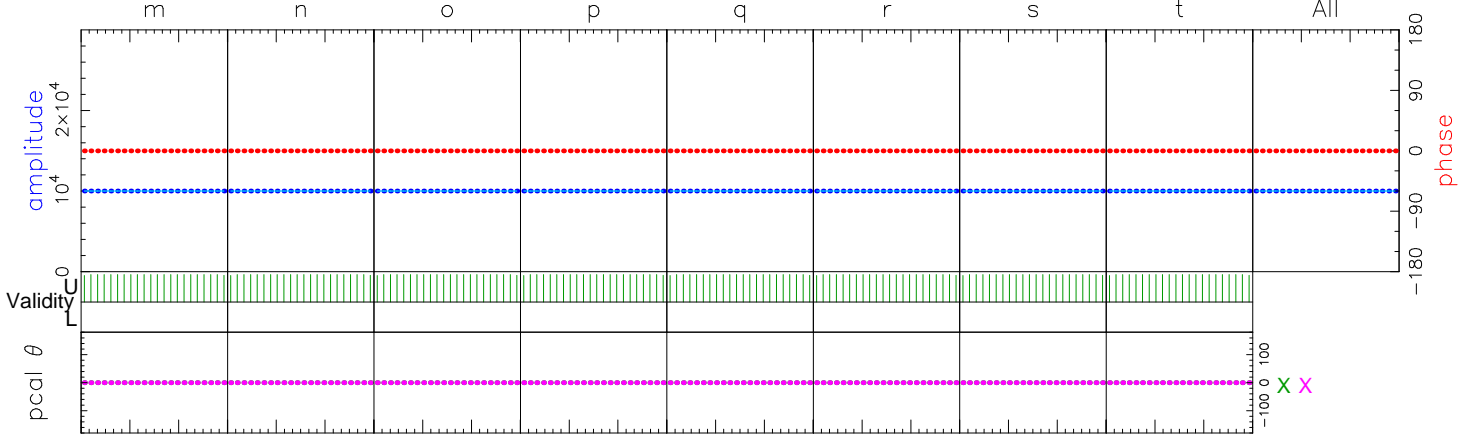
Fringe quality 9

SNR 366571.8
 Int time 179.690
 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. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171339
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	0	0	0	0	0	0	0	0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

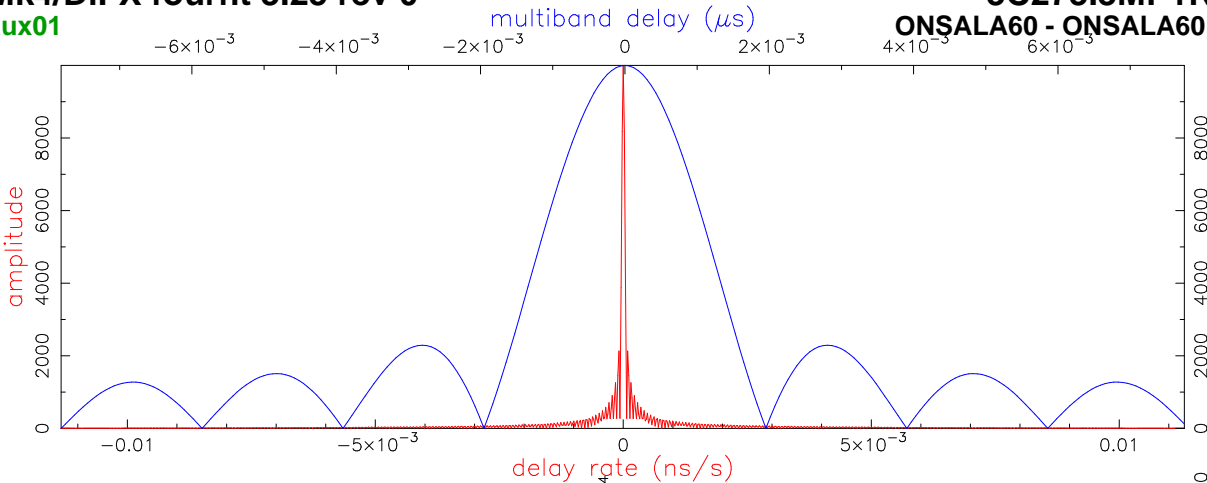
RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 212.8 el 30.3 pa 17.1 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/XX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XX.W.88.3MP1KJ

Mk4/DiFX fourfit 3.25 rev 0

aux01

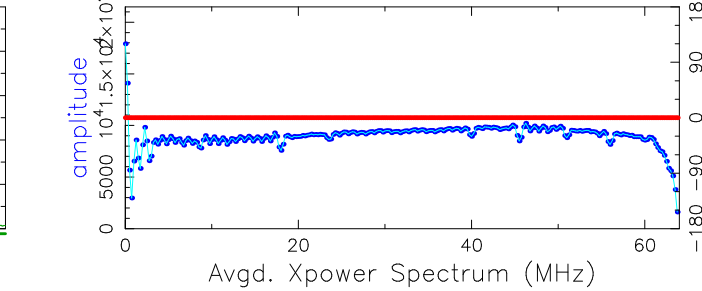
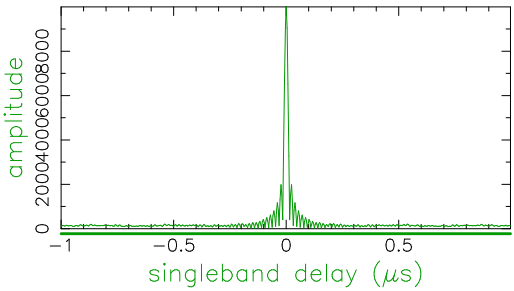
3C273.3MP1KJ, No0618, XX

ON\$ALA60 - ON\$ALA60, fgroup W, pol RR



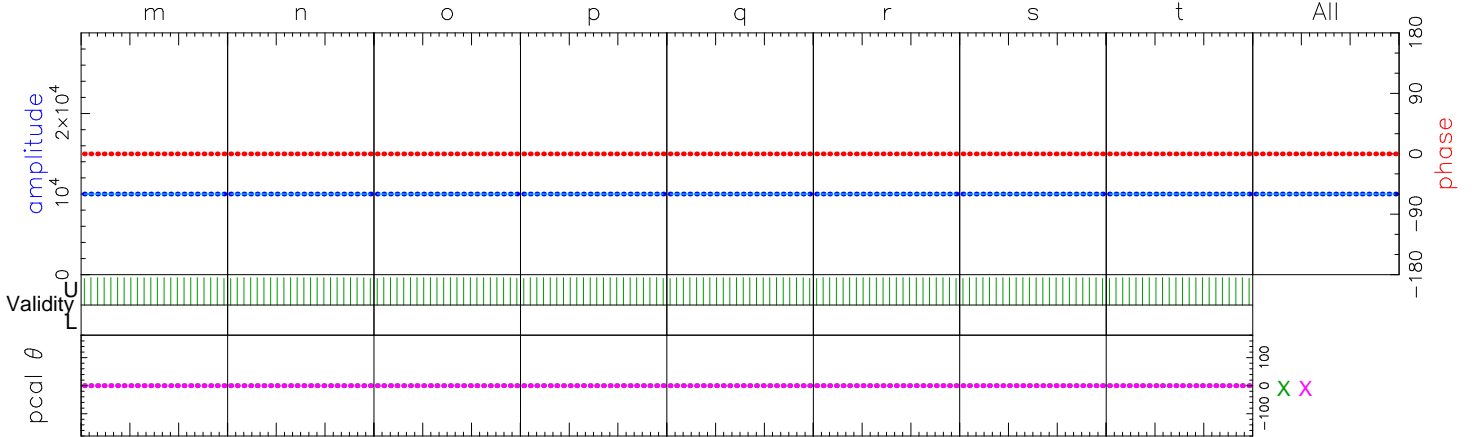
Fringe quality 9

SNR 366571.8
 Int time 179.690
 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. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171341
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
X	0	0	0	0	0	0	0	0	Ampl.	10000.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.4E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.7E-14
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 RMS Theor. Amplitude 9999.999 +/- 0.027 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
 X: az 212.8 el 30.3 pa 17.1 X: az 212.8 el 30.3 pa 17.1 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/c241b/v2/3mm/1234/No0618/XX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/XX.W.98.3MP1KJ simultaneous interpolator

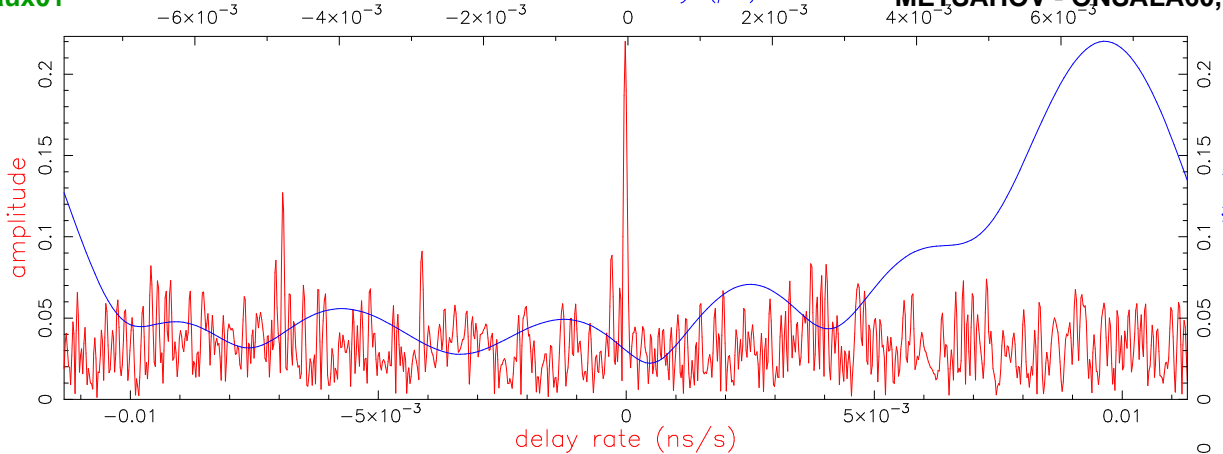
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, ZX

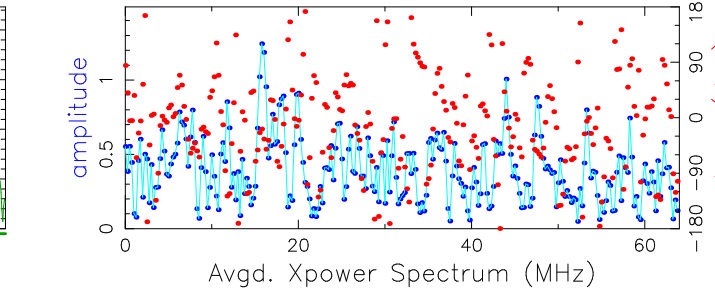
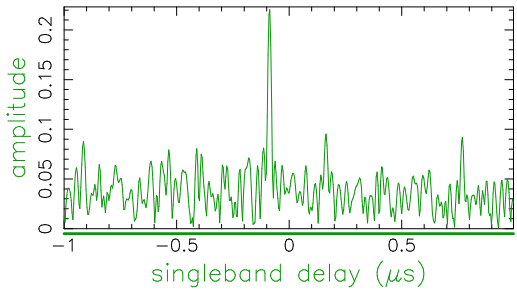
METSAHOV - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



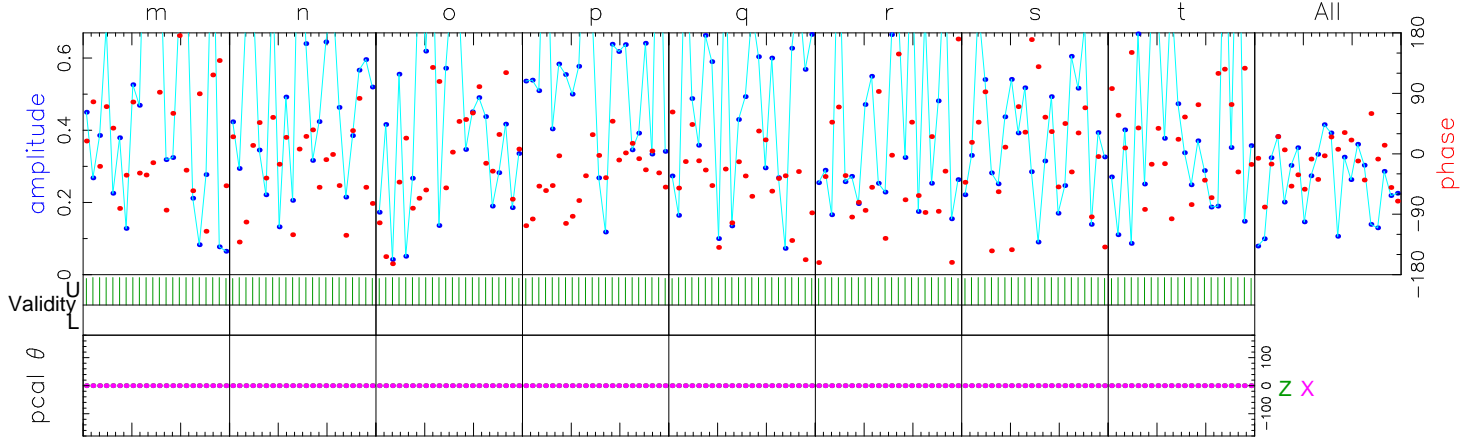
Fringe quality 9

SNR 8.2
 Int time 179.690
 Amp 0.223
 Phase -9.8
 PFD 4.8e-08
 Delays (us)
 SBD -0.087448
 MBD 0.006581
 Fringe rate (Hz)
 -0.002837
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171332
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -2.18674976200E+03 Apriori delay (usec) -2.18666259339E+03 Resid mbdelay (usec) 6.58139E-03 +/- 1.3E-04
 Sband delay (usec) -2.18675004114E+03 Apriori clock (usec) -1.1252316E+02 Resid sbdelay (usec) -8.74477E-02 +/- 1.1E-03
 Phase delay (usec) -2.18666259371E+03 Apriori clockrate (us/s) -6.0676312E-07 Resid phdelay (usec) -3.16879E-07 +/- 4.5E-07
 Delay rate (us/s) -1.07179783701E-01 Apriori rate (us/s) -1.07179750771E-01 Resid rate (us/s) -3.29295E-08 +/- 4.3E-09
 Total phase (deg) -295.8 Apriori accel (us/s/s) 1.11256833780E-05 Resid phase (deg) -9.8 +/- 14.0

RMS Theor. Amplitude 0.223 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.8 32.8 Search (1024X32) 0.209 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.9 57.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 28.5 19.8 Inc. seg. avg. 0.221 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.7 34.6 Inc. frq. avg. 0.227 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 225.1 el 24.0 pa 20.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) 620.179 255.662 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/ZX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/ZX.W.57.3MP1KJ

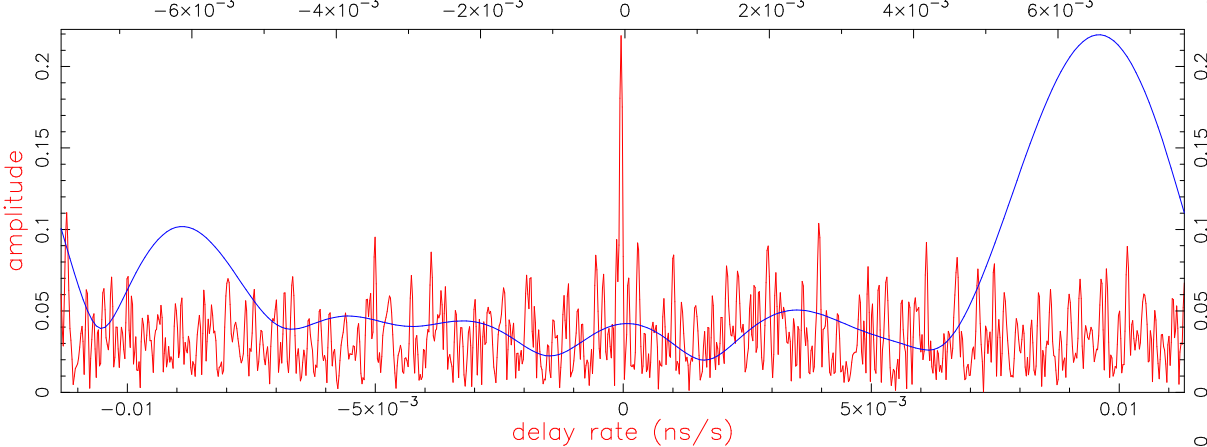
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, ZX

METSAHOV - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

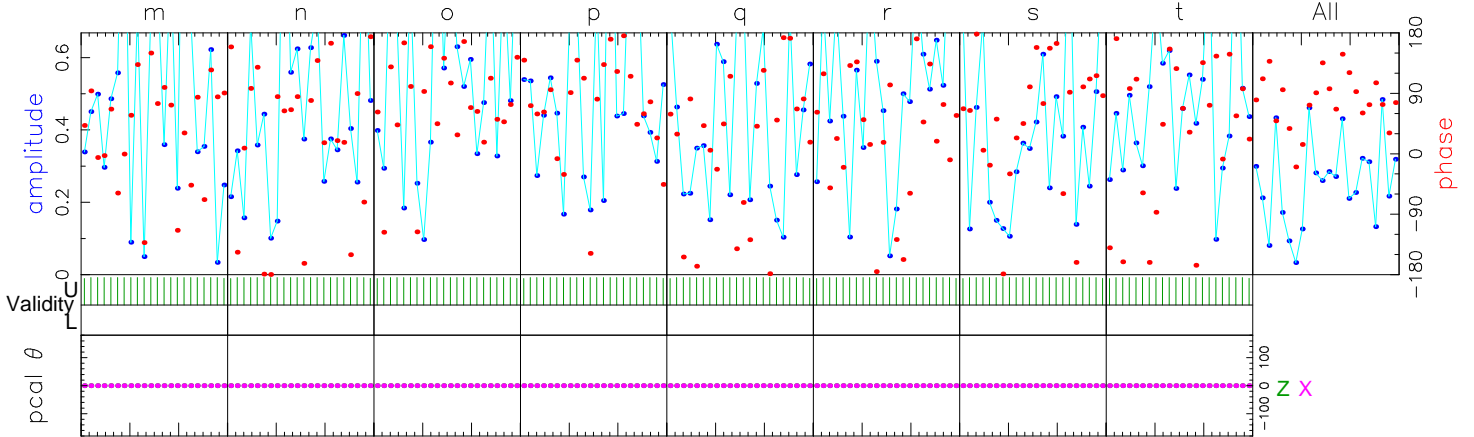


Fringe quality 9

SNR 8.2
 Int time 179.690
 Amp 0.223
 Phase 83.2
 PFD 5.5e-08
 Delays (us)
 SBD -0.056581
 MBD 0.006482
 Fringe rate (Hz)
 -0.002958
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171335
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	-2.18671861176E+03	Apriori delay (usec)	-2.18666259339E+03	Resid mbdelay (usec)	6.48163E-03	+/-	1.3E-04
Sband delay (usec)	-2.18671917439E+03	Apriori clock (usec)	-1.1252316E+02	Resid sbdelay (usec)	-5.65810E-02	+/-	1.1E-03
Phase delay (usec)	-2.18666259070E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	2.68440E-06	+/-	4.5E-07
Delay rate (us/s)	-1.07179785111E-01	Apriori rate (us/s)	-1.07179750771E-01	Resid rate (us/s)	-3.43395E-08	+/-	4.3E-09
Total phase (deg)	-202.8	Apriori accel (us/s/s)	1.11256833780E-05	Resid phase (deg)	83.2	+/-	14.0

ph/seg (deg)	40.3	Theor.	32.9	Amplitude	0.223 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	56.7	Search (1024X32)	0.211	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	23.3	Inc. seg. avg.	0.221	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	37.3	Inc. frq. avg.	0.219	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

Z: az 225.1 el 24.0 pa 20.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) 620.179 255.662 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/ZX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/ZX.W.65.3MP1KJ

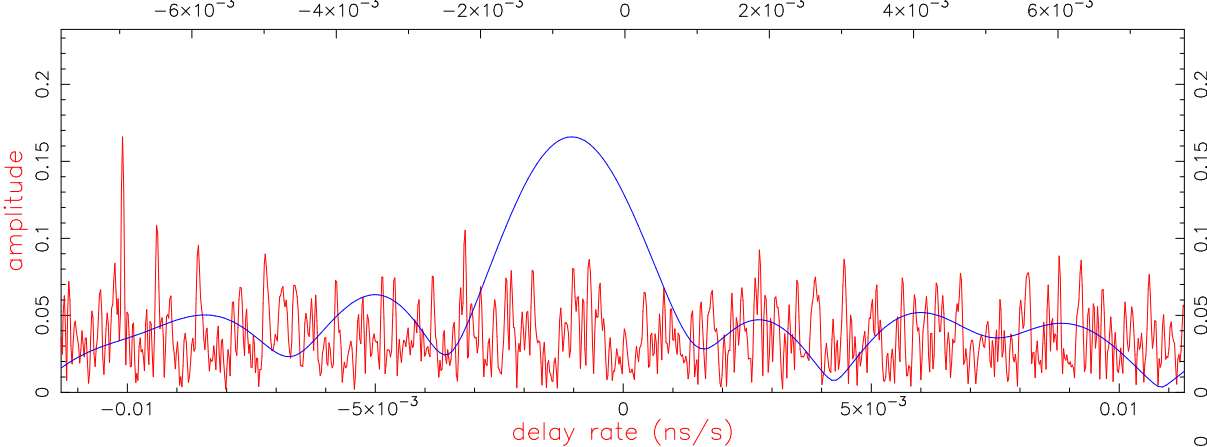
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C273.3MP1KJ, No0618, ZX

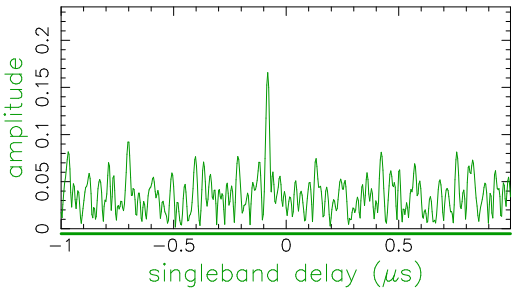
METSAHOV - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

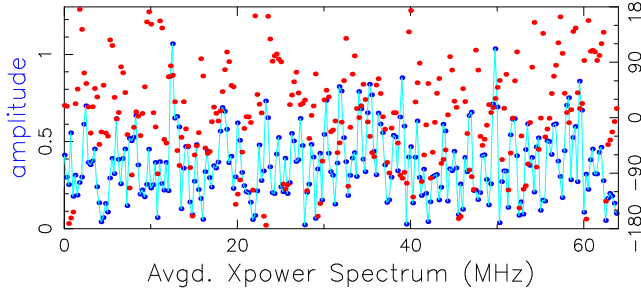


Fringe quality 0

SNR 6.1
 Int time 179.690
 Amp 0.236
 Phase 156.4
 PFD 1.5e-01
 Delays (us)
 SBD -0.082176
 MBD -0.000742
 Fringe rate (Hz)
 -0.870279
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

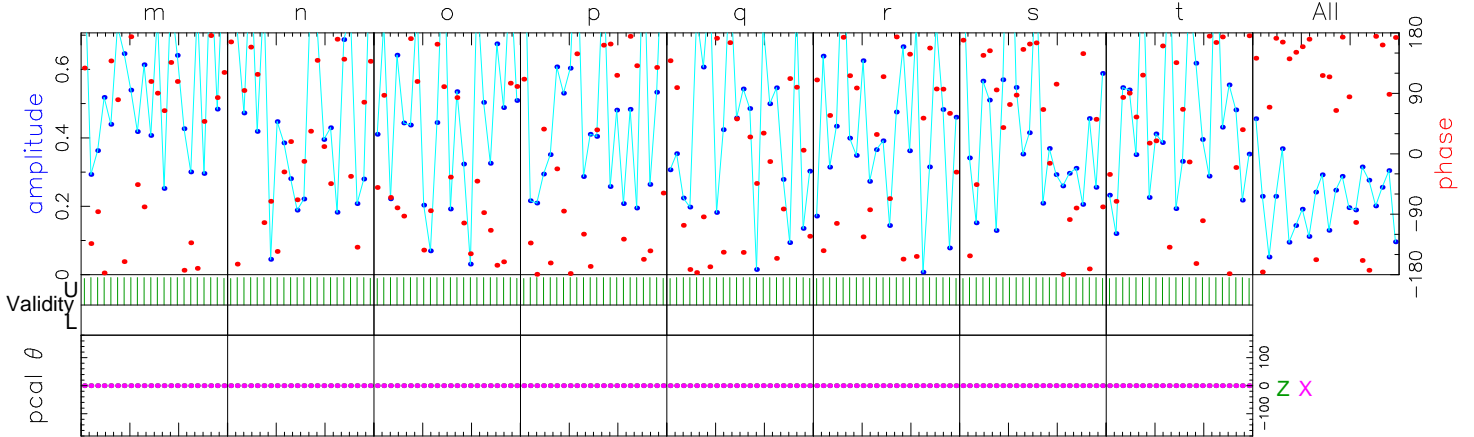


delay rate (ns/s)



Exp. c241b
 Exper # 1234
 Yr:day 2024:110
 Start 234000.00
 Stop 234300.23
 FRT 234134.00
 Corr/FF/build
 2024:359:200643
 2025:041:171337
 2024:113:095956
 RA & Dec (J2000)
 12h29m06.699742s
 +02°03'08.598116"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	145.6	152.0	159.2	175.0	176.8	166.8	138.1	143.8	Phase	156.4
	0.4	0.2	0.1	0.3	0.2	0.3	0.3	0.2	Ampl.	0.2
	237.0	78.1	386.8	165.7	450.7	46.6	11.3	450.8	Sbd box	236.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.18674146042E+03	Apriori delay (usec)	-2.18666259339E+03	Resid mbdelay (usec)	-7.42028E-04	+/-	1.8E-04
Sband delay (usec)	-2.18674476939E+03	Apriori clock (usec)	-1.1252316E+02	Resid sbdelay (usec)	-8.21760E-02	+/-	1.4E-03
Phase delay (usec)	-2.18666258834E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	5.04396E-06	+/-	6.1E-07
Delay rate (us/s)	-1.07189853843E-01	Apriori rate (us/s)	-1.07179750771E-01	Resid rate (us/s)	-1.01031E-05	+/-	5.8E-09
Total phase (deg)	-129.6	Apriori accel (us/s/s)	1.11256833780E-05	Resid phase (deg)	156.4	+/-	18.8

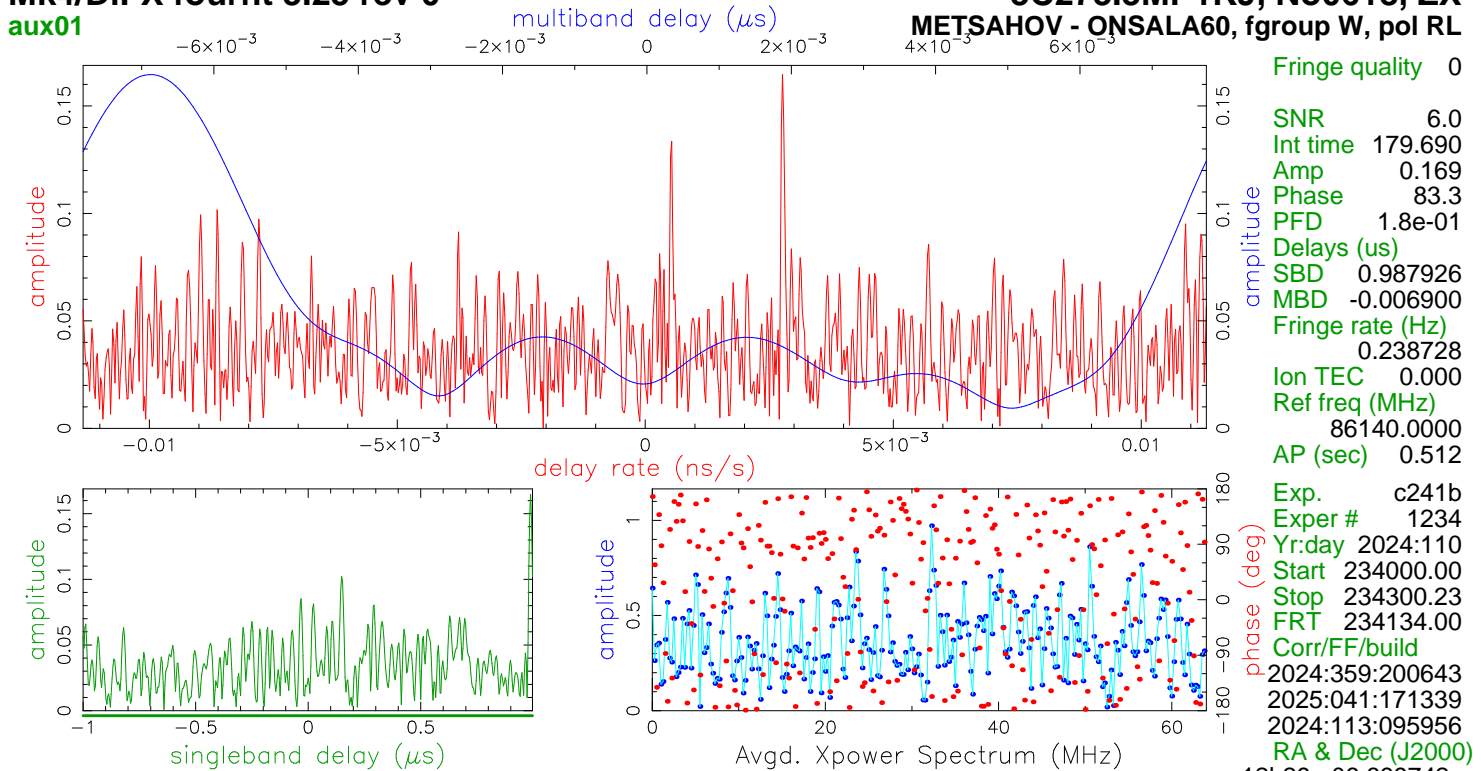
ph/seg (deg)	46.4	Theor.	44.2	Amplitude	0.236 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.3	Search (1024X32)	0.158	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	15.9	Inc. seg. avg.	0.244	Inc. frq. avg.	0.219	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.6	Inc. frq. avg.	0.219			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
Z: az 225.1 el 24.0 pa 20.7		X: az 212.8 el 30.3 pa 17.1		u, v (fr/asec)	620.179 255.662	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/c241b/v2/3mm/1234/No0618/ZX..3MP1KJ		Output file: /Exps/c241b/v2/3mm/1234/No0618/ZX.W.79.3MP1KJ					simultaneous interpolator	

Mk4/DiFX fourfit 3.25 rev 0

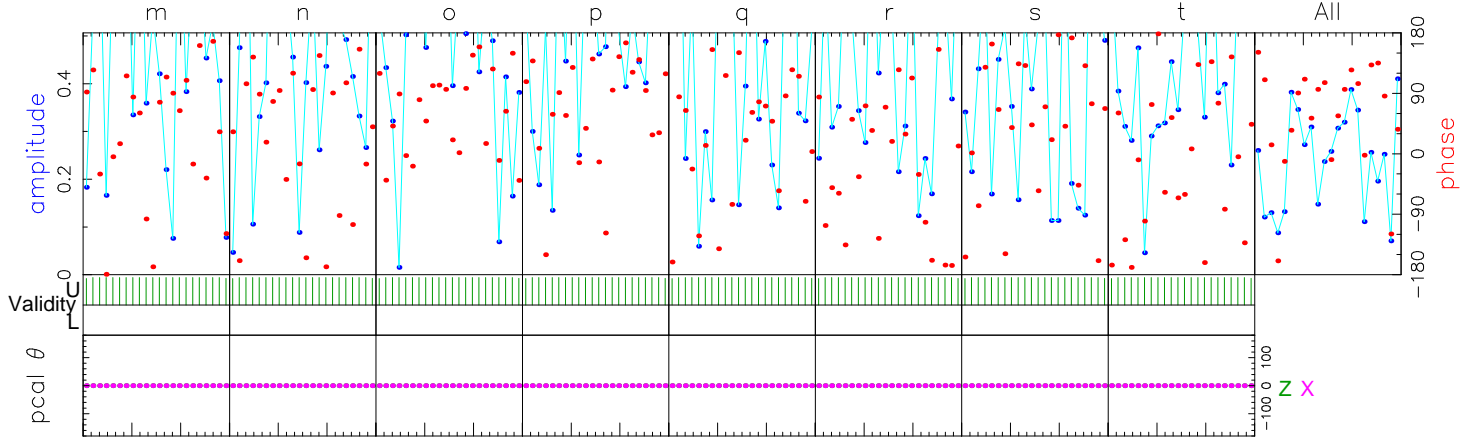
aux01

3C273.3MP1KJ, No0618, ZX

METSAHOV - ONSALA60, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-2.18566949386E+03	Apriori delay (usec)	-2.18666259339E+03	Resid mbdelay (usec)	-6.90047E-03	+/-	1.8E-04
Sband delay (usec)	-2.18567466764E+03	Apriori clock (usec)	-1.1252316E+02	Resid sbdelay (usec)	9.87926E-01	+/-	1.4E-03
Phase delay (usec)	-2.18666259070E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	2.68605E-06	+/-	6.1E-07
Delay rate (us/s)	-1.07176979381E-01	Apriori rate (us/s)	-1.07179750771E-01	Resid rate (us/s)	2.77139E-06	+/-	5.9E-09
Total phase (deg)	-202.7	Apriori accel (us/s/s)	1.11256833780E-05	Resid phase (deg)	83.3	+/-	19.0

ph/seg (deg)	63.5	Theor.	44.5	Amplitude	0.169 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.7	Search (1024X32)	0.160	Search	0.160	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.9	Inc. seg. avg.	0.191	Inc. seg. avg.	0.191	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.9	Inc. frq. avg.	0.157	Inc. frq. avg.	0.157	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

Z: az 225.1 el 24.0 pa 20.7 X: az 212.8 el 30.3 pa 17.1 u,v (fr/asec) 620.179 255.662 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241b/v2/3mm/1234/No0618/ZX..3MP1KJ Output file: /Exps/c241b/v2/3mm/1234/No0618/ZX.W.91.3MP1KJ