

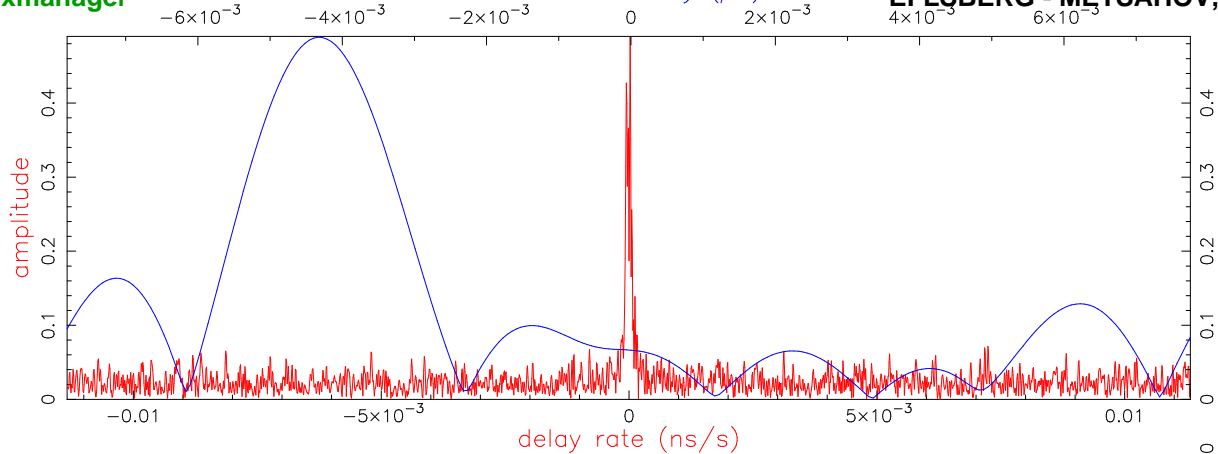
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, BZ

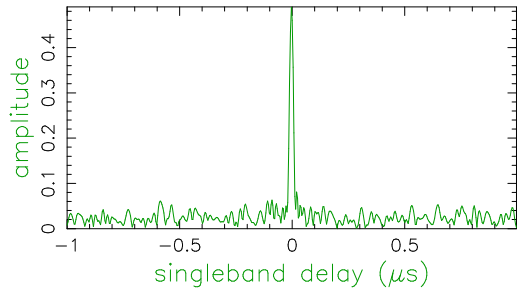
EFLSBERG - METSAHOV, fgroup W, pol RR

multiband delay (μ s)

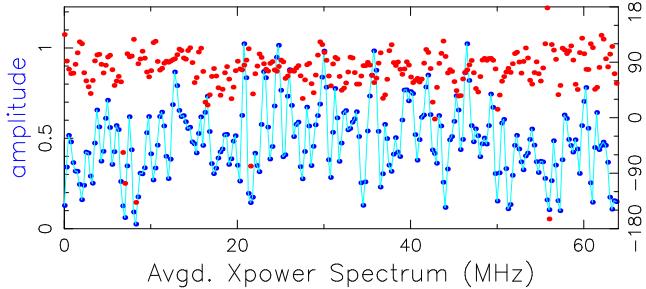


Fringe quality 7

SNR 27.0
 Int time 405.654
 Amp 0.490
 Phase 92.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.003286
 MBD -0.004305
 Fringe rate (Hz) 0.002126
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

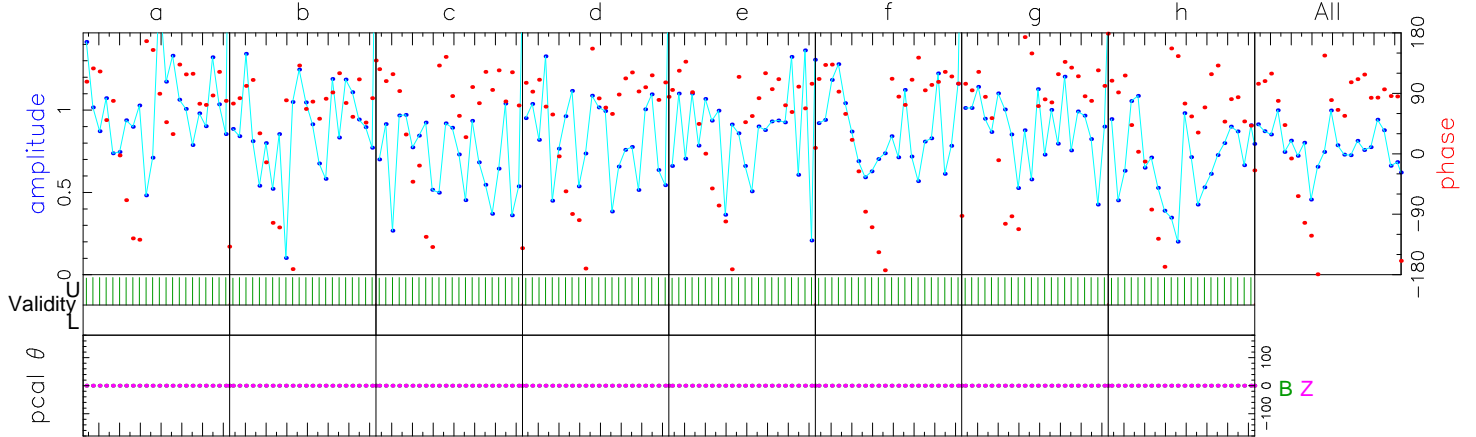


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162845
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	95.9	86.9	91.7	96.0	83.6	106.9	103.8	69.1		92.5
	0.6	0.6	0.4	0.5	0.5	0.5	0.5	0.4		0.5
	256.2	256.0	256.5	256.3	255.9	255.9	256.0	256.0		256.2
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
B	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	2.57527019970E+03		Apriori delay (usec)		2.57527450432E+03		Resid mbdelay (usec)		-4.30462E-03	+/- 4.0E-05
Sband delay (usec)	2.57527121857E+03		Apriori clock (usec)		-2.1346695E+01		Resid sbdelay (usec)		-3.28575E-03	+/- 3.2E-04
Phase delay (usec)	2.57527450731E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		2.98422E-06	+/- 1.4E-07
Delay rate (us/s)	2.81783573138E-01		Apriori rate (us/s)		2.81783548452E-01		Resid rate (us/s)		2.46861E-08	+/- 5.8E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.41740452175E-05		Resid phase (deg)		92.5	+/- 4.2

	RMS	Theor.	Amplitude	0.490 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	67.8	10.2	Search (2048X32)	0.479	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	65.5	17.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	13.0	6.0	Inc. seg. avg.	0.775	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	14.2	10.5	Inc. frq. avg.	0.495	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

B: az 162.2 el 40.1 pa -11.2 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) -1631.872 -888.788 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/BZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/BZ.W.18.1W7BJK

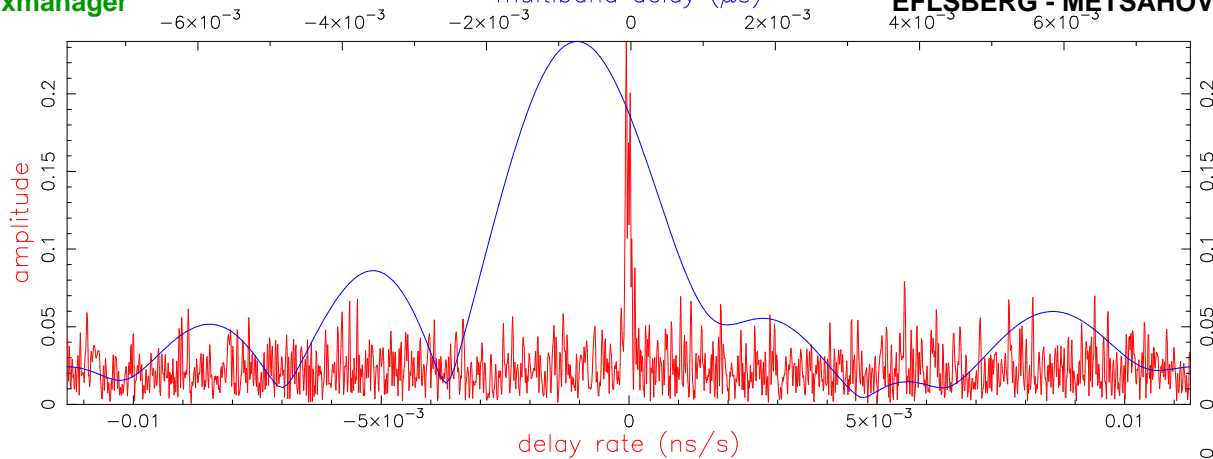
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, BZ

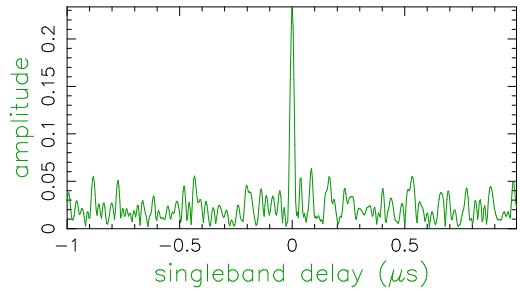
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

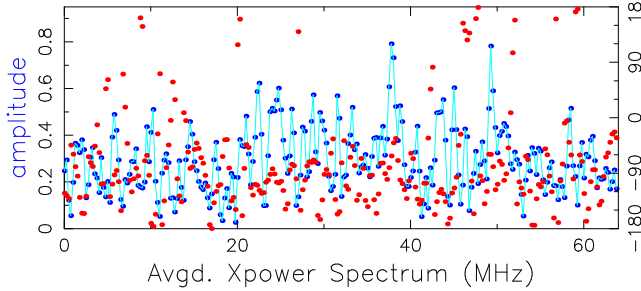


Fringe quality 9

SNR 12.9
Int time 405.654
Amp 0.234
Phase -94.6
PFD 3.3e-29
Delays (us)
SBD -0.000231
MBD -0.000755
Fringe rate (Hz)
-0.004554
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

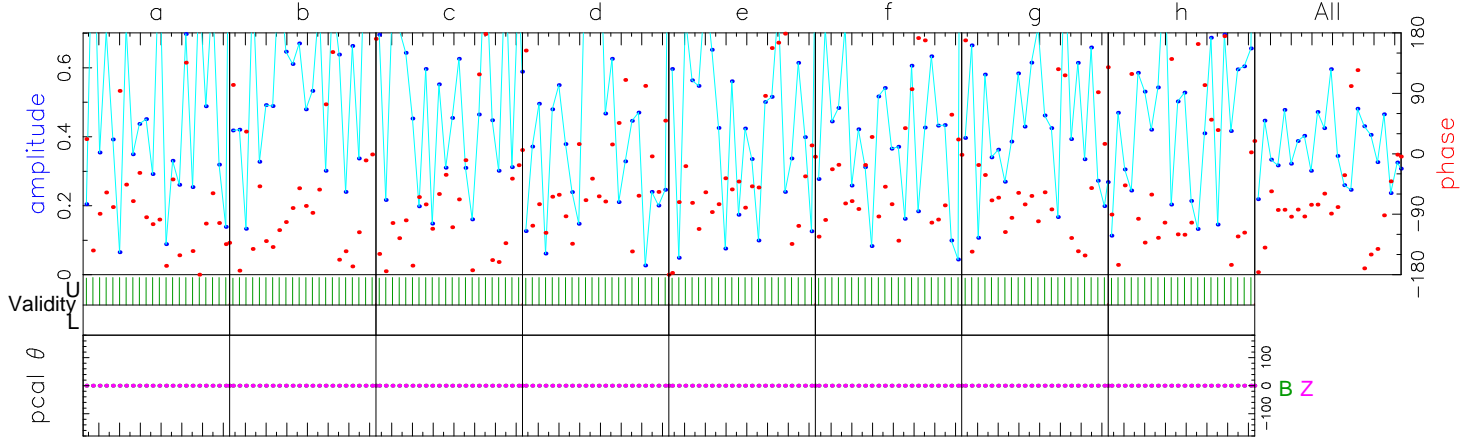


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162848
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.9	-104.0	-111.6	-60.6	-87.0	-77.0	-93.4	-122.3	Phase	-94.6
	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	256.7	257.1	257.0	256.6	256.4	257.5	256.8	257.3	Sbd box	256.9
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.57527374901E+03					2.57527450432E+03			Resid mbdelay (usec)	-7.55311E-04 +/- 8.4E-05
Sband delay (usec)	2.57527427307E+03					-2.1346695E+01			Resid sbdelay (usec)	-2.31250E-04 +/- 6.7E-04
Phase delay (usec)	2.57527450127E+03					-1.6000000E-08			Resid phdelay (usec)	-3.05058E-06 +/- 2.9E-07
Delay rate (us/s)	2.81783495579E-01					2.81783548452E-01			Resid rate (us/s)	-5.28726E-08 +/- 1.2E-09
Total phase (deg)		194.2				-1.41740452175E-05			Resid phase (deg)	-94.6 +/- 8.9
	RMS	Theor.	Amplitude	0.234 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.7	21.3	Search (2048X32)	0.226					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.0	37.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.2	12.6	Inc. seg. avg.	0.350					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	14.7	22.0	Inc. frq. avg.	0.240					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
										ion window (TEC) 0.00 0.00

B: az 162.2 el 40.1 pa -11.2 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) -1631.872 -888.788 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/BZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/BZ.W.33.1W7BJK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

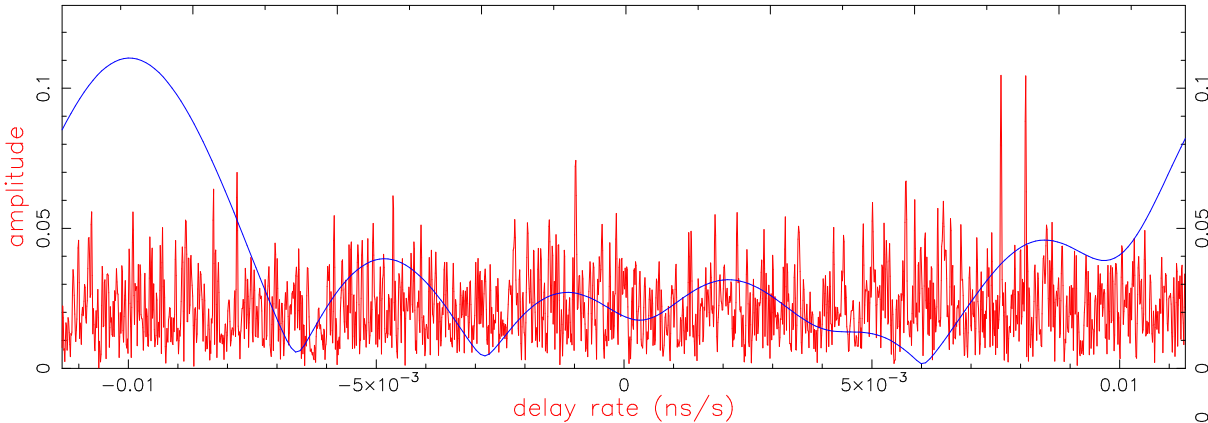
3C273.1W7BJK, No0103, BZ

EFLSBERG - METSAHOV, fgroup W, pol RL

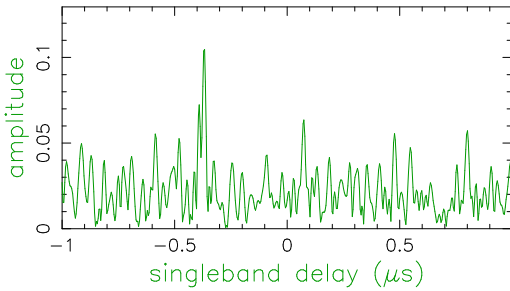
multiband delay (μs)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

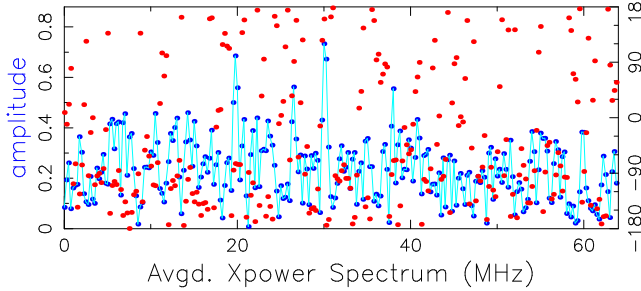
Fringe quality 0



SNR 5.9
Int time 405.654
Amp 0.130
Phase -144.8
PFD 6.4e-01
Delays (us)
SBD -0.368985
MBD 0.008301
Fringe rate (Hz) 0.656440
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

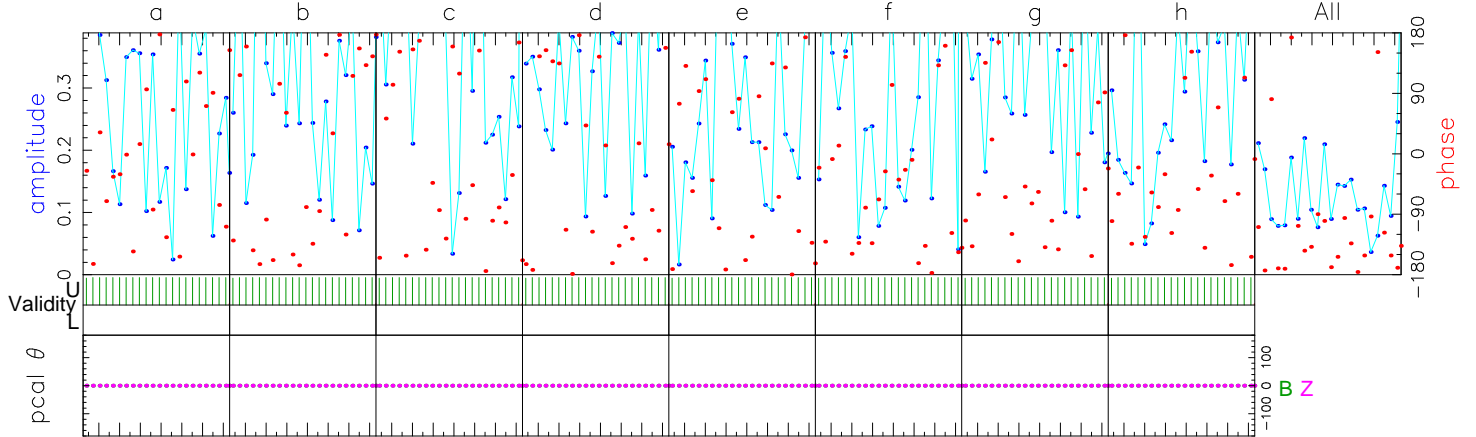


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162852
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-48.3	-175.9	-151.2	-165.8	-172.1	-142.6	-117.4	-82.4	Phase	-144.8
	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	346.4	162.2	491.1	507.8	352.1	125.1	291.5	266.3	Sbd box	162.5
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.57490780510E+03		Apriori delay (usec)		2.57527450432E+03		Resid mbdelay (usec)		8.30078E-03	+/- 1.8E-04
Sband delay (usec)	2.57490551907E+03		Apriori clock (usec)		-2.1346695E+01		Resid sbdelay (usec)		-3.68985E-01	+/- 1.5E-03
Phase delay (usec)	2.57527449965E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		-4.66935E-06	+/- 6.3E-07
Delay rate (us/s)	2.81791169074E-01		Apriori rate (us/s)		2.81783548452E-01		Resid rate (us/s)		7.62062E-06	+/- 2.7E-09
Total phase (deg)	144.0		Apriori accel (us/s/s)		-1.41740452175E-05		Resid phase (deg)		-144.8	+/- 19.5

	RMS	Theor.	Amplitude	0.130 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	43.7	46.7	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	59.0	81.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	51.9	27.5	Inc. seg. avg.	0.118	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	41.6	48.1	Inc. frq. avg.	0.139	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

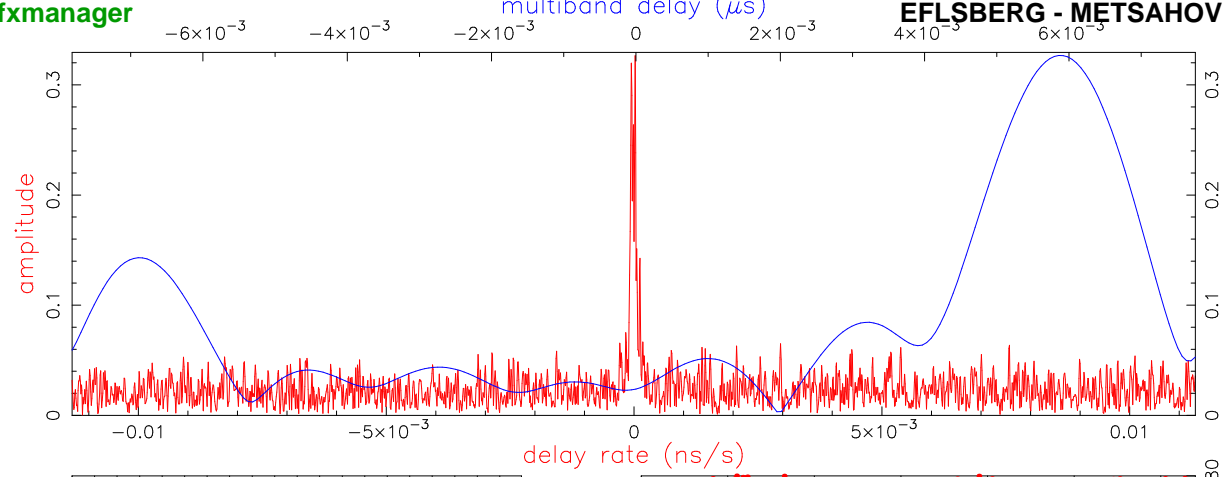
B: az 162.2 el 40.1 pa -11.2 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) -1631.872 -888.788 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/BZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/BZ.W.45.1W7BJK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

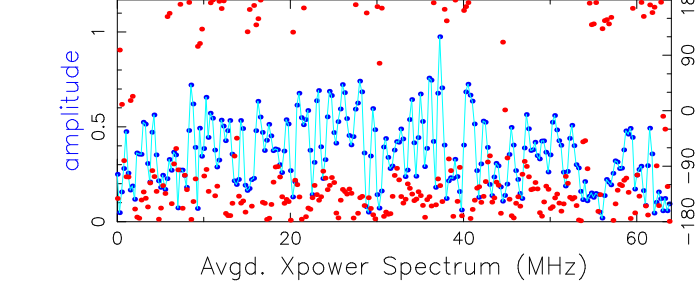
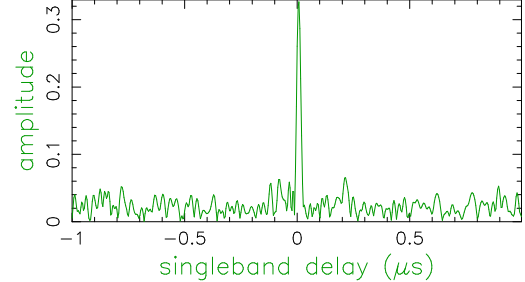
3C273.1W7BJK, No0103, BZ

EFLSBERG - METSAHOV, fgroup W, pol LL



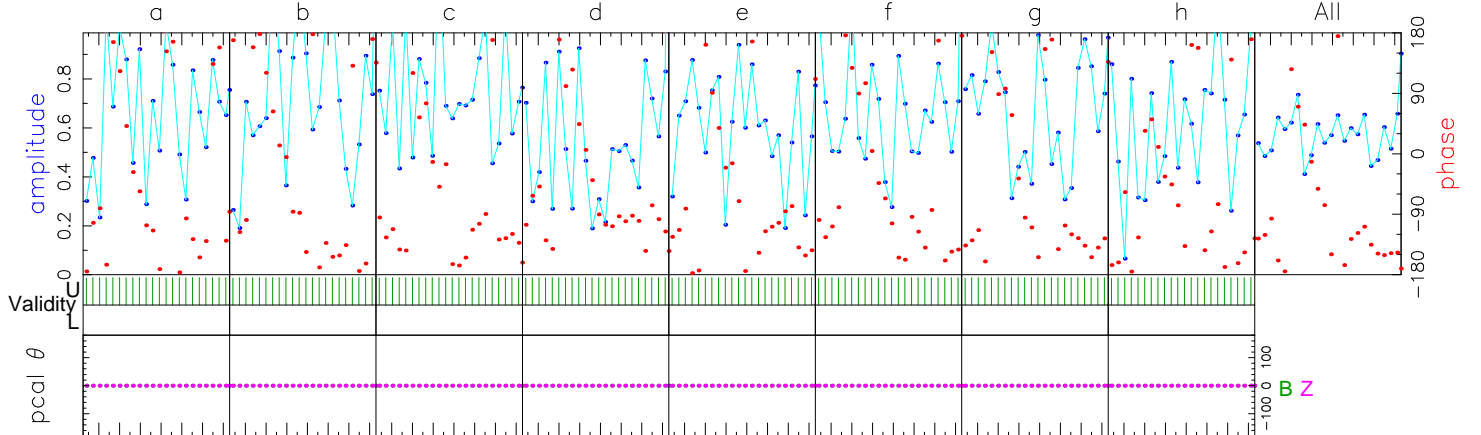
Fringe quality 9

SNR 18.1
Int time 405.654
Amp 0.329
Phase -138.8
PFD 0.0e+00
Delays (us)
SBD 0.006518
MBD 0.005845
Fringe rate (Hz)
0.002181
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162842
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
Group delay (usec)(sbd)	-164.4	-154.5	-117.3	-107.3	-131.7	-135.9	-151.8	-141.8		-138.8		
Sband delay (usec)	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3		0.3		
Phase delay (usec)	257.9	259.2	259.4	257.8	258.6	258.3	258.9	256.5		258.7		
Delay rate (us/s)	U/L 794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0				
	B 1000	1000	1000	1000	1000	1000	1000	1000		APs used		
	Z 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
B:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase		
B:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC		
B 1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000				
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks		
										Tracks		
Group delay (usec)(sbd)	2.57528034905E+03		Apriori delay (usec)		2.57527450432E+03		Resid mbdelay (usec)		5.84472E-03	+/- 6.0E-05		
Sband delay (usec)	2.57528102207E+03		Apriori clock (usec)		-2.1346695E+01		Resid sbdelay (usec)		6.51775E-03	+/- 4.7E-04		
Phase delay (usec)	2.57527449984E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		-4.47728E-06	+/- 2.0E-07		
Delay rate (us/s)	2.81783573775E-01		Apriori rate (us/s)		2.81783548452E-01		Resid rate (us/s)		2.53231E-08	+/- 8.7E-10		
Total phase (deg)	150.0		Apriori accel (us/s/s)		-1.41740452175E-05		Resid phase (deg)		-138.8	+/- 6.3		
	RMS	Theor.	Amplitude		0.329 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	67.4	15.1	Search (2048X32)		0.319		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	76.2	26.4	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	20.8	8.9	Inc. seg. avg.		0.548		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)	15.4	15.6	Inc. frq. avg.		0.339		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 162.2 el 40.1 pa -11.2	Z: az 184.7 el 31.6 pa 2.9		u,v (fr/asec)		-1631.872 -888.788						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c211a/v2/1234/No0103/BZ..1W7BJK		Output file: /Exps/c211a/v2/1234/No0103/BZ.W.5.1W7BJK									

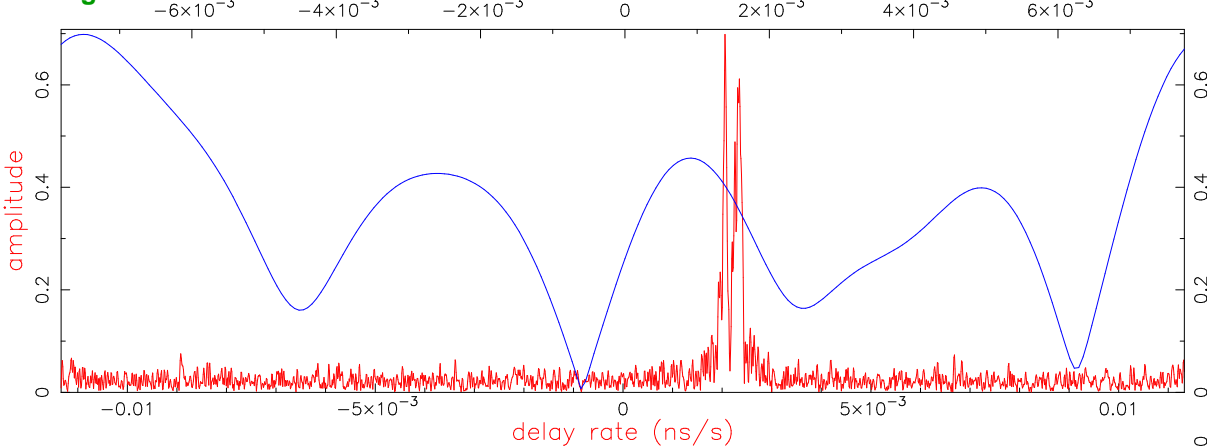
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZN

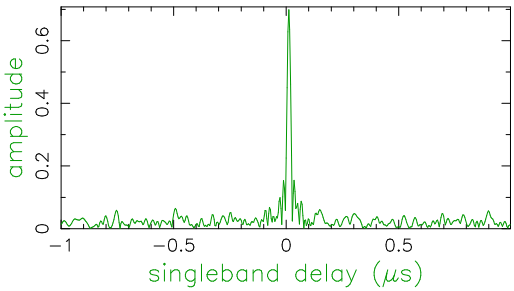
METSAHOV - NOEMA, fgroup W, pol LL

multiband delay (μ s)

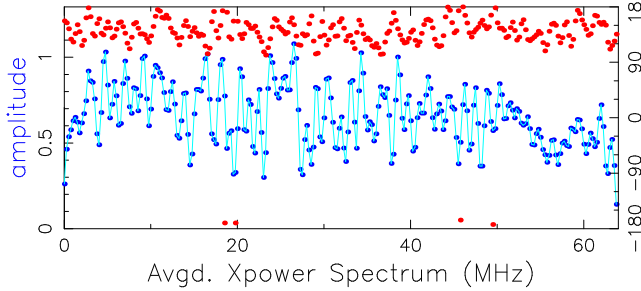


Fringe quality 3

SNR 38.5
 Int time 405.654
 Amp 0.708
 Phase 4.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.011834
 MBD -0.007503
 Fringe rate (Hz)
 0.177430
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

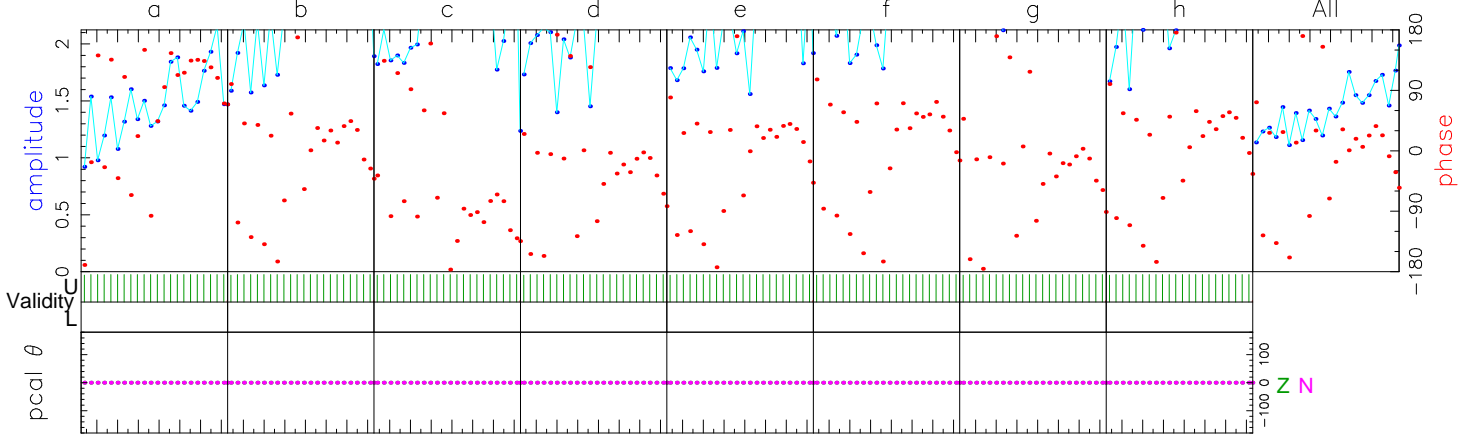


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162843
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	112.2	12.4	-106.9	-32.2	15.8	40.8	-30.3	27.3	Phase	4.1
	0.7	1.1	0.9	1.2	1.1	1.2	1.2	1.2	Ampl.	1.1
	257.7	259.3	259.7	260.1	260.5	260.1	260.2	259.2	Sbd box	260.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

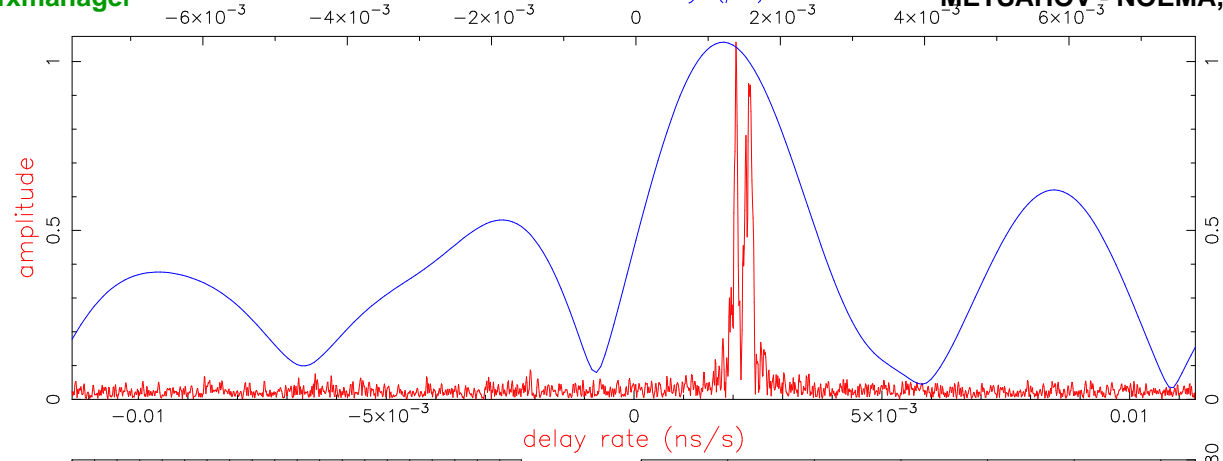
Group delay (usec)(sbd)	-4.05266457944E+03	Apriori delay (usec)	-4.05267270116E+03	Resid mbdelay (usec)	-7.50328E-03	+/-	2.8E-05
Sband delay (usec)	-4.05266086741E+03	Apriori clock (usec)	1.2767431E+01	Resid sbdelay (usec)	1.18337E-02	+/-	2.2E-04
Phase delay (usec)	-4.05267270103E+03	Apriori clockrate (us/s)	7.0100002E-07	Resid phdelay (usec)	1.33136E-07	+/-	9.6E-08
Delay rate (us/s)	-3.25988414686E-01	Apriori rate (us/s)	-3.25990474474E-01	Resid rate (us/s)	2.05979E-06	+/-	4.1E-10
Total phase (deg)	-167.9	Apriori accel (us/s/s)	2.22479861090E-05	Resid phase (deg)	4.1	+/-	3.0

ph/seg (deg)	80.0	Theor.	7.1	Search (2048X32)	0.682	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	106.6		12.5	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)	69.0		4.2	Inc. seg. avg.	1.425	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.3		7.4	Inc. frq. avg.	1.084	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 184.7 el 31.6 pa 2.9 N: az 159.1 el 45.4 pa -14.1 u,v (fr/asec) 1895.060 1522.819 simultaneous interpolator

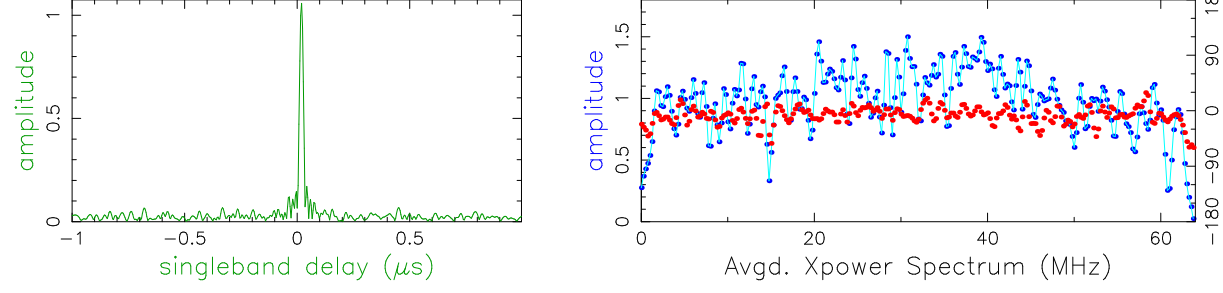
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZN..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZN.W.13.1W7BJK

multiband delay (μ s)

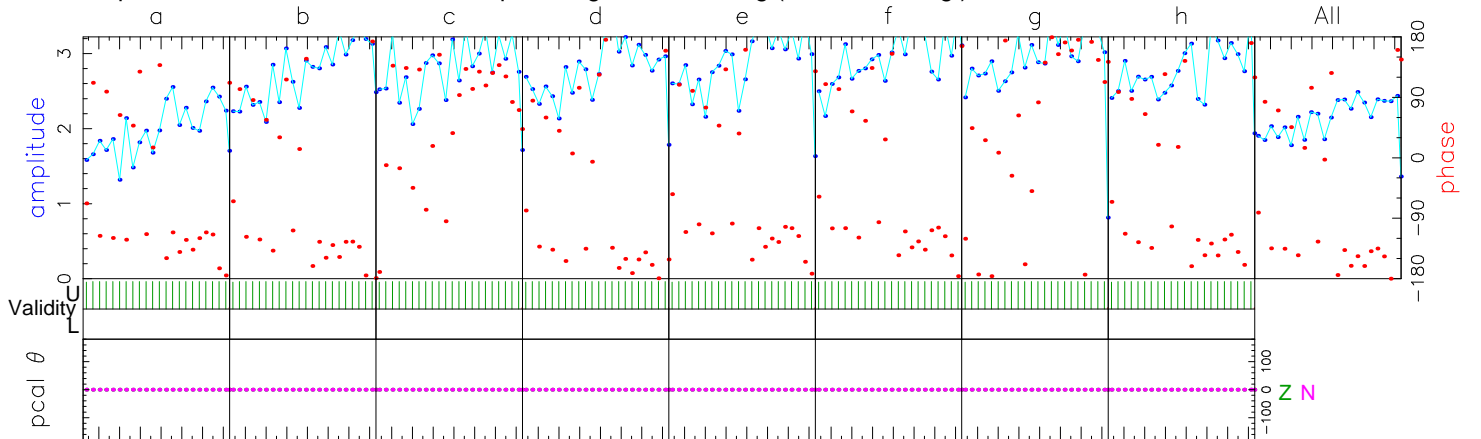


Fringe quality 2

SNR 58.4
Int time 405.654
Amp 1.075
Phase -162.7
PFD 0.0e+00
Delays (us)
SBD 0.018877
MBD 0.001195
Fringe rate (Hz) 0.177571
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162847
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-140.5	-151.5	107.3	-167.3	-133.0	-136.5	155.9	-148.0	Phase	-162.7
	1.1	1.4	1.4	1.4	1.4	1.4	1.4	1.3	Ampl.	1.3
	260.2	261.5	261.9	262.5	262.6	262.2	262.1	261.5	Sbd box	261.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.05265588081E+03	Apriori delay (usec)	-4.05267270116E+03	Resid mbdelay (usec)	1.19535E-03	+/-	1.9E-05
Sband delay (usec)	-4.05265382441E+03	Apriori clock (usec)	1.2767431E+01	Resid sbdelay (usec)	1.88768E-02	+/-	1.5E-04
Phase delay (usec)	-4.05267270641E+03	Apriori clockrate (us/s)	7.0100002E-07	Resid phdelay (usec)	-5.24818E-06	+/-	6.3E-08
Delay rate (us/s)	-3.25988413052E-01	Apriori rate (us/s)	-3.25990474474E-01	Resid rate (us/s)	2.06142E-06	+/-	2.7E-10
Total phase (deg)	-334.8	Apriori accel (us/s/s)	2.22479861090E-05	Resid phase (deg)	-162.7	+/-	2.0

ph/seg (deg)	78.9	Theor.	4.7	Amplitude	1.075 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	105.7	Search (2048X32)	1.020	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	45.2	Inc. seg. avg.	2.180	Inc. frq. avg.	1.343	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.1	Inc. frq. avg.	1.343			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
Z: az 184.7 el 31.6 pa 2.9		N: az 159.1 el 45.4 pa -14.1		u,v (fr/asec)	1895.060 1522.819	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

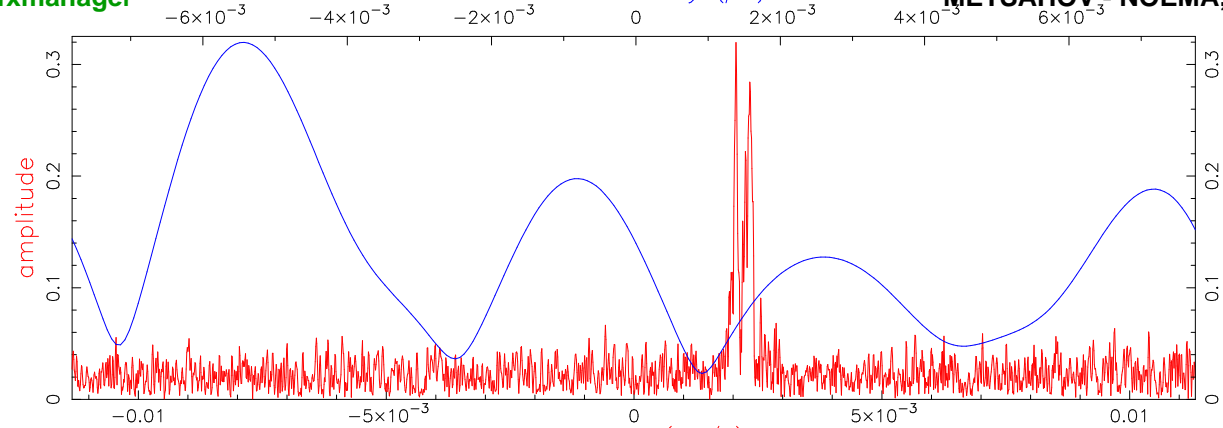
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZN

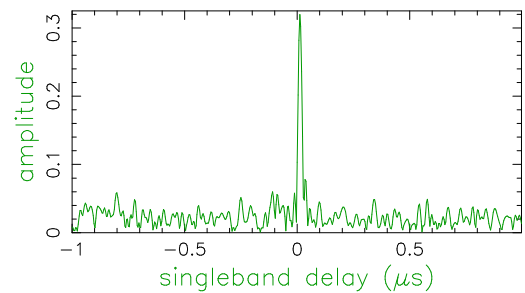
METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)

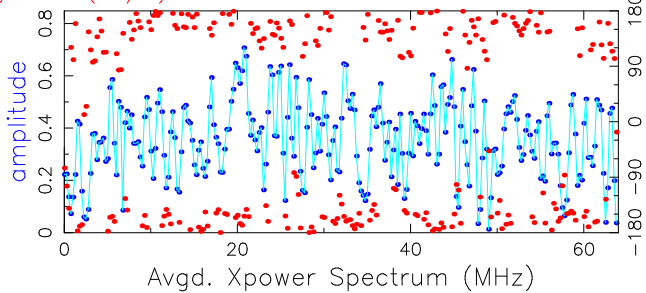


Fringe quality 7

SNR 17.7
 Int time 405.654
 Amp 0.325
 Phase 21.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.012464
 MBD -0.005415
 Fringe rate (Hz)
 0.177992
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

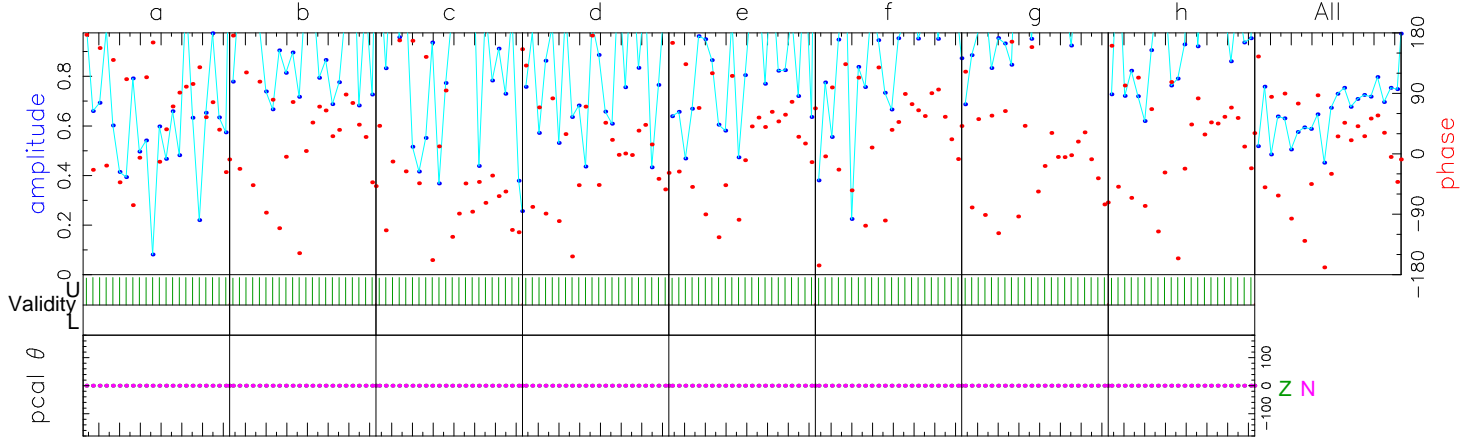


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162850
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	62.6	43.3	-72.4	-1.2	41.3	60.4	-11.4	31.7	Phase	21.4
	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	Ampl.	0.4
	258.1	259.7	260.4	261.1	260.8	261.0	260.4	260.3	Sbd box	260.2
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.05266249155E+03	Apriori delay (usec)	-4.05267270116E+03	Resid mbdelay (usec)	-5.41539E-03	+/-	6.1E-05
Sband delay (usec)	-4.05266023741E+03	Apriori clock (usec)	1.2767431E+01	Resid sbdelay (usec)	1.24638E-02	+/-	4.9E-04
Phase delay (usec)	-4.05267270047E+03	Apriori clockrate (us/s)	7.0100002E-07	Resid phdelay (usec)	6.90254E-07	+/-	2.1E-07
Delay rate (us/s)	-3.25988408158E-01	Apriori rate (us/s)	-3.25990474474E-01	Resid rate (us/s)	2.06632E-06	+/-	8.9E-10
Total phase (deg)	-150.7	Apriori accel (us/s/s)	2.22479861090E-05	Resid phase (deg)	21.4	+/-	6.5

ph/seg (deg)	74.8	RMS	15.6	Theor.	0.325 +/- 0.018	PCal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	108.3	Search (2048X32)	0.310	Search	0.310	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	49.3	Interp.	0.000	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008 0.008
amp/frq (%)	40.0	Inc. seg. avg.	0.640	Inc. seg. avg.	0.640	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	0.419	Inc. frq. avg.	0.419	Sample rate(MISamp/s): 128	ion window (TEC)	0.00 0.00
						Data rate(Mb/s): 2048		
						nlags: 256		
						t_cohere infinite		
Z: az 184.7 el 31.6 pa 2.9	N: az 159.1 el 45.4 pa -14.1	u, v (fr/asec)	1895.060 1522.819					simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZN..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZN.W.43.1W7BJK

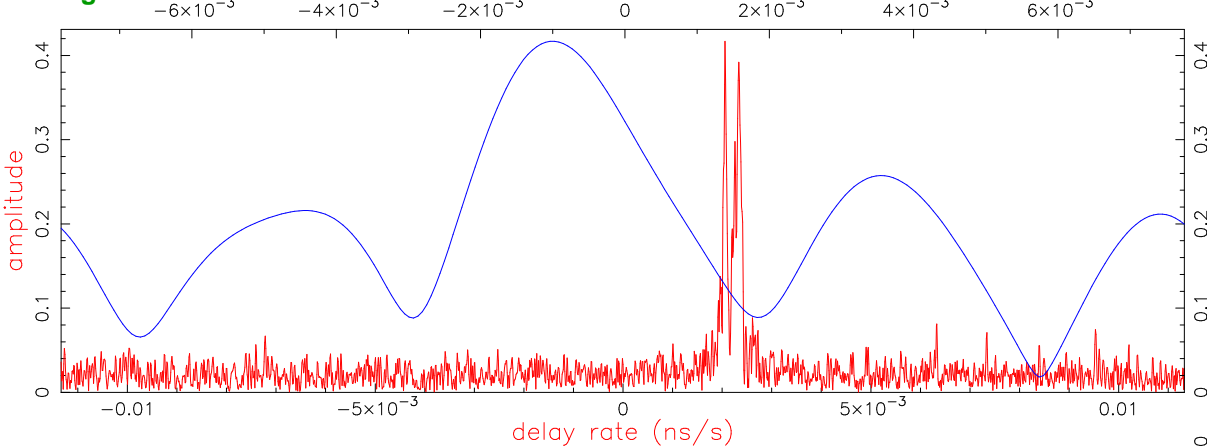
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZN

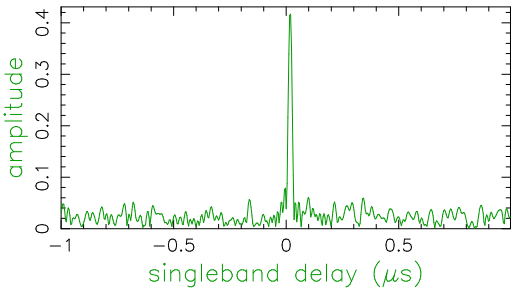
METSAHOV - NOEMA, fgroup W, pol RL

multiband delay (μ s)

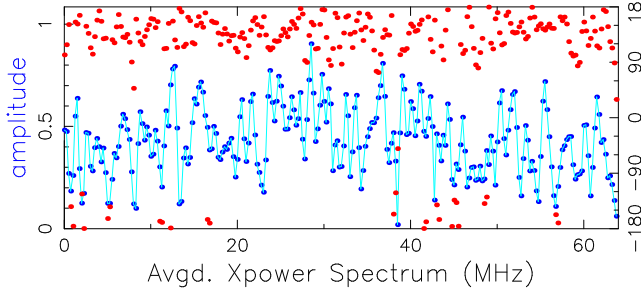


Fringe quality 7

SNR 23.4
 Int time 405.654
 Amp 0.431
 Phase -2.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.017714
 MBD -0.001026
 Fringe rate (Hz)
 0.177460
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

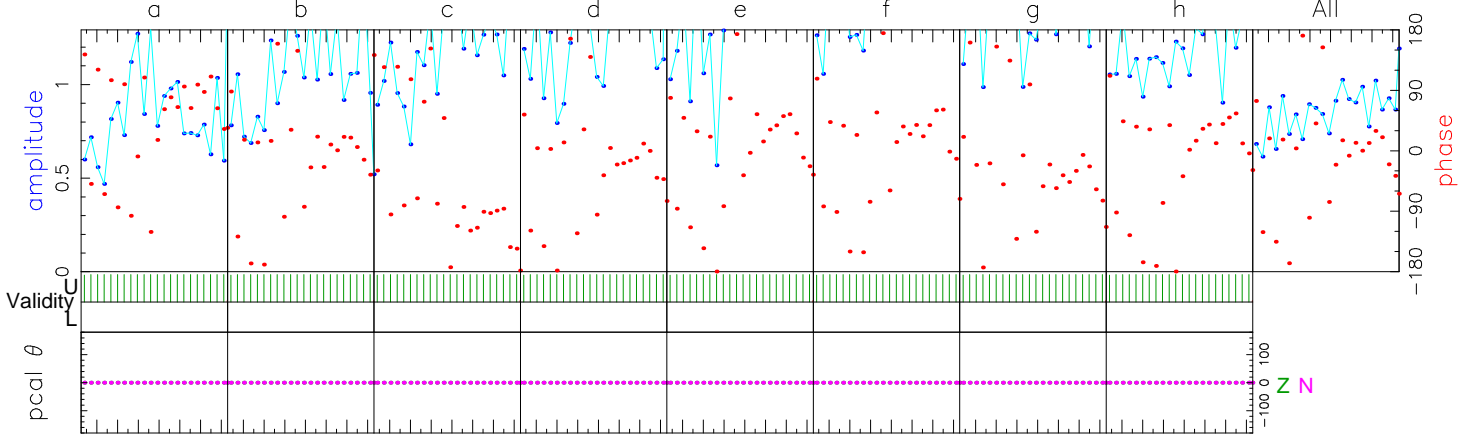


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162854
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	67.9	-4.0	-115.7	-17.4	22.7	21.0	-44.6	22.1	Phase	-2.4
	0.3	0.5	0.6	0.6	0.8	0.7	0.7	0.6	Ampl.	0.6
	259.6	260.7	261.4	261.8	262.1	261.5	261.6	260.8	Sbd box	261.5
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -4.05265810188E+03 Apriori delay (usec) -4.05267270116E+03 Resid mbdelay (usec) -1.02572E-03 +/- 4.6E-05
 Sband delay (usec) -4.05265498691E+03 Apriori clock (usec) 1.2767431E+01 Resid sbdelay (usec) 1.77143E-02 +/- 3.7E-04
 Phase delay (usec) -4.05267270124E+03 Apriori clockrate (us/s) 7.0100002E-07 Resid phdelay (usec) -7.78850E-08 +/- 1.6E-07
 Delay rate (us/s) -3.25988414338E-01 Apriori rate (us/s) -3.25990474474E-01 Resid rate (us/s) 2.06014E-06 +/- 6.7E-10
 Total phase (deg) -174.5 Apriori accel (us/s/s) 2.22479861090E-05 Resid phase (deg) -2.4 +/- 4.9

RMS Theor. Amplitude 0.431 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 80.0 11.7 Search (2048X32) 0.408 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 102.9 20.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 60.0 6.9 Inc. seg. avg. 0.841 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.6 12.1 Inc. frq. avg. 0.592 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 184.7 el 31.6 pa 2.9 N: az 159.1 el 45.4 pa -14.1 u,v (fr/asec) 1895.060 1522.819 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZN..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZN.W.56.1W7BJK

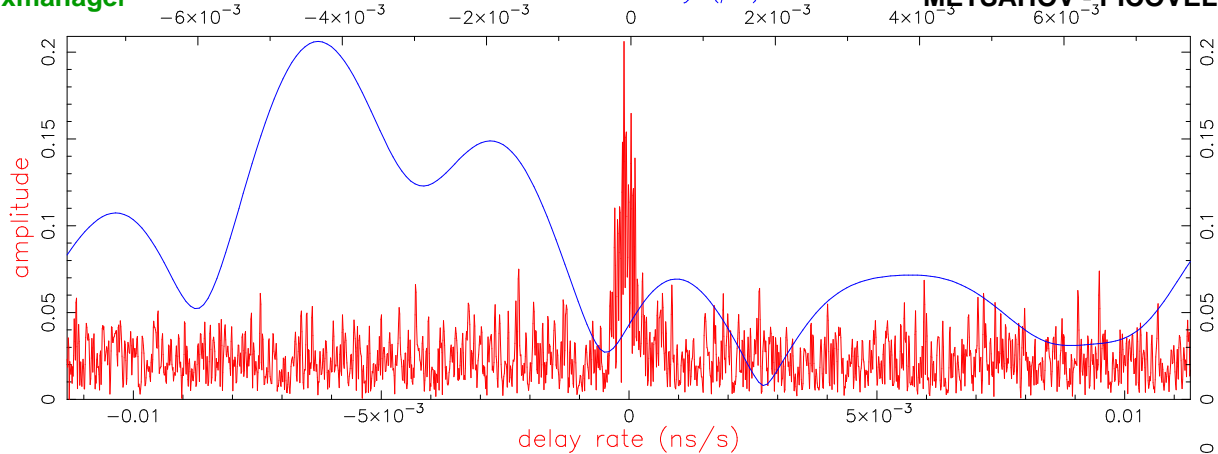
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZP

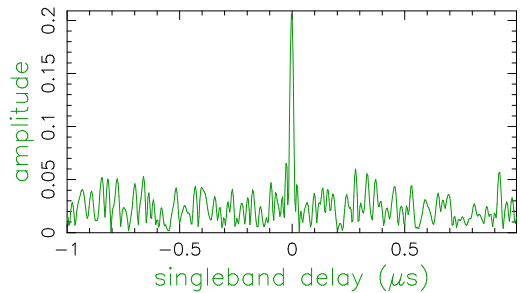
MEṬSAHOV - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

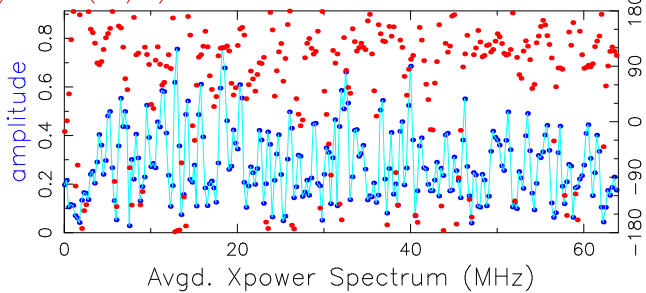


Fringe quality 9

SNR 11.5
 Int time 405.654
 Amp 0.209
 Phase 142.2
 PFD 5.5e-22
 Delays (us)
 SBD -0.002401
 MBD -0.004303
 Fringe rate (Hz)
 -0.008360
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

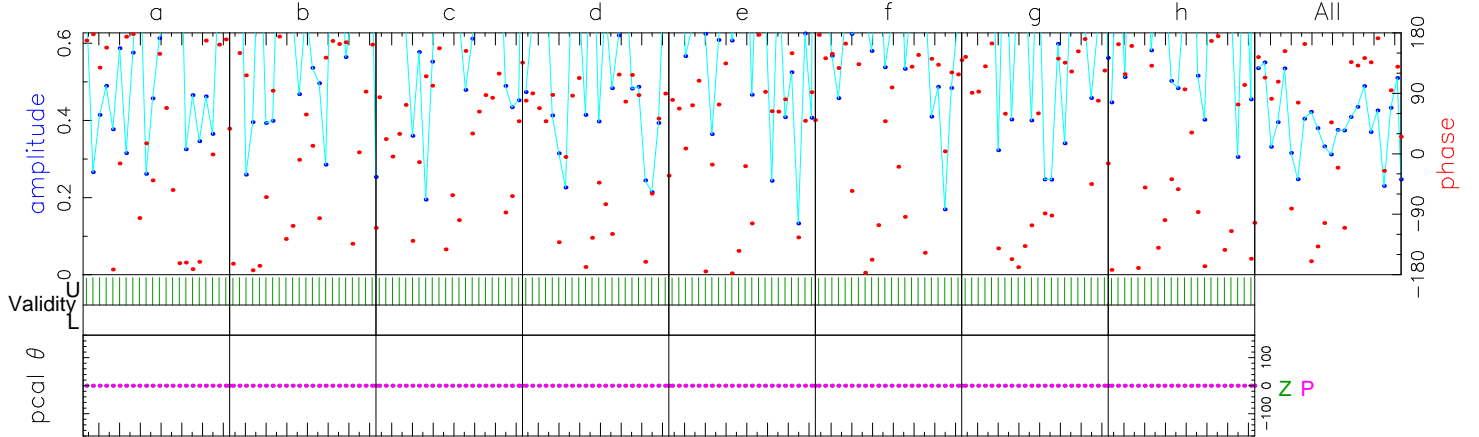


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162843
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-173.7	177.2	66.3	92.3	94.0	156.8	137.2	-174.0	Phase	142.2
	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	Ampl.	0.3
	254.9	256.5	256.8	256.6	257.5	257.2	257.1	256.2	Sbd box	256.4
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.90984170254E+03	Apriori delay (usec)	-4.90983739978E+03	Resid mbdelay (usec)	-4.30276E-03	+/-	9.4E-05
Sband delay (usec)	-4.90983980053E+03	Apriori clock (usec)	2.1474075E-01	Resid sbdelay (usec)	-2.40075E-03	+/-	7.5E-04
Phase delay (usec)	-4.90983739519E+03	Apriori clockrate (us/s)	6.1599998E-07	Resid phdelay (usec)	4.58427E-06	+/-	3.2E-07
Delay rate (us/s)	-5.48283348669E-01	Apriori rate (us/s)	-5.48283251614E-01	Resid rate (us/s)	-9.70547E-08	+/-	1.4E-09
Total phase (deg)	-79.9	Apriori accel (us/s/s)	2.71195823753E-05	Resid phase (deg)	142.2	+/-	10.0

ph/seg (deg)	77.3	Theor.	23.9	Amplitude	0.209 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	100.2	Search (2048X32)	0.201	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	51.5	Inc. seg. avg.	0.368	Inc. frq. avg.	0.265	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.7	Inc. frq. avg.	0.265			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 184.7 el 31.6 pa 2.9 P: az 142.4 el 48.6 pa -28.6 u,v (fr/asec) 3174.851 2419.302 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZP..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZP.W.14.1W7BJK

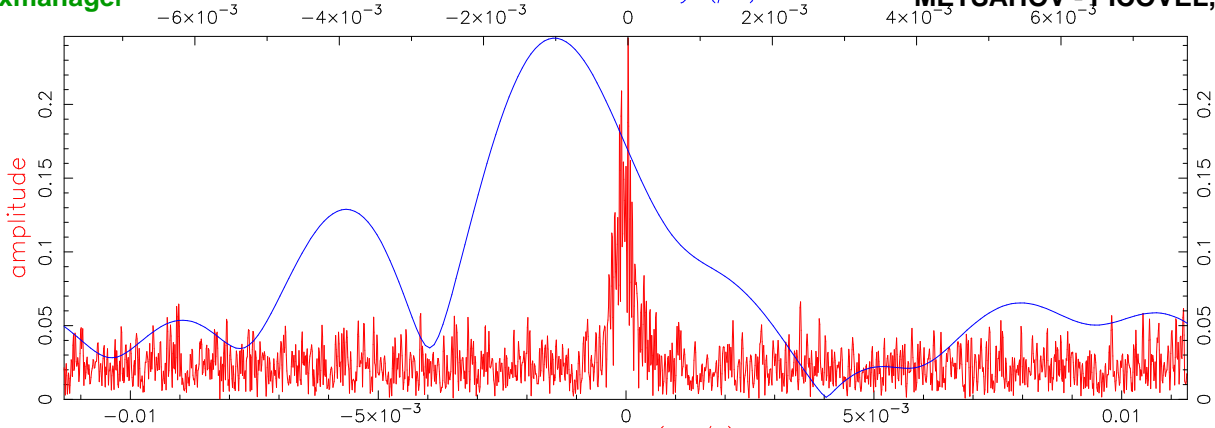
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZP

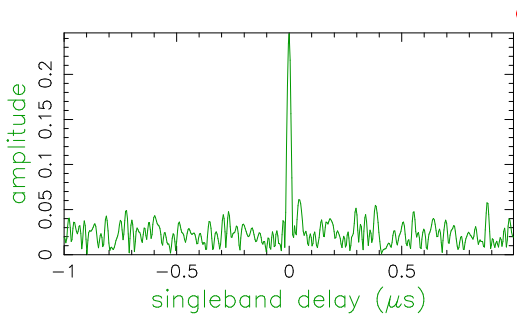
MEṬSAHOV - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

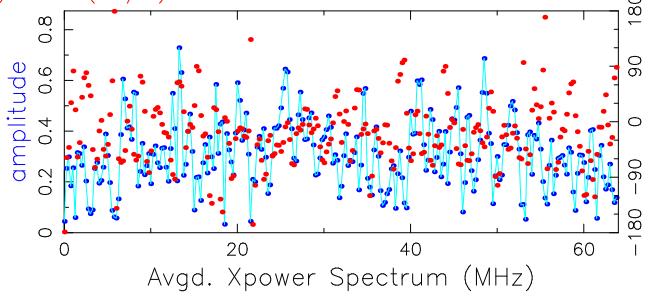


Fringe quality 9

SNR 13.6
 Int time 405.654
 Amp 0.246
 Phase -22.0
 PFD 4.2e-33
 Delays (us)
 SBD -0.000949
 MBD -0.001038
 Fringe rate (Hz)
 0.003579
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

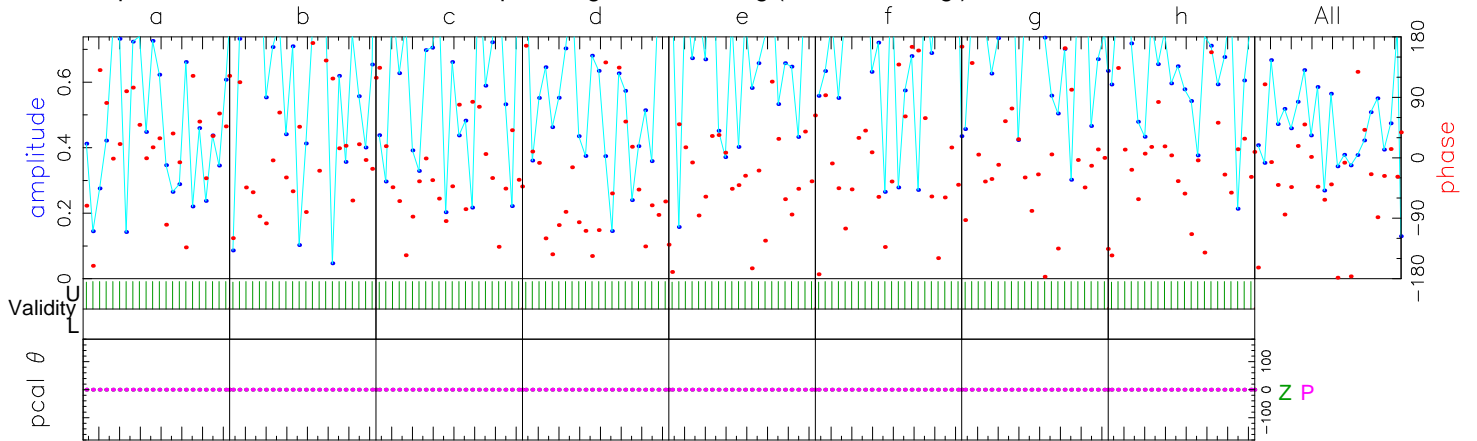


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162847
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	34.2	-28.1	-39.7	-93.6	-24.4	-19.2	-6.4	-8.5	Phase	-22.0
	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Ampl.	0.3
	254.5	255.7	255.7	257.0	257.0	256.8	257.1	256.3	Sbd box	256.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.90983843823E+03	Apriori delay (usec)	-4.90983739978E+03	Resid mbdelay (usec)	-1.03846E-03	+/-	8.0E-05
Sband delay (usec)	-4.90983834828E+03	Apriori clock (usec)	2.1474075E-01	Resid sbdelay (usec)	-9.48500E-04	+/-	6.4E-04
Phase delay (usec)	-4.90983740049E+03	Apriori clockrate (us/s)	6.1599998E-07	Resid phdelay (usec)	-7.09214E-07	+/-	2.7E-07
Delay rate (us/s)	-5.48283210068E-01	Apriori rate (us/s)	-5.48283251614E-01	Resid rate (us/s)	4.15463E-08	+/-	1.2E-09
Total phase (deg)	-244.1	Apriori accel (us/s/s)	2.71195823753E-05	Resid phase (deg)	-22.0	+/-	8.5

ph/seg (deg)	RMS 77.5	Theor. 20.3	Amplitude Search (2048X32)	0.240	0.246 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	104.8	35.4	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	38.9	12.0	Inc. seg. avg.	0.447	0.447	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	20.2	20.9	Inc. frq. avg.	0.280	0.280	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
Z: az 184.7 el 31.6 pa 2.9	P: az 142.4 el 48.6 pa -28.6	u, v (fr/asec) 3174.851 2419.302				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/c211a/v2/1234/No0103/ZP..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZP.W.29.1W7BJK simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

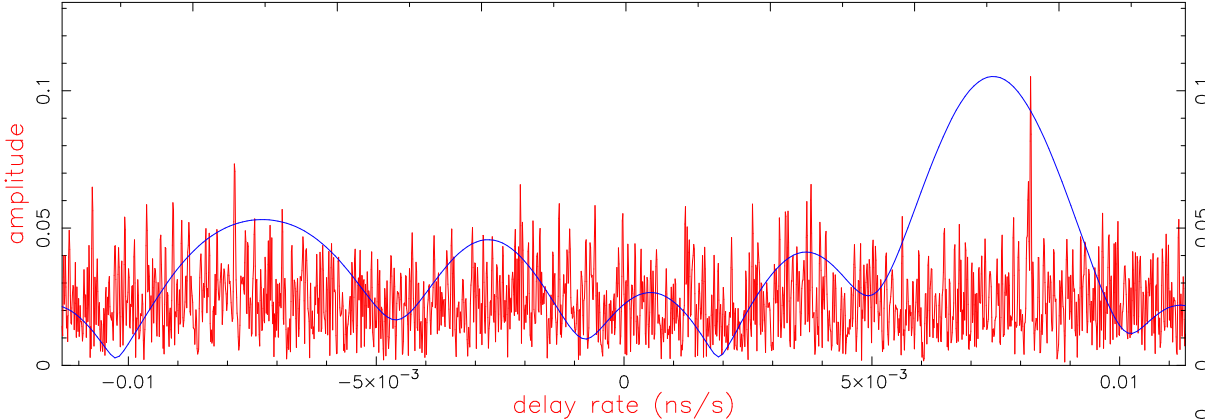
3C273.1W7BJK, No0103, ZP

MEṬSAHOV - PICOVEL, fgroup W, pol LR

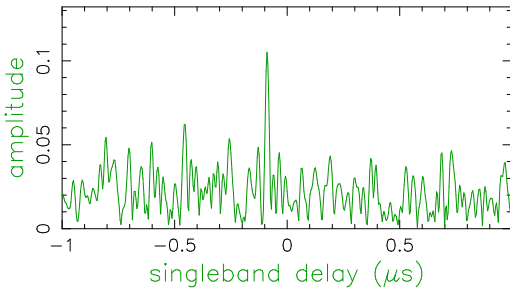
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

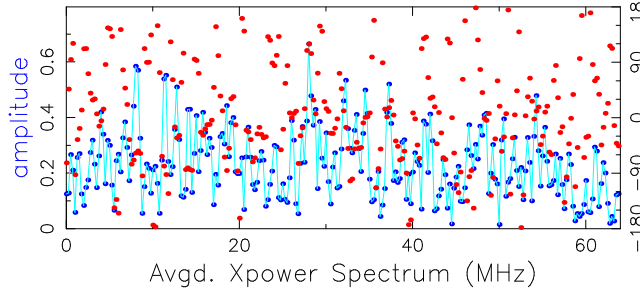
Fringe quality 0



SNR 5.8
 Int time 405.654
 Amp 0.132
 Phase -12.2
 PFD 8.0e-01
 Delays (us)
 SBD -0.089224
 MBD 0.005107
 Fringe rate (Hz)
 0.707727
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



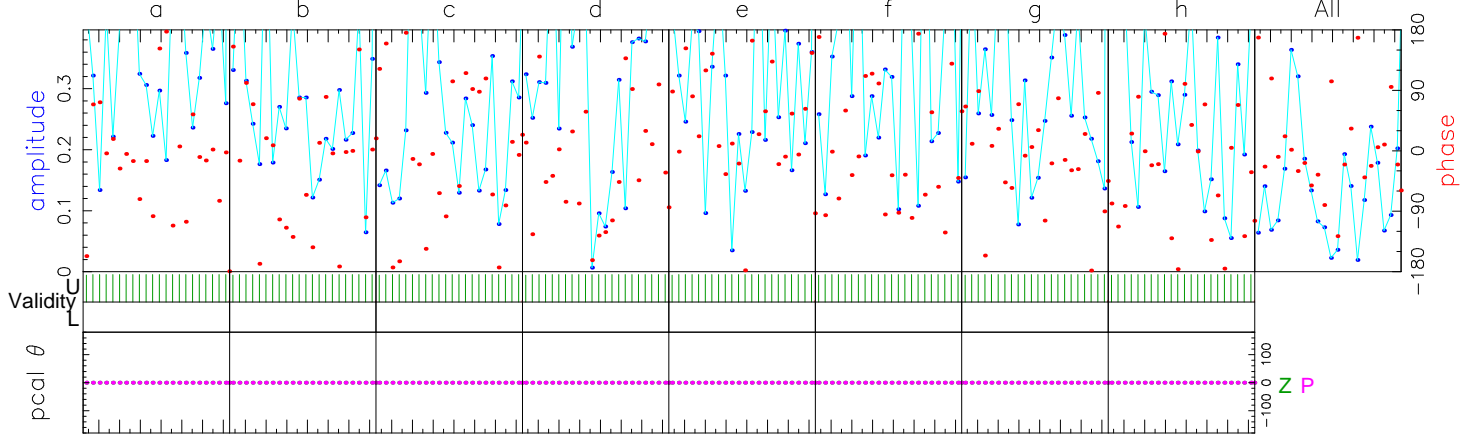
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

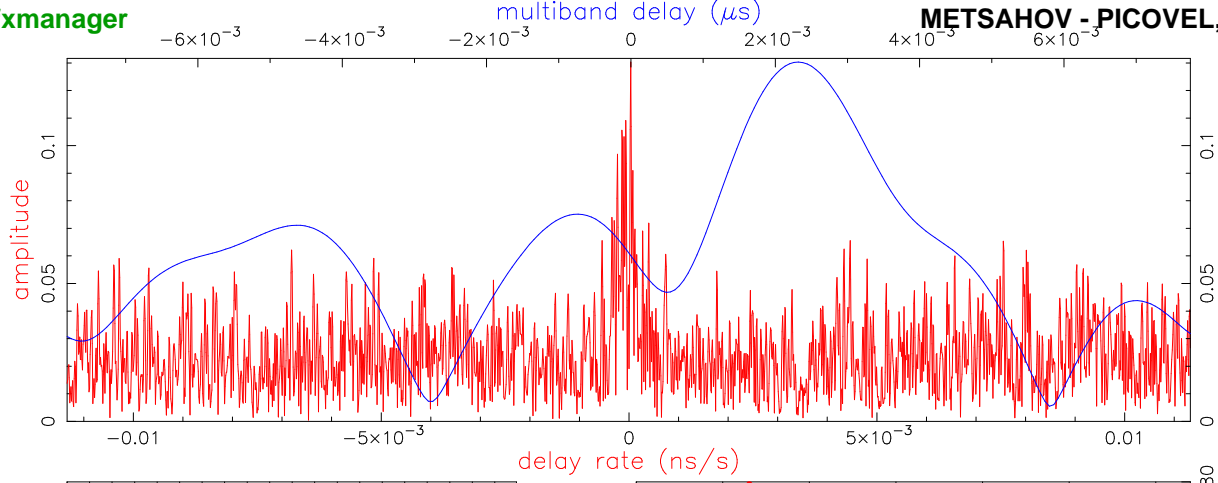
Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162850
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

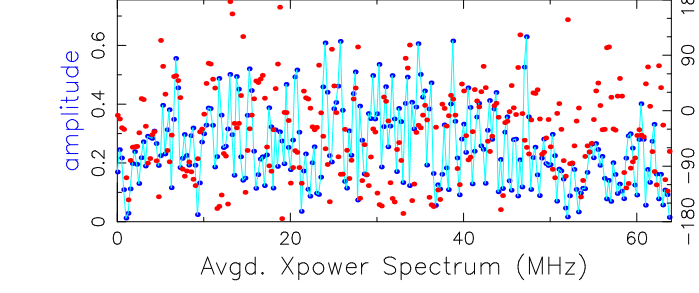
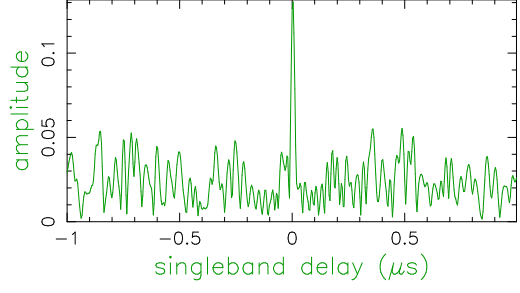


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-26.6	11.0	-16.4	-18.1	47.5	-40.5	-0.9	-47.5	Phase	-12.2
	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	36.1	46.7	168.4	342.2	335.7	176.6	313.3	147.3	Sbd box	234.2
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.90992604281E+03		Apriori delay (usec)		-4.90983739978E+03		Resid mbdelay (usec)		5.10697E-03	+/- 1.9E-04
Sband delay (usec)	-4.90992662403E+03		Apriori clock (usec)		2.1474075E-01		Resid sbdelay (usec)		-8.92242E-02	+/- 1.5E-03
Phase delay (usec)	-4.90983740017E+03		Apriori clockrate (us/s)		6.1599998E-07		Resid phdelay (usec)		-3.92982E-07	+/- 6.4E-07
Delay rate (us/s)	-5.48275035605E-01		Apriori rate (us/s)		-5.48283251614E-01		Resid rate (us/s)		8.21601E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.71195823753E-05		Resid phase (deg)		-12.2	+/- 19.7

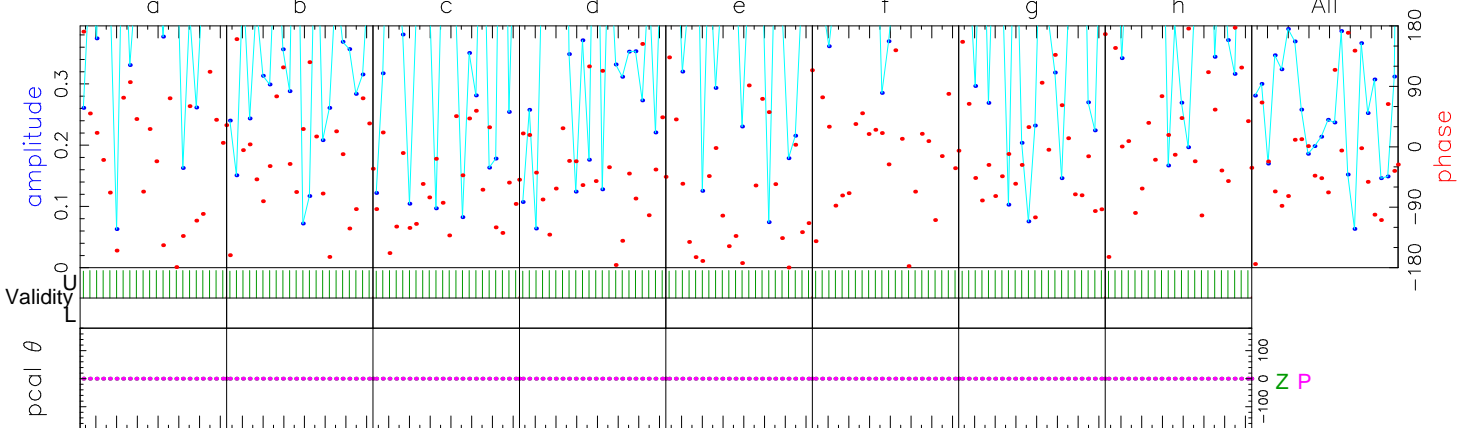
ph/seg (deg) 76.4 47.3 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 89.7 82.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.0 27.9 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.4 48.7 Inc. frq. avg. 0.134 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 184.7 el 31.6 pa 2.9 P: az 142.4 el 48.6 pa -28.6 u,v (fr/asec) 3174.851 2419.302 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZP..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZP.W.42.1W7BJK



Fringe quality 0
SNR 7.3
Int time 405.654
Amp 0.132
Phase -36.3
PFD 1.3e-04
Delays (us)
SBD 0.002613
MBD 0.002312
Fringe rate (Hz) 0.003328
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162853
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:P	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		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.90983508769E+03	Apriori delay (usec)	-4.90983739978E+03	Resid mbdelay (usec)	2.31209E-03	+/-	1.5E-04
Sband delay (usec)	-4.90983478653E+03	Apriori clock (usec)	2.1474075E-01	Resid sbdelay (usec)	2.61325E-03	+/-	1.2E-03
Phase delay (usec)	-4.90983740095E+03	Apriori clockrate (us/s)	6.1599998E-07	Resid phdelay (usec)	-1.17122E-06	+/-	5.1E-07
Delay rate (us/s)	-5.48283212981E-01	Apriori rate (us/s)	-5.48283251614E-01	Resid rate (us/s)	3.86334E-08	+/-	2.2E-09
Total phase (deg)	-258.4	Apriori accel (us/s/s)	2.71195823753E-05	Resid phase (deg)	-36.3	+/-	15.8

ph/seg (deg)	80.2	Theor.	37.9	Amplitude	0.132 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	118.7	Search (2048X32)	0.124	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	54.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	48.4	Inc. seg. avg.	0.212	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.168	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	

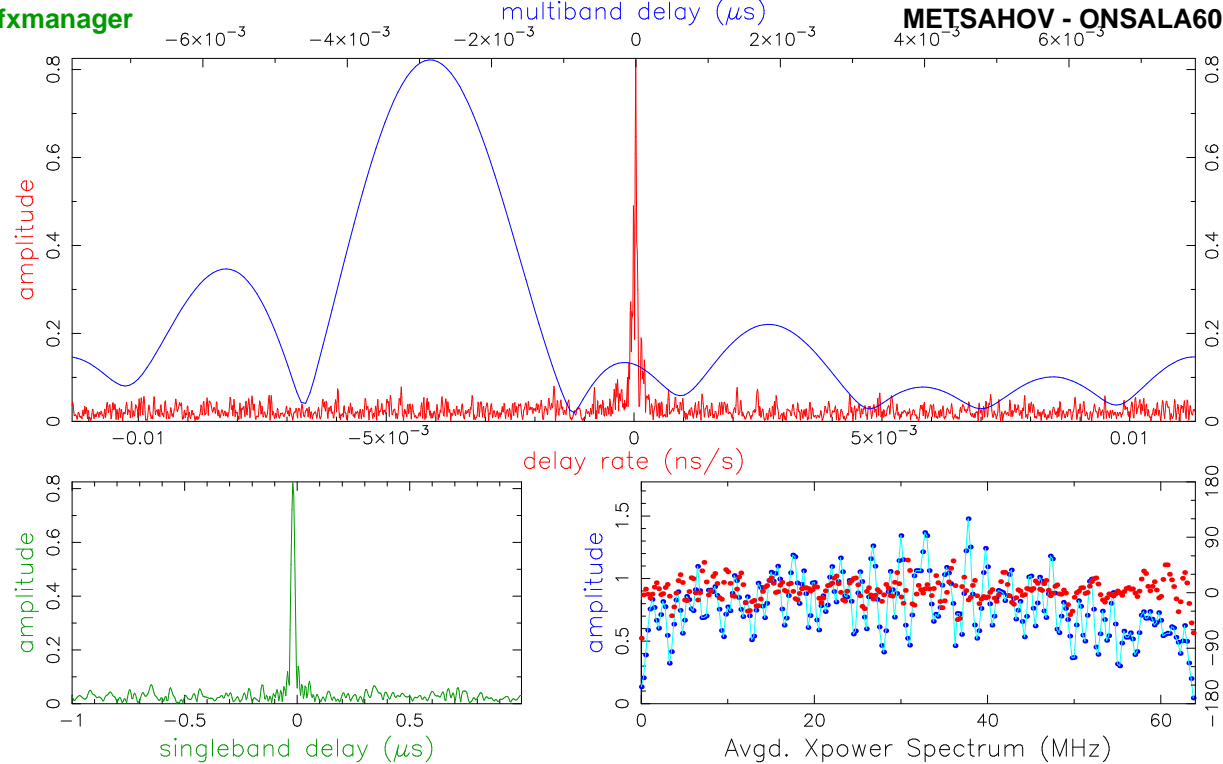
Z: az 184.7 el 31.6 pa 2.9 P: az 142.4 el 48.6 pa -28.6 u,v (fr/asec) 3174.851 2419.302 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZP..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZP.W.55.1W7BJK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZX

METSAHOV - ONSALA60, fgroup W, pol LL

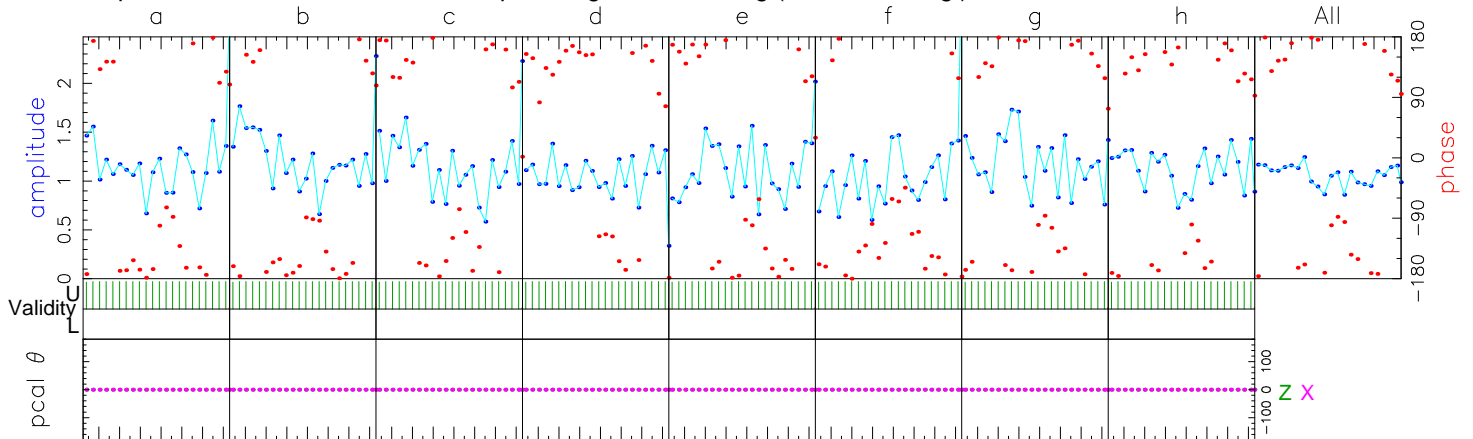


Fringe quality 7

SNR 45.5
 Int time 405.654
 Amp 0.825
 Phase -179.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.018684
 MBD -0.002835
 Fringe rate (Hz) 0.002968
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162843
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-175.3	-171.7	173.7	156.7	-176.6	-147.7	-173.0	166.2		-179.0		
	0.9	1.0	0.8	0.8	0.8	0.7	0.9	0.9	Ampl.	0.8		
	252.4	252.0	251.7	252.5	253.0	252.1	252.0	251.8	Sbd box	252.2		
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
X	1000	1000	1000	1000	1000	1000	1000	1000				
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec)(sbd)	-8.71359640091E+02		Apriori delay (usec)		-8.71341179865E+02		Resid mbdelay (usec)		-2.83523E-03	+/- 2.4E-05		
Sband delay (usec)	-8.71359863615E+02		Apriori clock (usec)		-5.7093224E+01		Resid sbdelay (usec)		-1.86838E-02	+/- 1.9E-04		
Phase delay (usec)	-8.71341185638E+02		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		-5.77245E-06	+/- 8.1E-08		
Delay rate (us/s)	-1.76292752562E-01		Apriori rate (us/s)		-1.76292787021E-01		Resid rate (us/s)		3.44586E-08	+/- 3.5E-10		
Total phase (deg)			Apriori accel (us/s/s)		4.42721504008E-06		Resid phase (deg)		-179.0	+/- 2.5		
	RMS	Theor.	Amplitude	0.825 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	41.7	6.0	Search (2048X32)	0.816		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	31.8	10.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.0	3.6	Inc. seg. avg.	1.062		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	11.3	6.2	Inc. frq. avg.	0.848		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 184.7 el 31.6 pa 2.9	X: az 169.7 el 34.1 pa -4.9		u, v (fr/asec) 1015.518 237.664						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c211a/v2/1234/No0103/ZX..1W7BJK		Output file: /Exps/c211a/v2/1234/No0103/ZX.W.10.1W7BJK									

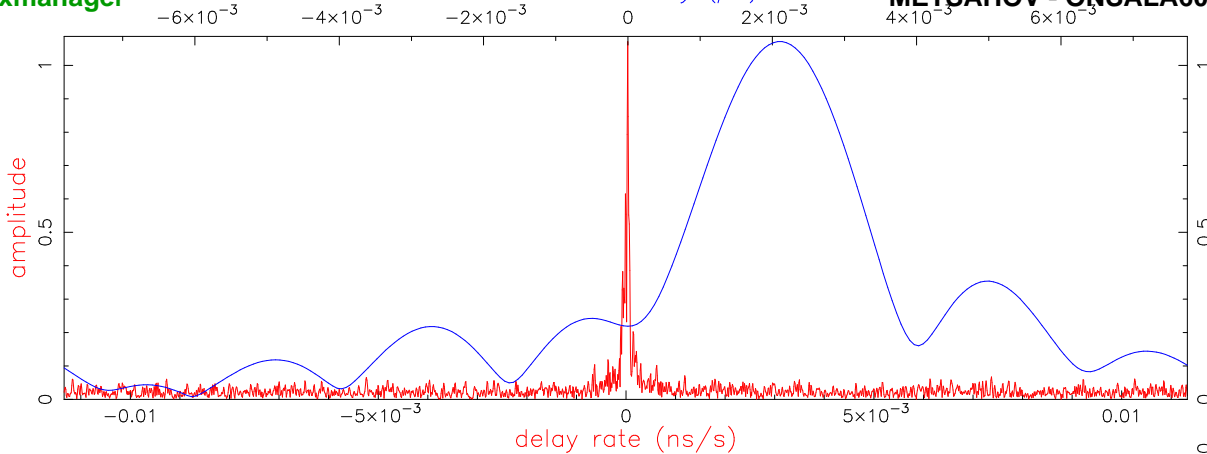
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZX

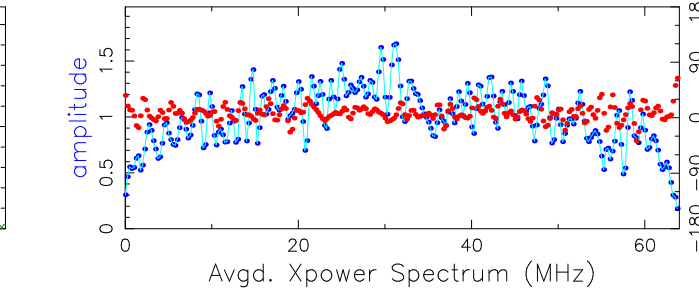
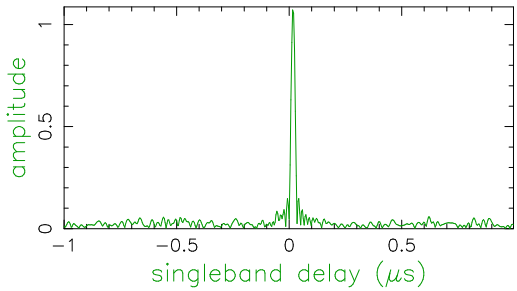
METSAHOV - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



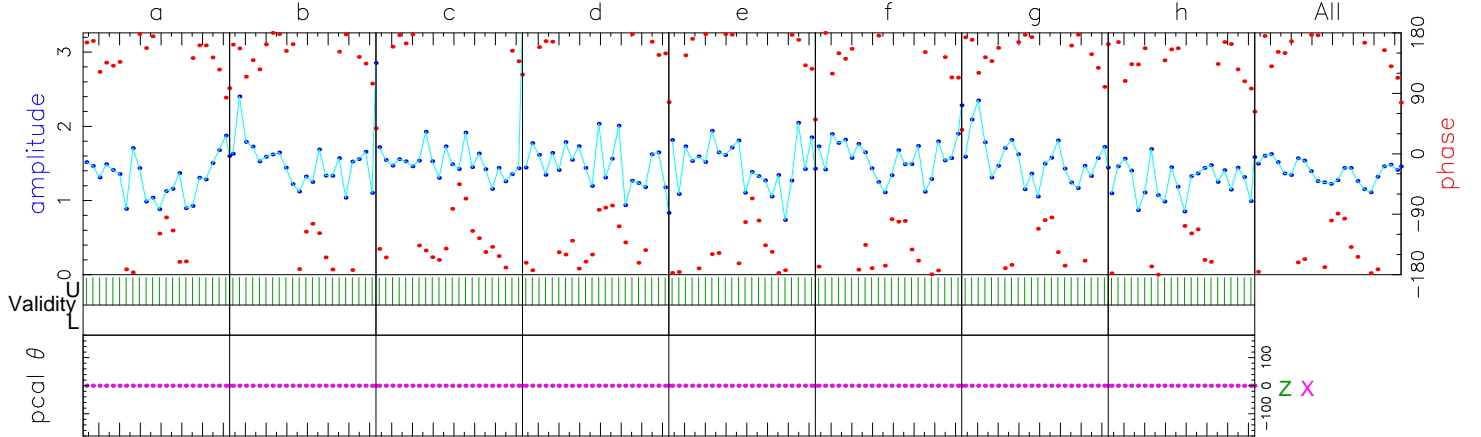
Fringe quality 5

SNR 59.9
 Int time 405.654
 Amp 1.087
 Phase -178.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.017247
 MBD 0.002139
 Fringe rate (Hz) 0.002975
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162846
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	161.3	166.9	-149.6	-156.2	-171.9	178.4	173.0	163.4	Phase	-178.9
	1.0	1.2	1.1	1.1	1.2	1.1	1.2	1.0	Ampl.	1.1
	261.2	261.7	261.7	261.6	261.3	261.5	261.6	261.0	Sbd box	261.4
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-8.71323415747E+02	Apriori delay (usec)	-8.71341179865E+02	Resid mbdelay (usec)	2.13912E-03	+/-	1.8E-05
Sband delay (usec)	-8.71323932865E+02	Apriori clock (usec)	-5.7093224E+01	Resid sbdelay (usec)	1.72470E-02	+/-	1.4E-04
Phase delay (usec)	-8.71341185634E+02	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-5.76815E-06	+/-	6.2E-08
Delay rate (us/s)	-1.76292752489E-01	Apriori rate (us/s)	-1.76292787021E-01	Resid rate (us/s)	3.45316E-08	+/-	2.6E-10
Total phase (deg)	-263.0	Apriori accel (us/s/s)	4.42721504008E-06	Resid phase (deg)	-178.9	+/-	1.9

ph/seg (deg)	41.5	Theor.	4.6	Amplitude	1.087 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	30.6		8.0	Search (2048X32)	1.057	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.0		2.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	8.5		4.7	Inc. seg. avg.	1.384	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	1.119	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 184.7 el 31.6 pa 2.9 X: az 169.7 el 34.1 pa -4.9 u,v (fr/asec) 1015.518 237.664 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZX..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZX.W.26.1W7BJK

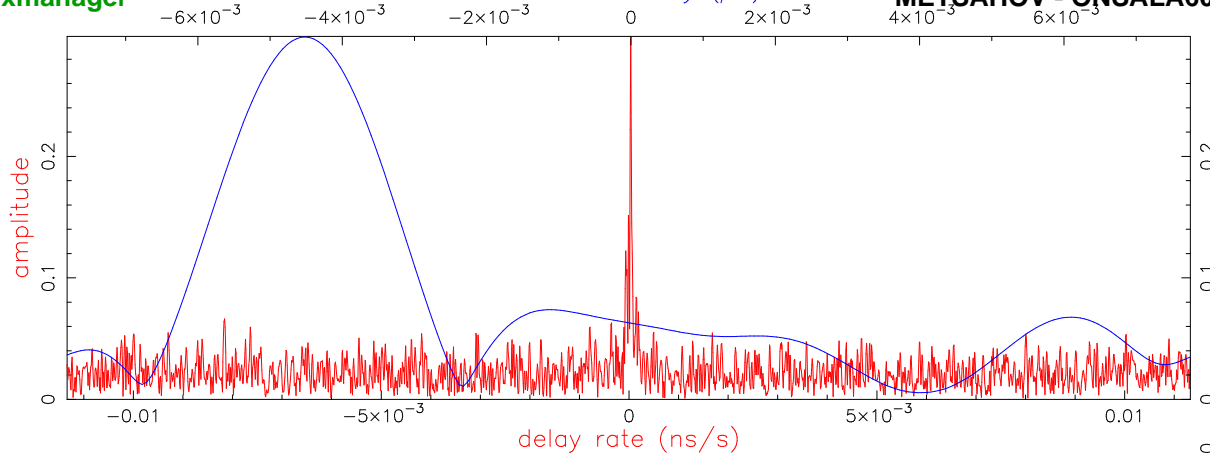
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZX

METSAHOV - ONSALA60, fgroup W, pol LR

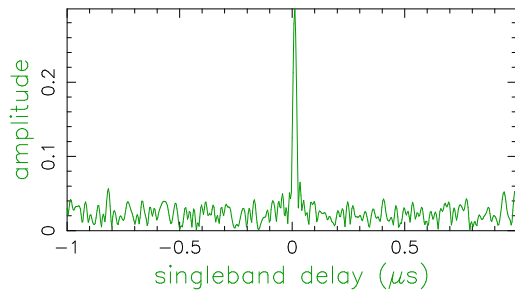
multiband delay (μ s)



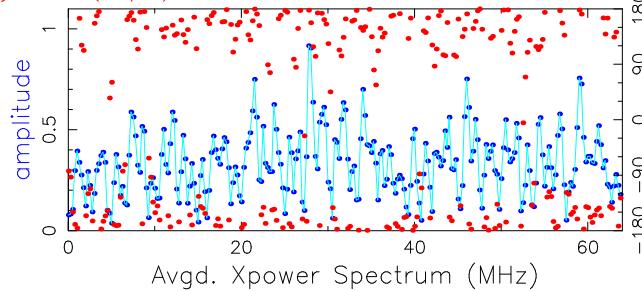
Fringe quality 9

SNR 16.5
Int time 405.654
Amp 0.299
Phase -10.0
PFD 0.0e+00
Delays (us)
SBD 0.011207
MBD -0.004528
Fringe rate (Hz) 0.003047
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

delay rate (ns/s)

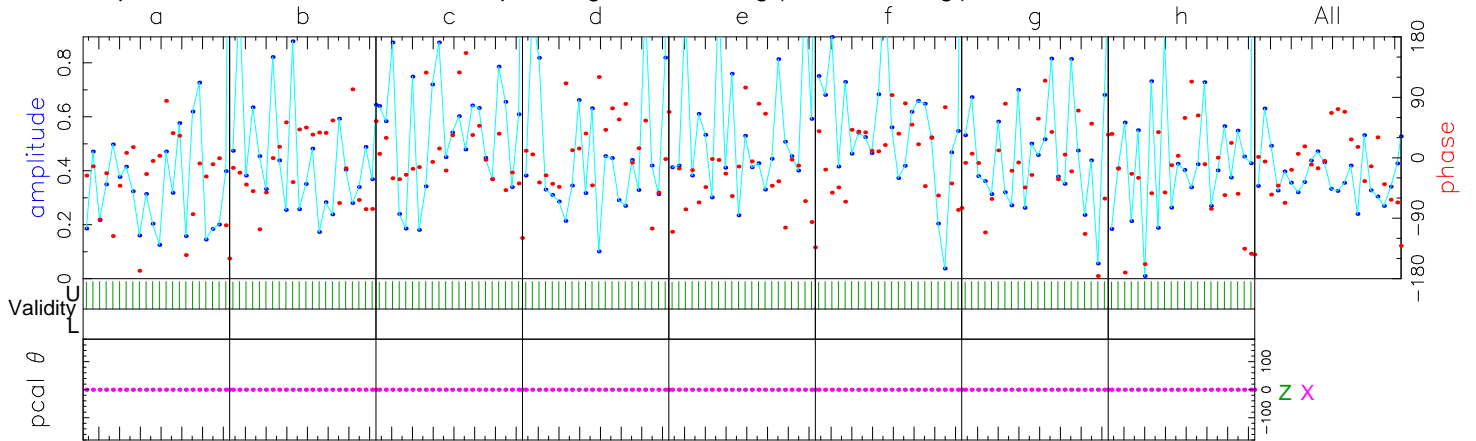


singleband delay (μ s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 210014.31
Stop 210700.84
FRT 210331.00
Corr/FF/build
2021:287:124222
2021:287:162850
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-22.4	-20.5	4.9	7.5	-39.0	5.3	0.9	-30.3	Phase	-10.0
	0.2	0.3	0.4	0.3	0.4	0.4	0.3	0.2	Ampl.	0.3
	267.9	259.9	260.0	259.1	260.8	260.0	259.5	260.0	Sbd box	259.9
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

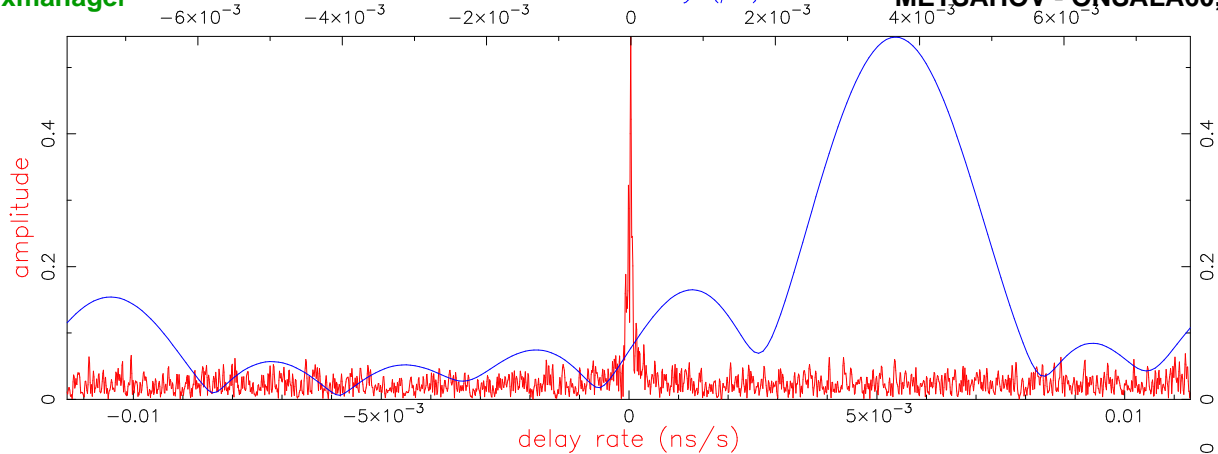
Group delay (usec)(sbd)	-8.71330082716E+02	Apriori delay (usec)	-8.71341179865E+02	Resid mbdelay (usec)	-4.52785E-03	+/-	6.6E-05
Sband delay (usec)	-8.71329972365E+02	Apriori clock (usec)	-5.7093224E+01	Resid sbdelay (usec)	1.12075E-02	+/-	5.2E-04
Phase delay (usec)	-8.71341180189E+02	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-3.23805E-07	+/-	2.2E-07
Delay rate (us/s)	-1.76292751648E-01	Apriori rate (us/s)	-1.76292787021E-01	Resid rate (us/s)	3.53726E-08	+/-	9.6E-10
Total phase (deg)	-94.1	Apriori accel (us/s/s)	4.42721504008E-06	Resid phase (deg)	-10.0	+/-	7.0

ph/seg (deg)	41.6	Theor.	16.7	Search (2048X32)	0.293	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	41.2		29.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	20.0		9.8	Inc. seg. avg.	0.369	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	23.3		17.2	Inc. frq. avg.	0.308	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 184.7 el 31.6 pa 2.9 X: az 169.7 el 34.1 pa -4.9 u,v (fr/asec) 1015.518 237.664 simultaneous interpolator

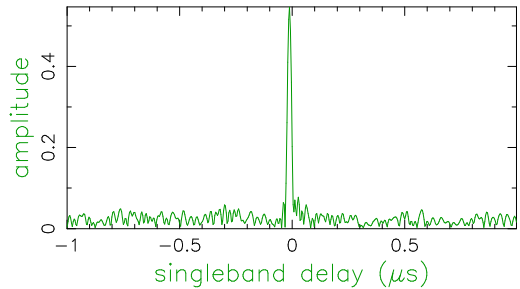
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZX..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZX.W.40.1W7BJK

multiband delay (μ s)

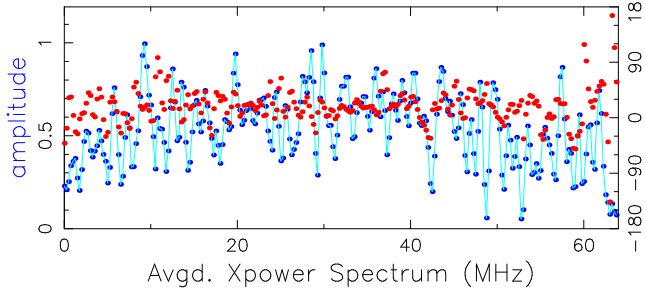


Fringe quality 7

SNR 30.1
 Int time 405.654
 Amp 0.547
 Phase -165.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.012346
 MBD 0.003652
 Fringe rate (Hz)
 0.002994
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

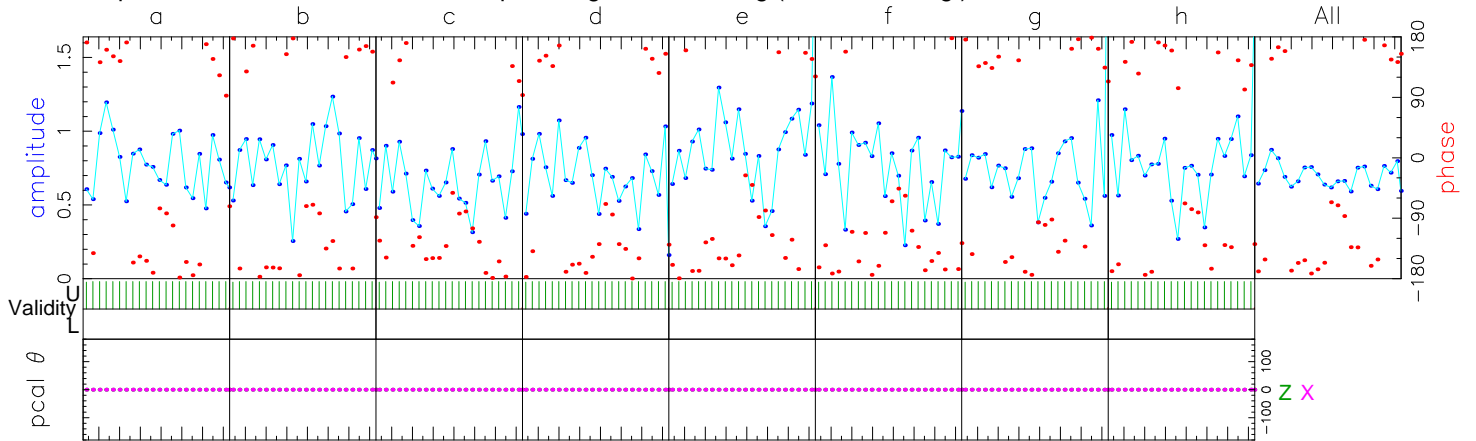


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162853
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-177.9	-165.1	-159.5	-173.2	-153.4	-143.5	-175.2	-179.5	Phase	-165.5
	0.6	0.6	0.4	0.5	0.6	0.6	0.6	0.5	Ampl.	0.6
	254.2	253.9	253.7	253.9	254.1	254.0	253.7	253.5	Sbd box	253.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.71353153122E+02	Apriori delay (usec)	-8.71341179865E+02	Resid mbdelay (usec)	3.65174E-03	+/-	3.6E-05
Sband delay (usec)	-8.71353526365E+02	Apriori clock (usec)	-5.7093224E+01	Resid sbdelay (usec)	-1.23465E-02	+/-	2.9E-04
Phase delay (usec)	-8.71341185202E+02	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-5.33624E-06	+/-	1.2E-07
Delay rate (us/s)	-1.76292752268E-01	Apriori rate (us/s)	-1.76292787021E-01	Resid rate (us/s)	3.47526E-08	+/-	5.2E-10
Total phase (deg)	-249.6	Apriori accel (us/s/s)	4.42721504008E-06	Resid phase (deg)	-165.5	+/-	3.8

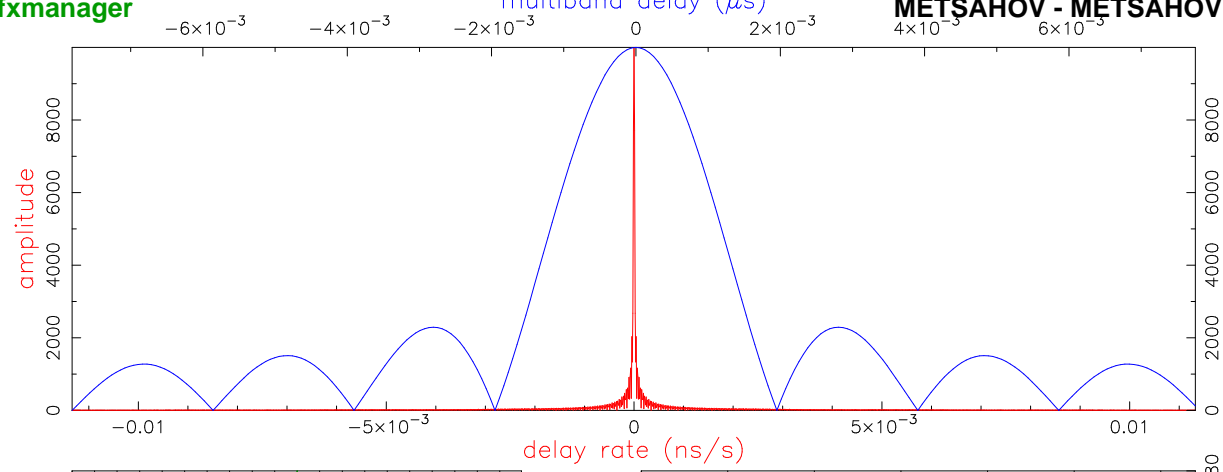
ph/seg (deg)	41.9	Theor.	9.1	Amplitude	0.547 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	31.7	Search (2048X32)	0.529	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	14.0	Inc. seg. avg.	0.694	Inc. frq. avg.	0.556	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	12.1	Inc. frq. avg.	0.556			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
Z: az 184.7 el 31.6 pa 2.9		X: az 169.7 el 34.1 pa -4.9		u,v (fr/asec)	1015.518 237.664	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZZ

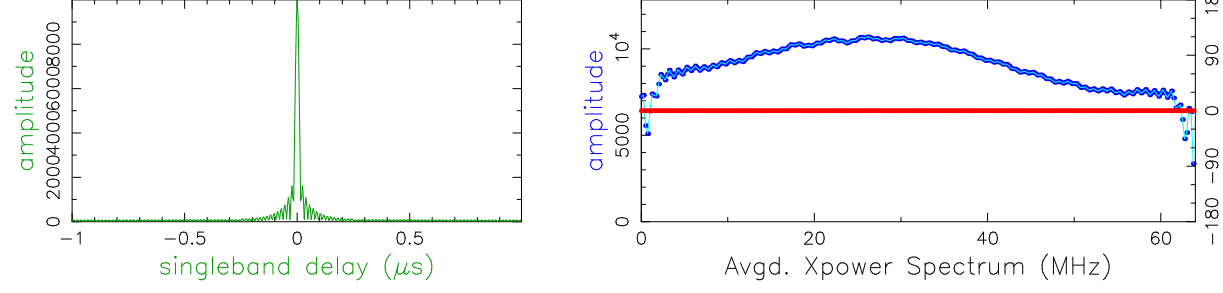
METSAHOV - METSAHOV, fgroup W, pol LL



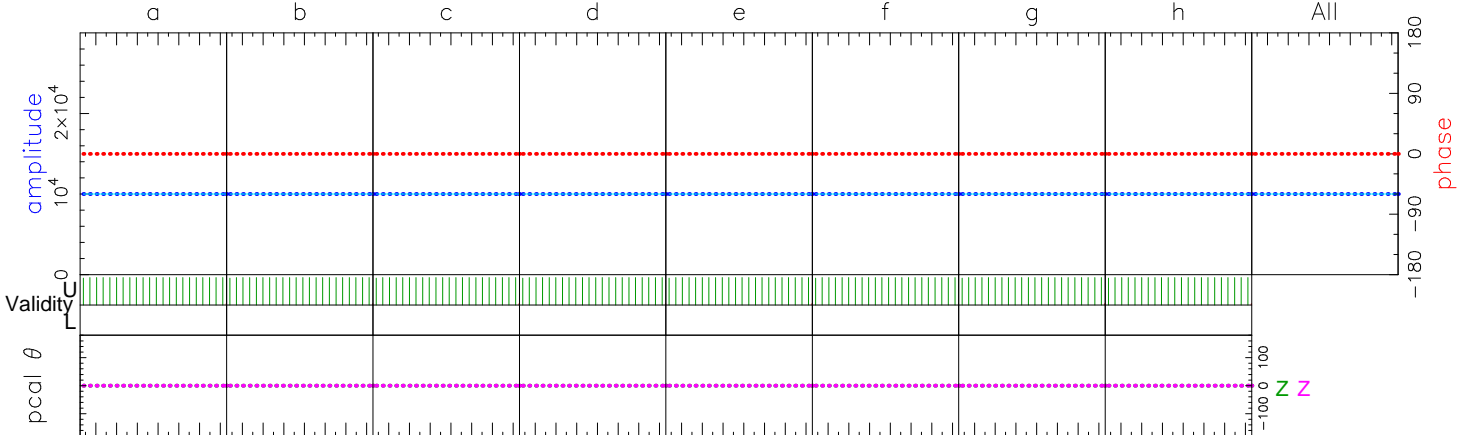
Fringe quality 9

SNR 550776.3
 Int time 405.654
 Amp 9999.996
 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. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162843
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	Ampl.	10000.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.6E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.7E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.9E-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	RMS	Theor.	Amplitude	9999.996 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.996	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	0.0	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	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	9999.996	Data rate(Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 184.7 el 31.6 pa 2.9 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

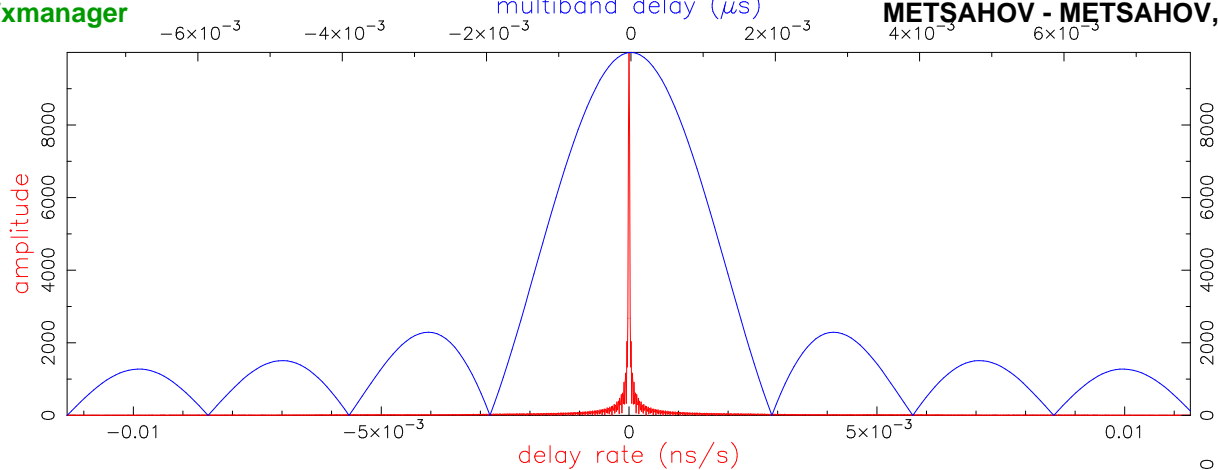
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZZ.W.15.1W7BJK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZZ

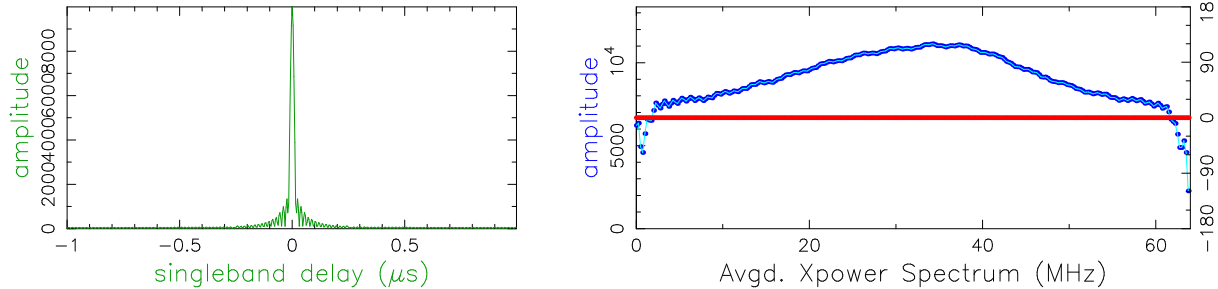
METSAHOV - METSAHOV, fgroup W, pol RR



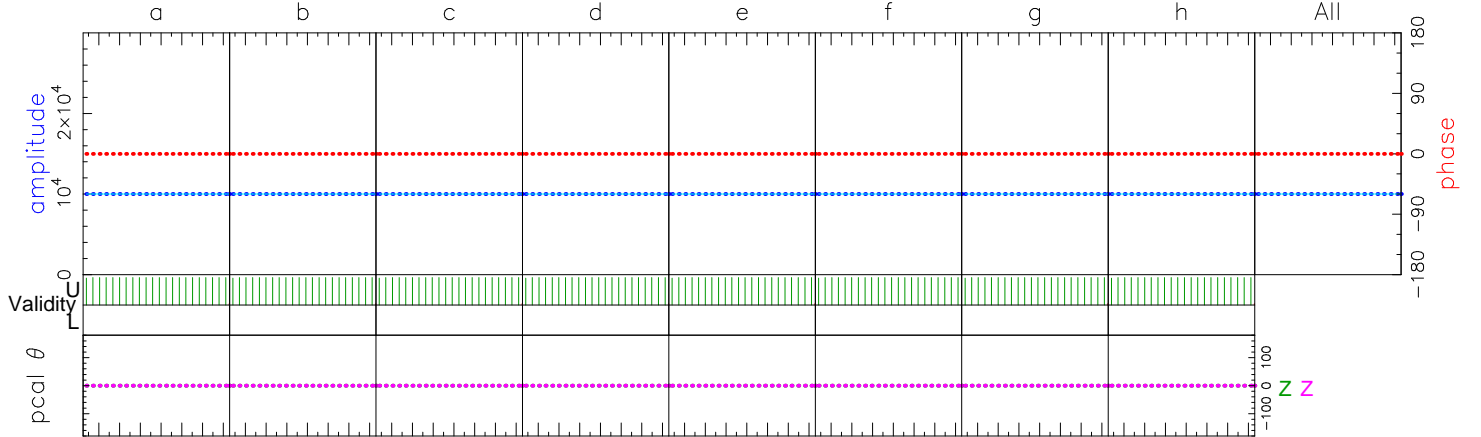
Fringe quality 9

SNR 550776.3
 Int time 405.654
 Amp 9999.996
 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. c211a
 Yr:day 16383
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162847
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	Ampl.	10000.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Apriori delay (usec)	9999.996 +/- 0.018
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Apriori clock (usec)	9999.996
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Apriori clockrate (us/s)	0.000
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Apriori rate (us/s)	9999.996
Total phase (deg)			0.0						Apriori accel (us/s/s)	0.000000000000E+00
									Resid mbdelay (usec)	0.000000E+00
									Resid sbdelay (usec)	0.000000E+00
									Resid phdelay (usec)	0.000000E+00
									Resid rate (us/s)	0.000000E+00
									Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0
 amp/seg (%) 0.0 0.0
 ph/frq (deg) 0.0 0.0
 amp/frq (%) 0.0 0.0

Z: az 184.7 el 31.6 pa 2.9
 Control file: cf_1234_gmva

Z: az 184.7 el 31.6 pa 2.9
 Input file: /Exps/c211a/v2/1234/No0103/ZZ..1W7BJK

u,v (fr/asec) 0.000 0.000
 Output file: /Exps/c211a/v2/1234/No0103/ZZ.W.28.1W7BJK

simultaneous interpolator

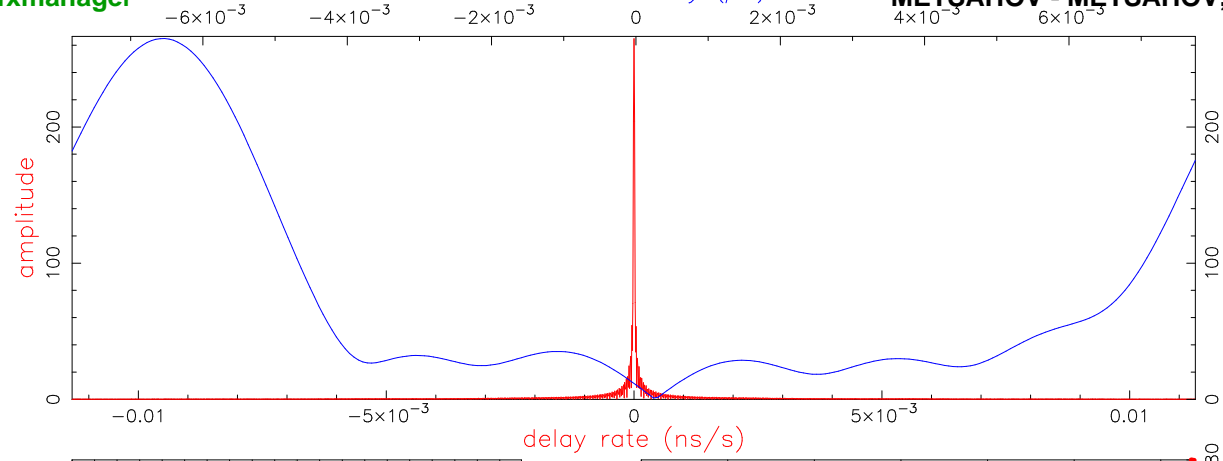
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZZ

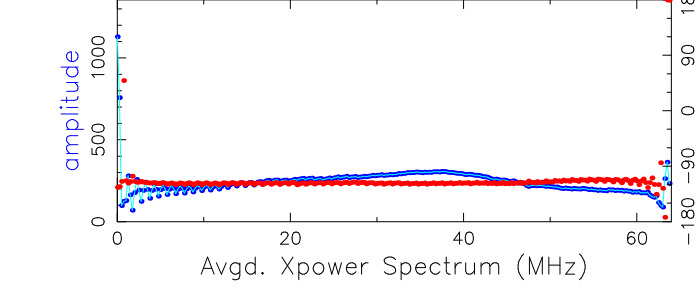
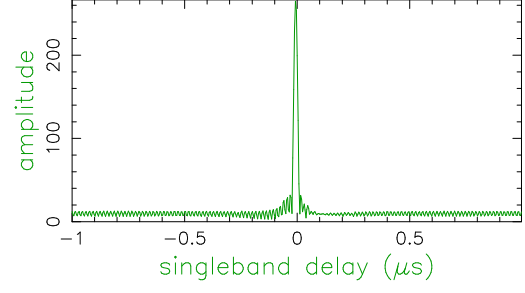
METSAHOV - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



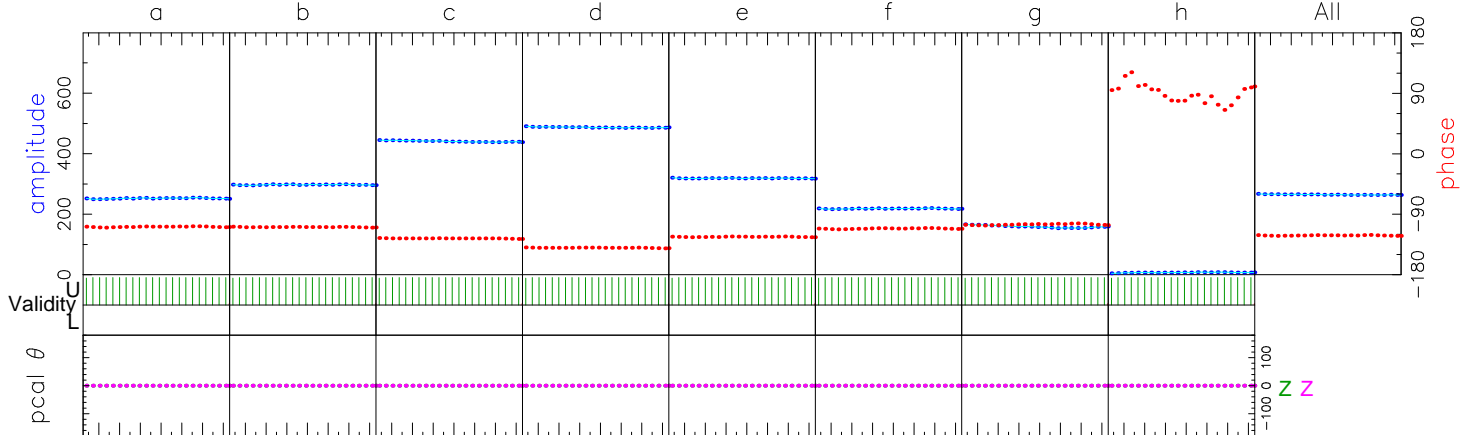
Fringe quality 5

SNR 14678.3
 Int time 405.654
 Amp 266.501
 Phase -121.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.006798
 MBD -0.006523
 Fringe rate (Hz)
 0.000012
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
 Stop 210700.84
 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162850
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-108.7	-109.1	-125.9	-139.9	-123.6	-111.3	-105.2	88.4	Phase	-121.5
	252.4	297.4	441.0	487.1	318.9	218.5	159.1	7.1	Ampl.	272.7
	255.3	255.1	255.2	255.2	255.5	255.7	256.2	257.4	Sbd box	255.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.52321875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-6.52322E-03	+/- 7.4E-08
Sband delay (usec)	-6.79825000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-6.79825E-03	+/- 5.9E-07
Phase delay (usec)	-3.91716866888E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.91717E-06	+/- 2.5E-10
Delay rate (us/s)	1.35334505341E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.35335E-10	+/- 1.1E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-121.5	+/- 0.0

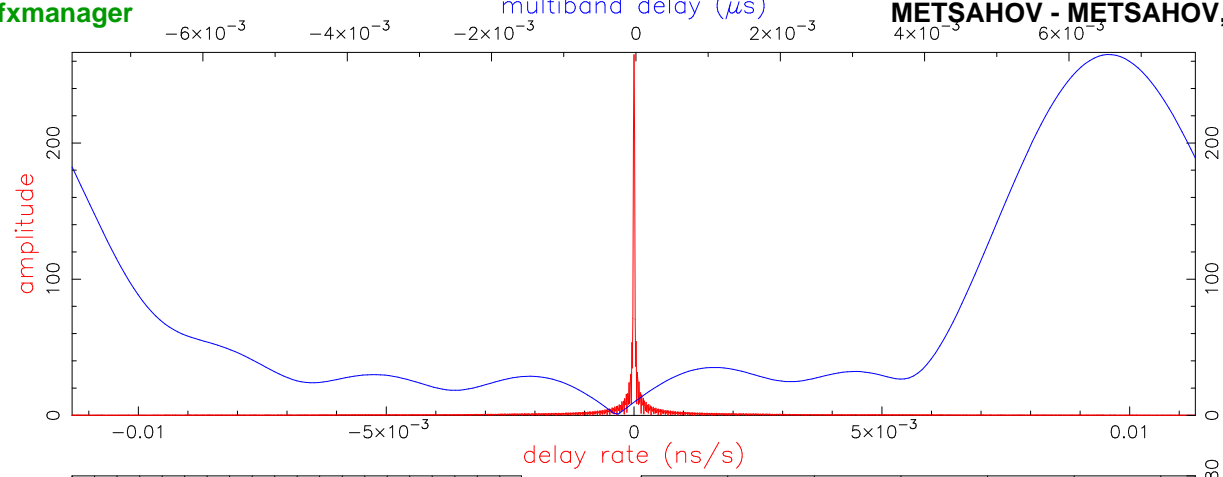
ph/seg (deg) 0.4 0.0 Theor. Amplitude 266.501 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Search (2048X32) 262.269 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.7 0.0 Inc. seg. avg. 264.862 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Z: az 184.7 el 31.6 pa 2.9 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZZ.W.41.1W7BJK simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W7BJK, No0103, ZZ

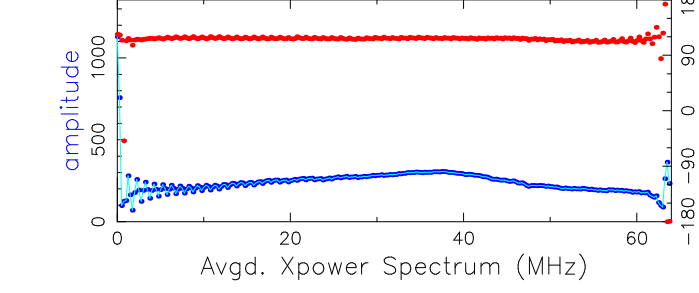
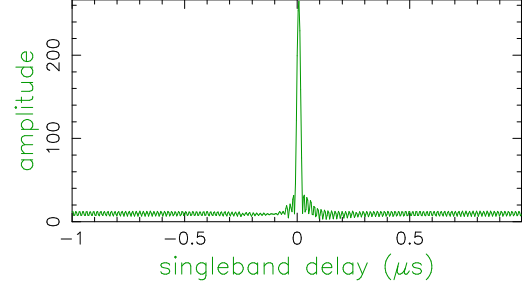
METSAHOV - METSAHOV, fgroup W, pol RL



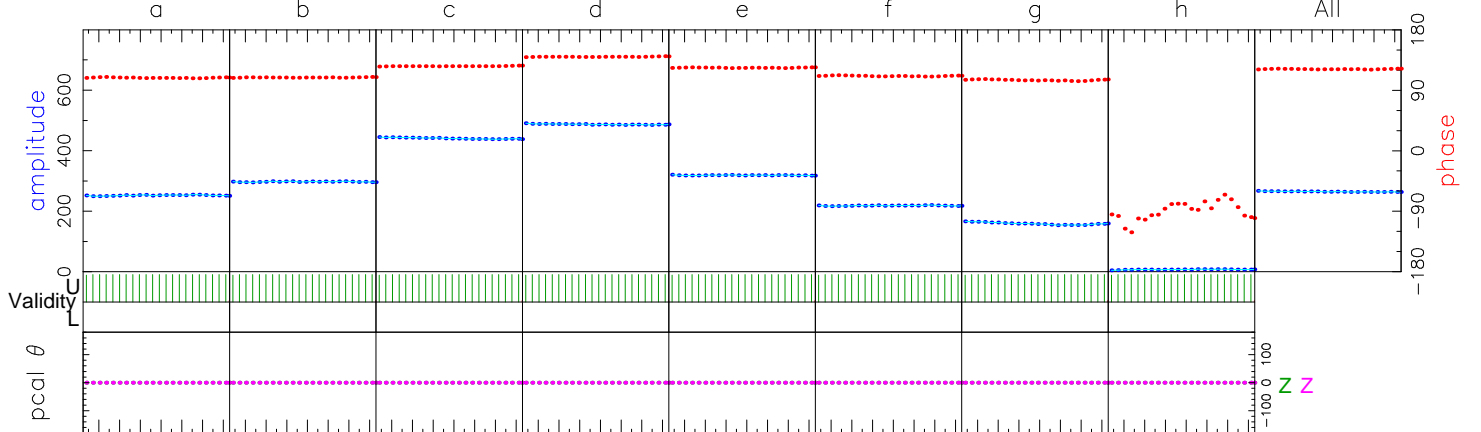
Fringe quality 5

SNR 14678.3
 Int time 405.654
 Amp 266.501
 Phase 121.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.006798
 MBD 0.006523
 Fringe rate (Hz)
 -0.000012
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 210014.31
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 FRT 210331.00
 Corr/FF/build
 2021:287:124222
 2021:287:162853
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	6.52321875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.52322E-03	+/- 7.4E-08
Sband delay (usec)	6.79825000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		6.79825E-03	+/- 5.9E-07
Phase delay (usec)	3.91716866882E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.91717E-06	+/- 2.5E-10
Delay rate (us/s)	-1.35334505341E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.35335E-10	+/- 1.1E-12
Total phase (deg)	121.5		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		121.5	+/- 0.0

ph/seg (deg) 0.4 0.0 Search (2048X32) 262.269 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.7 0.0 Inc. seg. avg. 264.862 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.7 0.0 Inc. frq. avg. 272.687 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 184.7 el 31.6 pa 2.9 Z: az 184.7 el 31.6 pa 2.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0103/ZZ..1W7BJK Output file: /Exps/c211a/v2/1234/No0103/ZZ.W.54.1W7BJK