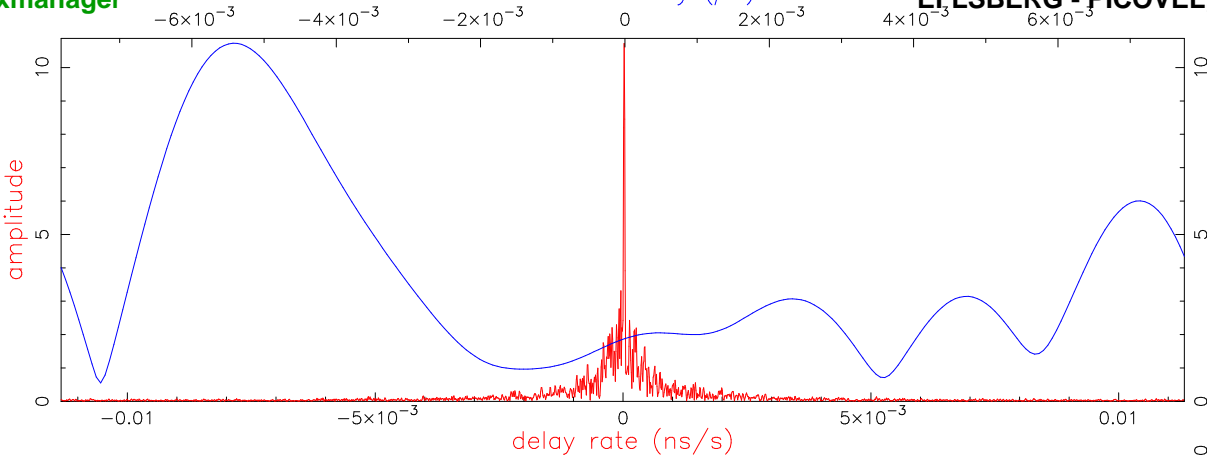
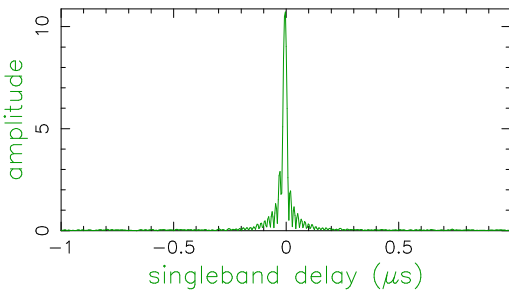


multiband delay (μ s)

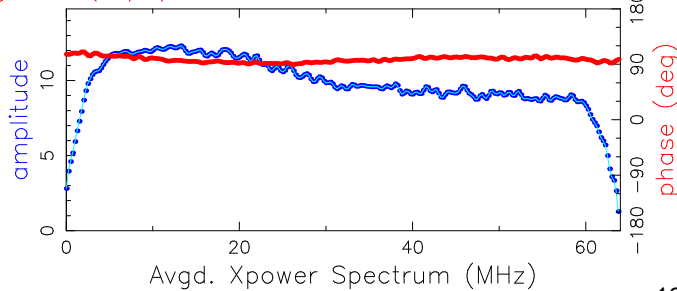


Fringe quality 3

SNR 609.2
Int time 419.824
Amp 10.873
Phase 99.3
PFD 0.0e+00
Delays (us)
SBD -0.005417
MBD -0.005459
Fringe rate (Hz)
0.002183
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

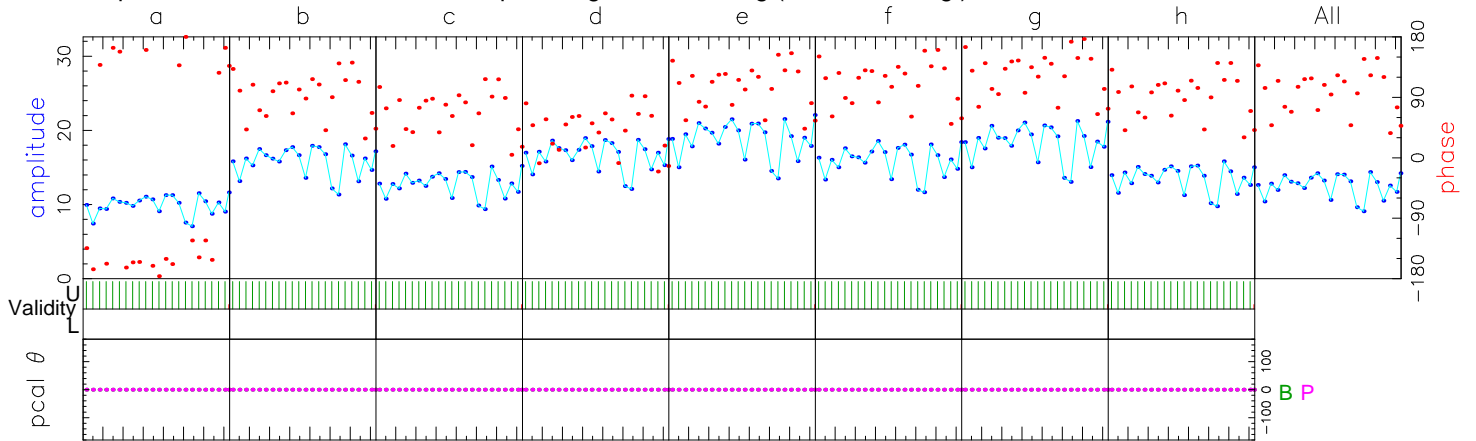


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101314
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

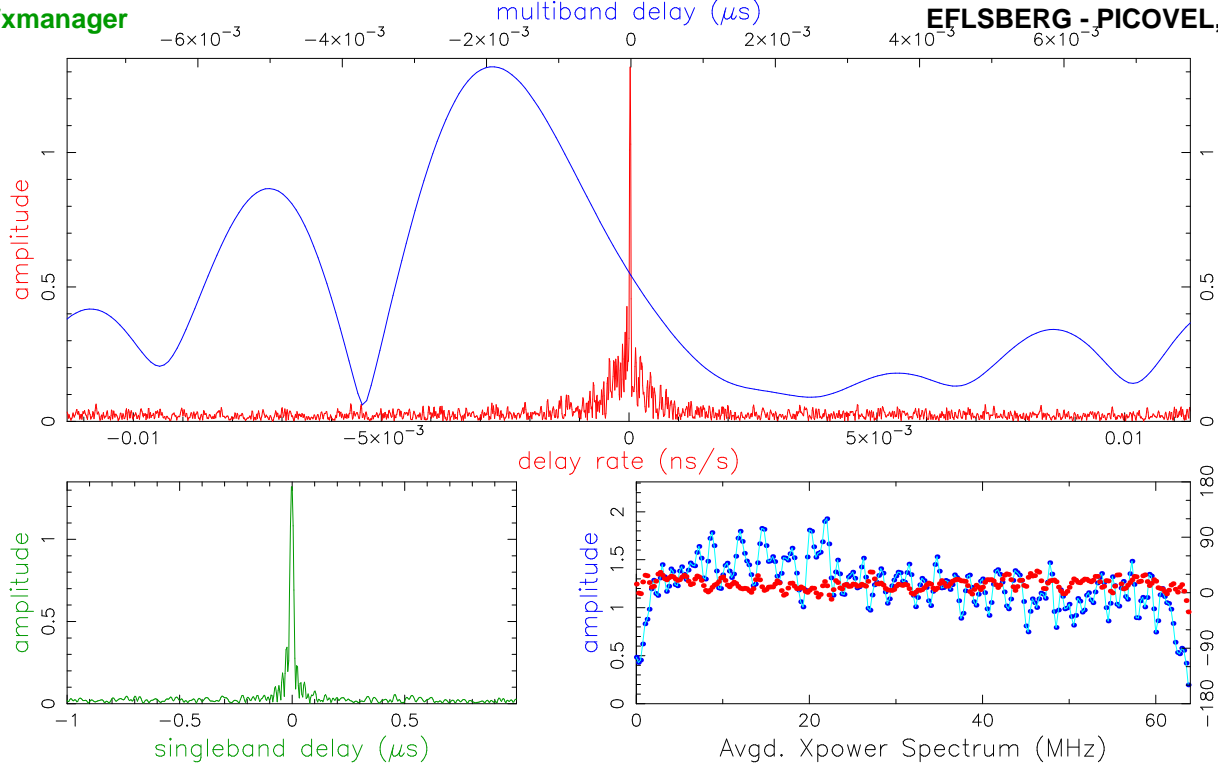
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-171.8	93.2	68.4	42.9	106.2	111.9	125.7	91.9	Phase	99.3
	8.5	13.5	10.9	14.2	16.1	13.7	15.7	11.6	Ampl.	13.0
	253.0	254.6	255.1	255.2	256.0	255.3	255.4	254.0	Sbd box	255.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.25427024631E+03		Apriori delay (usec)		-4.25426478736E+03		Resid mbdelay (usec)		-5.45895E-03	+/- 1.8E-06
Sband delay (usec)	-4.25427020411E+03		Apriori clock (usec)		-2.1124935E+01		Resid sbdelay (usec)		-5.41675E-03	+/- 1.4E-05
Phase delay (usec)	-4.25426478416E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		3.20226E-06	+/- 6.1E-09
Delay rate (us/s)	-4.15029199081E-02		Apriori rate (us/s)		-4.15029452561E-02		Resid rate (us/s)		2.53479E-08	+/- 2.5E-11
Total phase (deg)			Apriori accel (us/s/s)		2.31536049946E-05		Resid phase (deg)		99.3	+/- 0.2

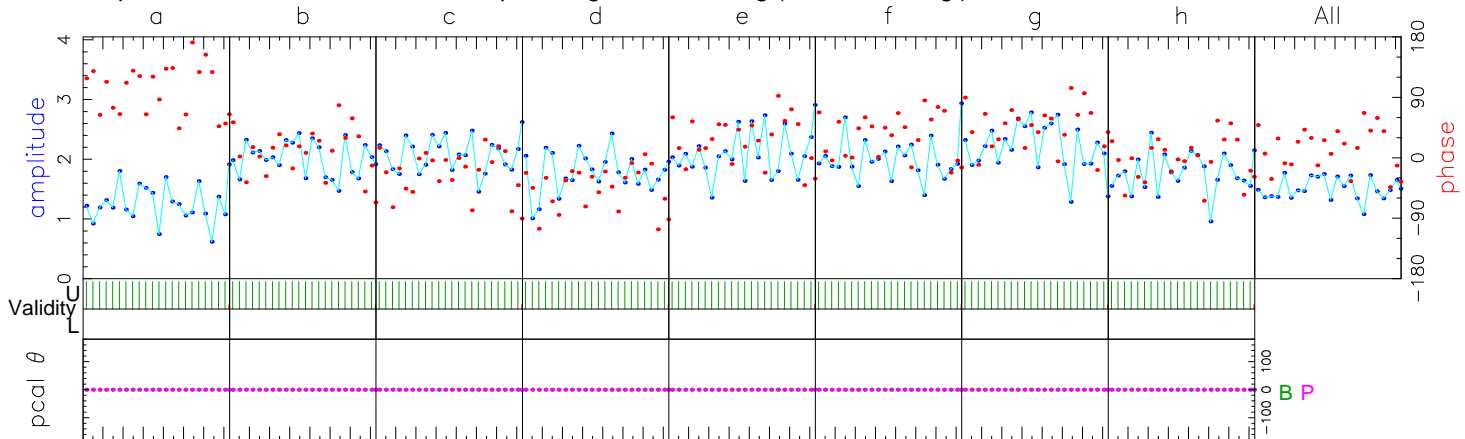
	RMS	Theor.	Amplitude	10.873 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	31.1	0.5	Search (2048X32)	10.491	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	20.1	0.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	46.6	0.3	Inc. seg. avg.	12.467	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	29.7	0.5	Inc. frq. avg.	13.034	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 223.3 el 33.1 pa 25.9 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 274.034 1558.576 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/BP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/BP.W.30.1W72T3

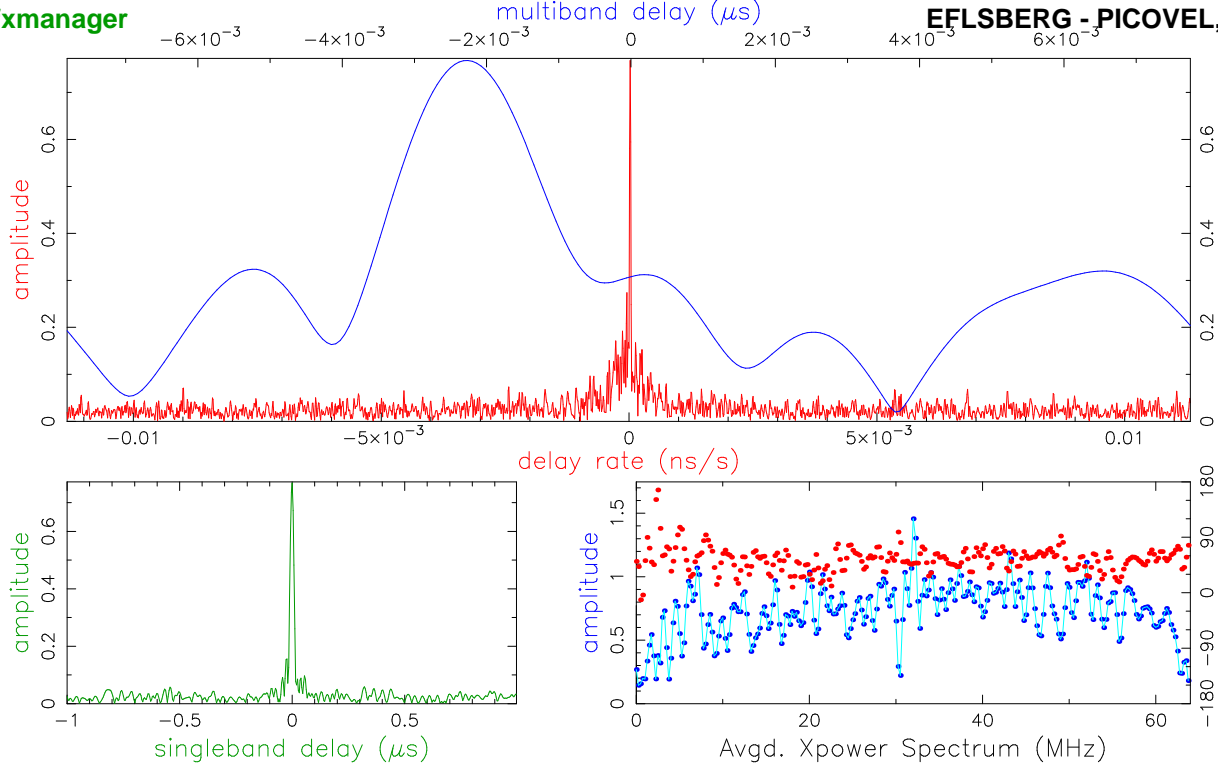


Fringe quality 4
SNR 75.7
Int time 419.824
Amp 1.350
Phase 14.8
PFD 0.0e+00
Delays (us)
SBD -0.001967
MBD -0.001966
Fringe rate (Hz) 0.002163
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Yr:day 16383
2021:287:093341
2021:287:101318
2021:252:122852
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

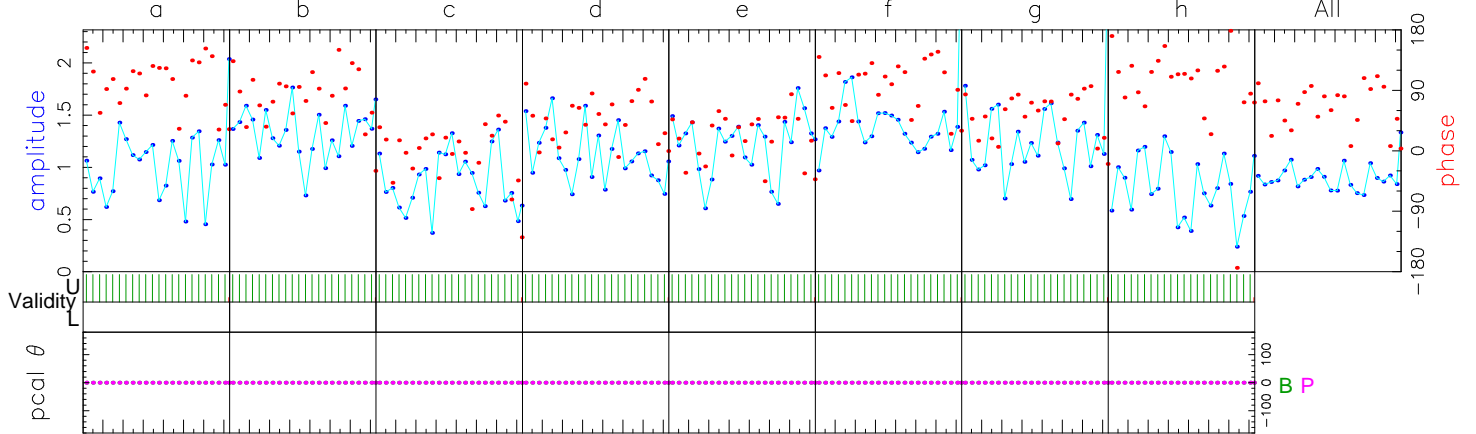


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	0:0	0:0	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-4.25426675331E+03								Resid mbdelay (usec)	-1.96595E-03 +/- 1.4E-05
Sband delay (usec)	-4.25426675436E+03								Resid sbdelay (usec)	-1.96700E-03 +/- 1.1E-04
Phase delay (usec)	-4.25426478689E+03								Resid phdelay (usec)	4.76997E-07 +/- 4.9E-08
Delay rate (us/s)	-4.15029201469E-02								Resid rate (us/s)	2.51092E-08 +/- 2.0E-10
Total phase (deg)			-267.3						Resid phase (deg)	14.8 +/- 1.5
ph/seg (deg)	30.2	3.6							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	18.1	6.3							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	47.4	2.1							Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	27.4	3.7							SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
									Sample rate(MISamp/s): 128	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	
									nlags: 256	
									t_cohere infinite	

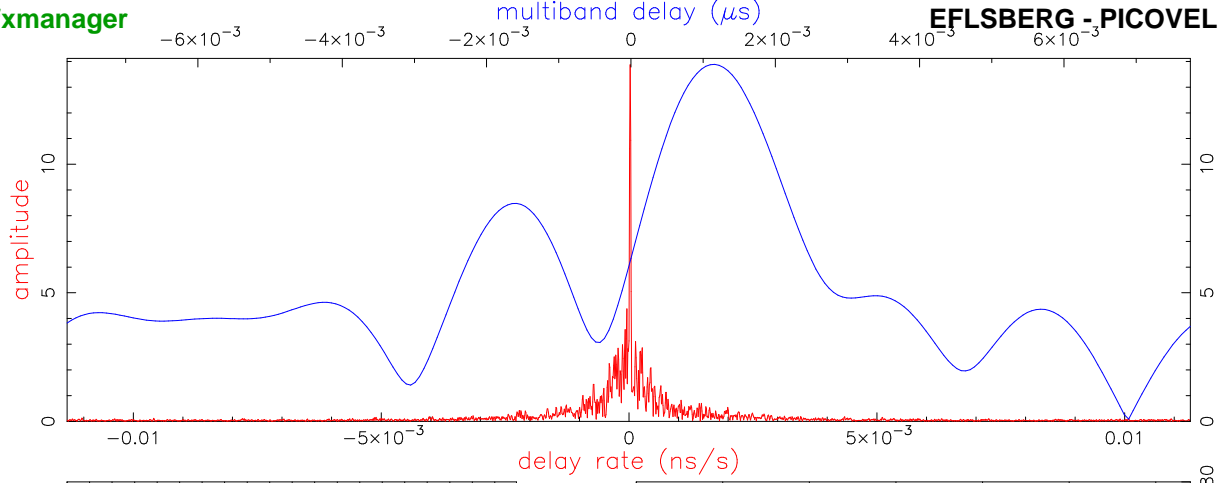


Fringe quality 5
SNR 43.3
Int time 419.824
Amp 0.772
Phase 66.7
PFD 0.0e+00
Delays (us)
SBD -0.001008
MBD -0.002295
Fringe rate (Hz) 0.002118
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101322
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

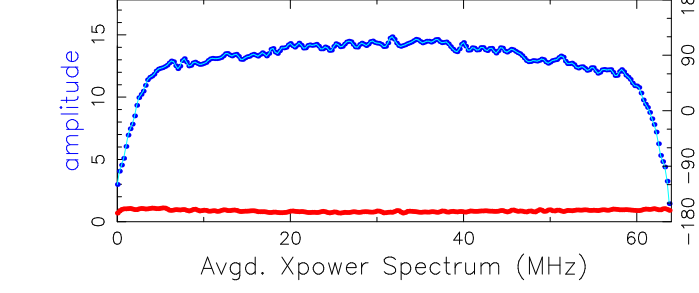
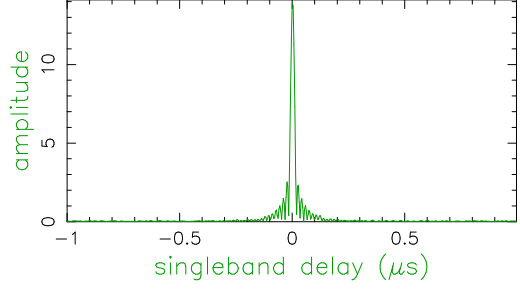
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



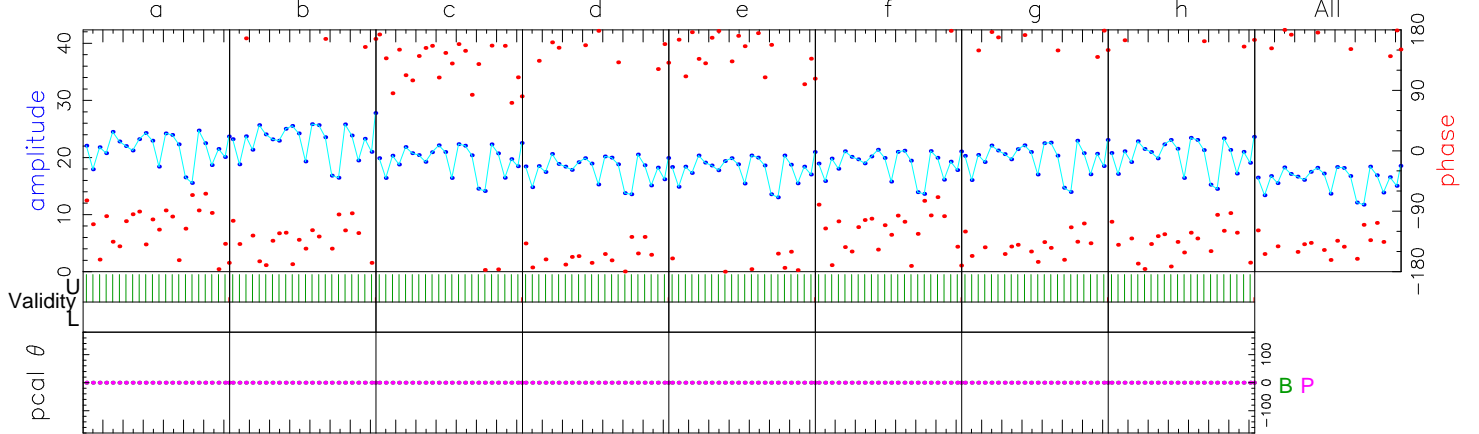
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.25426708250E+03									
Sband delay (usec)	-4.25426579536E+03									
Phase delay (usec)	-4.25426478521E+03									
Delay rate (us/s)	-4.15029206634E-02									
Total phase (deg)			-215.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										



Fringe quality 4
SNR 791.1
Int time 419.824
Amp 14.118
Phase -156.8
PFD 0.0e+00
Delays (us)
SBD 0.001727
MBD 0.001190
Fringe rate (Hz)
0.002154
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101310
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-111.9	-141.5	135.0	-176.1	161.1	-119.7	-159.2	-144.3	Phase	-156.8
	18.5	19.5	16.8	15.4	15.4	16.2	17.0	17.4	Ampl.	17.0
	256.3	257.3	257.7	258.2	258.4	258.2	258.1	256.8	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.25426359703E+03		Apriori delay (usec)		-4.25426478736E+03		Resid mbdelay (usec)		1.19033E-03	+/- 1.4E-06
Sband delay (usec)	-4.25426305986E+03		Apriori clock (usec)		-2.1124935E+01		Resid sbdelay (usec)		1.72750E-03	+/- 1.1E-05
Phase delay (usec)	-4.25426479242E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		-5.05647E-06	+/- 4.7E-09
Delay rate (us/s)	-4.15029202504E-02		Apriori rate (us/s)		-4.15029452561E-02		Resid rate (us/s)		2.50057E-08	+/- 1.9E-11
Total phase (deg)			Apriori accel (us/s/s)		2.31536049946E-05		Resid phase (deg)		-156.8	+/- 0.1

	RMS	Theor.	Amplitude	14.118 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	31.0	0.3	Search (2048X32)	13.474	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	20.0	0.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	42.0	0.2	Inc. seg. avg.	16.142	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	22.7	0.4	Inc. frq. avg.	17.022	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

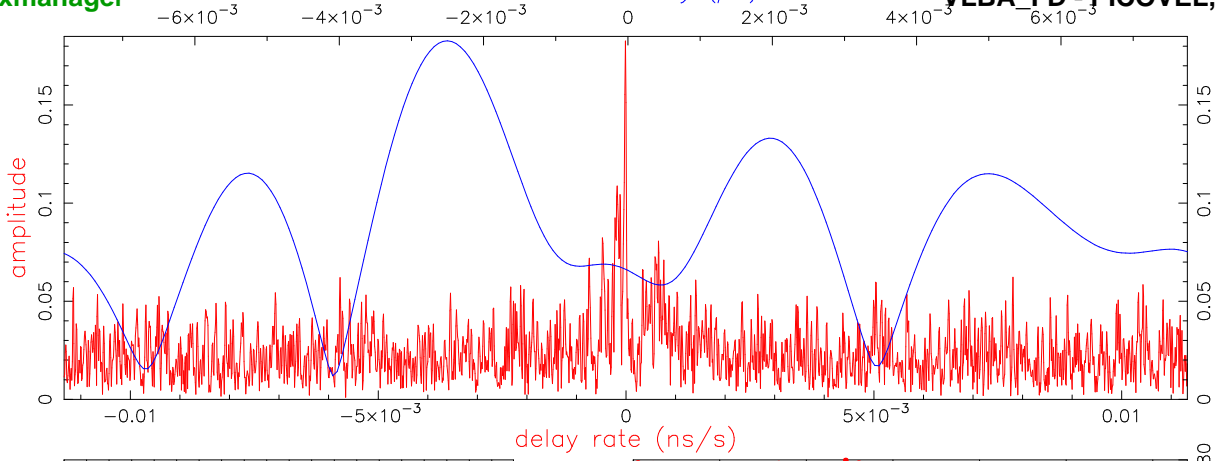
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, fP

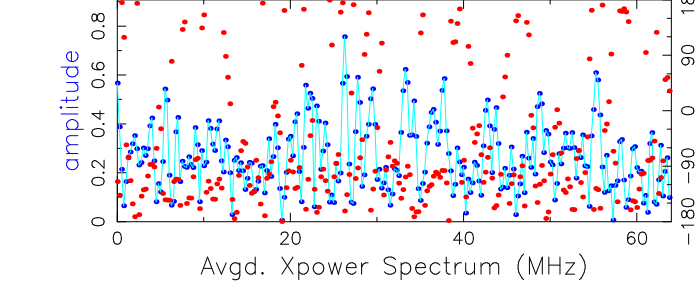
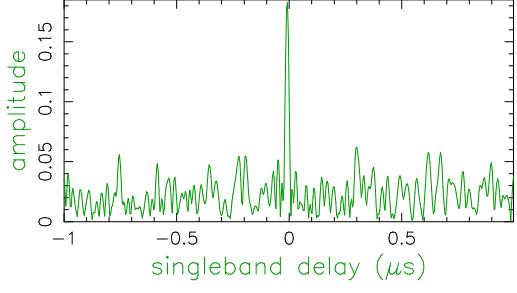
VLBA_FD - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



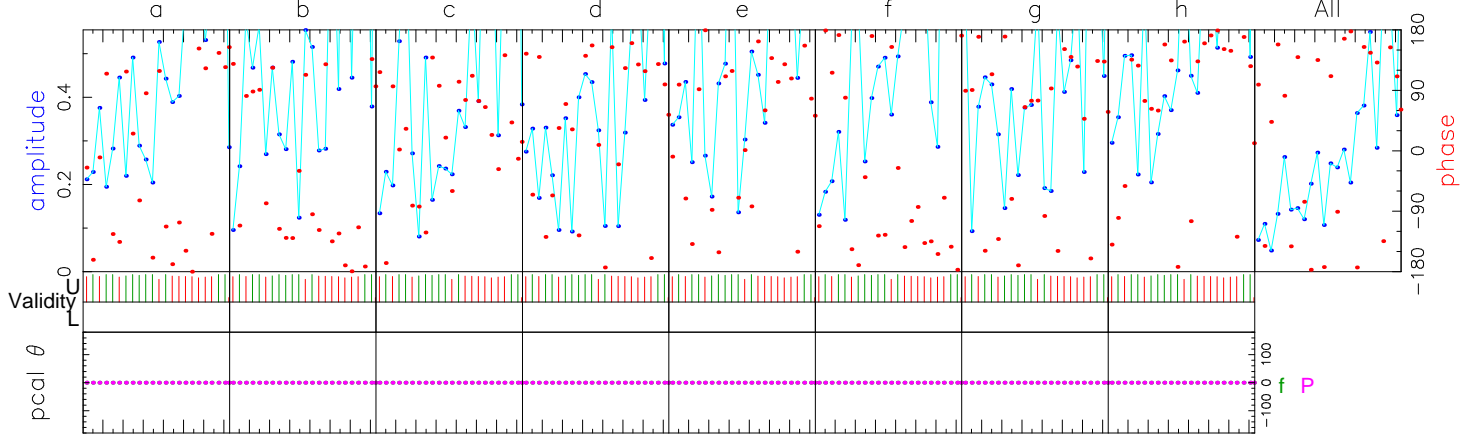
Fringe quality 9

SNR 10.1
 Int time 399.955
 Amp 0.185
 Phase 160.3
 PFD 2.0e-15
 Delays (us)
 SBD -0.009230
 MBD -0.002530
 Fringe rate (Hz)
 -0.000944
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101314
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	802/0	802/0	801/0	801/0	801/0	801/0	801/0	801/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.04782861415E+04	Apriori delay (usec)	-1.04782836118E+04	Resid mbdelay (usec)	-2.52963E-03	+/-	1.1E-04
Sband delay (usec)	-1.04782928421E+04	Apriori clock (usec)	1.1165371E+01	Resid sbdelay (usec)	-9.23025E-03	+/-	8.5E-04
Phase delay (usec)	-1.04782836067E+04	Apriori clockrate (us/s)	6.6000000E-07	Resid phdelay (usec)	5.16942E-06	+/-	3.7E-07
Delay rate (us/s)	1.82985253871E+00	Apriori rate (us/s)	1.82985254966E+00	Resid rate (us/s)	-1.09593E-08	+/-	1.5E-09
Total phase (deg)		Apriori accel (us/s/s)	5.54196310362E-05	Resid phase (deg)	160.3	+/-	11.3

ph/seg (deg)	57.7	Theor.	26.8	Amplitude	0.185 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	103.0		46.9	Search (2048X32)	0.182	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	58.3		16.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	51.2		28.0	Inc. seg. avg.	0.240	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.258	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 95.7 el 13.2 pa -59.0 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -10398.227 -668.908 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/fP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/fP.W.29.1W72T3

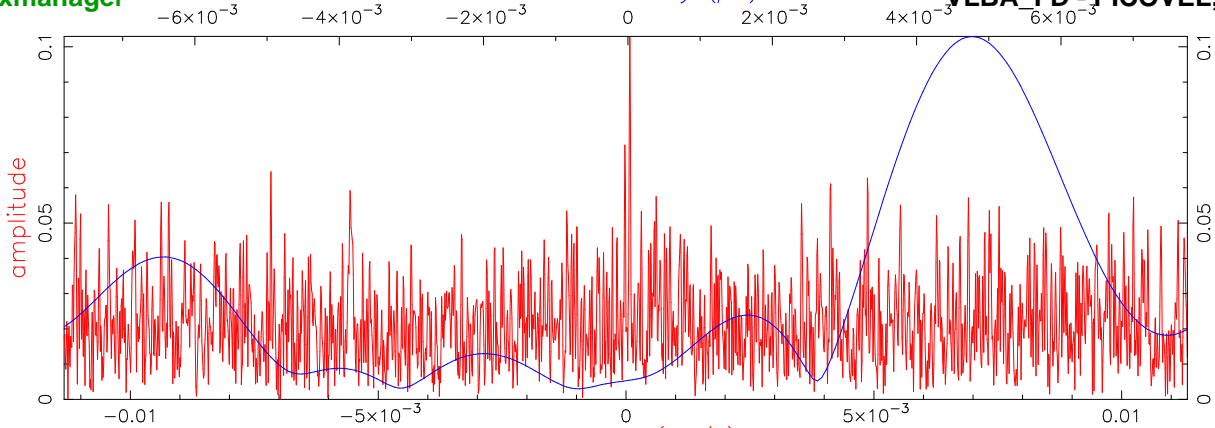
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

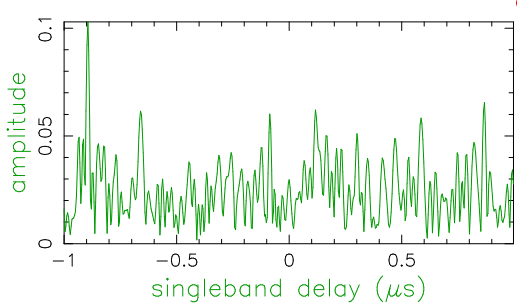
3C273.1W72T3, No0143, fP

VLBA_FD - PICOVEL, fgroup W, pol LR

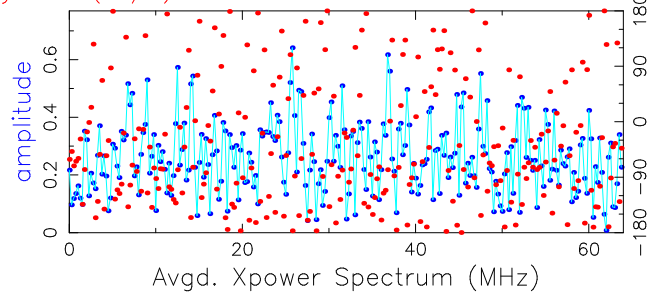
multiband delay (μ s)



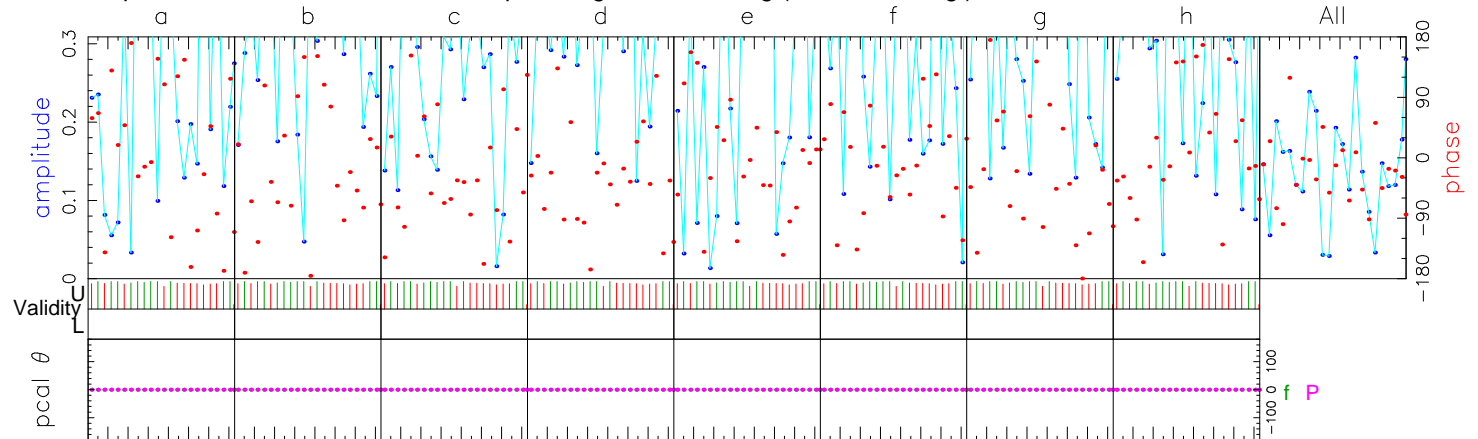
Fringe quality 0
 SNR 5.6
 Int time 399.955
 Amp 0.103
 Phase -24.3
 PFD 9.9e-01
 Delays (us)
 SBD -0.894763
 MBD 0.004764
 Fringe rate (Hz) 0.006782
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101318
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-5.3	-15.7	-53.9	-45.7	-4.9	-1.4	-47.2	-24.8	Phase	-24.3
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	88.1	323.6	325.3	28.3	323.0	285.7	48.2	20.5	Sbd box	27.9
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.04791850977E+04	Apriori delay (usec)	-1.04782836118E+04	Resid mbdelay (usec)	4.76410E-03	+/-	1.9E-04
Sband delay (usec)	-1.04791783748E+04	Apriori clock (usec)	1.1165371E+01	Resid sbdelay (usec)	-8.94763E-01	+/-	1.5E-03
Phase delay (usec)	-1.04782836126E+04	Apriori clockrate (us/s)	6.6000000E-07	Resid phdelay (usec)	-7.84996E-07	+/-	6.6E-07
Delay rate (us/s)	1.82985262839E+00	Apriori rate (us/s)	1.82985254966E+00	Resid rate (us/s)	7.87278E-08	+/-	2.8E-09
Total phase (deg)	-141.1	Apriori accel (us/s/s)	5.54196310362E-05	Resid phase (deg)	-24.3	+/-	20.4

ph/seg (deg)	50.0	Theor.	48.2	Amplitude	0.103 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	73.8	Search (2048X32)	0.102	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	23.1	Inc. seg. avg.	0.102	Inc. frq. avg.	0.097	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	36.8	Inc. frq. avg.	0.097			Sample rate (MSamp/s):	128	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

f: az 95.7 el 13.2 pa -59.0 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -10398.227 -668.908 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/fP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/fP.W.48.1W72T3

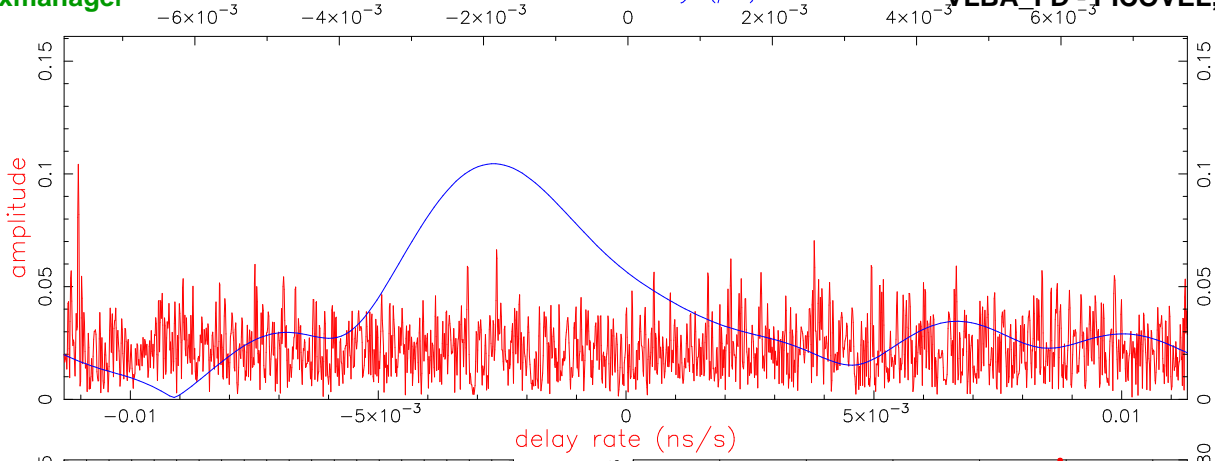
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

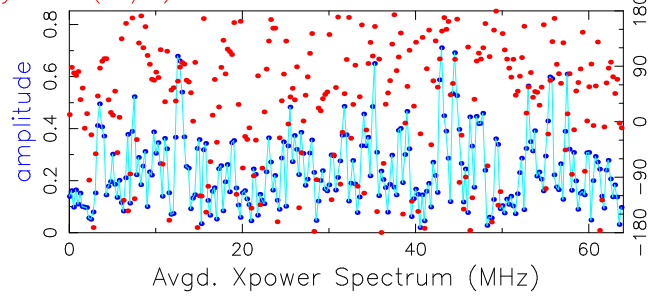
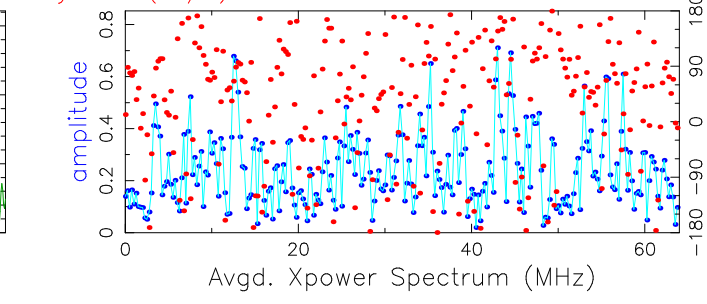
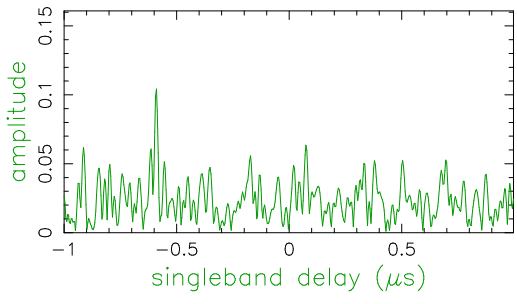
3C273.1W72T3, No0143, fP

VLBA_FD - PICOVEL, fgroup W, pol RL

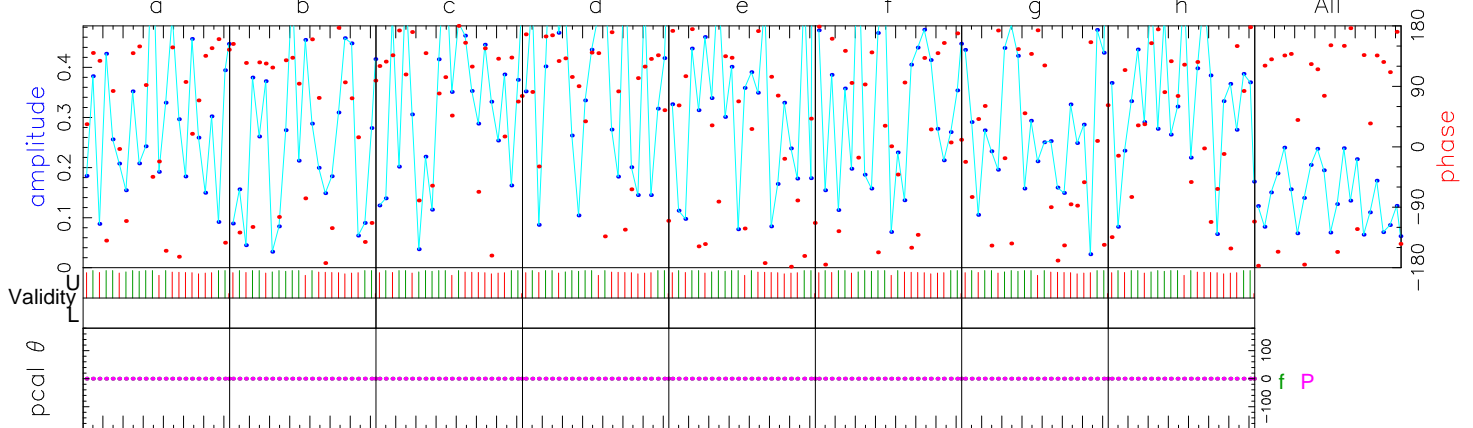
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 399.955
 Amp 0.161
 Phase 145.8
 PFD 9.0e-01
 Delays (us)
 SBD -0.590838
 MBD -0.001960
 Fringe rate (Hz)
 -0.952802
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Yr:day 16383
 Start 2021:287:093341
 Stop 2021:287:101321
 FRT 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	802/0	802/0	801/0	801/0	801/0	801/0	801/0	801/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.04788793222E+04	Apriori delay (usec)	-1.04782836118E+04	Resid mbdelay (usec)	-1.96036E-03	+/-	1.9E-04
Sband delay (usec)	-1.04788744501E+04	Apriori clock (usec)	1.1165371E+01	Resid sbdelay (usec)	-5.90838E-01	+/-	1.5E-03
Phase delay (usec)	-1.04782836071E+04	Apriori clockrate (us/s)	6.6000000E-07	Resid phdelay (usec)	4.70097E-06	+/-	6.4E-07
Delay rate (us/s)	1.82984148858E+00	Apriori rate (us/s)	1.82985254966E+00	Resid rate (us/s)	-1.10611E-05	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	5.54196310362E-05	Resid phase (deg)	145.8	+/-	20.0

ph/seg (deg)	48.8	Theor.	47.3	Amplitude	0.161 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.7		82.6	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	47.8		28.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.7		49.3	Inc. seg. avg.	0.166	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.163	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 95.7 el 13.2 pa -59.0 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -10398.227 -668.908 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/fP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/fP.W.69.1W72T3

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

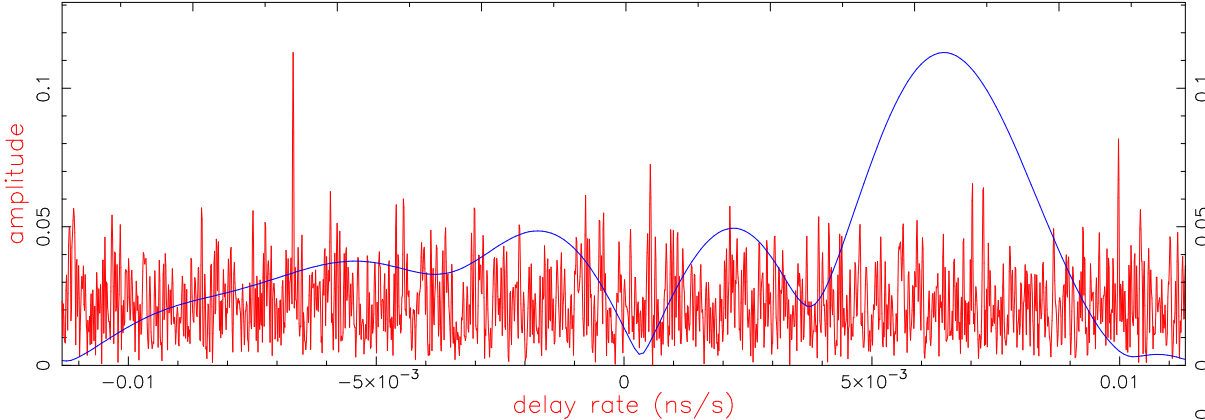
3C273.1W72T3, No0143, fP

VLBA_FD - PICOVEL, fgroup W, pol LL

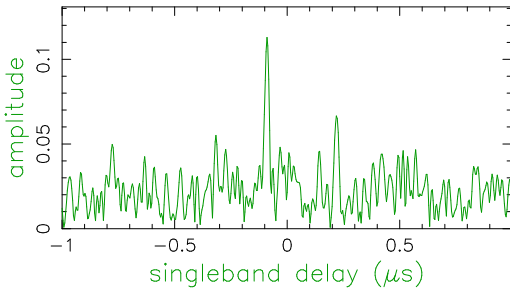
multiband delay (μ s)

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

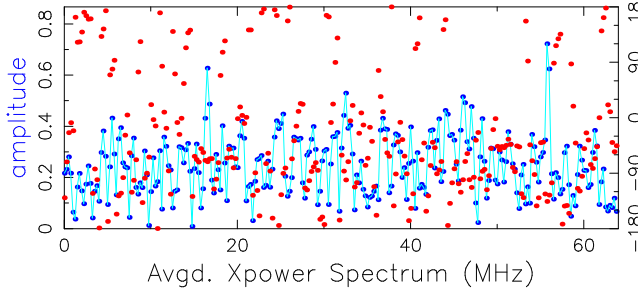
Fringe quality 0



SNR 6.2
Int time 399.955
Amp 0.131
Phase -83.1
PFD 1.6e-01
Delays (us)
SBD -0.089210
MBD 0.004389
Fringe rate (Hz)
-0.575587
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

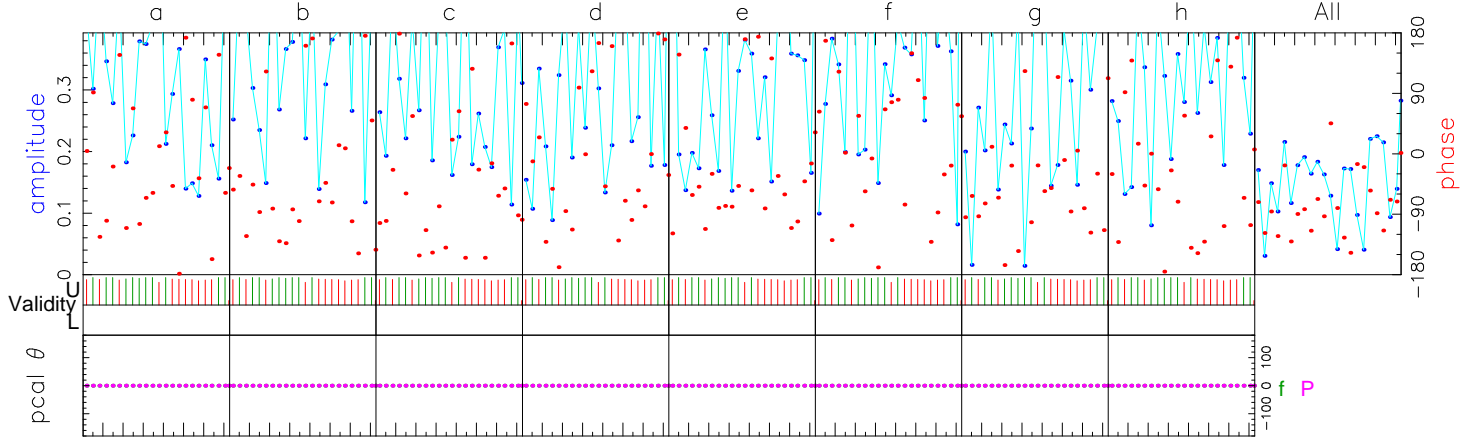


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101310
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-51.1	-88.7	-99.7	-110.6	-79.4	15.7	-64.9	-109.3	Phase	-83.1
	0.1	0.2	0.2	0.1	0.2	0.0	0.1	0.1	Ampl.	0.1
	364.8	472.5	93.3	175.7	233.4	258.5	232.7	312.6	Sbd box	234.2
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.04783729729E+04	Apriori delay (usec)	-1.04782836118E+04	Resid mbdelay (usec)	4.38894E-03	+/-	1.8E-04
Sband delay (usec)	-1.04783728218E+04	Apriori clock (usec)	1.1165371E+01	Resid sbdelay (usec)	-8.92100E-02	+/-	1.4E-03
Phase delay (usec)	-1.04782836145E+04	Apriori clockrate (us/s)	6.6000000E-07	Resid phdelay (usec)	-2.67954E-06	+/-	6.0E-07
Delay rate (us/s)	1.82984586767E+00	Apriori rate (us/s)	1.82985254966E+00	Resid rate (us/s)	-6.68200E-06	+/-	2.5E-09
Total phase (deg)	-199.8	Apriori accel (us/s/s)	5.54196310362E-05	Resid phase (deg)	-83.1	+/-	18.5

ph/seg (deg)	44.0	Theor.	43.9	Amplitude	0.131 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	59.5	Search (2048X32)	0.105	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)	46.3	Inc. seg. avg.	0.130	Inc. frq. avg.	0.128	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	53.4	Inc. frq. avg.	0.128			Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 95.7 el 13.2 pa -59.0 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -10398.227 -668.908 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/fP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/fP.W.9.1W72T3

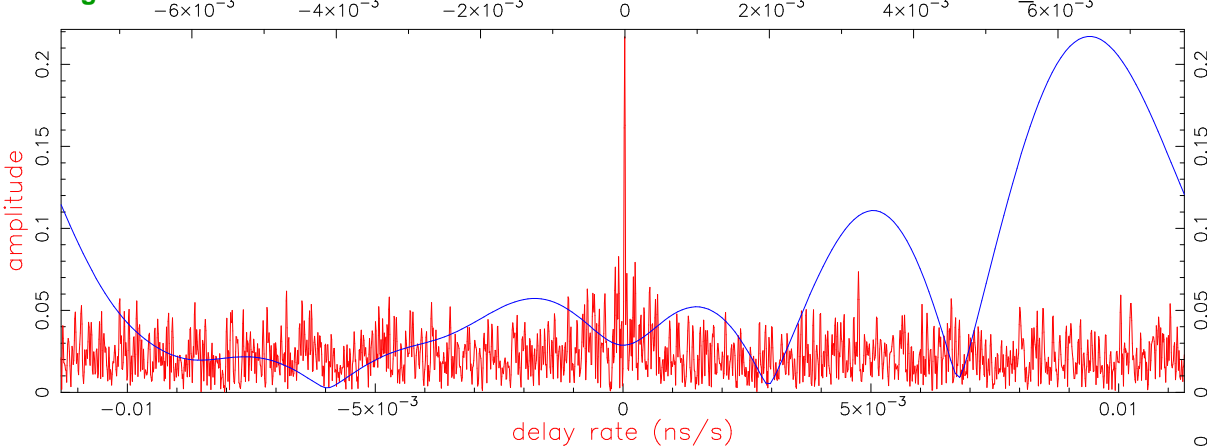
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, nP

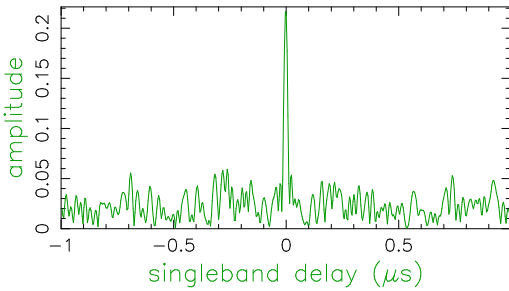
VLBA_NL - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

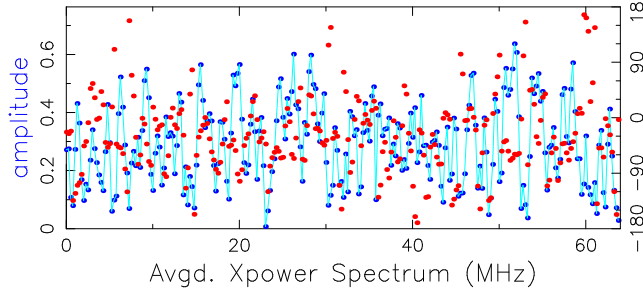


Fringe quality 9

SNR 12.4
 Int time 419.824
 Amp 0.221
 Phase -132.4
 PFD 1.3e-26
 Delays (us)
 SBD -0.002041
 MBD 0.006501
 Fringe rate (Hz)
 0.002898
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

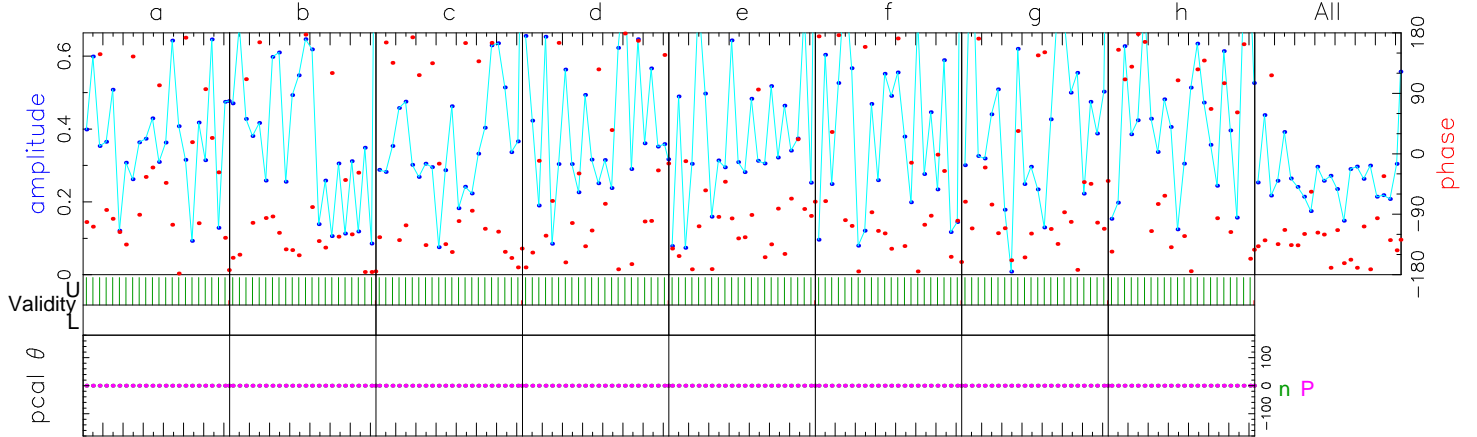


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101311
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-102.5	-139.8	-154.8	-147.1	-104.2	-117.0	-104.9	173.2	Phase	-132.4
	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	254.4	256.2	256.2	256.5	256.9	256.8	256.5	255.1	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.83411175413E+03		Apriori delay (usec)		-7.83410262985E+03		Resid mbdelay (usec)		6.50072E-03	+/- 8.8E-05
Sband delay (usec)	-7.83410467110E+03		Apriori clock (usec)		6.3425980E+00		Resid sbdelay (usec)		-2.04125E-03	+/- 6.9E-04
Phase delay (usec)	-7.83410263412E+03		Apriori clockrate (us/s)		8.9999996E-07		Resid phdelay (usec)		-4.27022E-06	+/- 3.0E-07
Delay rate (us/s)	1.56698599598E+00		Apriori rate (us/s)		1.56698596234E+00		Resid rate (us/s)		3.36423E-08	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		4.19316436171E-05		Resid phase (deg)		-132.4	+/- 9.2

ph/seg (deg) 41.0 22.2 Search (2048X32) 0.216 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.1 38.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.7 13.1 Inc. seg. avg. 0.246 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.6 22.8 Inc. frq. avg. 0.238 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 107.0 el 20.9 pa -45.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -8912.744 679.057 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/nP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/nP.W.12.1W72T3

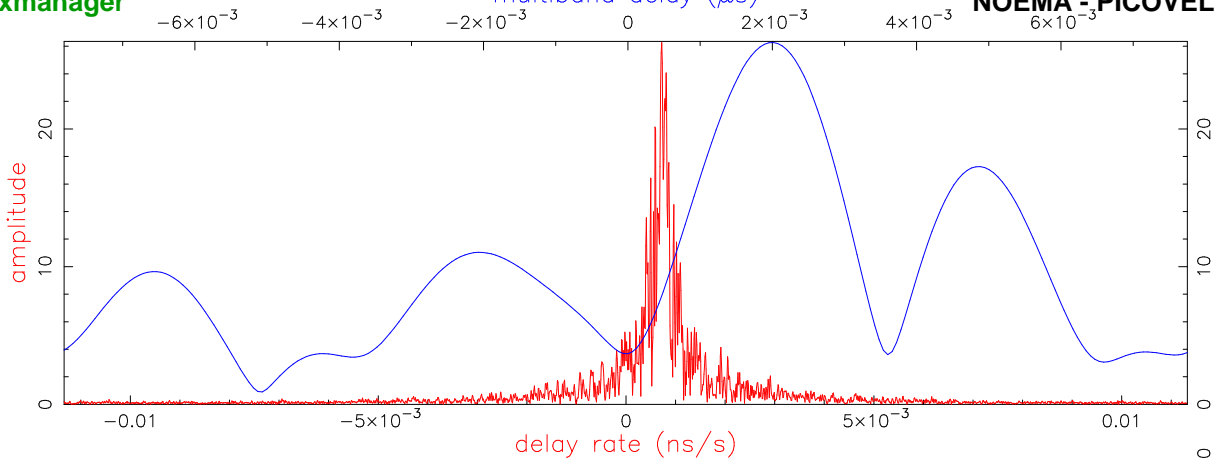
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, NP

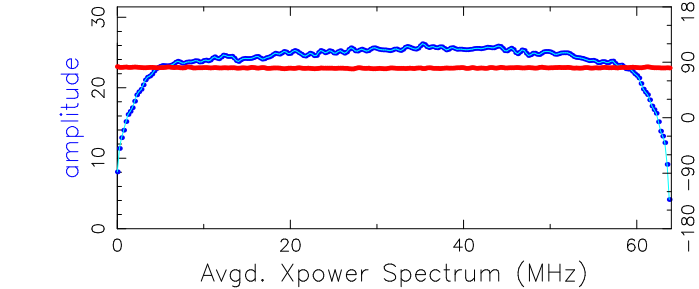
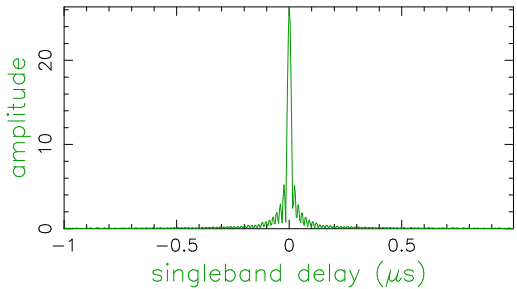
NOEMA - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



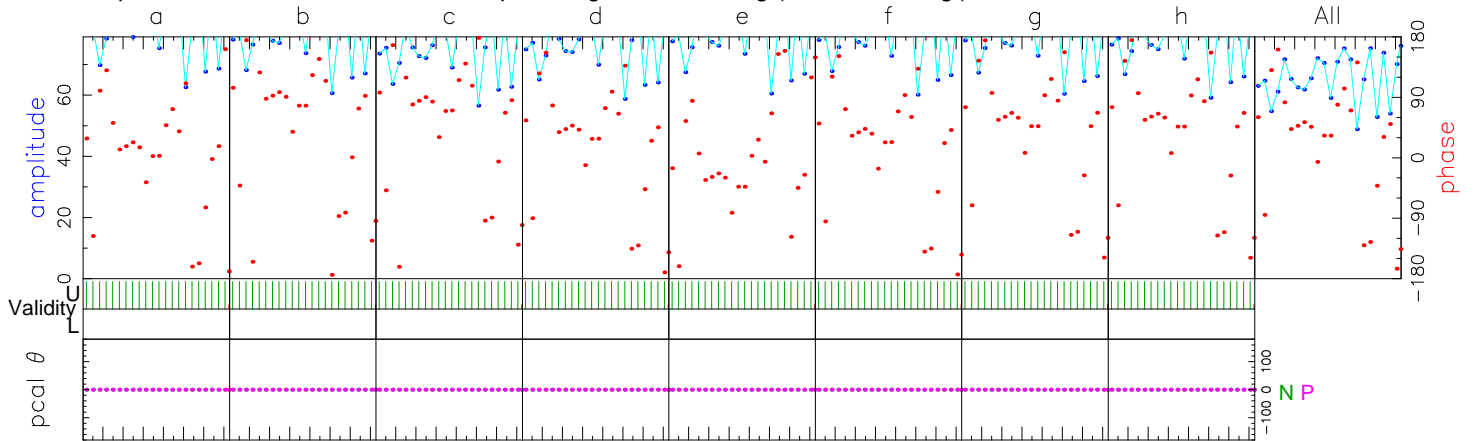
Fringe quality 2

SNR 1474.3
 Int time 419.824
 Amp 26.356
 Phase 63.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.000463
 MBD 0.002000
 Fringe rate (Hz)
 0.061879
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101312
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	32.7	107.7	100.0	58.5	-12.9	53.2	77.0	76.6		63.1
	33.6	32.8	30.7	31.4	32.5	32.4	32.4	32.0		32.2
	257.3	257.3	256.7	257.2	257.3	257.2	257.6	257.4		257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		APs used
P	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
N:P	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
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-2.84002944619E+03	Apriori delay (usec)	-2.84003144628E+03	Resid mbdelay (usec)	2.00009E-03	+/-	7.4E-07
Sband delay (usec)	-2.84003098353E+03	Apriori clock (usec)	-1.2531652E+01	Resid sbdelay (usec)	4.62750E-04	+/-	5.8E-06
Phase delay (usec)	-2.84003144425E+03	Apriori clockrate (us/s)	7.3369999E-06	Resid phdelay (usec)	2.03577E-06	+/-	2.5E-09
Delay rate (us/s)	-9.58397352580E-02	Apriori rate (us/s)	-9.58404536128E-02	Resid rate (us/s)	7.18355E-07	+/-	1.0E-11
Total phase (deg)	-218.7	Apriori accel (us/s/s)	1.54156116278E-05	Resid phase (deg)	63.1	+/-	0.1

ph/seg (deg)	80.4	RMS	26.356 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	150.1	Theor.	25.997	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.9	Search (2048X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	22.5	Interp.	65.203	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	32.221	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.		nlags:	256	t_cohere	infinite	

N: az 225.2 el 37.8 pa 30.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 573.254 924.962 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/NP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/NP.W.20.1W72T3

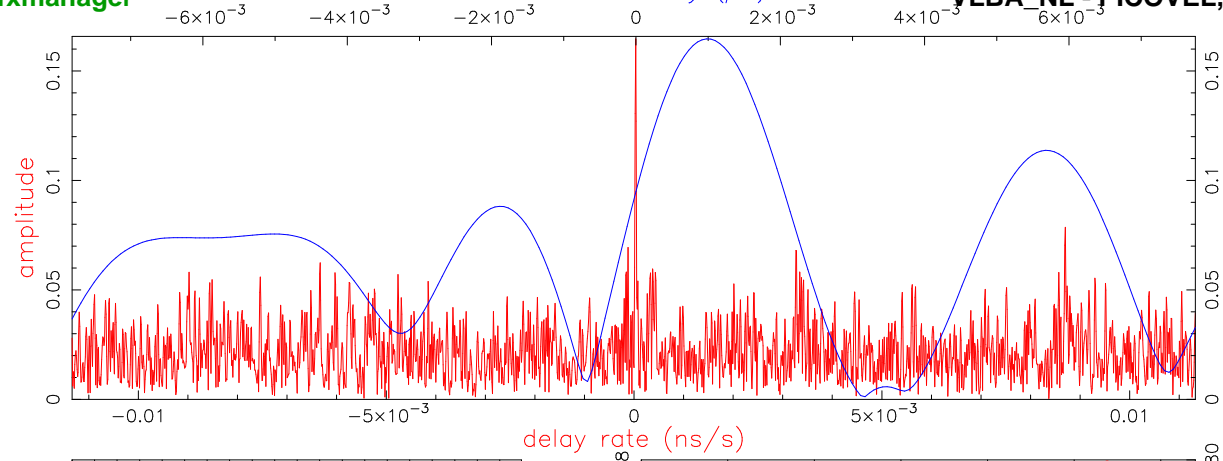
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

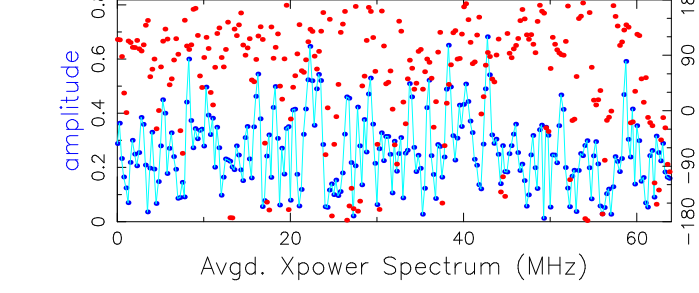
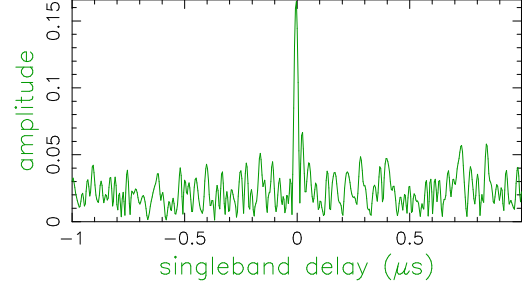
3C273.1W72T3, No0143, nP

VLBA_NL - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

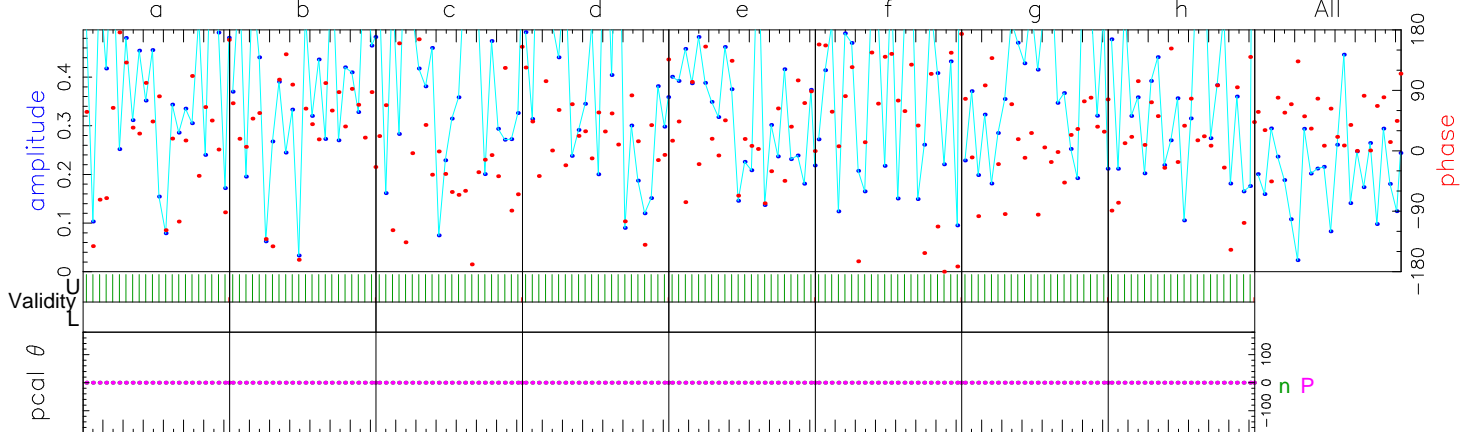


Fringe quality 9
 SNR 9.3
 Int time 419.824
 Amp 0.166
 Phase 36.2
 PFD 6.2e-12
 Delays (us)
 SBD -0.005060
 MBD 0.000972
 Fringe rate (Hz) 0.002799
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101314
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.83410165738E+03				-7.83410262985E+03				9.72466E-04	+/- 1.2E-04
Sband delay (usec)	-7.83410769035E+03				6.3425980E+00				-5.06050E-03	+/- 9.3E-04
Phase delay (usec)	-7.83410262868E+03				8.9999996E-07				1.16780E-06	+/- 4.0E-07
Delay rate (us/s)	1.56698599483E+00				1.56698596234E+00				3.24959E-08	+/- 1.6E-09
Total phase (deg)			-156.4		4.19316436171E-05				36.2	+/- 12.3
	RMS	Theor.	Amplitude	0.166 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	38.9	29.6	Search (2048X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	58.0	51.6	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	53.5	17.4	Inc. seg. avg.	0.179	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	44.1	30.4	Inc. frq. avg.	0.208	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
n: az 107.0 el 20.9 pa -45.5			P: az 218.9 el 48.1 pa 30.8		u,v (fr/asec) -8912.744 679.057					simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/nP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/nP.W.31.1W72T3

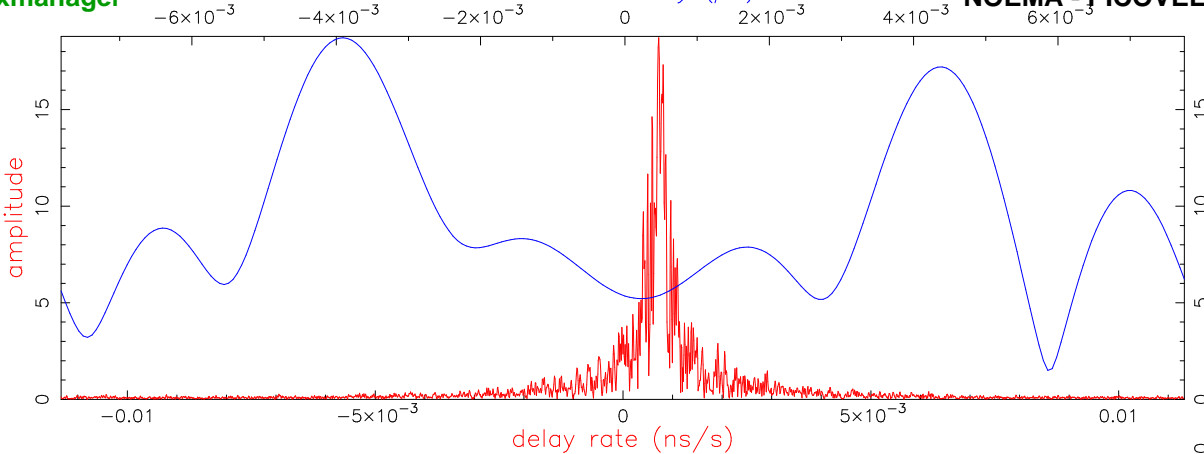
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, NP

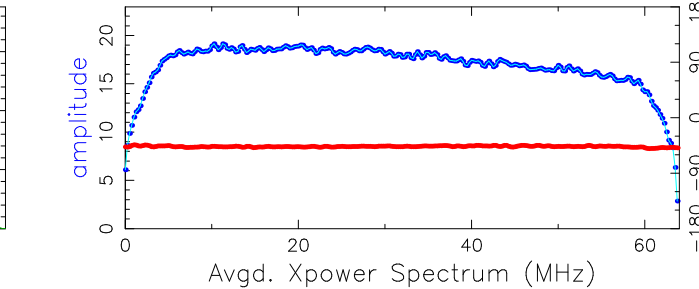
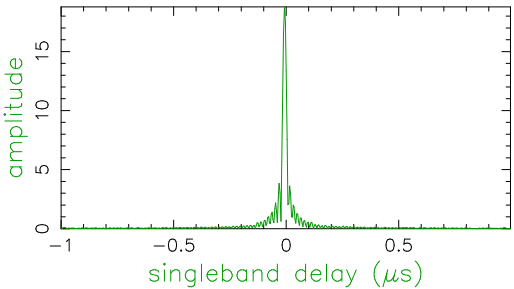
NOEMA - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



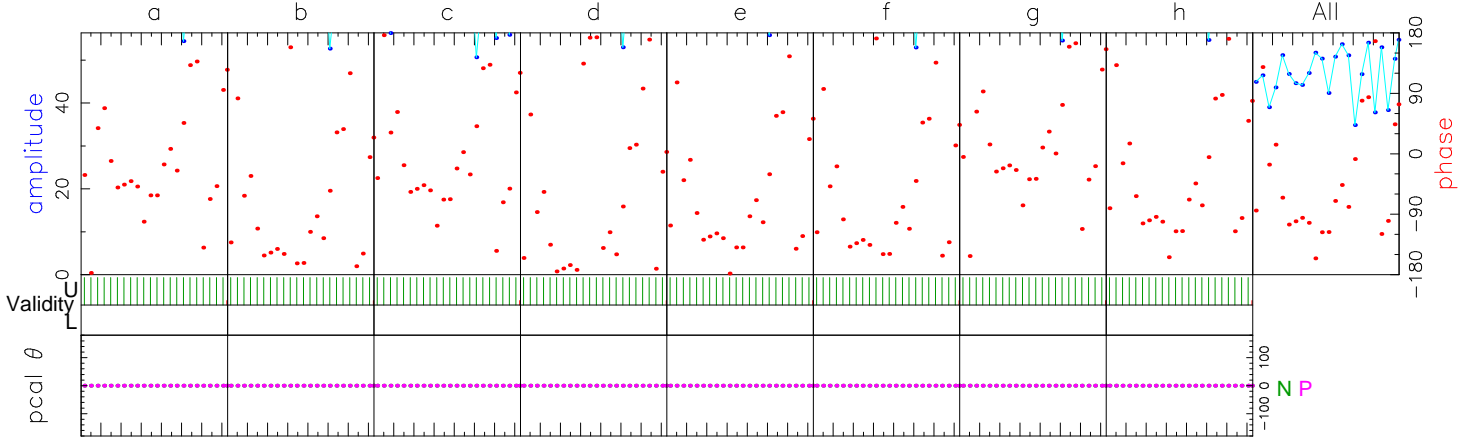
Fringe quality 1

SNR 1051.0
 Int time 419.824
 Amp 18.789
 Phase -85.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.007228
 MBD -0.003904
 Fringe rate (Hz)
 0.061939
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101316
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-30.6	-131.4	-36.7	-155.2	-107.9	-117.7	-6.1	-83.4		-85.2
	29.0	28.4	27.1	28.0	29.8	28.2	29.2	29.2	Ampl.	28.6
	254.9	254.7	254.4	254.8	255.1	254.6	255.1	255.1	Sbd box	255.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.84003535019E+03		Apriori delay (usec)		-2.84003144628E+03		Resid mbdelay (usec)		-3.90391E-03	+/- 1.0E-06
Sband delay (usec)	-2.84003867453E+03		Apriori clock (usec)		-1.2531652E+01		Resid sbdelay (usec)		-7.22825E-03	+/- 8.2E-06
Phase delay (usec)	-2.84003144903E+03		Apriori clockrate (us/s)		7.3369999E-06		Resid phdelay (usec)		-2.74630E-06	+/- 3.5E-09
Delay rate (us/s)	-9.58397345600E-02		Apriori rate (us/s)		-9.58404536128E-02		Resid rate (us/s)		7.19053E-07	+/- 1.5E-11
Total phase (deg)			Apriori accel (us/s/s)		1.54156116278E-05		Resid phase (deg)		-85.2	+/- 0.1

	RMS	Theor.	Amplitude	18.789 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	79.8	0.3	Search (2048X32)	18.437	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	151.0	0.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	58.0	0.2	Inc. seg. avg.	46.635	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	52.4	0.3	Inc. frq. avg.	28.609	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

N: az 225.2 el 37.8 pa 30.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 573.254 924.962 simultaneous interpolator

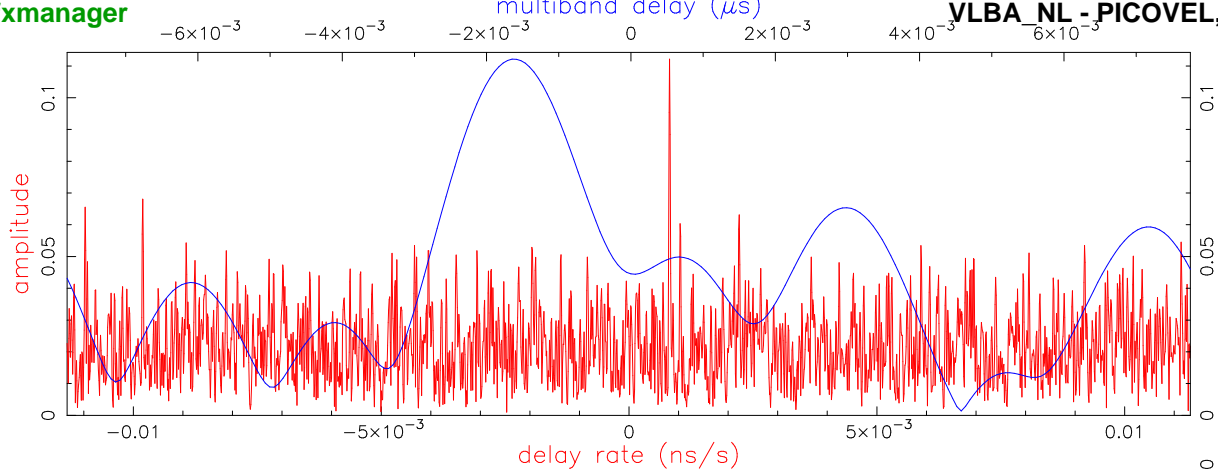
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/NP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/NP.W.40.1W72T3

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

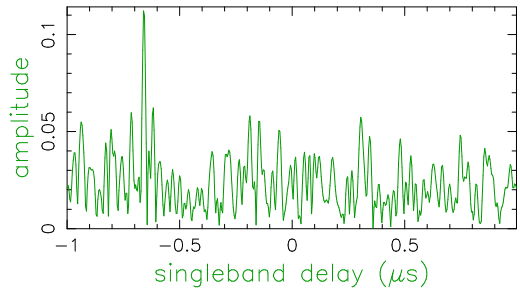
3C273.1W72T3, No0143, nP

VLBA_NL - PICOVEL, fgroup W, pol LR

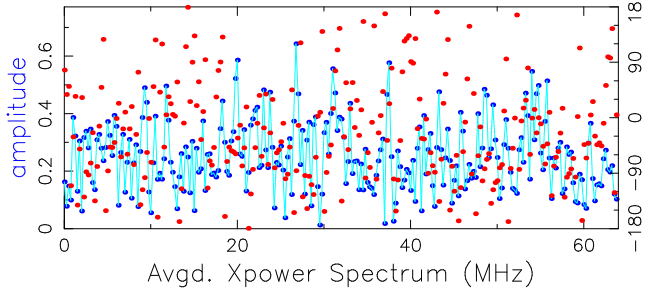


Fringe quality 0

SNR 6.4
Int time 419.824
Amp 0.114
Phase -50.7
PFD 4.5e-02
Delays (us)
SBD -0.658614
MBD -0.001599
Fringe rate (Hz)
0.070850
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

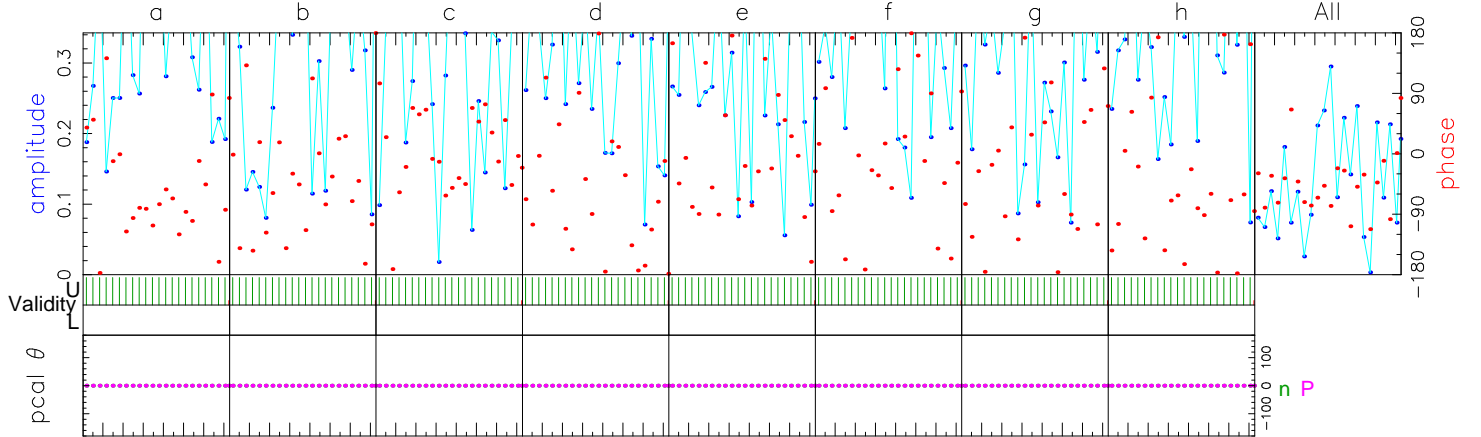


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101318
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-80.8	-49.9	-0.1	-82.8	-29.7	-34.9	-13.9	-85.6	Phase	-50.7
	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	87.9	155.2	87.7	121.6	253.2	449.1	245.6	87.9	Sbd box	88.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	-7.83476047867E+03		Apriori delay (usec)		-7.83410262985E+03		Resid mbdelay (usec)		-1.59882E-03	+/- 1.7E-04
Sband delay (usec)	-7.83476124385E+03		Apriori clock (usec)		6.3425980E+00		Resid sbdelay (usec)		-6.58614E-01	+/- 1.3E-03
Phase delay (usec)	-7.83410263148E+03		Apriori clockrate (us/s)		8.9999996E-07		Resid phdelay (usec)		-1.63342E-06	+/- 5.8E-07
Delay rate (us/s)	1.56698678484E+00		Apriori rate (us/s)		1.56698596234E+00		Resid rate (us/s)		8.22499E-07	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		4.19316436171E-05		Resid phase (deg)		-50.7	+/- 17.9

	RMS	Theor.	Amplitude	0.114 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	40.6	43.0	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.0	75.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.0	25.4	Inc. seg. avg.	0.104	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	46.5	44.3	Inc. frq. avg.	0.121	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 107.0 el 20.9 pa -45.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -8912.744 679.057 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/nP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/nP.W.51.1W72T3

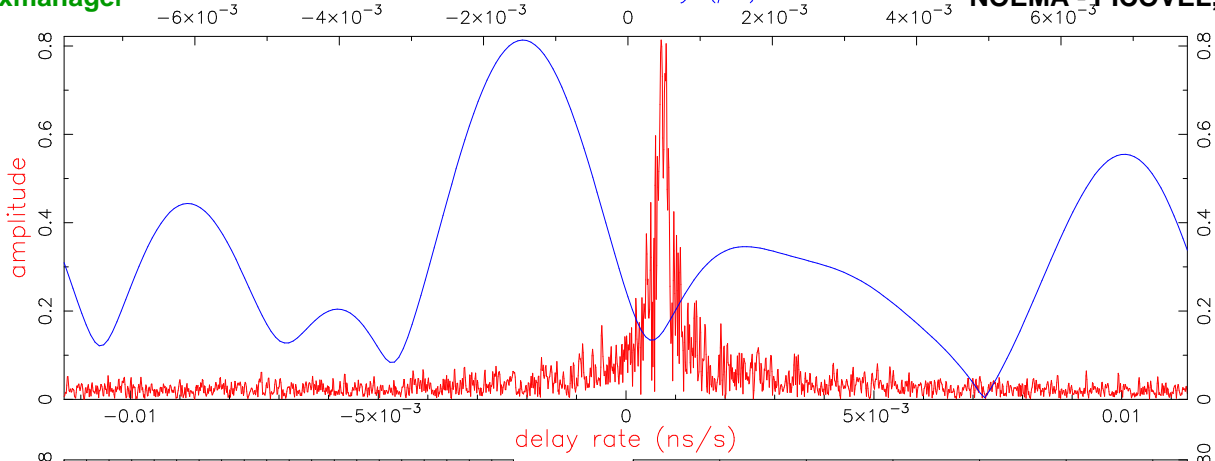
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

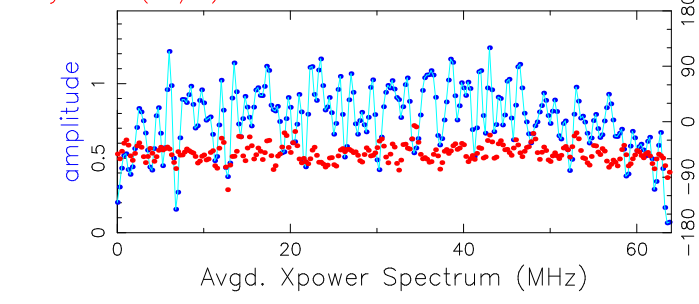
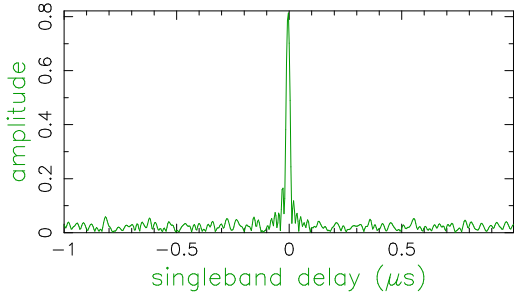
3C273.1W72T3, No0143, NP

NOEMA - PICOVEL, fgroup W, pol LR

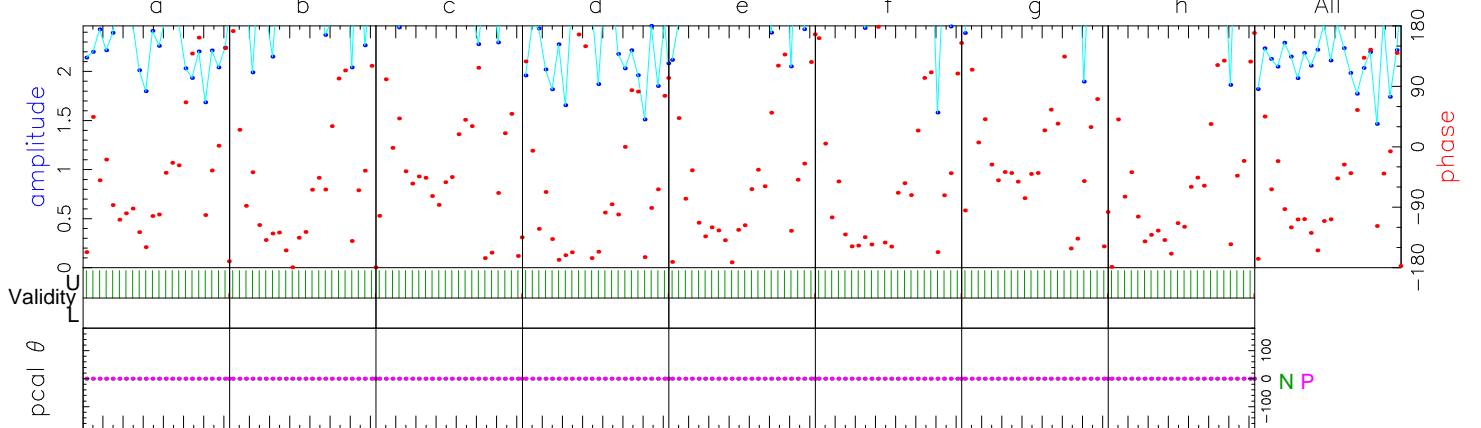
multiband delay (μ s)



Fringe quality 4
 SNR 46.0
 Int time 419.824
 Amp 0.822
 Phase -91.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.005110
 MBD -0.001468
 Fringe rate (Hz) 0.060823
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101320
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
N:P	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			
P	1000	1000	1000	1000	1000	1000	1000	1000				
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
Group delay (usec)(sbd)	-2.84003291448E+03				-2.84003144628E+03				Resid mbdelay (usec)	-1.46820E-03 +/- 2.4E-05		
Sband delay (usec)	-2.84003655653E+03				-1.2531652E+01				Resid sbdelay (usec)	-5.11025E-03 +/- 1.9E-04		
Phase delay (usec)	-2.84003144925E+03				7.3369999E-06				Resid phdelay (usec)	-2.96504E-06 +/- 8.0E-08		
Delay rate (us/s)	-9.58397475167E-02				-9.58404536128E-02				Resid rate (us/s)	7.06096E-07 +/- 3.3E-10		
Total phase (deg)			-13.8		1.54156116278E-05				Resid phase (deg)	-91.9 +/- 2.5		
RMS	76.5	6.0			0.822 +/- 0.018				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	76.5	6.0			0.802				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	160.3	10.4			Search (2048X32)				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	47.1	3.5			Inc. seg. avg.				Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	33.5	6.2			Inc. frq. avg.				Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

N: az 225.2 el 37.8 pa 30.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 573.254 924.962 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/NP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/NP.W.59.1W72T3

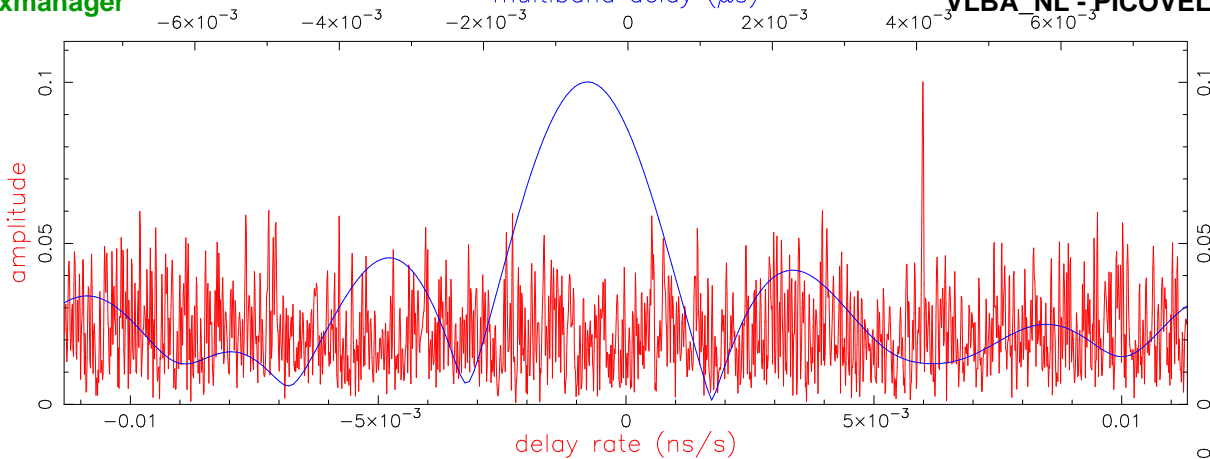
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, nP

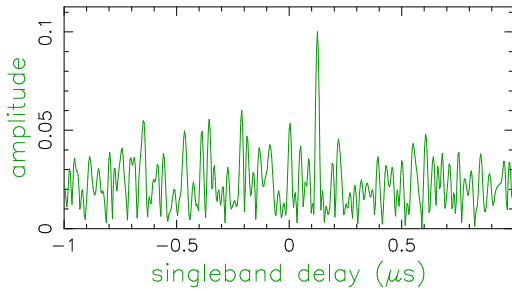
VLBA_NL - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

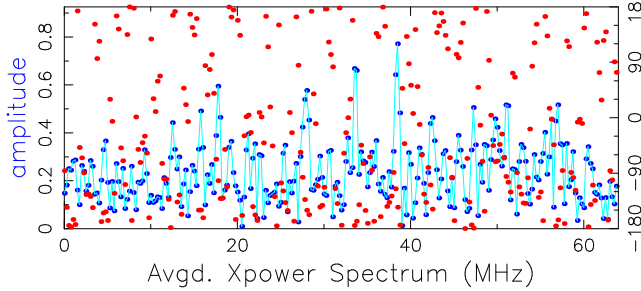


Fringe quality 0

SNR 5.6
 Int time 419.824
 Amp 0.113
 Phase -135.9
 PFD 9.9e-01
 Delays (us)
 SBD 0.125228
 MBD -0.000552
 Fringe rate (Hz)
 0.516931
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

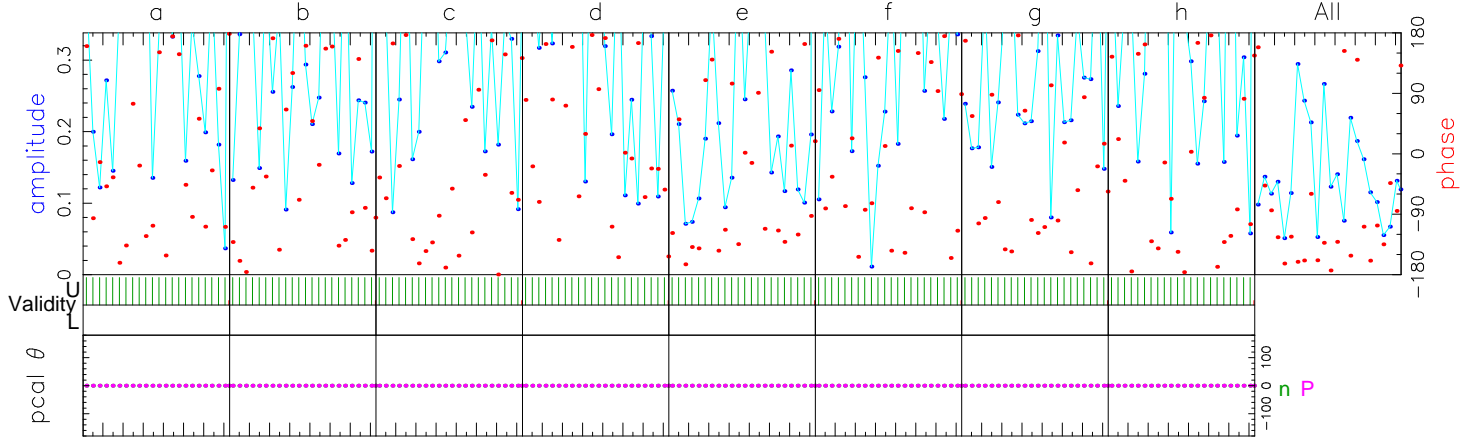


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101321
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

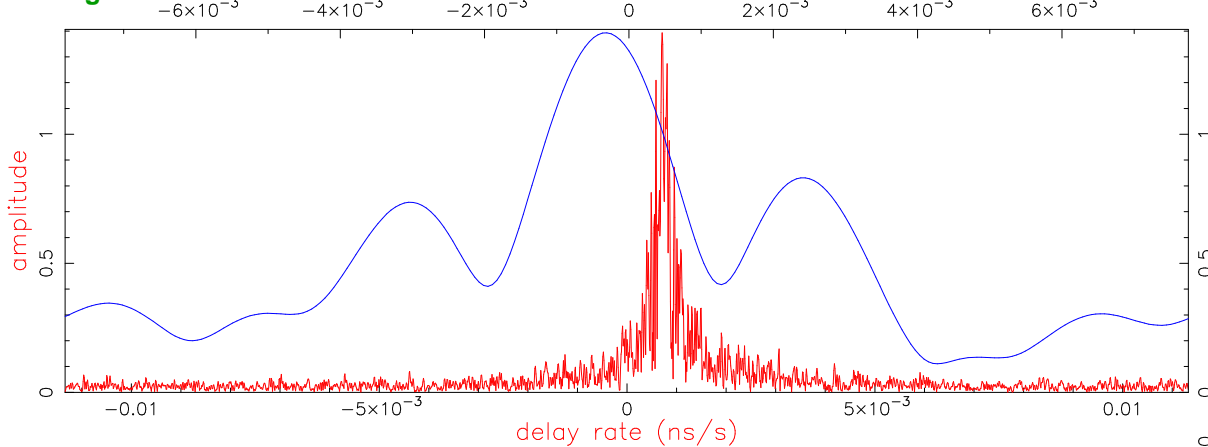
Group delay (usec)(sbd)	-7.83397818191E+03	Apriori delay (usec)	-7.83410262985E+03	Resid mbdelay (usec)	-5.52067E-04	+/-	1.9E-04
Sband delay (usec)	-7.83397740185E+03	Apriori clock (usec)	6.3425980E+00	Resid sbdelay (usec)	1.25228E-01	+/-	1.5E-03
Phase delay (usec)	-7.83410263423E+03	Apriori clockrate (us/s)	8.9999996E-07	Resid phdelay (usec)	-4.38184E-06	+/-	6.6E-07
Delay rate (us/s)	1.56699196339E+00	Apriori rate (us/s)	1.56698596234E+00	Resid rate (us/s)	6.00105E-06	+/-	2.7E-09
Total phase (deg)	-328.5	Apriori accel (us/s/s)	4.19316436171E-05	Resid phase (deg)	-135.9	+/-	20.4

ph/seg (deg)	48.4	Theor.	49.0	Amplitude	0.113 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	78.9		85.4	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	15.4		28.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	41.8		50.4	Inc. seg. avg.	0.116	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.103	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

n: az 107.0 el 20.9 pa -45.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) -8912.744 679.057 simultaneous interpolator

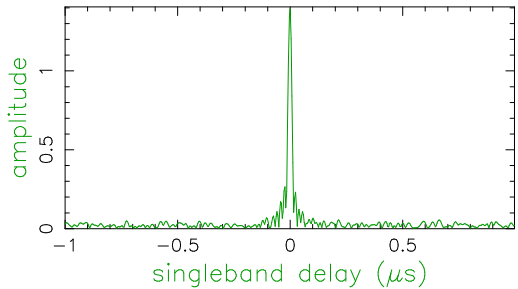
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/nP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/nP.W.68.1W72T3

multiband delay (μ s)

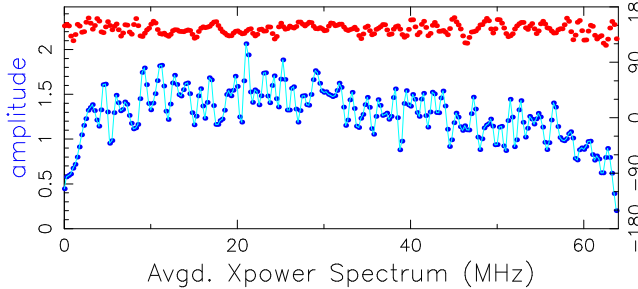


Fringe quality 2

SNR 78.7
Int time 419.824
Amp 1.406
Phase 135.2
PFD 0.0e+00
Delays (us)
SBD -0.001157
MBD -0.000333
Fringe rate (Hz)
0.061517
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

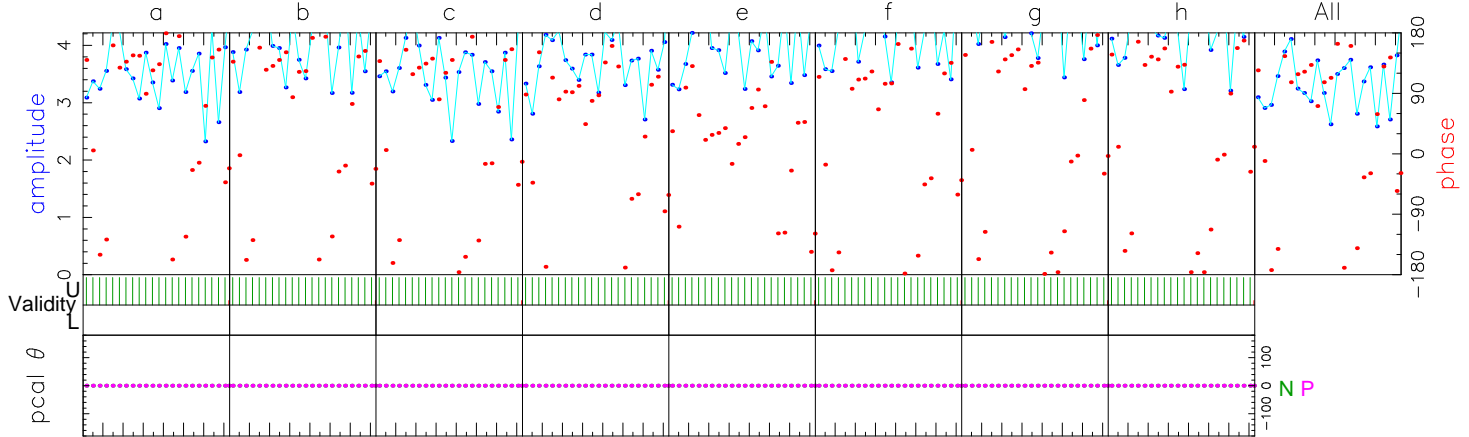


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001501.00
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101323
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

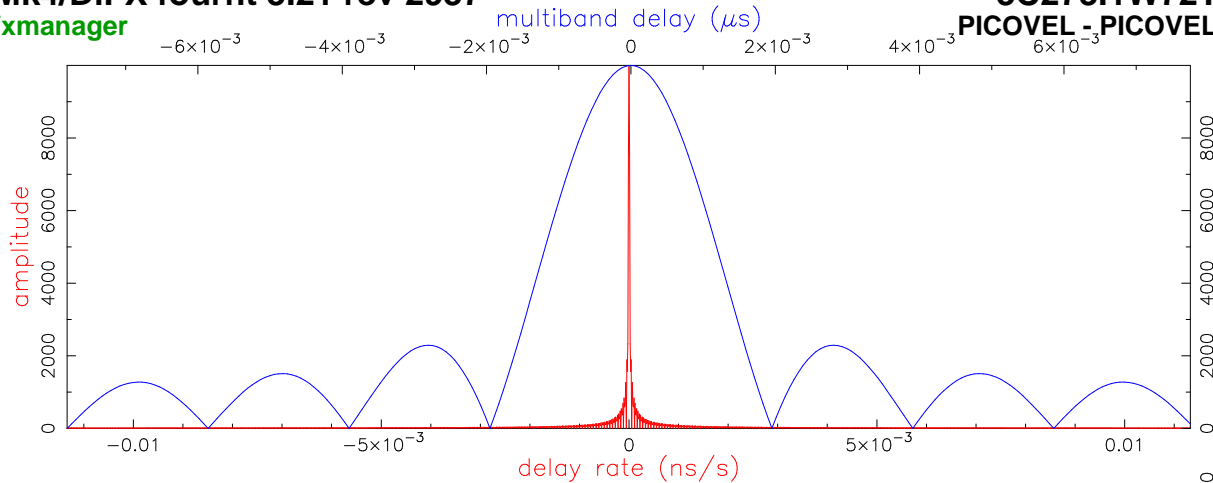


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	154.2	151.1	145.8	109.5	44.0	127.6	156.6	158.9	Phase	135.2
N	1.5	1.7	1.4	1.6	1.7	1.7	1.9	1.9	Ampl.	1.7
P	257.0	256.8	256.4	256.7	256.6	256.5	257.1	257.1	Sbd box	256.7
N:P	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-2.84003177894E+03		Apriori delay (usec)		-2.84003144628E+03		Resid mbdelay (usec)		-3.32656E-04	+/- 1.4E-05
Sband delay (usec)	-2.84003260303E+03		Apriori clock (usec)		-1.2531652E+01		Resid sbdelay (usec)		-1.15675E-03	+/- 1.1E-04
Phase delay (usec)	-2.84003144192E+03		Apriori clockrate (us/s)		7.3369999E-06		Resid phdelay (usec)		4.36040E-06	+/- 4.7E-08
Delay rate (us/s)	-9.58397394640E-02		Apriori rate (us/s)		-9.58404536128E-02		Resid rate (us/s)		7.14149E-07	+/- 1.9E-10
Total phase (deg)			Apriori accel (us/s/s)		1.54156116278E-05		Resid phase (deg)		135.2	+/- 1.5

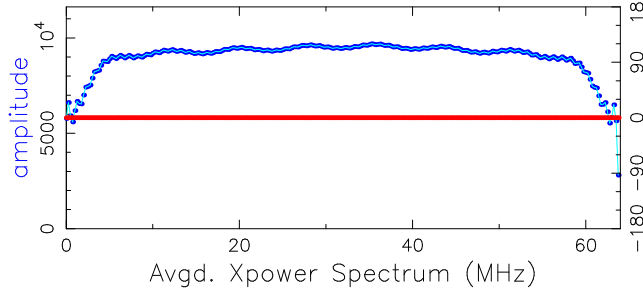
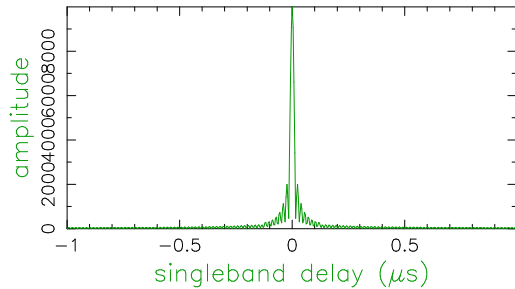
	RMS	Theor.	Amplitude	1.406 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	80.7	3.5	Search (2048X32)	1.380	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	139.9	6.1	Interp.	0.000	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	42.4	2.1	Inc. seg. avg.	3.319	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	23.4	3.6	Inc. frq. avg.	1.696	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

N: az 225.2 el 37.8 pa 30.5 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 573.254 924.962 simultaneous interpolator

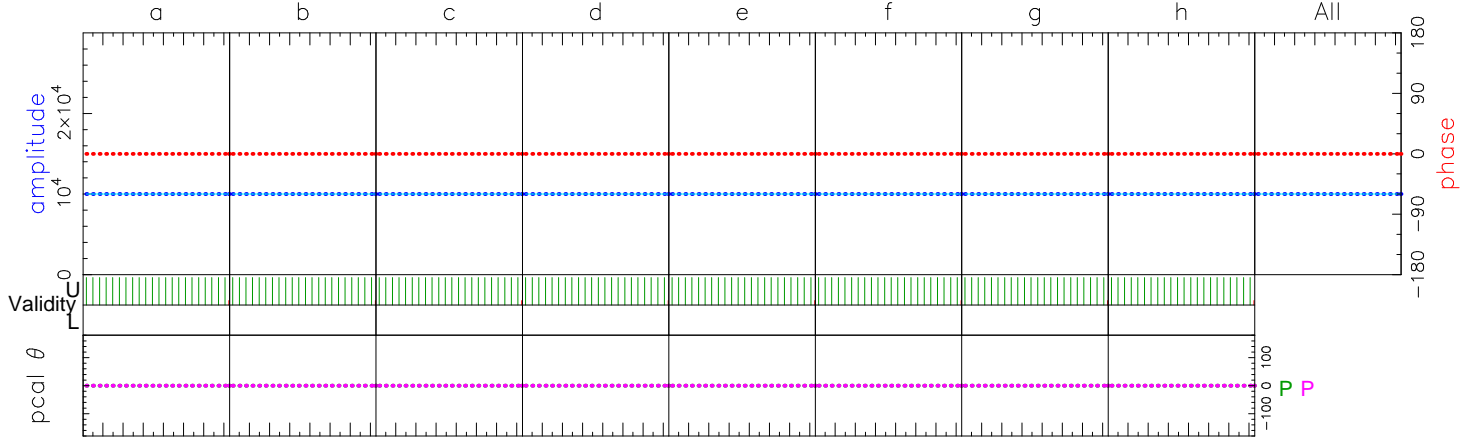
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/NP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/NP.W.76.1W72T3



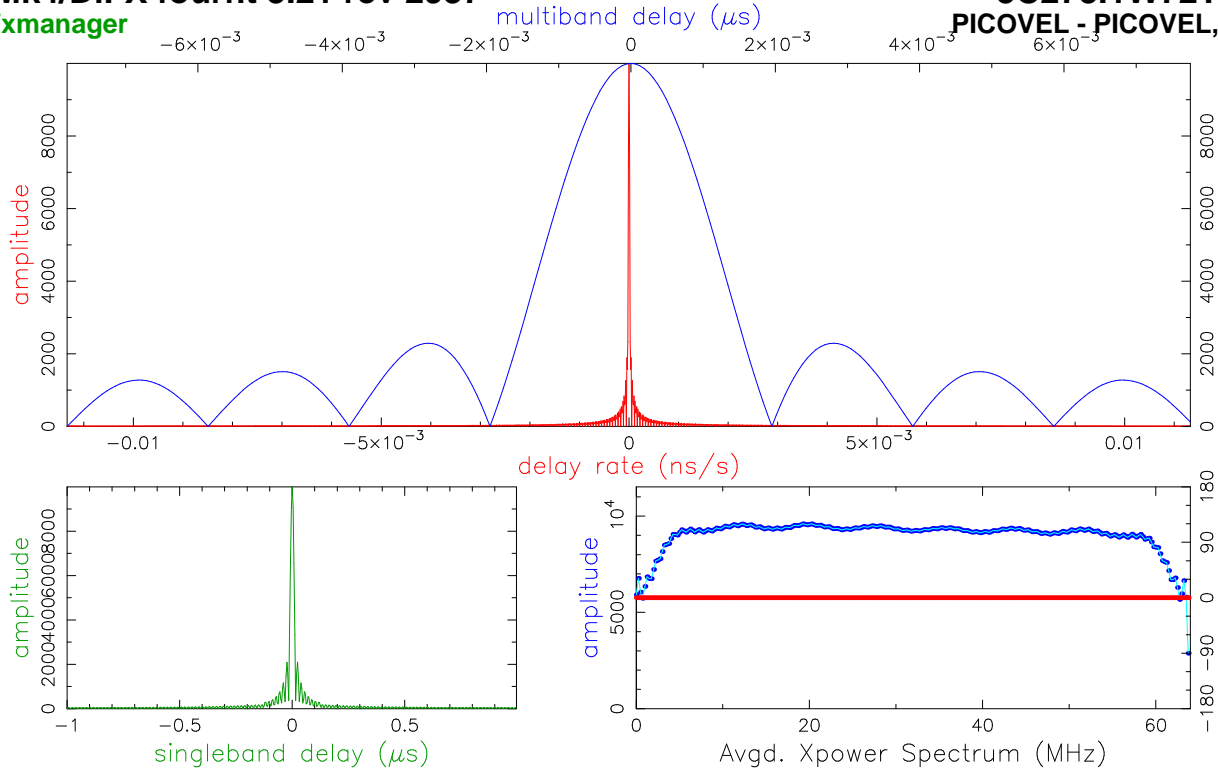
Fringe quality 9
SNR 560313.8
Int time 419.824
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Yr:day 16383
Start 2021:114
Stop 2021:114
FRT 001501.00
FRT 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101324
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

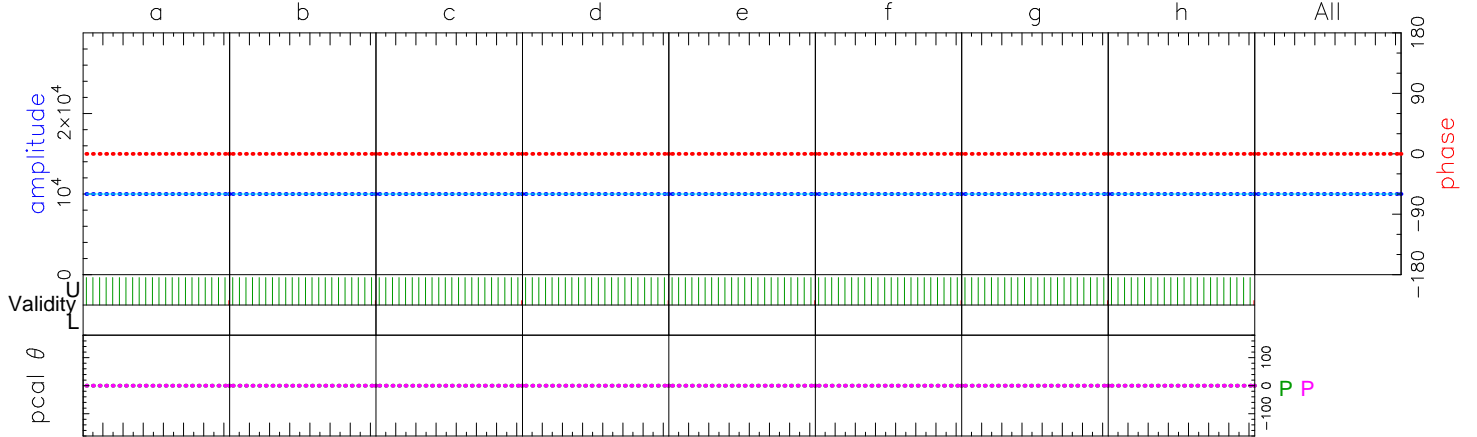


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
P	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
									Chan ids	
									Tracks	
									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	0.00000E+00	+/- 1.9E-09
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	0.00000E+00	+/- 1.5E-08
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	0.00000E+00	+/- 6.6E-12
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	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0
	RMS	Theor.	Amplitude	9999.999 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (2048X32)	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	Sample rate(MISamp/s): 128	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



Fringe quality 9
SNR 560313.8
Int time 419.824
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. c211a
Yr:day # 16383
Start 2021:114
Stop 2021:114
FRT 001501.00
FRT 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101327
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
P	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									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	0.00000E+00	+/- 1.9E-09
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	0.00000E+00	+/- 1.5E-08
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	0.00000E+00	+/- 6.6E-12
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	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 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 Sample rate(MISamp/s): 128 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
 P: az 218.9 el 48.1 pa 30.8 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/PP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/PP.W.87.1W72T3

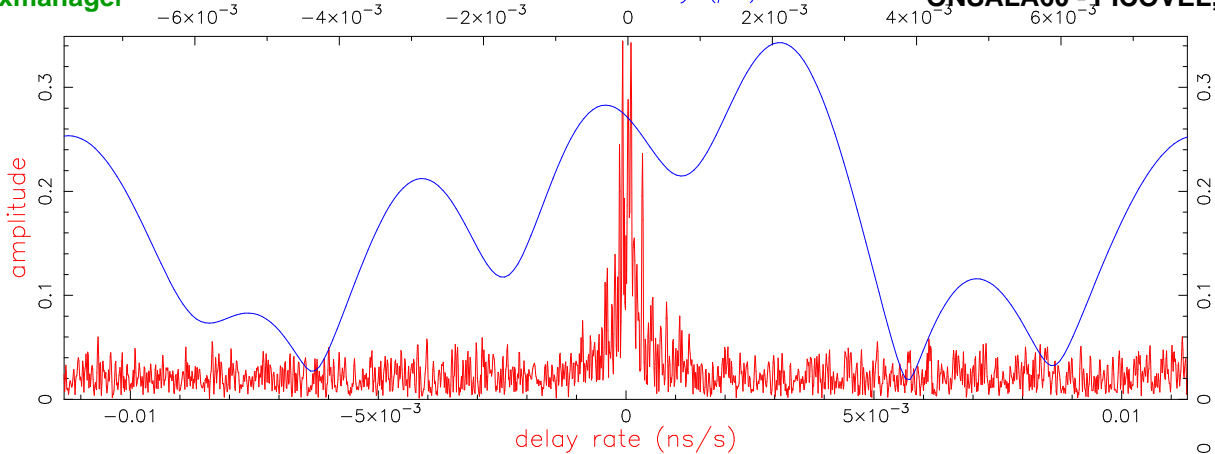
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, XP

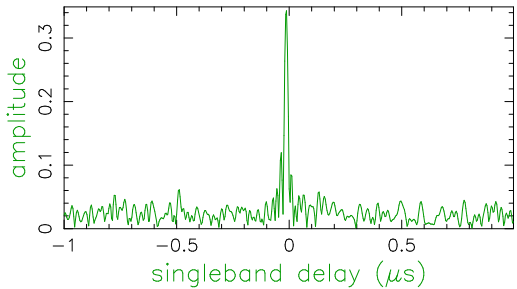
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

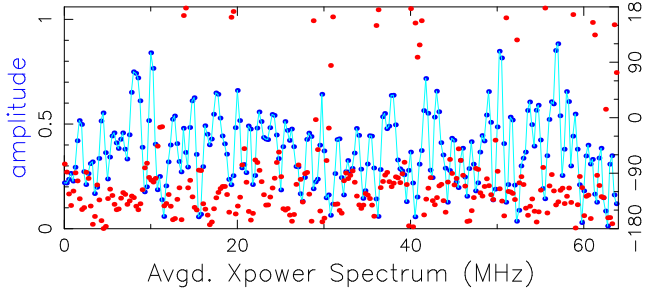


Fringe quality 7

SNR 19.6
 Int time 419.807
 Amp 0.349
 Phase 54.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.013344
 MBD 0.002065
 Fringe rate (Hz) 0.008229
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

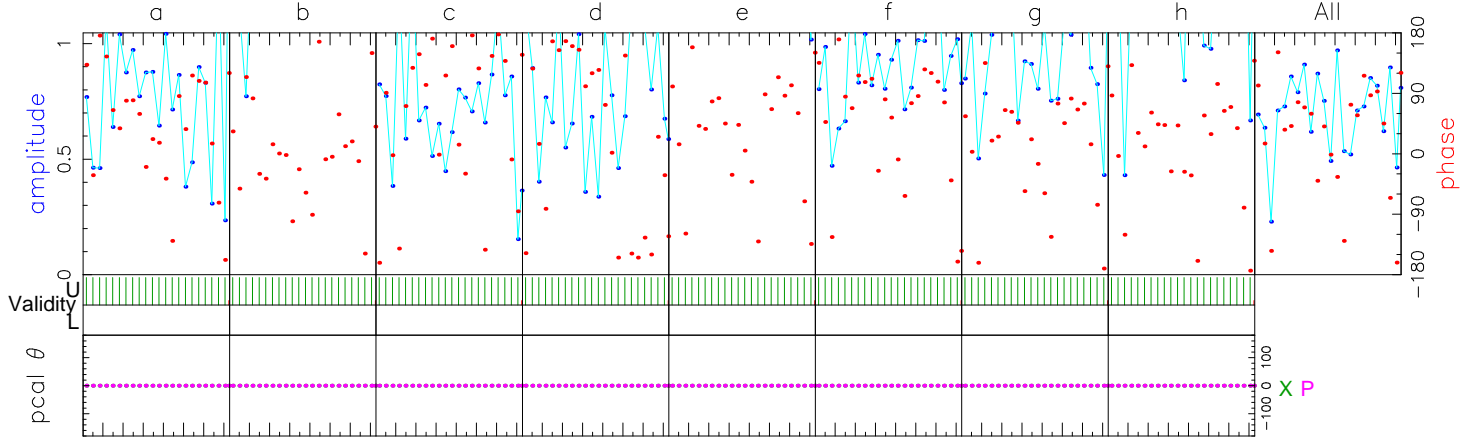


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101336
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	63.2	-8.3	143.2	172.1	58.0	89.6	38.2	38.0	Phase	54.3
	0.3	0.7	0.3	0.3	0.7	0.5	0.5	0.7	Ampl.	0.5
	251.0	252.7	253.6	253.7	253.4	253.6	253.9	253.1	Sbd box	253.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	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	
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	
									Tracks	
Group delay (usec)(sbd)	-6.42044832125E+03		Apriori delay (usec)		-6.42043476102E+03		Resid mbdelay (usec)		2.06477E-03	+/- 5.6E-05
Sband delay (usec)	-6.42044810527E+03		Apriori clock (usec)		5.7321163E+01		Resid sbdelay (usec)		-1.33442E-02	+/- 4.4E-04
Phase delay (usec)	-6.42043475927E+03		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		1.75011E-06	+/- 1.9E-07
Delay rate (us/s)	-1.01747010869E-02		Apriori rate (us/s)		-1.01747966210E-02		Resid rate (us/s)		9.55341E-08	+/- 7.8E-10
Total phase (deg)			Apriori accel (us/s/s)		3.53583829502E-05		Resid phase (deg)		54.3	+/- 5.9

	RMS	Theor.	Amplitude	0.349 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	77.8	14.1	Search (2048X32)	0.331	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	112.3	24.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	67.8	8.3	Inc. seg. avg.	0.681	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	66.6	14.5	Inc. frq. avg.	0.500	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 225.8 el 26.1 pa 23.2 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 113.609 2216.853 simultaneous interpolator

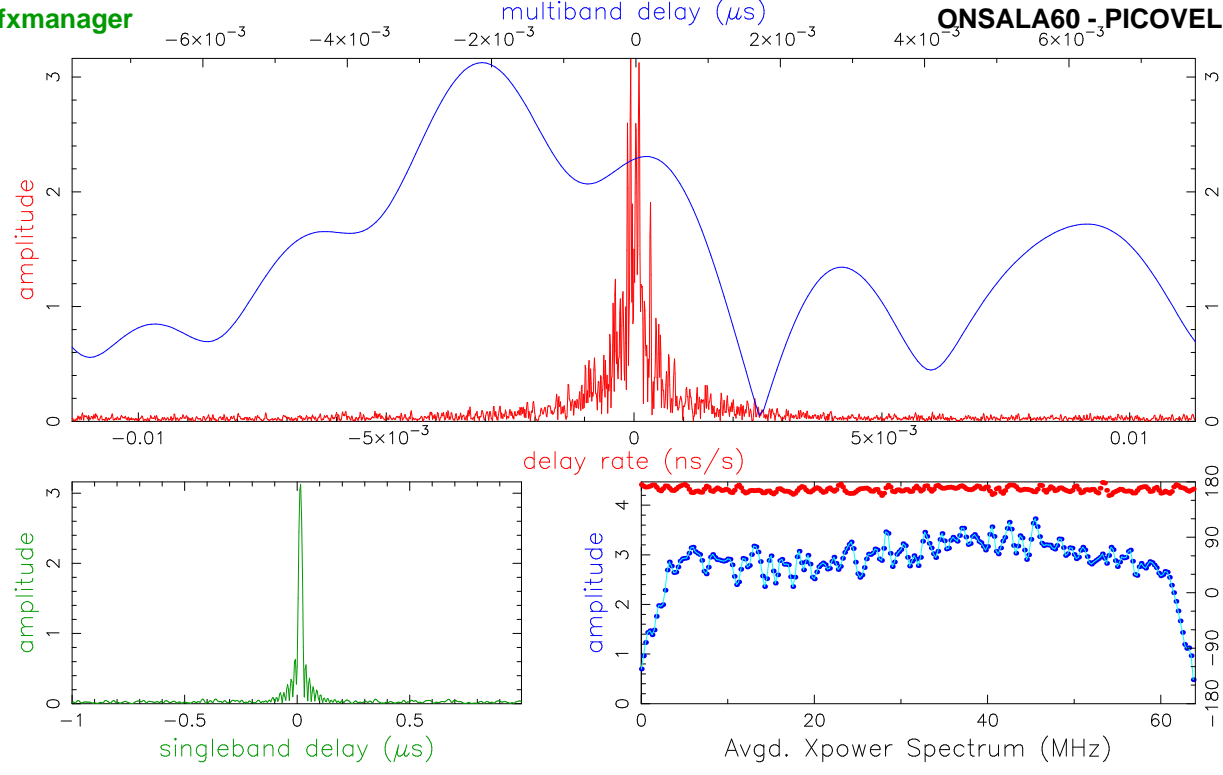
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/XP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/XP.W.107.1W72T3

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

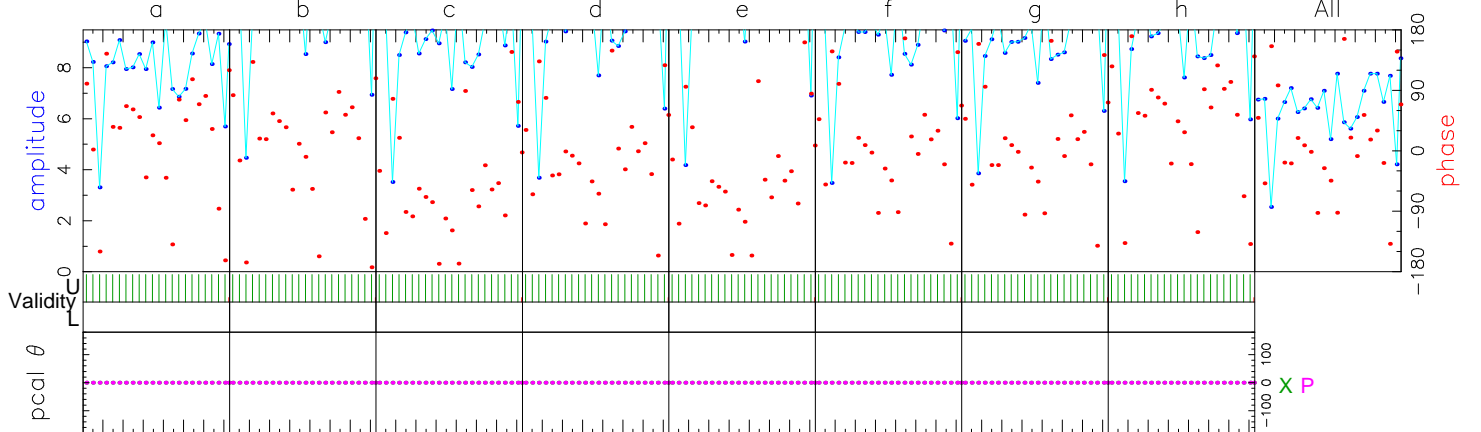
3C273.1W72T3, No0143, XP

ONSALA60 - PICOVEL, fgroup W, pol LL



Fringe quality 1
 SNR 177.2
 Int time 419.807
 Amp 3.163
 Phase -4.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.014194
 MBD -0.002171
 Fringe rate (Hz)
 0.008290
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101326
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	48.6	32.0	-79.9	-21.6	-65.2	-3.6	-4.8	68.5	Phase	-4.1
	3.9	5.1	4.5	4.8	5.3	4.6	4.3	4.6	Ampl.	4.6
	259.0	260.7	260.7	261.3	261.2	261.4	261.7	261.1	Sbd box	260.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	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	
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	
									Tracks	
Group delay (usec)(sbd)	-6.42042130681E+03		Apriori delay (usec)		-6.42043476102E+03		Resid mbdelay (usec)		-2.17079E-03	+/- 6.1E-06
Sband delay (usec)	-6.42042056652E+03		Apriori clock (usec)		5.7321163E+01		Resid sbdelay (usec)		1.41945E-02	+/- 4.9E-05
Phase delay (usec)	-6.42043476115E+03		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		-1.30974E-07	+/- 2.1E-08
Delay rate (us/s)	-1.01747003777E-02		Apriori rate (us/s)		-1.01747966210E-02		Resid rate (us/s)		9.62434E-08	+/- 8.6E-11
Total phase (deg)			Apriori accel (us/s/s)		3.53583829502E-05		Resid phase (deg)		-4.1	+/- 0.6

ph/seg (deg) 78.3 1.6 Theor. Amplitude 3.163 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 109.4 2.7 Search (2048X32) 3.022 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.5 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.3 1.6 Inc. seg. avg. 6.403 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 X: az 225.8 el 26.1 pa 23.2 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 113.609 2216.853 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/XP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/XP.W.81.1W72T3 simultaneous interpolator

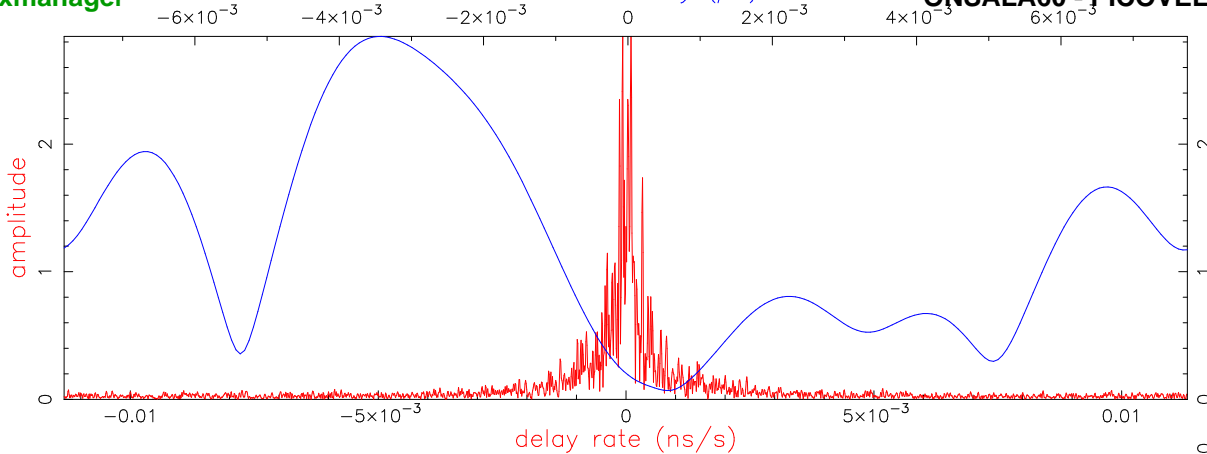
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, XP

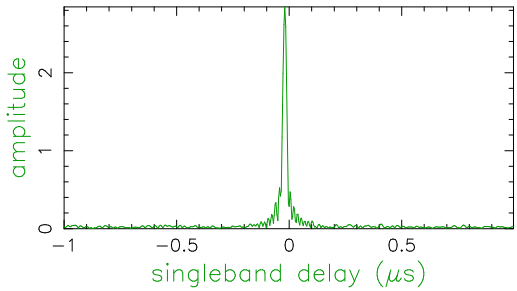
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

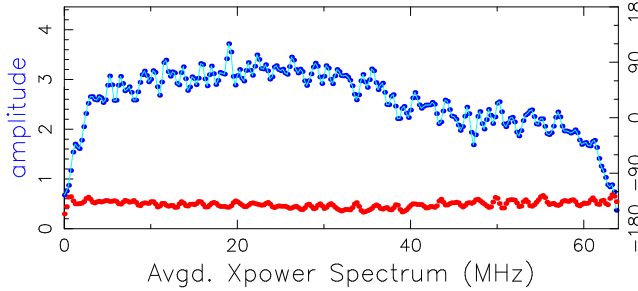


Fringe quality 1

SNR 159.4
 Int time 419.807
 Amp 2.844
 Phase 32.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.019617
 MBD -0.003437
 Fringe rate (Hz)
 0.008327
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

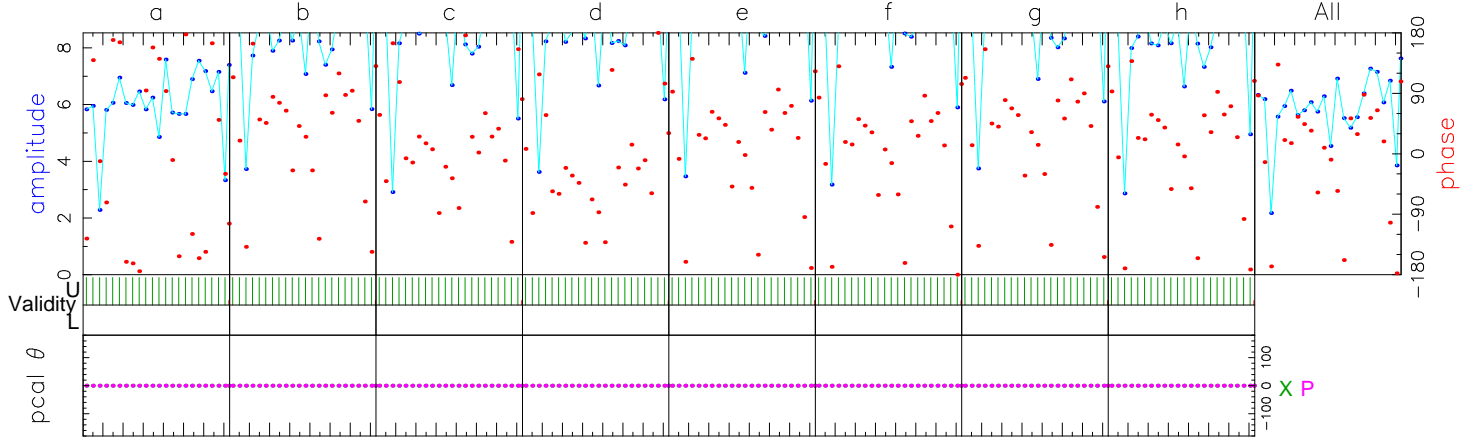


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101329
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-178.6	63.4	4.1	-42.7	39.2	29.7	57.2	37.7	Phase	32.7
	2.9	4.2	4.2	4.2	4.5	4.5	4.3	4.1	Ampl.	4.1
	249.8	250.9	251.0	251.8	252.6	251.5	252.0	251.8	Sbd box	252.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	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	
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	
									Tracks	
Group delay (usec)(sbd)	-6.42045382303E+03		Apriori delay (usec)		-6.42043476102E+03		Resid mbdelay (usec)		-3.43701E-03	+/- 6.8E-06
Sband delay (usec)	-6.42045437827E+03		Apriori clock (usec)		5.7321163E+01		Resid sbdelay (usec)		-1.96173E-02	+/- 5.4E-05
Phase delay (usec)	-6.42043475997E+03		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		1.05431E-06	+/- 2.3E-08
Delay rate (us/s)	-1.01746999490E-02		Apriori rate (us/s)		-1.01747966210E-02		Resid rate (us/s)		9.66721E-08	+/- 9.6E-11
Total phase (deg)			Apriori accel (us/s/s)		3.53583829502E-05		Resid phase (deg)		32.7	+/- 0.7

RMS Theor. Amplitude 2.844 +/- 0.018
 ph/seg (deg) 78.0 1.7 Search (2048X32) 2.798
 amp/seg (%) 111.6 3.0 Interp. 0.000
 ph/frq (deg) 71.0 1.0 Inc. seg. avg. 5.811
 amp/frq (%) 47.3 1.8 Inc. frq. avg. 4.109
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MSamp/s): 128 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

X: az 225.8 el 26.1 pa 23.2 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 113.609 2216.853 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/XP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/XP.W.89.1W72T3

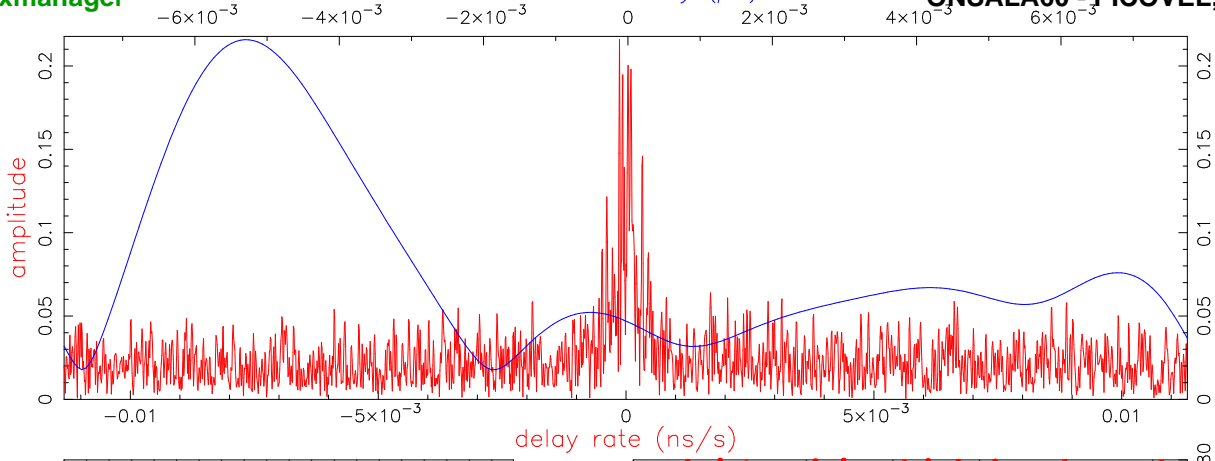
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, XP

ONSALA60 - PICOVEL, fgroup W, pol LR

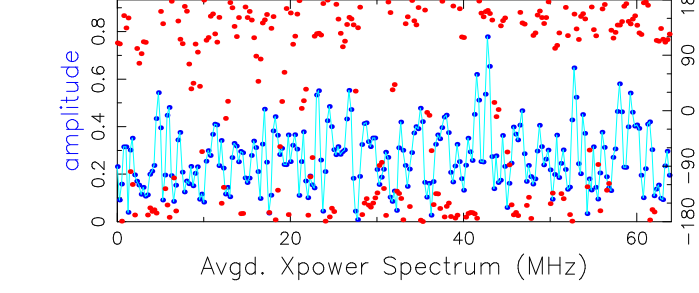
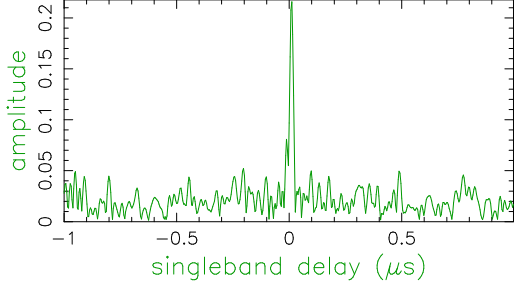
multiband delay (μ s)



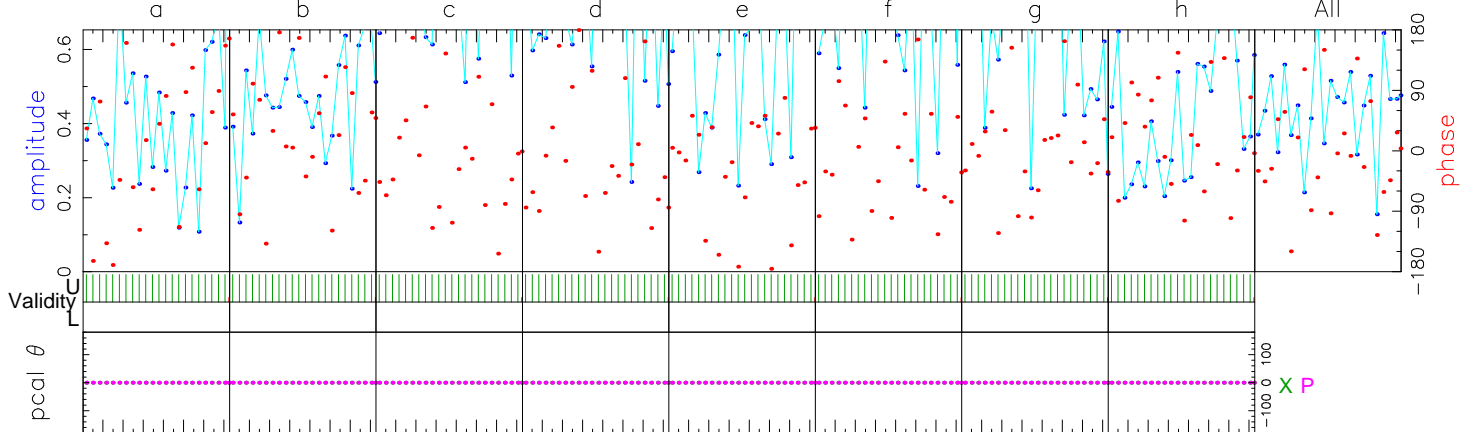
Fringe quality 9

SNR 12.2
 Int time 419.807
 Amp 0.218
 Phase -15.0
 PFD 1.6e-25
 Delays (us)
 SBD 0.010527
 MBD -0.005308
 Fringe rate (Hz)
 -0.011470
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001501.00
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101332
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	72.3	27.5	-38.4	-58.9	-1.1	-35.8	-0.7	10.8		Phase -15.0
	0.1	0.2	0.4	0.2	0.4	0.3	0.4	0.1		Ampl. 0.2
	255.7	446.8	258.5	259.3	259.5	259.5	259.2	288.0		Sbd box 259.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
P	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:P	0:0	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
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)	-6.42042444367E+03		Apriori delay (usec)		-6.42043476102E+03		Resid mbdelay (usec)		-5.30765E-03	+/- 8.9E-05
Sband delay (usec)	-6.42042423377E+03		Apriori clock (usec)		5.7321163E+01		Resid sbdelay (usec)		1.05273E-02	+/- 7.1E-04
Phase delay (usec)	-6.42043476150E+03		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		-4.82633E-07	+/- 3.0E-07
Delay rate (us/s)	-1.01749297781E-02		Apriori rate (us/s)		-1.01747966210E-02		Resid rate (us/s)		-1.33157E-07	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		3.53583829502E-05		Resid phase (deg)		-15.0	+/- 9.4

ph/seg (deg) 78.8 22.5 Search (2048X32) 0.214 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 117.6 39.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.2 13.3 Inc. seg. avg. 0.410 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.2 23.2 Inc. frq. avg. 0.243 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 225.8 el 26.1 pa 23.2 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 113.609 2216.853 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/XP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/XP.W.98.1W72T3

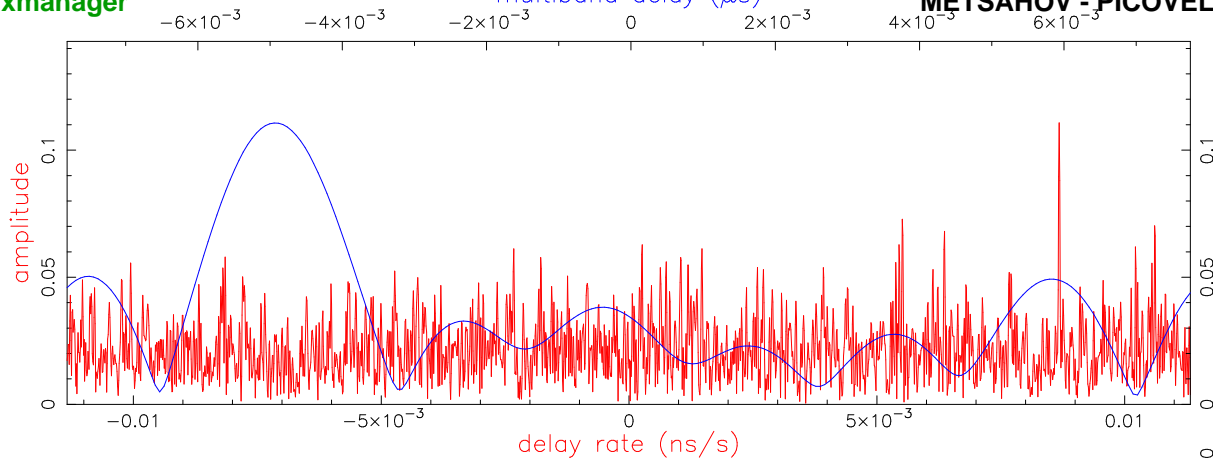
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, ZP

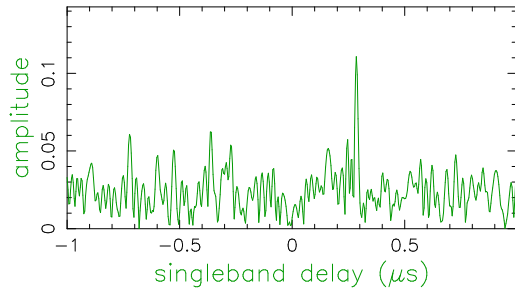
METSAHOV - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

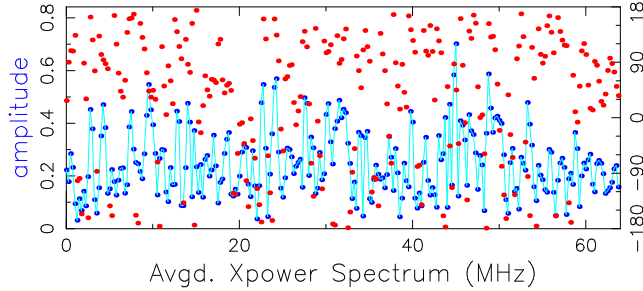


Fringe quality 0

SNR 6.1
 Int time 405.599
 Amp 0.143
 Phase -152.0
 PFD 2.5e-01
 Delays (us)
 SBD 0.285103
 MBD -0.004928
 Fringe rate (Hz)
 0.748343
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

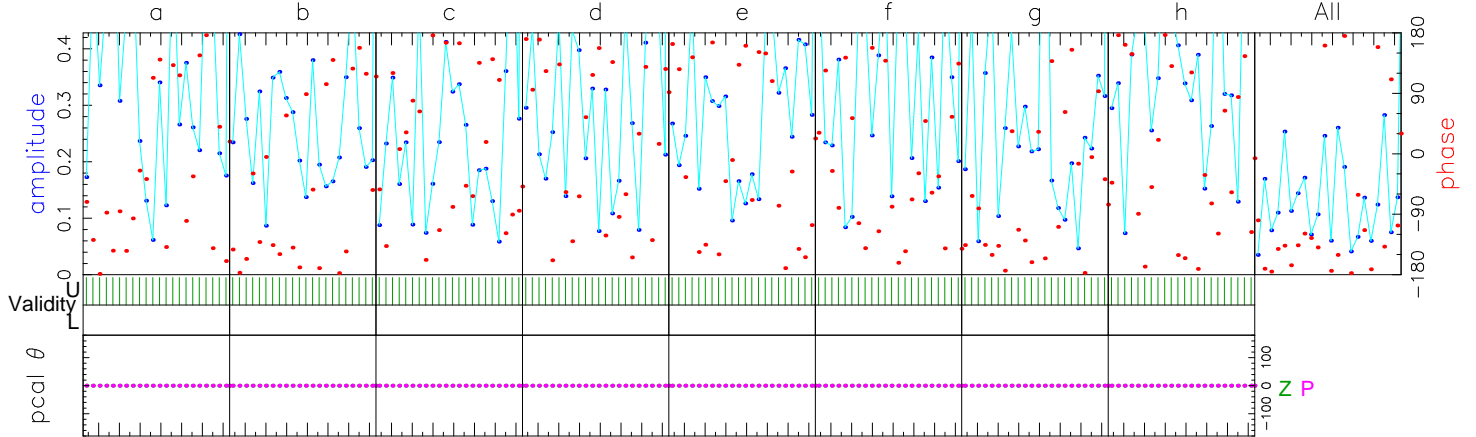


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001514.82
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101333
 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
	-141.2	-168.4	-126.0	179.8	-165.8	-121.1	-138.9	-159.6	Phase	-152.0
	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	126.4	324.0	339.0	235.1	489.5	346.6	2.0	50.9	Sbd box	330.0
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -8.82774843682E+03 Apriori delay (usec) -8.82804038386E+03 Resid mbdelay (usec) -4.92797E-03 +/- 1.8E-04
 Sband delay (usec) -8.82775528036E+03 Apriori clock (usec) 2.2194672E-01 Resid sbdelay (usec) 2.85103E-01 +/- 1.4E-03
 Phase delay (usec) -8.82804038876E+03 Apriori clockrate (us/s) 6.1599998E-07 Resid phdelay (usec) -4.90071E-06 +/- 6.1E-07
 Delay rate (us/s) -8.03567042616E-02 Apriori rate (us/s) -8.03653917788E-02 Resid rate (us/s) 8.68752E-06 +/- 2.6E-09
 Total phase (deg) -31.6 Apriori accel (us/s/s) 4.79543889906E-05 Resid phase (deg) -152.0 +/- 18.8

RMS Theor. Amplitude 0.143 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 40.5 45.1 Search (2048X32) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 70.2 78.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 23.2 26.6 Inc. seg. avg. 0.132 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.8 46.4 Inc. frq. avg. 0.135 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 237.3 el 19.3 pa 24.8 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 535.324 2476.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/ZP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/ZP.W.100.1W72T3

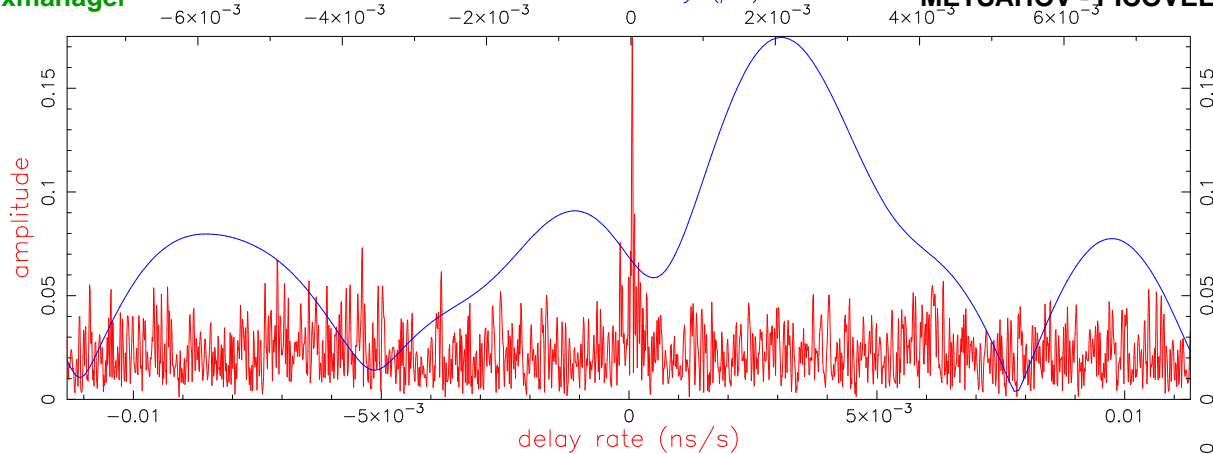
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, ZP

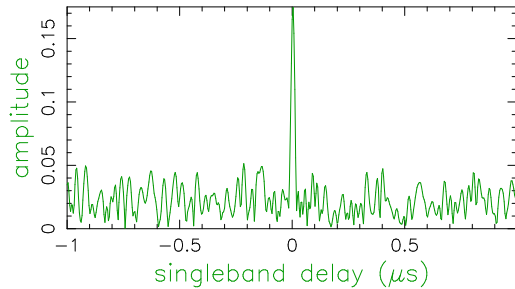
METSAHOV - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

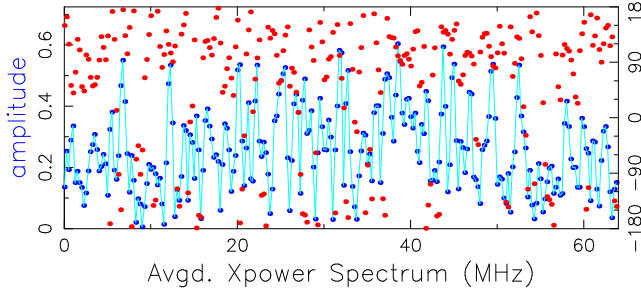


Fringe quality 9

SNR 9.6
 Int time 405.599
 Amp 0.175
 Phase 136.1
 PFD 2.3e-13
 Delays (us)
 SBD 0.003205
 MBD 0.002084
 Fringe rate (Hz) 0.006160
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

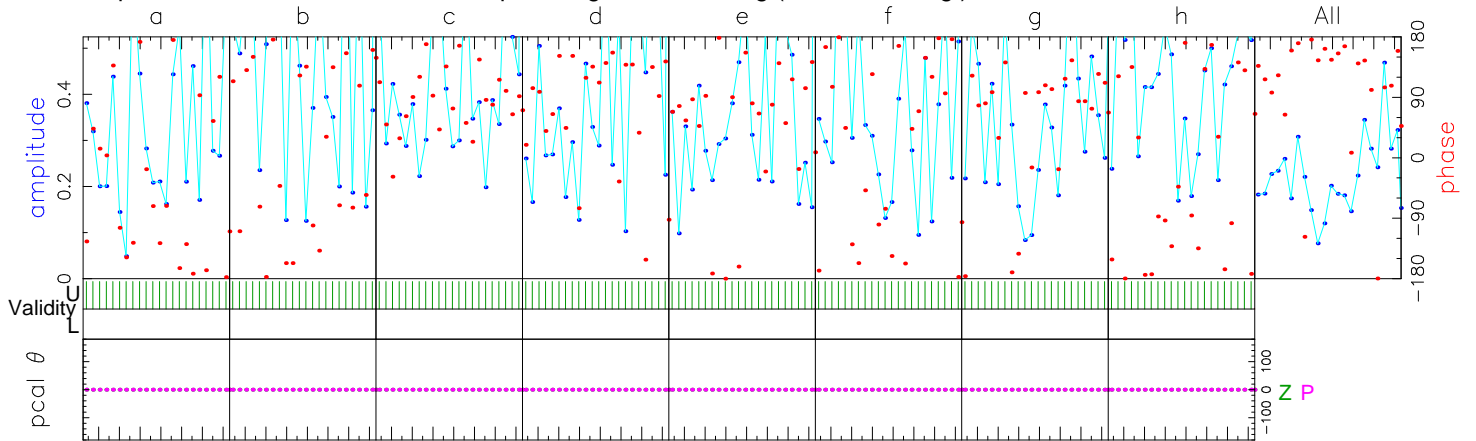


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001514.82
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101336
 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
	-164.9	171.0	83.3	114.7	102.7	167.9	111.3	-178.9	Phase	136.1
	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	256.0	257.4	257.8	258.5	342.5	258.8	258.7	256.9	Sbd box	257.8
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.82803829997E+03	Apriori delay (usec)	-8.82804038386E+03	Resid mbdelay (usec)	2.08389E-03	+/-	1.1E-04
Sband delay (usec)	-8.82803717911E+03	Apriori clock (usec)	2.2194672E-01	Resid sbdelay (usec)	3.20475E-03	+/-	8.9E-04
Phase delay (usec)	-8.82804037947E+03	Apriori clockrate (us/s)	6.1599998E-07	Resid phdelay (usec)	4.38803E-06	+/-	3.8E-07
Delay rate (us/s)	-8.03653202719E-02	Apriori rate (us/s)	-8.03653917788E-02	Resid rate (us/s)	7.15069E-08	+/-	1.6E-09
Total phase (deg)	-103.5	Apriori accel (us/s/s)	4.79543889906E-05	Resid phase (deg)	136.1	+/-	11.9

ph/seg (deg)	45.9	Theor.	28.5	Amplitude	0.175 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	56.5		49.8	Search (2048X32)	0.164	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.0		16.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.1		29.3	Inc. seg. avg.	0.203	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.217	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 237.3 el 19.3 pa 24.8 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 535.324 2476.619 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/ZP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/ZP.W.106.1W72T3

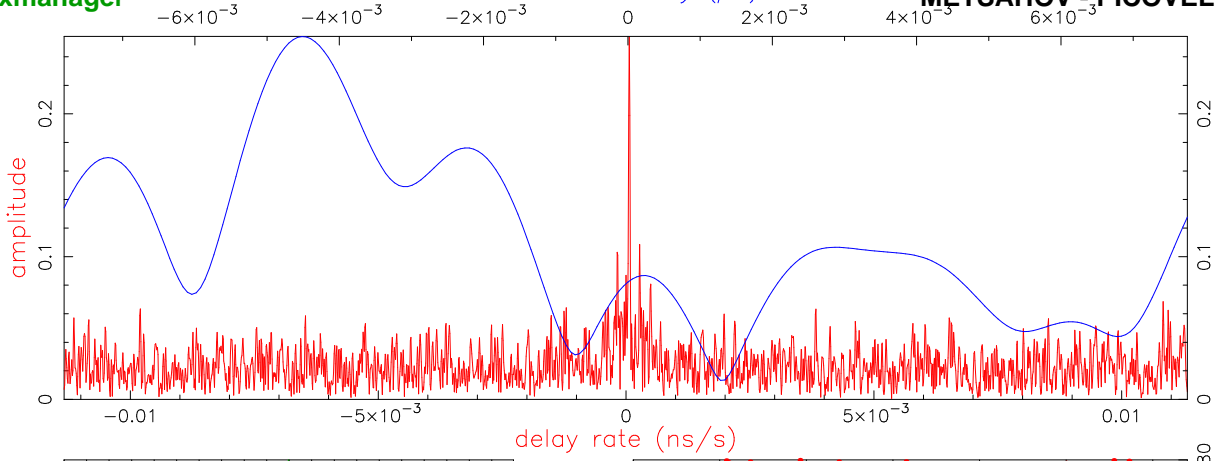
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W72T3, No0143, ZP

MEṬSAHOV - PICOVEL, fgroup W, pol LL

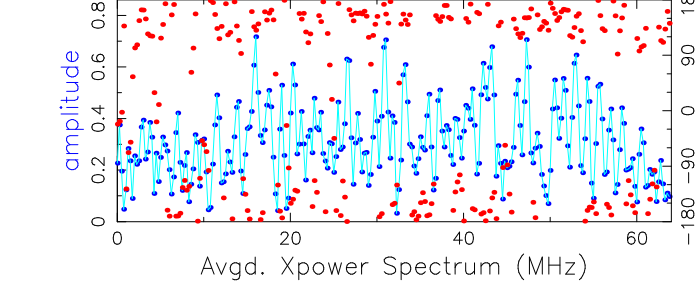
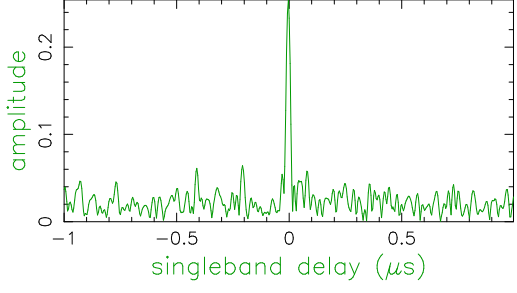
multiband delay (μ s)



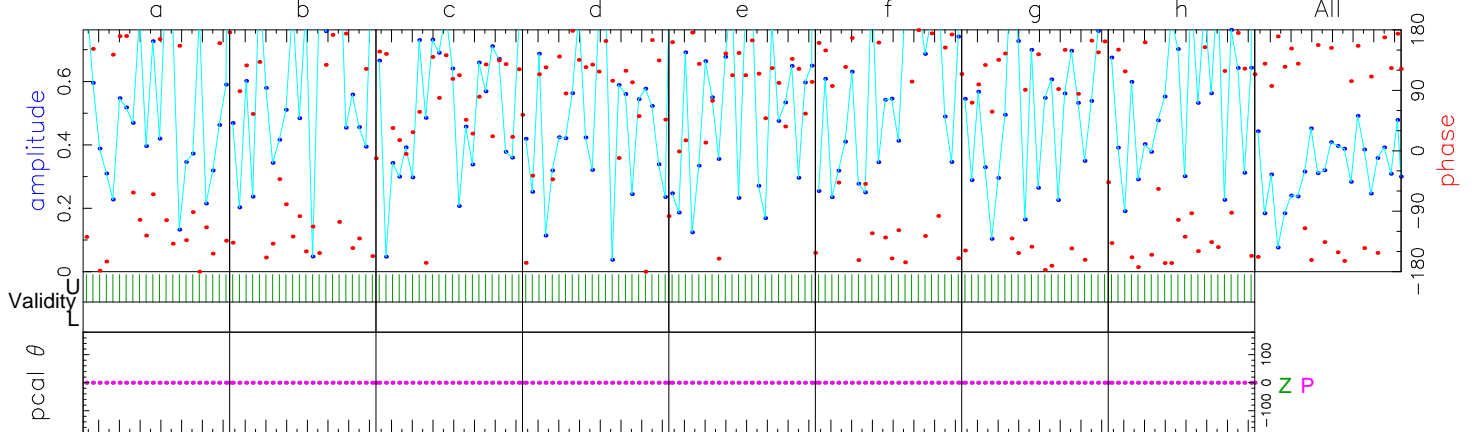
Fringe quality 9

SNR 14.0
 Int time 405.599
 Amp 0.254
 Phase 171.7
 PFD 8.6e-36
 Delays (us)
 SBD -0.004217
 MBD -0.004516
 Fringe rate (Hz) 0.005833
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 001514.82
 Stop 002200.84
 FRT 001831.00
 Corr/FF/build
 2021:287:093341
 2021:287:101326
 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)	-143.2	-158.5	93.9	130.0	106.4	-167.7	169.9	-151.9		171.7
Sband delay (usec)	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4		0.3
Phase delay (usec)	253.9	254.9	255.7	256.8	257.2	257.4	257.4	255.7		255.9
Delay rate (us/s)	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		0:0
Total phase (deg)			-67.9							171.7
Apriori delay (usec)										+/- 7.7E-05
Apriori clock (usec)										+/- 6.2E-04
Apriori clockrate (us/s)										+/- 2.6E-07
Apriori rate (us/s)										+/- 1.1E-09
Apriori accel (us/s/s)										+/- 8.2
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)										-1.000 1.000
mb window (us)										-0.008 0.008
dr window (ns/s)										-0.011 0.011
ion window (TEC)										0.00 0.00

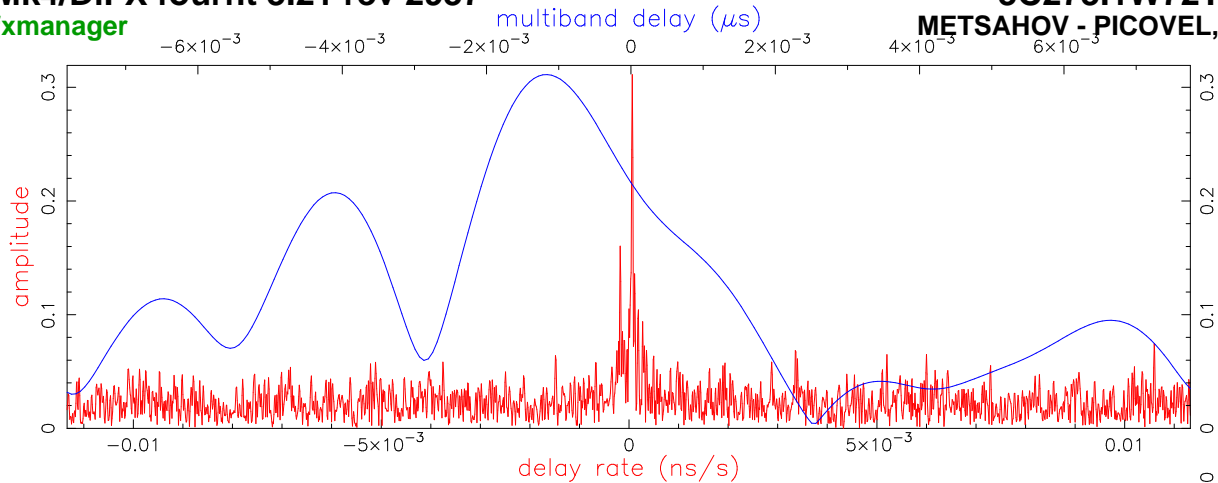
ph/seg (deg) 41.7 19.6 Search (2048X32) 0.251 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.6 34.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.8 11.6 Inc. seg. avg. 0.310 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.9 20.2 Inc. frq. avg. 0.345 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 237.3 el 19.3 pa 24.8 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 535.324 2476.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/ZP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/ZP.W.85.1W72T3

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

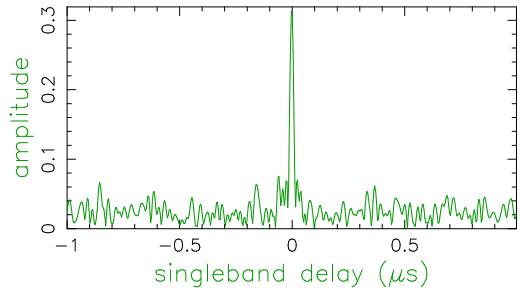
3C273.1W72T3, No0143, ZP

METSAHOV - PICOVEL, fgroup W, pol RR

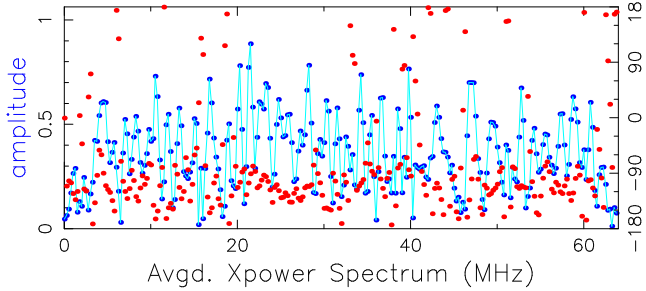


Fringe quality 8

SNR 17.6
Int time 405.599
Amp 0.319
Phase -124.6
PFD 0.0e+00
Delays (us)
SBD -0.002075
MBD -0.001203
Fringe rate (Hz) 0.005969
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

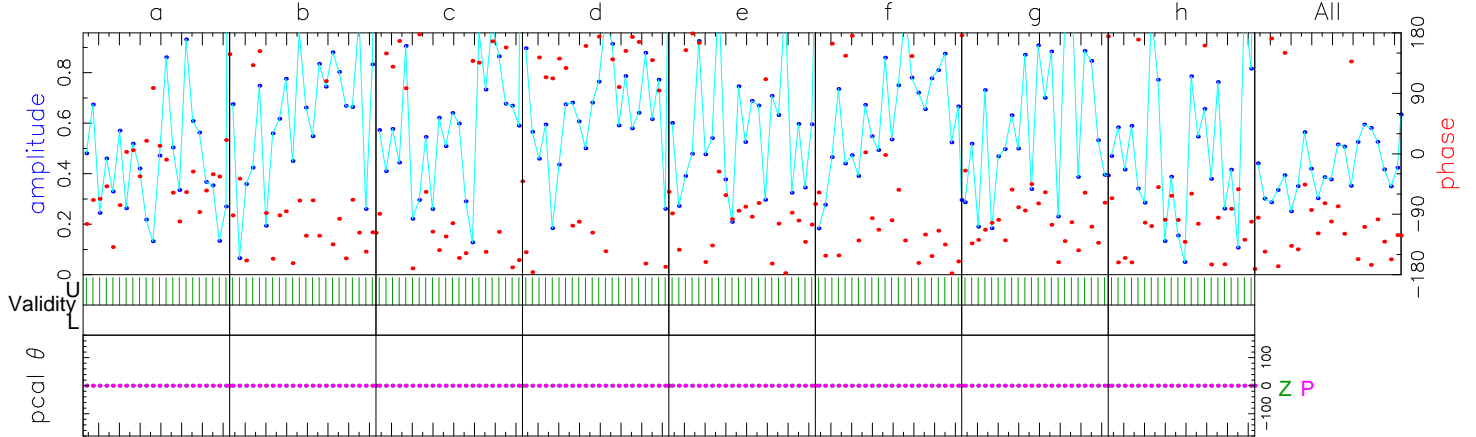


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 001514.82
Stop 002200.84
FRT 001831.00
Corr/FF/build
2021:287:093341
2021:287:101330
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
	-45.5	-120.1	-166.9	170.4	-118.7	-135.1	-96.0	-112.9	Phase	-124.6
	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	Ampl.	0.4
	254.7	255.4	255.8	256.4	257.2	255.9	256.6	256.3	Sbd box	256.5
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-8.82804158659E+03	Apriori delay (usec)	-8.82804038386E+03	Resid mbdelay (usec)	-1.20274E-03	+/-	6.2E-05
Sband delay (usec)	-8.82804245861E+03	Apriori clock (usec)	2.2194672E-01	Resid sbdelay (usec)	-2.07475E-03	+/-	4.9E-04
Phase delay (usec)	-8.82804038788E+03	Apriori clockrate (us/s)	6.1599998E-07	Resid phdelay (usec)	-4.01852E-06	+/-	2.1E-07
Delay rate (us/s)	-8.03653224826E-02	Apriori rate (us/s)	-8.03653917788E-02	Resid rate (us/s)	6.92962E-08	+/-	9.0E-10
Total phase (deg)	-4.2	Apriori accel (us/s/s)	4.79543889906E-05	Resid phase (deg)	-124.6	+/-	6.5

ph/seg (deg)	44.0	RMS	15.6	Theor.	44.0	Amplitude	0.319 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	44.0	Search (2048X32)	0.301	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	0.301	SampCntNorm: enabled	sb window (us) -1.000 1.000
ph/frq (deg)	47.3	Inc. seg. avg.	0.404	Inc. frq. avg.	0.394	Bits/sample: 2x2	0.404	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
amp/frq (%)	30.8	Inc. frq. avg.	0.394			Data rate(Mb/s): 2048	0.394	nlags: 256 t_cohere infinite	dr window (ns/s) -0.011 0.011

Z: az 237.3 el 19.3 pa 24.8 P: az 218.9 el 48.1 pa 30.8 u,v (fr/asec) 535.324 2476.619 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0143/ZP..1W72T3 Output file: /Exps/c211a/v2/1234/No0143/ZP.W.94.1W72T3