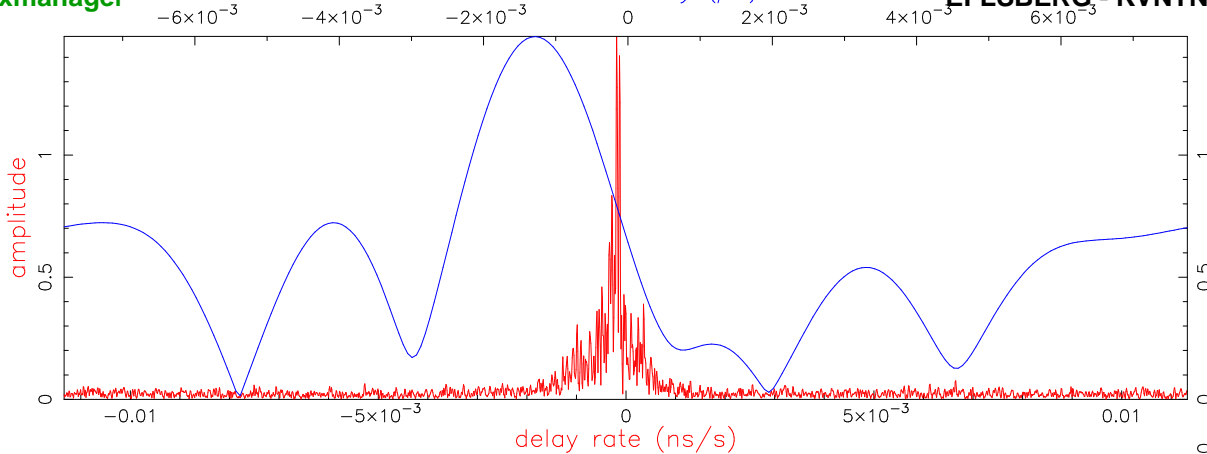
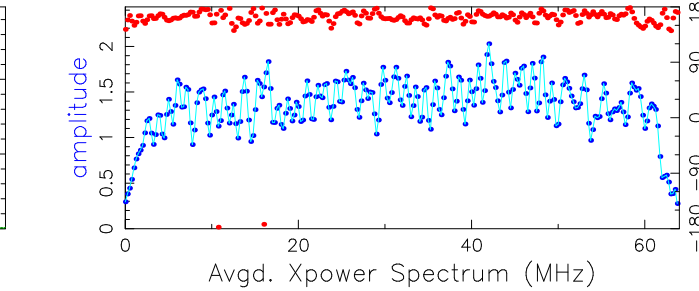
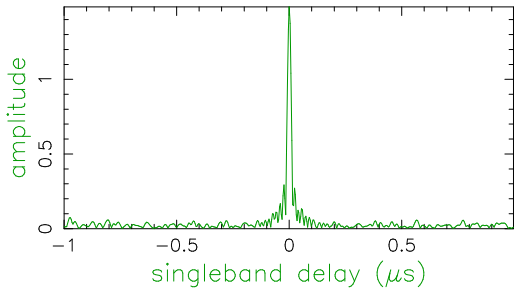


multiband delay (μ s)

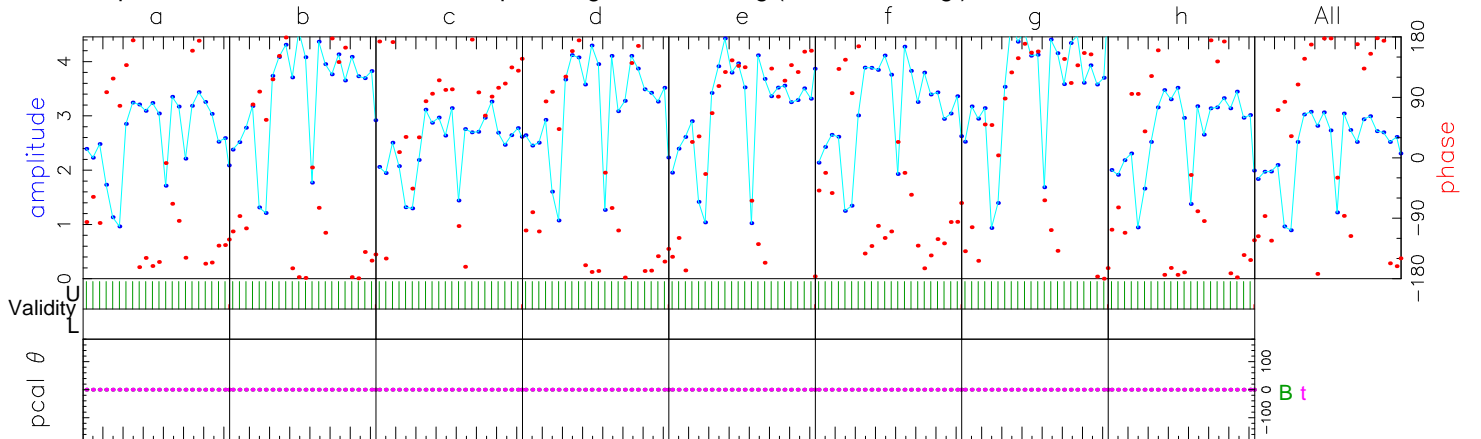
Fringe quality 2



SNR 83.2
 Int time 419.808
 Amp 1.486
 Phase -178.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000302
 MBD -0.001279
 Fringe rate (Hz)
 -0.016269
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051439
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



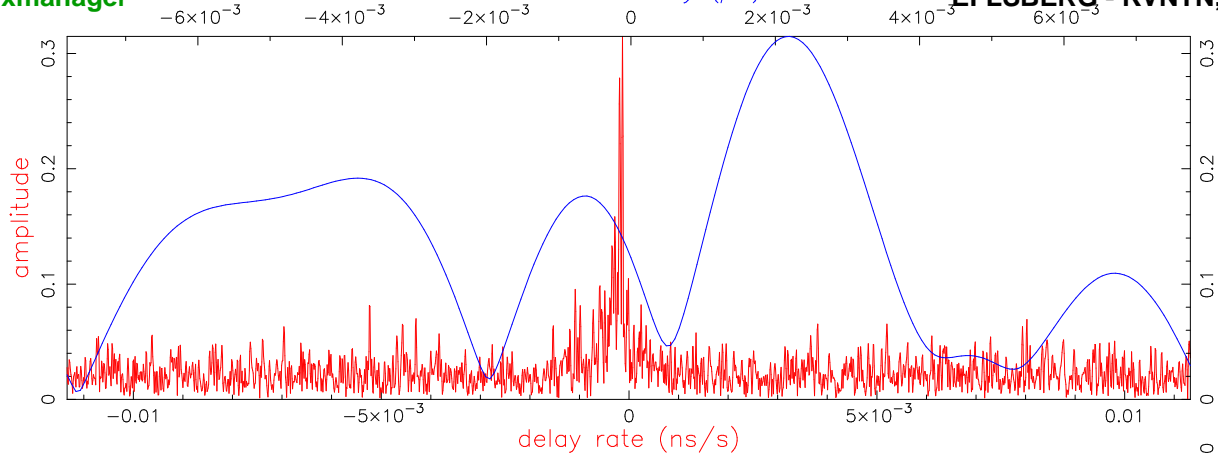
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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				
t	1000	1000	1000	1000	1000	1000	1000	1000				
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
B:t	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				
t	1000	1000	1000	1000	1000	1000	1000	1000				
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		7.36957215379E+03				7.36957343239E+03			Resid mbdelay (usec)	-1.27860E-03 +/- 1.3E-05		
Sband delay (usec)		7.36957373464E+03				-2.1796917E+01			Resid sbdelay (usec)	3.02250E-04 +/- 1.0E-04		
Phase delay (usec)		7.36957342665E+03				2.0000000E-07			Resid phdelay (usec)	-5.74096E-06 +/- 4.4E-08		
Delay rate (us/s)		1.43192063385E+00				1.43192082272E+00			Resid rate (us/s)	-1.88869E-07 +/- 1.8E-10		
Total phase (deg)			-10.3			-2.23350100950E-05			Resid phase (deg)	-178.0 +/- 1.4		
RMS	68.8	3.3							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	68.8	3.3	Search (2048X32)	1.439					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	76.2	5.8	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	45.4	1.9	Inc. seg. avg.	2.404					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	28.6	3.4	Inc. frq. avg.	1.850					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

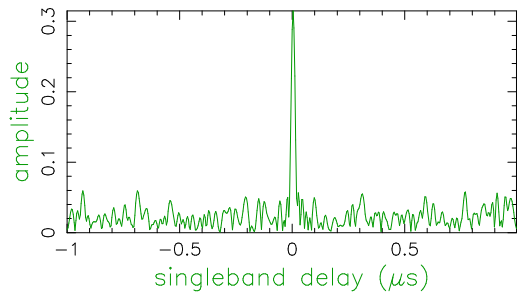
B: az 87.9 el 59.0 pa -59.2 t: az 302.9 el 31.6 pa 72.2 u,v (fr/asec) -11135.203 -8.892 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/Bt..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/Bt.W.25.1W6O3S

multiband delay (μ s)

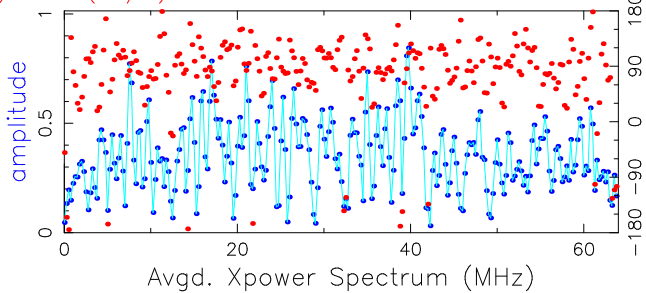


Fringe quality 7

SNR 17.6
 Int time 419.808
 Amp 0.315
 Phase 115.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.004000
 MBD 0.002186
 Fringe rate (Hz)
 -0.011166
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

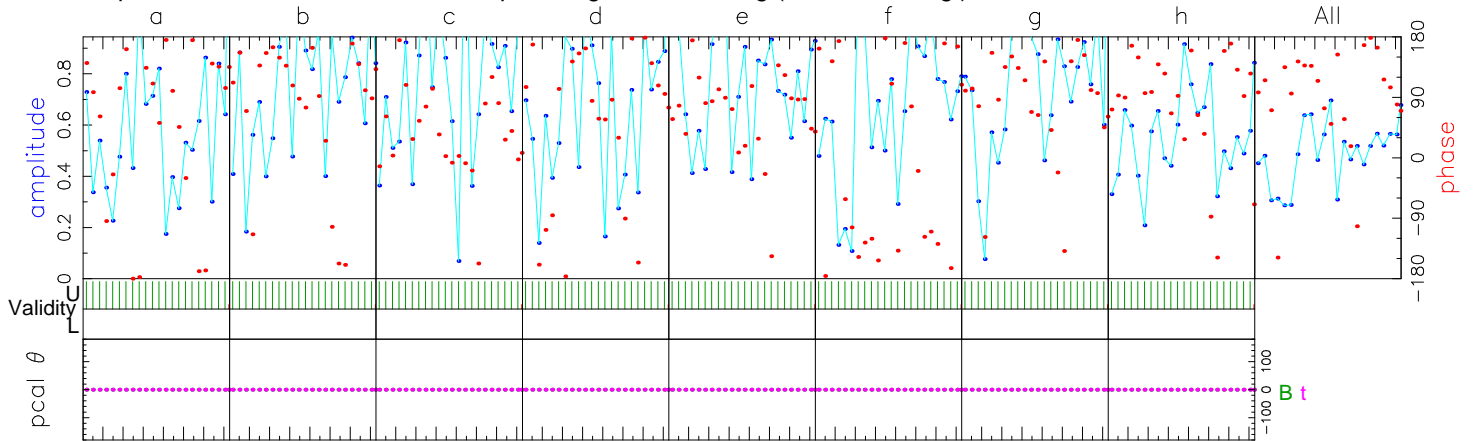


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051442
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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				
t	1000	1000	1000	1000	1000	1000	1000	1000				
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
B:t	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				
t	1000	1000	1000	1000	1000	1000	1000	1000				
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		7.36957561796E+03				7.36957343239E+03			Resid mbdelay (usec)	2.18557E-03 +/- 6.2E-05		
Sband delay (usec)		7.36957743239E+03				-2.1796917E+01			Resid sbdelay (usec)	4.00000E-03 +/- 4.9E-04		
Phase delay (usec)		7.36957343610E+03				2.0000000E-07			Resid phdelay (usec)	3.71125E-06 +/- 2.1E-07		
Delay rate (us/s)		1.43192069310E+00				1.43192082272E+00			Resid rate (us/s)	-1.29627E-07 +/- 8.6E-10		
Total phase (deg)			282.8			-2.23350100950E-05			Resid phase (deg)	115.1 +/- 6.5		
ph/seg (deg)	RMS 54.4	Theor. 15.6	Amplitude 0.315 +/- 0.018						Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	65.4	27.2	Search (2048X32) 0.298						Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	49.5	9.2	Interp. 0.000						Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	40.7	16.0	Inc. seg. avg. 0.467						Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
			Inc. frq. avg. 0.416						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

B: az 87.9 el 59.0 pa -59.2 t: az 302.9 el 31.6 pa 72.2 u,v (fr/asec) -11135.203 -8.892 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/Bt..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/Bt.W.45.1W6O3S

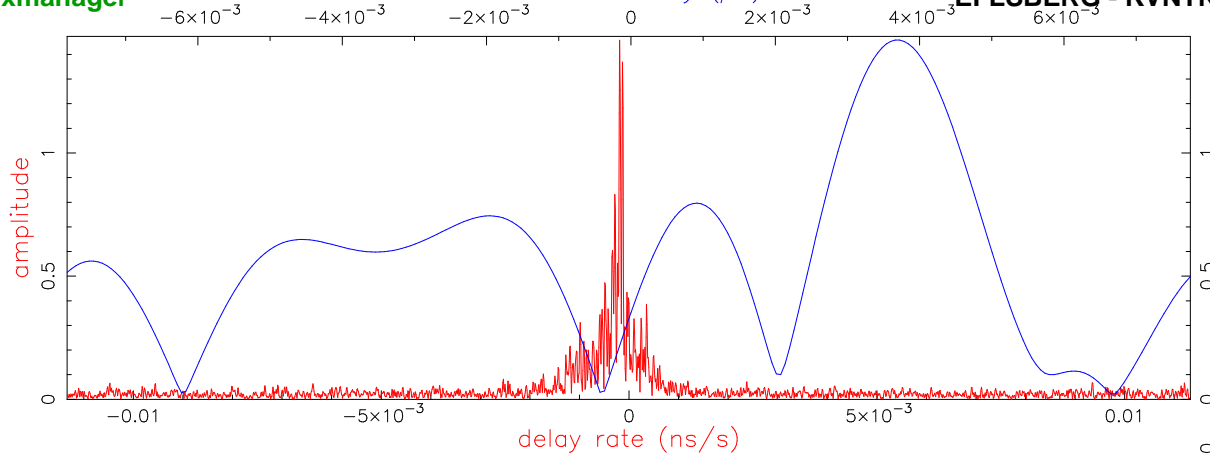
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W603S, No0170, Bt

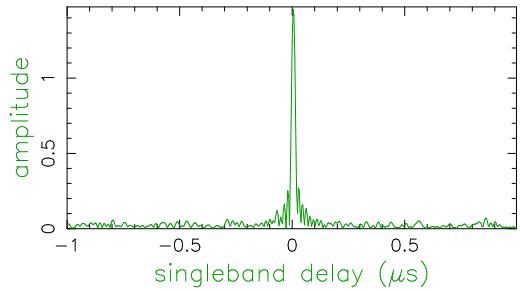
EFLSBERG - KVNTN, fgroup W, pol LL

multiband delay (μ s)

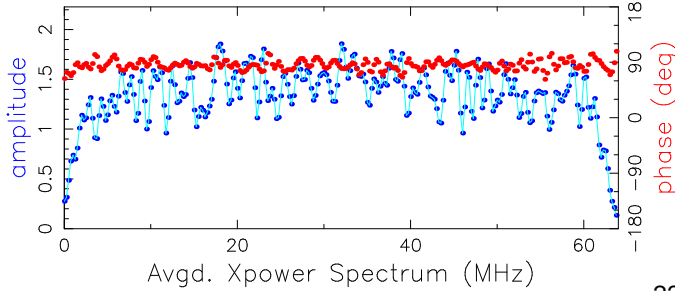


Fringe quality 2

SNR 82.5
 Int time 419.808
 Amp 1.473
 Phase 102.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.005230
 MBD 0.003727
 Fringe rate (Hz)
 -0.016227
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

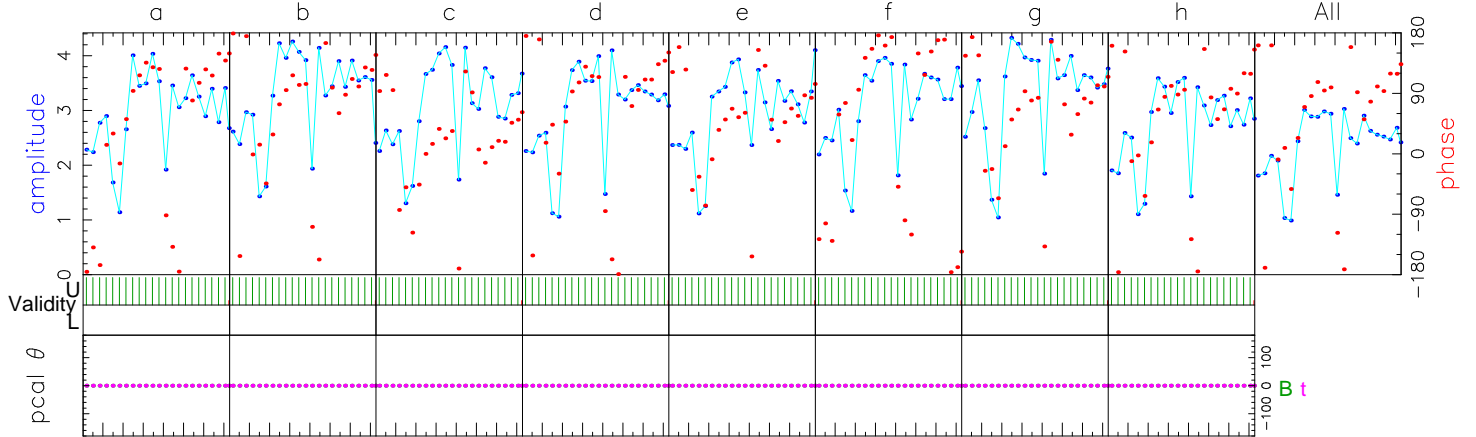


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051435
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	7.36957715954E+03		Apriori delay (usec)		7.36957343239E+03		Resid mbdelay (usec)		3.72715E-03	+/- 1.3E-05
Sband delay (usec)	7.36957866214E+03		Apriori clock (usec)		-2.1796917E+01		Resid sbdelay (usec)		5.22975E-03	+/- 1.0E-04
Phase delay (usec)	7.36957343569E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		3.30257E-06	+/- 4.5E-08
Delay rate (us/s)	1.43192063434E+00		Apriori rate (us/s)		1.43192082272E+00		Resid rate (us/s)		-1.88381E-07	+/- 1.8E-10
Total phase (deg)	270.1		Apriori accel (us/s/s)		-2.23350100950E-05		Resid phase (deg)		102.4	+/- 1.4

	RMS	Theor.	Amplitude	1.473 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	67.8	3.3	Search (2048X32)	1.425	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	73.4	5.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	45.7	2.0	Inc. seg. avg.	2.372	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	26.9	3.4	Inc. frq. avg.	1.851	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

B: az 87.9 el 59.0 pa -59.2 t: az 302.9 el 31.6 pa 72.2 u,v (fr/asec) -11135.203 -8.892 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/Bt..1W603S Output file: /Exps/c211a/v2/1234/No0170/Bt.W.5.1W603S

Mk4/DiFX fourfit 3.21 rev 2937

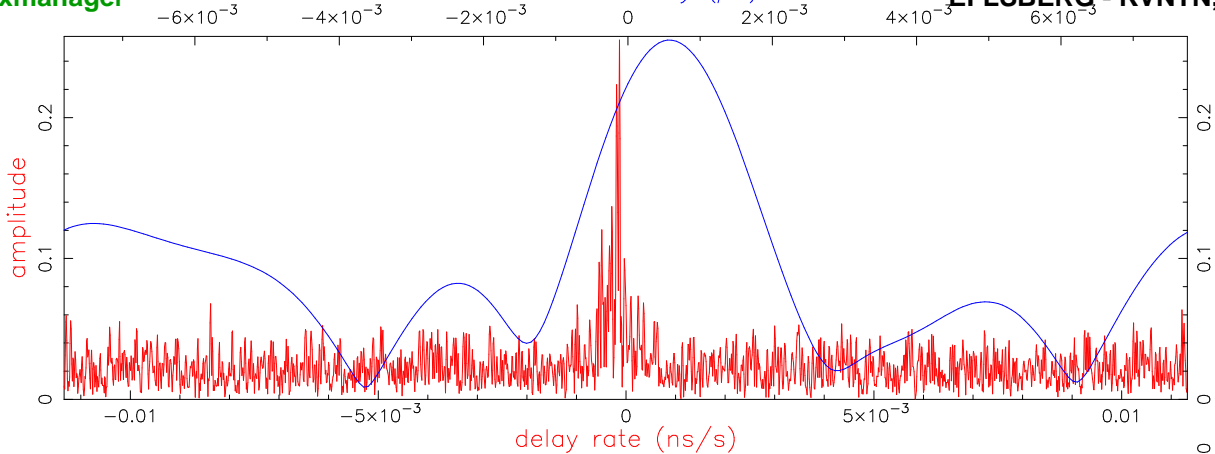
fxmanager

BLLAC.1W603S, No0170, Bt

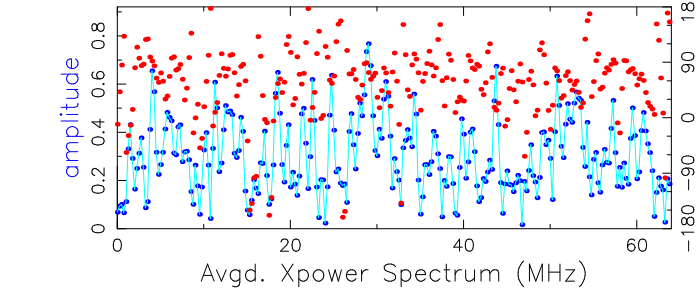
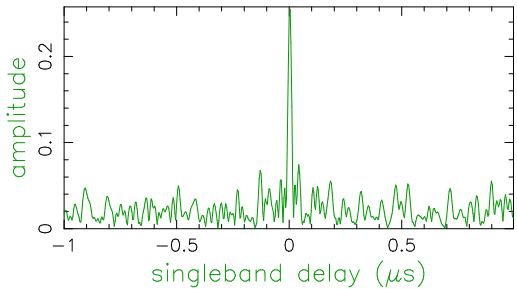
EFLSBERG - KVNTN, fgroup W, pol RL

multiband delay (μs)

Fringe quality 8

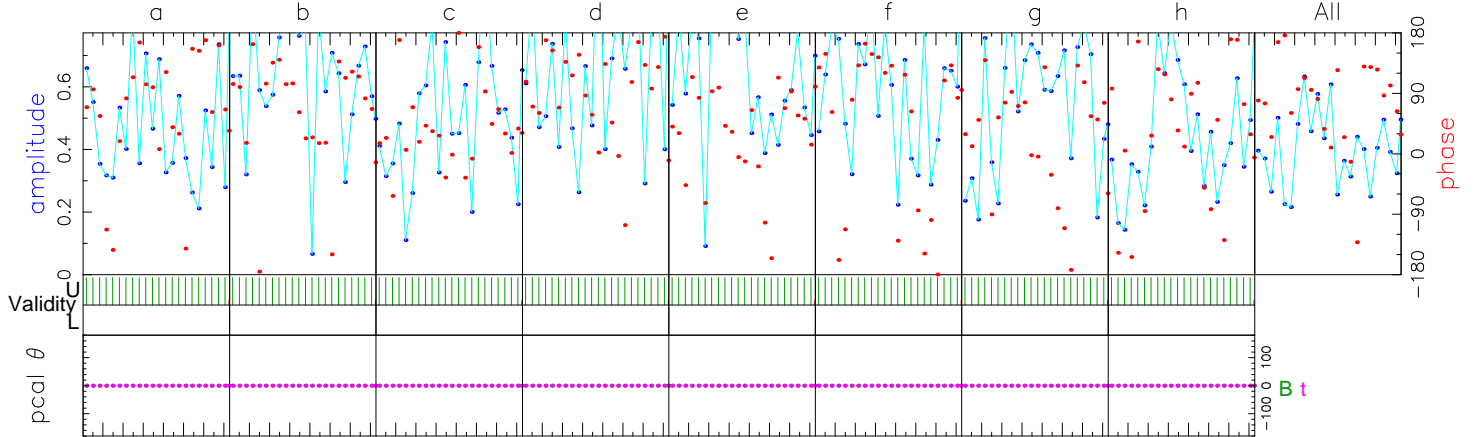


SNR 14.4
 Int time 419.808
 Amp 0.258
 Phase 87.8
 PFD 1.9e-38
 Delays (us)
 SBD 0.002628
 MBD 0.000545
 Fringe rate (Hz)
 -0.011363
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051446
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	7.36957397774E+03		Apriori delay (usec)		7.36957343239E+03		Resid mbdelay (usec)		5.45353E-04	+/- 7.5E-05
Sband delay (usec)	7.36957606039E+03		Apriori clock (usec)		-2.1796917E+01		Resid sbdelay (usec)		2.62800E-03	+/- 6.0E-04
Phase delay (usec)	7.36957343522E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		2.83224E-06	+/- 2.6E-07
Delay rate (us/s)	1.43192069081E+00		Apriori rate (us/s)		1.43192082272E+00		Resid rate (us/s)		-1.31915E-07	+/- 1.1E-09
Total phase (deg)	255.5		Apriori accel (us/s/s)		-2.23350100950E-05		Resid phase (deg)		87.8	+/- 7.9

	RMS	Theor.	Amplitude	0.258 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	56.1	19.0	Search (2048X32)	0.252	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	72.0	33.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	36.2	11.2	Inc. seg. avg.	0.380	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	37.1	19.6	Inc. frq. avg.	0.296	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

B: az 87.9 el 59.0 pa -59.2 t: az 302.9 el 31.6 pa 72.2 u,v (fr/asec) -11135.203 -8.892 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/Bt..1W603S Output file: /Exps/c211a/v2/1234/No0170/Bt.W.62.1W603S

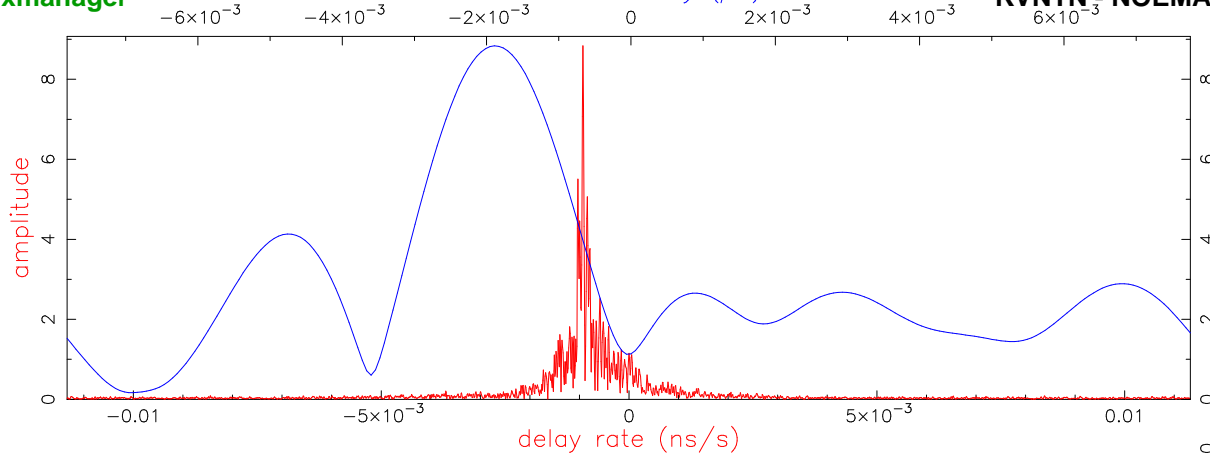
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tN

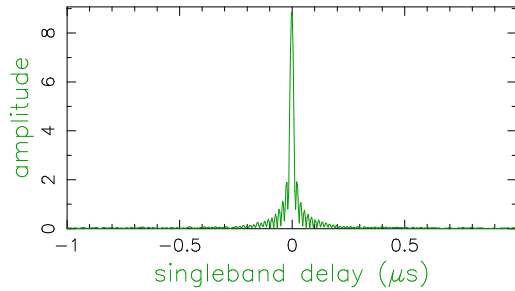
KVNTN - NOEMA, fgroup W, pol RR

multiband delay (μ s)

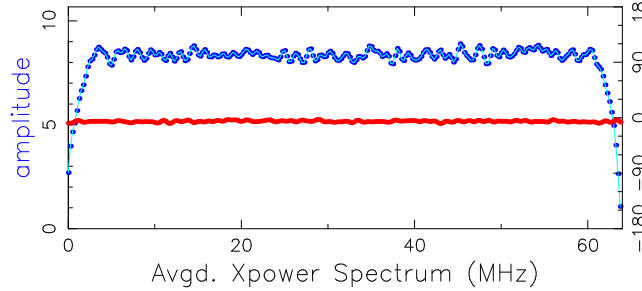


Fringe quality 3

SNR 507.0
Int time 419.822
Amp 9.073
Phase -6.2
PFD 0.0e+00
Delays (us)
SBD -0.001926
MBD -0.001887
Fringe rate (Hz)
-0.080420
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

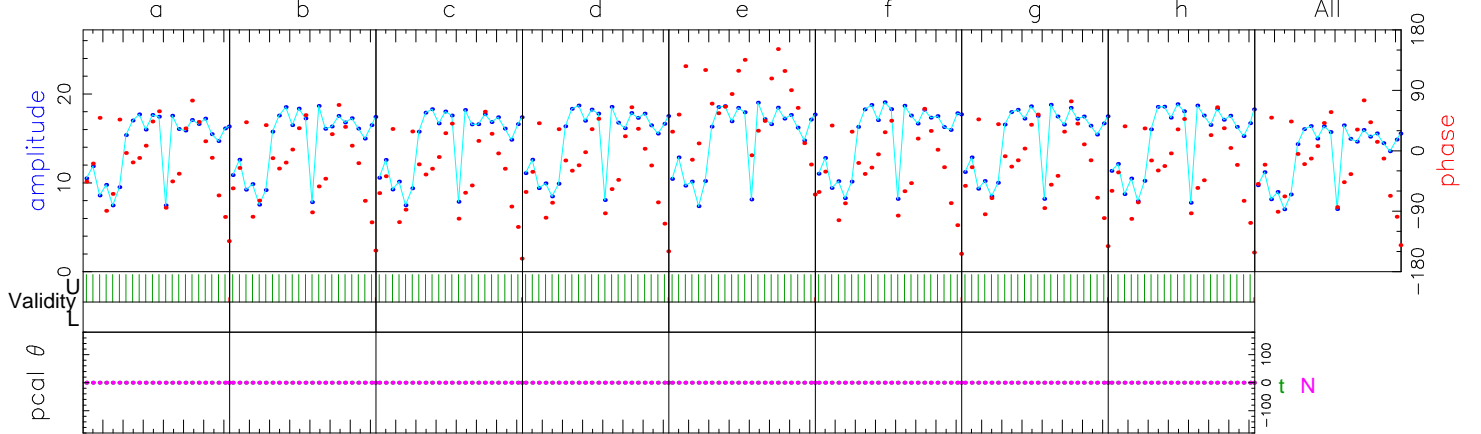


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051439
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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
	-4.6	-12.4	-22.1	-16.2	71.0	-19.2	-9.5	-15.9		-6.2
	9.6	9.8	9.9	10.1	10.1	10.2	10.1	10.1	Ampl.	10.0
	256.4	256.5	256.5	256.6	256.5	256.7	256.5	256.4	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.12790281473E+03		Apriori delay (usec)		-7.12790092748E+03		Resid mbdelay (usec)		-1.88725E-03	+/- 2.1E-06
Sband delay (usec)	-7.12790285323E+03		Apriori clock (usec)		1.3054505E+01		Resid sbdelay (usec)		-1.92575E-03	+/- 1.7E-05
Phase delay (usec)	-7.12790092768E+03		Apriori clockrate (us/s)		7.4350005E-06		Resid phdelay (usec)		-1.98717E-07	+/- 7.3E-09
Delay rate (us/s)	-1.50164062562E+00		Apriori rate (us/s)		-1.50163969202E+00		Resid rate (us/s)		-9.33600E-07	+/- 3.0E-11
Total phase (deg)			Apriori accel (us/s/s)		2.62648071167E-05		Resid phase (deg)		-6.2	+/- 0.2

ph/seg (deg) 51.9 0.5 Search (2048X32) 8.381 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.3 0.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.2 0.3 Inc. seg. avg. 13.249 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 10.1 0.6 Inc. frq. avg. 9.970 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 302.9 el 31.6 pa 72.2 N: az 77.8 el 57.7 pa -70.4 u,v (fr/asec) 11683.072 736.954 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tN..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tN.W.27.1W6O3S

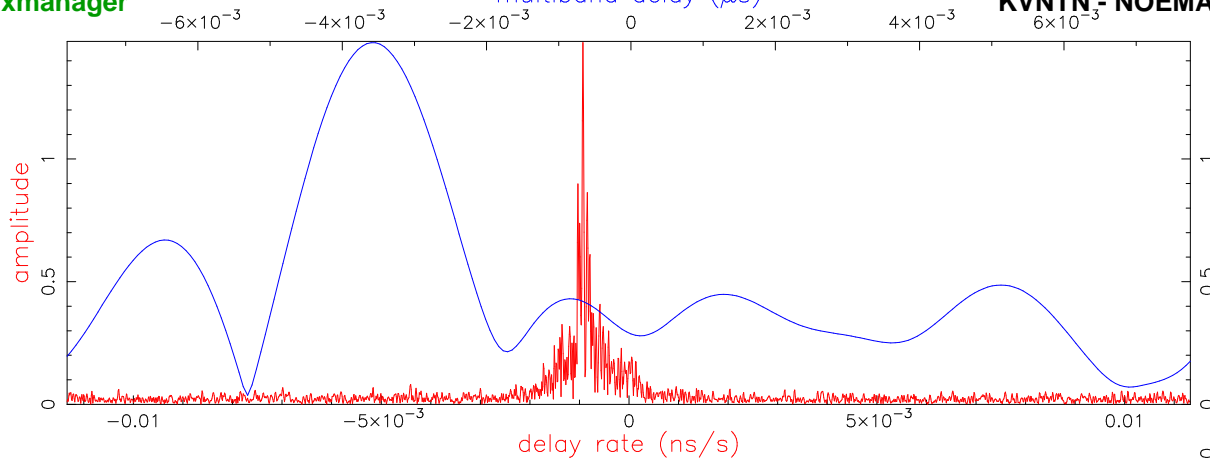
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W603S, No0170, tN

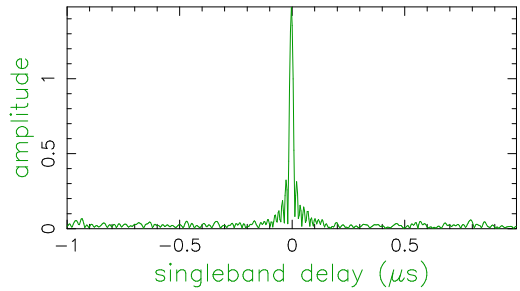
KVNTN- NOEMA, fgroup W, pol LR

multiband delay (μ s)

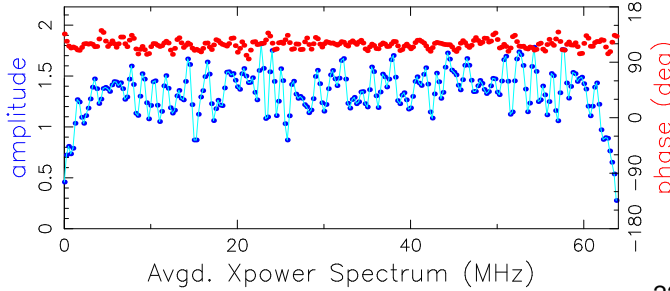


Fringe quality 3

SNR 82.7
 Int time 419.822
 Amp 1.479
 Phase 118.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.003629
 MBD -0.003577
 Fringe rate (Hz)
 -0.080522
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

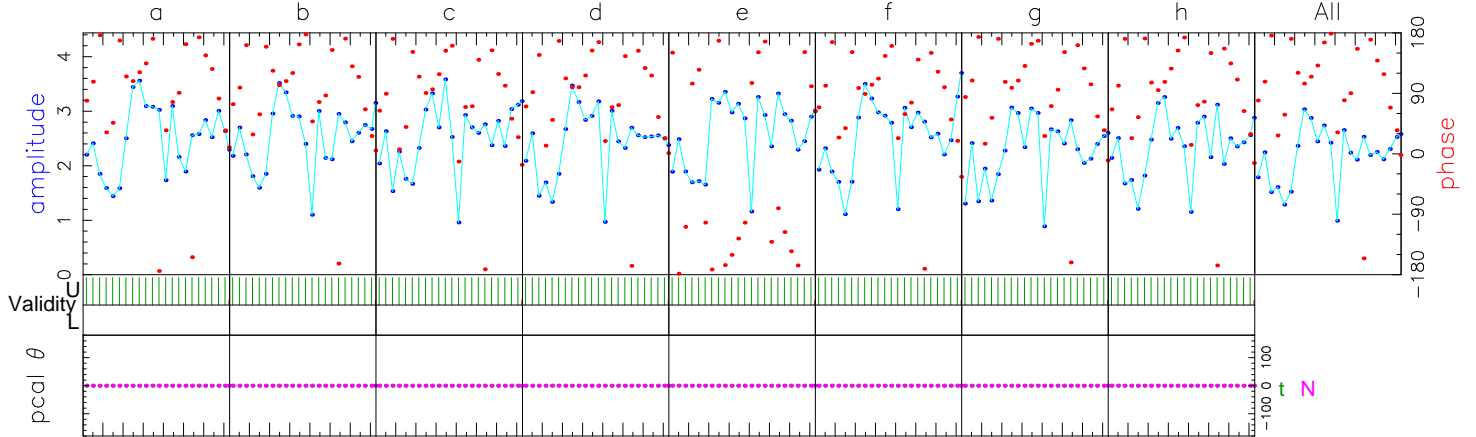


delay rate (ns/s)



Exp. c211a
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051444
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-7.12790450423E+03									
Sband delay (usec)	-7.12790455623E+03									
Phase delay (usec)	-7.12790092366E+03									
Delay rate (us/s)	-1.50164062680E+00									
Total phase (deg)			-203.1							
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)									118.4	+/- 1.4
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										
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) 51.7 3.3 Search (2048X32) 1.405 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.7 5.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.8 2.0 Inc. seg. avg. 2.177 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.2 3.4 Inc. frq. avg. 1.661 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 N: az 77.8 el 57.7 pa -70.4 u,v (fr/asec) 11683.072 736.954 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/No0170/tN..1W603S Output file: /Exps/c211a/v2/1234/No0170/tN.W.48.1W603S simultaneous interpolator

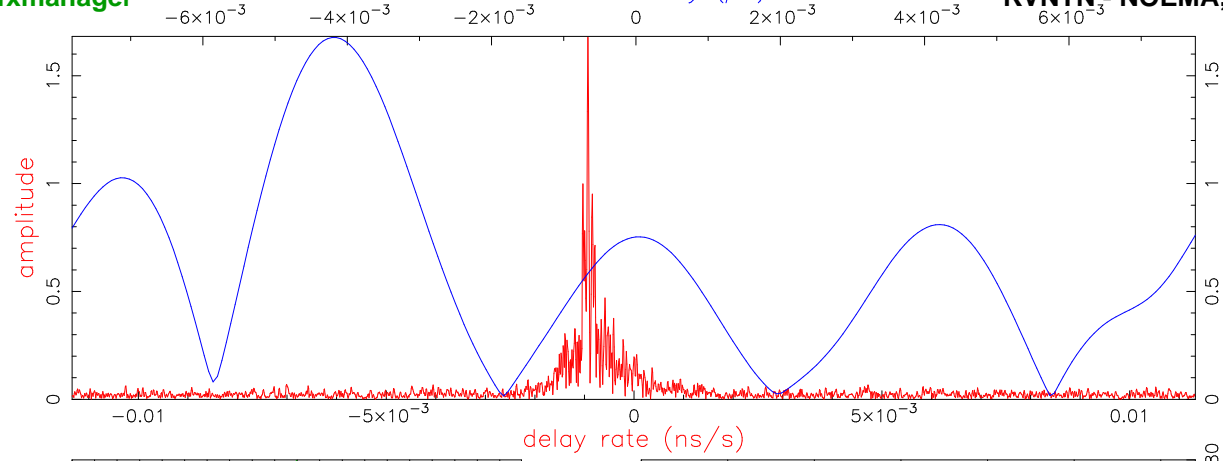
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tN

KVNTN- NOEMA, fgroup W, pol RL

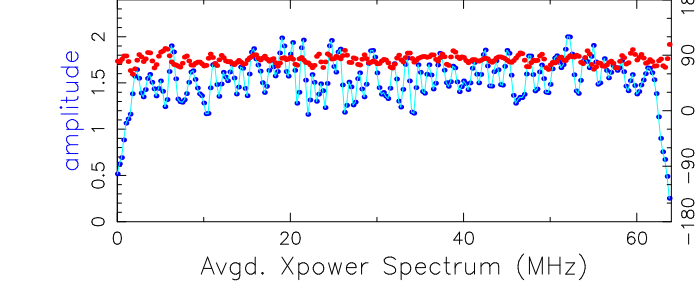
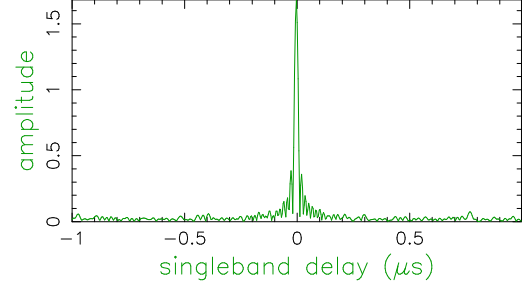
multiband delay (μ s)



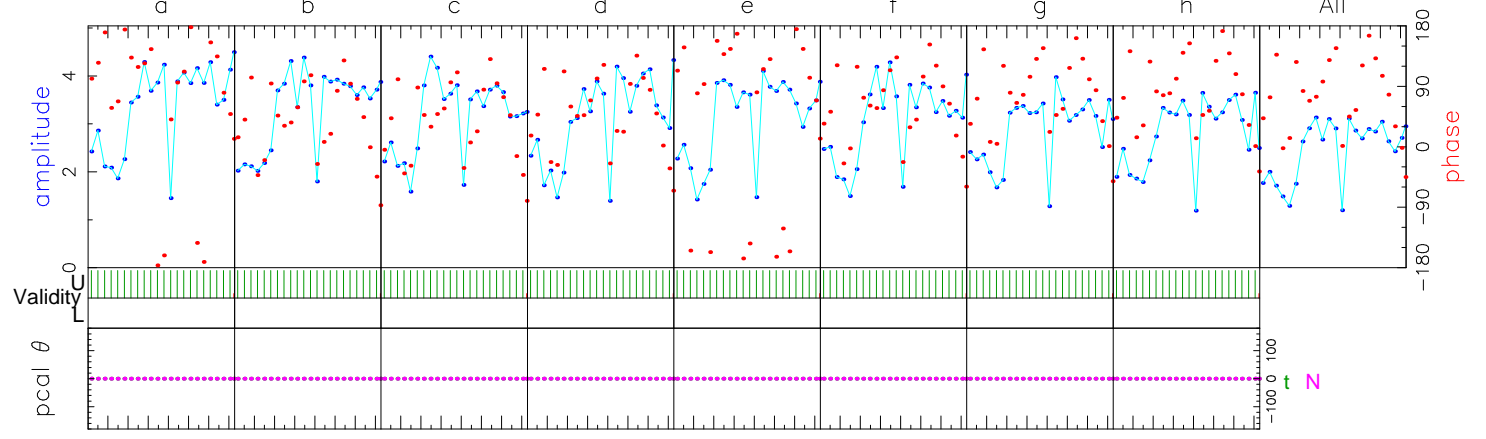
Fringe quality 2

SNR 94.0
Int time 419.822
Amp 1.682
Phase 84.2
PFD 0.0e+00
Delays (us)
SBD -0.004016
MBD -0.004184
Fringe rate (Hz)
-0.080490
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051447
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"



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		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-7.12790511104E+03									
Sband delay (usec)	-7.12790494348E+03									
Phase delay (usec)	-7.12790092476E+03									
Delay rate (us/s)	-1.50164062643E+00									
Total phase (deg)			-237.3							
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)									84.2	+/- 1.2
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										
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) 51.3 2.9 Search (2048X32) 1.605 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.9 5.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 43.2 1.7 Inc. seg. avg. 2.453 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 26.3 3.0 Inc. frq. avg. 2.110 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 302.9 el 31.6 pa 72.2 N: az 77.8 el 57.7 pa -70.4 u,v (fr/asec) 11683.072 736.954 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tN..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tN.W.66.1W6O3S

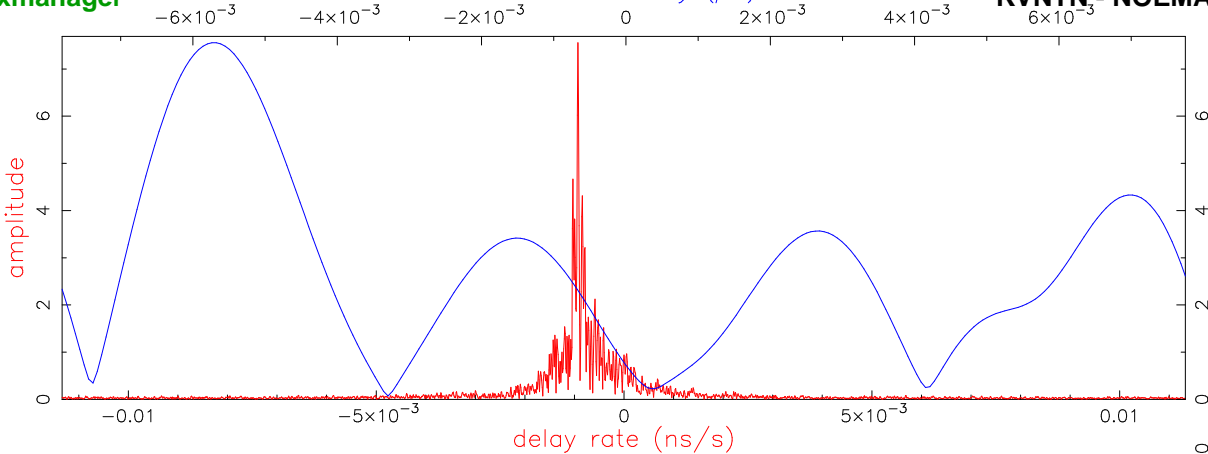
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tN

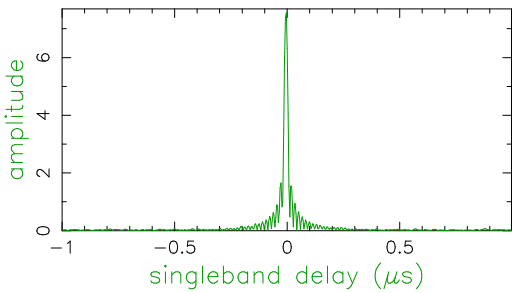
KVNTN- NOEMA, fgroup W, pol LL

multiband delay (μ s)

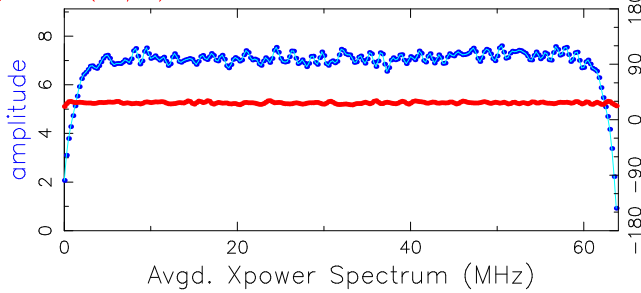


Fringe quality 2

SNR 429.7
 Int time 419.822
 Amp 7.691
 Phase 30.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.005430
 MBD -0.005711
 Fringe rate (Hz)
 -0.080427
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

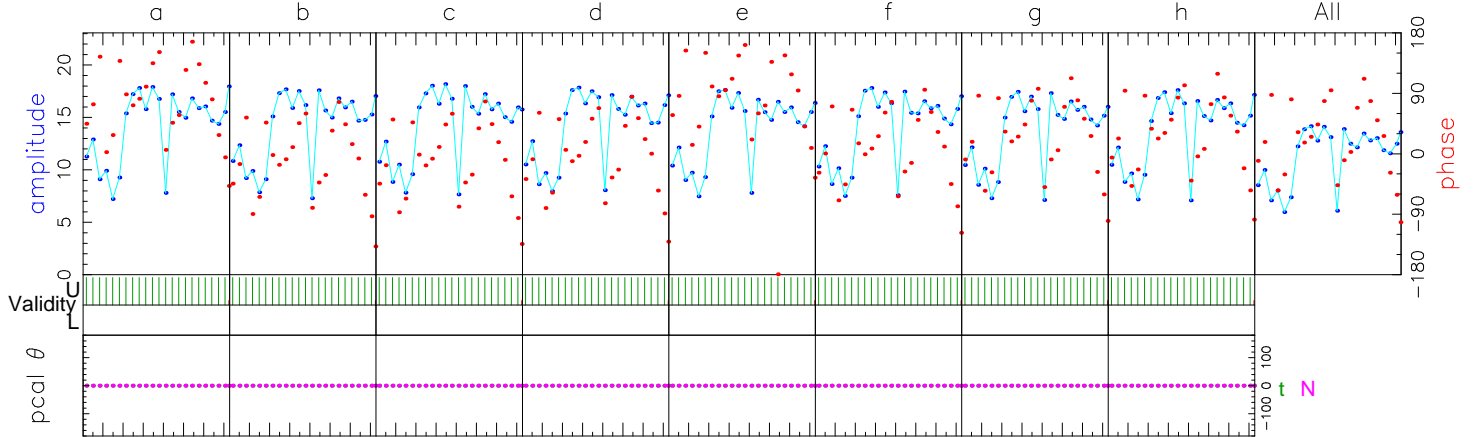


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051436
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-7.12790663857E+03	Apriori delay (usec)	-7.12790092748E+03	Resid mbdelay (usec)	-5.71109E-03	+/-	2.5E-06
Sband delay (usec)	-7.12790635748E+03	Apriori clock (usec)	1.3054505E+01	Resid sbdelay (usec)	-5.43000E-03	+/-	2.0E-05
Phase delay (usec)	-7.12790092649E+03	Apriori clockrate (us/s)	7.4350005E-06	Resid phdelay (usec)	9.89474E-07	+/-	8.6E-09
Delay rate (us/s)	-1.50164062570E+00	Apriori rate (us/s)	-1.50163969202E+00	Resid rate (us/s)	-9.33676E-07	+/-	3.5E-11
Total phase (deg)	-290.8	Apriori accel (us/s/s)	2.62648071167E-05	Resid phase (deg)	30.7	+/-	0.3

ph/seg (deg)	51.6	0.6	Amplitude	7.691 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	58.4	1.1	Search (2048X32)	7.269	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	43.1	0.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	22.8	0.7	Inc. seg. avg.	11.287	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	9.436	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 302.9 el 31.6 pa 72.2 N: az 77.8 el 57.7 pa -70.4 u,v (fr/asec) 11683.072 736.954 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tN..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tN.W.8.1W6O3S

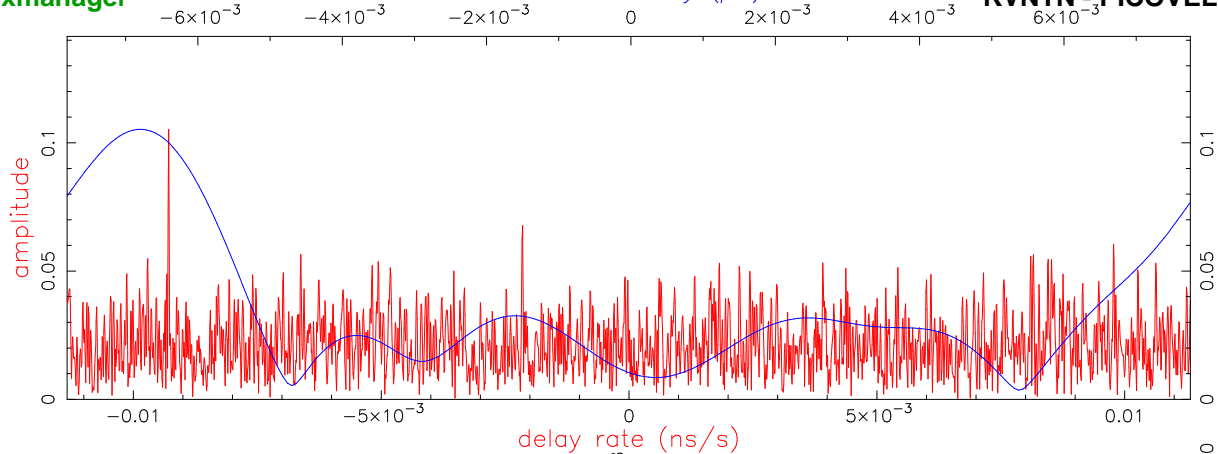
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tP

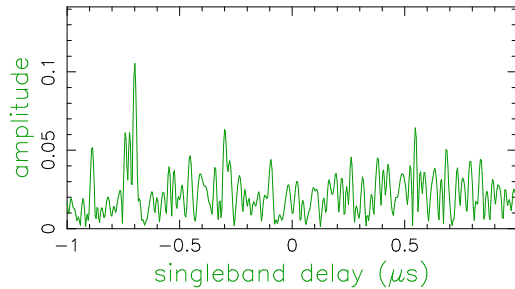
KVNTN - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

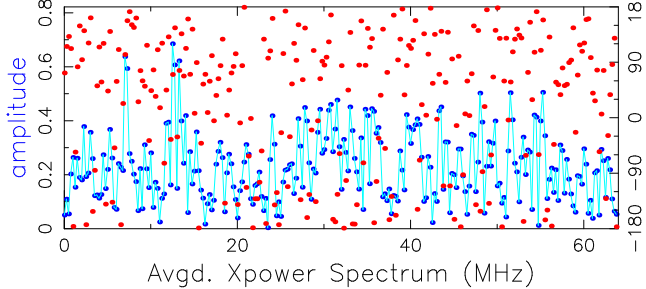


Fringe quality 0

SNR 5.9
Int time 419.824
Amp 0.141
Phase 60.9
PFD 5.8e-01
Delays (us)
SBD -0.699730
MBD -0.006803
Fringe rate (Hz)
-0.801024
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

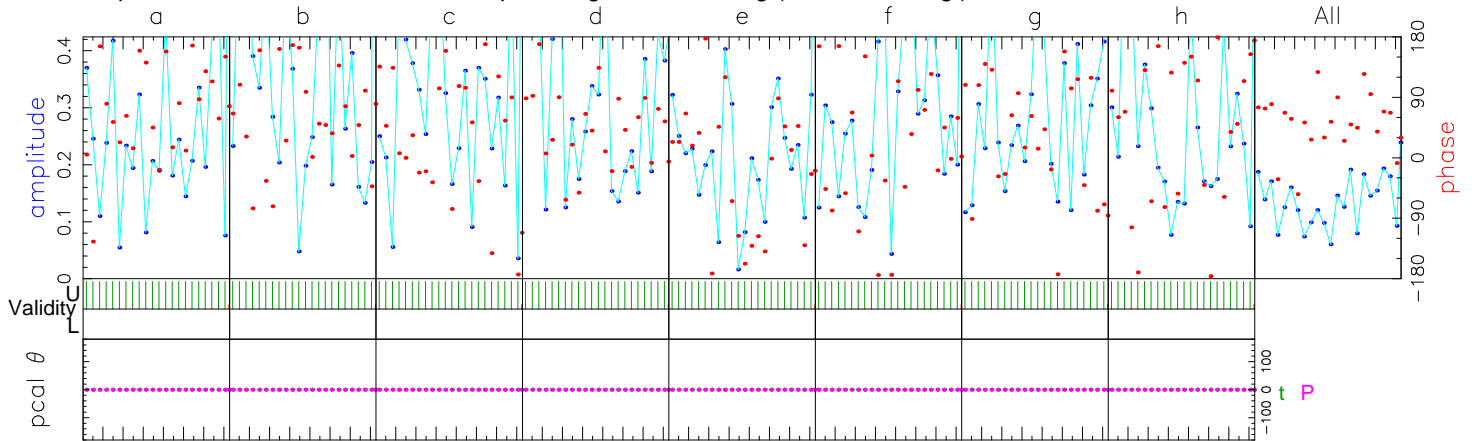


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051437
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.15121598454E+03	Apriori delay (usec)	-5.15052168189E+03	Resid mbdelay (usec)	-6.80264E-03	+/-	1.8E-04
Sband delay (usec)	-5.15122141139E+03	Apriori clock (usec)	6.8116188E-01	Resid sbdelay (usec)	-6.99730E-01	+/-	1.5E-03
Phase delay (usec)	-5.15052167993E+03	Apriori clockrate (us/s)	3.9999997E-07	Resid phdelay (usec)	1.96407E-06	+/-	6.3E-07
Delay rate (us/s)	-1.66827164169E+00	Apriori rate (us/s)	-1.66826234260E+00	Resid rate (us/s)	-9.29909E-06	+/-	2.6E-09
Total phase (deg)	-183.3	Apriori accel (us/s/s)	2.32789315751E-05	Resid phase (deg)	60.9	+/-	19.4

ph/seg (deg)	43.8	Theor.	46.5	Amplitude	0.141 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	47.9	Search (2048X32)	0.104	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.2	Inc. seg. avg.	0.135	Inc. frq. avg.	0.138	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	48.8	Inc. frq. avg.	0.138			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 256	t_cohere infinite

t: az 302.9 el 31.6 pa 72.2 P: az 65.1 el 48.6 pa -78.9 u,v (fr/asec) 12970.242 1161.573 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tP..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tP.W.17.1W6O3S

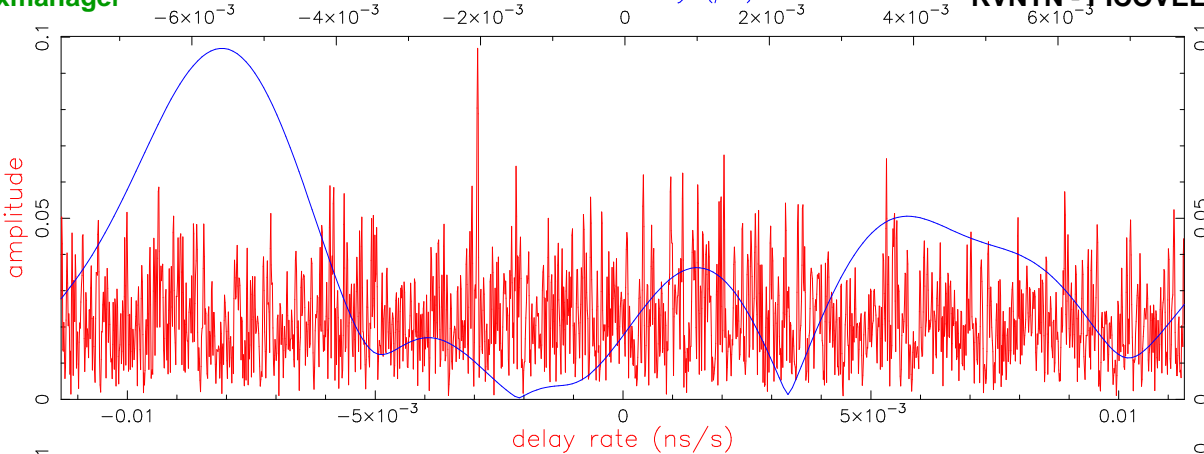
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tP

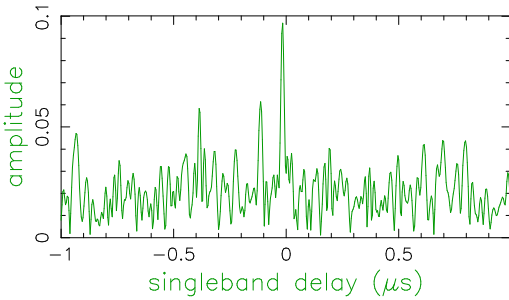
KVNTN - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

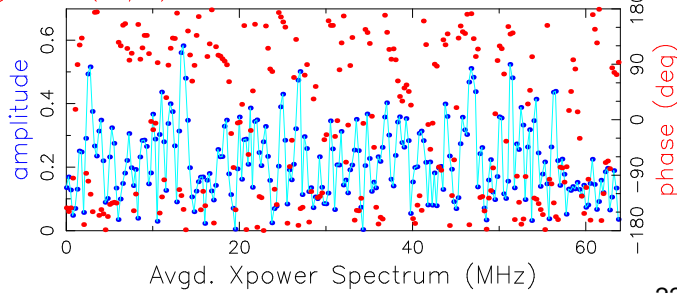


Fringe quality 0

SNR 5.5
 Int time 419.824
 Amp 0.100
 Phase 44.5
 PFD 1.0e+00
 Delays (us)
 SBD -0.016577
 MBD -0.005586
 Fringe rate (Hz)
 -0.252716
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

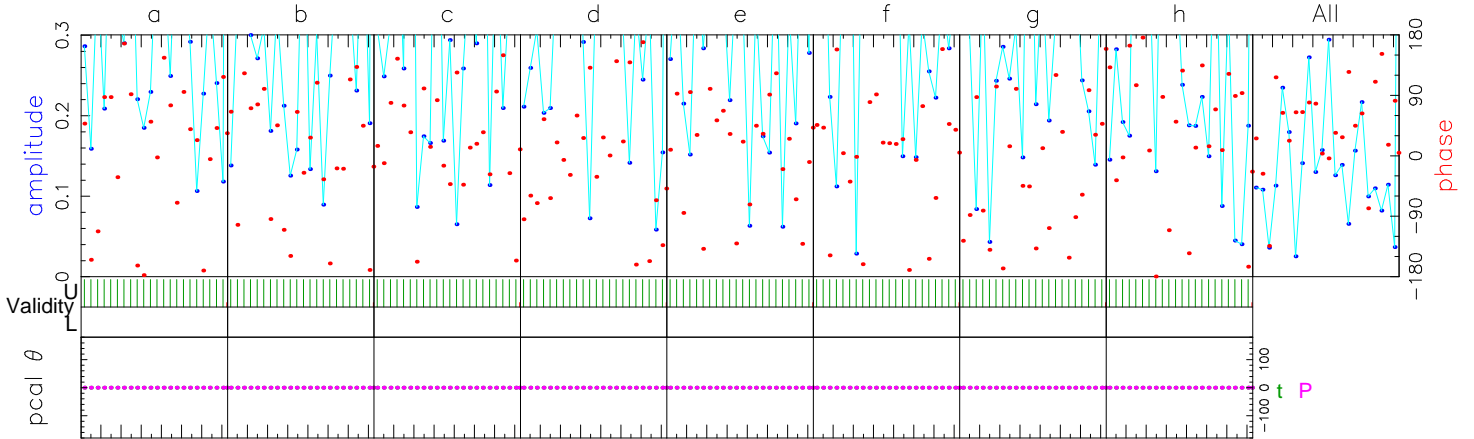


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051441
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.15054289316E+03									
Sband delay (usec)	-5.15053825839E+03									
Phase delay (usec)	-5.15052168046E+03									
Delay rate (us/s)	-1.66826527638E+00									
Total phase (deg)			-199.8							
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)									44.5	+/- 21.0
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
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) 64.1 50.3 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 97.7 87.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.8 29.7 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.1 51.8 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 P: az 65.1 el 48.6 pa -78.9 u,v (fr/asec) 12970.242 1161.573 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/No0170/tP..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tP.W.35.1W6O3S simultaneous interpolator

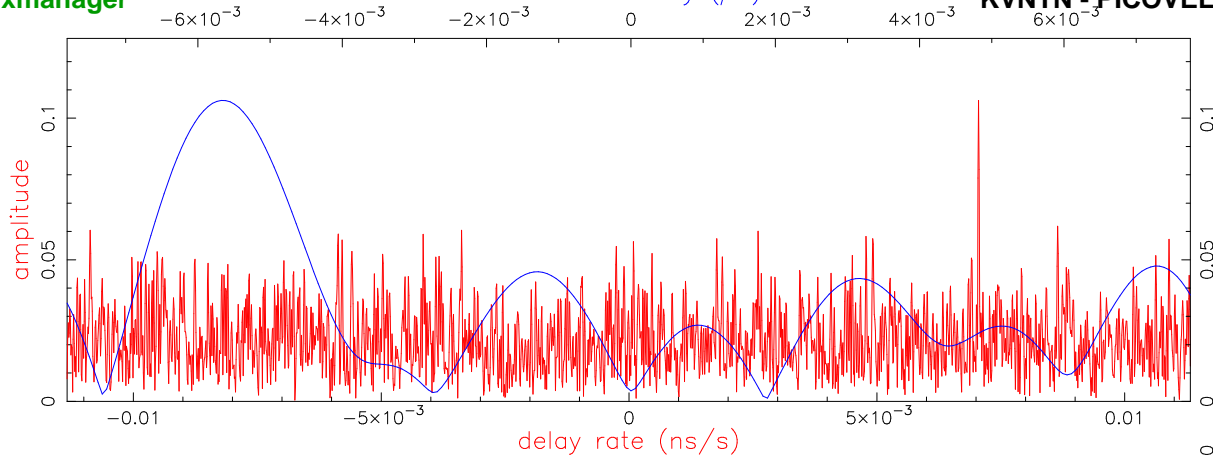
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tP

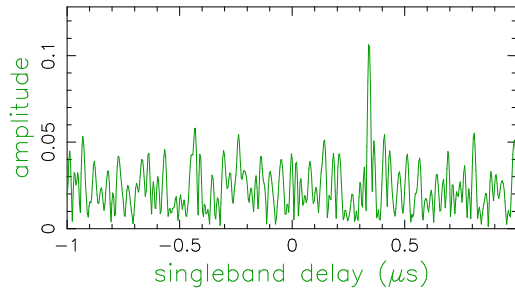
KVNTN - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

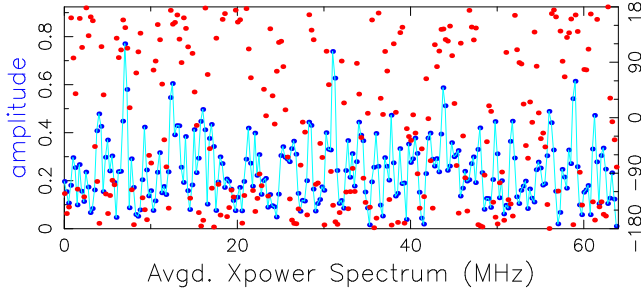


Fringe quality 0

SNR 6.1
 Int time 419.824
 Amp 0.128
 Phase -144.1
 PFD 2.6e-01
 Delays (us)
 SBD 0.341562
 MBD -0.005659
 Fringe rate (Hz)
 0.608220
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

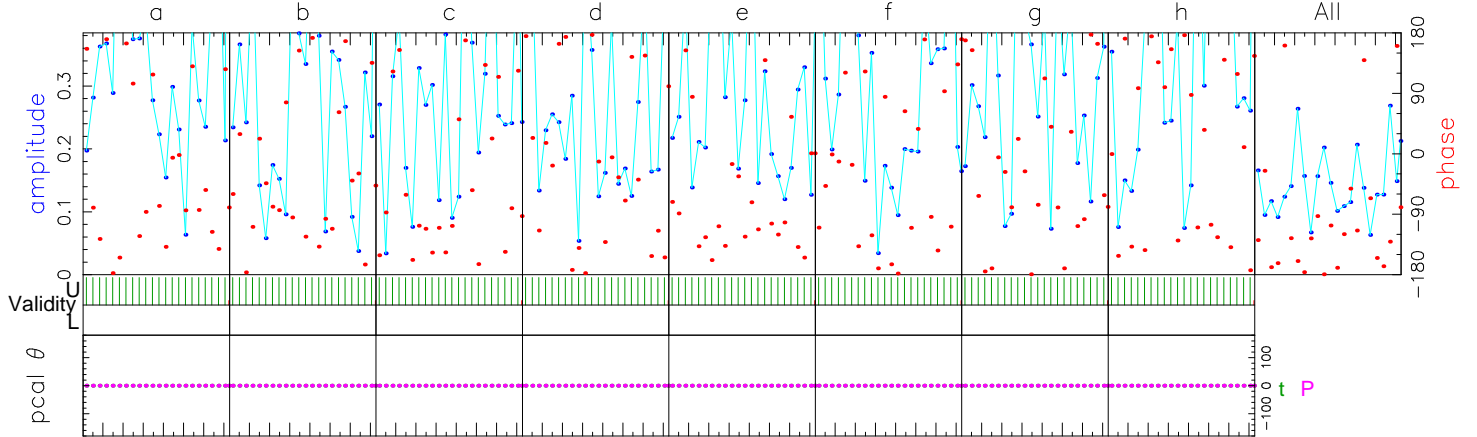


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051444
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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	
	-145.0	-135.2	-171.5	-167.4	-117.5	-130.9	-106.1	-166.1	Phase	-144.1	
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1	
	344.5	121.8	403.8	367.6	278.8	240.0	326.2	222.7	Sbd box	344.4	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000			
t	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)	-5.15018359082E+03		Apriori delay (usec)		-5.15052168189E+03		Resid mbdelay (usec)		-5.65892E-03	+/- 1.8E-04	
Sband delay (usec)	-5.15018012014E+03		Apriori clock (usec)		6.8116188E-01		Resid sbdelay (usec)		3.41562E-01	+/- 1.4E-03	
Phase delay (usec)	-5.15052168654E+03		Apriori clockrate (us/s)		3.9999997E-07		Resid phdelay (usec)		-4.64699E-06	+/- 6.1E-07	
Delay rate (us/s)	-1.66825528177E+00		Apriori rate (us/s)		-1.66826234260E+00		Resid rate (us/s)		7.06083E-06	+/- 2.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.32789315751E-05		Resid phase (deg)		-144.1	+/- 18.8	
	RMS	Theor.	Amplitude	0.128 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	48.8	45.1	Search (2048X32)	0.102		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	58.0	78.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	26.4	26.6	Inc. seg. avg.	0.129		Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048		dr window (ns/s)	-0.011 0.011
amp/frq (%)	36.1	46.4	Inc. frq. avg.	0.121		nlags: 256		t_cohere infinite		ion window (TEC)	0.00 0.00
t: az 302.9 el 31.6 pa 72.2	P: az 65.1 el 48.6 pa -78.9		u, v (fr/asec) 12970.242 1161.573						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c211a/v2/1234/No0170/tP..1W6O3S		Output file: /Exps/c211a/v2/1234/No0170/tP.W.53.1W6O3S								

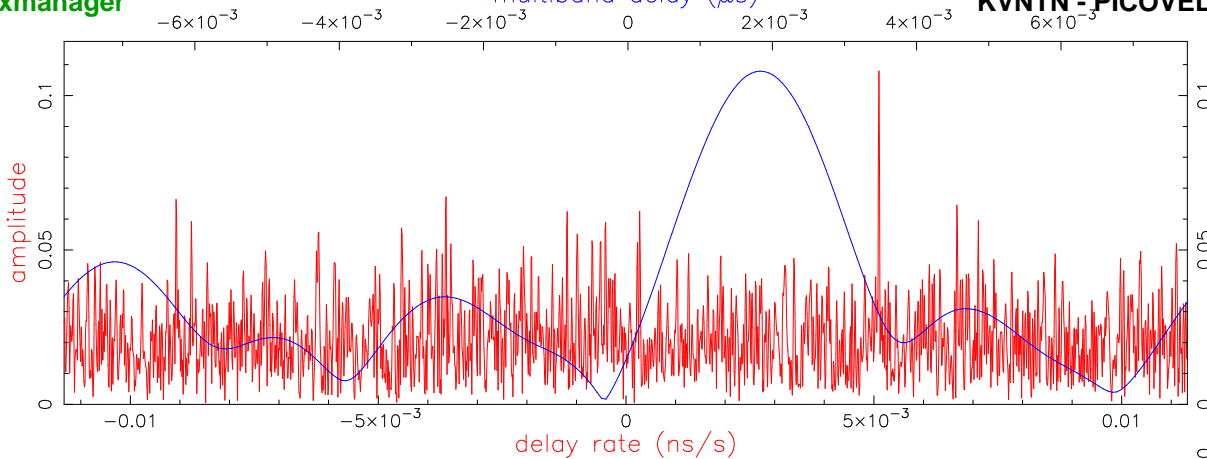
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tP

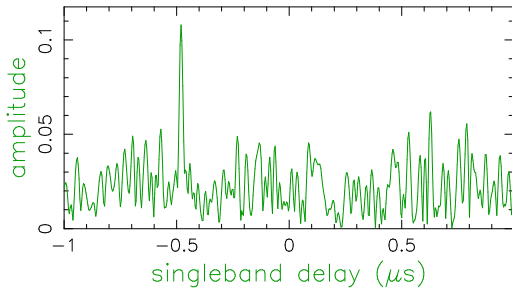
KVNTN - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

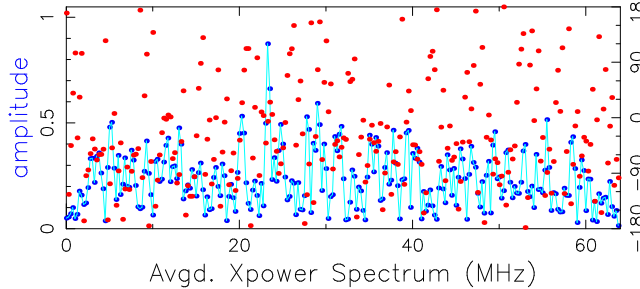


Fringe quality 0

SNR 6.0
 Int time 419.824
 Amp 0.118
 Phase 156.5
 PFD 3.2e-01
 Delays (us)
 SBD -0.480211
 MBD 0.001834
 Fringe rate (Hz)
 0.440358
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

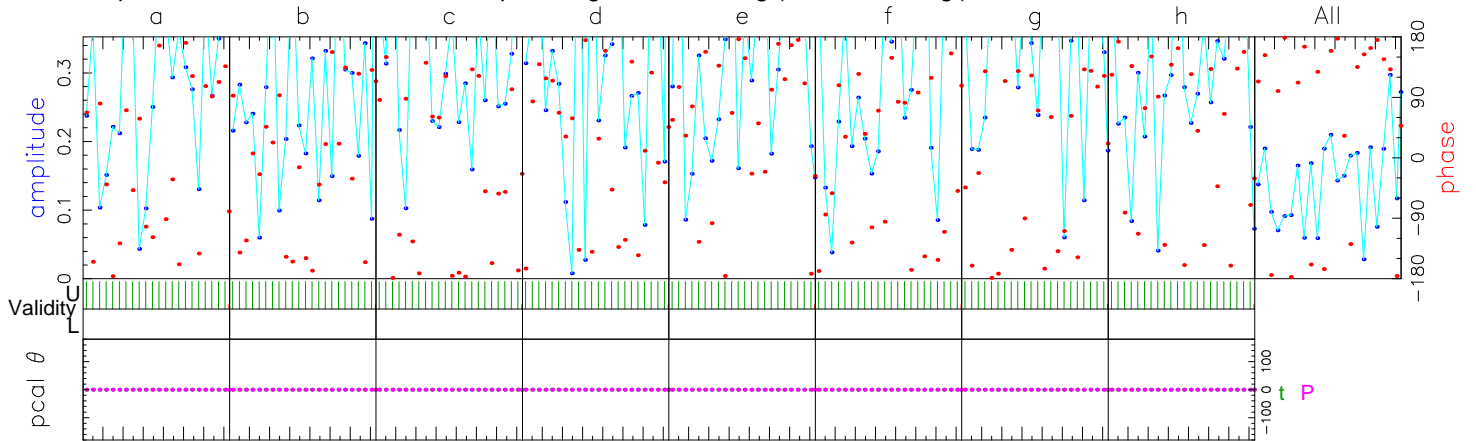


delay rate (ns/s)



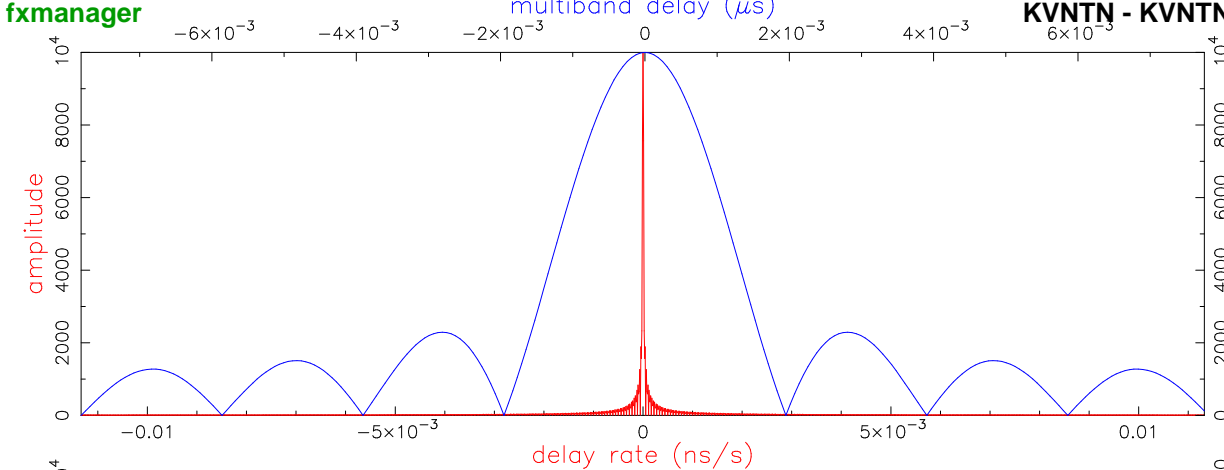
Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051449
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



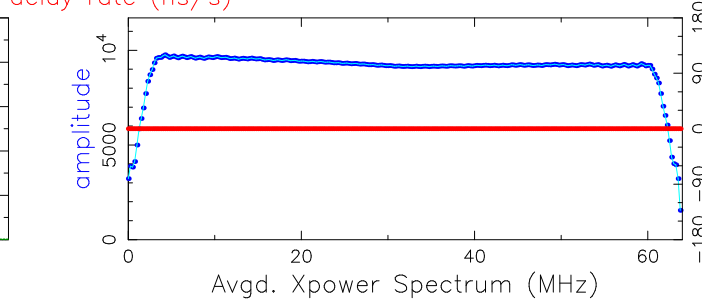
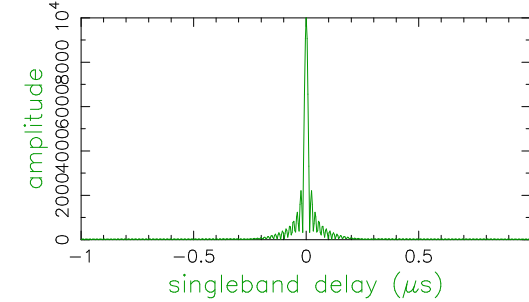
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.15100422336E+03									
Sband delay (usec)	-5.15100189289E+03									
Phase delay (usec)	-5.15052167685E+03									
Delay rate (us/s)	-1.66825723048E+00									
Total phase (deg)			-87.7							
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								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
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								
pcal θ										

ph/seg (deg) 42.0 45.4 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.2 79.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.1 26.8 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.5 46.8 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 P: az 65.1 el 48.6 pa -78.9 u,v (fr/asec) 12970.242 1161.573 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/No0170/tP..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tP.W.76.1W6O3S simultaneous interpolator



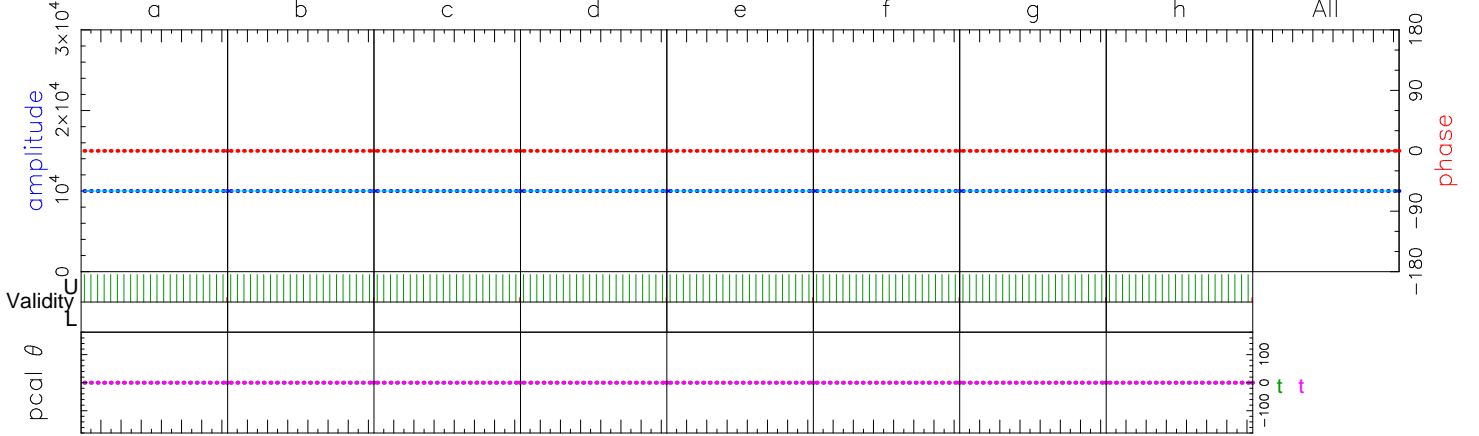
Fringe quality 9

SNR 560324.4
 Int time 419.840
 Amp 10000.000
 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 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051436
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



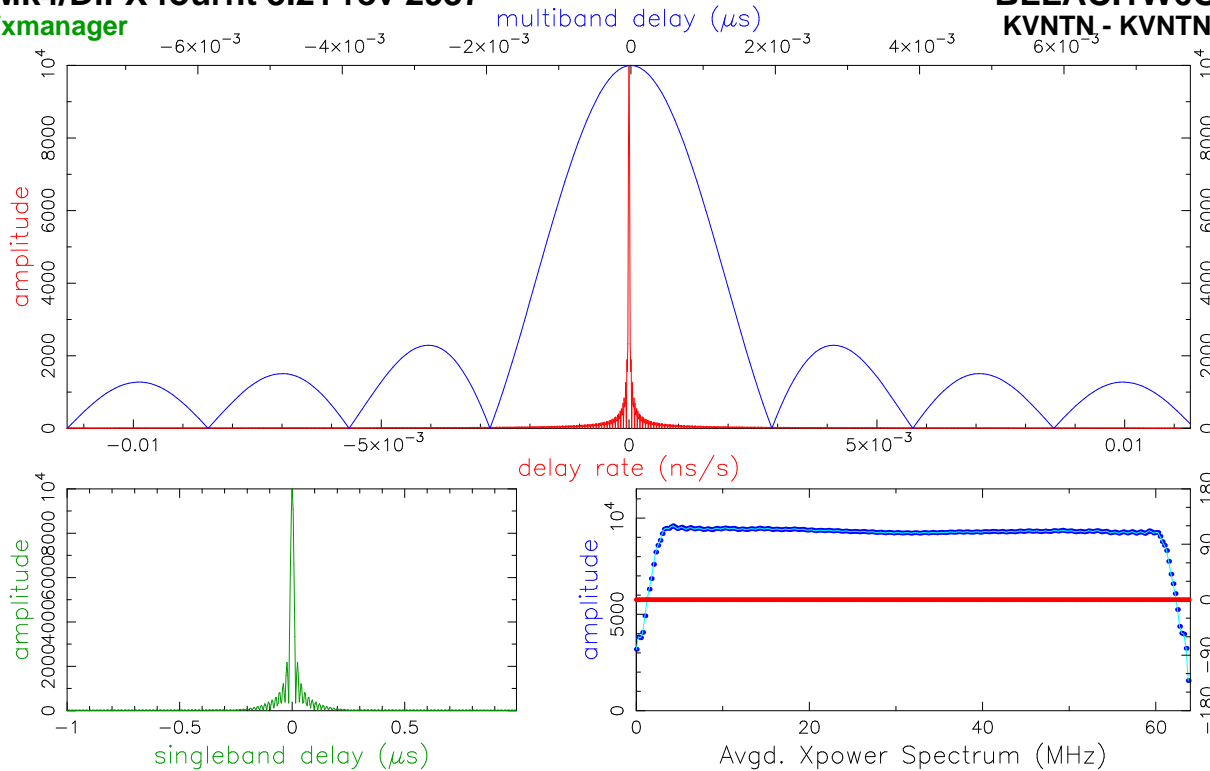
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 302.9 el 31.6 pa 72.2 t: az 302.9 el 31.6 pa 72.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tt..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tt.W.13.1W6O3S

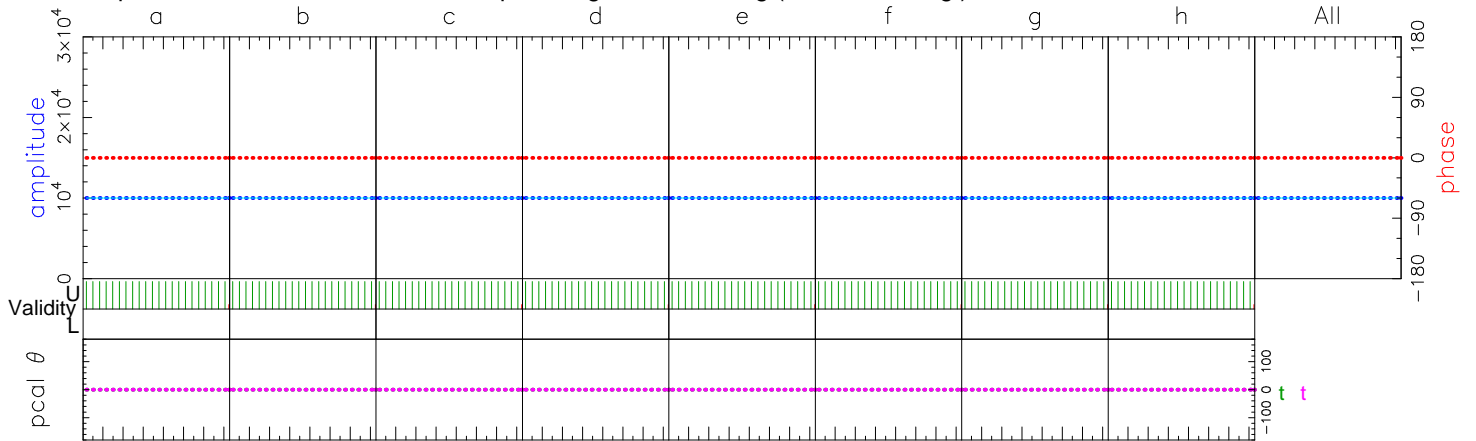


Fringe quality 9

SNR 560324.4
Int time 419.840
Amp 10000.000
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
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051440
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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

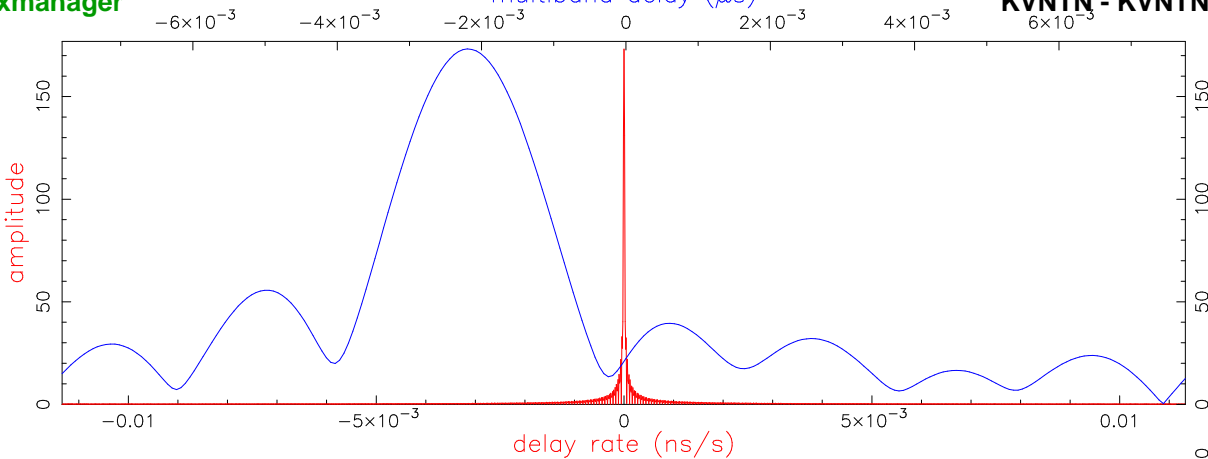


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
t	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
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

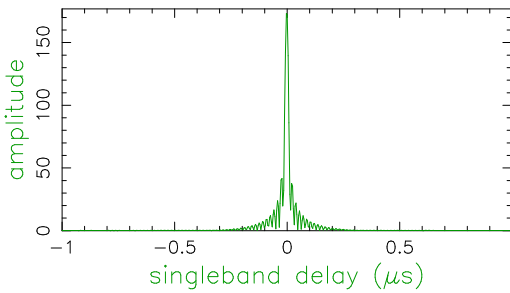
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 t: az 302.9 el 31.6 pa 72.2 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/No0170/tt.1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tt.W.29.1W6O3S simultaneous interpolator

multiband delay (μ s)

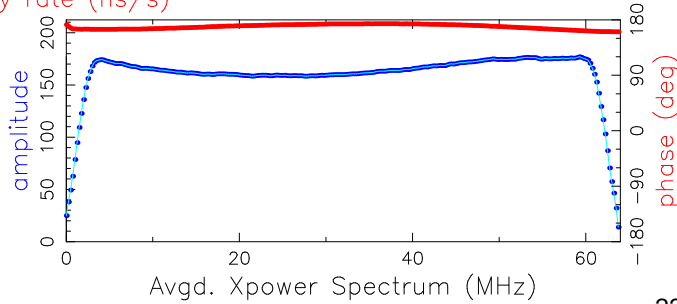
Fringe quality 8



SNR 9913.2
Int time 419.840
Amp 176.919
Phase 170.2
PFD 0.0e+00
Delays (us)
SBD -0.002080
MBD -0.002175
Fringe rate (Hz)
0.000008
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

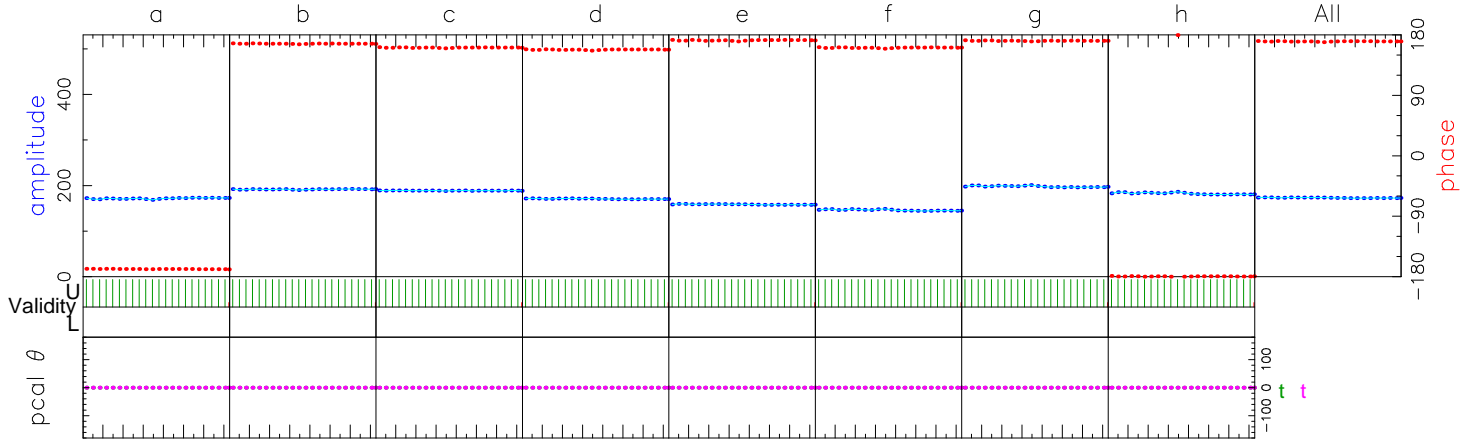


delay rate (ns/s)



Exp. c211a
Yr:day 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051444
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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
	-168.5	166.8	160.9	157.9	171.8	160.7	171.0	-179.5	Phase	170.2
	171.8	191.8	189.0	170.9	158.7	146.3	198.1	182.7	Ampl.	176.2
	255.7	256.4	256.3	256.6	256.6	256.5	256.9	256.9	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.17471875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.17472E-03	+/- 1.1E-07
Sband delay (usec)	-2.08025000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.08025E-03	+/- 8.7E-07
Phase delay (usec)	5.48807010399E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.48807E-06	+/- 3.7E-10
Delay rate (us/s)	9.49467210243E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		9.49467E-11	+/- 1.5E-12
Total phase (deg)	170.2		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		170.2	+/- 0.0

ph/seg (deg) 0.4 0.0 Theor. Amplitude 176.919 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 2.1 0.0 Search (2048X32) 169.144 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 9.3 0.0 Inc. seg. avg. 173.215 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
t: az 302.9 el 31.6 pa 72.2 t: az 302.9 el 31.6 pa 72.2 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/No0170/tt.1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tt.W.49.1W6O3S simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

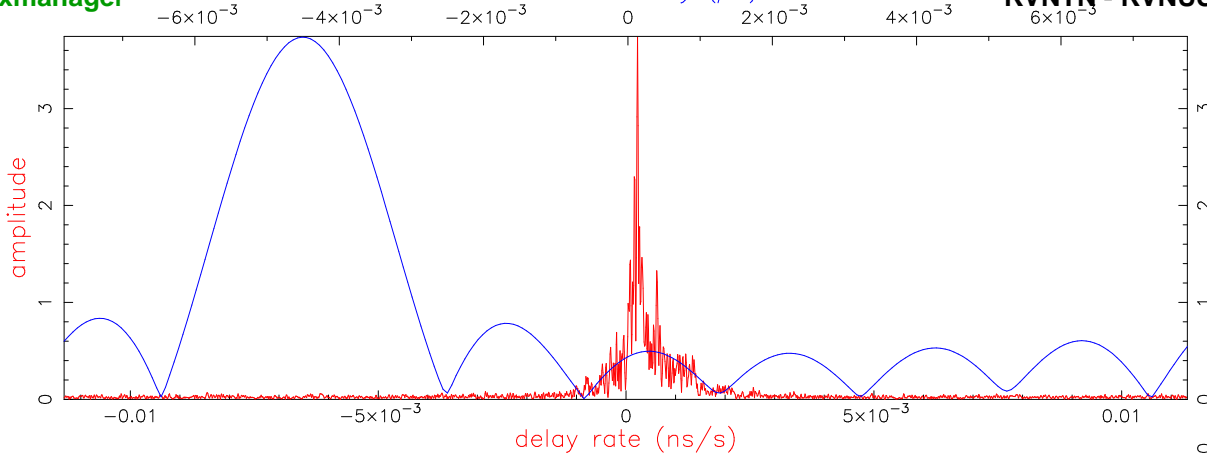
fxmanager

BLLAC.1W6O3S, No0170, tu

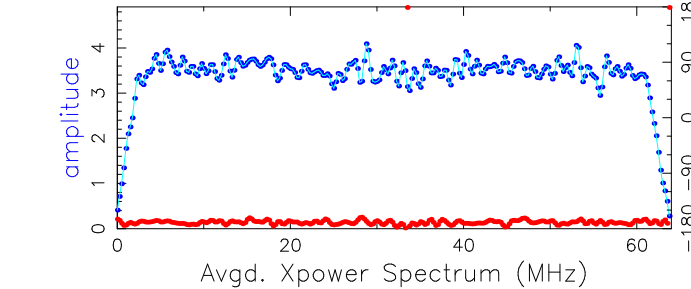
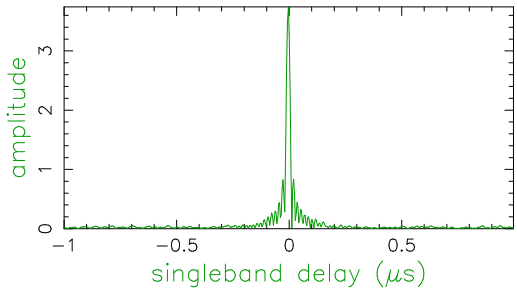
KVNTN - KVNUS, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

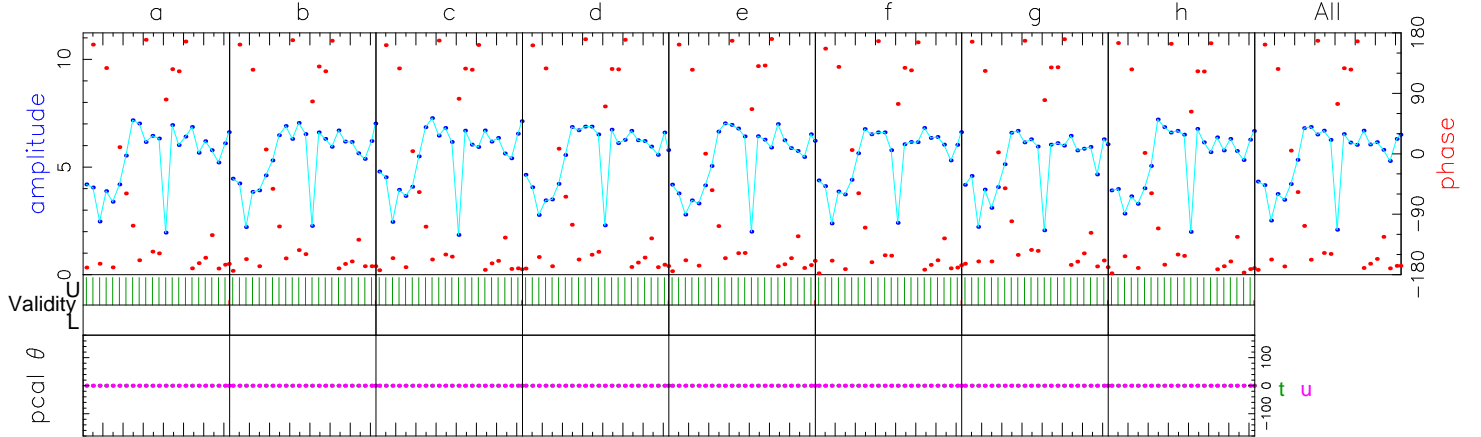


SNR 209.8
 Int time 419.840
 Amp 3.744
 Phase -168.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.004432
 MBD -0.004506
 Fringe rate (Hz)
 0.019734
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051437
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



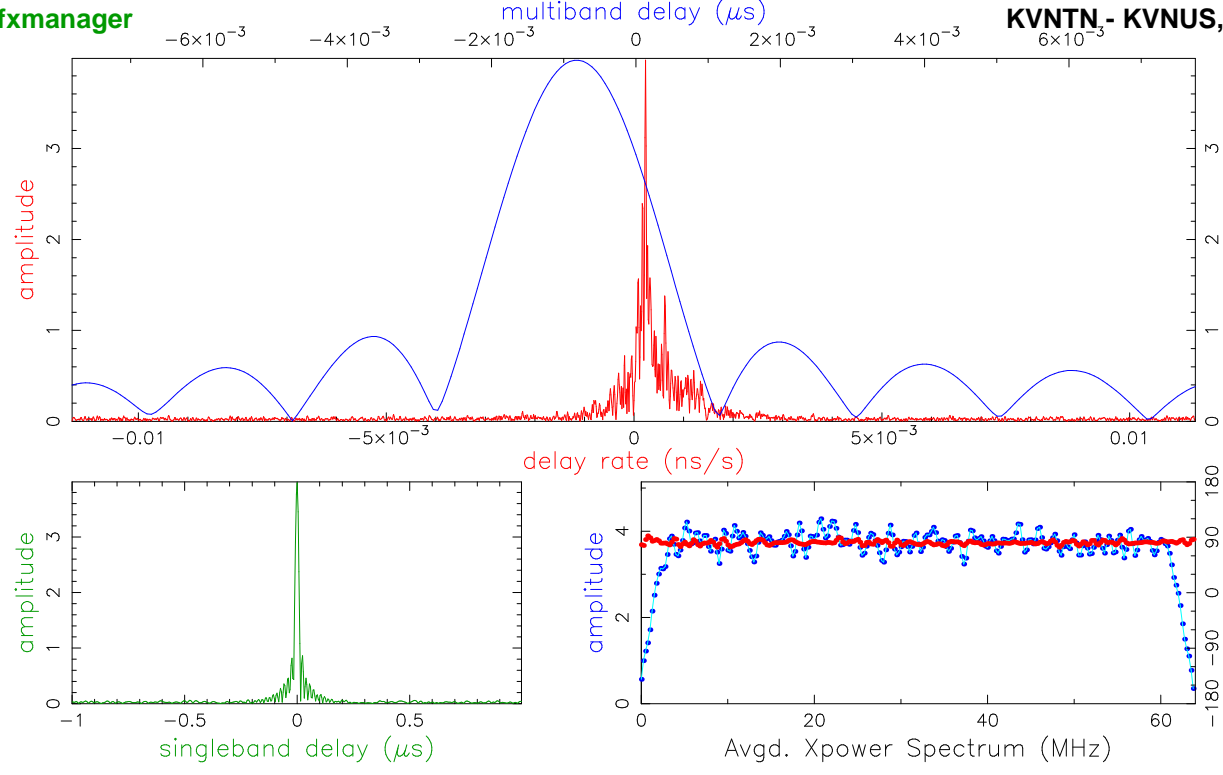
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.12886294827E+02	Apriori delay (usec)	2.12890800719E+02	Resid mbdelay (usec)	-4.50589E-03	+/-	5.2E-06
Sband delay (usec)	2.12886368719E+02	Apriori clock (usec)	-1.4764439E+01	Resid sbdelay (usec)	-4.43200E-03	+/-	4.1E-05
Phase delay (usec)	2.12890795271E+02	Apriori clockrate (us/s)	-1.3269999E-02	Resid phdelay (usec)	-5.44776E-06	+/-	1.8E-08
Delay rate (us/s)	-1.51190682699E-02	Apriori rate (us/s)	-1.51192973565E-02	Resid rate (us/s)	2.29087E-07	+/-	7.3E-11
Total phase (deg)	37.7	Apriori accel (us/s/s)	-3.67725366737E-06	Resid phase (deg)	-168.9	+/-	0.5

ph/seg (deg)	59.3	RMS	59.3	Theor.	1.3	Amplitude	3.744 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	57.4	Search (2048X32)	3.573	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	2.7	Inc. seg. avg.	5.372	Inc. frq. avg.	3.740	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	2.6	Inc. frq. avg.	3.740	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
								ion window (TEC)	0.00	0.00	

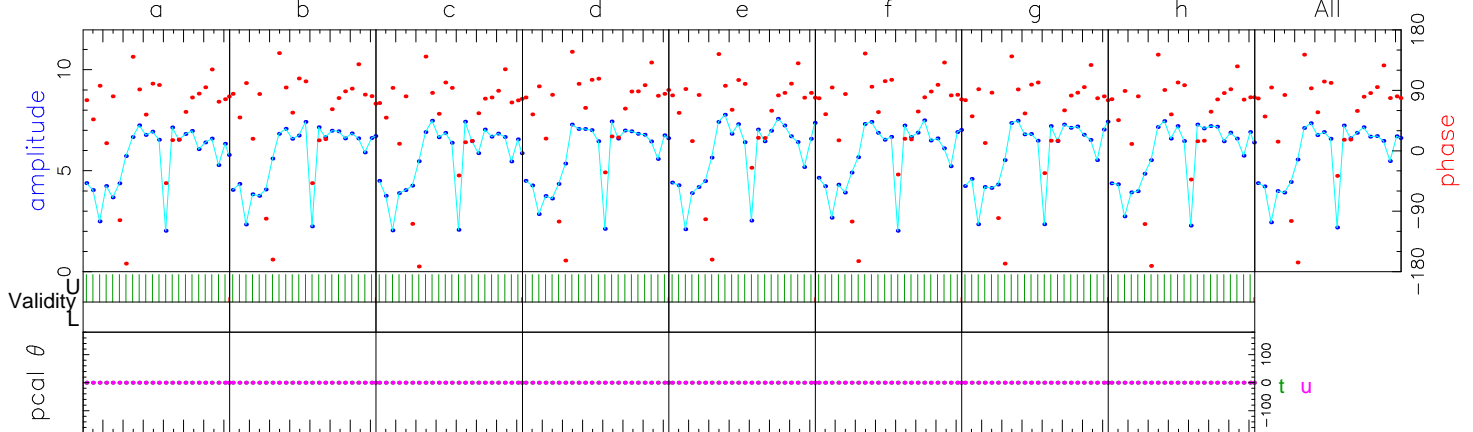
t: az 302.9 el 31.6 pa 72.2 u: az 302.5 el 30.9 pa 67.8 u,v (fr/asec) 110.525 -477.148 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tu...1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tu.W.18.1W6O3S



Fringe quality 5
SNR 223.6
Int time 419.840
Amp 3.992
Phase 80.8
PFD 0.0e+00
Delays (us)
SBD -0.000870
MBD -0.000823
Fringe rate (Hz) 0.019740
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051441
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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				
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used			
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
u	1000	1000	1000	1000	1000	1000	1000	1000				
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	2.12889977765E+02					2.12890800719E+02			Resid mbdelay (usec)	-8.22954E-04 +/- 4.9E-06		
Sband delay (usec)	2.12889930719E+02					-1.4764439E+01			Resid sbdelay (usec)	-8.70000E-04 +/- 3.9E-05		
Phase delay (usec)	2.12890803324E+02					-1.3269999E-02			Resid phdelay (usec)	2.60527E-04 +/- 1.7E-08		
Delay rate (us/s)	-1.51190681934E-02					-1.51192973565E-02			Resid rate (us/s)	2.29163E-07 +/- 6.8E-11		
Total phase (deg)			287.4			-3.67725366737E-06			Resid phase (deg)	80.8 +/- 0.5		
	RMS	Theor.	Amplitude	3.992 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	59.9	1.2	Search (2048X32)	3.825					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	58.2	2.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	3.1	0.7	Inc. seg. avg.	5.726					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	1.6	1.3	Inc. frq. avg.	3.977					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

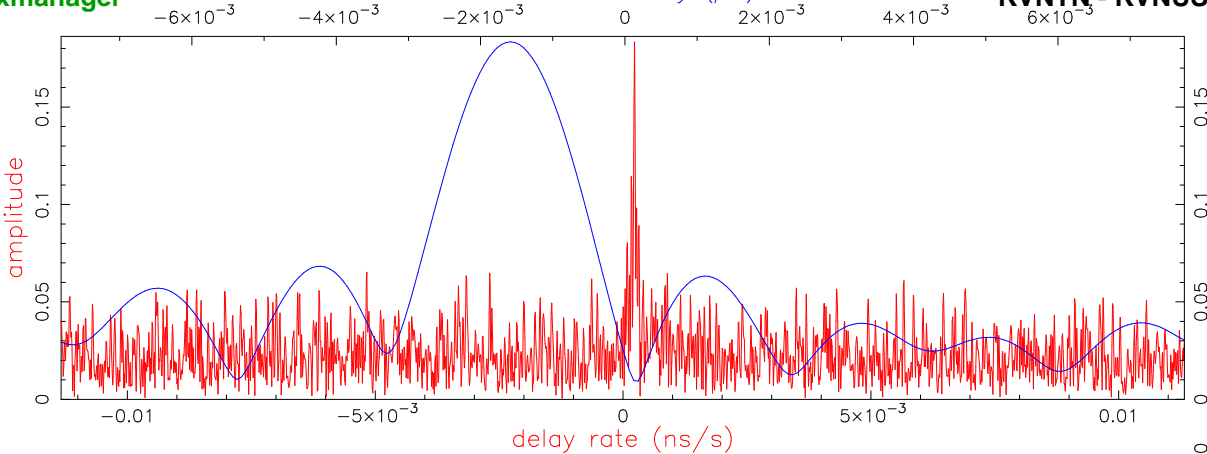
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tu

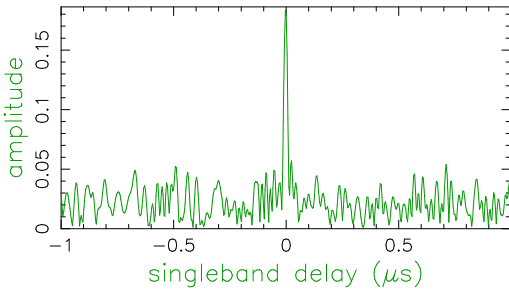
KVNTN - KVNUS, fgroup W, pol LR

multiband delay (μ s)

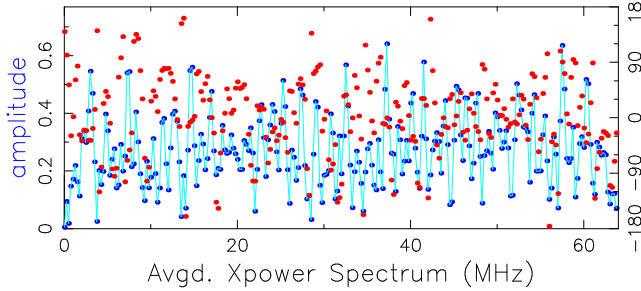


Fringe quality 9

SNR 10.4
 Int time 419.840
 Amp 0.186
 Phase 0.2
 PFD 7.7e-17
 Delays (us)
 SBD -0.002305
 MBD -0.001596
 Fringe rate (Hz)
 0.019886
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

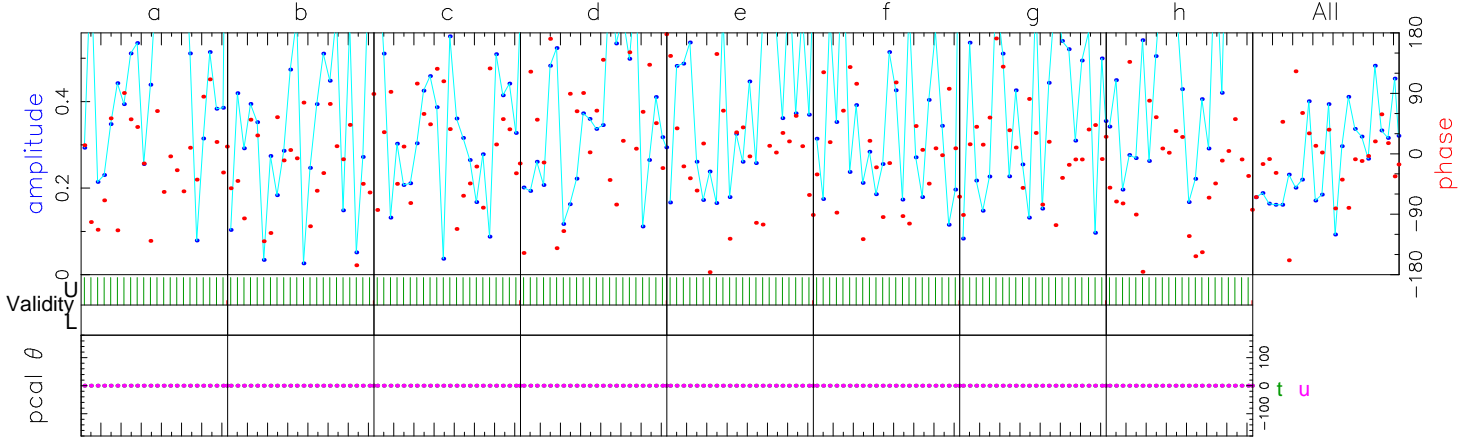


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051445
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		256.4
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.12889204234E+02					2.12890800719E+02			Resid mbdelay (usec)	-1.59649E-03 +/- 1.0E-04
Sband delay (usec)	2.12888495969E+02					-1.4764439E+01			Resid sbdelay (usec)	-2.30475E-03 +/- 8.3E-04
Phase delay (usec)	2.12890800725E+02					-1.3269999E-06			Resid phdelay (usec)	6.37793E-09 +/- 3.5E-07
Delay rate (us/s)	-1.51190665014E-02					-1.51192973565E-02			Resid rate (us/s)	2.30855E-07 +/- 1.5E-09
Total phase (deg)		206.8				-3.67725366737E-06			Resid phase (deg)	0.2 +/- 11.0
	RMS	Theor.	Amplitude	0.186 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.7	26.3	Search (2048X32)	0.177					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	73.3	46.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	18.1	15.5	Inc. seg. avg.	0.246					Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	28.2	27.1	Inc. frq. avg.	0.181					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

t: az 302.9 el 31.6 pa 72.2 u: az 302.5 el 30.9 pa 67.8 u,v (fr/asec) 110.525 -477.148 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tu..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tu.W.58.1W6O3S

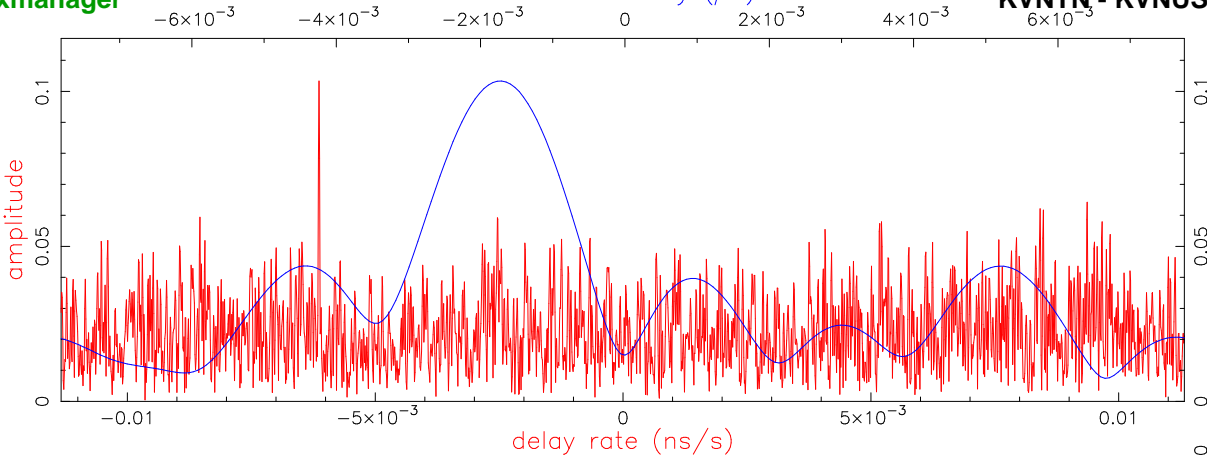
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tu

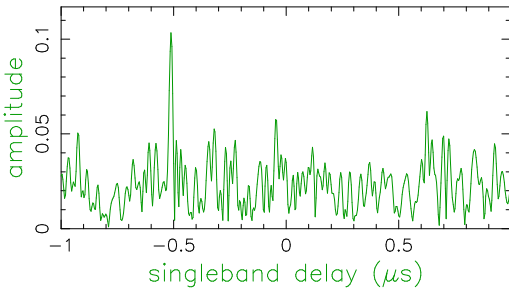
KVNTN - KVNUS, fgroup W, pol RL

multiband delay (μ s)

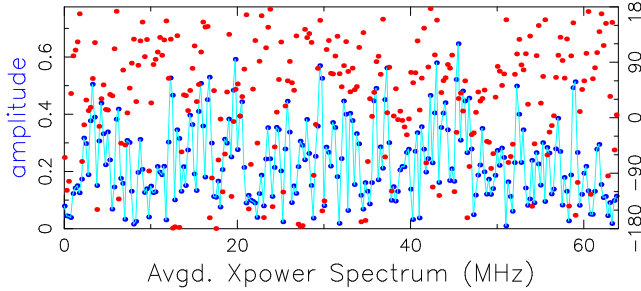


Fringe quality 0

SNR 5.8
Int time 419.840
Amp 0.117
Phase -31.3
PFD 8.2e-01
Delays (us)
SBD -0.511335
MBD -0.001733
Fringe rate (Hz)
-0.529470
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

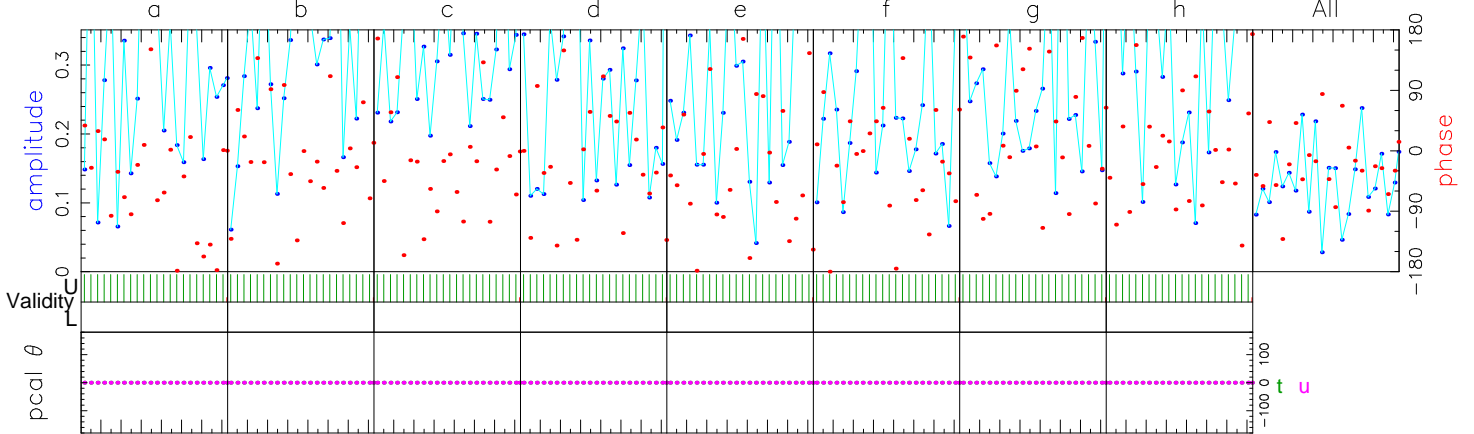


delay rate (ns/s)



Exp. c211a
Yr:day 16383
Start 2021:114
Stop 2021:114
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051449
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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
	-43.2	-12.4	-34.1	-31.9	-78.0	-15.8	-15.9	-30.0	Phase	-31.3
	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.2	Ampl.	0.1
	245.3	124.7	124.7	272.2	472.7	33.0	295.2	401.7	Sbd box	126.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.12373442348E+02	Apriori delay (usec)	2.12890800719E+02	Resid mbdelay (usec)	-1.73337E-03	+/-	1.9E-04
Sband delay (usec)	2.12379465469E+02	Apriori clock (usec)	-1.4764439E+01	Resid sbdelay (usec)	-5.11335E-01	+/-	1.5E-03
Phase delay (usec)	2.12890799709E+02	Apriori clockrate (us/s)	-1.3269999E-06	Resid phdelay (usec)	-1.00997E-06	+/-	6.4E-07
Delay rate (us/s)	-1.51254439734E-02	Apriori rate (us/s)	-1.51192973565E-02	Resid rate (us/s)	-6.14662E-06	+/-	2.6E-09
Total phase (deg)	175.3	Apriori accel (us/s/s)	-3.67725366737E-06	Resid phase (deg)	-31.3	+/-	19.8

ph/seg (deg)	49.9	Theor.	47.4	Amplitude	0.117 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	57.2	Search (2048X32)	0.101	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	23.0	Inc. seg. avg.	0.110	Inc. frq. avg.	0.110	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	42.8	Inc. frq. avg.	0.110			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

t: az 302.9 el 31.6 pa 72.2

u: az 302.5 el 30.9 pa 67.8

u, v (fr/asec) 110.525 -477.148

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tu...1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tu.W.78.1W6O3S

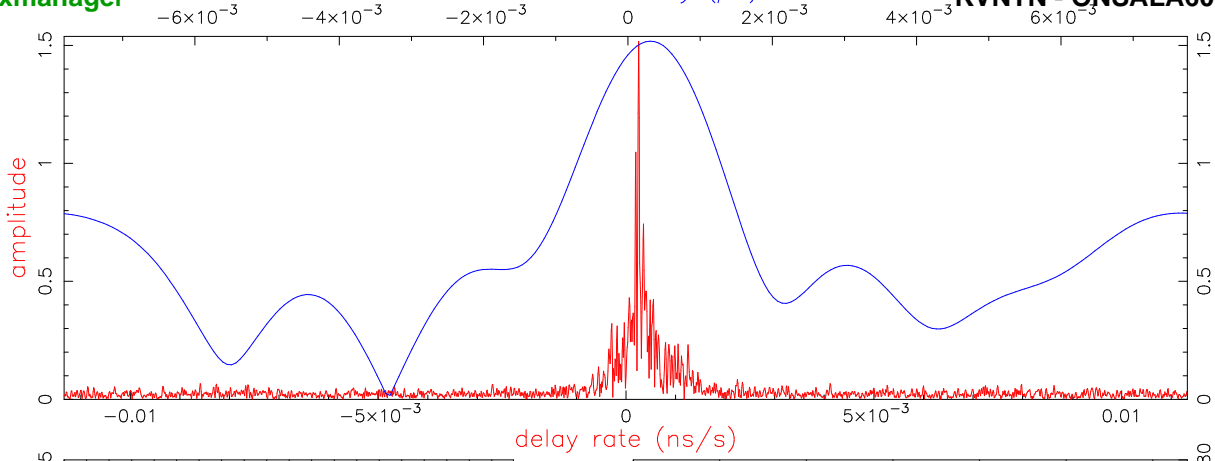
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W603S, No0170, tX

KVNTN - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



Fringe quality 2

SNR 86.2

Int time 419.799

Amp 1.538

Phase -93.1

PFD 0.0e+00

Delays (us)

SBD -0.017127

MBD 0.000266

Fringe rate (Hz)

0.022346

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:114

Start 043001.00

Stop 043700.84

FRT 043331.00

Corr/FF/build

2021:287:041606

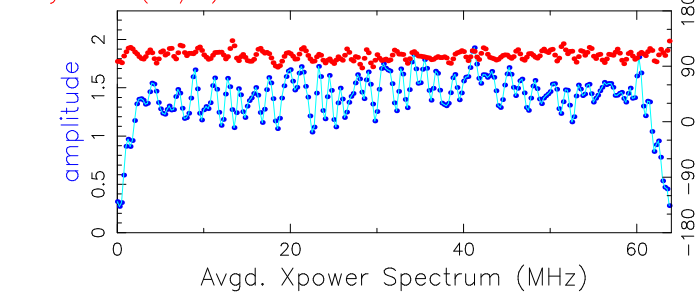
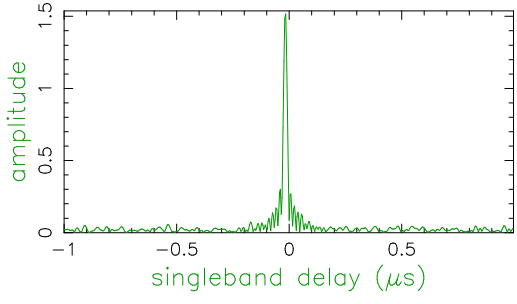
2021:287:051437

2021:252:122852

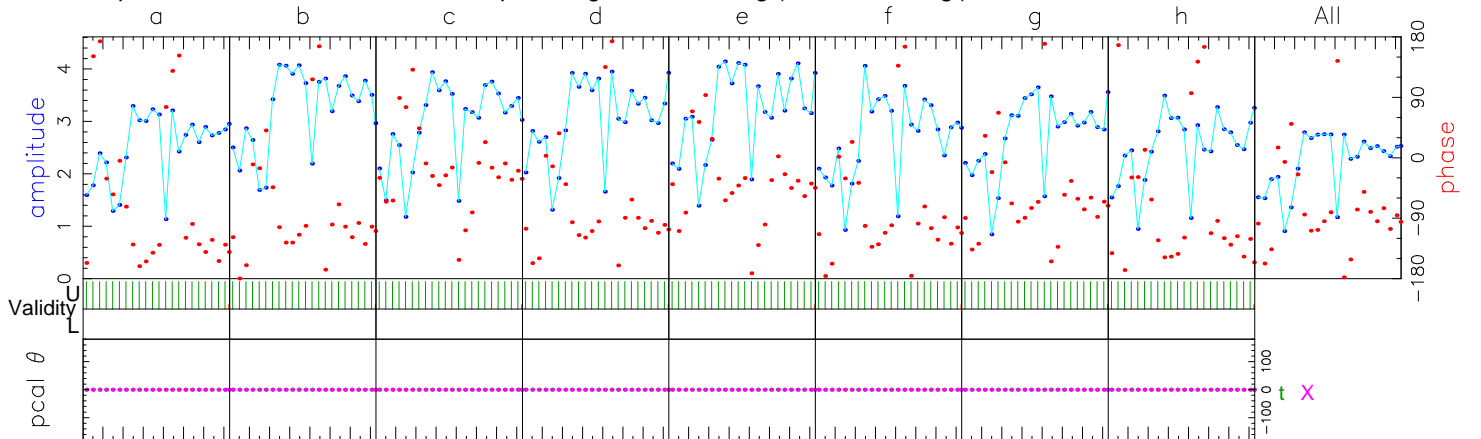
RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"



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
	-140.1	-113.7	-22.1	-105.1	-42.0	-113.6	-77.0	-131.5	Phase	-93.1
	1.7	2.2	2.0	2.1	2.1	1.8	1.9	1.7	Ampl.	1.9
	254.6	252.6	252.2	252.2	252.1	251.9	252.1	252.4	Sbd box	252.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	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)	-7.83463312241E+03		Apriori delay (usec)		-7.83461776385E+03		Resid mbdelay (usec)		2.66440E-04	+/- 1.3E-05
Sband delay (usec)	-7.83463489060E+03		Apriori clock (usec)		-5.6657253E+01		Resid sbdelay (usec)		-1.71268E-02	+/- 1.0E-04
Phase delay (usec)	-7.83461776685E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-3.00064E-06	+/- 4.3E-08
Delay rate (us/s)	-1.31456184438E+00		Apriori rate (us/s)		-1.31456210379E+00		Resid rate (us/s)		2.59412E-07	+/- 1.8E-10
Total phase (deg)			Apriori accel (us/s/s)		1.90183935210E-05		Resid phase (deg)		-93.1	+/- 1.3

ph/seg (deg) 60.0 3.2 Search (2048X32) 1.408 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 56.5 5.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 45.8 1.9 Inc. seg. avg. 2.204 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 29.5 3.3 Inc. frq. avg. 1.947 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

t: az 302.9 el 31.6 pa 72.2 X: az 104.5 el 61.3 pa -44.5 u,v (fr/asec) 10219.186 -680.444 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tX...1W603S Output file: /Exps/c211a/v2/1234/No0170/tX.W.19.1W603S

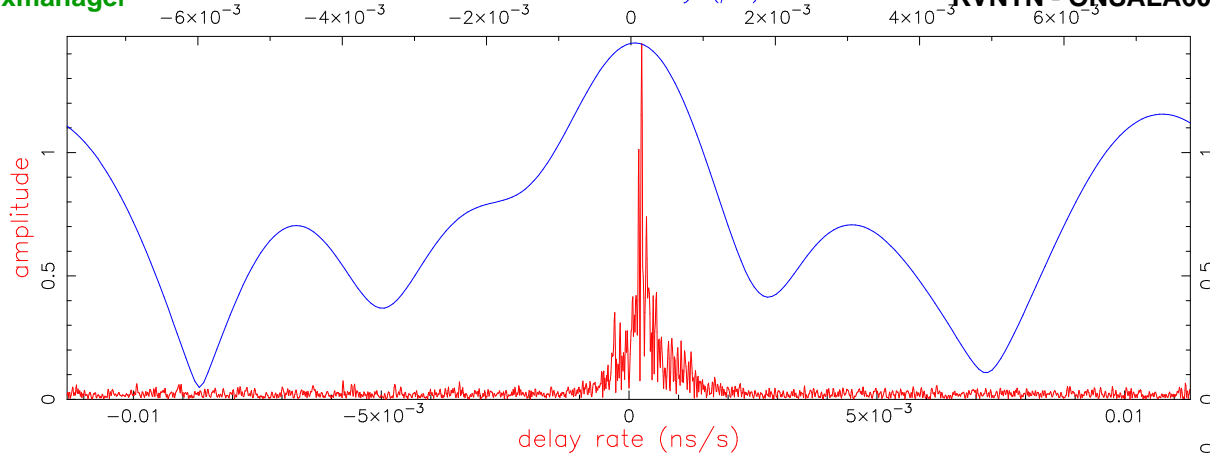
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tX

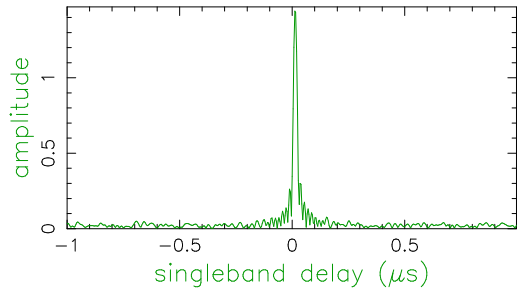
KVNTN - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

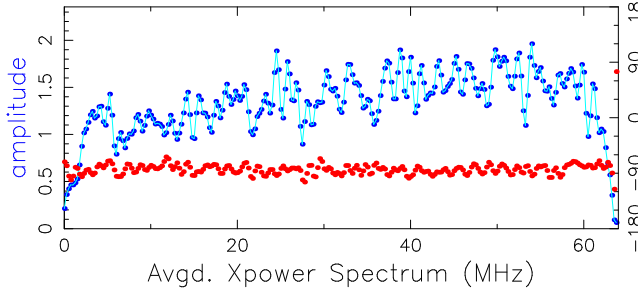


Fringe quality 1

SNR 82.4
 Int time 419.799
 Amp 1.470
 Phase 71.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.013542
 MBD 0.000122
 Fringe rate (Hz)
 0.022358
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

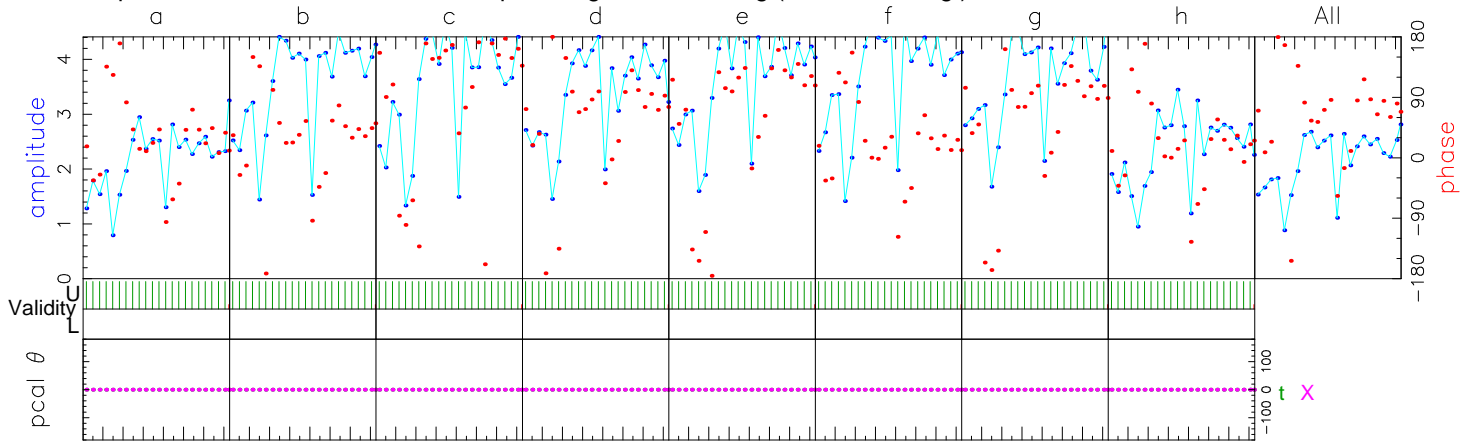


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051441
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-7.83460201722E+03								1.21628E-04	+/- 1.3E-05
Sband delay (usec)	-7.83460422185E+03								1.35420E-02	+/- 1.0E-04
Phase delay (usec)	-7.83461776153E+03								2.31701E-06	+/- 4.5E-08
Delay rate (us/s)	-1.31456184424E+00								2.59555E-07	+/- 1.9E-10
Total phase (deg)			7.9						71.9	+/- 1.4
Apriori delay (usec)					-7.83461776385E+03				Resid mbdelay (usec)	
Apriori clock (usec)					-5.6657253E+01				Resid sbdelay (usec)	
Apriori clockrate (us/s)					-7.2800002E-07				Resid phdelay (usec)	
Apriori rate (us/s)					-1.31456210379E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					1.90183935210E-05				Resid phase (deg)	
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									mb window (us)	-0.008 0.008
Sample rate(MISamp/s): 128									dr window (ns/s)	-0.011 0.011
Data rate(Mb/s): 2048									ion window (TEC)	0.00 0.00
nlags: 256										
t_cohere infinite										

ph/seg (deg) 60.5 3.3 Search (2048X32) 1.366 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.3 5.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.4 2.0 Inc. seg. avg. 2.135 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.9 3.4 Inc. frq. avg. 2.204 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 X: az 104.5 el 61.3 pa -44.5 u,v (fr/asec) 10219.186 -680.444 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/No0170/tX..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tX.W.39.1W6O3S simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

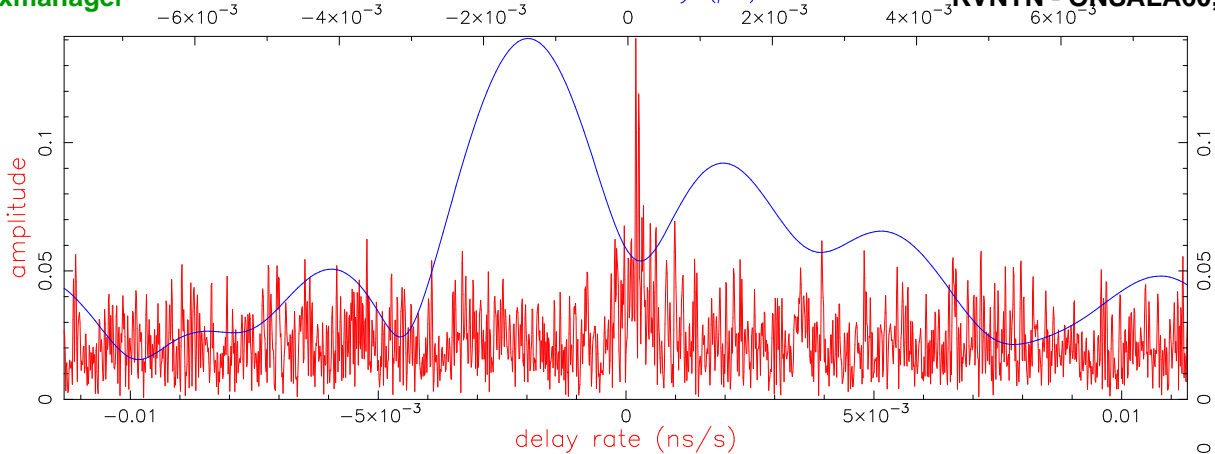
fxmanager

BLLAC.1W6O3S, No0170, tX

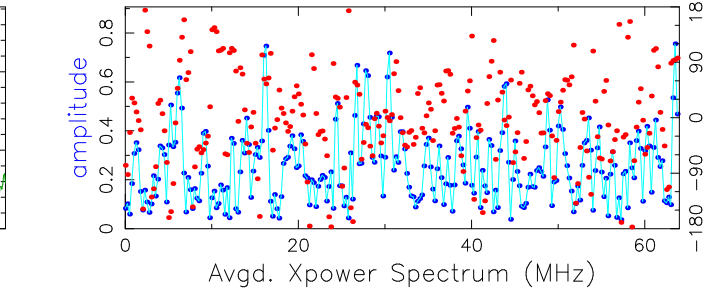
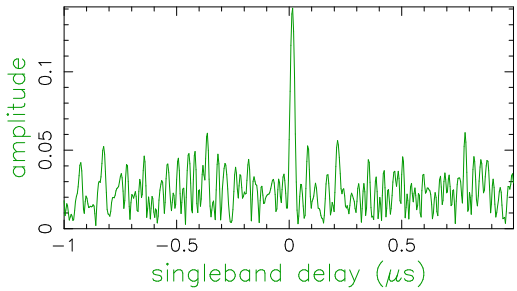
KVNTN - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 9

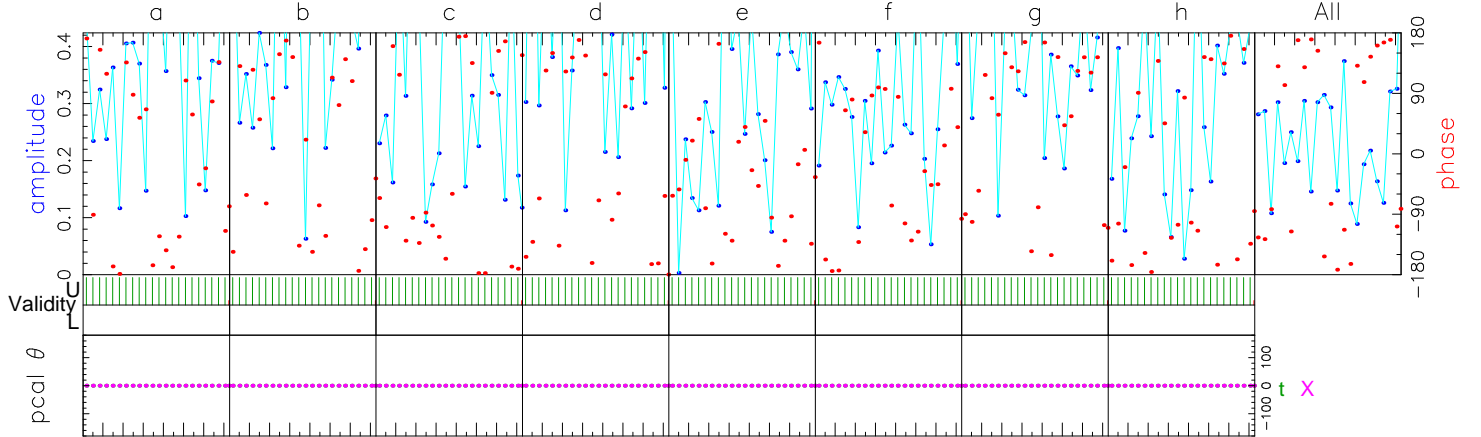


SNR 7.9
 Int time 419.799
 Amp 0.141
 Phase -168.2
 PFD 8.0e-07
 Delays (us)
 SBD 0.014480
 MBD -0.001412
 Fringe rate (Hz)
 0.017427
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051445
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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					
t	1000	1000	1000	1000	1000	1000	1000	1000					
X	1000	1000	1000	1000	1000	1000	1000	1000					
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
t	1000	1000	1000	1000	1000	1000	1000	1000					
X	1000	1000	1000	1000	1000	1000	1000	1000					
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
Group delay (usec)(sbd)	-7.83460355111E+03	-7.83460328410E+03	-7.83461776927E+03	-1.31456190148E+00	-232.2	Apriori delay (usec)	-7.83461776385E+03	Apriori clock (usec)	0.137	Resid mbdelay (usec)	-1.41226E-03	+/-	1.4E-04
Sband delay (usec)	-7.83460328410E+03	Apriori clockrate (us/s)	0.197	Apriori accel (us/s/s)	1.90183935210E-05	Resid sbdelay (usec)	1.44797E-02	Resid phdelay (usec)	-5.42402E-06	+/-	1.1E-03	4.7E-07	
Phase delay (usec)	-7.83461776927E+03	Apriori rate (us/s)	-1.31456210379E+00	Resid rate (us/s)	2.02312E-07	Resid phase (deg)	-168.2	+/-	1.9E-09	14.5			
Delay rate (us/s)	-1.31456190148E+00												
Total phase (deg)													

ph/seg (deg) 53.8 34.7 Search (2048X32) 0.137 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 89.4 60.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.0 20.5 Inc. seg. avg. 0.197 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.8 35.7 Inc. frq. avg. 0.160 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 X: az 104.5 el 61.3 pa -44.5 u,v (fr/asec) 10219.186 -680.444 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tX..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tX.W.56.1W6O3S simultaneous interpolator

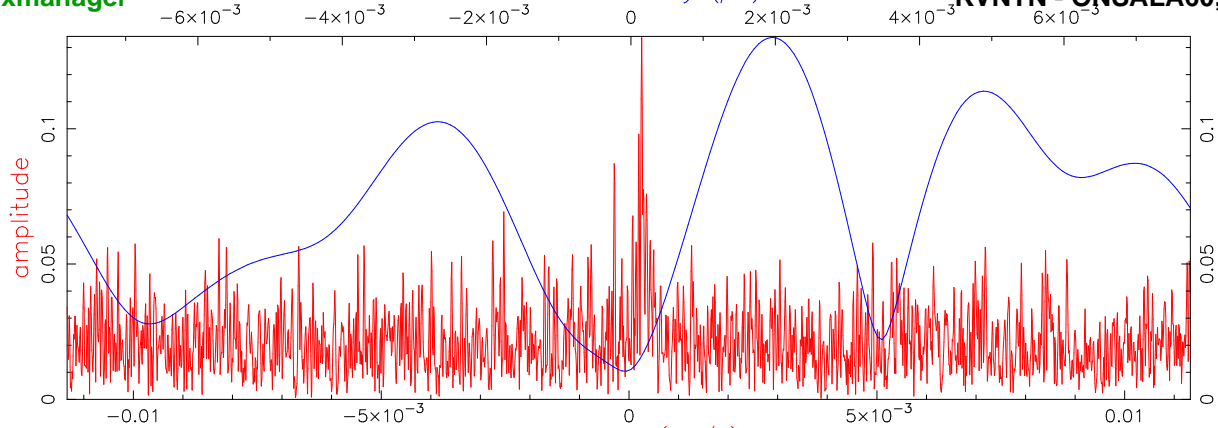
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tX

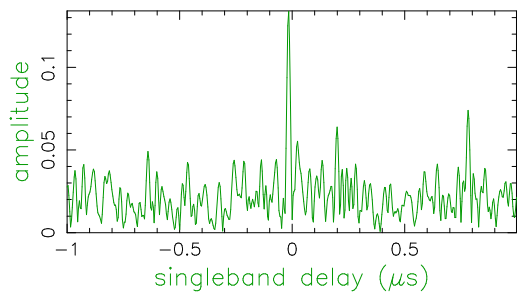
KVNTN - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

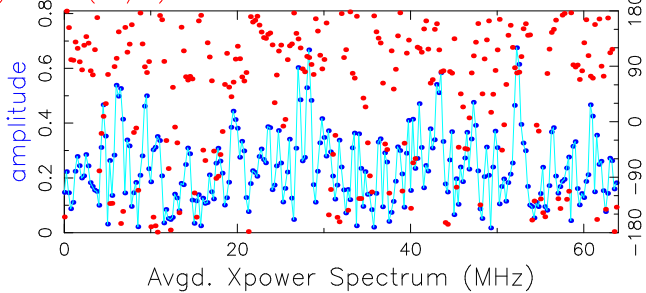


Fringe quality 9

SNR 7.5
 Int time 419.799
 Amp 0.134
 Phase -90.1
 PFD 1.9e-05
 Delays (us)
 SBD -0.016297
 MBD 0.001935
 Fringe rate (Hz)
 0.022314
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

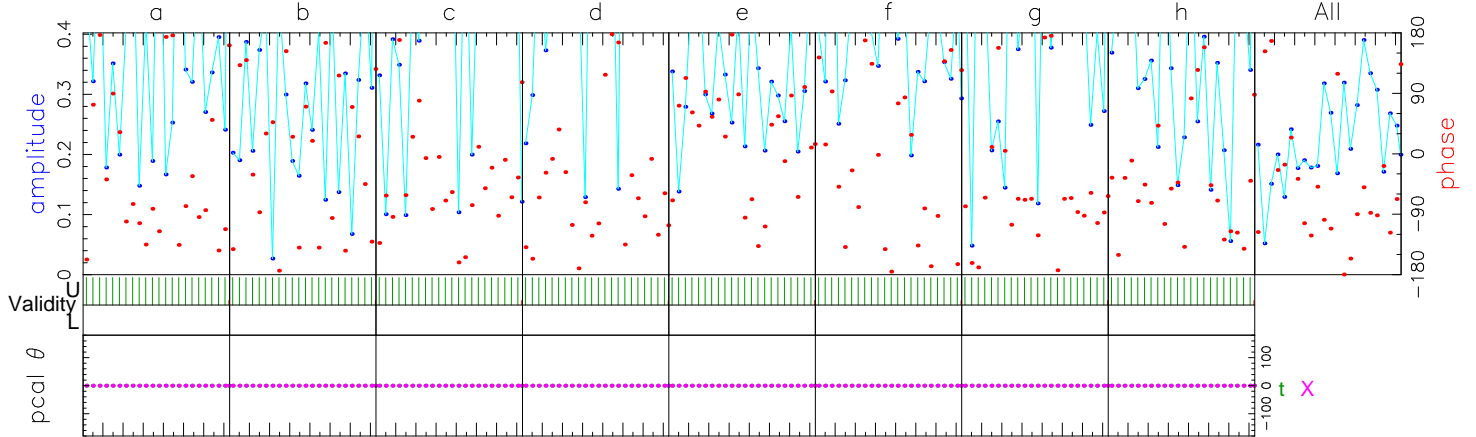


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051448
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



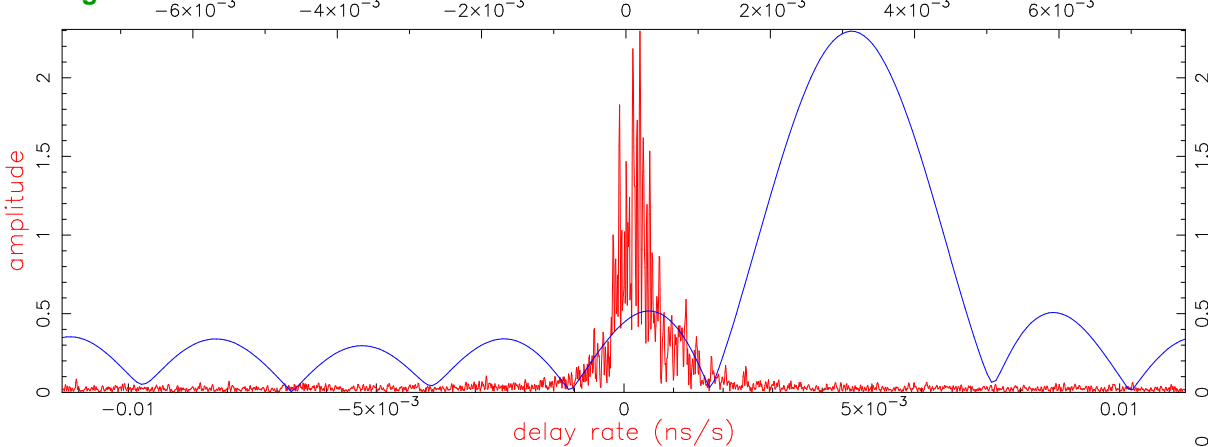
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-119.9	-143.4	-51.2	-94.1	48.4	170.6	-95.8	-79.7	Phase	-90.1
	0.2	0.0	0.3	0.3	0.1	0.1	0.3	0.2	Ampl.	0.2
	255.6	291.2	253.3	252.7	255.0	457.5	252.4	254.1	Sbd box	252.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.83463145394E+03		Apriori delay (usec)		-7.83461776385E+03		Resid mbdelay (usec)		1.93491E-03	+/- 1.4E-04
Sband delay (usec)	-7.83463406085E+03		Apriori clock (usec)		-5.6657253E+01		Resid sbdelay (usec)		-1.62970E-02	+/- 1.1E-03
Phase delay (usec)	-7.83461776675E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-2.90577E-06	+/- 4.9E-07
Delay rate (us/s)	-1.31456184475E+00		Apriori rate (us/s)		-1.31456210379E+00		Resid rate (us/s)		2.59040E-07	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		1.90183935210E-05		Resid phase (deg)		-90.1	+/- 15.3

	RMS	Theor.	Amplitude	0.134 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	67.2	36.6	Search (2048X32)	0.128	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	90.1	63.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	75.8	21.6	Inc. seg. avg.	0.189	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	83.8	37.6	Inc. frq. avg.	0.182	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

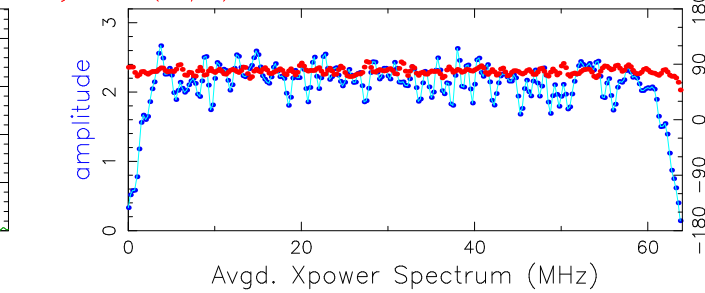
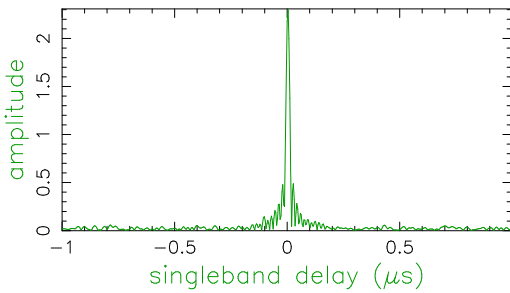
t: az 302.9 el 31.6 pa 72.2 X: az 104.5 el 61.3 pa -44.5 u,v (fr/asec) 10219.186 -680.444 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tX..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tX.W.75.1W6O3S

multiband delay (μ s)

Fringe quality 5

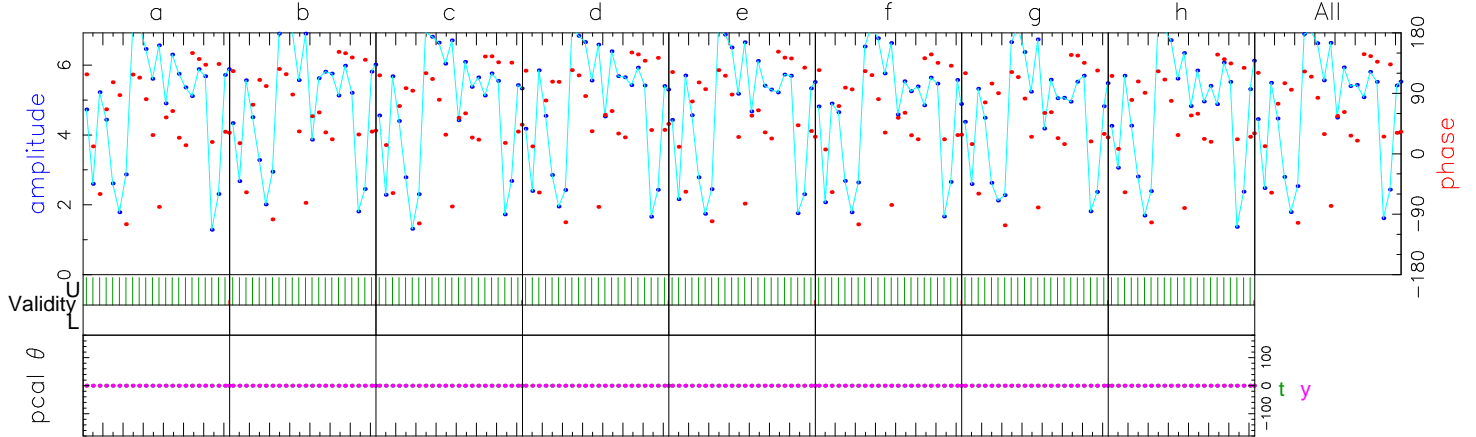


SNR 129.3
Int time 419.771
Amp 2.308
Phase 78.0
PFD 0.0e+00
Delays (us)
SBD 0.003033
MBD 0.003126
Fringe rate (Hz)
0.027468
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 043001.00
Stop 043700.84
FRT 043331.00
Corr/FF/build
2021:287:041606
2021:287:051437
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.07770056551E+02								3.12587E-03	+/- 8.4E-06
Sband delay (usec)	-6.07770149674E+02								3.03275E-03	+/- 6.7E-05
Phase delay (usec)	-6.07773179908E+02								2.51530E-06	+/- 2.9E-08
Delay rate (us/s)	-4.62947596675E-02								3.18872E-07	+/- 1.2E-10
Total phase (deg)			-258.2						78.0	+/- 0.9
			Apriori delay (usec)						Resid mbdelay (usec)	
			Apriori clock (usec)						Resid sbdelay (usec)	
			Apriori clockrate (us/s)						Resid phdelay (usec)	
			Apriori rate (us/s)						Resid rate (us/s)	
			Apriori accel (us/s/s)						Resid phase (deg)	
ph/seg (deg)	RMS 72.3	Theor. 2.1	Amplitude Search (2048X32)	2.308 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	127.0	3.7	Interp.	0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	2.8	1.3	Inc. seg. avg.	4.724					Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	2.0	2.2	Inc. frq. avg.	2.299					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite
t: az 302.9 el 31.6 pa 72.2			y: az 300.7 el 33.6 pa 66.9							
										simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c211a/v2/1234/No0170/ty..1W6O3S							Output file: /Exps/c211a/v2/1234/No0170/ty.W.15.1W6O3S

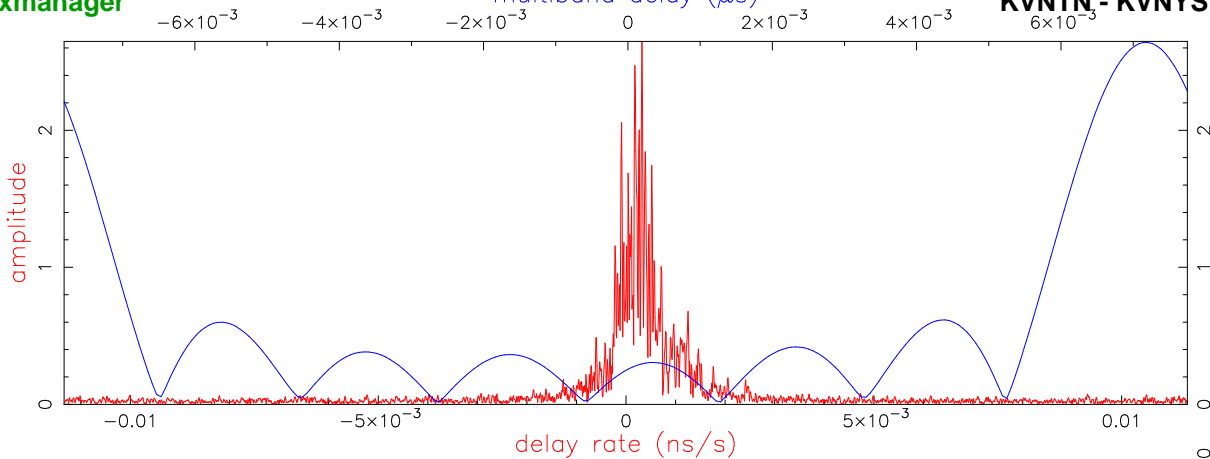
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, ty

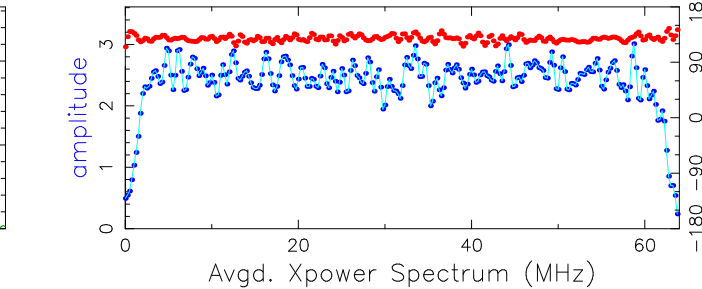
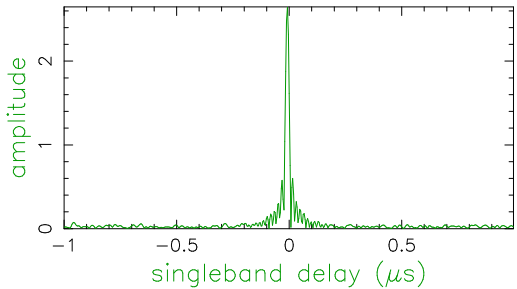
KVNTN - KVNYs, fgroup W, pol RR

multiband delay (μ s)

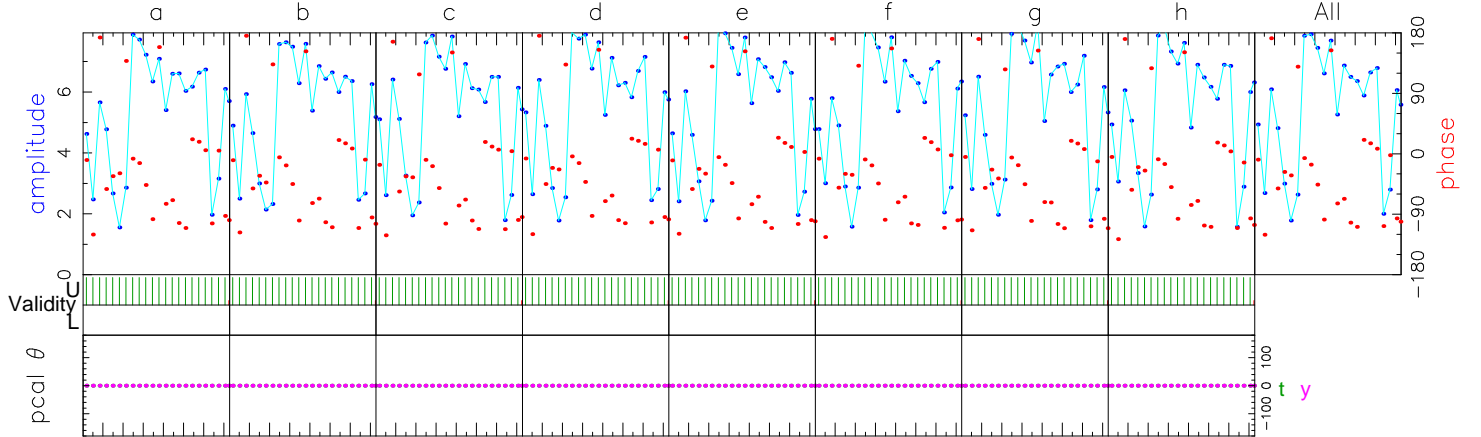


Fringe quality 5

SNR 148.3
 Int time 419.771
 Amp 2.648
 Phase -51.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.008441
 MBD 0.007175
 Fringe rate (Hz)
 0.027486
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051441
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



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		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.07781632676E+02								Resid mbdelay (usec)	7.17475E-03 +/- 7.3E-06
Sband delay (usec)	-6.07781623674E+02								Resid sbdelay (usec)	-8.44125E-03 +/- 5.8E-05
Phase delay (usec)	-6.07773184082E+02								Resid phdelay (usec)	-1.65860E-06 +/- 2.5E-08
Delay rate (us/s)	-4.62947594500E-02								Resid rate (us/s)	3.19090E-07 +/- 1.0E-10
Total phase (deg)			-27.7						Resid phase (deg)	-51.4 +/- 0.8
	RMS	Theor.	Amplitude	2.648 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	72.2	1.9	Search (2048X32)	2.546					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	127.3	3.2	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	2.6	1.1	Inc. seg. avg.	5.392					Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
amp/frq (%)	1.0	1.9	Inc. frq. avg.	2.643					Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
									nlags: 256	t_cohere infinite
										ion window (TEC) 0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

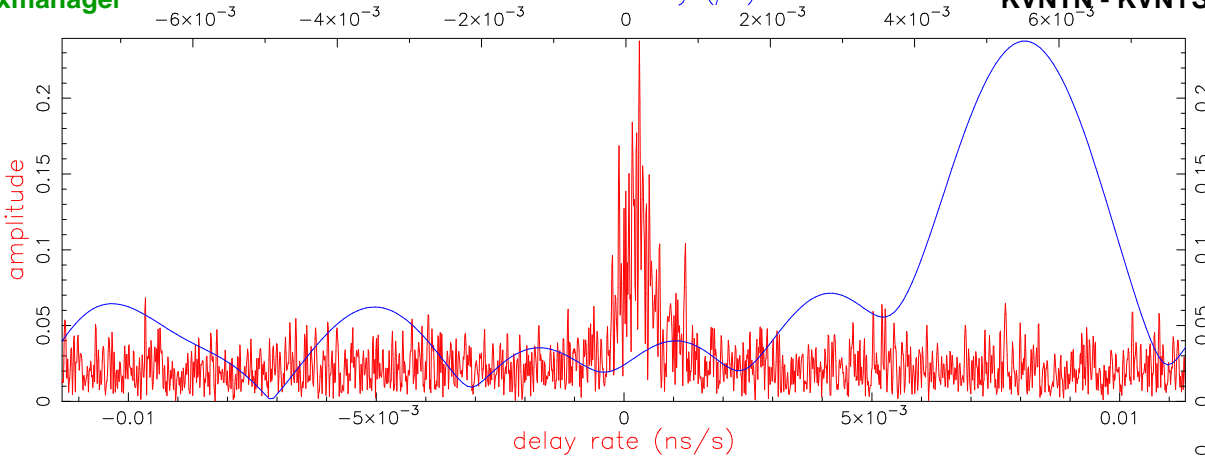
fxmanager

BLLAC.1W6O3S, No0170, ty

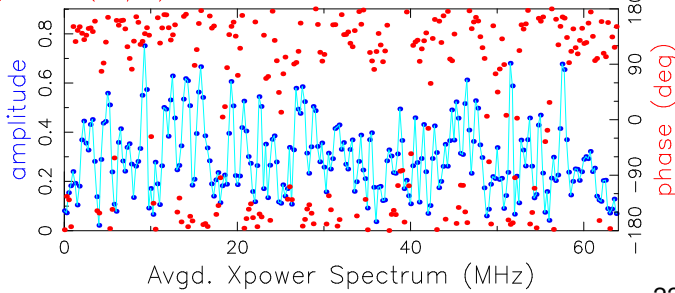
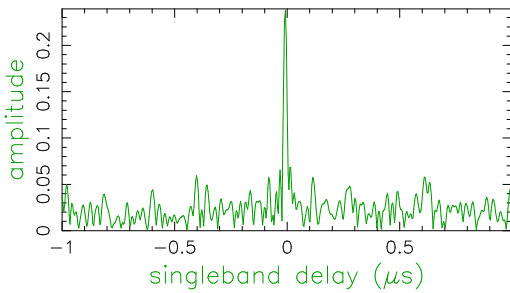
KVNTN - KVNYS, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 9

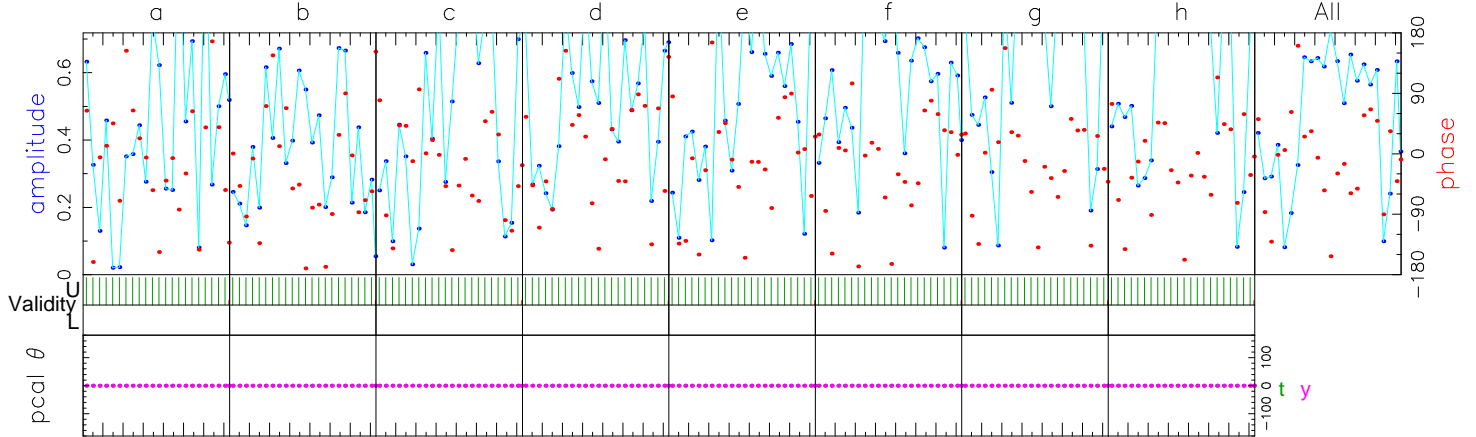


SNR 13.4
 Int time 419.771
 Amp 0.239
 Phase -5.7
 PFD 2.9e-32
 Delays (us)
 SBD -0.008836
 MBD 0.005533
 Fringe rate (Hz)
 0.027204
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051445
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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
	-3.4	-24.9	-12.6	23.0	-6.5	-1.8	-7.2	-11.4	Phase	-5.7
	0.2	0.1	0.3	0.2	0.2	0.3	0.3	0.4	Ampl.	0.2
	48.5	447.5	254.3	255.4	254.7	255.0	254.9	254.6	Sbd box	254.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.07783274395E+02		Apriori delay (usec)		-6.07773182424E+02		Resid mbdelay (usec)		5.53303E-03	+/- 8.1E-05
Sband delay (usec)	-6.07782018674E+02		Apriori clock (usec)		-9.7308350E-01		Resid sbdelay (usec)		-8.83625E-03	+/- 6.4E-04
Phase delay (usec)	-6.07773182608E+02		Apriori clockrate (us/s)		-2.0000000E-07		Resid phdelay (usec)		-1.84618E-07	+/- 2.8E-07
Delay rate (us/s)	-4.62947627306E-02		Apriori rate (us/s)		-4.62950785397E-02		Resid rate (us/s)		3.15809E-07	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.39183349640E-06		Resid phase (deg)		-5.7	+/- 8.5

ph/seg (deg) 71.1 20.5 Search (2048X32) 0.224 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 126.8 35.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.7 12.1 Inc. seg. avg. 0.443 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.3 21.1 Inc. frq. avg. 0.237 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 y: az 300.7 el 33.6 pa 66.9 u,v (fr/asec) 355.863 -501.477 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/ty..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/ty.W.55.1W6O3S

Mk4/DiFX fourfit 3.21 rev 2937

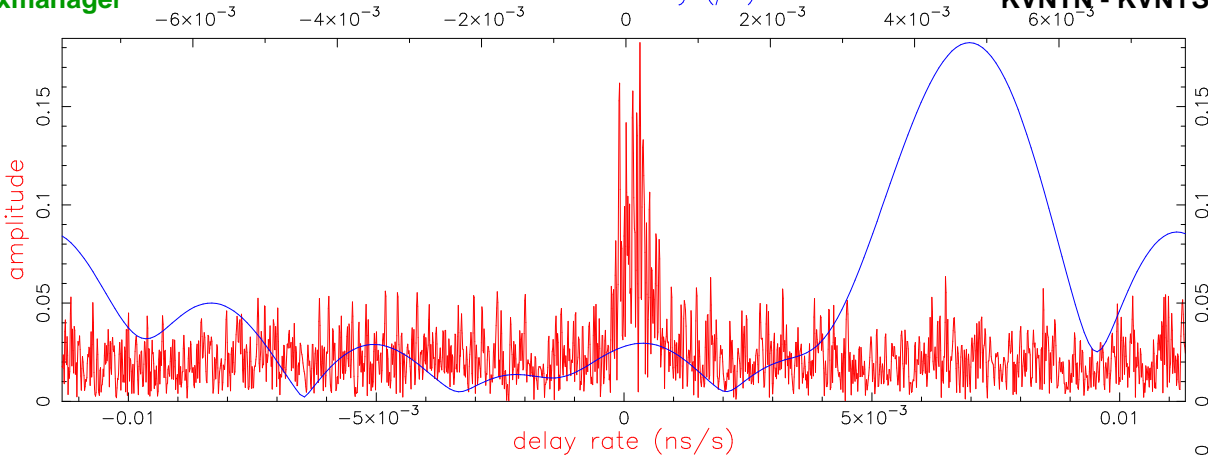
fxmanager

BLLAC.1W6O3S, No0170, ty

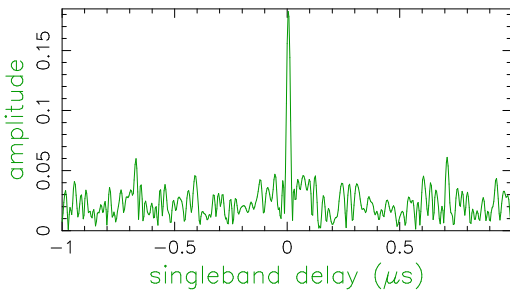
KVNTN - KVNYS, fgroup W, pol RL

multiband delay (μ s)

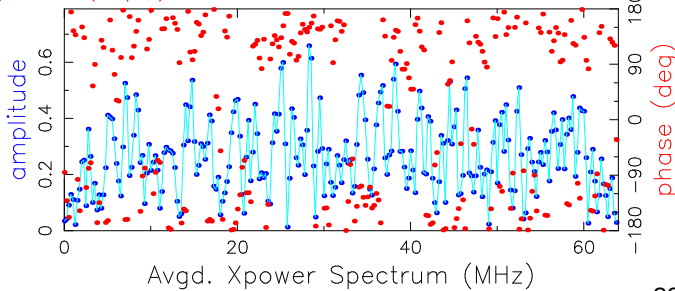
Fringe quality 9



SNR 10.3
 Int time 419.771
 Amp 0.185
 Phase 171.0
 PFD 1.9e-16
 Delays (us)
 SBD 0.005317
 MBD 0.004770
 Fringe rate (Hz) 0.027680
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

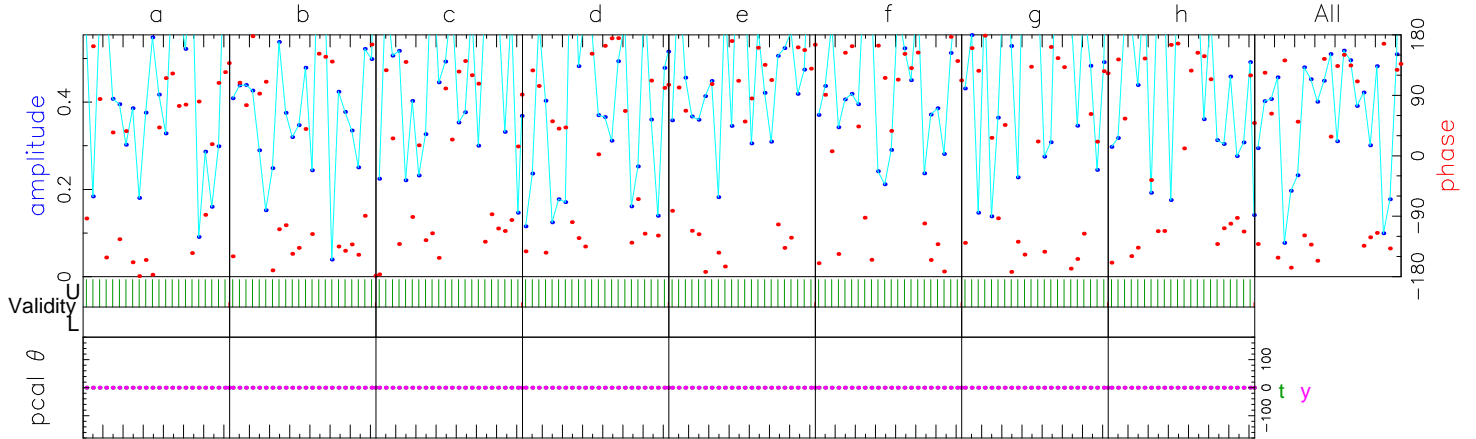


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043001.00
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051448
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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

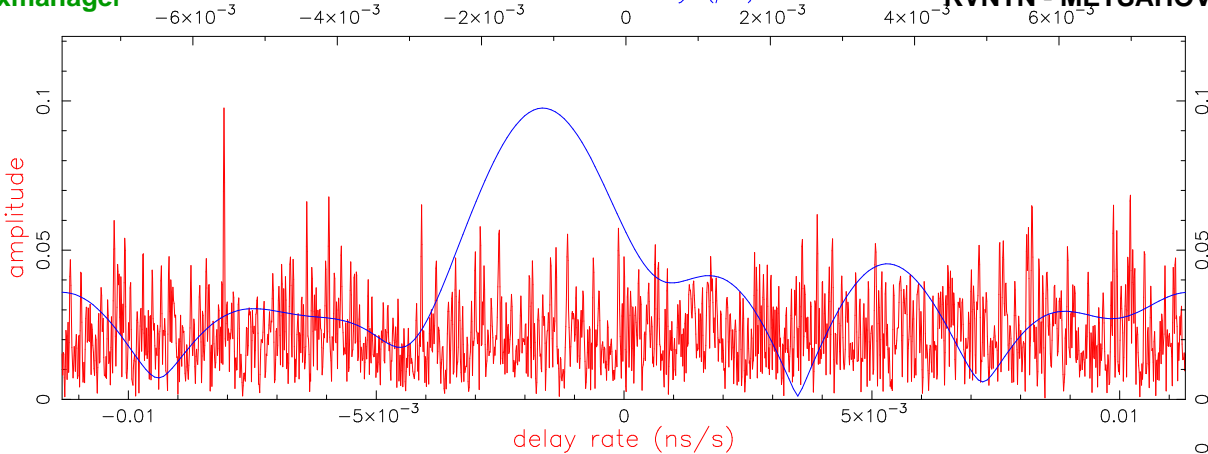


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-6.07768412707E+02									
Sband delay (usec)	-6.07767865674E+02									
Phase delay (usec)	-6.07773176908E+02									
Delay rate (us/s)	-4.62947572081E-02									
Total phase (deg)			-165.2							
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)									171.0	+/- 11.1
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										
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

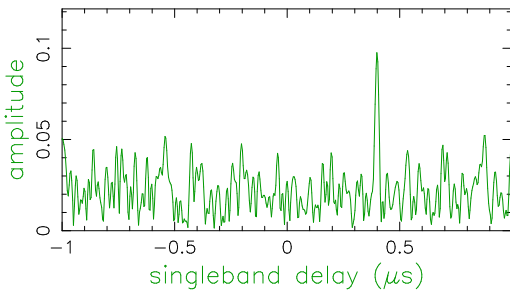
ph/seg (deg) 63.5 26.6 Search (2048X32) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 125.4 46.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.8 15.7 Inc. seg. avg. 0.334 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.5 27.3 Inc. frq. avg. 0.186 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 302.9 el 31.6 pa 72.2 y: az 300.7 el 33.6 pa 66.9 u,v (fr/asec) 355.863 -501.477 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/ty..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/ty.W.74.1W6O3S

multiband delay (μ s)

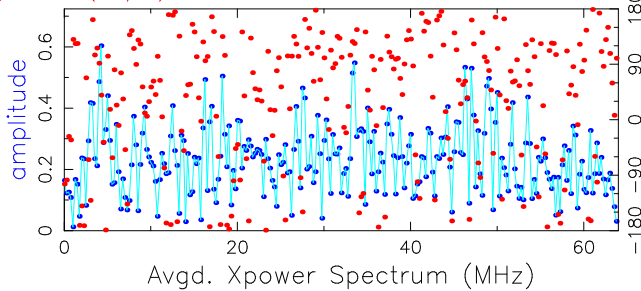
Fringe quality 0



SNR 5.4
 Int time 405.554
 Amp 0.122
 Phase 36.5
 PFD 1.0e+00
 Delays (us)
 SBD 0.399025
 MBD -0.001169
 Fringe rate (Hz)
 -0.696206
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

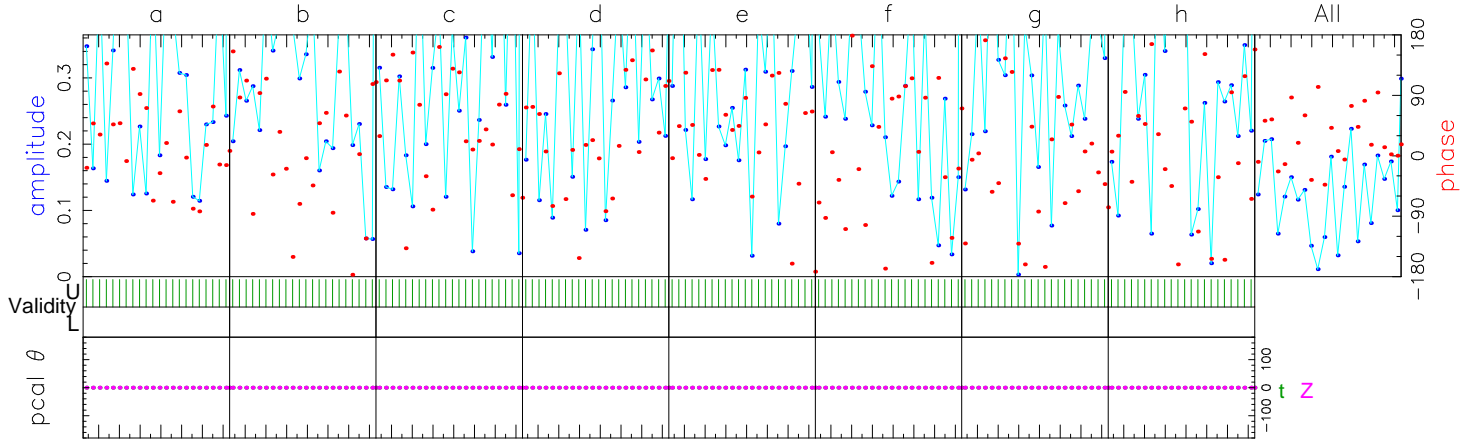


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043014.82
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051436
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.52094734584E+03	Apriori delay (usec)	-8.52135242701E+03	Resid mbdelay (usec)	-1.16883E-03	+/-	2.0E-04
Sband delay (usec)	-8.52095340201E+03	Apriori clock (usec)	4.4978905E-01	Resid sbdelay (usec)	3.99025E-01	+/-	1.6E-03
Phase delay (usec)	-8.52135242583E+03	Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	1.17757E-06	+/-	6.9E-07
Delay rate (us/s)	-1.17952979222E+00	Apriori rate (us/s)	-1.17952170997E+00	Resid rate (us/s)	-8.08226E-06	+/-	2.9E-09
Total phase (deg)	14.0	Apriori accel (us/s/s)	2.10274950413E-05	Resid phase (deg)	36.5	+/-	21.3

ph/seg (deg)	43.1	Theor.	51.0	Amplitude	0.122 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	66.8	Search (2048X32)	0.097	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	29.8	Inc. seg. avg.	0.110	Inc. frq. avg.	0.118	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	52.6	Inc. frq. avg.	0.118	Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
t: az 302.9 el 31.6 pa 72.2		Z: az 125.8 el 65.9 pa -33.1		u, v (fr/asec)	9175.747 -691.725			ion window (TEC)	0.00 0.00	

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tZ..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tZ.W.14.1W6O3S

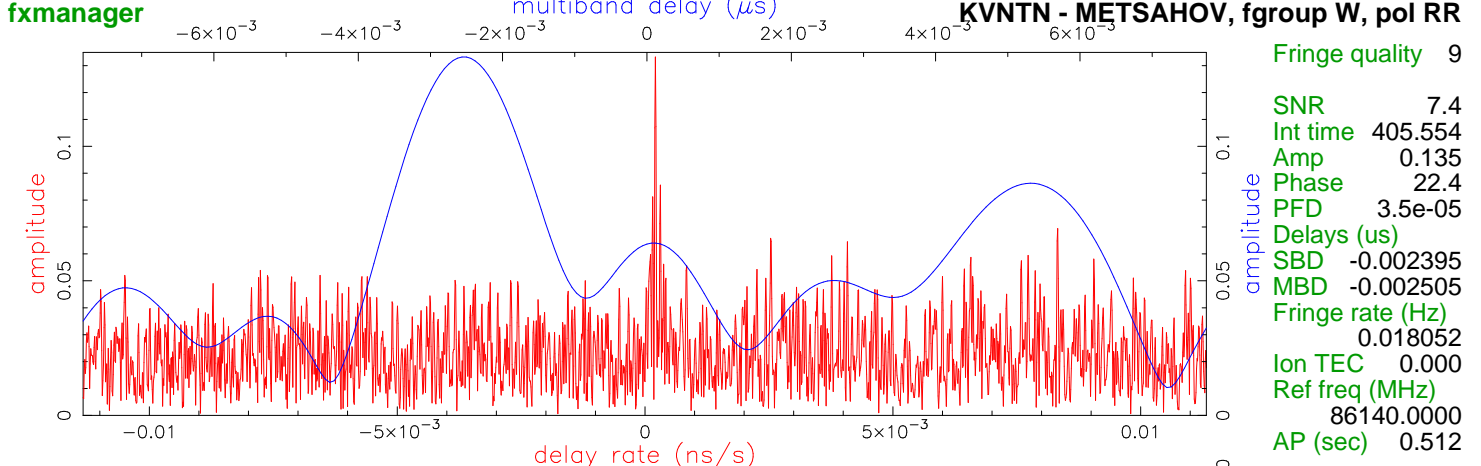
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6O3S, No0170, tZ

KVNTN - METSAHOV, fgroup W, pol RR



Fringe quality 9

SNR 7.4

Int time 405.554

Amp 0.135

Phase 22.4

PFD 3.5e-05

Delays (us)

SBD -0.002395

MBD -0.002505

Fringe rate (Hz)

0.018052

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:114

Start 043014.82

Stop 043700.84

FRT 043331.00

Corr/FF/build

2021:287:041606

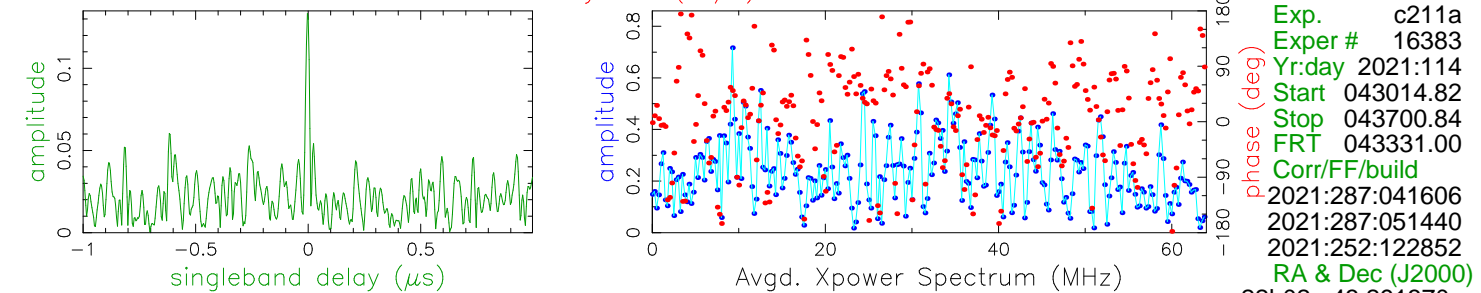
2021:287:051440

2021:252:122852

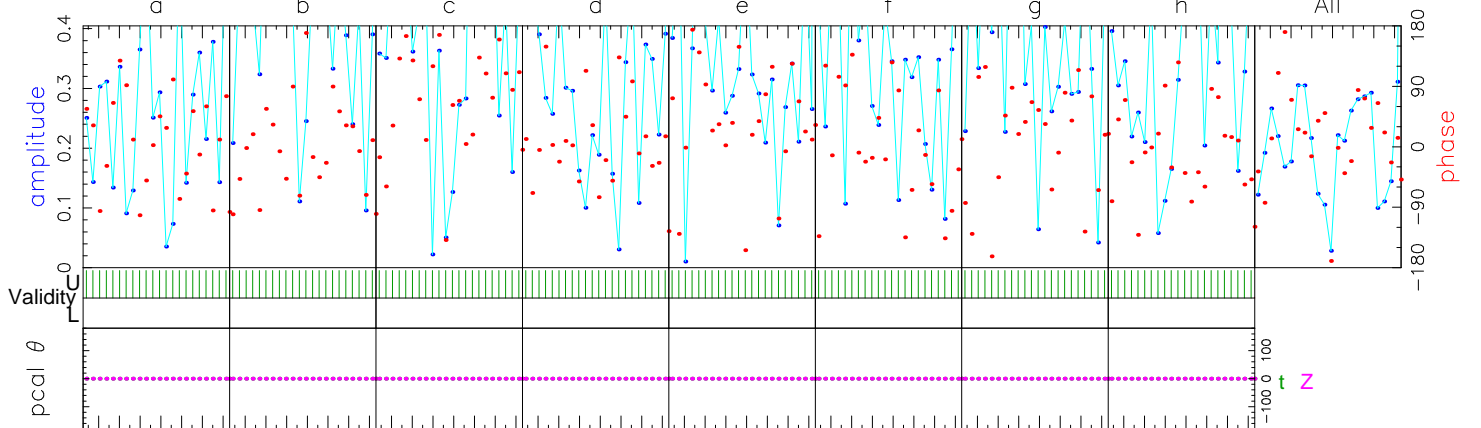
RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"



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
	-6.6	3.3	86.2	-1.9	79.2	-2.7	48.5	-9.3	Phase	22.4
	0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.2
	91.5	256.4	255.6	256.3	254.3	18.0	326.8	255.9	Sbd box	256.4
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-8.52135493192E+03		Apriori delay (usec)		-8.52135242701E+03		Resid mbdelay (usec)		-2.50491E-03	+/- 1.5E-04
Sband delay (usec)	-8.52135482176E+03		Apriori clock (usec)		4.4978905E-01		Resid sbdelay (usec)		-2.39475E-03	+/- 1.2E-03
Phase delay (usec)	-8.52135242629E+03		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		7.23389E-07	+/- 5.0E-07
Delay rate (us/s)	-1.17952150040E+00		Apriori rate (us/s)		-1.17952170997E+00		Resid rate (us/s)		2.09571E-07	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.10274950413E-05		Resid phase (deg)		22.4	+/- 15.4

ph/seg (deg) 65.3 37.0 Search (2048X32) 0.131 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 81.2 64.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

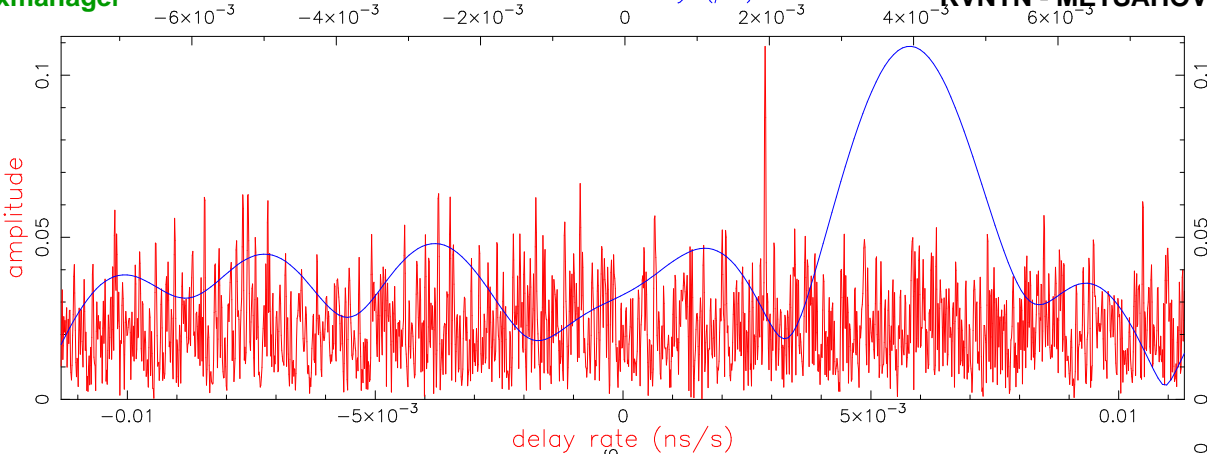
ph/frq (deg) 43.6 21.8 Inc. seg. avg. 0.169 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 48.3 38.1 Inc. frq. avg. 0.157 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

t: az 302.9 el 31.6 pa 72.2 Z: az 125.8 el 65.9 pa -33.1 u,v (fr/asec) 9175.747 -691.725 ion window (TEC) 0.00 0.00 simultaneous interpolator

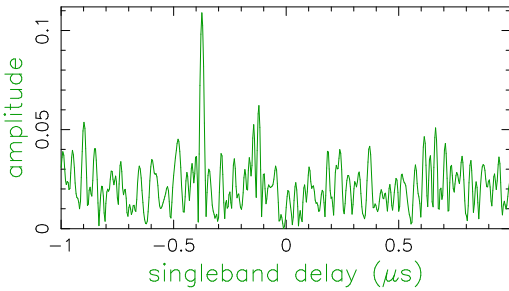
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tZ..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tZ.W.32.1W6O3S

multiband delay (μ s)

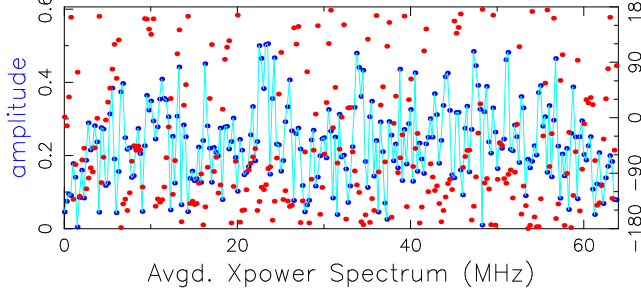


Fringe quality 0

SNR 6.0
 Int time 405.554
 Amp 0.112
 Phase -163.6
 PFD 3.9e-01
 Delays (us)
 SBD -0.374519
 MBD 0.003965
 Fringe rate (Hz)
 0.247391
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

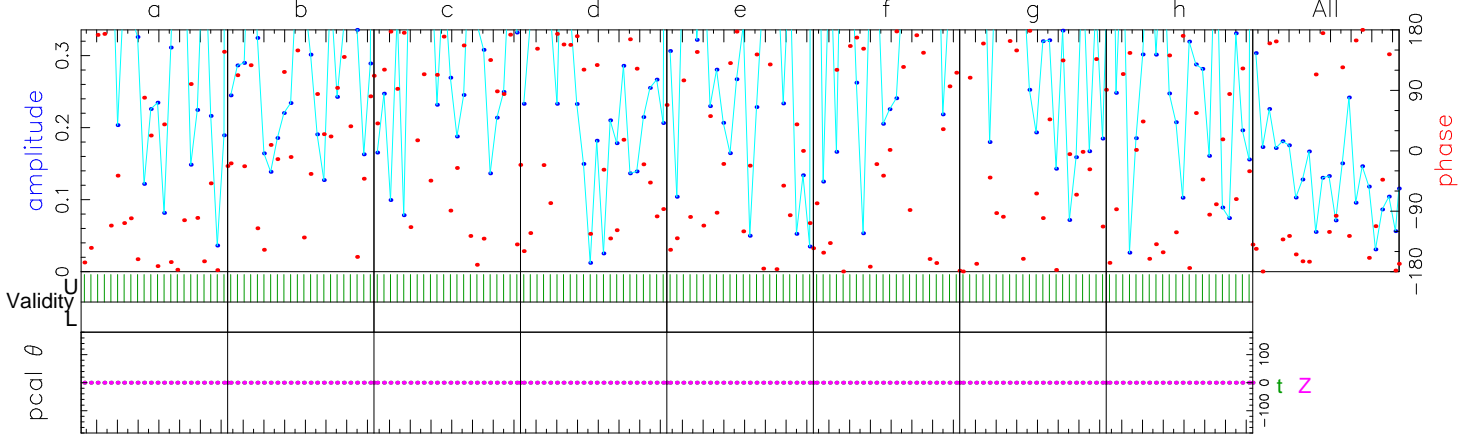


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043014.82
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051444
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-8.52172346228E+03	Apriori delay (usec)	-8.52135242701E+03	Resid mbdelay (usec)	3.96473E-03	+/-	1.8E-04
Sband delay (usec)	-8.52172694626E+03	Apriori clock (usec)	4.4978905E-01	Resid sbdelay (usec)	-3.74519E-01	+/-	1.4E-03
Phase delay (usec)	-8.52135243228E+03	Apriori clockrate (us/s)	-2.160000E-07	Resid phdelay (usec)	-5.27533E-06	+/-	6.2E-07
Delay rate (us/s)	-1.17951883800E+00	Apriori rate (us/s)	-1.17952170997E+00	Resid rate (us/s)	2.87197E-06	+/-	2.6E-09
Total phase (deg)	-186.1	Apriori accel (us/s/s)	2.10274950413E-05	Resid phase (deg)	-163.6	+/-	19.1

ph/seg (deg)	46.3	Theor.	45.8	Amplitude	0.112 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	64.4	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	51.0	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.7	Inc. seg. avg.	0.108	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.113	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

t: az 302.9 el 31.6 pa 72.2 Z: az 125.8 el 65.9 pa -33.1 u,v (fr/asec) 9175.747 -691.725 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tZ..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tZ.W.51.1W6O3S

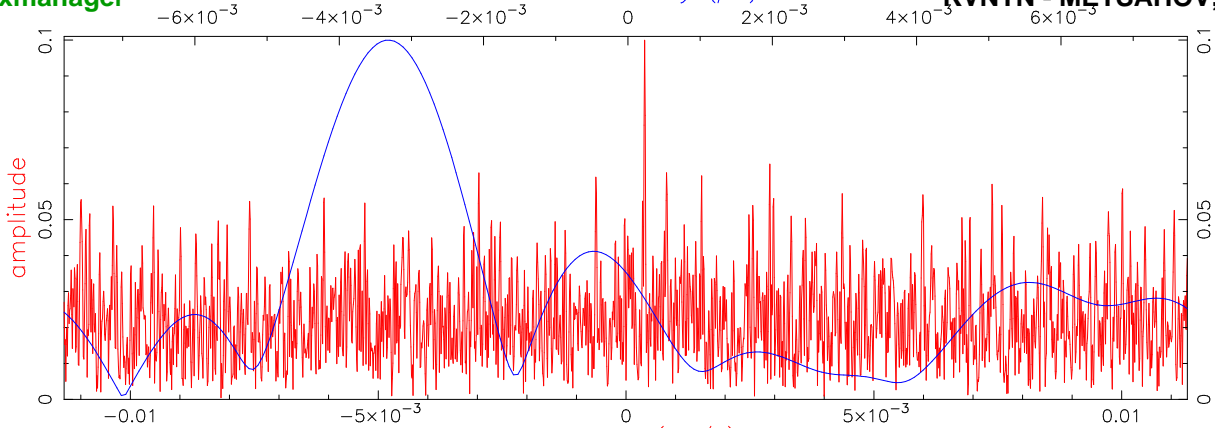
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

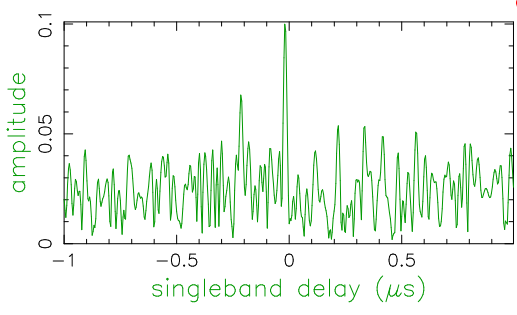
BLLAC.1W6O3S, No0170, tZ

KVNTN - METSAHOV, fgroup W, pol RL

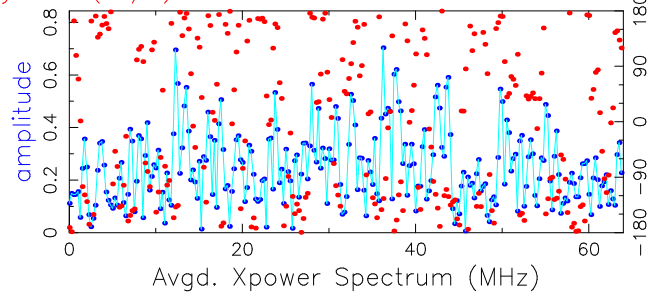
multiband delay (μ s)



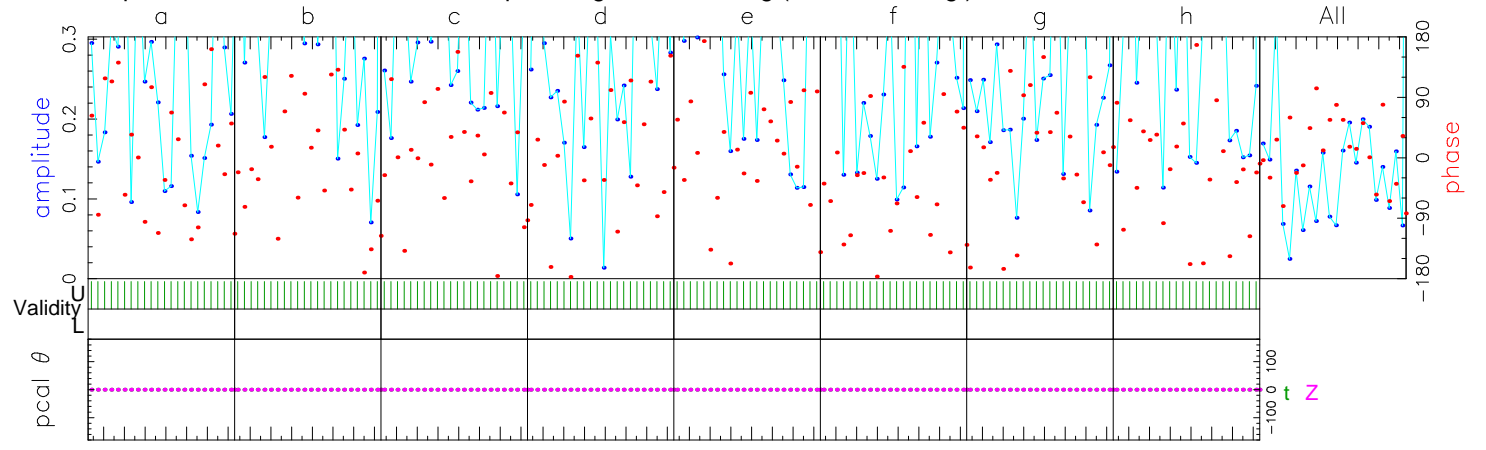
Fringe quality 0
 SNR 5.6
 Int time 405.554
 Amp 0.101
 Phase 14.1
 PFD 1.0e+00
 Delays (us)
 SBD -0.018265
 MBD -0.003293
 Fringe rate (Hz)
 0.032453
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 043014.82
 Stop 043700.84
 FRT 043331.00
 Corr/FF/build
 2021:287:041606
 2021:287:051447
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



delay rate (ns/s)



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	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.52137134548E+03									
Sband delay (usec)	-8.52137069176E+03									
Phase delay (usec)	-8.52135242655E+03									
Delay rate (us/s)	-1.17952133322E+00									
Total phase (deg)			-8.4							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal theta										
Tracks										
Chan ids										
Tracks										
Chan ids										
Tracks										
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								
simultaneous interpolator										

t: az 302.9 el 31.6 pa 72.2 Z: az 125.8 el 65.9 pa -33.1 u,v (fr/asec) 9175.747 -691.725
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0170/tZ..1W6O3S Output file: /Exps/c211a/v2/1234/No0170/tZ.W.68.1W6O3S