

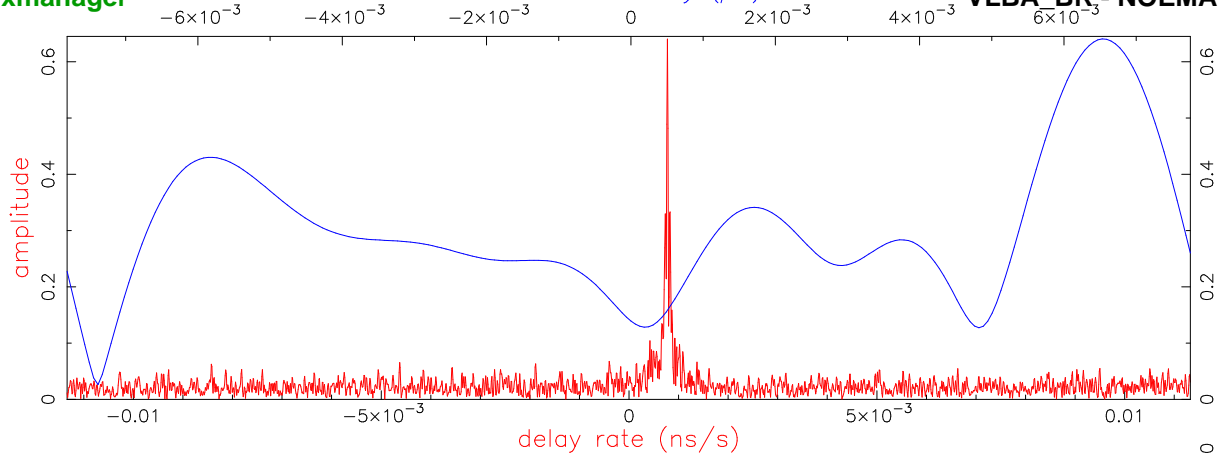
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, bN

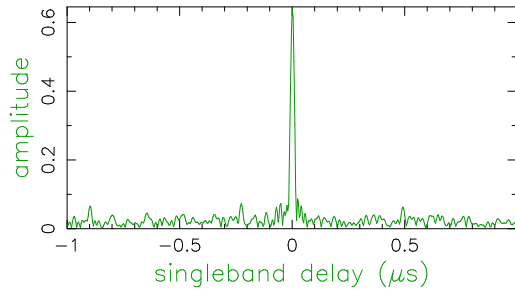
VLBA_BR - NOEMA, fgroup W, pol LL

multiband delay (μ s)

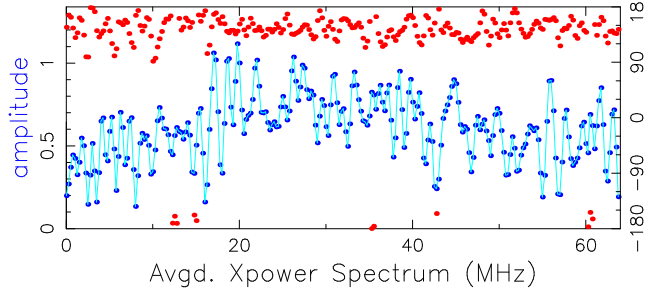


Fringe quality 4

SNR 36.1
Int time 419.705
Amp 0.645
Phase 82.2
PFD 0.0e+00
Delays (us)
SBD 0.000988
MBD 0.006573
Fringe rate (Hz)
0.066647
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

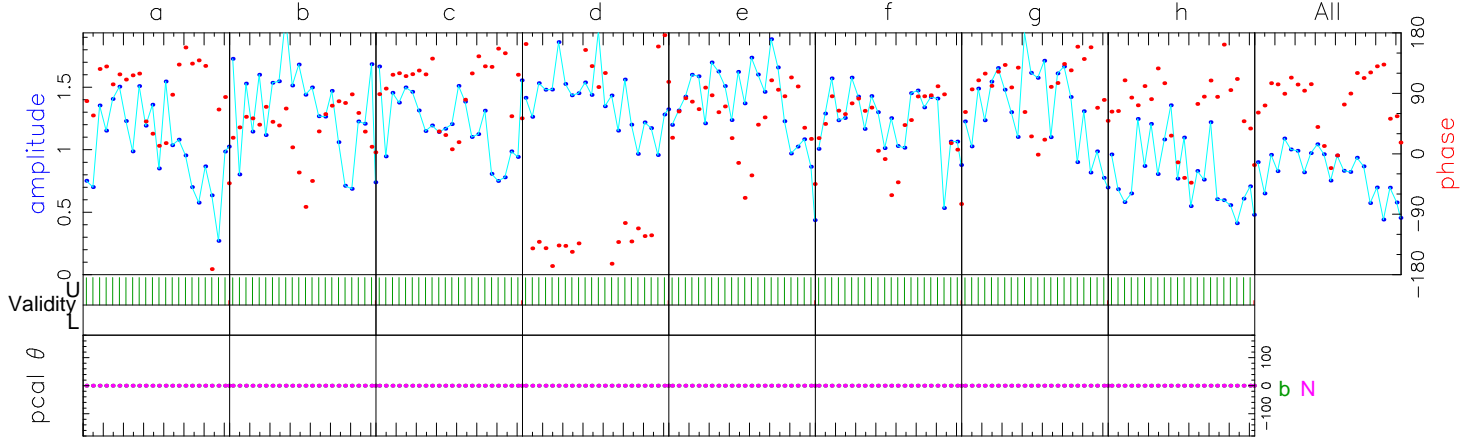


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130332
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.91542043261E+03	Apriori delay (usec)	2.91541385943E+03	Resid mbdelay (usec)	6.57317E-03	+/-	3.0E-05
Sband delay (usec)	2.91541484768E+03	Apriori clock (usec)	1.0263959E+01	Resid sbdelay (usec)	9.88250E-04	+/-	2.4E-04
Phase delay (usec)	2.91541386208E+03	Apriori clockrate (us/s)	-8.4199999E-06	Resid phdelay (usec)	2.65066E-06	+/-	1.0E-07
Delay rate (us/s)	1.18847568414E+00	Apriori rate (us/s)	1.18847491042E+00	Resid rate (us/s)	7.73711E-07	+/-	4.2E-10
Total phase (deg)	28.7	Apriori accel (us/s/s)	-1.17731069288E-05	Resid phase (deg)	82.2	+/-	3.2

ph/seg (deg)	42.1	RMS	7.6	Theor.	7.6	Amplitude	0.645 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	39.3	Search (2048X32)	0.632	Search (2048X32)	0.632	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	55.5	Inc. seg. avg.	0.827	Inc. seg. avg.	0.827	Inc. frq. avg.	0.906	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	47.4	Inc. frq. avg.	0.906	Inc. frq. avg.	0.906	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	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													

b: az 64.1 el 55.1 pa -72.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10840.461 -809.522 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/bN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/bN.W.12.1X1592

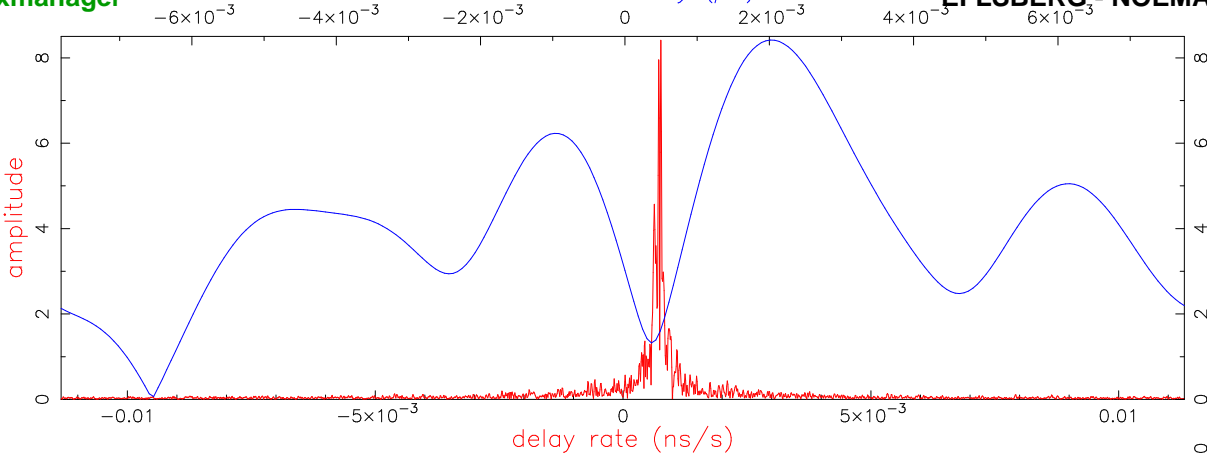
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, BN

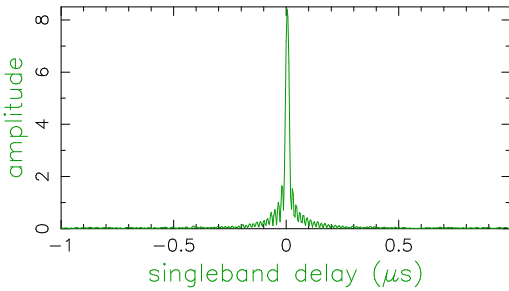
EFLSBERG₃- NOEMA, fgroup W, pol LL

multiband delay (μ s)

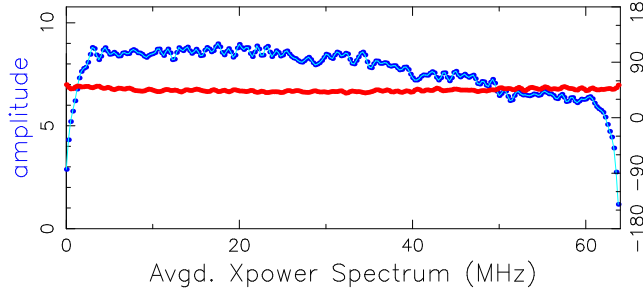


Fringe quality 1

SNR 475.5
 Int time 419.814
 Amp 8.503
 Phase 78.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.005101
 MBD 0.002074
 Fringe rate (Hz)
 0.066125
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

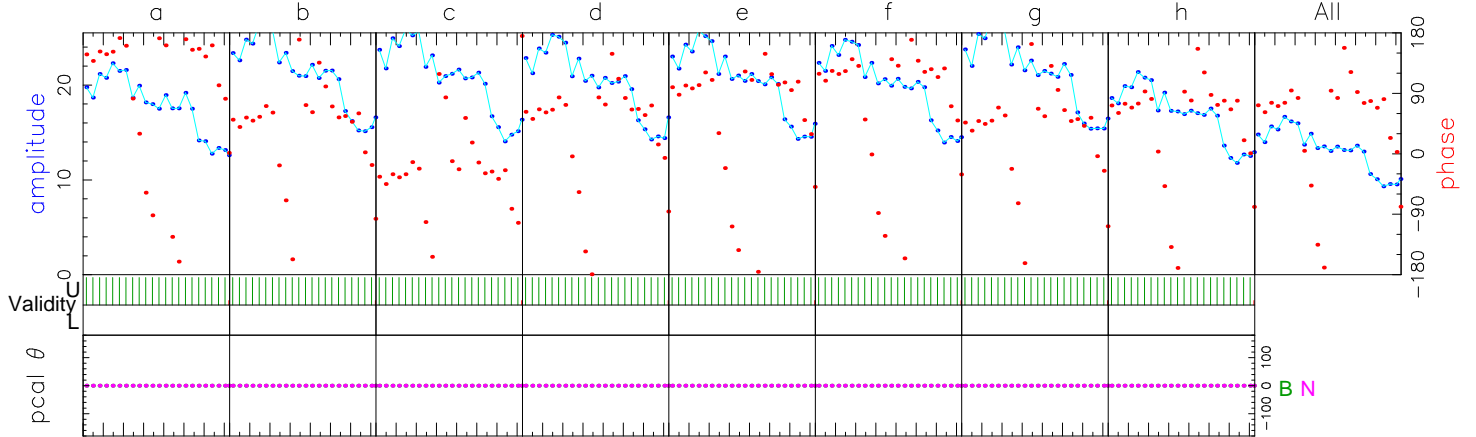


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130333
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	6.71044073614E+02	Apriori delay (usec)		6.71041999700E+02	Resid mbdelay (usec)		2.07391E-03	+/-	2.3E-06	
Sband delay (usec)	6.71047100950E+02	Apriori clock (usec)		-8.8138590E+00	Resid sbdelay (usec)		5.10125E-03	+/-	1.8E-05	
Phase delay (usec)	6.71042002241E+02	Apriori clockrate (us/s)		-8.3200001E-00	Resid phdelay (usec)		2.54075E-06	+/-	7.8E-09	
Delay rate (us/s)	6.70580475671E-02	Apriori rate (us/s)		6.70572799271E-02	Resid rate (us/s)		7.67640E-07	+/-	3.2E-11	
Total phase (deg)	26.3		Apriori accel (us/s/s)		2.45368781940E-06	Resid phase (deg)		78.8	+/-	0.2

ph/seg (deg)	59.1	0.6	Search (2048X32)	8.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	62.0	1.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	59.7	0.3	Inc. seg. avg.	13.298	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	50.1	0.6	Inc. frq. avg.	12.658	Sample rate(MISamp/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

B: az 299.7 el 46.6 pa 61.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -607.606 629.437 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/BN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/BN.W.19.1X1592

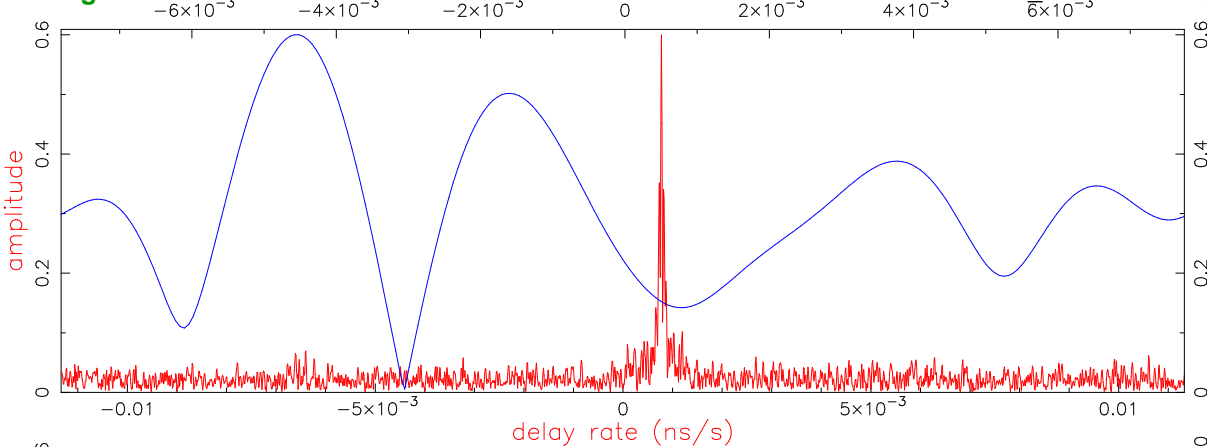
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, bN

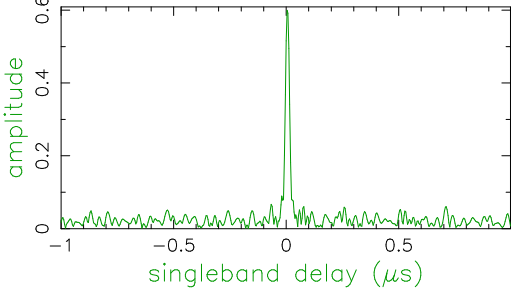
VLBA_BR - NOEMA, fgroup W, pol RR

multiband delay (μ s)

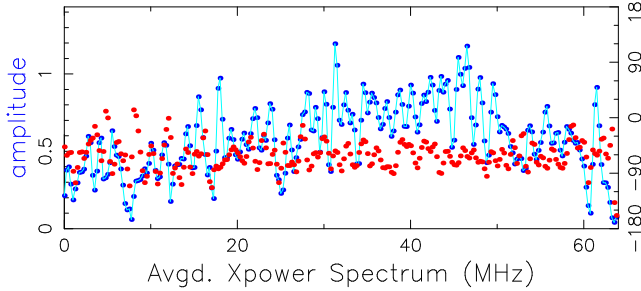


Fringe quality 3

SNR 34.1
 Int time 419.705
 Amp 0.609
 Phase 56.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.005534
 MBD -0.004504
 Fringe rate (Hz)
 0.066743
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

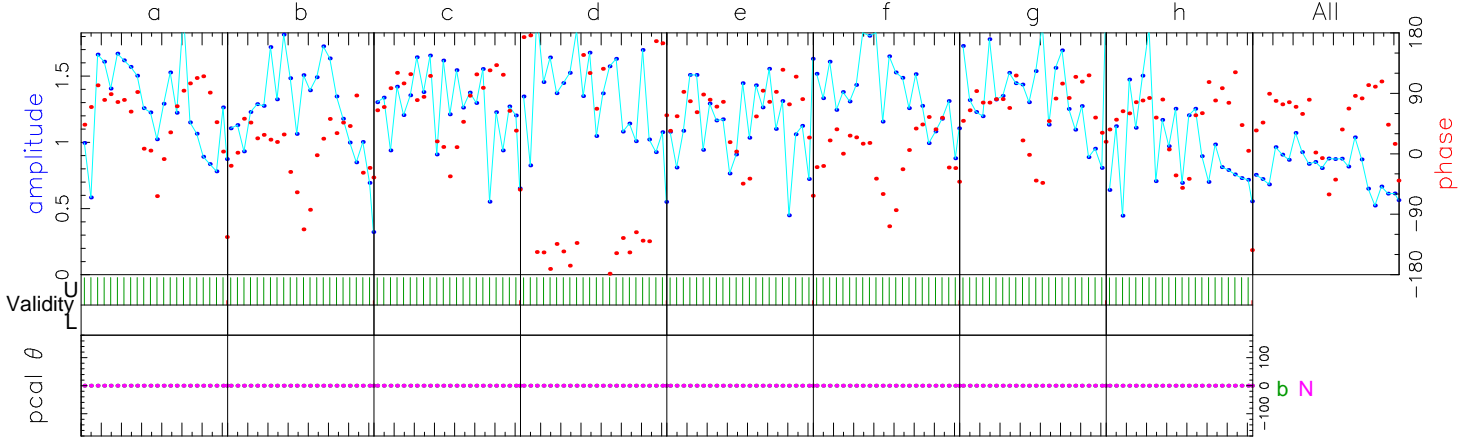


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130336
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	66.0	11.6	78.8	-165.0	65.8	0.4	65.8	56.4	Phase	56.1
	1.0	0.9	0.9	1.1	0.8	1.1	1.0	0.7	Ampl.	0.9
	256.6	259.2	259.4	259.1	259.6	259.1	258.0	256.6	Sbd box	258.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.91542498089E+03	Apriori delay (usec)	2.91541385943E+03	Resid mbdelay (usec)	-4.50355E-03	+/-	3.2E-05
Sband delay (usec)	2.91541939368E+03	Apriori clock (usec)	1.0263959E+01	Resid sbdelay (usec)	5.53425E-03	+/-	2.5E-04
Phase delay (usec)	2.91541386124E+03	Apriori clockrate (us/s)	-8.4199999E-06	Resid phdelay (usec)	1.81010E-03	+/-	1.1E-07
Delay rate (us/s)	1.18847568525E+00	Apriori rate (us/s)	1.18847491042E+00	Resid rate (us/s)	7.74825E-07	+/-	4.5E-10
Total phase (deg)	2.7	Apriori accel (us/s/s)	-1.17731069288E-05	Resid phase (deg)	56.1	+/-	3.4

ph/seg (deg)	45.2	RMS	45.2	Theor.	8.1	Amplitude	0.609 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	40.1	Search (2048X32)	0.586	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	64.8	Inc. seg. avg.	0.802	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	Sample rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	56.3	Inc. frq. avg.	0.934	Data rate (Mb/s):	2048								

b: az 64.1 el 55.1 pa -72.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10840.461 -809.522 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/bN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/bN.W.31.1X1592

Mk4/DiFX fourfit 3.21 rev 2937

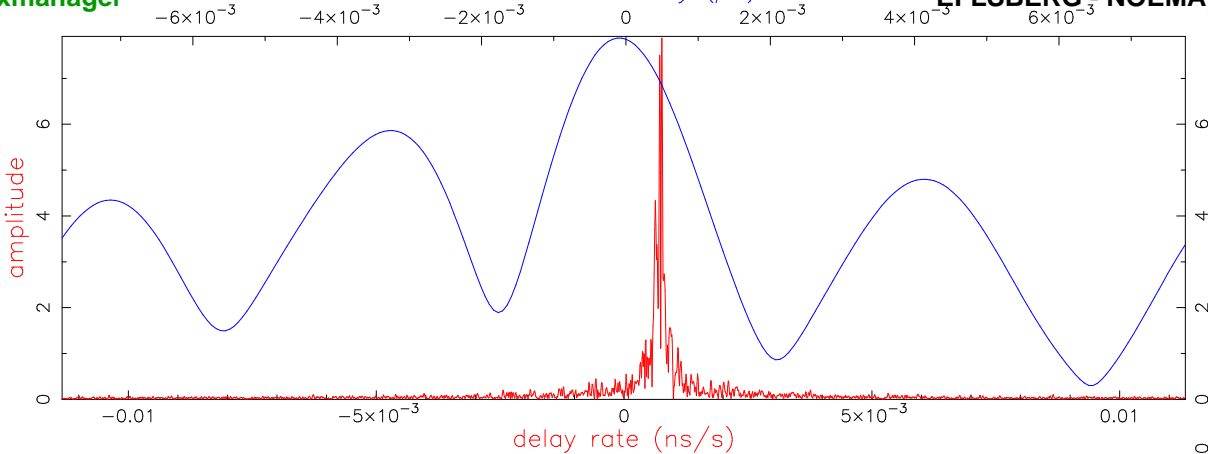
fxmanager

NRAO150.1X1592, No0093, BN

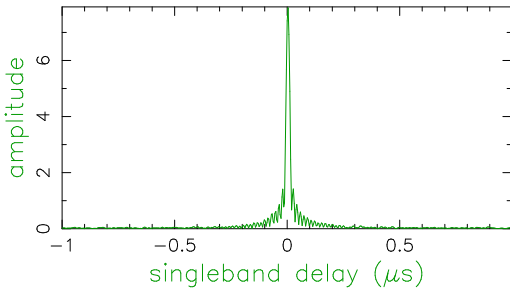
EFLSBERG - NOEMA, fgroup W, pol RR

multiband delay (μ s)

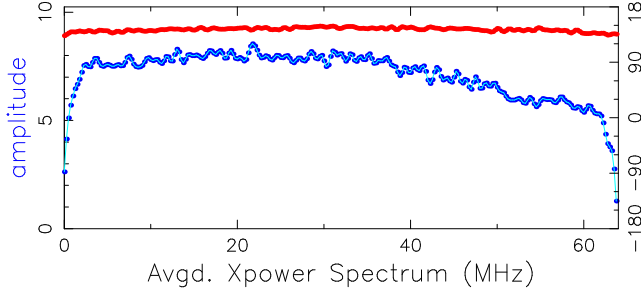
Fringe quality 1



SNR 442.7
 Int time 419.814
 Amp 7.916
 Phase -177.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.003225
 MBD -0.000119
 Fringe rate (Hz)
 0.066137
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

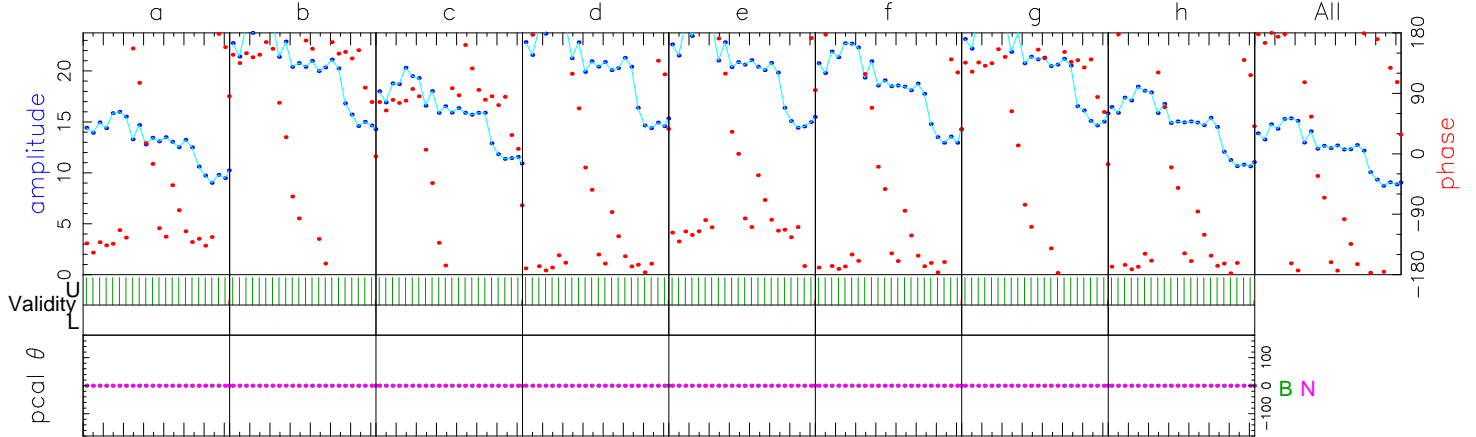


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130337
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-128.0	152.3	82.8	-165.6	-112.2	-163.9	139.3	-163.9	Phase	-177.6
	8.2	13.0	10.2	13.0	12.9	11.6	13.2	9.4	Ampl.	11.5
	255.7	257.6	258.3	258.2	258.6	258.3	258.0	256.6	Sbd box	257.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	6.71041880864E+02	Apriori delay (usec)	6.71041999700E+02	Resid mbdelay (usec)	-1.18836E-04	+/-	2.5E-06
Sband delay (usec)	6.71045224450E+02	Apriori clock (usec)	-8.8138590E+00	Resid sbdelay (usec)	3.22475E-03	+/-	1.9E-05
Phase delay (usec)	6.71041993974E+02	Apriori clockrate (us/s)	-8.3200001E-02	Resid phdelay (usec)	-5.72629E-06	+/-	8.3E-09
Delay rate (us/s)	6.70580477088E-02	Apriori rate (us/s)	6.70572799271E-02	Resid rate (us/s)	7.67782E-07	+/-	3.4E-11
Total phase (deg)	129.9	Apriori accel (us/s/s)	2.45368781940E-06	Resid phase (deg)	-177.6	+/-	0.3

ph/seg (deg)	59.2	RMS	59.2	Theor.	0.6	Amplitude	7.916 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	63.4	Search (2048X32)	7.324	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	57.6	Inc. seg. avg.	12.491	Inc. frq. avg.	11.454	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	50.3	Inc. frq. avg.	11.454	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
								ion window (TEC)	0.00	0.00	

B: az 299.7 el 46.6 pa 61.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -607.606 629.437 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/BN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/BN.W.39.1X1592

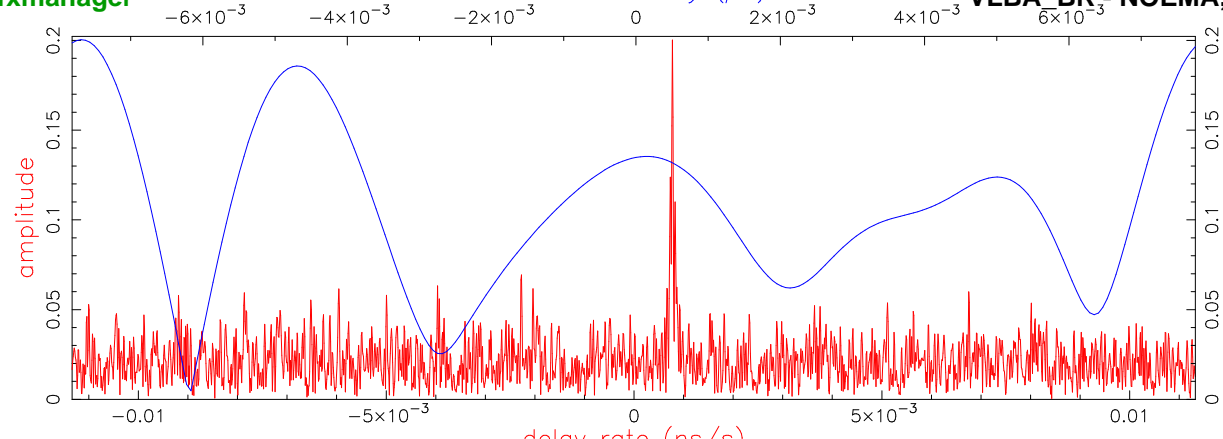
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

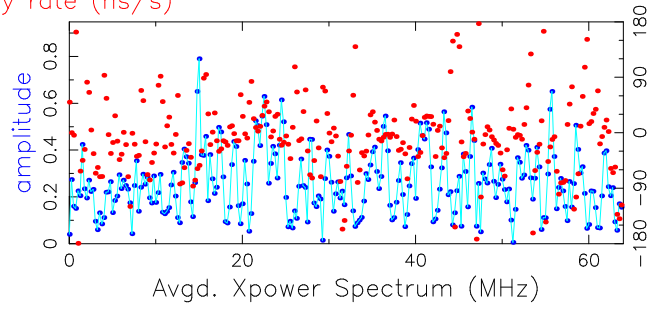
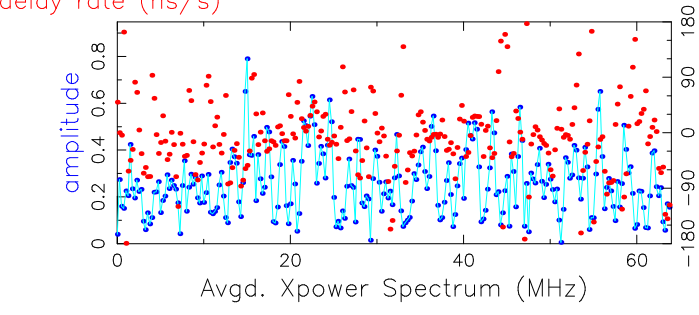
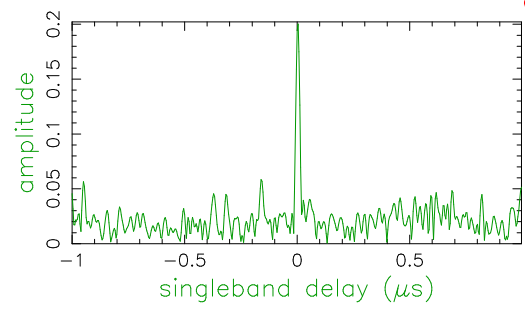
NRAO150.1X1592, No0093, bN

VLBA_BR - NOEMA, fgroup W, pol LR

multiband delay (μ s)

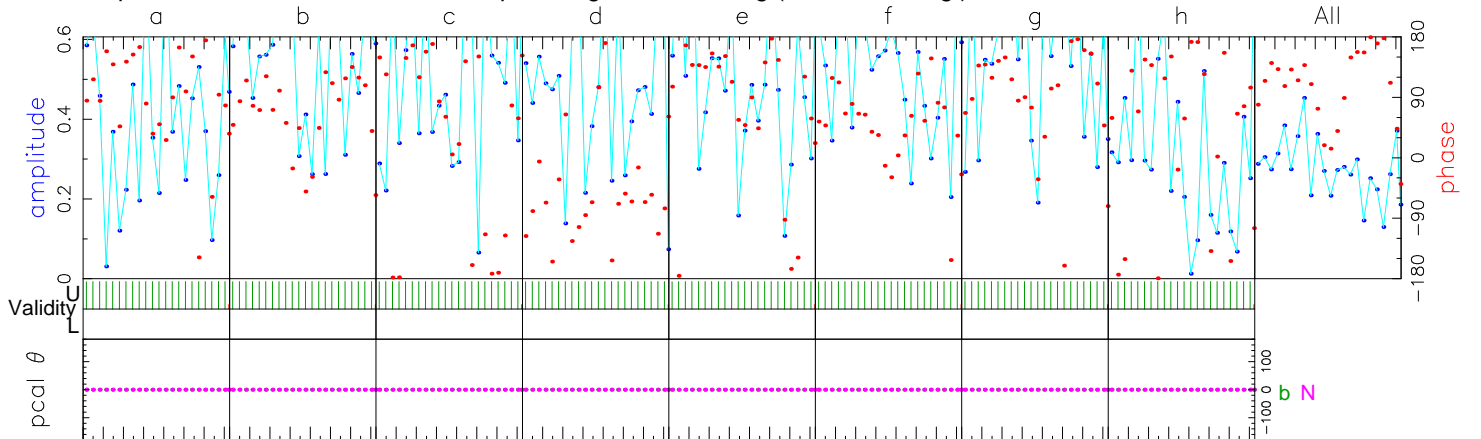


Fringe quality 9
 SNR 11.3
 Int time 419.705
 Amp 0.202
 Phase 111.3
 PFD 5.8e-21
 Delays (us)
 SBD 0.002665
 MBD -0.007724
 Fringe rate (Hz)
 0.066699
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130340
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.91542175995E+03				2.91541385943E+03					
Sband delay (usec)	2.91541652418E+03				1.0263959E+01					
Phase delay (usec)	2.91541386302E+03				-8.4199999E-06					
Delay rate (us/s)	1.18847568473E+00				1.18847491042E+00					
Total phase (deg)			57.8		-1.17731069288E-05					
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								
PC period (AP's)	5	5								
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) 49.9 24.3 Search (2048X32) 0.199 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.7 42.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 75.3 14.3 Inc. seg. avg. 0.258 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 69.6 25.0 Inc. frq. avg. 0.310 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 64.1 el 55.1 pa -72.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10840.461 -809.522 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/bN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/bN.W.51.1X1592

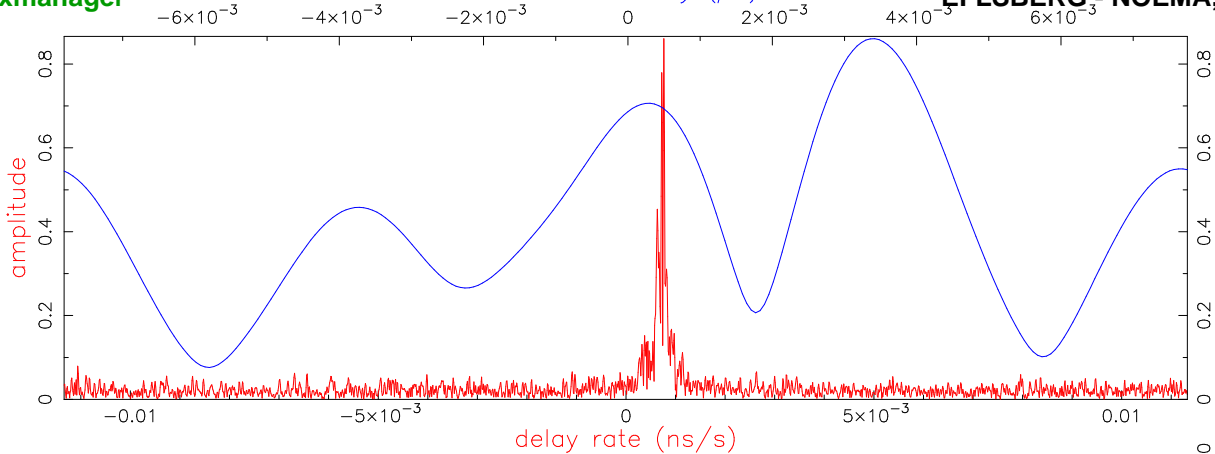
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, BN

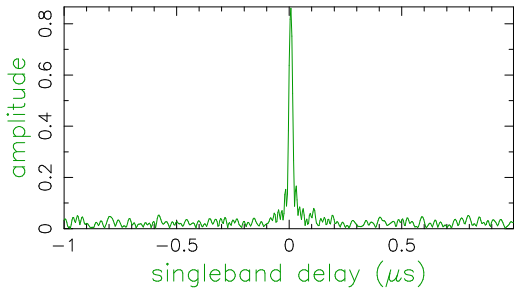
EFLSBERG - NOEMA, fgroup W, pol LR

multiband delay (μ s)

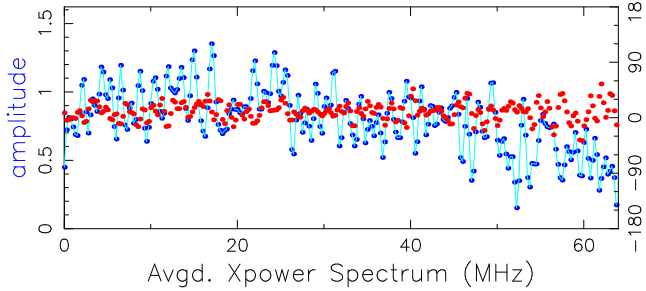


Fringe quality 1

SNR 48.4
 Int time 419.814
 Amp 0.866
 Phase 51.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.006946
 MBD 0.003369
 Fringe rate (Hz)
 0.066223
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

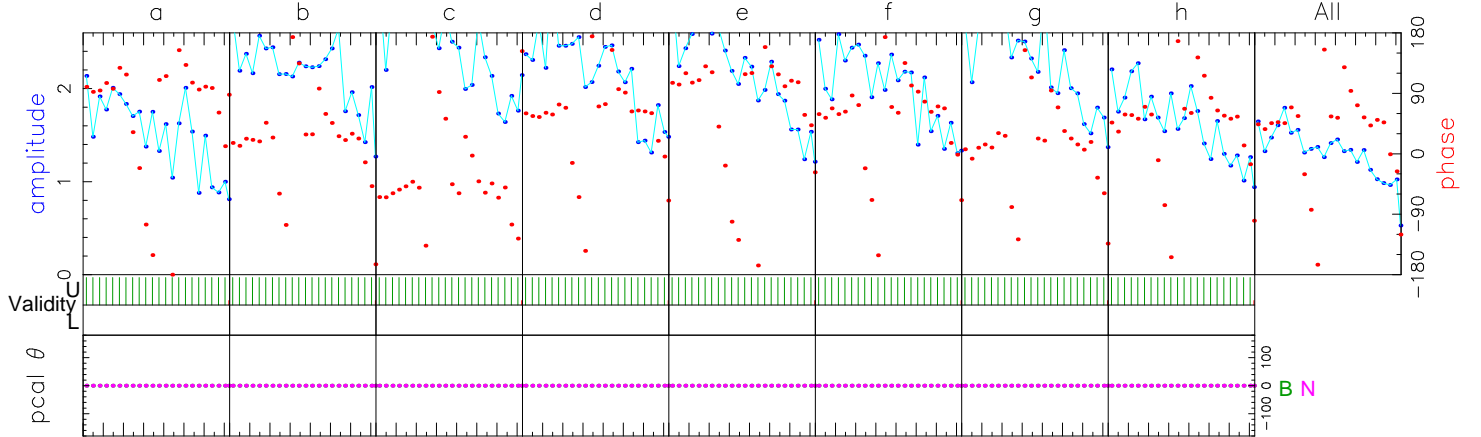


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130341
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:N	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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	6.71045368833E+02		Apriori delay (usec)		6.71041999700E+02		Resid mbdelay (usec)		3.36913E-03	+/- 2.2E-05
Sband delay (usec)	6.71048945950E+02		Apriori clock (usec)		-8.8138590E+00		Resid sbdelay (usec)		6.94625E-03	+/- 1.8E-04
Phase delay (usec)	6.71042001373E+02		Apriori clockrate (us/s)		-8.3200001E-02		Resid phdelay (usec)		1.67237E-06	+/- 7.6E-08
Delay rate (us/s)	6.70580487107E-02		Apriori rate (us/s)		6.70572799271E-02		Resid rate (us/s)		7.68784E-07	+/- 3.1E-10
Total phase (deg)	359.4		Apriori accel (us/s/s)		2.45368781940E-06		Resid phase (deg)		51.9	+/- 2.4
RMS	59.6	5.7	Amplitude		0.866 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
amp/seg (%)	60.1	9.9	Search (2048X32)		0.789		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	58.3	3.3	Interp.		0.000		Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	54.9	5.8	Inc. seg. avg.		1.328		SampCntNorm: enabled		dr window (ns/s)	-0.011 0.011
			Inc. frq. avg.		1.306		Data rate (Mb/s): 2048		ion window (TEC)	0.00 0.00
							nlags: 256 t_cohere infinite			

B: az 299.7 el 46.6 pa 61.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -607.606 629.437 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/BN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/BN.W.59.1X1592

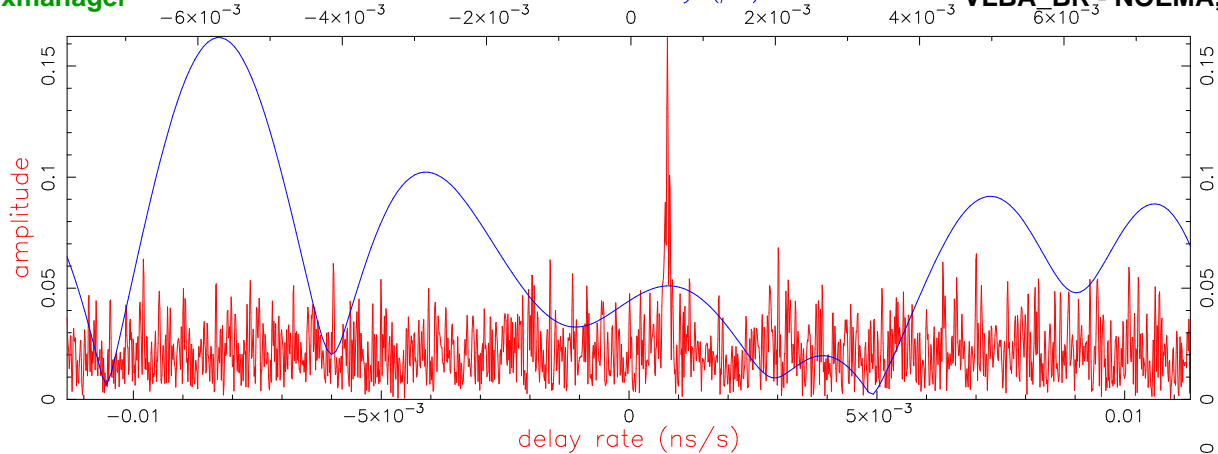
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, bN

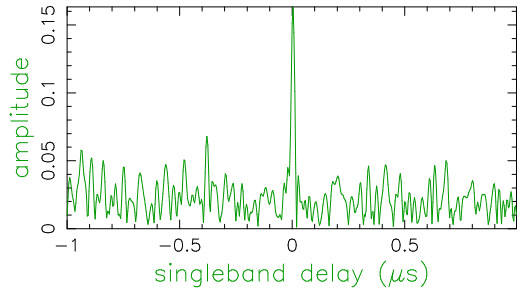
VLBA_BR - NOEMA, fgroup W, pol RL

multiband delay (μ s)

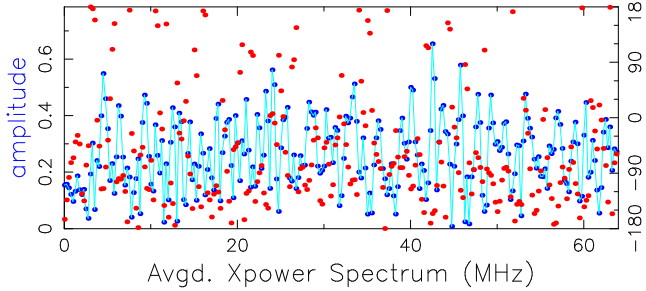


Fringe quality 9

SNR 9.1
Int time 419.705
Amp 0.163
Phase 8.3
PFD 2.6e-11
Delays (us)
SBD 0.003455
MBD -0.005728
Fringe rate (Hz)
0.066939
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

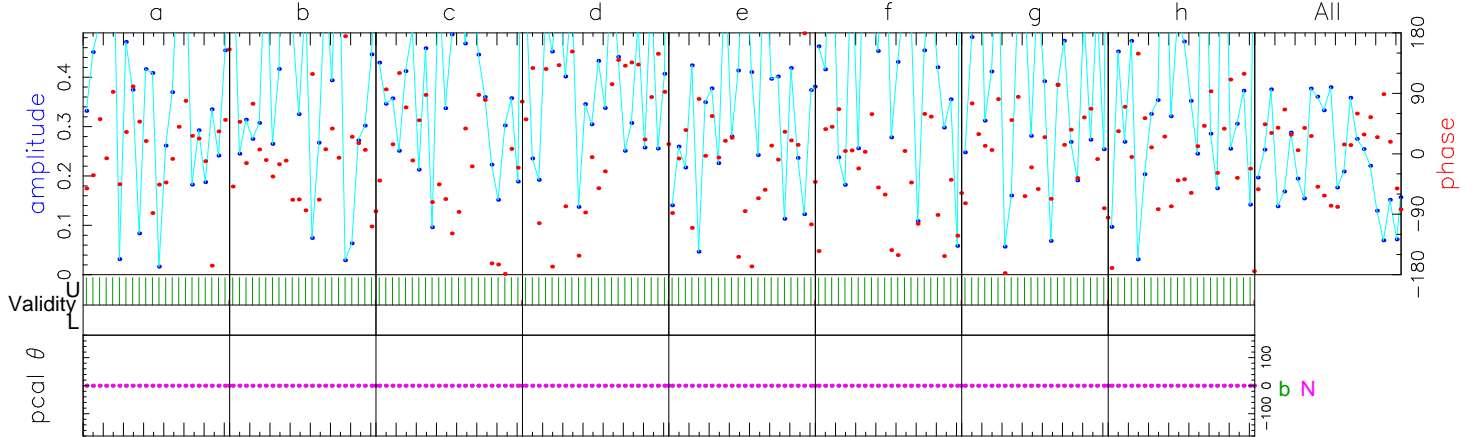


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130344
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



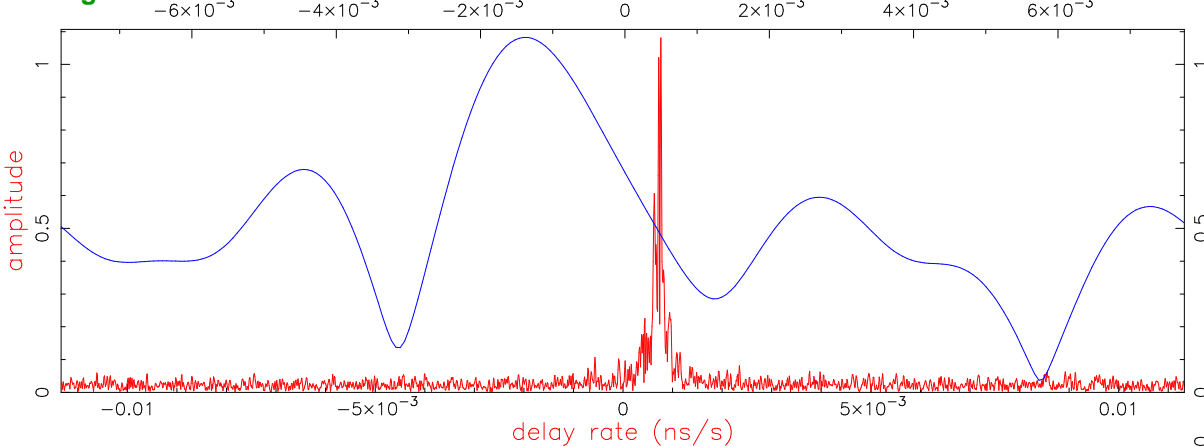
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	32.0	-20.7	4.8	117.6	-29.0	-9.5	21.0	13.9	Phase	8.3
	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	256.5	258.9	3.3	260.0	418.6	258.0	258.3	256.3	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.91542375686E+03		Apriori delay (usec)		2.91541385943E+03		Resid mbdelay (usec)		-5.72758E-03	+/- 1.2E-04
Sband delay (usec)	2.91541731418E+03		Apriori clock (usec)		1.0263959E+01		Resid sbdelay (usec)		3.45475E-03	+/- 9.4E-04
Phase delay (usec)	2.91541385970E+03		Apriori clockrate (us/s)		-8.4199999E-06		Resid phdelay (usec)		2.68545E-07	+/- 4.0E-07
Delay rate (us/s)	1.18847568752E+00		Apriori rate (us/s)		1.18847491042E+00		Resid rate (us/s)		7.77091E-07	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.17731069288E-05		Resid phase (deg)		8.3	+/- 12.5

	RMS	Theor.	Amplitude	0.163 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.3	30.1	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	73.2	52.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	50.4	17.7	Inc. seg. avg.	0.205	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.0	31.0	Inc. frq. avg.	0.193	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 64.1 el 55.1 pa -72.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10840.461 -809.522 simultaneous interpolator

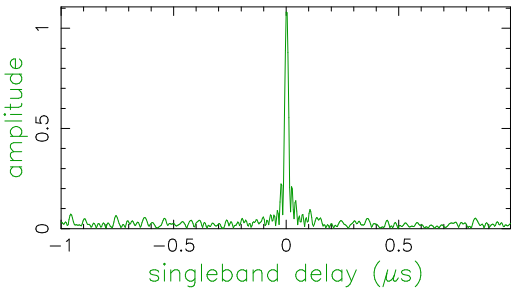
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/bN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/bN.W.72.1X1592

multiband delay (μs)

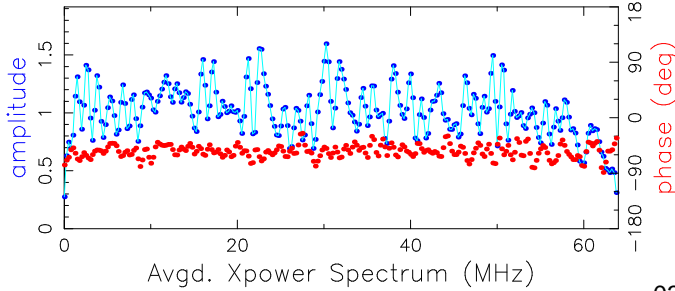


Fringe quality 1

SNR 61.9
Int time 419.814
Amp 1.107
Phase -19.0
PFD 0.0e+00
Delays (us)
SBD 0.001875
MBD -0.001312
Fringe rate (Hz)
0.065997
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

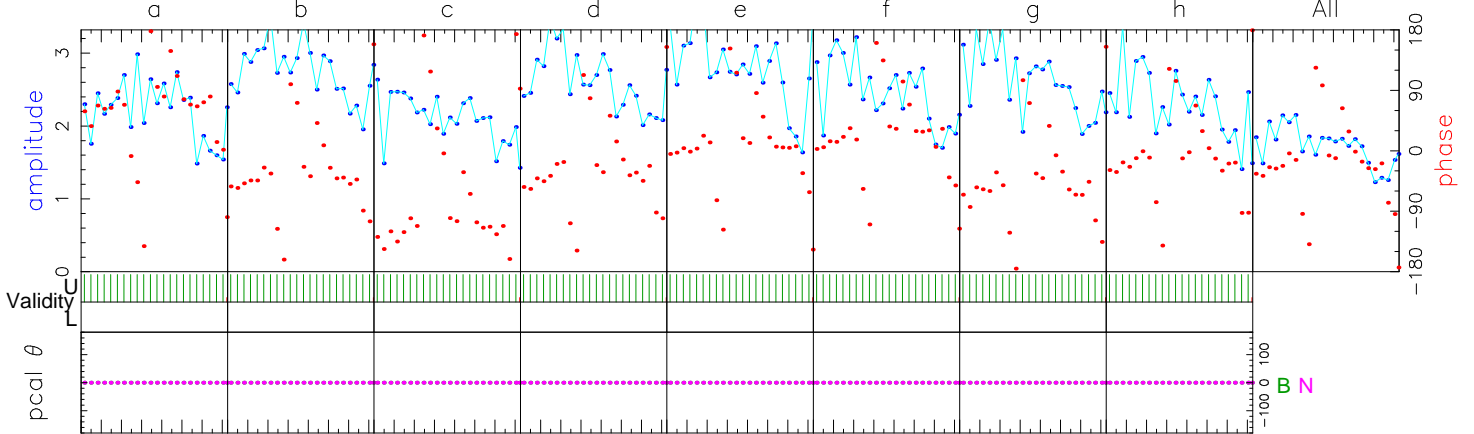


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130345
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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
	71.4	-39.3	-116.2	-34.4	7.6	21.0	-54.5	-13.6		Phase
	1.4	1.8	1.3	1.6	1.8	1.6	1.6	1.5		Ampl.
	255.3	257.0	257.8	257.7	257.9	257.9	257.6	256.2		Sbd box
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
N	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Manl PC
B	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	6.71040687395E+02	Apriori delay (usec)	6.71041999700E+02	Resid mbdelay (usec)	-1.31230E-03	+/-	1.8E-05
Sband delay (usec)	6.71043874950E+02	Apriori clock (usec)	-8.8138590E+00	Resid sbdelay (usec)	1.87525E-03	+/-	1.4E-04
Phase delay (usec)	6.71041999088E+02	Apriori clockrate (us/s)	-8.3200001E-02	Resid phdelay (usec)	-6.11910E-07	+/-	6.0E-08
Delay rate (us/s)	6.70580460855E-02	Apriori rate (us/s)	6.70572799271E-02	Resid rate (us/s)	7.66158E-07	+/-	2.5E-10
Total phase (deg)	288.5	Apriori accel (us/s/s)	2.45368781940E-06	Resid phase (deg)	-19.0	+/-	1.9

ph/seg (deg)	59.1	RMS	4.4	Theor.	4.4	Amplitude	1.107 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	61.1	Search (2048X32)	1.056	Search	1.056	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	60.3	Inc. seg. avg.	1.726	Inc. seg. avg.	1.726	Inc. frq. avg.	1.567	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.2	Inc. frq. avg.	1.567	Inc. frq. avg.	1.567	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
												ion window (TEC)	0.00 0.00

B: az 299.7 el 46.6 pa 61.7 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -607.606 629.437 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/BN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/BN.W.78.1X1592

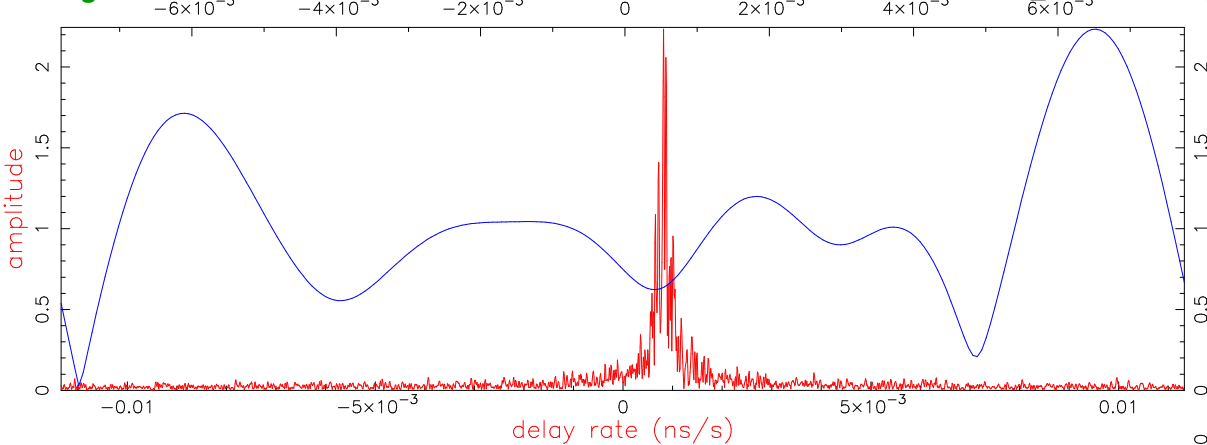
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, fN

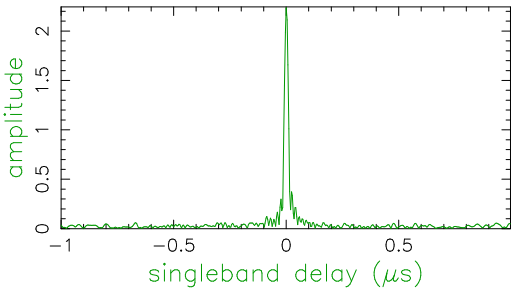
VLBA_FD - NOEMA, fgroup W, pol RR

multiband delay (μ s)

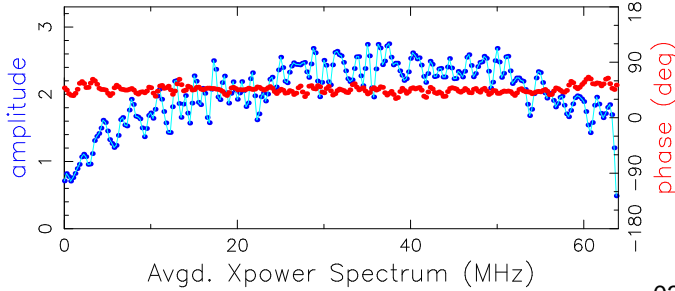


Fringe quality 1

SNR 125.0
 Int time 416.324
 Amp 2.245
 Phase -21.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.000696
 MBD 0.006531
 Fringe rate (Hz) 0.070427
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

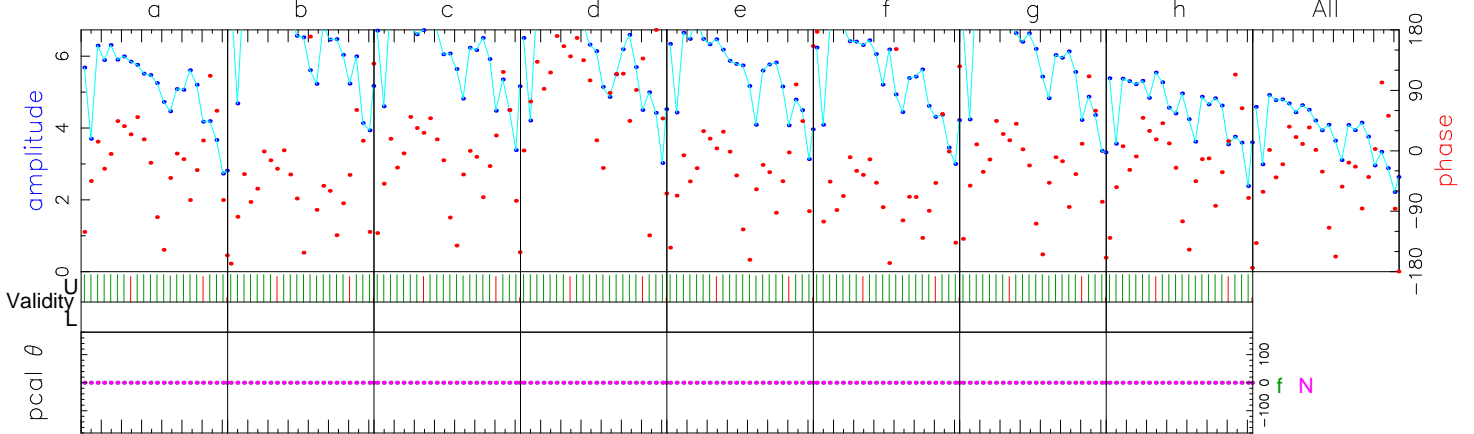


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130354
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-8.3	-57.6	-5.8	113.4	-26.8	-70.2	-14.4	-13.5	Phase	-21.5
	3.0	3.7	3.4	3.4	3.1	3.4	3.4	2.5	Ampl.	3.2
	255.9	257.6	258.1	258.1	258.1	258.1	257.3	255.6	Sbd box	257.2
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	2.84386171588E+03		Apriori delay (usec)		2.84385518486E+03		Resid mbdelay (usec)		6.53102E-03	+/- 8.7E-06
Sband delay (usec)	2.84385588061E+03		Apriori clock (usec)		2.3510651E+01		Resid sbdelay (usec)		6.95750E-04	+/- 6.9E-05
Phase delay (usec)	2.84385518417E+03		Apriori clockrate (us/s)		-8.2600003E-06		Resid phdelay (usec)		-6.93132E-07	+/- 3.0E-08
Delay rate (us/s)	1.18163883083E+00		Apriori rate (us/s)		1.18163801325E+00		Resid rate (us/s)		8.17583E-07	+/- 1.2E-10
Total phase (deg)	203.1		Apriori accel (us/s/s)		-3.19345319094E-05		Resid phase (deg)		-21.5	+/- 0.9

ph/seg (deg) 63.1 2.2 Search (2048X32) 2.210 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.4 3.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.1 1.3 Inc. seg. avg. 3.938 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.3 2.3 Inc. frq. avg. 3.224 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 43.4 el 54.6 pa -109.1 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10807.787 -4076.900 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/fN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/fN.W.116.1X1592

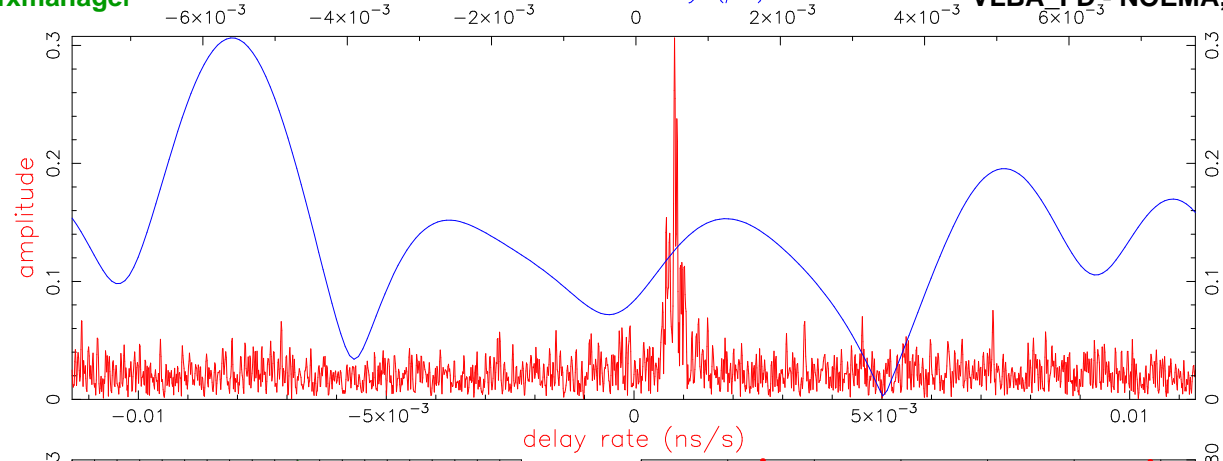
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, fN

VLBA_FD- NOEMA, fgroup W, pol LR

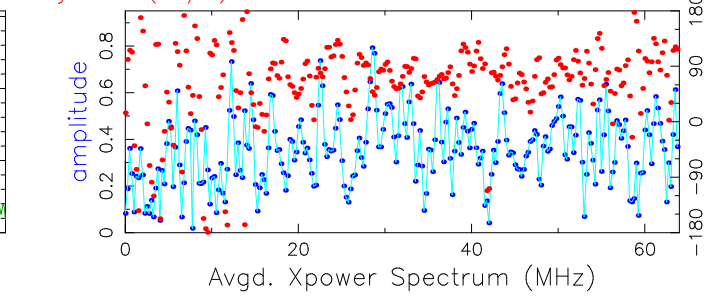
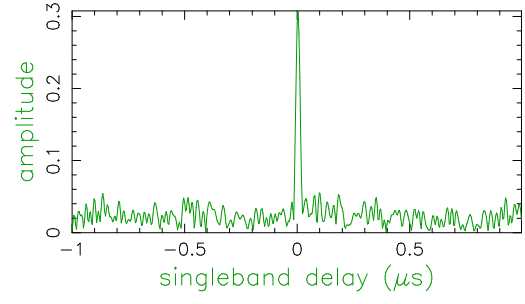
multiband delay (μ s)



Fringe quality 7

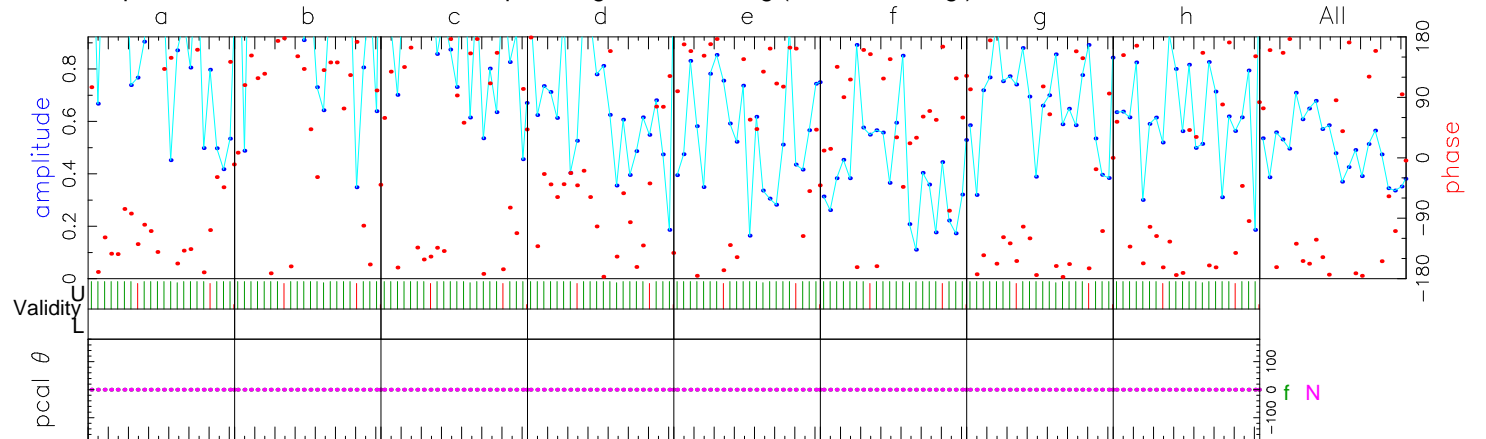
SNR 17.1
 Int time 416.324
 Amp 0.308
 Phase -176.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.003261
 MBD -0.005604
 Fringe rate (Hz) 0.070381
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130358
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-140.3	144.9	175.0	-77.4	160.9	114.4	-164.9	-160.5	Phase	-176.4
	0.6	0.7	0.5	0.3	0.3	0.1	0.4	0.3	Ampl.	0.4
	256.5	258.0	259.2	259.4	259.0	260.2	258.1	256.3	Sbd box	257.8
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.84386520592E+03		Apriori delay (usec)		2.84385518486E+03		Resid mbdelay (usec)		-5.60394E-03	+/- 6.3E-05
Sband delay (usec)	2.84385844561E+03		Apriori clock (usec)		2.3510651E+01		Resid sbdelay (usec)		3.26075E-03	+/- 5.0E-04
Phase delay (usec)	2.84385517917E+03		Apriori clockrate (us/s)		-8.2600003E-06		Resid phdelay (usec)		-5.68892E-06	+/- 2.2E-07
Delay rate (us/s)	1.18163883030E+00		Apriori rate (us/s)		1.18163801325E+00		Resid rate (us/s)		8.17053E-07	+/- 8.9E-10
Total phase (deg)	48.2		Apriori accel (us/s/s)		-3.19345319094E-05		Resid phase (deg)		-176.4	+/- 6.7

ph/seg (deg) 63.2 16.0 Theor. Amplitude 0.308 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.4 27.9 Search (2048X32) 0.301 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.3 9.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 60.4 16.5 Inc. seg. avg. 0.484 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 43.4 el 54.6 pa -109.1 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10807.787 -4076.900 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/fN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/fN.W.135.1X1592 simultaneous interpolator

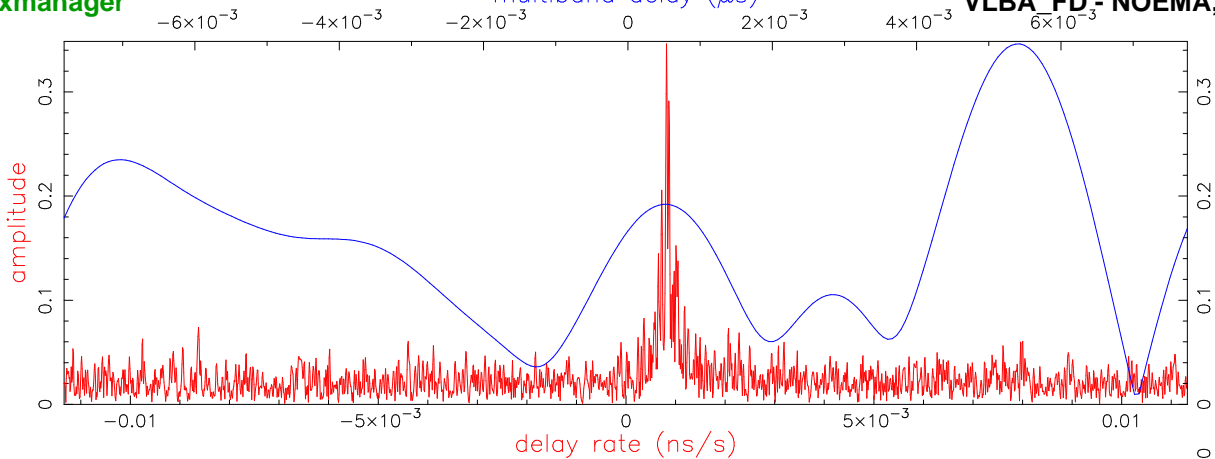
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, fN

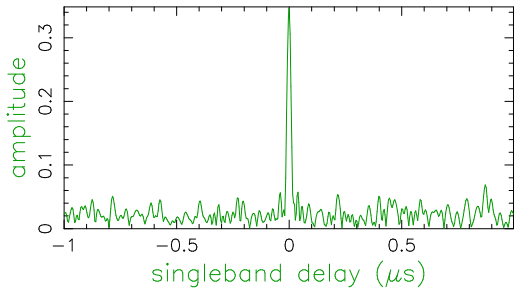
VLBA_FD- NOEMA, fgroup W, pol RL

multiband delay (μ s)

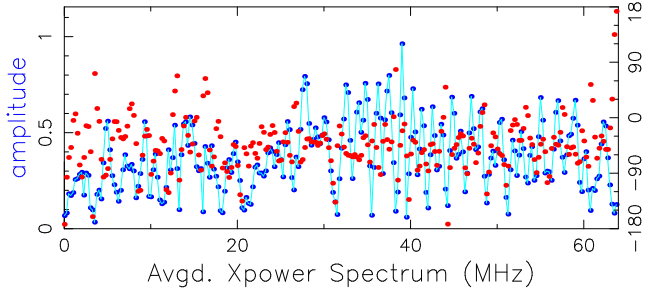


Fringe quality 7

SNR 19.4
 Int time 416.324
 Amp 0.349
 Phase -117.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.000932
 MBD 0.005386
 Fringe rate (Hz) 0.070272
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

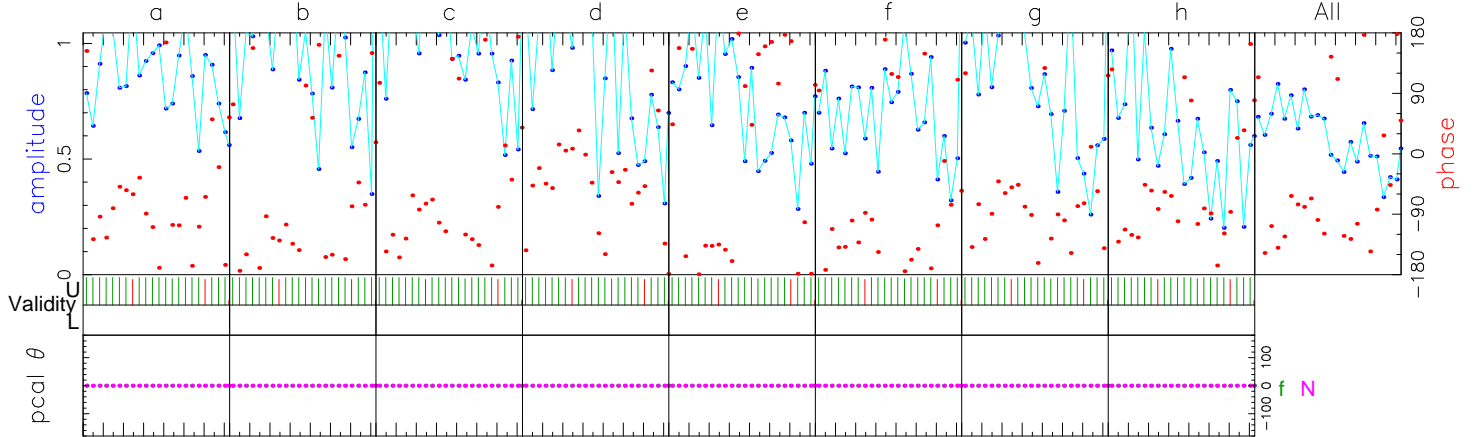


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130402
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-95.9	-152.9	-123.3	-27.9	-179.0	-157.4	-96.0	-96.7	Phase	-117.9
	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.3	Ampl.	0.5
	255.4	257.0	257.6	257.4	257.5	257.9	257.0	254.7	Sbd box	256.8
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.84386057042E+03		Apriori delay (usec)		2.84385518486E+03		Resid mbdelay (usec)		5.38556E-03	+/- 5.6E-05
Sband delay (usec)	2.84385425286E+03		Apriori clock (usec)		2.3510651E+01		Resid sbdelay (usec)		-9.32000E-04	+/- 4.4E-04
Phase delay (usec)	2.84385518106E+03		Apriori clockrate (us/s)		-8.2600003E-06		Resid phdelay (usec)		-3.80200E-06	+/- 1.9E-07
Delay rate (us/s)	1.18163882903E+00		Apriori rate (us/s)		1.18163801325E+00		Resid rate (us/s)		8.15787E-07	+/- 7.9E-10
Total phase (deg)	106.7		Apriori accel (us/s/s)		-3.19345319094E-05		Resid phase (deg)		-117.9	+/- 5.9

	RMS	Theor.	Amplitude	0.349 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	65.8	14.1	Search (2048X32)	0.335	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	80.4	24.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	51.7	8.4	Inc. seg. avg.	0.579	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	44.1	14.6	Inc. frq. avg.	0.475	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

f: az 43.4 el 54.6 pa -109.1 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10807.787 -4076.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/fN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/fN.W.152.1X1592

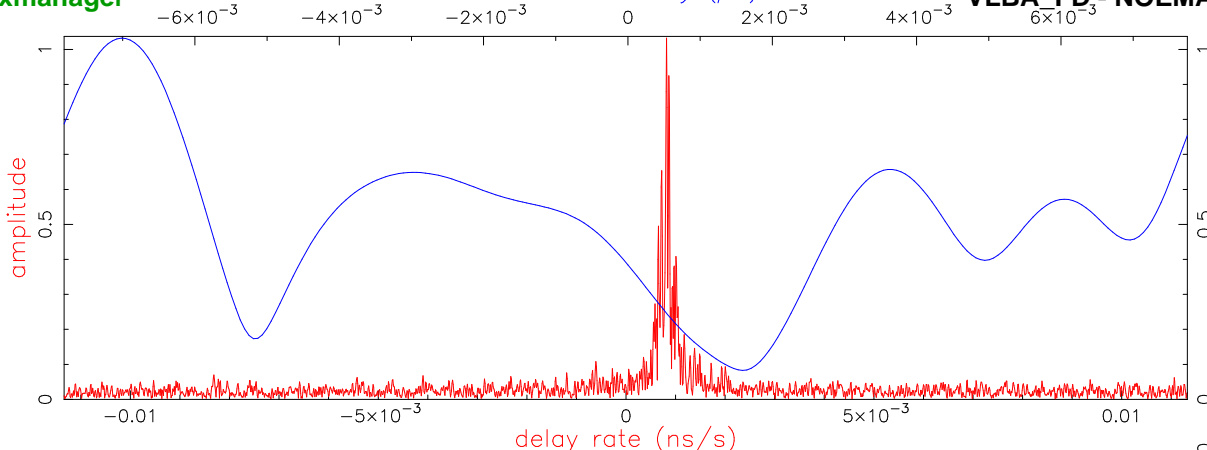
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

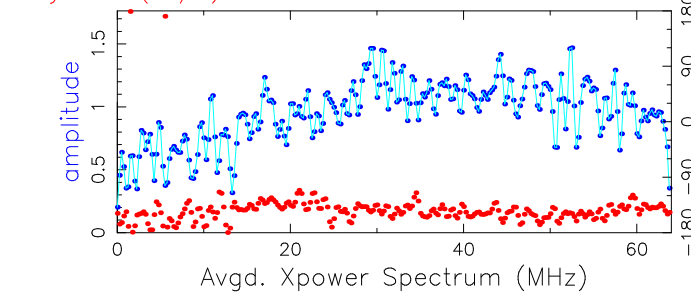
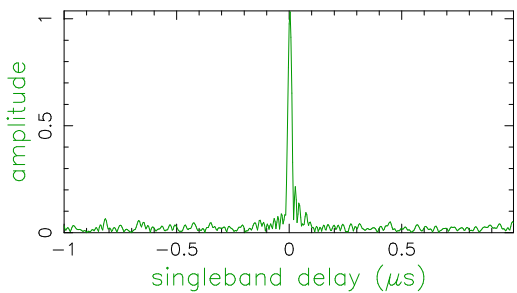
NRAO150.1X1592, No0093, fN

VLBA_FD- NOEMA, fgroup W, pol LL

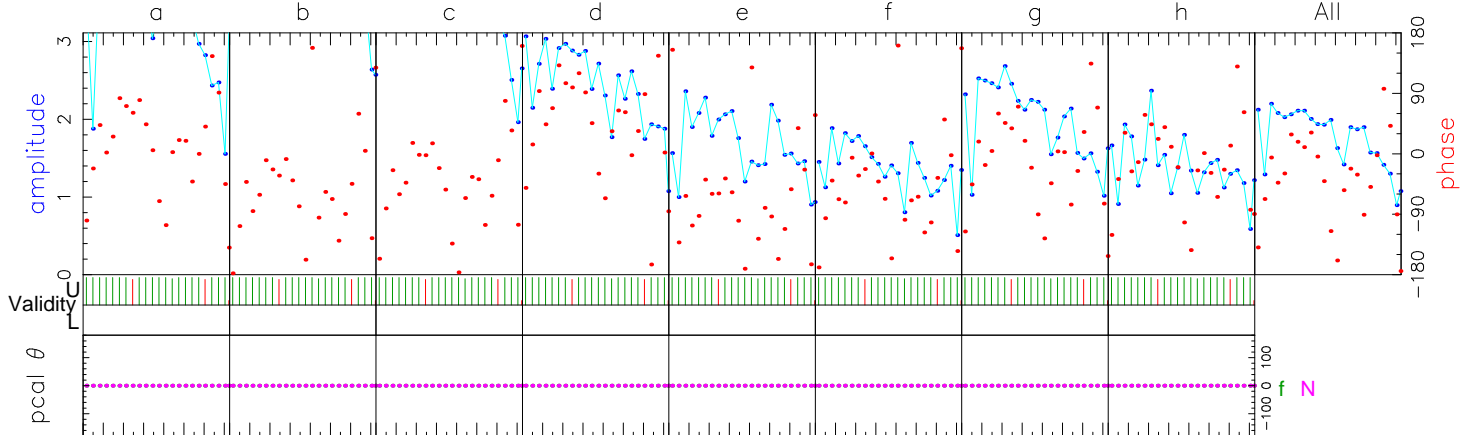
multiband delay (μ s)



Fringe quality 1
 SNR 57.8
 Int time 416.324
 Amp 1.037
 Phase -27.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.003219
 MBD -0.007029
 Fringe rate (Hz)
 0.070404
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130350
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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
	22.3	-64.5	-41.5	60.8	-85.1	-59.8	-1.8	-6.3	Phase	-27.7
	1.8	2.6	2.2	1.3	1.0	0.8	1.0	0.7	Ampl.	1.4
	256.0	257.5	258.3	258.4	258.5	258.4	257.7	256.2	Sbd box	257.8
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.84386378135E+03		Apriori delay (usec)		2.84385518486E+03		Resid mbdelay (usec)		-7.02851E-03	+/- 1.9E-05
Sband delay (usec)	2.84385840411E+03		Apriori clock (usec)		2.3510651E+01		Resid sbdelay (usec)		3.21925E-03	+/- 1.5E-04
Phase delay (usec)	2.84385518397E+03		Apriori clockrate (us/s)		-8.2600003E-06		Resid phdelay (usec)		-8.92435E-07	+/- 6.4E-08
Delay rate (us/s)	1.18163883057E+00		Apriori rate (us/s)		1.18163801325E+00		Resid rate (us/s)		8.17325E-07	+/- 2.7E-10
Total phase (deg)	196.9		Apriori accel (us/s/s)		-3.19345319094E-05		Resid phase (deg)		-27.7	+/- 2.0

ph/seg (deg) 61.8 4.7 Search (2048X32) 1.010 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.5 8.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.7 2.8 Inc. seg. avg. 1.780 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 73.4 4.9 Inc. frq. avg. 1.437 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 43.4 el 54.6 pa -109.1 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10807.787 -4076.900 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/fN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/fN.W.93.1X1592

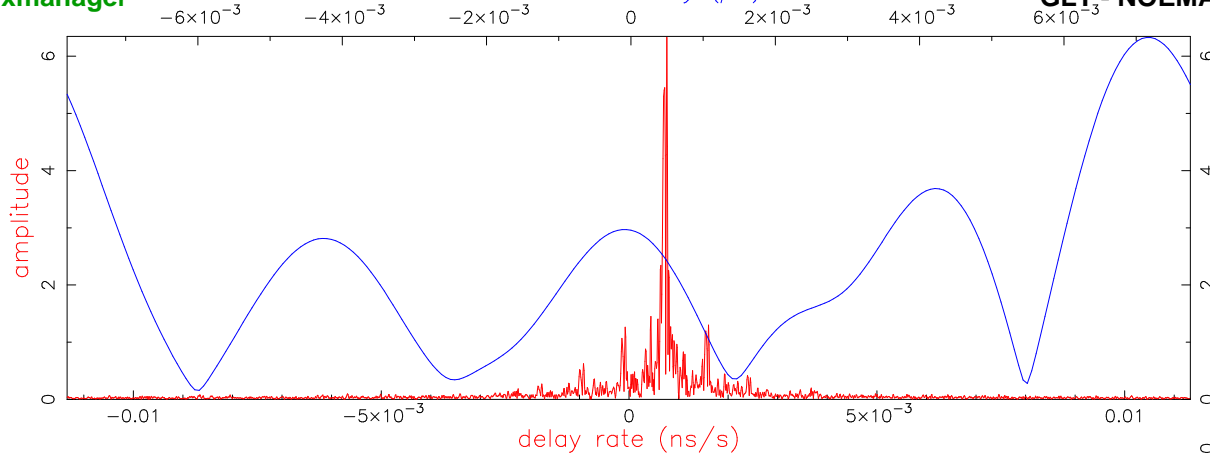
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, gN

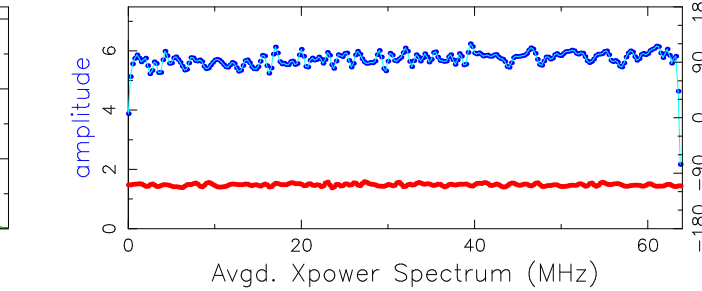
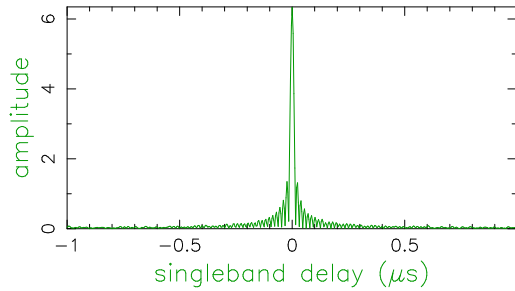
GLT - NOEMA, fgroup W, pol LL

multiband delay (μ s)



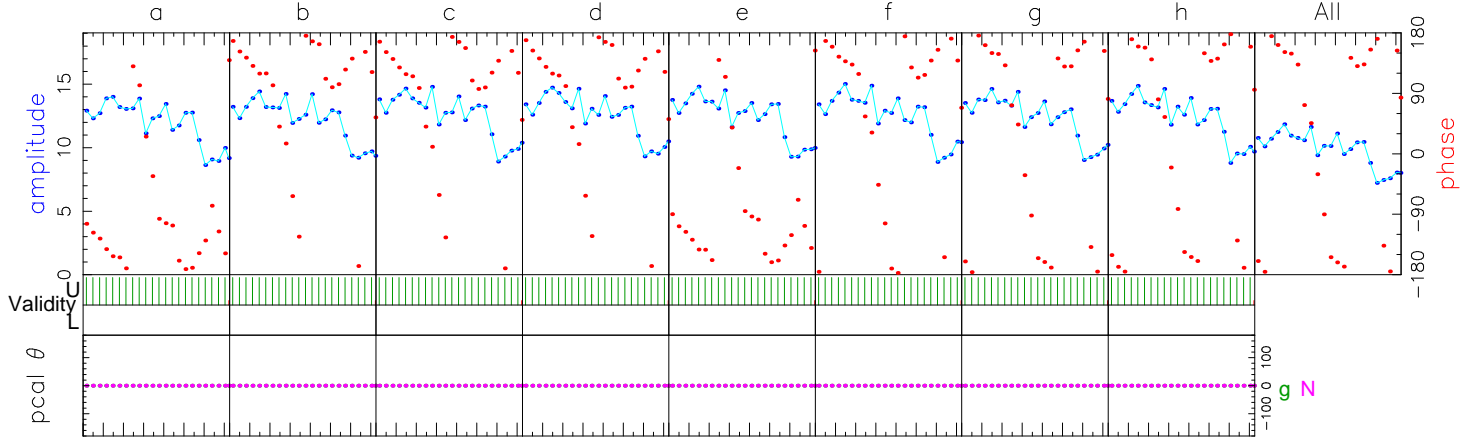
Fringe quality 2

SNR 355.0
 Int time 419.821
 Amp 6.348
 Phase 164.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.000369
 MBD 0.007167
 Fringe rate (Hz)
 0.065995
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130407
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-137.8	133.5	130.6	132.6	-127.5	148.1	163.4	172.2	Phase	164.2
	7.6	7.9	8.0	8.0	8.0	8.0	7.9	7.9	Ampl.	7.9
	256.8	256.8	256.9	256.9	256.9	256.9	257.1	256.9	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N/g	0	0	0	0	0	0	0	0	PC freqs	
g:N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N/g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N/g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 4.56545110514E+03 Apriori delay (usec) 4.56544393841E+03 Resid mbdelay (usec) 7.16673E-03 +/- 3.1E-06
 Sband delay (usec) 4.56544356916E+03 Apriori clock (usec) 1.3688151E+01 Resid sbdelay (usec) -3.69250E-04 +/- 2.4E-05
 Phase delay (usec) 4.56544394371E+03 Apriori clockrate (us/s) -8.2480004E-06 Resid phdelay (usec) 5.29646E-06 +/- 1.0E-08
 Delay rate (us/s) 6.72192129520E-01 Apriori rate (us/s) 6.72191363387E-01 Resid rate (us/s) 7.66133E-07 +/- 4.3E-11
 Total phase (deg) 111.9 Apriori accel (us/s/s) -4.77522011250E-07 Resid phase (deg) 164.2 +/- 0.3

RMS Theor. Amplitude 6.348 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.4 0.8 Search (2048X32) 6.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 60.4 1.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.6 0.5 Inc. seg. avg. 9.947 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 24.9 0.8 Inc. frq. avg. 7.922 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 174.2 el 64.4 pa -2.3 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -6124.856 1517.721 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/gN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/gN.W.171.1X1592

Mk4/DiFX fourfit 3.21 rev 2937

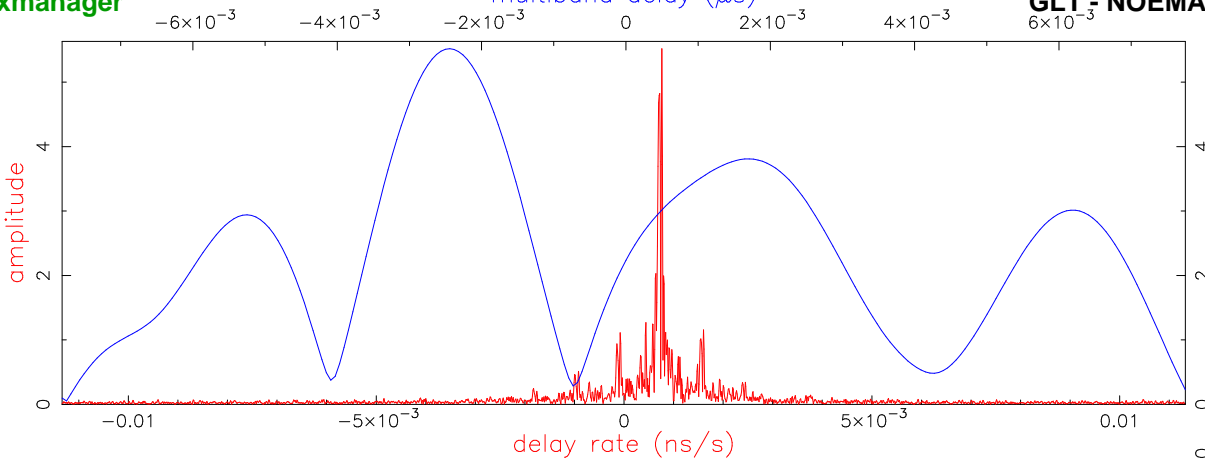
fxmanager

NRAO150.1X1592, No0093, gN

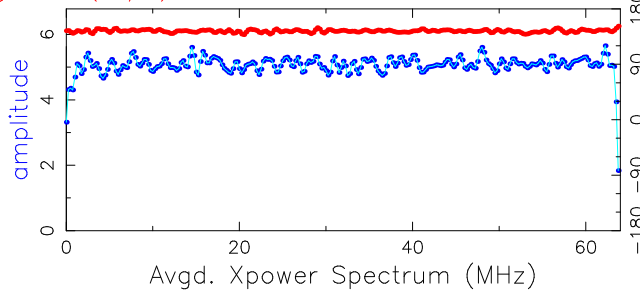
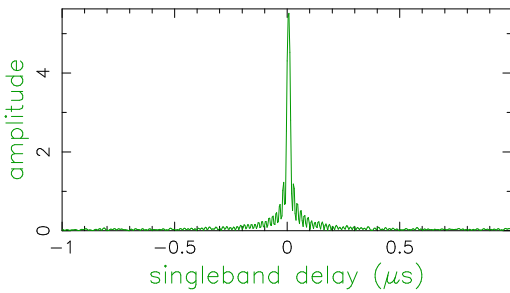
GLT - NOEMA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 2

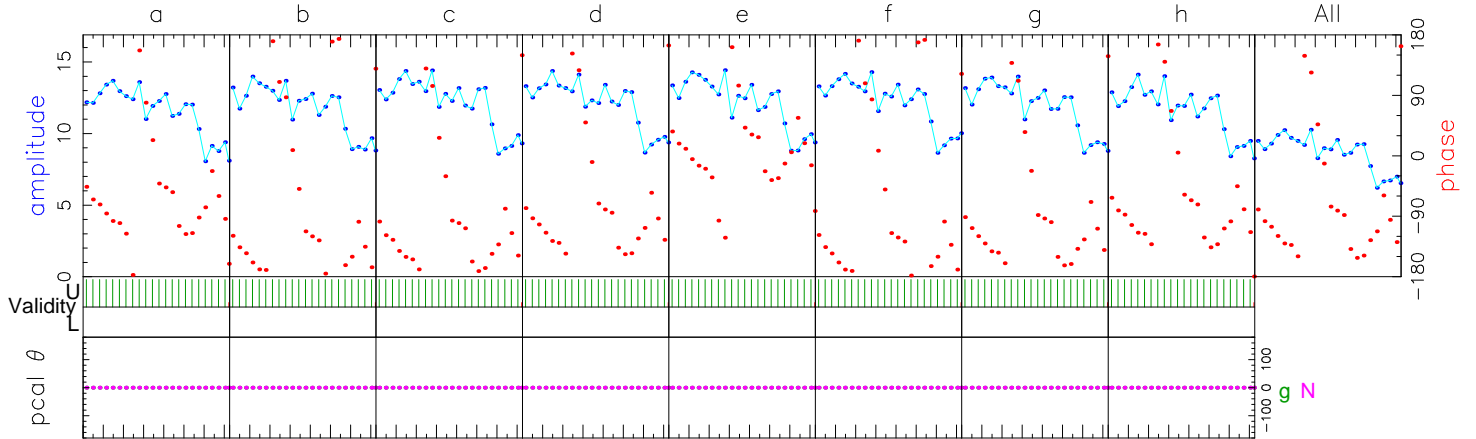


SNR 315.0
 Int time 419.821
 Amp 5.632
 Phase -116.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.006147
 MBD -0.002450
 Fringe rate (Hz)
 0.065986
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130412
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-82.6	-155.2	-137.1	-113.3	-1.6	-155.9	-128.5	-100.8	Phase	-116.9
	7.3	7.6	7.7	7.7	7.8	7.7	7.6	7.5	Ampl.	7.6
	258.4	258.7	258.6	258.6	258.7	258.6	258.7	258.7	Sbd box	258.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g:N	0	0	0	0	0	0	0	0	PC freqs	
N:g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N:g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N:g	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	4.56545711345E+03		Apriori delay (usec)		4.56544393841E+03		Resid mbdelay (usec)		-2.44996E-03	+/- 3.4E-06
Sband delay (usec)	4.56545008566E+03		Apriori clock (usec)		1.3688151E+01		Resid sbdelay (usec)		6.14725E-03	+/- 2.7E-05
Phase delay (usec)	4.56544393464E+03		Apriori clockrate (us/s)		-8.2480004E-06		Resid phdelay (usec)		-3.77105E-06	+/- 1.2E-08
Delay rate (us/s)	6.72192129424E-01		Apriori rate (us/s)		6.72191363387E-01		Resid rate (us/s)		7.66037E-07	+/- 4.8E-11
Total phase (deg)	190.7		Apriori accel (us/s/s)		-4.77522011250E-07		Resid phase (deg)		-116.9	+/- 0.4

ph/seg (deg) 58.6 0.9 Search (2048X32) 5.334 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.9 1.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.2 0.5 Inc. seg. avg. 8.736 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.2 0.9 Inc. frq. avg. 7.607 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 174.2 el 64.4 pa -2.3 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -6124.856 1517.721 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/gN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/gN.W.195.1X1592

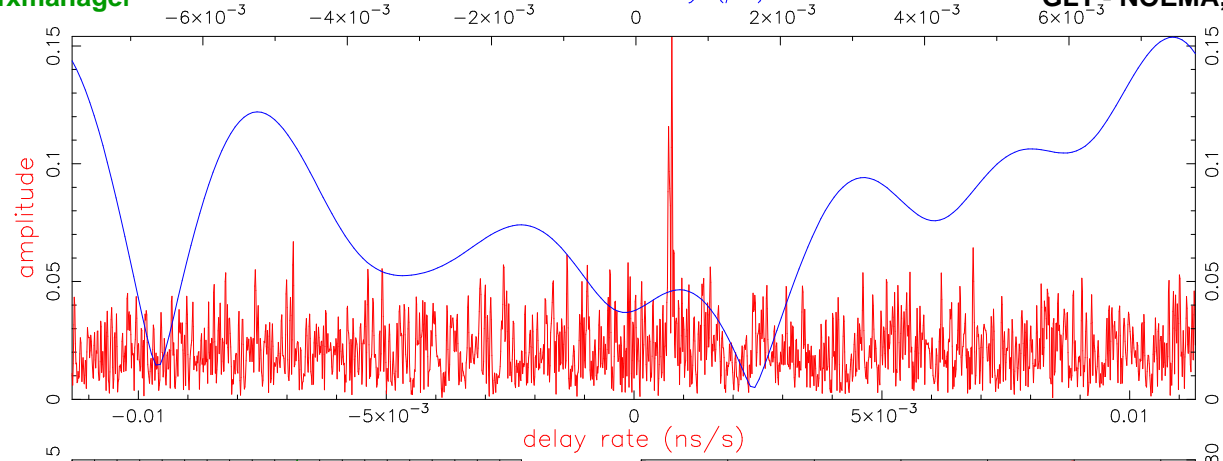
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

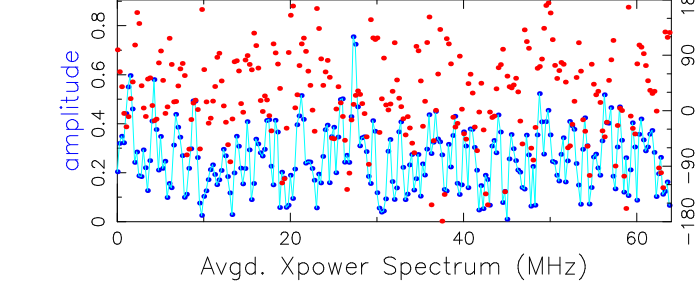
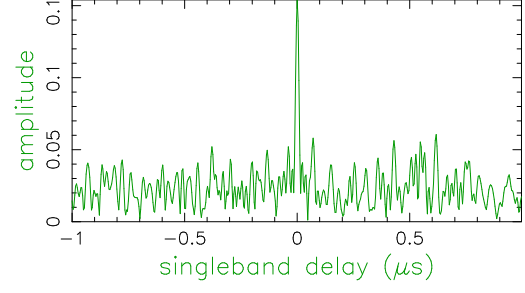
NRAO150.1X1592, No0093, gN

GLT - NOEMA, fgroup W, pol LR

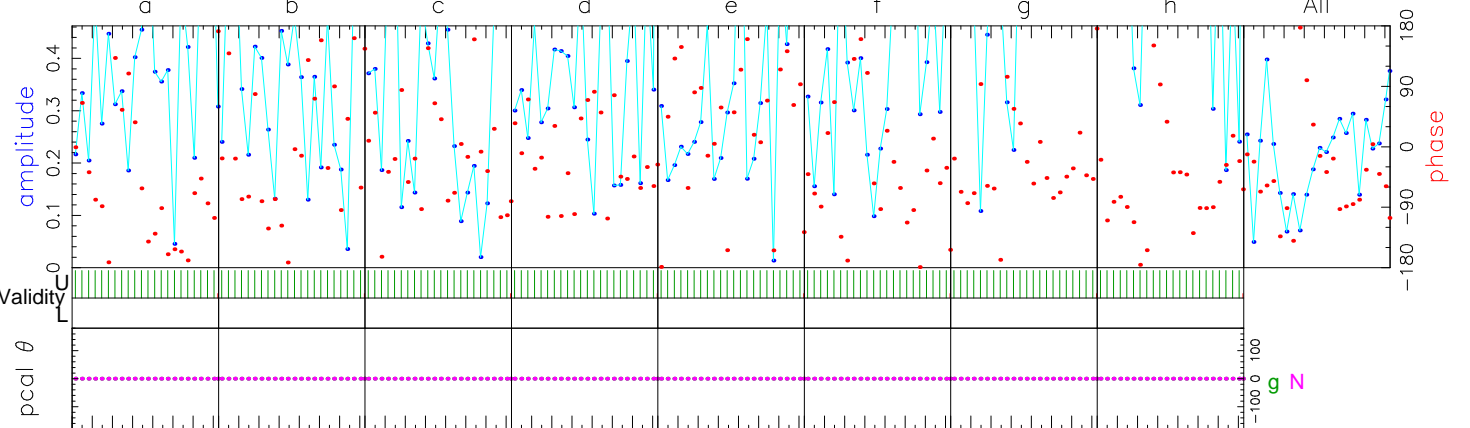
multiband delay (μ s)



Fringe quality 9
 SNR 8.6
 Int time 419.821
 Amp 0.154
 Phase -52.3
 PFD 2.5e-09
 Delays (us)
 SBD 0.000198
 MBD 0.007436
 Fringe rate (Hz) 0.065791
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130416
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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
Validity	1	1	1	1	1	1	1	1		
pcal θ										
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	4.56545137476E+03				4.56544393841E+03				7.43635E-03	+/- 1.3E-04
Sband delay (usec)	4.56544413641E+03				1.3688151E+01				1.98000E-04	+/- 1.0E-03
Phase delay (usec)	4.56544393672E+03				-8.2480004E-06				-1.68800E-06	+/- 4.3E-07
Delay rate (us/s)	6.72192127154E-01				6.72191363387E-01				7.63767E-07	+/- 1.8E-09
Total phase (deg)			255.3		-4.77522011250E-07				-52.3	+/- 13.3
pcal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					128					
Data rate (Mb/s):					2048					
PC period (AP's)					5, 5					
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										

ph/seg (deg) 59.1 31.9 Search (2048X32) 0.152 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.1 55.7 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.9 18.8 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 82.2 32.8 Inc. frq. avg. 0.204 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 174.2 el 64.4 pa -2.3 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -6124.856 1517.721 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/gN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/gN.W.216.1X1592

Mk4/DiFX fourfit 3.21 rev 2937

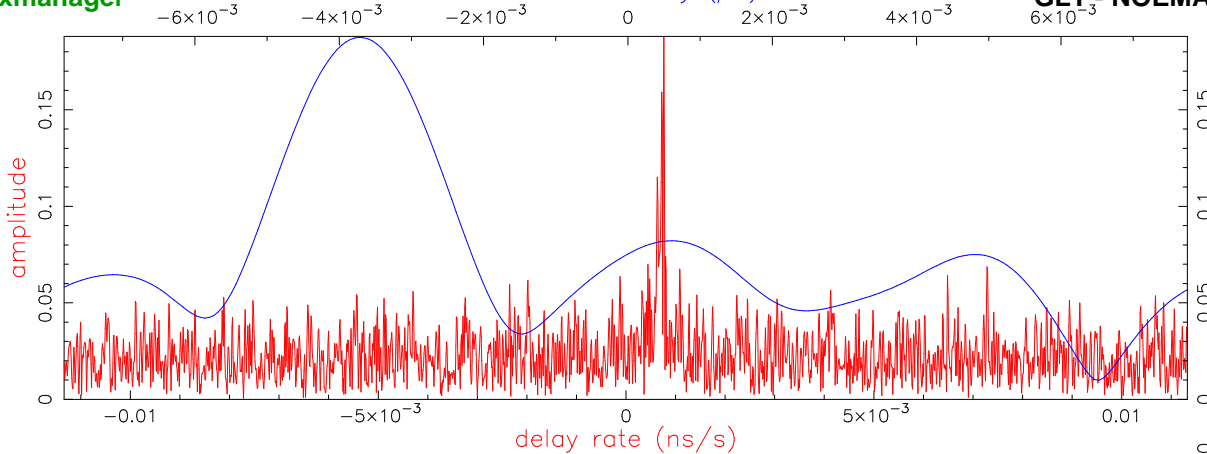
fxmanager

NRAO150.1X1592, No0093, gN

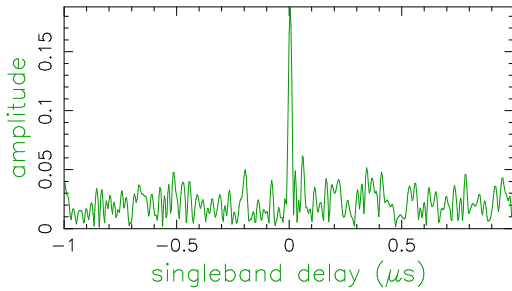
GLT - NOEMA, fgroup W, pol RL

multiband delay (μ s)

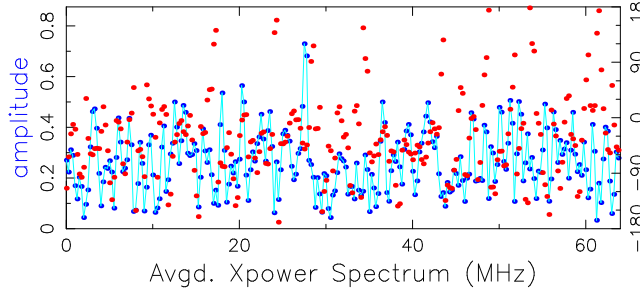
Fringe quality 9



SNR 10.5
 Int time 419.821
 Amp 0.188
 Phase 53.5
 PFD 3.3e-17
 Delays (us)
 SBD 0.004295
 MBD -0.003714
 Fringe rate (Hz) 0.065612
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

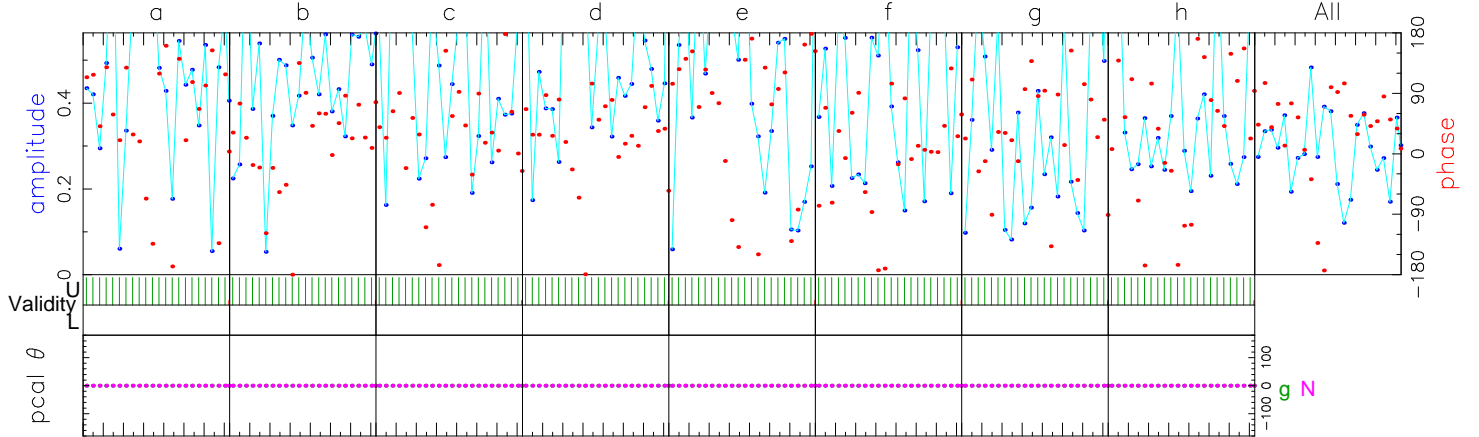


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130419
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 4.56545584898E+03 Apriori delay (usec) 4.56544393841E+03 Resid mbdelay (usec) -3.71443E-03 +/- 1.0E-04
 Sband delay (usec) 4.56544823316E+03 Apriori clock (usec) 1.3688151E+01 Resid sbdelay (usec) 4.29475E-03 +/- 8.2E-04
 Phase delay (usec) 4.56544394014E+03 Apriori clockrate (us/s) -8.2480004E-06 Resid phdelay (usec) 1.72605E-06 +/- 3.5E-07
 Delay rate (us/s) 6.72192125083E-01 Apriori rate (us/s) 6.72191363387E-01 Resid rate (us/s) 7.61696E-07 +/- 1.4E-09
 Total phase (deg) 1.2 Apriori accel (us/s/s) -4.77522011250E-07 Resid phase (deg) 53.5 +/- 10.9

ph/seg (deg) 57.2 26.1 Amplitude 0.188 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.7 45.6 Search (2048X32) 0.183 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.6 15.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.1 26.9 Inc. seg. avg. 0.267 Sample rate(MISamp/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

g: az 174.2 el 64.4 pa -2.3 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -6124.856 1517.721 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/gN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/gN.W.234.1X1592

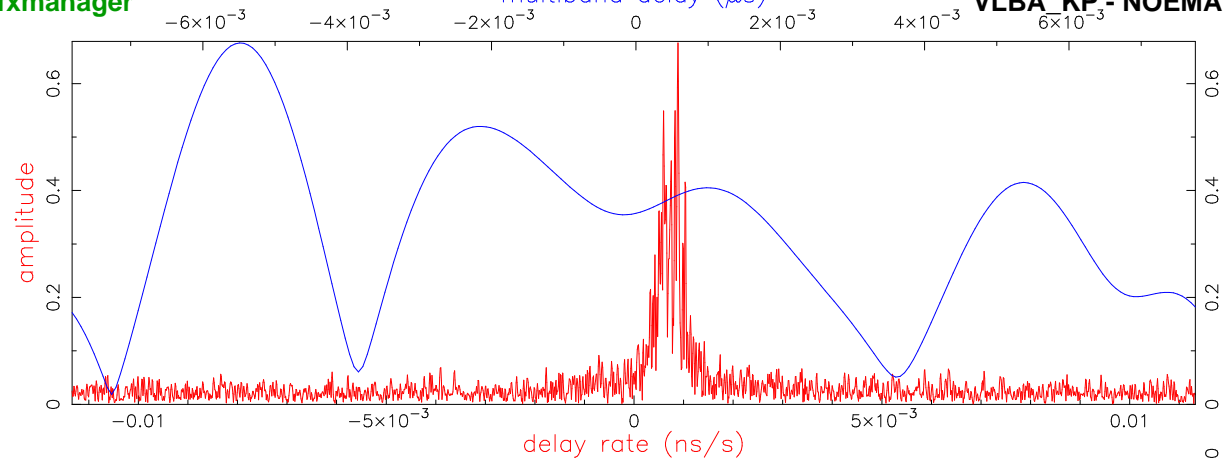
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, kN

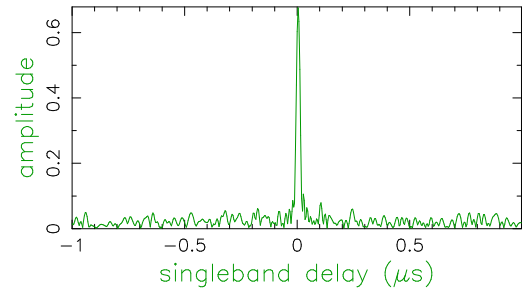
VLBA_KP - NOEMA, fgroup W, pol LL

multiband delay (μ s)

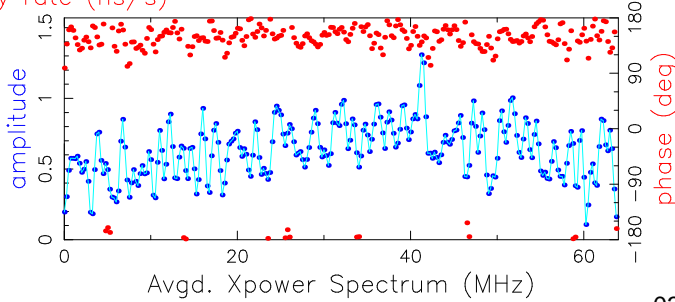


Fringe quality 3

SNR 37.9
Int time 419.824
Amp 0.679
Phase -94.3
PFD 0.0e+00
Delays (us)
SBD 0.004440
MBD -0.005463
Fringe rate (Hz)
0.076395
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

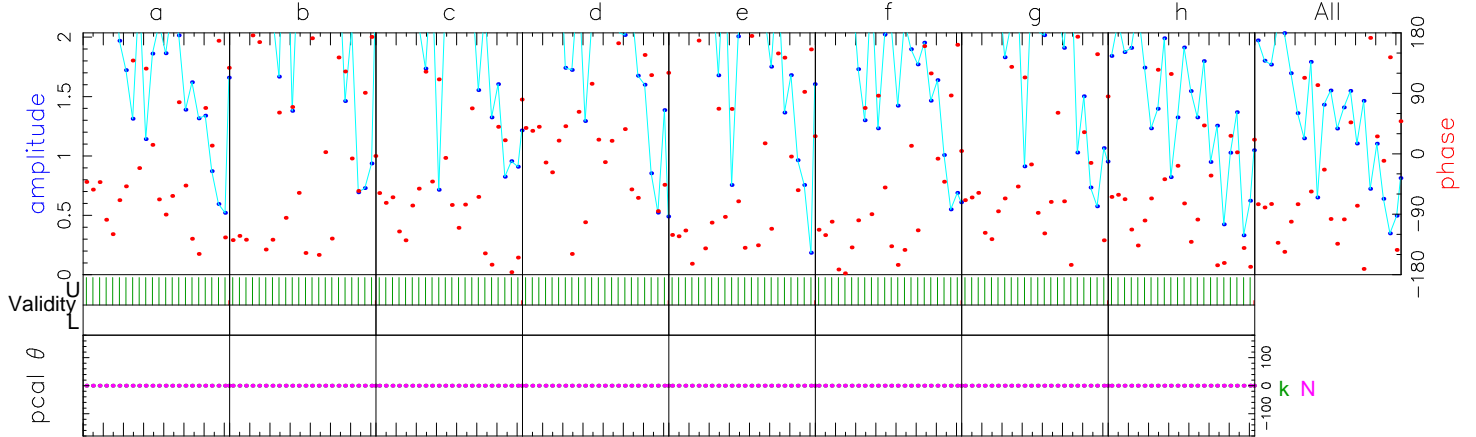


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130408
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-63.4	-146.0	-79.5	16.9	-137.7	-130.9	-84.4	-77.1	Phase	-94.3
	0.9	1.2	1.1	1.2	1.1	0.9	1.1	0.7	Ampl.	1.0
	256.2	258.1	259.0	258.8	258.8	258.9	258.0	256.1	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.01290683020E+03		Apriori delay (usec)		2.01289666796E+03		Resid mbdelay (usec)		-5.46276E-03	+/- 2.9E-05
Sband delay (usec)	2.01290110846E+03		Apriori clock (usec)		1.3570140E+01		Resid sbdelay (usec)		4.44050E-03	+/- 2.3E-04
Phase delay (usec)	2.01289666492E+03		Apriori clockrate (us/s)		-8.3200001E-06		Resid phdelay (usec)		-3.04129E-06	+/- 9.7E-08
Delay rate (us/s)	1.25654467172E+00		Apriori rate (us/s)		1.25654378484E+00		Resid rate (us/s)		8.86873E-07	+/- 4.0E-10
Total phase (deg)	257.7		Apriori accel (us/s/s)		-2.58401257844E-05		Resid phase (deg)		-94.3	+/- 3.0

ph/seg (deg) 79.6 7.2 Search (2048X32) 0.661 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 121.6 12.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.5 4.3 Inc. seg. avg. 1.324 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.6 7.5 Inc. frq. avg. 1.022 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 46.7 el 50.9 pa -100.6 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -11480.057 -3369.200 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/kN.1X1592 Output file: /Exps/c211c/v1/1234/No0093/kN.W.177.1X1592

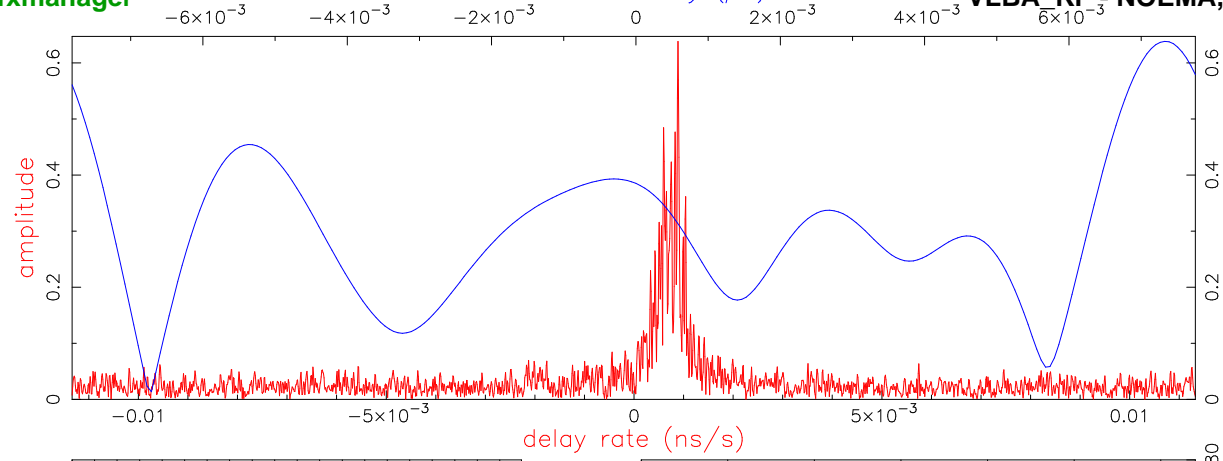
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, kN

VLBA_KP - NOEMA, fgroup W, pol RR

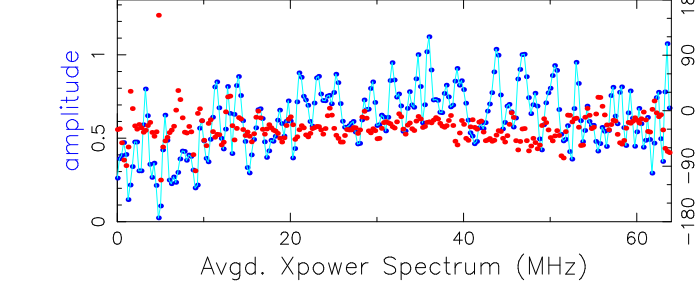
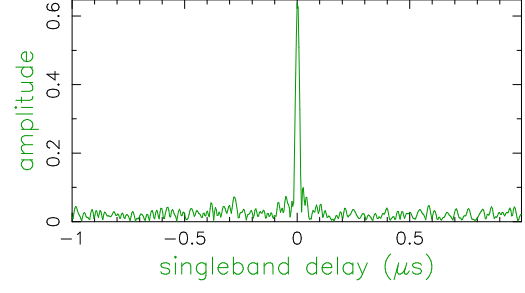
multiband delay (μ s)



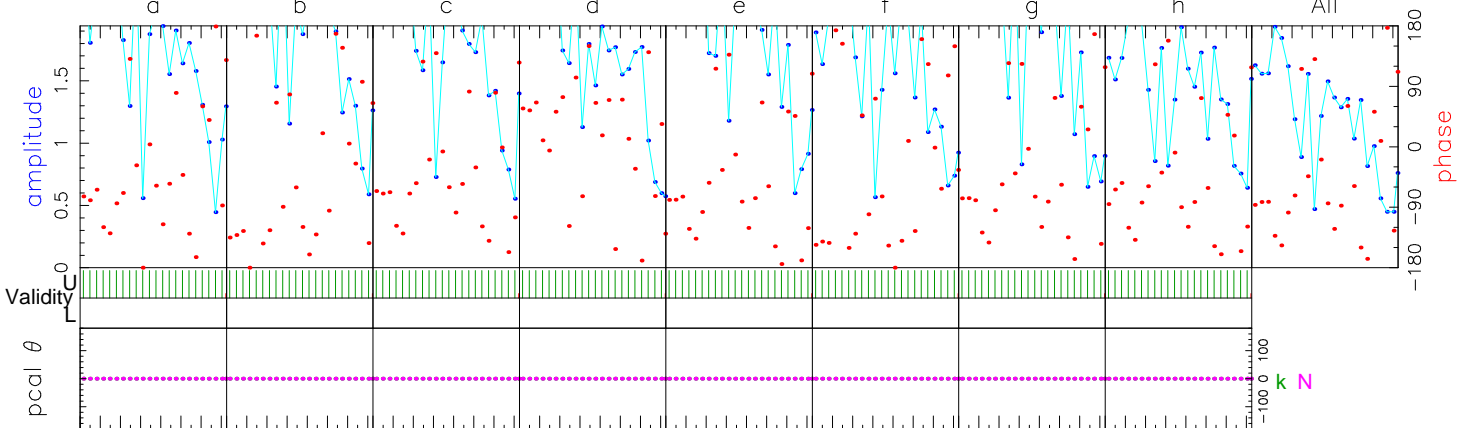
Fringe quality 3

SNR 36.2
 Int time 419.824
 Amp 0.647
 Phase -96.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001444
 MBD 0.007358
 Fringe rate (Hz) 0.076155
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130412
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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
	-81.7	-138.0	-74.5	49.4	-91.7	-153.4	-87.3	-91.2	Phase	-96.0
	0.9	1.0	1.0	0.9	1.0	0.8	1.0	0.7	Ampl.	0.9
	255.8	257.9	258.2	258.5	258.1	258.6	257.6	256.1	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	2.01290402579E+03		Apriori delay (usec)		2.01289666796E+03		Resid mbdelay (usec)		7.35783E-03	+/- 3.0E-05
Sband delay (usec)	2.01289811171E+03		Apriori clock (usec)		1.3570140E+01		Resid sbdelay (usec)		1.44375E-03	+/- 2.4E-04
Phase delay (usec)	2.01289666486E+03		Apriori clockrate (us/s)		-8.3200001E-06		Resid phdelay (usec)		-3.09462E-06	+/- 1.0E-07
Delay rate (us/s)	1.25654466892E+00		Apriori rate (us/s)		1.25654378484E+00		Resid rate (us/s)		8.84079E-07	+/- 4.2E-10
Total phase (deg)	256.1		Apriori accel (us/s/s)		-2.58401257844E-05		Resid phase (deg)		-96.0	+/- 3.2

ph/seg (deg) 77.5 7.6 Search (2048X32) 0.624 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 110.3 13.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.0 4.5 Inc. seg. avg. 1.198 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.7 7.8 Inc. frq. avg. 0.928 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 46.7 el 50.9 pa -100.6 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -11480.057 -3369.200 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/kN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/kN.W.197.1X1592

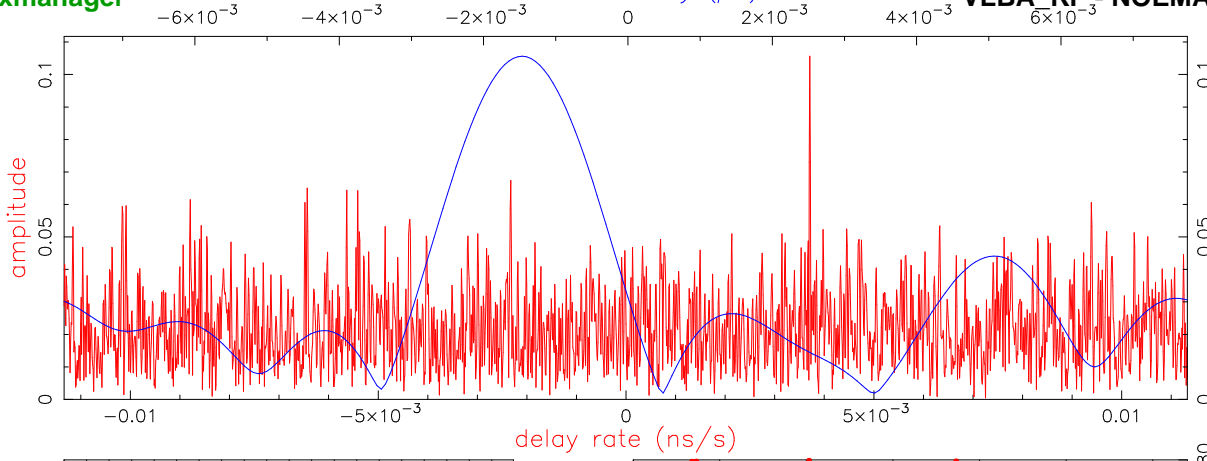
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

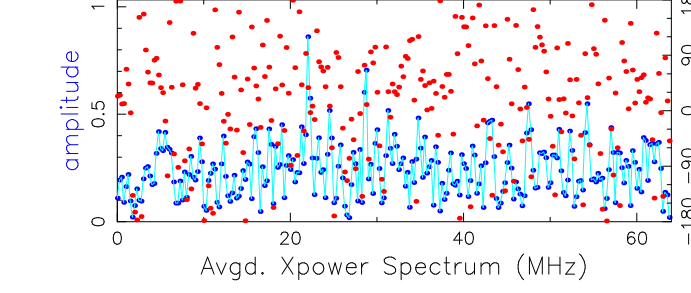
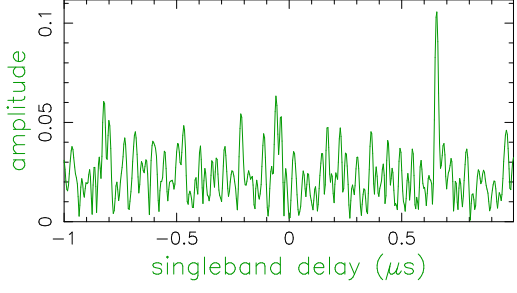
NRAO150.1X1592, No0093, kN

VLBA_KP - NOEMA, fgroup W, pol LR

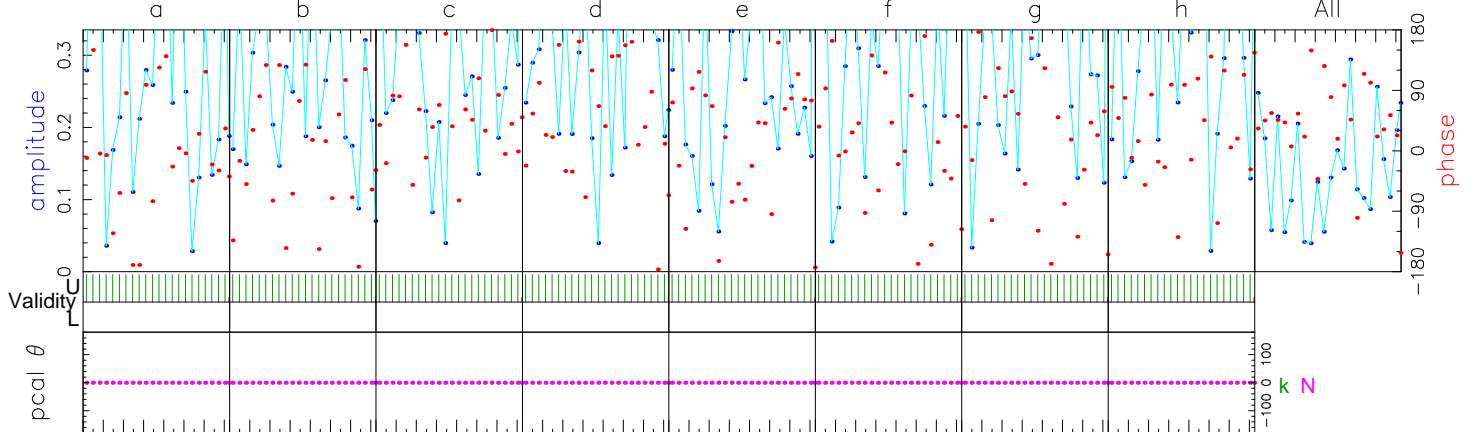
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 419.824
 Amp 0.112
 Phase 43.1
 PFD 4.2e-01
 Delays (us)
 SBD 0.654828
 MBD -0.001477
 Fringe rate (Hz) 0.319552
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build 2021:303:151428
 2021:304:130417
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"



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		
k	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		2.01355144090E+03				2.01289666796E+03			Resid mbdelay (usec)	-1.47706E-03 +/- 1.8E-04
Sband delay (usec)		2.01355149646E+03				1.3570140E+01			Resid sbdelay (usec)	6.54828E-01 +/- 1.4E-03
Phase delay (usec)		2.01289666935E+03				-8.3200001E-06			Resid phdelay (usec)	1.38885E-06 +/- 6.2E-07
Delay rate (us/s)		1.25654749452E+00				1.25654378484E+00			Resid rate (us/s)	3.70968E-06 +/- 2.5E-09
Total phase (deg)			35.1			-2.58401257844E-05			Resid phase (deg)	43.1 +/- 19.1
	RMS	Theor.	Amplitude	0.112 +/- 0.019		Pcal mode: MANUAL, MANUAL			PC period (AP's)	5, 5
ph/seg (deg)	55.0	45.9	Search (2048X32)	0.104		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	74.6	80.1	Interp.	0.000		Bits/sample: 2x2			mb window (us)	-0.008 0.008
ph/frq (deg)	12.3	27.1	Inc. seg. avg.	0.111		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	39.7	47.2	Inc. frq. avg.	0.101		Data rate(Mb/s): 2048			ion window (TEC)	0.00 0.00
k: az 46.7 el 50.9 pa -100.6			N: az 304.4 el 44.0 pa 69.6			nlags: 256			t_cohere infinite	
Control file: cf_1234_gmva			Input file: /Exps/c211c/v1/1234/No0093/kN.1X1592			u,v (fr/asec) -11480.057 -3369.200				simultaneous interpolator
						Output file: /Exps/c211c/v1/1234/No0093/kN.W.221.1X1592				

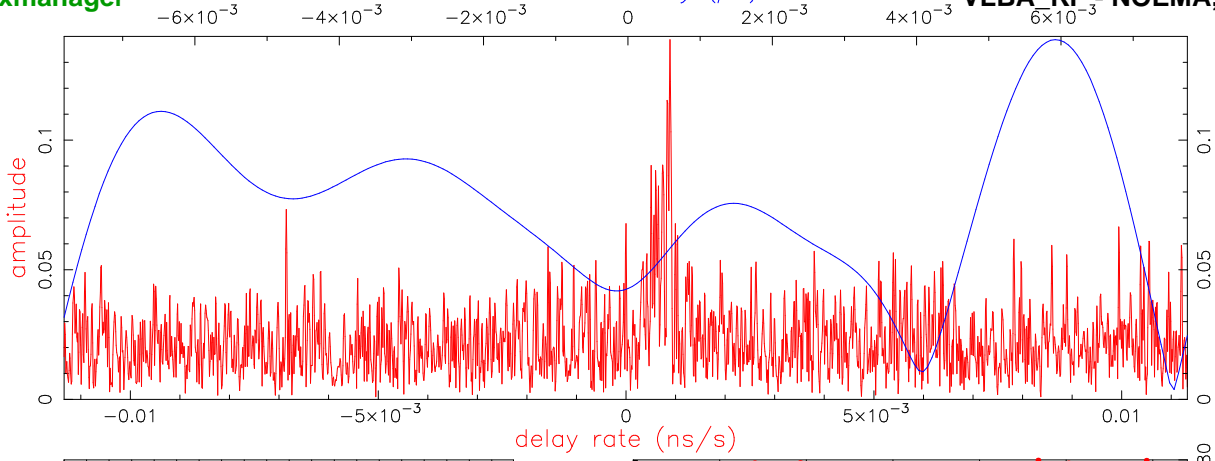
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, kN

VLBA_KP - NOEMA, fgroup W, pol RL

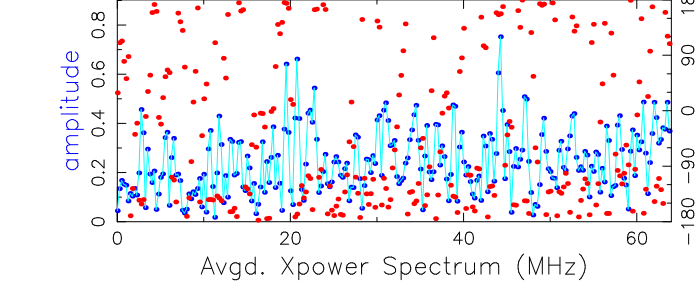
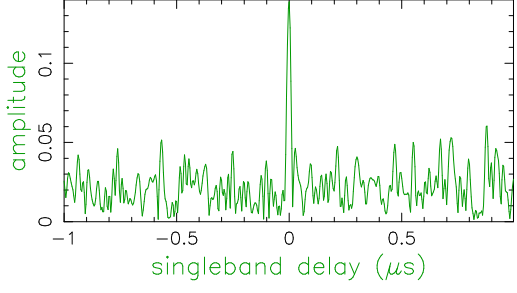
multiband delay (μ s)



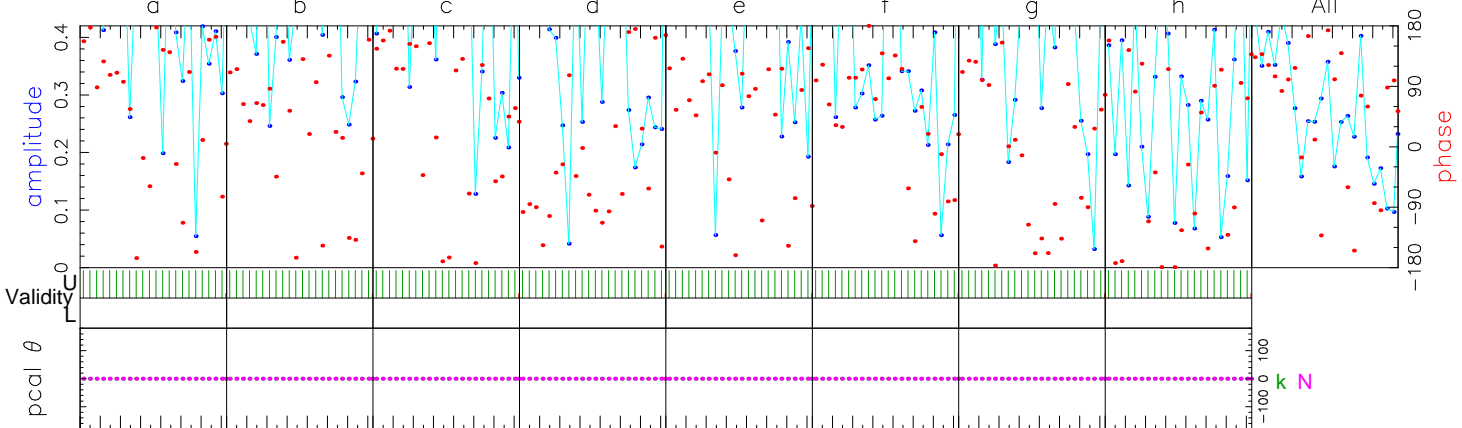
Fringe quality 9

SNR 7.8
 Int time 419.824
 Amp 0.140
 Phase 119.1
 PFD 1.7e-06
 Delays (us)
 SBD -0.001154
 MBD 0.005919
 Fringe rate (Hz) 0.076086
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130421
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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		
k	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec)(sbd)	2.01290258735E+03		Apriori delay (usec)		2.01289666796E+03		Resid mbdelay (usec)		5.91939E-03	+/- 1.4E-04
Sband delay (usec)	2.01289551446E+03		Apriori clock (usec)		1.3570140E+01		Resid sbdelay (usec)		-1.15350E-03	+/- 1.1E-03
Phase delay (usec)	2.01289667180E+03		Apriori clockrate (us/s)		-8.3200001E-06		Resid phdelay (usec)		3.84151E-06	+/- 4.7E-07
Delay rate (us/s)	1.25654466812E+00		Apriori rate (us/s)		1.25654378484E+00		Resid rate (us/s)		8.83279E-07	+/- 1.9E-09
Total phase (deg)	111.2		Apriori accel (us/s/s)		-2.58401257844E-05		Resid phase (deg)		119.1	+/- 14.6

ph/seg (deg) 80.4 35.1 Search (2048X32) 0.136 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 121.7 61.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.8 20.7 Inc. seg. avg. 0.230 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 71.7 36.1 Inc. frq. avg. 0.202 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 46.7 el 50.9 pa -100.6 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -11480.057 -3369.200 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/kN.1X1592 Output file: /Exps/c211c/v1/1234/No0093/kN.W.239.1X1592

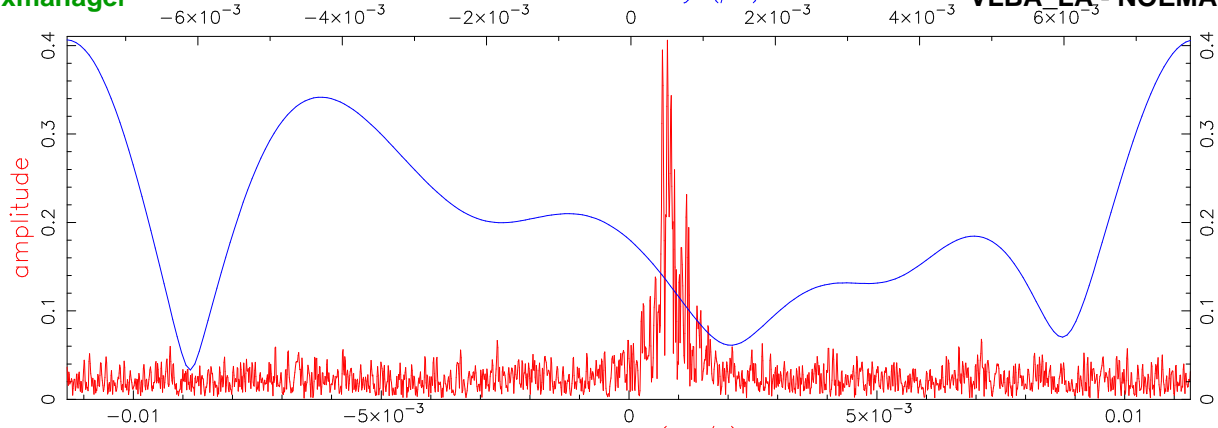
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, IN

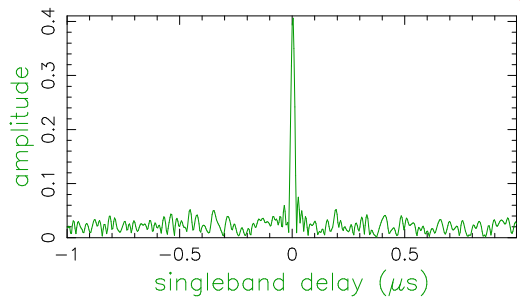
VLBA_LA- NOEMA, fgroup W, pol LL

multiband delay (μ s)

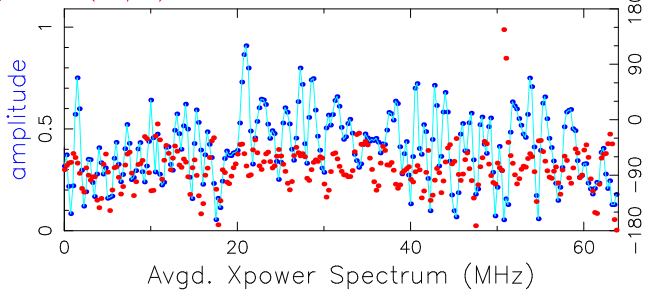


Fringe quality 7

SNR 23.0
 Int time 419.822
 Amp 0.410
 Phase 44.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.002665
 MBD -0.007862
 Fringe rate (Hz)
 0.066635
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

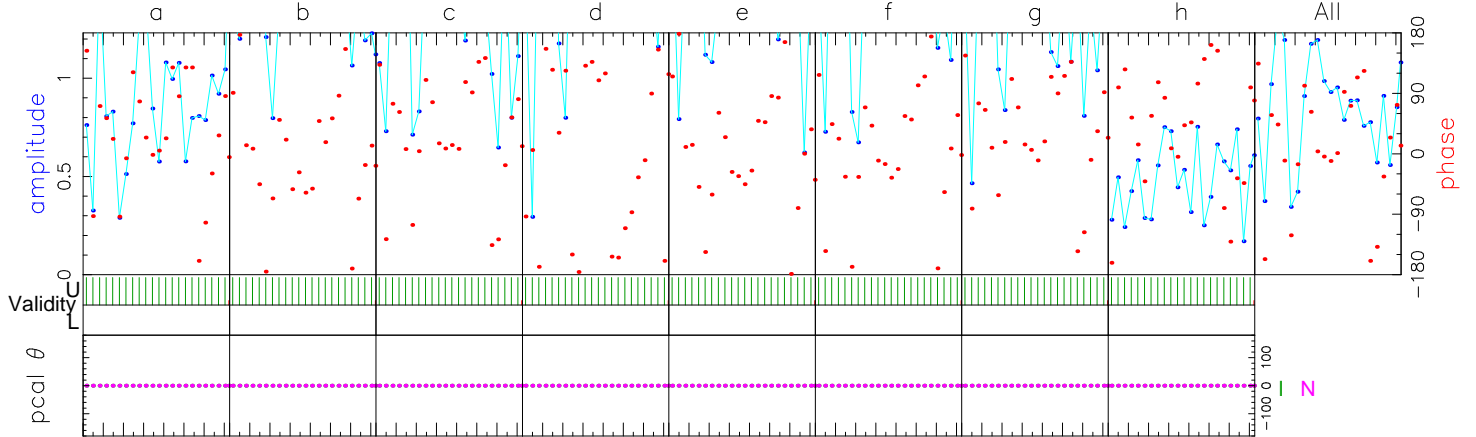


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130423
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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		
I	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.27745205245E+03	Apriori delay (usec)	3.27744428978E+03	Resid mbdelay (usec)	-7.86233E-03	+/-	4.7E-05
Sband delay (usec)	3.27744695453E+03	Apriori clock (usec)	1.0621684E+01	Resid sbdelay (usec)	2.66475E-03	+/-	3.8E-04
Phase delay (usec)	3.27744429121E+03	Apriori clockrate (us/s)	-8.6060005E-06	Resid phdelay (usec)	1.43554E-06	+/-	1.6E-07
Delay rate (us/s)	1.17657224474E+00	Apriori rate (us/s)	1.17657147118E+00	Resid rate (us/s)	7.73563E-07	+/-	6.6E-10
Total phase (deg)	88.2	Apriori accel (us/s/s)	-2.77291227185E-05	Resid phase (deg)	44.5	+/-	5.0

ph/seg (deg)	84.2	Theor.	12.0	Amplitude	0.410 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	123.9	Search (2048X32)	0.397	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	57.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	64.6	Inc. seg. avg.	0.829	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.593	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	

I: az 49.6 el 56.8 pa -101.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10755.883 -3251.029 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/IN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/IN.W.245.1X1592

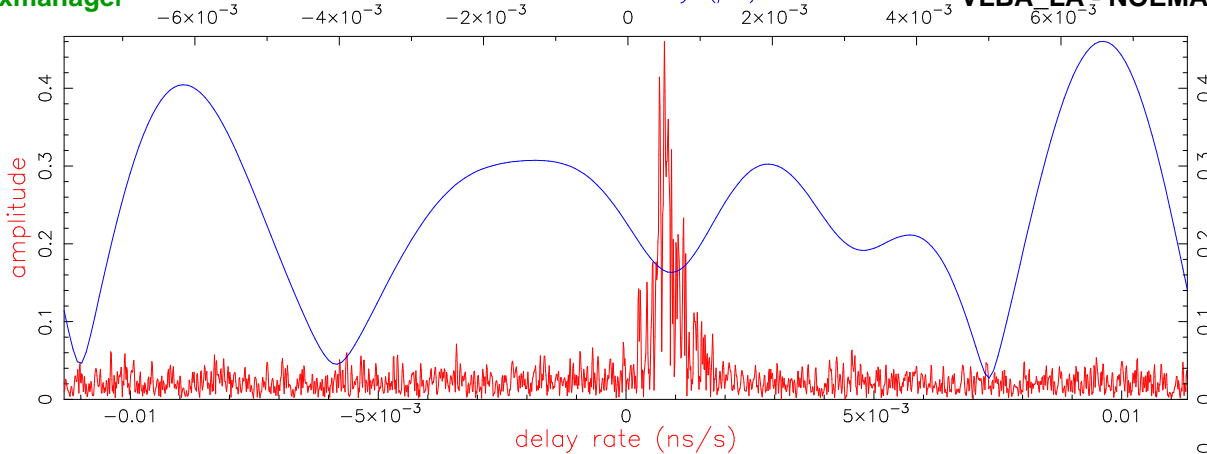
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, IN

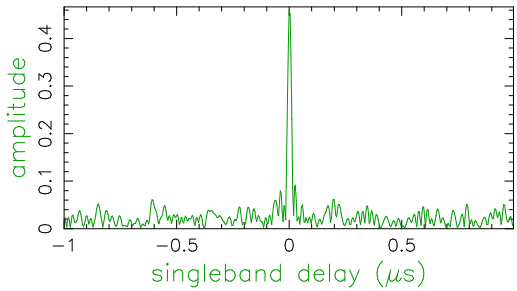
VLBA LA - NOEMA, fgroup W, pol RR

multiband delay (μ s)

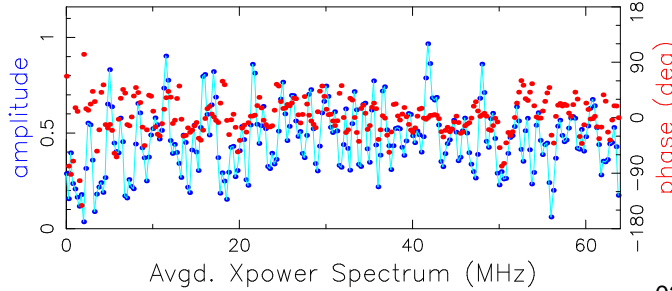


Fringe quality 5

SNR 26.1
 Int time 419.822
 Amp 0.467
 Phase -55.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.001487
 MBD 0.006623
 Fringe rate (Hz)
 0.066730
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

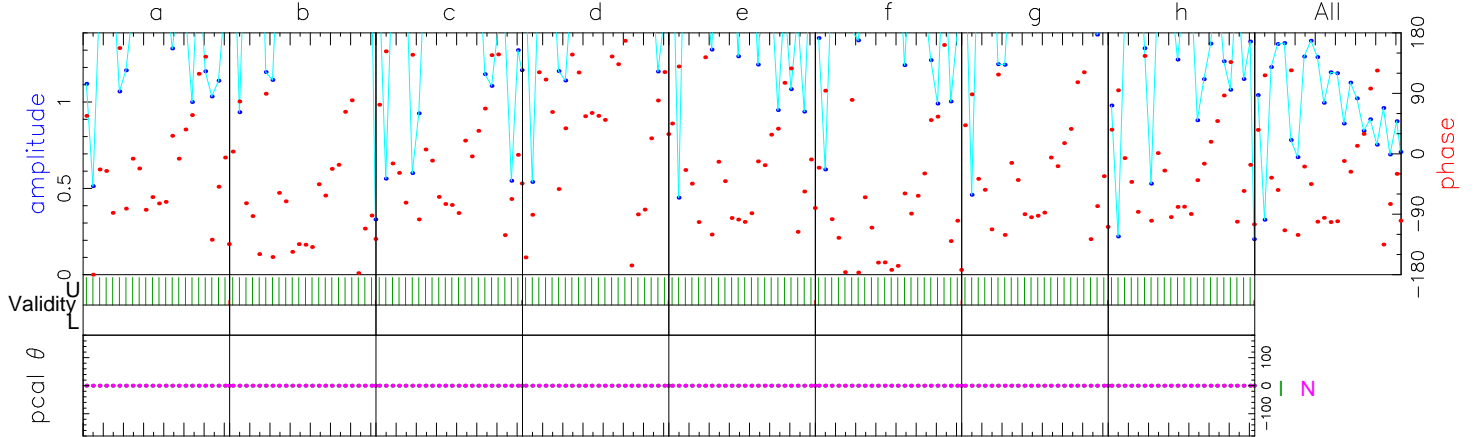


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130427
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-35.0	-92.6	-26.2	101.5	-46.5	-127.3	-50.4	-40.2	Phase	-55.3
	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.7	Ampl.	0.7
	255.8	257.7	258.3	258.3	258.1	258.0	257.3	256.2	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	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)	3.27745091289E+03		Apriori delay (usec)		3.27744428978E+03		Resid mbdelay (usec)		6.62311E-03	+/- 4.2E-05
Sband delay (usec)	3.27744577703E+03		Apriori clock (usec)		1.0621684E+01		Resid sbdelay (usec)		1.48725E-03	+/- 3.3E-04
Phase delay (usec)	3.27744428799E+03		Apriori clockrate (us/s)		-8.6060005E-06		Resid phdelay (usec)		-1.78393E-06	+/- 1.4E-07
Delay rate (us/s)	1.17657224585E+00		Apriori rate (us/s)		1.17657147118E+00		Resid rate (us/s)		7.74671E-07	+/- 5.8E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.77291227185E-05		Resid phase (deg)		-55.3	+/- 4.4

ph/seg (deg) 86.3 10.5 Search (2048X32) 0.456 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 126.3 18.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 73.9 6.2 Inc. seg. avg. 0.981 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 60.3 10.8 Inc. frq. avg. 0.739 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 49.6 el 56.8 pa -101.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10755.883 -3251.029 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/IN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/IN.W.262.1X1592

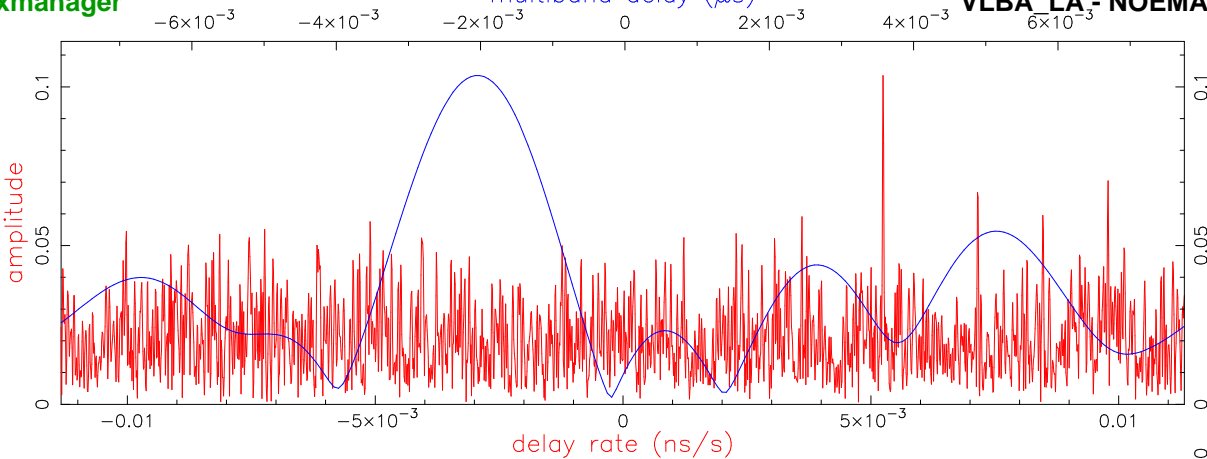
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, IN

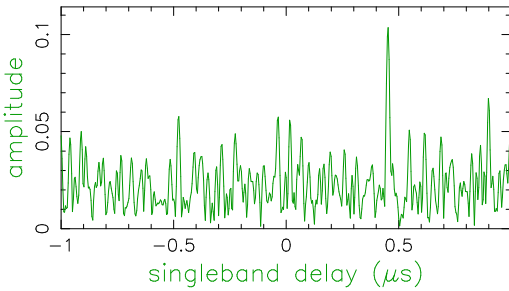
VLBA LA- NOEMA, fgroup W, pol LR

multiband delay (μ s)

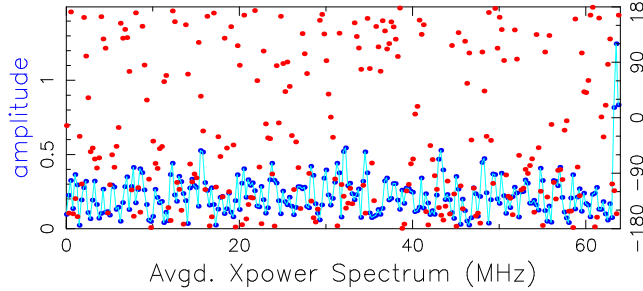


Fringe quality 0

SNR 5.9
 Int time 419.822
 Amp 0.114
 Phase 32.2
 PFD 7.0e-01
 Delays (us)
 SBD 0.452011
 MBD -0.002016
 Fringe rate (Hz)
 0.452853
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

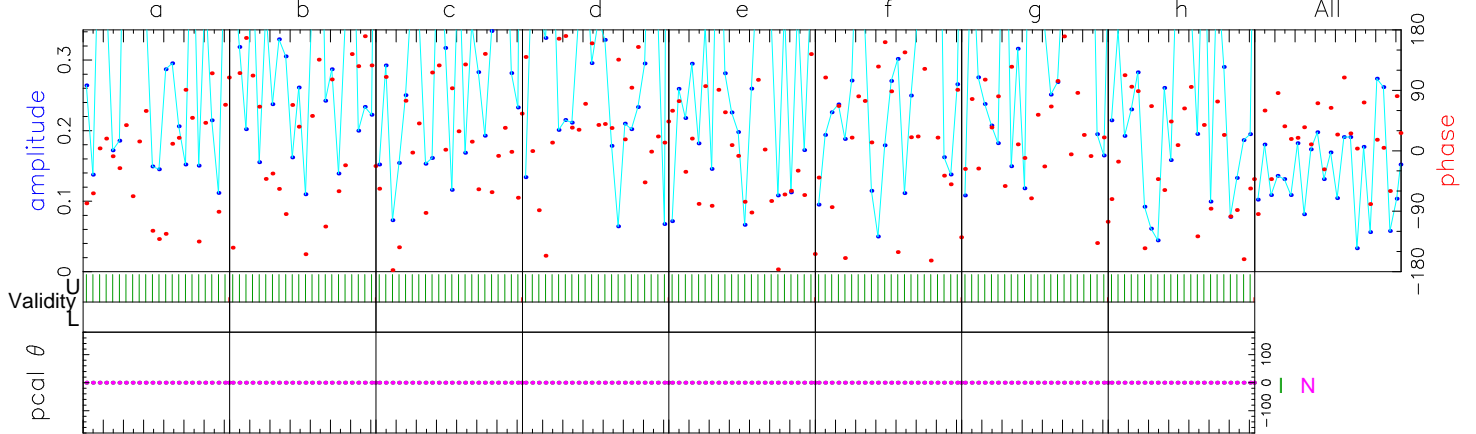


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130431
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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		
I	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.27789539863E+03		Apriori delay (usec)		3.27744428978E+03		Resid mbdelay (usec)		-2.01615E-03	+/- 1.9E-04
Sband delay (usec)	3.27789630103E+03		Apriori clock (usec)		1.0621684E+01		Resid sbdelay (usec)		4.52011E-01	+/- 1.5E-03
Phase delay (usec)	3.27744429081E+03		Apriori clockrate (us/s)		-8.6060005E-06		Resid phdelay (usec)		1.03721E-06	+/- 6.3E-07
Delay rate (us/s)	1.17657672836E+00		Apriori rate (us/s)		1.17657147118E+00		Resid rate (us/s)		5.25718E-06	+/- 2.6E-09
Total phase (deg)	75.8		Apriori accel (us/s/s)		-2.77291227185E-05		Resid phase (deg)		32.2	+/- 19.6

	RMS	Theor.	Amplitude	0.114 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	54.1	46.9	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.2	81.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.1	27.7	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	35.1	48.3	Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 49.6 el 56.8 pa -101.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10755.883 -3251.029 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/IN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/IN.W.283.1X1592

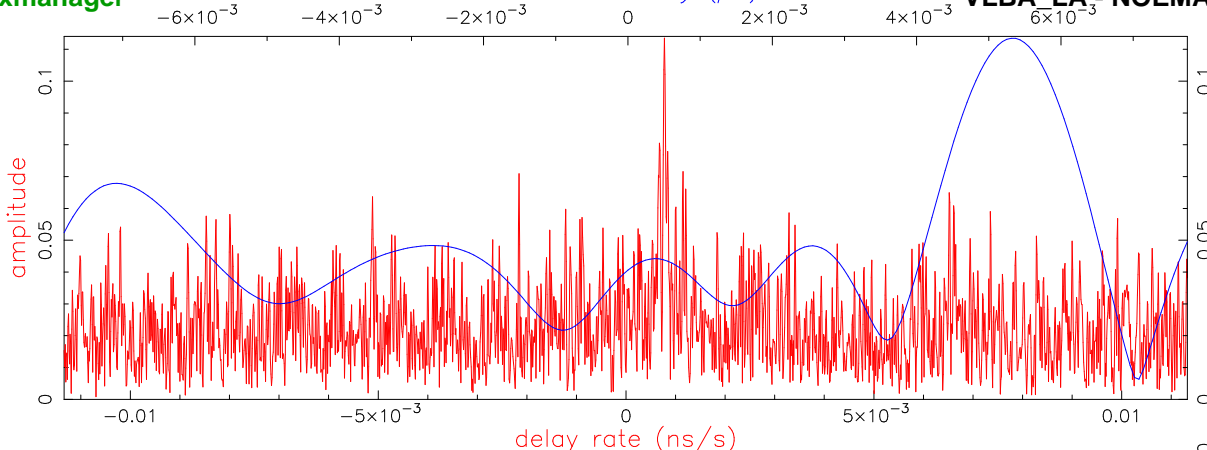
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

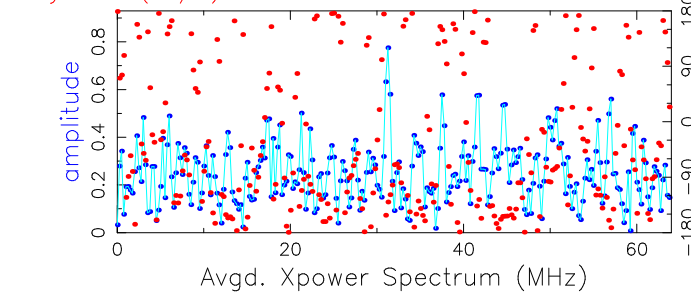
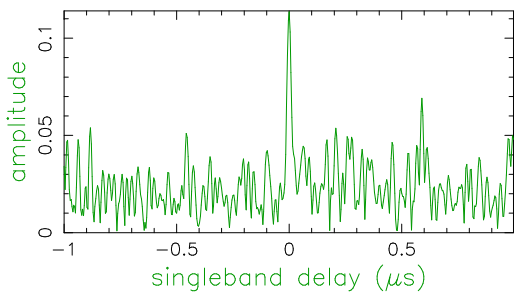
NRAO150.1X1592, No0093, IN

VLBA LA- NOEMA, fgroup W, pol RL

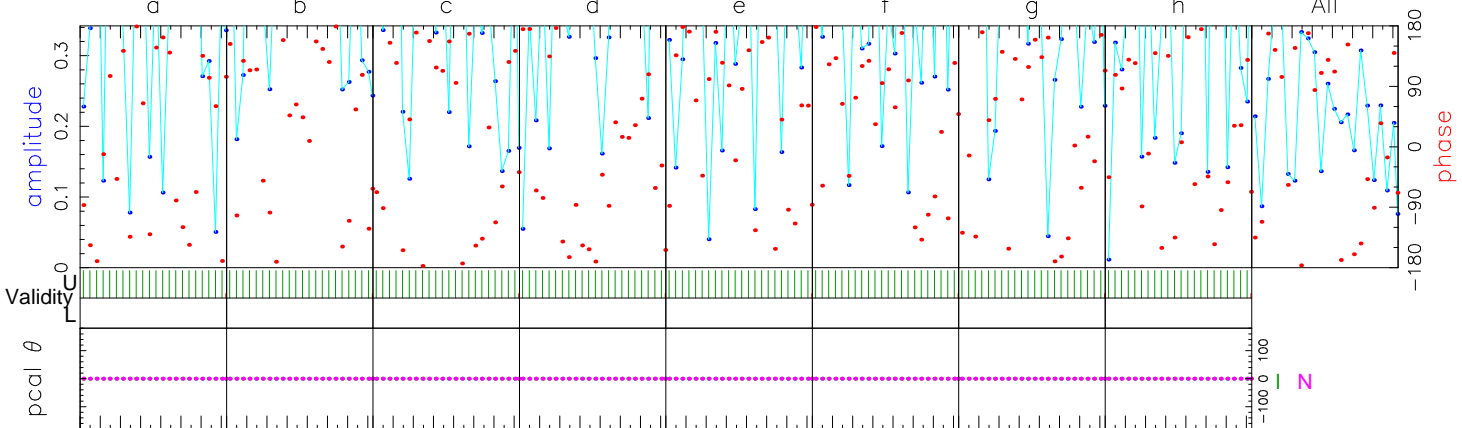
multiband delay (μ s)



Fringe quality 0
 SNR 6.4
 Int time 419.822
 Amp 0.114
 Phase 156.2
 PFD 4.8e-02
 Delays (us)
 SBD -0.000821
 MBD 0.005321
 Fringe rate (Hz) 0.066805
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build 2021:303:151428
 2021:304:130435
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"



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
	-175.4	125.8	159.5	-73.4	145.1	111.7	173.3	167.1	Phase	156.2
	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	156.1	257.1	257.6	106.8	382.1	29.2	200.2	310.9	Sbd box	256.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 3.27744961111E+03 Apriori delay (usec) 3.27744428978E+03 Resid mbdelay (usec) 5.32133E-03 +/- 1.7E-04
 Sband delay (usec) 3.27744346903E+03 Apriori clock (usec) 1.0621684E+01 Resid sbdelay (usec) -8.20750E-04 +/- 1.4E-03
 Phase delay (usec) 3.27744429481E+03 Apriori clockrate (us/s) -8.6060005E-06 Resid phdelay (usec) 5.03784E-06 +/- 5.8E-07
 Delay rate (us/s) 1.17657224672E+00 Apriori rate (us/s) 1.17657147118E+00 Resid rate (us/s) 7.75545E-07 +/- 2.4E-09
 Total phase (deg) 199.9 Apriori accel (us/s/s) -2.77291227185E-05 Resid phase (deg) 156.2 +/- 18.0

RMS Theor. Amplitude 0.114 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 79.5 43.1 Search (2048X32) 0.111 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 123.9 75.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 59.5 25.4 Inc. seg. avg. 0.176 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.1 44.3 Inc. frq. avg. 0.129 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

I: az 49.6 el 56.8 pa -101.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -10755.883 -3251.029 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/IN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/IN.W.303.1X1592

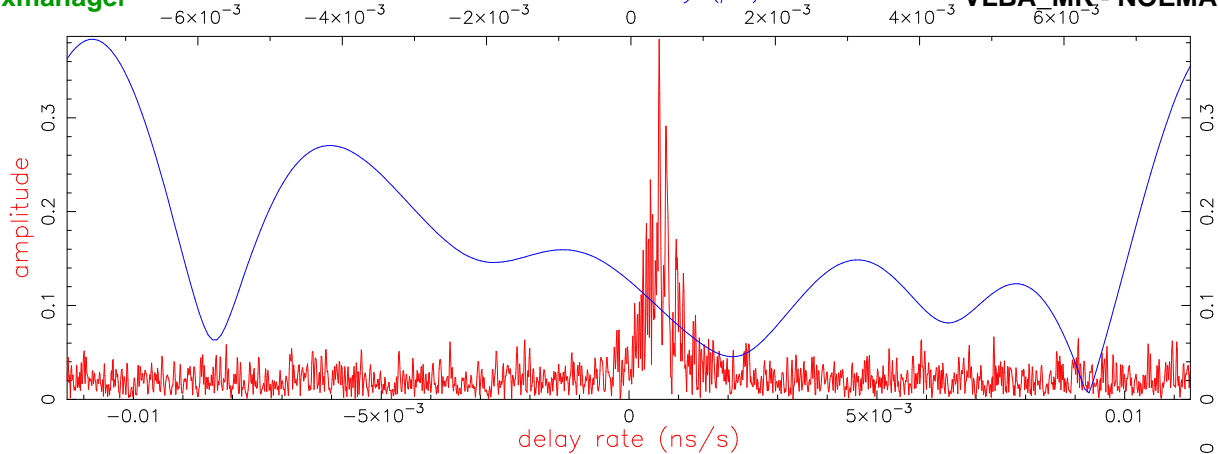
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, mN

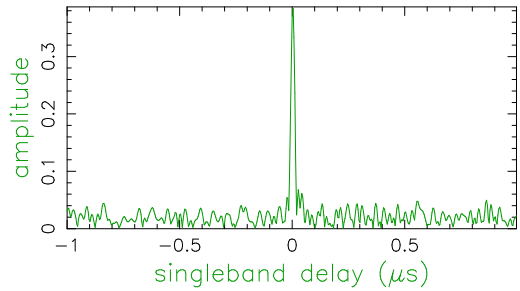
VLBA_MK- NOEMA, fgroup W, pol LL

multiband delay (μ s)

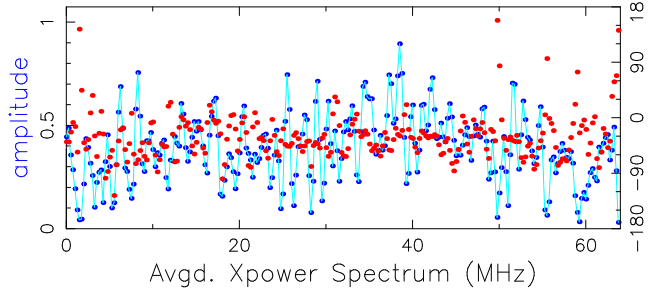


Fringe quality 7

SNR 21.6
Int time 419.825
Amp 0.387
Phase 83.4
PFD 0.0e+00
Delays (us)
SBD 0.002801
MBD -0.007495
Fringe rate (Hz) 0.052851
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

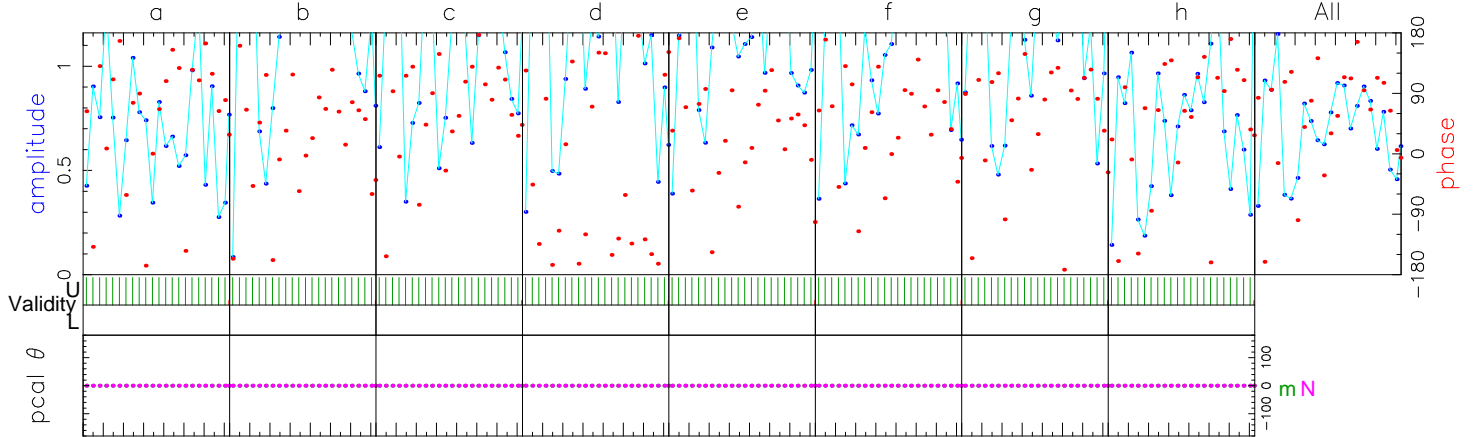


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130424
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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		
m	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.97262183989E+03				-8.97262997026E+03					
Sband delay (usec)	-8.97262716976E+03				2.8958939E+01					
Phase delay (usec)	-8.97262996757E+03				-8.0020001E-06					
Delay rate (us/s)	1.57884338854E+00				1.57884277498E+00					
Total phase (deg)			-146.4		1.59848285057E-05					
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)									83.4	+/- 5.0E-05
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							
simultaneous interpolator										

m: az 40.6 el 14.8 pa -76.5 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -14342.896 -341.584 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/mN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/mN.W.250.1X1592

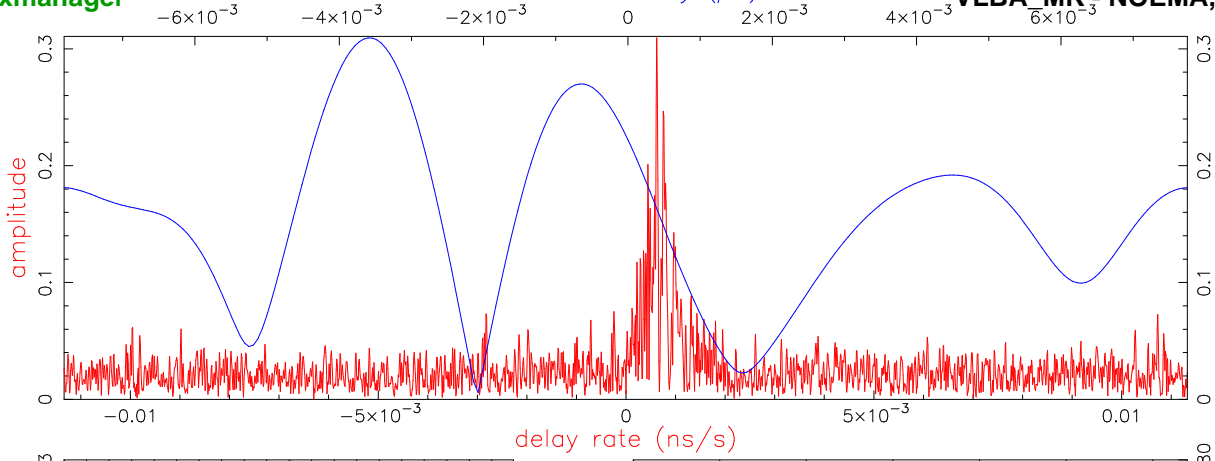
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, mN

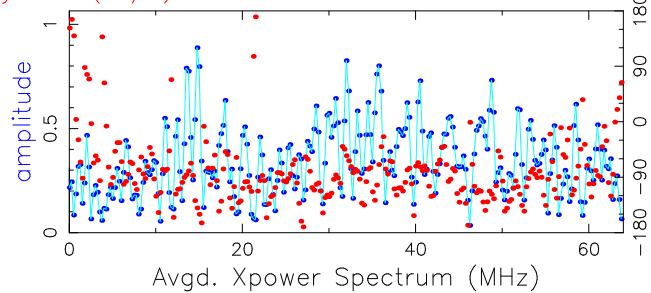
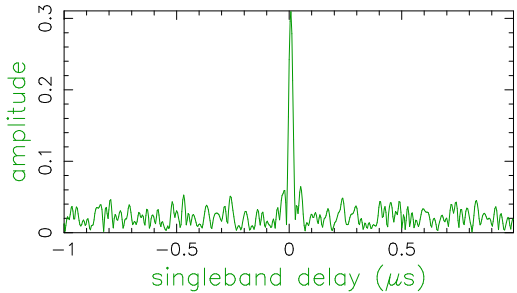
VLBA_MK - NOEMA, fgroup W, pol RR

multiband delay (μ s)



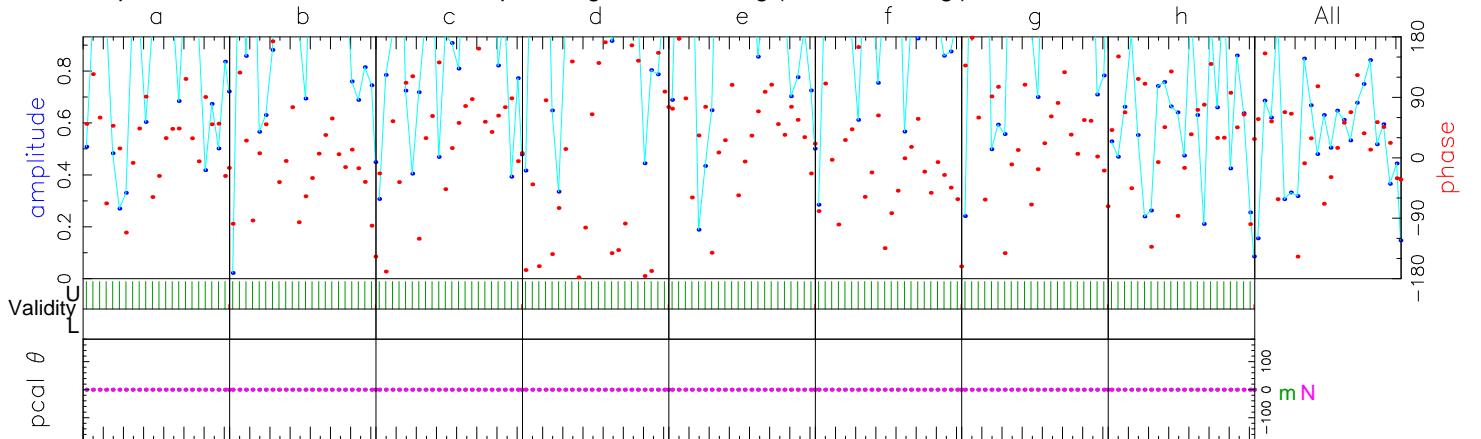
Fringe quality 7

SNR 17.4
 Int time 419.825
 Amp 0.311
 Phase 29.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.007017
 MBD -0.003601
 Fringe rate (Hz)
 0.053046
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130428
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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

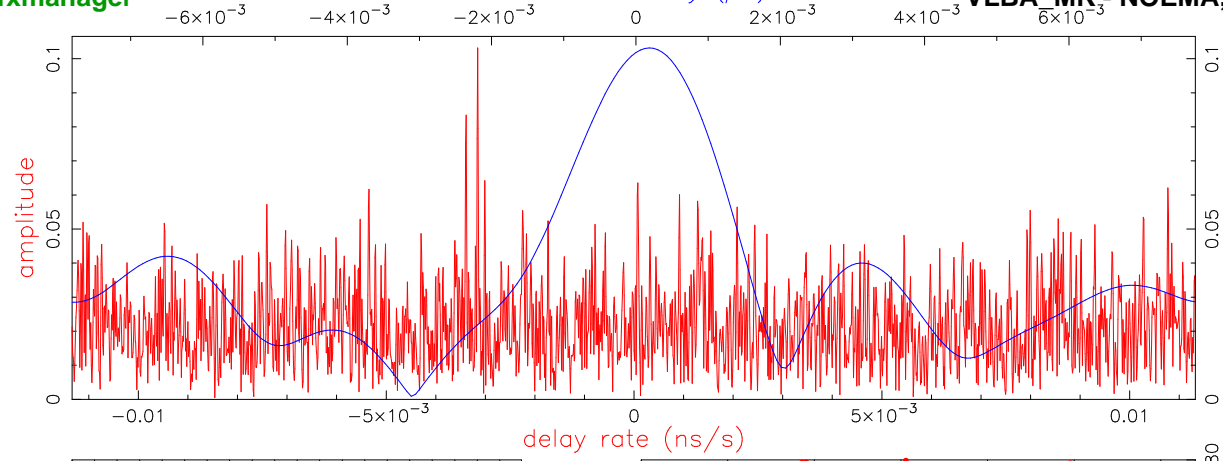


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.97261794616E+03									
Sband delay (usec)	-8.97262295326E+03									
Phase delay (usec)	-8.97262996932E+03									
Delay rate (us/s)	1.57884339080E+00									
Total phase (deg)			-200.5							
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Channels										
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										

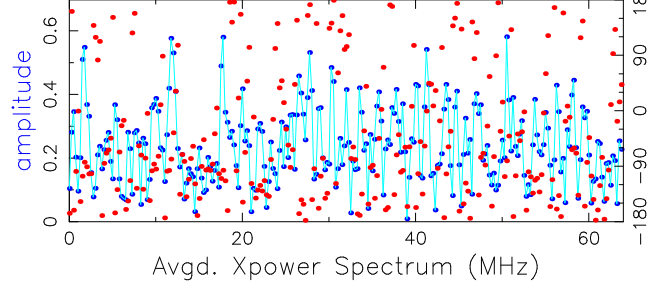
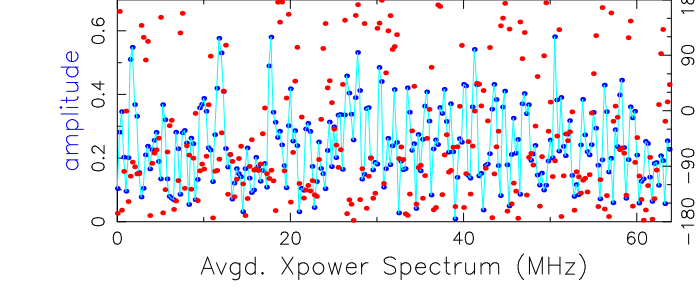
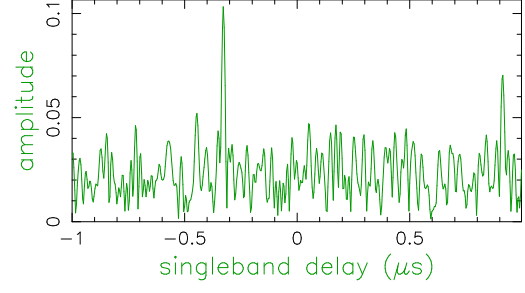
m: az 40.6 el 14.8 pa -76.5 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -14342.896 -341.584

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/mN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/mN.W.271.1X1592

multiband delay (μ s)

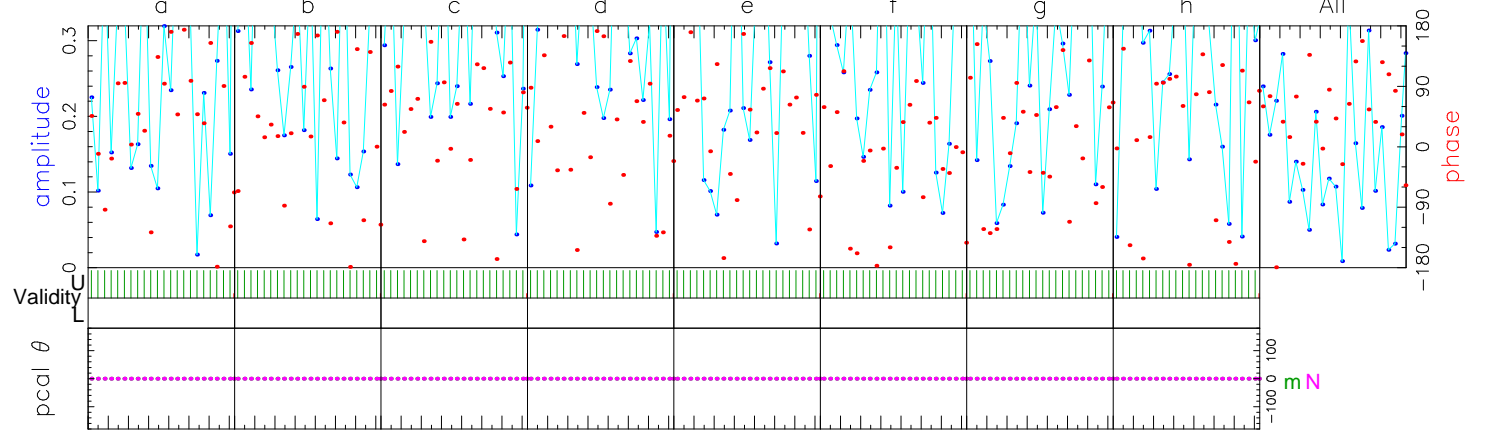


Fringe quality 0
SNR 5.8
Int time 419.825
Amp 0.107
Phase 63.0
PFD 8.4e-01
Delays (us)
SBD -0.328008
MBD 0.000189
Fringe rate (Hz)
-0.271748
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130432
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.97295790638E+03				-8.97262997026E+03				1.88883E-04	+/- 1.9E-04
Sband delay (usec)	-8.97295797851E+03				2.8958939E+01				-3.28008E-01	+/- 1.5E-03
Phase delay (usec)	-8.97262996823E+03				-8.0020001E-06				2.03023E-06	+/- 6.4E-07
Delay rate (us/s)	1.57883962026E+00				1.57884277498E+00				-3.15473E-06	+/- 2.6E-09
Total phase (deg)			-166.9		1.59848285057E-05				63.0	+/- 19.8
ph/seg (deg)	55.6	47.5								
amp/seg (%)	101.5	82.9								
ph/frq (deg)	34.7	28.0								
amp/frq (%)	28.7	48.9								
m: az 40.6 el 14.8 pa -76.5	N: az 304.4 el 44.0 pa 69.6		u,v (fr/asec) -14342.896 -341.584		simultaneous interpolator					

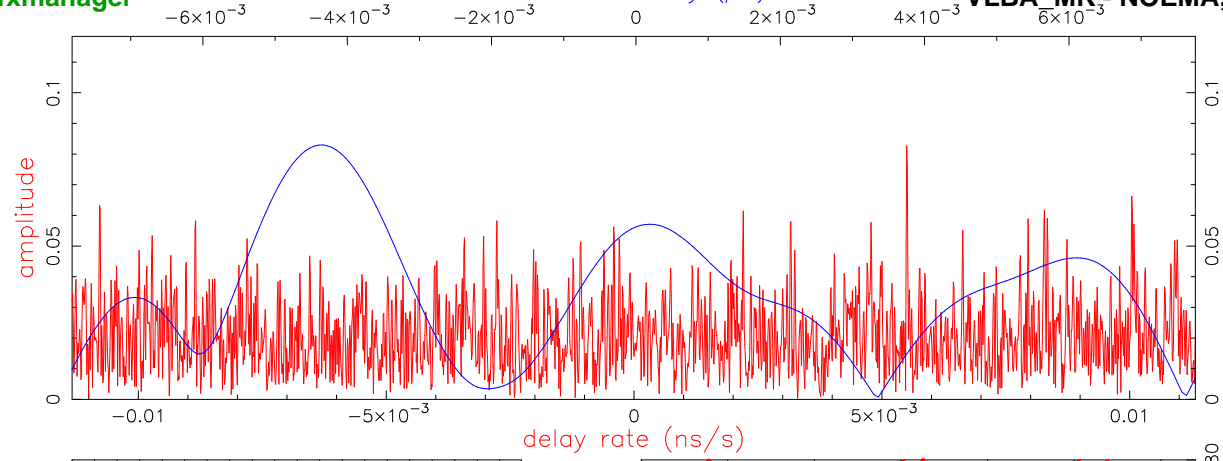
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, mN

VLBA_MK- NOEMA, fgroup W, pol RL

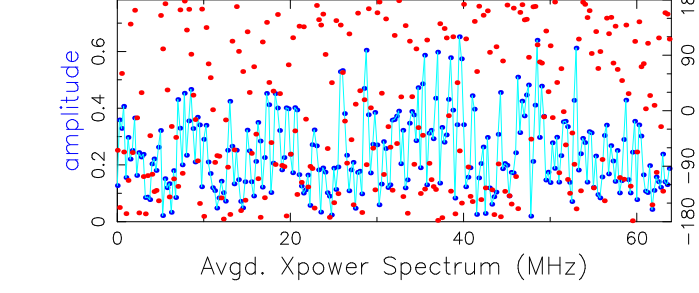
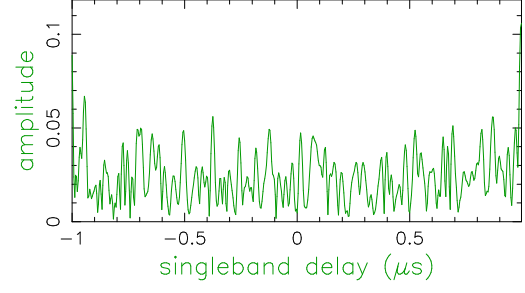
multiband delay (μ s)



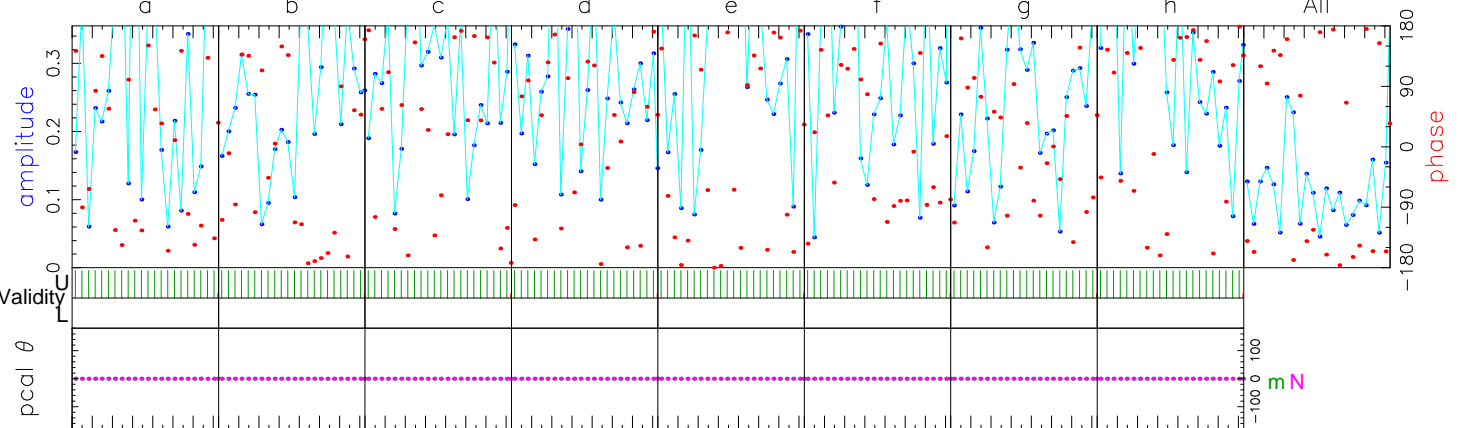
Fringe quality 0

SNR 6.0
 Int time 419.825
 Amp 0.118
 Phase 178.0
 PFD 3.9e-01
 Delays (us)
 SBD 0.994608
 MBD -0.004268
 Fringe rate (Hz)
 0.474806
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130435
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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		
m	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.97163423838E+03	-8.97163536226E+03	-8.97262996452E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03		
Sband delay (usec)	-8.97163536226E+03	-8.97163536226E+03	-8.97262996452E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03	-8.97262997026E+03		
Phase delay (usec)	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03	-8.97262996452E+03		
Delay rate (us/s)	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00	1.57884828701E+00		
Total phase (deg)			-51.8							
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)										
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 θ										
m N										
RMS	48.4	45.7								
Theor.										
Amplitude										
0.118 +/- 0.020										
Search (2048X32)										
0.104										
Interp.										
0.000										
Inc. seg. avg.										
0.096										
Inc. frq. avg.										
0.097										
m: az 40.6 el 14.8 pa -76.5										
N: az 304.4 el 44.0 pa 69.6										
u,v (fr/asec) -14342.896 -341.584										
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0093/mN..1X1592										
Output file: /Exps/c211c/v1/1234/No0093/mN.W.305.1X1592										

simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

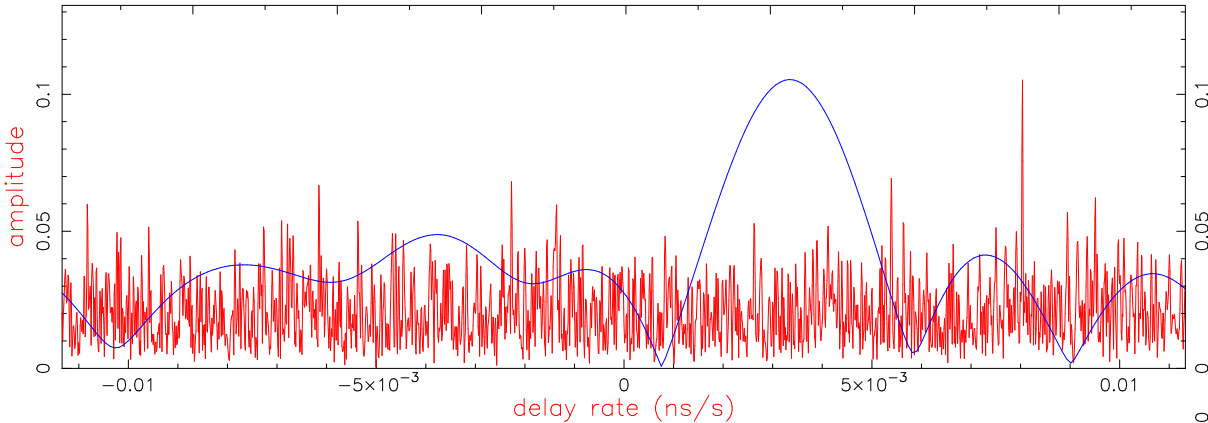
NRAO150.1X1592, No0093, nN

VLBA_NL- NOEMA, fgroup W, pol LL

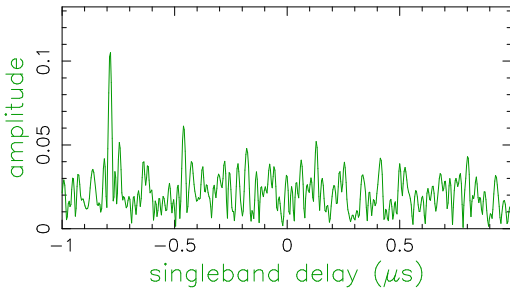
multiband delay (μ s)

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

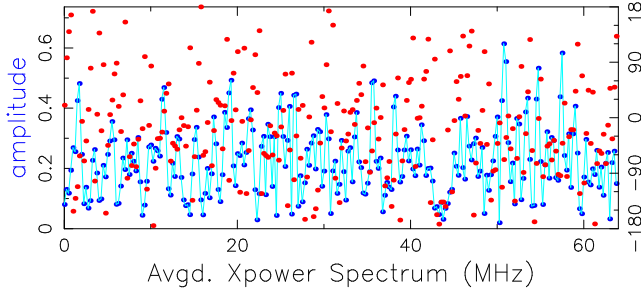
Fringe quality 0



SNR 6.0
 Int time 419.820
 Amp 0.132
 Phase -115.5
 PFD 4.5e-01
 Delays (us)
 SBD -0.786620
 MBD 0.002208
 Fringe rate (Hz)
 0.693173
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

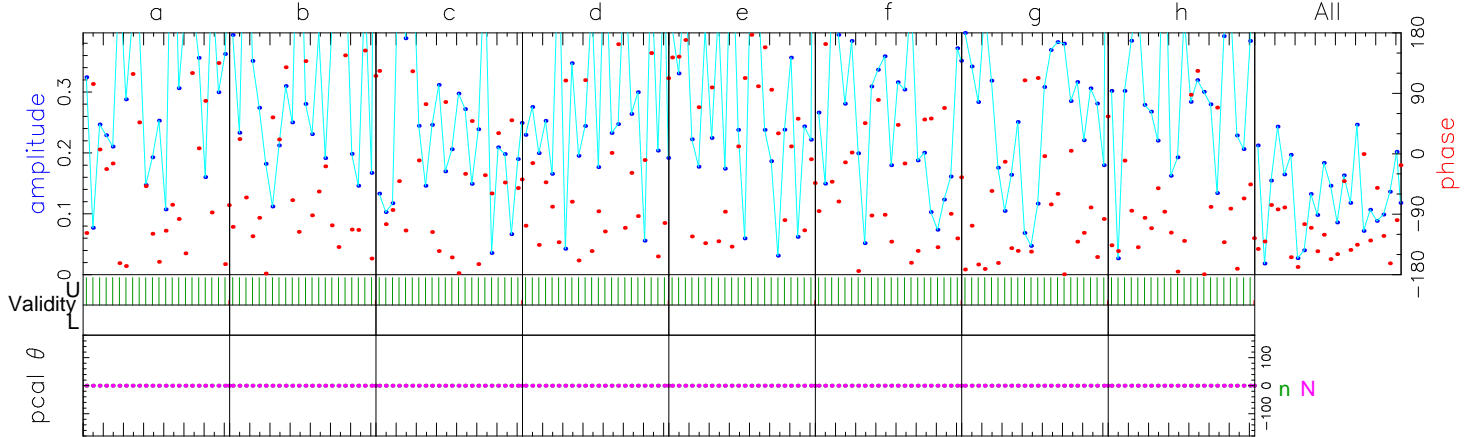


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130425
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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
	-127.4	-120.7	-68.8	-114.1	-177.9	-67.3	-119.7	-108.5	Phase	-115.5
	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	139.8	193.9	410.0	389.3	289.1	201.0	429.1	56.1	Sbd box	55.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.36488325474E+03	Apriori delay (usec)	5.36566229643E+03	Resid mbdelay (usec)	2.20831E-03	+/-	1.8E-04
Sband delay (usec)	5.36487567668E+03	Apriori clock (usec)	1.8727684E+01	Resid sbdelay (usec)	-7.86620E-01	+/-	1.4E-03
Phase delay (usec)	5.36566229271E+03	Apriori clockrate (us/s)	-8.0200005E-06	Resid phdelay (usec)	-3.72525E-06	+/-	6.2E-07
Delay rate (us/s)	9.79383122725E-01	Apriori rate (us/s)	9.79375075671E-01	Resid rate (us/s)	8.04705E-06	+/-	2.6E-09
Total phase (deg)	-38.3	Apriori accel (us/s/s)	-3.16512055529E-05	Resid phase (deg)	-115.5	+/-	19.2

ph/seg (deg)	43.2	Theor.	46.0	Amplitude	0.132 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	64.6	Search (2048X32)	0.103	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	37.9	Inc. seg. avg.	0.125	Inc. frq. avg.	0.132	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	41.0	Inc. frq. avg.	0.132	Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048	nlags: 256
n: az 54.1 el 69.4 pa -107.2		N: az 304.4 el 44.0 pa 69.6		u, v (fr/asec) -8968.165 -3194.652		ion window (TEC)	0.00 0.00

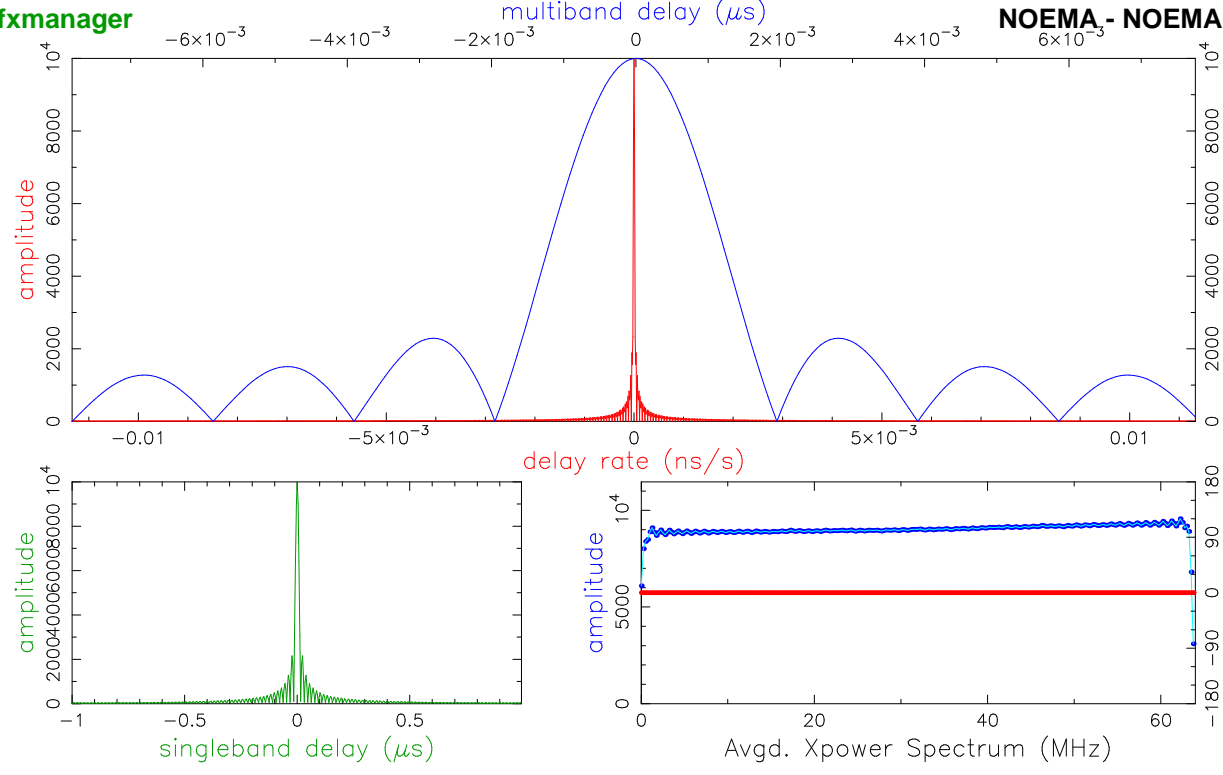
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/nN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/nN.W.258.1X1592 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

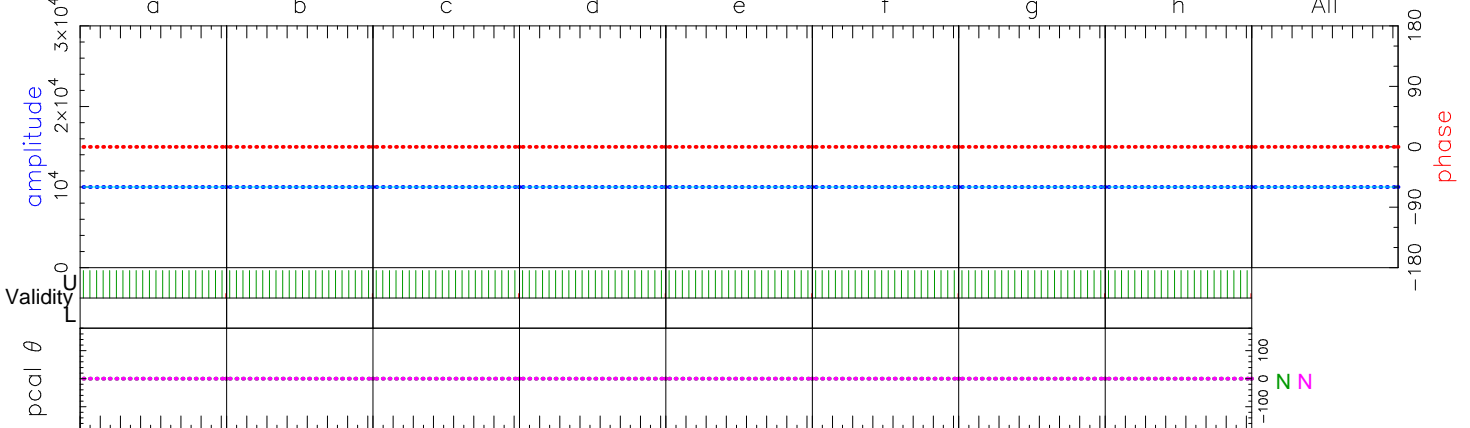
NRAO150.1X1592, No0093, NN

NOEMA - NOEMA, fgroup W, pol LL



Fringe quality 9
 SNR 560314.6
 Int time 419.825
 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. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130427
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"

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

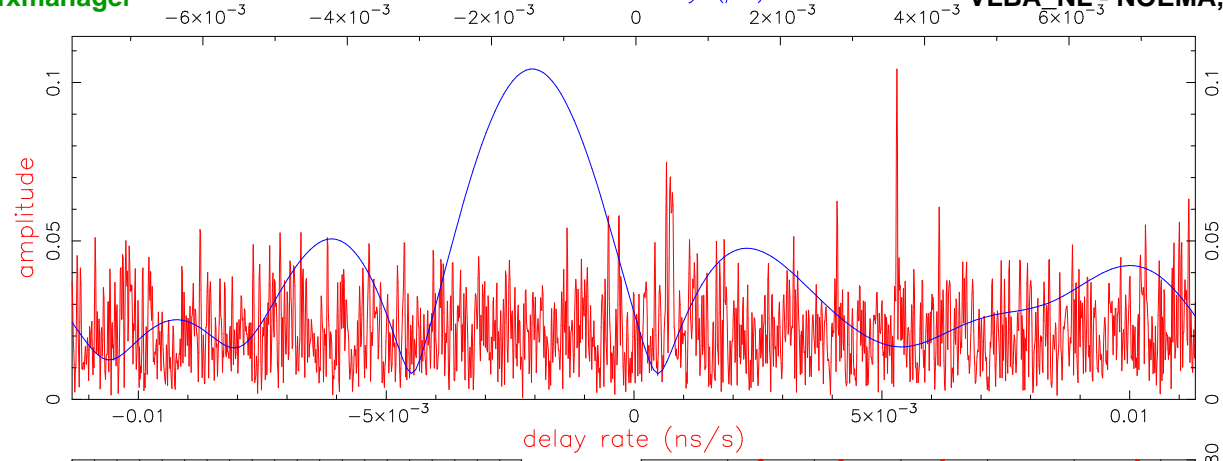


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0
N	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
N	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

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

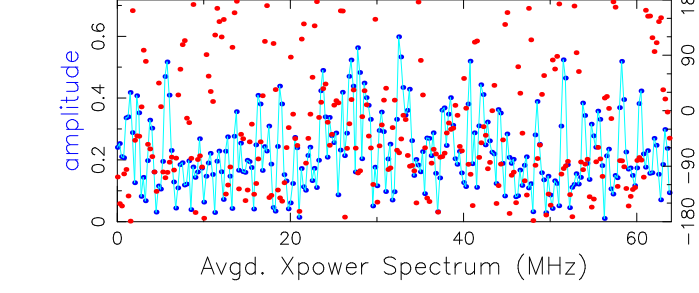
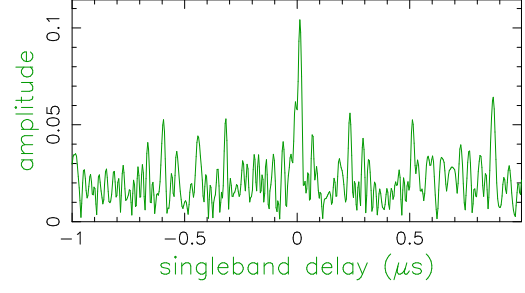
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

multiband delay (μ s)



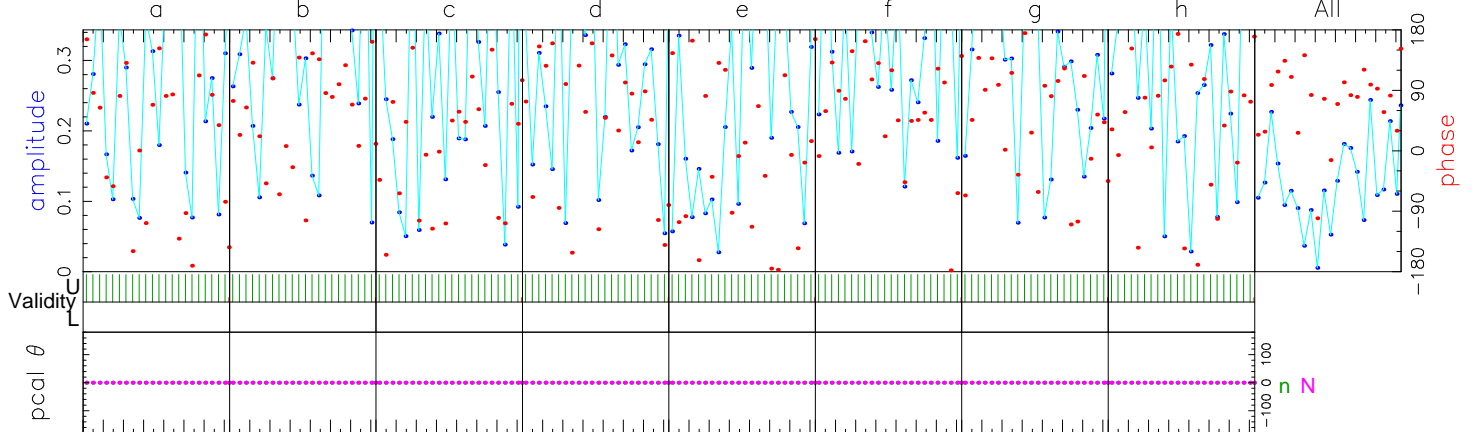
Fringe quality 0

SNR 5.9
 Int time 419.820
 Amp 0.115
 Phase 83.3
 PFD 7.0e-01
 Delays (us)
 SBD 0.012333
 MBD -0.001422
 Fringe rate (Hz)
 0.457581
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130429
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.36567649967E+03			5.36566229643E+03				-1.42176E-03	+/- 1.9E-04
Sband delay (usec)		5.36567462968E+03			1.8727684E+01				1.23332E-02	+/- 1.5E-03
Phase delay (usec)		5.36566229912E+03			-8.0200005E-06				2.68652E-06	+/- 6.3E-07
Delay rate (us/s)		9.79380387733E-01			9.79375075671E-01				5.31206E-06	+/- 2.6E-09
Total phase (deg)			160.6		-3.16512055529E-05				83.3	+/- 19.6
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 (MSamp/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) 54.1 46.9 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.0 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 65.0 27.7 Inc. seg. avg. 0.102 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.7 48.3 Inc. frq. avg. 0.111 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 54.1 el 69.4 pa -107.2 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -8968.165 -3194.652 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/nN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/nN.W.278.1X1592

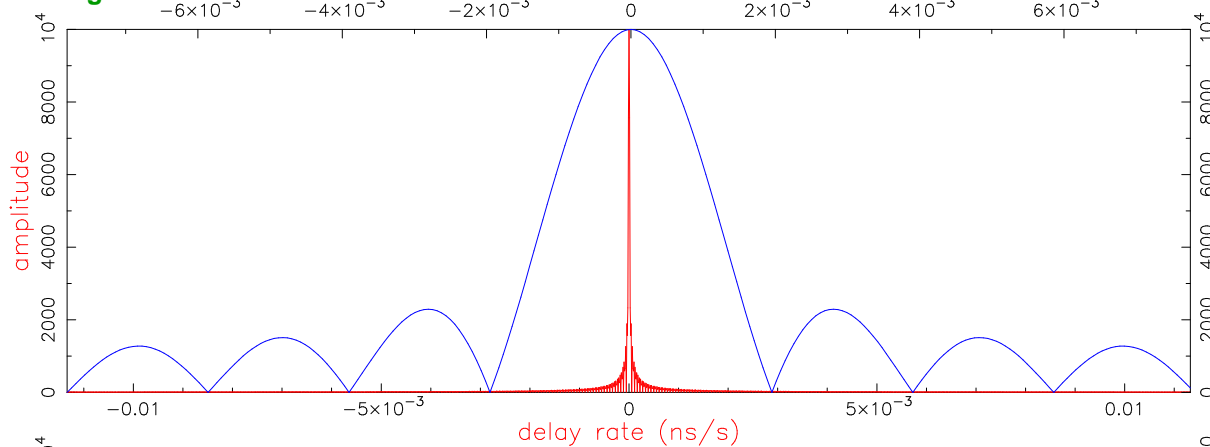
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NN

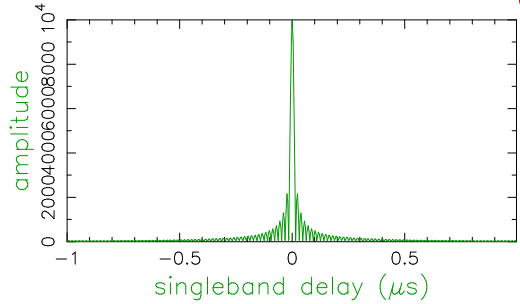
NOEMA - NOEMA, fgroup W, pol RR

multiband delay (μ s)

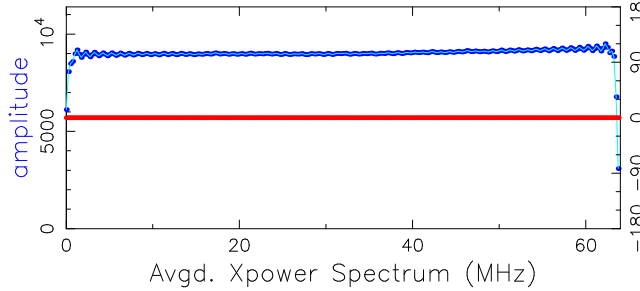


Fringe quality 9

SNR 560314.6
 Int time 419.825
 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

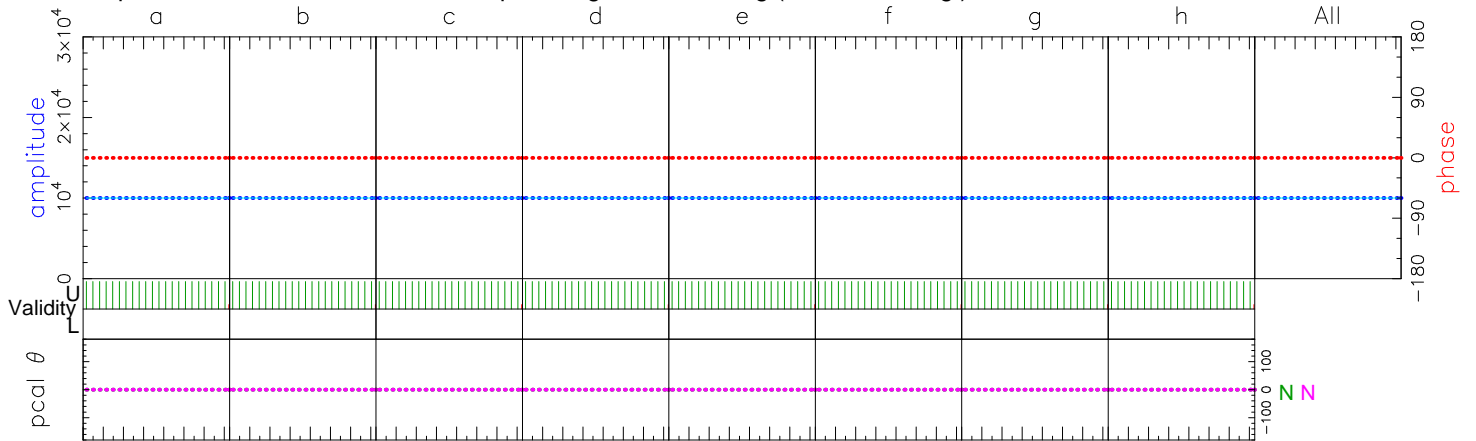


delay rate (ns/s)



Exp. c211c
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130431
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5					
amp/seg (%)	0.0	Search (2048X32)	10000.000	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000						
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008					
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011						
N:	az 304.4	el 44.0	pa 69.6	N:	az 304.4	el 44.0	pa 69.6	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/c211c/v1/1234/No0093/NN..1X1592	Output file:	/Exps/c211c/v1/1234/No0093/NN.W.284.1X1592	u,v (fr/asec)	0.000	0.000	simultaneous interpolator							

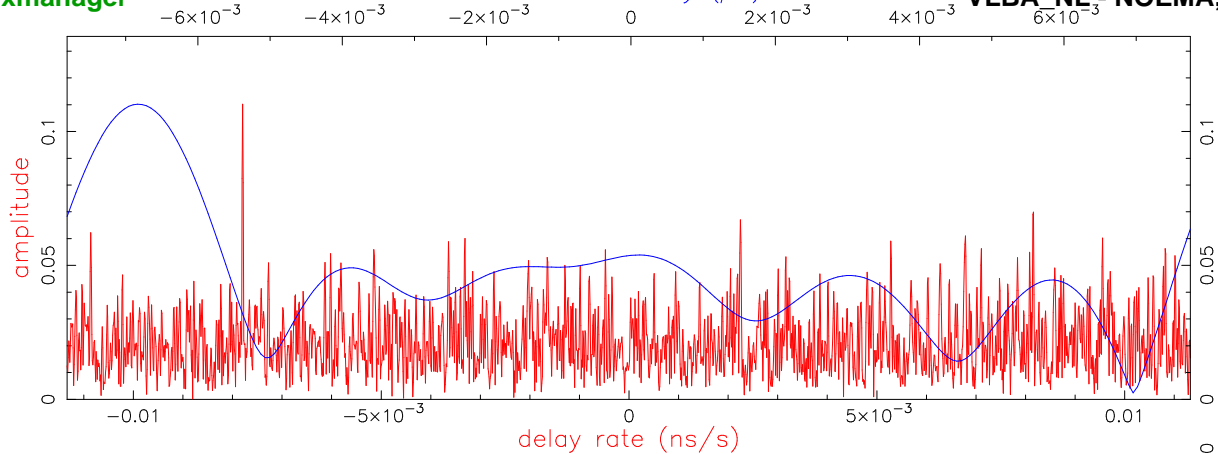
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, nN

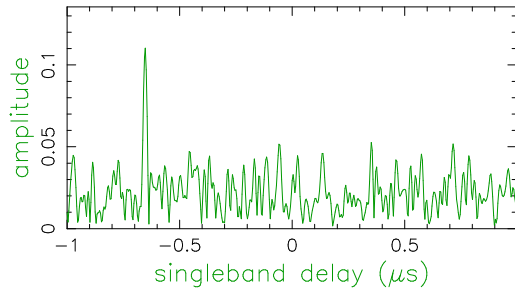
VLBA_NL- NOEMA, fgroup W, pol LR

multiband delay (μ s)

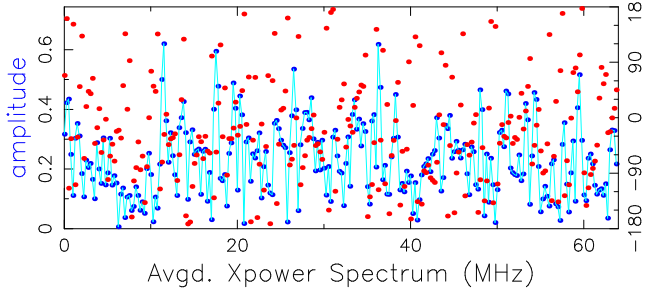


Fringe quality 0

SNR 6.2
 Int time 419.820
 Amp 0.135
 Phase 80.0
 PFD 1.4e-01
 Delays (us)
 SBD -0.653133
 MBD -0.006840
 Fringe rate (Hz)
 -0.672377
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

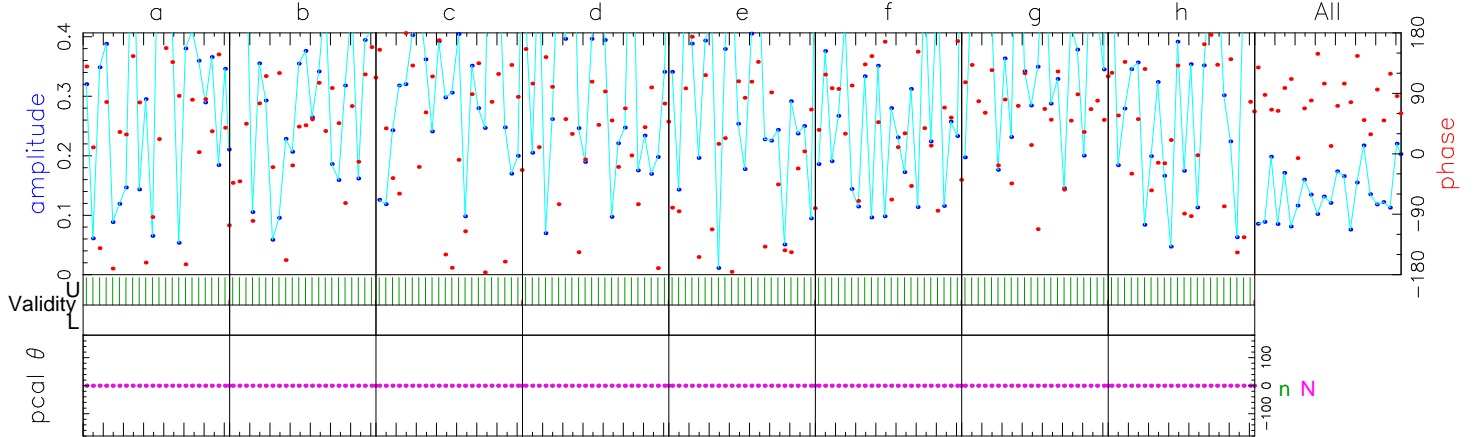


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130433
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.36501483096E+03			5.36566229643E+03				-6.84047E-03	+/- 1.8E-04
Sband delay (usec)		5.36500916318E+03			1.8727684E+01				-6.53133E-01	+/- 1.4E-03
Phase delay (usec)		5.36566229901E+03			-8.0200005E-06				2.58005E-06	+/- 6.0E-07
Delay rate (us/s)		9.79367270044E-01			9.79375075671E-01				-7.80563E-06	+/- 2.5E-09
Total phase (deg)			157.3		-3.1651205529E-05				80.0	+/- 18.5
	RMS	Theor.	Amplitude	0.135 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	38.6	44.3	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	44.4	77.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	45.4	26.2	Inc. seg. avg.	0.128	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	58.5	45.6	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
n: az 54.1 el 69.4 pa -107.2	N: az 304.4 el 44.0 pa 69.6		u,v (fr/asec) -8968.165 -3194.652				simultaneous interpolator			

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/nN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/nN.W.297.1X1592

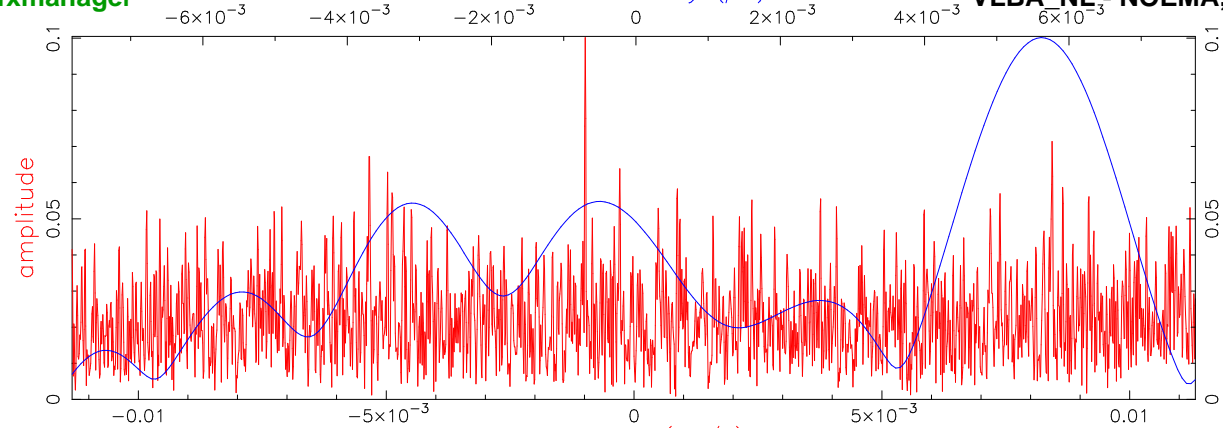
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

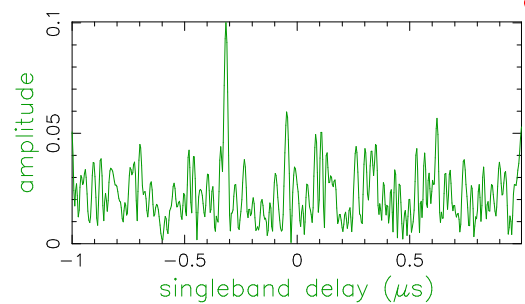
NRAO150.1X1592, No0093, nN

VLBA_NL- NOEMA, fgroup W, pol RL

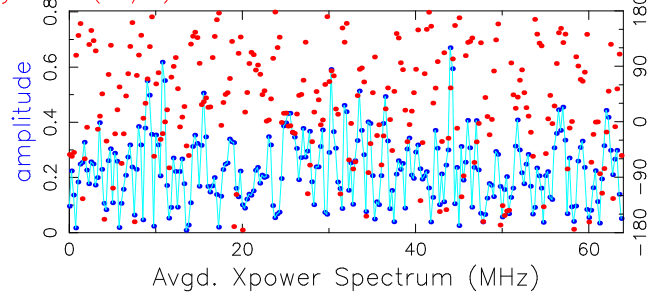
multiband delay (μ s)



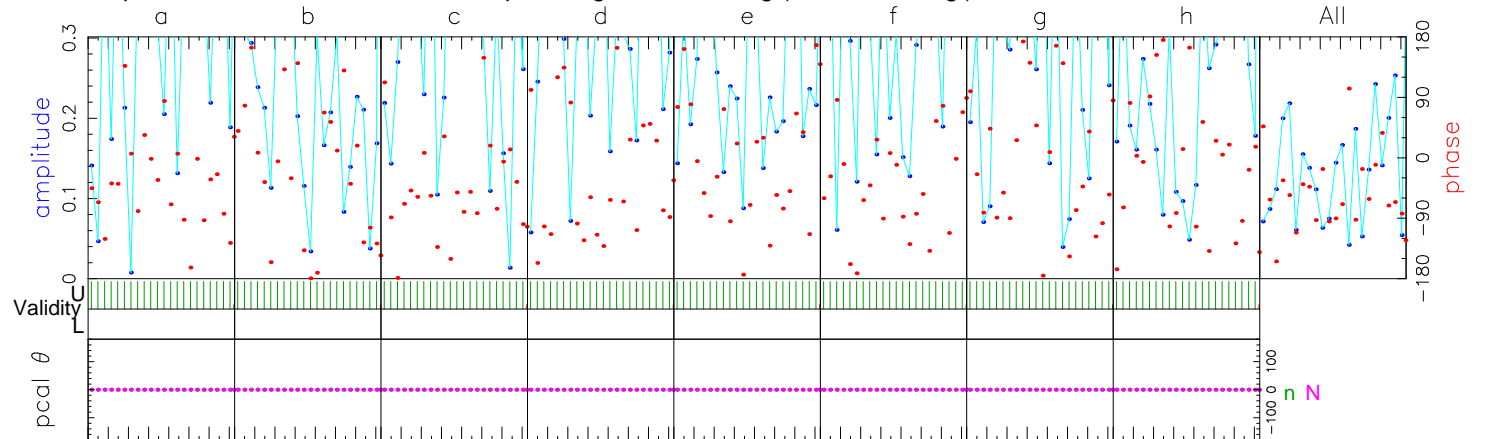
Fringe quality 0
 SNR 5.6
 Int time 419.820
 Amp 0.100
 Phase -57.7
 PFD 9.9e-01
 Delays (us)
 SBD -0.316615
 MBD 0.005616
 Fringe rate (Hz)
 -0.084828
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130437
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-55.6	38.5	-70.7	-94.2	-34.6	-48.2	-98.9	-33.4	Phase	-57.7
	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	54.7	146.5	175.8	461.5	1.4	334.1	198.1	34.5	Sbd box	175.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.36533978745E+03		Apriori delay (usec)		5.36566229643E+03		Resid mbdelay (usec)		5.61602E-03	+/- 1.9E-04
Sband delay (usec)	5.36534568118E+03		Apriori clock (usec)		1.8727684E+01		Resid sbdelay (usec)		-3.16615E-01	+/- 1.5E-03
Phase delay (usec)	5.36566229457E+03		Apriori clockrate (us/s)		-8.0200005E-06		Resid phdelay (usec)		-1.86135E-06	+/- 6.6E-07
Delay rate (us/s)	9.79374090898E-01		Apriori rate (us/s)		9.79375075671E-01		Resid rate (us/s)		-9.84773E-07	+/- 2.7E-09
Total phase (deg)	19.5		Apriori accel (us/s/s)		-3.16512055529E-05		Resid phase (deg)		-57.7	+/- 20.4

ph/seg (deg) 56.7 49.0 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.5 85.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.7 28.9 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 55.6 50.4 Inc. frq. avg. 0.101 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 54.1 el 69.4 pa -107.2 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -8968.165 -3194.652 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/nN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/nN.W.316.1X1592

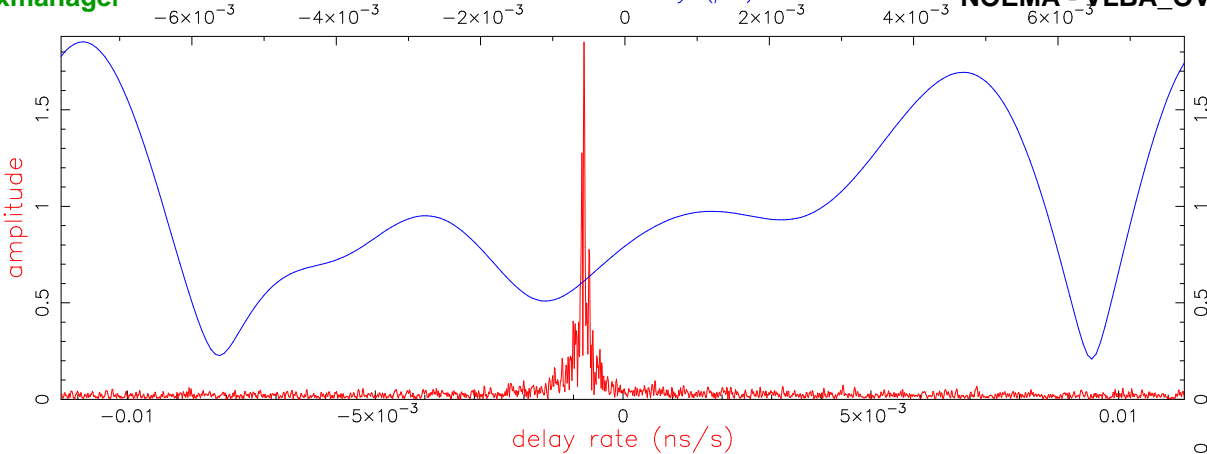
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, No

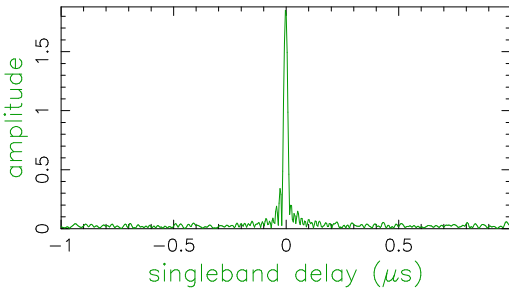
NOEMA - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

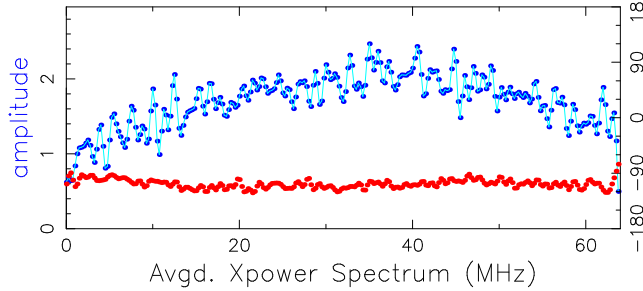


Fringe quality 2

SNR 105.1
Int time 419.824
Amp 1.880
Phase -48.0
PFD 0.0e+00
Delays (us)
SBD -0.002345
MBD -0.007472
Fringe rate (Hz)
-0.067680
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

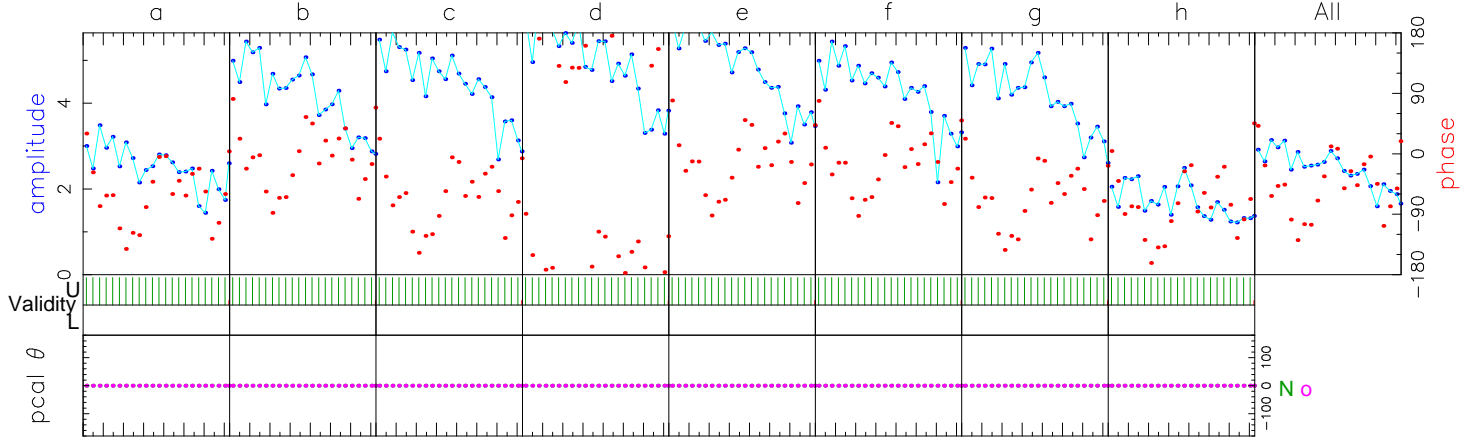


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180000.00
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130435
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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
	-62.3	-6.9	-64.2	-176.3	-14.2	-15.7	-64.7	-74.6	Phase	-48.0
	1.8	3.1	3.3	3.7	3.6	3.2	3.1	1.3	Ampl.	2.9
	258.1	256.4	255.6	255.9	256.1	255.9	256.5	258.2	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.83822675150E+03		Apriori delay (usec)		-1.83821927928E+03		Resid mbdelay (usec)		-7.47221E-03	+/- 1.0E-05
Sband delay (usec)	-1.83822162453E+03		Apriori clock (usec)		-1.6997192E+01		Resid sbdelay (usec)		-2.34525E-03	+/- 8.2E-05
Phase delay (usec)	-1.83821928083E+03		Apriori clockrate (us/s)		7.9599998E-06		Resid phdelay (usec)		-1.54709E-06	+/- 3.5E-08
Delay rate (us/s)	-1.27878641318E+00		Apriori rate (us/s)		-1.27878562749E+00		Resid rate (us/s)		-7.85694E-07	+/- 1.4E-10
Total phase (deg)			Apriori accel (us/s/s)		1.82566066998E-05		Resid phase (deg)		-48.0	+/- 1.1

ph/seg (deg) 42.8 2.6 Search (2048X32) 1.833 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 39.5 4.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 60.3 1.5 Inc. seg. avg. 2.501 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 69.4 2.7 Inc. frq. avg. 2.896 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
N: az 304.4 el 44.0 pa 69.6 o: az 52.2 el 50.1 pa -88.4 u,v (fr/asec) 11671.239 2209.515 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/No..1X1592 Output file: /Exps/c211c/v1/1234/No0093/No.W.302.1X1592

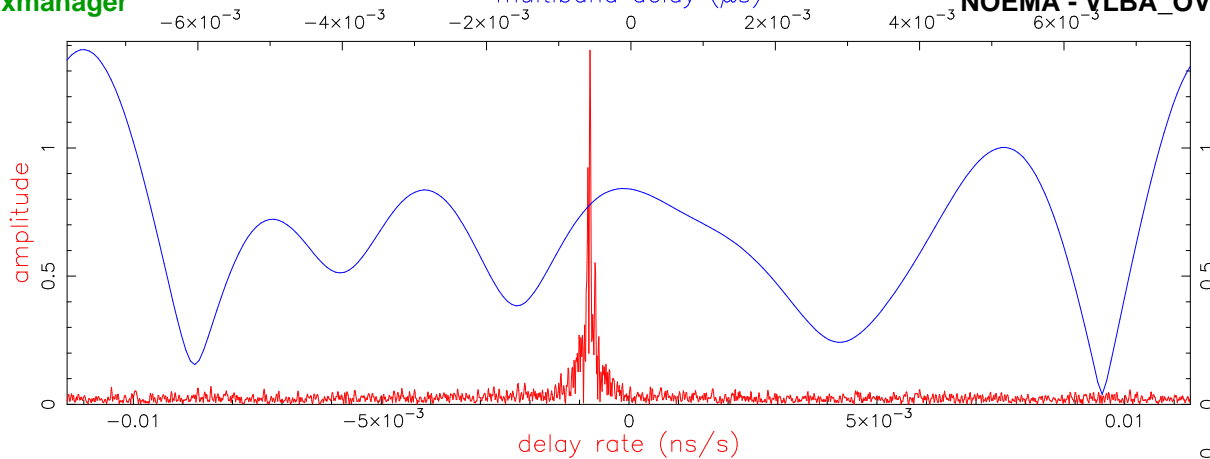
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, No

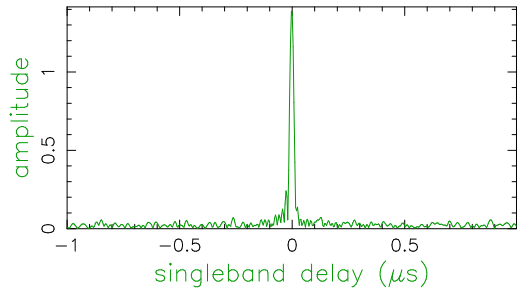
NOEMA - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

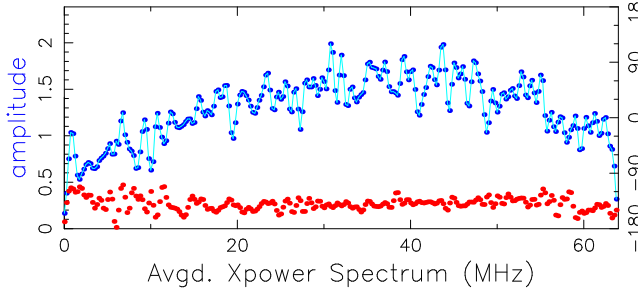


Fringe quality 2

SNR 79.2
 Int time 419.824
 Amp 1.416
 Phase -76.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002061
 MBD -0.007646
 Fringe rate (Hz)
 -0.067723
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

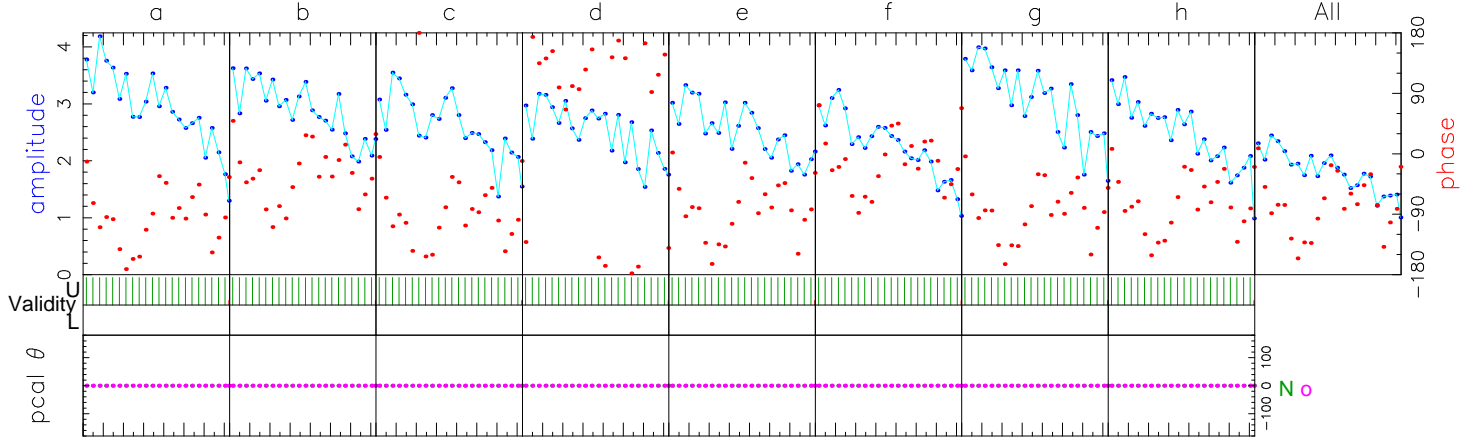


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130439
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-95.9	-31.3	-94.9	146.5	-81.0	-13.5	-86.2	-74.4	Phase	-76.7
	2.3	2.2	2.0	1.9	1.9	1.8	2.4	1.9	Ampl.	2.0
	258.2	255.9	255.5	255.7	255.7	255.5	256.5	258.3	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.83822692522E+03	Apriori delay (usec)	-1.83821927928E+03	Resid mbdelay (usec)	-7.64593E-03	+/-	1.4E-05
Sband delay (usec)	-1.83822134078E+03	Apriori clock (usec)	-1.6997192E+01	Resid sbdelay (usec)	-2.06150E-03	+/-	1.1E-04
Phase delay (usec)	-1.83821928176E+03	Apriori clockrate (us/s)	7.9599998E-06	Resid phdelay (usec)	-2.47486E-06	+/-	4.7E-08
Delay rate (us/s)	-1.27878641369E+00	Apriori rate (us/s)	-1.27878562749E+00	Resid rate (us/s)	-7.86197E-07	+/-	1.9E-10
Total phase (deg)	-335.0	Apriori accel (us/s/s)	1.82566066998E-05	Resid phase (deg)	-76.7	+/-	1.4

ph/seg (deg)	41.4	Theor.	3.5	Amplitude	1.416 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	37.8		6.1	Search (2048X32)	1.363	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	65.3		2.0	Inc. seg. avg.	1.831	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	46.2		3.6	Inc. frq. avg.	2.038	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

N: az 304.4 el 44.0 pa 69.6 o: az 52.2 el 50.1 pa -88.4 u,v (fr/asec) 11671.239 2209.515 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/No..1X1592 Output file: /Exps/c211c/v1/1234/No0093/No.W.319.1X1592

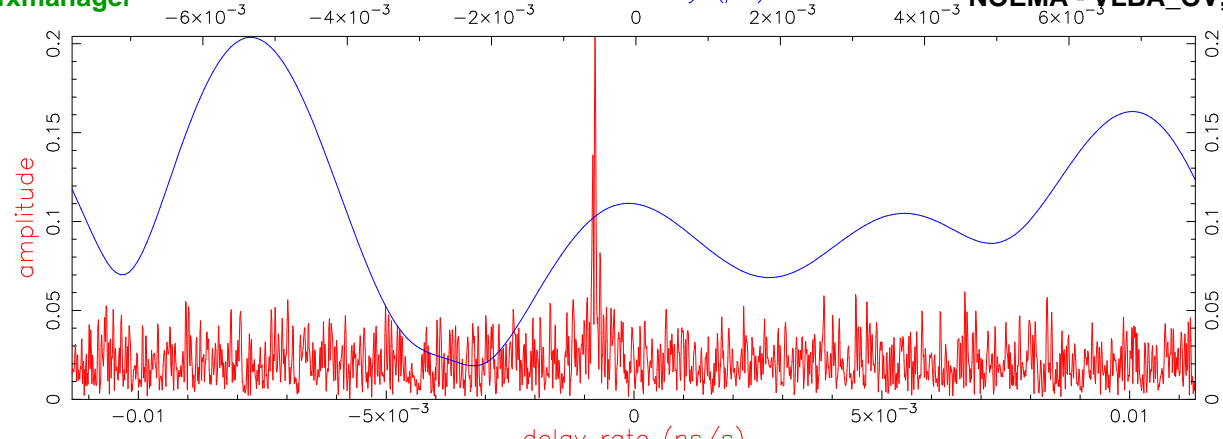
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

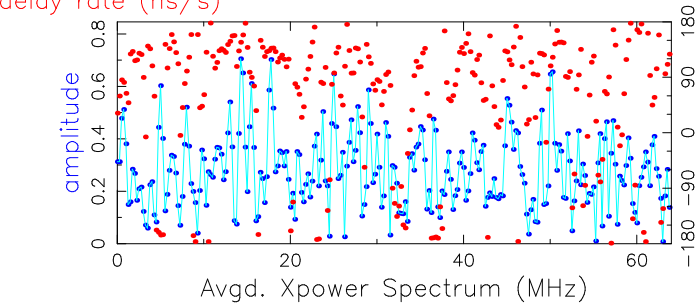
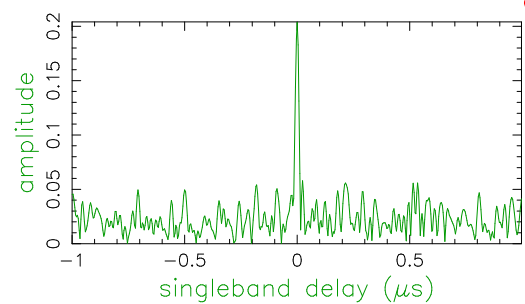
NRAO150.1X1592, No0093, No

NOEMA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

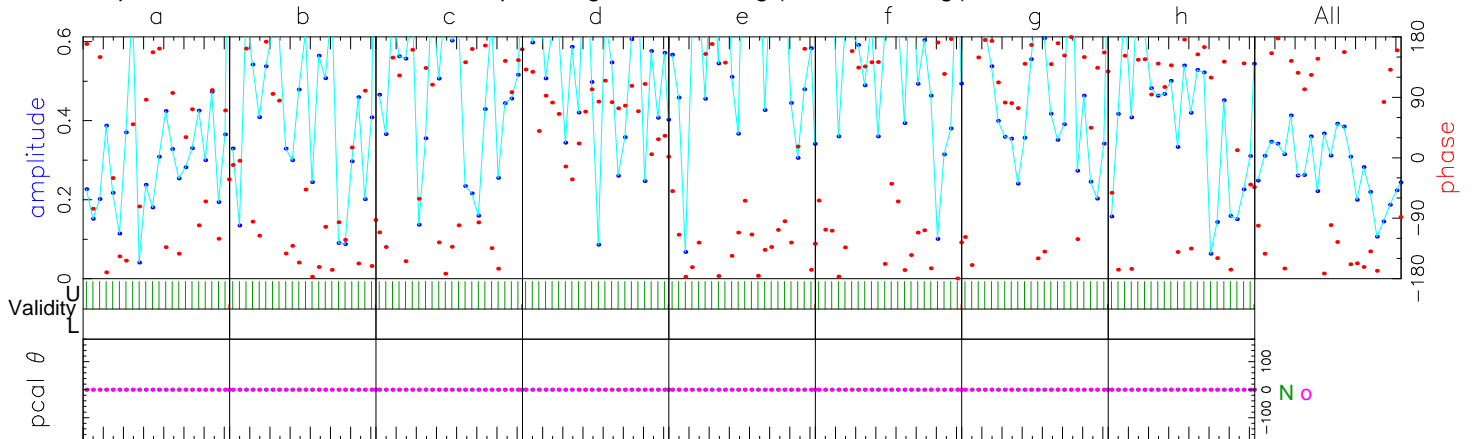


Fringe quality 9
 SNR 11.4
 Int time 419.824
 Amp 0.204
 Phase 178.4
 PFD 1.7e-21
 Delays (us)
 SBD -0.000264
 MBD -0.005342
 Fringe rate (Hz)
 -0.067640
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130443
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.83822462162E+03									
Sband delay (usec)	-1.83821954353E+03									
Phase delay (usec)	-1.83821927353E+03									
Delay rate (us/s)	-1.27878641273E+00									
Total phase (deg)			-79.9							
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)									178.4	+/- 10.0
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									
PC period (AP's)	5	5								
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) 47.3 24.1 Search (2048X32) 0.199 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.1 42.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.6 14.2 Inc. seg. avg. 0.260 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 72.1 24.8 Inc. frq. avg. 0.286 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 o: az 52.2 el 50.1 pa -88.4 u,v (fr/asec) 11671.239 2209.515 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/No..1X1592 Output file: /Exps/c211c/v1/1234/No0093/No.W.334.1X1592

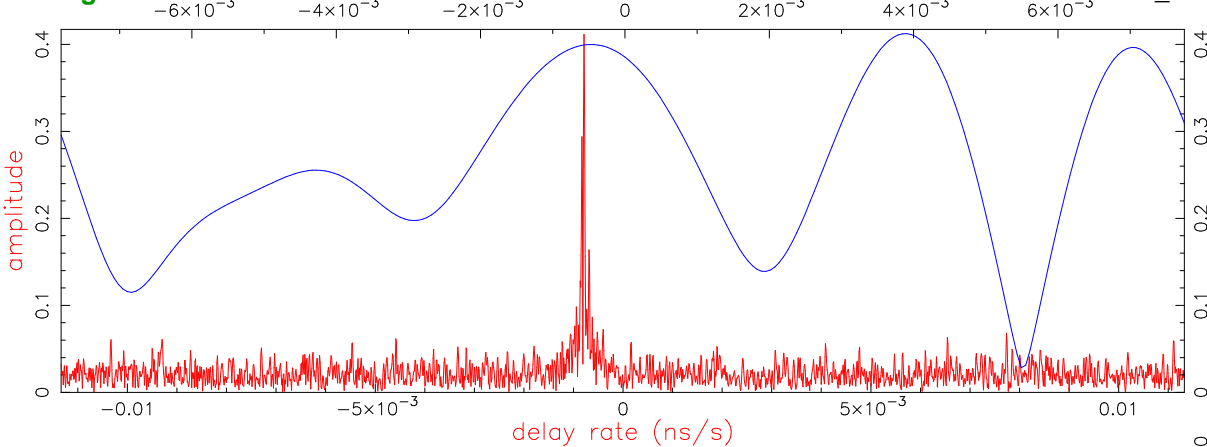
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, No

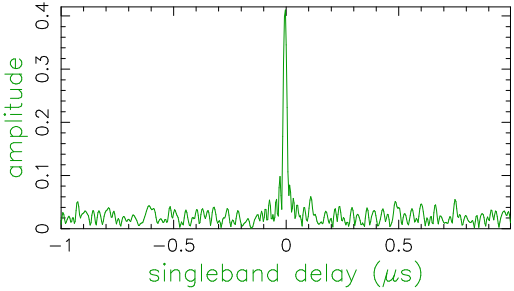
NOEMA - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

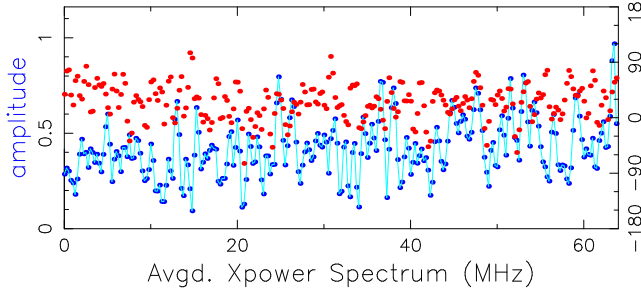


Fringe quality 7

SNR 23.3
 Int time 419.824
 Amp 0.417
 Phase -79.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.005256
 MBD 0.003807
 Fringe rate (Hz)
 -0.067540
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

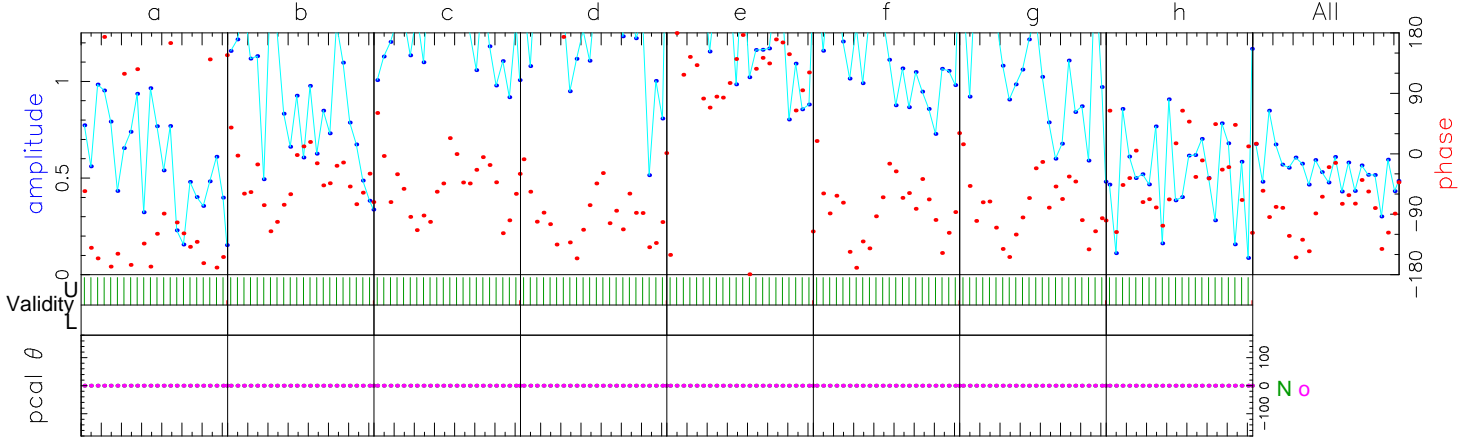


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130447
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-161.7	-38.6	-47.6	-93.4	131.1	-81.2	-78.0	-30.5		Phase
	0.4	0.7	0.9	1.0	1.0	0.8	0.8	0.4		Ampl.
	257.6	255.5	255.2	255.5	255.6	255.6	255.8	257.2		Sbd box
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
N	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	0	0	0	0	0	0	0	0		PC freqs
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
N:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
N	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-1.83823109715E+03	Apriori delay (usec)	-1.83821927928E+03	Resid mbdelay (usec)	3.80713E-03	+/-	4.7E-05
Sband delay (usec)	-1.83822453503E+03	Apriori clock (usec)	-1.6997192E+01	Resid sbdelay (usec)	-5.25575E-03	+/-	3.7E-04
Phase delay (usec)	-1.83821928184E+03	Apriori clockrate (us/s)	7.9599998E-06	Resid phdelay (usec)	-2.55991E-06	+/-	1.6E-07
Delay rate (us/s)	-1.27878641156E+00	Apriori rate (us/s)	-1.27878562749E+00	Resid rate (us/s)	-7.84070E-07	+/-	6.5E-10
Total phase (deg)	-337.7	Apriori accel (us/s/s)	1.82566066998E-05	Resid phase (deg)	-79.4	+/-	4.9

ph/seg (deg)	42.6	Theor.	11.8	Search (2048X32)	0.403	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	40.6		20.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	75.7		6.9	Inc. seg. avg.	0.536	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	98.8		12.1	Inc. frq. avg.	0.753	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 304.4 el 44.0 pa 69.6 o: az 52.2 el 50.1 pa -88.4 u,v (fr/asec) 11671.239 2209.515 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/No..1X1592 Output file: /Exps/c211c/v1/1234/No0093/No.W.354.1X1592

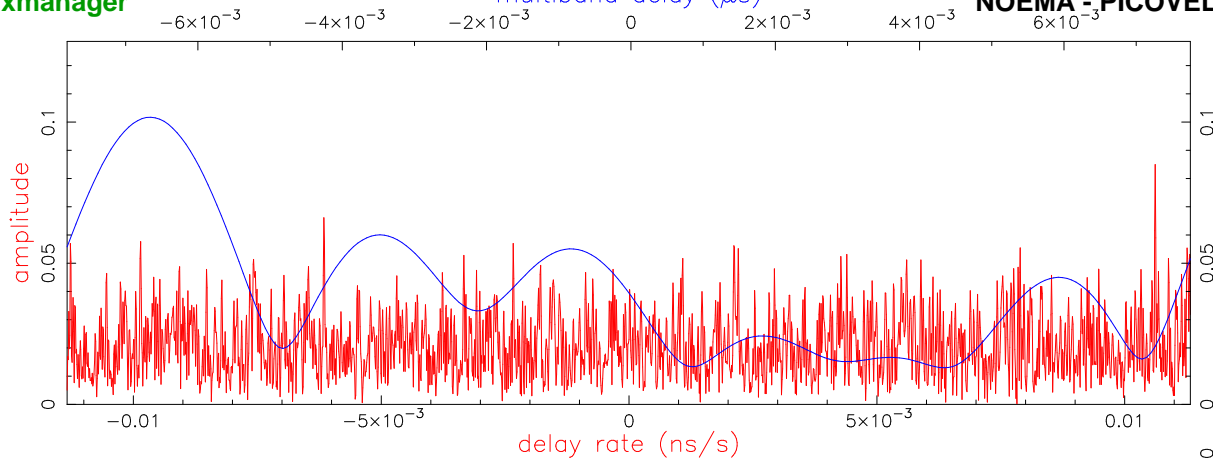
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NP

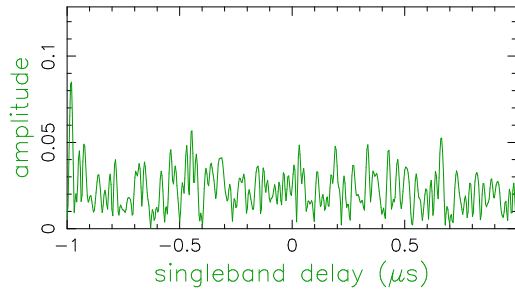
NOEMA - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

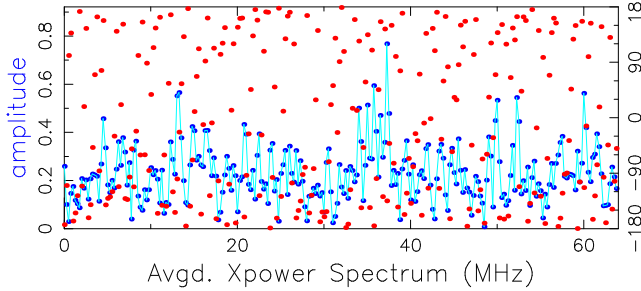


Fringe quality 0

SNR 4.9
 Int time 419.825
 Amp 0.129
 Phase -58.2
 PFD 1.0e+00
 Delays (us)
 SBD -0.982180
 MBD 0.008301
 Fringe rate (Hz)
 0.916232
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

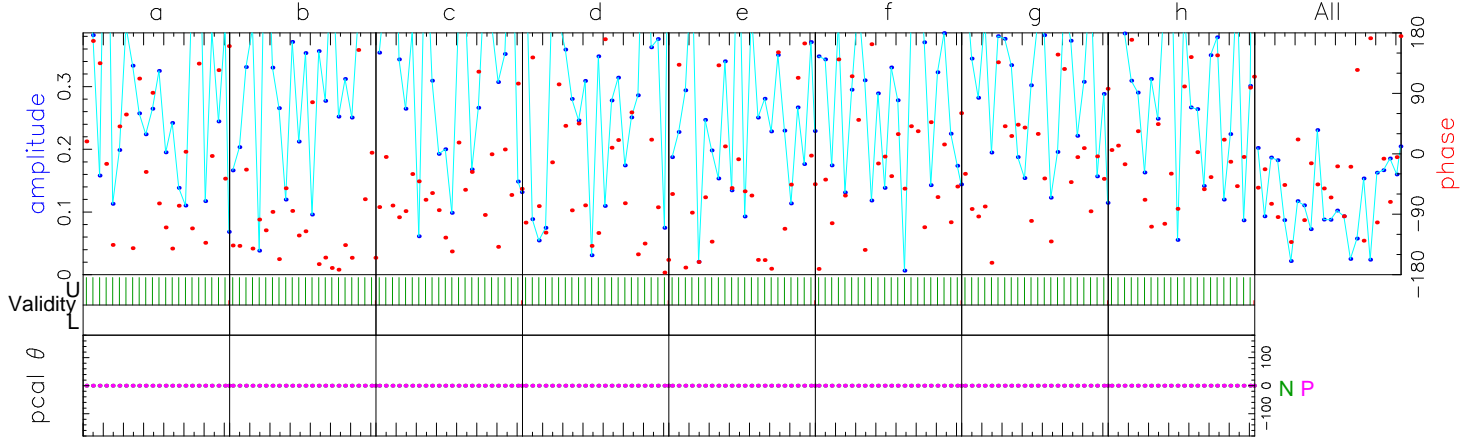


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130440
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-14.4	-126.1	-57.9	-66.7	-94.4	-6.7	-29.7	-3.4	Phase	-58.2
	0.0	0.3	0.3	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	218.3	5.9	5.9	416.1	247.9	328.2	155.8	56.6	Sbd box	5.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.26394160090E+02		Apriori delay (usec)		-3.25418085872E+02		Resid mbdelay (usec)		8.30078E-03	+/- 2.2E-04
Sband delay (usec)	-3.26400265372E+02		Apriori clock (usec)		-1.2188056E+01		Resid sbdelay (usec)		-9.82180E-01	+/- 1.8E-03
Phase delay (usec)	-3.25418087749E+02		Apriori clockrate (us/s)		8.9200002E-06		Resid phdelay (usec)		-1.87723E-06	+/- 7.6E-07
Delay rate (us/s)	3.00145414721E-02		Apriori rate (us/s)		3.00039049247E-02		Resid rate (us/s)		1.06365E-05	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		1.04256990221E-05		Resid phase (deg)		-58.2	+/- 23.6

	RMS	Theor.	Amplitude	0.129 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	62.4	56.5	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	78.0	98.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	48.9	33.3	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	82.1	58.1	Inc. frq. avg.	0.146	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

N: az 304.4 el 44.0 pa 69.6 P: az 308.5 el 45.2 pa 84.1 u,v (fr/asec) -257.472 1571.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NP..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NP.W.321.1X1592

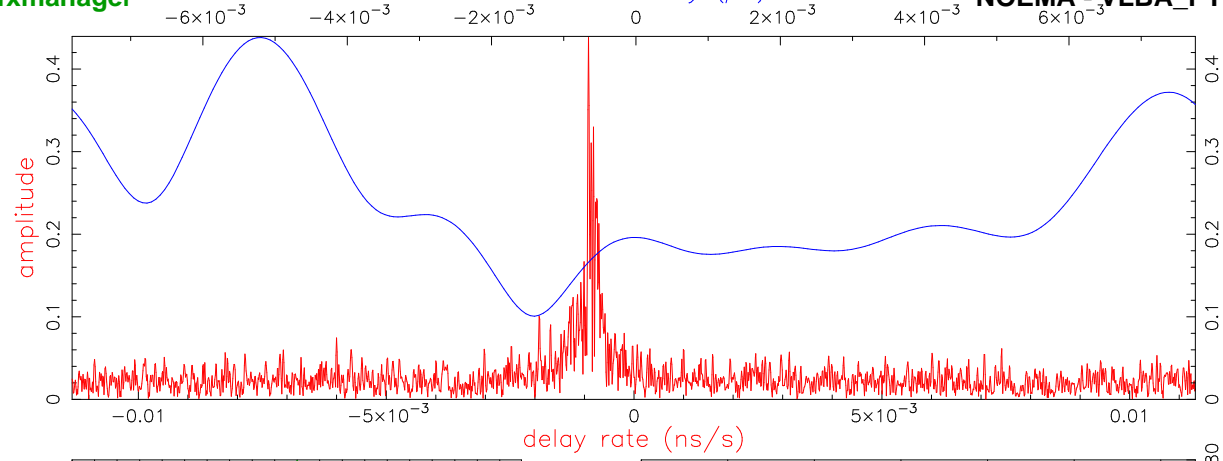
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

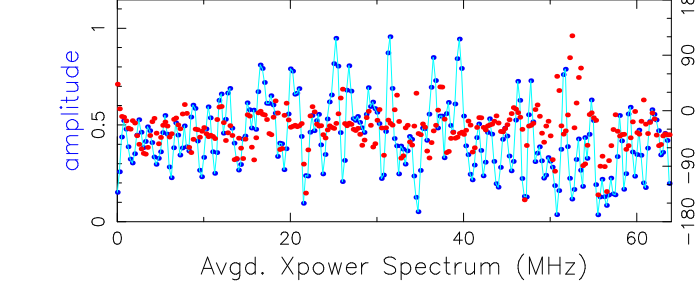
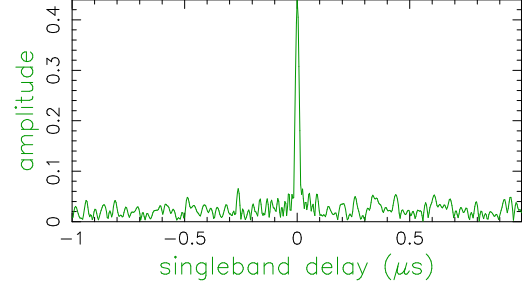
NRAO150.1X1592, No0093, Np

NOEMA - VLBA_PT, fgroup W, pol LL

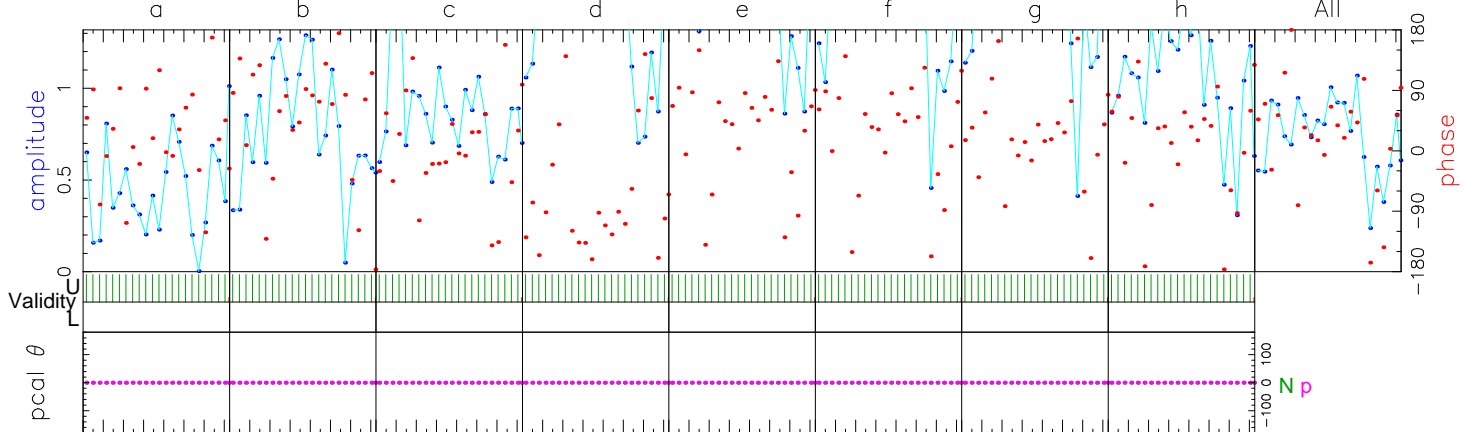
multiband delay (μ s)



Fringe quality 5
 SNR 24.6
 Int time 419.823
 Amp 0.440
 Phase 35.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000292
 MBD -0.005202
 Fringe rate (Hz)
 -0.079529
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130440
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
p	0	0	0	0	0	0	0	0		
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.84845869669E+03				-2.84845349489E+03				-5.20180E-03	+/- 4.4E-05
Sband delay (usec)	-2.84845320339E+03				-1.8785122E+01				2.91500E-04	+/- 3.5E-04
Phase delay (usec)	-2.84845349375E+03				8.4400004E-06				1.14229E-06	+/- 1.5E-07
Delay rate (us/s)	-1.20570746608E+00				-1.20570654283E+00				-9.23251E-07	+/- 6.2E-10
Total phase (deg)			17.4		2.72483048500E-05				35.4	+/- 4.7
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 (us/s)										
PC period (AP's) 5, 5										
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 mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
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 mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
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

N: az 304.4 el 44.0 pa 69.6 p: az 48.3 el 54.6 pa -102.0 u,v (fr/asec) 11020.037 3319.071 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/Np..1X1592 Output file: /Exps/c211c/v1/1234/No0093/Np.W.322.1X1592

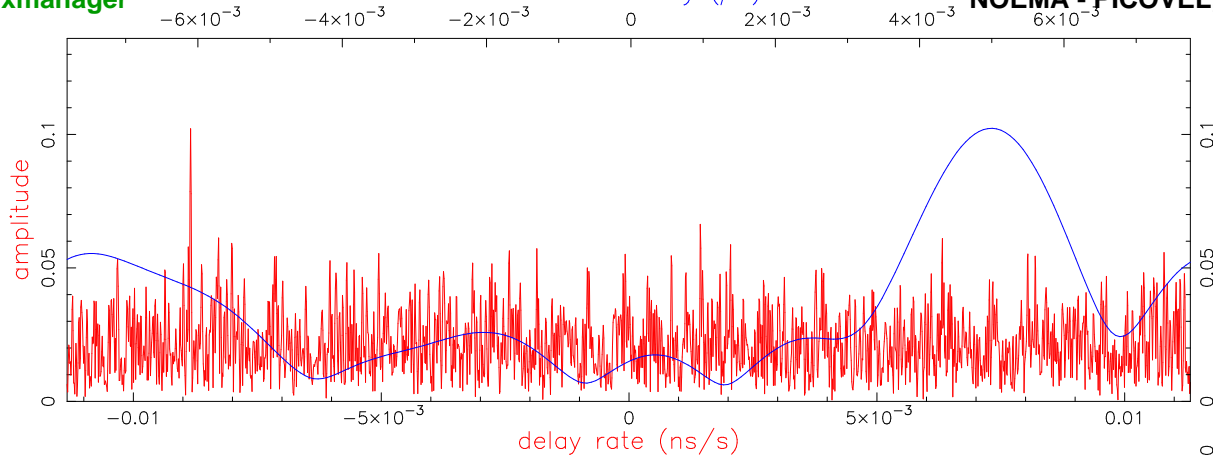
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NP

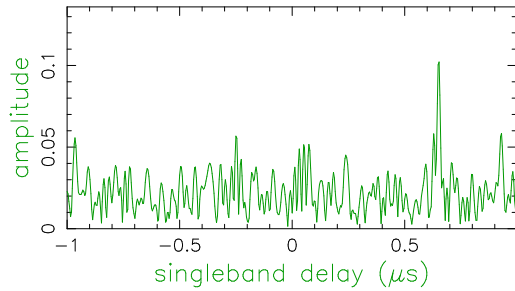
NOEMA - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

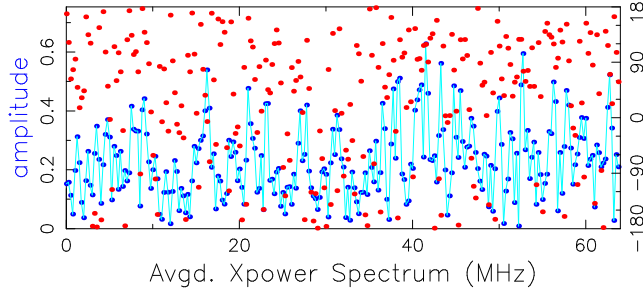


Fringe quality 0

SNR 5.8
 Int time 419.825
 Amp 0.136
 Phase -16.5
 PFD 7.2e-01
 Delays (us)
 SBD 0.650685
 MBD 0.004942
 Fringe rate (Hz)
 -0.763080
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

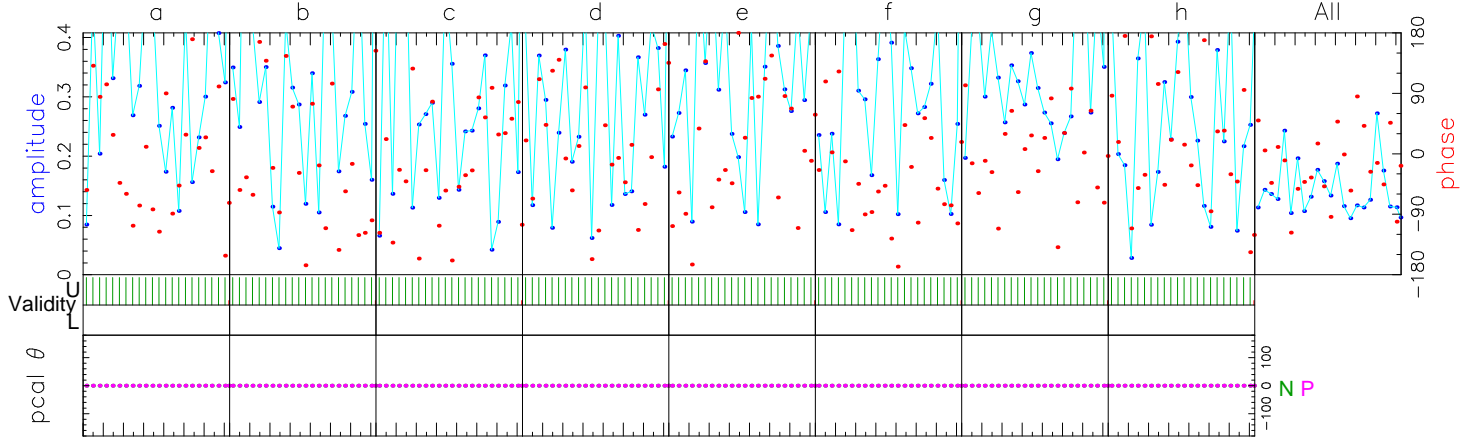


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130443
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-16.5	-80.6	-4.5	21.6	-14.0	-48.4	-12.4	5.1	Phase	-16.5
	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.1	Ampl.	0.1
	285.4	442.2	65.9	483.7	494.7	423.2	423.1	25.7	Sbd box	423.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.24772518630E+02	Apriori delay (usec)	-3.25418085872E+02	Resid mbdelay (usec)	4.94224E-03	+/-	1.9E-04
Sband delay (usec)	-3.24767400872E+02	Apriori clock (usec)	-1.2188056E+01	Resid sbdelay (usec)	6.50685E-01	+/-	1.5E-03
Phase delay (usec)	-3.25418086403E+02	Apriori clockrate (us/s)	8.9200002E-06	Resid phdelay (usec)	-5.31352E-07	+/-	6.3E-07
Delay rate (us/s)	2.99950463269E-02	Apriori rate (us/s)	3.00039049247E-02	Resid rate (us/s)	-8.85860E-06	+/-	2.6E-09
Total phase (deg)	-346.6	Apriori accel (us/s/s)	1.04256990221E-05	Resid phase (deg)	-16.5	+/-	19.6

ph/seg (deg)	51.3	Theor.	47.0	Amplitude	0.136 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.3		82.0	Search (2048X32)	0.100	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.7		27.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.1		48.4	Inc. seg. avg.	0.142	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.132	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

N: az 304.4 el 44.0 pa 69.6 P: az 308.5 el 45.2 pa 84.1 u,v (fr/asec) -257.472 1571.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NP..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NP.W.338.1X1592

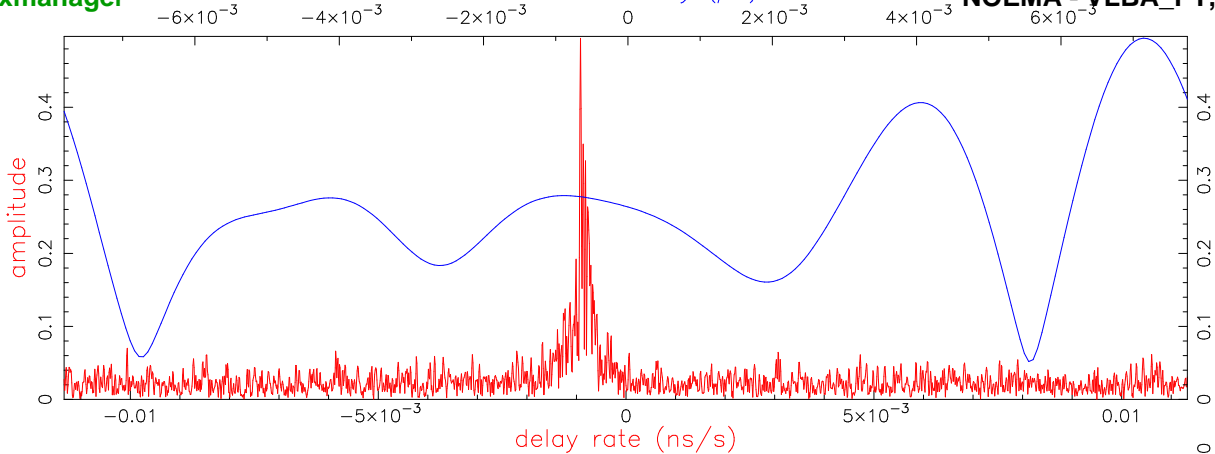
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, Np

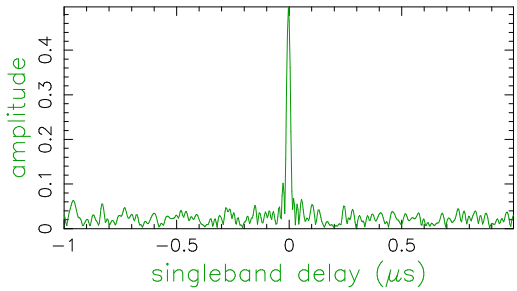
NOEMA - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

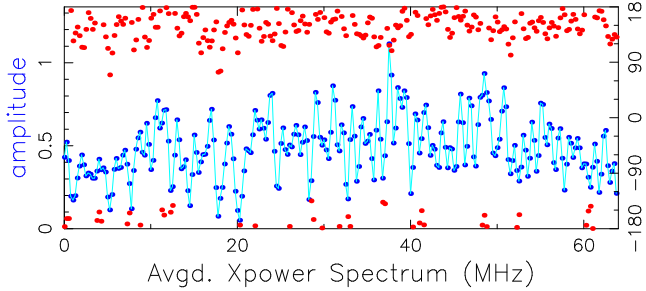


Fringe quality 5

SNR 27.8
 Int time 419.823
 Amp 0.497
 Phase 34.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.003265
 MBD 0.007168
 Fringe rate (Hz)
 -0.079604
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

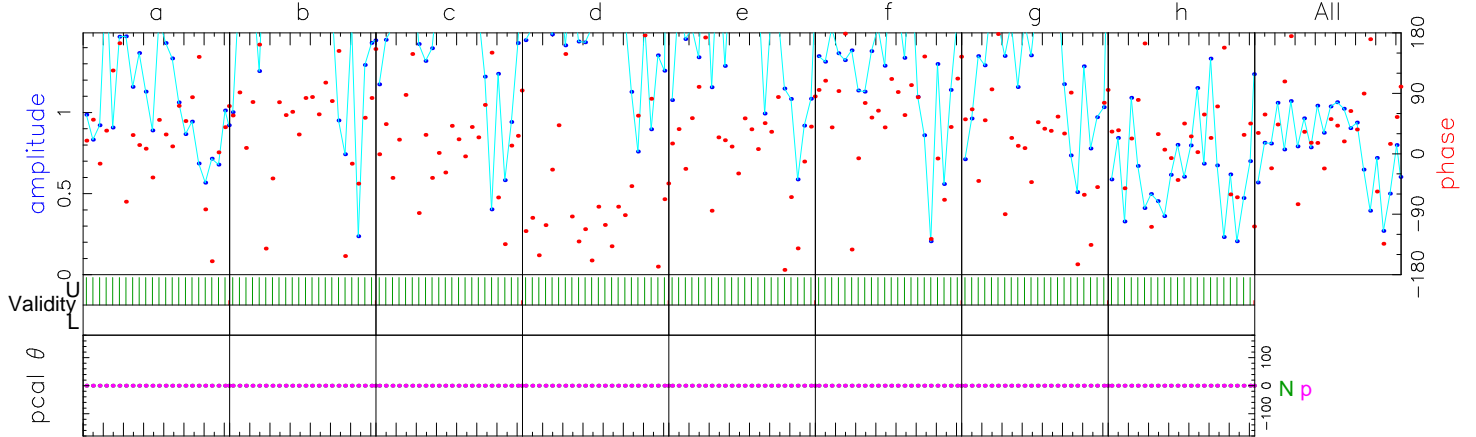


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130444
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	31.9	70.8	15.9	-108.5	27.2	82.2	29.2	20.7	Ampl.	34.5
	0.6	0.9	0.9	0.9	0.8	0.8	0.6	0.4	Ampl.	0.8
	257.7	255.7	255.4	255.4	255.3	255.7	256.2	257.9	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.84846195156E+03		Apriori delay (usec)		-2.84845349489E+03		Resid mbdelay (usec)		7.16833E-03	+/- 3.9E-05
Sband delay (usec)	-2.84845676014E+03		Apriori clock (usec)		-1.8785122E+01		Resid sbdelay (usec)		-3.26525E-03	+/- 3.1E-04
Phase delay (usec)	-2.84845349378E+03		Apriori clockrate (us/s)		8.4400004E-06		Resid phdelay (usec)		1.11105E-06	+/- 1.3E-07
Delay rate (us/s)	-1.20570746696E+00		Apriori rate (us/s)		-1.20570654283E+00		Resid rate (us/s)		-9.24124E-07	+/- 5.5E-10
Total phase (deg)	16.5		Apriori accel (us/s/s)		2.72483048500E-05		Resid phase (deg)		34.5	+/- 4.1

ph/seg (deg) 69.1 9.9 Search (2048X32) 0.468 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.2 17.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.1 5.8 Inc. seg. avg. 0.800 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 63.0 10.2 Inc. frq. avg. 0.758 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 p: az 48.3 el 54.6 pa -102.0 u,v (fr/asec) 11020.037 3319.071 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/Np..1X1592 Output file: /Exps/c211c/v1/1234/No0093/Np.W.341.1X1592

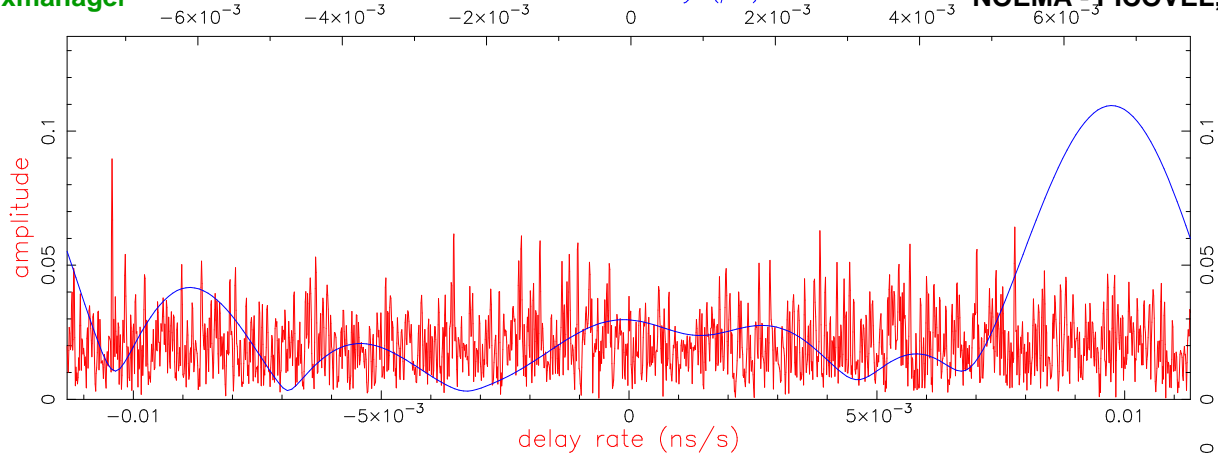
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NP

NOEMA - PICOVEL, fgroup W, pol LR

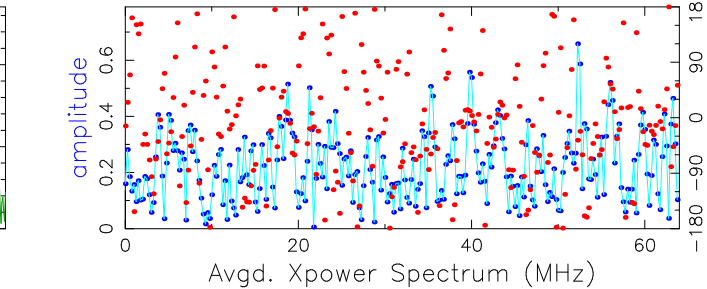
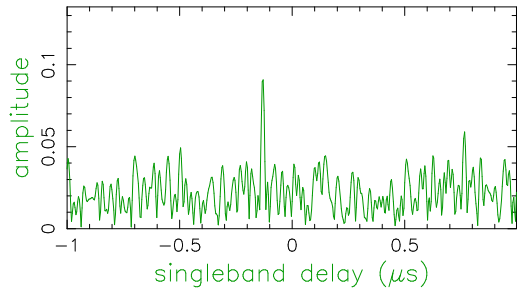
multiband delay (μ s)



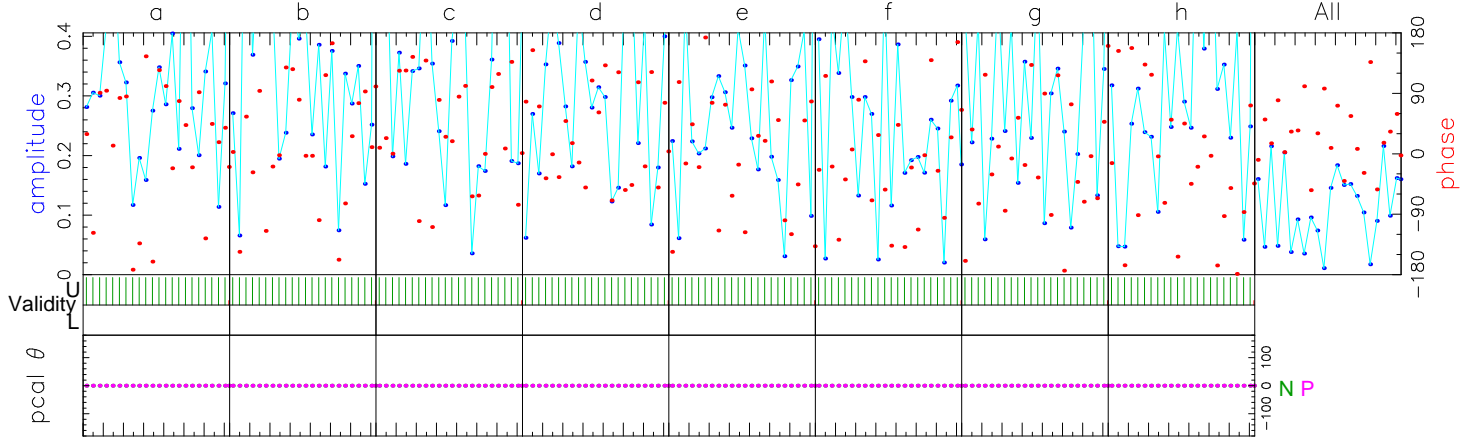
Fringe quality 0

SNR 5.2
 Int time 419.825
 Amp 0.135
 Phase 17.4
 PFD 1.0e+00
 Delays (us)
 SBD -0.130641
 MBD -0.008301
 Fringe rate (Hz)
 -0.899333
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130447
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-3.25551386653E+02									
Sband delay (usec)	-3.25548726372E+02									
Phase delay (usec)	-3.25418085312E+02									
Delay rate (us/s)	2.99934645563E-02									
Total phase (deg)			-312.7							
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)									17.4	+/- 22.0
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 50.4 52.8 Search (2048X32) 0.108 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.8 92.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.3 31.2 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.5 54.4 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 P: az 308.5 el 45.2 pa 84.1 u,v (fr/asec) -257.472 1571.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NP..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NP.W.355.1X1592

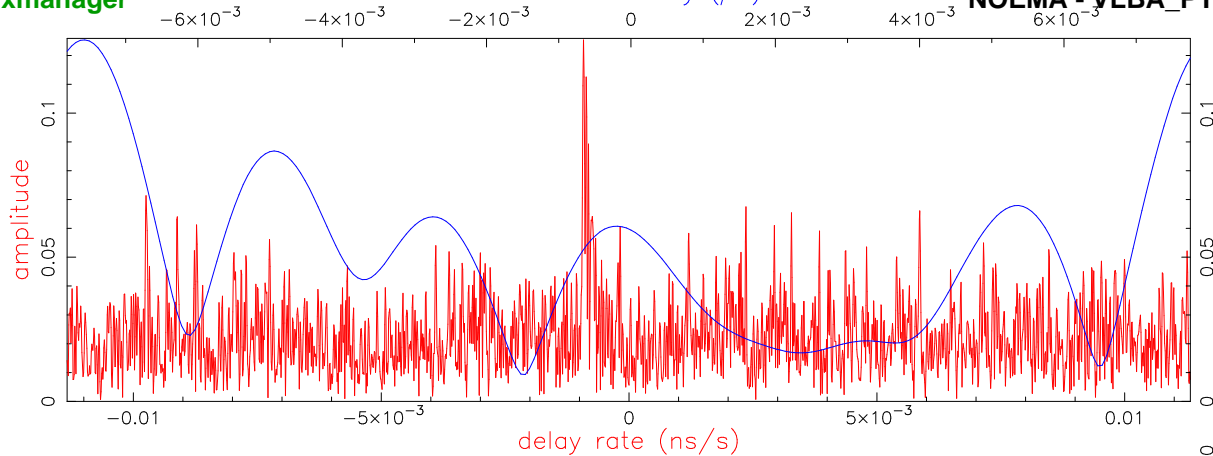
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, Np

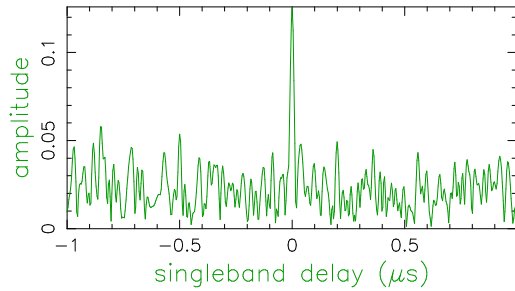
NOEMA - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

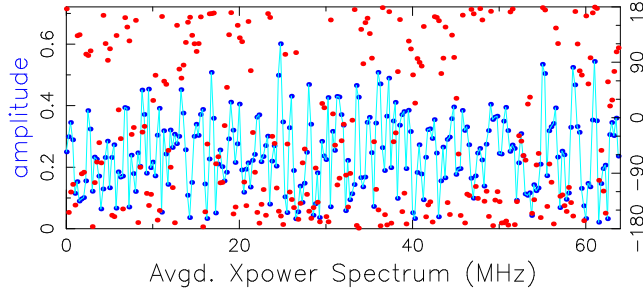


Fringe quality 0

SNR 7.0
 Int time 419.823
 Amp 0.126
 Phase -89.2
 PFD 6.0e-04
 Delays (us)
 SBD -0.000514
 MBD -0.007595
 Fringe rate (Hz)
 -0.079622
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

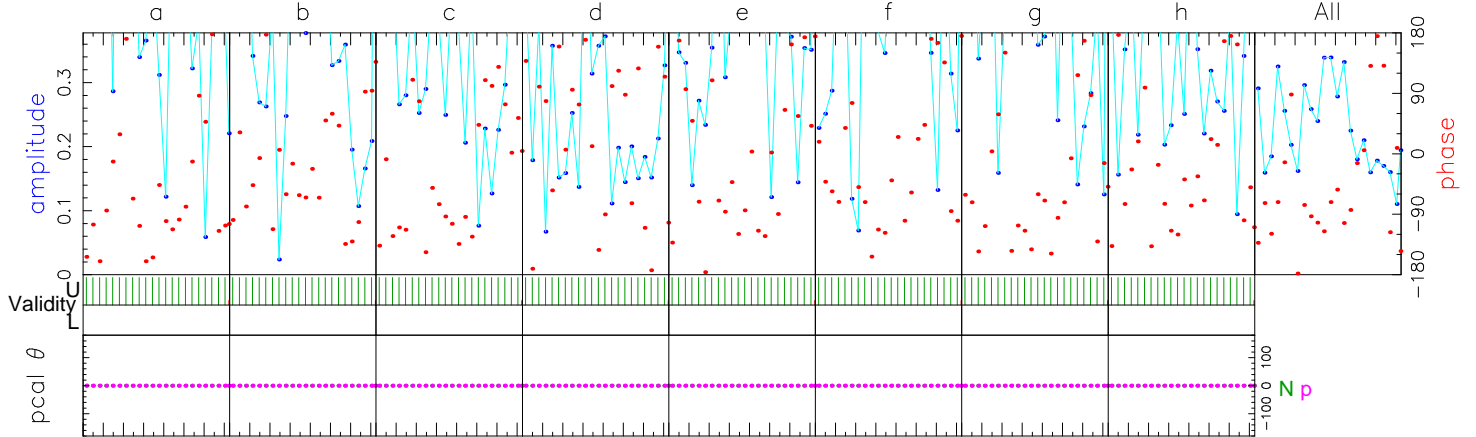


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130448
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-104.1	-42.2	-93.3	150.7	-109.2	-55.8	-101.7	-77.4	Phase	-89.2
	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
	259.1	257.5	348.8	162.0	223.8	256.0	256.6	259.2	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.84846109010E+03		Apriori delay (usec)		-2.84845349489E+03		Resid mbdelay (usec)		-7.59520E-03	+/- 1.5E-04
Sband delay (usec)	-2.84845400864E+03		Apriori clock (usec)		-1.8785122E+01		Resid sbdelay (usec)		-5.13750E-04	+/- 1.2E-03
Phase delay (usec)	-2.84845349777E+03		Apriori clockrate (us/s)		8.4400004E-06		Resid phdelay (usec)		-2.87485E-06	+/- 5.3E-07
Delay rate (us/s)	-1.20570746717E+00		Apriori rate (us/s)		-1.20570654283E+00		Resid rate (us/s)		-9.24337E-07	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		2.72483048500E-05		Resid phase (deg)		-89.2	+/- 16.3

	RMS	Theor.	Amplitude	0.126 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	75.1	39.1	Search (2048X32)	0.121	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	98.8	68.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	55.8	23.0	Inc. seg. avg.	0.187	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	50.0	40.2	Inc. frq. avg.	0.143	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

N: az 304.4 el 44.0 pa 69.6 p: az 48.3 el 54.6 pa -102.0 u,v (fr/asec) 11020.037 3319.071 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v/1234/No0093/Np..1X1592 Output file: /Exps/c211c/v/1234/No0093/Np.W.360.1X1592

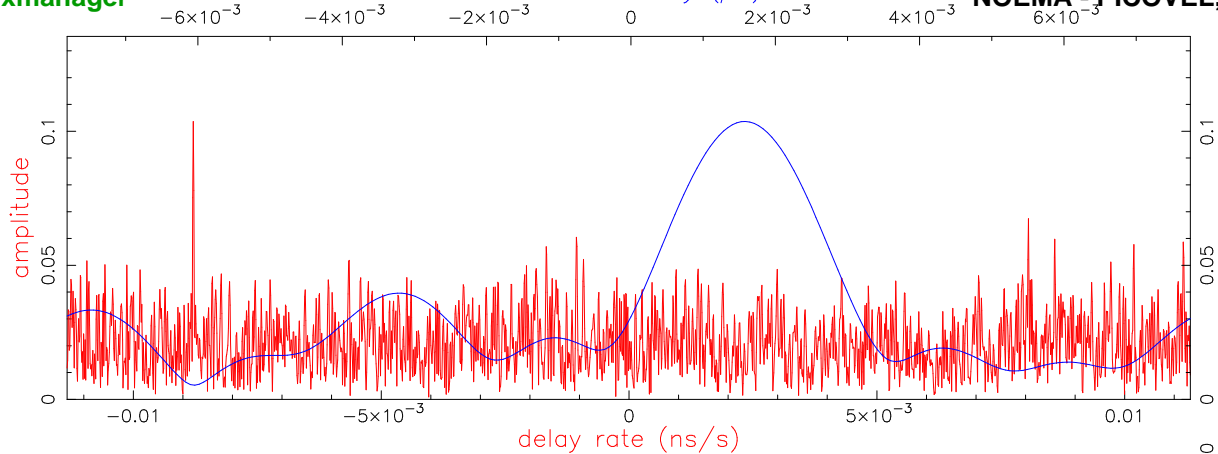
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NP

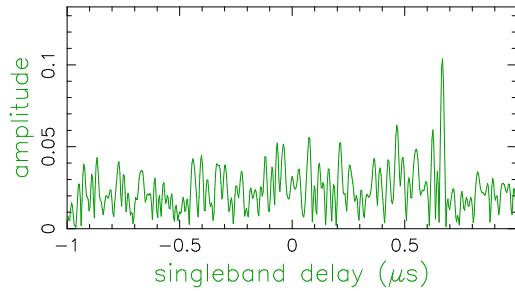
NOEMA - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

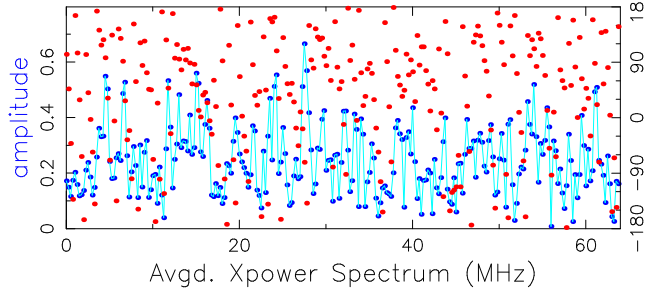


Fringe quality 0

SNR 5.8
 Int time 419.825
 Amp 0.135
 Phase -168.9
 PFD 7.3e-01
 Delays (us)
 SBD 0.667042
 MBD 0.001560
 Fringe rate (Hz)
 -0.758189
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

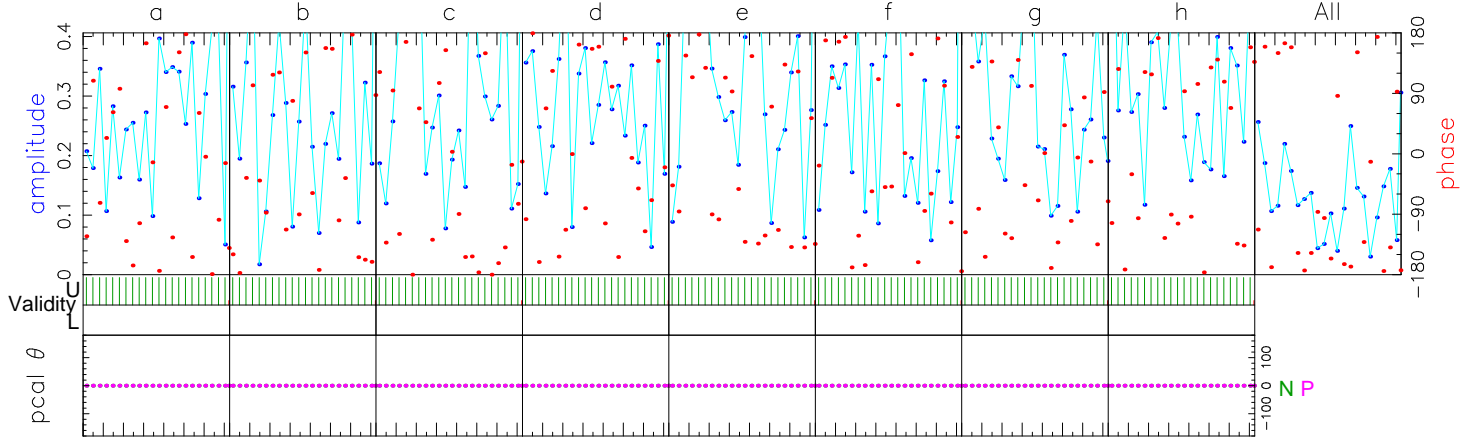


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130451
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.24744651114E+02	Apriori delay (usec)	-3.25418085872E+02	Resid mbdelay (usec)	1.55976E-03	+/-	1.9E-04
Sband delay (usec)	-3.24751043372E+02	Apriori clock (usec)	-1.2188056E+01	Resid sbdelay (usec)	6.67042E-01	+/-	1.5E-03
Phase delay (usec)	-3.25418091318E+02	Apriori clockrate (us/s)	8.9200002E-06	Resid phdelay (usec)	-5.44600E-06	+/-	6.3E-07
Delay rate (us/s)	2.99951030972E-02	Apriori rate (us/s)	3.00039049247E-02	Resid rate (us/s)	-8.80183E-06	+/-	2.6E-09
Total phase (deg)	-139.0	Apriori accel (us/s/s)	1.04256990221E-05	Resid phase (deg)	-168.9	+/-	19.6

ph/seg (deg)	56.4	Theor.	47.1	Amplitude	0.135 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.3		82.1	Search (2048X32)	0.103	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.6		27.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.6		48.4	Inc. seg. avg.	0.126	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.124	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

N: az 304.4 el 44.0 pa 69.6 P: az 308.5 el 45.2 pa 84.1 u,v (fr/asec) -257.472 1571.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NP..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NP.W.375.1X1592

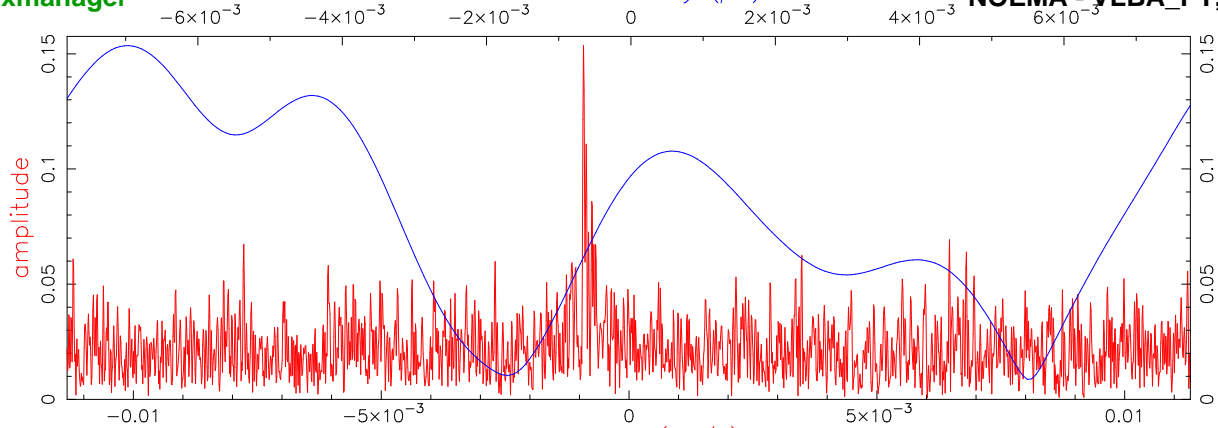
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, Np

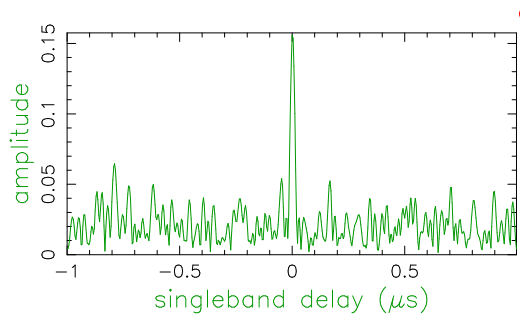
NOEMA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

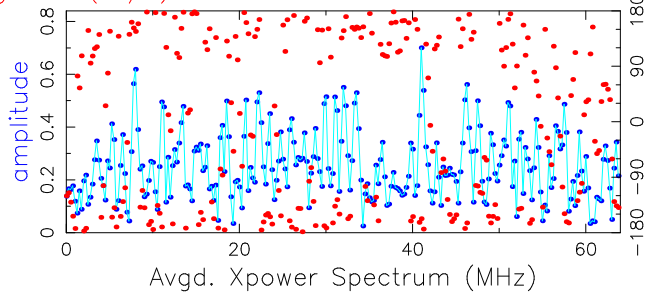


Fringe quality 9

SNR 8.8
 Int time 419.823
 Amp 0.158
 Phase -82.3
 PFD 4.9e-10
 Delays (us)
 SBD 0.001483
 MBD -0.006953
 Fringe rate (Hz)
 -0.079445
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

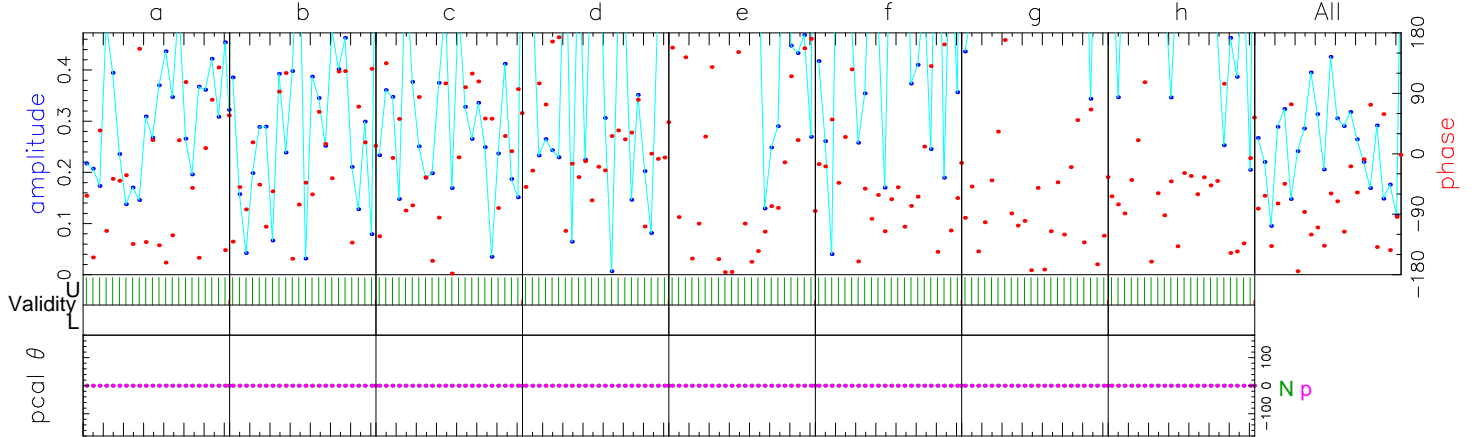


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130452
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-109.6	-43.1	34.5	-19.0	-160.8	-72.2	-99.8	-59.7	Phase	-82.3
	0.1	0.0	0.0	0.2	0.3	0.3	0.4	0.4	Ampl.	0.2
	398.2	55.1	3.1	257.3	256.5	256.2	257.0	259.5	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.84844482294E+03		Apriori delay (usec)		-2.84845349489E+03		Resid mbdelay (usec)		-6.95305E-03	+/- 1.2E-04
Sband delay (usec)	-2.84845201164E+03		Apriori clock (usec)		-1.8785122E+01		Resid sbdelay (usec)		1.48325E-03	+/- 9.8E-04
Phase delay (usec)	-2.84845349754E+03		Apriori clockrate (us/s)		8.4400004E-06		Resid phdelay (usec)		-2.65315E-06	+/- 4.2E-07
Delay rate (us/s)	-1.20570746511E+00		Apriori rate (us/s)		-1.20570654283E+00		Resid rate (us/s)		-9.22278E-07	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.72483048500E-05		Resid phase (deg)		-82.3	+/- 13.0

ph/seg (deg) 69.5 31.2 Search (2048X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.2 54.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.1 18.4 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 95.3 32.1 Inc. frq. avg. 0.206 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 p: az 48.3 el 54.6 pa -102.0 u,v (fr/asec) 11020.037 3319.071 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/Np..1X1592 Output file: /Exps/c211c/v1/1234/No0093/Np.W.377.1X1592

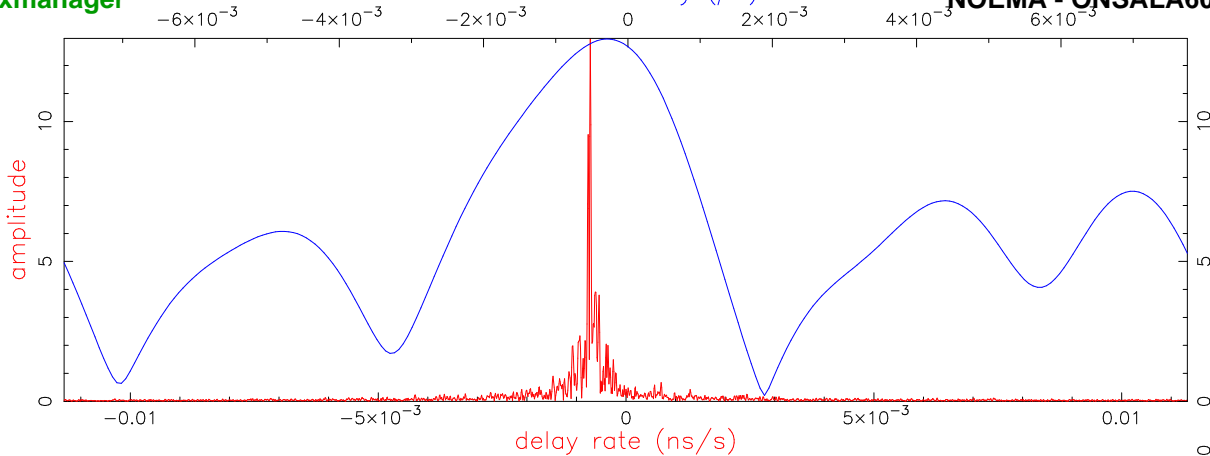
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NX

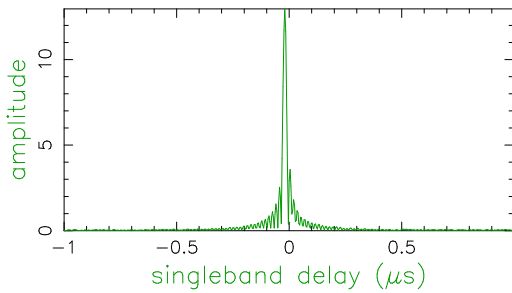
NOEMA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

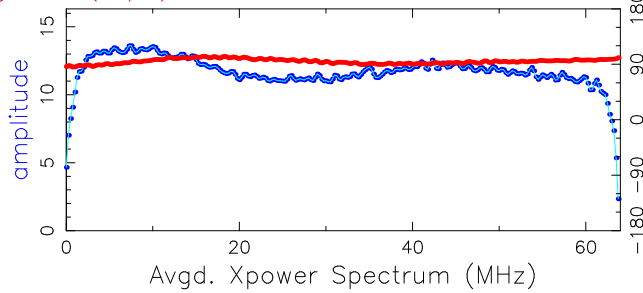


Fringe quality 2

SNR 725.5
 Int time 419.789
 Amp 12.970
 Phase -127.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.019577
 MBD -0.000284
 Fringe rate (Hz)
 -0.062039
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

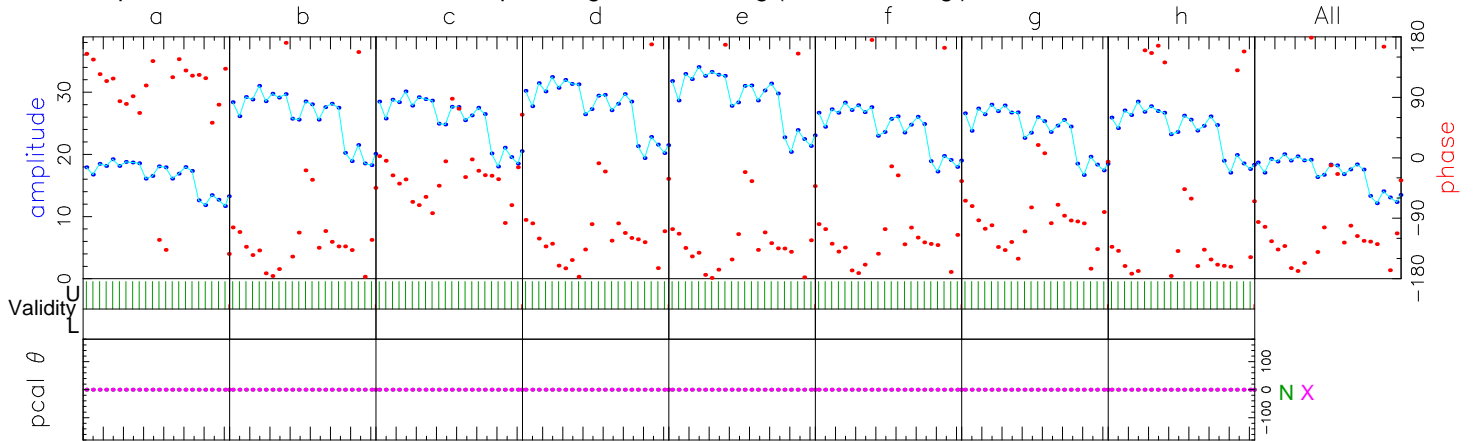


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130442
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	-9.09690394461E+02	Apriori delay (usec)	-9.09674485024E+02	Resid mbdelay (usec)	-2.84438E-04	+/-	1.5E-06
Sband delay (usec)	-9.09694062524E+02	Apriori clock (usec)	-6.9747215E+01	Resid sbdelay (usec)	-1.95775E-02	+/-	1.2E-05
Phase delay (usec)	-9.09674489136E+02	Apriori clockrate (us/s)	7.7919997E-06	Resid phdelay (usec)	-4.11212E-06	+/-	5.1E-09
Delay rate (us/s)	-1.45229787936E-01	Apriori rate (us/s)	-1.45229067729E-01	Resid rate (us/s)	-7.20206E-07	+/-	2.1E-11
Total phase (deg)	-177.9	Apriori accel (us/s/s)	-7.79928456786E-06	Resid phase (deg)	-127.5	+/-	0.2

ph/seg (deg)	43.6	RMS	43.6	Theor.	0.4	Amplitude	12.970 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	36.9		0.7	Search (2048X32)	12.751	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	64.0		0.2	Inc. seg. avg.	17.079	Inc. frq. avg.	18.729	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	49.0		0.4	Inc. frq. avg.	18.729	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011

N: az 304.4 el 44.0 pa 69.6 X: az 295.8 el 47.2 pa 50.2 u,v (fr/asec) 1311.598 -1548.644 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NX..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NX.W.329.1X1592

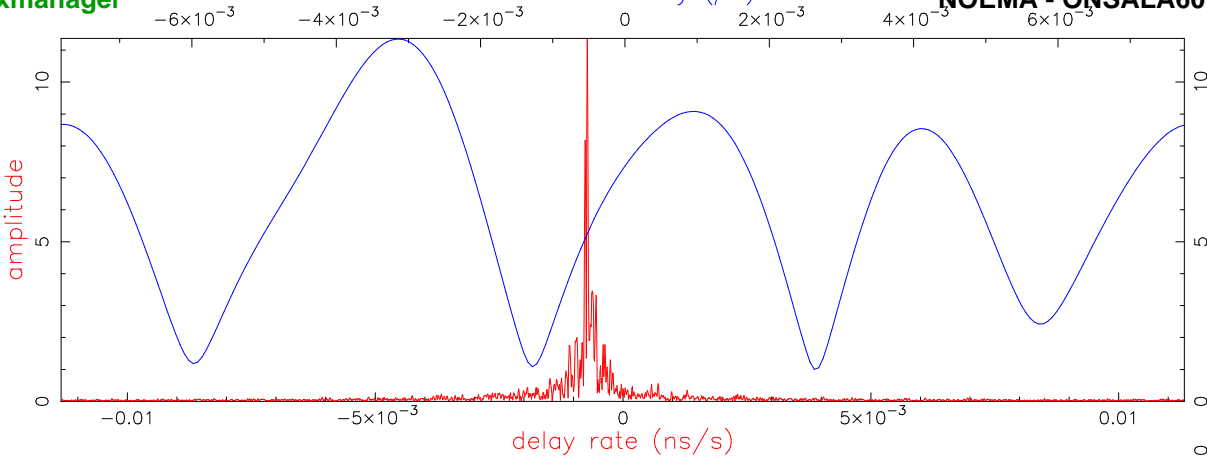
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NX

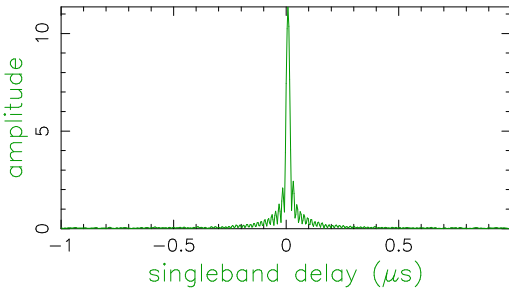
NOEMA - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

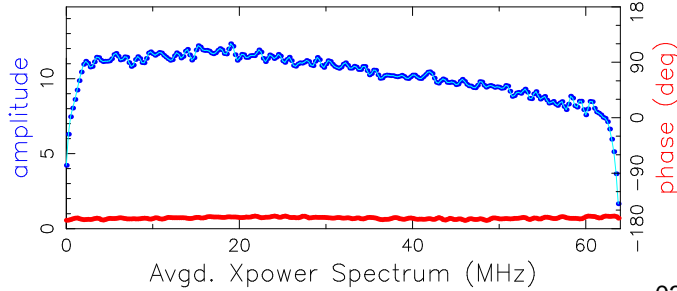


Fringe quality 2

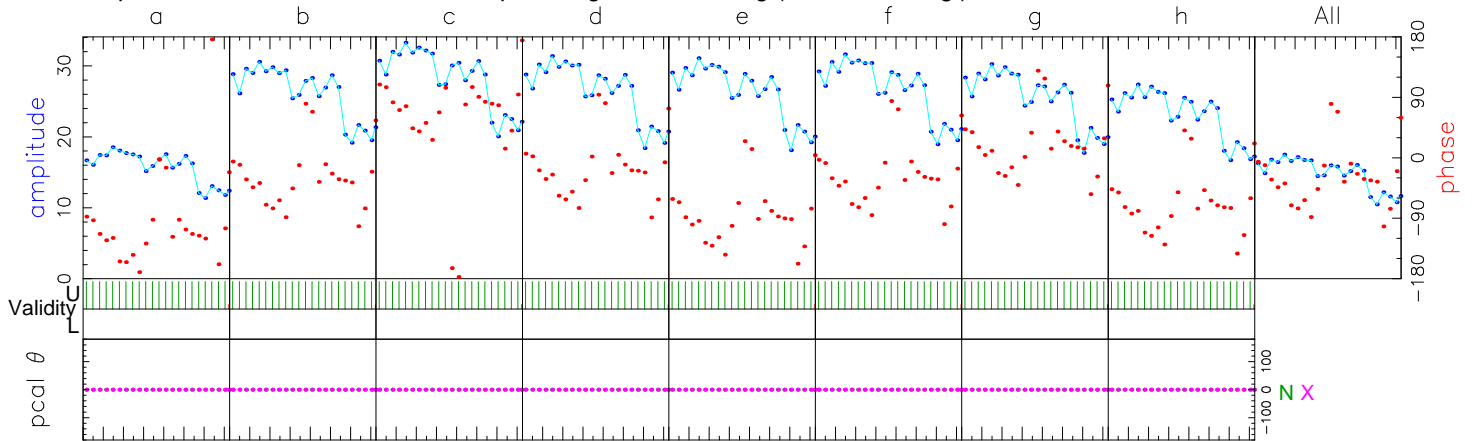
SNR 635.9
 Int time 419.789
 Amp 11.368
 Phase -35.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.007945
 MBD -0.003138
 Fringe rate (Hz)
 -0.062057
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130446
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-116.9	-35.2	79.4	-22.1	-90.8	-32.5	13.1	-75.4		-35.3
	12.1	20.1	21.7	20.4	20.1	20.4	19.5	17.7	Ampl.	19.0
	261.1	259.9	259.3	258.9	258.5	259.0	259.1	259.3	Sbd box	259.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.09661997774E+02		Apriori delay (usec)		-9.09674485024E+02		Resid mbdelay (usec)		-3.13775E-03	+/- 1.7E-06
Sband delay (usec)	-9.09666540524E+02		Apriori clock (usec)		-6.9747215E+01		Resid sbdelay (usec)		7.94450E-03	+/- 1.4E-05
Phase delay (usec)	-9.09674486161E+02		Apriori clockrate (us/s)		7.7919997E-06		Resid phdelay (usec)		-1.13793E-06	+/- 5.8E-09
Delay rate (us/s)	-1.45229788150E-01		Apriori rate (us/s)		-1.45229067729E-01		Resid rate (us/s)		-7.20420E-07	+/- 2.4E-11
Total phase (deg)			Apriori accel (us/s/s)		-7.79928456786E-06		Resid phase (deg)		-35.3	+/- 0.2

ph/seg (deg) 43.3 0.4 Search (2048X32) 11.198 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.2 0.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.1 0.3 Inc. seg. avg. 14.883 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 71.7 0.4 Inc. frq. avg. 19.015 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 X: az 295.8 el 47.2 pa 50.2 u,v (fr/asec) 1311.598 -1548.644 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NX..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NX.W.350.1X1592

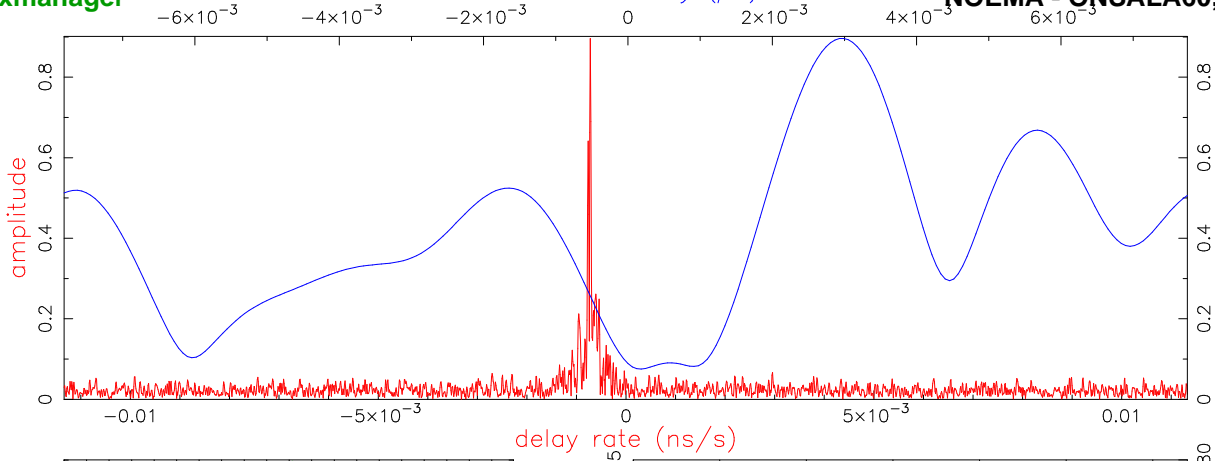
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NX

NOEMA - ONSALA60, fgroup W, pol LR

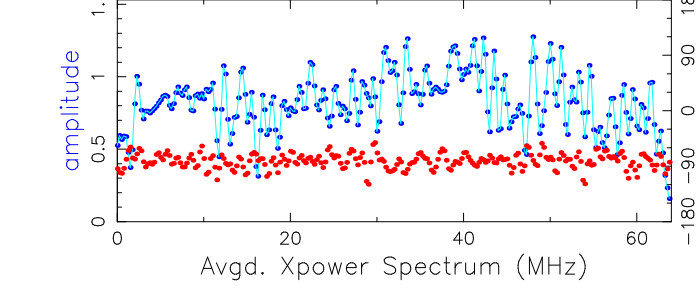
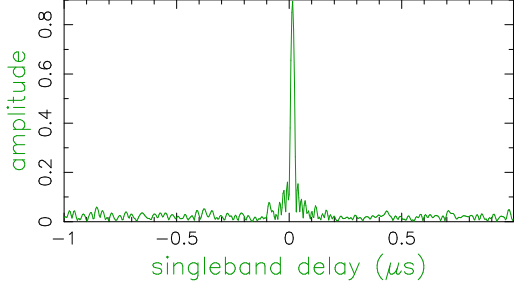
multiband delay (μ s)



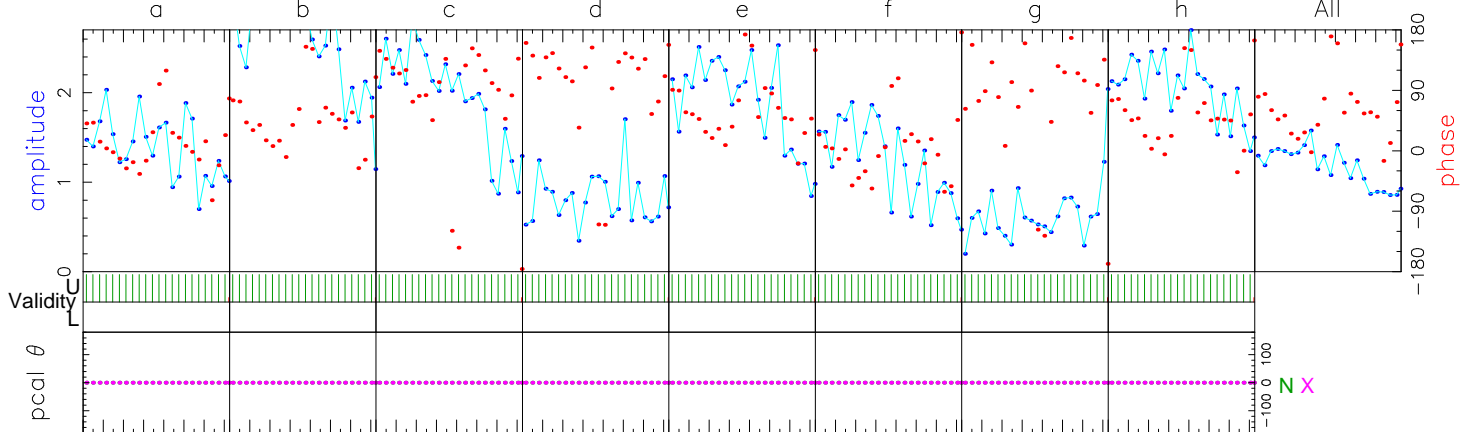
Fringe quality 2

SNR 50.4
 Int time 419.789
 Amp 0.901
 Phase 55.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.014782
 MBD 0.002932
 Fringe rate (Hz)
 -0.062035
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130450
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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
Group delay (usec)(sbd)	8.5	42.9	116.2	130.4	57.8	-7.3	114.0	47.5	Phase	55.0
Sband delay (usec)	1.1	2.0	1.4	0.6	1.4	1.0	0.4	1.5	Ampl.	1.2
Phase delay (usec)	261.7	261.1	260.6	260.7	259.6	259.7	262.5	260.6	Sbd box	260.8
Delay rate (us/s)	U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Total phase (deg)	N 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	X 1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
	N:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	N 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	X 1000	1000	1000	1000	1000	1000	1000	1000		
	N W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	X W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.09655927930E+02		Apriori delay (usec)		-9.09674485024E+02		Resid mbdelay (usec)		2.93209E-03	+/- 2.2E-05
Sband delay (usec)	-9.09659703274E+02		Apriori clock (usec)		-6.9747215E+01		Resid sbdelay (usec)		1.47817E-02	+/- 1.7E-04
Phase delay (usec)	-9.09674483251E+02		Apriori clockrate (us/s)		7.7919997E-06		Resid phdelay (usec)		1.77292E-06	+/- 7.3E-08
Delay rate (us/s)	-1.45229787897E-01		Apriori rate (us/s)		-1.45229067729E-01		Resid rate (us/s)		-7.20167E-07	+/- 3.0E-10
Total phase (deg)	4.6		Apriori accel (us/s/s)		-7.79928456786E-06		Resid phase (deg)		55.0	+/- 2.3

ph/seg (deg) 44.1 5.5 Search (2048X32) 0.874 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.0 9.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.5 3.2 Inc. seg. avg. 1.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.8 5.6 Inc. frq. avg. 1.185 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 X: az 295.8 el 47.2 pa 50.2 u,v (fr/asec) 1311.598 -1548.644 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NX..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NX.W.369.1X1592

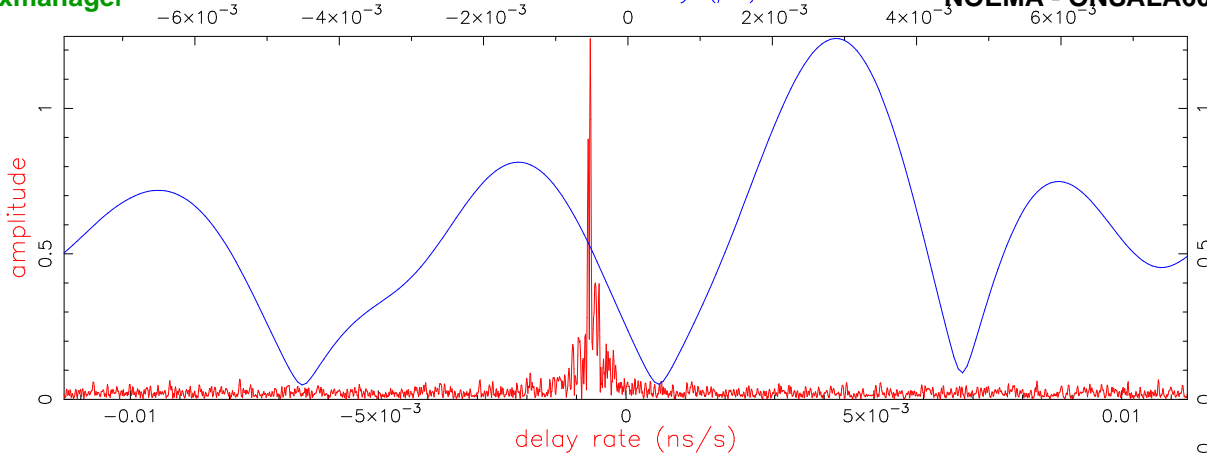
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, NX

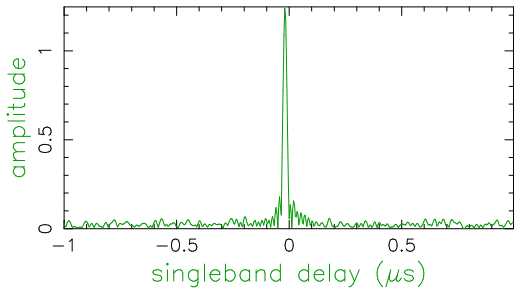
NOEMA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

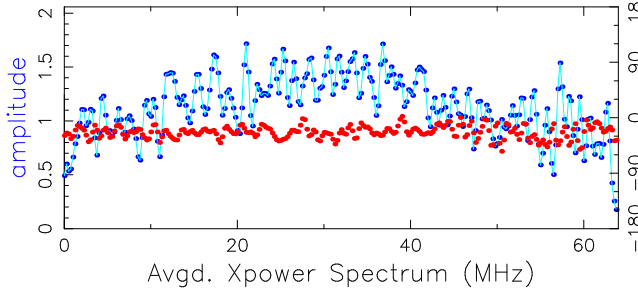


Fringe quality 1

SNR 69.8
 Int time 419.789
 Amp 1.247
 Phase 87.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.018629
 MBD 0.002918
 Fringe rate (Hz)
 -0.061983
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

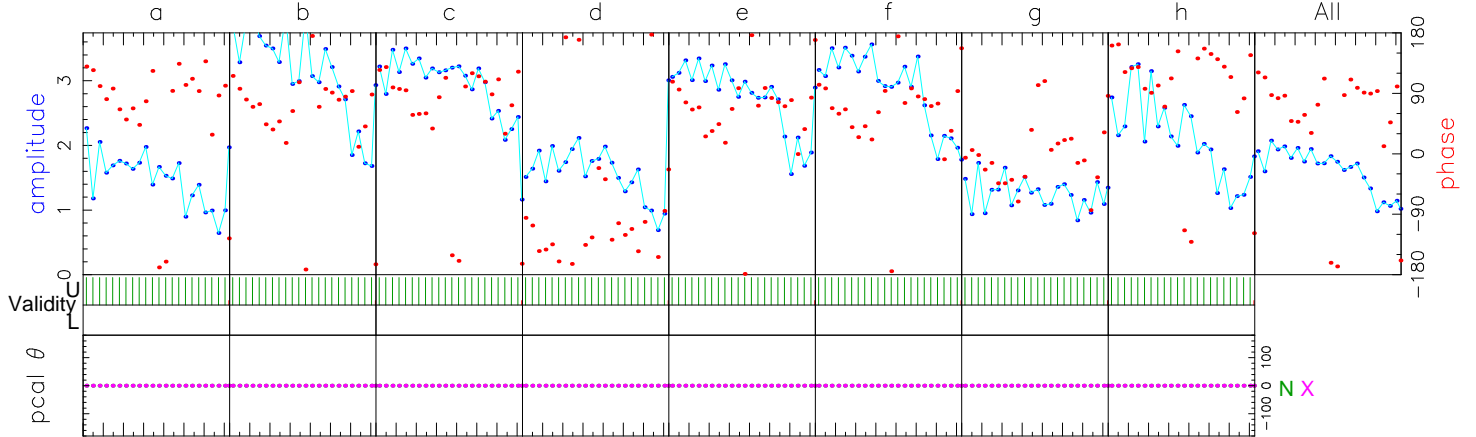


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180000.00
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130454
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.09687192493E+02			Apriori delay (usec)	-9.09674485024E+02			Resid mbdelay (usec)	2.91753E-03	+/- 1.6E-05
Sband delay (usec)	-9.09693113774E+02			Apriori clock (usec)	-6.9747215E+01			Resid sbdelay (usec)	-1.86287E-02	+/- 1.2E-04
Phase delay (usec)	-9.09674482189E+02			Apriori clockrate (us/s)	7.7919997E-06			Resid phdelay (usec)	2.83416E-06	+/- 5.3E-08
Delay rate (us/s)	-1.45229787290E-01			Apriori rate (us/s)	-1.45229067729E-01			Resid rate (us/s)	-7.19561E-07	+/- 2.2E-10
Total phase (deg)		37.5		Apriori accel (us/s/s)	-7.79928456786E-06			Resid phase (deg)	87.9	+/- 1.6

ph/seg (deg) 44.2 3.9 Search (2048X32) 1.225 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.6 6.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 73.4 2.3 Inc. seg. avg. 1.638 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 57.9 4.1 Inc. frq. avg. 1.714 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 304.4 el 44.0 pa 69.6 X: az 295.8 el 47.2 pa 50.2 u,v (fr/asec) 1311.598 -1548.644 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/NX..1X1592 Output file: /Exps/c211c/v1/1234/No0093/NX.W.388.1X1592

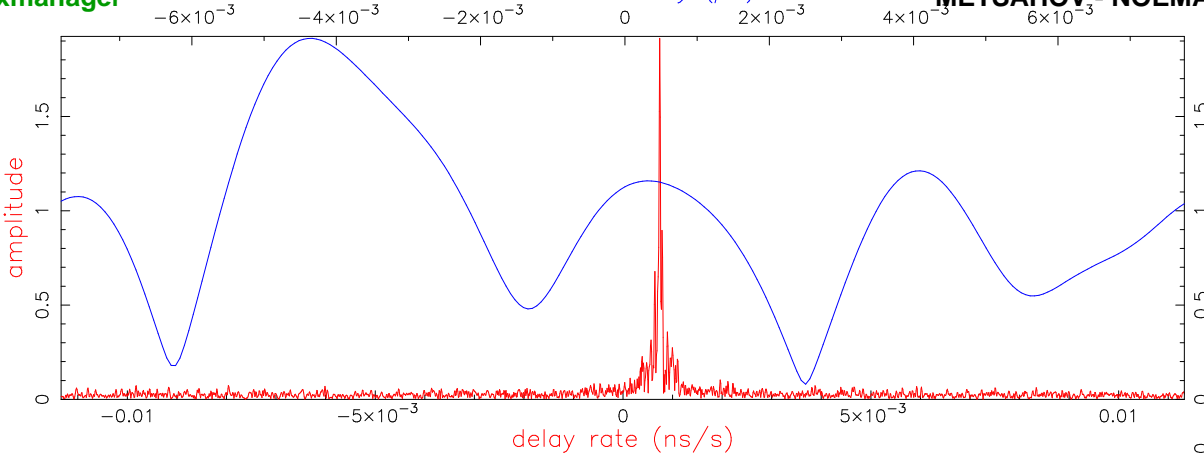
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, ZN

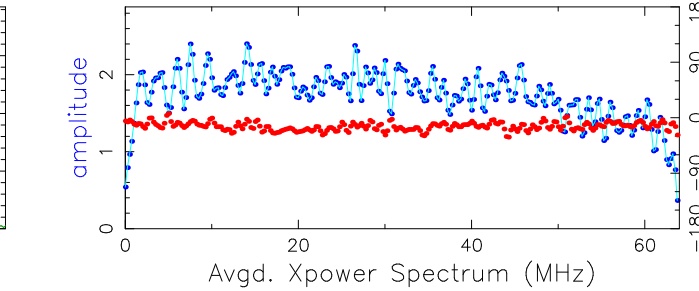
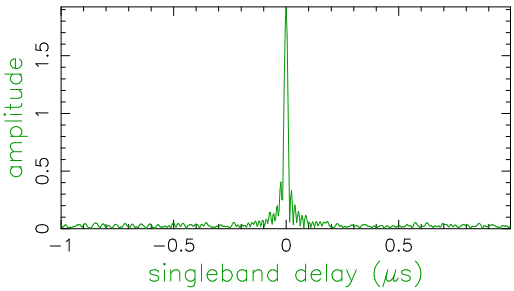
METSAHOV - NOEMA, fgroup W, pol LL

multiband delay (μ s)



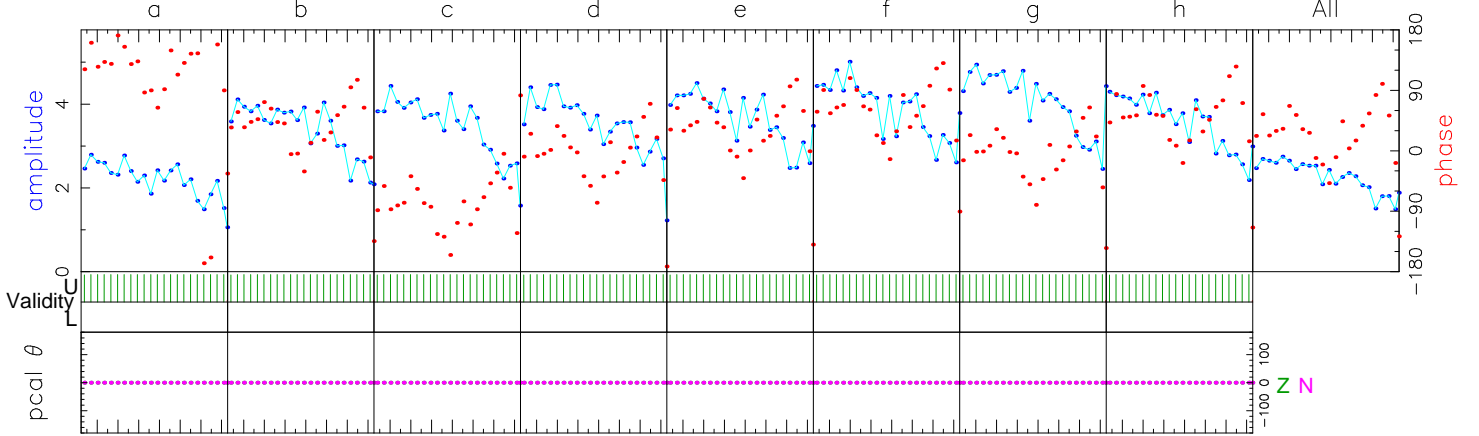
Fringe quality 2

SNR 105.8
 Int time 405.845
 Amp 1.924
 Phase 28.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000772
 MBD -0.004376
 Fringe rate (Hz)
 0.064183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180013.31
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130448
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.85943820516E+02	Apriori delay (usec)	-2.85939444723E+02	Resid mbdelay (usec)	-4.37579E-03	+/-	1.0E-05
Sband delay (usec)	-2.85940216723E+02	Apriori clock (usec)	1.2533809E+01	Resid sbdelay (usec)	-7.72000E-04	+/-	8.1E-05
Phase delay (usec)	-2.85939443818E+02	Apriori clockrate (us/s)	-8.3039998E-06	Resid phdelay (usec)	9.04866E-07	+/-	3.5E-08
Delay rate (us/s)	1.73864862224E-01	Apriori rate (us/s)	1.73864117124E-01	Resid rate (us/s)	7.45100E-07	+/-	1.5E-10
Total phase (deg)	-248.6	Apriori accel (us/s/s)	1.60976879582E-05	Resid phase (deg)	28.1	+/-	1.1

ph/seg (deg)	35.7	Theor.	2.6	Amplitude	1.924 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	26.5		4.5	Search (2048X32)	1.857	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	67.1		1.5	Inc. seg. avg.	2.278	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	57.8		2.7	Inc. frq. avg.	2.951	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
Z: az 301.0 el 42.8 pa 42.9		N: az 304.4 el 44.0 pa 69.6		u,v (fr/asec)	-1559.073 2499.203	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/c211c/v1/1234/No0093/ZN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/ZN.W.361.1X1592 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

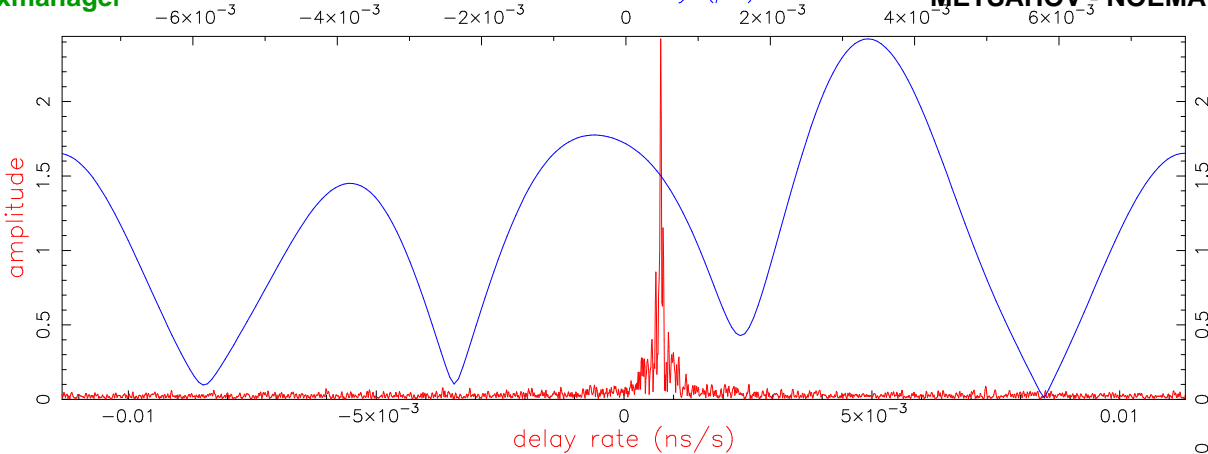
fxmanager

NRAO150.1X1592, No0093, ZN

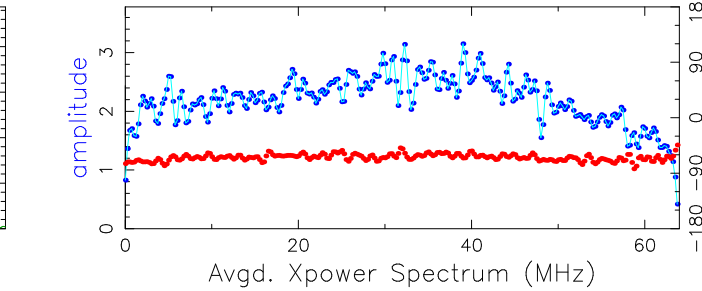
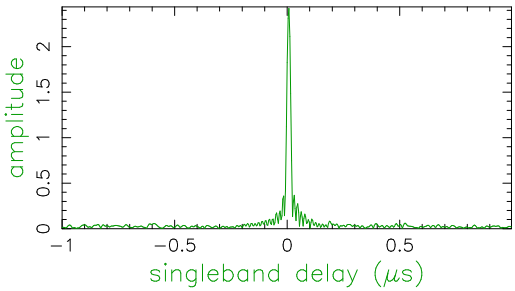
METSAHOV - NOEMA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 2

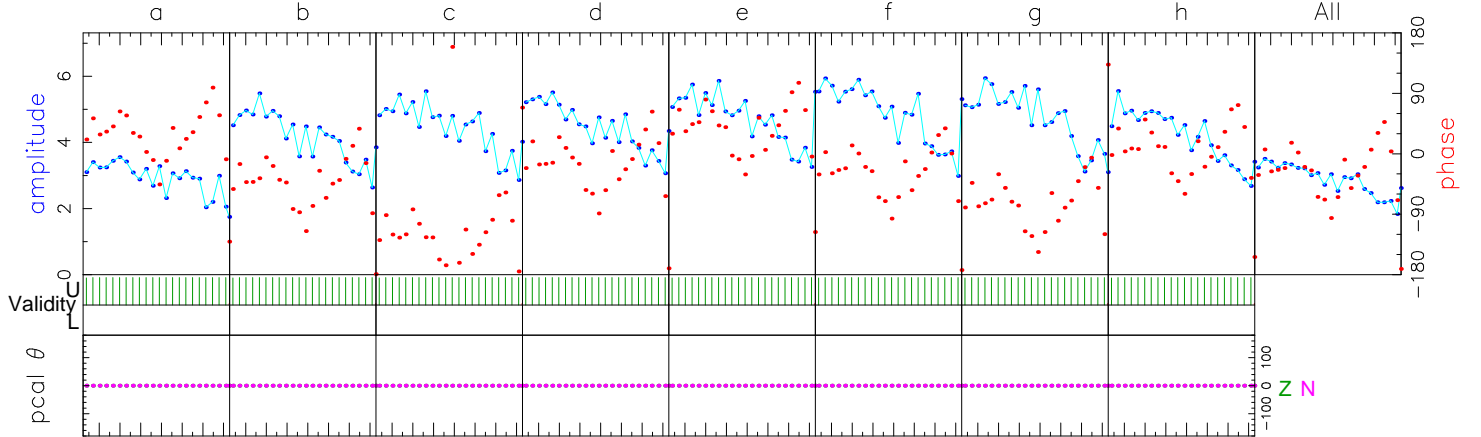


SNR 134.1
 Int time 405.845
 Amp 2.438
 Phase -23.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.006855
 MBD 0.003335
 Fringe rate (Hz) 0.064215
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180013.31
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130452
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	30.9	-40.7	-123.7	-12.9	38.2	-25.0	-75.3	7.6	Phase	-23.2
	2.6	3.5	3.8	3.7	4.0	4.1	4.0	3.6	Ampl.	3.7
	256.9	258.3	258.8	259.2	259.3	259.1	259.0	258.1	Sbd box	258.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -2.85936109734E+02 Apriori delay (usec) -2.85939444723E+02 Resid mbdelay (usec) 3.33499E-03 +/- 8.1E-06
 Sband delay (usec) -2.85932589223E+02 Apriori clock (usec) 1.2533809E+01 Resid sbdelay (usec) 6.85550E-03 +/- 6.4E-05
 Phase delay (usec) -2.85939445470E+02 Apriori clockrate (us/s) -8.3039998E-06 Resid phdelay (usec) -7.46975E-07 +/- 2.8E-08
 Delay rate (us/s) 1.73864862591E-01 Apriori rate (us/s) 1.73864117124E-01 Resid rate (us/s) 7.45467E-07 +/- 1.2E-10
 Total phase (deg) -299.8 Apriori accel (us/s/s) 1.60976879582E-05 Resid phase (deg) -23.2 +/- 0.9

RMS Theor. Amplitude 2.438 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 35.4 2.0 Search (2048X32) 2.303 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 26.2 3.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 59.0 1.2 Inc. seg. avg. 2.881 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 53.3 2.1 Inc. frq. avg. 3.654 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 301.0 el 42.8 pa 42.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -1559.073 2499.203 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/ZN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/ZN.W.378.1X1592

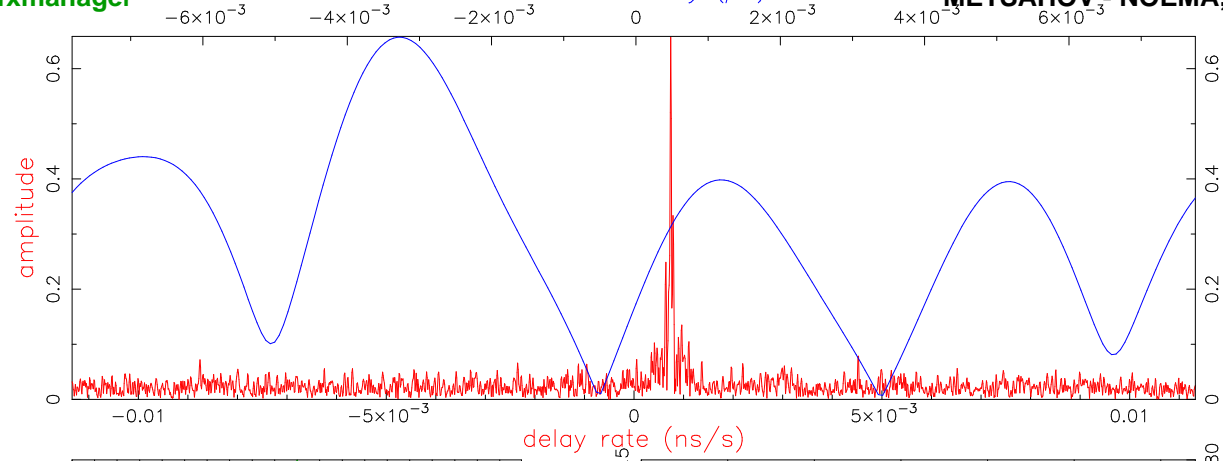
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, ZN

METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)

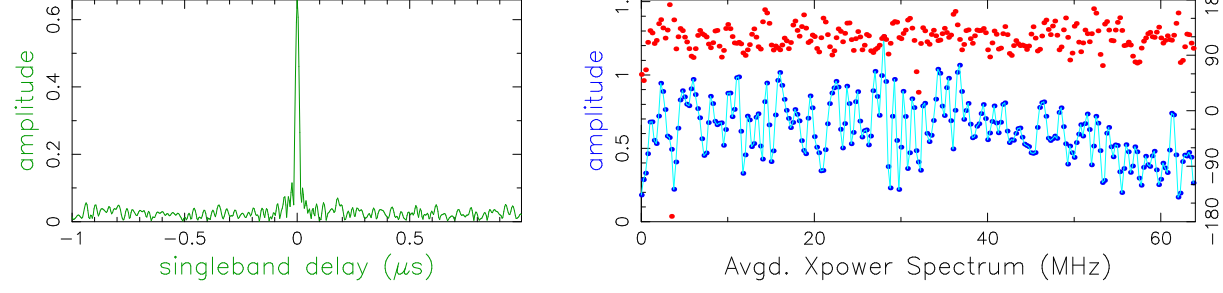


Fringe quality 4

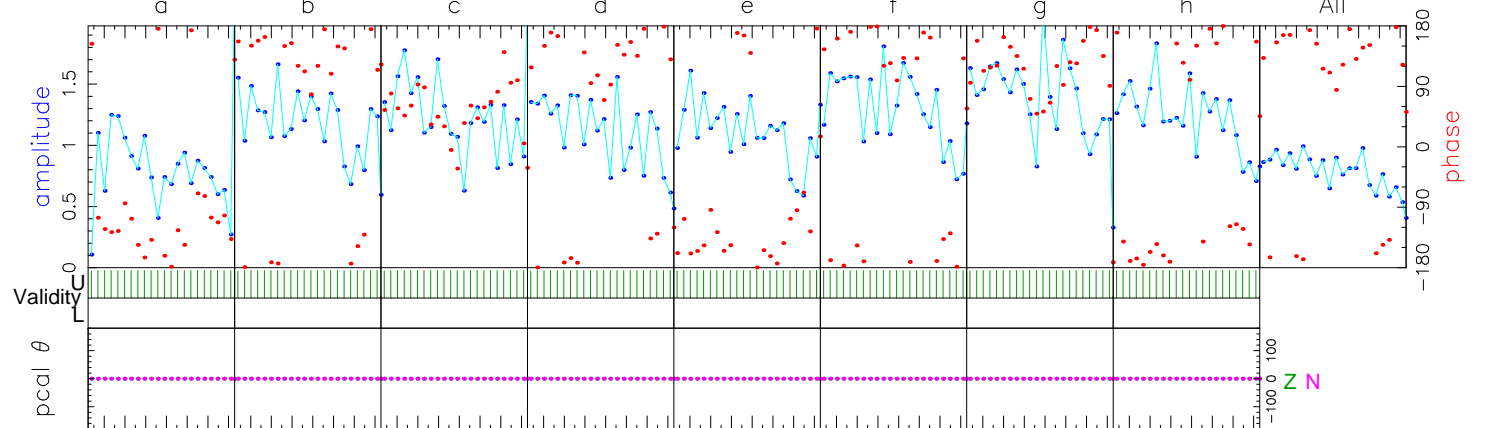
SNR 36.2
 Int time 405.845
 Amp 0.659
 Phase 159.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.000261
 MBD -0.003269
 Fringe rate (Hz)
 0.064140
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 180013.31
 Stop 180659.84
 FRT 180330.00
 Corr/FF/build
 2021:303:151428
 2021:304:130455
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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
	-126.6	152.0	57.4	155.3	-151.8	167.1	117.1	-171.5	Phase	159.3
	0.7	1.0	1.0	0.9	0.9	1.1	1.2	1.0	Ampl.	1.0
	254.9	256.5	256.9	257.5	257.7	257.5	257.3	256.5	Sbd box	257.1
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.85942713641E+02	Apriori delay (usec)	-2.85939444723E+02	Resid mbdelay (usec)	-3.26892E-03	+/-	3.0E-05
Sband delay (usec)	-2.85939183973E+02	Apriori clock (usec)	1.2533809E+01	Resid sbdelay (usec)	2.60750E-04	+/-	2.4E-04
Phase delay (usec)	-2.85939439586E+02	Apriori clockrate (us/s)	-8.3039998E-06	Resid phdelay (usec)	5.13679E-06	+/-	1.0E-07
Delay rate (us/s)	1.73864861720E-01	Apriori rate (us/s)	1.73864117124E-01	Resid rate (us/s)	7.44596E-07	+/-	4.3E-10
Total phase (deg)		Apriori accel (us/s/s)	1.60976879582E-05	Resid phase (deg)	159.3	+/-	3.2

ph/seg (deg)	35.9	RMS	7.6	Theor.	7.6	Amplitude	0.659 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	29.0	Search (2048X32)	0.642	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	59.2	Inc. seg. avg.	0.790	Inc. frq. avg.	0.963	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	51.6	Inc. frq. avg.	0.963	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 301.0 el 42.8 pa 42.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -1559.073 2499.203 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/ZN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/ZN.W.394.1X1592

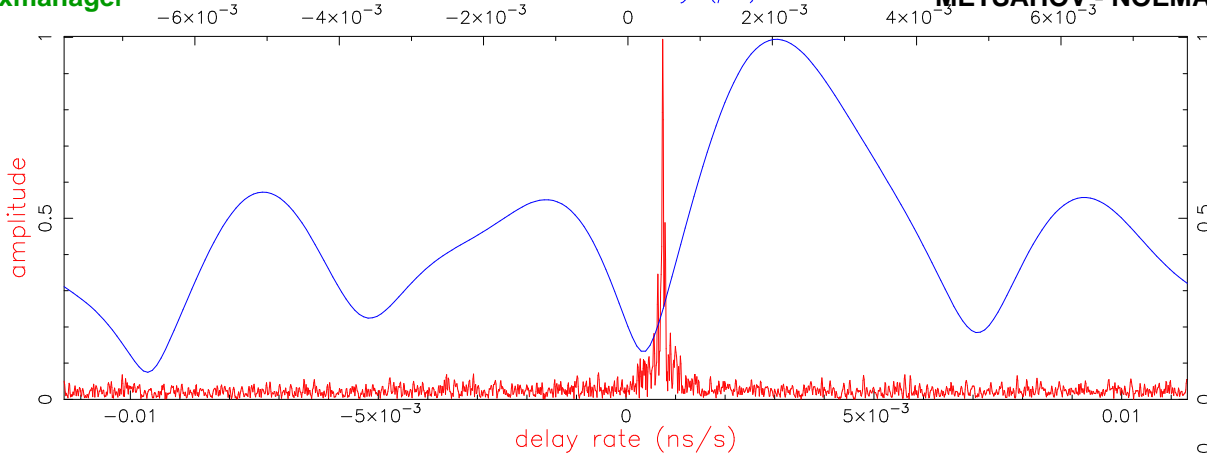
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1592, No0093, ZN

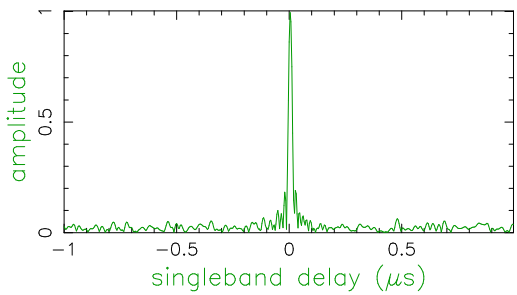
METSAHOV - NOEMA, fgroup W, pol RL

multiband delay (μ s)

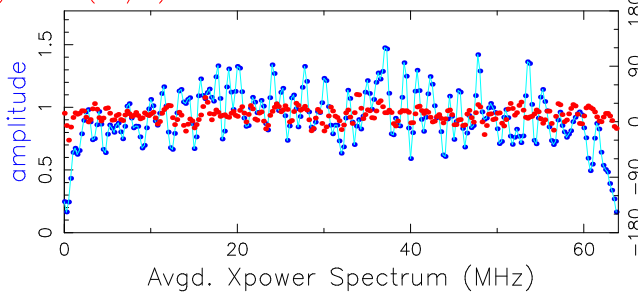


Fringe quality 2

SNR 55.1
Int time 405.845
Amp 1.003
Phase 44.1
PFD 0.0e+00
Delays (us)
SBD 0.004943
MBD 0.002077
Fringe rate (Hz)
0.064231
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

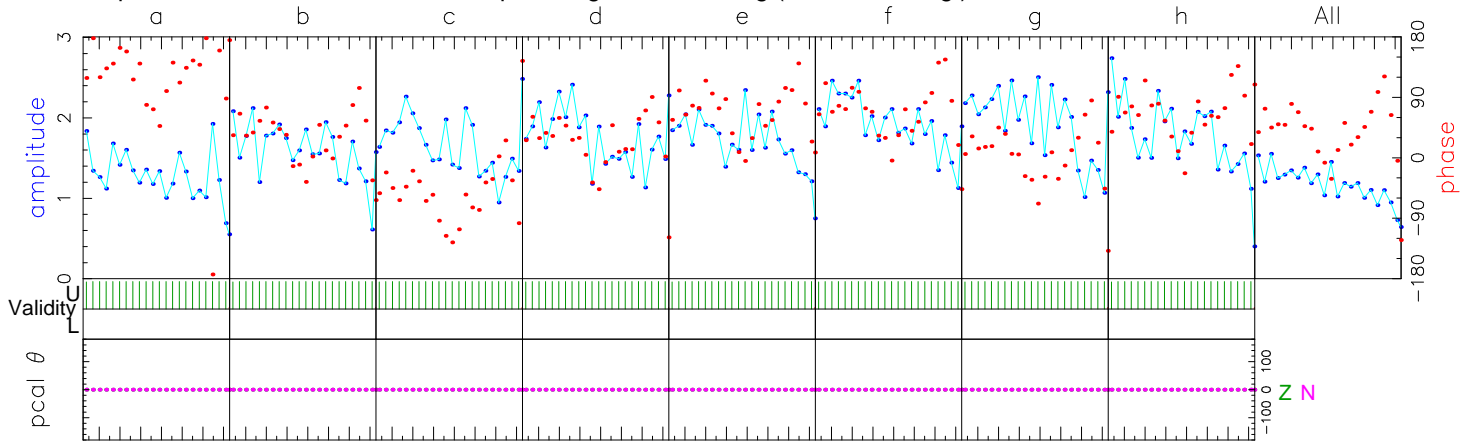


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 180013.31
Stop 180659.84
FRT 180330.00
Corr/FF/build
2021:303:151428
2021:304:130458
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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
	132.7	33.4	-55.7	30.2	69.4	71.2	5.5	64.4	Phase	44.1
	1.1	1.3	1.4	1.5	1.4	1.6	1.6	1.5	Ampl.	1.4
	256.3	257.6	258.3	258.7	258.7	258.5	258.5	257.5	Sbd box	258.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.85937367391E+02	Apriori delay (usec)	-2.85939444723E+02	Resid mbdelay (usec)	2.07733E-03	+/-	2.0E-05
Sband delay (usec)	-2.85934502223E+02	Apriori clock (usec)	1.2533809E+01	Resid sbdelay (usec)	4.94250E-03	+/-	1.6E-04
Phase delay (usec)	-2.85939443301E+02	Apriori clockrate (us/s)	-8.3039998E-06	Resid phdelay (usec)	1.42257E-06	+/-	6.7E-08
Delay rate (us/s)	1.73864862780E-01	Apriori rate (us/s)	1.73864117124E-01	Resid rate (us/s)	7.45656E-07	+/-	2.9E-10
Total phase (deg)	-232.5	Apriori accel (us/s/s)	1.60976879582E-05	Resid phase (deg)	44.1	+/-	2.1

ph/seg (deg)	35.6	Theor.	5.0	Amplitude	1.003 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	27.3		8.7	Search (2048X32)	0.960	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	59.7		2.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	45.5		5.1	Inc. seg. avg.	1.185	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	1.427	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 301.0 el 42.8 pa 42.9 N: az 304.4 el 44.0 pa 69.6 u,v (fr/asec) -1559.073 2499.203 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0093/ZN..1X1592 Output file: /Exps/c211c/v1/1234/No0093/ZN.W.401.1X1592