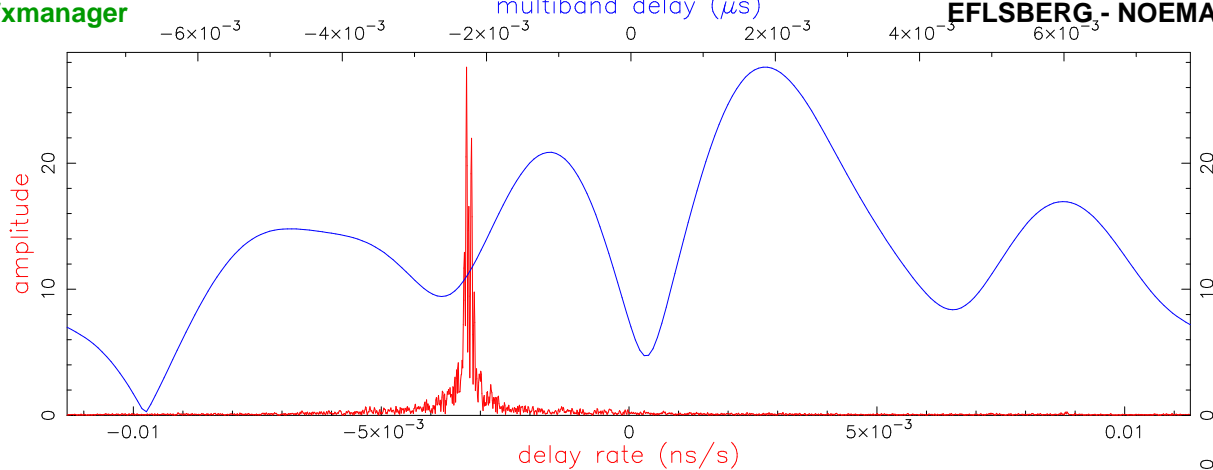


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

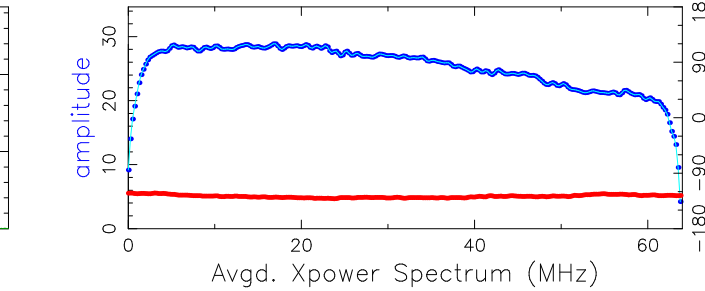
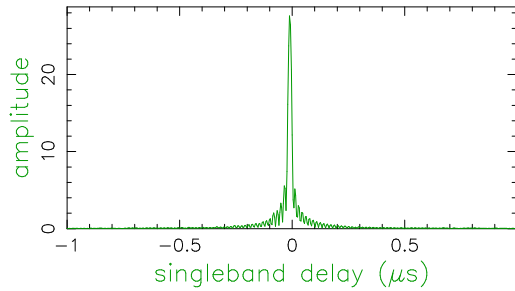
3C273.1W6XBK, No0156, BN

EFLSBERG₃- NOEMA, fgroup W, pol LL



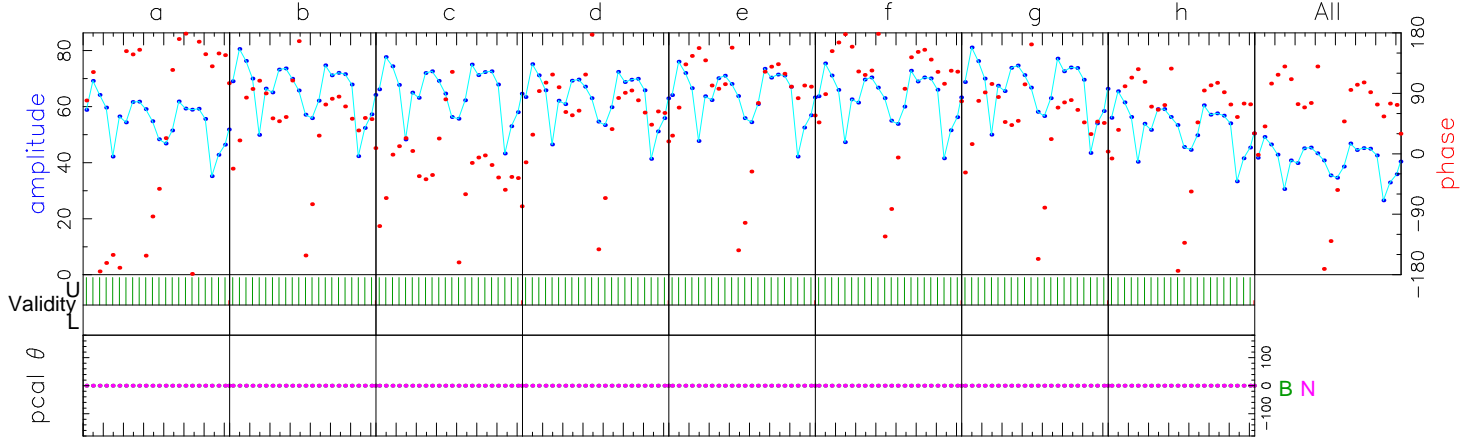
Fringe quality 1

SNR 1558.0
 Int time 419.828
 Amp 28.787
 Phase 87.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010645
 MBD 0.001899
 Fringe rate (Hz)
 -0.282712
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080439
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	-7.52835776752E+02	Apriori delay (usec)	-7.52822051092E+02	Resid mbdelay (usec)	1.89934E-03	+/-	7.0E-07
Sband delay (usec)	-7.52832695842E+02	Apriori clock (usec)	-8.6610823E+00	Resid sbdelay (usec)	-1.06447E-02	+/-	5.5E-06
Phase delay (usec)	-7.52822048285E+02	Apriori clockrate (us/s)	-8.6550003E-06	Resid phdelay (usec)	2.80714E-06	+/-	2.4E-09
Delay rate (us/s)	1.04215670245E-01	Apriori rate (us/s)	1.04218952254E-01	Resid rate (us/s)	-3.28201E-06	+/-	9.8E-12
Total phase (deg)	-86.1	Apriori accel (us/s/s)	4.21989566415E-06	Resid phase (deg)	87.1	+/-	0.1

ph/seg (deg)	56.6	RMS	28.787 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	50.5	Theor.		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	60.5	Search (2048X32)	25.508	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.2	Interp.	0.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	42.087	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.	43.404	nlags:	256	t_cohere	infinite	

B: az 254.9 el 14.6 pa 37.9 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -592.003 624.444 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/BN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/BN.W.18.1W6XBK

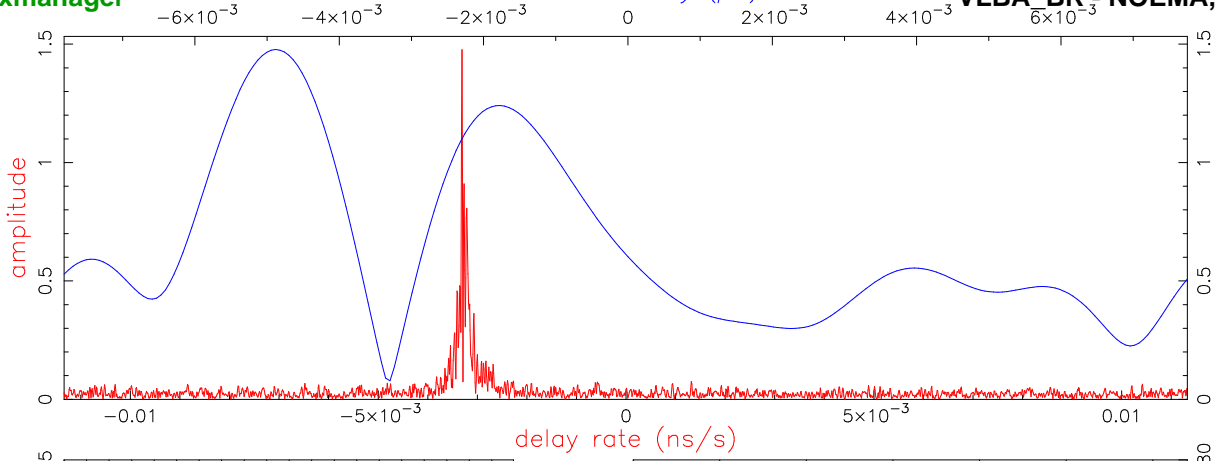
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

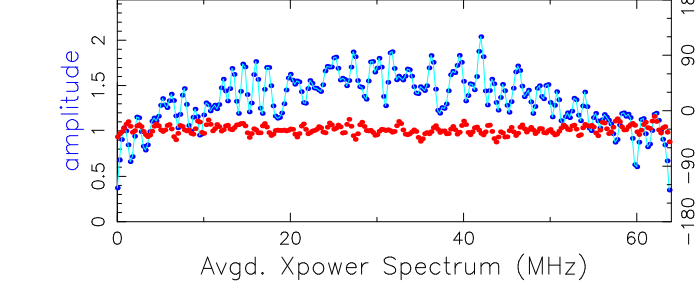
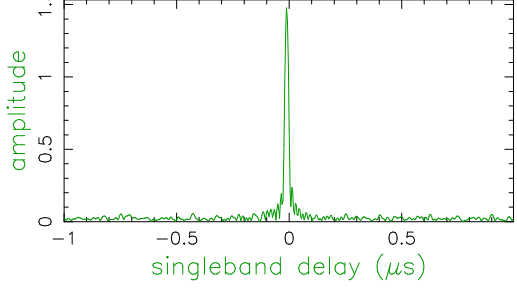
3C273.1W6XBK, No0156, bN

VLBA_BR - NOEMA, fgroup W, pol RR

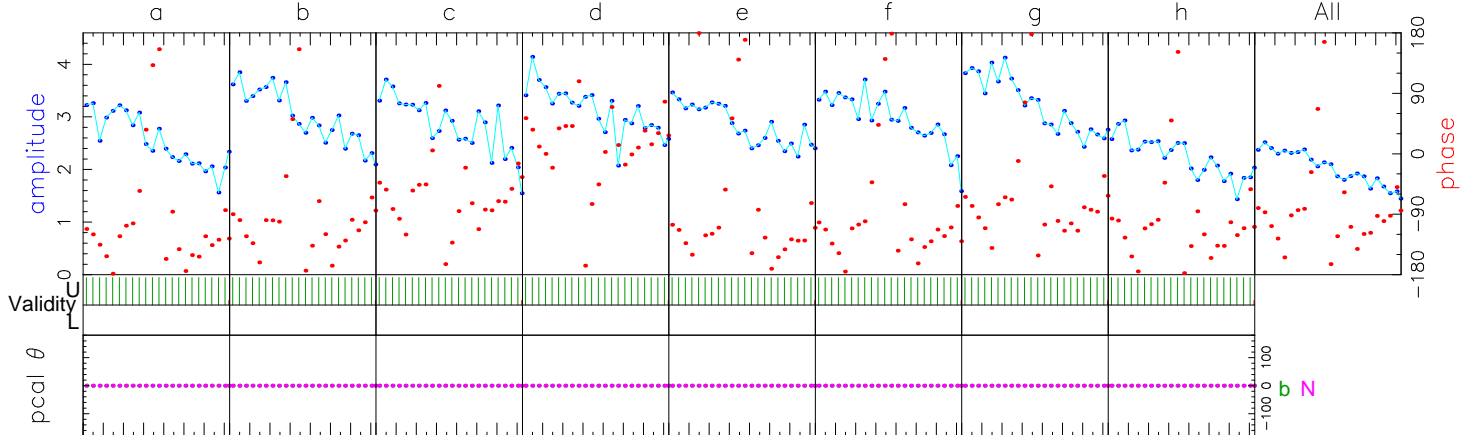
multiband delay (μ s)



Fringe quality 1
 SNR 82.9
 Int time 419.832
 Amp 1.533
 Phase -103.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.011187
 MBD -0.004870
 Fringe rate (Hz)
 -0.285511
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080441
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.2	-114.3	-71.3	21.4	-131.2	-124.6	-89.1	-121.2	Phase	-103.6
	1.9	2.3	2.1	2.3	2.1	2.2	2.4	1.6	Ampl.	2.1
	252.7	254.8	255.0	254.8	255.0	254.8	254.0	252.3	Sbd box	254.1
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.47112258886E+03		Apriori delay (usec)		2.47112745886E+03		Resid mbdelay (usec)		-4.87000E-03	+/- 1.3E-05
Sband delay (usec)	2.47111627161E+03		Apriori clock (usec)		1.0430598E+01		Resid sbdelay (usec)		-1.11872E-02	+/- 1.0E-04
Phase delay (usec)	2.47112745552E+03		Apriori clockrate (us/s)		-8.7550002E-06		Resid phdelay (usec)		-3.34137E-06	+/- 4.5E-08
Delay rate (us/s)	1.89746801142E+00		Apriori rate (us/s)		1.89747132593E+00		Resid rate (us/s)		-3.31450E-06	+/- 1.8E-10
Total phase (deg)	6.5		Apriori accel (us/s/s)		-1.29241699068E-05		Resid phase (deg)		-103.6	+/- 1.4

ph/seg (deg) 51.7 3.3 Search (2048X32) 1.365 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.2 5.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.8 2.0 Inc. seg. avg. 2.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.3 3.4 Inc. frq. avg. 2.121 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 114.2 el 22.6 pa -37.6 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10887.649 345.008 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/bN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/bN.W.26.1W6XBK simultaneous interpolator

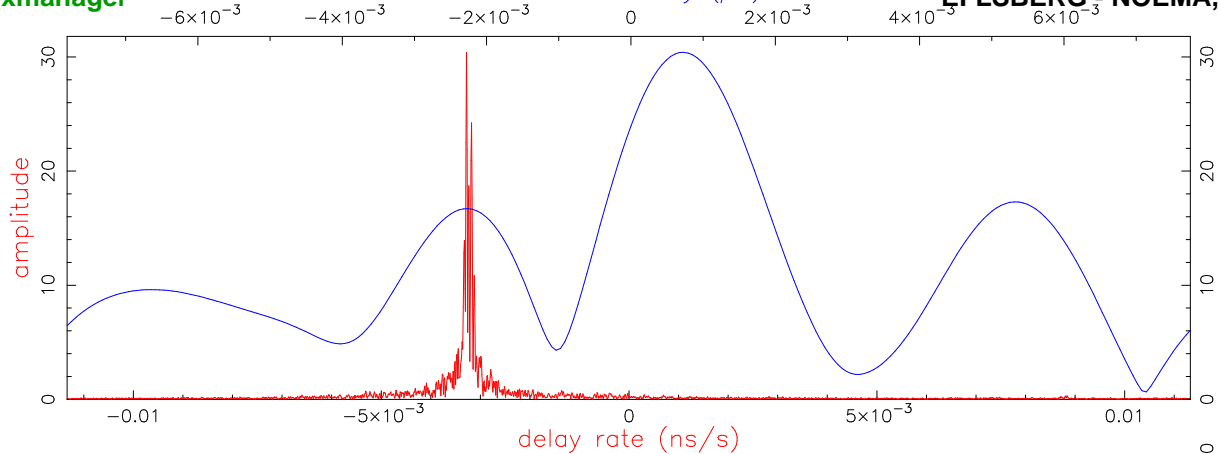
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, BN

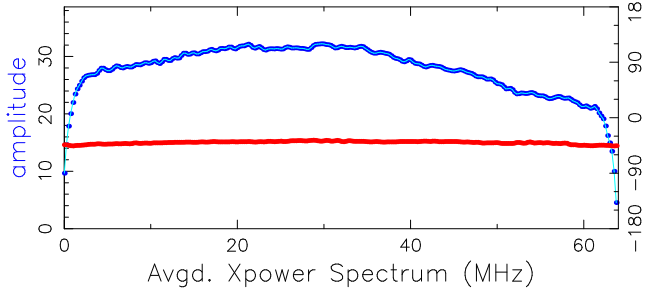
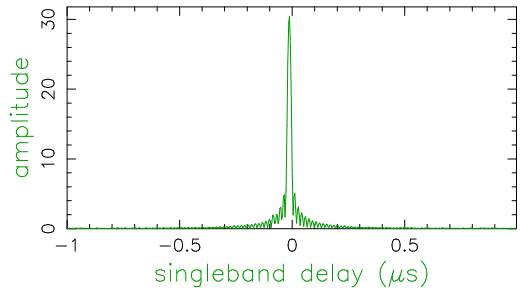
EFLSBERG - NOEMA, fgroup W, pol RR

multiband delay (μ s)



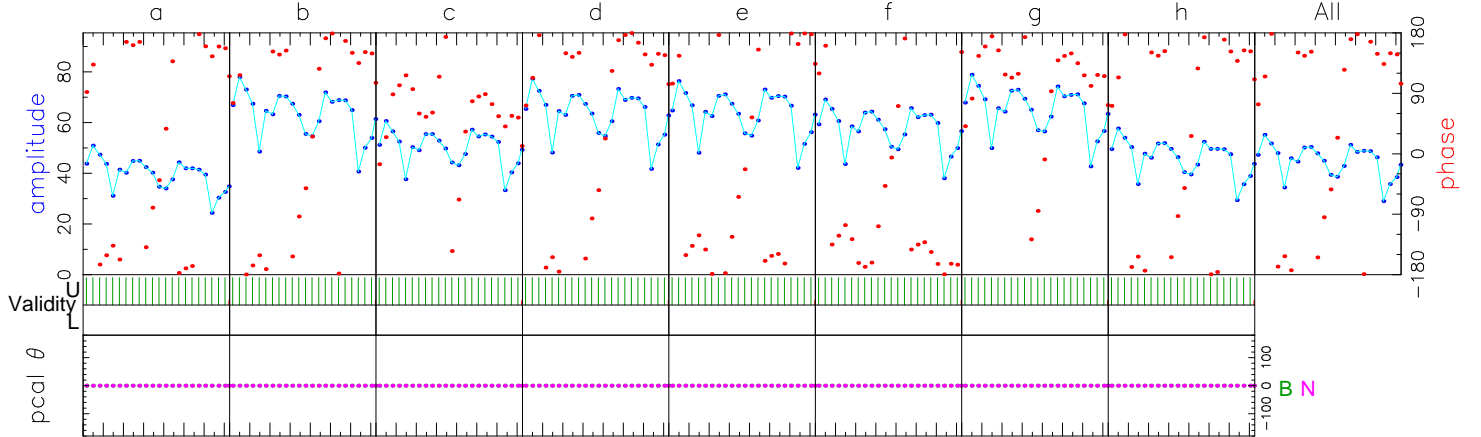
Fringe quality 2

SNR 1721.3
 Int time 419.828
 Amp 31.805
 Phase 162.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.013076
 MBD 0.000673
 Fringe rate (Hz)
 -0.282719
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080443
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	-7.52837002752E+02	Apriori delay (usec)	-7.52822051092E+02	Resid mbdelay (usec)	6.73340E-04	+/-	6.3E-07
Sband delay (usec)	-7.52835127092E+02	Apriori clock (usec)	-8.6610823E+00	Resid sbdelay (usec)	-1.30760E-02	+/-	5.0E-06
Phase delay (usec)	-7.52822045856E+02	Apriori clockrate (us/s)	-8.6550003E-06	Resid phdelay (usec)	5.23552E-06	+/-	2.1E-09
Delay rate (us/s)	1.04215670166E-01	Apriori rate (us/s)	1.04218952254E-01	Resid rate (us/s)	-3.28209E-06	+/-	8.9E-12
Total phase (deg)	-10.8	Apriori accel (us/s/s)	4.21989566415E-06	Resid phase (deg)	162.4	+/-	0.1

ph/seg (deg)	56.6	RMS	31.805 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	50.6	Theor.		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.1	Search (2048X32)	28.205	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.9	Interp.	0.000	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	46.503	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.	39.295	nlags:	256	t_cohere	infinite	

B: az 254.9 el 14.6 pa 37.9 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -592.003 624.444 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/BN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/BN.W.38.1W6XBK

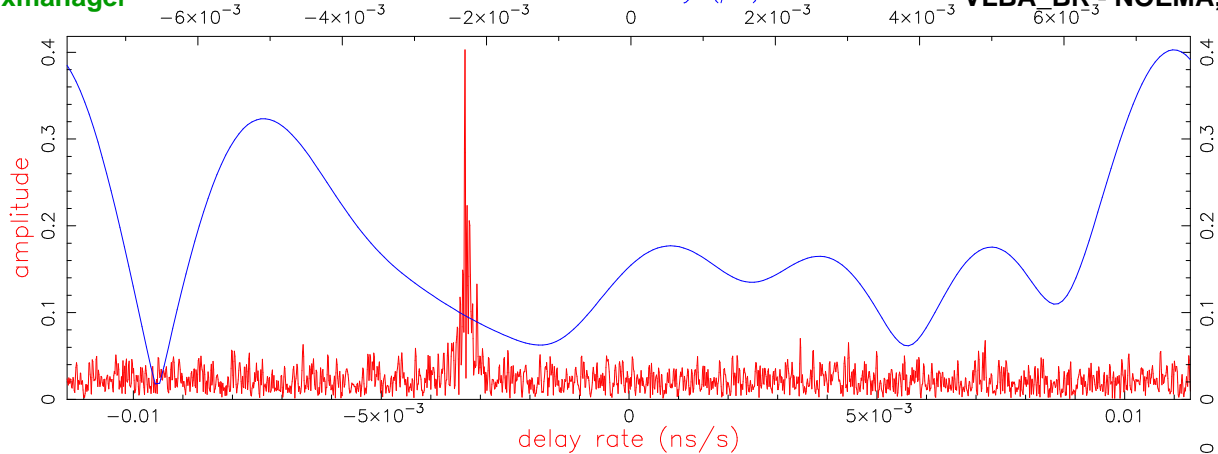
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, bN

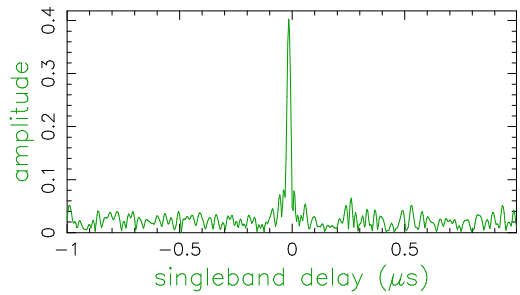
VLBA_BR - NOEMA, fgroup W, pol LR

multiband delay (μ s)

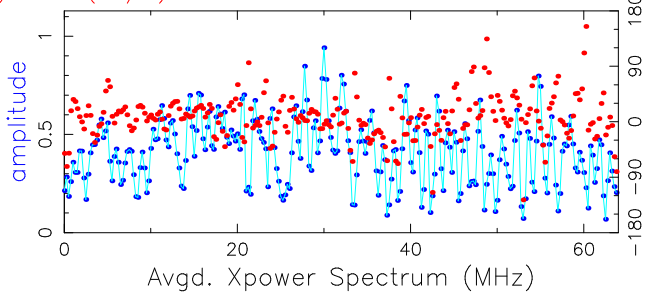


Fringe quality 7

SNR 22.6
 Int time 419.832
 Amp 0.418
 Phase -74.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.014975
 MBD -0.008090
 Fringe rate (Hz)
 -0.285513
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

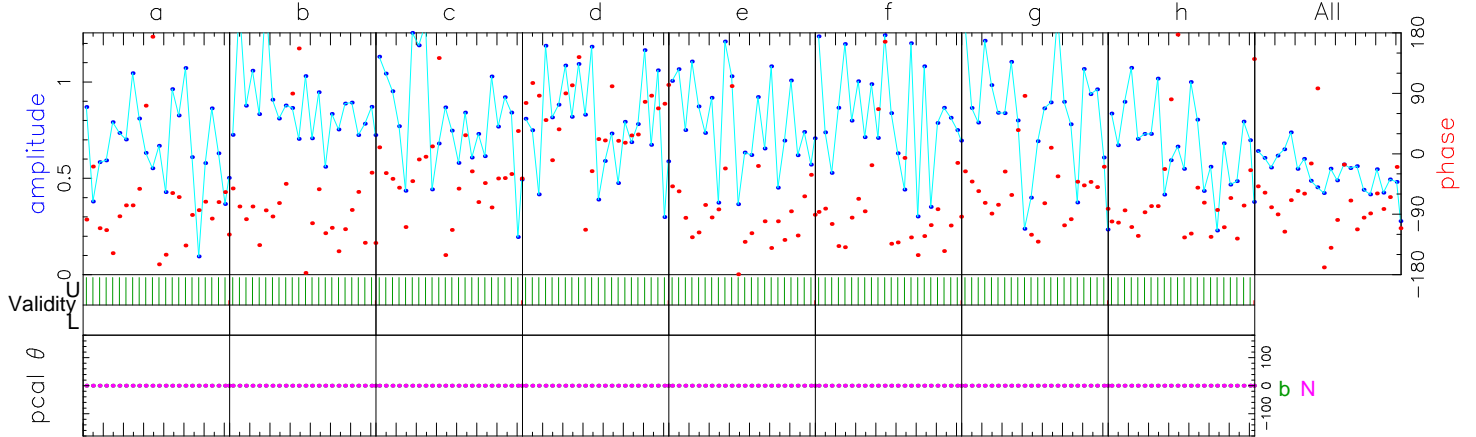


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080445
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	2.47111936873E+03	Apriori delay (usec)	2.47112745886E+03	Resid mbdelay (usec)	-8.09013E-03	+/-	4.8E-05
Sband delay (usec)	2.47111248386E+03	Apriori clock (usec)	1.0430598E+01	Resid sbdelay (usec)	-1.49750E-02	+/-	3.8E-04
Phase delay (usec)	2.47112745647E+03	Apriori clockrate (us/s)	-8.7550002E-06	Resid phdelay (usec)	-2.39043E-06	+/-	1.6E-07
Delay rate (us/s)	1.89746801140E+00	Apriori rate (us/s)	1.89747132593E+00	Resid rate (us/s)	-3.31453E-06	+/-	6.7E-10
Total phase (deg)	36.0	Apriori accel (us/s/s)	-1.29241699068E-05	Resid phase (deg)	-74.1	+/-	5.1

ph/seg (deg)	51.8	Theor.	12.1	Amplitude	0.418 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	39.2		21.2	Search (2048X32)	0.379	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	60.4		7.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.5		12.5	Inc. seg. avg.	0.544	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.572	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 114.2 el 22.6 pa -37.6 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10887.649 345.008 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/bN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/bN.W.45.1W6XBK

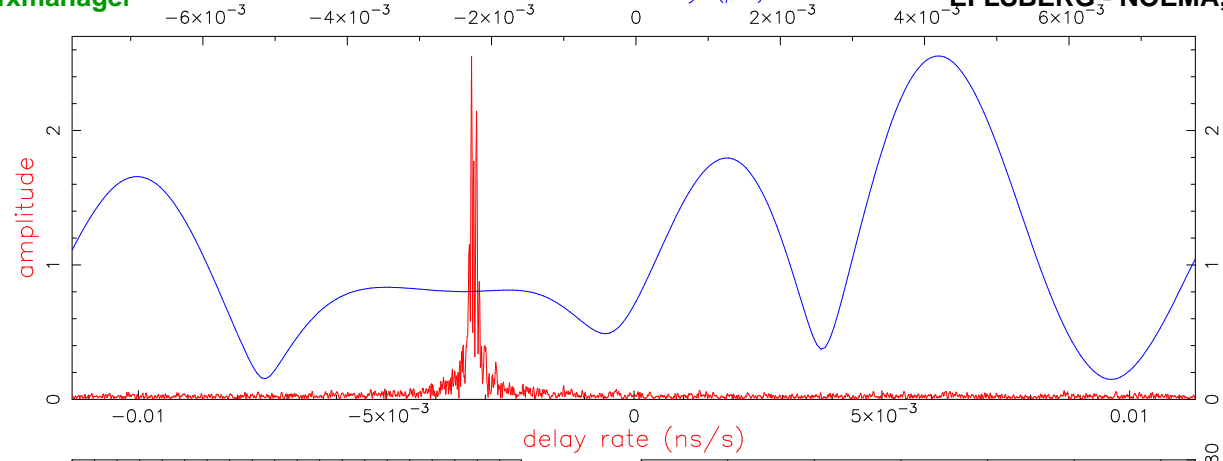
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, BN

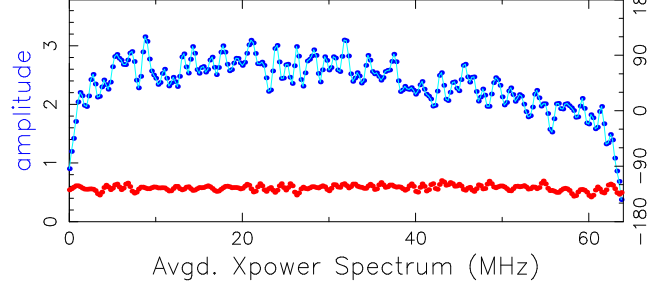
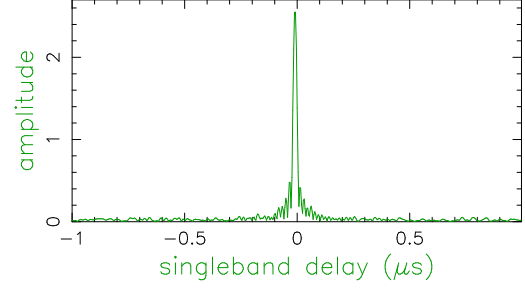
EFLSBERG - NOEMA, fgroup W, pol LR

multiband delay (μ s)

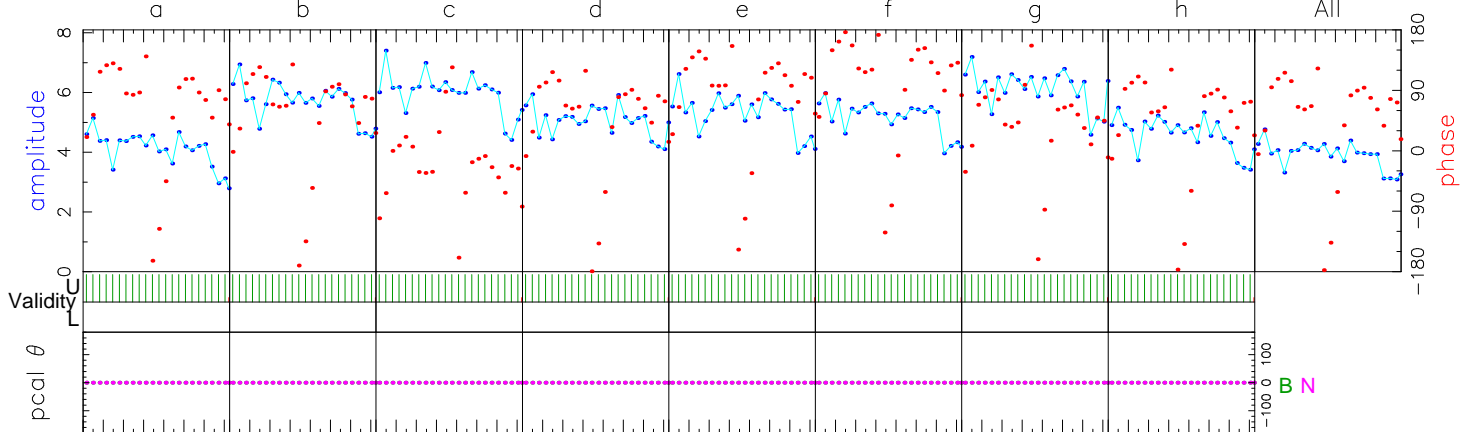


Fringe quality 2

SNR 146.1
 Int time 419.828
 Amp 2.700
 Phase 76.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.009736
 MBD 0.004131
 Fringe rate (Hz)
 -0.282591
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080447
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
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) -7.52833545252E+02 Apriori delay (usec) -7.52822051092E+02 Resid mbdelay (usec) 4.13084E-03 +/- 7.4E-06
 Sband delay (usec) -7.52831786842E+02 Apriori clock (usec) -8.6610823E+00 Resid sbdelay (usec) -9.73575E-03 +/- 5.9E-05
 Phase delay (usec) -7.52822048623E+02 Apriori clockrate (us/s) -8.6550003E-06 Resid phdelay (usec) 2.46853E-06 +/- 2.5E-08
 Delay rate (us/s) 1.04215671647E-01 Apriori rate (us/s) 1.04218952254E-01 Resid rate (us/s) -3.28061E-06 +/- 1.0E-10
 Total phase (deg) -96.6 Apriori accel (us/s/s) 4.21989566415E-06 Resid phase (deg) 76.6 +/- 0.8

RMS Theor. Amplitude 2.700 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.6 1.9 Search (2048X32) 2.446 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 53.2 3.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 49.7 1.1 Inc. seg. avg. 4.064 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 35.6 1.9 Inc. frq. avg. 3.556 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 254.9 el 14.6 pa 37.9 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -592.003 624.444 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/BN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/BN.W.59.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

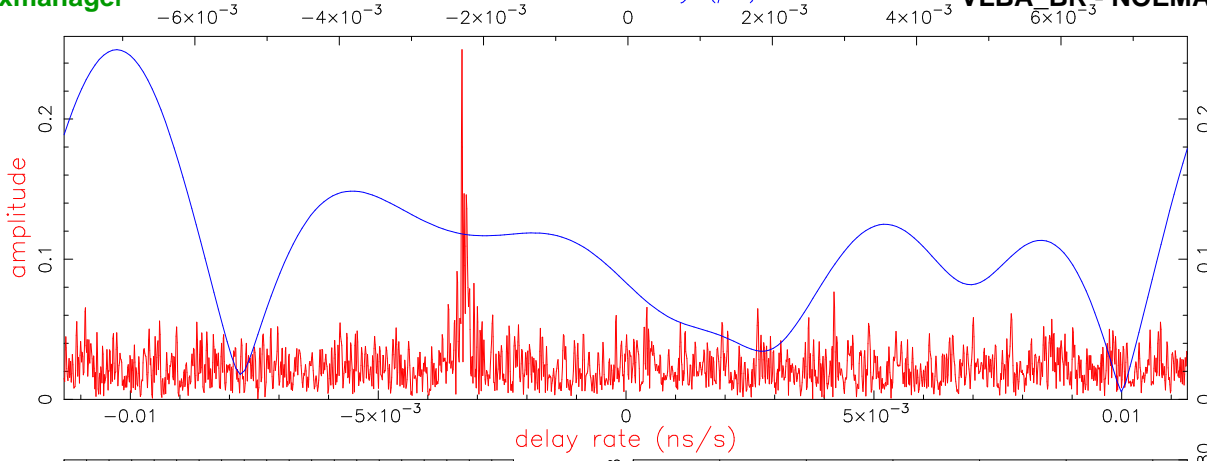
fxmanager

3C273.1W6XBK, No0156, bN

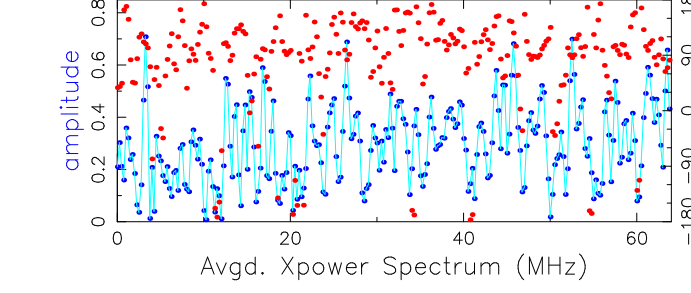
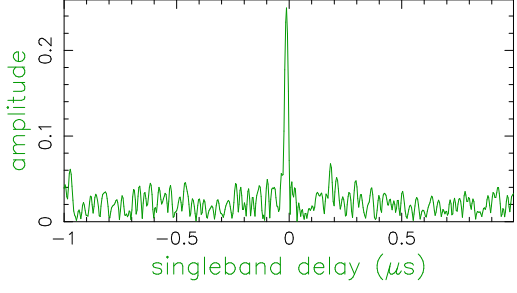
VLBA_BR - NOEMA, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

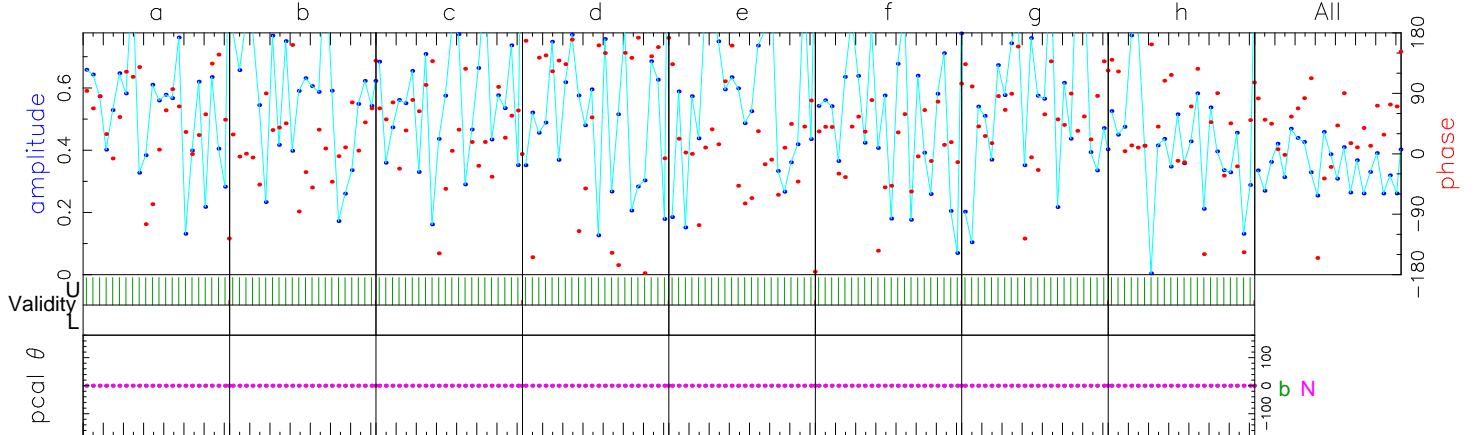


SNR 14.0
 Int time 419.832
 Amp 0.259
 Phase 44.9
 PFD 8.3e-36
 Delays (us)
 SBD -0.012285
 MBD -0.007100
 Fringe rate (Hz)
 -0.285576
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080448
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.47112035901E+03		Apriori delay (usec)		2.47112745886E+03		Resid mbdelay (usec)		-7.09985E-03	+/- 7.7E-05
Sband delay (usec)	2.47111517386E+03		Apriori clock (usec)		1.0430598E+01		Resid sbdelay (usec)		-1.22850E-02	+/- 6.1E-04
Phase delay (usec)	2.47112746031E+03		Apriori clockrate (us/s)		-8.7550002E-06		Resid phdelay (usec)		1.44778E-06	+/- 2.6E-07
Delay rate (us/s)	1.89746801067E+00		Apriori rate (us/s)		1.89747132593E+00		Resid rate (us/s)		-3.31526E-06	+/- 1.1E-09
Total phase (deg)	155.1		Apriori accel (us/s/s)		-1.29241699068E-05		Resid phase (deg)		44.9	+/- 8.2
ph/seg (deg)	RMS 51.0	Theor. 19.6	Amplitude 0.259 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	47.7	34.2	Search (2048X32) 0.232		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	53.3	11.6	Interp. 0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
amp/frq (%)	39.8	20.2	Inc. seg. avg. 0.340		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
			Inc. frq. avg. 0.342							
b: az 114.2 el 22.6 pa -37.6	N: az 255.7 el 16.7 pa 43.7		u,v (fr/asec) -10887.649 345.008						simultaneous interpolator	

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/bN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/bN.W.65.1W6XBK

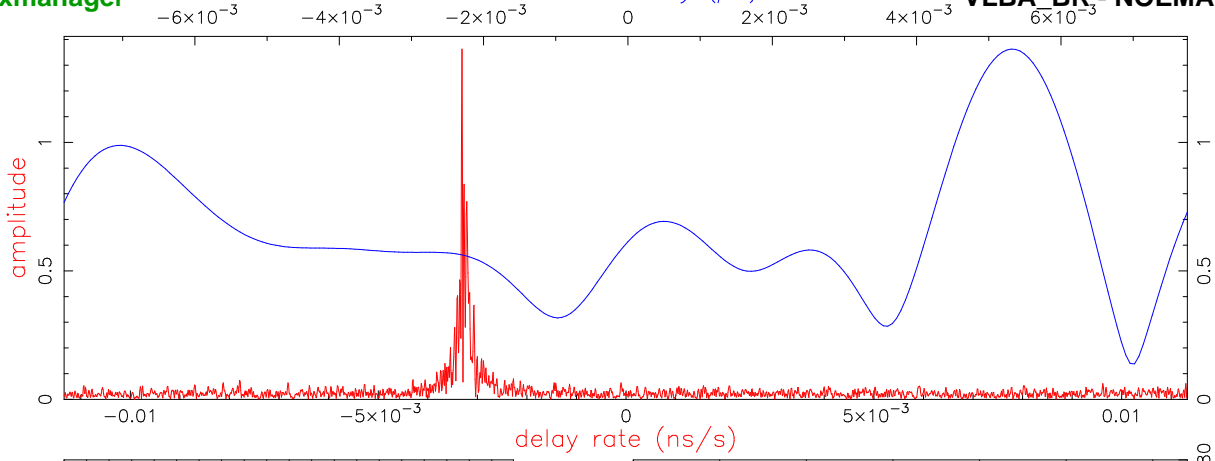
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, bN

VLBA BR- NOEMA, fgroup W, pol LL

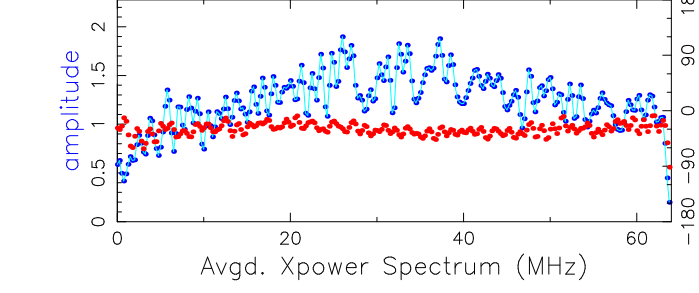
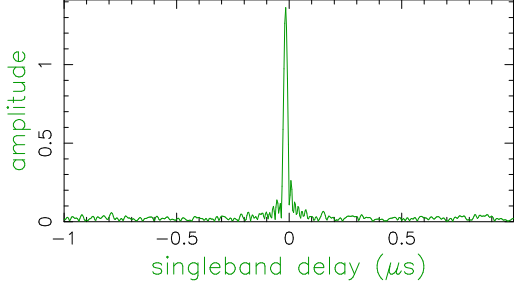
multiband delay (μ s)



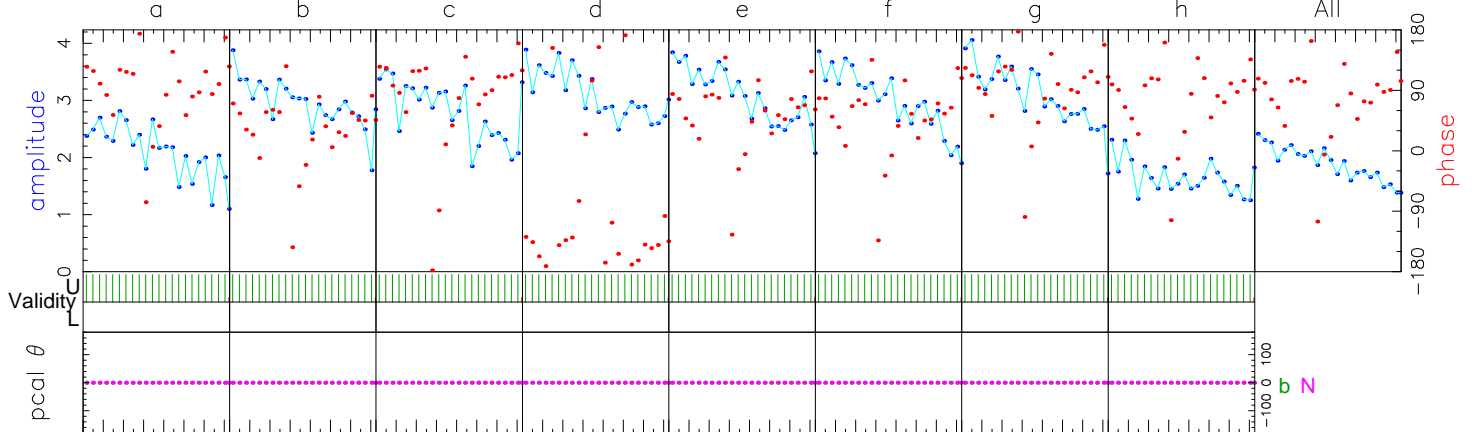
Fringe quality 1

SNR 76.4
 Int time 419.832
 Amp 1.412
 Phase 85.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.015874
 MBD 0.005315
 Fringe rate (Hz)
 -0.285571
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080438
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	2.47111714911E+03	Apriori delay (usec)		2.47112745886E+03	Resid mbdelay (usec)		5.31525E-03	+/- 1.4E-05	
Sband delay (usec)	2.47111158461E+03	Apriori clock (usec)		1.0430598E+01	Resid sbdelay (usec)		-1.58742E-02	+/- 1.1E-04	
Phase delay (usec)	2.47112746163E+03	Apriori clockrate (us/s)		-8.7550002E-06	Resid phdelay (usec)		2.77125E-06	+/- 4.8E-08	
Delay rate (us/s)	1.89746801074E+00	Apriori rate (us/s)		1.89747132593E+00	Resid rate (us/s)		-3.31519E-06	+/- 2.0E-10	
Total phase (deg)	196.1	Apriori accel (us/s/s)		-1.29241699068E-05	Resid phase (deg)		85.9	+/- 1.5	

ph/seg (deg)	52.0	Theor.	3.6	Amplitude	1.412 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	44.9		6.3	Search (2048X32)	1.249	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	57.2		2.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	51.8		3.7	Inc. seg. avg.	1.971	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	2.035	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 114.2 el 22.6 pa -37.6 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10887.649 345.008 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/bN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/bN.W.7.1W6XBK

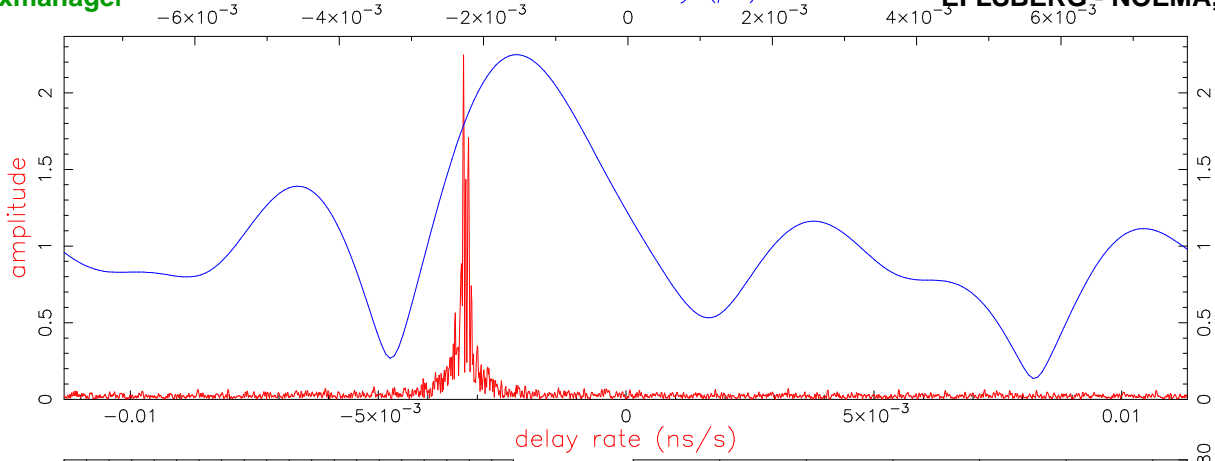
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, BN

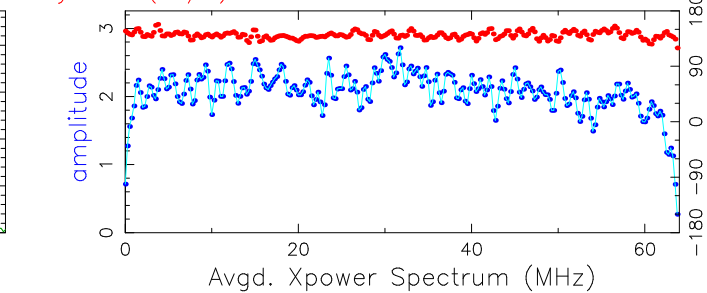
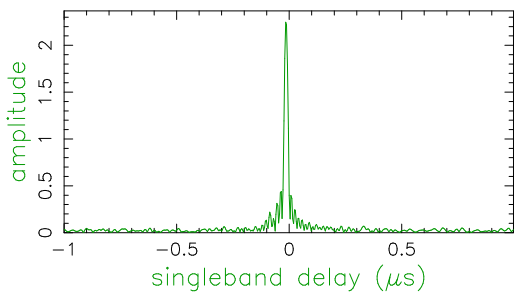
EFLSBERG - NOEMA, fgroup W, pol RL

multiband delay (μs)



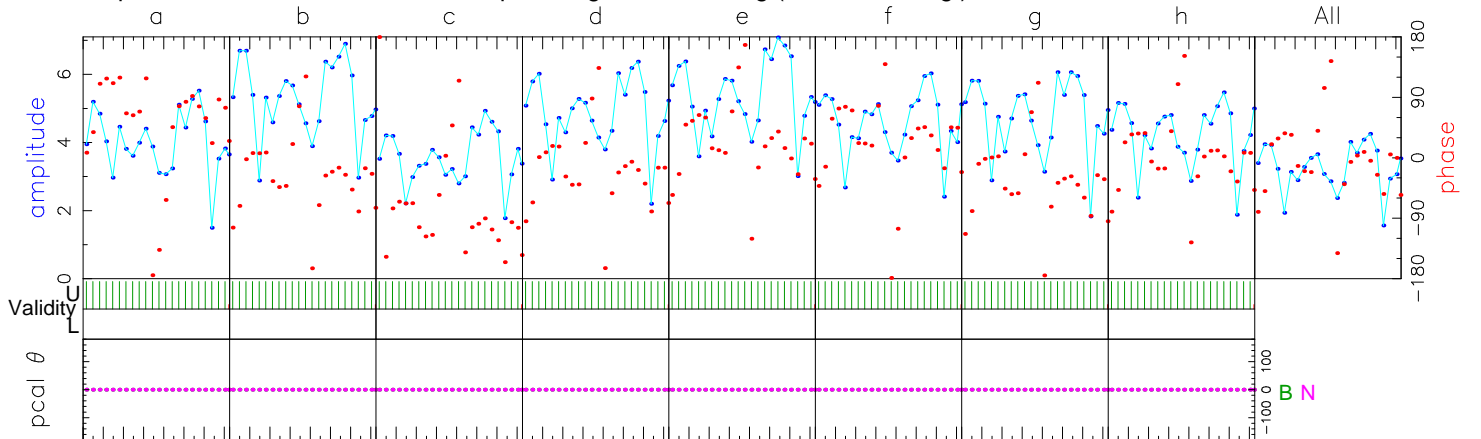
Fringe quality 1

SNR 128.2
 Int time 419.828
 Amp 2.368
 Phase -3.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.013915
 MBD -0.001478
 Fringe rate (Hz)
 -0.282594
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080450
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	-7.52839154190E+02	Apriori delay (usec)	-7.52822051092E+02	Resid mbdelay (usec)	-1.47810E-03	+/-	8.5E-06
Sband delay (usec)	-7.52835966342E+02	Apriori clock (usec)	-8.6610823E+00	Resid sbdelay (usec)	-1.39153E-02	+/-	6.7E-05
Phase delay (usec)	-7.52822051196E+02	Apriori clockrate (us/s)	-8.6550003E-06	Resid phdelay (usec)	-1.04267E-07	+/-	2.9E-08
Delay rate (us/s)	1.04215671617E-01	Apriori rate (us/s)	1.04218952254E-01	Resid rate (us/s)	-3.28064E-06	+/-	1.2E-10
Total phase (deg)	-176.4	Apriori accel (us/s/s)	4.21989566415E-06	Resid phase (deg)	-3.2	+/-	0.9

ph/seg (deg)	57.3	RMS	2.1	Theor.	2.368 +/- 0.018	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	51.4	Search (2048X32)	2.134	Amplitude		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	59.0	Interp.	0.000	Interp.		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.9	Inc. seg. avg.	3.364	Inc. seg. avg.		Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	3.276	Inc. frq. avg.		Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 254.9 el 14.6 pa 37.9 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -592.003 624.444 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/BN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/BN.W.76.1W6XBK

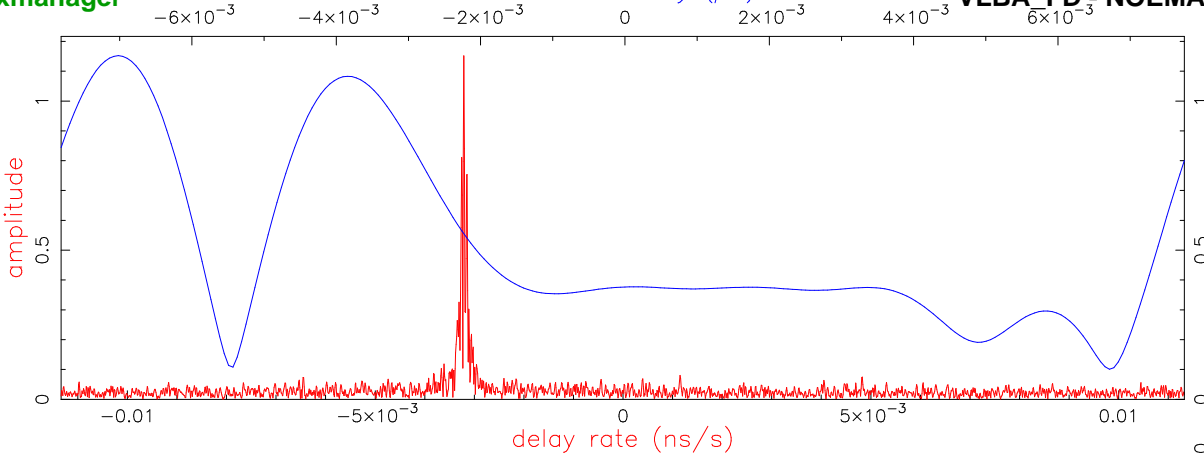
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, fN

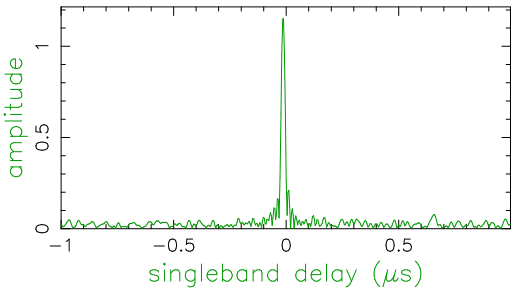
VLBA_FD - NOEMA, fgroup W, pol RR

multiband delay (μ s)

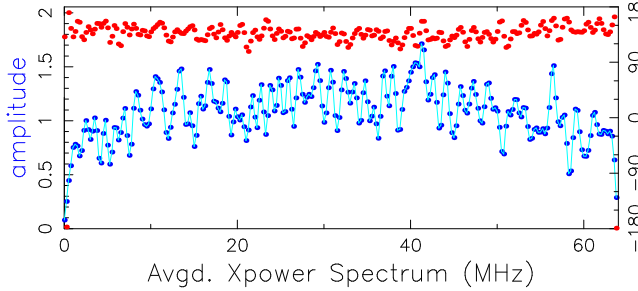


Fringe quality 1

SNR 64.8
Int time 405.614
Amp 1.217
Phase 61.0
PFD 0.0e+00
Delays (us)
SBD -0.013653
MBD -0.007054
Fringe rate (Hz)
-0.277180
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

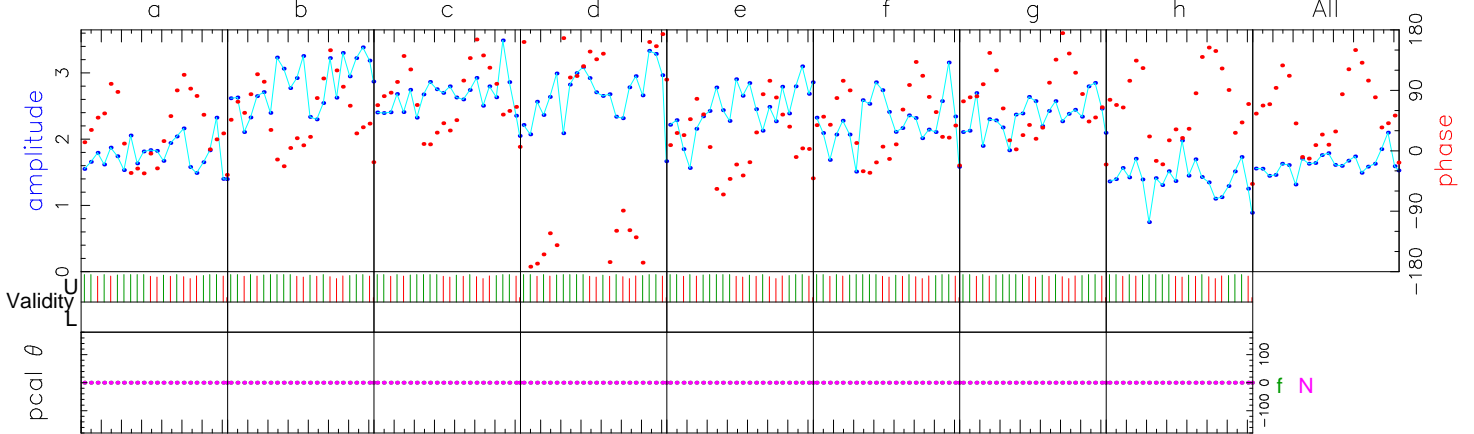


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 023000.00
Stop 023659.84
FRT 023330.00
Corr/FF/build
2021:287:073510
2021:287:080500
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All						
U/L	804/0	804/0	802/0	802/0	803/0	803/0	803/0	803/0								
f	1000	1000	1000	1000	1000	1000	1000	1000								
N	1000	1000	1000	1000	1000	1000	1000	1000								
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0								
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0								
f	1000	1000	1000	1000	1000	1000	1000	1000								
N	1000	1000	1000	1000	1000	1000	1000	1000								
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR								
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR								
Group delay (usec)(sbd)	8.34133338198E+03		Apriori delay (usec)		8.34134043606E+03		Resid mbdelay (usec)		-7.05408E-03	+/- 1.7E-05						
Sband delay (usec)	8.34132678331E+03		Apriori clock (usec)		2.3629711E+01		Resid sbdelay (usec)		-1.36528E-02	+/- 1.3E-04						
Phase delay (usec)	8.34134043803E+03		Apriori clockrate (us/s)		-8.5950006E-06		Resid phdelay (usec)		1.96678E-06	+/- 5.7E-08						
Delay rate (us/s)	1.90500492573E+00		Apriori rate (us/s)		1.90500814352E+00		Resid rate (us/s)		-3.21779E-06	+/- 2.4E-10						
Total phase (deg)			119.5		Apriori accel (us/s/s)		-4.49634646369E-05		Resid phase (deg)		61.0	+/- 1.8				
RMS	46.3	4.2	Amplitude		1.217 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5							
ph/seg (deg)	41.1	7.3	Search (2048X32)		1.091		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000				
amp/seg (%)	54.7	2.5	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.008	0.008		
ph/frq (deg)	49.4	4.4	Inc. seg. avg.		1.686		Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011		0.011			
amp/frq (%)			Inc. frq. avg.		1.692		Data rate(Mb/s): 2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	0.00

f: az 117.9 el 41.3 pa -49.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10969.801 -1821.332 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/fN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/fN.W.111.1W6XBK

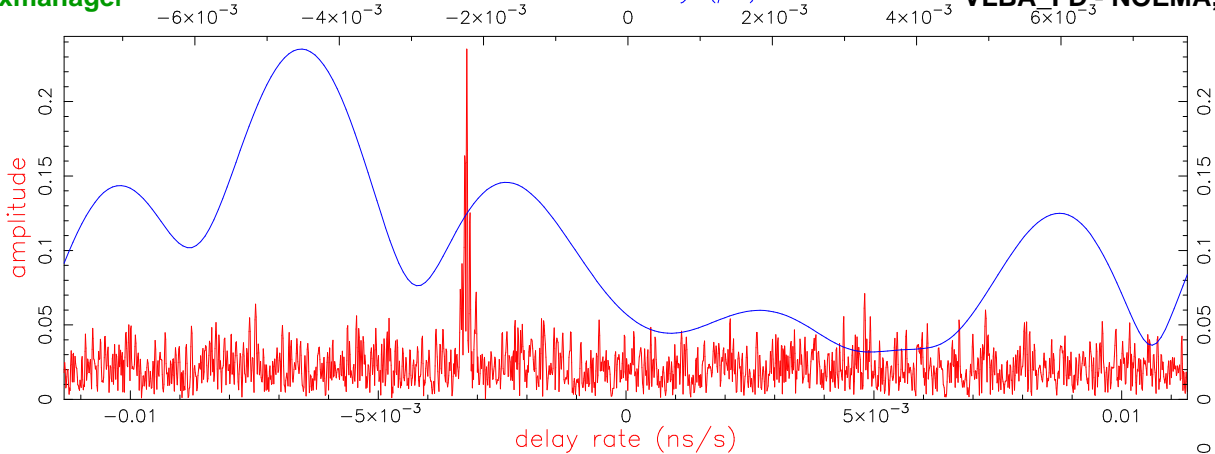
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, fN

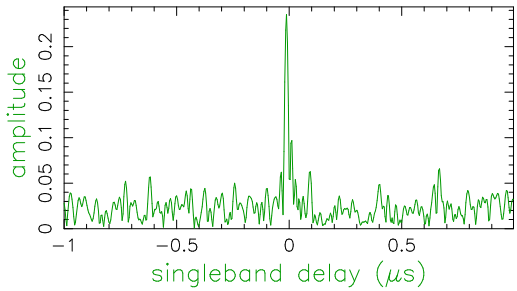
VLBA_FD- NOEMA, fgroup W, pol LR

multiband delay (μ s)

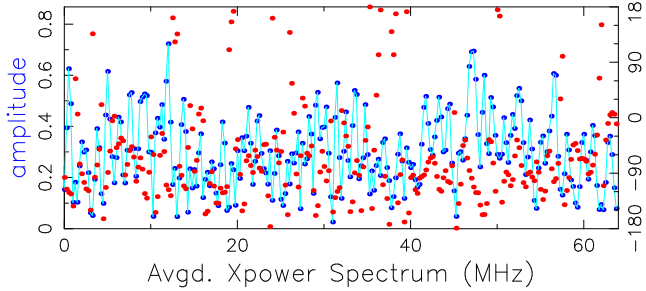


Fringe quality 9

SNR 13.0
 Int time 405.614
 Amp 0.244
 Phase -178.7
 PFD 8.0e-30
 Delays (us)
 SBD -0.012265
 MBD -0.004540
 Fringe rate (Hz)
 -0.277104
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

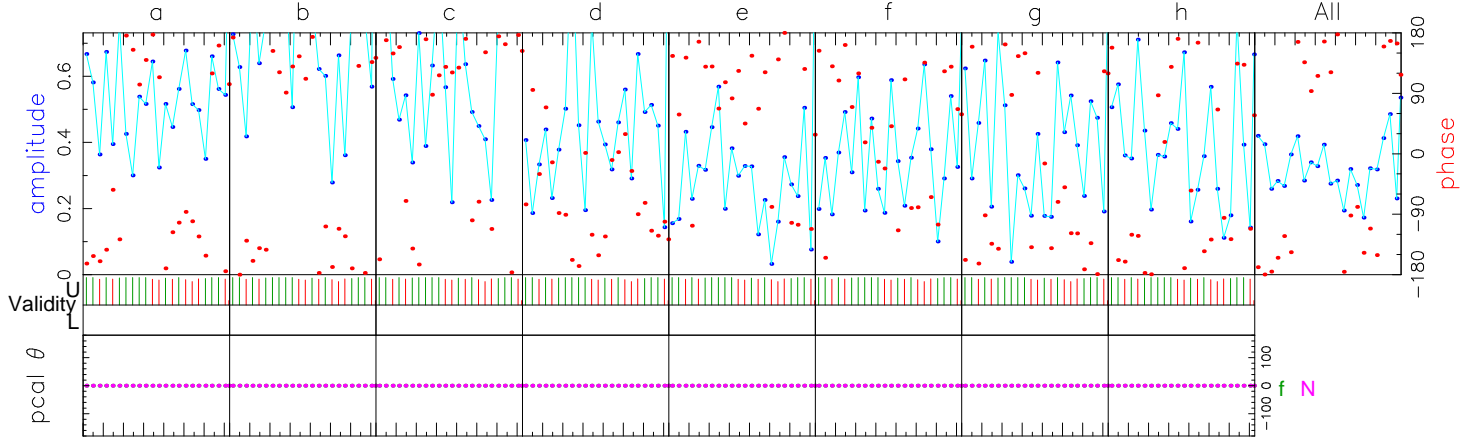


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080504
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-161.7	169.7	168.8	-95.3	124.8	107.1	-148.0	-178.1	Phase	-178.7
	0.4	0.6	0.5	0.2	0.2	0.1	0.2	0.2	Ampl.	0.3
	252.3	253.9	255.0	255.1	255.6	81.1	254.0	252.7	Sbd box	253.9
U/L	803/0	803/0	802/0	802/0	805/0	805/0	802/0	802/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	8.34133589655E+03	Apriori delay (usec)	8.34134043606E+03	Resid mbdelay (usec)	-4.53952E-03	+/-	8.4E-05
Sband delay (usec)	8.34132817131E+03	Apriori clock (usec)	2.3629711E+01	Resid sbdelay (usec)	-1.22647E-02	+/-	6.6E-04
Phase delay (usec)	8.34134043030E+03	Apriori clockrate (us/s)	-8.5950006E-06	Resid phdelay (usec)	-5.76366E-06	+/-	2.8E-07
Delay rate (us/s)	1.90500492662E+00	Apriori rate (us/s)	1.90500814352E+00	Resid rate (us/s)	-3.21690E-06	+/-	1.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.49634646369E-05	Resid phase (deg)	-178.7	+/-	8.8

ph/seg (deg)	46.7	RMS	20.9	Theor.	Amplitude	0.244 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	49.9	Search (2048X32)	0.218	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Search (2048X32)	0.218	SampCntNorm: enabled	mb window (us)	-1.000 1.000
ph/frq (deg)	53.5	Inc. seg. avg.	0.313	Bits/sample: 2x2	Inc. seg. avg.	0.313	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011
amp/frq (%)	62.5	Inc. frq. avg.	0.290	Data rate(Mb/s): 2048	Inc. frq. avg.	0.290	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 117.9 el 41.3 pa -49.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10969.801 -1821.332 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/fN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/fN.W.134.1W6XBK

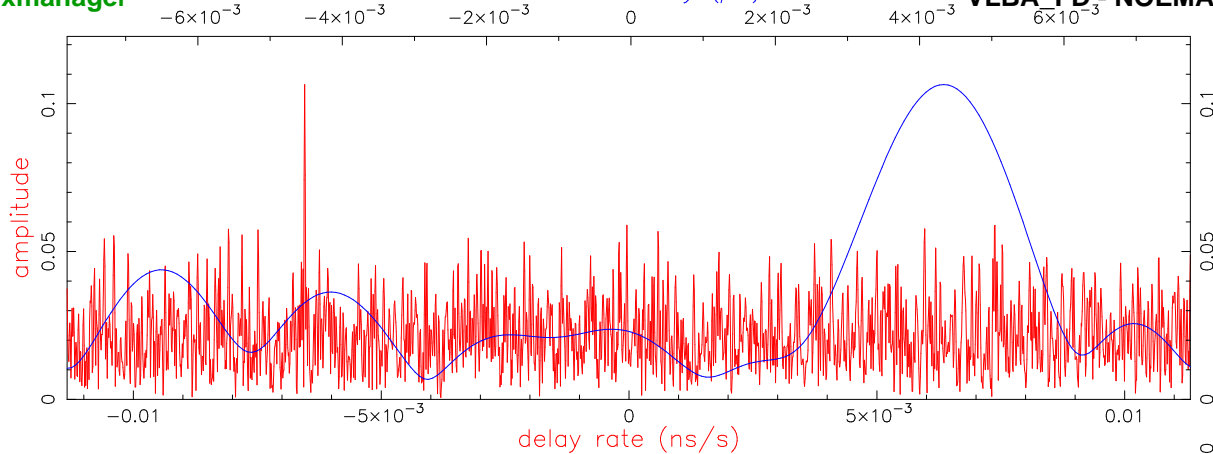
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, fN

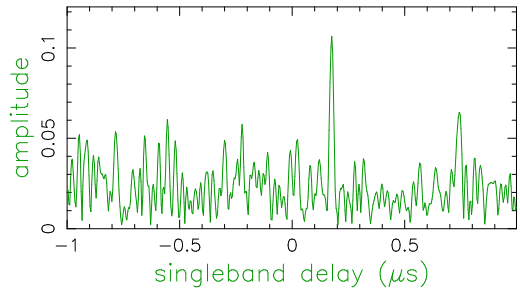
VLBA_FD- NOEMA, fgroup W, pol RL

multiband delay (μ s)

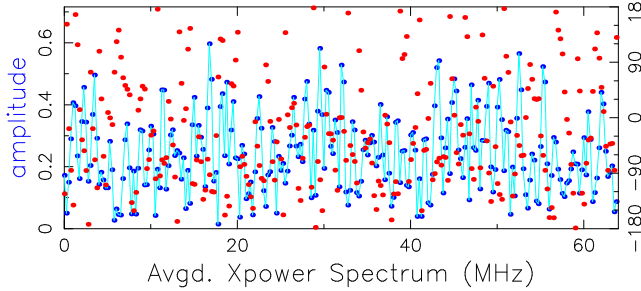


Fringe quality 0

SNR 5.9
 Int time 405.614
 Amp 0.123
 Phase 110.9
 PFD 6.7e-01
 Delays (us)
 SBD 0.175380
 MBD 0.004336
 Fringe rate (Hz)
 -0.564582
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

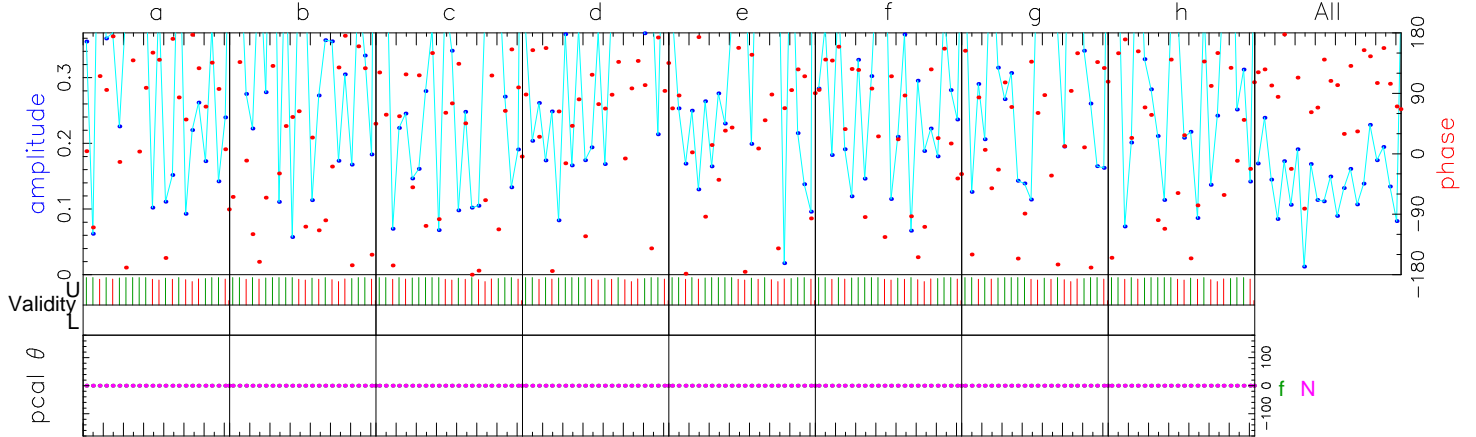


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080507
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	111.4	170.4	100.9	102.0	91.3	115.3	98.6	139.8	Phase	110.9
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	301.9	25.0	156.0	301.7	453.9	86.2	458.5	445.2	Sbd box	301.9
U/L	804/0	804/0	802/0	802/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	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	

Group delay (usec)(sbd)	8.34151664690E+03	Apriori delay (usec)	8.34134043606E+03	Resid mbdelay (usec)	4.33584E-03	+/-	1.8E-04
Sband delay (usec)	8.34151581656E+03	Apriori clock (usec)	2.3629711E+01	Resid sbdelay (usec)	1.75380E-01	+/-	1.5E-03
Phase delay (usec)	8.34134043964E+03	Apriori clockrate (us/s)	-8.5950006E-06	Resid phdelay (usec)	3.57515E-06	+/-	6.3E-07
Delay rate (us/s)	1.90500158928E+00	Apriori rate (us/s)	1.90500814352E+00	Resid rate (us/s)	-6.55424E-06	+/-	2.7E-09
Total phase (deg)	169.4	Apriori accel (us/s/s)	-4.49634646369E-05	Resid phase (deg)	110.9	+/-	19.5

ph/seg (deg)	59.1	Theor.	46.3	Amplitude	0.123 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.9		80.9	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.2		27.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.8		48.2	Inc. seg. avg.	0.124	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 117.9 el 41.3 pa -49.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10969.801 -1821.332 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/fN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/fN.W.152.1W6XBK

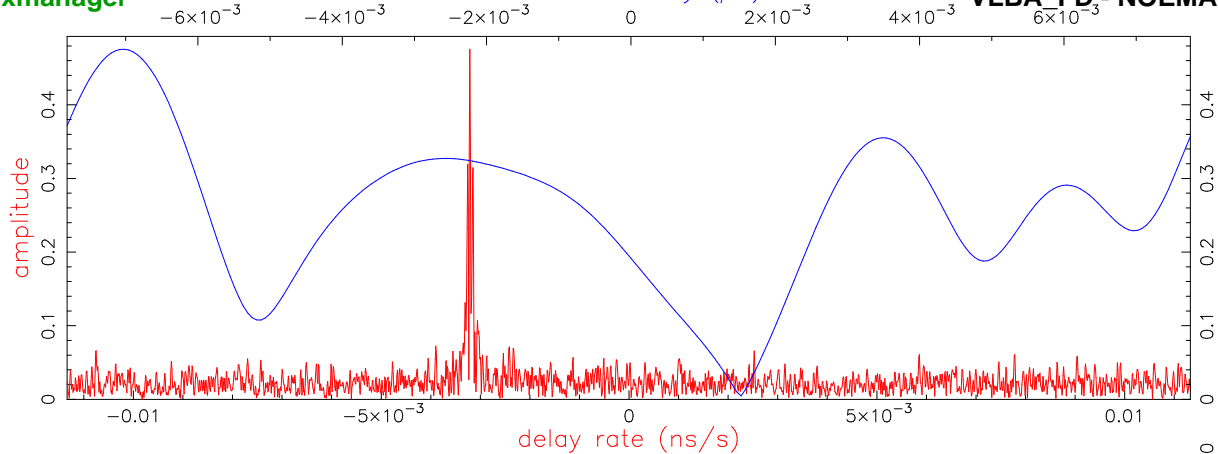
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, fN

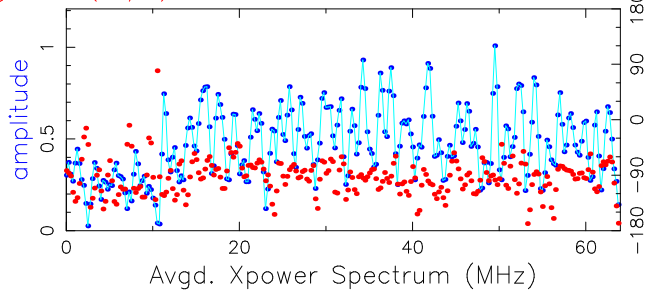
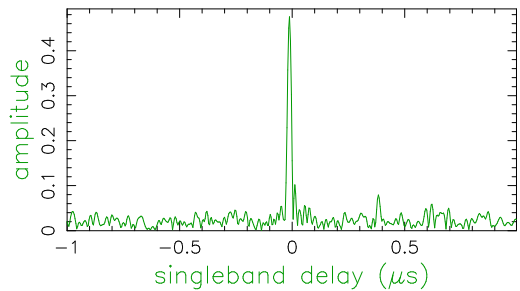
VLBA_FD- NOEMA, fgroup W, pol LL

multiband delay (μ s)



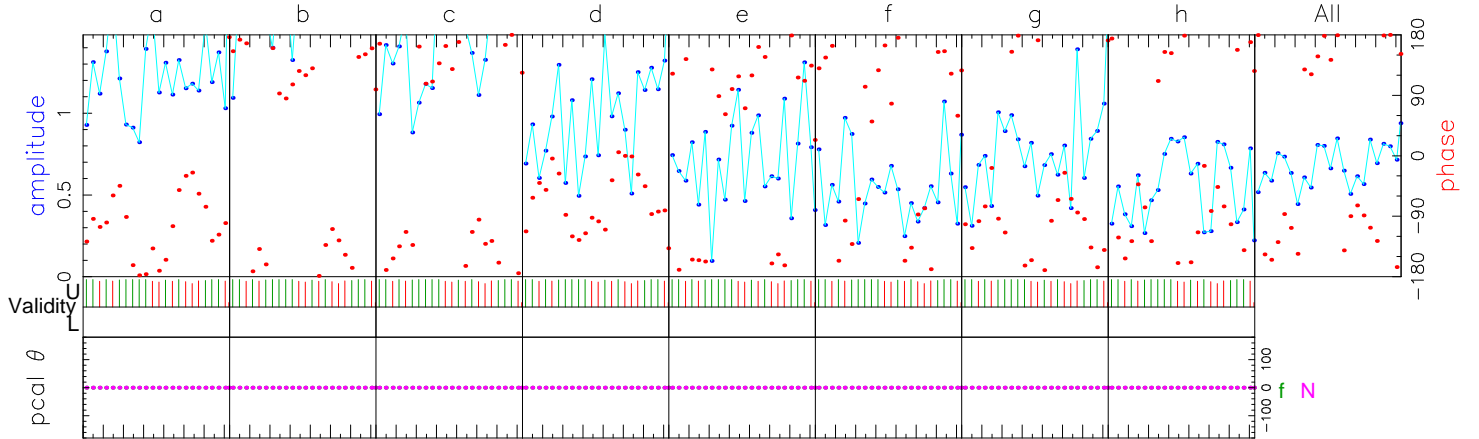
Fringe quality 5

SNR 26.3
 Int time 405.614
 Amp 0.493
 Phase -155.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.012419
 MBD -0.007057
 Fringe rate (Hz)
 -0.277168
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080455
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	802/0	802/0	805/0	805/0	802/0	802/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	8.34133337895E+03	Apriori delay (usec)	8.34134043606E+03	Resid mbdelay (usec)	-7.05711E-03	+/-	4.1E-05
Sband delay (usec)	8.34132801706E+03	Apriori clock (usec)	2.3629711E+01	Resid sbdelay (usec)	-1.24190E-02	+/-	3.3E-04
Phase delay (usec)	8.34134043105E+03	Apriori clockrate (us/s)	-8.5950006E-06	Resid phdelay (usec)	-5.01058E-06	+/-	1.4E-07
Delay rate (us/s)	1.90500492587E+00	Apriori rate (us/s)	1.90500814352E+00	Resid rate (us/s)	-3.21765E-06	+/-	5.9E-10
Total phase (deg)		Apriori accel (us/s/s)	-4.49634646369E-05	Resid phase (deg)	-155.4	+/-	4.4

ph/seg (deg)	47.4	Theor.	Amplitude	0.493 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	48.0	10.4	Search (2048X32)	0.452	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	56.2	6.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	85.7	10.8	Inc. seg. avg.	0.685	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	0.723	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 117.9 el 41.3 pa -49.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10969.801 -1821.332 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/fN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/fN.W.89.1W6XBK

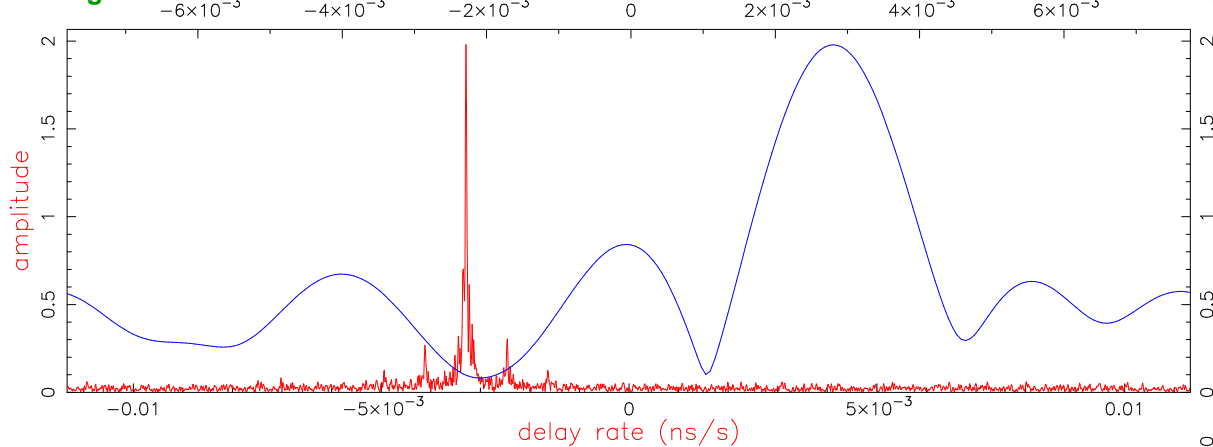
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, gN

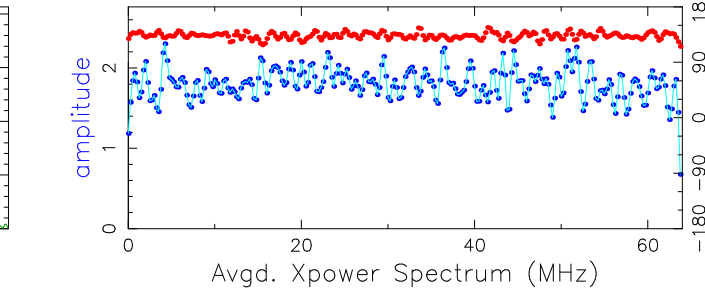
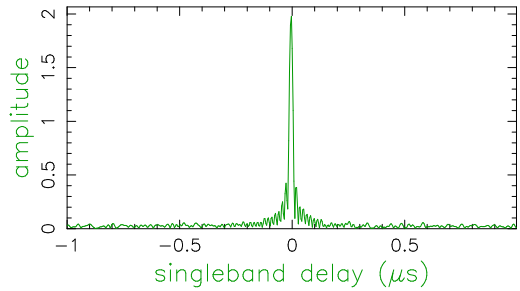
GLT - NOEMA, fgroup W, pol RR

multiband delay (μ s)



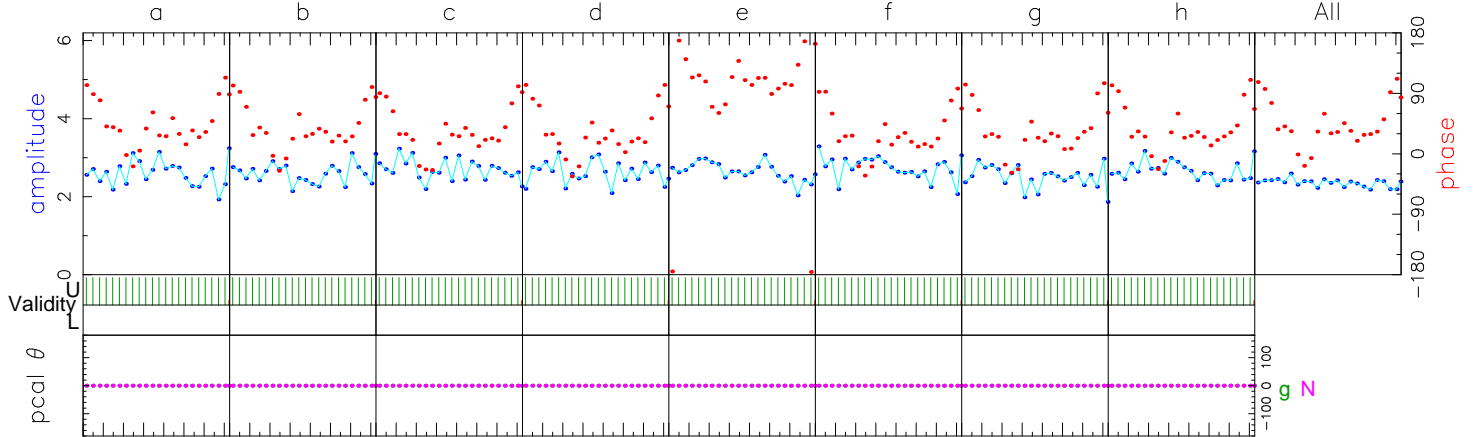
Fringe quality 5

SNR 111.8
 Int time 419.834
 Amp 2.067
 Phase 42.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.005041
 MBD 0.002804
 Fringe rate (Hz)
 -0.283586
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080501
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd) -2.63029463289E+02 Apriori delay (usec) -2.63016642088E+02 Resid mbdelay (usec) 2.80380E-03 +/- 9.7E-06
 Sband delay (usec) -2.63021683088E+02 Apriori clock (usec) 1.3828710E+01 Resid sbdelay (usec) -5.04100E-03 +/- 7.7E-05
 Phase delay (usec) -2.63016640703E+02 Apriori clockrate (us/s) -8.5950006E-06 Resid phdelay (usec) 1.38495E-06 +/- 3.3E-08
 Delay rate (us/s) 1.06755441528E+00 Apriori rate (us/s) 1.06755770744E+00 Resid rate (us/s) -3.29216E-06 +/- 1.4E-10
 Total phase (deg) -154.9 Apriori accel (us/s/s) 2.50367787084E-06 Resid phase (deg) 42.9 +/- 1.0

RMS Theor. Amplitude 2.067 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.9 2.5 Search (2048X32) 1.892 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 18.7 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 31.6 1.4 Inc. seg. avg. 2.437 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 10.9 2.5 Inc. frq. avg. 2.281 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 173.4 el 15.3 pa -1.4 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -6113.374 2406.989 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/gN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/gN.W.119.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

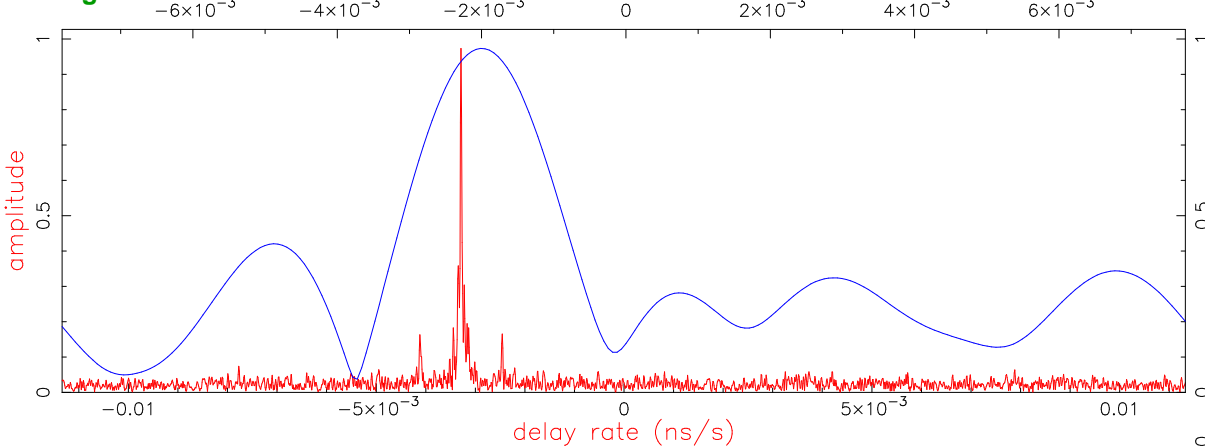
fxmanager

3C273.1W6XBK, No0156, gN

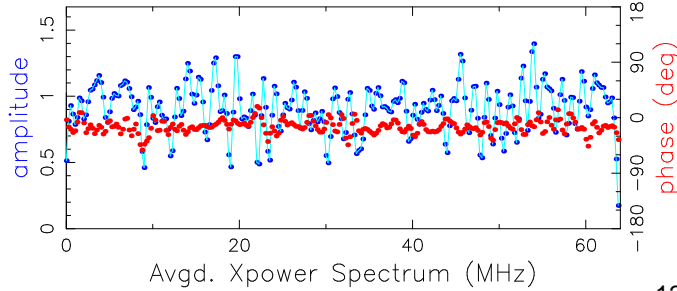
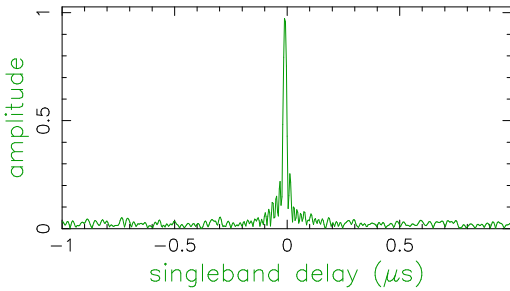
GLT - NOEMA, fgroup W, pol LR

multiband delay (μs)

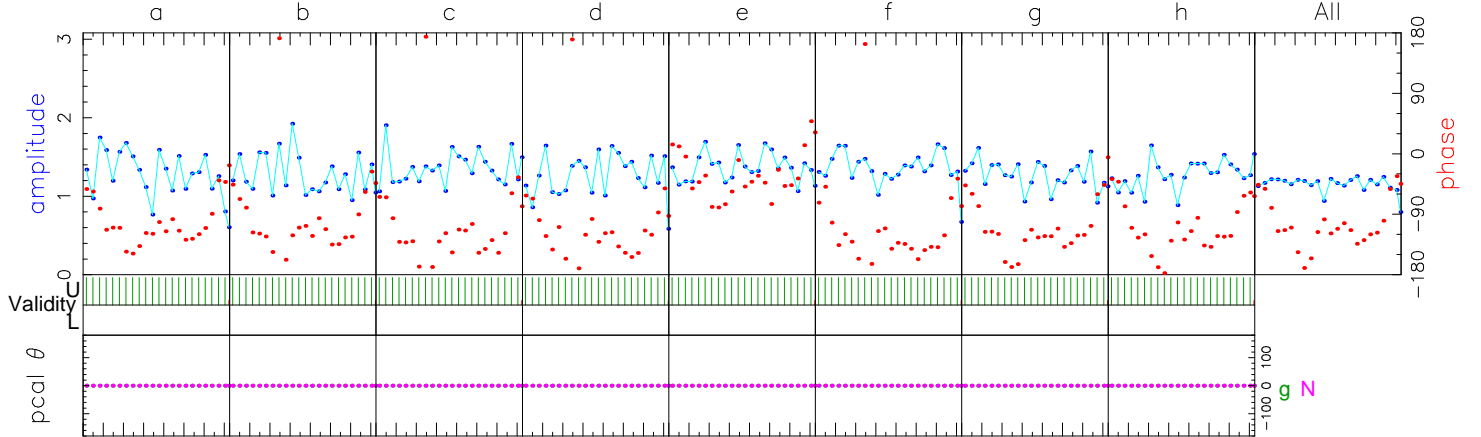
Fringe quality 5



SNR 55.6
 Int time 419.834
 Amp 1.027
 Phase -107.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.010058
 MBD -0.001998
 Fringe rate (Hz)
 -0.283590
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080504
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



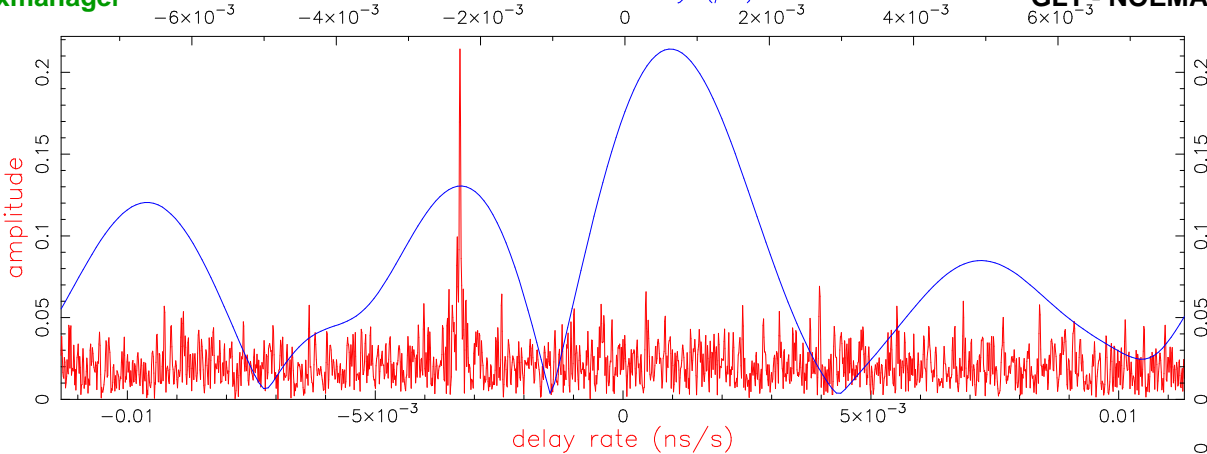
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-106.4	-110.1	-120.9	-123.1	-34.9	-125.9	-113.4	-112.7	Phase	-107.6
	1.2	1.1	1.1	1.1	1.2	1.2	1.1	1.1	Ampl.	1.1
	254.3	254.4	254.4	254.4	254.5	254.5	254.6	254.4	Sbd box	254.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
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	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	-2.63034265195E+02		Apriori delay (usec)		-2.63016642088E+02		Resid mbdelay (usec)		-1.99811E-03	+/- 2.0E-05
Sband delay (usec)	-2.63026700088E+02		Apriori clock (usec)		1.3828710E+01		Resid sbdelay (usec)		-1.00580E-02	+/- 1.5E-04
Phase delay (usec)	-2.63016645558E+02		Apriori clockrate (us/s)		-8.5950006E-06		Resid phdelay (usec)		-3.47005E-06	+/- 6.6E-08
Delay rate (us/s)	1.06755441524E+00		Apriori rate (us/s)		1.06755770744E+00		Resid rate (us/s)		-3.29219E-06	+/- 2.7E-10
Total phase (deg)			Apriori accel (us/s/s)		2.50367787084E-06		Resid phase (deg)		-107.6	+/- 2.1

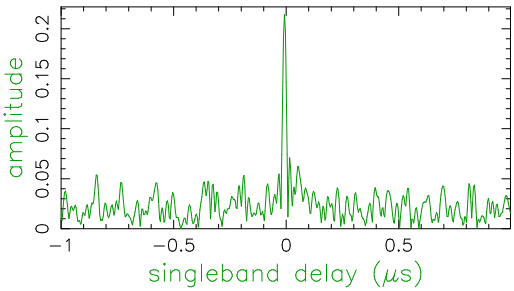
ph/seg (deg) 34.5 4.9 Search (2048X32) 0.927 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.7 8.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.9 2.9 Inc. seg. avg. 1.199 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.0 5.1 Inc. frq. avg. 1.130 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 173.4 el 15.3 pa -1.4 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -6113.374 2406.989 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/gN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/gN.W.137.1W6XBK

multiband delay (μ s)

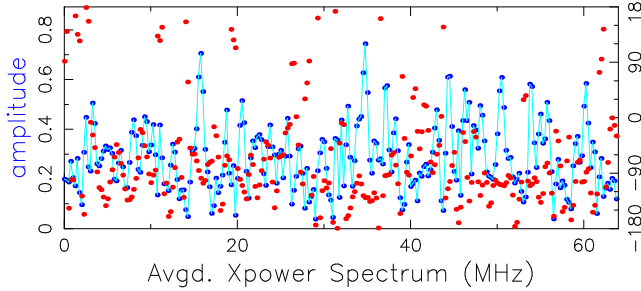


Fringe quality 9

SNR 12.0
 Int time 419.834
 Amp 0.222
 Phase 168.4
 PFD 1.6e-24
 Delays (us)
 SBD -0.007505
 MBD 0.000634
 Fringe rate (Hz)
 -0.283764
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

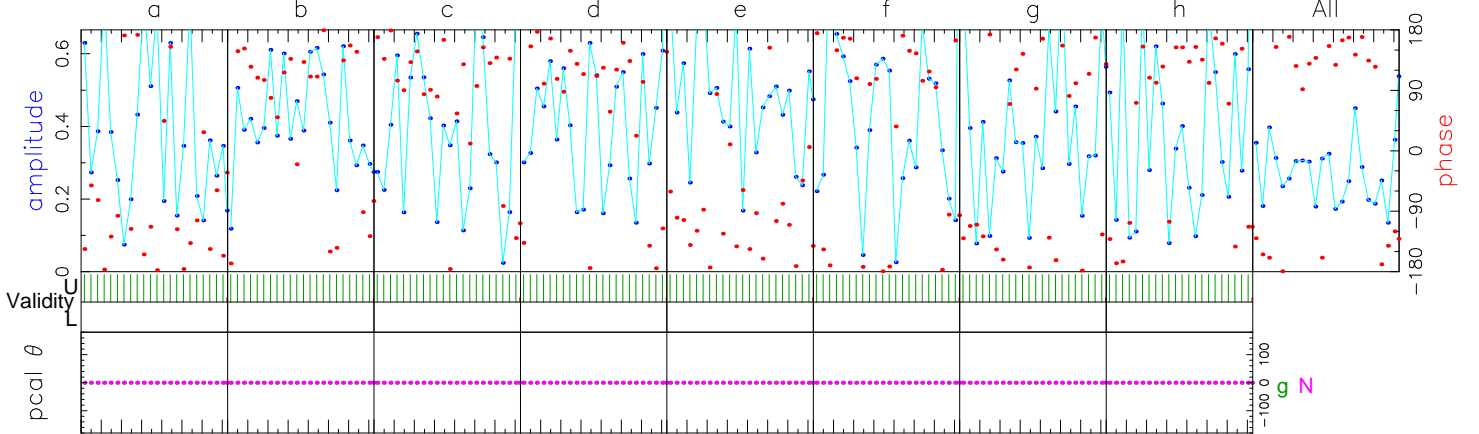


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080508
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-146.6	133.8	133.0	145.3	-111.4	153.6	179.7	162.0	Phase	168.4
	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	Ampl.	0.3
	254.9	255.2	255.7	255.8	255.2	254.3	255.9	254.2	Sbd box	255.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
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	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.63031632830E+02	Apriori delay (usec)	-2.63016642088E+02	Resid mbdelay (usec)	6.34258E-04	+/-	9.0E-05
Sband delay (usec)	-2.63024146838E+02	Apriori clock (usec)	1.3828710E+01	Resid sbdelay (usec)	-7.50475E-03	+/-	7.2E-04
Phase delay (usec)	-2.63016636658E+02	Apriori clockrate (us/s)	-8.5950006E-06	Resid phdelay (usec)	5.42995E-06	+/-	3.1E-07
Delay rate (us/s)	1.06755441322E+00	Apriori rate (us/s)	1.06755770744E+00	Resid rate (us/s)	-3.29422E-06	+/-	1.3E-09
Total phase (deg)	-29.4	Apriori accel (us/s/s)	2.50367787084E-06	Resid phase (deg)	168.4	+/-	9.5

ph/seg (deg)	38.0	Theor.	22.9	Amplitude	0.222 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	47.1	Search (2048X32)	0.201	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)	44.4	Inc. seg. avg.	0.262	Inc. frq. avg.	0.272	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	28.7	Inc. frq. avg.	0.272			Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

g: az 173.4 el 15.3 pa -1.4 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -6113.374 2406.989 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/gN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/gN.W.156.1W6XBK

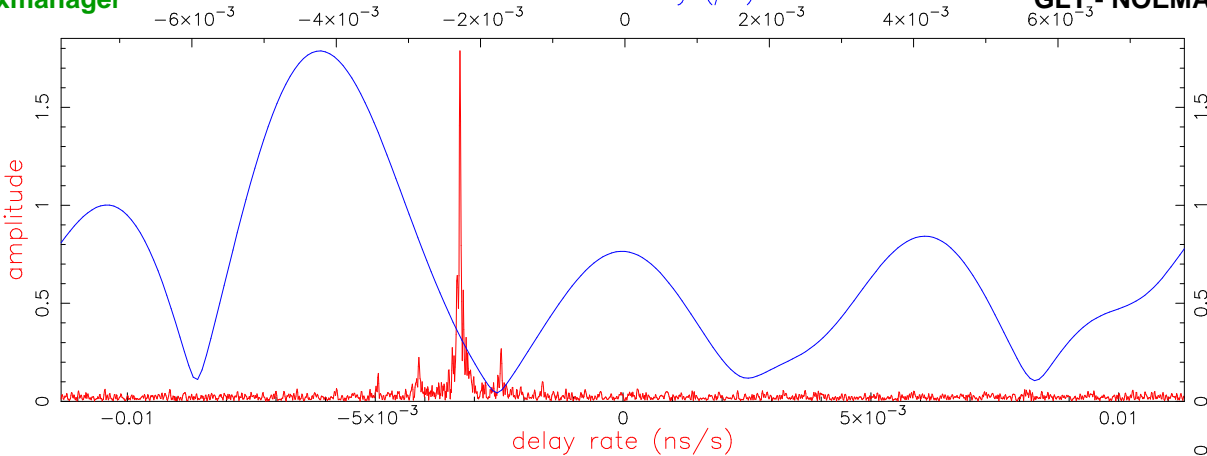
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, gN

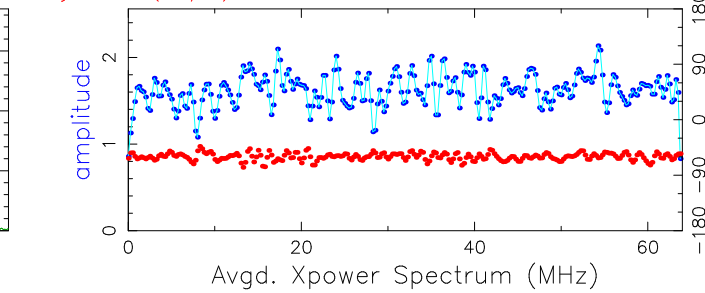
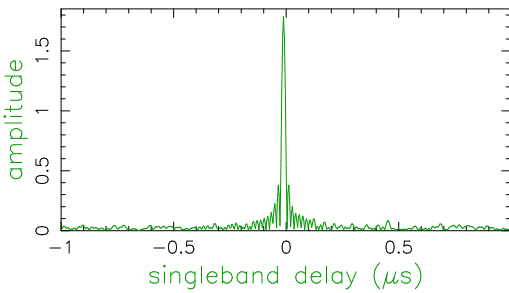
GLT - NOEMA, fgroup W, pol LL

multiband delay (μ s)



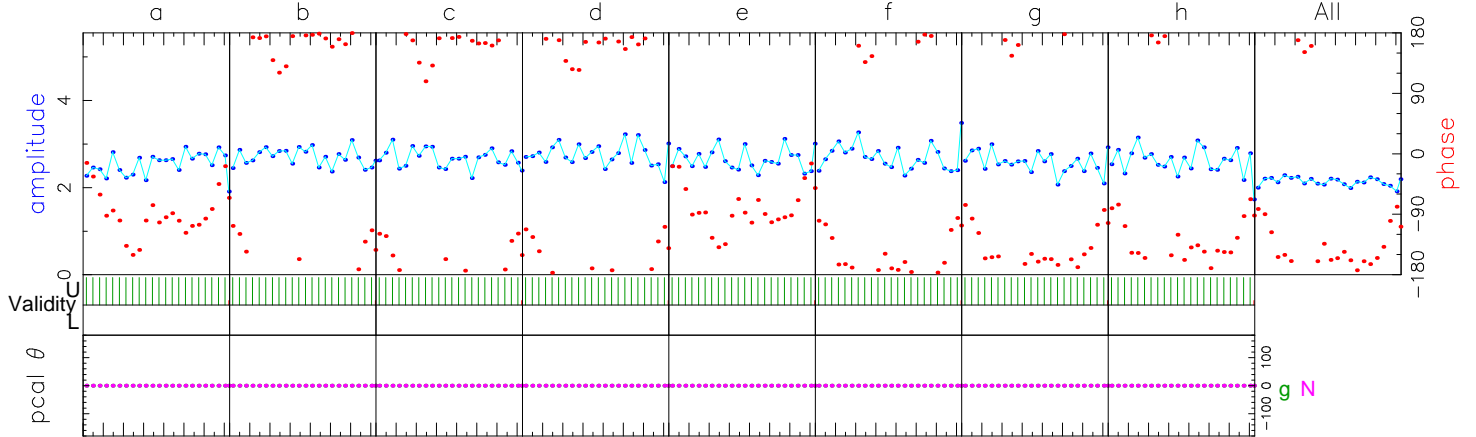
Fringe quality 3

SNR 100.2
 Int time 419.834
 Amp 1.851
 Phase -148.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.011898
 MBD -0.004229
 Fringe rate (Hz)
 -0.283552
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080457
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.3	-178.1	-179.2	179.1	-82.1	-164.5	-150.4	-138.4	Phase	-148.3
	2.2	2.3	2.3	2.4	2.3	2.3	2.2	2.3	Ampl.	2.3
	253.9	253.9	254.0	253.8	253.9	254.0	254.1	254.0	Sbd box	254.0
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)	-2.63020870695E+02	Apriori delay (usec)	-2.63016642088E+02	Resid mbdelay (usec)	-4.22861E-03	+/-	1.1E-05
Sband delay (usec)	-2.63028540338E+02	Apriori clock (usec)	1.3828710E+01	Resid sbdelay (usec)	-1.18983E-02	+/-	8.6E-05
Phase delay (usec)	-2.63016646870E+02	Apriori clockrate (us/s)	-8.5950006E-06	Resid phdelay (usec)	-4.78159E-06	+/-	3.7E-08
Delay rate (us/s)	1.06755441569E+00	Apriori rate (us/s)	1.06755770744E+00	Resid rate (us/s)	-3.29175E-06	+/-	1.5E-10
Total phase (deg)	-346.1	Apriori accel (us/s/s)	2.50367787084E-06	Resid phase (deg)	-148.3	+/-	1.1

ph/seg (deg)	34.4	Theor.	2.7	Amplitude	1.851 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	20.1		4.8	Search (2048X32)	1.716	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.1		1.6	Inc. seg. avg.	2.208	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	24.3		2.8	Inc. frq. avg.	2.297	Data rate (Mb/s):	2048	nlags:	256	ion window (TEC)	0.00	0.00
g: az 173.4 el 15.3 pa -1.4		N: az 255.7 el 16.7 pa 43.7		u,v (fr/asec)	-6113.374 2406.989							simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/gN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/gN.W.99.1W6XBK

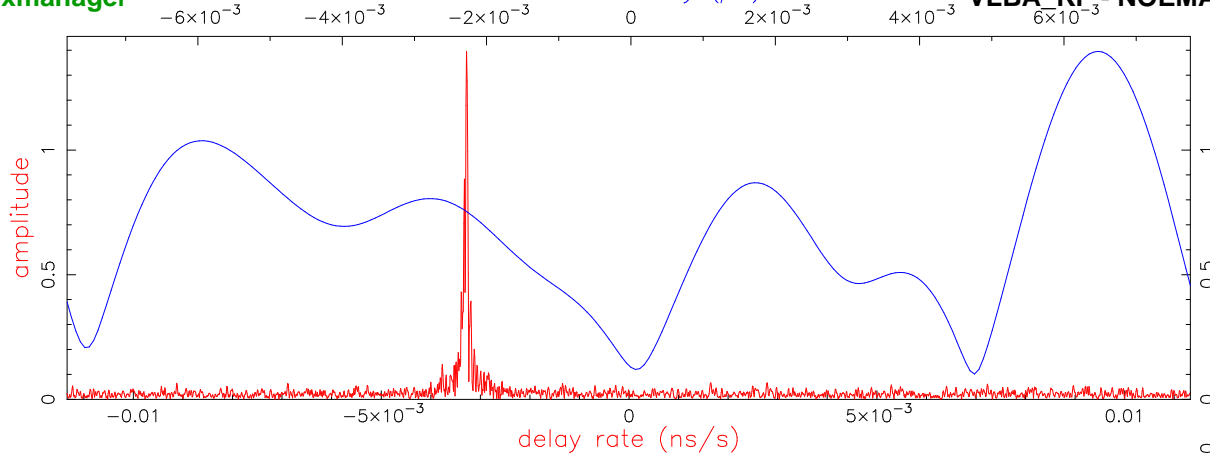
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, kN

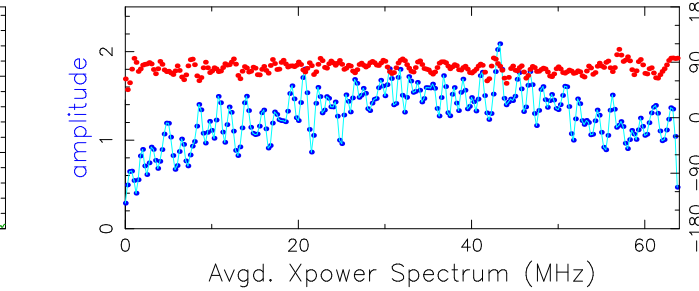
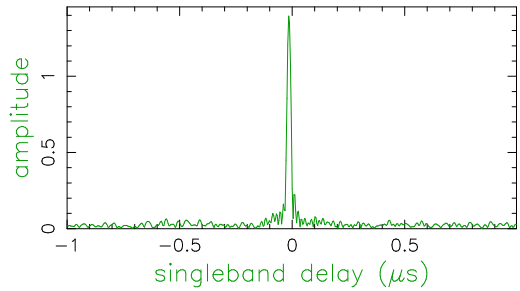
VLBA_KP - NOEMA, fgroup W, pol LL

multiband delay (μ s)



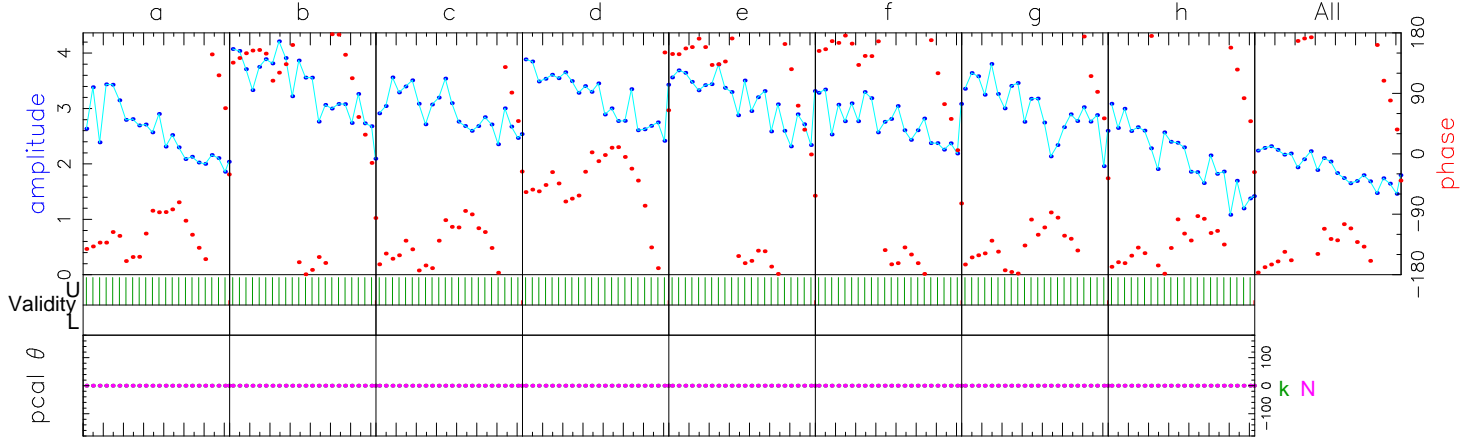
Fringe quality 1

SNR 78.8
 Int time 419.799
 Amp 1.456
 Phase -159.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.014410
 MBD 0.006509
 Fringe rate (Hz)
 -0.282353
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080511
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	6.45774898361E+03	Apriori delay (usec)	6.45775809961E+03	Resid mbdelay (usec)	6.50900E-03	+/-	1.4E-05
Sband delay (usec)	6.45774368986E+03	Apriori clock (usec)	1.3720918E+01	Resid sbdelay (usec)	-1.44097E-02	+/-	1.1E-04
Phase delay (usec)	6.45775809447E+03	Apriori clockrate (us/s)	-8.6550003E-06	Resid phdelay (usec)	-5.14003E-06	+/-	4.7E-08
Delay rate (us/s)	2.01835949307E+00	Apriori rate (us/s)	2.01836277090E+00	Resid rate (us/s)	-3.27784E-06	+/-	1.9E-10
Total phase (deg)		Apriori accel (us/s/s)	-3.49252218386E-05	Resid phase (deg)	-159.4	+/-	1.5

ph/seg (deg)	55.5	Theor.	3.5	Amplitude	1.456 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	41.8		6.1	Search (2048X32)	1.369	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	59.1		2.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	52.0		3.6	Inc. seg. avg.	1.994	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	2.168	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 112.6 el 34.8 pa -51.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -11607.215 -1619.627 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/kN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/kN.W.162.1W6XBK

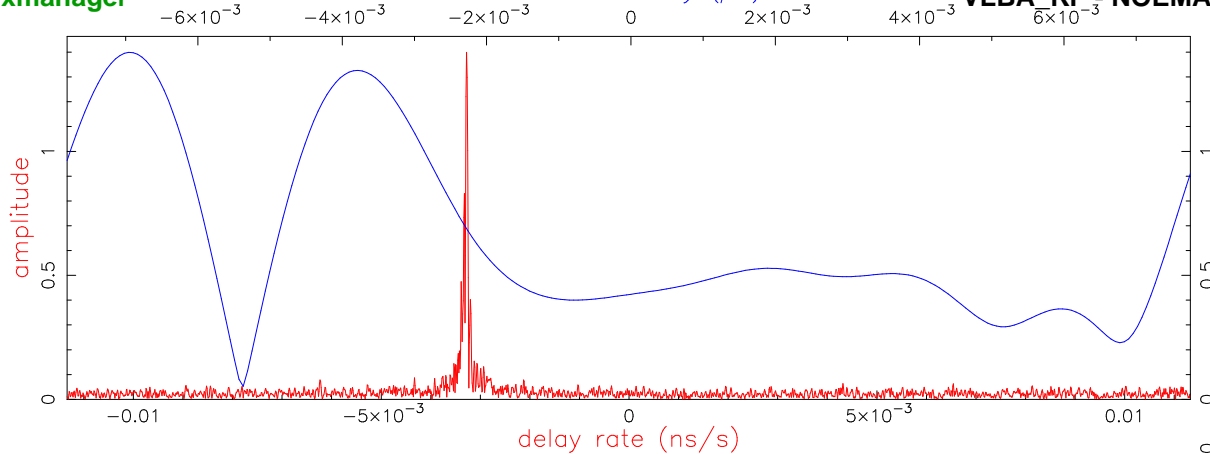
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, kN

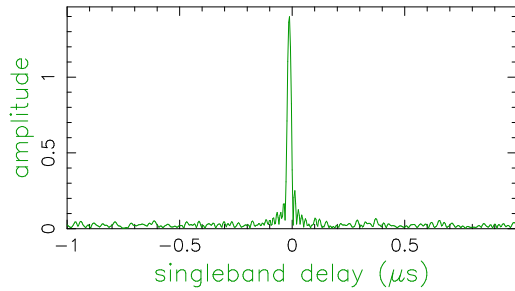
VLBA_KP - NOEMA, fgroup W, pol RR

multiband delay (μ s)

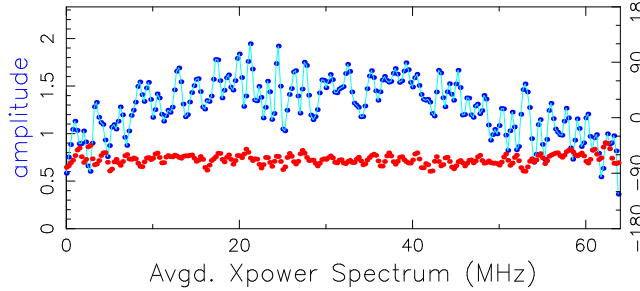


Fringe quality 1

SNR 79.2
Int time 419.799
Amp 1.464
Phase -137.7
PFD 0.0e+00
Delays (us)
SBD -0.013071
MBD -0.006961
Fringe rate (Hz)
-0.282246
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

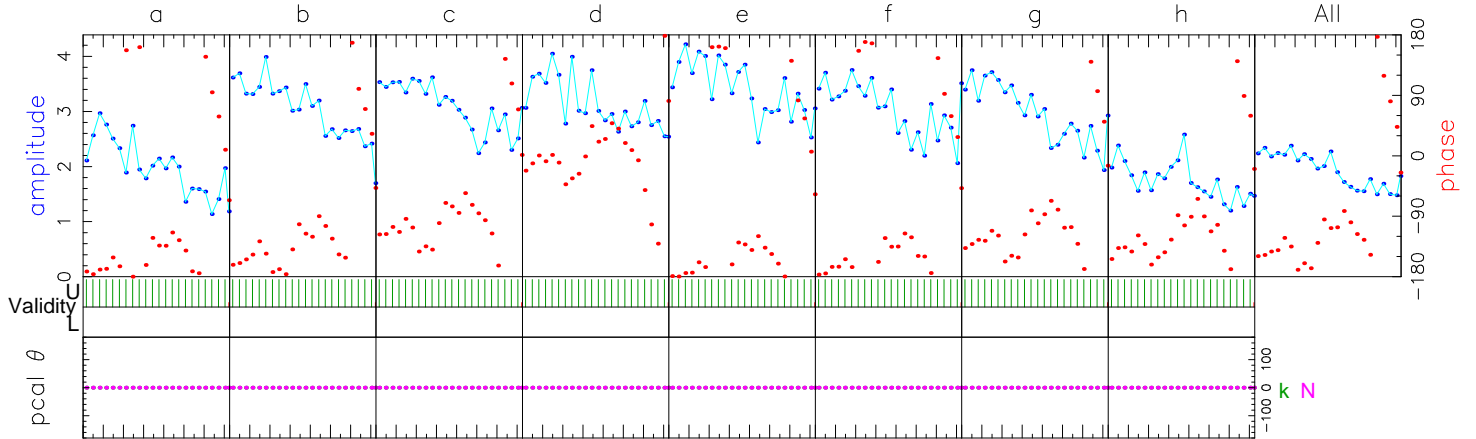


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 023000.00
Stop 023659.84
FRT 023330.00
Corr/FF/build
2021:287:073510
2021:287:080515
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.4	-146.6	-109.6	-6.2	-171.3	-168.1	-123.6	-128.6	Phase	-137.7
	1.5	2.3	2.3	2.3	2.5	2.2	2.3	1.3	Ampl.	2.1
	252.1	254.2	254.4	254.6	254.3	254.6	253.7	252.1	Sbd box	253.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	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	Manl 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)	6.45775113911E+03		Apriori delay (usec)		6.45775809961E+03		Resid mbdelay (usec)		-6.96050E-03	+/- 1.4E-05
Sband delay (usec)	6.45774502886E+03		Apriori clock (usec)		1.3720918E+01		Resid sbdelay (usec)		-1.30708E-02	+/- 1.1E-04
Phase delay (usec)	6.45775809517E+03		Apriori clockrate (us/s)		-8.6550003E-06		Resid phdelay (usec)		-4.44107E-06	+/- 4.7E-08
Delay rate (us/s)	2.01835949431E+00		Apriori rate (us/s)		2.01836277090E+00		Resid rate (us/s)		-3.27660E-06	+/- 1.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-3.49252218386E-05		Resid phase (deg)		-137.7	+/- 1.4

	RMS	Theor.	Amplitude	1.464 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.7	3.5	Search (2048X32)	1.387	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	42.8	6.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	59.5	2.0	Inc. seg. avg.	2.001	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.0	3.6	Inc. frq. avg.	2.091	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 112.6 el 34.8 pa -51.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -11607.215 -1619.627 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/kN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/kN.W.182.1W6XBK

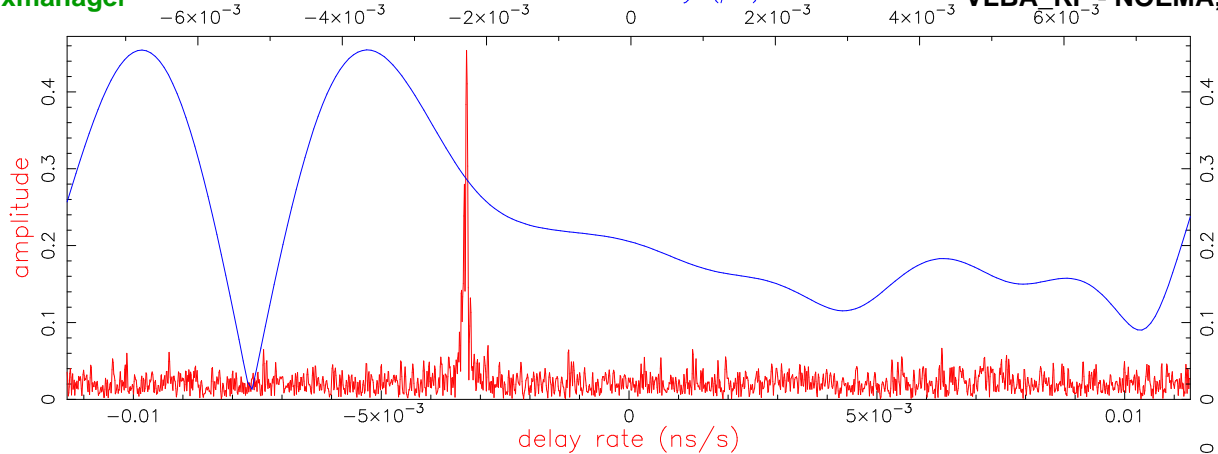
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, kN

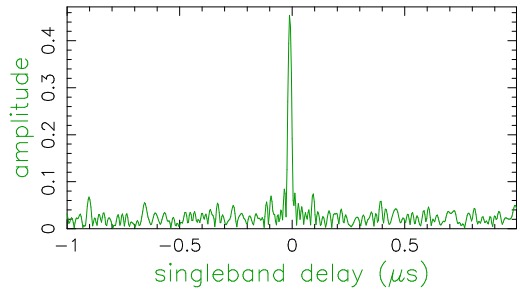
VLBA_KP - NOEMA, fgroup W, pol LR

multiband delay (μ s)

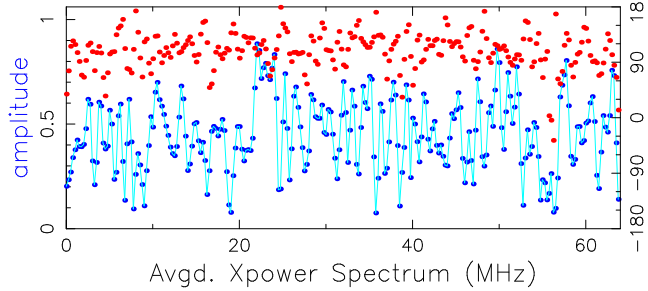


Fringe quality 5

SNR 25.6
 Int time 419.799
 Amp 0.472
 Phase 26.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010857
 MBD -0.003598
 Fringe rate (Hz)
 -0.282332
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

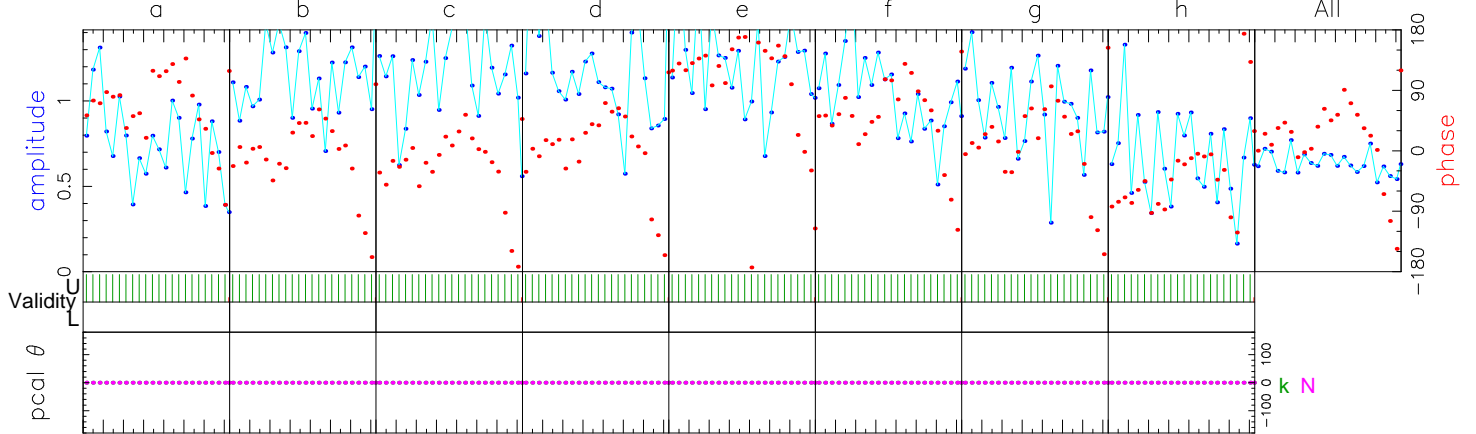


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080519
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	71.9	-2.5	-12.8	12.7	129.2	59.0	17.1	-51.0		26.1
	0.6	0.8	0.9	0.9	0.9	0.7	0.6	0.5		0.7
	252.1	254.0	254.8	254.5	254.2	254.5	253.6	252.2		254.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
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)	6.45775450205E+03		Apriori delay (usec)		6.45775809961E+03		Resid mbdelay (usec)		-3.59757E-03	+/- 4.2E-05
Sband delay (usec)	6.45774724286E+03		Apriori clock (usec)		1.3720918E+01		Resid sbdelay (usec)		-1.08568E-02	+/- 3.4E-04
Phase delay (usec)	6.45775810045E+03		Apriori clockrate (us/s)		-8.6550003E-06		Resid phdelay (usec)		8.41291E-07	+/- 1.4E-07
Delay rate (us/s)	2.01835949330E+00		Apriori rate (us/s)		2.01836277090E+00		Resid rate (us/s)		-3.27760E-06	+/- 6.0E-10
Total phase (deg)	278.3		Apriori accel (us/s/s)		-3.49252218386E-05		Resid phase (deg)		26.1	+/- 4.5

ph/seg (deg) 56.3 10.8 Search (2048X32) 0.452 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.9 18.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.0 6.3 Inc. seg. avg. 0.647 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.5 11.1 Inc. frq. avg. 0.724 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 112.6 el 34.8 pa -51.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -11607.215 -1619.627 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/kN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/kN.W.201.1W6XBK

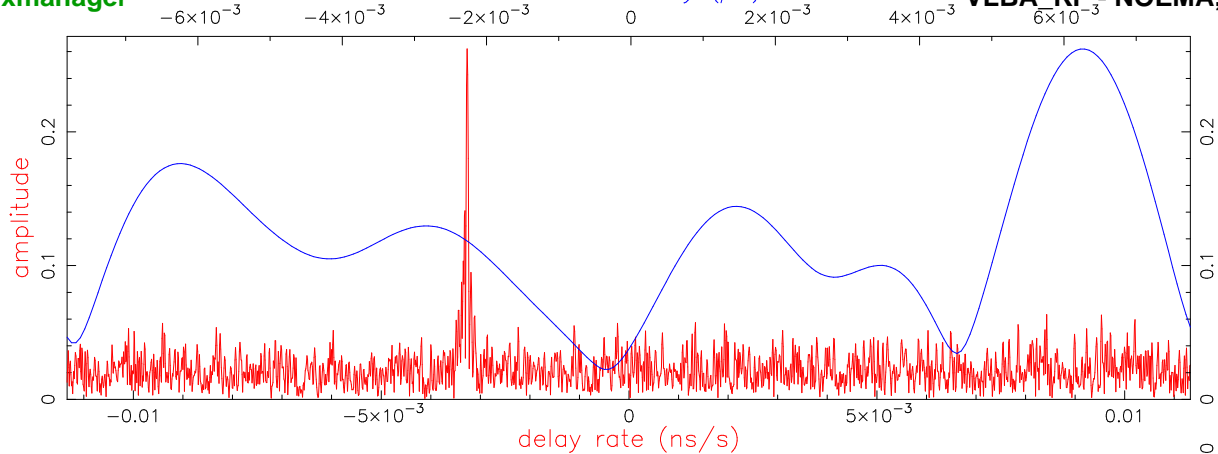
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, kN

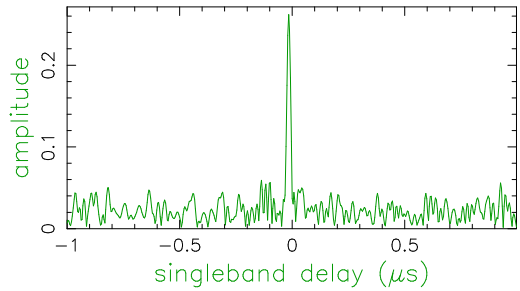
VLBA_KP - NOEMA, fgroup W, pol RL

multiband delay (μ s)

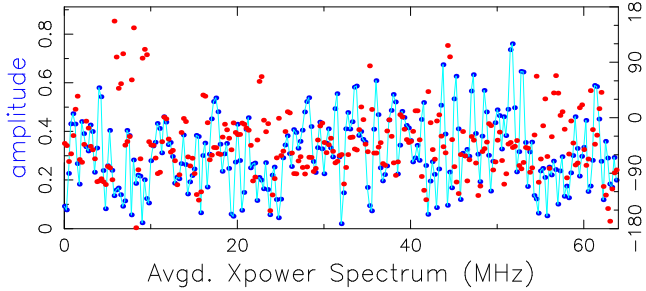


Fringe quality 7

SNR 14.7
 Int time 419.799
 Amp 0.271
 Phase 61.0
 PFD 4.6e-40
 Delays (us)
 SBD -0.015347
 MBD 0.006266
 Fringe rate (Hz)
 -0.282128
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

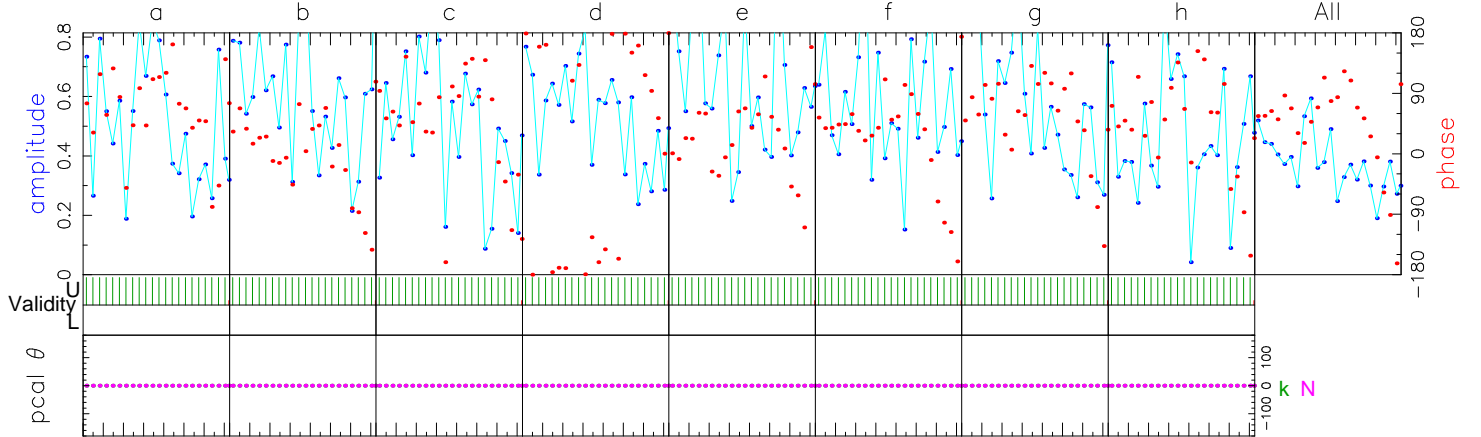


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080522
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	6.45774874092E+03	Apriori delay (usec)		6.45775809961E+03	Resid mbdelay (usec)		6.26631E-03	+/- 7.4E-05	
Sband delay (usec)	6.45774275236E+03	Apriori clock (usec)		1.3720918E+01	Resid sbdelay (usec)		-1.53472E-02	+/- 5.9E-04	
Phase delay (usec)	6.45775810158E+03	Apriori clockrate (us/s)		-8.6550003E-06	Resid phdelay (usec)		1.96681E-06	+/- 2.5E-07	
Delay rate (us/s)	2.01835949568E+00	Apriori rate (us/s)		2.01836277090E+00	Resid rate (us/s)		-3.27523E-06	+/- 1.0E-09	
Total phase (deg)	313.2		Apriori accel (us/s/s)		-3.49252218386E-05	Resid phase (deg)		61.0	+/- 7.8

ph/seg (deg)	58.3	RMS	18.7	Theor.	0.271 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	57.2	Search (2048X32)	0.259	Amplitude		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	53.4	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.2	Inc. seg. avg.	0.371	Inc. frq. avg.	0.372	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.372			Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

k: az 112.6 el 34.8 pa -51.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -11607.215 -1619.627 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/kN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/kN.W.218.1W6XBK

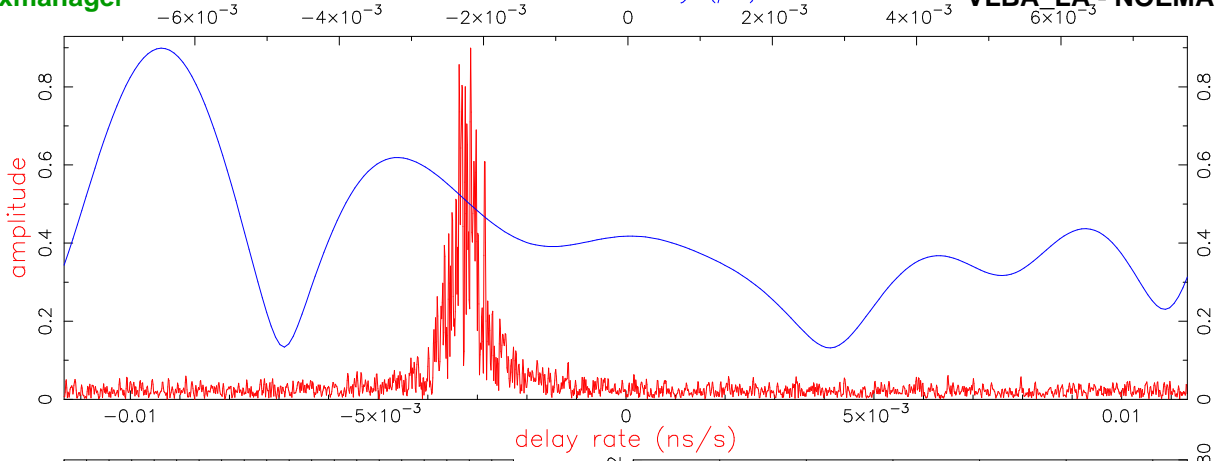
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, IN

VLBA LA- NOEMA, fgroup W, pol LL

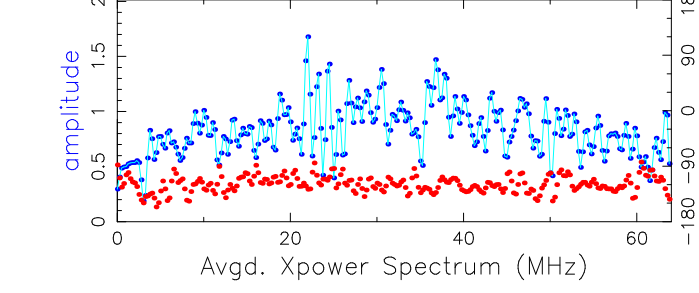
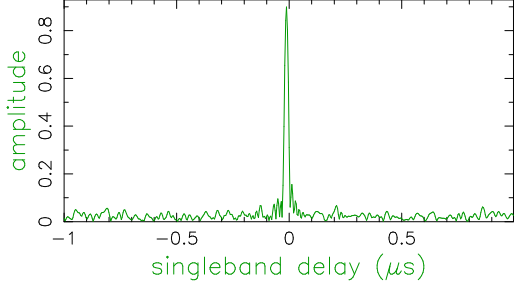
multiband delay (μ s)



Fringe quality 1

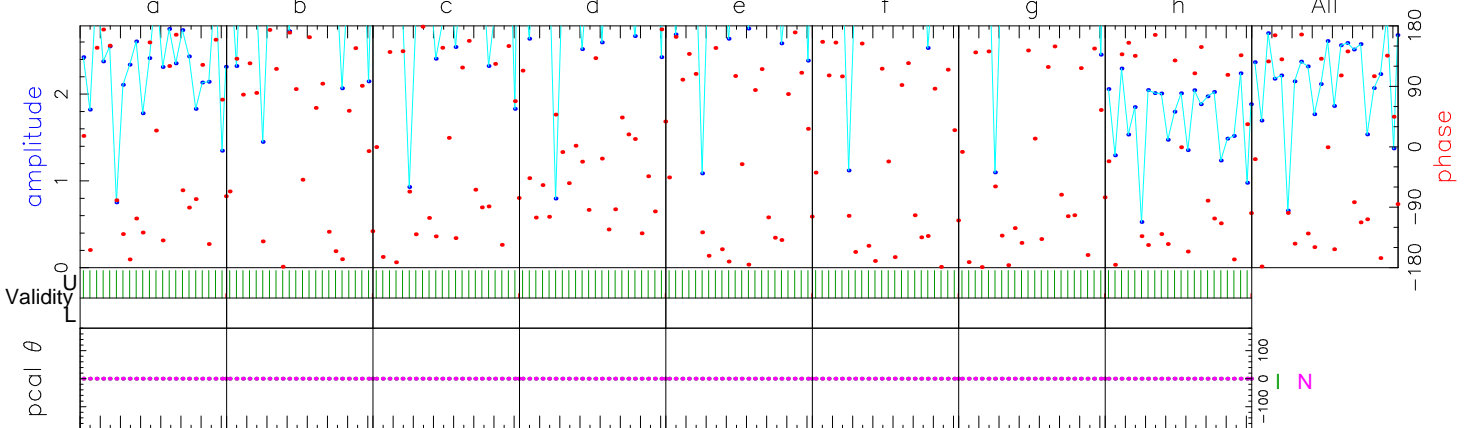
SNR 50.4
 Int time 419.827
 Amp 0.929
 Phase 174.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.012219
 MBD -0.006478
 Fringe rate (Hz)
 -0.270065
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080513
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-169.1	126.7	-168.3	-59.6	150.7	157.7	-177.4	177.2	Phase	174.4
	1.0	1.4	1.3	1.4	1.5	1.5	1.6	0.8	Ampl.	1.3
	252.2	254.0	254.8	254.7	254.5	254.5	253.8	251.8	Sbd box	253.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	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	Manl PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	7.13136937931E+03	Apriori delay (usec)	7.13137585756E+03	Resid mbdelay (usec)	-6.47825E-03	+/-	2.2E-05
Sband delay (usec)	7.13136363806E+03	Apriori clock (usec)	1.0814839E+01	Resid sbdelay (usec)	-1.22195E-02	+/-	1.7E-04
Phase delay (usec)	7.13137586319E+03	Apriori clockrate (us/s)	-8.9410007E-06	Resid phdelay (usec)	5.62418E-06	+/-	7.3E-08
Delay rate (us/s)	1.89312579004E+00	Apriori rate (us/s)	1.89312892523E+00	Resid rate (us/s)	-3.13519E-06	+/-	3.0E-10
Total phase (deg)	307.7	Apriori accel (us/s/s)	-3.83119234801E-05	Resid phase (deg)	174.4	+/-	2.3

ph/seg (deg)	77.4	RMS	5.4	Theor.	5.4	Amplitude	0.929 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	150.5	Search (2048X32)	0.883	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)	57.2	Inc. seg. avg.	2.217	Inc. frq. avg.	1.302	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	50.0	Inc. frq. avg.	1.302			Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 119.5 el 37.1 pa -44.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10893.592 -1139.369 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/IN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/IN.W.170.1W6XBK

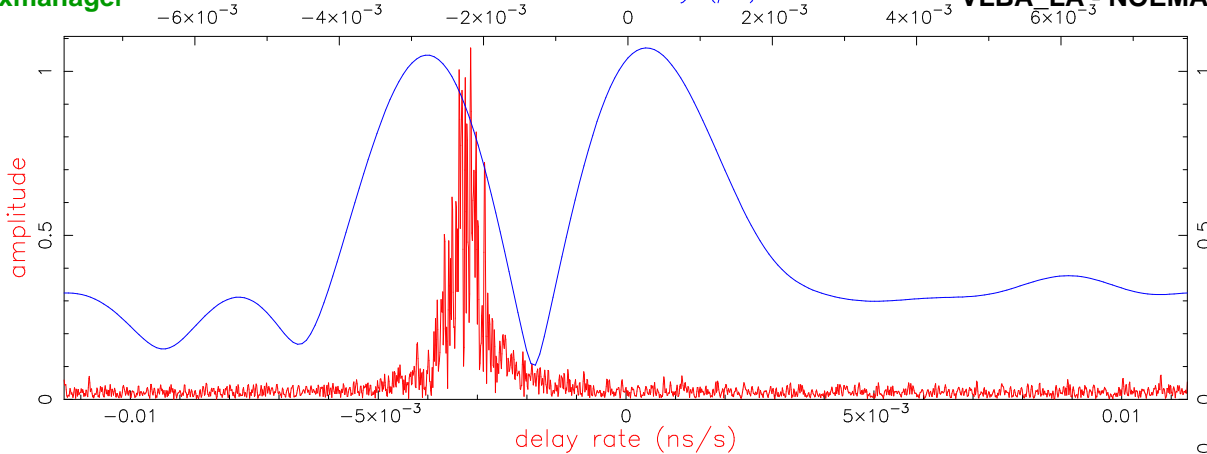
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, IN

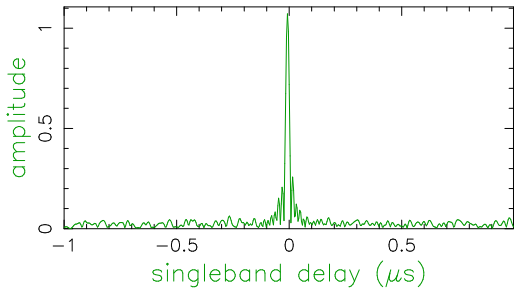
VLBA_LA - NOEMA, fgroup W, pol RR

multiband delay (μ s)

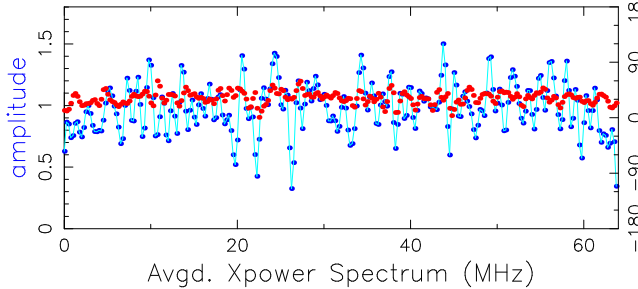


Fringe quality 1

SNR 60.1
 Int time 419.827
 Amp 1.106
 Phase -57.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.007520
 MBD 0.000272
 Fringe rate (Hz)
 -0.270063
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

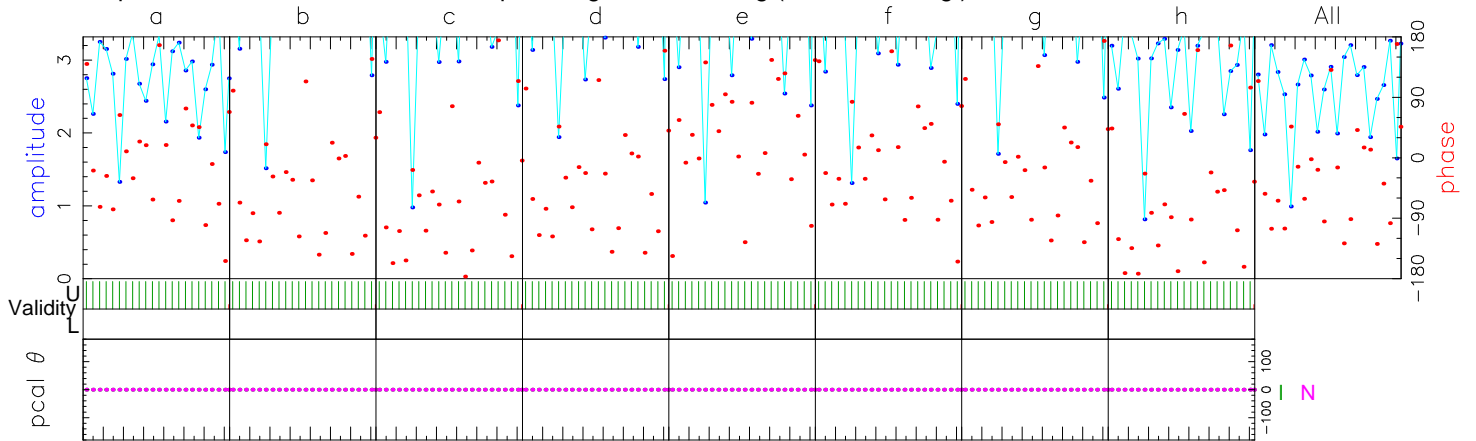


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080517
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.1	-76.7	-106.9	-68.0	40.5	-24.8	-53.7	-125.0	Phase	-57.4
	1.2	1.7	1.7	1.6	1.7	1.7	1.8	1.3	Ampl.	1.6
	253.0	255.2	255.5	255.4	255.5	255.3	254.8	253.1	Sbd box	255.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.13137612925E+03		Apriori delay (usec)		7.13137585756E+03		Resid mbdelay (usec)		2.71684E-04	+/- 1.8E-05
Sband delay (usec)	7.13136833756E+03		Apriori clock (usec)		1.0814839E+01		Resid sbdelay (usec)		-7.52000E-03	+/- 1.4E-04
Phase delay (usec)	7.13137585571E+03		Apriori clockrate (us/s)		-8.9410007E-06		Resid phdelay (usec)		-1.85124E-06	+/- 6.2E-08
Delay rate (us/s)	1.89312579007E+00		Apriori rate (us/s)		1.89312892523E+00		Resid rate (us/s)		-3.13516E-06	+/- 2.5E-10
Total phase (deg)	75.9		Apriori accel (us/s/s)		-3.83119234801E-05		Resid phase (deg)		-57.4	+/- 1.9

ph/seg (deg) 78.5 4.6 Search (2048X32) 1.052 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 148.5 8.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.4 2.7 Inc. seg. avg. 2.636 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.1 4.7 Inc. frq. avg. 1.584 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 119.5 el 37.1 pa -44.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10893.592 -1139.369 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/IN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/IN.W.188.1W6XBK

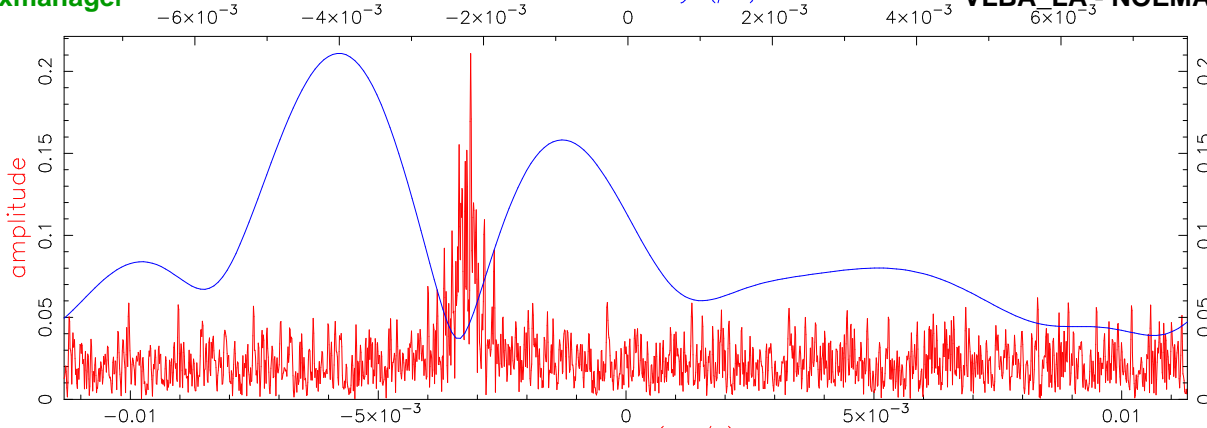
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, IN

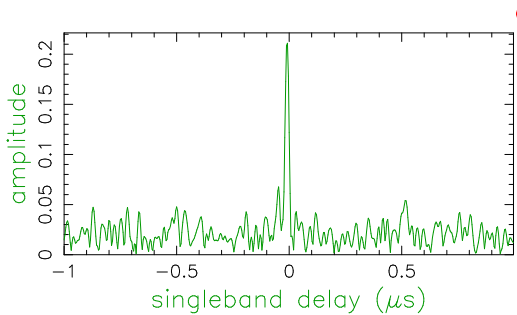
VLBA LA- NOEMA, fgroup W, pol LR

multiband delay (μs)

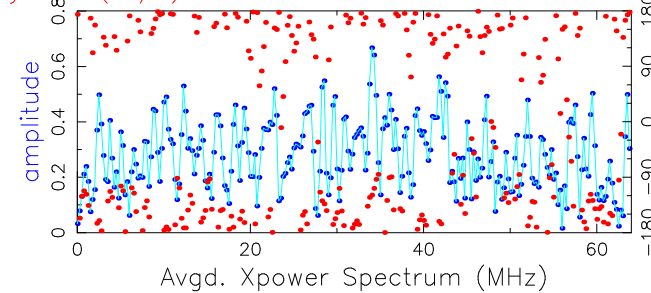


Fringe quality 9

SNR 12.0
 Int time 419.827
 Amp 0.221
 Phase 127.4
 PFD 1.5e-24
 Delays (us)
 SBD -0.009524
 MBD -0.004037
 Fringe rate (Hz)
 -0.269839
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

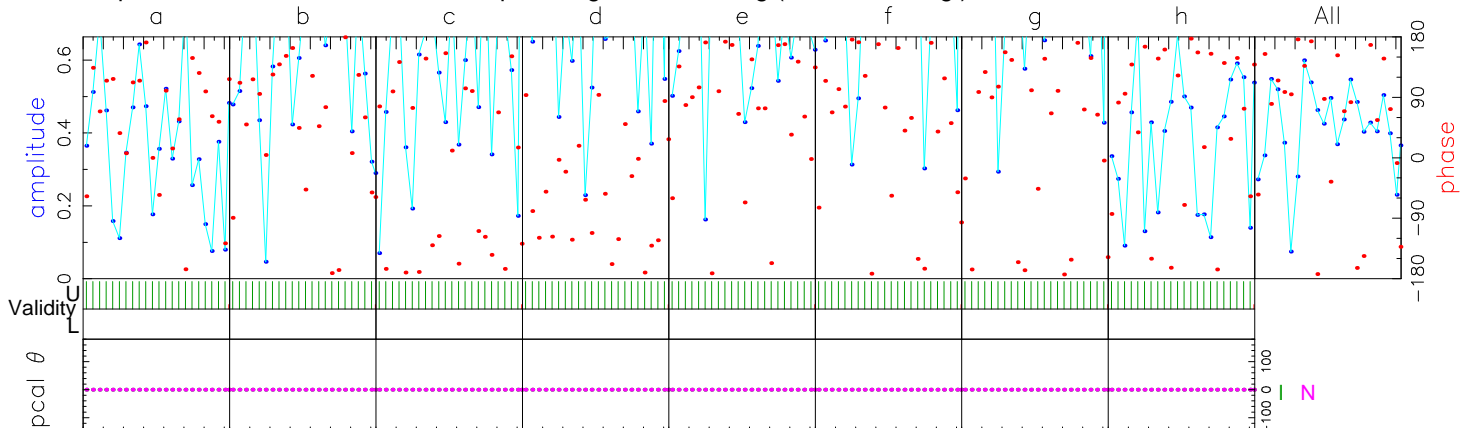


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080522
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	102.1	114.0	167.7	-80.3	116.7	111.3	128.4	139.7	Phase	127.4
	0.2	0.3	0.3	0.2	0.4	0.3	0.4	0.2	Ampl.	0.3
	251.7	254.4	255.2	255.0	255.1	254.6	254.8	251.6	Sbd box	254.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	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	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)	7.13137182106E+03		Apriori delay (usec)		7.13137585756E+03		Resid mbdelay (usec)		-4.03650E-03	+/- 9.0E-05
Sband delay (usec)	7.13136633356E+03		Apriori clock (usec)		1.0814839E+01		Resid sbdelay (usec)		-9.52400E-03	+/- 7.2E-04
Phase delay (usec)	7.13137586167E+03		Apriori clockrate (us/s)		-8.9410007E-06		Resid phdelay (usec)		4.10673E-06	+/- 3.1E-07
Delay rate (us/s)	1.89312579267E+00		Apriori rate (us/s)		1.89312892523E+00		Resid rate (us/s)		-3.13256E-06	+/- 1.3E-09
Total phase (deg)	260.7		Apriori accel (us/s/s)		-3.83119234801E-05		Resid phase (deg)		127.4	+/- 9.5

	RMS	Theor.	Amplitude	0.221 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	74.0	22.9	Search (2048X32)	0.208	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	108.9	39.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	66.1	13.5	Inc. seg. avg.	0.397	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.4	23.5	Inc. frq. avg.	0.275	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

I: az 119.5 el 37.1 pa -44.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10893.592 -1139.369 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/IN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/IN.W.214.1W6XBK

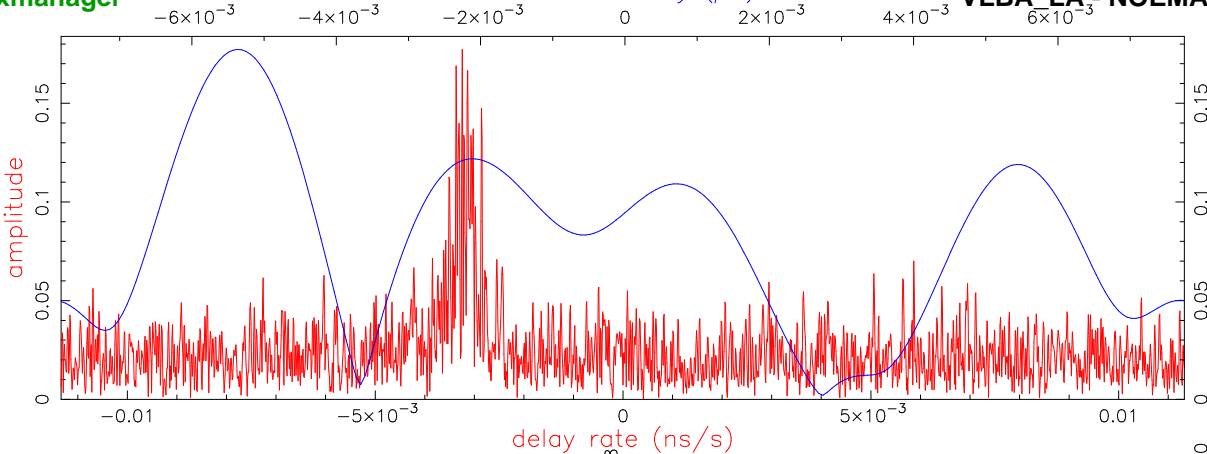
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, IN

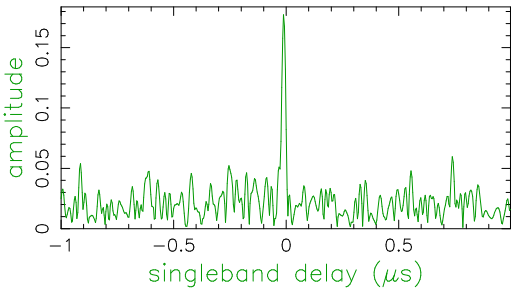
VLBA LA- NOEMA, fgroup W, pol RL

multiband delay (μ s)

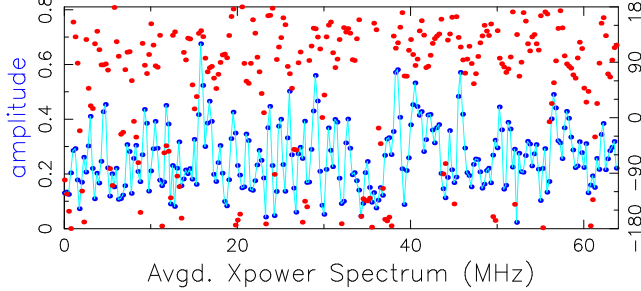


Fringe quality 9

SNR 10.0
 Int time 419.827
 Amp 0.184
 Phase 53.0
 PFD 9.8e-15
 Delays (us)
 SBD -0.011034
 MBD -0.005340
 Fringe rate (Hz)
 -0.279546
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

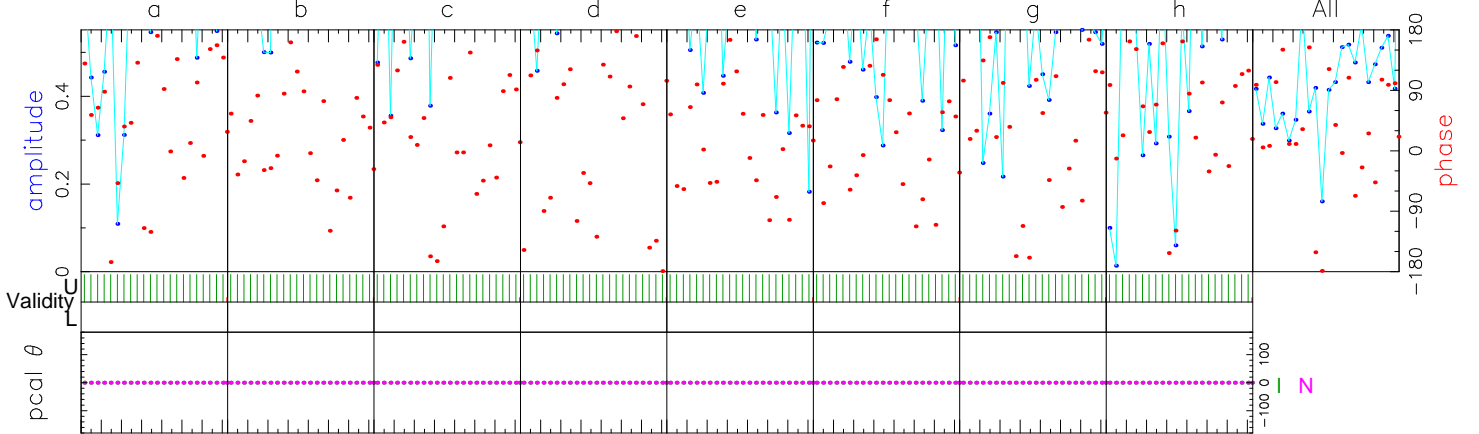


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080525
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	7.13137051759E+03	Apriori delay (usec)	7.13137585756E+03	Resid mbdelay (usec)	-5.33998E-03	+/-	1.1E-04
Sband delay (usec)	7.13136482381E+03	Apriori clock (usec)	1.0814839E+01	Resid sbdelay (usec)	-1.10338E-02	+/-	8.7E-04
Phase delay (usec)	7.13137585927E+03	Apriori clockrate (us/s)	-8.9410007E-06	Resid phdelay (usec)	1.70770E-06	+/-	3.7E-07
Delay rate (us/s)	1.89312567998E+00	Apriori rate (us/s)	1.89312892523E+00	Resid rate (us/s)	-3.24525E-06	+/-	1.5E-09
Total phase (deg)	186.3	Apriori accel (us/s/s)	-3.83119234801E-05	Resid phase (deg)	53.0	+/-	11.5

ph/seg (deg)	RMS 74.5	Theor. 27.6	Amplitude Search (2048X32)	0.184 +/- 0.018	0.171	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	154.6	48.2	Interp.	0.000	0.399	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	54.1	16.3	Inc. seg. avg.	0.399	0.246	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	59.9	28.4	Inc. frq. avg.	0.246		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 119.5 el 37.1 pa -44.5 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -10893.592 -1139.369 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/IN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/IN.W.232.1W6XBK

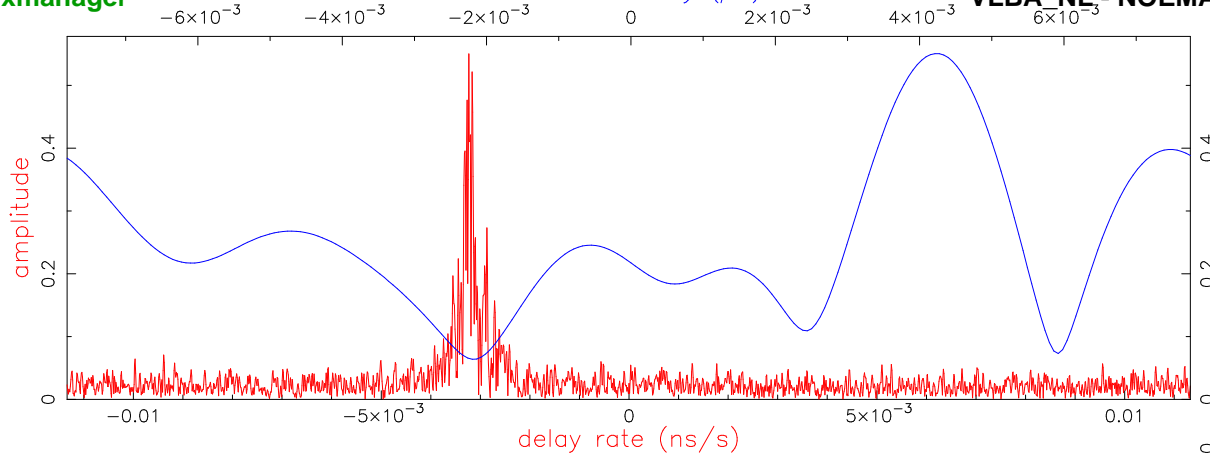
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, nN

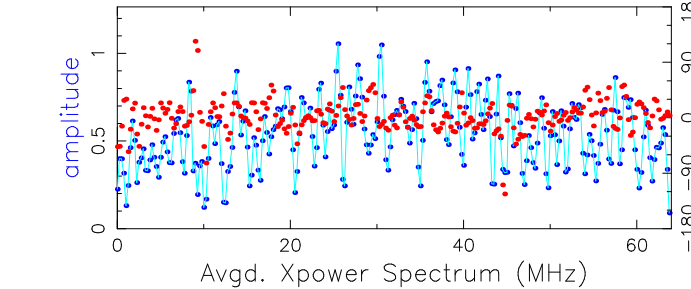
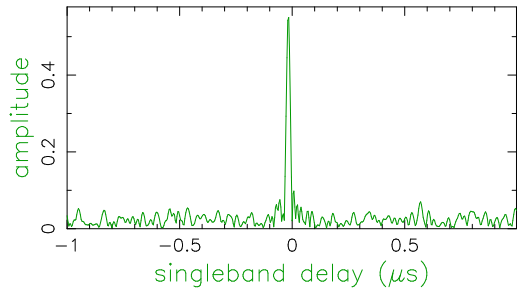
VLBA_NL- NOEMA, fgroup W, pol LL

multiband delay (μ s)



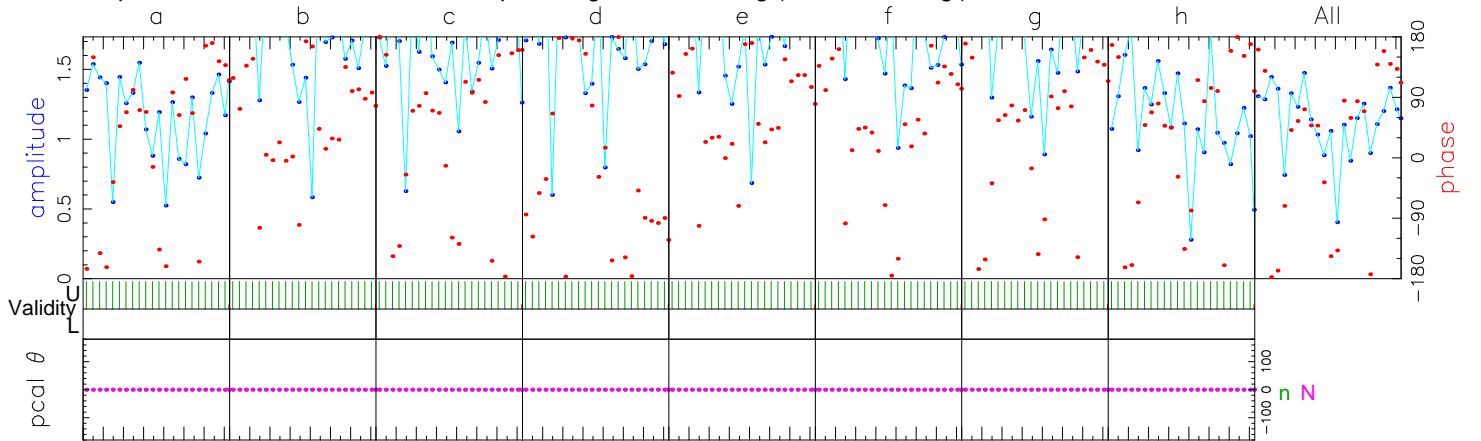
Fringe quality 3

SNR 31.3
 Int time 419.826
 Amp 0.578
 Phase 114.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.017259
 MBD 0.004187
 Fringe rate (Hz)
 -0.278602
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080514
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	8.54846704281E+03		Apriori delay (usec)		8.54847848040E+03		Resid mbdelay (usec)		4.18741E-03	+/- 3.5E-05
Sband delay (usec)	8.54846122115E+03		Apriori clock (usec)		1.8808880E+01		Resid sbdelay (usec)		-1.72592E-02	+/- 2.8E-04
Phase delay (usec)	8.54847848410E+03		Apriori clockrate (us/s)		-8.3550007E-06		Resid phdelay (usec)		3.70547E-06	+/- 1.2E-07
Delay rate (us/s)	1.58365104284E+00		Apriori rate (us/s)		1.58365427714E+00		Resid rate (us/s)		-3.23429E-06	+/- 4.9E-10
Total phase (deg)	223.5		Apriori accel (us/s/s)		-4.54948187770E-05		Resid phase (deg)		114.9	+/- 3.7

ph/seg (deg) 74.3 8.8 Search (2048X32) 0.537 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 111.3 15.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.8 5.2 Inc. seg. avg. 1.155 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.6 9.0 Inc. frq. avg. 0.791 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 138.7 el 42.3 pa -29.0 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -9128.792 -438.975 ion window (TEC) 0.00 0.00
 simultaneous interpolator

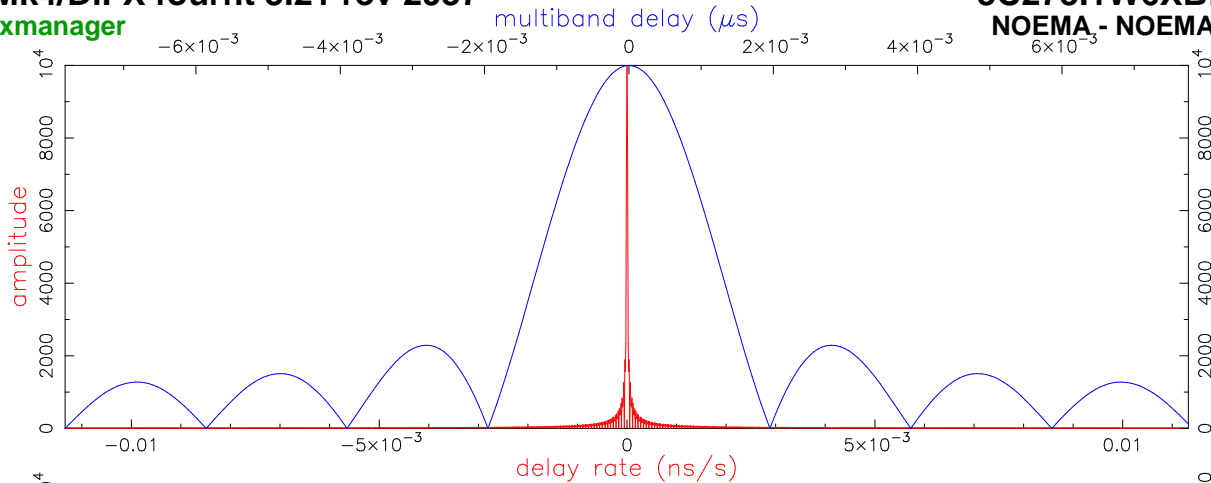
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/nN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/nN.W.176.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

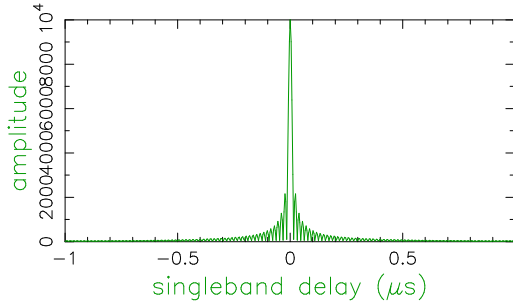
3C273.1W6XBK, No0156, NN

NOEMA - NOEMA, fgroup W, pol LL

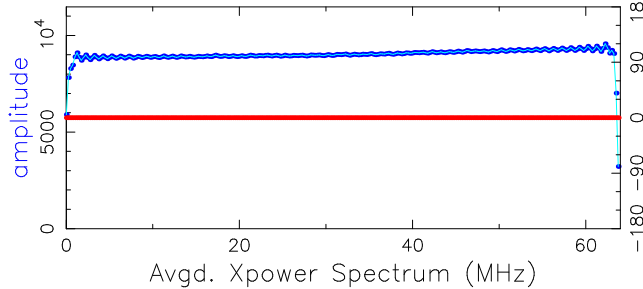


Fringe quality 9

SNR 560320.3
 Int time 419.834
 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

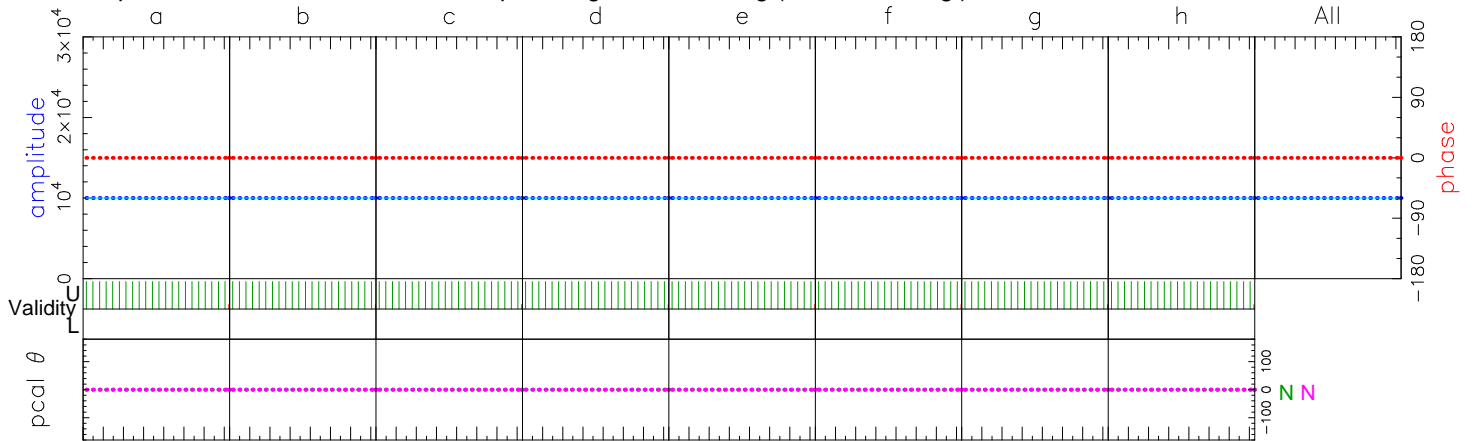


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2023000.00
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080516
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
N	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
N:N	0:0	0:0	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	0.0	0.0
N	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
N	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

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

RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NN.W.183.1W6XBK

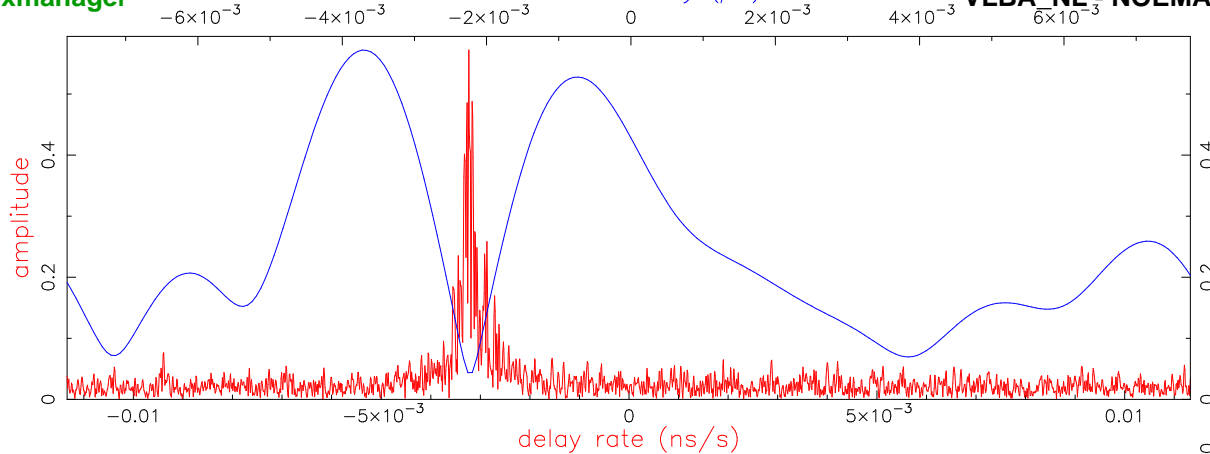
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, nN

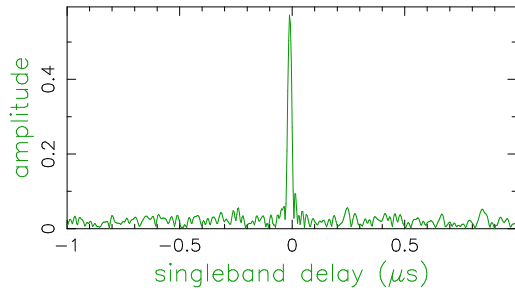
VLBA_NL - NOEMA, fgroup W, pol RR

multiband delay (μ s)

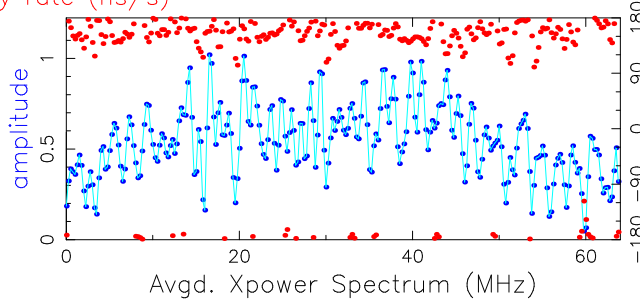


Fringe quality 3

SNR 32.2
 Int time 419.826
 Amp 0.594
 Phase 76.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010789
 MBD -0.003688
 Fringe rate (Hz)
 -0.278566
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

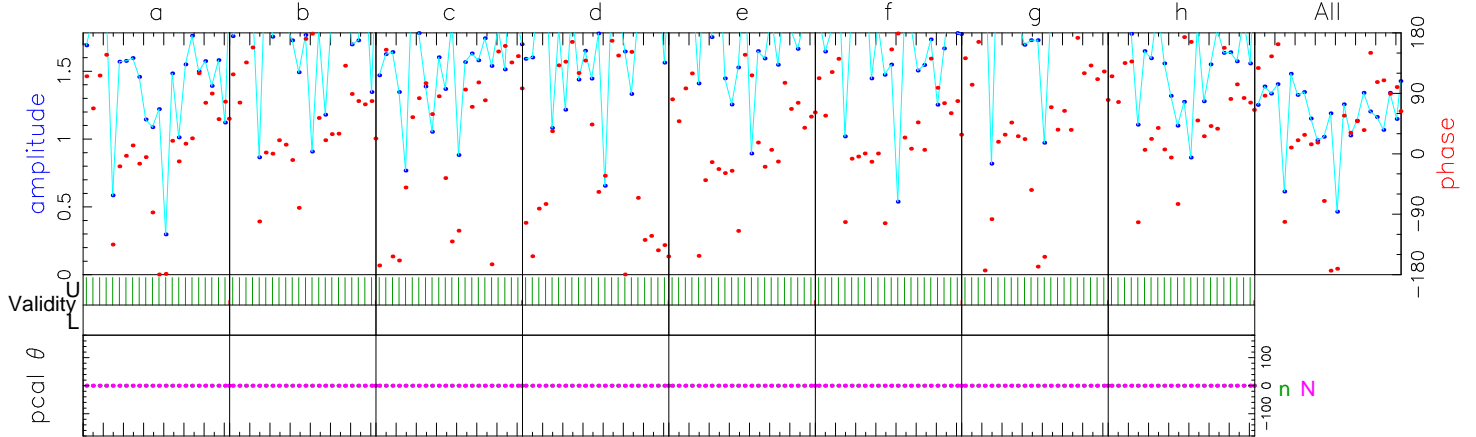


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080519
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
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)	8.54847479218E+03		Apriori delay (usec)		8.54847848040E+03		Resid mbdelay (usec)		-3.68822E-03	+/- 3.4E-05
Sband delay (usec)	8.54846769190E+03		Apriori clock (usec)		1.8808880E+01		Resid sbdelay (usec)		-1.07885E-02	+/- 2.7E-04
Phase delay (usec)	8.54847848285E+03		Apriori clockrate (us/s)		-8.3550007E-06		Resid phdelay (usec)		2.45345E-06	+/- 1.1E-07
Delay rate (us/s)	1.58365104326E+00		Apriori rate (us/s)		1.58365427714E+00		Resid rate (us/s)		-3.23387E-06	+/- 4.7E-10
Total phase (deg)	184.6		Apriori accel (us/s/s)		-4.54948187770E-05		Resid phase (deg)		76.1	+/- 3.6

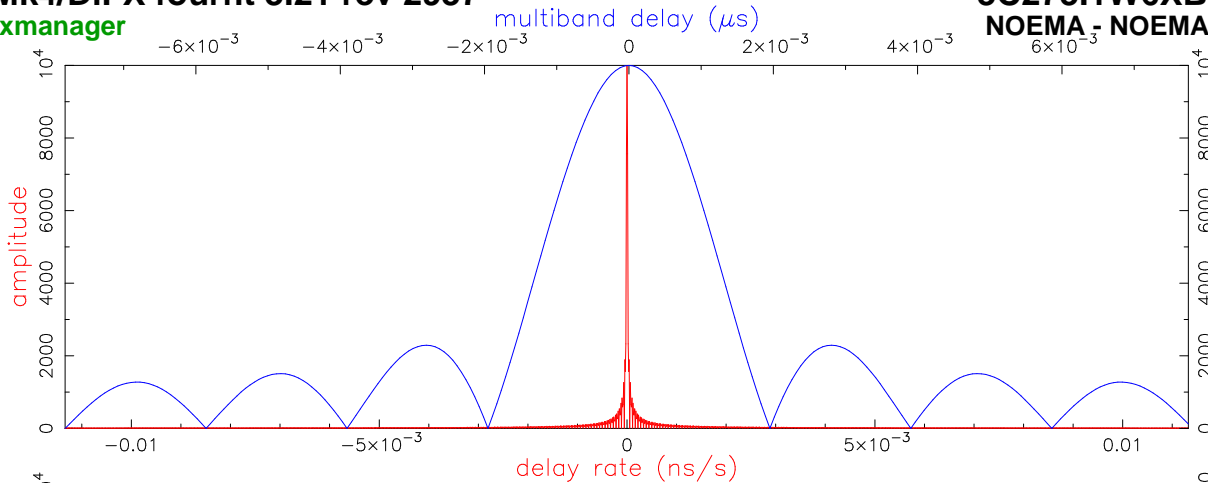
ph/seg (deg) 74.5 8.5 Search (2048X32) 0.558 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 111.2 14.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.0 5.0 Inc. seg. avg. 1.194 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.7 8.8 Inc. frq. avg. 0.835 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 138.7 el 42.3 pa -29.0 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -9128.792 -438.975 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/nN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/nN.W.200.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

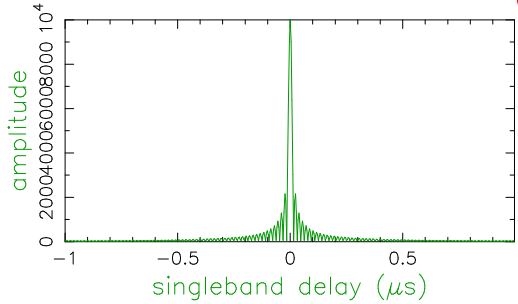
3C273.1W6XBK, No0156, NN

NOEMA - NOEMA, fgroup W, pol RR

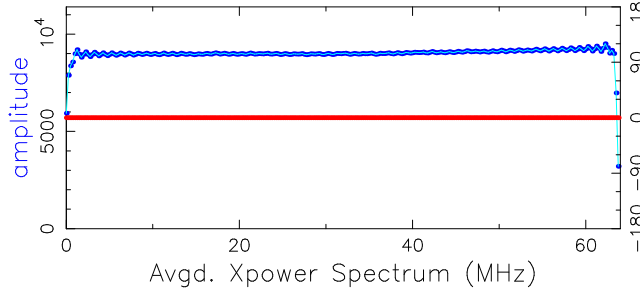


Fringe quality 9

SNR 560320.3
 Int time 419.834
 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

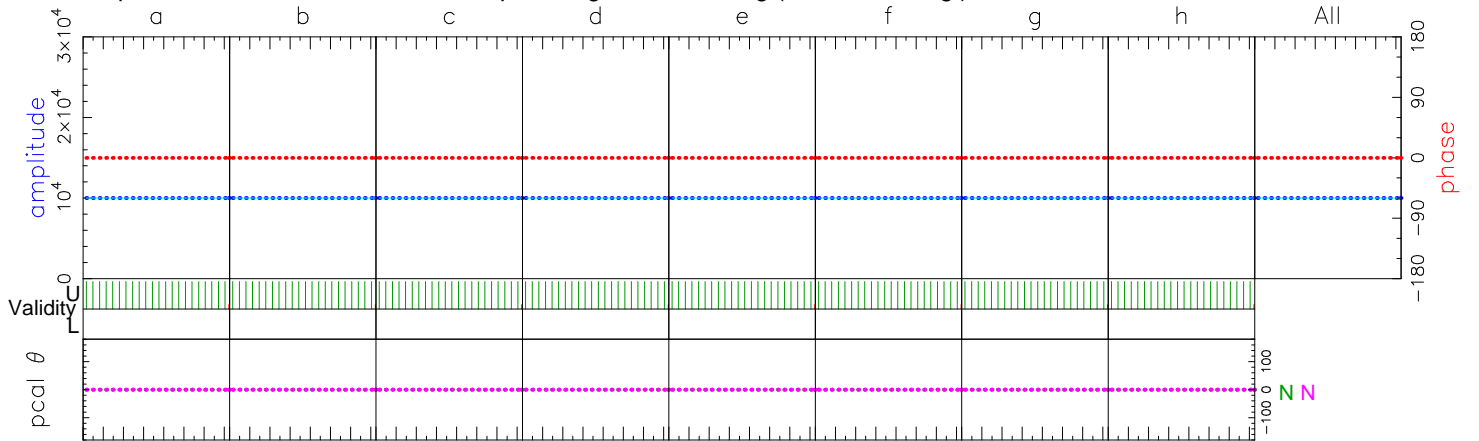


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 202300.00
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080520
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	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	Theor.	Amplitude	10000.000 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	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	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

N: az 255.7 el 16.7 pa 43.7 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NN.W.204.1W6XBK

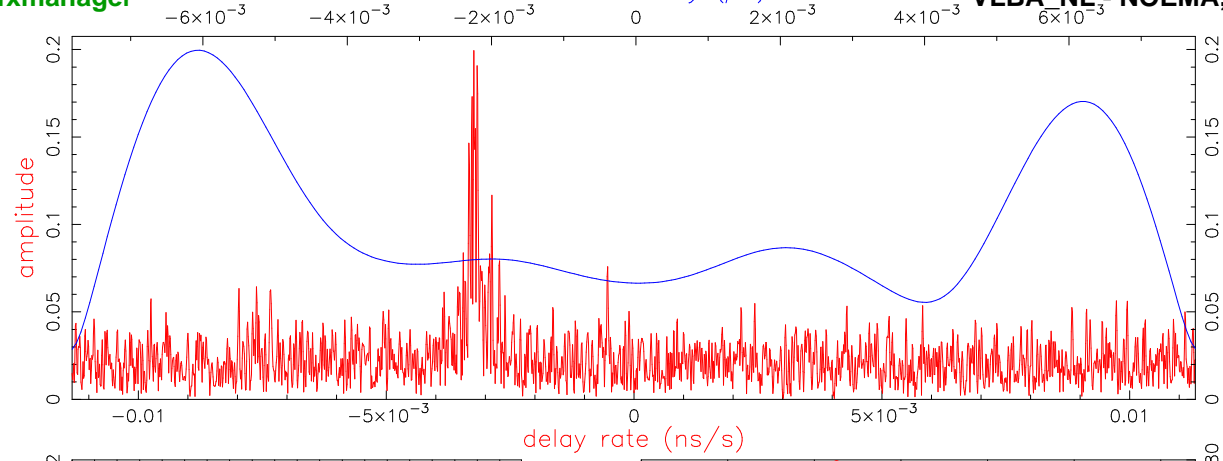
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, nN

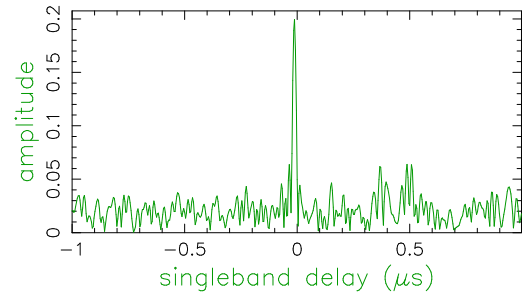
VLBA_NL- NOEMA, fgroup W, pol LR

multiband delay (μ s)

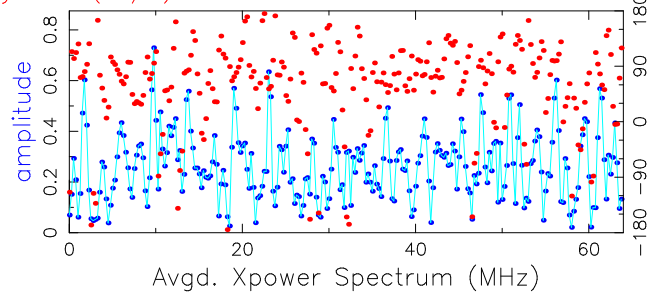


Fringe quality 9

SNR 11.2
 Int time 419.826
 Amp 0.208
 Phase 3.3
 PFD 1.2e-20
 Delays (us)
 SBD -0.012685
 MBD -0.006127
 Fringe rate (Hz)
 -0.278699
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

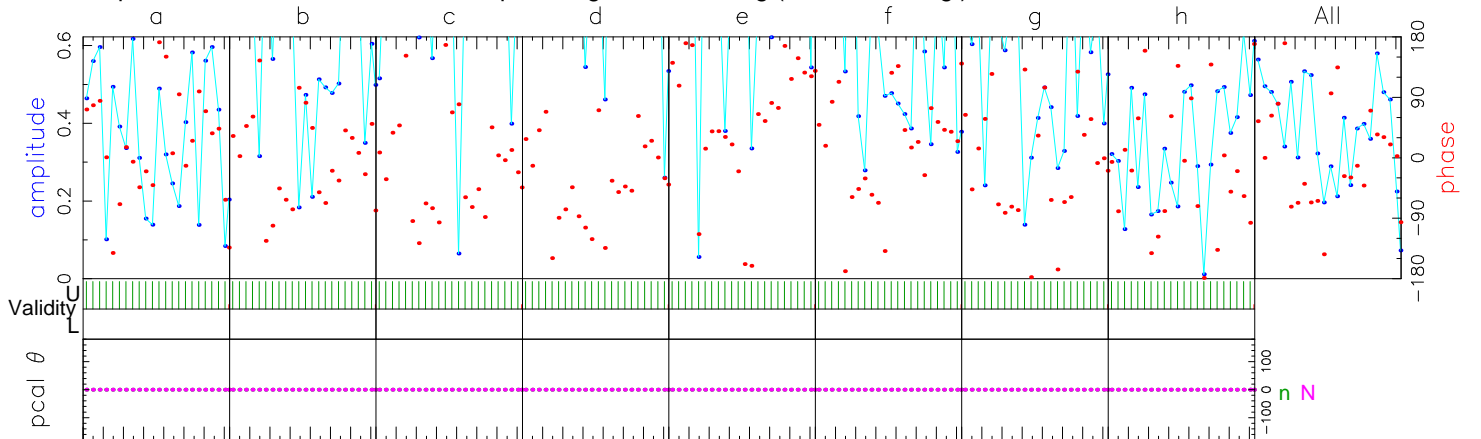


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080523
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.54847235350E+03		Apriori delay (usec)		8.54847848040E+03		Resid mbdelay (usec)		-6.12690E-03	+/- 9.7E-05
Sband delay (usec)	8.54846579515E+03		Apriori clock (usec)		1.8808880E+01		Resid sbdelay (usec)		-1.26852E-02	+/- 7.7E-04
Phase delay (usec)	8.54847848050E+03		Apriori clockrate (us/s)		-8.3550007E-06		Resid phdelay (usec)		1.04879E-07	+/- 3.3E-07
Delay rate (us/s)	1.58365104172E+00		Apriori rate (us/s)		1.58365427714E+00		Resid rate (us/s)		-3.23541E-06	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.54948187770E-05		Resid phase (deg)		3.3	+/- 10.2

ph/seg (deg) 74.1 24.4 Search (2048X32) 0.193 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 114.2 42.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.9 14.4 Inc. seg. avg. 0.376 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 70.2 25.2 Inc. frq. avg. 0.289 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 138.7 el 42.3 pa -29.0 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -9128.792 -438.975 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/nN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/nN.W.221.1W6XBK simultaneous interpolator

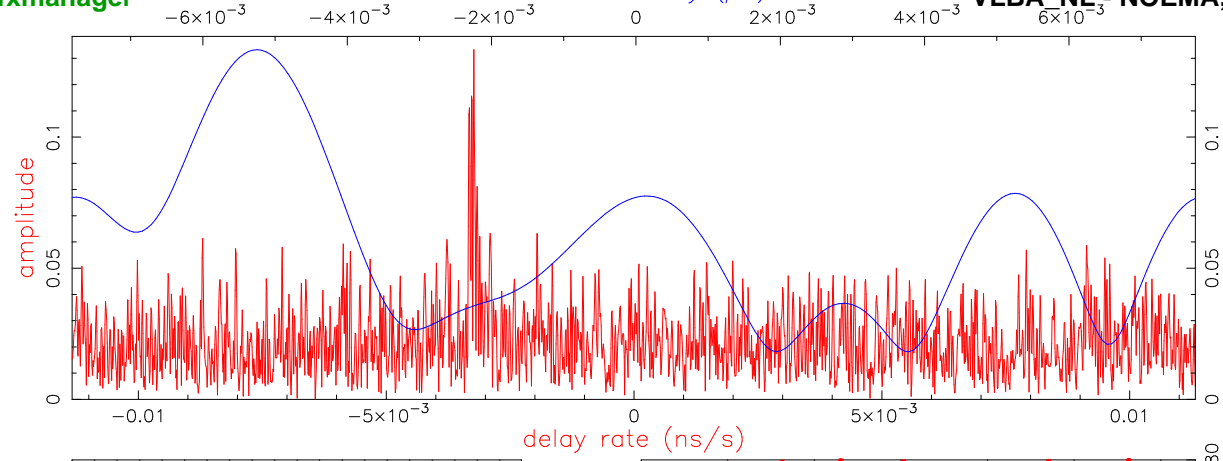
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, nN

VLBA_NL- NOEMA, fgroup W, pol RL

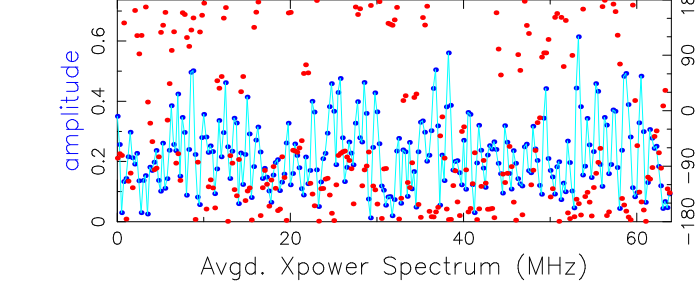
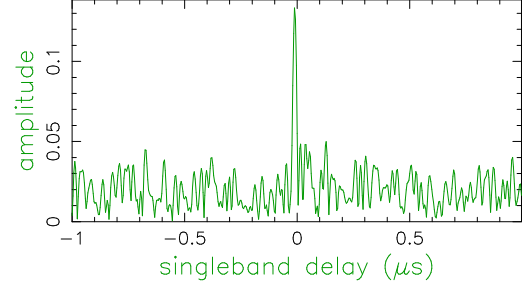
multiband delay (μ s)



Fringe quality 9

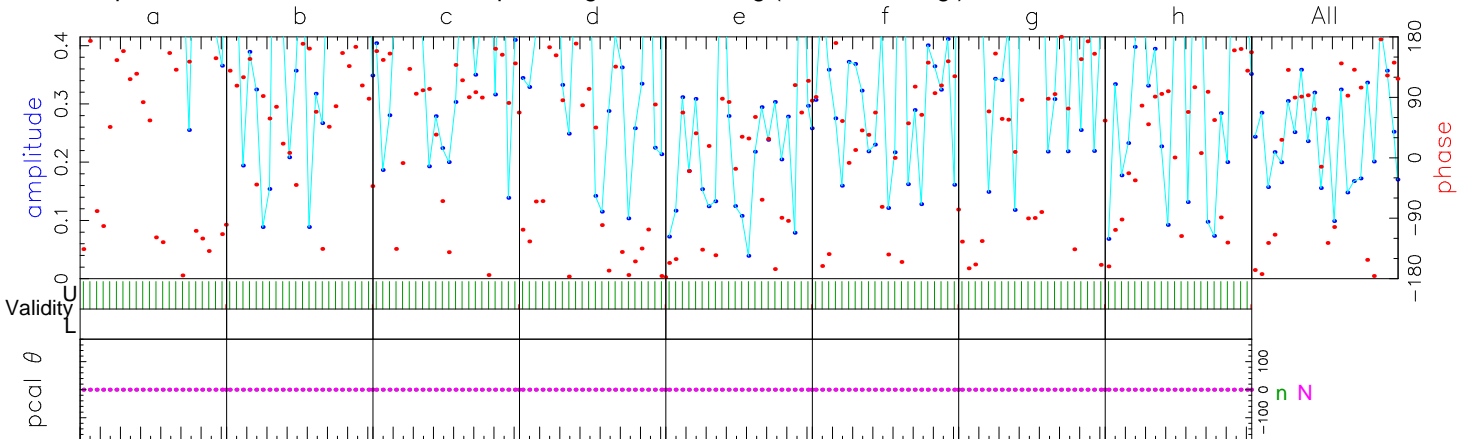
SNR 7.5
 Int time 419.826
 Amp 0.138
 Phase 145.1
 PFD 2.1e-05
 Delays (us)
 SBD -0.010917
 MBD -0.005242
 Fringe rate (Hz)
 -0.278552
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080527
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.6	106.1	129.4	-177.4	63.9	123.9	-167.0	115.9	Phase	145.1
	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.1	Ampl.	0.2
	252.3	253.8	254.5	254.6	175.2	247.1	298.5	106.8	Sbd box	254.2
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	
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)	8.54847323793E+03		Apriori delay (usec)		8.54847848040E+03		Resid mbdelay (usec)		-5.24247E-03	+/- 1.4E-04
Sband delay (usec)	8.54846756290E+03		Apriori clock (usec)		1.8808880E+01		Resid sbdelay (usec)		-1.09175E-02	+/- 1.1E-03
Phase delay (usec)	8.54847848508E+03		Apriori clockrate (us/s)		-8.3550007E-06		Resid phdelay (usec)		4.67898E-06	+/- 4.9E-07
Delay rate (us/s)	1.58365104343E+00		Apriori rate (us/s)		1.58365427714E+00		Resid rate (us/s)		-3.23371E-06	+/- 2.0E-09
Total phase (deg)	253.6		Apriori accel (us/s/s)		-4.54948187770E-05		Resid phase (deg)		145.1	+/- 15.3

ph/seg (deg) 69.6 36.7 Amplitude 0.138 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 106.1 64.0 Search (2048X32) 0.129 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.3 21.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 65.0 37.7 Inc. seg. avg. 0.214 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 n: az 138.7 el 42.3 pa -29.0 N: az 255.7 el 16.7 pa 43.7 u,v (fr/asec) -9128.792 -438.975 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/nN..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/nN.W.237.1W6XBK

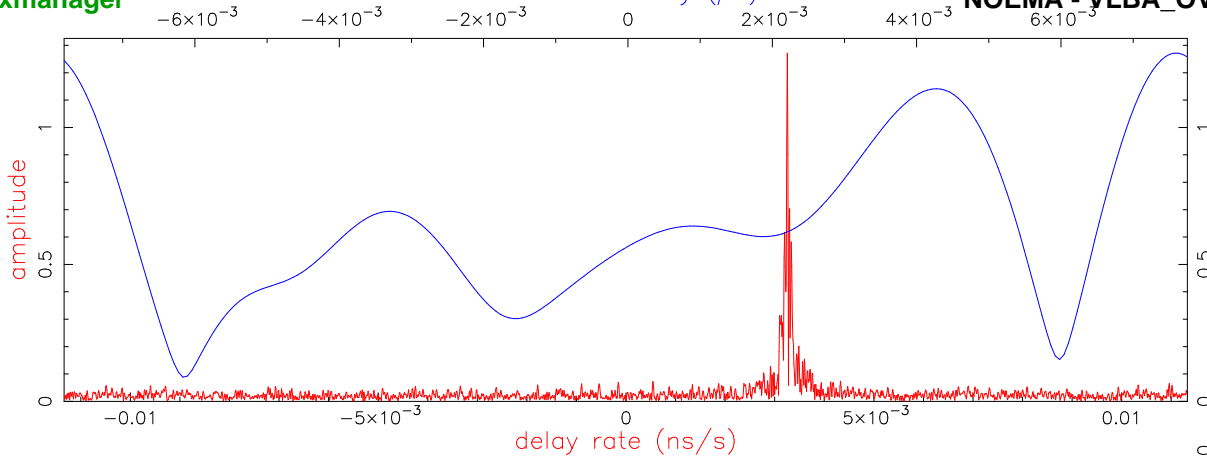
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, No

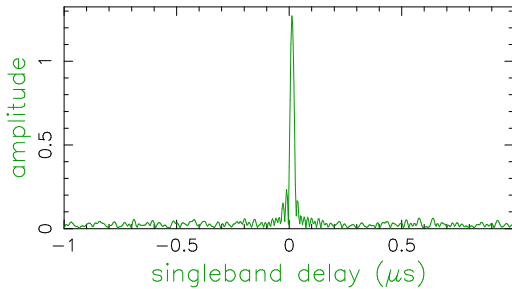
NOEMA - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

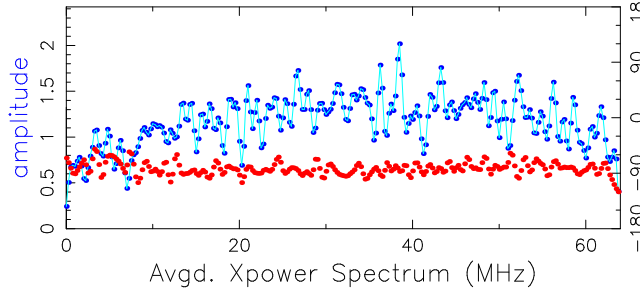


Fringe quality 2

SNR 71.8
 Int time 419.806
 Amp 1.325
 Phase -22.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.012834
 MBD 0.007623
 Fringe rate (Hz)
 0.280961
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

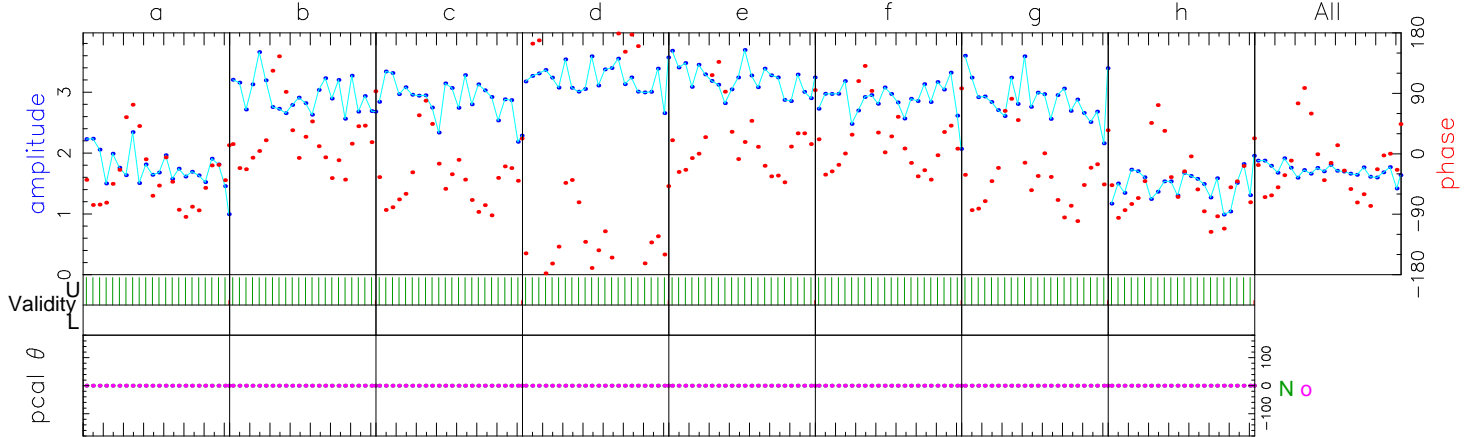


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080527
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	-4.23095671094E+03	Apriori delay (usec)	-4.23096433374E+03	Resid mbdelay (usec)	7.62281E-03	+/-	1.5E-05
Sband delay (usec)	-4.23095149924E+03	Apriori clock (usec)	-1.7048676E+01	Resid sbdelay (usec)	1.28345E-02	+/-	1.2E-04
Phase delay (usec)	-4.23096433446E+03	Apriori clockrate (us/s)	8.2950001E-06	Resid phdelay (usec)	-7.17170E-07	+/-	5.1E-08
Delay rate (us/s)	-2.04675109027E+00	Apriori rate (us/s)	-2.04675435194E+00	Resid rate (us/s)	3.26168E-06	+/-	2.1E-10
Total phase (deg)	-277.3	Apriori accel (us/s/s)	2.27785643562E-05	Resid phase (deg)	-22.2	+/-	1.6

ph/seg (deg)	45.8	Theor.	3.8	Amplitude	1.325 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	34.7		6.7	Search (2048X32)	1.196	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	60.8		2.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	63.8		3.9	Inc. seg. avg.	1.768	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	2.019	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

N: az 255.7 el 16.7 pa 43.7 o: az 110.6 el 27.7 pa -48.2 u,v (fr/asec) 11755.147 917.143 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/No..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/No.W.238.1W6XBK

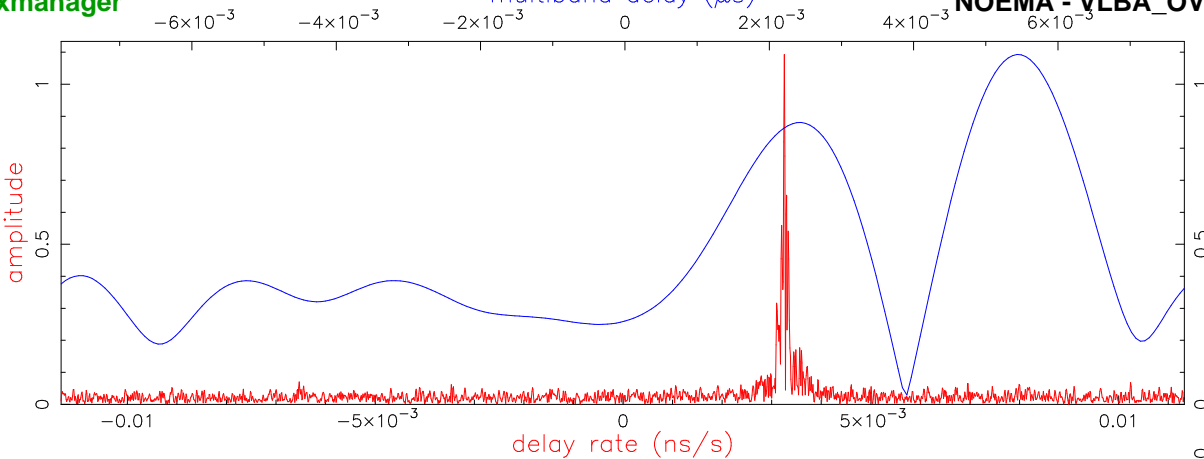
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, No

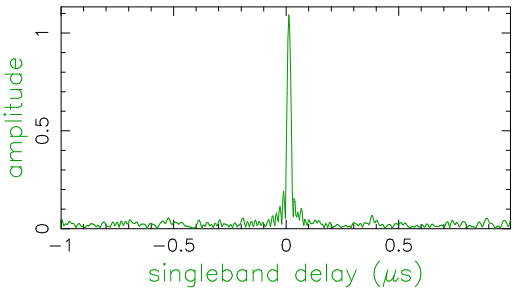
NOEMA - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

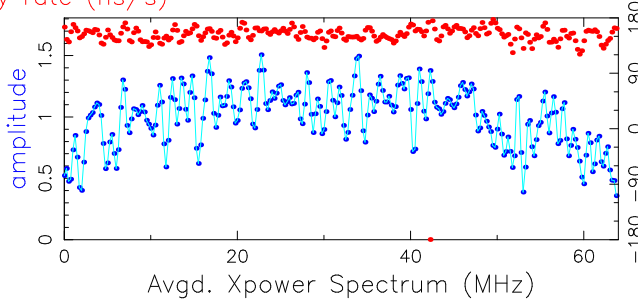


Fringe quality 3

SNR 61.4
 Int time 419.806
 Amp 1.134
 Phase -126.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.012398
 MBD 0.005458
 Fringe rate (Hz)
 0.280947
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

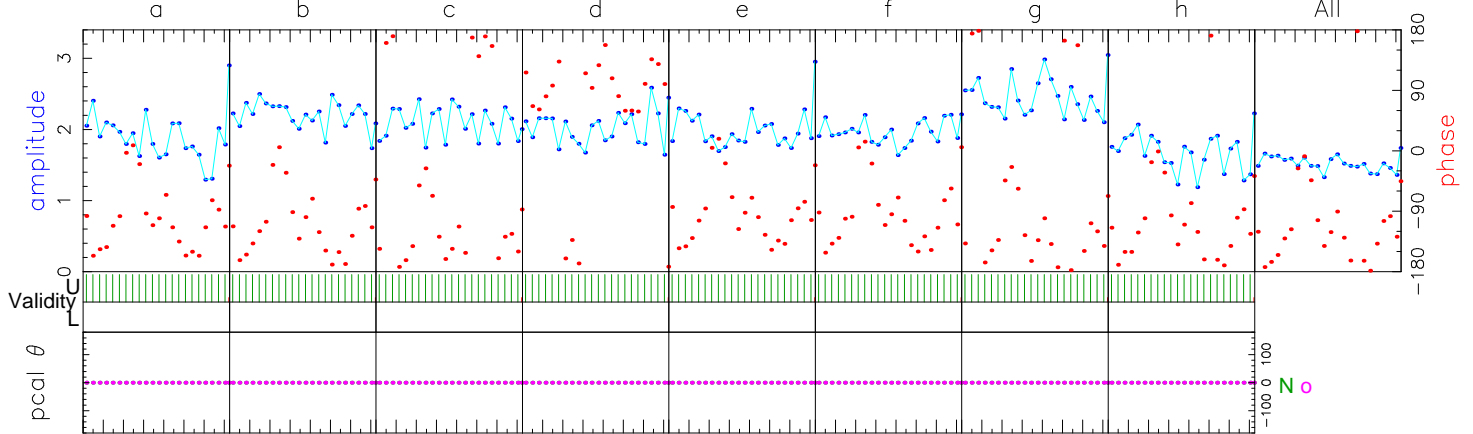


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080530
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-107.7	-112.7	-150.4	108.8	-98.7	-99.7	-140.4	-120.2	Phase	-126.2
	1.4	1.6	1.5	1.5	1.5	1.5	1.8	1.2	Ampl.	1.5
	261.8	259.4	259.3	259.3	259.3	259.2	260.2	262.0	Sbd box	260.2
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.23095887606E+03		Apriori delay (usec)		-4.23096433374E+03		Resid mbdelay (usec)		5.45768E-03	+/- 1.8E-05
Sband delay (usec)	-4.23095193549E+03		Apriori clock (usec)		-1.7048676E+01		Resid sbdelay (usec)		1.23983E-02	+/- 1.4E-04
Phase delay (usec)	-4.23096433781E+03		Apriori clockrate (us/s)		8.2950001E-06		Resid phdelay (usec)		-4.07112E-06	+/- 6.0E-08
Delay rate (us/s)	-2.04675109042E+00		Apriori rate (us/s)		-2.04675435194E+00		Resid rate (us/s)		3.26152E-06	+/- 2.5E-10
Total phase (deg)			Apriori accel (us/s/s)		2.277856433562E-05		Resid phase (deg)		-126.2	+/- 1.9

	RMS	Theor.	Amplitude	1.134 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.9	4.5	Search (2048X32)	1.019	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	39.3	7.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	55.4	2.6	Inc. seg. avg.	1.564	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	36.4	4.6	Inc. frq. avg.	1.507	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

N: az 255.7 el 16.7 pa 43.7 o: az 110.6 el 27.7 pa -48.2 u,v (fr/asec) 11755.147 917.143 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/No..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/No.W.250.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

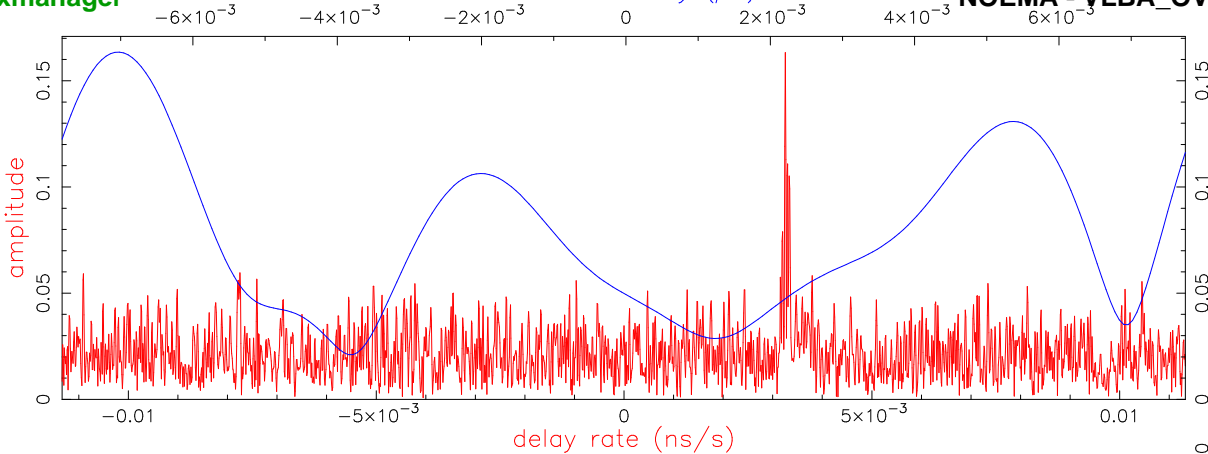
fxmanager

3C273.1W6XBK, No0156, No

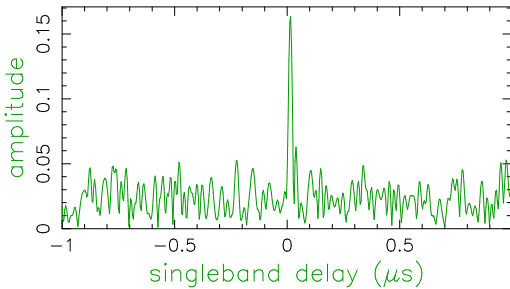
NOEMA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

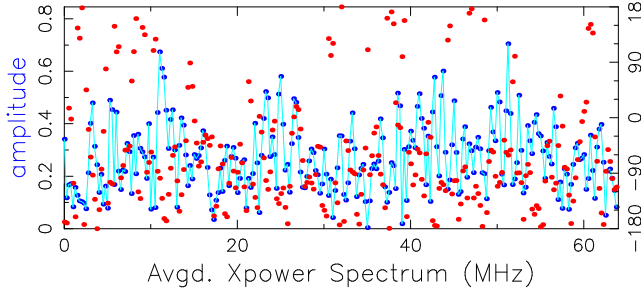
Fringe quality 9



SNR 9.3
 Int time 419.806
 Amp 0.171
 Phase 143.9
 PFD 8.6e-12
 Delays (us)
 SBD 0.014252
 MBD -0.007093
 Fringe rate (Hz)
 0.280991
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

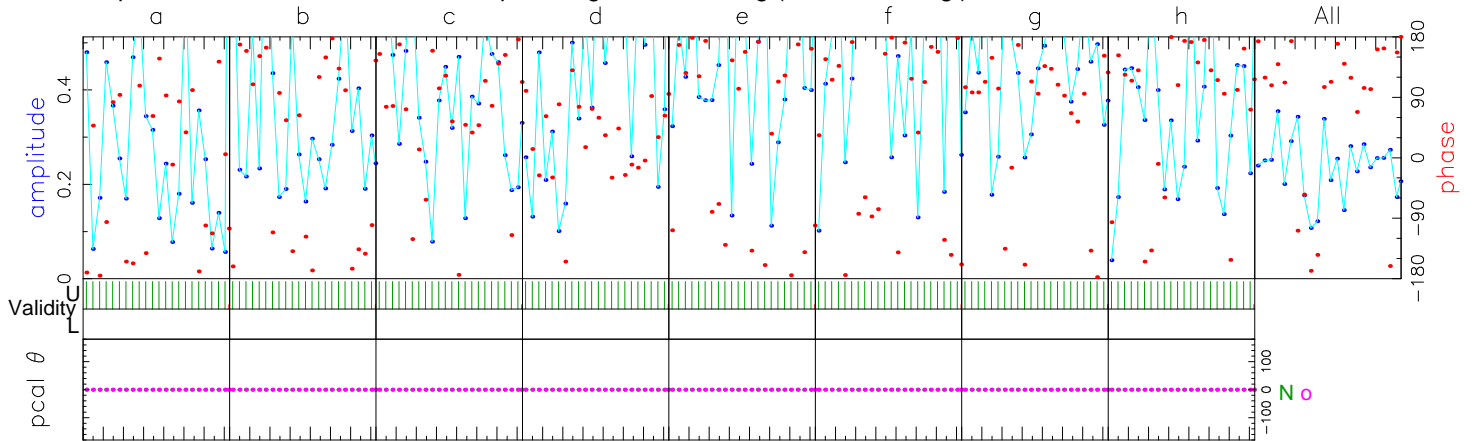


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080534
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	147.5	170.7	107.6	31.6	177.5	-175.1	120.0	151.2	Phase	143.9
Sband delay (usec)	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	Ampl.	0.2
Phase delay (usec)	107.4	260.1	258.8	260.3	260.3	260.6	260.7	262.4	Sbd box	260.6
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	
	o 1000	1000	1000	1000	1000	1000	1000	1000	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 W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.23095580206E+03		Apriori delay (usec)	-4.23096433374E+03	Resid mbdelay (usec)	-7.09332E-03	+/-	1.2E-04		
Sband delay (usec)	-4.23095008124E+03		Apriori clock (usec)	-1.7048676E+01	Resid sbdelay (usec)	1.42525E-02	+/-	9.3E-04		
Phase delay (usec)	-4.23096432910E+03		Apriori clockrate (us/s)	8.2950001E-06	Resid phdelay (usec)	4.63923E-06	+/-	4.0E-07		
Delay rate (us/s)	-2.04675108991E+00		Apriori rate (us/s)	-2.04675435194E+00	Resid rate (us/s)	3.26203E-06	+/-	1.6E-09		
Total phase (deg)		-111.2	Apriori accel (us/s/s)	2.27785643562E-05	Resid phase (deg)	143.9	+/-	12.4		

	RMS	Theor.	Amplitude	0.171 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.9	29.7	Search (2048X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	59.9	51.8	Interp.	0.000	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	54.9	17.5	Inc. seg. avg.	0.219	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	59.4	30.6	Inc. frq. avg.	0.232	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 o: az 110.6 el 27.7 pa -48.2 u,v (fr/asec) 11755.147 917.143 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/No..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/No.W.268.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

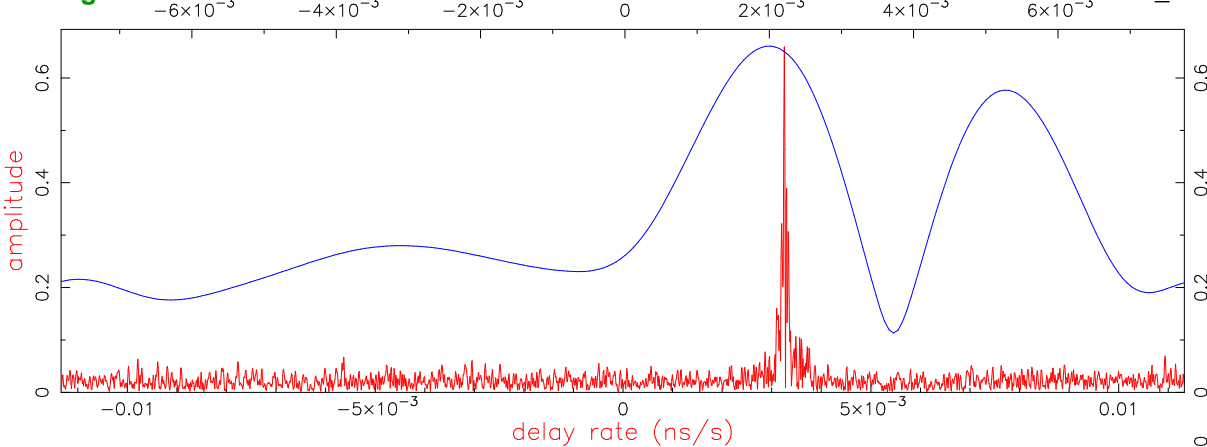
fxmanager

3C273.1W6XBK, No0156, No

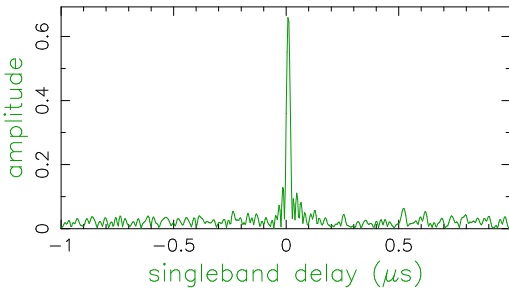
NOEMA - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

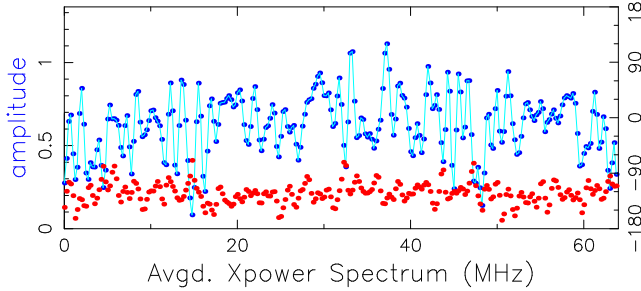
Fringe quality 4



SNR 37.5
 Int time 419.806
 Amp 0.693
 Phase -38.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.009383
 MBD 0.002082
 Fringe rate (Hz)
 0.280972
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

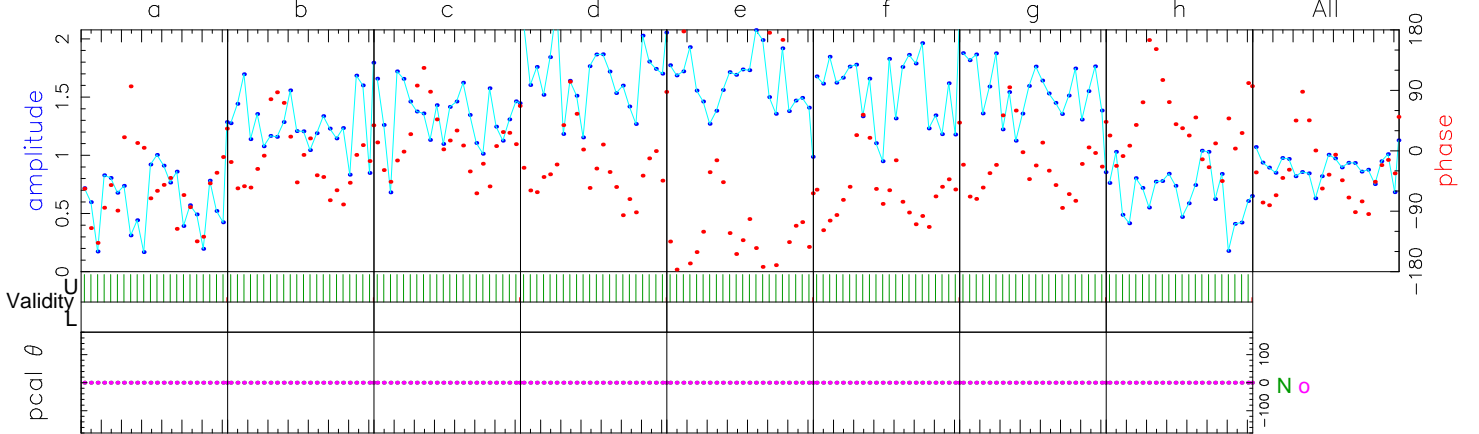


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080537
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.2	-19.3	10.2	-29.4	-140.6	-65.7	-27.0	29.3		-38.4
	0.5	1.0	1.0	1.3	1.2	1.2	1.2	0.4		1.0
	261.6	259.7	259.1	259.1	259.6	259.5	259.8	261.8		259.4
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		
o	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.23096225159E+03		Apriori delay (usec)		-4.23096433374E+03		Resid mbdelay (usec)		2.08215E-03	+/- 2.9E-05
Sband delay (usec)	-4.23095495024E+03		Apriori clock (usec)		-1.7048676E+01		Resid sbdelay (usec)		9.38350E-03	+/- 2.3E-04
Phase delay (usec)	-4.23096433498E+03		Apriori clockrate (us/s)		8.2950001E-06		Resid phdelay (usec)		-1.23677E-06	+/- 9.9E-08
Delay rate (us/s)	-2.04675109014E+00		Apriori rate (us/s)		-2.04675435194E+00		Resid rate (us/s)		3.26180E-06	+/- 4.1E-10
Total phase (deg)			Apriori accel (us/s/s)		2.27785643562E-05		Resid phase (deg)		-38.4	+/- 3.1

ph/seg (deg) 46.3 7.3 Search (2048X32) 0.619 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.6 12.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.6 4.3 Inc. seg. avg. 0.914 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.5 7.5 Inc. frq. avg. 0.977 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 255.7 el 16.7 pa 43.7 o: az 110.6 el 27.7 pa -48.2 u,v (fr/asec) 11755.147 917.143 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/No..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/No.W.285.1W6XBK

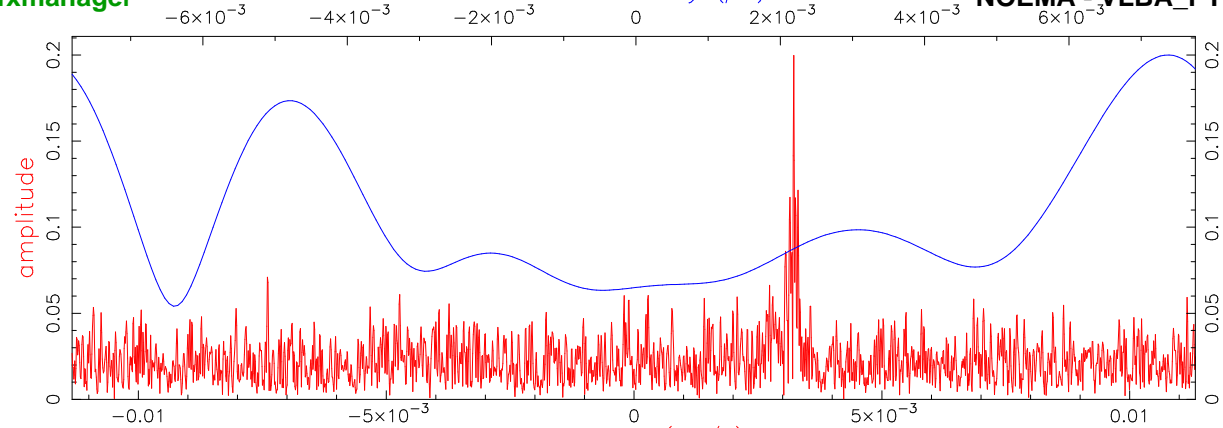
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, Np

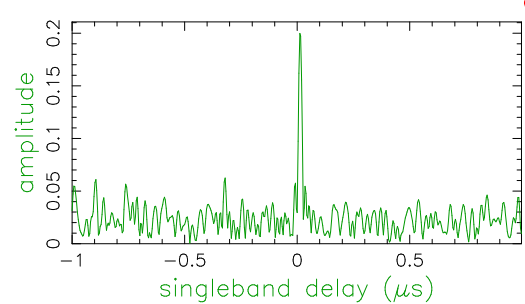
NOEMA - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



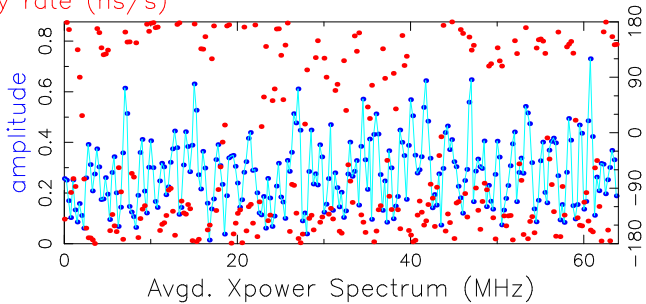
Fringe quality 9

SNR 11.4
Int time 419.827
Amp 0.211
Phase -90.9
PFD 1.5e-21
Delays (us)
SBD 0.013439
MBD 0.007441
Fringe rate (Hz)
0.277653
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



singleband delay (μ s)

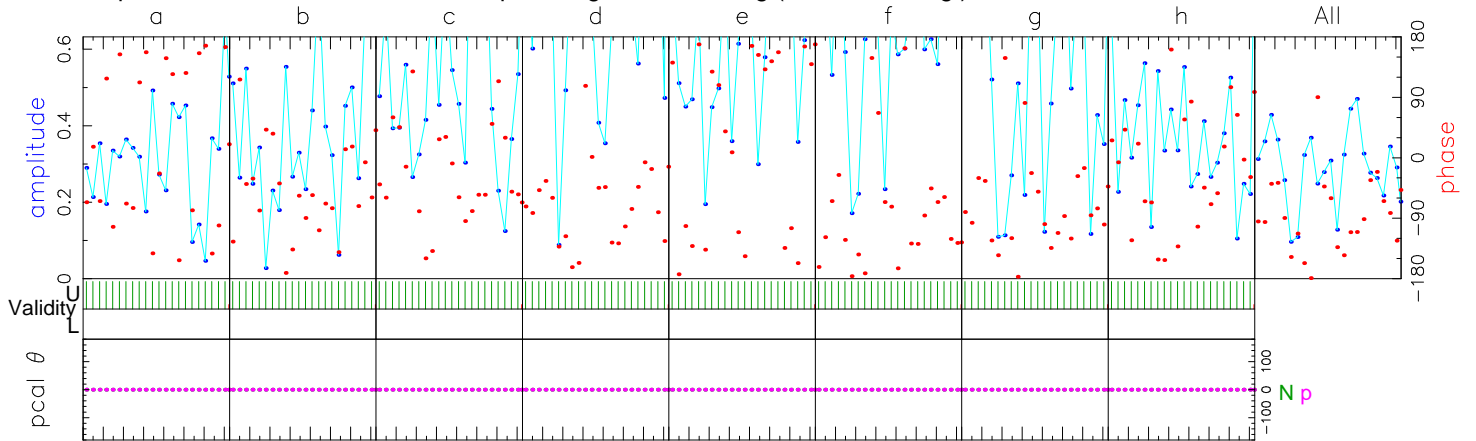
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 023000.00
Stop 023659.84
FRT 023330.00
Corr/FF/build
2021:287:073510
2021:287:080527
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



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

Group delay (usec)(sbd)	-6.95431396605E+03	Apriori delay (usec)	-6.95432140713E+03	Resid mbdelay (usec)	7.44108E-03	+/-	9.5E-05
Sband delay (usec)	-6.95430796788E+03	Apriori clock (usec)	-1.8941334E+01	Resid sbdelay (usec)	1.34393E-02	+/-	7.5E-04
Phase delay (usec)	-6.95432141006E+03	Apriori clockrate (us/s)	8.7750007E-06	Resid phdelay (usec)	-2.92991E-06	+/-	3.2E-07
Delay rate (us/s)	-1.93893932031E+00	Apriori rate (us/s)	-1.93894254359E+00	Resid rate (us/s)	3.22328E-06	+/-	1.3E-09
Total phase (deg)		Apriori accel (us/s/s)	3.74072950084E-05	Resid phase (deg)	-90.9	+/-	10.0

ph/seg (deg)	57.2	Theor.	24.1	Amplitude	0.211 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	65.6		42.0	Search (2048X32)	0.196	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	63.9		14.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	77.5		24.8	Inc. seg. avg.	0.282	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.295	Data rate(Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 255.7 el 16.7 pa 43.7 p: az 117.0 el 36.5 pa -47.1 u,v (fr/asec) 11155.055 1322.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/Np..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/Np.W.241.1W6XBK

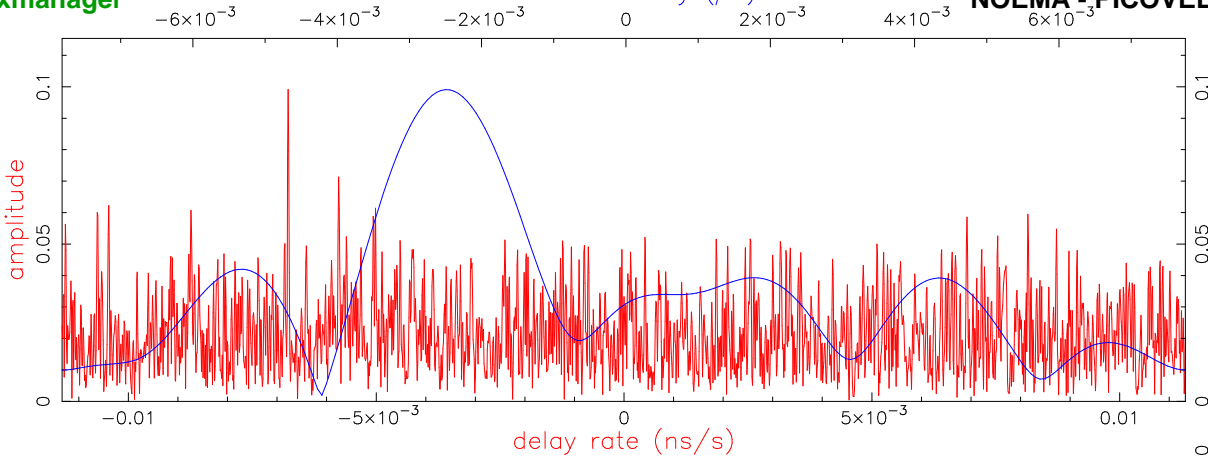
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, NP

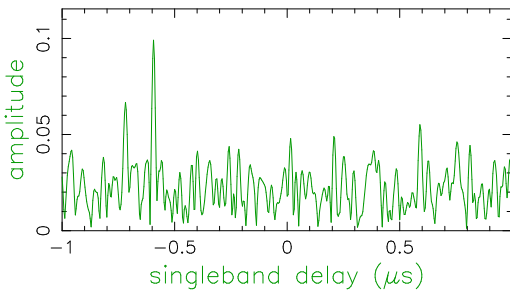
NOEMA - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

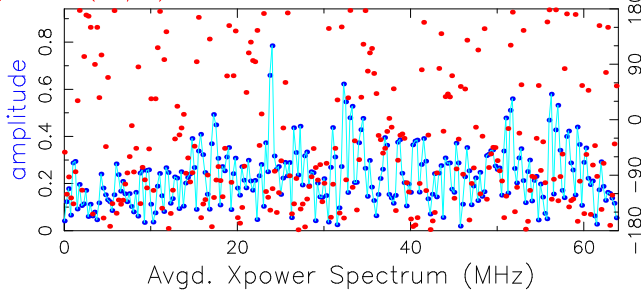


Fringe quality 0

SNR 5.6
Int time 419.831
Amp 0.115
Phase -94.8
PFD 1.0e+00
Delays (us)
SBD -0.593798
MBD -0.002485
Fringe rate (Hz)
-0.584597
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

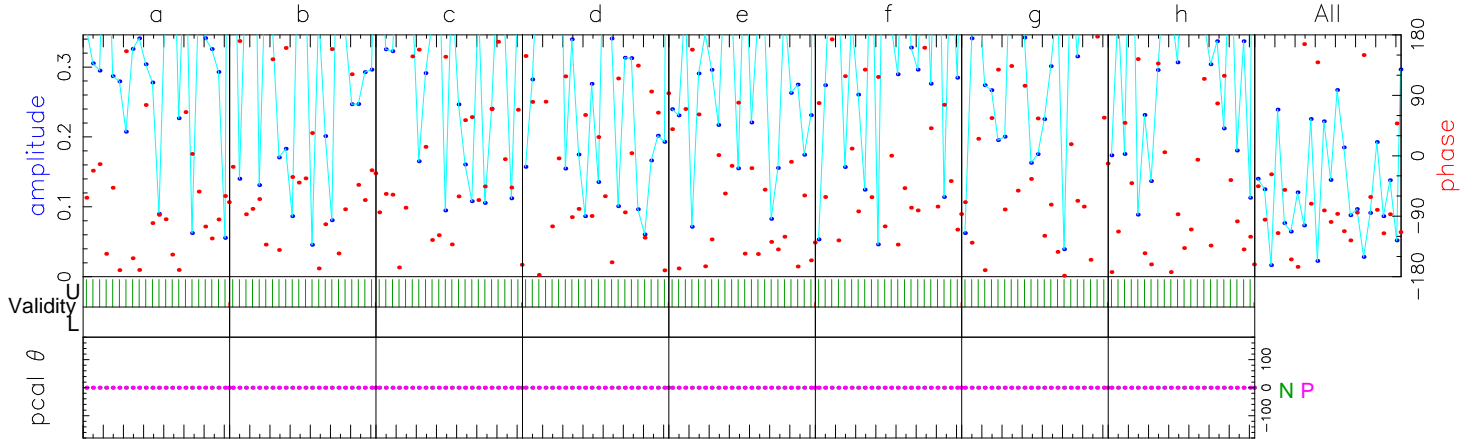


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 023000.00
Stop 023659.84
FRT 023330.00
Corr/FF/build
2021:287:073510
2021:287:080529
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-109.2	-85.1	-99.7	-63.6	-99.9	-81.2	-84.1	-115.0	Phase	-94.8
	0.2	0.2	0.1	0.0	0.1	0.2	0.2	0.1	Ampl.	0.1
	106.6	451.7	156.1	170.1	466.3	104.5	379.3	510.6	Sbd box	105.0
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	
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	

Group delay (usec)(sbd)	-3.08142351444E+03	Apriori delay (usec)	-3.08082727939E+03	Resid mbdelay (usec)	-2.48505E-03	+/-	2.0E-04
Sband delay (usec)	-3.08142107764E+03	Apriori clock (usec)	-1.2458993E+01	Resid sbdelay (usec)	-5.93798E-01	+/-	1.6E-03
Phase delay (usec)	-3.08082728245E+03	Apriori clockrate (us/s)	9.2550004E-06	Resid phdelay (usec)	-3.05845E-06	+/-	6.7E-07
Delay rate (us/s)	3.81074551666E-02	Apriori rate (us/s)	3.81142417534E-02	Resid rate (us/s)	-6.78659E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	1.66956528777E-05	Resid phase (deg)	-94.8	+/-	20.6

ph/seg (deg)	RMS 60.6	Theor. 49.5	Amplitude Search (2048X32)	0.115 +/- 0.021	0.098	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	77.3	86.4	Interp.	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.4	29.2	Inc. seg. avg.	0.105	0.105	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	52.2	50.9	Inc. frq. avg.	0.105	0.105	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 255.7 el 16.7 pa 43.7 P: az 251.6 el 25.6 pa 49.3 u,v (fr/asec) -198.092 929.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NP..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NP.W.242.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

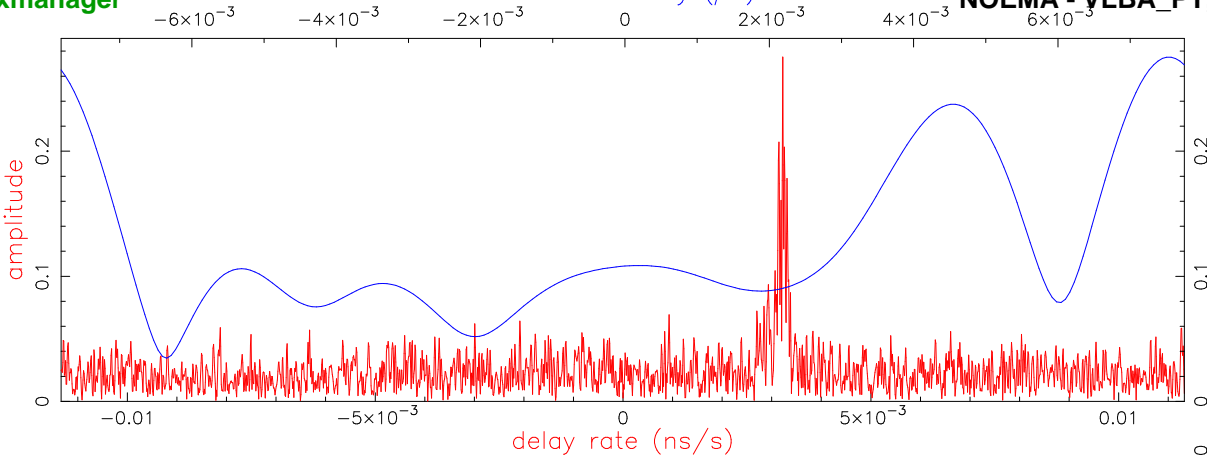
fxmanager

3C273.1W6XBK, No0156, Np

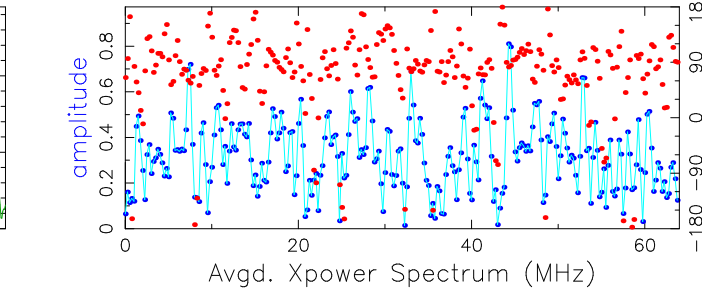
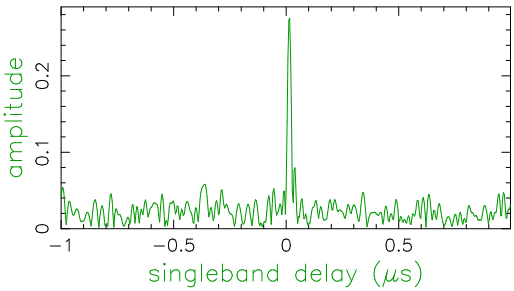
NOEMA - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 7

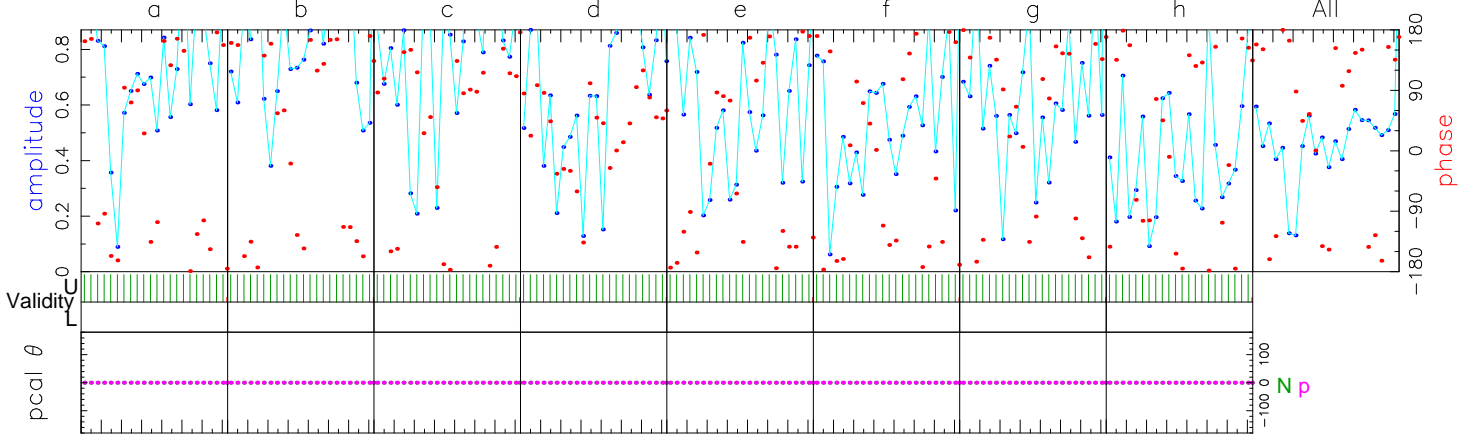


SNR 15.7
 Int time 419.827
 Amp 0.290
 Phase 162.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.013861
 MBD 0.007512
 Fringe rate (Hz) 0.277698
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080531
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-178.6	-178.4	132.6	44.3	-168.5	-174.2	166.8	173.4	Phase	162.6
	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.2	Ampl.	0.4
	262.4	260.1	259.5	260.0	260.1	259.9	260.5	262.1	Sbd box	260.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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)	-6.95431389517E+03		Apriori delay (usec)		-6.95432140713E+03		Resid mbdelay (usec)		7.51196E-03	+/- 6.9E-05
Sband delay (usec)	-6.95430754663E+03		Apriori clock (usec)		-1.8941334E+01		Resid sbdelay (usec)		1.38605E-02	+/- 5.5E-04
Phase delay (usec)	-6.95432140188E+03		Apriori clockrate (us/s)		8.7750007E-06		Resid phdelay (usec)		5.24462E-06	+/- 2.3E-07
Delay rate (us/s)	-1.93893931980E+00		Apriori rate (us/s)		-1.93894254359E+00		Resid rate (us/s)		3.22379E-06	+/- 9.7E-10
Total phase (deg)			Apriori accel (us/s/s)		3.74072950084E-05		Resid phase (deg)		162.6	+/- 7.3

	RMS	Theor.	Amplitude	0.290 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.6	17.5	Search (2048X32)	0.267	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	81.7	30.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	53.4	10.3	Inc. seg. avg.	0.461	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.1	18.0	Inc. frq. avg.	0.390	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 p: az 117.0 el 36.5 pa -47.1 u,v (fr/asec) 11155.055 1322.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/Np..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/Np.W.258.1W6XBK

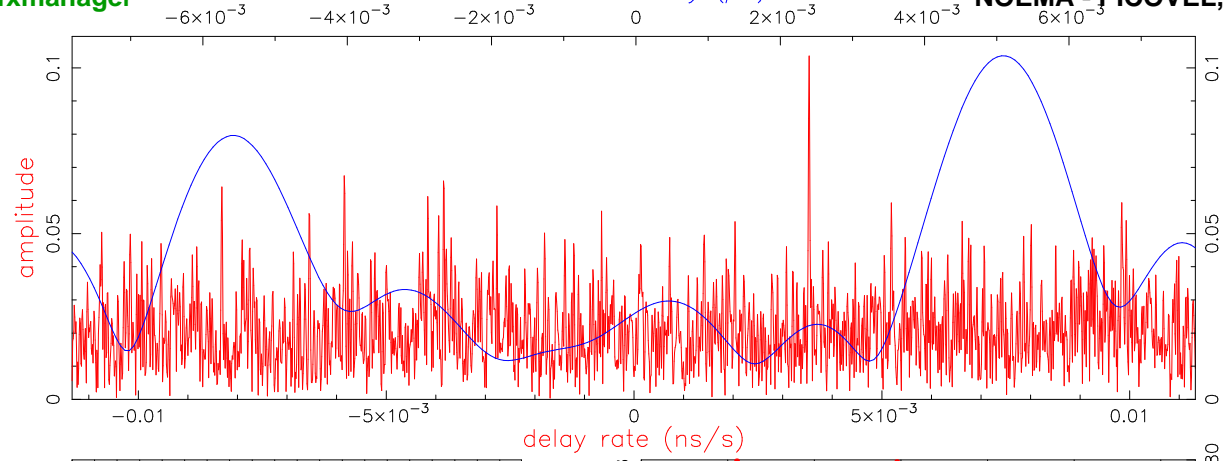
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

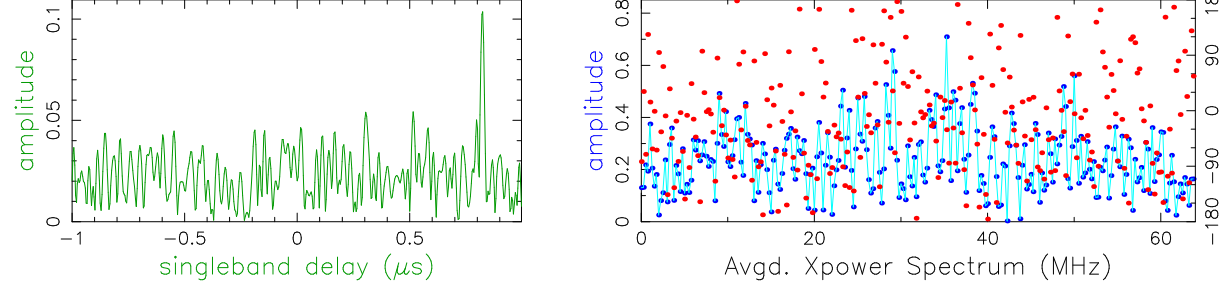
3C273.1W6XBK, No0156, NP

NOEMA - PICOVEL, fgroup W, pol RR

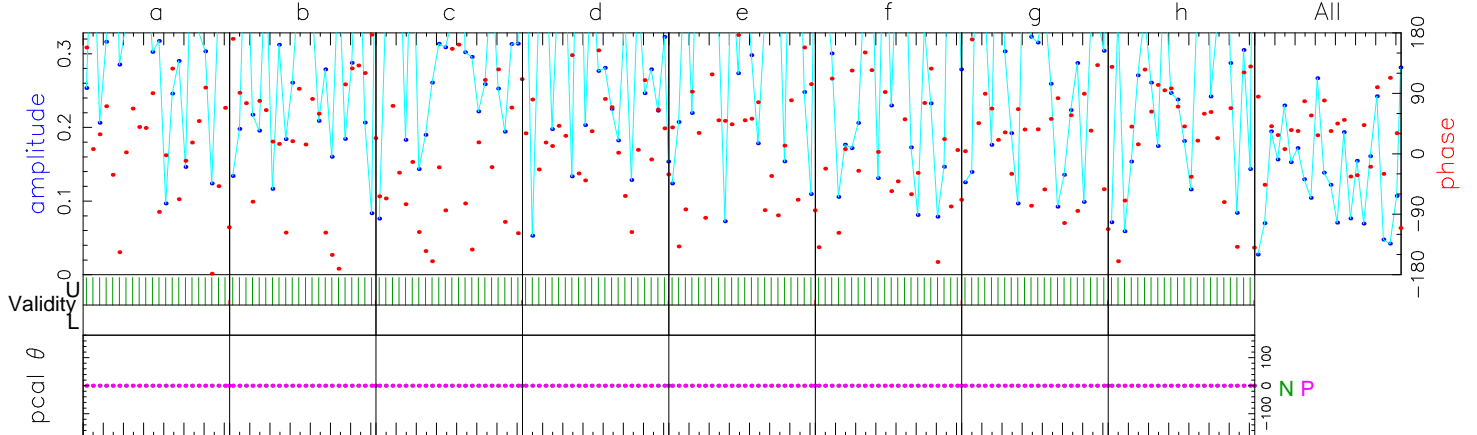
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.831
 Amp 0.109
 Phase 33.5
 PFD 6.2e-01
 Delays (us)
 SBD 0.822548
 MBD 0.005051
 Fringe rate (Hz) 0.304454
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build 2021:287:073510
 2021:287:080532
 2021:252:122852
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.08000972797E+03								5.05141E-03	+/- 1.8E-04
Sband delay (usec)	-3.08000473114E+03								8.22548E-01	+/- 1.5E-03
Phase delay (usec)	-3.08082727831E+03								1.08123E-06	+/- 6.3E-07
Delay rate (us/s)	3.81177761628E-02								3.53441E-06	+/- 2.6E-09
Total phase (deg)		-271.2							33.5	+/- 19.4
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 44.8 46.6 Search (2048X32) 0.109 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.8 81.4 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 27.5 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.7 48.0 Inc. frq. avg. 0.115 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 255.7 el 16.7 pa 43.7 P: az 251.6 el 25.6 pa 49.3 u,v (fr/asec) -198.092 929.037 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NP..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NP.W.260.1W6XBK

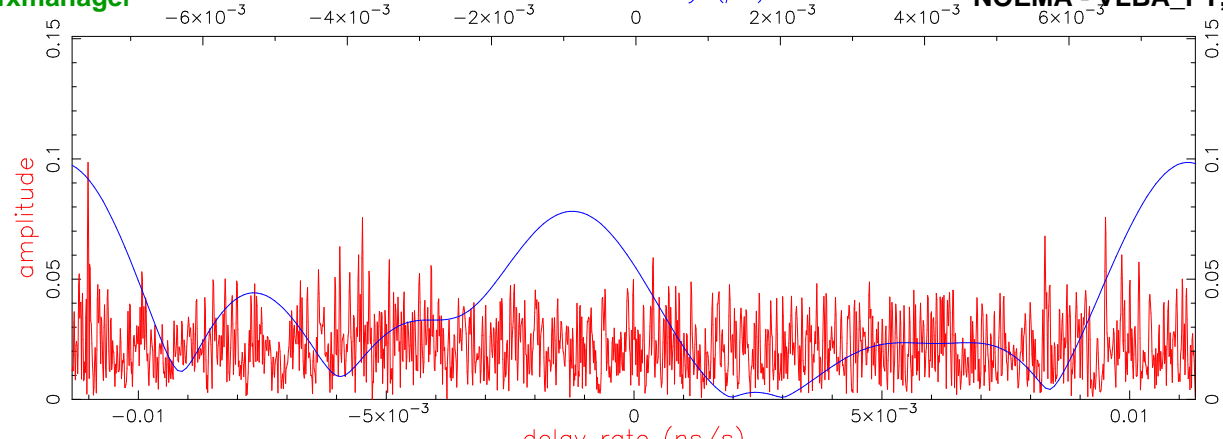
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, Np

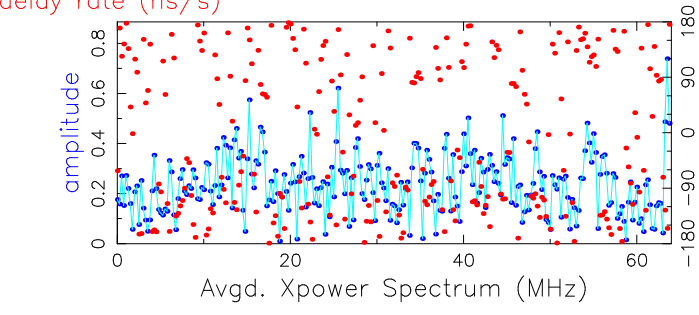
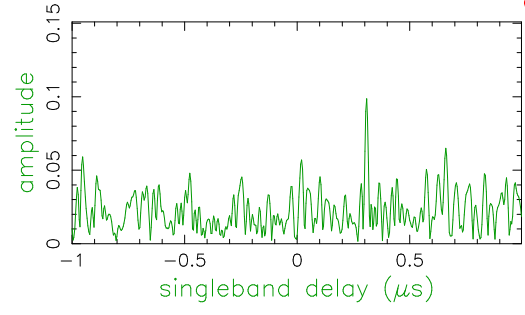
NOEMA - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



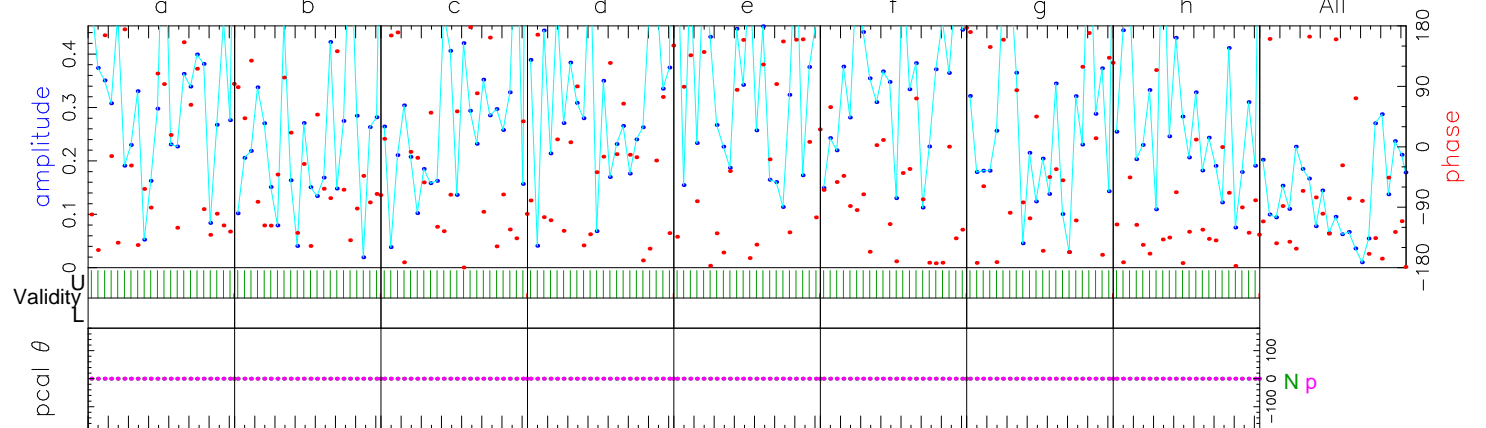
Fringe quality 0

SNR 5.5
 Int time 419.827
 Amp 0.151
 Phase -127.6
 PFD 1.0e+00
 Delays (us)
 SBD 0.308188
 MBD -0.007986
 Fringe rate (Hz)
 -0.950060
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080535
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-154.8	-89.6	-128.2	-74.7	175.6	-85.3	-166.0	-117.0	Phase	-127.6
	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.3	Ampl.	0.2
	488.2	496.0	468.4	136.1	336.1	14.2	264.5	335.7	Sbd box	335.9
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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.95401689360E+03		Apriori delay (usec)		-6.95432140713E+03		Resid mbdelay (usec)		-7.98647E-03	+/- 2.0E-04
Sband delay (usec)	-6.95401321913E+03		Apriori clock (usec)		-1.8941334E+01		Resid sbdelay (usec)		3.08188E-01	+/- 1.6E-03
Phase delay (usec)	-6.95432141124E+03		Apriori clockrate (us/s)		8.7750007E-06		Resid phdelay (usec)		-4.11499E-06	+/- 6.7E-07
Delay rate (us/s)	-1.93895357285E+00		Apriori rate (us/s)		-1.93894254359E+00		Resid rate (us/s)		-1.10293E-05	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		3.74072950084E-05		Resid phase (deg)		-127.6	+/- 20.7

ph/seg (deg) 58.5 49.7 Search (2048X32) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 86.5 86.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.9 29.3 Inc. seg. avg. 0.152 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.4 51.1 Inc. frq. avg. 0.167 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 255.7 el 16.7 pa 43.7 p: az 117.0 el 36.5 pa -47.1 u,v (fr/asec) 11155.055 1322.931 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/Np..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/Np.W.275.1W6XBK

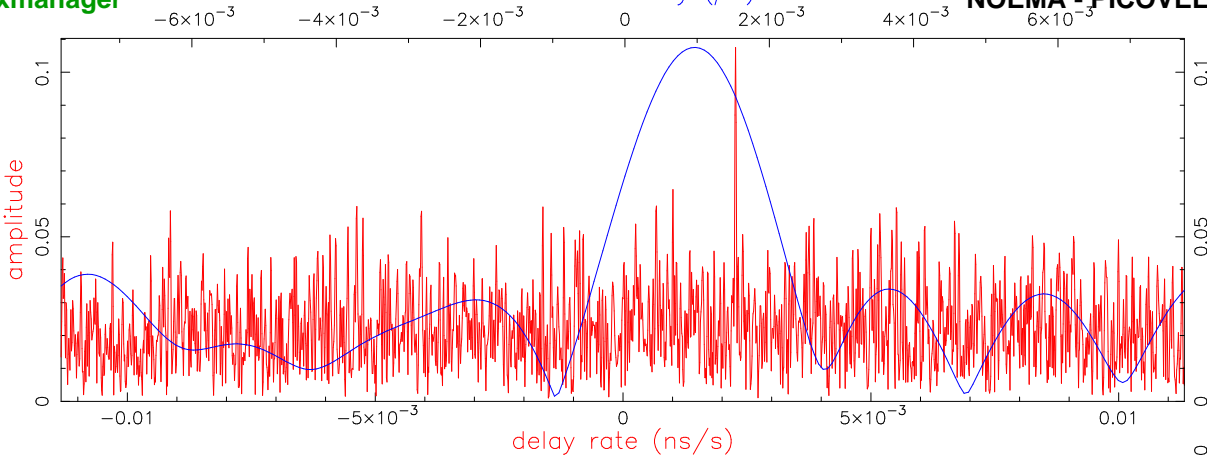
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, NP

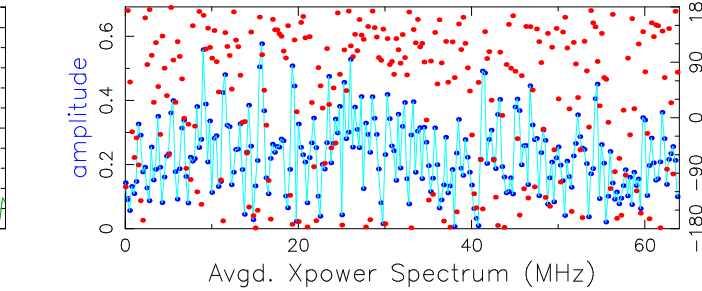
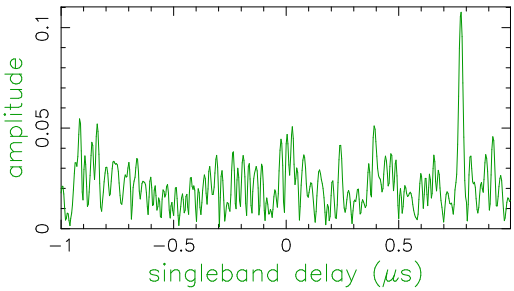
NOEMA - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



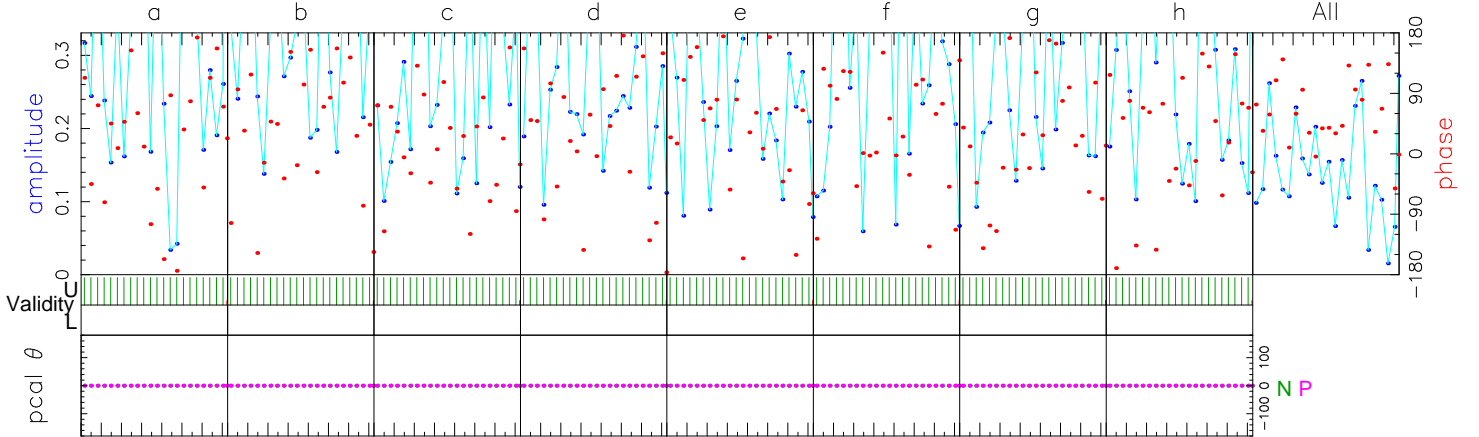
Fringe quality 0

SNR 6.1
 Int time 419.831
 Amp 0.110
 Phase 60.2
 PFD 2.7e-01
 Delays (us)
 SBD 0.775981
 MBD 0.000960
 Fringe rate (Hz)
 0.196244
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080536
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



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

Group delay (usec)(sbd)	-3.08004506912E+03	Apriori delay (usec)	-3.08082727939E+03	Resid mbdelay (usec)	9.60263E-04	+/-	1.8E-04
Sband delay (usec)	-3.08005129814E+03	Apriori clock (usec)	-1.2458993E+01	Resid sbdelay (usec)	7.75981E-01	+/-	1.4E-03
Phase delay (usec)	-3.08082727745E+03	Apriori clockrate (us/s)	9.2550004E-02	Resid phdelay (usec)	1.94065E-06	+/-	6.1E-07
Delay rate (us/s)	3.81165199553E-02	Apriori rate (us/s)	3.81142417534E-02	Resid rate (us/s)	2.27820E-06	+/-	2.5E-09
Total phase (deg)	-244.5	Apriori accel (us/s/s)	1.66956528777E-05	Resid phase (deg)	60.2	+/-	18.9

ph/seg (deg)	48.3	Theor.	45.2	Amplitude	0.110 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	67.9		78.9	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.2		26.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	19.8		46.5	Inc. seg. avg.	0.108	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 255.7 el 16.7 pa 43.7 P: az 251.6 el 25.6 pa 49.3 u,v (fr/asec) -198.092 929.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NP..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NP.W.278.1W6XBK

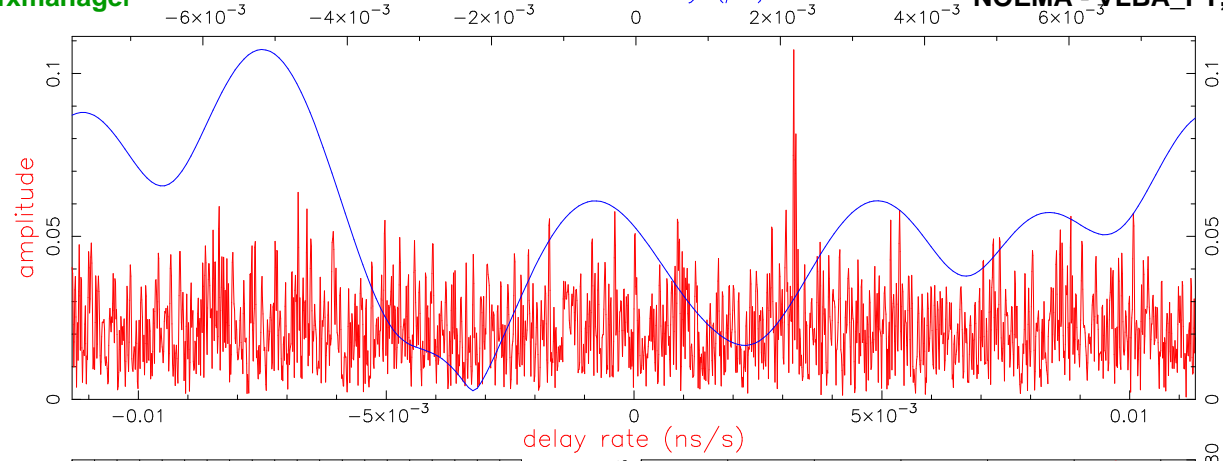
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

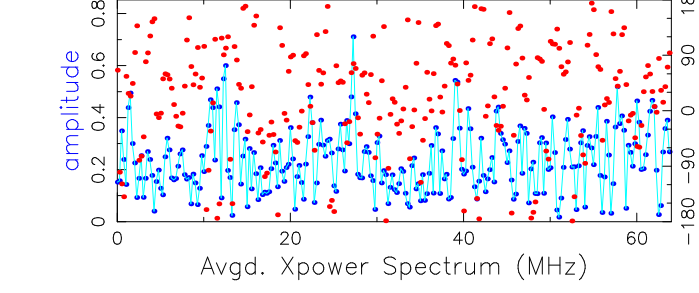
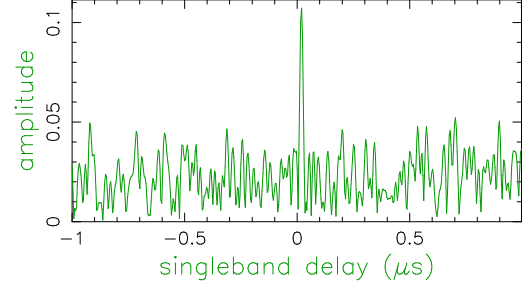
3C273.1W6XBK, No0156, Np

NOEMA - VLBA_PT, fgroup W, pol RL

multiband delay (μs)

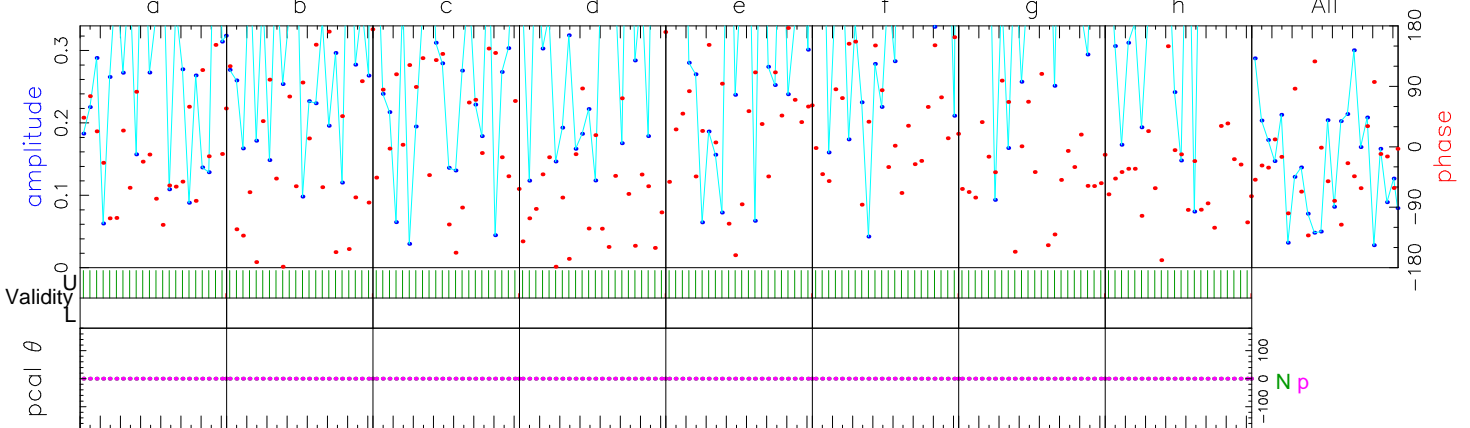


Fringe quality 0
 SNR 6.0
 Int time 419.827
 Amp 0.111
 Phase -35.4
 PFD 3.4e-01
 Delays (us)
 SBD 0.018730
 MBD -0.005230
 Fringe rate (Hz) 0.277460
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build 2021:287:073510
 2021:287:080538
 2021:252:122852
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
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		

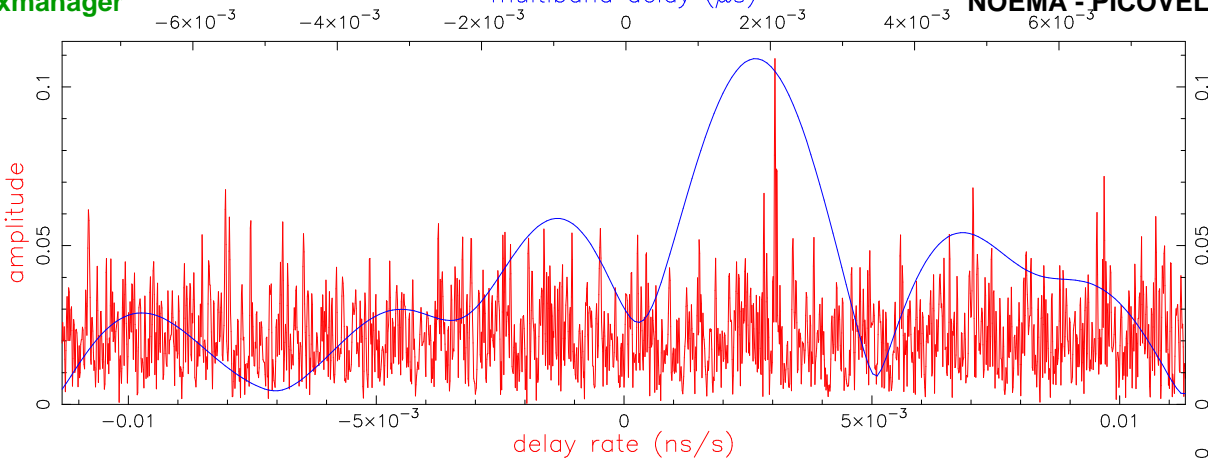
Group delay (usec)(sbd)	-6.95429538667E+03	Apriori delay (usec)	-6.95432140713E+03	Resid mbdelay (usec)	-5.22954E-03	+/-	1.8E-04
Sband delay (usec)	-6.95430267713E+03	Apriori clock (usec)	-1.8941334E+01	Resid sbdelay (usec)	1.87300E-02	+/-	1.4E-03
Phase delay (usec)	-6.95432140827E+03	Apriori clockrate (us/s)	8.7750007E-06	Resid phdelay (usec)	-1.14162E-06	+/-	6.1E-07
Delay rate (us/s)	-1.93893932255E+00	Apriori rate (us/s)	-1.93894254359E+00	Resid rate (us/s)	3.22104E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	3.74072950084E-05	Resid phase (deg)	-35.4	+/-	19.0

ph/seg (deg)	64.7	Theor.	45.5	Amplitude	0.111 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	79.7		79.5	Search (2048X32)	0.106	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	61.5		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	71.8		46.9	Inc. seg. avg.	0.117	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.142	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

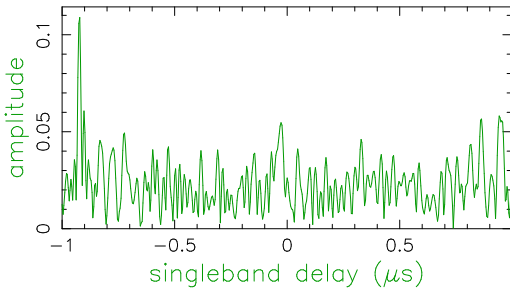
N: az 255.7 el 16.7 pa 43.7 p: az 117.0 el 36.5 pa -47.1 u,v (fr/asec) 11155.055 1322.931 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/Np..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/Np.W.293.1W6XBK

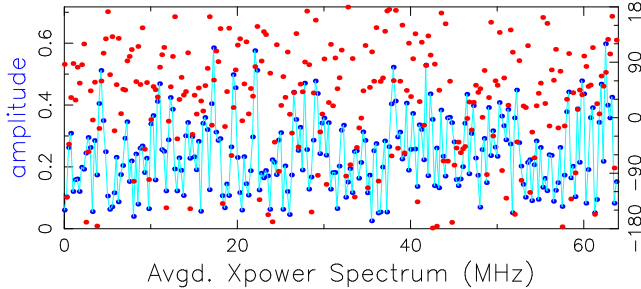
multiband delay (μ s)



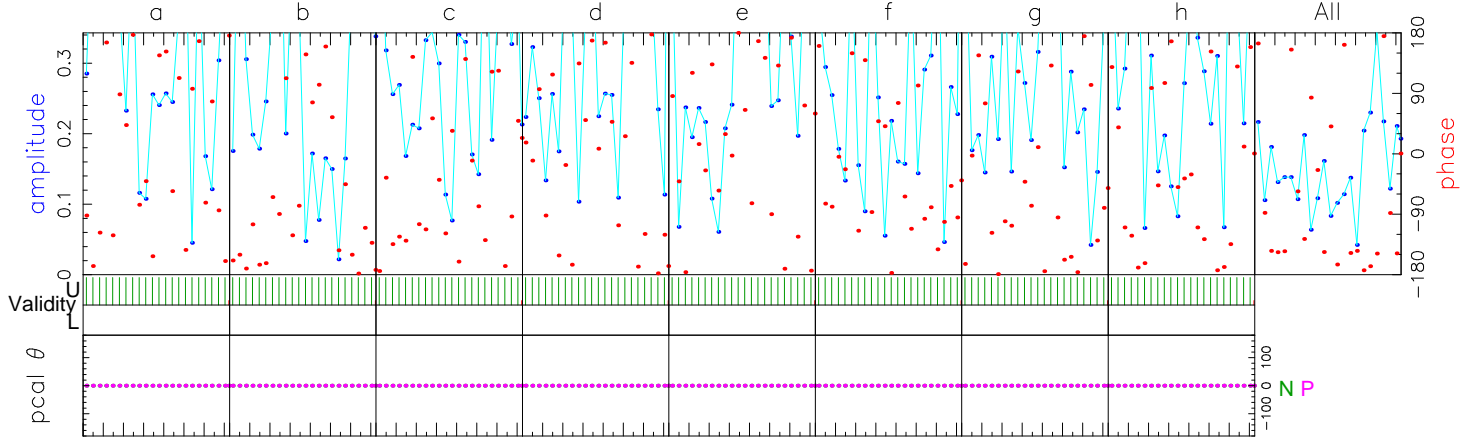
Fringe quality 0
SNR 6.2
Int time 419.831
Amp 0.114
Phase -153.7
PFD 1.3e-01
Delays (us)
SBD -0.923377
MBD 0.001776
Fringe rate (Hz) 0.262349
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 023000.00
Stop 023659.84
FRT 023330.00
Corr/FF/build 2021:287:073510
2021:287:080539
2021:252:122852
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-164.2	-133.4	-145.6	168.8	142.4	-106.8	-142.3	-159.8	Phase	-153.7
Sband delay (usec)	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
Phase delay (usec)	117.3	20.8	476.7	509.7	469.1	69.6	58.7	26.2	Sbd box	20.6
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	
	P 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	N:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	N:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	N 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	P 1000	1000	1000	1000	1000	1000	1000	1000		
	N W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
	P W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.08174737865E+03		Apriori delay (usec)		-3.08082727939E+03		Resid mbdelay (usec)		1.77574E-03	+/- 1.7E-04
Sband delay (usec)	-3.08175065614E+03		Apriori clock (usec)		-1.2458993E+01		Resid sbdelay (usec)		-9.23377E-01	+/- 1.4E-03
Phase delay (usec)	-3.08082728434E+03		Apriori clockrate (us/s)		9.2550004E-02		Resid phdelay (usec)		-4.95628E-06	+/- 5.9E-07
Delay rate (us/s)	3.81172873700E-02		Apriori rate (us/s)		3.81142417534E-02		Resid rate (us/s)		3.04562E-06	+/- 2.5E-09
Total phase (deg)	-98.4		Apriori accel (us/s/s)		1.66956528777E-05		Resid phase (deg)		-153.7	+/- 18.4

ph/seg (deg) 63.9 44.2 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.0 77.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.5 26.1 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 35.4 45.5 Inc. frq. avg. 0.117 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 255.7 el 16.7 pa 43.7 P: az 251.6 el 25.6 pa 49.3 u,v (fr/asec) -198.092 929.037 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NP..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NP.W.296.1W6XBK

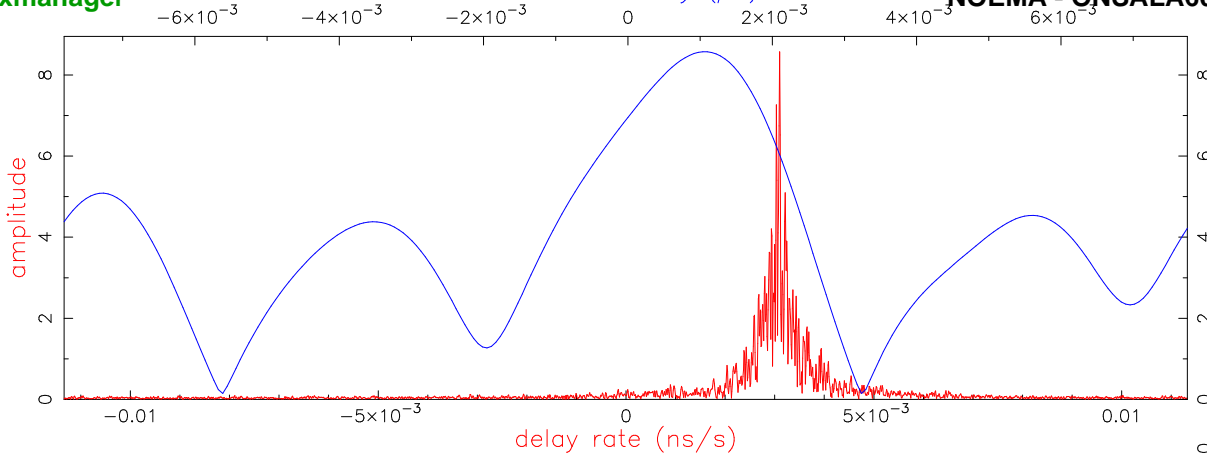
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, NX

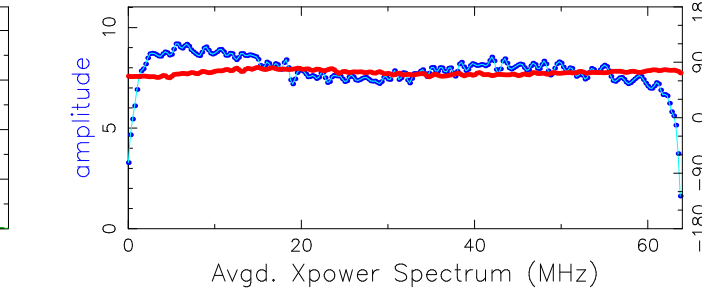
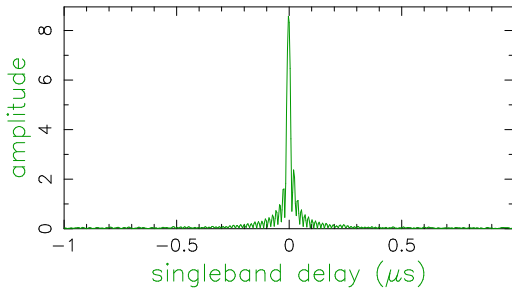
NOEMA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



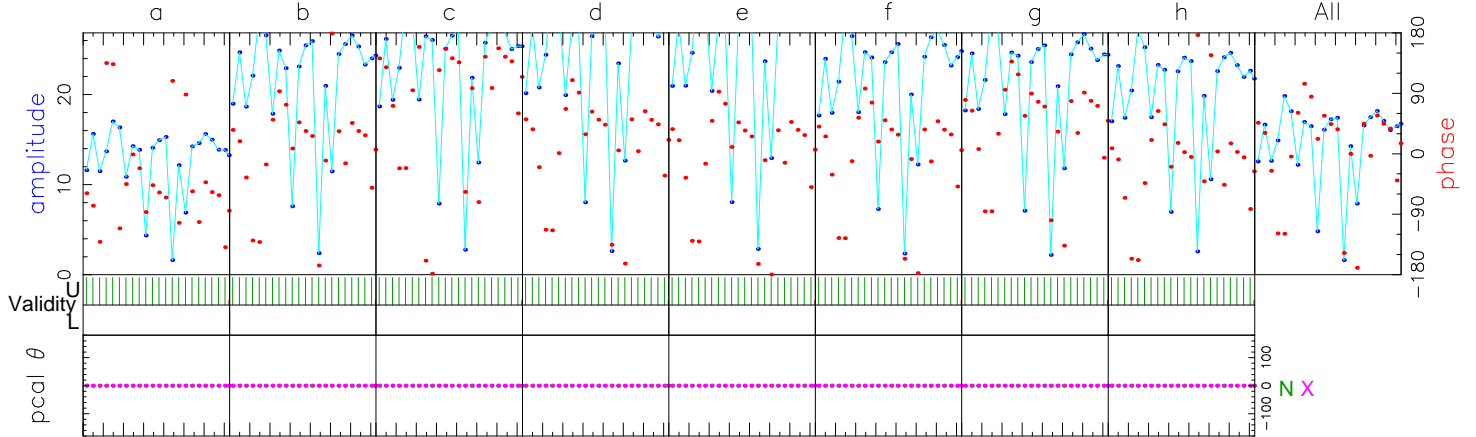
Fringe quality 1

SNR 486.3
 Int time 419.815
 Amp 8.953
 Phase 30.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002543
 MBD 0.001099
 Fringe rate (Hz)
 0.267265
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080530
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-71.7	20.0	130.1	36.9	21.0	23.2	64.3	-10.6	Phase	30.8
	7.7	13.0	13.8	14.6	14.8	12.9	13.0	12.2	Ampl.	12.8
	258.8	256.9	256.4	256.3	256.4	256.0	256.2	256.7	Sbd box	256.3
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 2.29098778421E+03 Apriori delay (usec) 2.29098668477E+03 Resid mbdelay (usec) 1.09944E-03 +/- 2.2E-06
 Sband delay (usec) 2.29098414202E+03 Apriori clock (usec) -6.9789291E+01 Resid sbdelay (usec) -2.54275E-03 +/- 1.8E-05
 Phase delay (usec) 2.29098668576E+03 Apriori clockrate (us/s) 8.1269999E-06 Resid phdelay (usec) 9.94601E-07 +/- 7.6E-09
 Delay rate (us/s) -2.23433719852E-01 Apriori rate (us/s) -2.23436822536E-01 Resid rate (us/s) 3.10268E-06 +/- 3.1E-11
 Total phase (deg) 40.2 Apriori accel (us/s/s) -1.30830885265E-05 Resid phase (deg) 30.8 +/- 0.2

RMS Theor. Amplitude 8.953 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 75.1 0.6 Search (2048X32) 8.286 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 85.4 1.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 62.6 0.3 Inc. seg. avg. 15.099 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.4 0.6 Inc. frq. avg. 12.753 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 X: az 257.6 el 10.1 pa 31.9 u,v (fr/asec) 1264.332 -1274.210 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NX..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NX.W.246.1W6XBK

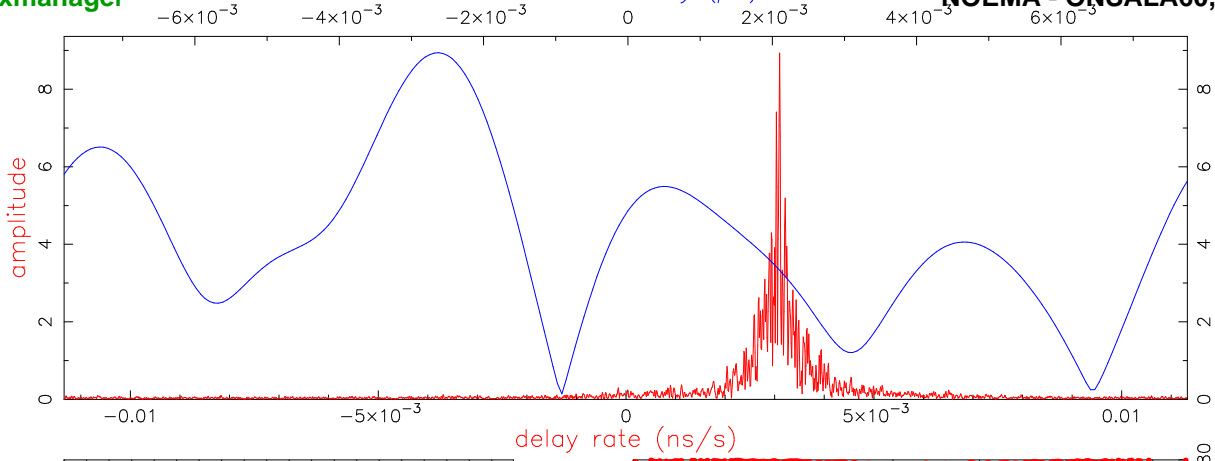
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6XBK, No0156, NX

NOEMA - ONSALA60, fgroup W, pol RR

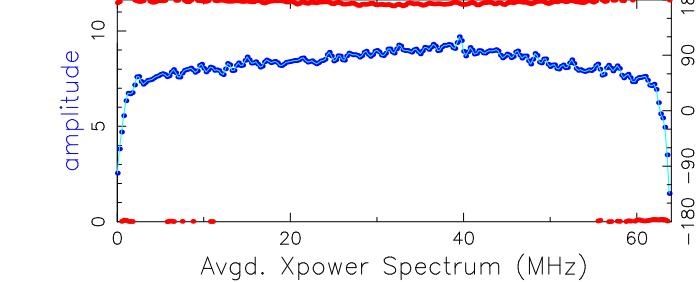
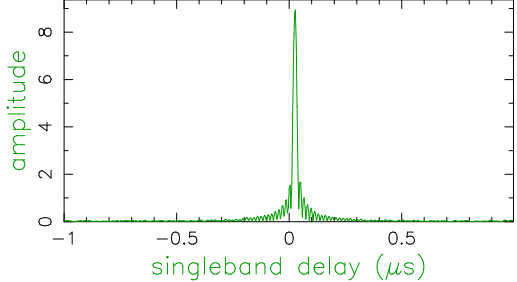
multiband delay (μ s)



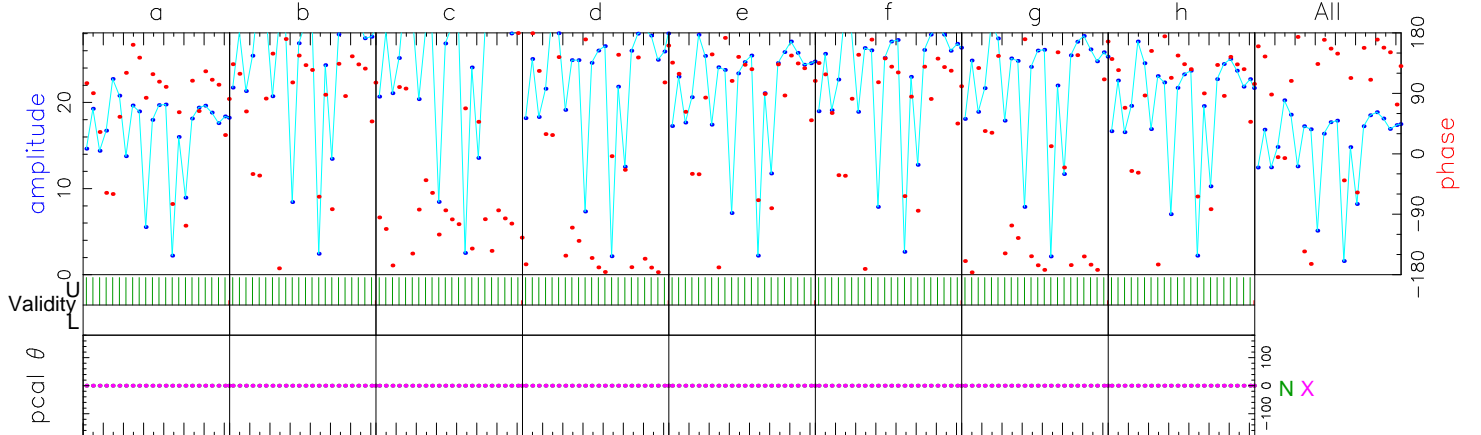
Fringe quality 1

SNR 508.6
 Int time 419.815
 Amp 9.364
 Phase 143.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.025713
 MBD -0.002690
 Fringe rate (Hz) 0.267271
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080533
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	93.5	119.1	-110.7	177.9	119.7	116.1	-178.9	120.6	Phase	143.7
	10.0	15.1	15.1	13.7	13.0	14.0	13.6	12.1	Ampl.	13.3
	265.5	264.2	263.7	263.3	262.9	263.4	263.4	263.7	Sbd box	263.6
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	
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	

Group delay (usec)(sbd)	2.29101524506E+03	Apriori delay (usec)	2.29098668477E+03	Resid mbdelay (usec)	-2.68971E-03	+/-	2.1E-06
Sband delay (usec)	2.29101239752E+03	Apriori clock (usec)	-6.9789291E+01	Resid sbdelay (usec)	2.57128E-02	+/-	1.7E-05
Phase delay (usec)	2.29098668940E+03	Apriori clockrate (us/s)	8.1269999E-06	Resid phdelay (usec)	4.63314E-06	+/-	7.3E-09
Delay rate (us/s)	-2.23433719780E-01	Apriori rate (us/s)	-2.23436822536E-01	Resid rate (us/s)	3.10276E-06	+/-	3.0E-11
Total phase (deg)	153.1	Apriori accel (us/s/s)	-1.30830885265E-05	Resid phase (deg)	143.7	+/-	0.2

ph/seg (deg) 74.6 0.5 Search (2048X32) 8.587 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.0 0.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.8 0.3 Inc. seg. avg. 15.533 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.5 0.6 Inc. frq. avg. 13.324 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 255.7 el 16.7 pa 43.7 X: az 257.6 el 10.1 pa 31.9 u,v (fr/asec) 1264.332 -1274.210 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NX..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NX.W.264.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

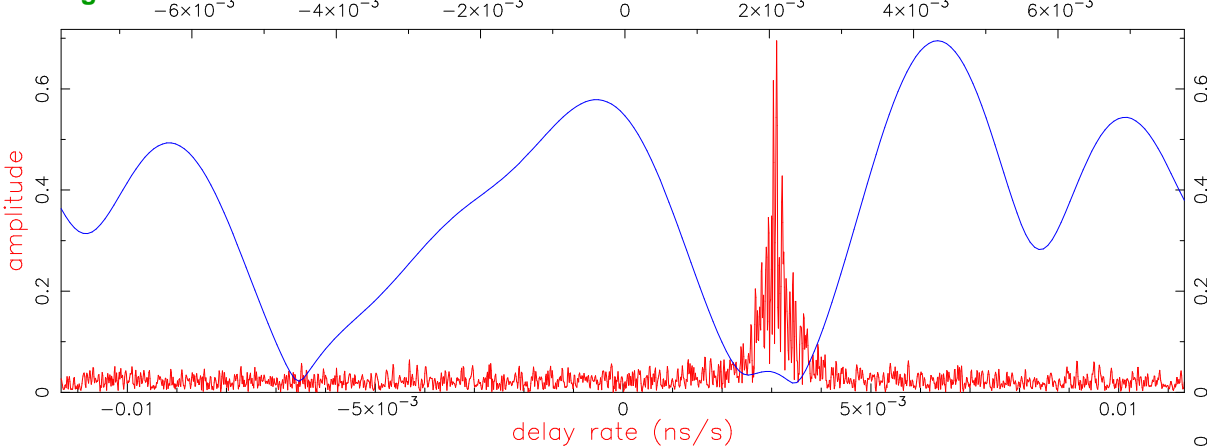
fxmanager

3C273.1W6XBK, No0156, NX

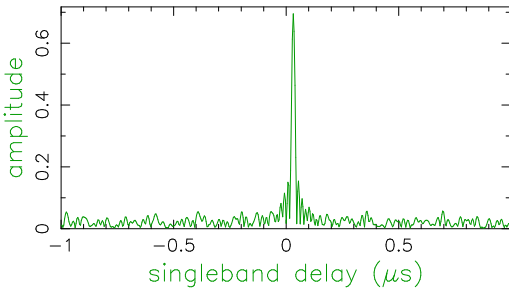
NOEMA - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

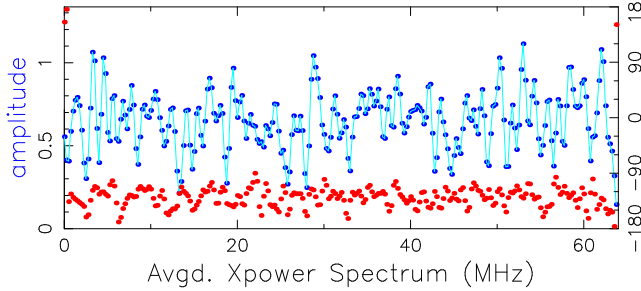
Fringe quality 3



SNR 39.0
 Int time 419.815
 Amp 0.718
 Phase -175.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.031618
 MBD 0.004343
 Fringe rate (Hz)
 0.267340
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

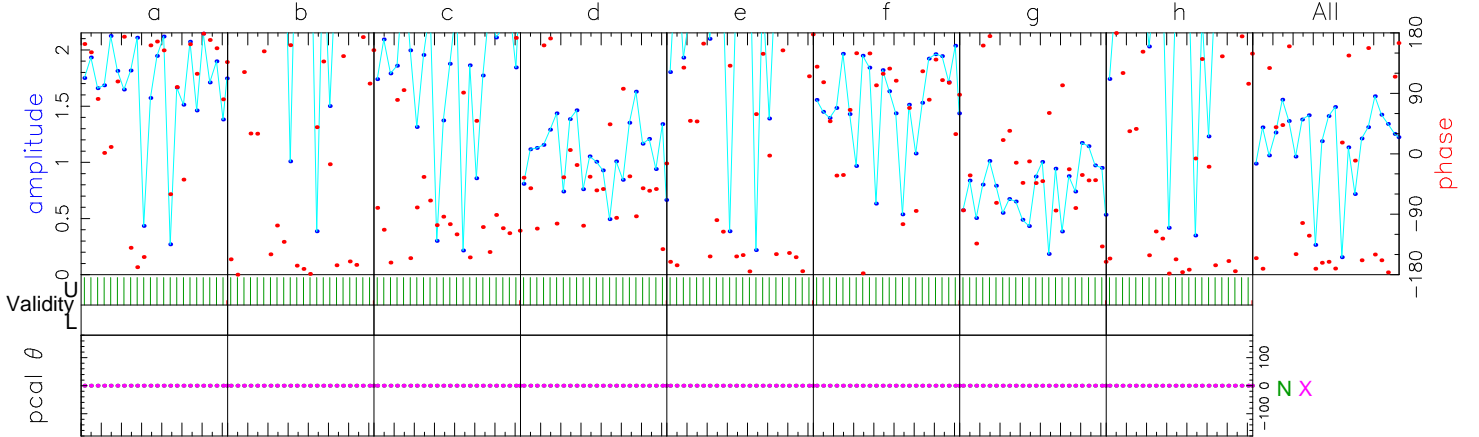


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080536
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	149.5	176.9	-118.2	-65.6	-174.6	104.1	-51.7	176.2	Phase	-175.4
	1.0	1.8	1.1	0.6	1.5	0.9	0.4	1.4	Ampl.	1.1
	266.3	265.3	264.9	263.9	264.1	264.1	263.0	264.9	Sbd box	265.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.29102227824E+03 Apriori delay (usec) 2.29098668477E+03 Resid mbdelay (usec) 4.34347E-03 +/- 2.8E-05
 Sband delay (usec) 2.29101830302E+03 Apriori clock (usec) -6.9789291E+01 Resid sbdelay (usec) 3.16182E-02 +/- 2.2E-04
 Phase delay (usec) 2.29098667911E+03 Apriori clockrate (us/s) 8.1269999E-06 Resid phdelay (usec) -5.65620E-06 +/- 9.5E-08
 Delay rate (us/s) -2.23433718982E-01 Apriori rate (us/s) -2.23436822536E-01 Resid rate (us/s) 3.10355E-06 +/- 3.9E-10
 Total phase (deg) -166.0 Apriori accel (us/s/s) -1.30830885265E-05 Resid phase (deg) -175.4 +/- 2.9

RMS Theor. Amplitude 0.718 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 73.1 7.0 Search (2048X32) 0.649 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 86.6 12.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 80.1 4.2 Inc. seg. avg. 1.206 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 79.1 7.3 Inc. frq. avg. 1.082 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 X: az 257.6 el 10.1 pa 31.9 u,v (fr/asec) 1264.332 -1274.210 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NX..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NX.W.281.1W6XBK

Mk4/DiFX fourfit 3.21 rev 2937

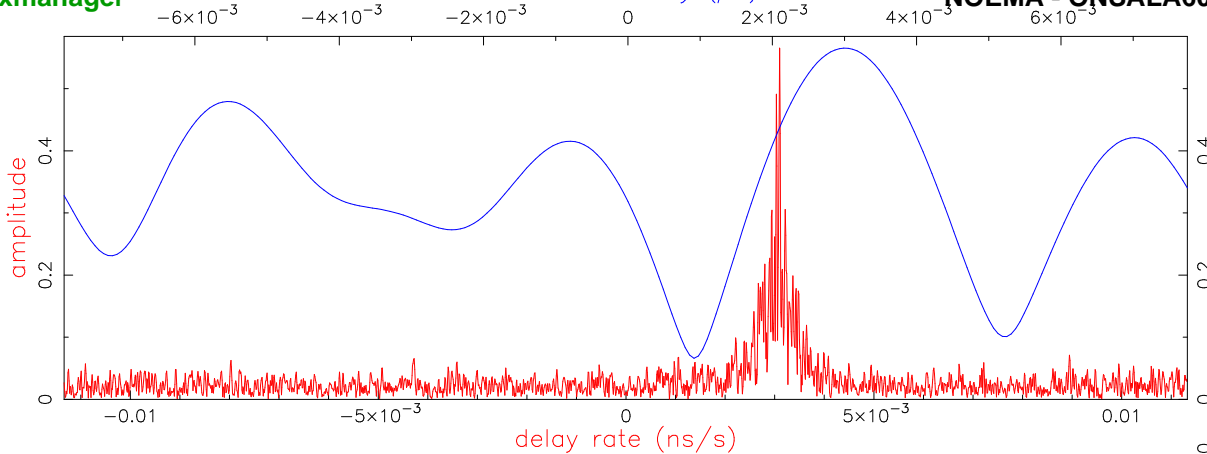
fxmanager

3C273.1W6XBK, No0156, NX

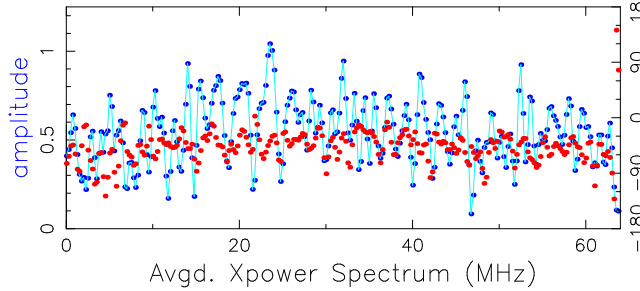
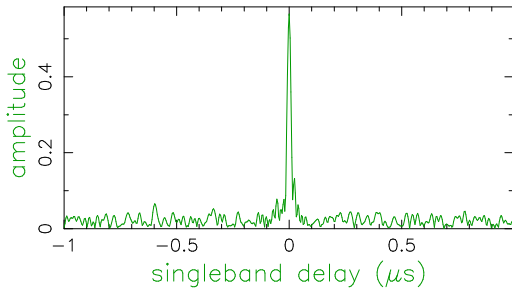
NOEMA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 3

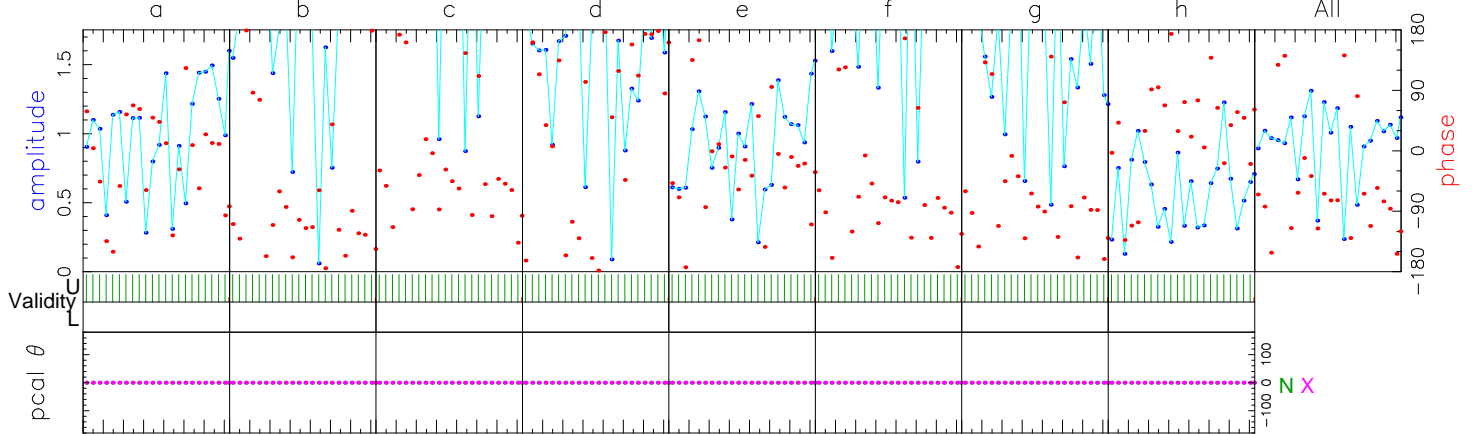


SNR 31.7
 Int time 419.815
 Amp 0.584
 Phase -87.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000532
 MBD 0.003003
 Fringe rate (Hz)
 0.267375
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 023000.00
 Stop 023659.84
 FRT 023330.00
 Corr/FF/build
 2021:287:073510
 2021:287:080540
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	3.0	-130.7	-60.7	168.1	-38.5	-93.6	-91.3	32.7		Phase	-87.4
	0.6	1.2	1.7	1.0	0.5	1.3	1.0	0.3		Ampl.	0.9
	259.2	256.7	256.3	256.1	255.1	256.1	256.6	255.4		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	
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)	2.29098968743E+03		Apriori delay (usec)		2.29098668477E+03		Resid mbdelay (usec)		3.00266E-03	+/-	3.4E-05
Sband delay (usec)	2.29098615227E+03		Apriori clock (usec)		-6.9789291E+01		Resid sbdelay (usec)		-5.32500E-04	+/-	2.7E-04
Phase delay (usec)	2.29098668195E+03		Apriori clockrate (us/s)		8.1269999E-06		Resid phdelay (usec)		-2.81822E-06	+/-	1.2E-07
Delay rate (us/s)	-2.23433718576E-01		Apriori rate (us/s)		-2.23436822536E-01		Resid rate (us/s)		3.10396E-06	+/-	4.8E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.30830885265E-05		Resid phase (deg)		-87.4	+/-	3.6

RMS Theor. Amplitude 0.584 +/- 0.018
 ph/seg (deg) 69.9 8.7 Search (2048X32) 0.537
 amp/seg (%) 80.0 15.1 Interp. 0.000
 ph/frq (deg) 80.2 5.1 Inc. seg. avg. 0.954
 amp/frq (%) 98.3 8.9 Inc. frq. avg. 0.939

Group delay (usec)(sbd) 2.29098968743E+03
 Sband delay (usec) 2.29098615227E+03
 Phase delay (usec) 2.29098668195E+03
 Delay rate (us/s) -2.23433718576E-01
 Total phase (deg) -78.0

Apriori delay (usec) 2.29098668477E+03
 Apriori clock (usec) -6.9789291E+01
 Apriori clockrate (us/s) 8.1269999E-06
 Apriori rate (us/s) -2.23436822536E-01
 Apriori accel (us/s/s) -1.30830885265E-05

Resid mbdelay (usec) 3.00266E-03
 Resid sbdelay (usec) -5.32500E-04
 Resid phdelay (usec) -2.81822E-06
 Resid rate (us/s) 3.10396E-06
 Resid phase (deg) -87.4

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

N: az 255.7 el 16.7 pa 43.7 X: az 257.6 el 10.1 pa 31.9 u,v (fr/asec) 1264.332 -1274.210 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0156/NX..1W6XBK Output file: /Exps/c211a/v2/1234/No0156/NX.W.298.1W6XBK