

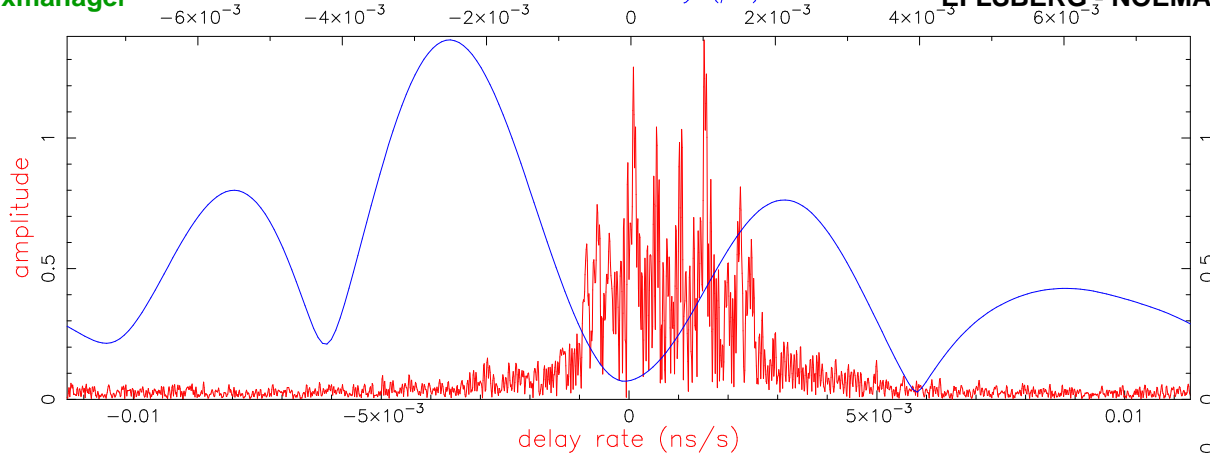
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, BN

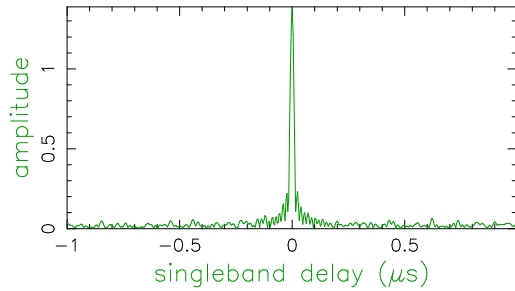
EFLSBERG - NOEMA, fgroup W, pol RR

multiband delay (μ s)

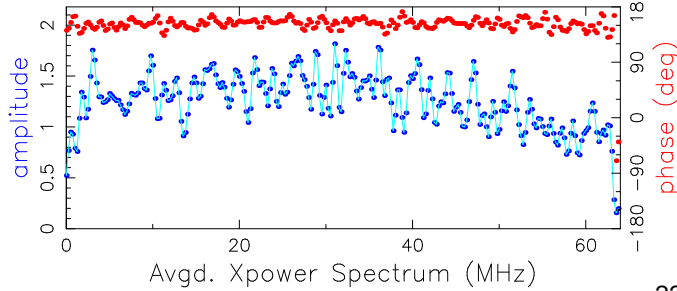


Fringe quality 2

SNR 77.2
 Int time 419.814
 Amp 1.389
 Phase 174.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000669
 MBD -0.002535
 Fringe rate (Hz)
 0.130701
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

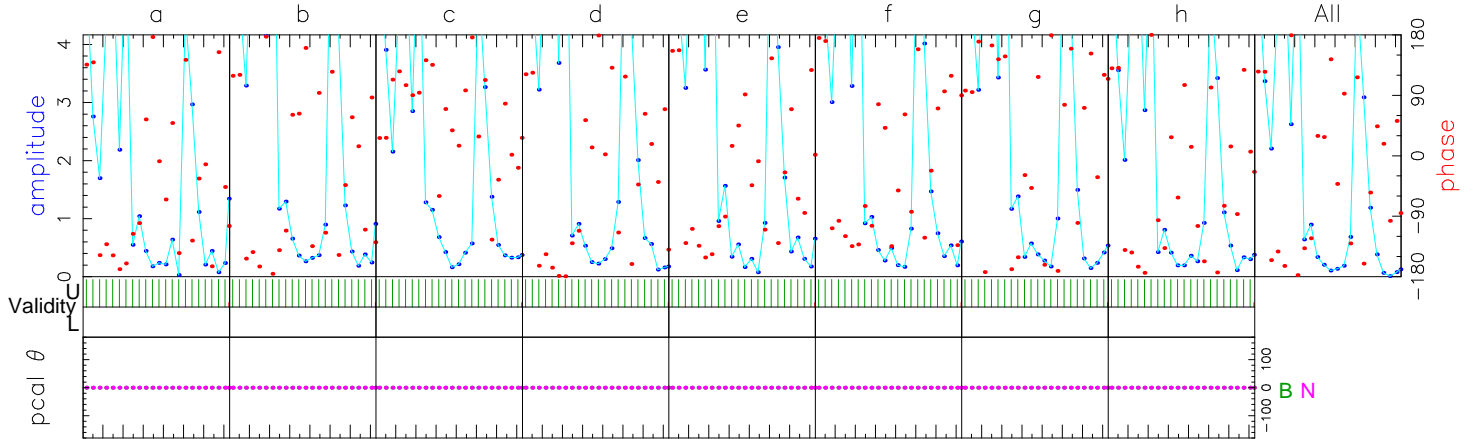


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050757
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.9	174.4	81.0	171.3	-152.4	-141.6	142.6	173.7	Phase	174.6
	1.2	2.0	1.4	1.9	1.9	1.8	2.1	1.4	Ampl.	1.7
	254.8	256.7	257.5	257.3	257.8	257.4	257.2	255.6	Sbd box	256.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	

Group delay (usec)(sbd)	5.89237500450E+02	Apriori delay (usec)	5.89240035757E+02	Resid mbdelay (usec)	-2.53531E-03	+/-	1.4E-05
Sband delay (usec)	5.89239367007E+02	Apriori clock (usec)	-8.7767696E+00	Resid sbdelay (usec)	-6.68750E-04	+/-	1.1E-04
Phase delay (usec)	5.89240041388E+02	Apriori clockrate (us/s)	7.6350003E-06	Resid phdelay (usec)	5.63109E-06	+/-	4.8E-08
Delay rate (us/s)	-8.33653048778E-02	Apriori rate (us/s)	-8.33668221902E-02	Resid rate (us/s)	1.51731E-06	+/-	2.0E-10
Total phase (deg)		Apriori accel (us/s/s)	2.08143400023E-06	Resid phase (deg)	174.6	+/-	1.5

ph/seg (deg)	RMS 89.0	Theor. 3.6	Amplitude Search (2048X32)	1.389 +/- 0.018	1.363	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	160.4	6.2	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	46.7	2.1	Inc. seg. avg.	1.972		Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	32.0	3.7	Inc. frq. avg.	1.725		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 75.5 el 47.1 pa -56.4 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 651.373 592.481 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/BN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/BN.W.26.1W6ILQ

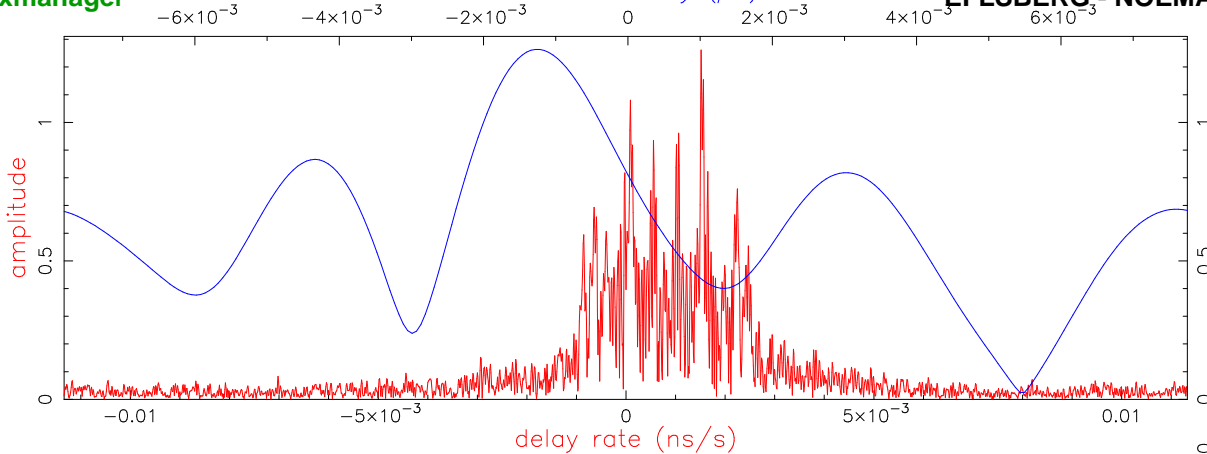
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, BN

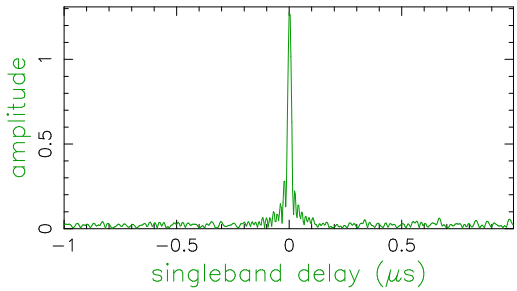
EFLSBERG₃- NOEMA, fgroup W, pol LL

multiband delay (μ s)

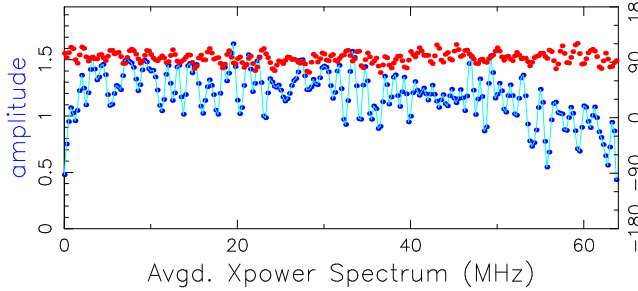


Fringe quality 1

SNR 72.9
 Int time 419.814
 Amp 1.311
 Phase 133.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001672
 MBD -0.001334
 Fringe rate (Hz)
 0.130786
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

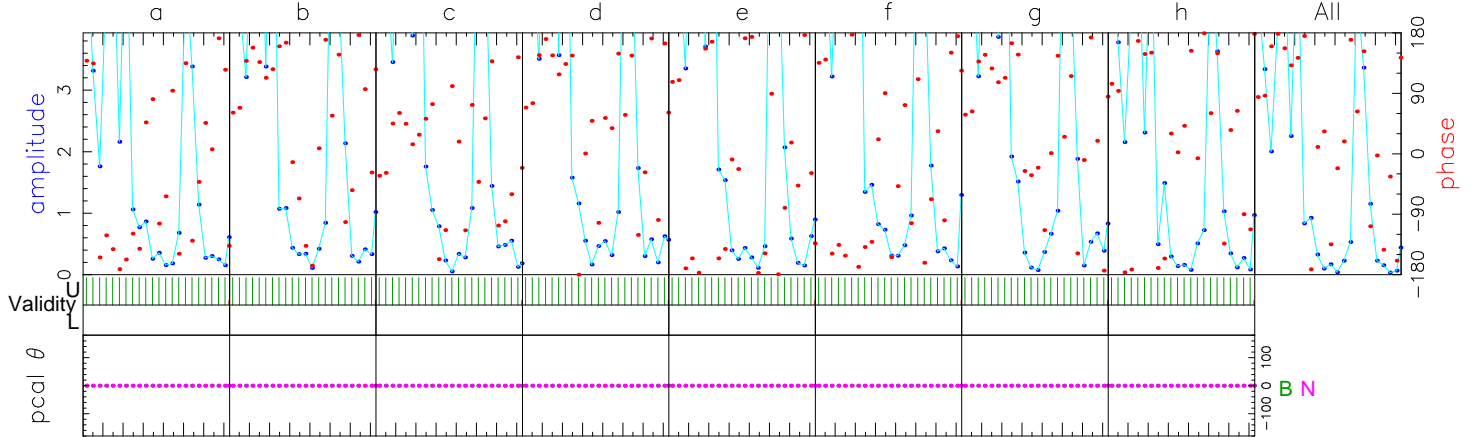


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050753
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.5	116.1	18.7	123.2	160.6	-178.8	104.4	141.7	Phase	133.2
	1.4	1.8	2.2	2.2	2.1	2.1	2.1	1.4	Ampl.	1.9
	255.7	256.8	257.7	257.8	257.9	257.8	257.3	256.3	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.89238701387E+02	Apriori delay (usec)	5.89240035757E+02	Resid mbdelay (usec)	-1.33437E-03	+/-	1.5E-05
Sband delay (usec)	5.89241707507E+02	Apriori clock (usec)	-8.7767696E+00	Resid sbdelay (usec)	1.67175E-03	+/-	1.2E-04
Phase delay (usec)	5.89240040051E+02	Apriori clockrate (us/s)	7.6350003E-06	Resid phdelay (usec)	4.29382E-06	+/-	5.1E-08
Delay rate (us/s)	-8.33653038993E-02	Apriori rate (us/s)	-8.33668221902E-02	Resid rate (us/s)	1.51829E-06	+/-	2.1E-10
Total phase (deg)	18.0	Apriori accel (us/s/s)	2.08143400023E-06	Resid phase (deg)	133.2	+/-	1.6

ph/seg (deg)	85.6	Theor.	3.8	Amplitude	1.311 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	152.3	Search (2048X32)	1.249	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	59.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	51.0	Inc. seg. avg.	1.816	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	1.895	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 75.5 el 47.1 pa -56.4 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 651.373 592.481 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/BN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/BN.W.3.1W6ILQ

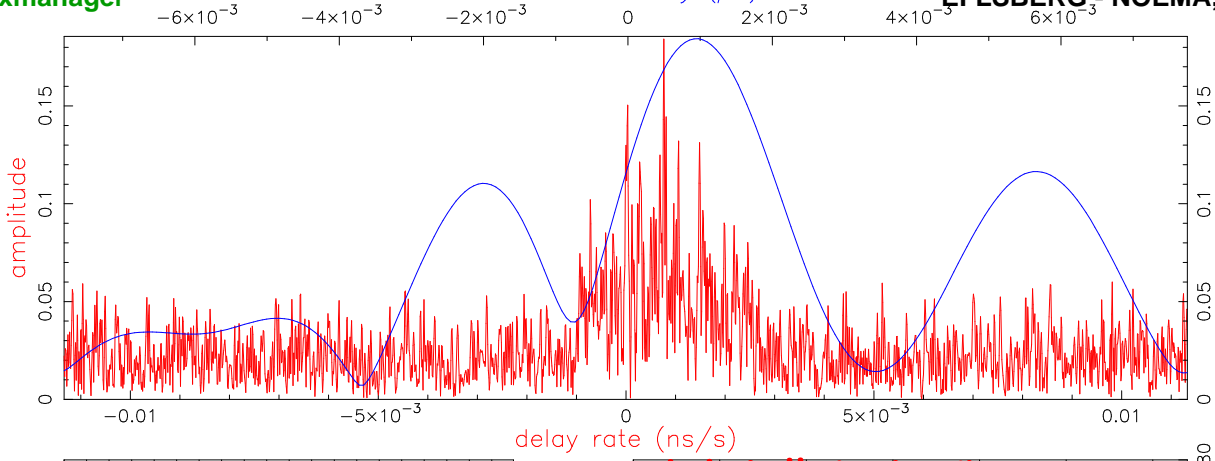
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, BN

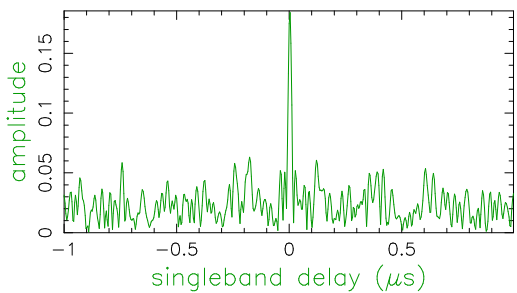
EFLSBERG - NOEMA, fgroup W, pol LR

multiband delay (μ s)

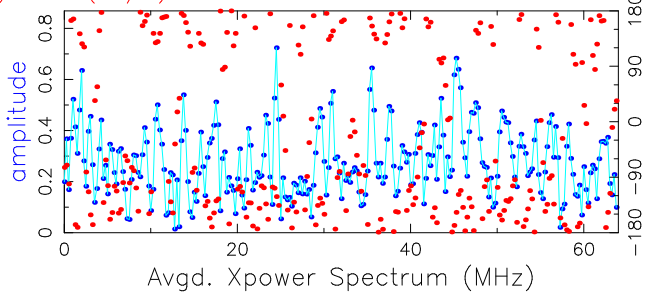


Fringe quality 9

SNR 10.4
 Int time 419.814
 Amp 0.186
 Phase -138.2
 PFD 1.4e-16
 Delays (us)
 SBD 0.002968
 MBD 0.000895
 Fringe rate (Hz)
 0.066333
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

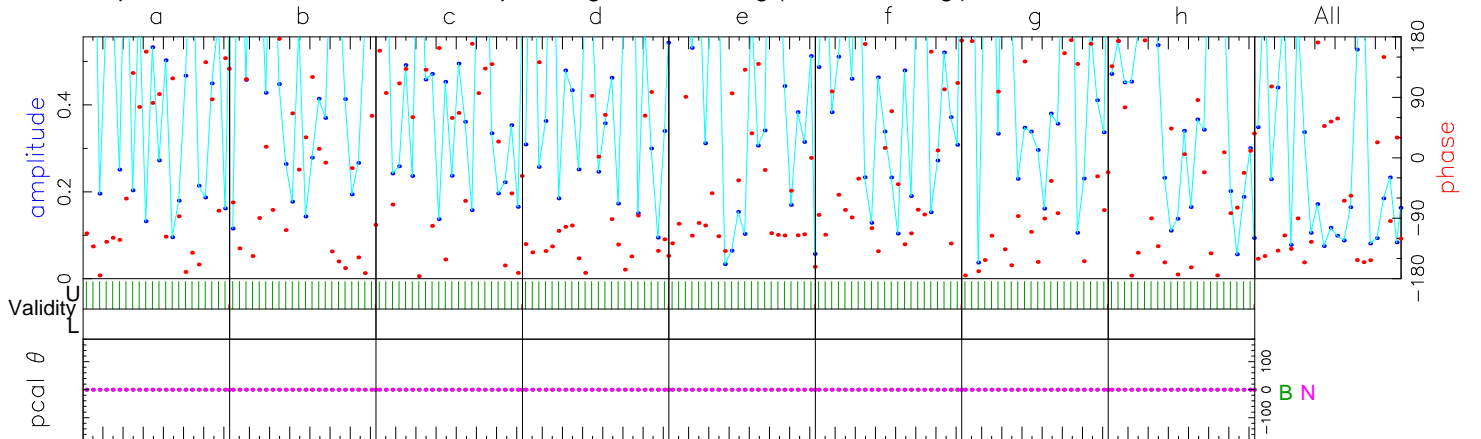


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050801
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.7	-124.1	137.7	-145.9	-97.7	-87.6	-155.7	-154.2	Phase	-138.2
	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.1	Ampl.	0.2
	255.3	257.4	258.5	258.1	258.0	258.9	258.0	256.3	Sbd box	257.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 5.89240930461E+02 Apriori delay (usec) 5.89240035757E+02 Resid mbdelay (usec) 8.94705E-04 +/- 1.0E-04
 Sband delay (usec) 5.89243004007E+02 Apriori clock (usec) -8.7767696E+00 Resid sbdelay (usec) 2.96825E-03 +/- 8.3E-04
 Phase delay (usec) 5.89240031299E+02 Apriori clockrate (us/s) 7.6350003E-06 Resid phdelay (usec) -4.45724E-06 +/- 3.6E-07
 Delay rate (us/s) -8.33660521255E-02 Apriori rate (us/s) -8.33668221902E-02 Resid rate (us/s) 7.70065E-07 +/- 1.5E-09
 Total phase (deg) 106.6 Apriori accel (us/s/s) 2.08143400023E-06 Resid phase (deg) -138.2 +/- 11.0

RMS Theor. Amplitude 0.186 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 89.9 26.5 Search (2048X32) 0.171 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 127.3 46.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 44.9 15.6 Inc. seg. avg. 0.250 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 40.8 27.3 Inc. frq. avg. 0.222 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 75.5 el 47.1 pa -56.4 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 651.373 592.481 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/BN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/BN.W.45.1W6ILQ

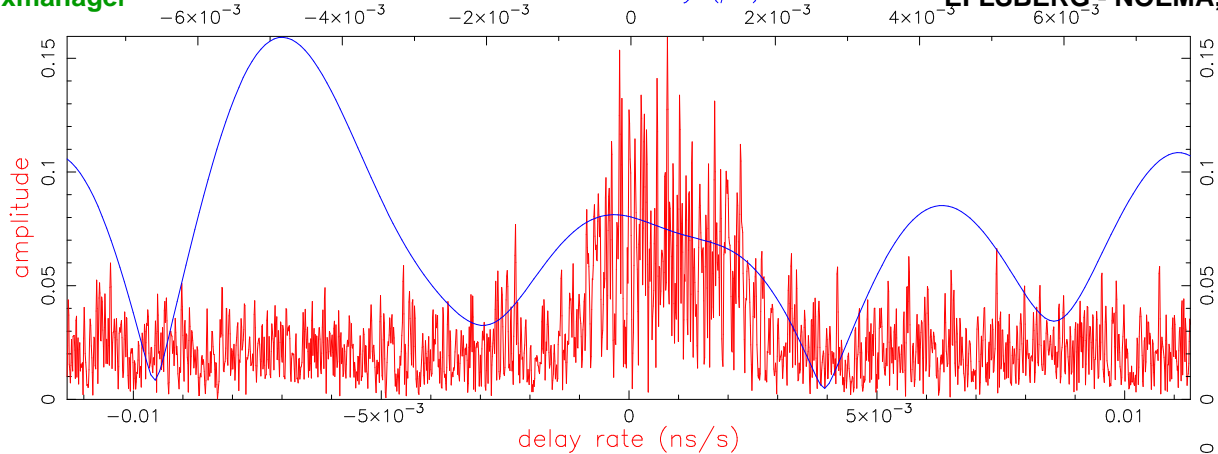
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

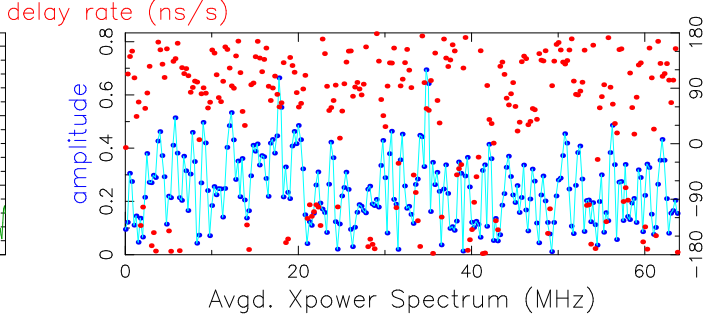
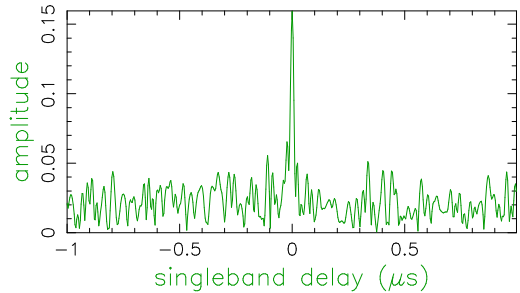
BLLAC.1W6ILQ, No0160, BN

EFLSBERG - NOEMA, fgroup W, pol RL

multiband delay (μ s)

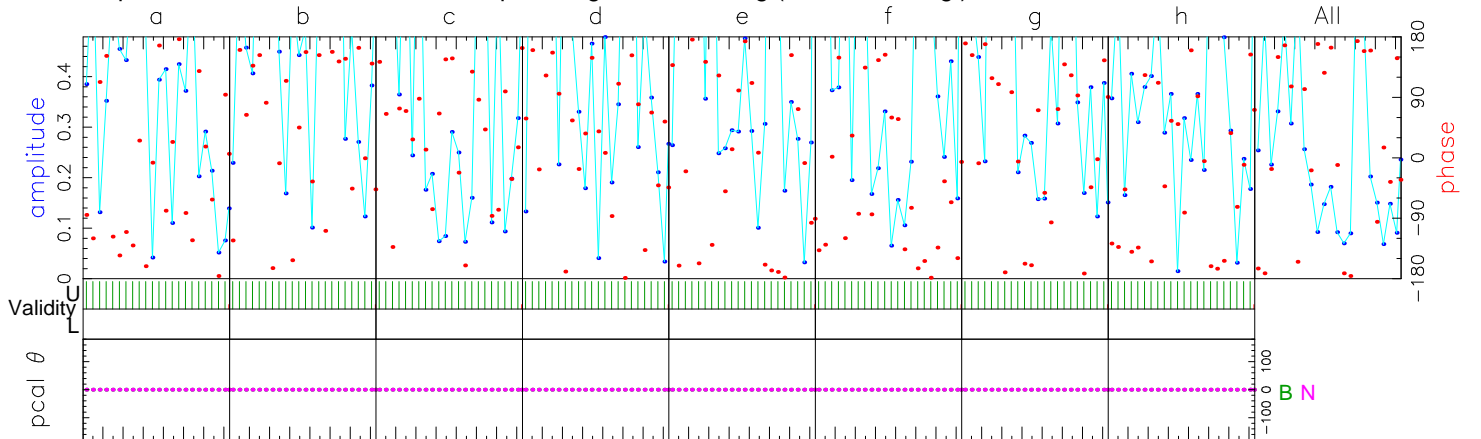


Fringe quality 9
 SNR 8.9
 Int time 419.814
 Amp 0.160
 Phase 170.0
 PFD 1.7e-10
 Delays (us)
 SBD -0.000321
 MBD -0.004845
 Fringe rate (Hz) 0.066682
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build 2021:287:021716
 2021:287:050805
 2021:252:122852
 RA & Dec (J2000) 22h02m43.291370s
 +42°16'39.979885"



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
	-127.0	151.7	71.1	144.4	-168.0	-137.9	137.0	-165.0	Phase	170.0
	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.1	Ampl.	0.2
	254.3	255.7	257.8	256.6	257.7	257.0	256.6	254.9	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.89235190524E+02	Apriori delay (usec)	5.89240035757E+02	Resid mbdelay (usec)	-4.84523E-03	+/-	1.2E-04
Sband delay (usec)	5.89239714757E+02	Apriori clock (usec)	-8.7767696E+00	Resid sbdelay (usec)	-3.21000E-04	+/-	9.6E-04
Phase delay (usec)	5.89240041240E+02	Apriori clockrate (us/s)	7.6350003E-06	Resid phdelay (usec)	5.48335E-06	+/-	4.1E-07
Delay rate (us/s)	-8.33660480782E-02	Apriori rate (us/s)	-8.33668221902E-02	Resid rate (us/s)	7.74112E-07	+/-	1.7E-09
Total phase (deg)		Apriori accel (us/s/s)	2.08143400023E-06	Resid phase (deg)	170.0	+/-	12.8

ph/seg (deg)	86.7	Theor.	30.8	Amplitude	0.160 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	130.5	Search (2048X32)	0.157	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	57.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	52.5	Inc. seg. avg.	0.228	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
		Inc. frq. avg.	0.211	Data rate (Mb/s):	2048					

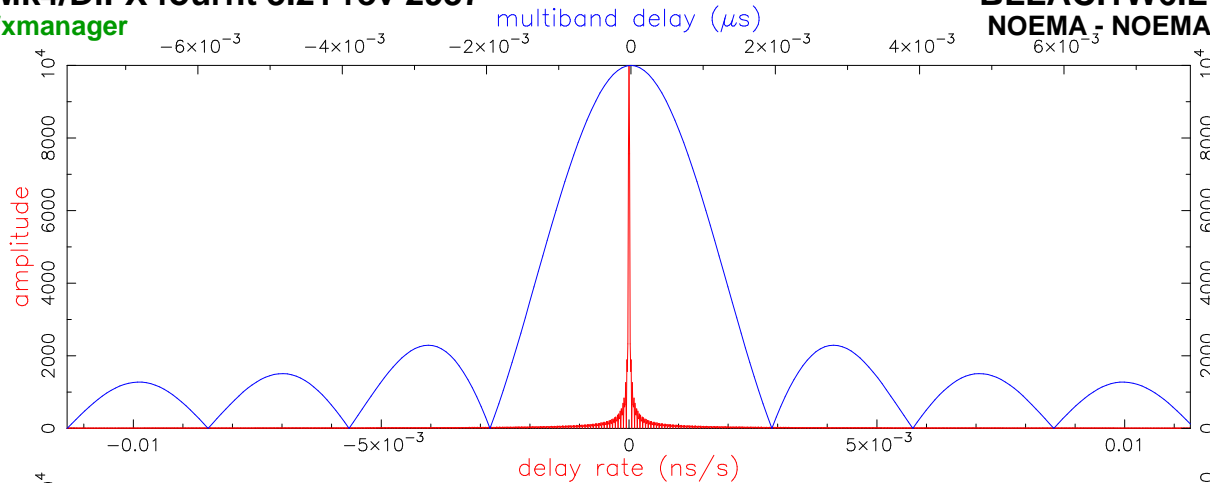
B: az 75.5 el 47.1 pa -56.4 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 651.373 592.481 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/BN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/BN.W.64.1W6ILQ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

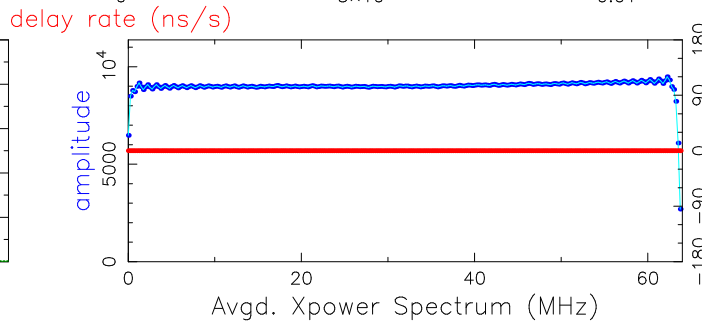
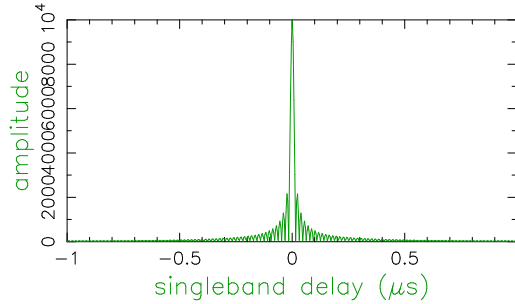
BLLAC.1W6ILQ, No0160, NN

NOEMA - NOEMA, fgroup W, pol RR



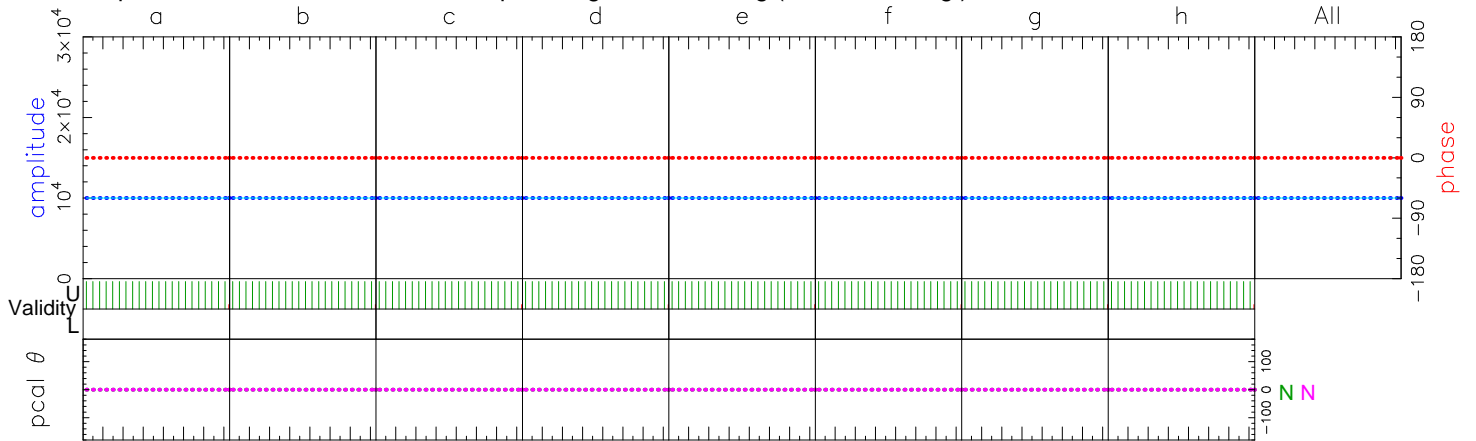
Fringe quality 9

SNR 560314.4
 Int time 419.825
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2021:114
 FRT 031501.00
 Corr/FF/build
 2021:287:021716
 2021:287:050757
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0	
N	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0	
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used		
N:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
N	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
N	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
									Tracks		
									Tracks		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	1.9E-09	
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	1.5E-08	
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	6.6E-12	
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	2.7E-14	
Total phase (deg)			0.0							+/-	0.0

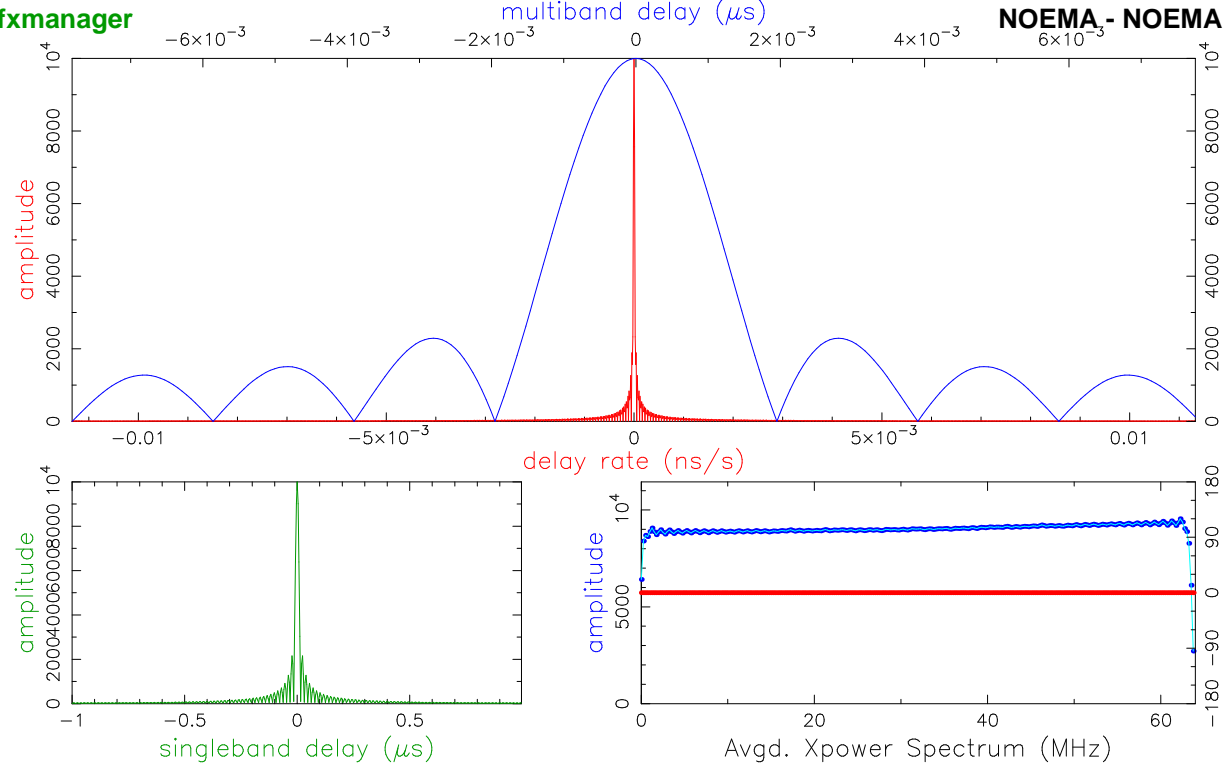
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 N: az 69.2 el 44.7 pa -64.5 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NN.W.28.1W6ILQ simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

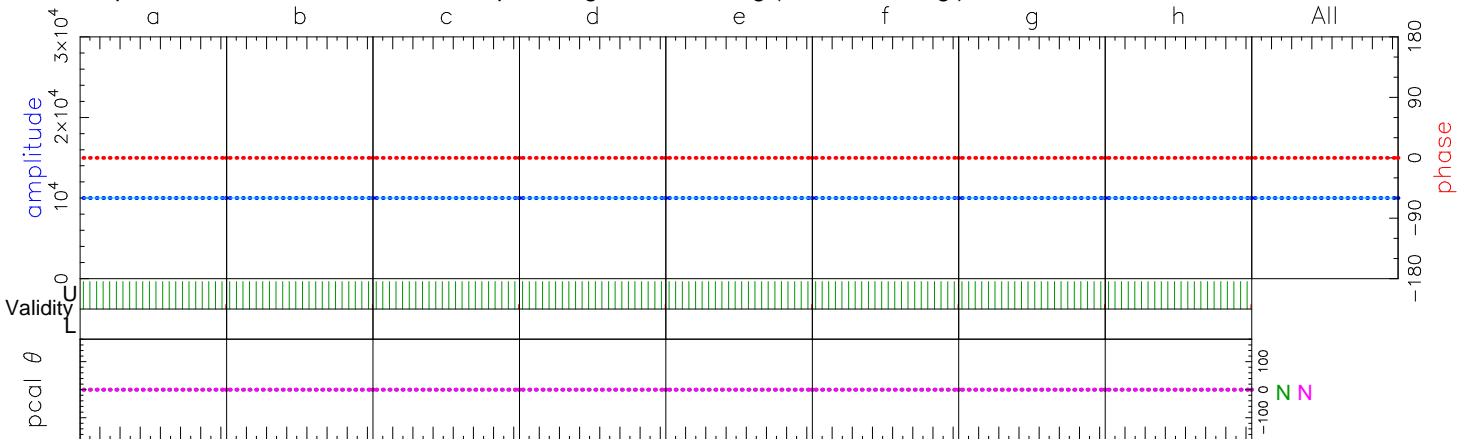
BLLAC.1W6ILQ, No0160, NN

NOEMA - NOEMA, fgroup W, pol LL



Fringe quality 9
 SNR 560314.4
 Int time 419.825
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2021:114
 FRT 031501.00
 2021:287:021716
 2021:287:050754
 2021:252:122852
 RA & Dec (J2000) 22h02m43.291370s +42°16'39.979885"

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



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

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

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 N: az 69.2 el 44.7 pa -64.5 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NN.W.8.1W6ILQ simultaneous interpolator

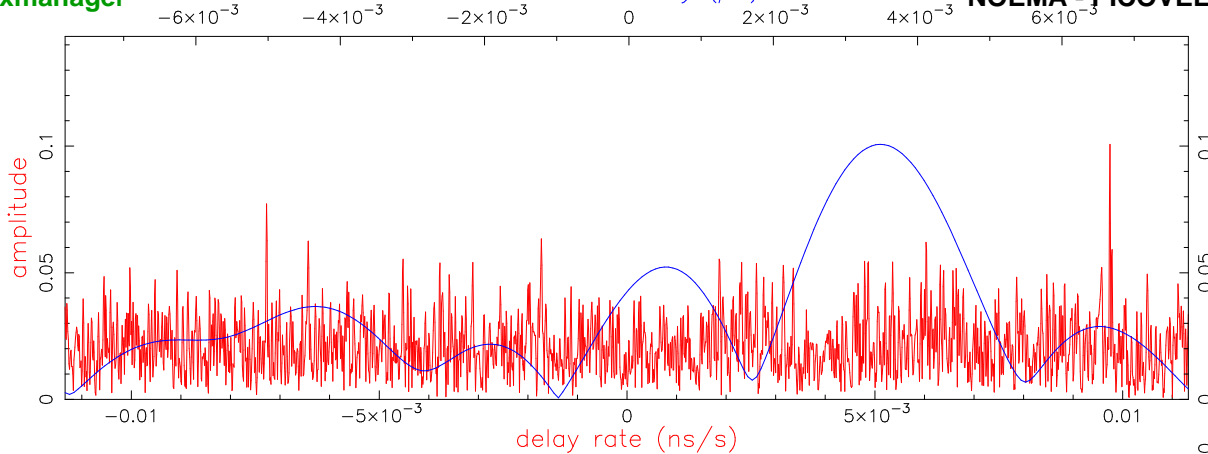
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NP

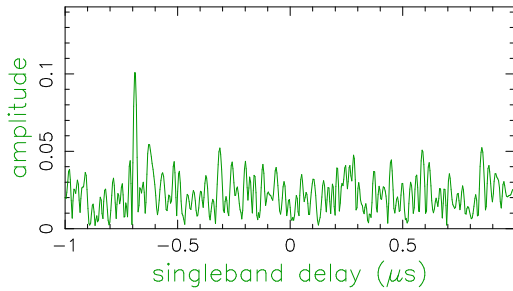
NOEMA - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

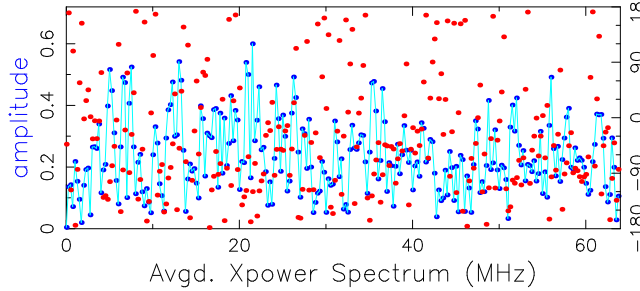


Fringe quality 0

SNR 5.8
 Int time 419.825
 Amp 0.143
 Phase -140.7
 PFD 8.1e-01
 Delays (us)
 SBD -0.689467
 MBD 0.003473
 Fringe rate (Hz)
 0.840531
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

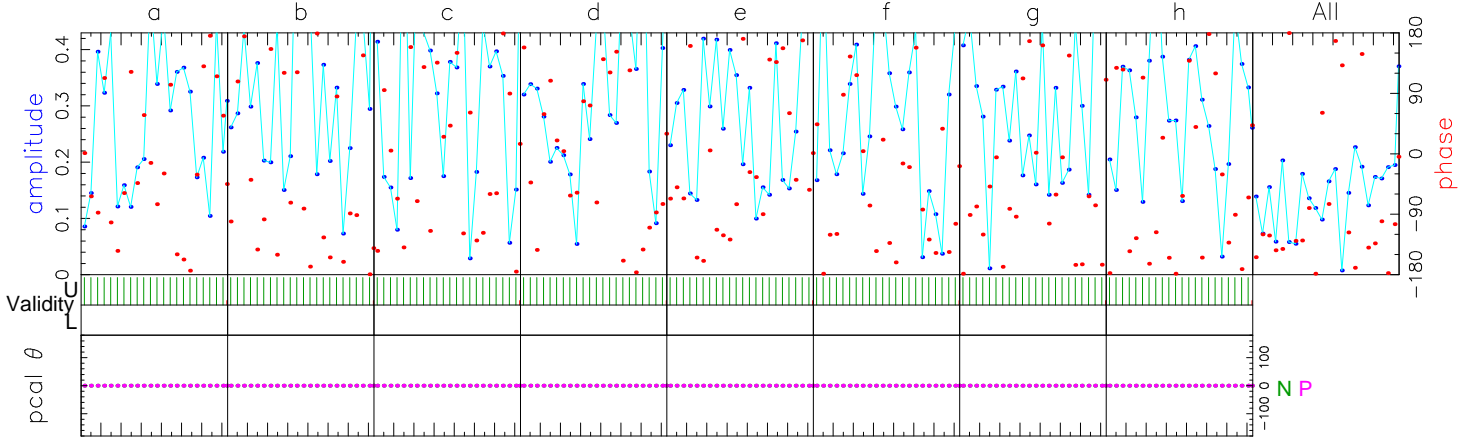


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050757
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.5	-159.3	-133.4	-177.6	-103.1	-142.7	-127.2	-158.3	Phase	-140.7
	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	206.7	487.1	162.0	117.0	412.2	177.6	25.9	41.1	Sbd box	80.5
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	

Group delay (usec)(sbd)	2.68315212158E+03	Apriori delay (usec)	2.68383614813E+03	Resid mbdelay (usec)	3.47344E-03	+/-	1.9E-04
Sband delay (usec)	2.68314668063E+03	Apriori clock (usec)	-1.2341684E+01	Resid sbdelay (usec)	-6.89467E-01	+/-	1.5E-03
Phase delay (usec)	2.68383614359E+03	Apriori clockrate (us/s)	-7.0350002E-06	Resid phdelay (usec)	-4.53703E-06	+/-	6.4E-07
Delay rate (us/s)	-1.44526107526E-01	Apriori rate (us/s)	-1.44535865257E-01	Resid rate (us/s)	9.75773E-06	+/-	2.6E-09
Total phase (deg)	147.3	Apriori accel (us/s/s)	-6.74222218408E-06	Resid phase (deg)	-140.7	+/-	19.8

ph/seg (deg)	RMS 52.6	Theor. 47.4	Amplitude 52.6	0.143 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.4	82.7	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	31.1	27.9	Inc. seg. avg.	0.145	Bits/sample: 2x2	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.1	48.8	Inc. frq. avg.	0.136	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

N: az 69.2 el 44.7 pa -64.5 P: az 59.9 el 35.1 pa -69.6 u,v (fr/asec) 1106.258 154.262 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NP..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NP.W.24.1W6ILQ

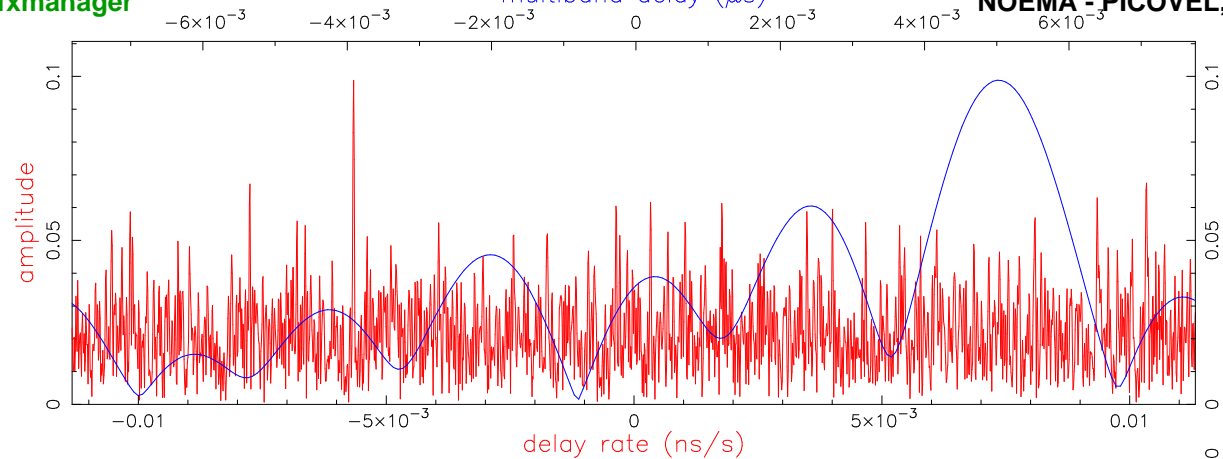
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NP

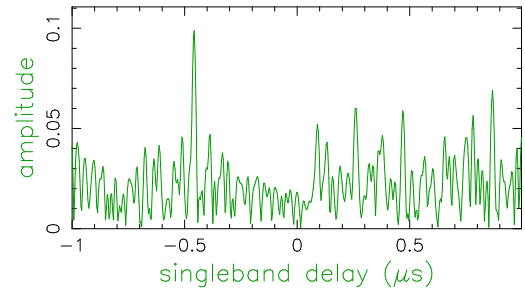
NOEMA - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

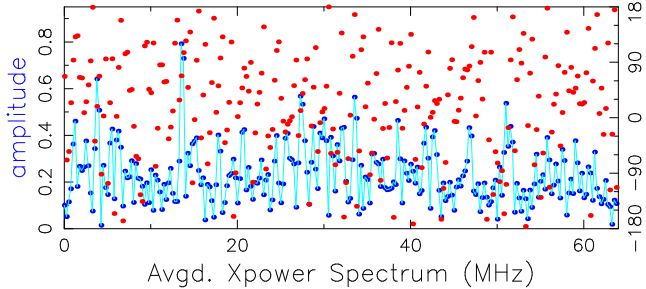


Fringe quality 0

SNR 5.6
 Int time 419.825
 Amp 0.111
 Phase 111.5
 PFD 1.0e+00
 Delays (us)
 SBD -0.458249
 MBD 0.004988
 Fringe rate (Hz)
 -0.488192
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

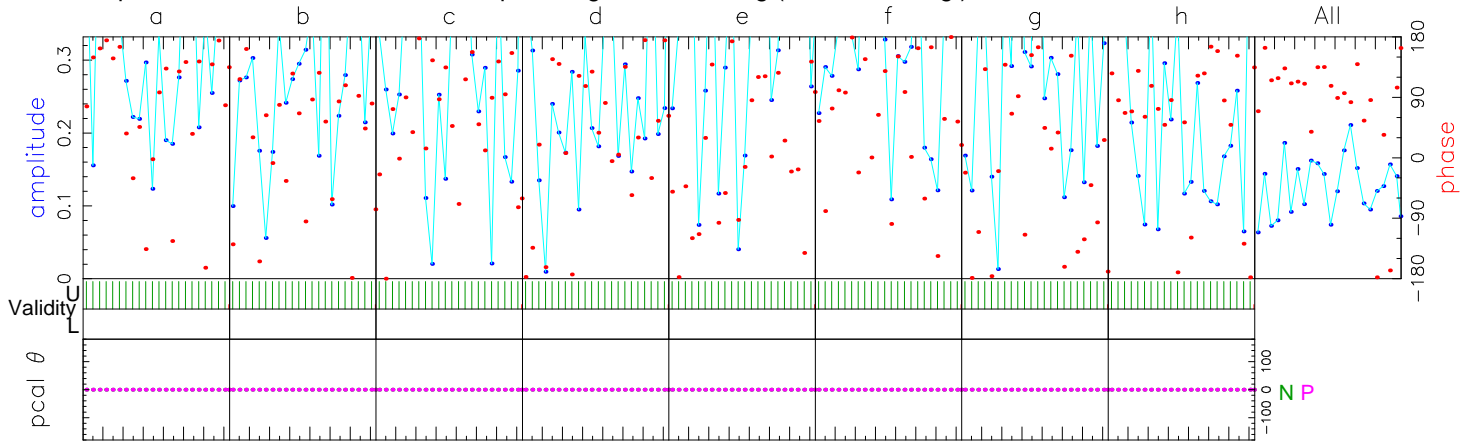


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2021:114
 FRT 031501.00
 Corr/FF/build
 2021:287:021716
 2021:287:050800
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



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

Group delay (usec)(sbd)	2.68337238586E+03	Apriori delay (usec)	2.68383614813E+03	Resid mbdelay (usec)	4.98773E-03	+/-	1.9E-04
Sband delay (usec)	2.68337789913E+03	Apriori clock (usec)	-1.2341684E+01	Resid sbdelay (usec)	-4.58249E-01	+/-	1.5E-03
Phase delay (usec)	2.68383615173E+03	Apriori clockrate (us/s)	-7.0350002E-06	Resid phdelay (usec)	3.59700E-06	+/-	6.6E-07
Delay rate (us/s)	-1.44541532678E-01	Apriori rate (us/s)	-1.44535865257E-01	Resid rate (us/s)	-5.66742E-06	+/-	2.7E-09
Total phase (deg)	39.5	Apriori accel (us/s/s)	-6.74222218408E-06	Resid phase (deg)	111.5	+/-	20.5

ph/seg (deg)	40.1	RMS	49.2	Theor.	49.2	Amplitude	0.111 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	48.7	Search (2048X32)	0.097	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	25.0	Inc. seg. avg.	0.104	Inc. frq. avg.	0.104	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	48.3	Inc. frq. avg.	0.104			Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
						Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00	
						nlags: 256		t_cohere infinite			

N: az 69.2 el 44.7 pa -64.5 P: az 59.9 el 35.1 pa -69.6 u,v (fr/asec) 1106.258 154.262 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NP..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NP.W.43.1W6ILQ

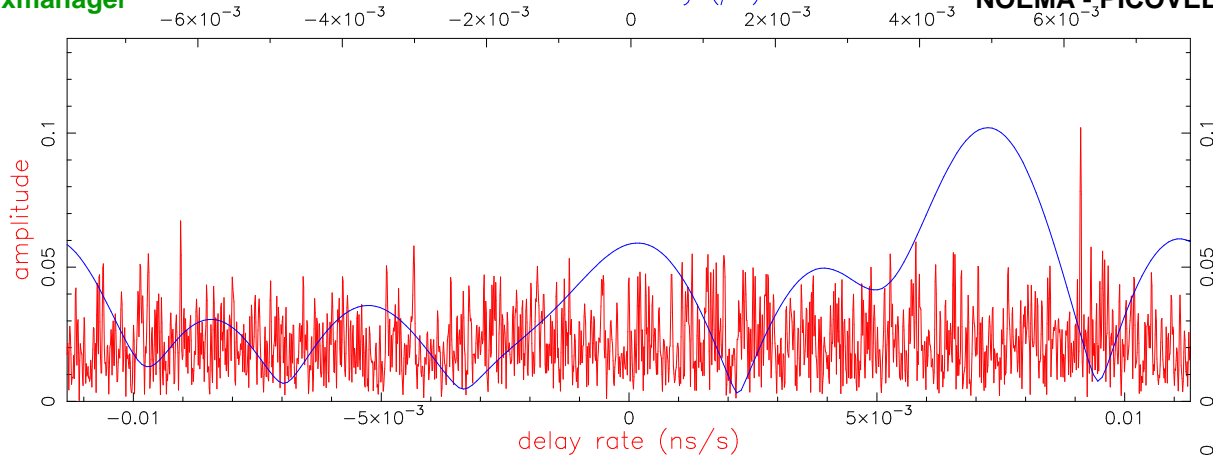
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NP

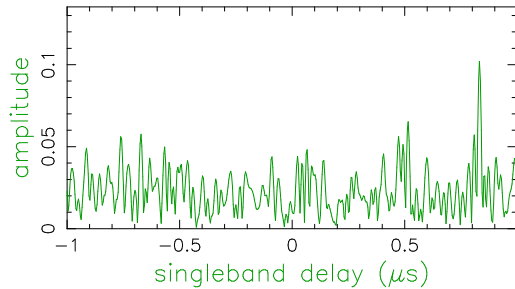
NOEMA - PICOVEL, fgroup W, pol LL

multiband delay (μs)

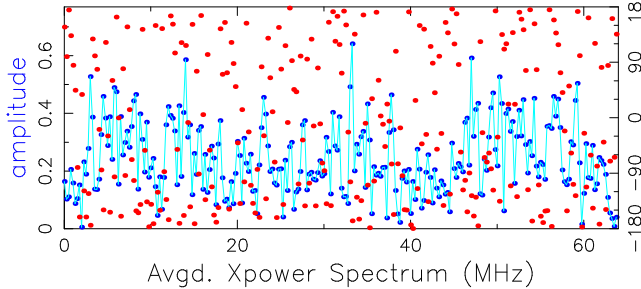


Fringe quality 0

SNR 5.7
 Int time 419.825
 Amp 0.135
 Phase 3.9
 PFD 9.3e-01
 Delays (us)
 SBD 0.831985
 MBD 0.004945
 Fringe rate (Hz)
 0.786111
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

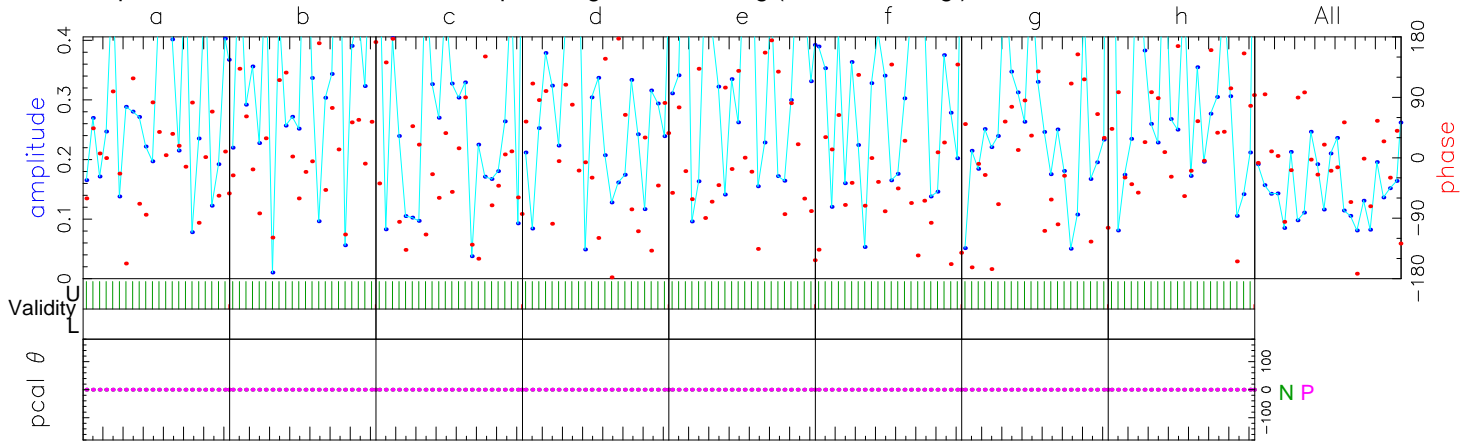


delay rate (ns/s)



Exp. c211a
 Yr:day # 16383
 Start 2021:114
 Stop 2021:114
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050753
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
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)	2.68466921840E+03	Apriori delay (usec)	2.68383614813E+03	Resid mbdelay (usec)	4.94527E-03	+/-	1.9E-04
Sband delay (usec)	2.68466813263E+03	Apriori clock (usec)	-1.2341684E+01	Resid sbdelay (usec)	8.31985E-01	+/-	1.5E-03
Phase delay (usec)	2.68383614826E+03	Apriori clockrate (us/s)	-7.0350002E-06	Resid phdelay (usec)	1.25474E-07	+/-	6.5E-07
Delay rate (us/s)	-1.44526739283E-01	Apriori rate (us/s)	-1.44535865257E-01	Resid rate (us/s)	9.12597E-06	+/-	2.7E-09
Total phase (deg)	291.9	Apriori accel (us/s/s)	-6.74222218408E-06	Resid phase (deg)	3.9	+/-	20.0

ph/seg (deg)	63.5	Theor.	48.1	Amplitude	0.135 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	68.6	Search (2048X32)	0.099	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	38.5	Inc. seg. avg.	0.148	Inc. frq. avg.	0.140	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	54.0	Inc. frq. avg.	0.140	Sample rate(MSamp/s): 128		Data rate(Mb/s): 2048	nlags: 256
				ion window (TEC)	0.00	0.00	

N: az 69.2 el 44.7 pa -64.5 P: az 59.9 el 35.1 pa -69.6 u,v (fr/asec) 1106.258 154.262 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NP..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NP.W.5.1W6ILQ

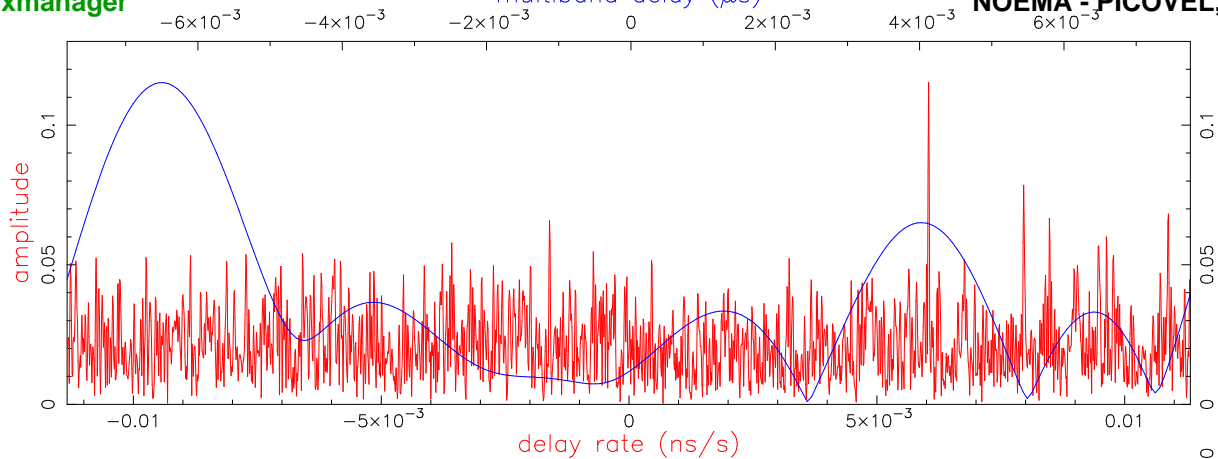
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NP

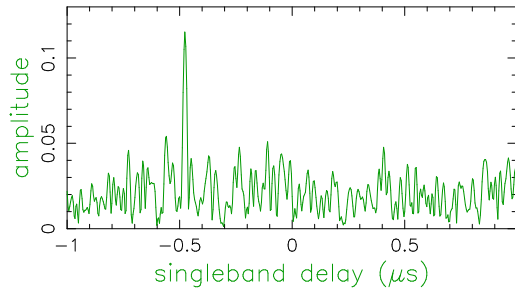
NOEMA - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

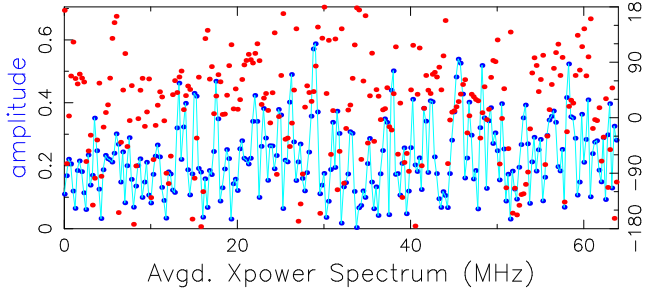


Fringe quality 0

SNR 6.5
 Int time 419.825
 Amp 0.130
 Phase 22.0
 PFD 2.9e-02
 Delays (us)
 SBD -0.476355
 MBD -0.006499
 Fringe rate (Hz)
 0.521633
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

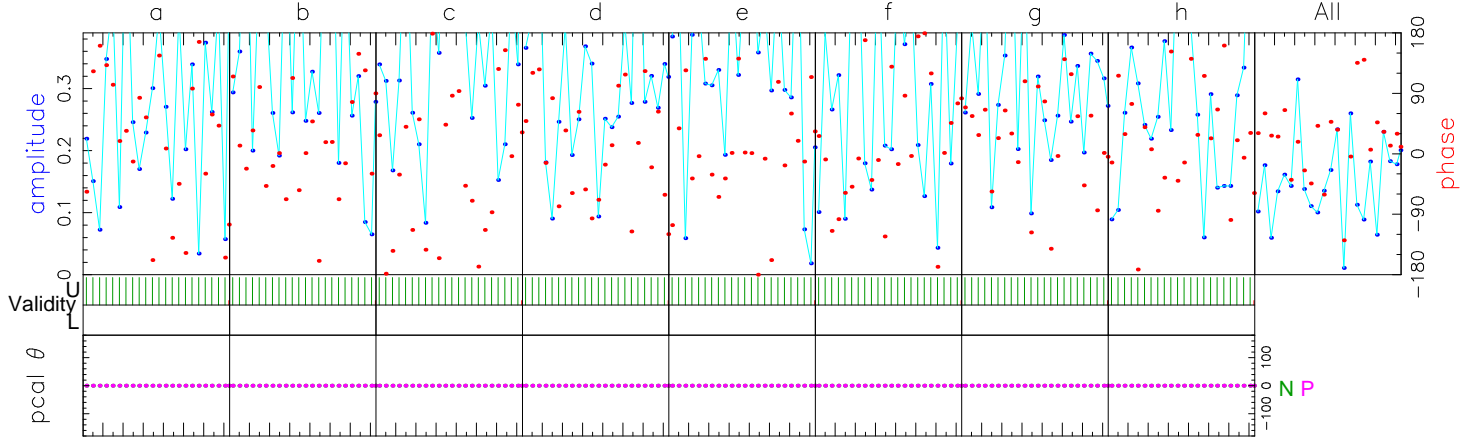


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050804
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
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)	2.68336089889E+03	Apriori delay (usec)	2.68383614813E+03	Resid mbdelay (usec)	-6.49924E-03	+/-	1.7E-04
Sband delay (usec)	2.68335979288E+03	Apriori clock (usec)	-1.2341684E+01	Resid sbdelay (usec)	-4.76355E-01	+/-	1.3E-03
Phase delay (usec)	2.68383614884E+03	Apriori clockrate (us/s)	-7.0350002E-06	Resid phdelay (usec)	7.07941E-07	+/-	5.7E-07
Delay rate (us/s)	-1.44529809614E-01	Apriori rate (us/s)	-1.44535865257E-01	Resid rate (us/s)	6.05564E-06	+/-	2.4E-09
Total phase (deg)	310.0	Apriori accel (us/s/s)	-6.74222218408E-06	Resid phase (deg)	22.0	+/-	17.7

ph/seg (deg)	57.4	RMS	42.5	Theor.	42.5	Amplitude	0.130 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	66.7	Search (2048X32)	0.114	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	28.6	Inc. seg. avg.	0.133	Inc. frq. avg.	0.129	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	41.6	Inc. frq. avg.	0.129	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
N: az 69.2 el 44.7 pa -64.5 P: az 59.9 el 35.1 pa -69.6 u,v (fr/asec) 1106.258 154.262 simultaneous interpolator Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NP..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NP.W.62.1W6ILQ											

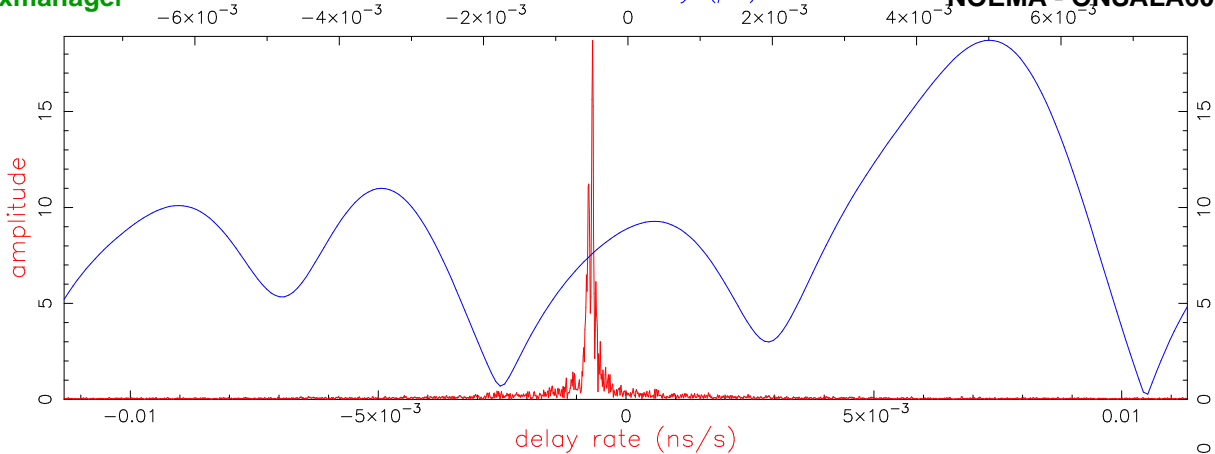
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NX

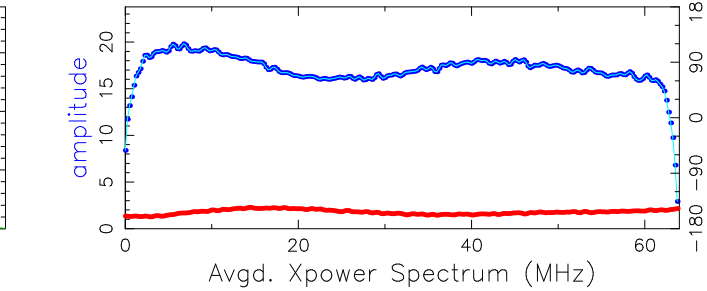
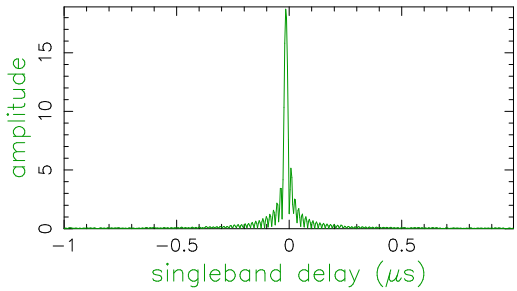
NOEMA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



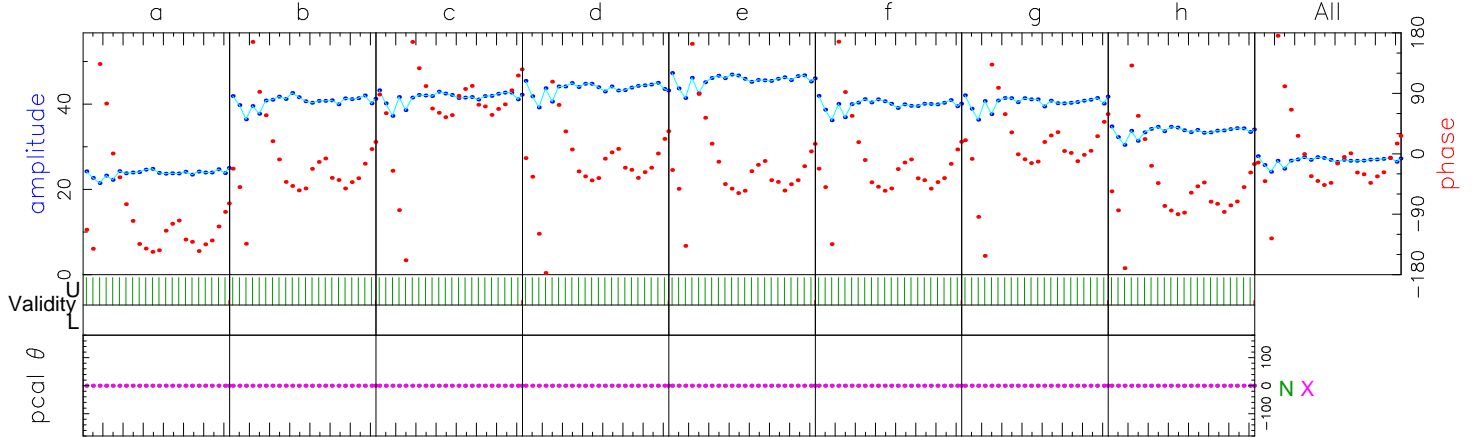
Fringe quality 1

SNR 1058.4
 Int time 419.798
 Amp 18.917
 Phase -17.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.014416
 MBD 0.005038
 Fringe rate (Hz)
 -0.058142
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050754
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.1	-25.8	83.3	-10.8	-29.3	-26.4	14.7	-61.1	Phase	-17.6
	16.7	28.6	29.2	30.6	31.9	27.9	28.2	23.5	Ampl.	27.1
	255.8	253.9	253.4	253.2	253.4	253.0	253.2	253.6	Sbd box	253.3
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)	-1.60626277237E+03	Apriori delay (usec)	-1.60625218519E+03	Resid mbdelay (usec)	5.03782E-03	+/-	1.0E-06
Sband delay (usec)	-1.60626660144E+03	Apriori clock (usec)	-6.9675026E+01	Resid sbdelay (usec)	-1.44163E-02	+/-	8.1E-06
Phase delay (usec)	-1.60625218576E+03	Apriori clockrate (us/s)	-8.1630007E-01	Resid phdelay (usec)	-5.67610E-07	+/-	3.5E-09
Delay rate (us/s)	2.09121189972E-01	Apriori rate (us/s)	2.09121864945E-01	Resid rate (us/s)	-6.74973E-07	+/-	1.4E-11
Total phase (deg)	-101.2	Apriori accel (us/s/s)	-2.46297365084E-06	Resid phase (deg)	-17.6	+/-	0.1

ph/seg (deg)	55.7	RMS	55.7	Theor.	0.3	Amplitude	18.917 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	41.9		41.9		0.5	Search (2048X32)	18.151	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	62.6		62.6		0.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	49.4		49.4		0.3	Inc. seg. avg.	26.791	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	27.077	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 69.2 el 44.7 pa -64.5 X: az 86.9 el 51.1 pa -46.7 u,v (fr/asec) -1627.494 -1067.904 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NX..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NX.W.10.1W6ILQ

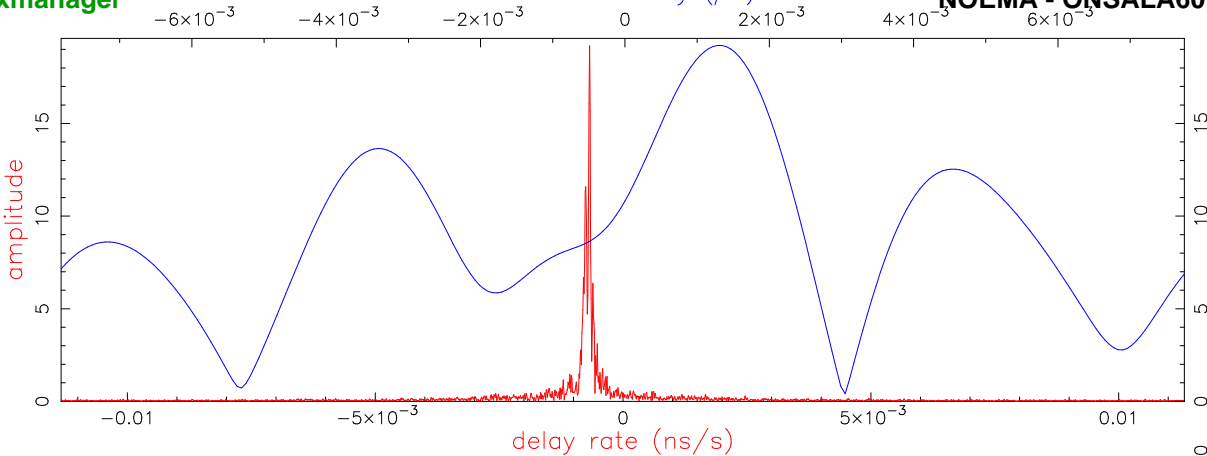
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NX

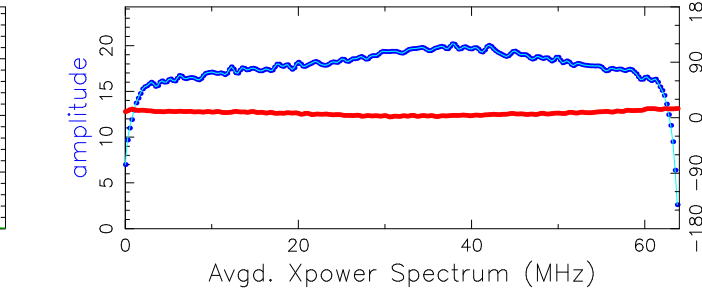
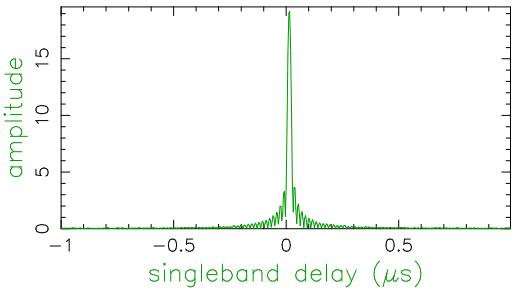
NOEMA - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



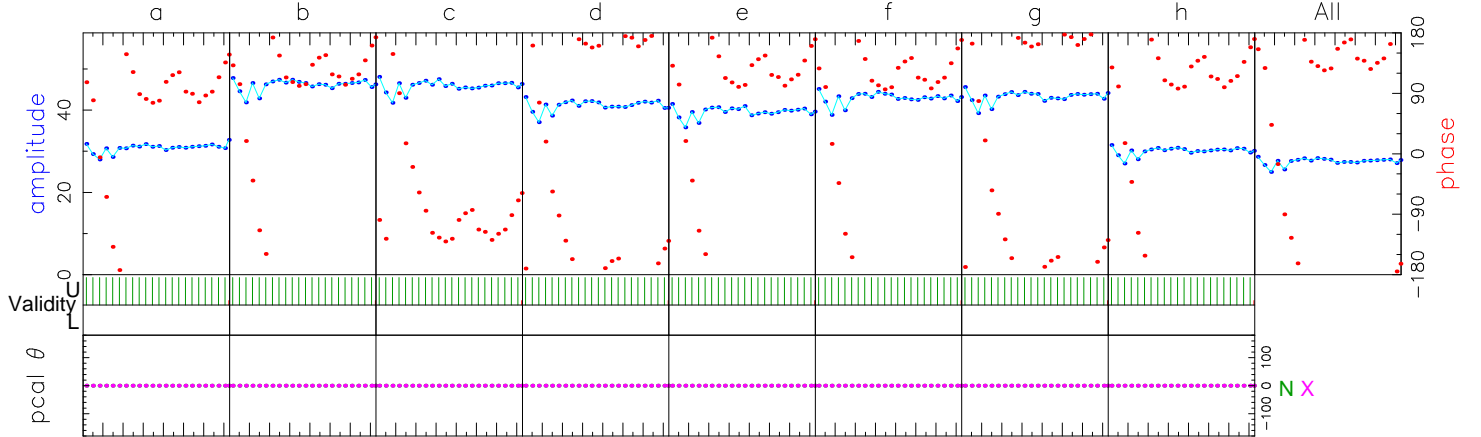
Fringe quality 1

SNR 1096.2
 Int time 419.798
 Amp 19.593
 Phase 152.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.013849
 MBD 0.001252
 Fringe rate (Hz)
 -0.058146
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050758
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
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)	-1.60623530809E+03								1.25210E-03	+/- 9.9E-07
Sband delay (usec)	-1.60623833669E+03								1.38485E-02	+/- 7.9E-06
Phase delay (usec)	-1.60625218028E+03								4.90545E-06	+/- 3.4E-09
Delay rate (us/s)	2.09121189922E-01								-6.75023E-07	+/- 1.4E-11
Total phase (deg)			68.5						152.1	+/- 0.1
			Apriori delay (usec)						Resid mbdelay (usec)	
			Apriori clock (usec)						Resid sbdelay (usec)	
			Apriori clockrate (us/s)						Resid phdelay (usec)	
			Apriori rate (us/s)						Resid rate (us/s)	
			Apriori accel (us/s/s)						Resid phase (deg)	
ph/seg (deg)	55.9	0.3	Search (2048X32)	18.888					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	40.9	0.4	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	0.1	Inc. seg. avg.	27.553					Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	47.3	0.3	Inc. frq. avg.	27.903					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite
N: az 69.2 el 44.7 pa -64.5			X: az 86.9 el 51.1 pa -46.7							
										simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c211a/v2/1234/No0160/NX..1W6ILQ							Output file: /Exps/c211a/v2/1234/No0160/NX.W.29.1W6ILQ

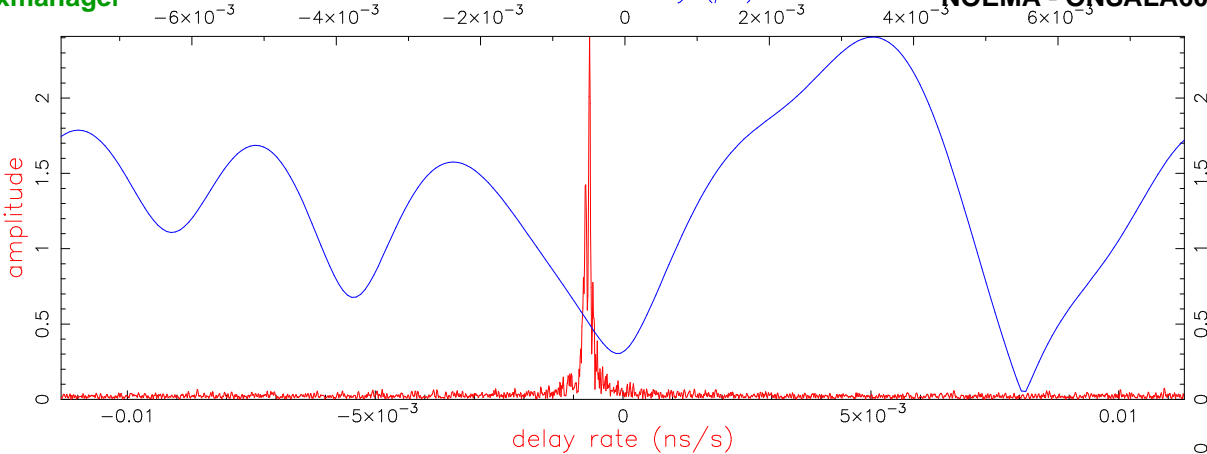
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NX

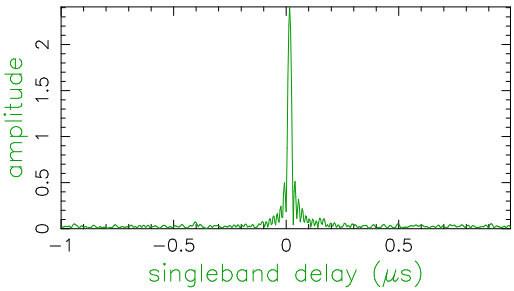
NOEMA - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

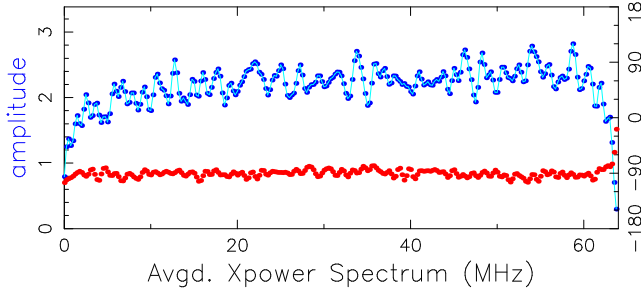


Fringe quality 1

SNR 134.8
 Int time 419.798
 Amp 2.410
 Phase 46.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.015363
 MBD 0.003430
 Fringe rate (Hz)
 -0.058155
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

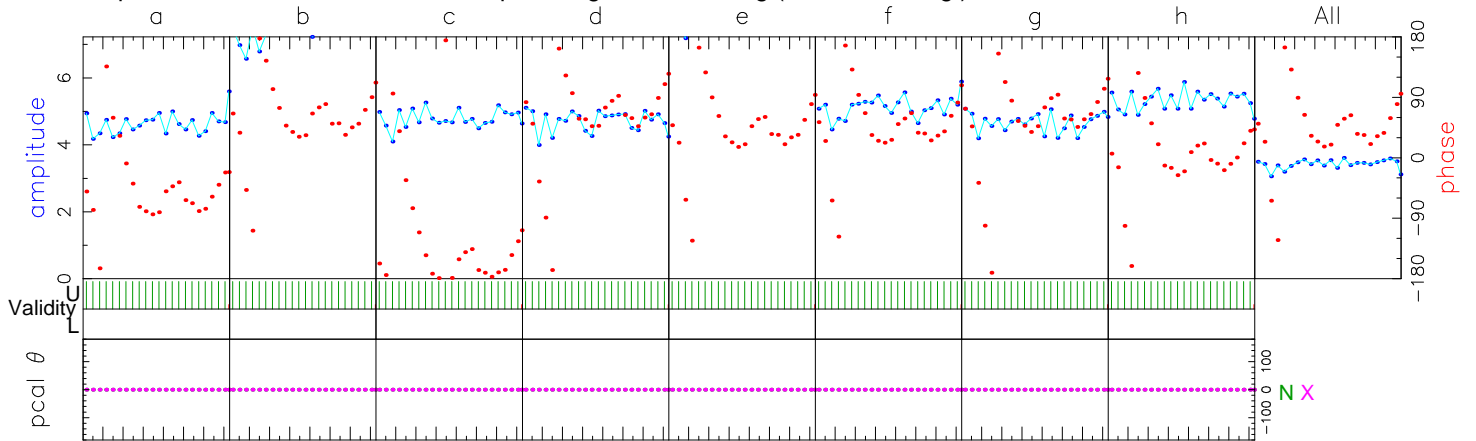


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050801
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.3	60.8	-155.5	75.3	45.6	49.6	71.6	5.7	Phase	46.7
	3.2	5.4	3.3	3.3	5.6	3.6	3.2	3.7	Ampl.	3.9
	263.1	262.2	261.0	260.7	260.8	260.8	260.6	261.5	Sbd box	260.9
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	Manl 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)	-1.60623313031E+03	Apriori delay (usec)	-1.60625218519E+03	Resid mbdelay (usec)	3.42988E-03	+/-	8.1E-06
Sband delay (usec)	-1.60623682194E+03	Apriori clock (usec)	-6.9675026E+01	Resid sbdelay (usec)	1.53632E-02	+/-	6.4E-05
Phase delay (usec)	-1.60625218368E+03	Apriori clockrate (us/s)	-8.1630007E-01	Resid phdelay (usec)	1.50600E-06	+/-	2.7E-08
Delay rate (us/s)	2.09121189823E-01	Apriori rate (us/s)	2.09121864945E-01	Resid rate (us/s)	-6.75121E-07	+/-	1.1E-10
Total phase (deg)	-36.9	Apriori accel (us/s/s)	-2.46297365084E-06	Resid phase (deg)	46.7	+/-	0.9

ph/seg (deg)	56.2	RMS	2.0	Theor.	2.0	Amplitude	2.410 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	43.2	56.2	2.0	Search (2048X32)	2.348	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	80.0	43.2	3.6	Inc. seg. avg.	3.439	Inc. frq. avg.	3.912	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	72.9	80.0	1.2	Inc. frq. avg.	3.912	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 69.2 el 44.7 pa -64.5 X: az 86.9 el 51.1 pa -46.7 u,v (fr/asec) -1627.494 -1067.904 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NX..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NX.W.47.1W6ILQ

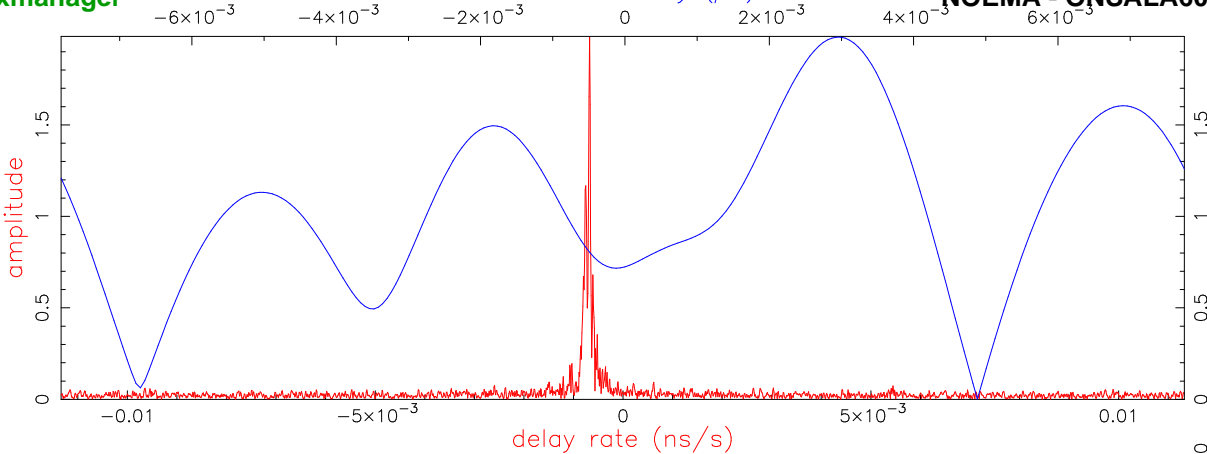
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, NX

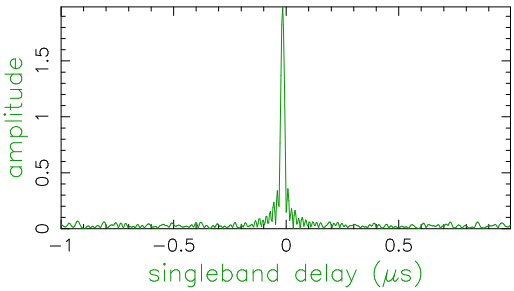
NOEMA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

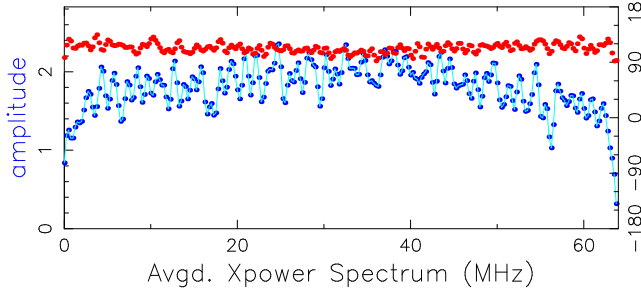


Fringe quality 1

SNR 111.0
 Int time 419.798
 Amp 1.984
 Phase -104.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.015890
 MBD 0.002949
 Fringe rate (Hz)
 -0.058142
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

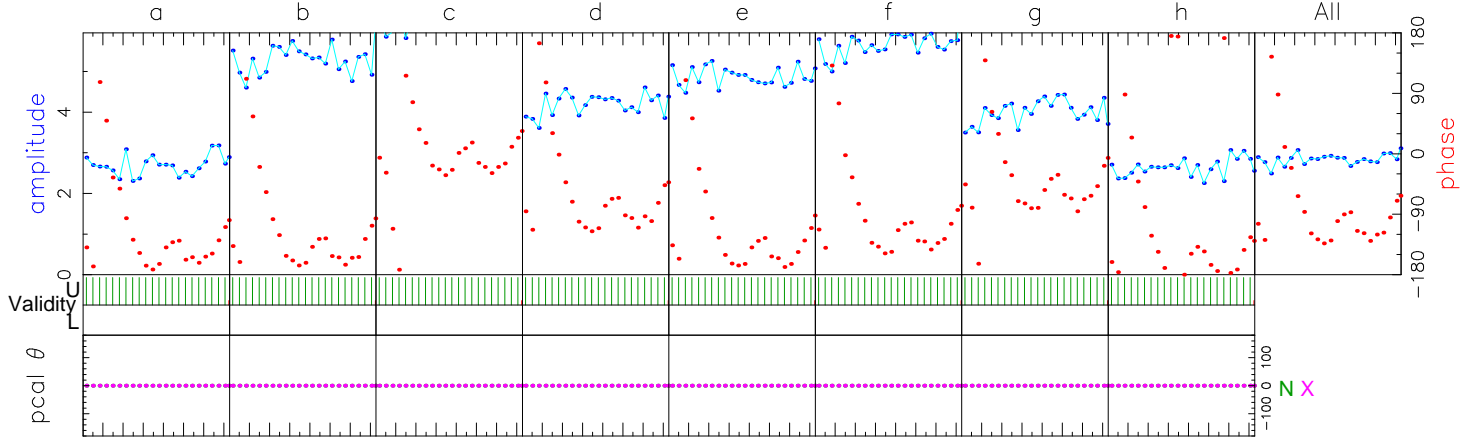


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050805
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.4	-139.9	-3.9	-83.8	-140.1	-116.9	-52.5	-157.6	Phase	-104.3
	1.9	3.7	4.5	2.9	3.4	4.0	2.8	1.9	Ampl.	3.1
	255.2	253.2	253.2	252.5	252.7	252.9	252.8	252.9	Sbd box	252.9
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	Manl 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)	-1.60626486153E+03		Apriori delay (usec)		-1.60625218519E+03		Resid mbdelay (usec)		2.94866E-03	+/- 9.8E-06
Sband delay (usec)	-1.60626807569E+03		Apriori clock (usec)		-6.9675026E+01		Resid sbdelay (usec)		-1.58905E-02	+/- 7.8E-05
Phase delay (usec)	-1.60625218855E+03		Apriori clockrate (us/s)		-8.1630007E-01		Resid phdelay (usec)		-3.36291E-06	+/- 3.3E-08
Delay rate (us/s)	2.09121189979E-01		Apriori rate (us/s)		2.09121864945E-01		Resid rate (us/s)		-6.74966E-07	+/- 1.4E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.46297365084E-06		Resid phase (deg)		-104.3	+/- 1.0

ph/seg (deg) 55.7 2.5 Search (2048X32) 1.927 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.5 4.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.9 1.5 Inc. seg. avg. 2.836 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 73.0 2.5 Inc. frq. avg. 3.125 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 69.2 el 44.7 pa -64.5 X: az 86.9 el 51.1 pa -46.7 u,v (fr/asec) -1627.494 -1067.904 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/NX..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/NX.W.63.1W6ILQ

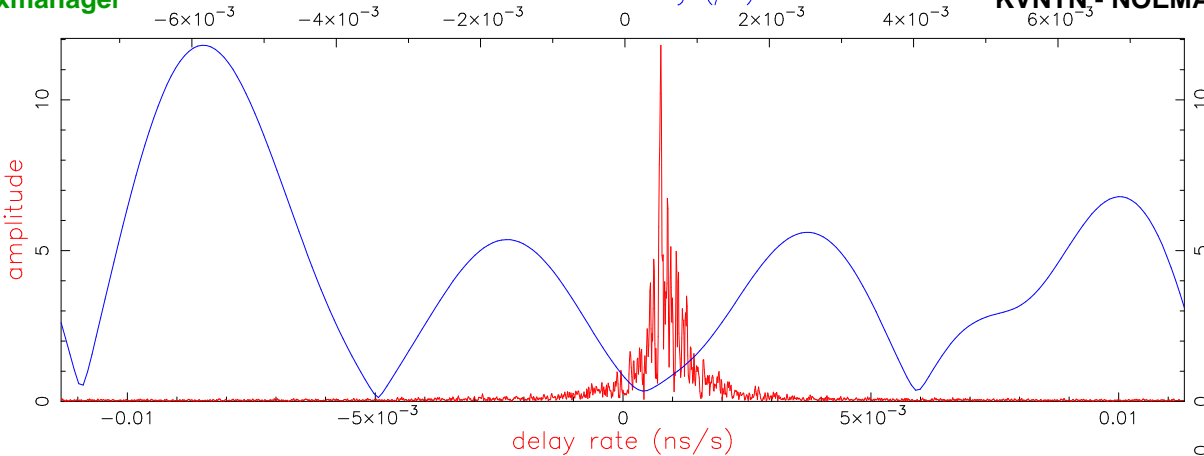
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, tN

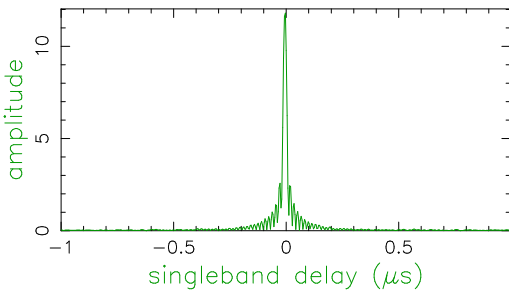
KVNTN- NOEMA, fgroup W, pol LL

multiband delay (μ s)

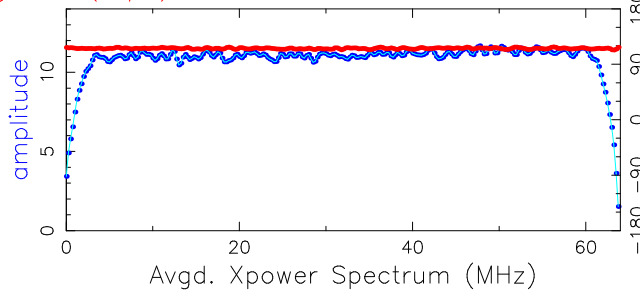


Fringe quality 2

SNR 673.1
 Int time 419.781
 Amp 12.037
 Phase 119.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.005550
 MBD -0.005846
 Fringe rate (Hz)
 0.065964
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

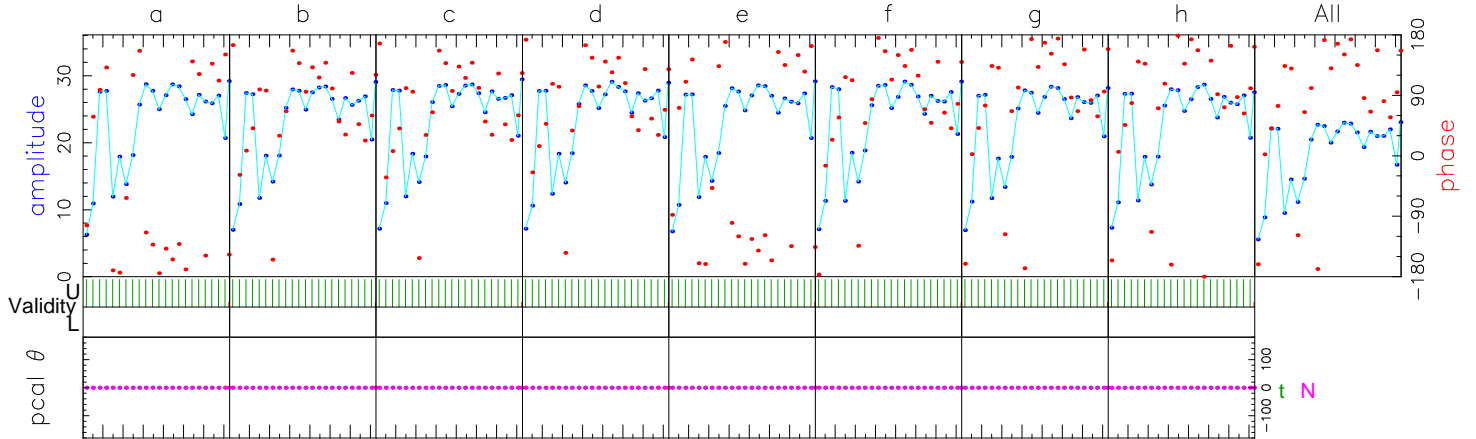


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050755
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



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

Group delay (usec)(sbd)	-2.27594944162E+02	Apriori delay (usec)	-2.27589098325E+02	Resid mbdelay (usec)	-5.84584E-03	+/-	1.6E-06
Sband delay (usec)	-2.27594647825E+02	Apriori clock (usec)	1.3021048E+01	Resid sbdelay (usec)	-5.54950E-03	+/-	1.3E-05
Phase delay (usec)	-2.27589094482E+02	Apriori clockrate (us/s)	7.4350005E-06	Resid phdelay (usec)	3.84399E-06	+/-	5.5E-09
Delay rate (us/s)	-1.53759600456E+00	Apriori rate (us/s)	-1.53759677034E+00	Resid rate (us/s)	7.65782E-07	+/-	2.3E-11
Total phase (deg)	-215.5	Apriori accel (us/s/s)	-1.04275609365E-05	Resid phase (deg)	119.2	+/-	0.2

ph/seg (deg)	57.3	0.4	Search (2048X32)	11.512	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	68.6	0.7	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)	43.2	0.2	Inc. seg. avg.	18.477	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	22.5	0.4	Inc. frq. avg.	14.743	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

t: az 298.9 el 45.3 pa 82.7 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11892.538 -1930.067 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/tN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/tN.W.20.1W6ILQ

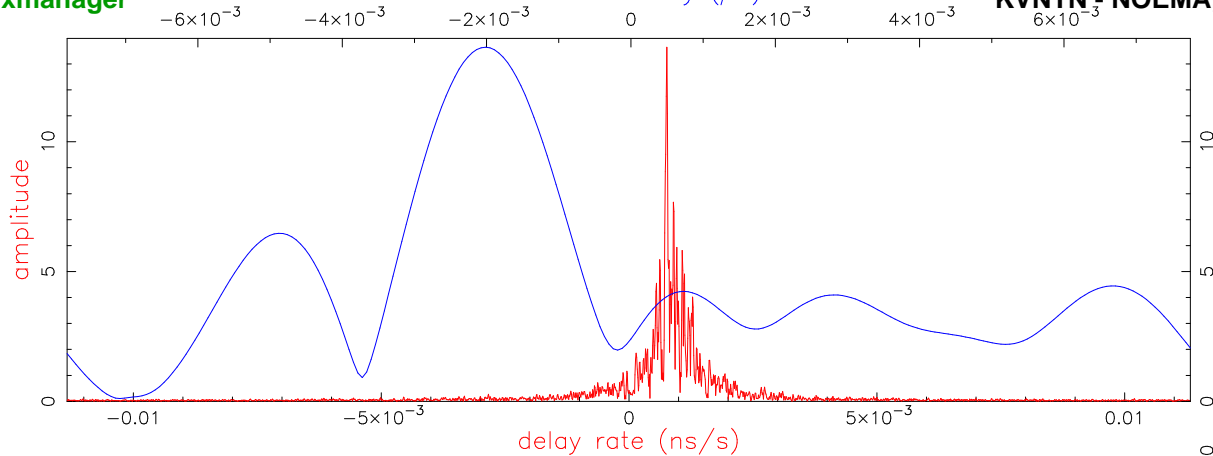
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, tN

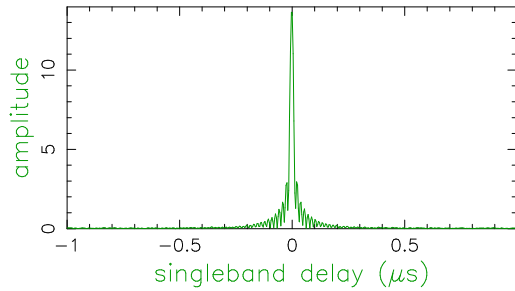
KVNTN - NOEMA, fgroup W, pol RR

multiband delay (μ s)

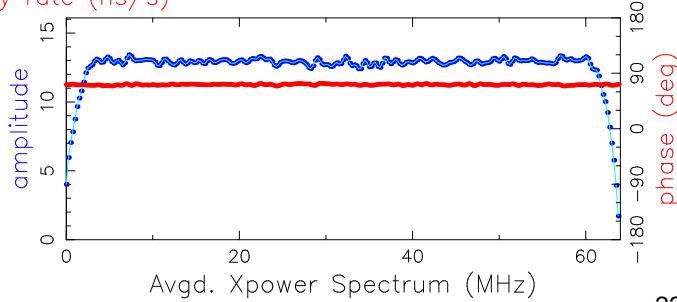


Fringe quality 3

SNR 782.0
 Int time 419.781
 Amp 13.983
 Phase 71.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.002016
 MBD -0.002013
 Fringe rate (Hz)
 0.065971
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

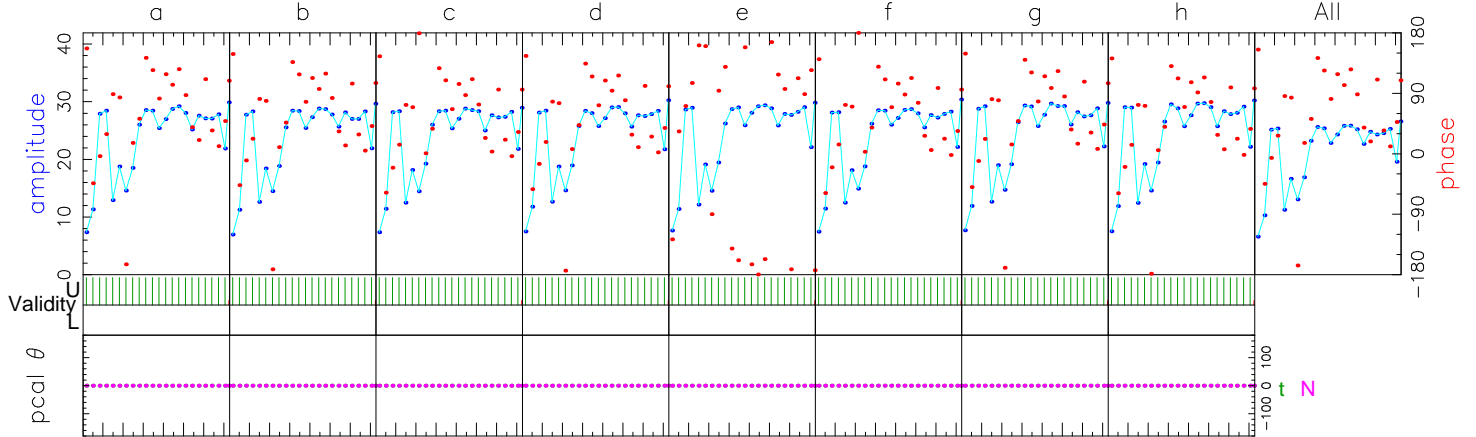


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050759
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.27591110849E+02									
Sband delay (usec)	-2.27591114575E+02									
Phase delay (usec)	-2.27589096023E+02									
Delay rate (us/s)	-1.53759600448E+00									
Total phase (deg)		-263.3								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
t N										
13.983 +/- 0.018										
13.086										
0.000										
21.212										
15.389										
0.000E+00										
-1.04275609365E-05										
71.4										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
simultaneous interpolator										

t: az 298.9 el 45.3 pa 82.7 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11892.538 -1930.067 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/tN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/tN.W.39.1W6ILQ

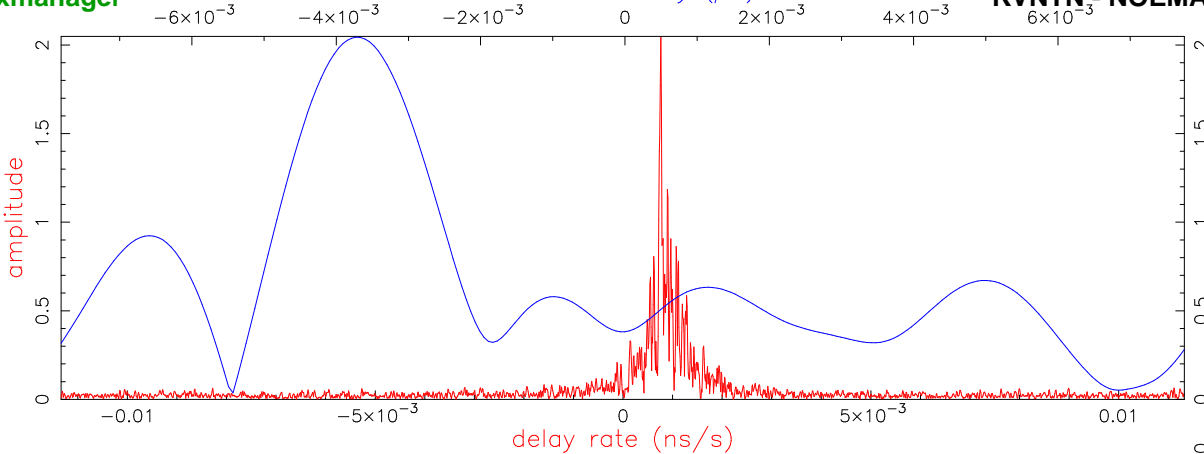
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, tN

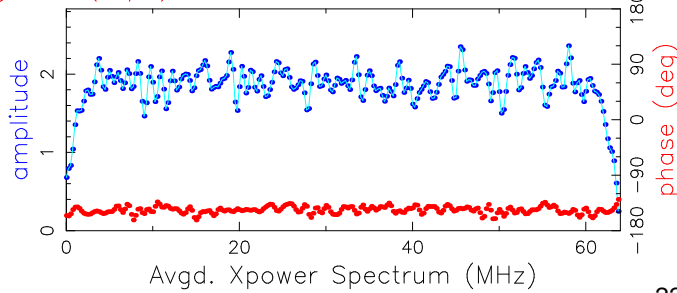
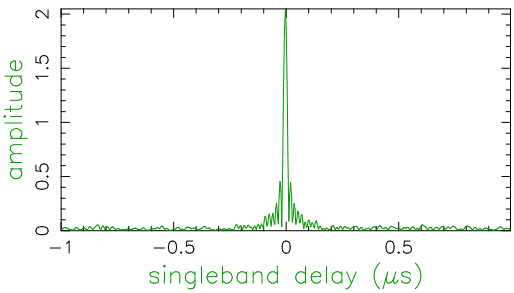
KVNTN- NOEMA, fgroup W, pol LR

multiband delay (μ s)



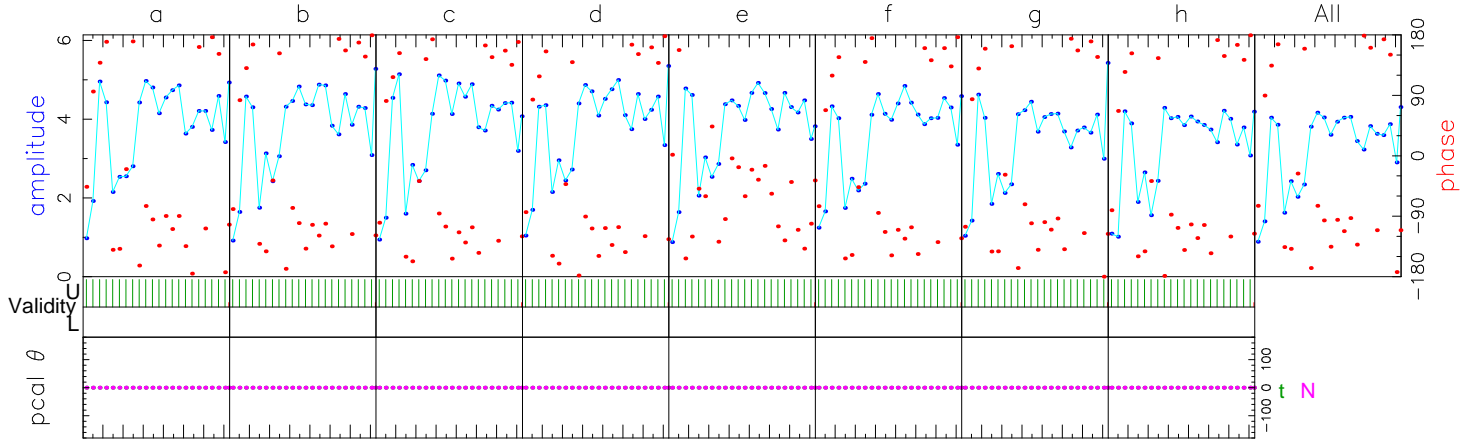
Fringe quality 3

SNR 114.6
 Int time 419.781
 Amp 2.049
 Phase -146.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003715
 MBD -0.003709
 Fringe rate (Hz)
 0.065943
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050804
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



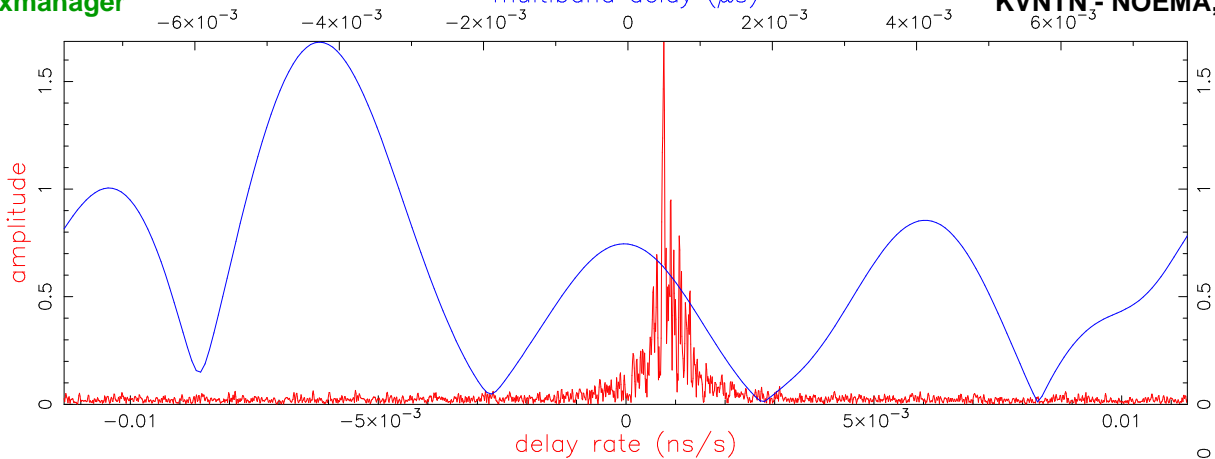
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-144.2	-151.0	-161.8	-159.4	-72.2	-161.1	-150.3	-156.5	Phase	-146.7
	2.3	2.4	2.3	2.4	2.4	2.2	2.1	2.1	Ampl.	2.3
	256.0	256.0	256.1	256.1	256.1	256.2	256.1	256.0	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27592807037E+02		Apriori delay (usec)		-2.27589098325E+02		Resid mbdelay (usec)		-3.70871E-03	+/- 9.5E-06
Sband delay (usec)	-2.27592813325E+02		Apriori clock (usec)		1.3021048E+01		Resid sbdelay (usec)		-3.71500E-03	+/- 7.5E-05
Phase delay (usec)	-2.27589103056E+02		Apriori clockrate (us/s)		7.4350005E-06		Resid phdelay (usec)		-4.73066E-06	+/- 3.2E-08
Delay rate (us/s)	-1.53759600480E+00		Apriori rate (us/s)		-1.53759677034E+00		Resid rate (us/s)		7.65537E-07	+/- 1.3E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.04275609365E-05		Resid phase (deg)		-146.7	+/- 1.0

	RMS	Theor.	Amplitude	2.049 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	57.6	2.4	Search (2048X32)	2.010	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	74.6	4.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	32.3	1.4	Inc. seg. avg.	3.230	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	13.2	2.5	Inc. frq. avg.	2.295	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
t: az 298.9 el 45.3 pa 82.7	N: az 69.2 el 44.7 pa -64.5		u,v (fr/asec) 11892.538 -1930.067				ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/tN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/tN.W.59.1W6ILQ

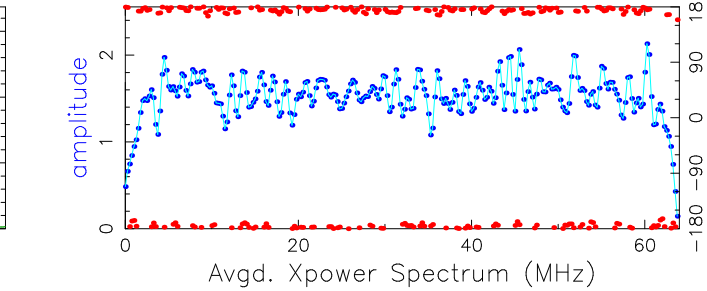
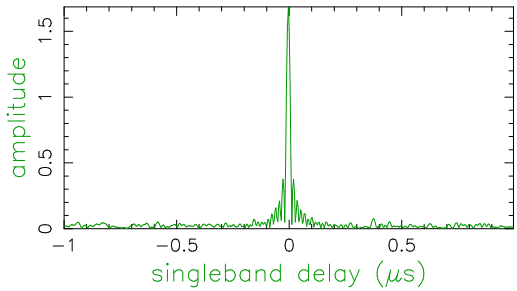
simultaneous interpolator

multiband delay (μ s)



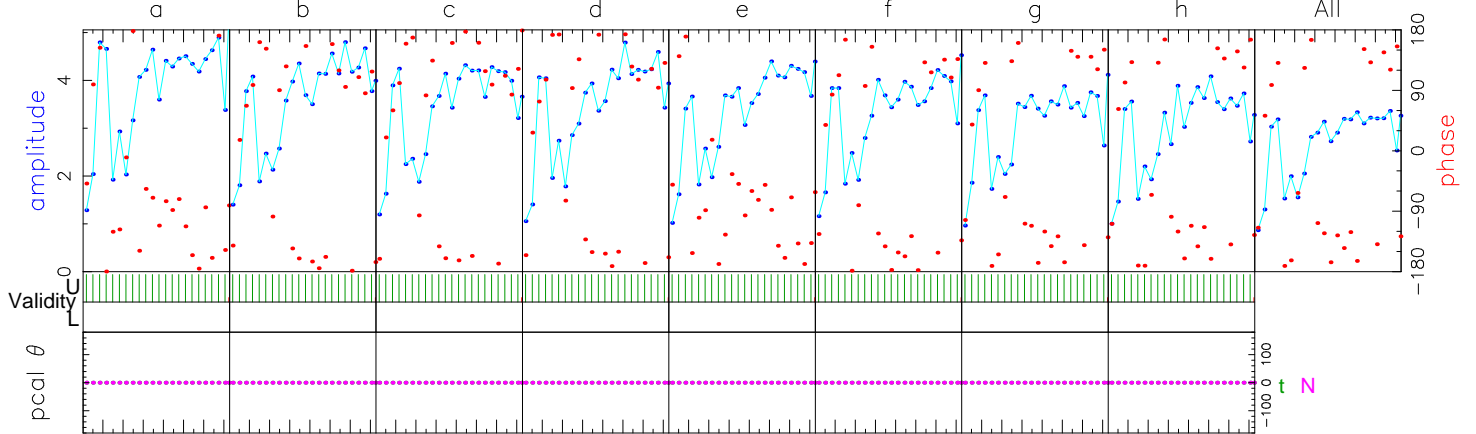
Fringe quality 2

SNR 94.3
Int time 419.781
Amp 1.686
Phase -178.6
PFD 0.0e+00
Delays (us)
SBD -0.004019
MBD -0.004272
Fringe rate (Hz)
0.065888
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 031501.00
Stop 032200.84
FRT 031831.00
Corr/FF/build
2021:287:021716
2021:287:050807
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-126.9	144.9	148.3	154.6	-107.8	166.9	-177.3	-174.6	Phase	-178.6
	2.4	2.3	2.2	2.2	2.2	2.0	1.9	1.9	Ampl.	2.1
	255.8	255.7	256.0	256.0	255.9	256.2	256.1	256.0	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27593369943E+02		Apriori delay (usec)		-2.27589098325E+02		Resid mbdelay (usec)		-4.27162E-03	+/- 1.2E-05
Sband delay (usec)	-2.27593117575E+02		Apriori clock (usec)		1.3021048E+01		Resid sbdelay (usec)		-4.01925E-03	+/- 9.1E-05
Phase delay (usec)	-2.27589104084E+02		Apriori clockrate (us/s)		7.4350005E-06		Resid phdelay (usec)		-5.75862E-06	+/- 3.9E-08
Delay rate (us/s)	-1.53759600545E+00		Apriori rate (us/s)		-1.53759677034E+00		Resid rate (us/s)		7.64890E-07	+/- 1.6E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.04275609365E-05		Resid phase (deg)		-178.6	+/- 1.2

	RMS	Theor.	Amplitude	1.686 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.0	2.9	Search (2048X32)	1.658	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.4	5.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	43.0	1.7	Inc. seg. avg.	2.660	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	27.5	3.0	Inc. frq. avg.	2.117	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

t: az 298.9 el 45.3 pa 82.7 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11892.538 -1930.067 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/tN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/tN.W.78.1W6ILQ

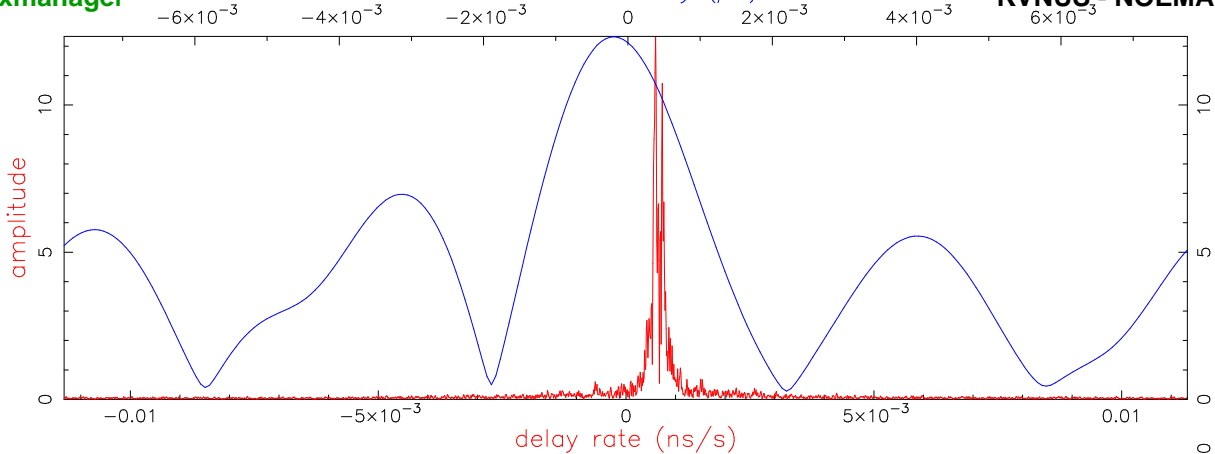
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, uN

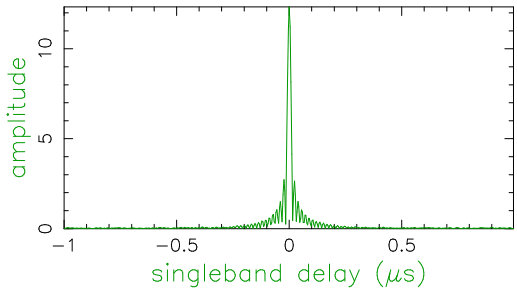
KVNUS - NOEMA, fgroup W, pol LL

multiband delay (μ s)

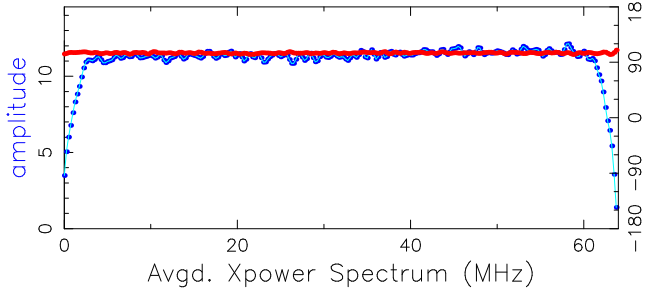


Fringe quality 2

SNR 690.2
 Int time 419.791
 Amp 12.333
 Phase 108.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000107
 MBD -0.000196
 Fringe rate (Hz)
 0.051617
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

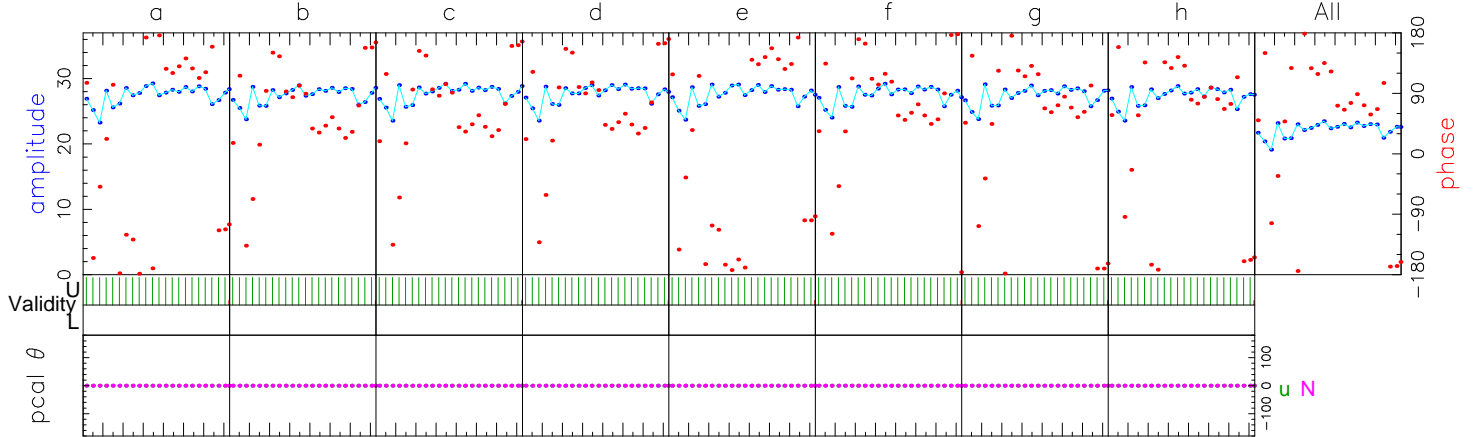


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050755
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



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

Group delay (usec)(sbd)	-4.70403250079E+02	Apriori delay (usec)	-4.70403054348E+02	Resid mbdelay (usec)	-1.95730E-04	+/-	1.6E-06
Sband delay (usec)	-4.70402947598E+02	Apriori clock (usec)	2.7779512E+01	Resid sbdelay (usec)	1.06750E-04	+/-	1.2E-05
Phase delay (usec)	-4.70403050846E+02	Apriori clockrate (us/s)	8.7619998E-06	Resid phdelay (usec)	3.50247E-06	+/-	5.4E-09
Delay rate (us/s)	-1.53953582014E+00	Apriori rate (us/s)	-1.53953641936E+00	Resid rate (us/s)	5.99224E-07	+/-	2.2E-11
Total phase (deg)		Apriori accel (us/s/s)	-6.59121772247E-06	Resid phase (deg)	108.6	+/-	0.2

ph/seg (deg)	63.4	0.4	Amplitude	12.333 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	80.7	0.7	Search (2048X32)	11.998	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	42.6	0.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	23.8	0.4	Inc. seg. avg.	22.222	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
			Inc. frq. avg.	15.271	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

u: az 297.4 el 44.4 pa 77.5 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11916.293 -1443.146 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/uN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/uN.W.19.1W6ILQ

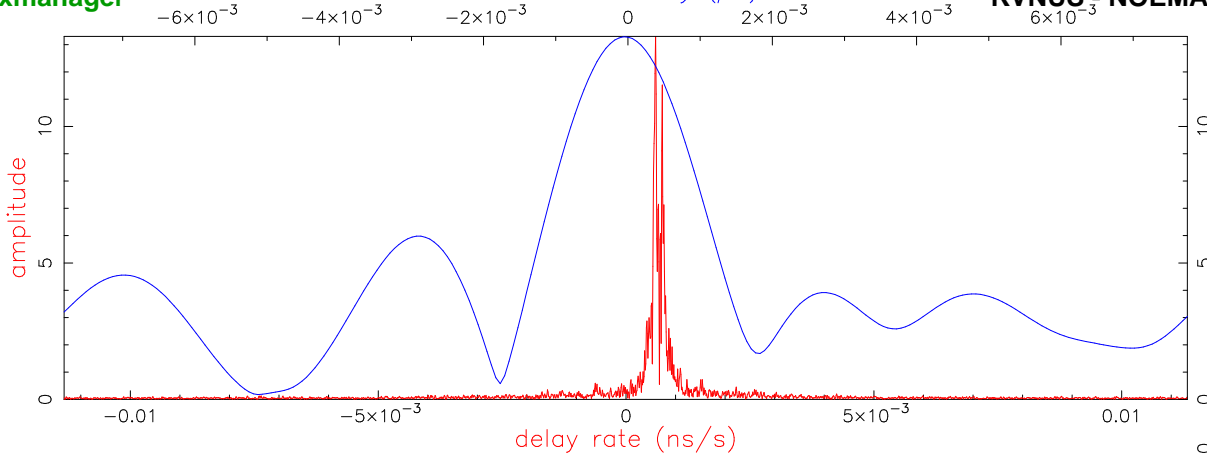
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, uN

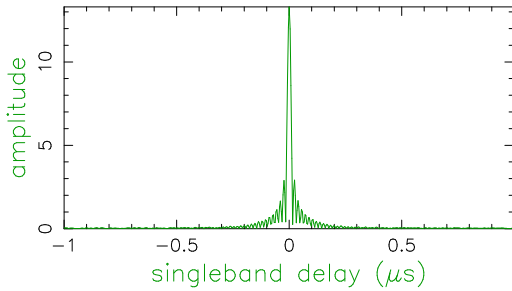
KVNUS - NOEMA, fgroup W, pol RR

multiband delay (μ s)

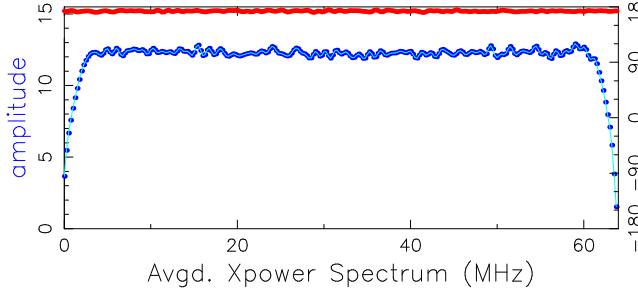


Fringe quality 3

SNR 744.6
 Int time 419.791
 Amp 13.304
 Phase 172.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.000077
 MBD -0.000043
 Fringe rate (Hz)
 0.051635
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

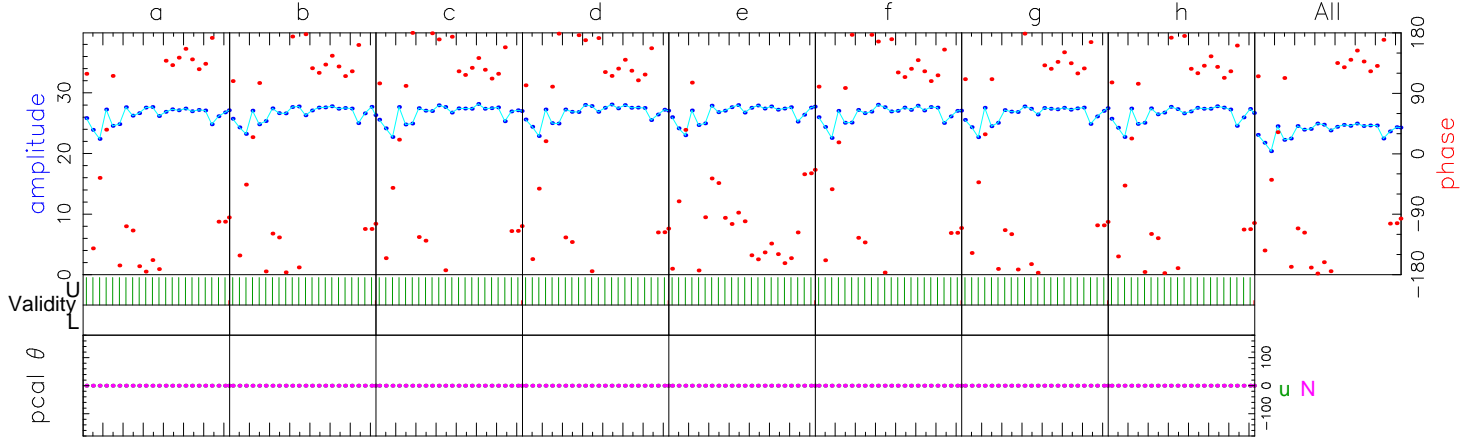


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050759
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

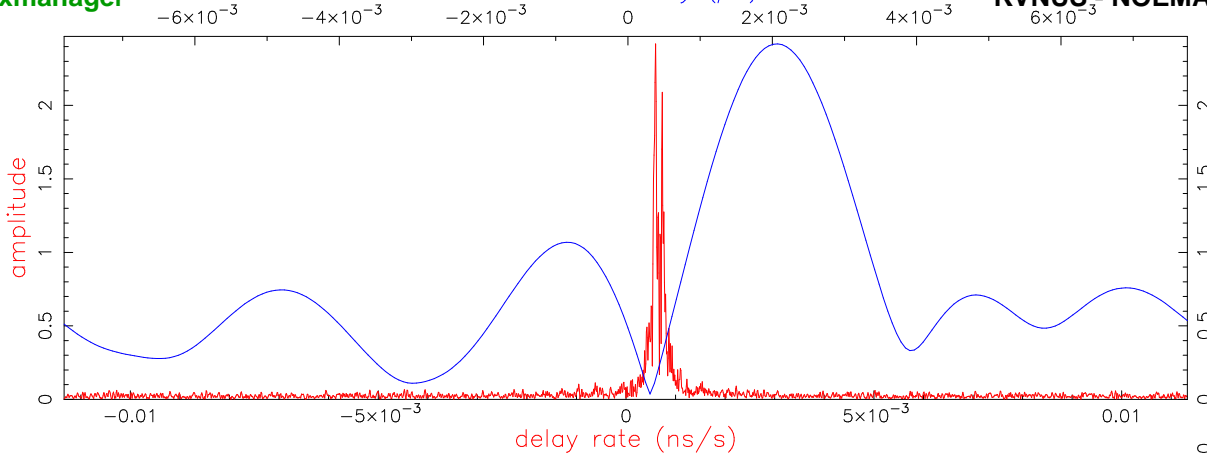
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.70403097016E+02		Apriori delay (usec)	-4.70403054348E+02	Resid mbdelay (usec)	-4.26680E-05	+/-	1.5E-06		
Sband delay (usec)	-4.70403130848E+02		Apriori clock (usec)	2.7779512E+01	Resid sbdelay (usec)	-7.65000E-05	+/-	1.2E-05		
Phase delay (usec)	-4.70403048780E+02		Apriori clockrate (us/s)	8.7619998E-06	Resid phdelay (usec)	5.56818E-06	+/-	5.0E-09		
Delay rate (us/s)	-1.53953581993E+00		Apriori rate (us/s)	-1.53953641936E+00	Resid rate (us/s)	5.99430E-07	+/-	2.0E-11		
Total phase (deg)		136.1	Apriori accel (us/s/s)	-6.59121772247E-06	Resid phase (deg)	172.7	+/-	0.2		

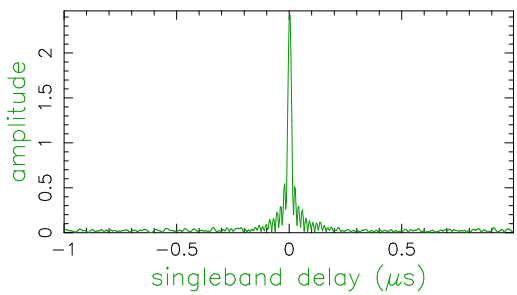
ph/seg (deg) 63.2 0.4 Search (2048X32) 12.928 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.6 0.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.0 0.2 Inc. seg. avg. 23.825 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.5 0.4 Inc. frq. avg. 14.836 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 297.4 el 44.4 pa 77.5 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11916.293 -1443.146 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/uN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/uN.W.35.1W6ILQ

multiband delay (μ s)

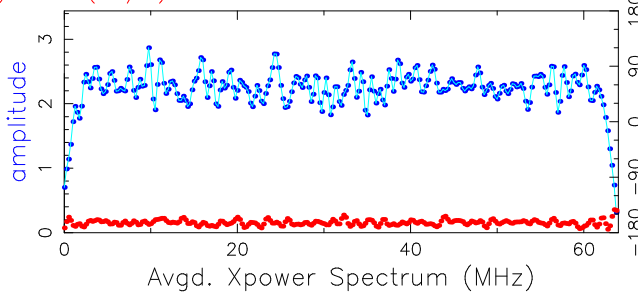


Fringe quality 3

SNR 138.2
Int time 419.791
Amp 2.470
Phase -162.6
PFD 0.0e+00
Delays (us)
SBD 0.002160
MBD 0.002058
Fringe rate (Hz)
0.051658
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

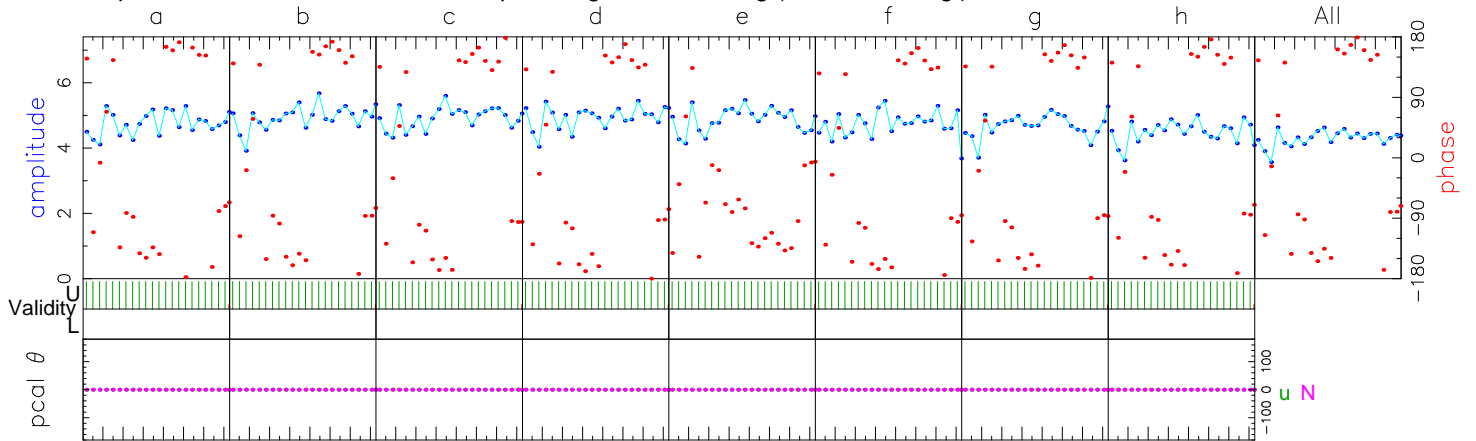


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 031501.00
Stop 032200.84
FRT 031831.00
Corr/FF/build
2021:287:021716
2021:287:050803
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
u:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.70400995923E+02				-4.70403054348E+02				2.05843E-03	+/- 7.9E-06
Sband delay (usec)	-4.70400894098E+02				2.7779512E+01				2.16025E-03	+/- 6.2E-05
Phase delay (usec)	-4.70403059590E+02				8.7619998E-06				-5.24186E-06	+/- 2.7E-08
Delay rate (us/s)	-1.53953581966E+00				-1.53953641936E+00				5.99700E-07	+/- 1.1E-10
Total phase (deg)			-199.1		-6.59121772247E-06				-162.6	+/- 0.8
	RMS	Theor.	Amplitude	2.470 +/- 0.018						
ph/seg (deg)	62.6	2.0	Search (2048X32)	2.381						
amp/seg (%)	74.9	3.5	Interp.	0.000						
ph/frq (deg)	31.3	1.2	Inc. seg. avg.	4.302						
amp/frq (%)	10.0	2.0	Inc. frq. avg.	2.694						
u: az 297.4 el 44.4 pa 77.5			N: az 69.2 el 44.7 pa -64.5							
			u,v (fr/asec) 11916.293 -1443.146							
Control file: cf_1234_gmva			Input file: /Exps/c211a/v2/1234/No0160/uN..1W6ILQ							
			Output file: /Exps/c211a/v2/1234/No0160/uN.W.56.1W6ILQ							

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_coherence infinite ion window (TEC) 0.00 0.00

simultaneous interpolator

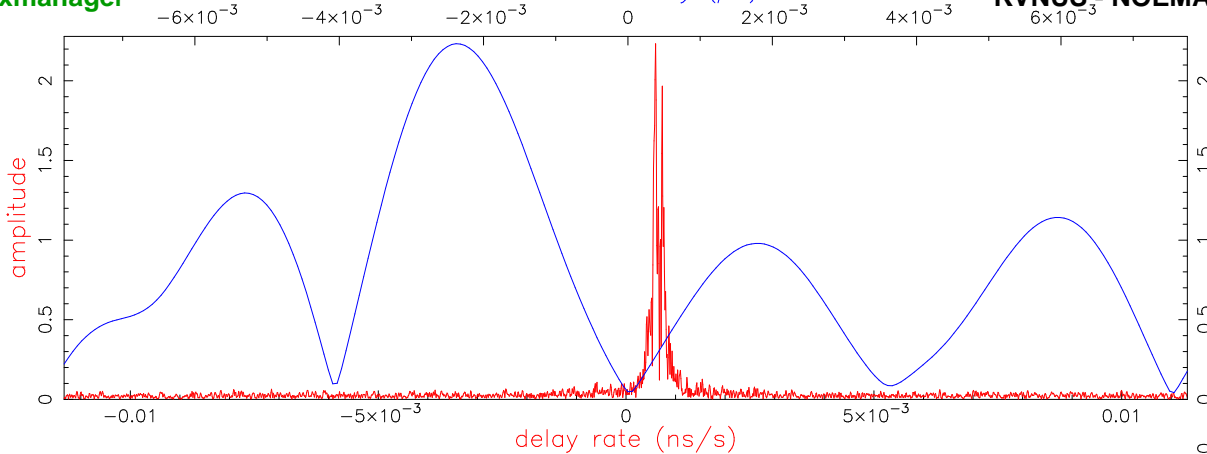
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, uN

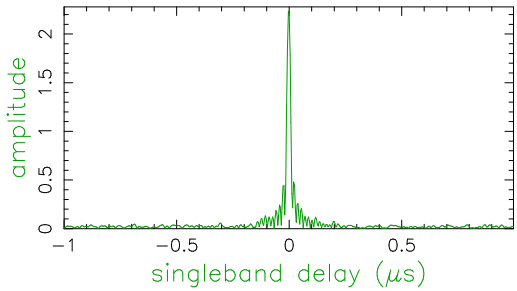
KVNUS- NOEMA, fgroup W, pol RL

multiband delay (μ s)

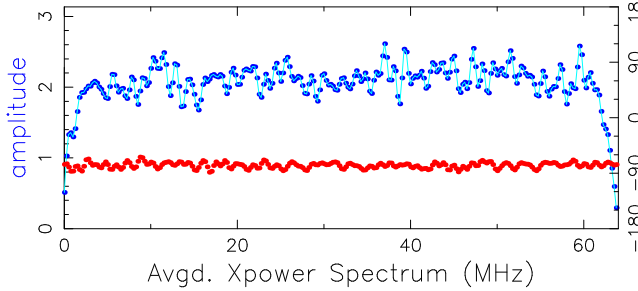


Fringe quality 2

SNR 127.6
 Int time 419.791
 Amp 2.279
 Phase -74.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002152
 MBD -0.002363
 Fringe rate (Hz)
 0.051607
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

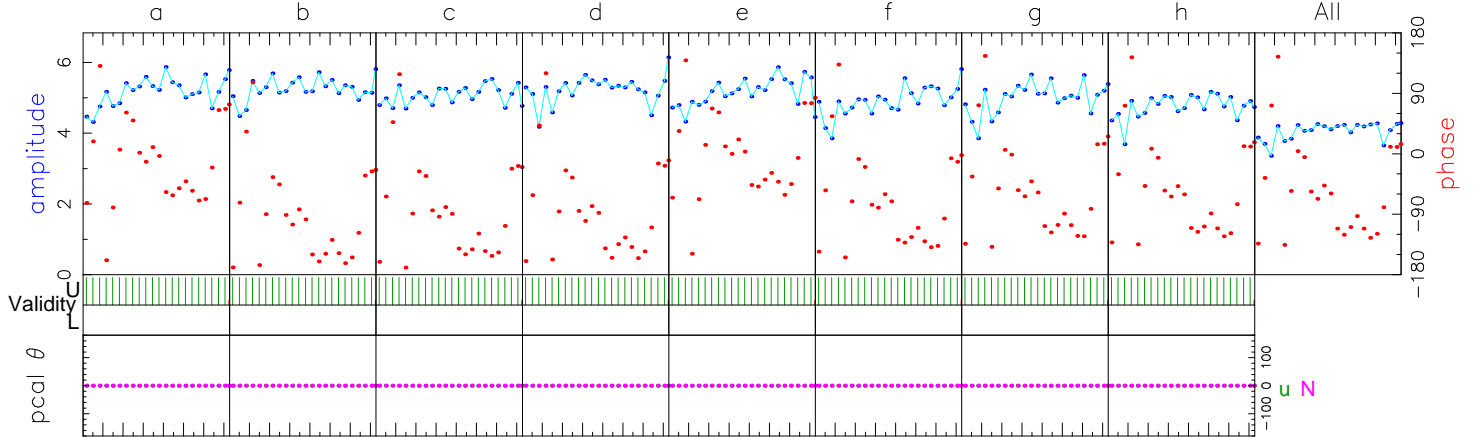


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050806
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



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

Group delay (usec)(sbd)	-4.70405417235E+02	Apriori delay (usec)	-4.70403054348E+02	Resid mbdelay (usec)	-2.36289E-03	+/-	8.5E-06
Sband delay (usec)	-4.70405206598E+02	Apriori clock (usec)	2.7779512E+01	Resid sbdelay (usec)	-2.15225E-03	+/-	6.8E-05
Phase delay (usec)	-4.70403056762E+02	Apriori clockrate (us/s)	8.7619998E-06	Resid phdelay (usec)	-2.41345E-06	+/-	2.9E-08
Delay rate (us/s)	-1.53953582026E+00	Apriori rate (us/s)	-1.53953641936E+00	Resid rate (us/s)	5.99106E-07	+/-	1.2E-10
Total phase (deg)	-111.4	Apriori accel (us/s/s)	-6.59121772247E-06	Resid phase (deg)	-74.8	+/-	0.9

ph/seg (deg)	63.5	2.2	Search (2048X32)	2.201	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	78.8	3.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	43.4	1.3	Inc. seg. avg.	4.055	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	23.7	2.2	Inc. frq. avg.	2.808	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

u: az 297.4 el 44.4 pa 77.5 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11916.293 -1443.146 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/uN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/uN.W.75.1W6ILQ

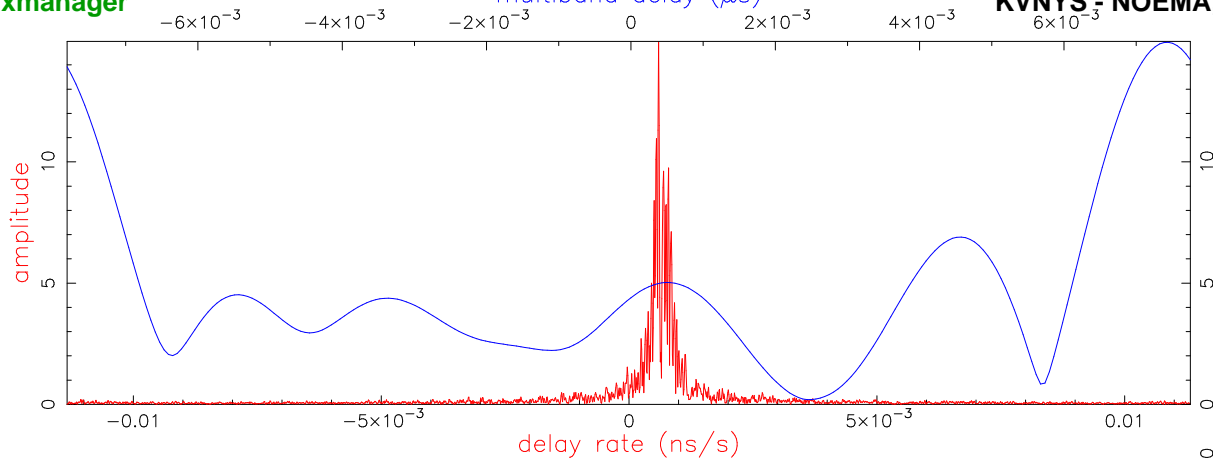
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, yN

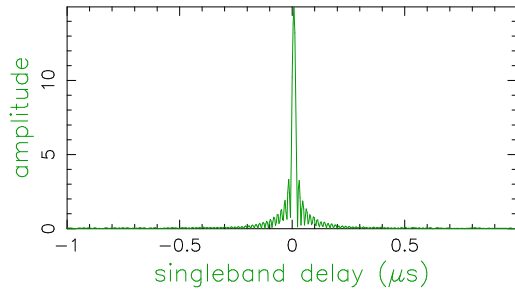
KVNYS - NOEMA, fgroup W, pol RR

multiband delay (μ s)

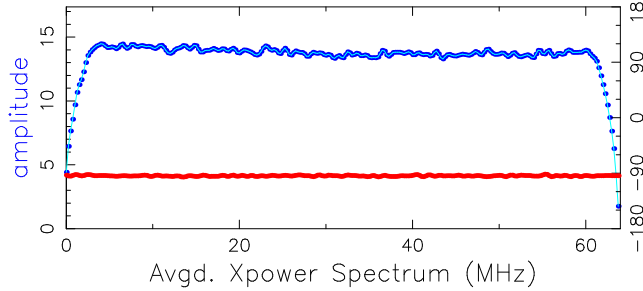


Fringe quality 3

SNR 837.8
Int time 419.785
Amp 14.970
Phase -94.5
PFD 0.0e+00
Delays (us)
SBD 0.007395
MBD 0.007425
Fringe rate (Hz)
0.051666
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

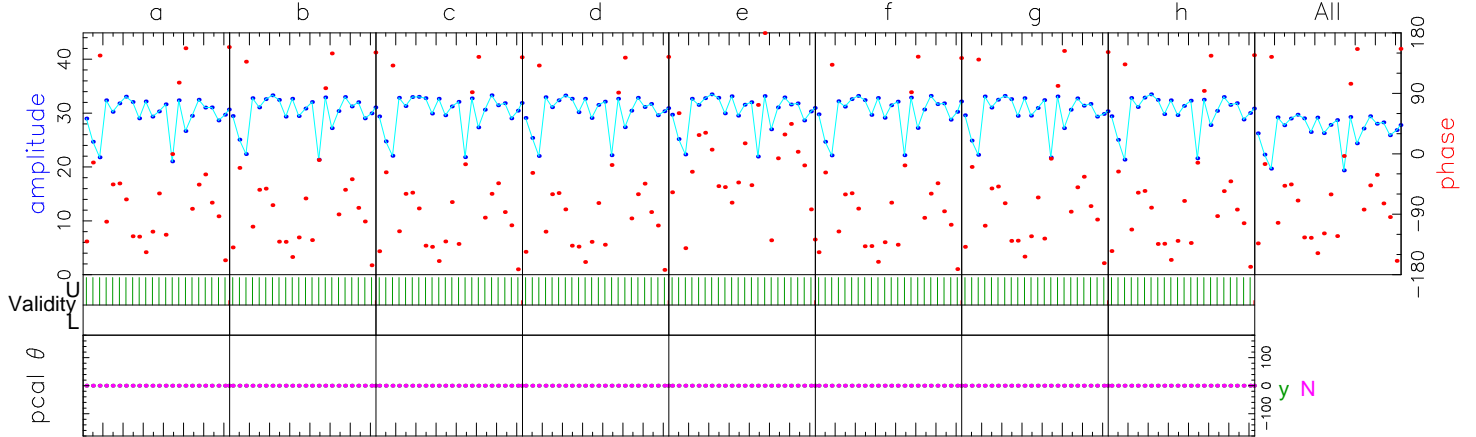


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 031501.00
Stop 032200.84
FRT 031831.00
Corr/FF/build
2021:287:021716
2021:287:050813
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-93.0	-100.8	-106.7	-107.3	-18.3	-107.0	-98.7	-104.1	Phase	-94.5
	16.5	16.7	16.8	16.8	16.8	16.8	16.7	16.8	Ampl.	16.8
	258.8	258.9	259.0	258.8	259.0	258.9	258.9	258.9	Sbd box	258.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
y	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)	1.89548482234E+02		Apriori delay (usec)		1.89541057277E+02		Resid mbdelay (usec)		7.42496E-03	+/- 1.3E-06
Sband delay (usec)	1.89548451777E+02		Apriori clock (usec)		1.3993231E+01		Resid sbdelay (usec)		7.39450E-03	+/- 1.0E-05
Phase delay (usec)	1.89541054230E+02		Apriori clockrate (us/s)		7.6350003E-06		Resid phdelay (usec)		-3.04734E-06	+/- 4.4E-09
Delay rate (us/s)	-1.49992266388E+00		Apriori rate (us/s)		-1.49992326367E+00		Resid rate (us/s)		5.99790E-07	+/- 1.8E-11
Total phase (deg)	148.1		Apriori accel (us/s/s)		-8.02202127060E-06		Resid phase (deg)		-94.5	+/- 0.1

	RMS	Theor.	Amplitude	14.970 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.3	0.3	Search (2048X32)	14.662	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	81.8	0.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	32.7	0.2	Inc. seg. avg.	26.861	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	11.9	0.3	Inc. frq. avg.	16.751	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

y: az 295.0 el 46.9 pa 76.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11606.393 -1355.905 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/yN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/yN.W.101.1W6ILQ

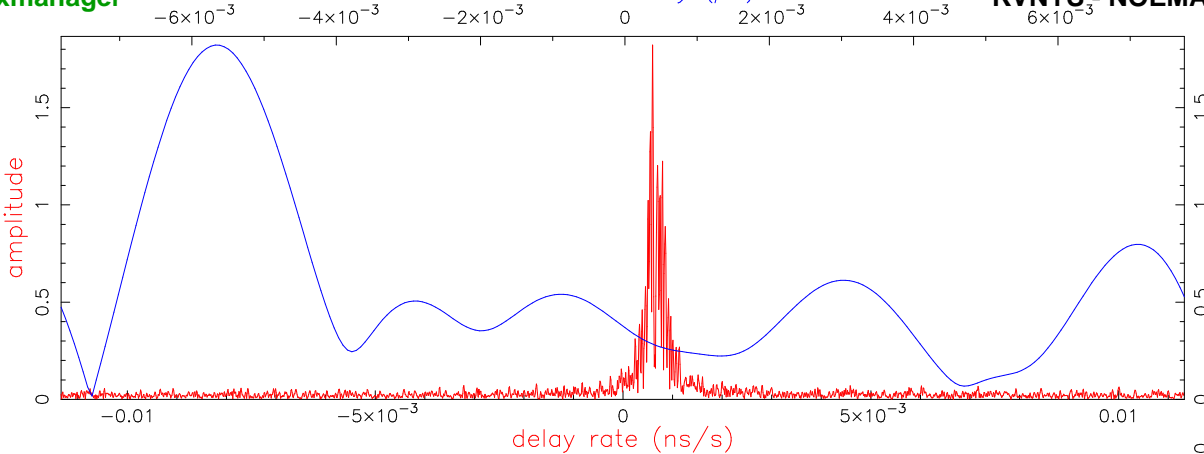
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, yN

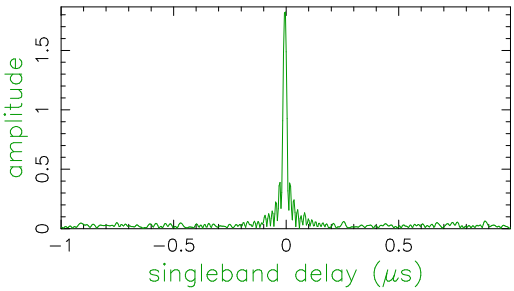
KVNYS- NOEMA, fgroup W, pol LR

multiband delay (μ s)

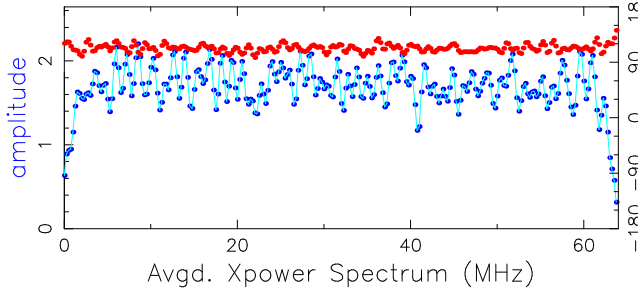


Fringe quality 3

SNR 104.5
 Int time 419.785
 Amp 1.867
 Phase 111.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.005799
 MBD -0.005656
 Fringe rate (Hz)
 0.051652
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

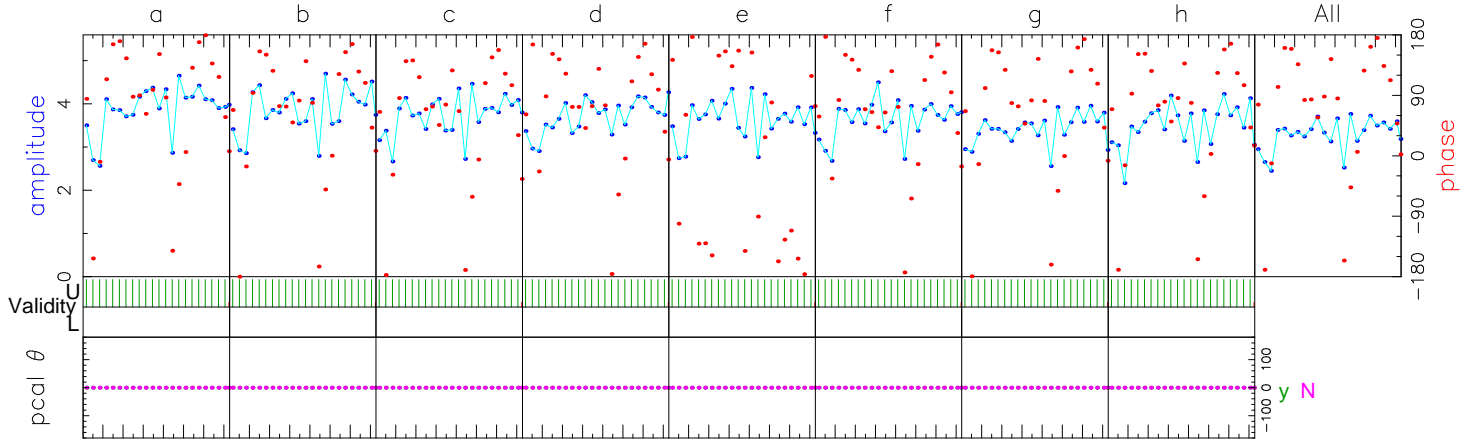


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050817
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
y	1000	1000	1000	1000	1000	1000	1000	1000			
N	1000	1000	1000	1000	1000	1000	1000	1000			
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
y	1000	1000	1000	1000	1000	1000	1000	1000			
N	1000	1000	1000	1000	1000	1000	1000	1000			
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		1.89535401609E+02			1.89541057277E+02						
Sband delay (usec)		1.89535257777E+02			1.3993231E+01						
Phase delay (usec)		1.89541060873E+02			7.6350003E-06						
Delay rate (us/s)		-1.49992266405E+00			-1.49992326367E+00						
Total phase (deg)			354.1		-8.02202127060E-06						
				Apriori delay (usec)					Resid mbdelay (usec)	-5.65567E-03	+/- 1.0E-05
				Apriori clock (usec)	1.786				Resid sbdelay (usec)	-5.79950E-03	+/- 8.2E-05
				Apriori clockrate (us/s)	0.000				Resid phdelay (usec)	3.59577E-06	+/- 3.5E-08
				Apriori rate (us/s)	2.018				Resid rate (us/s)	5.99623E-07	+/- 1.5E-10
				Apriori accel (us/s/s)					Resid phase (deg)	111.5	+/- 1.1
ph/seg (deg)	64.7	2.6		Search (2048X32)	1.786				PCal mode: MANUAL, MANUAL		
amp/seg (%)	79.5	4.6		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	30.6	1.6		Inc. seg. avg.	3.302				Bits/sample: 2x2		
amp/frq (%)	9.5	2.7		Inc. frq. avg.	2.018				SampCntNorm: enabled		
									Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
y: az 295.0 el 46.9 pa 76.1				N: az 69.2 el 44.7 pa -64.5					ion window (TEC)	0.00	0.00
Control file: cf_1234_gmva				Input file: /Exps/c211a/v2/1234/No0160/yN..1W6ILQ					simultaneous interpolator		
				Output file: /Exps/c211a/v2/1234/No0160/yN.W.119.1W6ILQ							

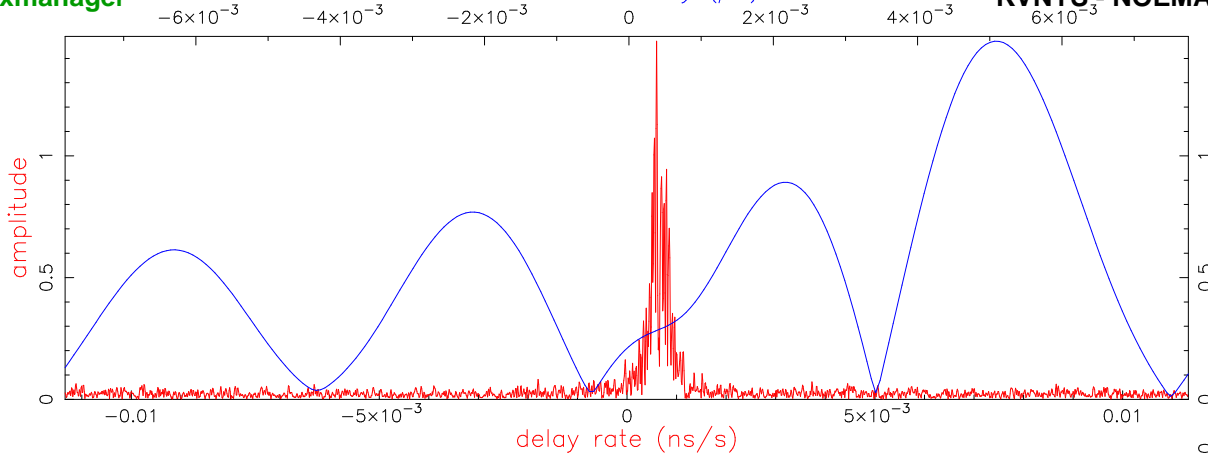
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, yN

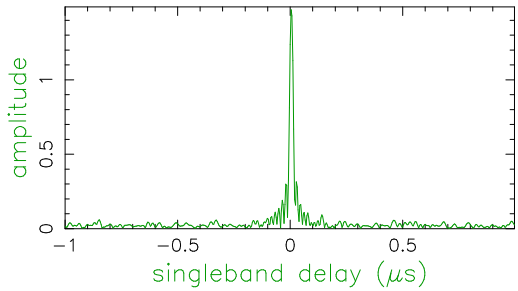
KVNYS- NOEMA, fgroup W, pol RL

multiband delay (μ s)

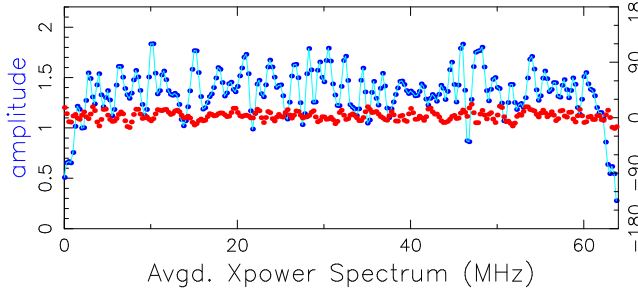


Fringe quality 2

SNR 83.4
 Int time 419.785
 Amp 1.490
 Phase 5.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.005285
 MBD 0.005093
 Fringe rate (Hz)
 0.051635
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

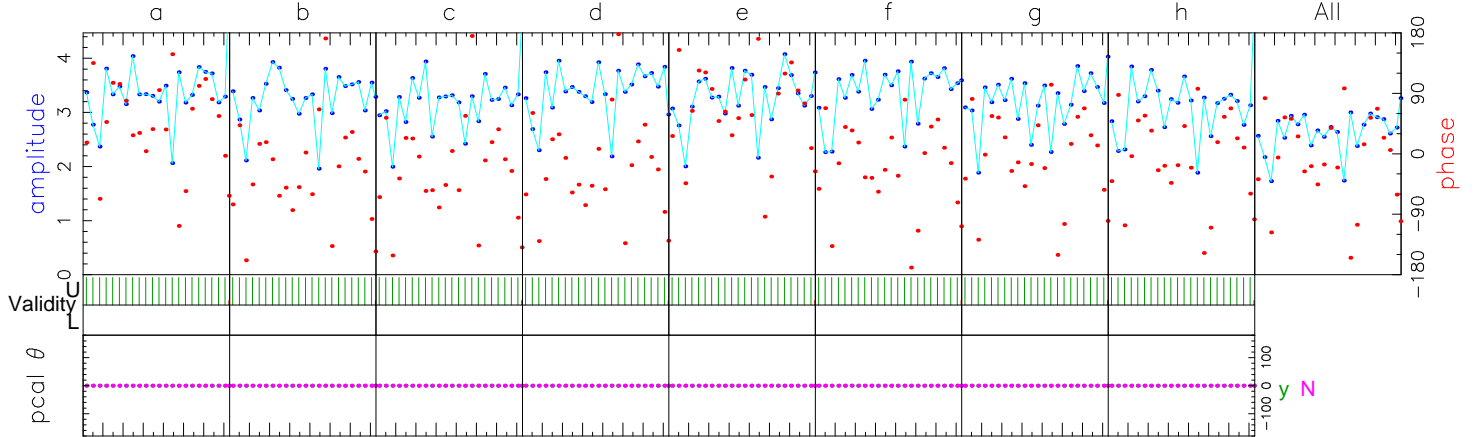


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050820
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



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

Group delay (usec)(sbd)	1.89546150171E+02	Apriori delay (usec)	1.89541057277E+02	Resid mbdelay (usec)	5.09289E-03	+/-	1.3E-05
Sband delay (usec)	1.89546342527E+02	Apriori clock (usec)	1.3993231E+01	Resid sbdelay (usec)	5.28525E-03	+/-	1.0E-04
Phase delay (usec)	1.89541057441E+02	Apriori clockrate (us/s)	7.6350003E-06	Resid phdelay (usec)	1.64467E-07	+/-	4.4E-08
Delay rate (us/s)	-1.49992266424E+00	Apriori rate (us/s)	-1.49992326367E+00	Resid rate (us/s)	5.99436E-07	+/-	1.8E-10
Total phase (deg)	247.7	Apriori accel (us/s/s)	-8.02202127060E-06	Resid phase (deg)	5.1	+/-	1.4

ph/seg (deg)	64.9	RMS	3.3	Theor.	3.3	Amplitude	1.490 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.4		5.7		5.7	Search (2048X32)	1.443	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	43.8		1.9		1.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	24.2		3.4		3.4	Inc. seg. avg.	2.616	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	1.845	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 295.0 el 46.9 pa 76.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11606.393 -1355.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/yN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/yN.W.136.1W6ILQ

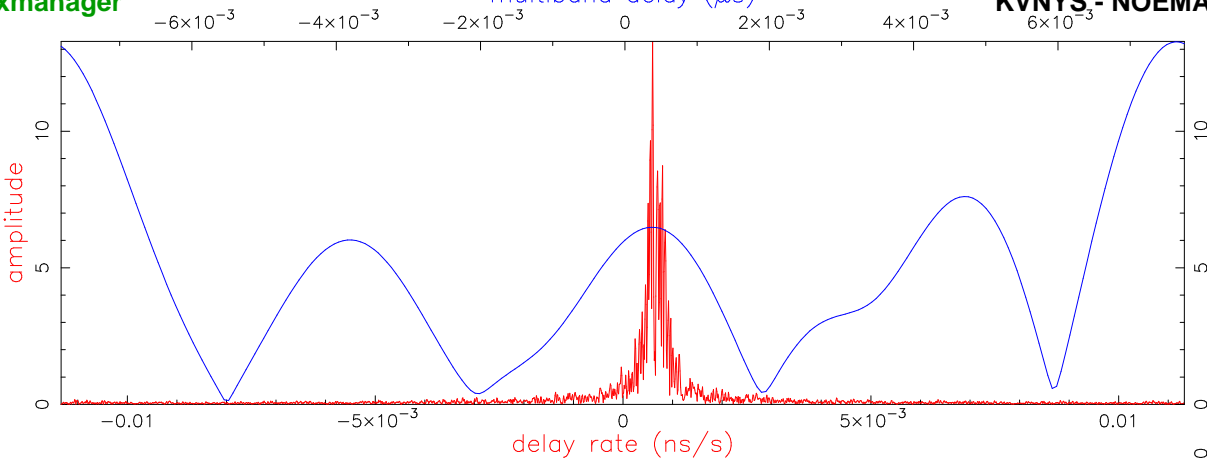
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, yN

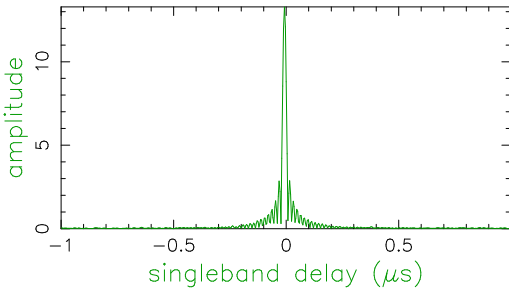
KVNSY- NOEMA, fgroup W, pol LL

multiband delay (μs)

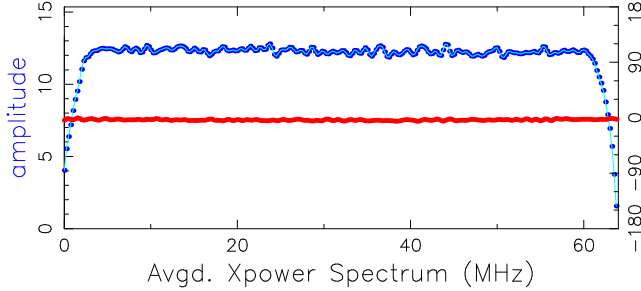


Fringe quality 2

SNR 743.7
 Int time 419.785
 Amp 13.288
 Phase 179.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.007692
 MBD 0.007642
 Fringe rate (Hz)
 0.051652
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

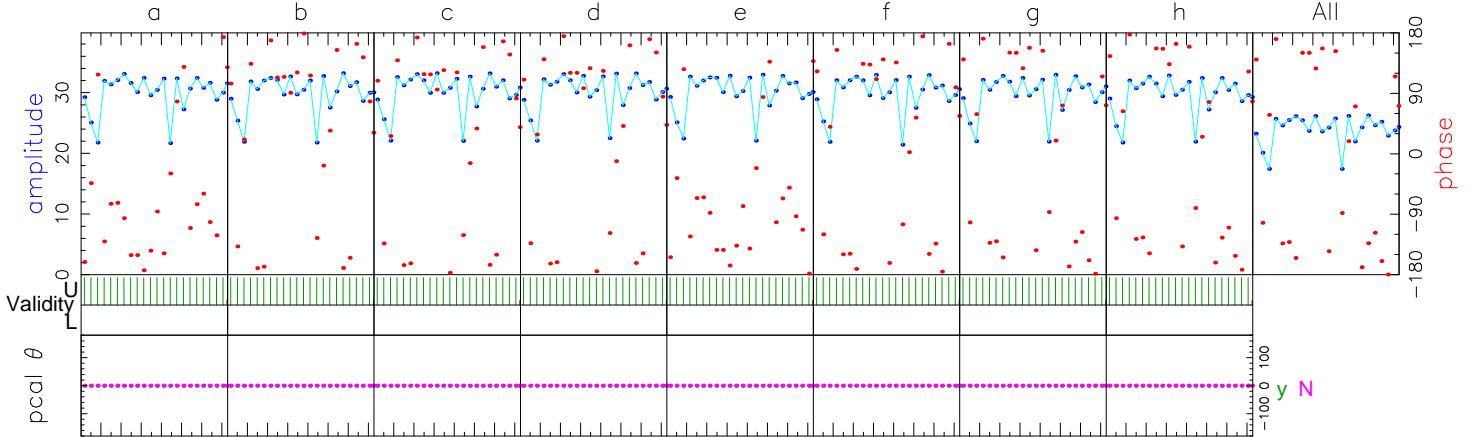


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031501.00
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050810
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.4	143.4	148.0	150.1	-113.6	163.3	-179.4	-173.3	Phase	179.8
	16.8	16.7	16.8	16.8	16.7	16.6	16.5	16.4	Ampl.	16.7
	254.9	254.8	255.2	254.9	255.0	255.1	255.1	255.1	Sbd box	255.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.89533074296E+02	Apriori delay (usec)		1.89541057277E+02	Resid mbdelay (usec)		7.64202E-03	+/- 1.5E-06	
Sband delay (usec)	1.89533365527E+02	Apriori clock (usec)		1.3993231E+01	Resid sbdelay (usec)		-7.69175E-03	+/- 1.2E-05	
Phase delay (usec)	1.89541063076E+02	Apriori clockrate (us/s)		7.6350003E-06	Resid phdelay (usec)		5.79939E-06	+/- 5.0E-09	
Delay rate (us/s)	-1.49992266405E+00	Apriori rate (us/s)		-1.49992326367E+00	Resid rate (us/s)		5.99627E-07	+/- 2.0E-11	
Total phase (deg)	62.4		Apriori accel (us/s/s)		-8.02202127060E-06	Resid phase (deg)		179.8	+/- 0.2

ph/seg (deg)	65.2	0.4	Search (2048X32)	12.840	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	81.7	0.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	43.7	0.2	Inc. seg. avg.	23.858	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.4	0.4	Inc. frq. avg.	16.656	Data rate(Mb/s): 2048		nlags: 256 t_coherence infinite		ion window (TEC)	0.00	0.00

y: az 295.0 el 46.9 pa 76.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 11606.393 -1355.905 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/yN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/yN.W.84.1W6ILQ

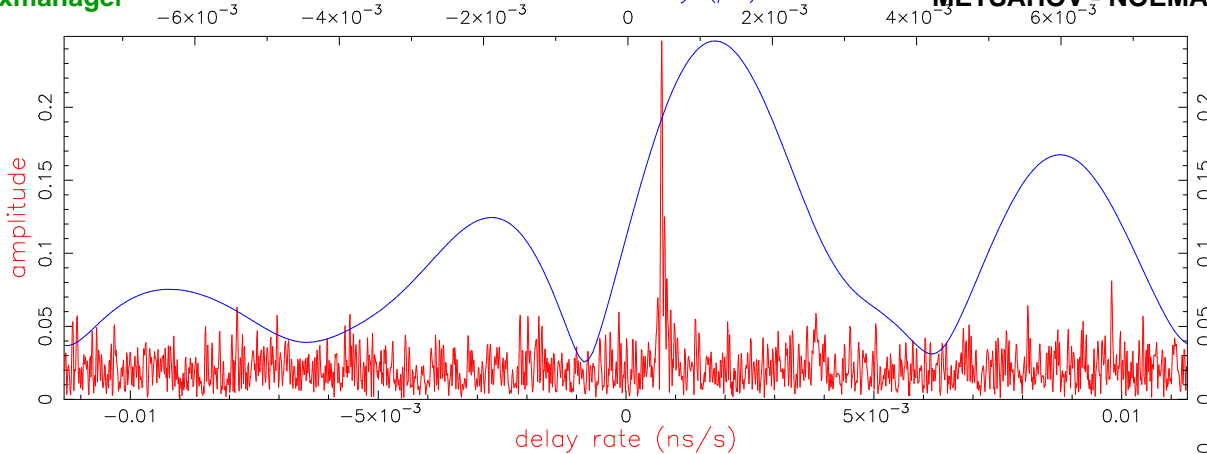
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W6ILQ, No0160, ZN

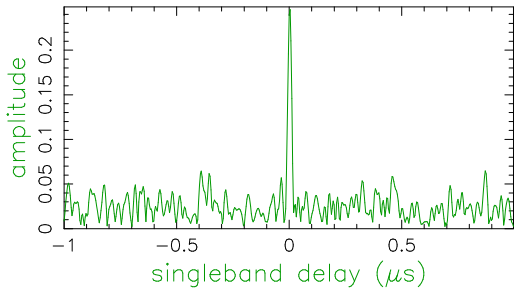
METSAHOV - NOEMA, fgroup W, pol RR

multiband delay (μ s)

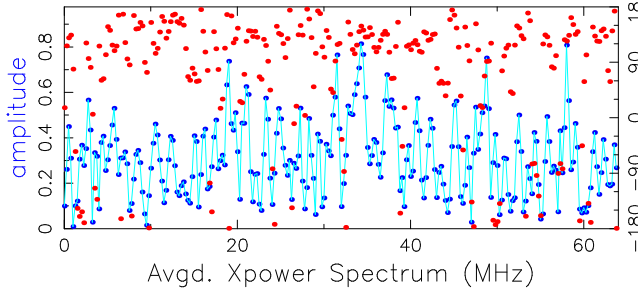


Fringe quality 9

SNR 13.7
 Int time 405.628
 Amp 0.249
 Phase 143.0
 PFD 9.7e-34
 Delays (us)
 SBD 0.002507
 MBD 0.001191
 Fringe rate (Hz) 0.062116
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

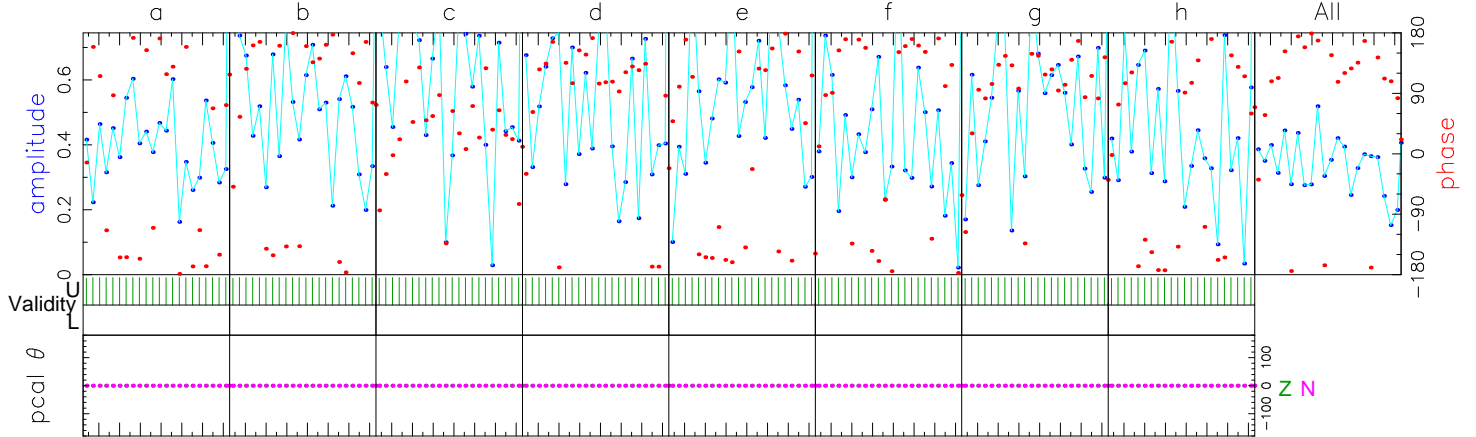


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031514.31
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050814
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	166.9	167.2	42.2	131.7	175.2	160.3	120.1	163.8	Phase	143.0
	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.2	Ampl.	0.3
	255.8	257.8	257.9	257.7	258.3	258.1	258.1	257.3	Sbd box	257.6
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.86966242101E+03	Apriori delay (usec)	2.86966122965E+03	Resid mbdelay (usec)	1.19136E-03	+/-	7.9E-05
Sband delay (usec)	2.86966373690E+03	Apriori clock (usec)	1.2570286E+01	Resid sbdelay (usec)	2.50725E-03	+/-	6.3E-04
Phase delay (usec)	2.86966123426E+03	Apriori clockrate (us/s)	7.6510005E-06	Resid phdelay (usec)	4.61018E-06	+/-	2.7E-07
Delay rate (us/s)	-3.28076513926E-01	Apriori rate (us/s)	-3.28077235033E-01	Resid rate (us/s)	7.21107E-07	+/-	1.2E-09
Total phase (deg)	258.9	Apriori accel (us/s/s)	-2.61255872539E-06	Resid phase (deg)	143.0	+/-	8.4

ph/seg (deg)	52.1	RMS	20.1	Theor.	0.249 +/- 0.018	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	49.6	Search (2048X32)	0.241	Amplitude		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.9	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.7	Inc. seg. avg.	0.319	Inc. seg. avg.		Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.314	Inc. frq. avg.		Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 102.1 el 57.3 pa -41.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 2538.525 858.283 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/ZN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/ZN.W.106.1W6ILQ

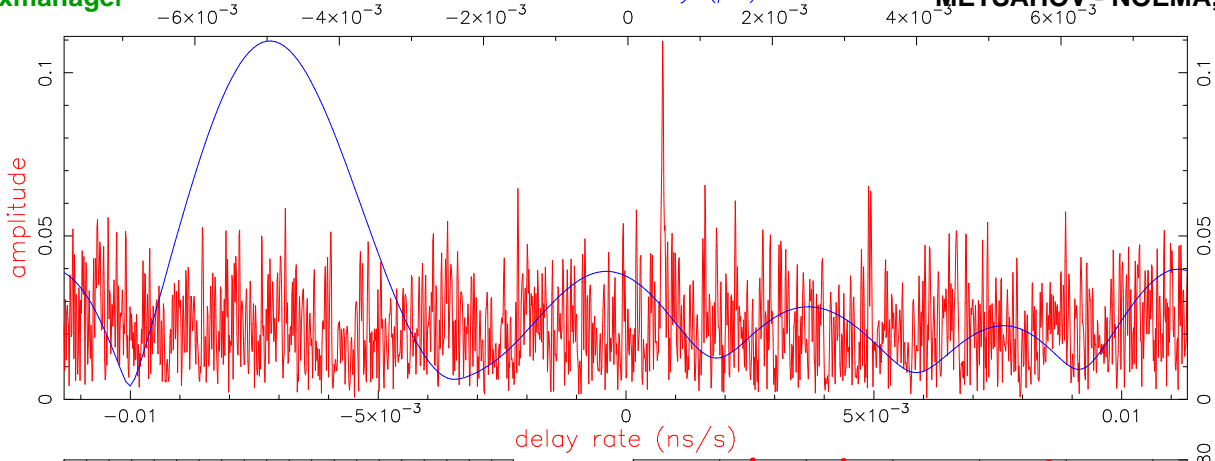
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

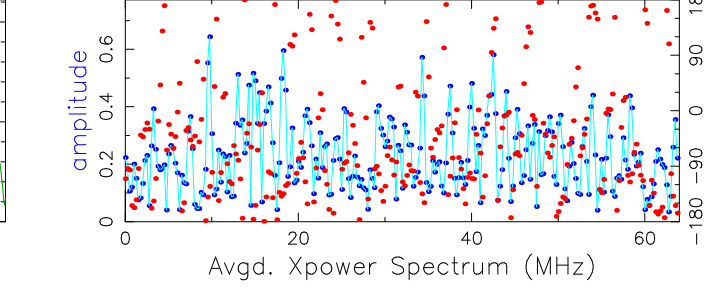
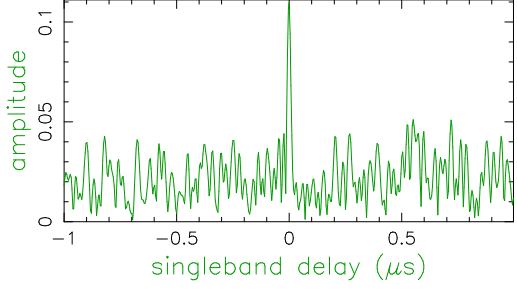
BLLAC.1W6ILQ, No0160, ZN

METSAHOV - NOEMA, fgroup W, pol LR

multiband delay (μ s)

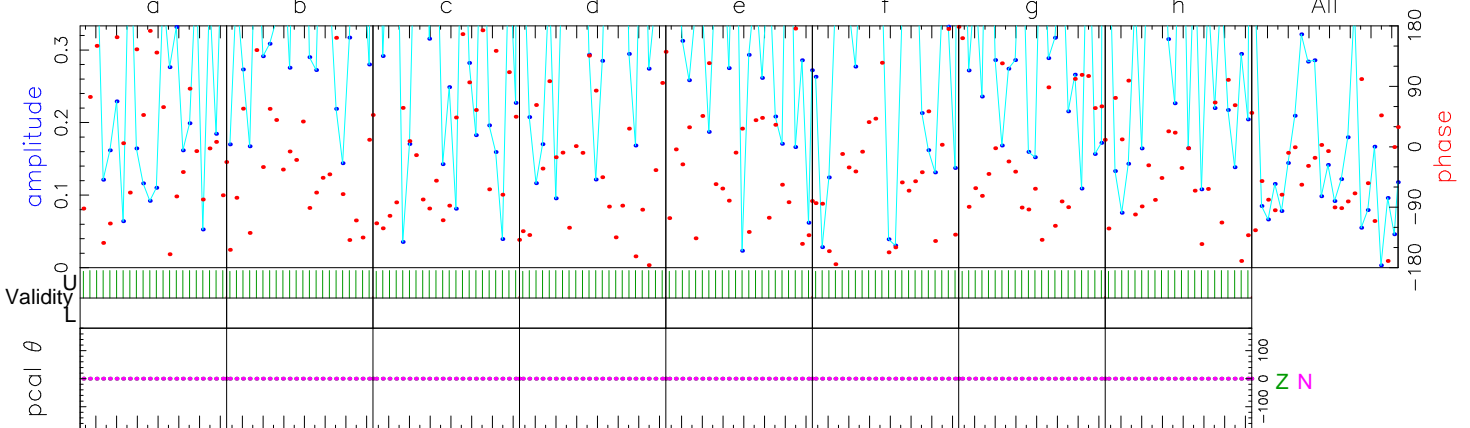


Fringe quality 0
 SNR 6.1
 Int time 405.628
 Amp 0.111
 Phase -58.7
 PFD 2.3e-01
 Delays (us)
 SBD -0.001393
 MBD -0.005004
 Fringe rate (Hz)
 0.063531
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031514.31
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050817
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

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



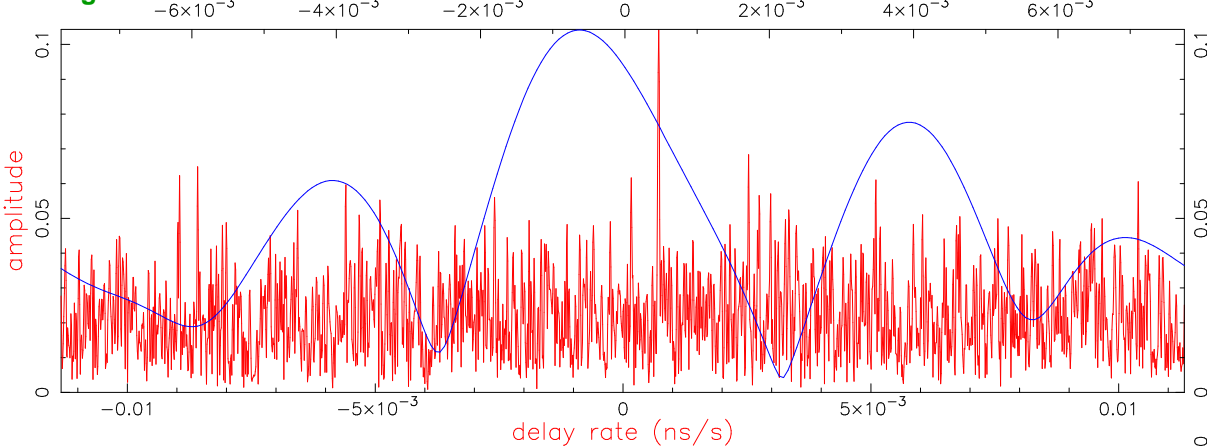
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.4	-43.0	-98.7	-72.3	-54.6	-20.6	-75.9	-57.3	Phase	-58.7
	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	166.0	178.9	17.4	254.6	447.1	259.1	60.8	180.1	Sbd box	256.6
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.86965622589E+03 Apriori delay (usec) 2.86966122965E+03 Resid mbdelay (usec) -5.00376E-03 +/- 1.8E-04
 Sband delay (usec) 2.86965983715E+03 Apriori clock (usec) 1.2570286E+01 Resid sbdelay (usec) -1.39250E-03 +/- 1.4E-03
 Phase delay (usec) 2.86966122776E+03 Apriori clockrate (us/s) 7.6510005E-06 Resid phdelay (usec) -1.89351E-06 +/- 6.0E-07
 Delay rate (us/s) -3.28076497503E-01 Apriori rate (us/s) -3.28077235033E-01 Resid rate (us/s) 7.37530E-07 +/- 2.6E-09
 Total phase (deg) 57.2 Apriori accel (us/s/s) -2.61255872539E-06 Resid phase (deg) -58.7 +/- 18.8

RMS Theor. Amplitude 0.111 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 59.9 45.0 Search (2048X32) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 102.9 78.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.9 26.5 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.4 46.3 Inc. frq. avg. 0.107 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

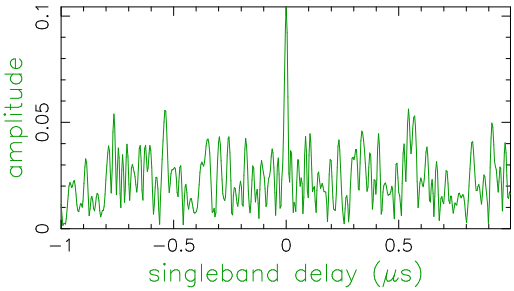
Z: az 102.1 el 57.3 pa -41.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 2538.525 858.283 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/ZN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/ZN.W.121.1W6ILQ

multiband delay (μs)

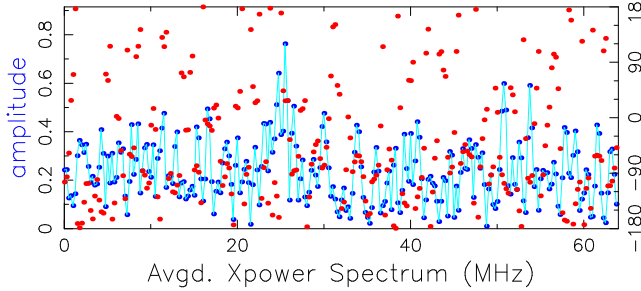


Fringe quality 0

SNR 5.7
 Int time 405.628
 Amp 0.104
 Phase -90.8
 PFD 9.1e-01
 Delays (us)
 SBD -0.000134
 MBD -0.000629
 Fringe rate (Hz)
 0.062100
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

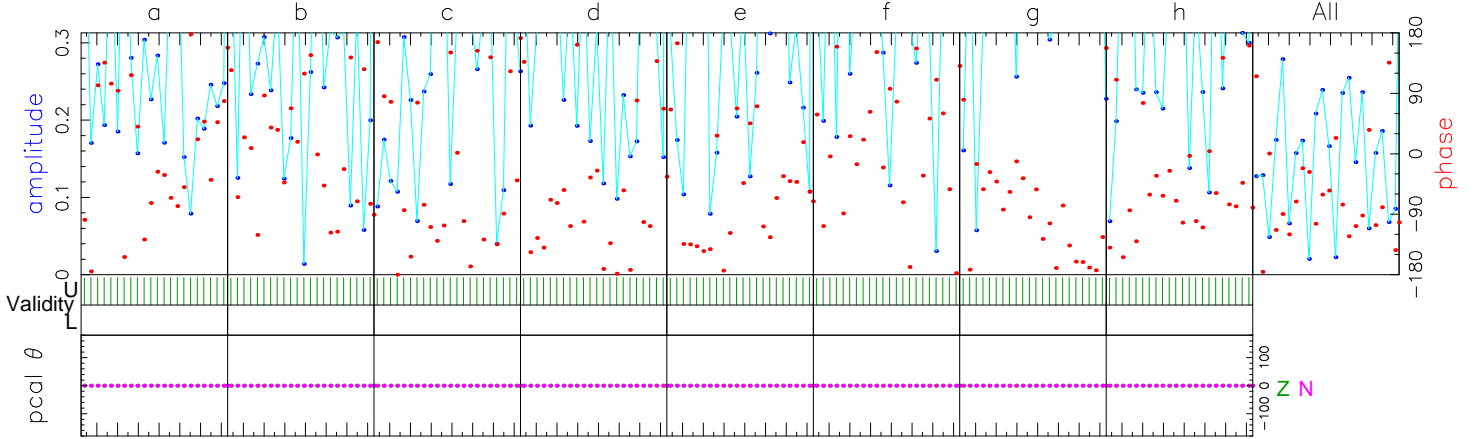


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031514.31
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build
 2021:287:021716
 2021:287:050820
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.1	-0.1	-139.8	-111.2	-100.7	11.3	-102.5	-81.4	Phase	-90.8
	0.0	0.1	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.1
	146.6	318.3	420.0	306.2	21.6	191.2	257.2	256.0	Sbd box	257.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.86966060107E+03	Apriori delay (usec)	2.86966122965E+03	Resid mbdelay (usec)	-6.28579E-04	+/-	1.9E-04
Sband delay (usec)	2.86966109590E+03	Apriori clock (usec)	1.2570286E+01	Resid sbdelay (usec)	-1.33750E-04	+/-	1.5E-03
Phase delay (usec)	2.86966122672E+03	Apriori clockrate (us/s)	7.6510005E-06	Resid phdelay (usec)	-2.92911E-06	+/-	6.4E-07
Delay rate (us/s)	-3.28076514109E-01	Apriori rate (us/s)	-3.28077235033E-01	Resid rate (us/s)	7.20924E-07	+/-	2.7E-09
Total phase (deg)	25.1	Apriori accel (us/s/s)	-2.61255872539E-06	Resid phase (deg)	-90.8	+/-	20.0

ph/seg (deg)	68.5	Theor.	47.9	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	84.9		83.6	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	60.6		28.2	Inc. seg. avg.	0.110	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	71.9		49.3	Inc. frq. avg.	0.122	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

Z: az 102.1 el 57.3 pa -41.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 2538.525 858.283 simultaneous interpolator

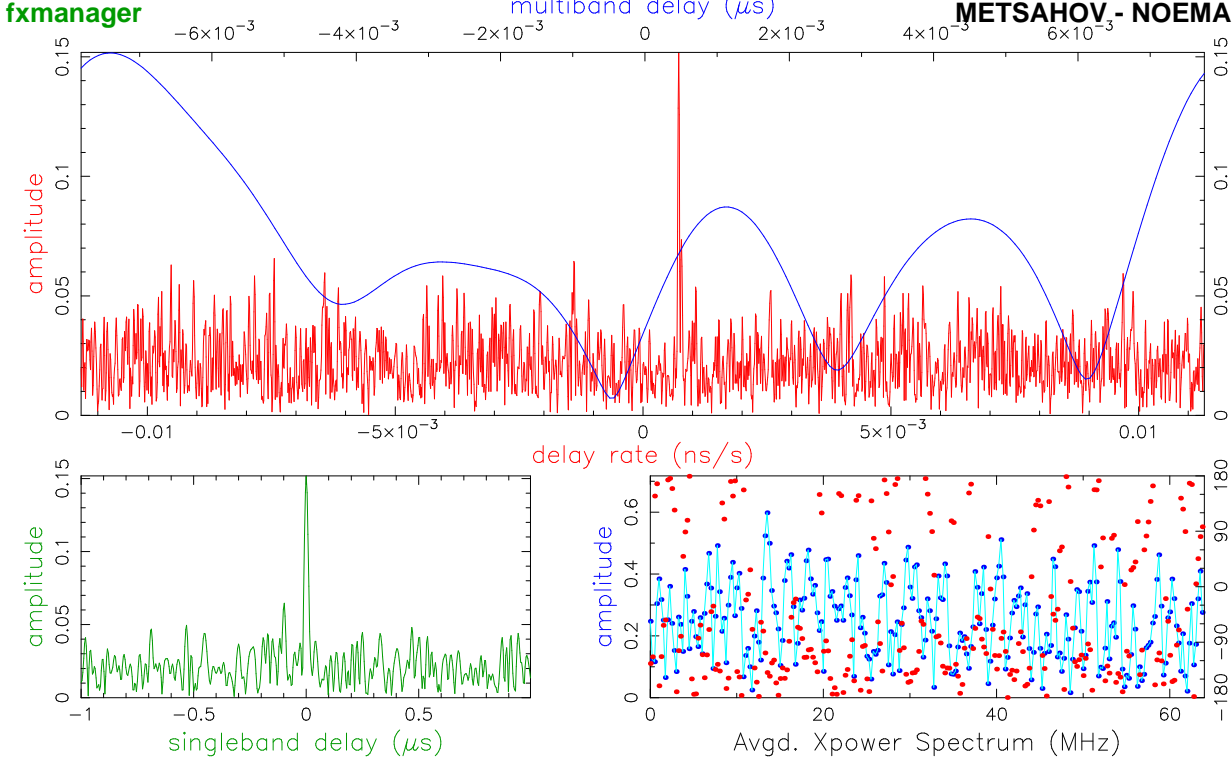
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/ZN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/ZN.W.134.1W6ILQ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

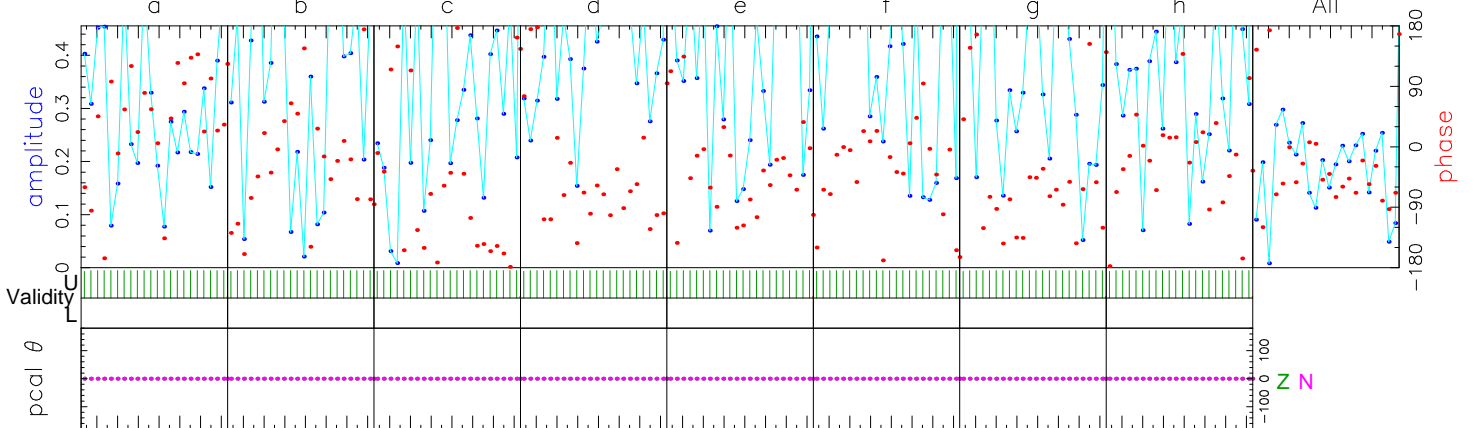
BLLAC.1W6ILQ, No0160, ZN

METSAHOV - NOEMA, fgroup W, pol LL



Fringe quality 9
 SNR 8.3
 Int time 405.628
 Amp 0.152
 Phase -50.1
 PFD 2.4e-08
 Delays (us)
 SBD -0.000076
 MBD -0.007410
 Fringe rate (Hz) 0.062074
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 031514.31
 Stop 032200.84
 FRT 031831.00
 Corr/FF/build 2021:287:021716
 2021:287:050810
 2021:252:122852
 RA & Dec (J2000) 22h02m43.291370s
 +42°16'39.979885"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	59.2	-40.2	-134.6	-80.0	-38.0	-21.1	-83.6	-10.1	Phase	-50.1
	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.1	Ampl.	0.2
	254.0	255.4	255.4	256.7	255.9	257.2	255.9	247.3	Sbd box	257.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.86965381935E+03		Apriori delay (usec)		2.86966122965E+03		Resid mbdelay (usec)		-7.41030E-03	+/- 1.3E-04
Sband delay (usec)	2.86966115365E+03		Apriori clock (usec)		1.2570286E+01		Resid sbdelay (usec)		-7.60000E-05	+/- 1.0E-03
Phase delay (usec)	2.86966122803E+03		Apriori clockrate (us/s)		7.6510005E-06		Resid phdelay (usec)		-1.61430E-06	+/- 4.4E-07
Delay rate (us/s)	-3.28076514420E-01		Apriori rate (us/s)		-3.28077235033E-01		Resid rate (us/s)		7.20613E-07	+/- 1.9E-09
Total phase (deg)	65.8		Apriori accel (us/s/s)		-2.61255872539E-06		Resid phase (deg)		-50.1	+/- 13.7

ph/seg (deg) 54.9 32.9 Search (2048X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.0 57.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.0 19.4 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.6 33.9 Inc. frq. avg. 0.207 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 102.1 el 57.3 pa -41.1 N: az 69.2 el 44.7 pa -64.5 u,v (fr/asec) 2538.525 858.283 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0160/ZN..1W6ILQ Output file: /Exps/c211a/v2/1234/No0160/ZN.W.90.1W6ILQ simultaneous interpolator