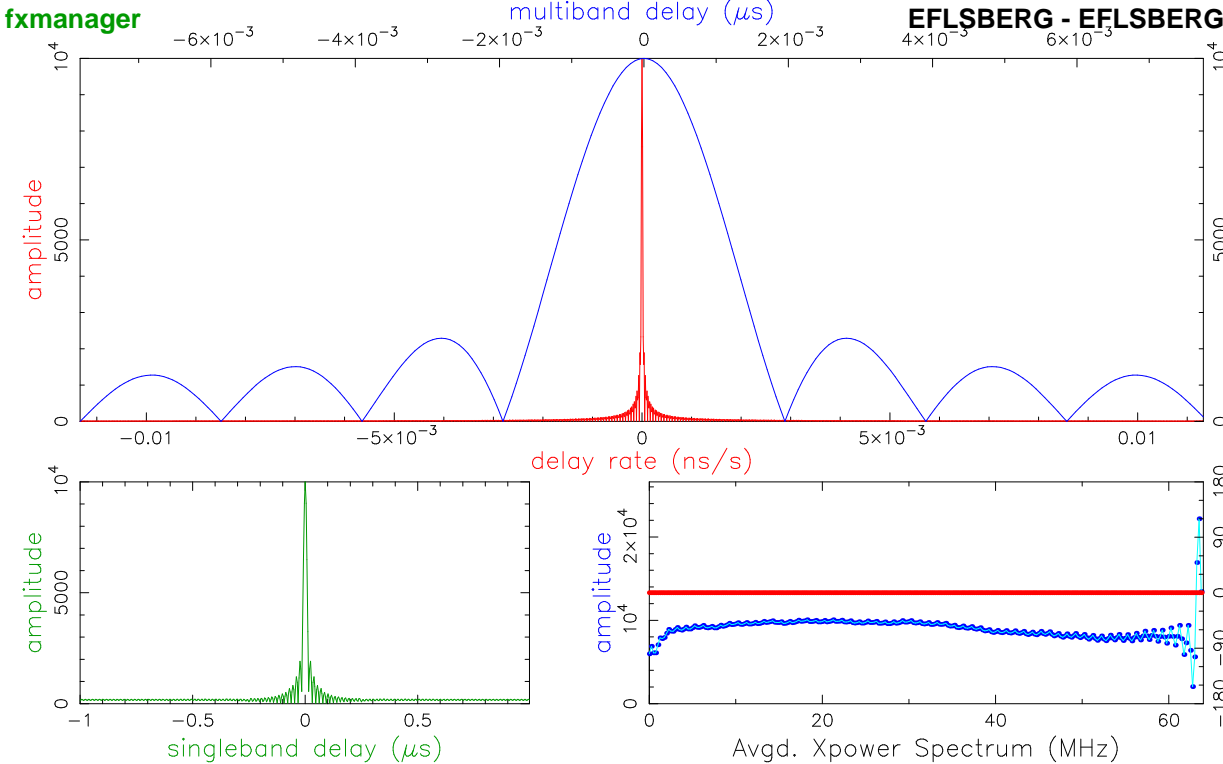


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BB

EFLSBERG - EFLSBERG, fgroup W, pol RR

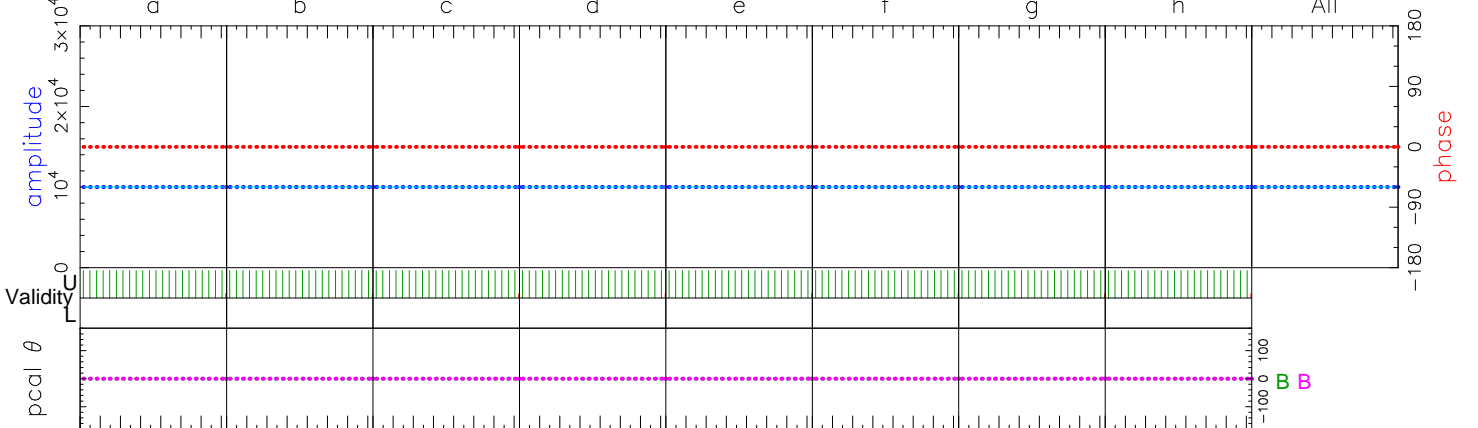


Fringe quality 9

SNR 560308.2
 Int time 419.816
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114521
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
Total phase (deg)		0.0							Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 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
 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BB..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BB.W.22.1WZRGR

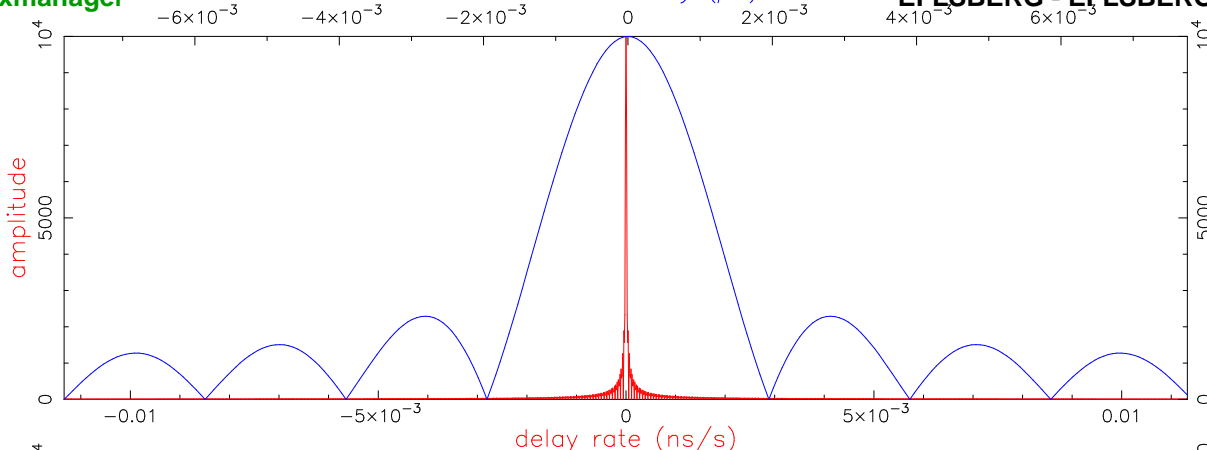
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BB

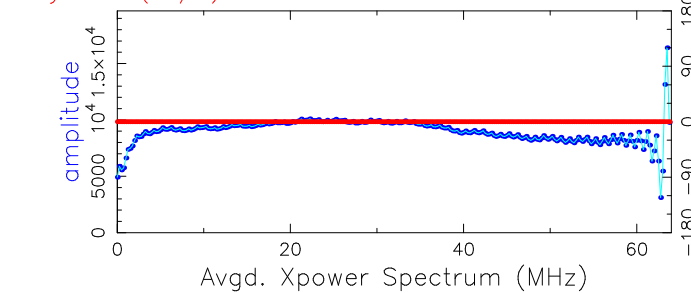
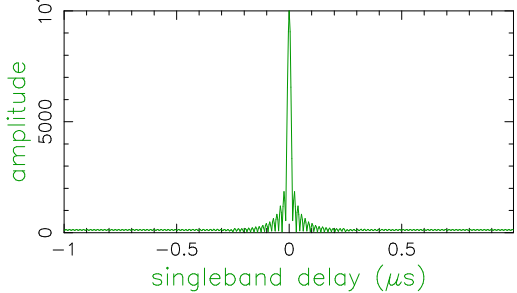
EFLSBERG - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)



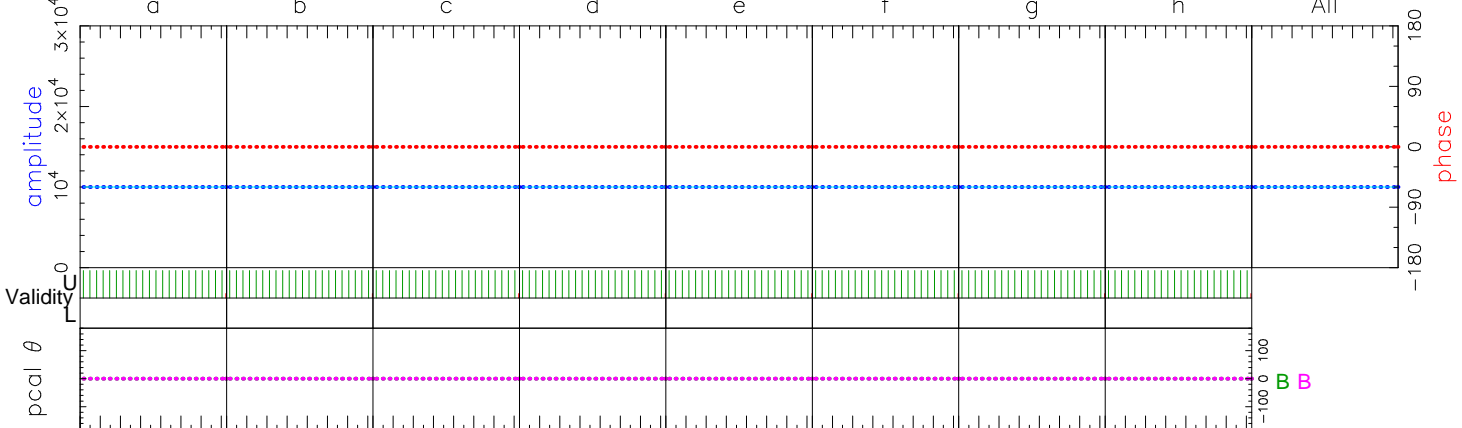
Fringe quality 9

SNR 560308.2
 Int time 419.816
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114517
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



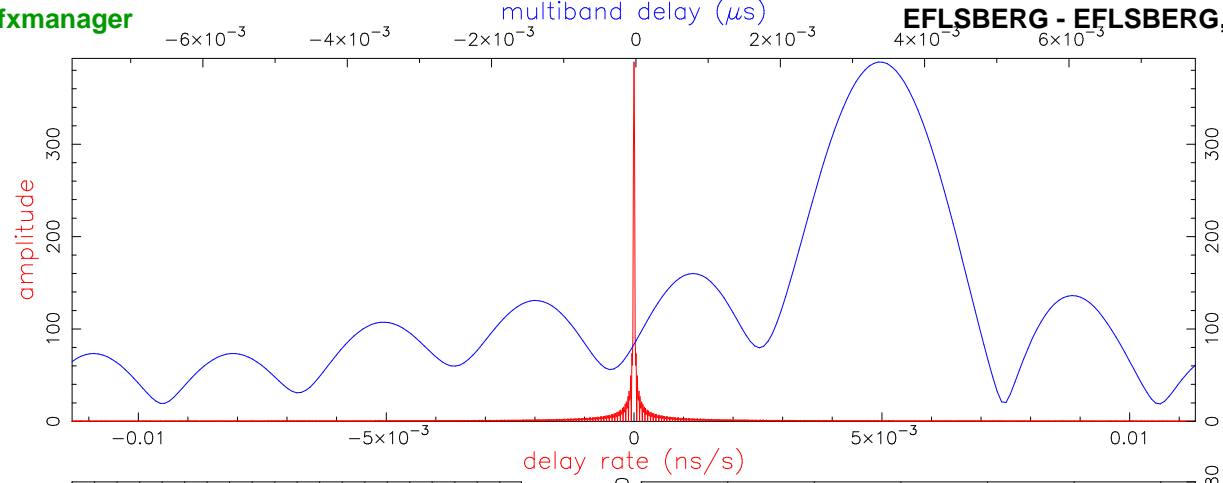
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000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

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

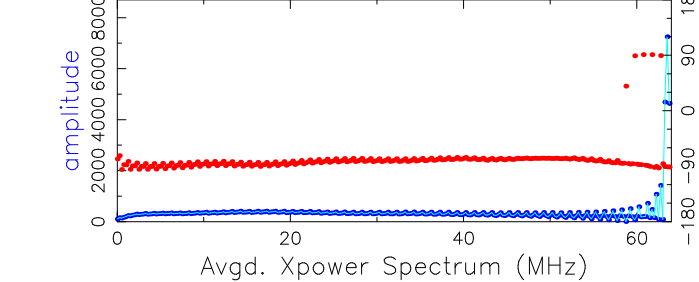
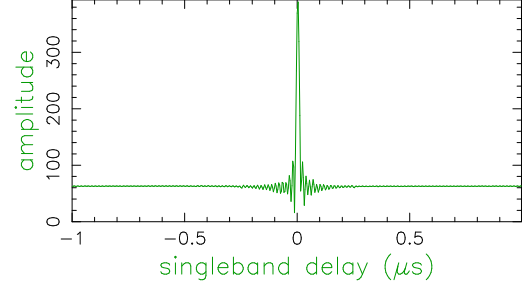
	RMS	Theor.	Amplitude	10000.001 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (2048X32)	10000.001	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	0.0	0.0	Inc. frq. avg.	10000.001	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 B: az 63.6 el 51.0 pa -64.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

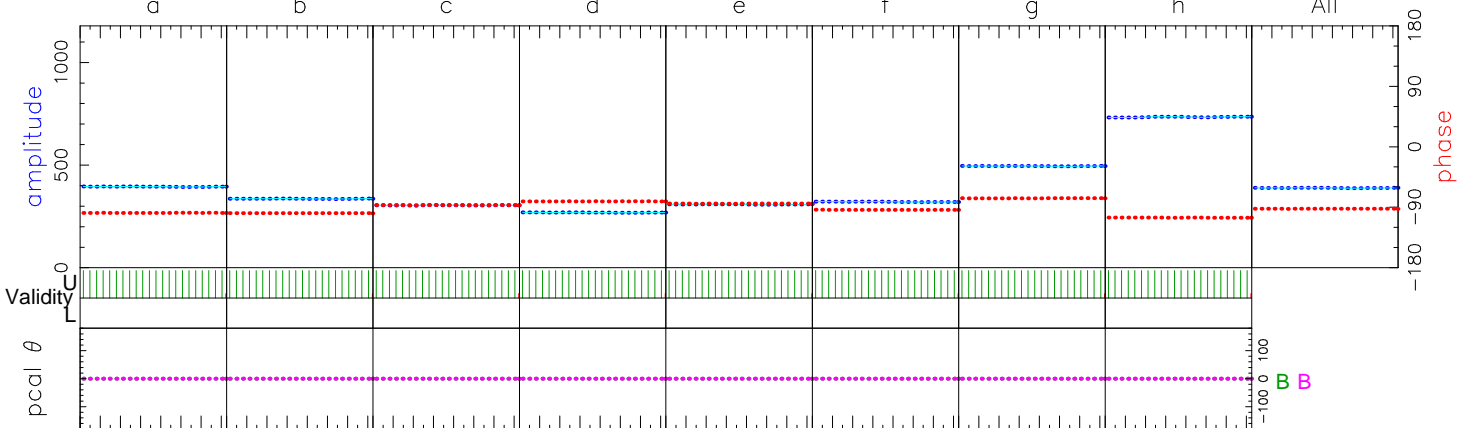
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BB..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BB.W.3.1WZRGR



Fringe quality 8
SNR 22016.0
Int time 419.816
Amp 392.927
Phase -92.3
PFD 0.0e+00
Delays (us)
SBD 0.002781
MBD 0.003392
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090000.00
Stop 090659.84
FRT 090330.00
Corr/FF/build 2021:302:211904
2021:303:114525
2021:252:122852
RA & Dec (J2000) 03h59m29.747267s
+50°57'50.161694"



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



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

Group delay (usec)(sbd)	3.39203125000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	3.39203E-03	+/-	4.9E-08
Sband delay (usec)	2.78125000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.78125E-03	+/-	3.9E-07
Phase delay (usec)	-2.97502722341E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.97503E-06	+/-	1.7E-10
Delay rate (us/s)	5.66846095667E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	5.66846E-12	+/-	6.9E-13
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-92.3	+/-	0.0

ph/seg (deg)	0.0	0.0	Amplitude	392.927 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	1.0	0.0	Search (2048X32)	388.803	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.9	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.6	0.0	Inc. seg. avg.	389.028	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	395.452	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 63.6 el 51.0 pa -64.9 B: az 63.6 el 51.0 pa -64.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

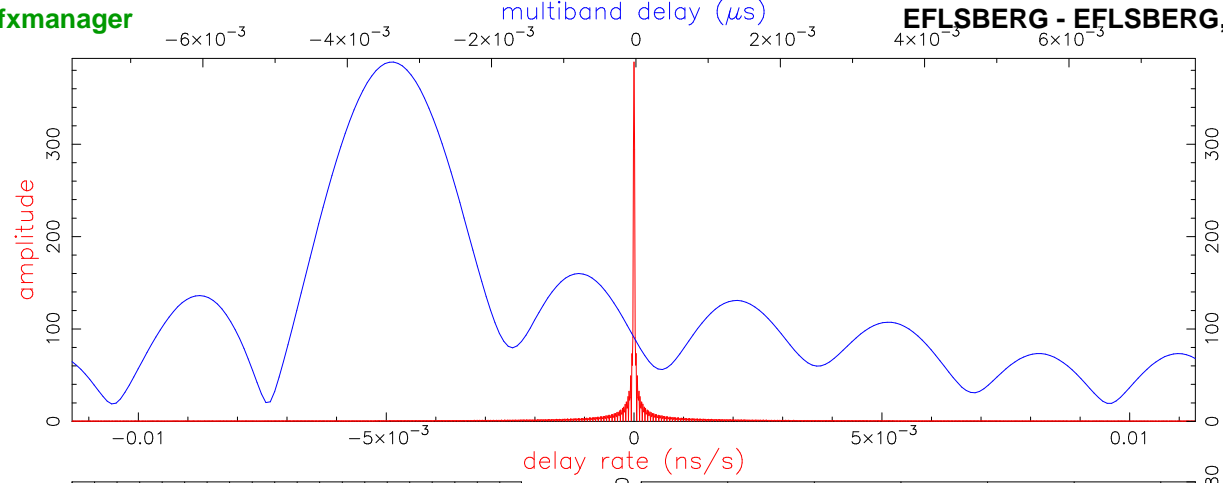
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BB..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BB.W.42.1WZRGR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BB

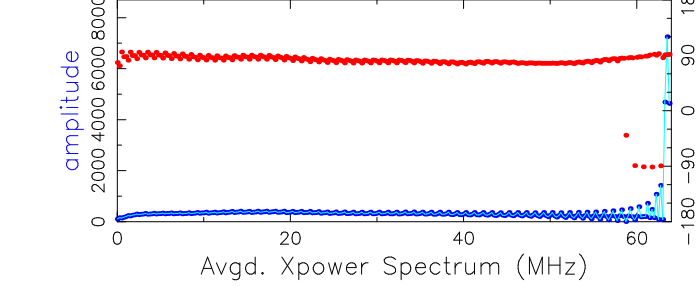
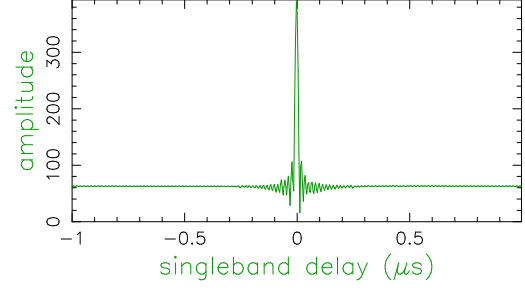
EFLSBERG - EFLSBERG, fgroup W, pol RL



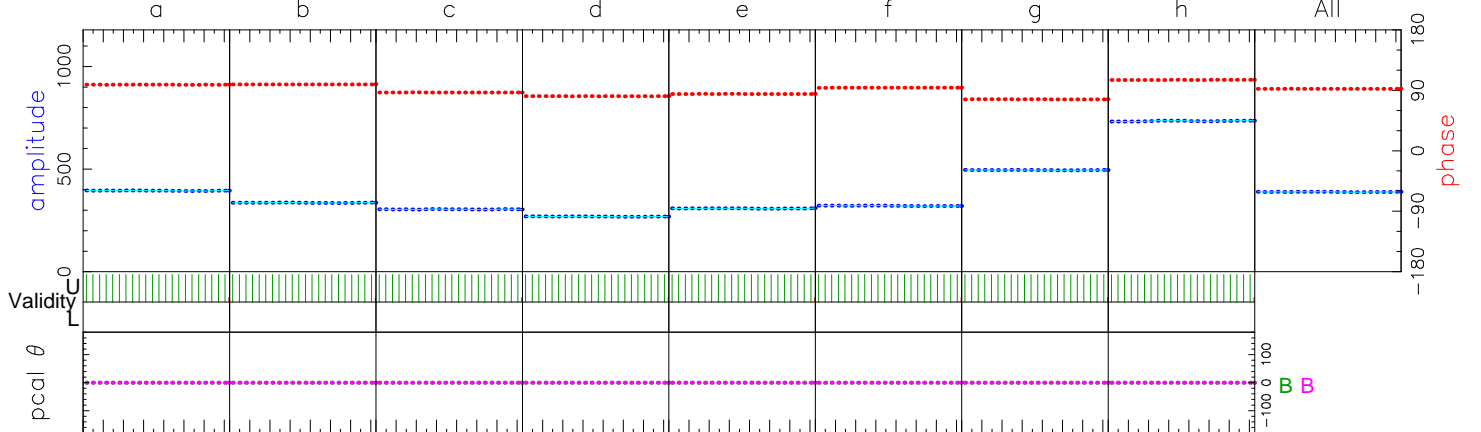
Fringe quality 8

SNR 22016.0
 Int time 419.816
 Amp 392.927
 Phase 92.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002781
 MBD -0.003392
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114528
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-3.39203125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.39203E-03	+/- 4.9E-08
Sband delay (usec)	-2.78125000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.78125E-03	+/- 3.9E-07
Phase delay (usec)	2.97502722332E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.97503E-06	+/- 1.7E-10
Delay rate (us/s)	-5.66846095667E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.66846E-12	+/- 6.9E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		92.3	+/- 0.0

ph/seg (deg) 0.0 0.0 Search (2048X32) 388.803 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.0 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.9 0.0 Inc. seg. avg. 389.028 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.6 0.0 Inc. frq. avg. 395.452 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 B: az 63.6 el 51.0 pa -64.9 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BB..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BB.W.59.1WZRGR simultaneous interpolator

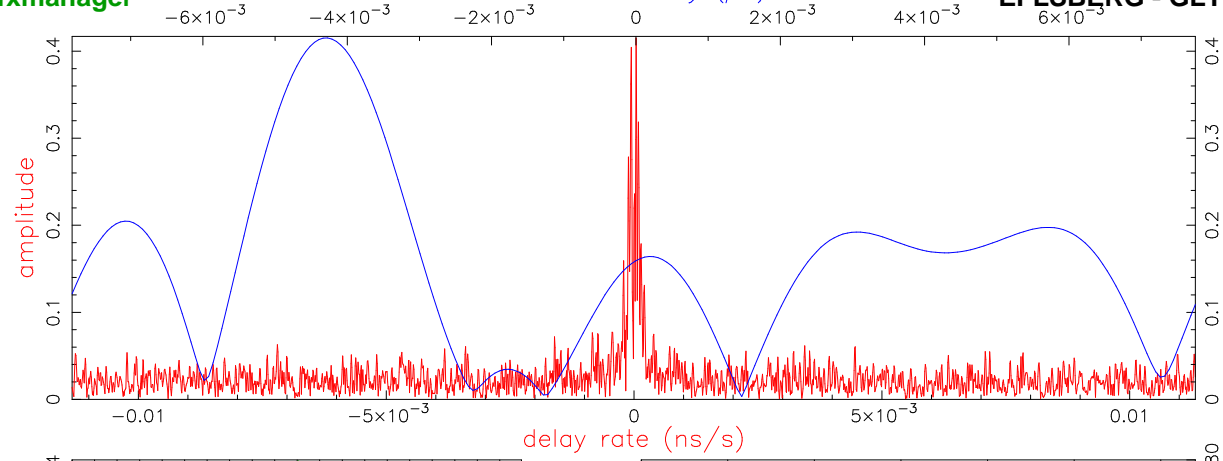
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bg

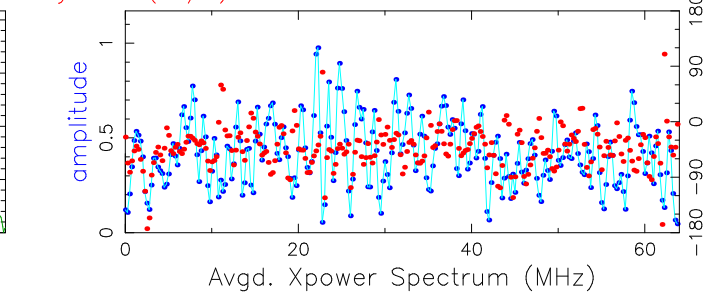
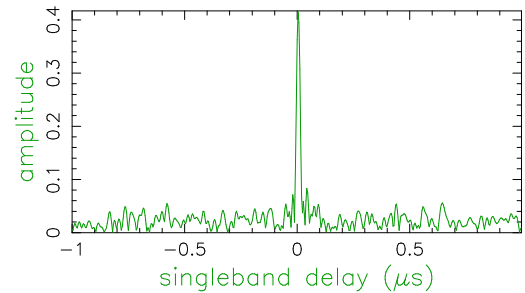
EFLSBERG - GLT, fgroup W, pol LL

multiband delay (μ s)



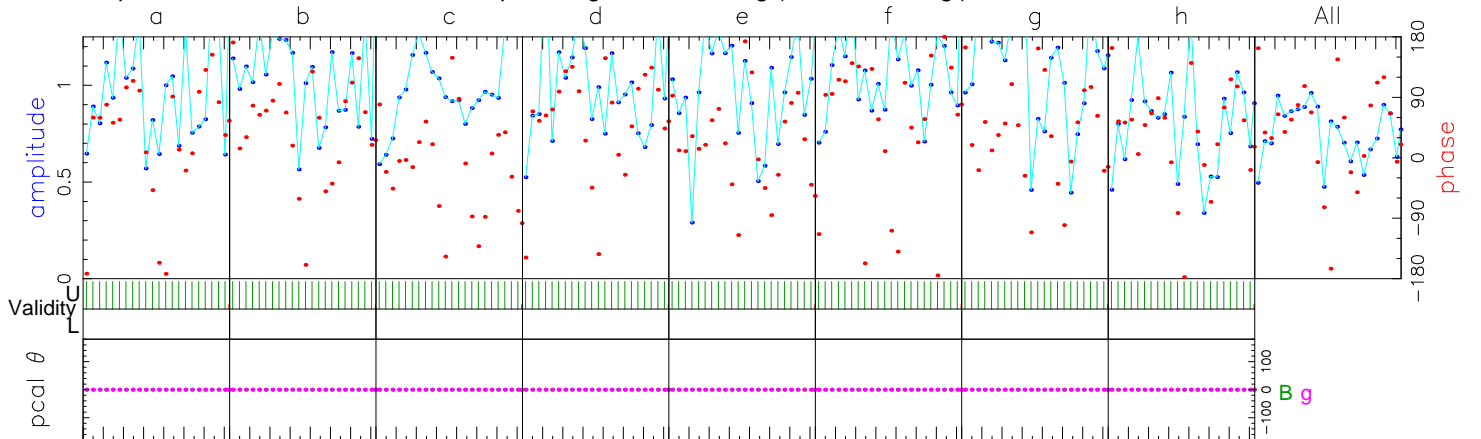
Fringe quality 8

SNR 23.4
 Int time 419.816
 Amp 0.417
 Phase 60.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.004779
 MBD -0.004267
 Fringe rate (Hz)
 0.003919
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114520
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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

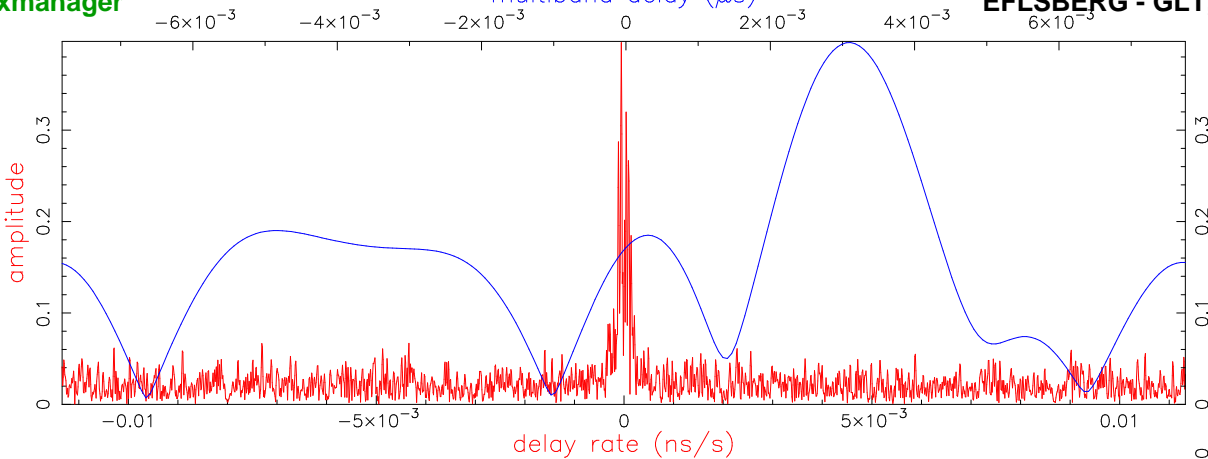


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	81.0	66.4	-12.4	82.1	29.6	126.0	38.3	58.6	Phase	60.6
B	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	Ampl.	0.5
g	257.1	258.3	258.7	259.0	258.9	258.8	258.4	257.6	Sbd box	258.2
B	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	2.87908450724E+03		Apriori delay (usec)		2.87907314958E+03		Resid mbdelay (usec)		-4.26734E-03	+/- 4.6E-05
Sband delay (usec)	2.87907792883E+03		Apriori clock (usec)		-2.2499676E+01		Resid sbdelay (usec)		4.77925E-03	+/- 3.7E-04
Phase delay (usec)	2.87907315153E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		1.95533E-06	+/- 1.6E-07
Delay rate (us/s)	4.02404841613E-01		Apriori rate (us/s)		4.02404796120E-01		Resid rate (us/s)		4.54929E-08	+/- 6.5E-10
Total phase (deg)	98.3		Apriori accel (us/s/s)		-3.30866018878E-05		Resid phase (deg)		60.6	+/- 4.9

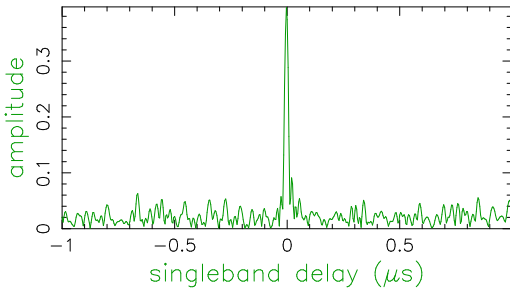
ph/seg (deg) 66.1 11.8 Search (2048X32) 0.411 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.4 20.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.7 6.9 Inc. seg. avg. 0.738 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.3 12.1 Inc. frq. avg. 0.514 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 g: az 32.4 el 40.2 pa -11.6 u,v (fr/asec) -3714.978 -4299.881 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bg..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bg.W.20.1WZRGR simultaneous interpolator

multiband delay (μ s)

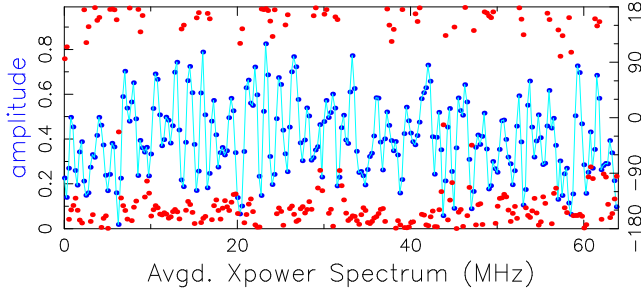
Fringe quality 8



SNR 22.2
 Int time 419.816
 Amp 0.397
 Phase 125.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.003158
 MBD 0.003114
 Fringe rate (Hz) -0.004900
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

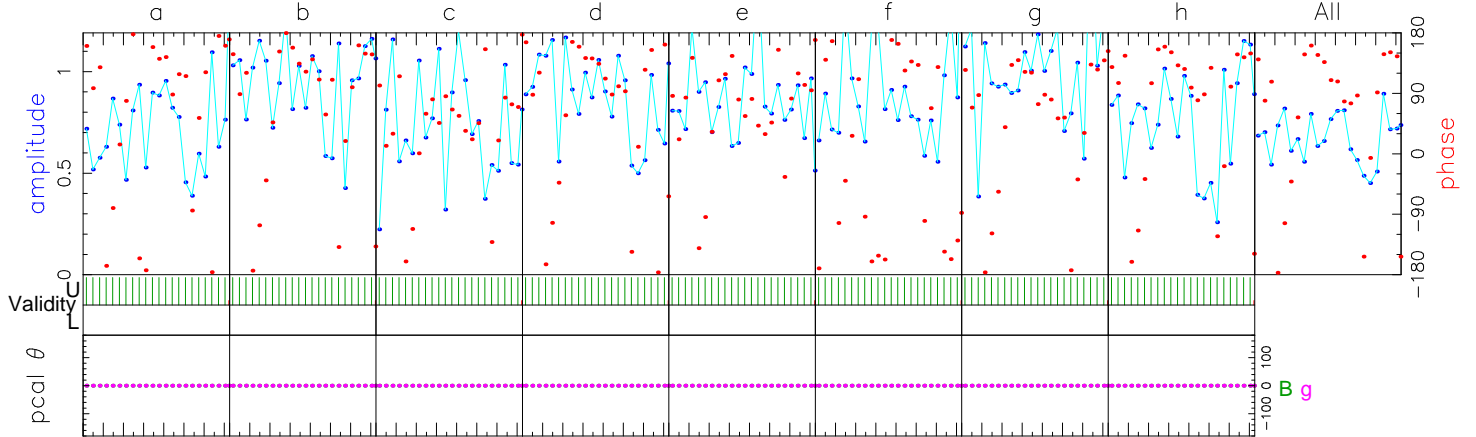


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114524
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

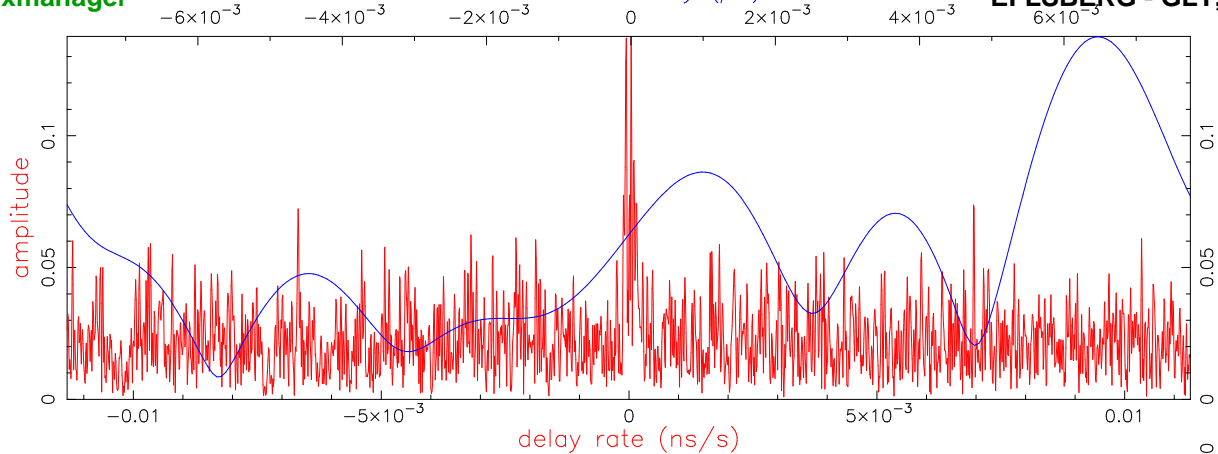
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.87907626328E+03		Apriori delay (usec)		2.87907314958E+03		Resid mbdelay (usec)		3.11370E-03	+/- 4.9E-05
Sband delay (usec)	2.87906999183E+03		Apriori clock (usec)		-2.2499676E+01		Resid sbdelay (usec)		-3.15775E-03	+/- 3.9E-04
Phase delay (usec)	2.87907315362E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		4.04218E-06	+/- 1.7E-07
Delay rate (us/s)	4.02404739237E-01		Apriori rate (us/s)		4.02404796120E-01		Resid rate (us/s)		-5.68830E-08	+/- 6.9E-10
Total phase (deg)	163.0		Apriori accel (us/s/s)		-3.30866018878E-05		Resid phase (deg)		125.3	+/- 5.2

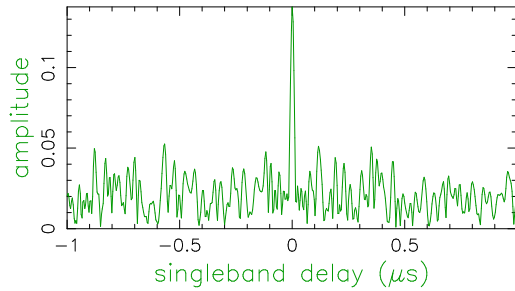
ph/seg (deg) 64.8 12.4 Search (2048X32) 0.387 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.8 21.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.6 7.3 Inc. seg. avg. 0.655 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.0 12.7 Inc. frq. avg. 0.488 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 g: az 32.4 el 40.2 pa -11.6 u,v (fr/asec) -3714.978 -4299.881 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bg..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bg.W.38.1WZRGR

multiband delay (μ s)

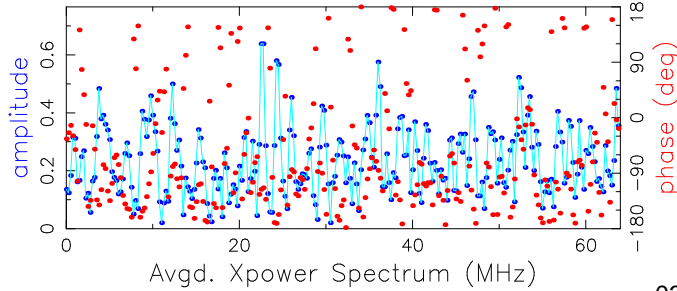


Fringe quality 9

SNR 7.7
 Int time 419.816
 Amp 0.138
 Phase -179.0
 PFD 4.0e-06
 Delays (us)
 SBD 0.000467
 MBD 0.006483
 Fringe rate (Hz)
 0.003643
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

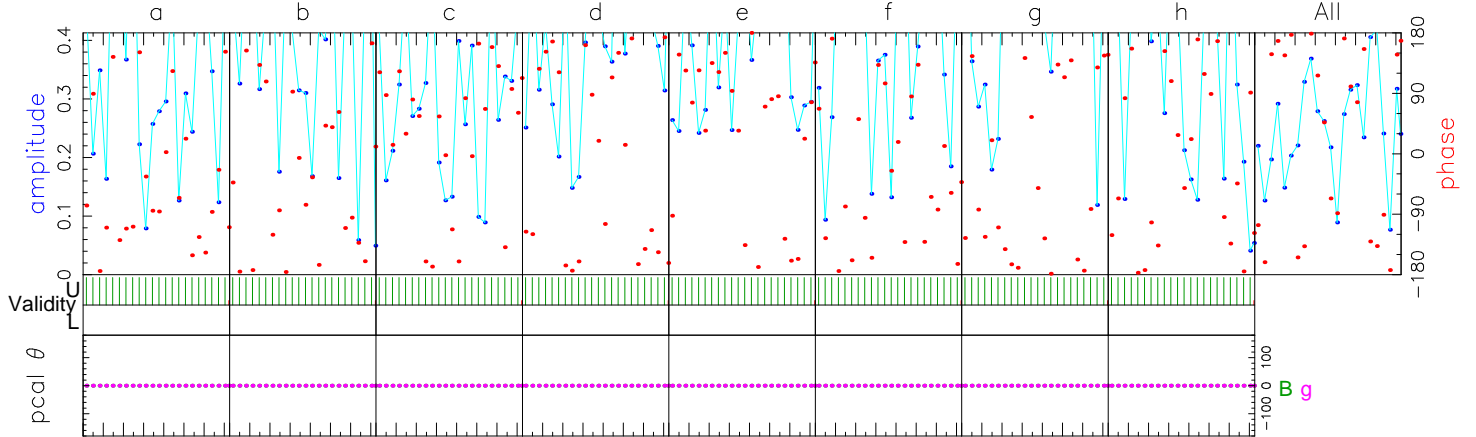


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114527
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



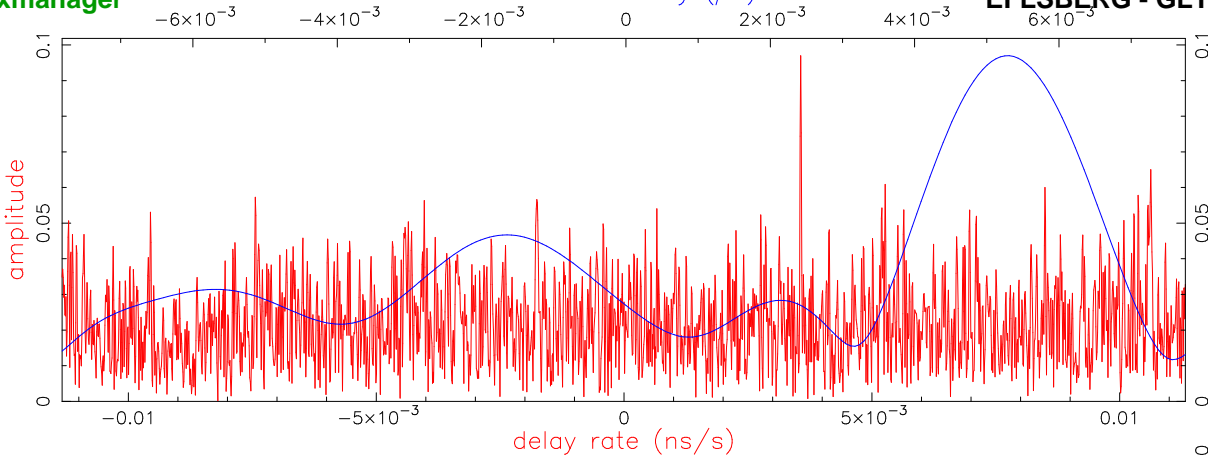
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-134.9	-169.2	111.5	179.7	123.2	-123.2	-168.5	-171.6	Phase	-179.0
	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.1	Ampl.	0.2
	256.4	60.7	45.0	258.1	258.3	78.7	257.1	305.8	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B:g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.87907963305E+03		Apriori delay (usec)		2.87907314958E+03		Resid mbdelay (usec)		6.48348E-03	+/- 1.4E-04
Sband delay (usec)	2.87907361608E+03		Apriori clock (usec)		-2.2499676E+01		Resid sbdelay (usec)		4.66500E-04	+/- 1.1E-03
Phase delay (usec)	2.87907314381E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		-5.77099E-06	+/- 4.8E-07
Delay rate (us/s)	4.02404838410E-01		Apriori rate (us/s)		4.02404796120E-01		Resid rate (us/s)		4.22903E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.30866018878E-05		Resid phase (deg)		-179.0	+/- 14.9

	RMS	Theor.	Amplitude	0.138 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.8	35.6	Search (2048X32)	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	106.1	62.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	47.4	21.0	Inc. seg. avg.	0.212	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	48.6	36.7	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 g: az 32.4 el 40.2 pa -11.6 u,v (fr/asec) -3714.978 -4299.881 simultaneous interpolator

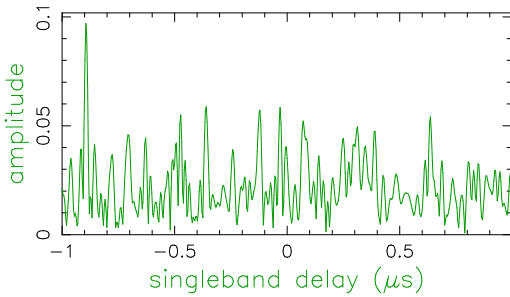
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bg..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bg.W.54.1WZRGR

multiband delay (μs)

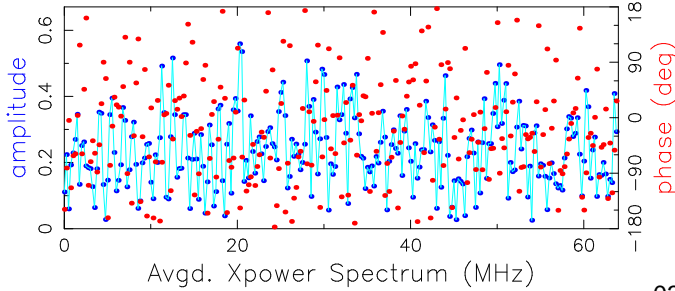


Fringe quality 0

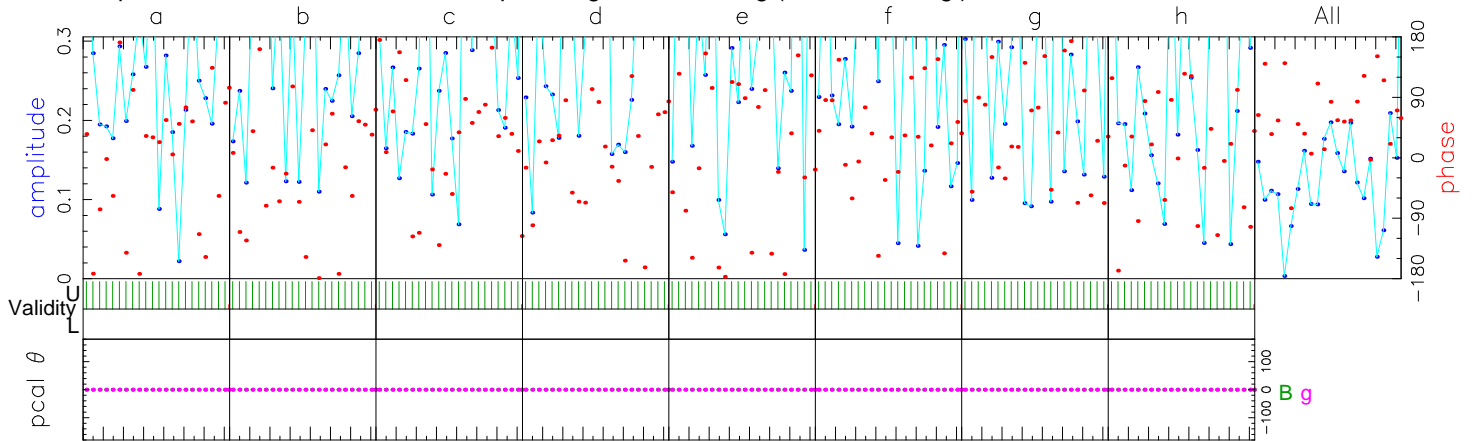
SNR 5.5
Int time 419.816
Amp 0.102
Phase 54.7
PFD 1.0e+00
Delays (us)
SBD -0.893503
MBD 0.005261
Fringe rate (Hz)
0.307201
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090000.00
Stop 090659.84
FRT 090330.00
Corr/FF/build
2021:302:211904
2021:303:114531
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	62.5	13.6	63.5	35.6	128.7	38.5	47.3	50.7	Phase	54.7
	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	238.1	321.7	249.6	28.9	179.0	248.8	204.5	225.4	Sbd box	28.3
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	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.87817216030E+03		Apriori delay (usec)		2.87907314958E+03		Resid mbdelay (usec)		5.26072E-03	+/- 2.0E-04
Sband delay (usec)	2.87817964683E+03		Apriori clock (usec)		-2.2499676E+01		Resid sbdelay (usec)		-8.93503E-01	+/- 1.6E-03
Phase delay (usec)	2.87907315134E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		1.76380E-06	+/- 6.7E-07
Delay rate (us/s)	4.02408362423E-01		Apriori rate (us/s)		4.02404796120E-01		Resid rate (us/s)		3.56630E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.30866018878E-05		Resid phase (deg)		54.7	+/- 20.9

	RMS	Theor.	Amplitude	0.102 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.5	50.2	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	66.7	87.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	36.5	29.6	Inc. seg. avg.	0.094	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.4	51.6	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 g: az 32.4 el 40.2 pa -11.6 u,v (fr/asec) -3714.978 -4299.881 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bg..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bg.W.75.1WZRGR

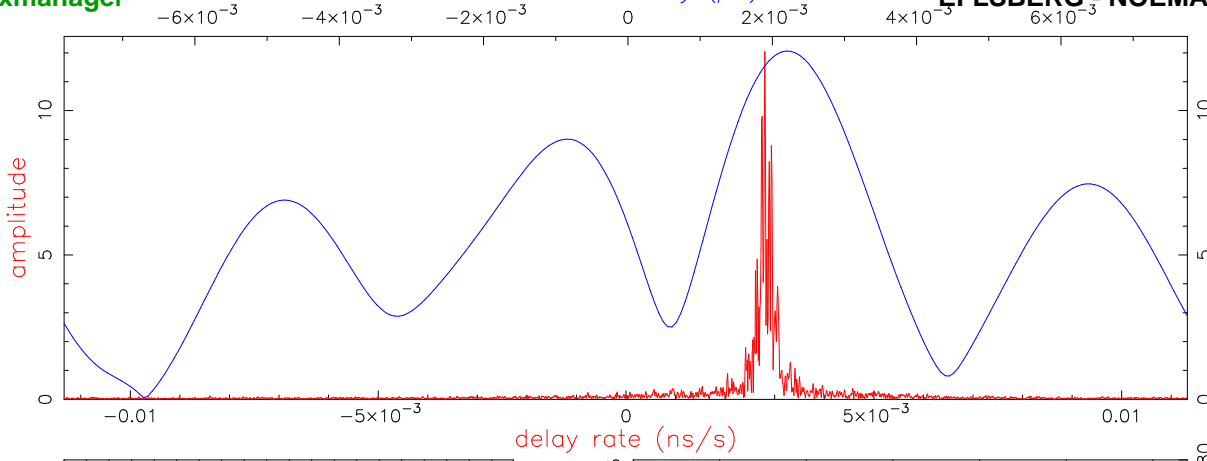
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BN

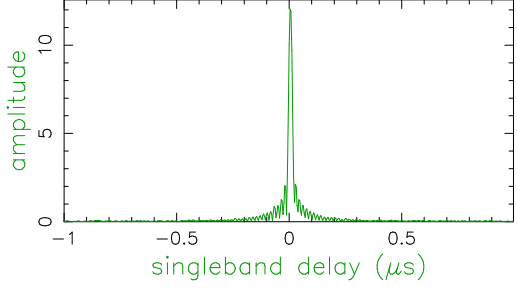
EFLSBERG - NOEMA, fgroup W, pol RR

multiband delay (μ s)



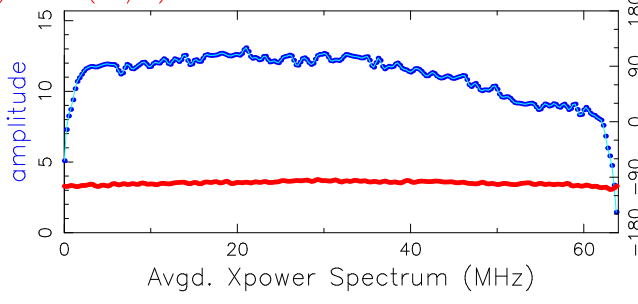
Fringe quality 1

SNR 686.8
 Int time 419.814
 Amp 12.571
 Phase -61.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.005619
 MBD 0.002273
 Fringe rate (Hz)
 0.241344
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



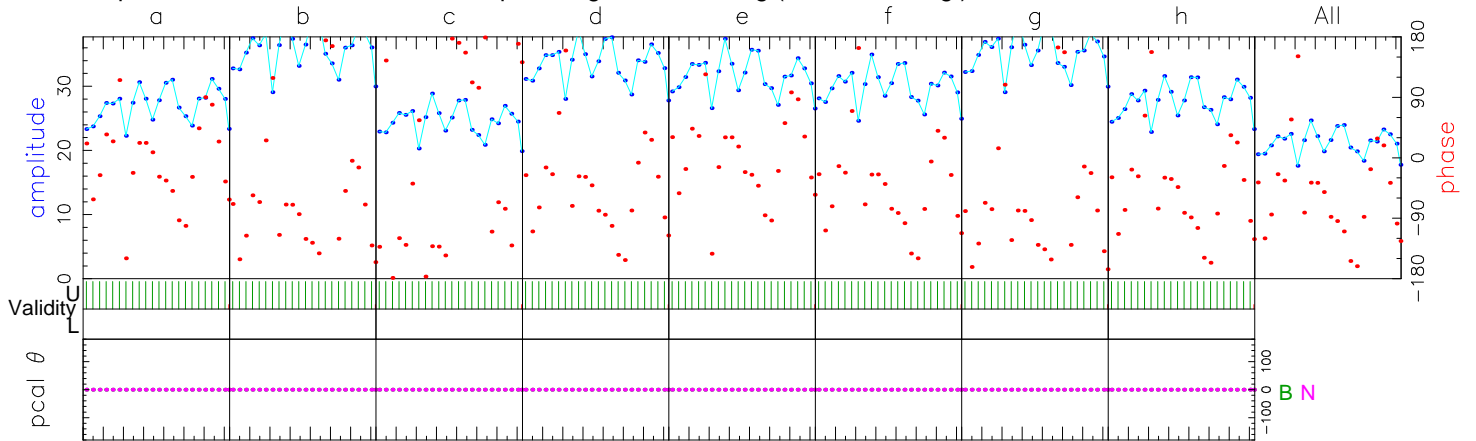
singleband delay (μ s)

delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114522
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-2.3	-94.3	-156.2	-52.2	5.9	-49.7	-103.7	-56.1	Phase	-61.9
	15.7	20.9	14.4	19.4	18.4	17.4	20.5	16.0	Ampl.	17.8
	256.3	258.2	258.9	258.8	259.2	258.9	258.7	257.2	Sbd box	258.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	8.14756654332E+02	Apriori delay (usec)	8.14754381492E+02	Resid mbdelay (usec)	2.27284E-03	+/-	1.6E-06
Sband delay (usec)	8.14760000742E+02	Apriori clock (usec)	-8.8014498E+00	Resid sbdelay (usec)	5.61925E-03	+/-	1.3E-05
Phase delay (usec)	8.14754379495E+02	Apriori clockrate (us/s)	4.3890000E-06	Resid phdelay (usec)	-1.99721E-06	+/-	5.4E-09
Delay rate (us/s)	-7.13591431102E-02	Apriori rate (us/s)	-7.13619448732E-02	Resid rate (us/s)	2.80176E-06	+/-	2.2E-11
Total phase (deg)		Apriori accel (us/s/s)	1.6895469977E-06	Resid phase (deg)	-61.9	+/-	0.2

ph/seg (deg)	62.4	0.4	Search (2048X32)	11.800	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.5	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)	57.9	0.2	Inc. seg. avg.	21.887	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.4	0.4	Inc. frq. avg.	17.840	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 N: az 57.3 el 47.5 pa -72.8 u,v (fr/asec) 651.491 543.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BN..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BN.W.26.1WZRGR

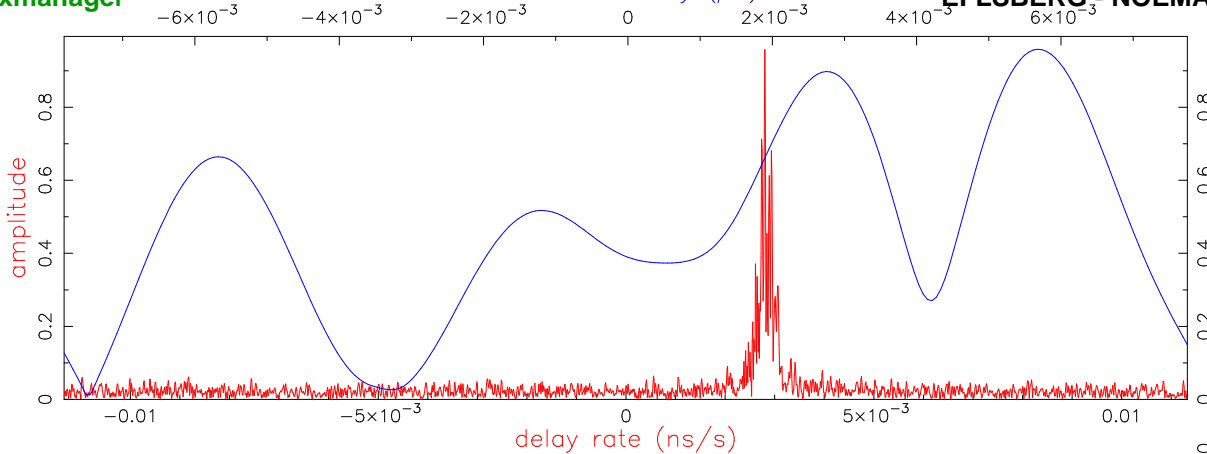
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BN

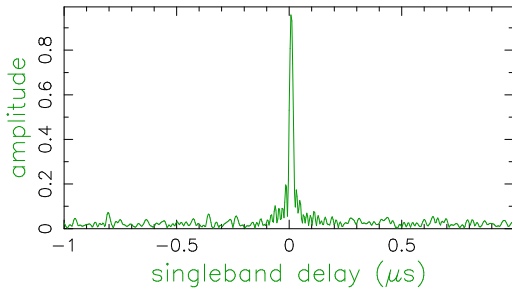
EFLSBERG - NOEMA, fgroup W, pol LR

multiband delay (μ s)

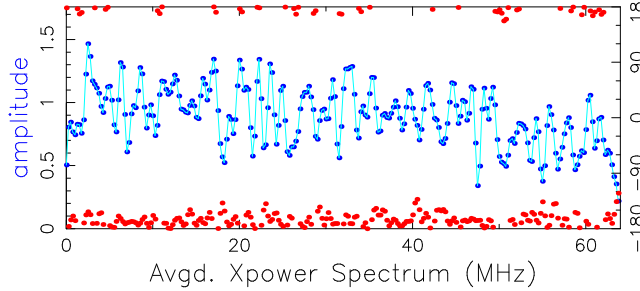


Fringe quality 1

SNR 54.3
 Int time 419.814
 Amp 0.994
 Phase -130.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.009183
 MBD 0.005726
 Fringe rate (Hz)
 0.241252
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

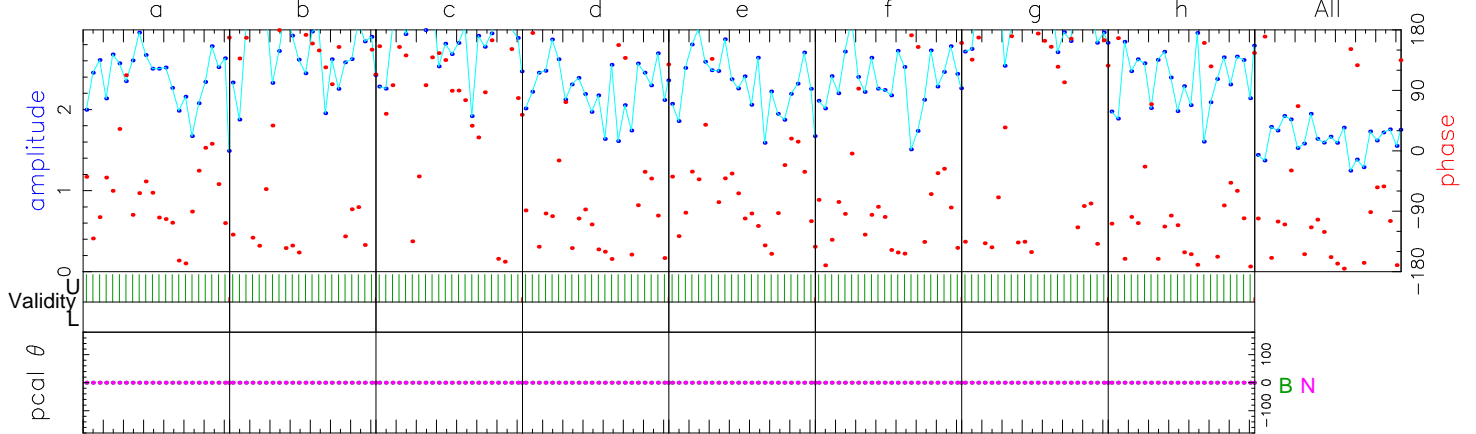


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114526
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-71.6	-162.6	121.8	-117.3	-63.1	-107.4	-161.1	-127.9	Phase	-130.6
	1.4	1.6	1.7	1.3	1.4	1.4	2.0	1.4	Ampl.	1.5
	257.7	258.9	259.6	260.1	259.9	259.9	259.3	258.6	Sbd box	259.4
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 8.14760107676E+02 Apriori delay (usec) 8.14754381492E+02 Resid mbdelay (usec) 5.72618E-03 +/- 2.0E-05
 Sband delay (usec) 8.14763564742E+02 Apriori clock (usec) -8.8014498E+00 Resid sbdelay (usec) 9.18325E-03 +/- 1.6E-04
 Phase delay (usec) 8.14754377281E+02 Apriori clockrate (us/s) 4.3890000E-06 Resid phdelay (usec) -4.21117E-06 +/- 6.8E-08
 Delay rate (us/s) -7.13591441794E-02 Apriori rate (us/s) -7.13619448732E-02 Resid rate (us/s) 2.80069E-06 +/- 2.8E-10
 Total phase (deg) 21.2 Apriori accel (us/s/s) 1.68954699777E-06 Resid phase (deg) -130.6 +/- 2.1

RMS Theor. Amplitude 0.994 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 61.5 5.1 Search (2048X32) 0.928 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 70.5 8.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 60.9 3.0 Inc. seg. avg. 1.661 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.9 5.2 Inc. frq. avg. 1.531 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 N: az 57.3 el 47.5 pa -72.8 u,v (fr/asec) 651.491 543.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BN..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BN.W.47.1WZRGR

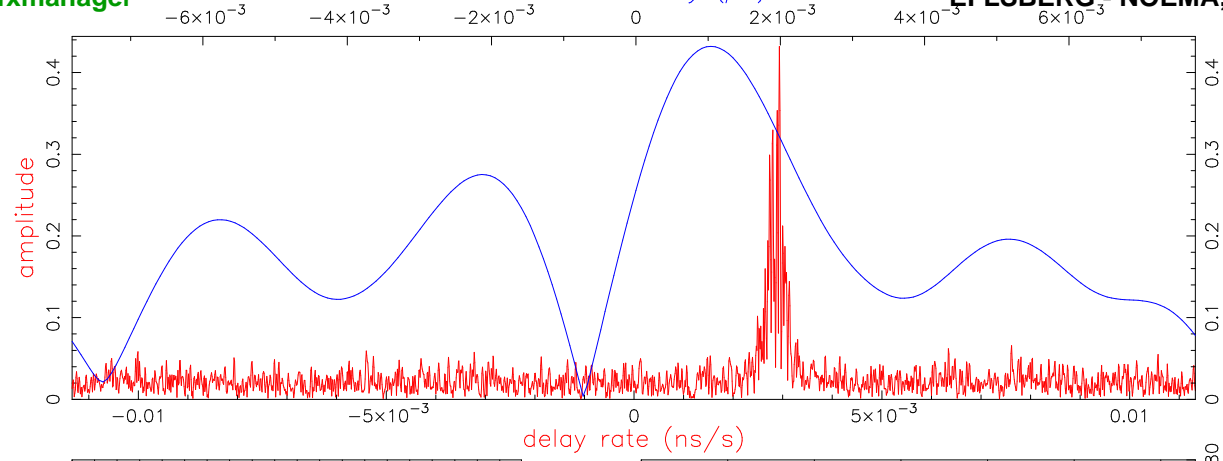
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

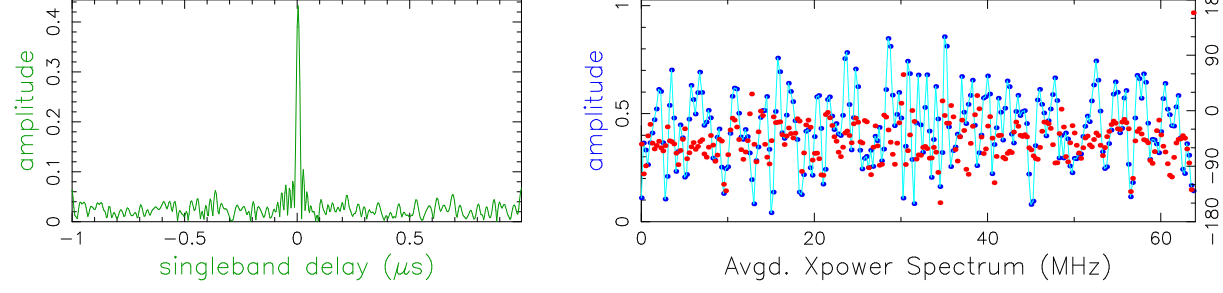
NRAO150.1WZRGR, No0037, BN

EFLSBERG - NOEMA, fgroup W, pol RL

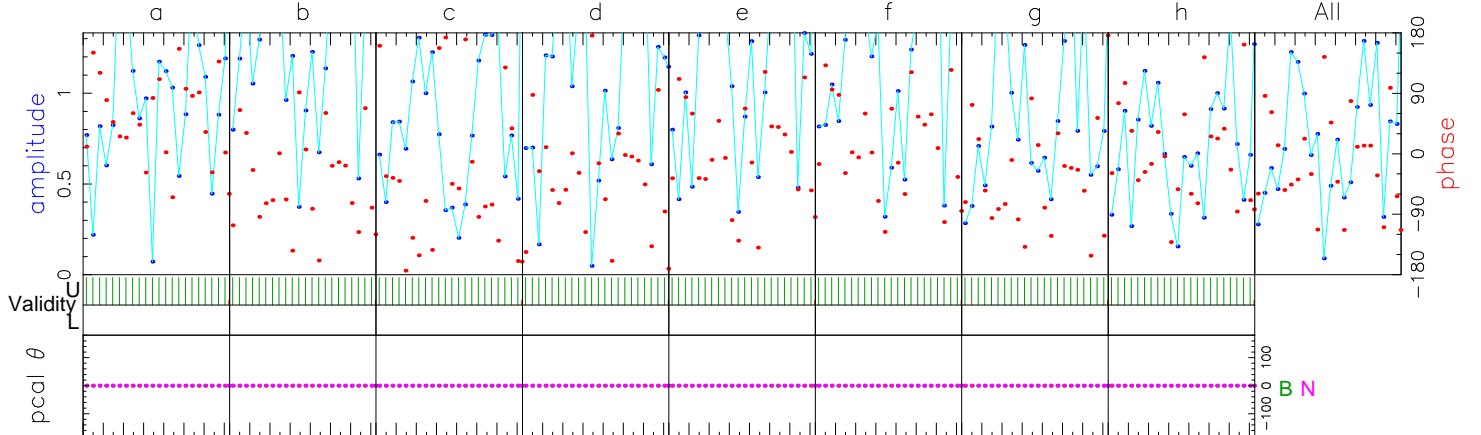
multiband delay (μ s)



Fringe quality 5
 SNR 24.2
 Int time 419.816
 Amp 0.444
 Phase -14.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.003889
 MBD 0.001039
 Fringe rate (Hz) 0.253116
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114530
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	48.3	-40.9	-110.1	-38.2	9.8	23.6	-52.1	-5.1	Phase	-14.8
	0.6	0.8	0.4	0.7	0.7	0.7	0.5	0.4	Ampl.	0.6
	256.3	257.3	258.6	258.4	258.5	257.9	258.6	257.1	Sbd box	258.0
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	
									Tracks	
Group delay (usec)(sbd)	8.14755420448E+02		Apriori delay (usec)		8.14754381492E+02		Resid mbdelay (usec)		1.03896E-03	+/- 4.5E-05
Sband delay (usec)	8.14758270492E+02		Apriori clock (usec)		-8.8014498E+00		Resid sbdelay (usec)		3.88900E-03	+/- 3.6E-04
Phase delay (usec)	8.14754381016E+02		Apriori clockrate (us/s)		4.3890000E-06		Resid phdelay (usec)		-4.75940E-07	+/- 1.5E-07
Delay rate (us/s)	-7.13590064521E-02		Apriori rate (us/s)		-7.13619448732E-02		Resid rate (us/s)		2.93842E-06	+/- 6.3E-10
Total phase (deg)	137.1		Apriori accel (us/s/s)		1.68954699777E-06		Resid phase (deg)		-14.8	+/- 4.7

ph/seg (deg) 70.2 11.4 Search (2048X32) 0.411 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 104.0 19.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.5 6.7 Inc. seg. avg. 0.739 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.1 11.7 Inc. frq. avg. 0.598 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 N: az 57.3 el 47.5 pa -72.8 u,v (fr/asec) 651.491 543.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BN..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BN.W.66.1WZRGR

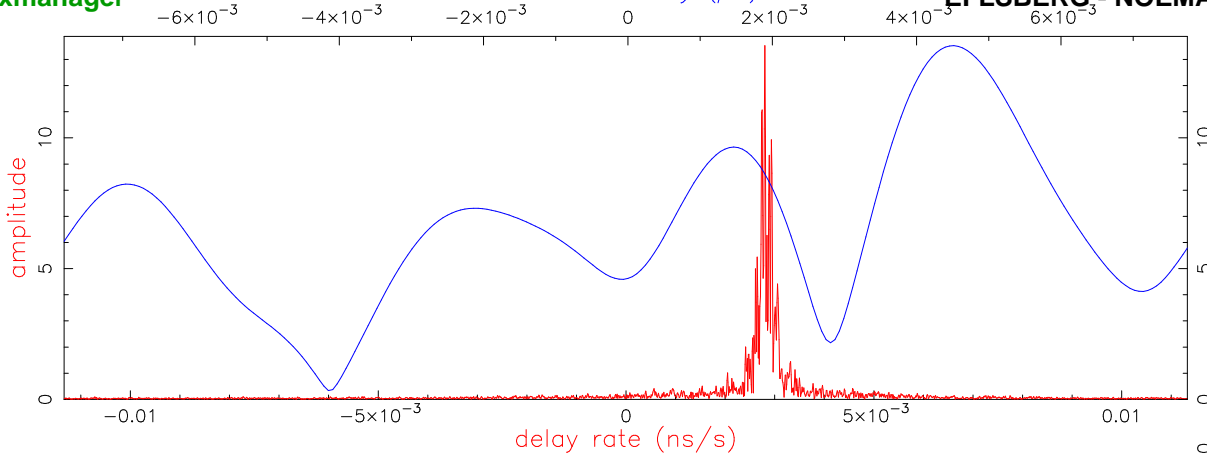
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BN

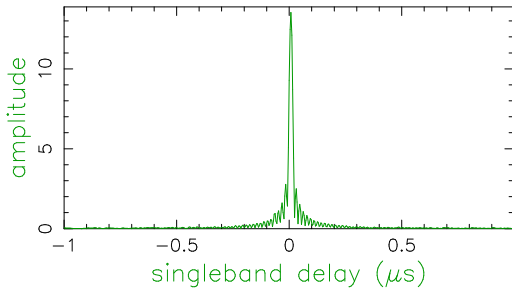
EFLSBERG₃ - NOEMA, fgroup W, pol LL

multiband delay (μ s)

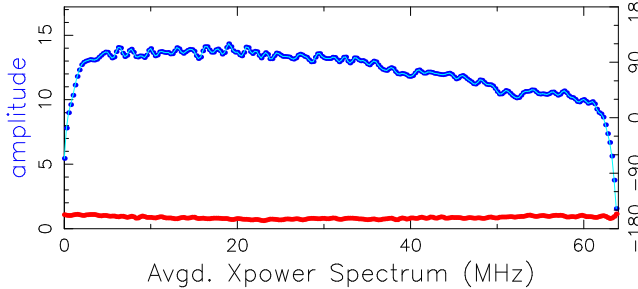


Fringe quality 1

SNR 758.4
 Int time 419.816
 Amp 13.882
 Phase -127.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.007524
 MBD 0.004494
 Fringe rate (Hz)
 0.241359
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

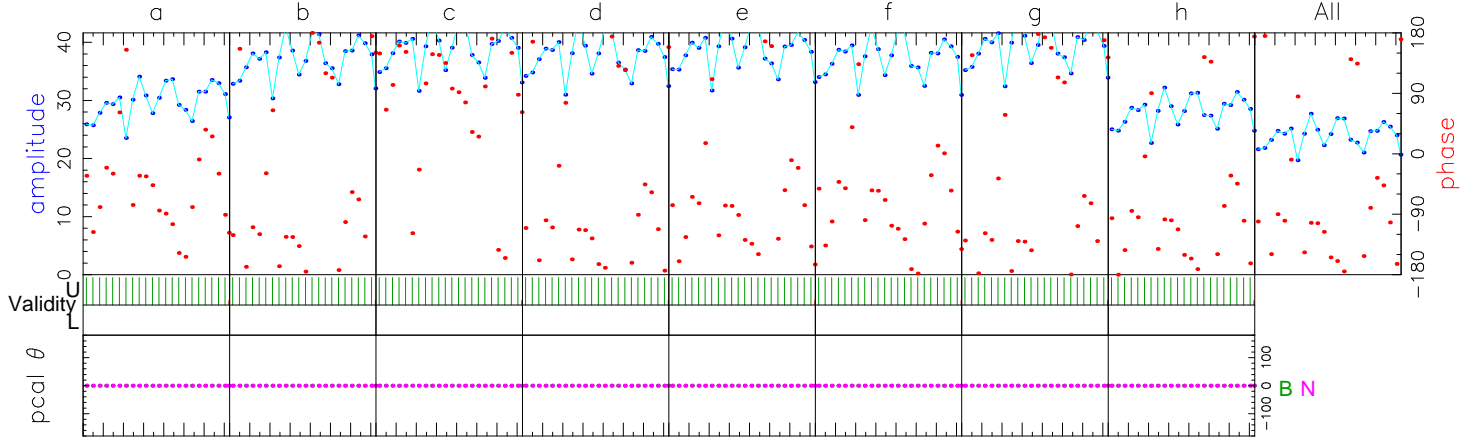


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114518
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.5	-147.6	124.1	-137.1	-101.6	-79.2	-154.8	-123.1	Phase	-127.2
	17.2	21.5	22.4	21.8	22.4	21.6	22.8	16.1	Ampl.	20.7
	257.3	258.3	259.3	259.3	259.4	259.3	258.9	257.7	Sbd box	258.9
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	8.14758875426E+02	Apriori delay (usec)	8.14754381492E+02	Resid mbdelay (usec)	4.49393E-03	+/-	1.4E-06
Sband delay (usec)	8.14761905242E+02	Apriori clock (usec)	-8.8014498E+00	Resid sbdelay (usec)	7.52375E-03	+/-	1.1E-05
Phase delay (usec)	8.14754377392E+02	Apriori clockrate (us/s)	4.3890000E-06	Resid phdelay (usec)	-4.10039E-06	+/-	4.9E-09
Delay rate (us/s)	-7.13591429317E-02	Apriori rate (us/s)	-7.13619448732E-02	Resid rate (us/s)	2.80194E-06	+/-	2.0E-11
Total phase (deg)	24.7	Apriori accel (us/s/s)	1.68954699777E-06	Resid phase (deg)	-127.2	+/-	0.2

ph/seg (deg)	RMS 62.5	Theor. 0.4	Amplitude Search (2048X32)	13.882 +/- 0.018	13.358	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	79.2	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)	59.3	0.2	Inc. seg. avg.	24.691		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	52.2	0.4	Inc. frq. avg.	20.727		Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
								ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 N: az 57.3 el 47.5 pa -72.8 u,v (fr/asec) 651.491 543.646 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BN..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BN.W.7.1WZRGR

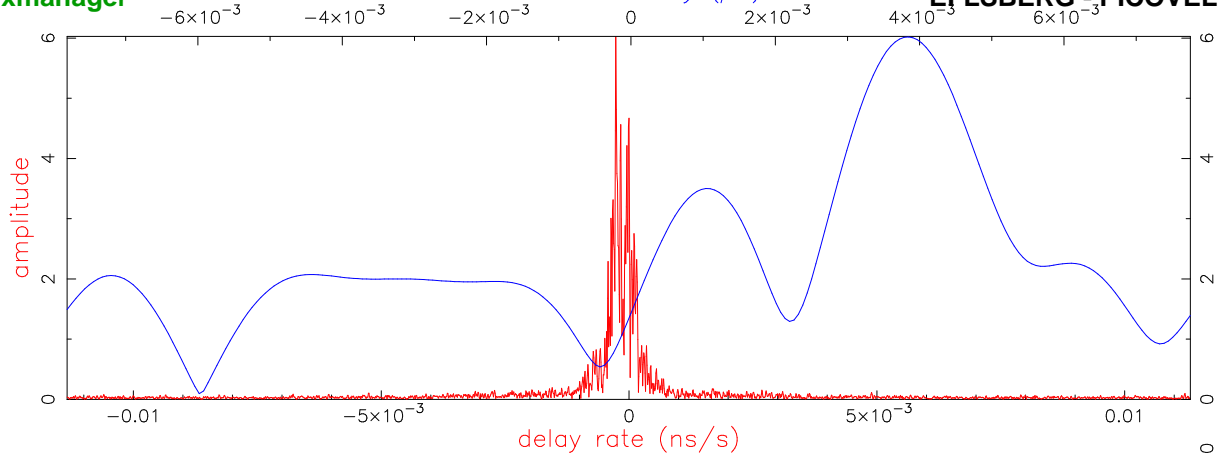
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BP

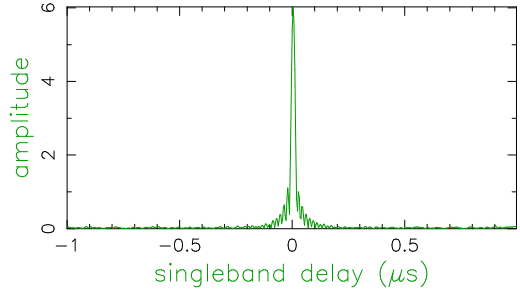
EFLSBERG - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

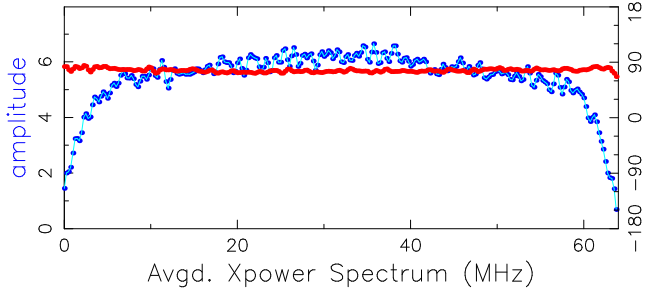


Fringe quality 2

SNR 337.7
 Int time 419.816
 Amp 6.028
 Phase 82.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.004380
 MBD 0.003847
 Fringe rate (Hz)
 -0.023273
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

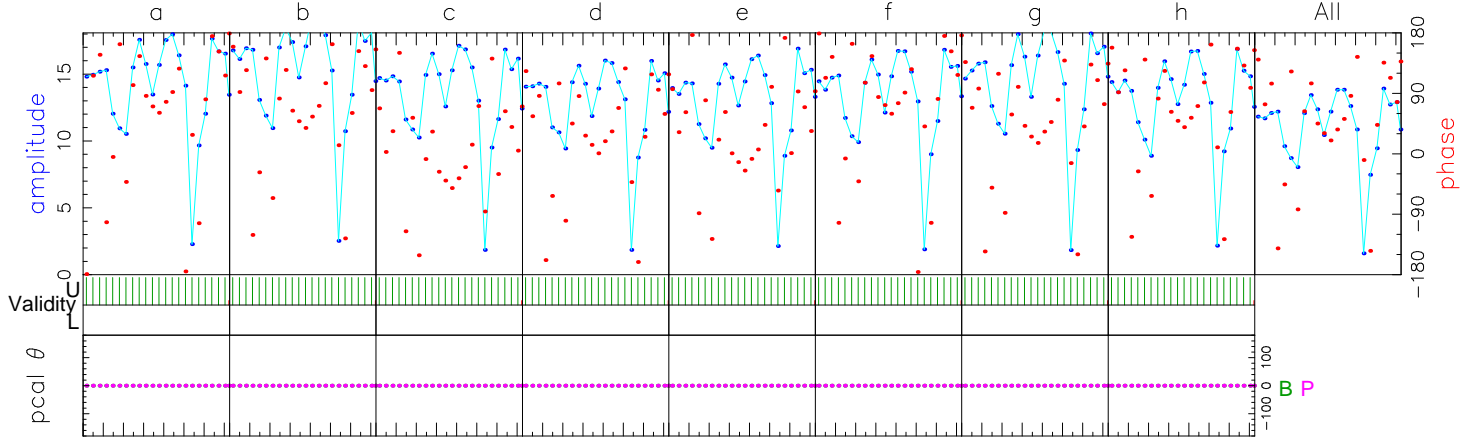


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114517
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	123.0	101.2	10.4	65.1	39.5	122.8	78.1	101.8	Phase	82.7
B	7.7	8.4	7.4	7.0	7.1	7.2	7.9	7.2	Ampl.	7.5
P	257.1	258.0	258.4	258.9	259.1	258.8	258.8	257.5	Sbd box	258.1
B:P	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.55626262279E+03	Apriori delay (usec)	3.55625877552E+03	Resid mbdelay (usec)	3.84727E-03	+/-	3.2E-06
Sband delay (usec)	3.55626315552E+03	Apriori clock (usec)	-2.1021355E+01	Resid sbdelay (usec)	4.38000E-03	+/-	2.6E-05
Phase delay (usec)	3.55625877819E+03	Apriori clockrate (us/s)	5.9999998E-07	Resid phdelay (usec)	2.66840E-06	+/-	1.1E-08
Delay rate (us/s)	-1.93154063333E-01	Apriori rate (us/s)	-1.93153793161E-01	Resid rate (us/s)	-2.70172E-07	+/-	4.5E-11
Total phase (deg)	55.1	Apriori accel (us/s/s)	-4.19325128118E-06	Resid phase (deg)	82.7	+/-	0.3

ph/seg (deg)	72.2	0.8	Amplitude	6.028 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	95.5	1.4	Search (2048X32)	5.710	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.5	0.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.5	0.8	Inc. seg. avg.	11.085	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	7.496	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 63.6 el 51.0 pa -64.9 P: az 49.5 el 37.3 pa -75.4 u,v (fr/asec) 1749.155 519.039 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BP..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BP.W.1.1WZRGR

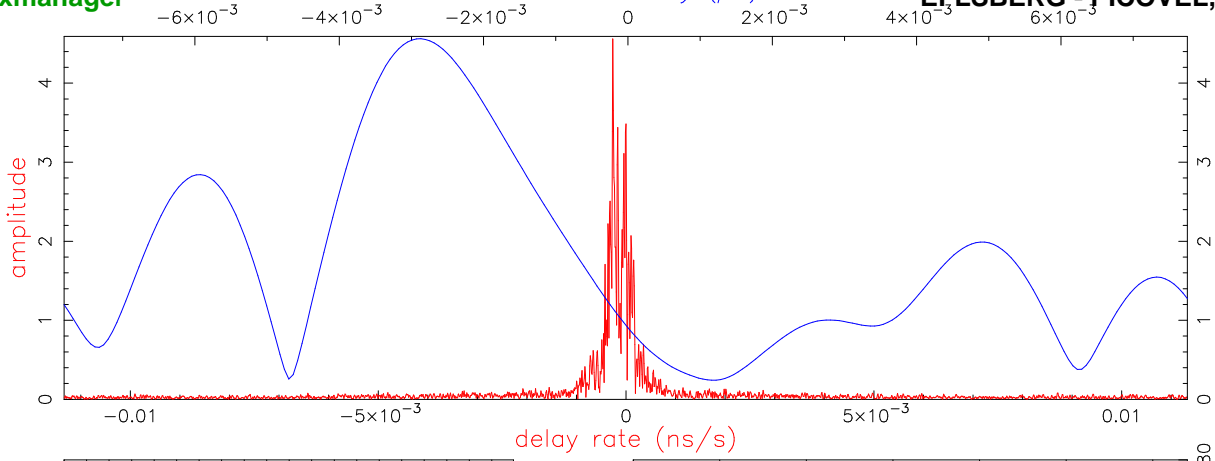
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BP

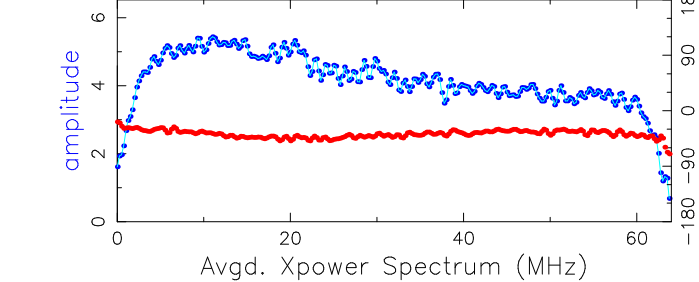
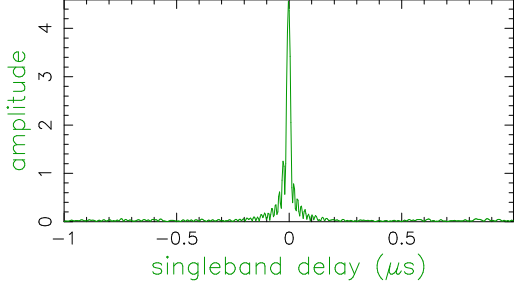
EFLSBERG - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

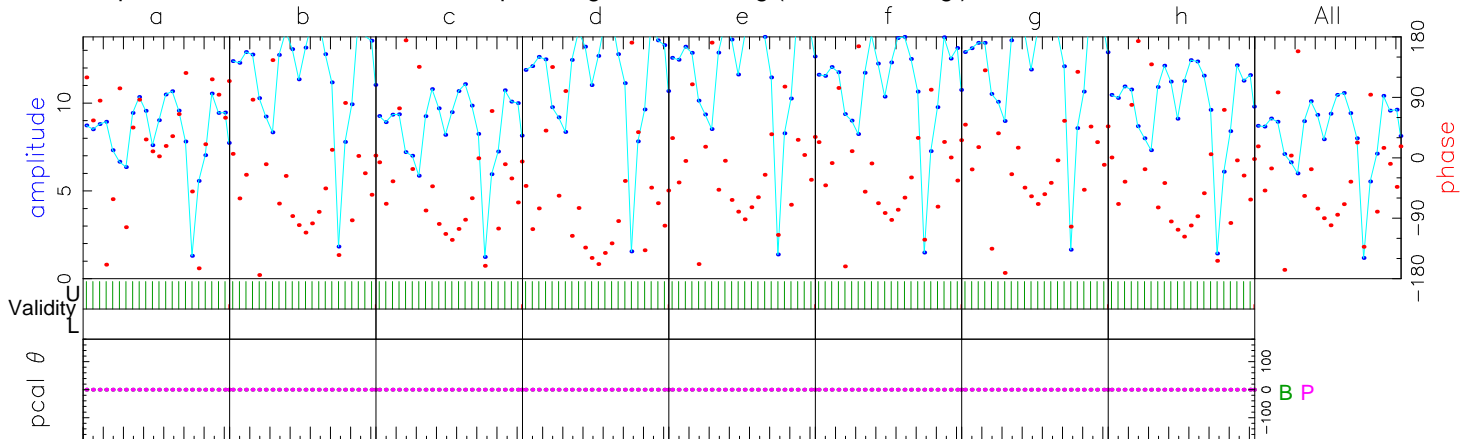


Fringe quality 2

SNR 257.2
 Int time 419.816
 Amp 4.591
 Phase -38.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002868
 MBD -0.002852
 Fringe rate (Hz)
 -0.023303
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114521
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	63.0	-50.4	-60.8	-97.2	-27.4	-30.5	-6.8	-57.0	Phase	-38.9
	4.5	6.4	4.8	6.4	6.5	6.1	6.8	5.5	Ampl.	5.9
	253.6	255.2	255.7	255.9	256.7	255.9	256.1	254.7	Sbd box	256.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.55625592329E+03		Apriori delay (usec)		3.55625877552E+03		Resid mbdelay (usec)		-2.85223E-03	+/- 4.2E-06
Sband delay (usec)	3.55625590752E+03		Apriori clock (usec)		-2.1021355E+01		Resid sbdelay (usec)		-2.86800E-03	+/- 3.3E-05
Phase delay (usec)	3.55625877426E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		-1.25348E-06	+/- 1.4E-08
Delay rate (us/s)	-1.93154063682E-01		Apriori rate (us/s)		-1.93153793161E-01		Resid rate (us/s)		-2.70522E-07	+/- 5.9E-11
Total phase (deg)	293.5		Apriori accel (us/s/s)		-4.19325128118E-06		Resid phase (deg)		-38.9	+/- 0.4

RMS Theor. Amplitude 4.591 +/- 0.018
 ph/seg (deg) 71.9 1.1 Search (2048X32) 4.289
 amp/seg (%) 92.8 1.9 Interp. 0.000
 ph/frq (deg) 51.6 0.6 Inc. seg. avg. 8.310
 amp/frq (%) 32.7 1.1 Inc. frq. avg. 5.864
 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_cohere infinite ion window (TEC) 0.00 0.00
 B: az 63.6 el 51.0 pa -64.9 P: az 49.5 el 37.3 pa -75.4 u,v (fr/asec) 1749.155 519.039 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BP..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BP.W.21.1WZRGR

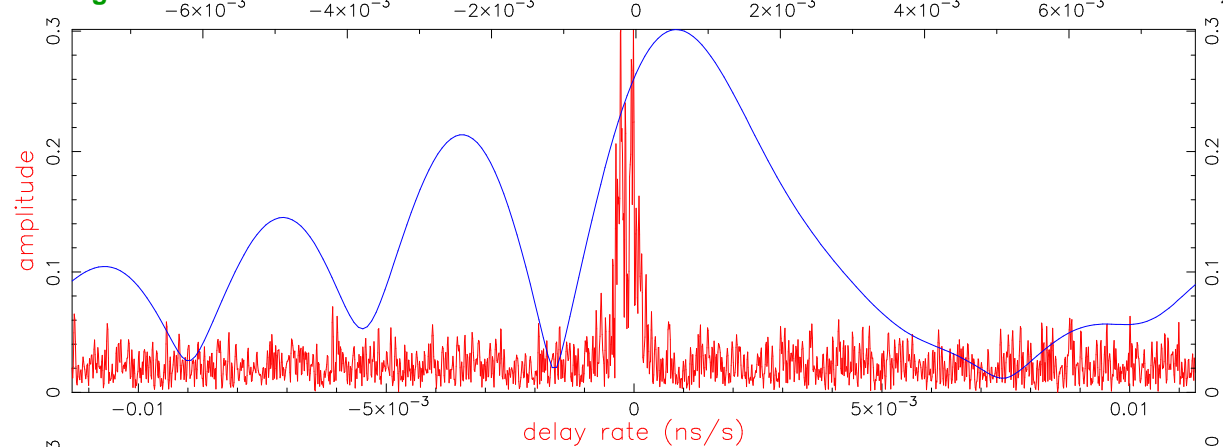
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BP

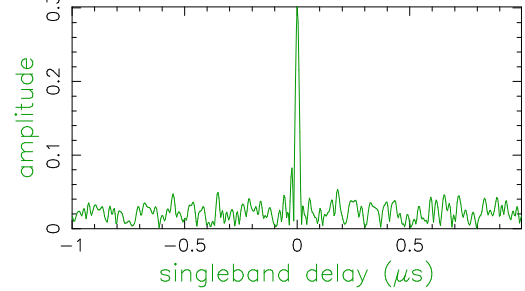
EFLSBERG - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

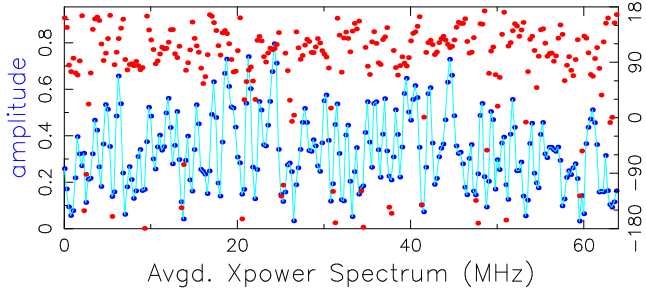


Fringe quality 8

SNR 16.9
Int time 419.816
Amp 0.301
Phase 114.6
PFD 0.0e+00
Delays (us)
SBD 0.000297
MBD 0.000563
Fringe rate (Hz)
-0.001044
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

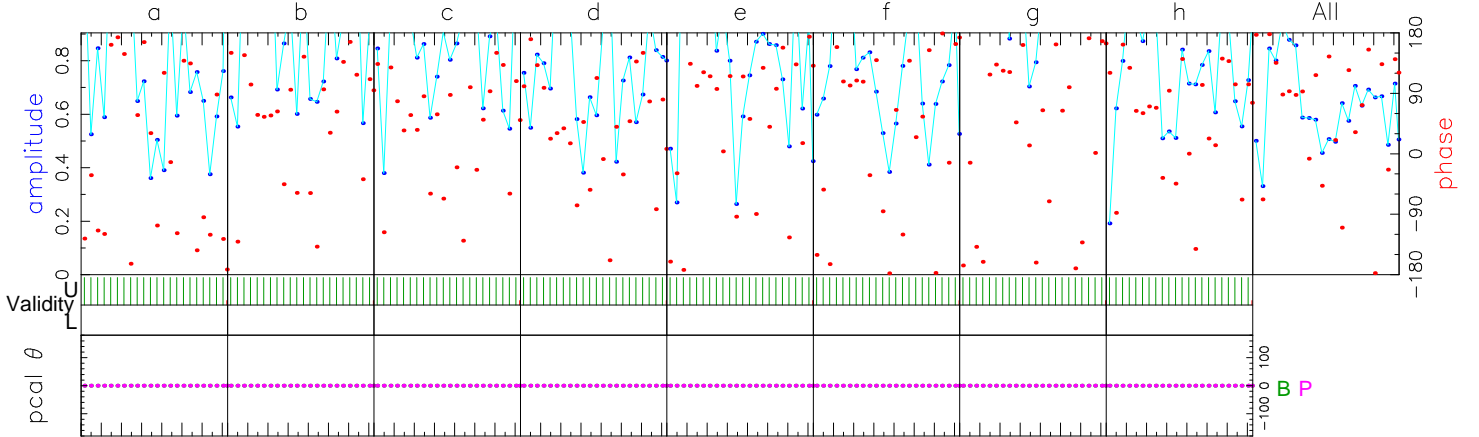


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090000.00
Stop 090659.84
FRT 090330.00
Corr/FF/build
2021:302:211904
2021:303:114524
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.9	97.1	72.4	56.2	122.7	136.0	145.6	90.8	Phase	114.6
	0.4	0.5	0.4	0.3	0.5	0.3	0.5	0.3	Ampl.	0.4
	254.8	256.1	256.8	257.1	257.2	256.2	256.4	256.7	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.55625933863E+03		Apriori delay (usec)		3.55625877552E+03		Resid mbdelay (usec)		5.63115E-04	+/- 6.4E-05
Sband delay (usec)	3.55625907302E+03		Apriori clock (usec)		-2.1021355E+01		Resid sbdelay (usec)		2.97500E-04	+/- 5.1E-04
Phase delay (usec)	3.55625877921E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		3.69533E-06	+/- 2.2E-07
Delay rate (us/s)	-1.93153805285E-01		Apriori rate (us/s)		-1.93153793161E-01		Resid rate (us/s)		-1.21241E-08	+/- 9.0E-10
Total phase (deg)			Apriori accel (us/s/s)		-4.19325128118E-06		Resid phase (deg)		114.6	+/- 6.8

ph/seg (deg) 81.3 16.3 Theor. Amplitude 0.301 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 123.6 28.4 Search (2048X32) 0.300 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.6 9.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.9 16.7 Inc. seg. avg. 0.617 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 P: az 49.5 el 37.3 pa -75.4 u,v (fr/asec) 1749.155 519.039 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BP..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BP.W.41.1WZRGR simultaneous interpolator

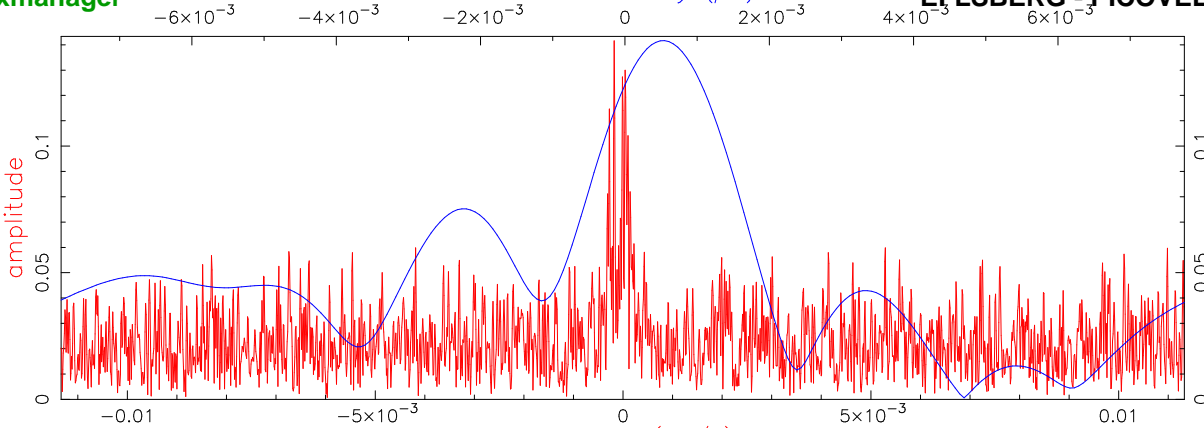
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BP

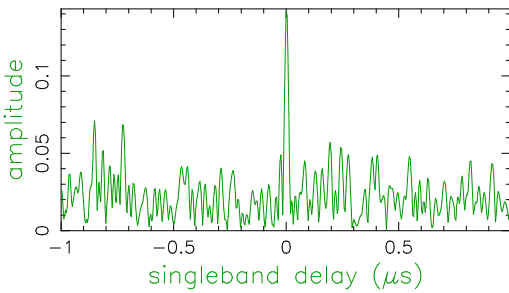
EFLSBERG - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

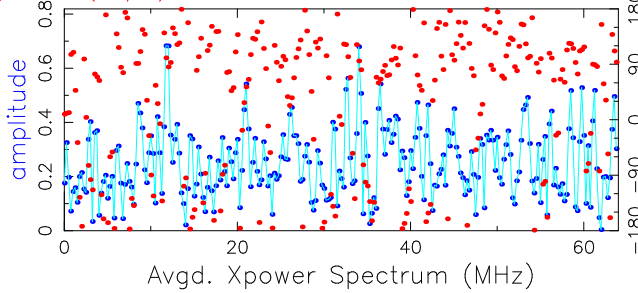


Fringe quality 9

SNR 8.0
 Int time 419.816
 Amp 0.143
 Phase 125.4
 PFD 3.4e-07
 Delays (us)
 SBD 0.001494
 MBD 0.000568
 Fringe rate (Hz)
 -0.014877
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

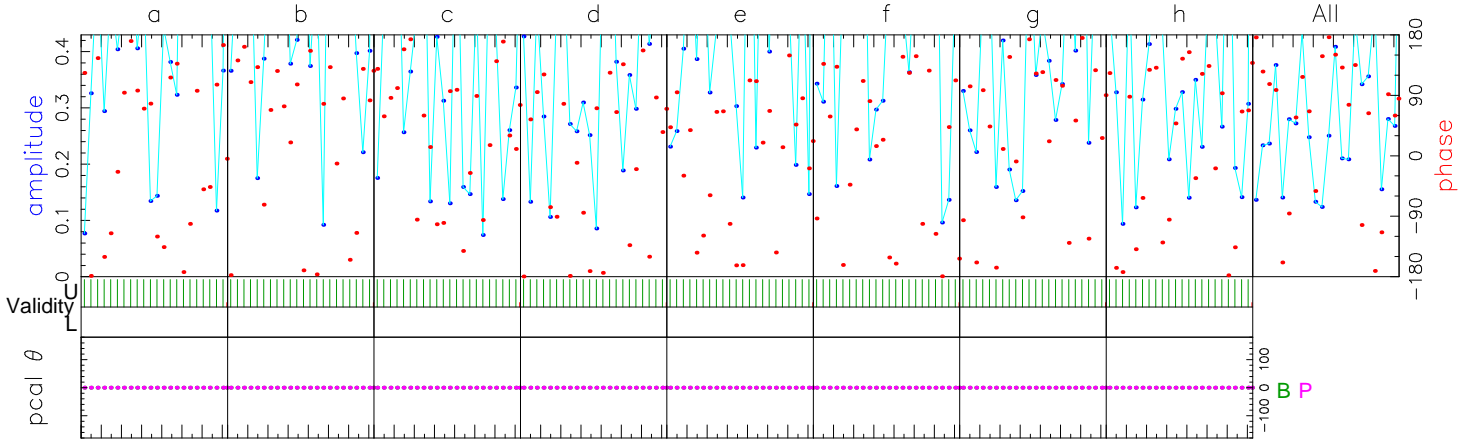


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114529
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	161.8	130.5	83.7	132.5	67.9	148.4	120.4	139.1	Phase	125.4
	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.2
	39.4	257.3	127.8	71.7	258.9	377.9	259.5	120.8	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.55625934361E+03		Apriori delay (usec)		3.55625877552E+03		Resid mbdelay (usec)		5.68096E-04	+/- 1.4E-04
Sband delay (usec)	3.55626026952E+03		Apriori clock (usec)		-2.1021355E+01		Resid sbdelay (usec)		1.49400E-03	+/- 1.1E-03
Phase delay (usec)	3.55625877956E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		4.04394E-06	+/- 4.6E-07
Delay rate (us/s)	-1.93153965867E-01		Apriori rate (us/s)		-1.93153793161E-01		Resid rate (us/s)		-1.72707E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.19325128118E-06		Resid phase (deg)		125.4	+/- 14.3

	RMS	Theor.	Amplitude	0.143 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	74.6	34.2	Search (2048X32)	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	121.1	59.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.6	20.2	Inc. seg. avg.	0.235	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.3	35.2	Inc. frq. avg.	0.150	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 P: az 49.5 el 37.3 pa -75.4 u,v (fr/asec) 1749.155 519.039 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BP..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BP.W.60.1WZRGR

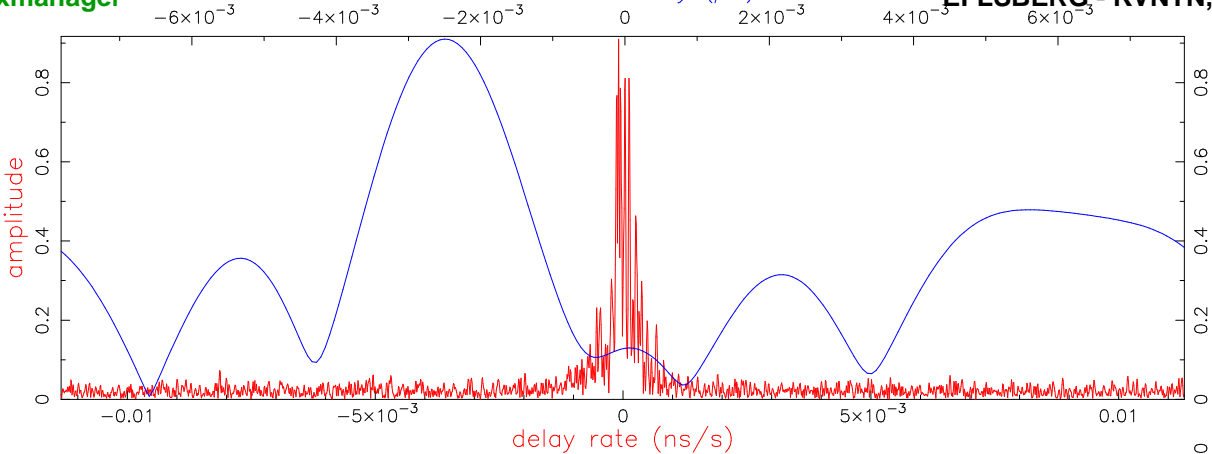
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bt

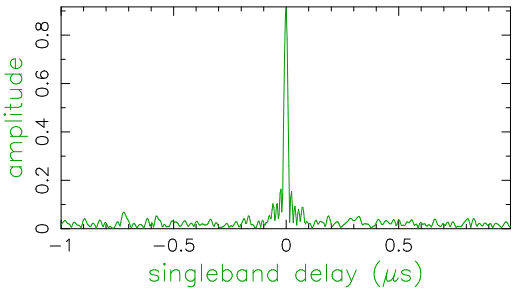
EFLSBERG - KVNTN, fgroup W, pol RR

multiband delay (μ s)

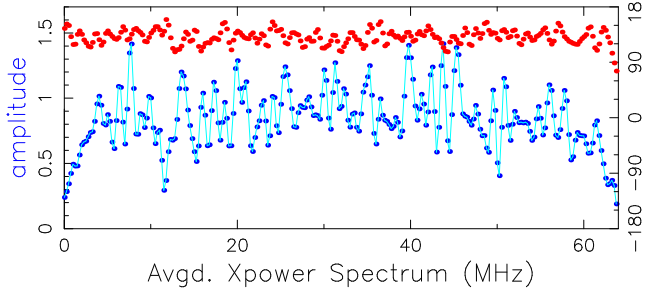


Fringe quality 2

SNR 51.4
 Int time 419.816
 Amp 0.917
 Phase 146.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.001150
 MBD -0.002530
 Fringe rate (Hz)
 -0.007749
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

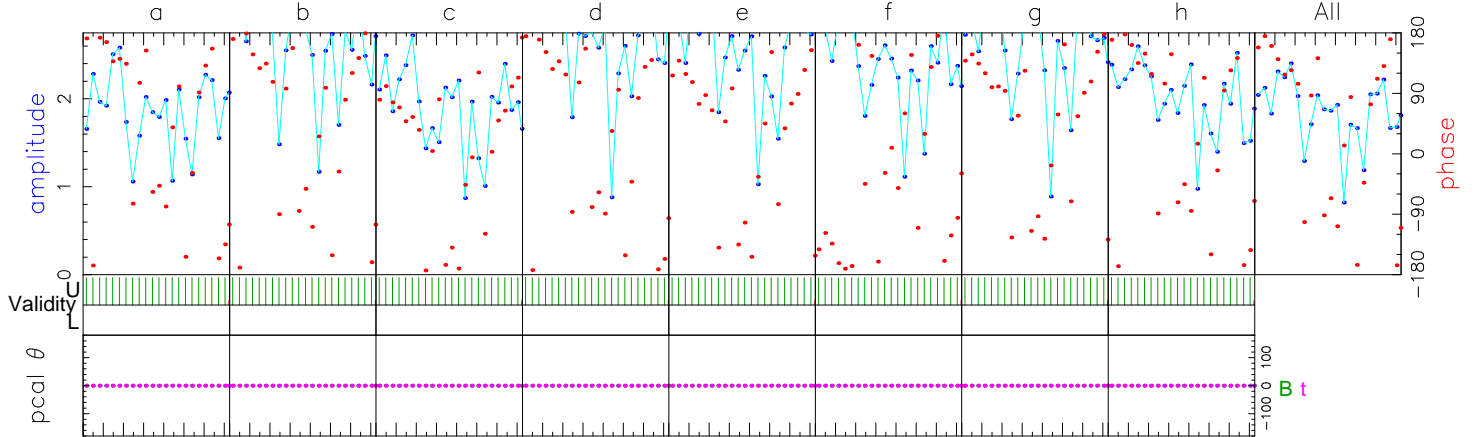


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114522
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.38582067299E+03			1.38582320307E+03					
Sband delay (usec)		1.38582205307E+03			-2.1798029E+01					
Phase delay (usec)		1.38582320780E+03			4.9999999E-08					
Delay rate (us/s)		1.23570411264E+00			1.23570420260E+00					
Total phase (deg)			43.3		1.20872825138E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (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										
B t										
Amplitude										
Phase										
Ampl.										
Sbd box										
APs used										
PC freqs										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
RMS										
Theor.										
Amplitude										
Search (2048X32)										
0.917 +/- 0.018										
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)										
simultaneous interpolator										

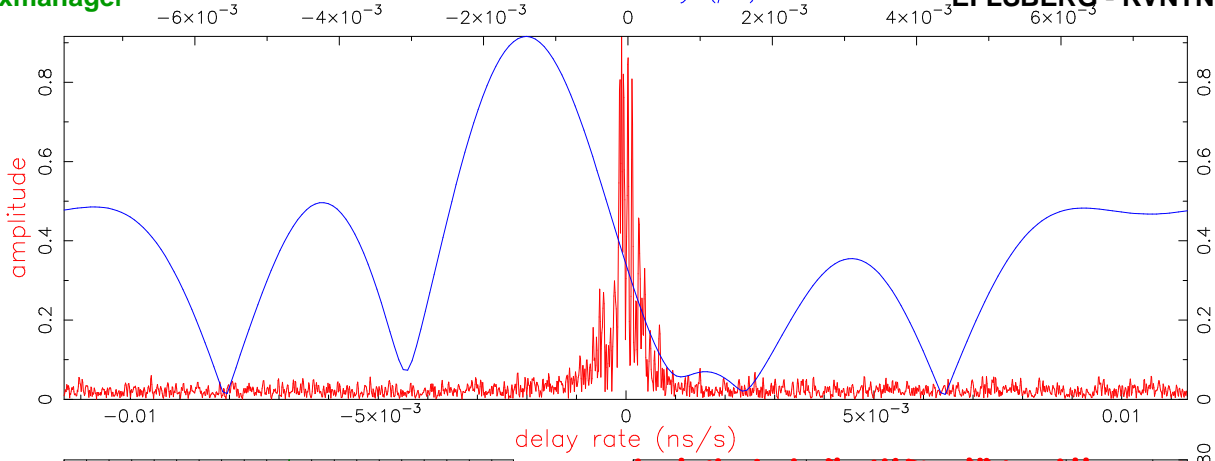
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bt

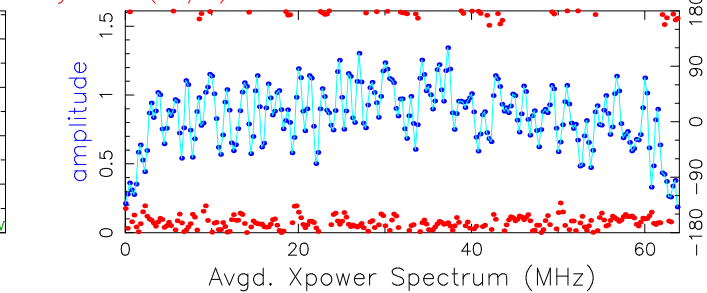
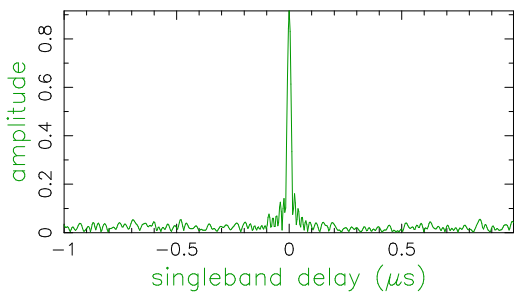
EFLSBERG - KVNTN, fgroup W, pol LL

multiband delay (μ s)



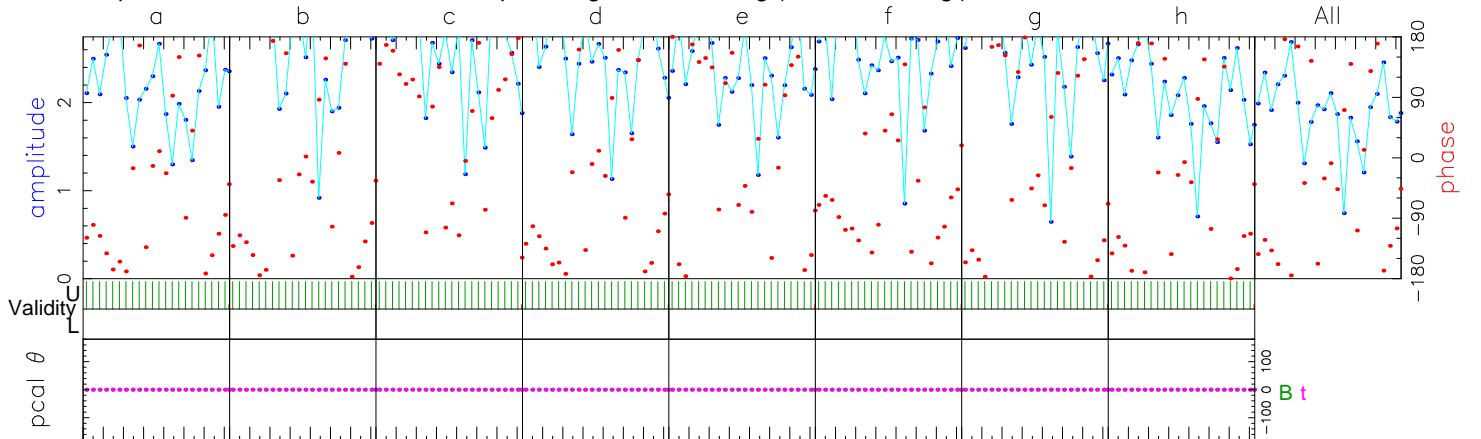
Fringe quality 2

SNR 51.3
 Int time 419.816
 Amp 0.916
 Phase -152.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.000150
 MBD -0.001413
 Fringe rate (Hz)
 -0.007672
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114518
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-132.4	-138.9	133.3	-132.5	169.4	-80.1	-167.8	-153.9	Phase	-152.7
	1.0	1.3	1.3	1.3	1.1	1.2	1.3	1.0	Ampl.	1.2
	255.7	256.8	257.8	257.8	258.0	257.6	257.2	256.0	Sbd box	257.0
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	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.38582178968E+03		Apriori delay (usec)		1.38582320307E+03		Resid mbdelay (usec)		-1.41339E-03	+/- 2.1E-05
Sband delay (usec)	1.38582305282E+03		Apriori clock (usec)		-2.1798029E+01		Resid sbdelay (usec)		-1.50250E-04	+/- 1.7E-04
Phase delay (usec)	1.38582319815E+03		Apriori clockrate (us/s)		4.9999999E-08		Resid phdelay (usec)		-4.92258E-06	+/- 7.2E-08
Delay rate (us/s)	1.23570411354E+00		Apriori rate (us/s)		1.23570420260E+00		Resid rate (us/s)		-8.90607E-08	+/- 3.0E-10
Total phase (deg)	103.8		Apriori accel (us/s/s)		1.20872825138E-05		Resid phase (deg)		-152.7	+/- 2.2

ph/seg (deg) 77.6 5.4 Search (2048X32) 0.910 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 116.9 9.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.3 3.2 Inc. seg. avg. 1.895 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.8 5.5 Inc. frq. avg. 1.196 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 t: az 311.2 el 46.2 pa 91.9 u,v (fr/asec) -11233.943 2520.671 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bt..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bt.W.4.1WZRGR

Mk4/DiFX fourfit 3.21 rev 2937

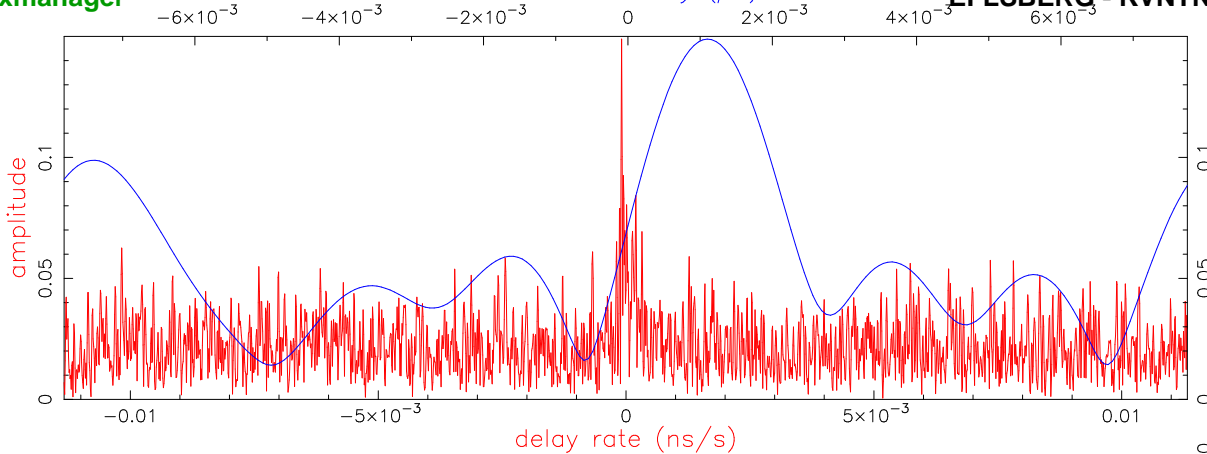
fxmanager

NRAO150.1WZRGR, No0037, Bt

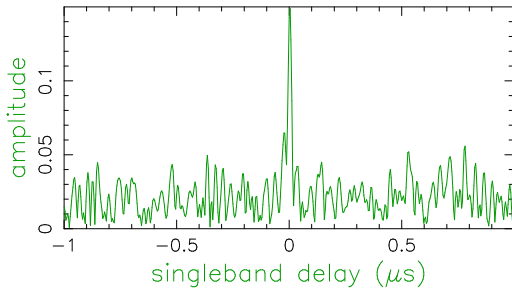
EFLSBERG - KVNTN, fgroup W, pol LR

multiband delay (μ s)

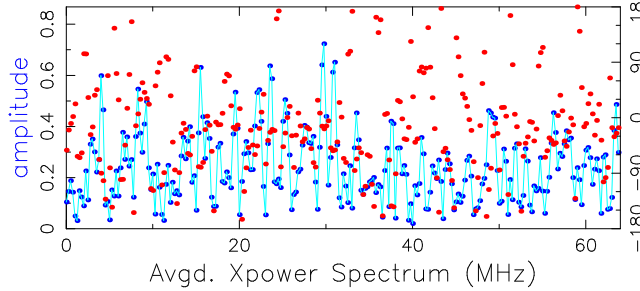
Fringe quality 9



SNR 8.4
 Int time 419.816
 Amp 0.150
 Phase -5.6
 PFD 1.5e-08
 Delays (us)
 SBD 0.002798
 MBD 0.001083
 Fringe rate (Hz)
 -0.007944
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

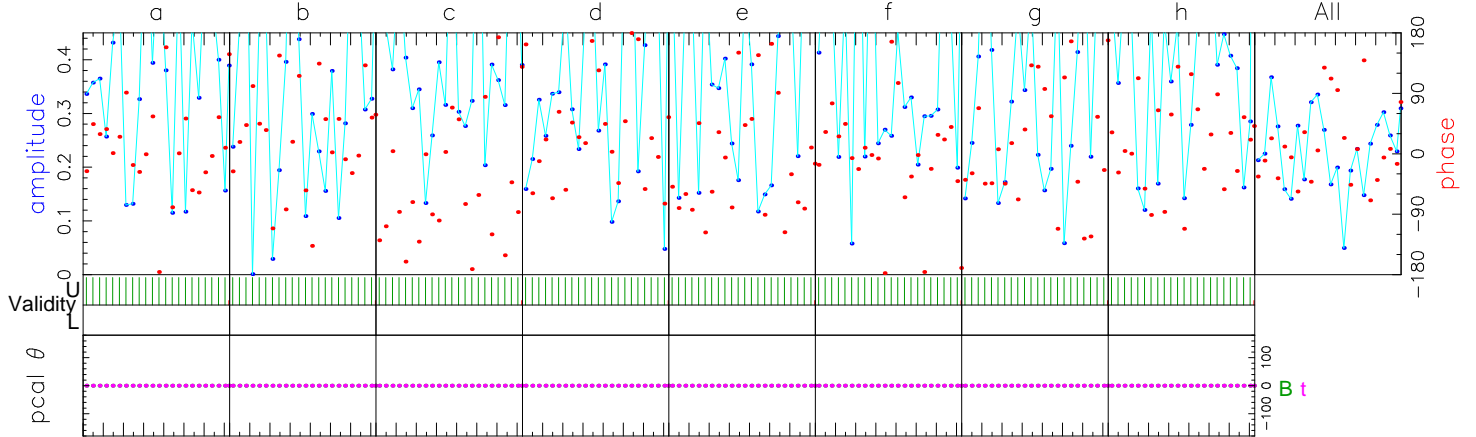


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114525
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	1.38582428655E+03	Apriori delay (usec)	1.38582320307E+03	Resid mbdelay (usec)	1.08349E-03	+/-	1.3E-04
Sband delay (usec)	1.38582600132E+03	Apriori clock (usec)	-2.1798029E+01	Resid sbdelay (usec)	2.79825E-03	+/-	1.0E-03
Phase delay (usec)	1.38582320289E+03	Apriori clockrate (us/s)	4.9999999E-08	Resid phdelay (usec)	-1.79669E-07	+/-	4.4E-07
Delay rate (us/s)	1.23570411038E+00	Apriori rate (us/s)	1.23570420260E+00	Resid rate (us/s)	-9.22273E-08	+/-	1.8E-09
Total phase (deg)	250.9	Apriori accel (us/s/s)	1.20872825138E-05	Resid phase (deg)	-5.6	+/-	13.6

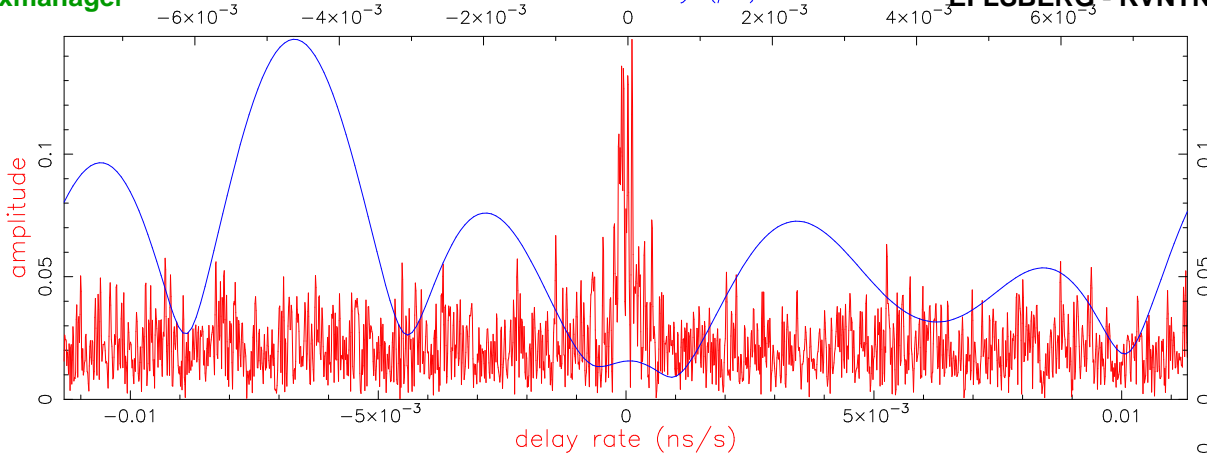
ph/seg (deg)	60.1	Theor.	32.7	Amplitude	0.150 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.3	Search (2048X32)	0.141	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	43.0	Inc. seg. avg.	0.199	Inc. frq. avg.	0.173	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.2	Inc. frq. avg.	0.173			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 63.6 el 51.0 pa -64.9 t: az 311.2 el 46.2 pa 91.9 u,v (fr/asec) -11233.943 2520.671 simultaneous interpolator

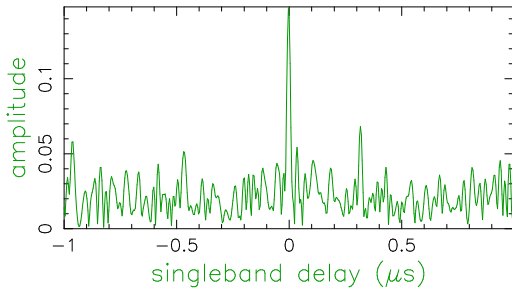
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bt..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bt.W.43.1WZRGR

multiband delay (μ s)

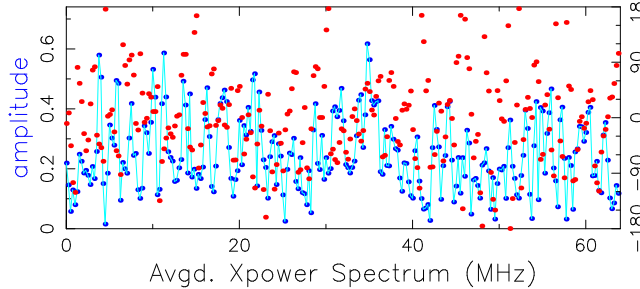
Fringe quality 9



SNR 8.3
 Int time 419.816
 Amp 0.148
 Phase 13.2
 PFD 3.9e-08
 Delays (us)
 SBD -0.002772
 MBD -0.004597
 Fringe rate (Hz)
 0.010416
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

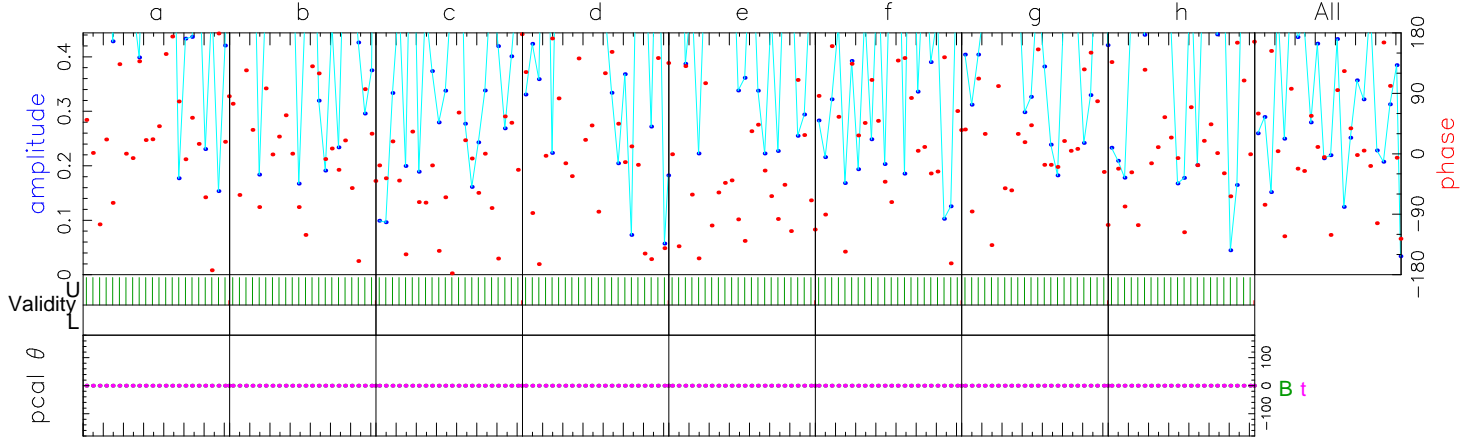


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114529
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.38581860646E+03				1.38582320307E+03			Resid mbdelay (usec)	-4.59661E-03 +/- 1.3E-04
Sband delay (usec)		1.38582043082E+03				-2.1798029E+01			Resid sbdelay (usec)	-2.77225E-03 +/- 1.0E-03
Phase delay (usec)		1.38582320350E+03				4.9999999E-08			Resid phdelay (usec)	4.26913E-07 +/- 4.5E-07
Delay rate (us/s)		1.23570432353E+00				1.23570420260E+00			Resid rate (us/s)	1.20925E-07 +/- 1.8E-09
Total phase (deg)			269.7			1.20872825138E-05			Resid phase (deg)	13.2 +/- 13.8

ph/seg (deg) 81.4 33.1 Amplitude 0.148 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 141.9 57.8 Search (2048X32) 0.142 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.7 19.5 Inc. seg. avg. 0.276 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.9 34.1 Inc. frq. avg. 0.170 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 t: az 311.2 el 46.2 pa 91.9 u,v (fr/asec) -11233.943 2520.671 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bt..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bt.W.61.1WZRGR simultaneous interpolator

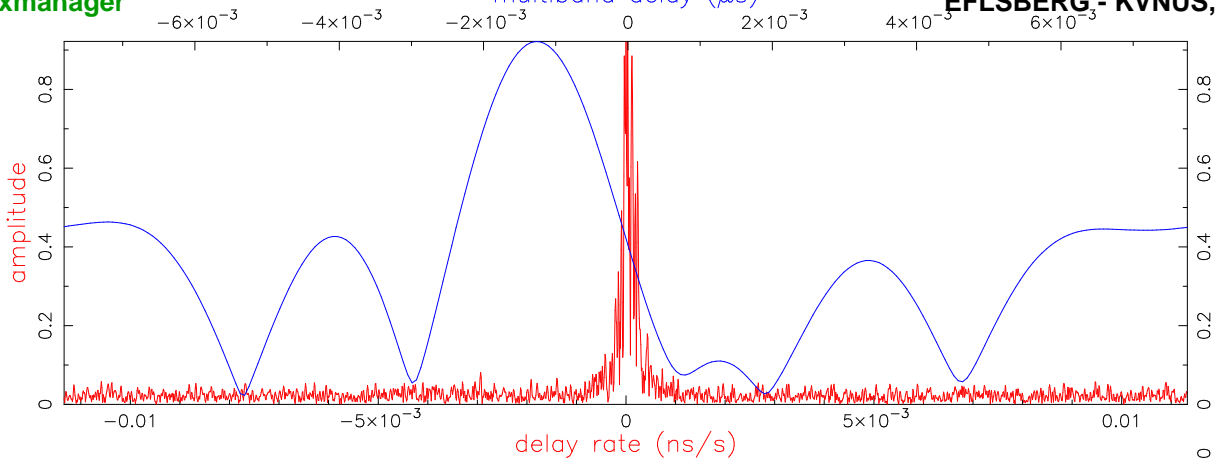
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bu

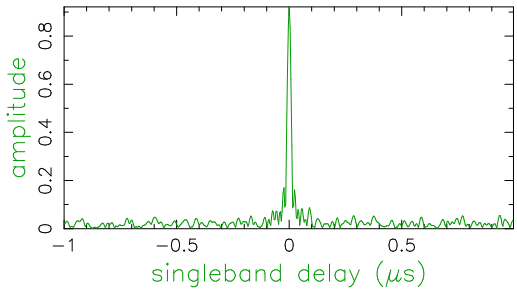
EFLSBERG₃- KVNUS, fgroup W, pol RR

multiband delay (μ s)

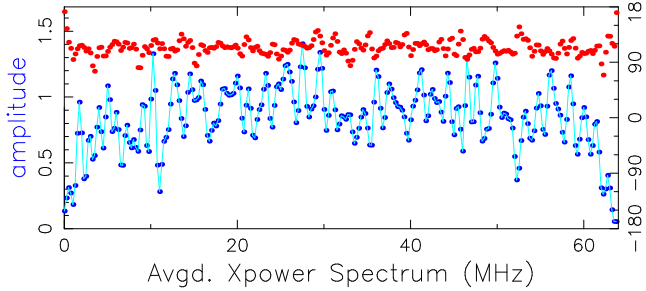


Fringe quality 2

SNR 51.6
 Int time 419.816
 Amp 0.922
 Phase 125.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000198
 MBD -0.001270
 Fringe rate (Hz) 0.000287
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

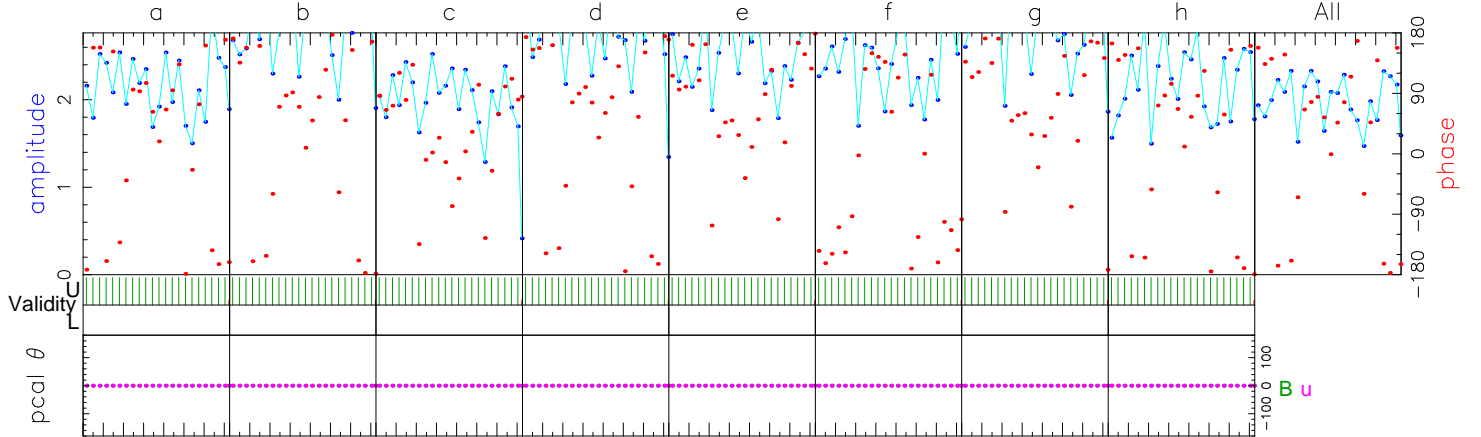


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114522
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	144.3	133.9	48.3	142.1	90.2	-166.0	105.2	131.6	Phase	125.8
B	1.0	1.3	0.9	1.3	1.2	1.2	1.3	1.0	Ampl.	1.2
u	255.4	257.0	257.9	257.6	258.0	257.8	257.6	256.0	Sbd box	256.9
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.44962086675E+03		Apriori delay (usec)		1.44962213641E+03		Resid mbdelay (usec)		-1.26966E-03	+/- 2.1E-05
Sband delay (usec)	1.44962193841E+03		Apriori clock (usec)		-3.6764355E+01		Resid sbdelay (usec)		-1.98000E-04	+/- 1.7E-04
Phase delay (usec)	1.44962214046E+03		Apriori clockrate (us/s)		-1.1270000E-06		Resid phdelay (usec)		4.05610E-06	+/- 7.2E-08
Delay rate (us/s)	1.23806881935E+00		Apriori rate (us/s)		1.23806881603E+00		Resid rate (us/s)		3.32739E-09	+/- 3.0E-10
Total phase (deg)	64.6		Apriori accel (us/s/s)		8.82320384847E-06		Resid phase (deg)		125.8	+/- 2.2

ph/seg (deg) 75.7 5.3 Search (2048X32) 0.877 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 121.6 9.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.6 3.1 Inc. seg. avg. 2.004 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.3 5.5 Inc. frq. avg. 1.159 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 u: az 309.5 el 46.0 pa 86.5 u,v (fr/asec) -11260.354 2023.237 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bu..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bu.W.27.1WZRGR

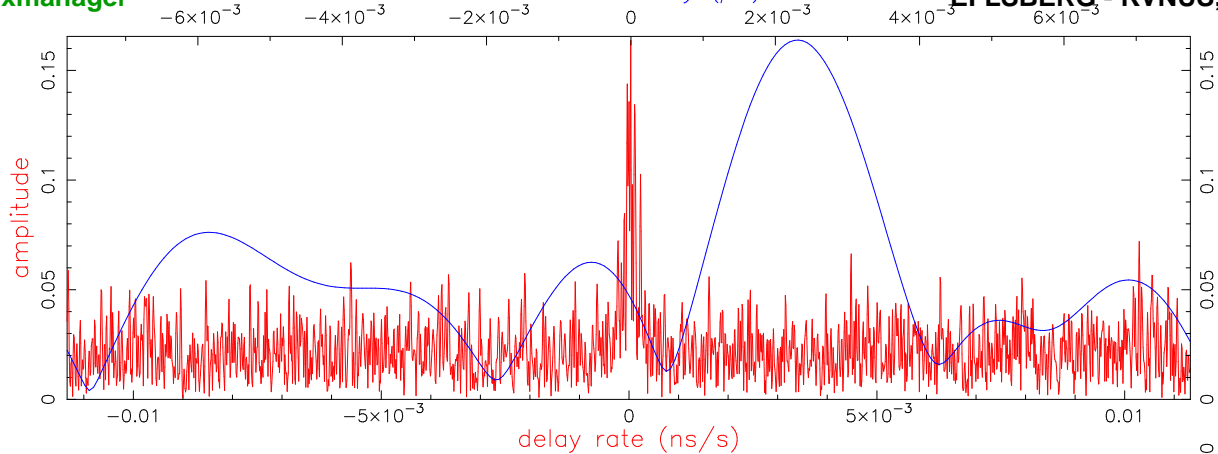
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bu

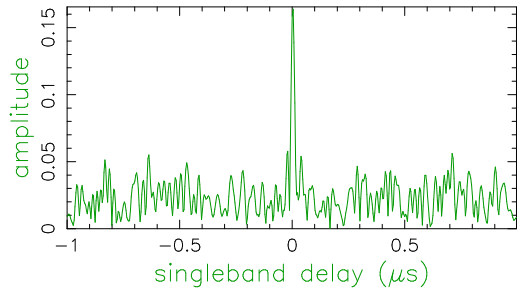
EFLSBERG - KVNUS, fgroup W, pol LR

multiband delay (μ s)

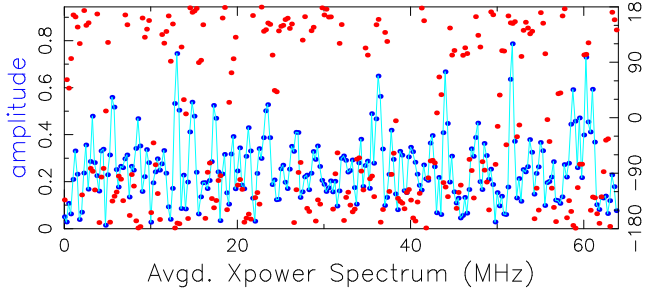


Fringe quality 9

SNR 9.3
 Int time 419.816
 Amp 0.166
 Phase -160.4
 PFD 7.0e-12
 Delays (us)
 SBD 0.002608
 MBD 0.002261
 Fringe rate (Hz)
 0.003293
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

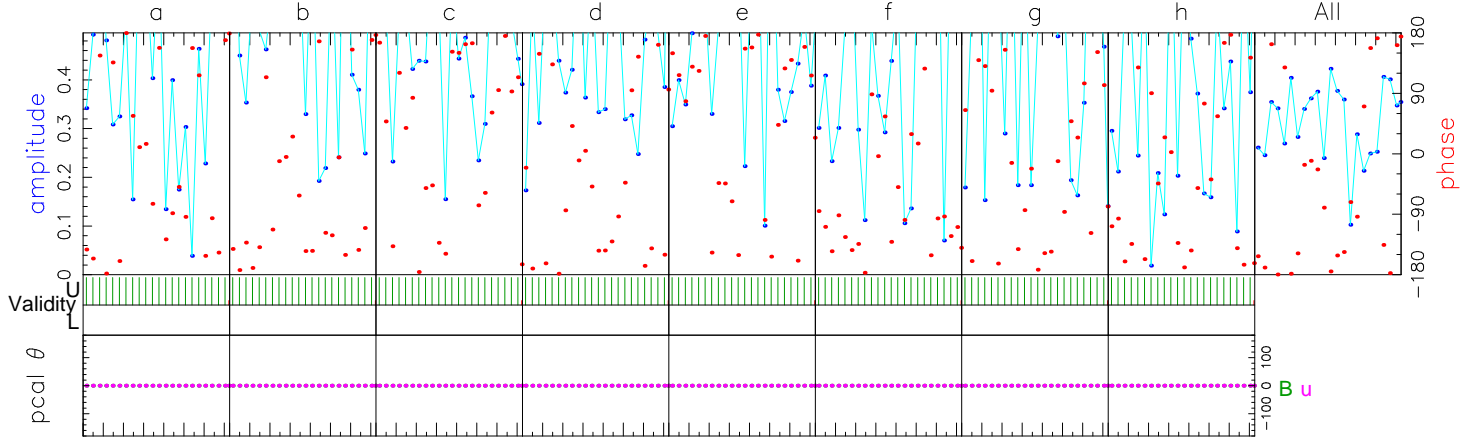


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114526
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.8	-138.1	134.2	-145.5	170.1	-115.7	-166.4	-155.6	Phase	-160.4
	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	255.9	257.8	434.5	260.2	258.9	258.4	14.1	255.9	Sbd box	257.7
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	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.44962439703E+03		Apriori delay (usec)		1.44962213641E+03		Resid mbdelay (usec)		2.26062E-03 +/- 1.2E-04	
Sband delay (usec)	1.44962474466E+03		Apriori clock (usec)		-3.6764355E+01		Resid sbdelay (usec)		2.60825E-03 +/- 9.3E-04	
Phase delay (usec)	1.44962213123E+03		Apriori clockrate (us/s)		-1.1270000E-06		Resid phdelay (usec)		-5.17247E-06 +/- 4.0E-07	
Delay rate (us/s)	1.23806885426E+00		Apriori rate (us/s)		1.23806881603E+00		Resid rate (us/s)		3.82302E-08 +/- 1.6E-09	
Total phase (deg)	138.4		Apriori accel (us/s/s)		8.82320384847E-06		Resid phase (deg)		-160.4 +/- 12.4	

	RMS	Theor.	Amplitude	0.166 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	70.6	29.6	Search (2048X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	101.0	51.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	36.3	17.5	Inc. seg. avg.	0.277	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	26.5	30.5	Inc. frq. avg.	0.182	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 256	t_cohere infinite

B: az 63.6 el 51.0 pa -64.9 u: az 309.5 el 46.0 pa 86.5 u,v (fr/asec) -11260.354 2023.237 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bu..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bu.W.45.1WZRGR

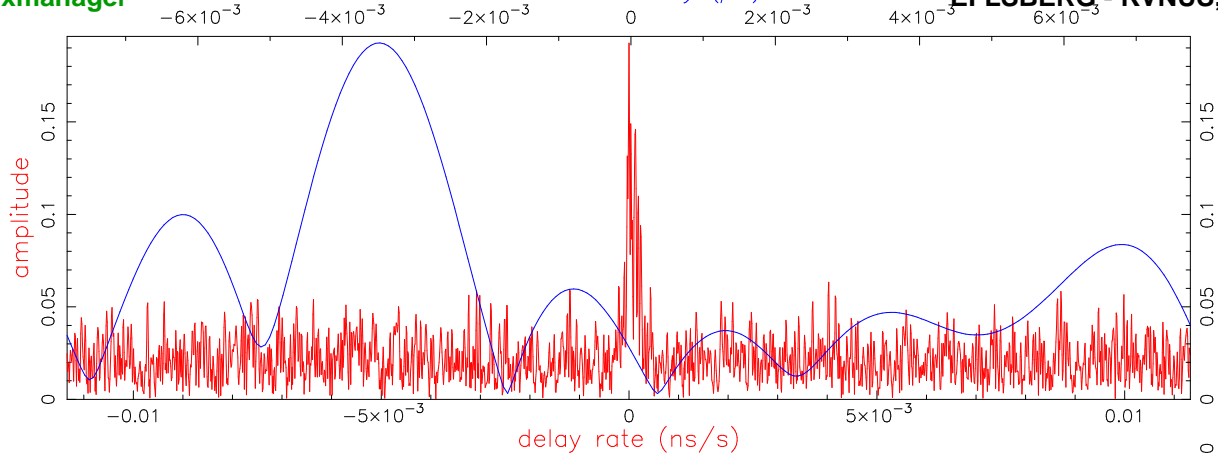
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, Bu

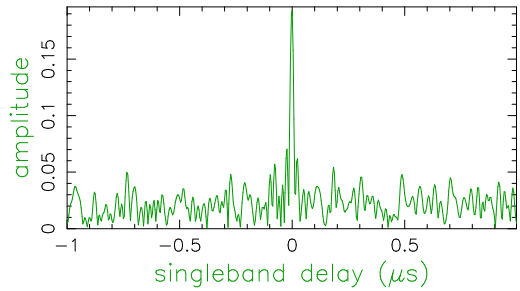
EFLSBERG - KVNUS, fgroup W, pol RL

multiband delay (μ s)

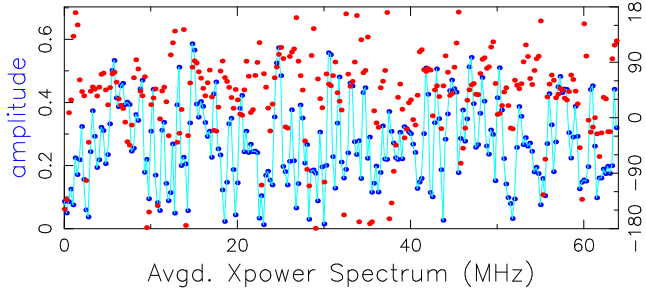


Fringe quality 9

SNR 11.0
 Int time 419.816
 Amp 0.196
 Phase 72.4
 PFD 1.9e-19
 Delays (us)
 SBD -0.001651
 MBD -0.003514
 Fringe rate (Hz) 0.000214
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

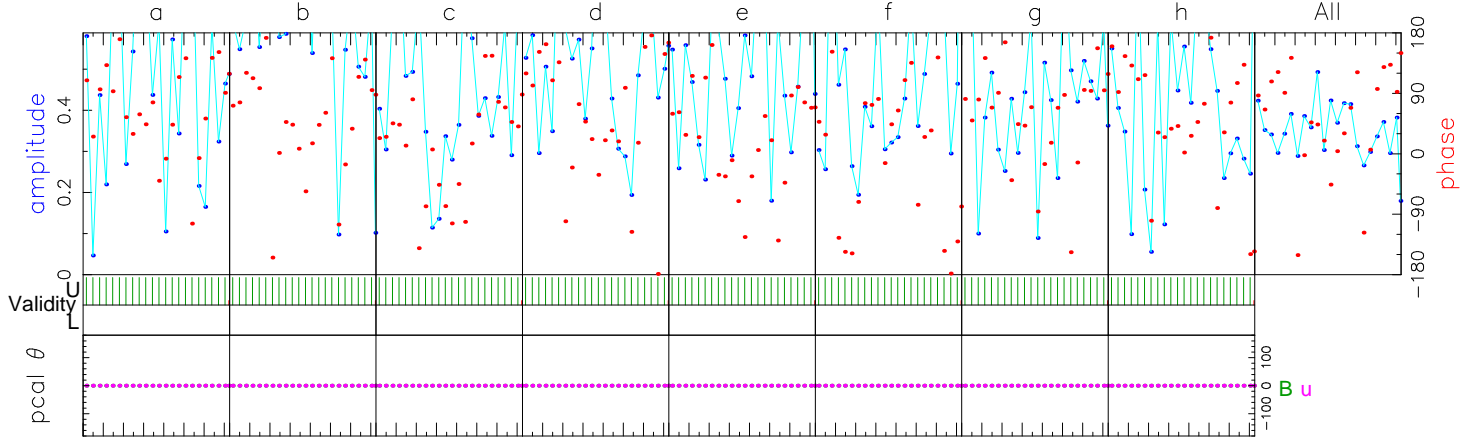


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114530
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



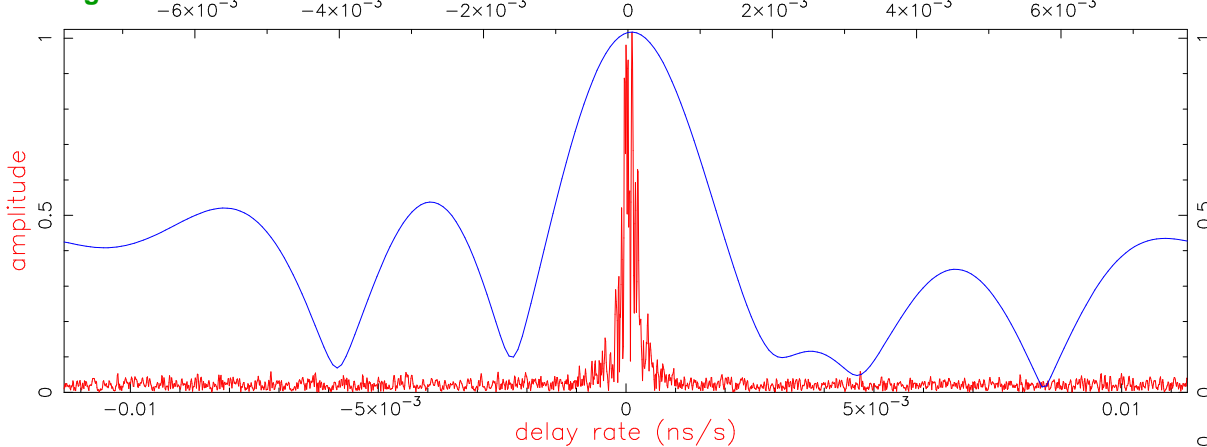
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	89.2	68.9	33.2	94.8	37.9	124.2	72.2	77.9	Phase	72.4
	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.2	Ampl.	0.2
	255.6	255.9	256.2	105.2	251.5	424.3	257.0	257.3	Sbd box	256.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.44961862228E+03		Apriori delay (usec)		1.44962213641E+03		Resid mbdelay (usec)		-3.51413E-03	+/- 9.9E-05
Sband delay (usec)	1.44962048566E+03		Apriori clock (usec)		-3.6764355E+01		Resid sbdelay (usec)		-1.65075E-03	+/- 7.8E-04
Phase delay (usec)	1.44962213874E+03		Apriori clockrate (us/s)		-1.1270000E-06		Resid phdelay (usec)		2.33312E-06	+/- 3.4E-07
Delay rate (us/s)	1.23806881851E+00		Apriori rate (us/s)		1.23806881603E+00		Resid rate (us/s)		2.48491E-09	+/- 1.4E-09
Total phase (deg)	11.2		Apriori accel (us/s/s)		8.82320384847E-06		Resid phase (deg)		72.4	+/- 10.4

	RMS	Theor.	Amplitude	0.196 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.1	25.0	Search (2048X32)	0.189	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	86.6	43.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	32.2	14.7	Inc. seg. avg.	0.325	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	31.2	25.7	Inc. frq. avg.	0.204	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 u: az 309.5 el 46.0 pa 86.5 u,v (fr/asec) -11260.354 2023.237 simultaneous interpolator

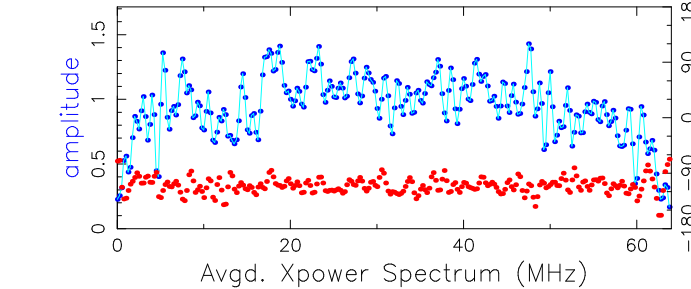
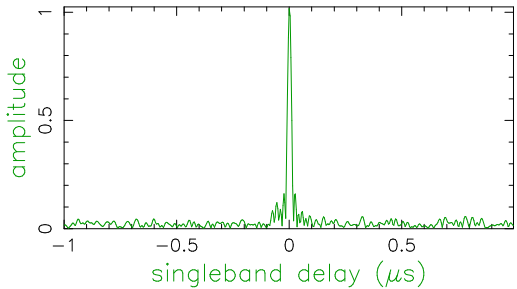
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bu..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bu.W.63.1WZRGR

multiband delay (μ s)

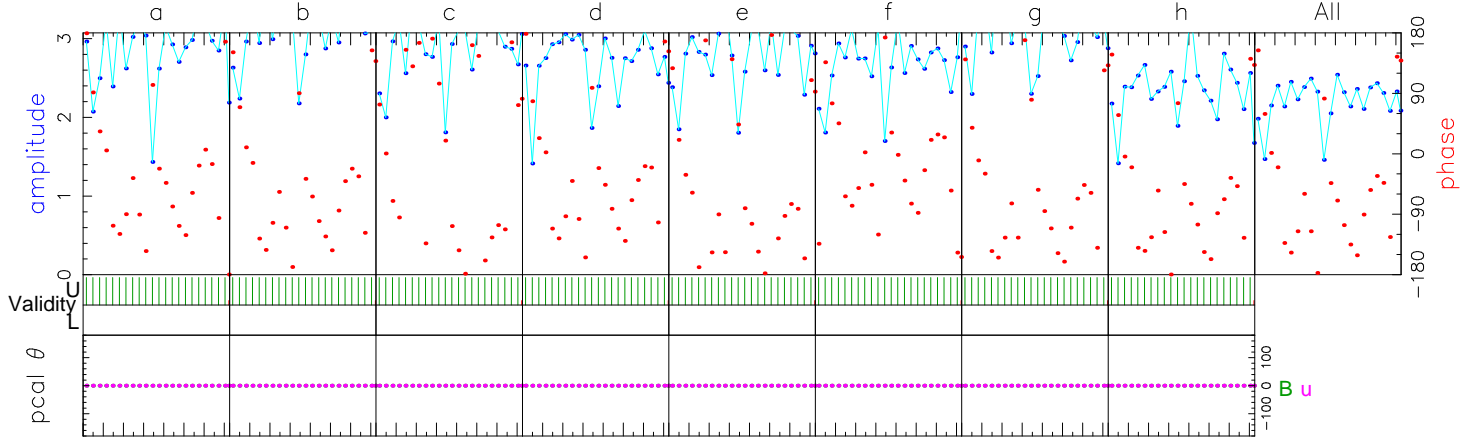


Fringe quality 2

SNR 57.4
Int time 419.816
Amp 1.025
Phase -97.9
PFD 0.0e+00
Delays (us)
SBD 0.001180
MBD 0.000082
Fringe rate (Hz)
0.010448
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090000.00
Stop 090659.84
FRT 090330.00
Corr/FF/build
2021:302:211904
2021:303:114518
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



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



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

Group delay (usec)(sbd)	1.44962221886E+03	Apriori delay (usec)	1.44962213641E+03	Resid mbdelay (usec)	8.24496E-05	+/-	1.9E-05
Sband delay (usec)	1.44962331591E+03	Apriori clock (usec)	-3.6764355E+01	Resid sbdelay (usec)	1.17950E-03	+/-	1.5E-04
Phase delay (usec)	1.44962213325E+03	Apriori clockrate (us/s)	-1.1270000E-06	Resid phdelay (usec)	-3.15736E-06	+/-	6.4E-08
Delay rate (us/s)	1.23806893732E+00	Apriori rate (us/s)	1.23806881603E+00	Resid rate (us/s)	1.21292E-07	+/-	2.7E-10
Total phase (deg)	200.9	Apriori accel (us/s/s)	8.82320384847E-06	Resid phase (deg)	-97.9	+/-	2.0

ph/seg (deg)	76.8	RMS	76.8	Theor.	4.8	Amplitude	1.025 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	118.3		4.8		4.8	Search (2048X32)	1.012	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	44.6		2.8		2.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.5		4.9		4.9	Inc. seg. avg.	2.198	Sample rate (MSamp/s):	128			ion window (TEC)	0.00	0.00
						Inc. frq. avg.	1.274	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	

B: az 63.6 el 51.0 pa -64.9 u: az 309.5 el 46.0 pa 86.5 u,v (fr/asec) -11260.354 2023.237 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/Bu..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/Bu.W.9.1WZRGR

Mk4/DiFX fourfit 3.21 rev 2937

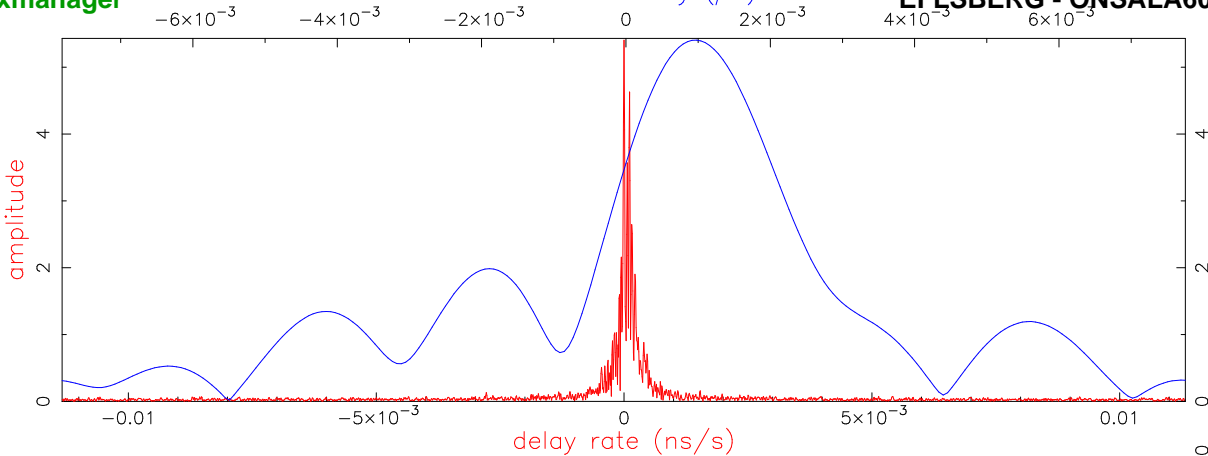
fxmanager

NRAO150.1WZRGR, No0037, BX

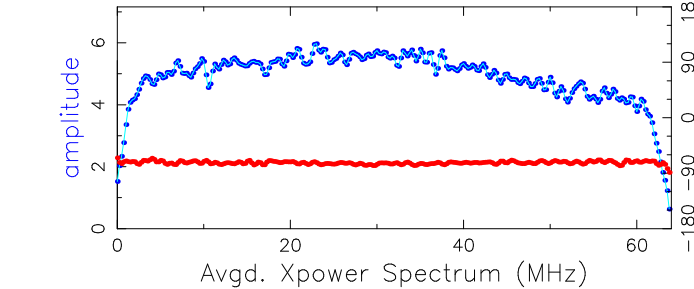
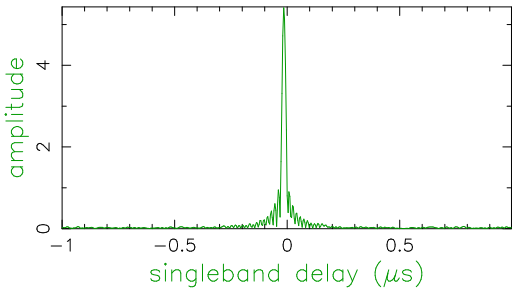
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

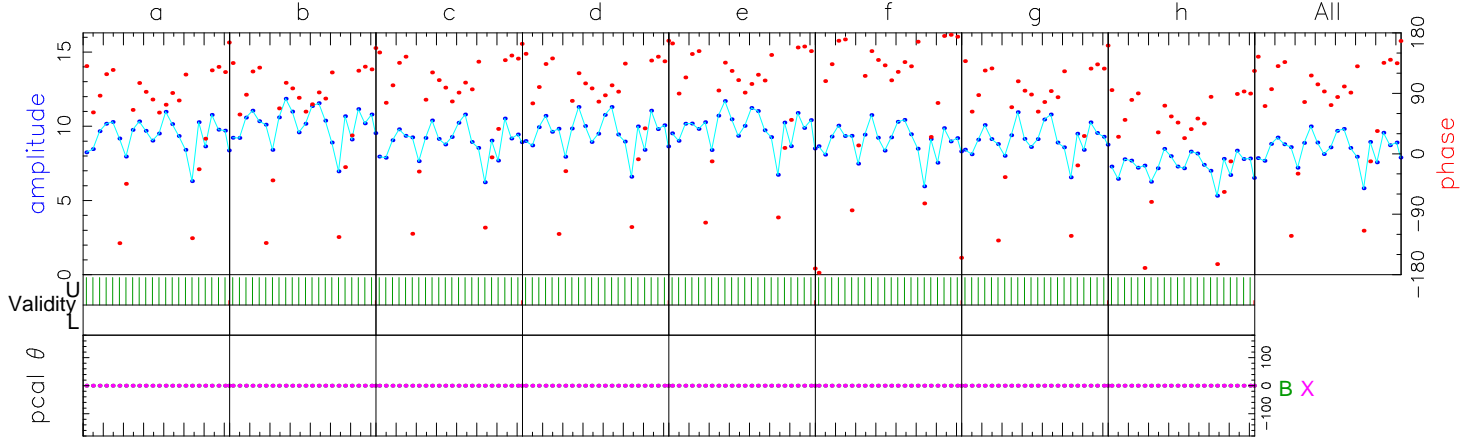
Fringe quality 3



SNR 304.4
 Int time 419.795
 Amp 5.433
 Phase 105.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.014725
 MBD 0.000985
 Fringe rate (Hz) 0.000167
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114519
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



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

Group delay (usec)(sbd)	-1.20621280942E+03	Apriori delay (usec)	-1.20619816954E+03	Resid mbdelay (usec)	9.85125E-04	+/-	3.6E-06
Sband delay (usec)	-1.20621289454E+03	Apriori clock (usec)	-7.8543968E+01	Resid sbdelay (usec)	-1.47250E-02	+/-	2.8E-05
Phase delay (usec)	-1.20619816614E+03	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	3.40431E-06	+/-	1.2E-08
Delay rate (us/s)	1.07130038686E-01	Apriori rate (us/s)	1.07130036744E-01	Resid rate (us/s)	1.94216E-09	+/-	5.0E-11
Total phase (deg)		Apriori accel (us/s/s)	-2.00460428142E-07	Resid phase (deg)	105.6	+/-	0.4

ph/seg (deg)	62.1	0.9	Search (2048X32)	5.364	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	59.9	1.6	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)	26.7	0.5	Inc. seg. avg.	8.550	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	11.4	0.9	Inc. frq. avg.	5.819	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 X: az 75.0 el 56.2 pa -56.0 u,v (fr/asec) -974.639 -404.231 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BX..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BX.W.13.1WZRGR

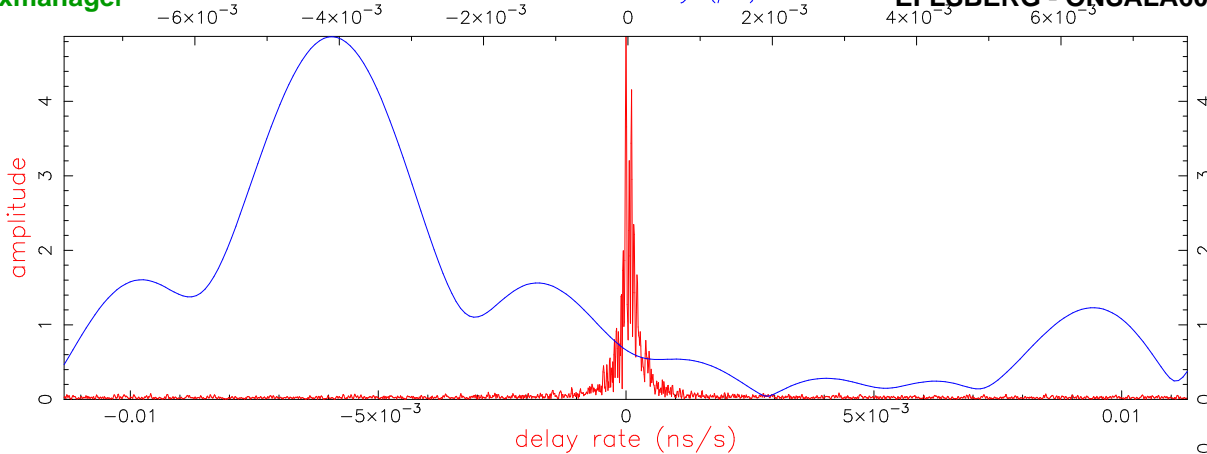
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BX

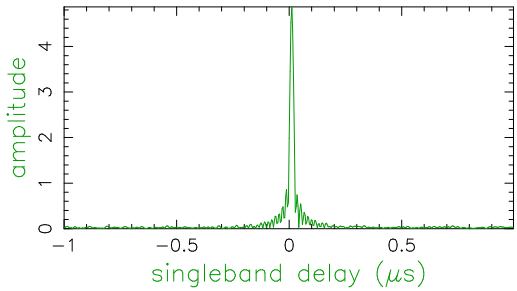
EFLSBERG - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

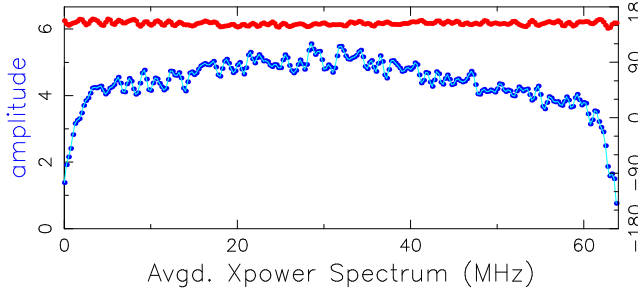


Fringe quality 3

SNR 272.9
 Int time 419.795
 Amp 4.870
 Phase -29.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.011310
 MBD -0.004114
 Fringe rate (Hz)
 0.000183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

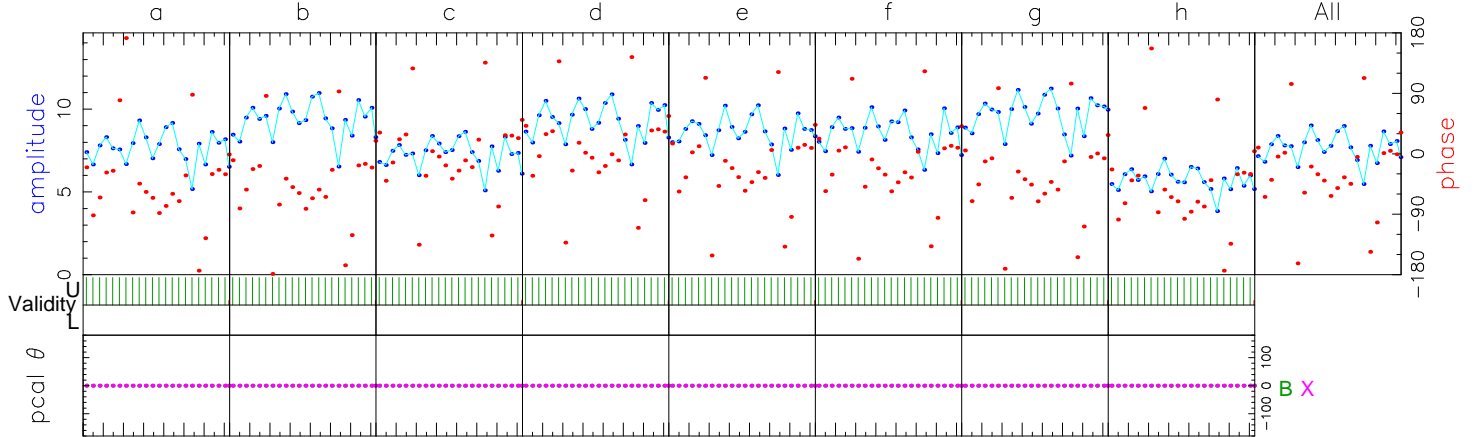


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114523
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.6	-47.5	-4.8	4.9	-21.6	-20.3	-35.8	-62.7	Phase	-29.2
	4.9	6.0	4.7	5.9	5.5	5.4	6.0	3.6	Ampl.	5.2
	259.8	260.2	260.4	259.9	259.7	260.1	259.8	258.6	Sbd box	259.9
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.20618665870E+03		Apriori delay (usec)		-1.20619816954E+03		Resid mbdelay (usec)		-4.11416E-03	+/- 4.0E-06
Sband delay (usec)	-1.20618685954E+03		Apriori clock (usec)		-7.8543968E+01		Resid sbdelay (usec)		1.13100E-02	+/- 3.2E-05
Phase delay (usec)	-1.20619817049E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-9.42731E-07	+/- 1.4E-08
Delay rate (us/s)	1.07130038863E-01		Apriori rate (us/s)		1.07130036744E-01		Resid rate (us/s)		2.11930E-09	+/- 5.6E-11
Total phase (deg)			Apriori accel (us/s/s)		-2.00460428142E-07		Resid phase (deg)		-29.2	+/- 0.4

RMS Theor. Amplitude 4.870 +/- 0.018
 ph/seg (deg) 62.3 1.0 Search (2048X32) 4.748
 amp/seg (%) 60.6 1.8 Interp. 0.000
 ph/frq (deg) 26.3 0.6 Inc. seg. avg. 7.701
 amp/frq (%) 17.6 1.0 Inc. frq. avg. 5.246
 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_cohere infinite ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 X: az 75.0 el 56.2 pa -56.0 u,v (fr/asec) -974.639 -404.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BX..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BX.W.36.1WZRGR

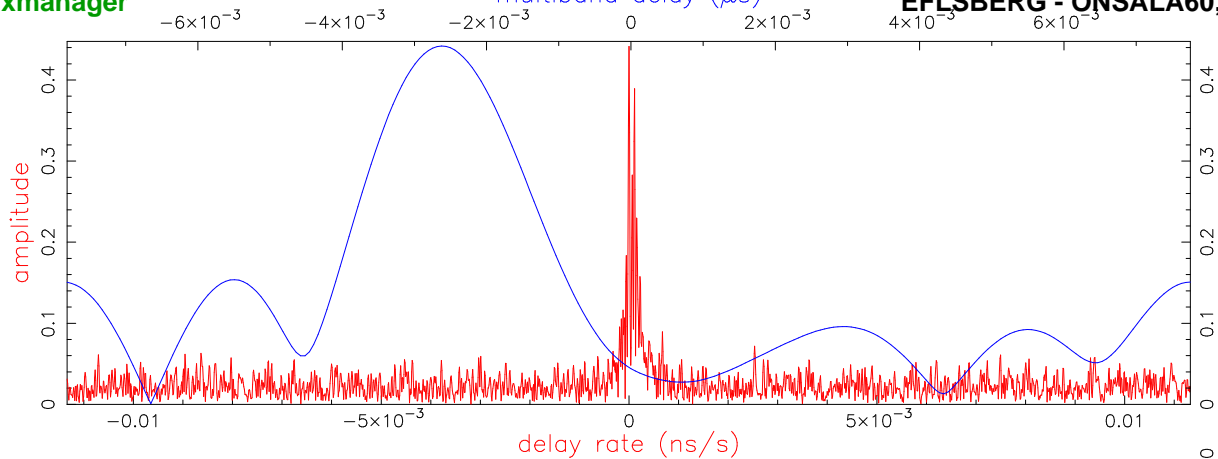
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BX

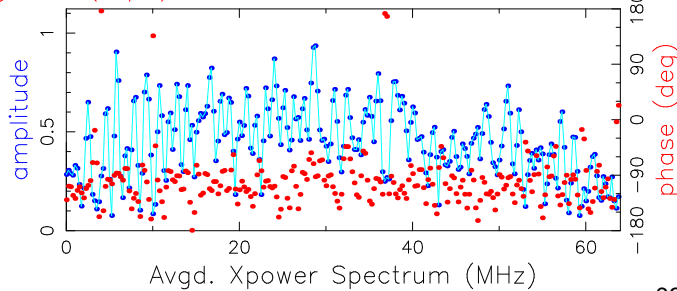
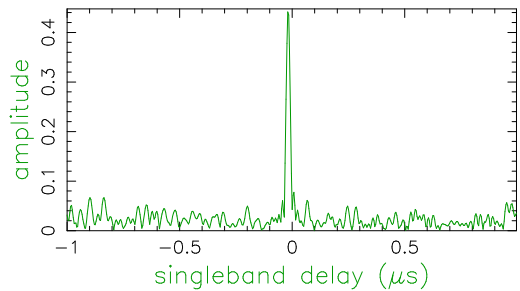
EFLSBERG - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



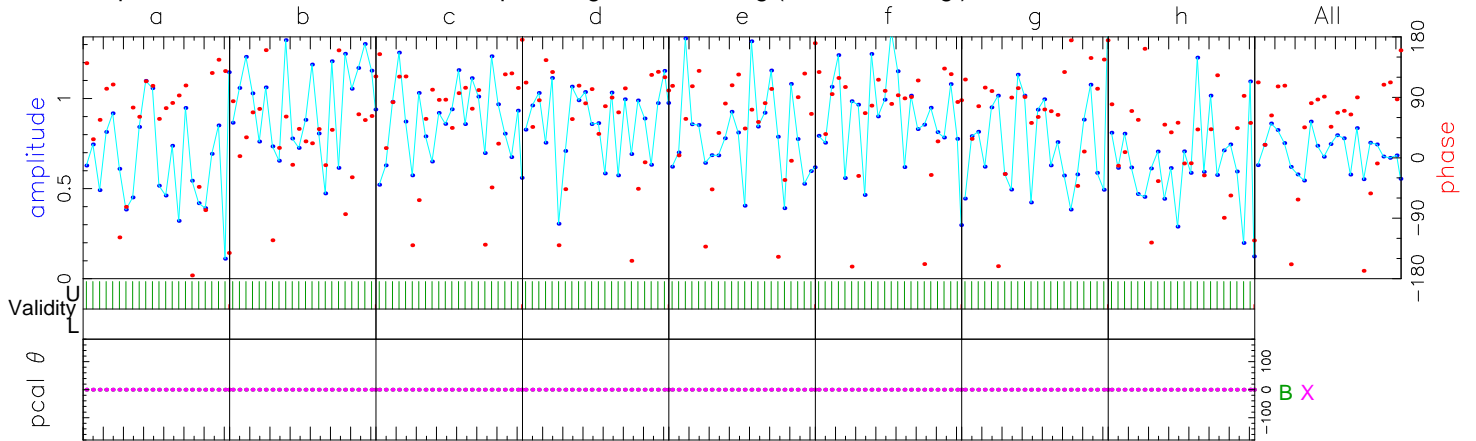
Fringe quality 6

SNR 25.1
 Int time 419.795
 Amp 0.448
 Phase 77.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.017919
 MBD -0.002566
 Fringe rate (Hz)
 0.000148
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114531
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.7	40.1	88.2	90.3	78.4	95.6	89.2	26.0	Phase	77.4
	0.4	0.6	0.5	0.5	0.5	0.6	0.5	0.4	Ampl.	0.5
	252.5	252.3	253.0	251.8	252.3	252.9	251.8	250.7	Sbd box	252.4
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	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)	-1.20621636020E+03		Apriori delay (usec)		-1.20619816954E+03		Resid mbdelay (usec)		-2.56566E-03	+/- 4.3E-05
Sband delay (usec)	-1.20621608879E+03		Apriori clock (usec)		-7.8543968E+01		Resid sbdelay (usec)		-1.79192E-02	+/- 3.4E-04
Phase delay (usec)	-1.20619816705E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		2.49755E-06	+/- 1.5E-07
Delay rate (us/s)	1.07130038466E-01		Apriori rate (us/s)		1.07130036744E-01		Resid rate (us/s)		1.72250E-09	+/- 6.1E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.00460428142E-07		Resid phase (deg)		77.4	+/- 4.6

ph/seg (deg) 61.9 11.0 Search (2048X32) 0.434 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.8 19.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.0 6.5 Inc. seg. avg. 0.698 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.8 11.3 Inc. frq. avg. 0.483 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 X: az 75.0 el 56.2 pa -56.0 u,v (fr/asec) -974.639 -404.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BX..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BX.W.73.1WZRGR

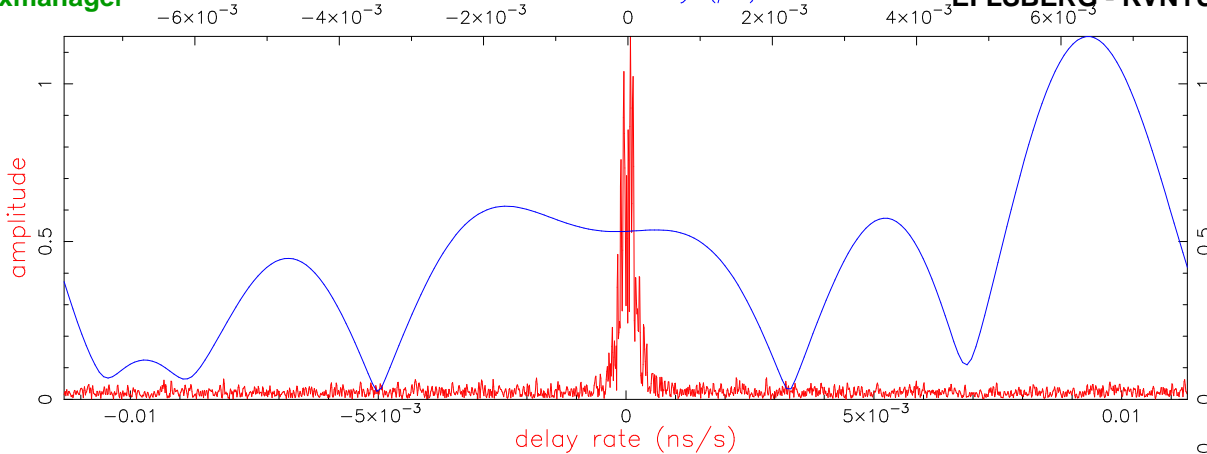
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, By

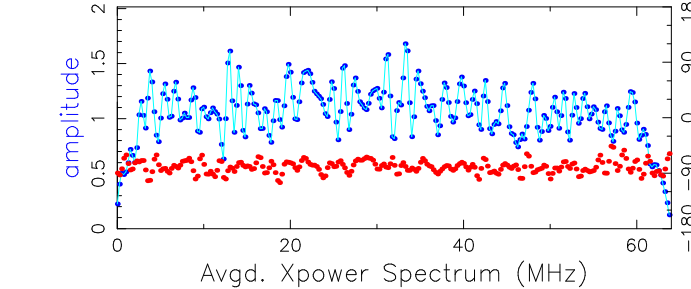
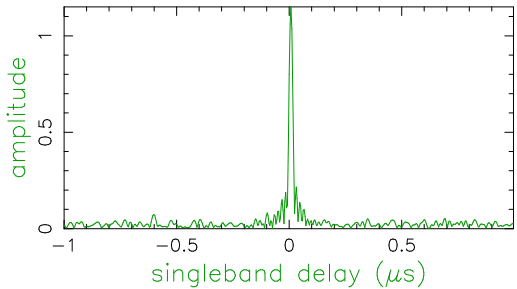
EFLSBERG - KVNS, fgroup W, pol LL

multiband delay (μ s)

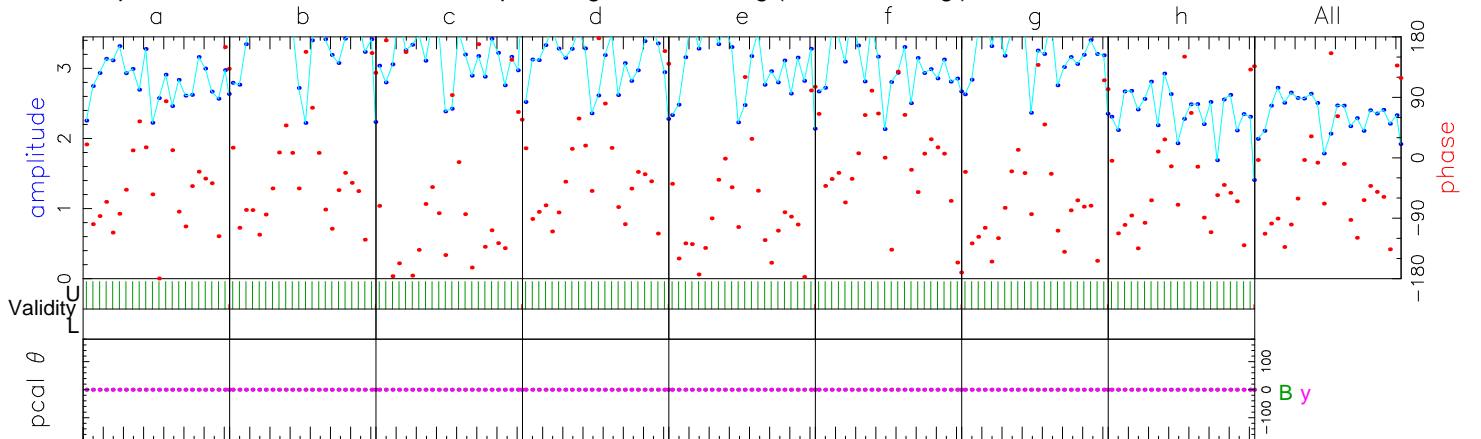


Fringe quality 2

SNR 64.5
 Int time 419.816
 Amp 1.150
 Phase -65.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.007563
 MBD 0.006370
 Fringe rate (Hz)
 0.007369
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114518
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



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

Group delay (usec)(sbd)	7.75168165728E+02	Apriori delay (usec)	7.75161795870E+02	Resid mbdelay (usec)	6.36986E-03	+/-	1.7E-05
Sband delay (usec)	7.75169359120E+02	Apriori clock (usec)	-2.2767000E+01	Resid sbdelay (usec)	7.56325E-03	+/-	1.3E-04
Phase delay (usec)	7.75161793749E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.12039E-06	+/-	5.7E-08
Delay rate (us/s)	1.20407913361E+00	Apriori rate (us/s)	1.20407904805E+00	Resid rate (us/s)	8.55520E-08	+/-	2.4E-10
Total phase (deg)	-31.1	Apriori accel (us/s/s)	1.00021209396E-05	Resid phase (deg)	-65.8	+/-	1.8

ph/seg (deg)	69.8	RMS	Theor.	Amplitude	1.150 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	106.6	69.8	4.3	Search (2048X32)	1.128	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.4	106.6	7.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.1	45.4	2.5	Inc. seg. avg.	2.347	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		30.1	4.4	Inc. frq. avg.	1.466	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 63.6 el 51.0 pa -64.9 y: az 307.6 el 48.7 pa 85.9 u,v (fr/asec) -10948.526 1977.108 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/By..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/By.W.11.1WZRGR

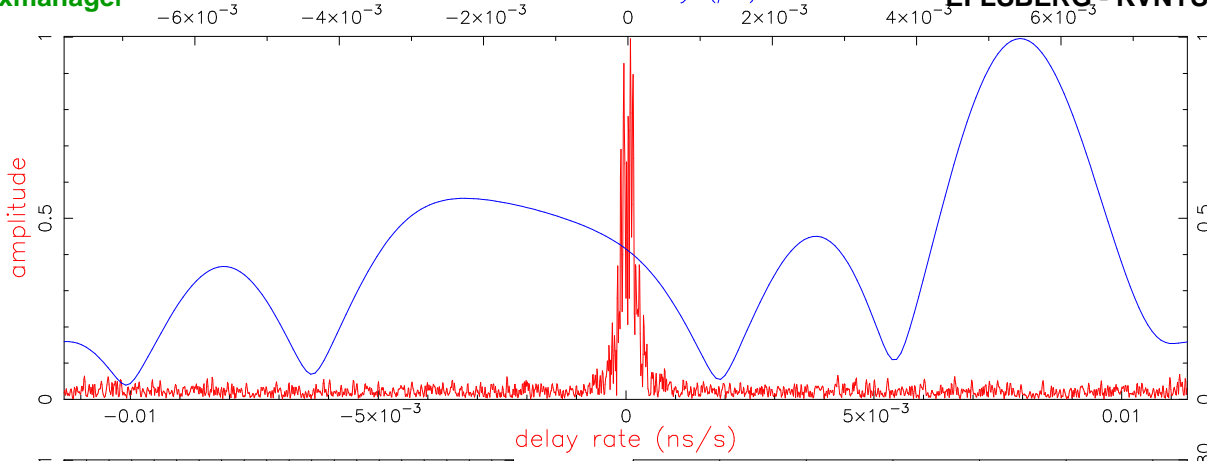
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, By

EFLSBERG - KVNYs, fgroup W, pol RR

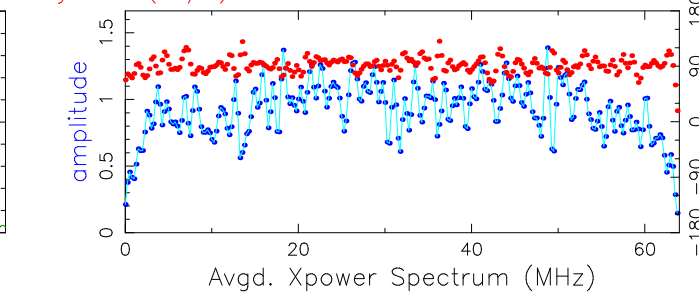
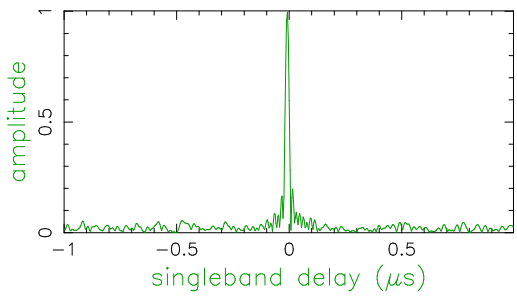
multiband delay (μ s)



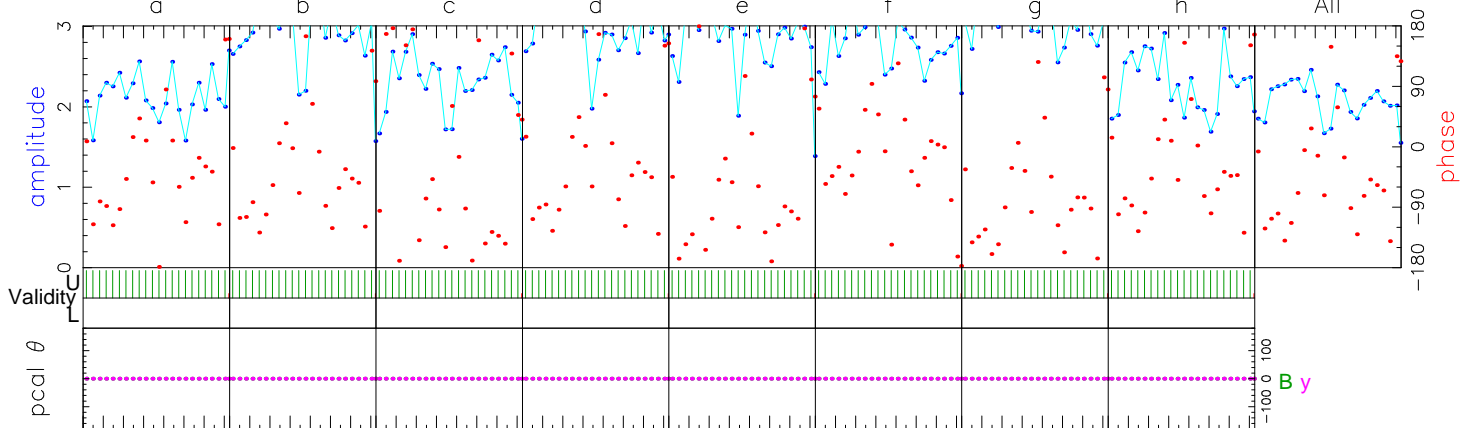
Fringe quality 2

SNR 56.2
Int time 419.816
Amp 1.002
Phase -72.7
PFD 0.0e+00
Delays (us)
SBD -0.008863
MBD 0.005402
Fringe rate (Hz)
0.007341
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090000.00
Stop 090659.84
FRT 090330.00
Corr/FF/build
2021:302:211904
2021:303:114522
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-48.7	-61.4	-148.2	-57.8	-114.2	-10.6	-95.4	-54.3	Phase	-72.7
	1.0	1.4	1.2	1.4	1.4	1.3	1.4	1.1	Ampl.	1.3
	252.9	254.9	255.4	255.5	255.7	255.5	255.2	254.0	Sbd box	254.7
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.75151572853E+02		Apriori delay (usec)		7.75161795870E+02		Resid mbdelay (usec)		5.40198E-03	+/- 1.9E-05
Sband delay (usec)	7.75152932620E+02		Apriori clock (usec)		-2.2767000E+01		Resid sbdelay (usec)		-8.86325E-03	+/- 1.5E-04
Phase delay (usec)	7.75161793524E+02		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.34584E-06	+/- 6.6E-08
Delay rate (us/s)	1.20407913327E+00		Apriori rate (us/s)		1.20407904805E+00		Resid rate (us/s)		8.52196E-08	+/- 2.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.00021209396E-05		Resid phase (deg)		-72.7	+/- 2.0

ph/seg (deg) 70.1 4.9 Search (2048X32) 0.971 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 110.2 8.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.7 2.9 Inc. seg. avg. 2.079 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.2 5.0 Inc. frq. avg. 1.278 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_coherence infinite dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 y: az 307.6 el 48.7 pa 85.9 u,v (fr/asec) -10948.526 1977.108 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/By..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/By.W.30.1WZRGR

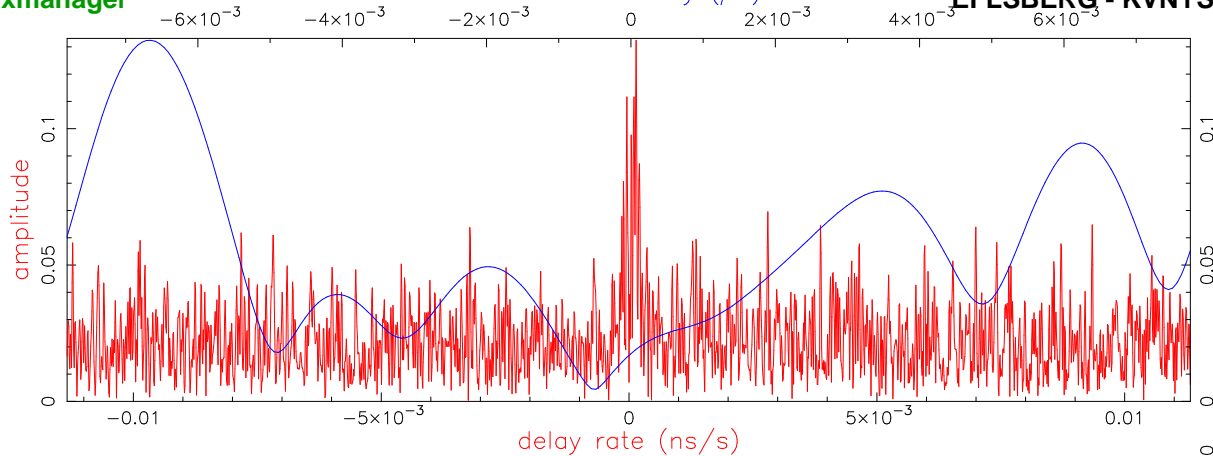
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, By

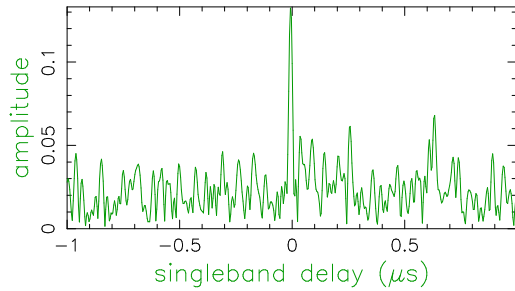
EFLSBERG - KVNYS, fgroup W, pol LR

multiband delay (μ s)

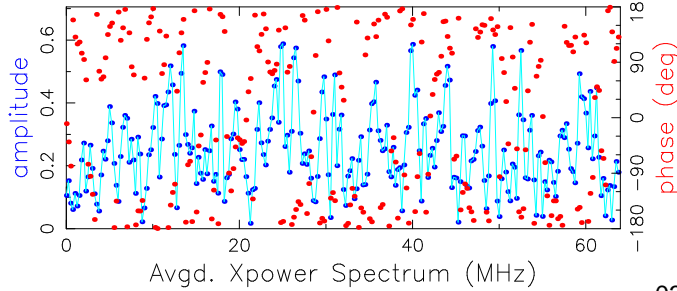


Fringe quality 9

SNR 7.5
 Int time 419.816
 Amp 0.133
 Phase 165.8
 PFD 2.8e-05
 Delays (us)
 SBD -0.006875
 MBD -0.006656
 Fringe rate (Hz)
 0.012196
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

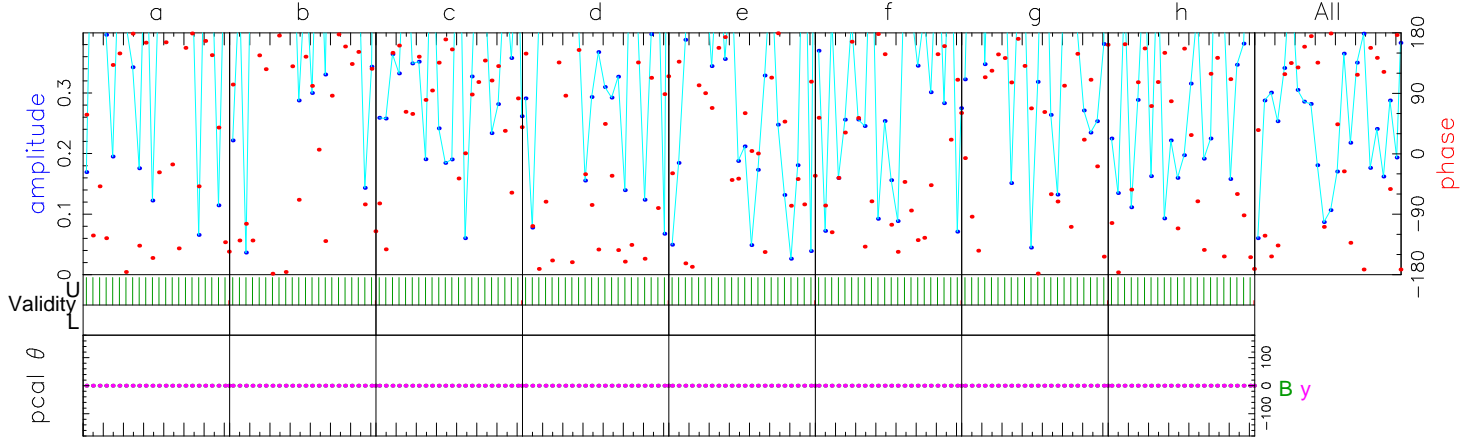


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114526
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		7.75155139682E+02			7.75161795870E+02					
Sband delay (usec)		7.75154920620E+02			-2.2767000E+01					
Phase delay (usec)		7.75161801216E+02			0.0000000E+00					
Delay rate (us/s)		1.20407918964E+00			1.20407904805E+00					
Total phase (deg)			200.4		1.00021209396E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									165.8	+/- 15.4
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

B: az 63.6 el 51.0 pa -64.9 y: az 307.6 el 48.7 pa 85.9 u,v (fr/asec) -10948.526 1977.108 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/By..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/By.W.50.1WZRGR

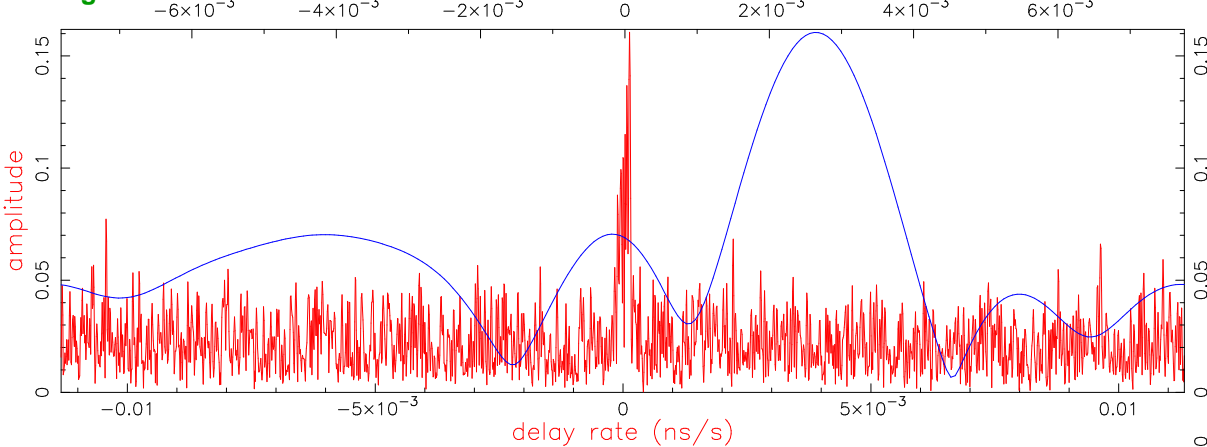
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, By

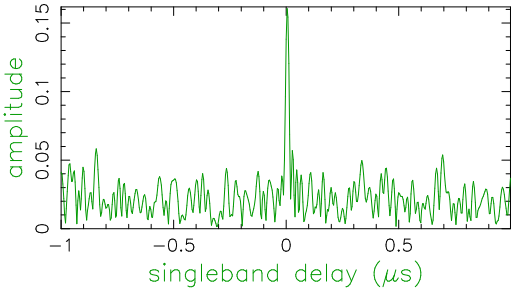
EFLSBERG - KVNYS, fgroup W, pol RL

multiband delay (μ s)

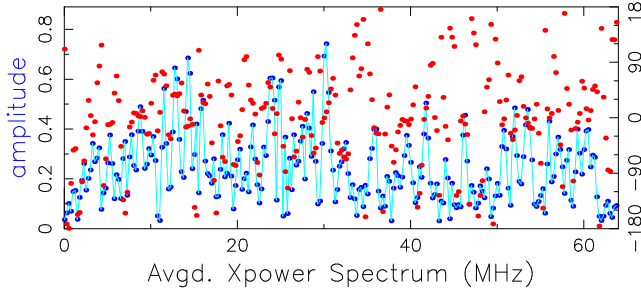


Fringe quality 9

SNR 9.1
 Int time 419.816
 Amp 0.162
 Phase 35.5
 PFD 4.7e-11
 Delays (us)
 SBD 0.005062
 MBD 0.002641
 Fringe rate (Hz) 0.011727
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

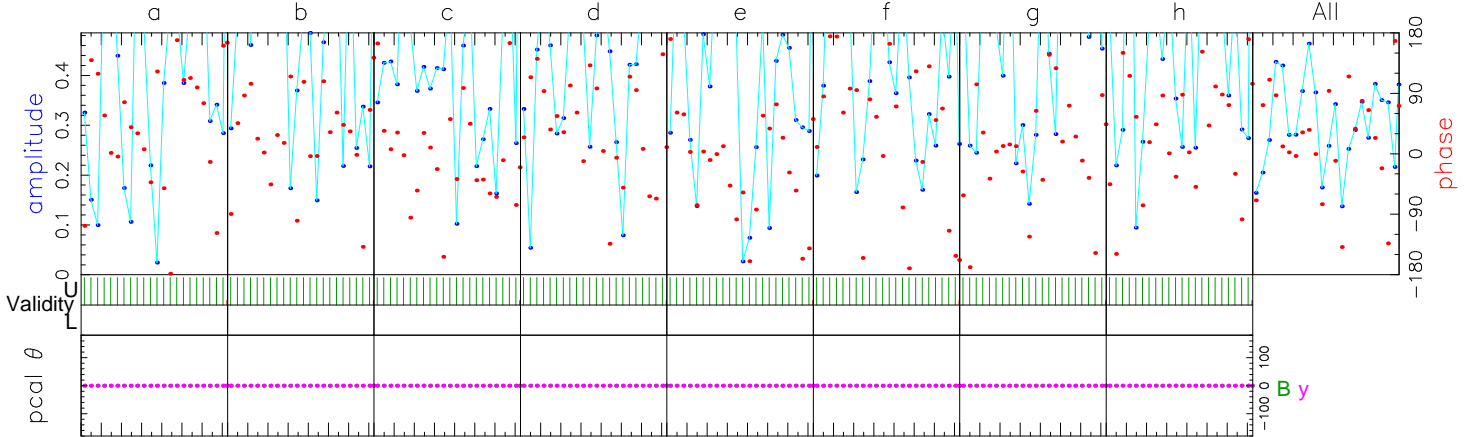


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090000.00
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114530
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	62.1	35.9	-0.2	55.3	4.1	114.0	8.1	57.3	Phase	35.5
	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	62.4	257.9	258.7	302.6	258.7	145.0	258.8	257.0	Sbd box	258.3
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.75164436766E+02		Apriori delay (usec)		7.75161795870E+02		Resid mbdelay (usec)		2.64090E-03	+/- 1.2E-04
Sband delay (usec)	7.75166857620E+02		Apriori clock (usec)		-2.2767000E+01		Resid sbdelay (usec)		5.06175E-03	+/- 9.5E-04
Phase delay (usec)	7.75161797014E+02		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		1.14462E-06	+/- 4.1E-07
Delay rate (us/s)	1.20407918420E+00		Apriori rate (us/s)		1.20407904805E+00		Resid rate (us/s)		1.36140E-07	+/- 1.7E-09
Total phase (deg)	70.1		Apriori accel (us/s/s)		1.00021209396E-05		Resid phase (deg)		35.5	+/- 12.6

	RMS	Theor.	Amplitude	0.162 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	77.1	30.3	Search (2048X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	101.5	52.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	42.3	17.9	Inc. seg. avg.	0.265	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	35.5	31.2	Inc. frq. avg.	0.181	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 y: az 307.6 el 48.7 pa 85.9 u,v (fr/asec) -10948.526 1977.108 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/By..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/By.W.68.1WZRGR

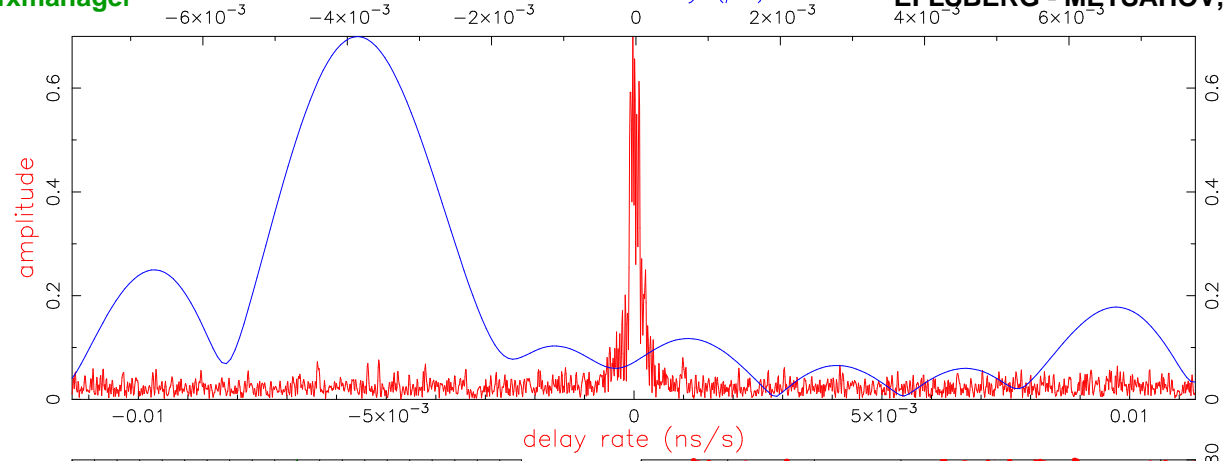
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BZ

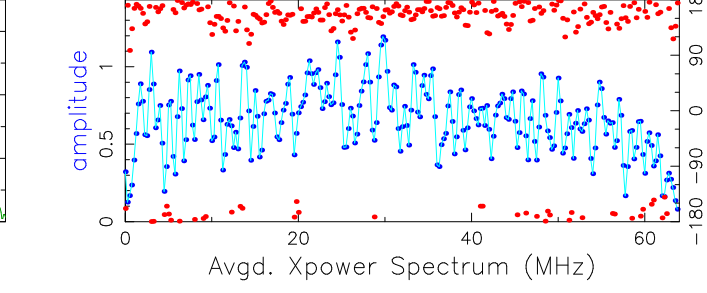
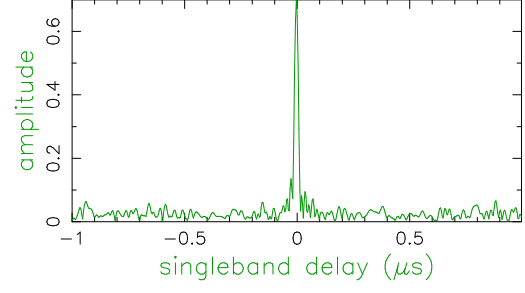
EFLSBERG - METSAHOV, fgroup W, pol RR

multiband delay (μ s)



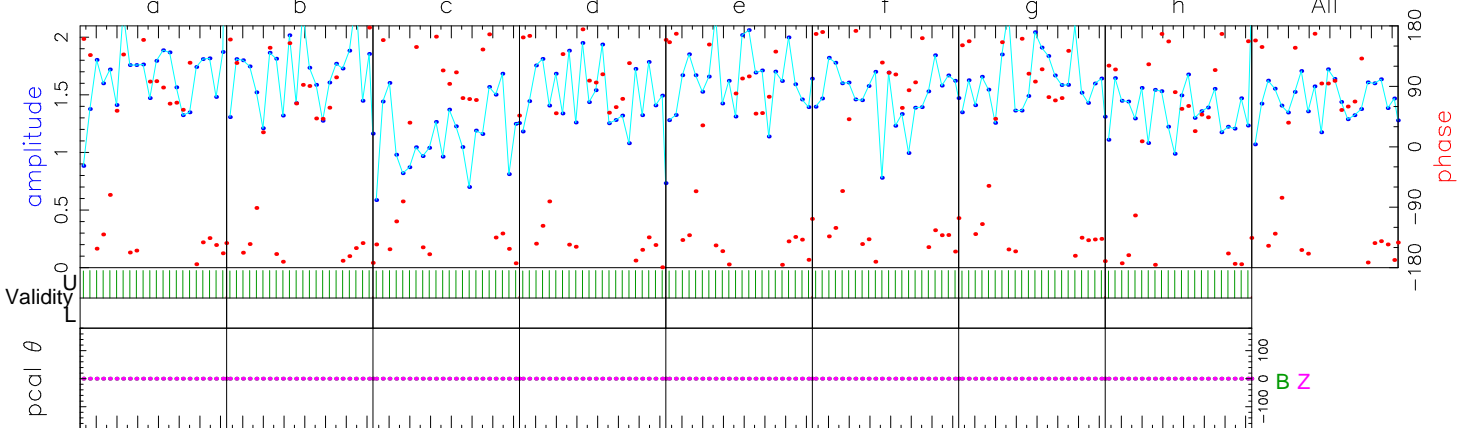
Fringe quality 6

SNR 38.6
 Int time 405.840
 Amp 0.700
 Phase 164.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.003610
 MBD -0.003852
 Fringe rate (Hz)
 -0.001815
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090013.31
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114522
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	-2.40590274527E+03	Apriori delay (usec)	-2.40589889333E+03	Resid mbdelay (usec)	-3.85194E-03	+/-	2.8E-05
Sband delay (usec)	-2.40590250383E+03	Apriori clock (usec)	-2.1347151E+01	Resid sbdelay (usec)	-3.61050E-03	+/-	2.2E-04
Phase delay (usec)	-2.40589888802E+03	Apriori clockrate (us/s)	-1.6000000E-08	Resid phdelay (usec)	5.30561E-06	+/-	9.6E-08
Delay rate (us/s)	2.07456617512E-01	Apriori rate (us/s)	2.07456638579E-01	Resid rate (us/s)	-2.10675E-08	+/-	4.1E-10
Total phase (deg)	-77.1	Apriori accel (us/s/s)	4.23813019423E-06	Resid phase (deg)	164.5	+/-	3.0

ph/seg (deg)	67.0	Theor.	7.1	Search (2048X32)	0.696	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	112.0		12.4	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)	17.2		4.2	Inc. seg. avg.	1.455	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	10.4		7.3	Inc. frq. avg.	0.720	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 Z: az 88.9 el 63.0 pa -52.0 u,v (fr/asec) -1880.386 -107.620 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BZ..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BZ.W.29.1WZRGR

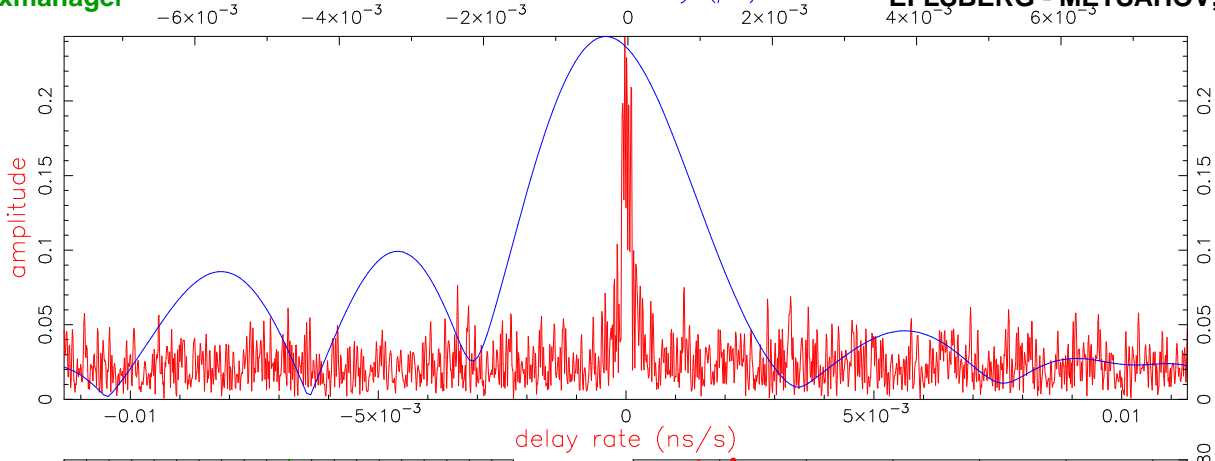
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BZ

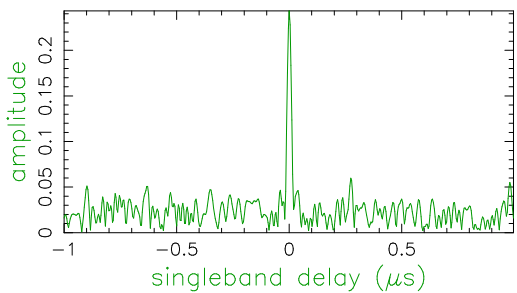
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

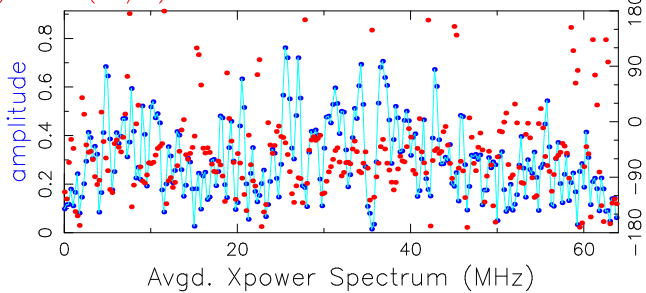


Fringe quality 9

SNR 13.4
Int time 405.840
Amp 0.243
Phase -58.9
PFD 3.2e-32
Delays (us)
SBD 0.000195
MBD -0.000303
Fringe rate (Hz)
-0.001818
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

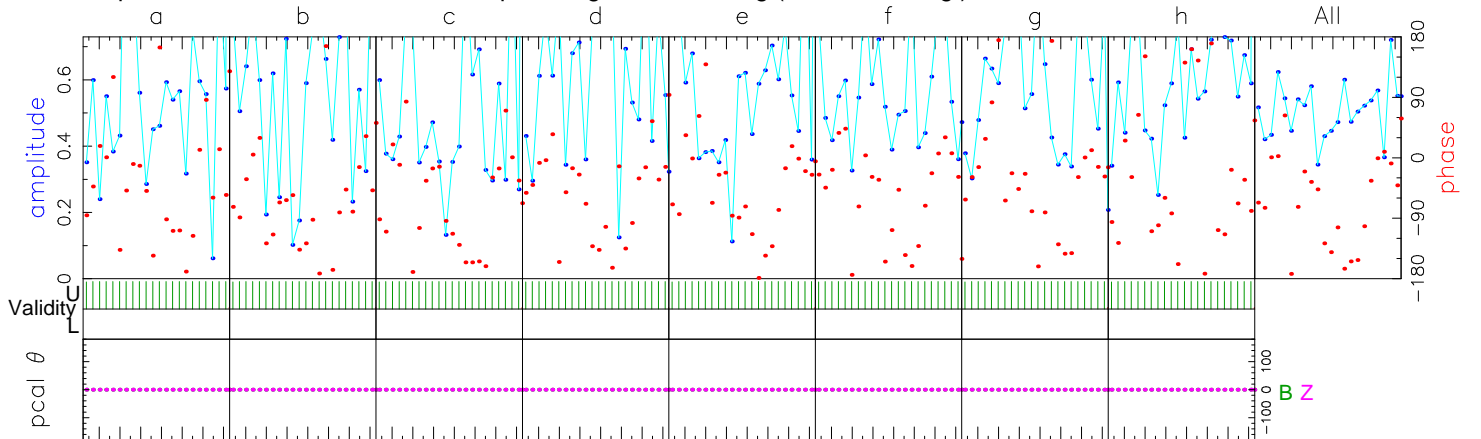


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 090013.31
Stop 090659.84
FRT 090330.00
Corr/FF/build
2021:302:211904
2021:303:114526
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-51.5	-71.4	-80.7	-58.3	-51.5	-31.5	-43.8	-109.9	Phase	-58.9
	0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.2	Ampl.	0.3
	257.8	256.7	255.4	257.0	256.9	257.0	256.8	257.2	Sbd box	257.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.40589919643E+03		Apriori delay (usec)		-2.40589889333E+03		Resid mbdelay (usec)		-3.03099E-04	+/- 8.1E-05
Sband delay (usec)	-2.40589869858E+03		Apriori clock (usec)		-2.1347151E+01		Resid sbdelay (usec)		1.94750E-04	+/- 6.4E-04
Phase delay (usec)	-2.40589889523E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		-1.89875E-06	+/- 2.8E-07
Delay rate (us/s)	2.07456617476E-01		Apriori rate (us/s)		2.07456638579E-01		Resid rate (us/s)		-2.11037E-08	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		4.23813019423E-06		Resid phase (deg)		-58.9	+/- 8.5

ph/seg (deg) 65.4 20.5 Amplitude 0.243 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 114.1 35.8 Search (2048X32) 0.239 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.8 12.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.6 21.1 Inc. seg. avg. 0.477 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 B: az 63.6 el 51.0 pa -64.9 Z: az 88.9 el 63.0 pa -52.0 u,v (fr/asec) -1880.386 -107.620 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BZ..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BZ.W.48.1WZRGR simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

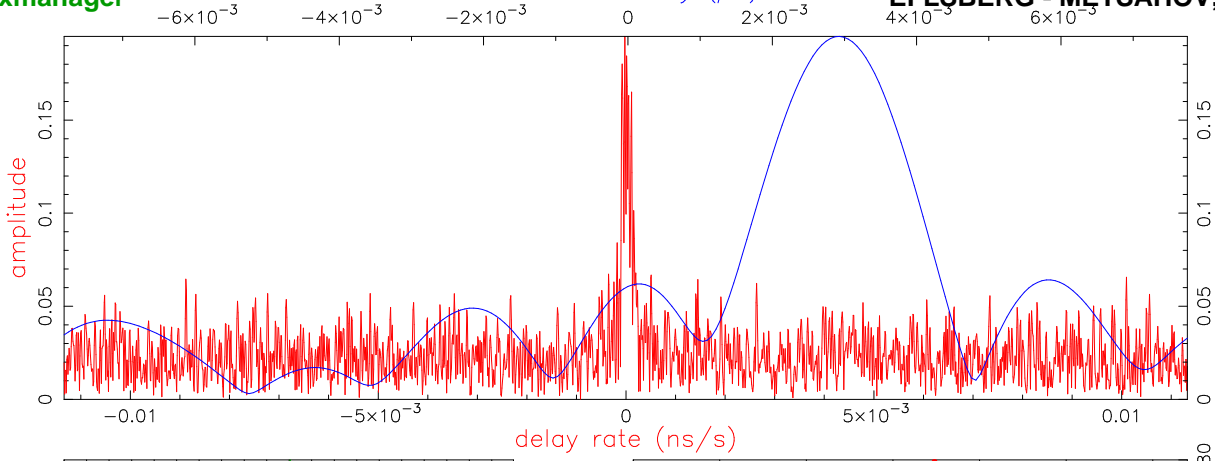
fxmanager

NRAO150.1WZRGR, No0037, BZ

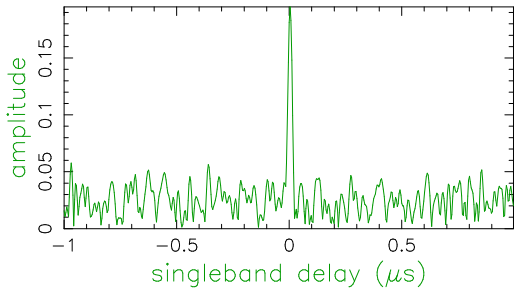
EFLSBERG - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

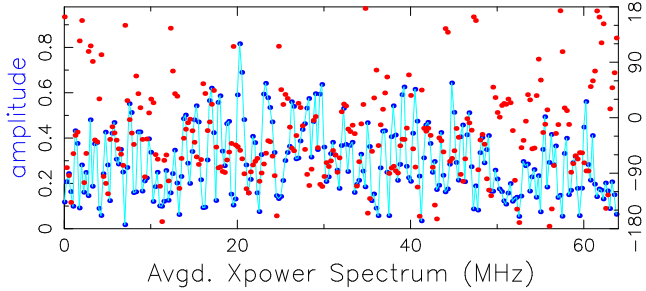
Fringe quality 9



SNR 10.7
 Int time 405.840
 Amp 0.195
 Phase -30.6
 PFD 3.0e-18
 Delays (us)
 SBD 0.004062
 MBD 0.002925
 Fringe rate (Hz) -0.001767
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

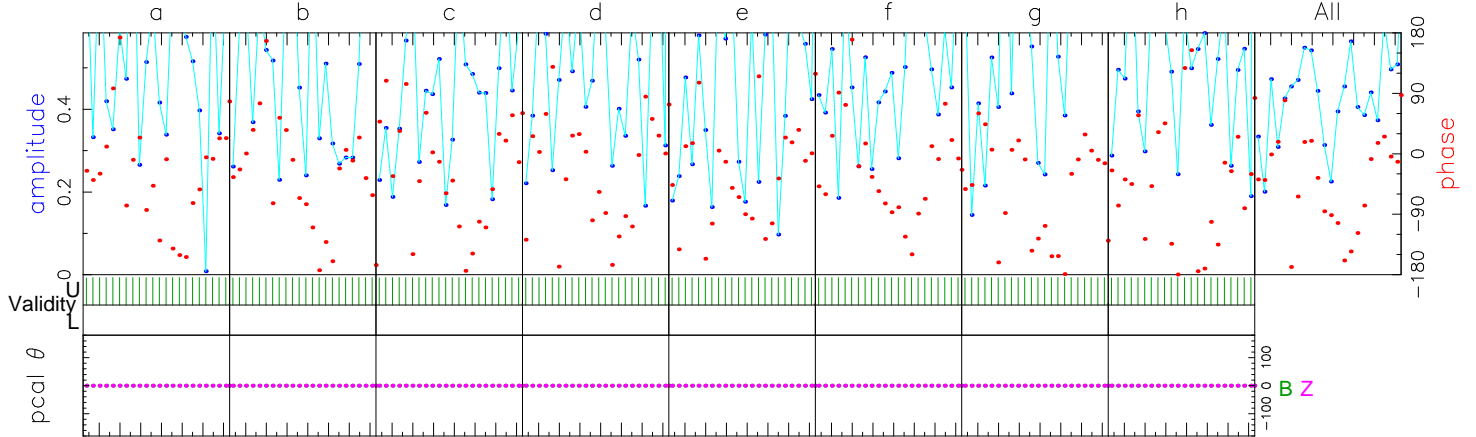


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090013.31
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114530
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-44.3	-29.6	-17.1	-14.3	-24.5	-35.3	-27.7	-52.6	Phase	-30.6
	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.1	Ampl.	0.2
	258.2	259.5	368.2	256.7	258.5	257.4	257.5	117.9	Sbd box	258.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.40589596871E+03		Apriori delay (usec)		-2.40589889333E+03		Resid mbdelay (usec)		2.92462E-03	+/- 1.0E-04
Sband delay (usec)	-2.40589483158E+03		Apriori clock (usec)		-2.1347151E+01		Resid sbdelay (usec)		4.06175E-03	+/- 8.0E-04
Phase delay (usec)	-2.40589889431E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		-9.86071E-07	+/- 3.4E-07
Delay rate (us/s)	2.07456618062E-01		Apriori rate (us/s)		2.07456638579E-01		Resid rate (us/s)		-2.05170E-08	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.23813019423E-06		Resid phase (deg)		-30.6	+/- 10.7

	RMS	Theor.	Amplitude	0.195 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	67.2	25.6	Search (2048X32)	0.193	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	130.5	44.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	14.1	15.1	Inc. seg. avg.	0.389	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	29.0	26.3	Inc. frq. avg.	0.192	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 63.6 el 51.0 pa -64.9 Z: az 88.9 el 63.0 pa -52.0 u,v (fr/asec) -1880.386 -107.620 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BZ..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BZ.W.65.1WZRGR

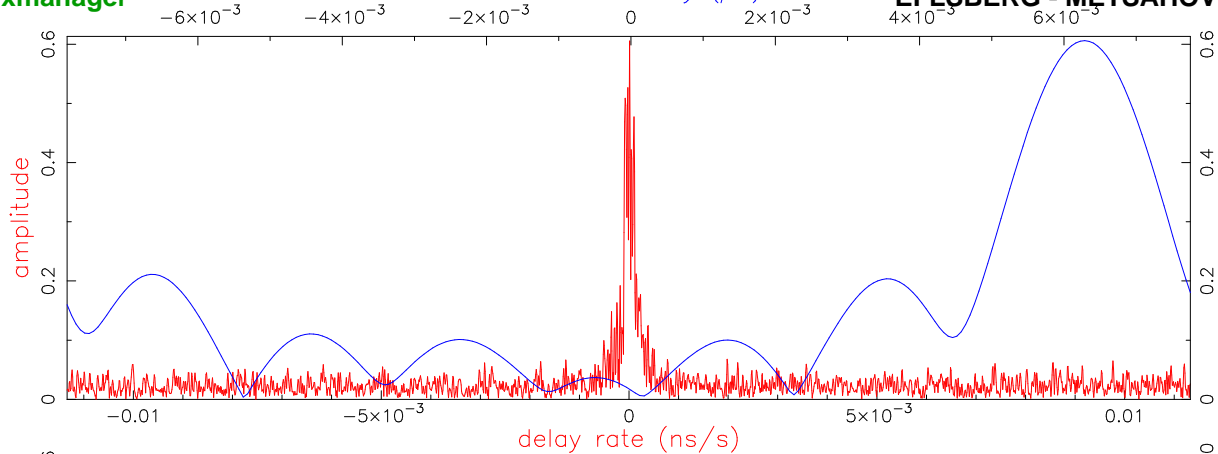
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1WZRGR, No0037, BZ

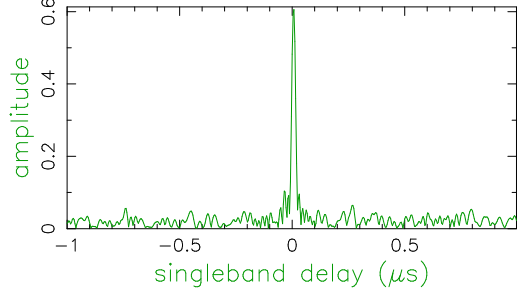
EFLSBERG - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

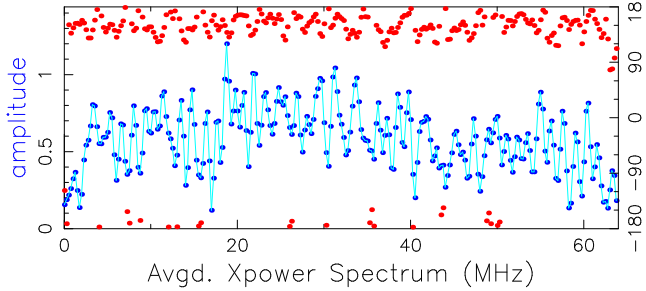


Fringe quality 6

SNR 33.8
 Int time 405.840
 Amp 0.613
 Phase 154.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.006337
 MBD 0.006239
 Fringe rate (Hz)
 0.001339
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

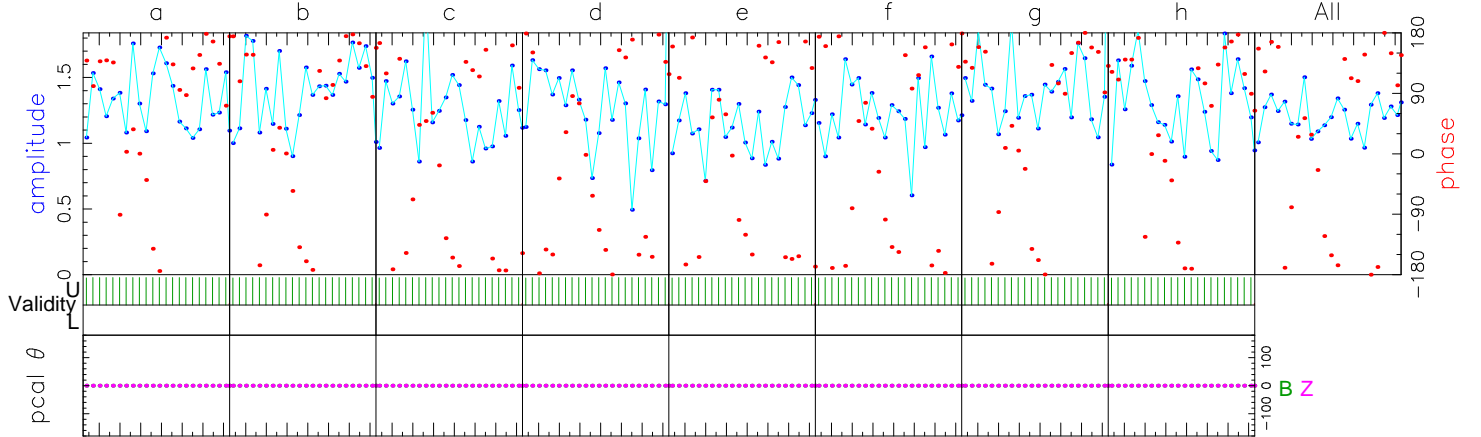


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 090013.31
 Stop 090659.84
 FRT 090330.00
 Corr/FF/build
 2021:302:211904
 2021:303:114518
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	132.8	145.8	158.2	-178.6	169.8	173.2	143.6	143.2	Phase	154.8
	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	Ampl.	0.6
	259.0	258.4	259.2	258.7	258.6	258.7	258.1	258.1	Sbd box	258.6
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.40589265440E+03	Apriori delay (usec)	-2.40589889333E+03	Resid mbdelay (usec)	6.23892E-03	+/-	3.2E-05
Sband delay (usec)	-2.40589255658E+03	Apriori clock (usec)	-2.1347151E+01	Resid sbdelay (usec)	6.33675E-03	+/-	2.5E-04
Phase delay (usec)	-2.40589888834E+03	Apriori clockrate (us/s)	-1.6000000E-08	Resid phdelay (usec)	4.99134E-06	+/-	1.1E-07
Delay rate (us/s)	2.07456654127E-01	Apriori rate (us/s)	2.07456638579E-01	Resid rate (us/s)	1.55479E-08	+/-	4.7E-10
Total phase (deg)	-86.9	Apriori accel (us/s/s)	4.23813019423E-06	Resid phase (deg)	154.8	+/-	3.4

ph/seg (deg)	RMS 72.1	Theor. 8.1	Amplitude Search (2048X32)	0.613 +/- 0.018	0.568	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	99.3	14.2	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)	18.7	4.8	Inc. seg. avg.	1.196		Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	9.4	8.4	Inc. frq. avg.	0.628		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 63.6 el 51.0 pa -64.9 Z: az 88.9 el 63.0 pa -52.0 u,v (fr/asec) -1880.386 -107.620 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0037/BZ..1WZRGR Output file: /Exps/c211c/v1/1234/No0037/BZ.W.8.1WZRGR