

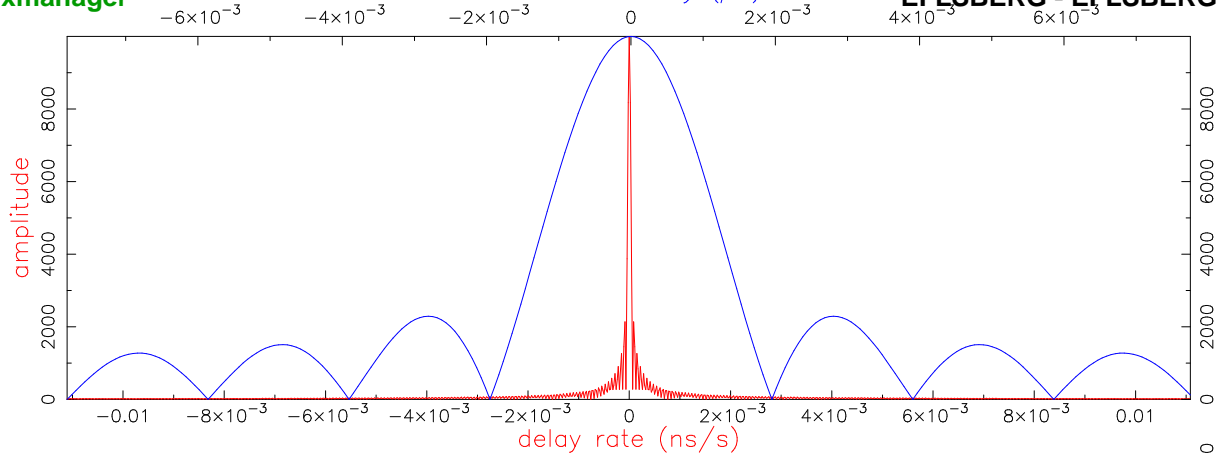
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BB

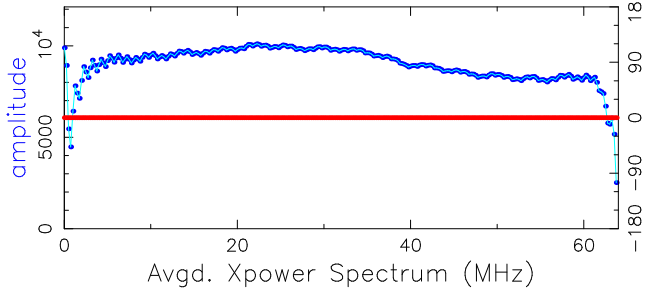
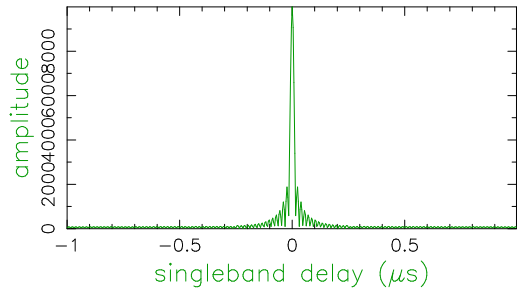
EFLSBERG - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)



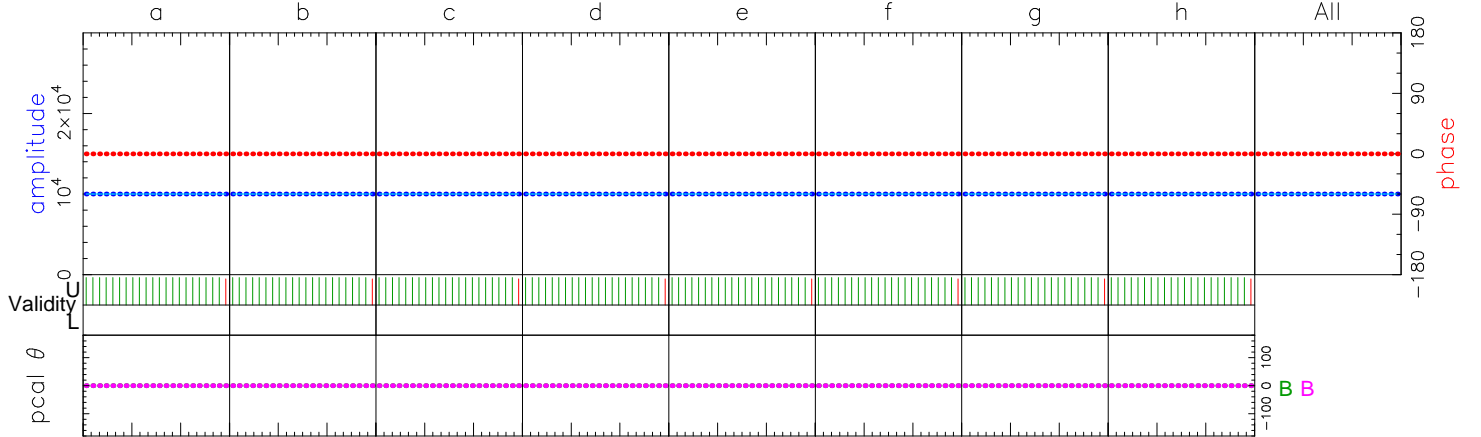
Fringe quality 9

SNR 366661.9
 Int time 179.778
 Amp 9999.999
 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)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060623
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	9.9E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.999	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BB.W.1.1JFKZ

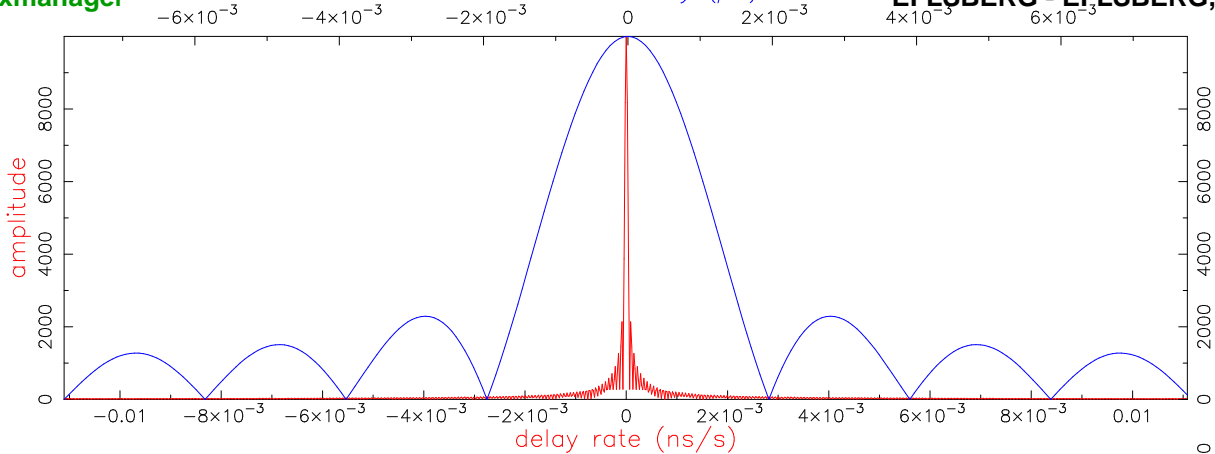
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BB

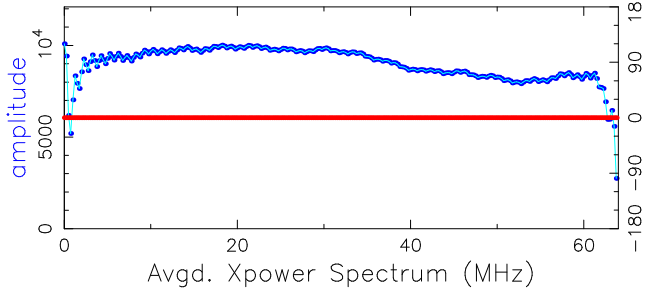
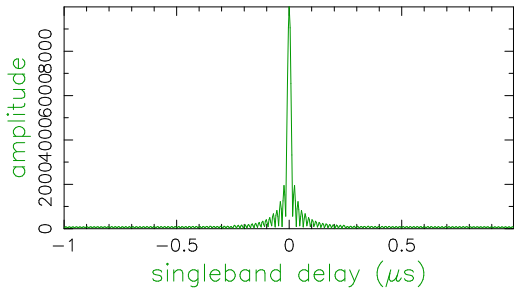
EFLSBERG - EFLSBERG, fgroup W, pol RR

multiband delay (μ s)



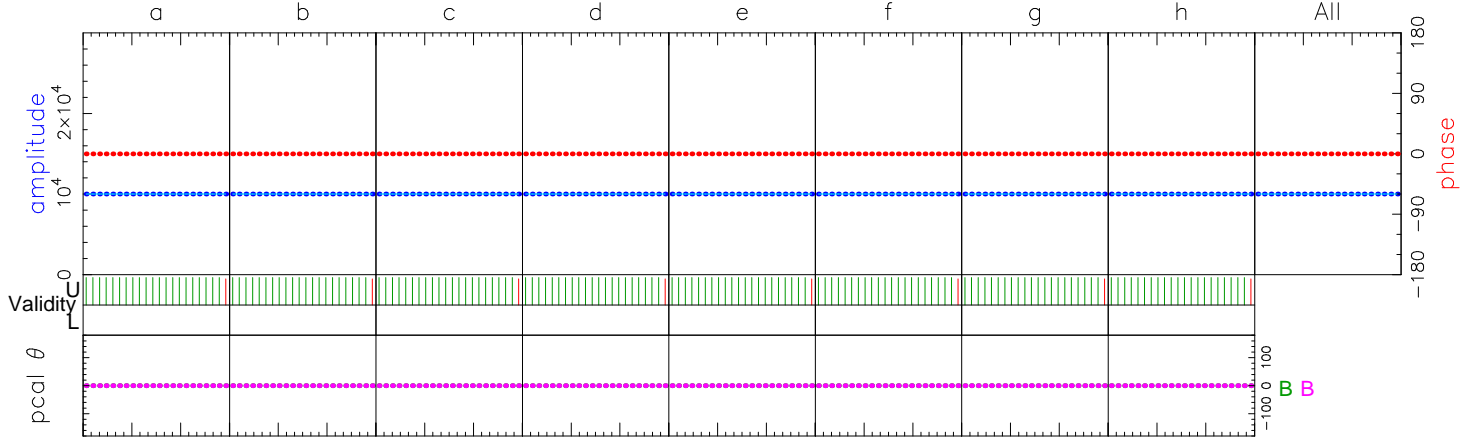
Fringe quality 9

SNR 366661.9
 Int time 179.778
 Amp 9999.999
 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)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060624
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	9.9E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BB.W.16.1JFKZ

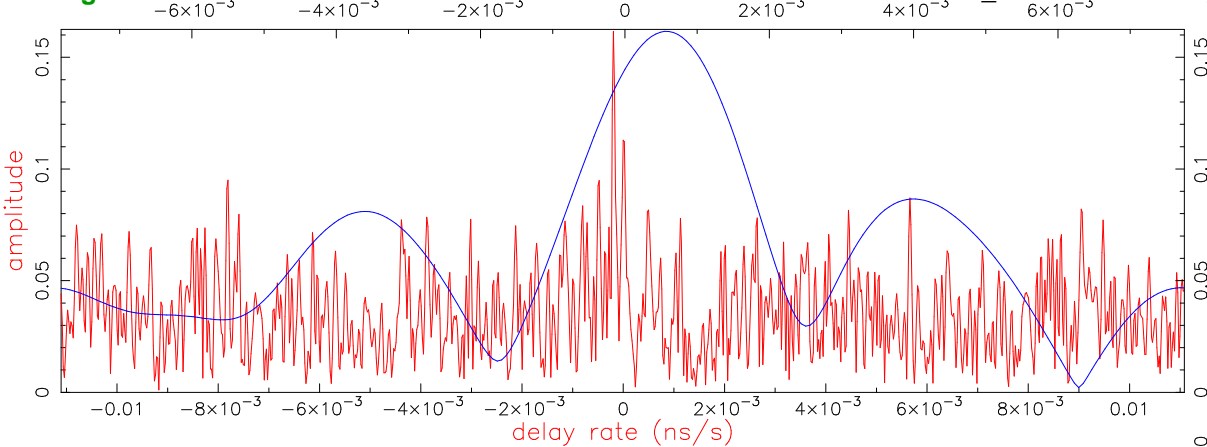
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, bB

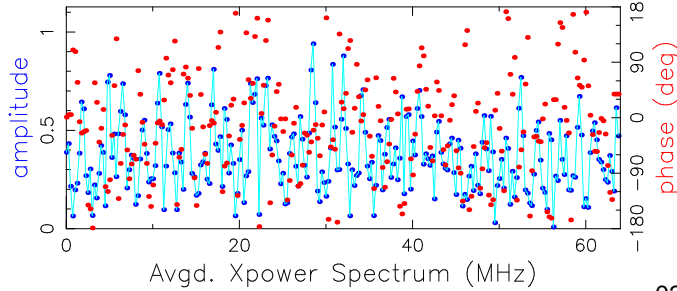
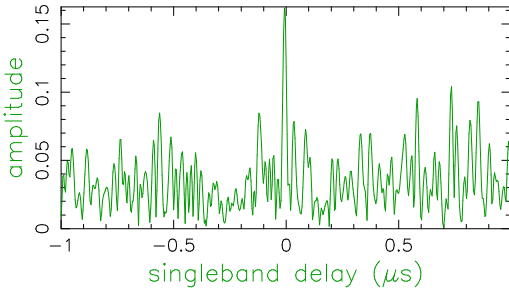
VLBA_BR - EFLSBERG, fgroup W, pol RR

multiband delay (μ s)



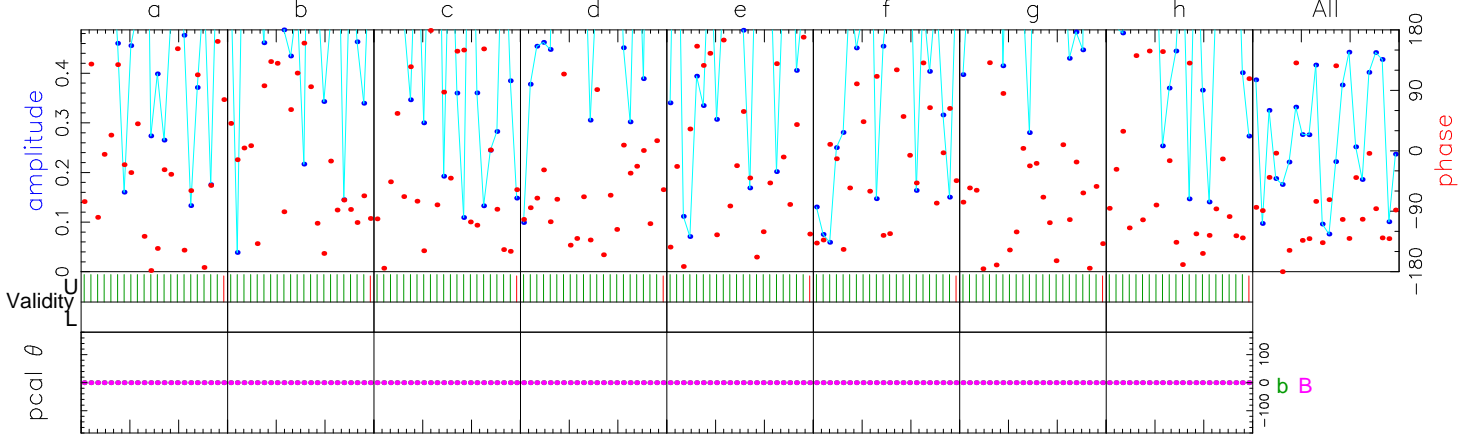
Fringe quality 0

SNR 6.0
 Int time 179.778
 Amp 0.162
 Phase -100.6
 PFD 2.8e-01
 Delays (us)
 SBD -0.006874
 MBD 0.000604
 Fringe rate (Hz)
 -0.016269
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060626
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-143.8	-96.0	-109.5	-78.1	-107.5	-12.8	-108.9	-114.8	Phase	-100.6
	0.1	0.0	0.3	0.3	0.1	0.1	0.3	0.3	Ampl.	0.2
	167.0	430.6	254.8	255.7	162.4	27.9	255.5	265.6	Sbd box	255.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
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)	-2.89579532734E+03		Apriori delay (usec)		-2.89579593129E+03		Resid mbdelay (usec)		6.03950E-04	+/- 1.8E-04
Sband delay (usec)	-2.89580280504E+03		Apriori clock (usec)		-1.1783582E+01		Resid sbdelay (usec)		-6.87375E-03	+/- 1.4E-03
Phase delay (usec)	-2.89579593447E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		-3.17726E-06	+/- 6.1E-07
Delay rate (us/s)	1.72188481057E+00		Apriori rate (us/s)		1.72188499557E+00		Resid rate (us/s)		-1.85002E-07	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.44503865850E-05		Resid phase (deg)		-100.6	+/- 19.2

	RMS	Theor.	Amplitude	0.162 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.3	45.1	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	98.9	78.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	41.8	27.2	Inc. seg. avg.	0.207	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	68.2	47.5	Inc. frq. avg.	0.160	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 92.6 el 25.0 pa -44.1 B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) -10502.550 116.972 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/bB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/bB.W.32.1JFKZ

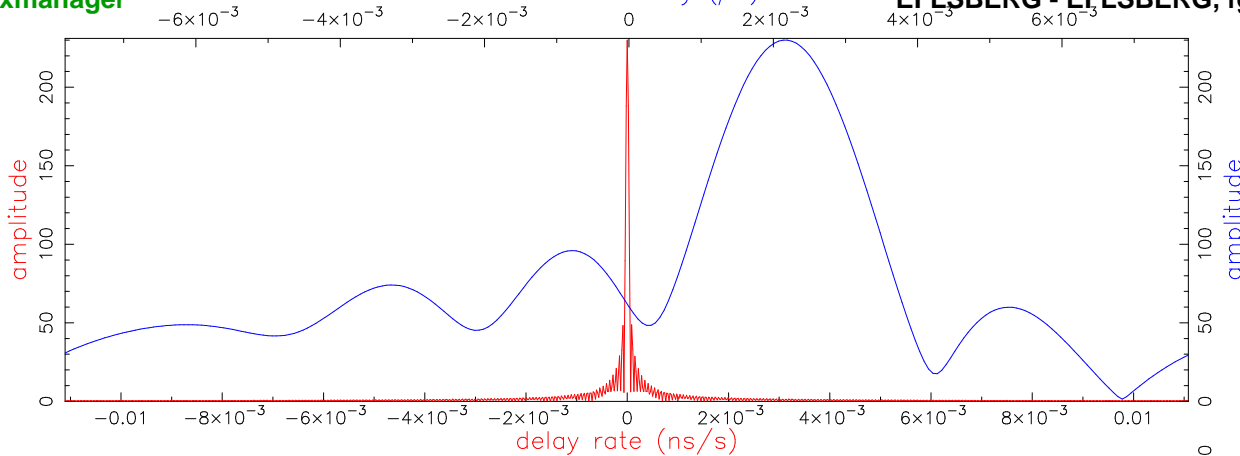
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BB

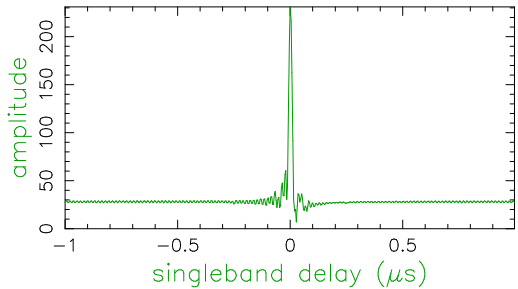
EFLSBERG - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)

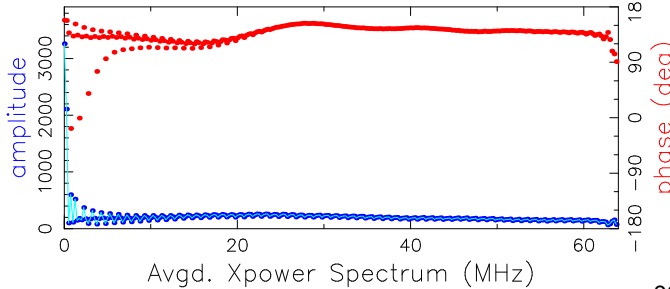


Fringe quality 6

SNR 8473.1
 Int time 179.778
 Amp 231.089
 Phase 122.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.000835
 MBD 0.002198
 Fringe rate (Hz)
 -0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

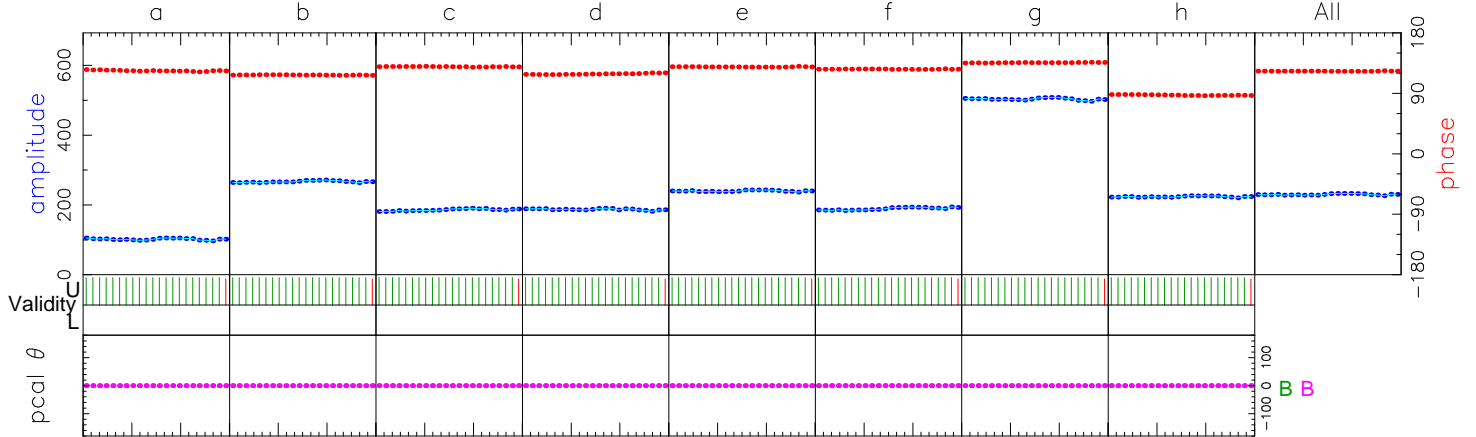


singleband delay (μ s)



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060626
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	123.6	117.2	129.6	118.8	129.3	125.9	135.6	87.3	Phase	122.9
B	101.9	266.9	185.9	187.2	240.1	189.3	503.5	223.8	Ampl.	237.3
B	258.7	257.2	256.7	258.1	256.8	257.1	257.2	261.8	Sbd box	257.2
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.19759375000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.19759E-03	+/- 1.3E-07
Sband delay (usec)	8.34750000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		8.34750E-04	+/- 1.0E-06
Phase delay (usec)	3.88167926192E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.88168E-06	+/- 4.3E-10
Delay rate (us/s)	-4.58075974661E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-4.58076E-11	+/- 4.1E-12
Total phase (deg)	122.9		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		122.9	+/- 0.0

RMS Theor. Amplitude 231.089 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X32) 226.085 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.9 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 16.2 0.0 Inc. seg. avg. 229.967 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.9 0.0 Inc. frq. avg. 237.331 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BB.W.34.1JFKZ

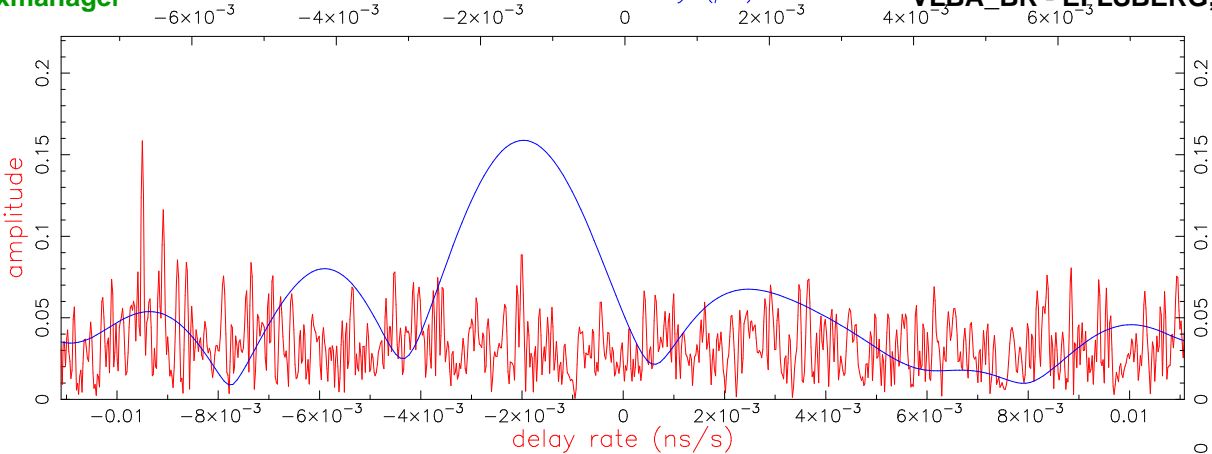
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, bB

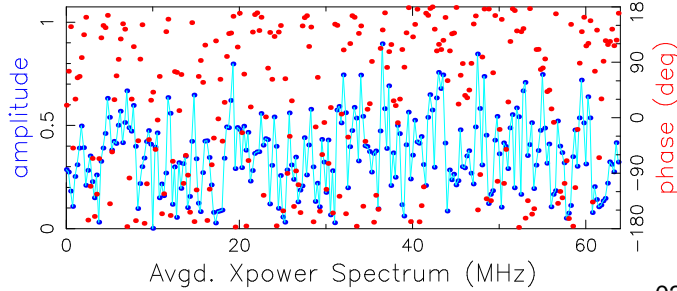
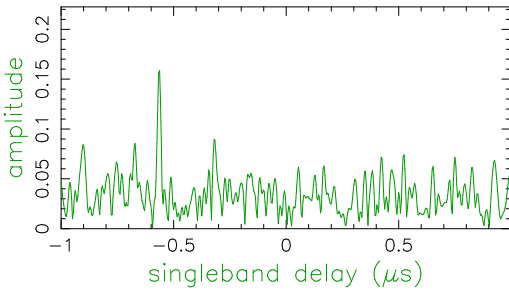
VLBA_BR - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)



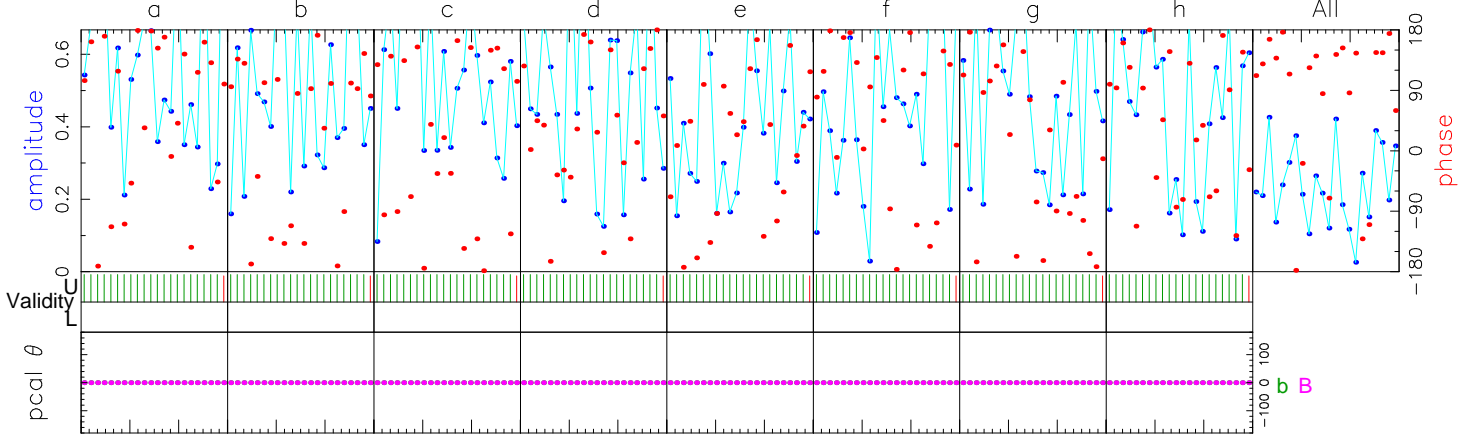
Fringe quality 0

SNR 5.9
 Int time 179.778
 Amp 0.223
 Phase 145.6
 PFD 3.5e-01
 Delays (us)
 SBD -0.564171
 MBD -0.001483
 Fringe rate (Hz)
 -0.836915
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060628
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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: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)	-2.89635991436E+03				-2.89579593129E+03				-1.48307E-03	+/- 1.8E-04
Sband delay (usec)	-2.89636010254E+03				-1.1783582E+01				-5.64171E-01	+/- 1.5E-03
Phase delay (usec)	-2.89579592670E+03				2.0000000E-07				4.59778E-06	+/- 6.1E-07
Delay rate (us/s)	1.72187547868E+00				1.72188499557E+00				-9.51689E-06	+/- 5.9E-09
Total phase (deg)			74.3		1.44503865850E-05				145.6	+/- 19.4
ph/seg (deg)	62.7	45.5			0.155					
amp/seg (%)	83.3	79.4			0.000					
ph/frq (deg)	31.4	27.4			0.253					
amp/frq (%)	40.4	47.9			0.216					
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										

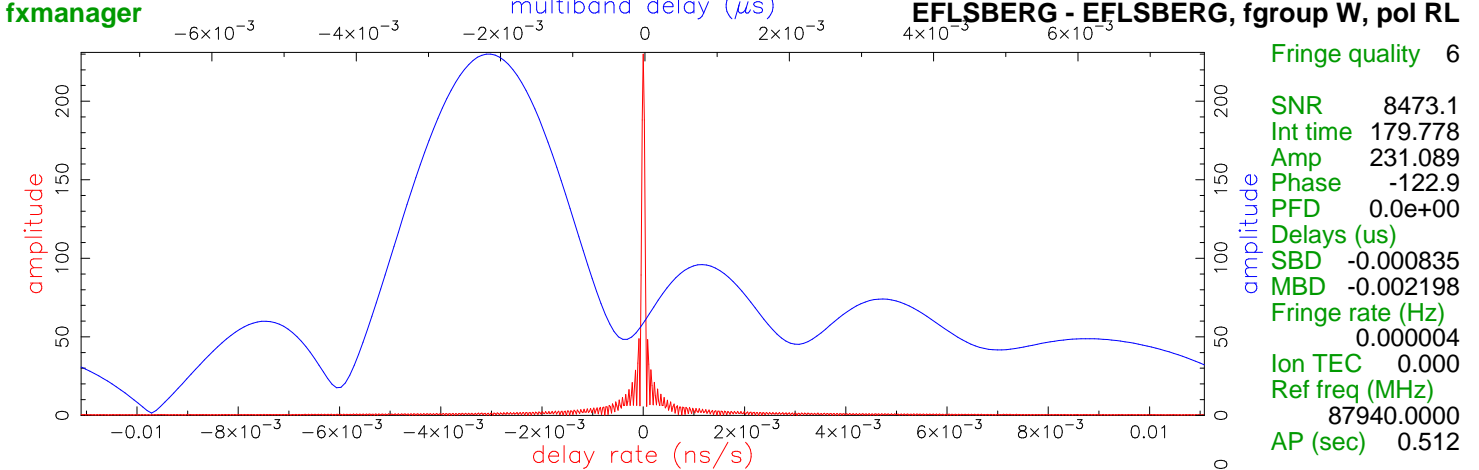
b: az 92.6 el 25.0 pa -44.1 B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) -10502.550 116.972 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/bB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/bB.W.50.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

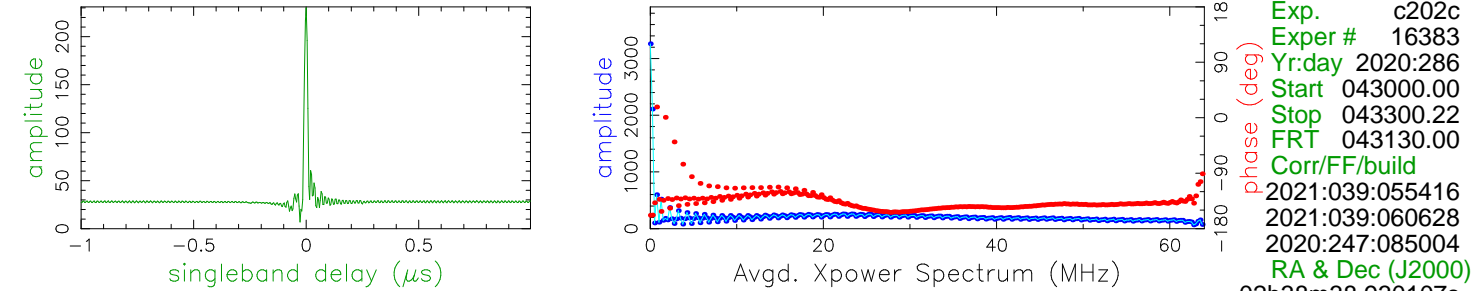
0235+164.1JFKZ, No0038, BB

EFLSBERG - EFLSBERG, fgroup W, pol RL



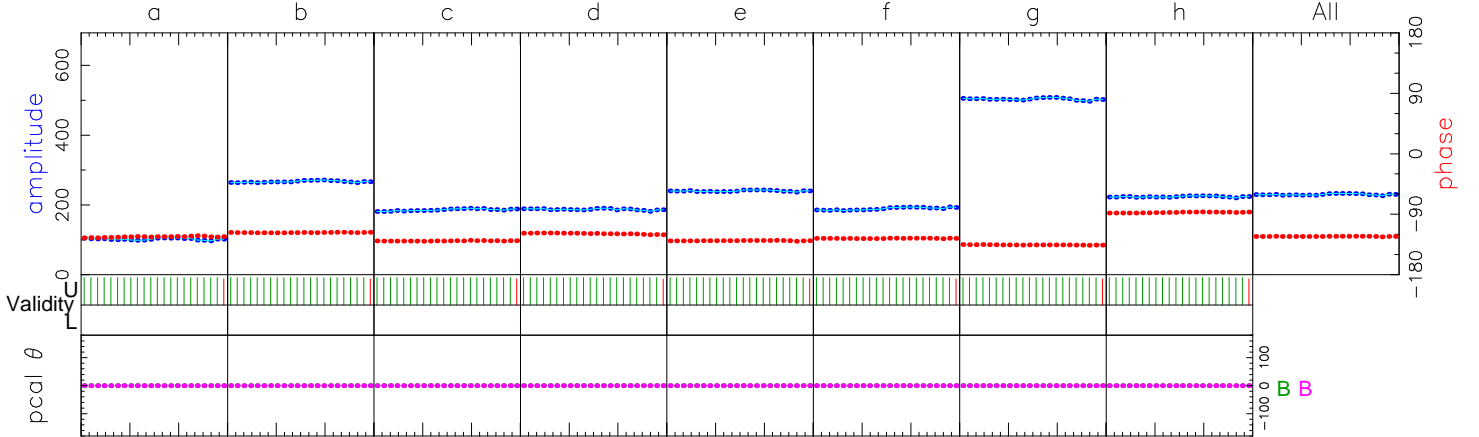
Fringe quality 6

SNR 8473.1
 Int time 179.778
 Amp 231.089
 Phase -122.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.000835
 MBD -0.002198
 Fringe rate (Hz) 0.000004
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060628
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-123.6	-117.2	-129.6	-118.8	-129.3	-125.9	-135.6	-87.3	Phase	-122.9
	101.9	266.9	185.9	187.2	240.1	189.3	503.5	223.8	Ampl.	237.3
	255.3	256.8	257.3	255.9	257.2	256.9	256.8	252.2	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	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	
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)	-2.19759375000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.19759E-03	+/-	1.3E-07
Sband delay (usec)	-8.34750000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-8.34750E-04	+/-	1.0E-06
Phase delay (usec)	-3.88167926178E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.88168E-06	+/-	4.3E-10
Delay rate (us/s)	4.58075974661E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	4.58076E-11	+/-	4.1E-12
Total phase (deg)	-122.9	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-122.9	+/-	0.0

ph/seg (deg)	0.2	0.0	RMS	231.089 +/- 0.027	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.9	0.1	Theor.	226.085	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.2	0.0	Search (1024X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	47.9	0.0	Inc. seg. avg.	229.967	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	237.331	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 253.5 el 34.4 pa 39.5 B: az 253.5 el 34.4 pa 39.5 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BB.W.55.1JFKZ

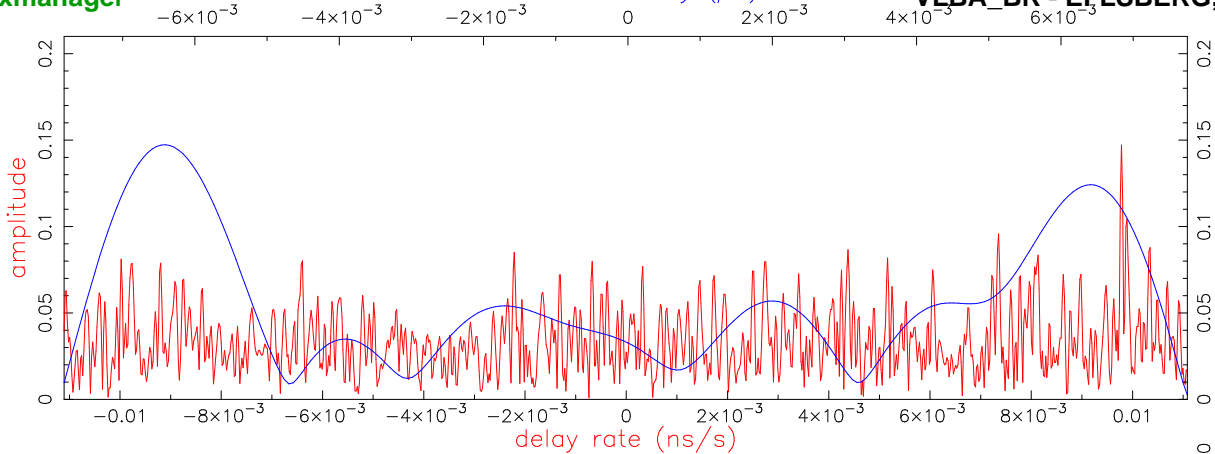
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, bB

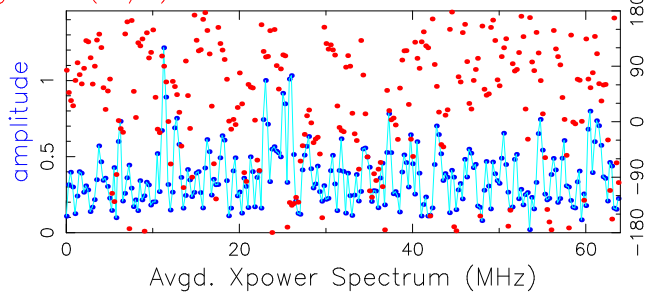
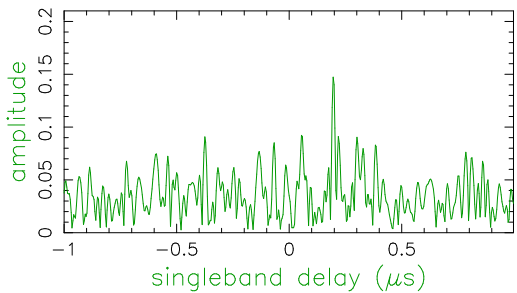
VLBA_BR - EFLSBERG, fgroup W, pol RL

multiband delay (μ s)



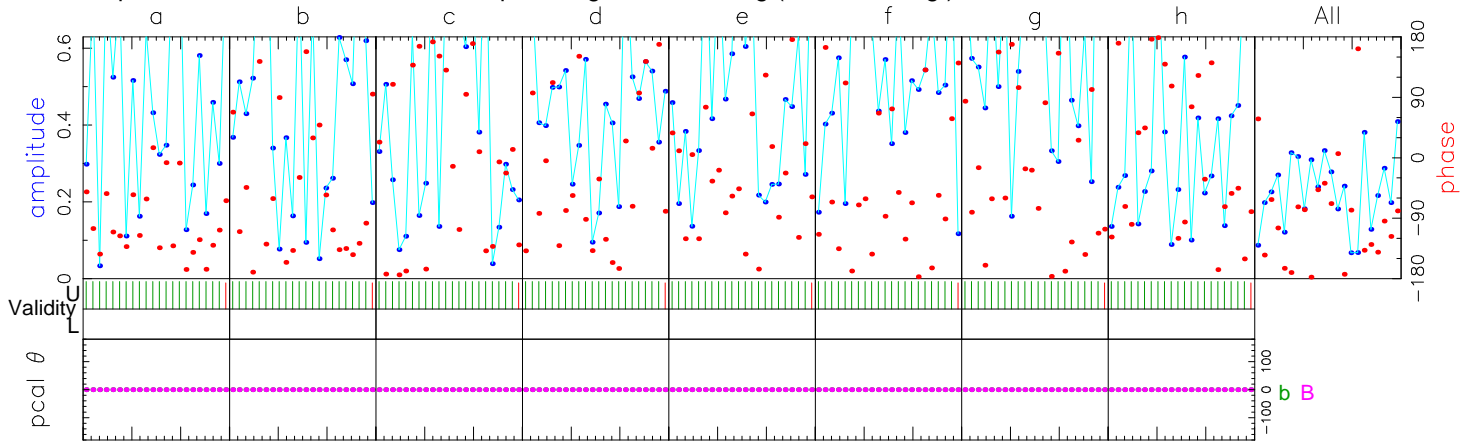
Fringe quality 0

SNR 5.5
 Int time 179.778
 Amp 0.210
 Phase -105.1
 PFD 1.0e+00
 Delays (us)
 SBD 0.196501
 MBD -0.006371
 Fringe rate (Hz)
 0.862223
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060630
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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: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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.89559917702E+03	-2.89559943004E+03	-2.89579593461E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	-6.37072E-03	+/- 2.0E-04
Sband delay (usec)	-2.89559943004E+03	-2.89559943004E+03	-2.89579593461E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	-2.89579593129E+03	1.96501E-01	+/- 1.6E-03
Phase delay (usec)	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-2.89579593461E+03	-3.32068E-06	+/- 6.6E-07
Delay rate (us/s)	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	1.72189480024E+00	9.80467E-06	+/- 6.4E-09
Total phase (deg)			-176.4						-105.1	+/- 21.0
Apriori delay (usec)				0.145						
Apriori clock (usec)				0.145						
Apriori clockrate (us/s)				0.0000000E-07						
Apriori rate (us/s)				1.72189480024E+00						
Apriori accel (us/s/s)				1.44503865850E-05						
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)									-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 92.6 el 25.0 pa -44.1 B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) -10502.550 116.972 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/bB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/bB.W.70.1JFKZ

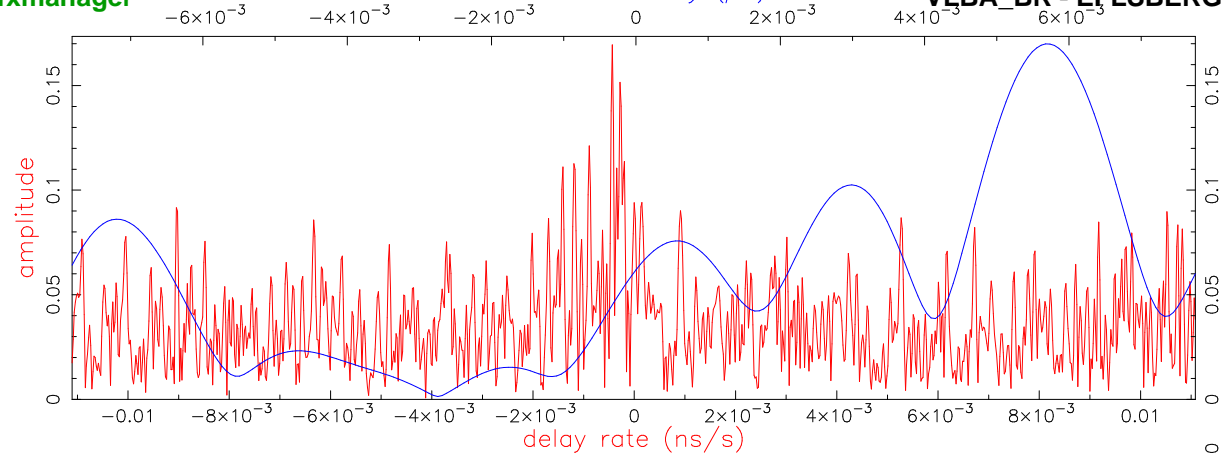
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, bB

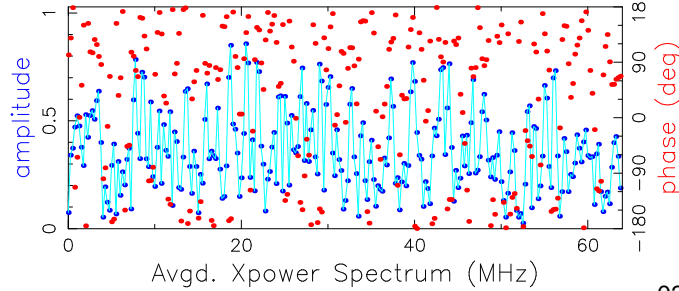
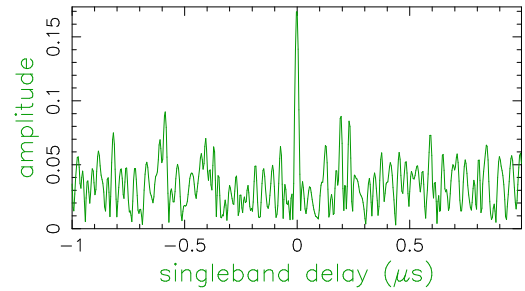
VLBA_BR - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)



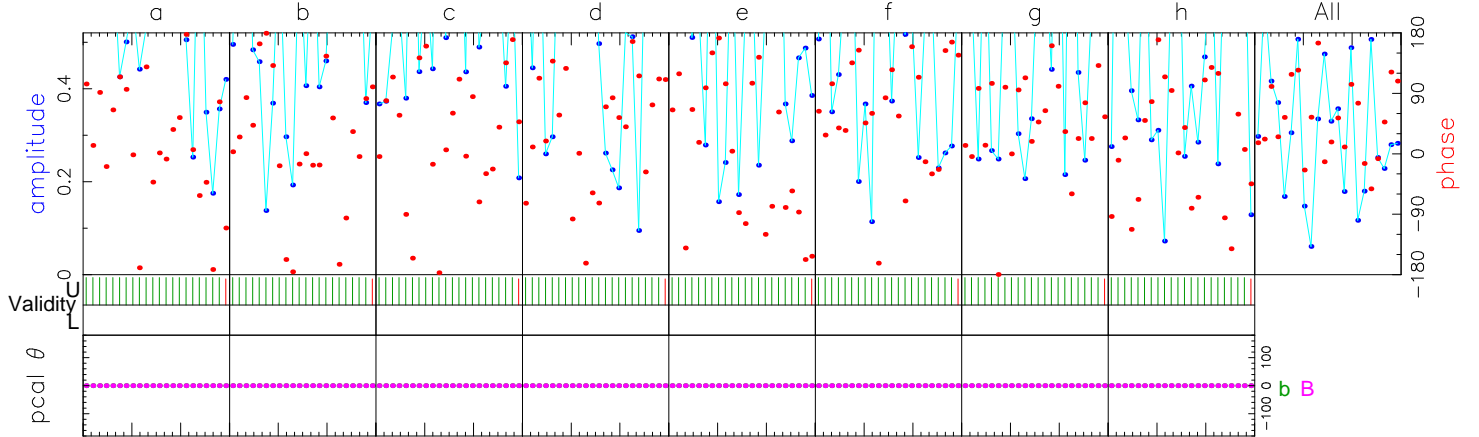
Fringe quality 0

SNR 6.4
 Int time 179.778
 Amp 0.173
 Phase 50.5
 PFD 2.8e-02
 Delays (us)
 SBD -0.001980
 MBD 0.005625
 Fringe rate (Hz)
 -0.038160
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060623
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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: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)	-2.89579030591E+03		Apriori delay (usec)		-2.89579593129E+03		Resid mbdelay (usec)		5.62538E-03	+/- 1.7E-04
Sband delay (usec)	-2.89579791079E+03		Apriori clock (usec)		-1.1783582E+01		Resid sbdelay (usec)		-1.97950E-03	+/- 1.4E-03
Phase delay (usec)	-2.89579592970E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		1.59587E-06	+/- 5.7E-07
Delay rate (us/s)	1.72188456164E+00		Apriori rate (us/s)		1.72188499557E+00		Resid rate (us/s)		-4.33930E-07	+/- 5.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.44503865850E-05		Resid phase (deg)		50.5	+/- 18.0

	RMS	Theor.	Amplitude	0.173 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.5	42.3	Search (1024X32)	0.168	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	114.1	73.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	42.7	25.5	Inc. seg. avg.	0.246	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.3	44.5	Inc. frq. avg.	0.173	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 92.6 el 25.0 pa -44.1 B: az 253.5 el 34.4 pa 39.5 u,v (fr/asec) -10502.550 116.972 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/bB..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/bB.W.7.1JFKZ

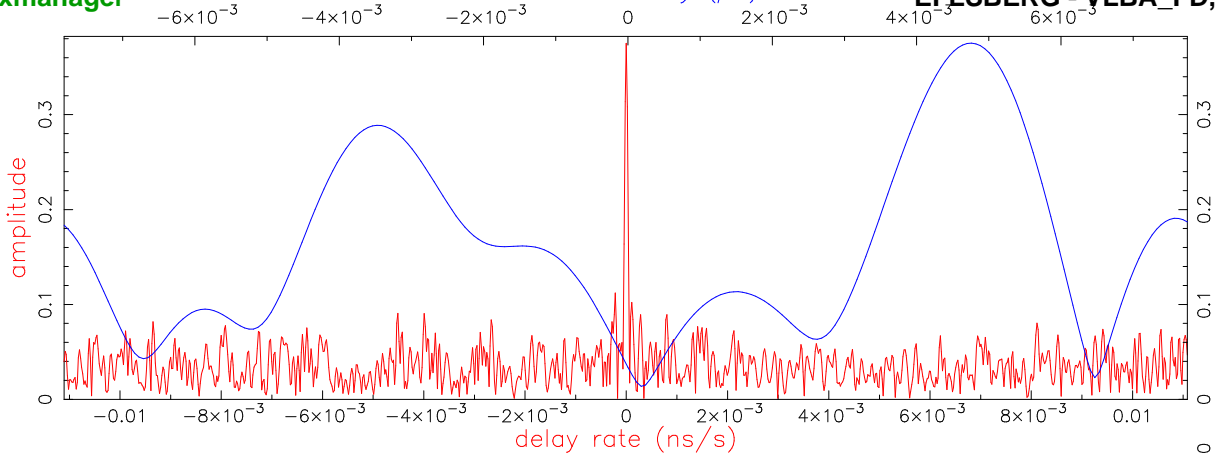
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bf

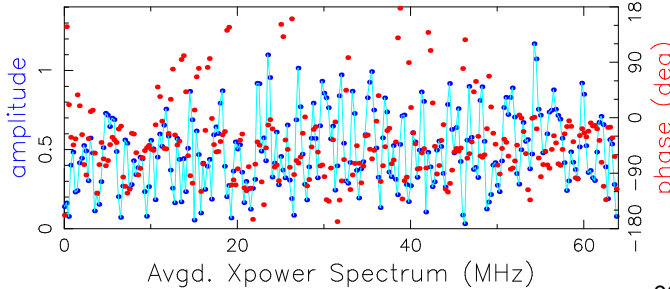
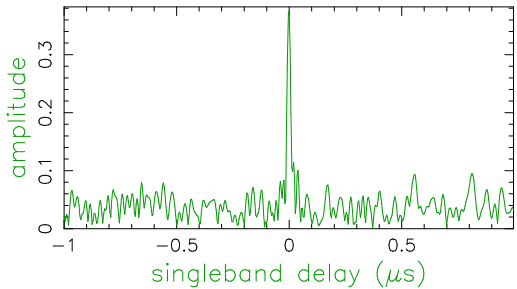
EFLSBERG - VLBA_FD, fgroup W, pol RR

multiband delay (μ s)



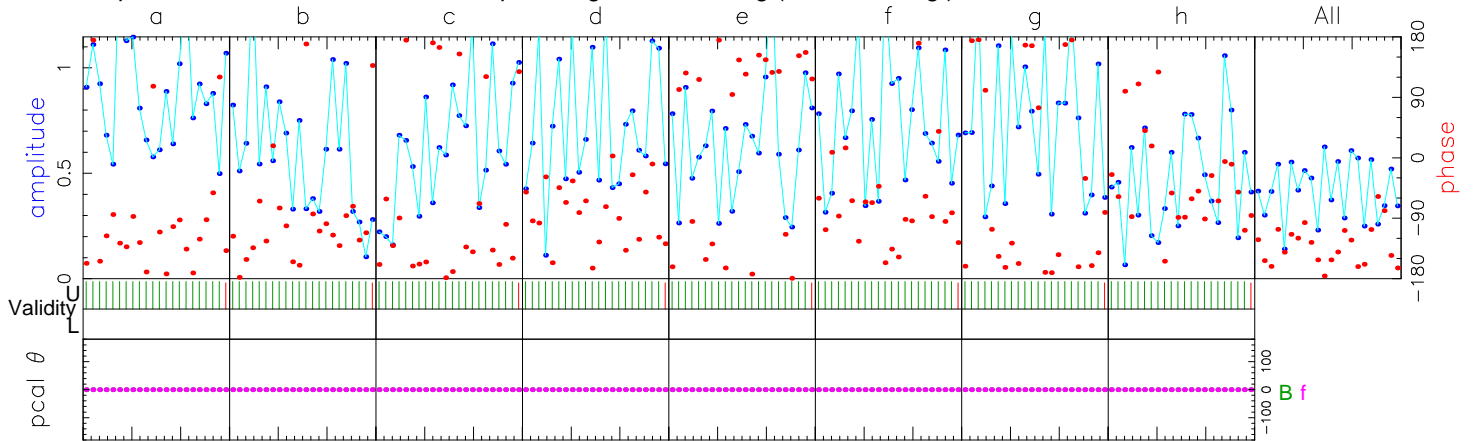
Fringe quality 9

SNR 14.0
 Int time 179.778
 Amp 0.382
 Phase -130.8
 PFD 3.3e-36
 Delays (us)
 SBD -0.001720
 MBD 0.004712
 Fringe rate (Hz)
 -0.000718
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060626
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-131.6	-116.9	-159.8	-80.9	156.3	-99.3	-166.1	-50.5	Phase	-130.8
	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.3	Ampl.	0.5
	256.7	257.2	257.3	256.9	257.8	256.7	257.4	89.7	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.25844694531E+03		Apriori delay (usec)		-1.25845165753E+03		Resid mbdelay (usec)		4.71222E-03	+/- 7.7E-05
Sband delay (usec)	-1.25845337728E+03		Apriori clock (usec)		2.1447461E+00		Resid sbdelay (usec)		-1.71975E-03	+/- 6.1E-04
Phase delay (usec)	-1.25845166166E+03		Apriori clockrate (us/s)		-5.9999998E-07		Resid phdelay (usec)		-4.13251E-06	+/- 2.6E-07
Delay rate (us/s)	-1.83100795280E+00		Apriori rate (us/s)		-1.83100794463E+00		Resid rate (us/s)		-8.16763E-09	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.52098943502E-05		Resid phase (deg)		-130.8	+/- 8.2

	RMS	Theor.	Amplitude	0.382 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	29.5	19.2	Search (1024X32)	0.360	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	37.3	33.4	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	54.0	11.6	Inc. seg. avg.	0.401	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	41.9	20.2	Inc. frq. avg.	0.496				

B: az 253.5 el 34.4 pa 39.5 f: az 92.3 el 38.1 pa -63.8 u,v (fr/asec) 11181.098 2632.532 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bf.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bf.W.31.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

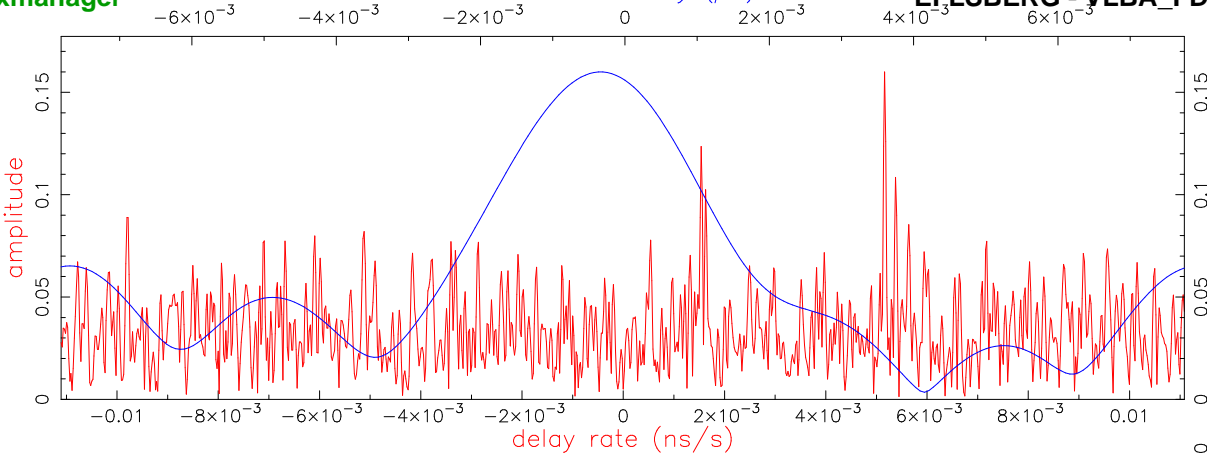
fxmanager

0235+164.1JFKZ, No0038, Bf

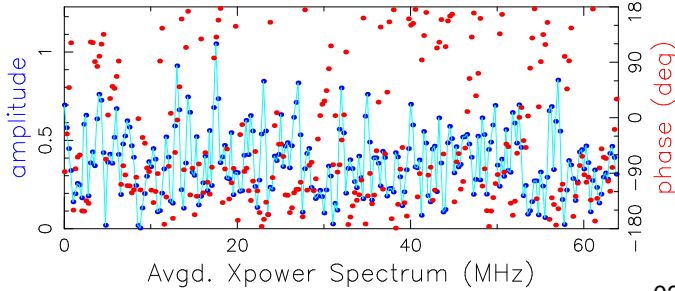
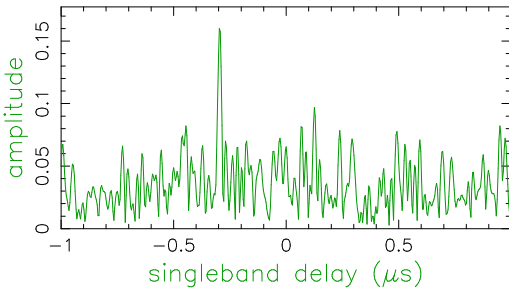
EFLSBERG - VLBA_FD, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

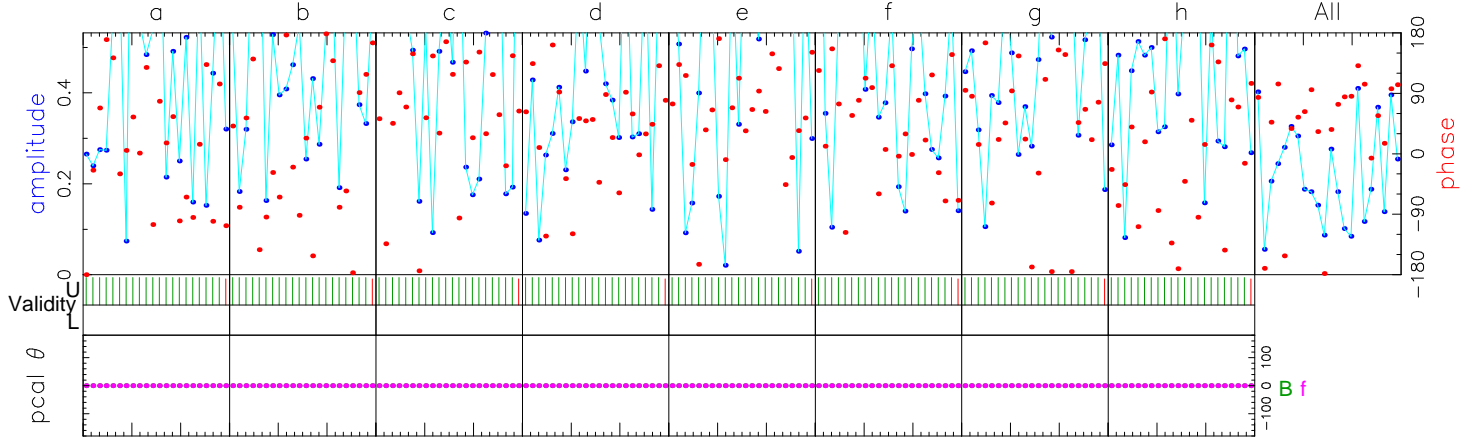


SNR 5.9
 Int time 179.778
 Amp 0.177
 Phase 77.1
 PFD 3.1e-01
 Delays (us)
 SBD -0.295310
 MBD -0.000374
 Fringe rate (Hz)
 0.454618
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060629
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.25874890680E+03									
Sband delay (usec)	-1.25874696753E+03									
Phase delay (usec)	-1.25845165510E+03									
Delay rate (us/s)	-1.83100277499E+00									
Total phase (deg)		-197.7								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
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										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

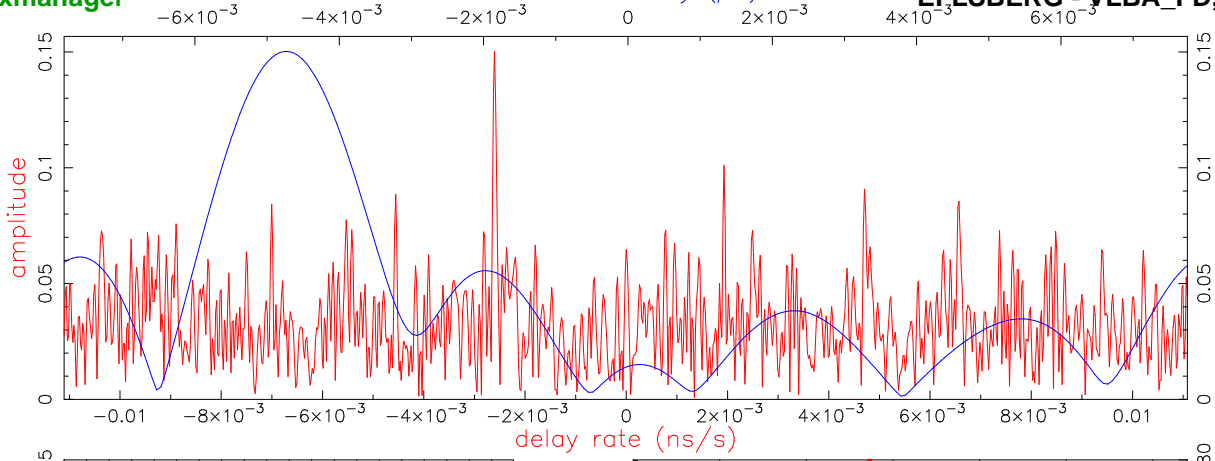
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bf

EFLSBERG - VLBA_FD, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.6

Int time 179.778

Amp 0.157

Phase -4.7

PFD 9.1e-01

Delays (us)

SBD 0.220997

MBD -0.004758

Fringe rate (Hz)

-0.229942

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 043000.00

Stop 043300.22

FRT 043130.00

Corr/FF/build

2021:039:055416

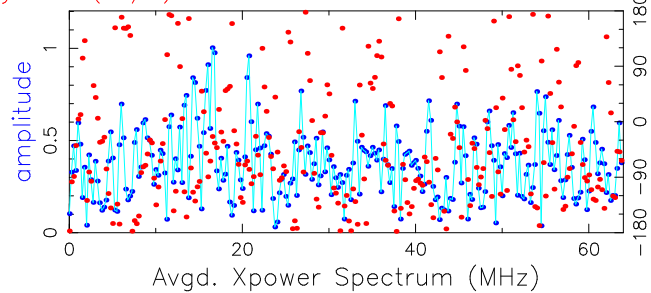
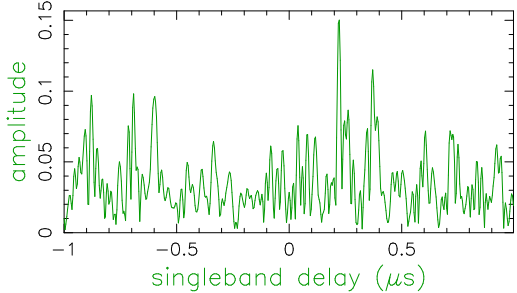
2021:039:060630

2020:247:085004

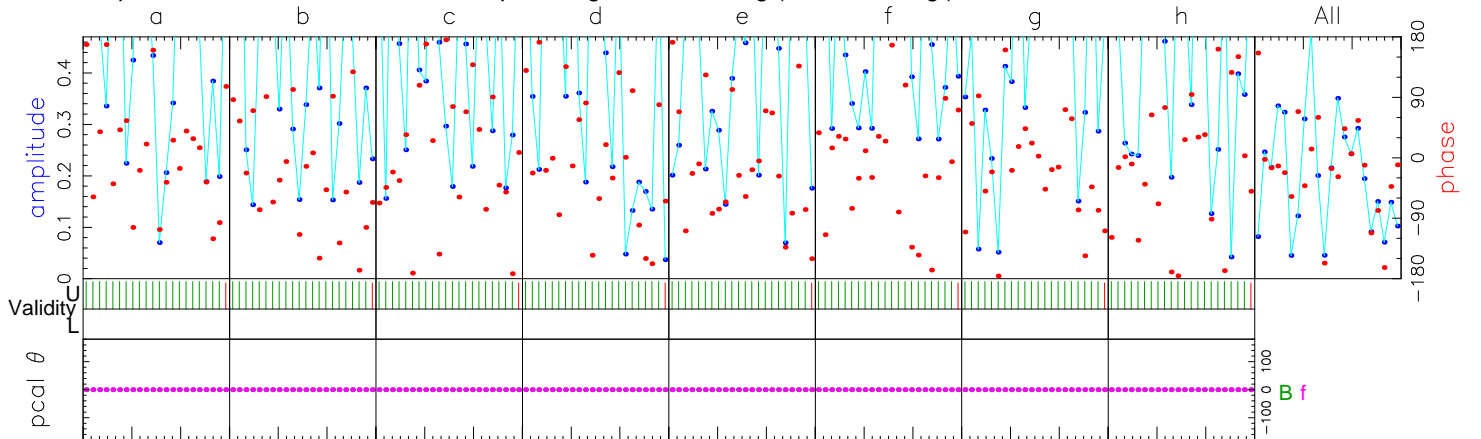
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	8.4	-16.3	-15.8	-1.8	-28.3	9.8	-8.0	11.1	Phase	-4.7
	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	288.9	228.0	175.3	324.4	207.0	412.1	277.4	352.1	Sbd box	313.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.25823766512E+03		Apriori delay (usec)		-1.25845165753E+03		Resid mbdelay (usec)		-4.75759E-03	+/- 1.9E-04
Sband delay (usec)	-1.25823066078E+03		Apriori clock (usec)		2.1447461E+00		Resid sbdelay (usec)		2.20997E-01	+/- 1.5E-03
Phase delay (usec)	-1.25845165768E+03		Apriori clockrate (us/s)		-5.9999998E-07		Resid phdelay (usec)		-1.47220E-07	+/- 6.4E-07
Delay rate (us/s)	-1.83101055939E+00		Apriori rate (us/s)		-1.83100794463E+00		Resid rate (us/s)		-2.61476E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.52098943502E-05		Resid phase (deg)		-4.7	+/- 20.4

ph/seg (deg) 72.0 47.8 Search (1024X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 81.3 83.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 15.6 28.9 Inc. seg. avg. 0.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 31.9 50.4 Inc. frq. avg. 0.140 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 253.5 el 34.4 pa 39.5 f: az 92.3 el 38.1 pa -63.8 u,v (fr/asec) 11181.098 2632.532 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bf..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bf.W.74.1JFKZ

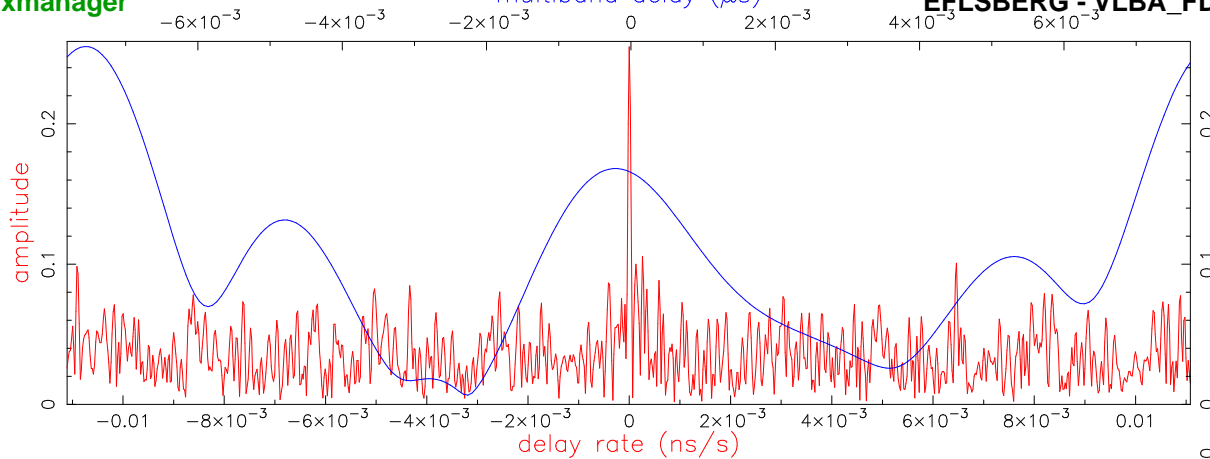
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bf

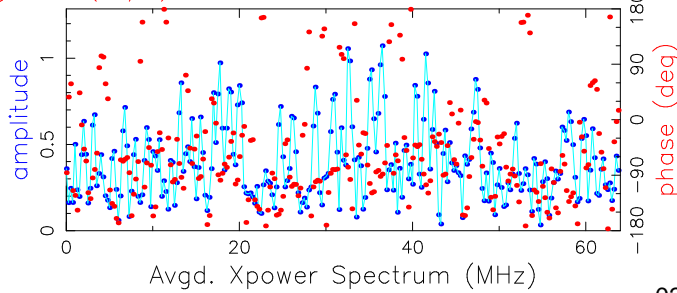
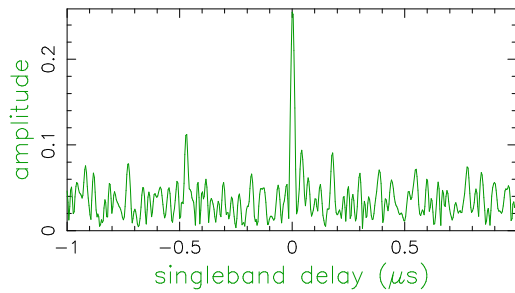
EFLSBERG - VLBA_FD, fgroup W, pol LL

multiband delay (μ s)



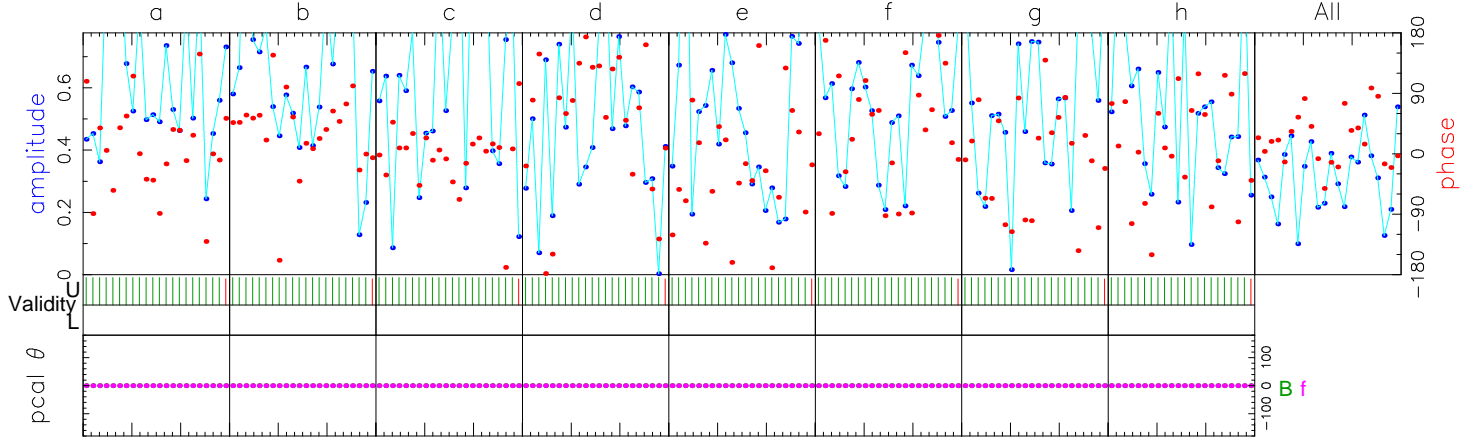
Fringe quality 9

SNR 9.5
 Int time 179.778
 Amp 0.259
 Phase 22.3
 PFD 4.7e-13
 Delays (us)
 SBD 0.001684
 MBD -0.007504
 Fringe rate (Hz)
 -0.000741
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060624
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.25844353619E+03				-1.25845165753E+03				-7.50366E-03	+/- 1.1E-04
Sband delay (usec)	-1.25844997353E+03				2.1447461E+00				1.68400E-03	+/- 9.1E-04
Phase delay (usec)	-1.25845165683E+03				-5.9999998E-07				7.02850E-07	+/- 3.8E-07
Delay rate (us/s)	-1.83100795306E+00				-1.83100794463E+00				-8.42721E-09	+/- 3.7E-09
Total phase (deg)		-252.5			1.52098943502E-05				22.3	+/- 12.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	38.6	28.3			0.259 +/- 0.027					
ph/seg (deg)	38.6	28.3								
amp/seg (%)	49.6	49.4								
ph/frq (deg)	44.8	17.1								
amp/frq (%)	50.5	29.8								
Search (1024X32)					0.244					
Inc. seg. avg.					0.282					
Inc. frq. avg.					0.301					
PCal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					128					
Data rate (Mb/s):					2048					
PC period (AP's)					5, 5					
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

B: az 253.5 el 34.4 pa 39.5 f: az 92.3 el 38.1 pa -63.8 u,v (fr/asec) 11181.098 2632.532 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bf.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bf.W.8.1JFKZ

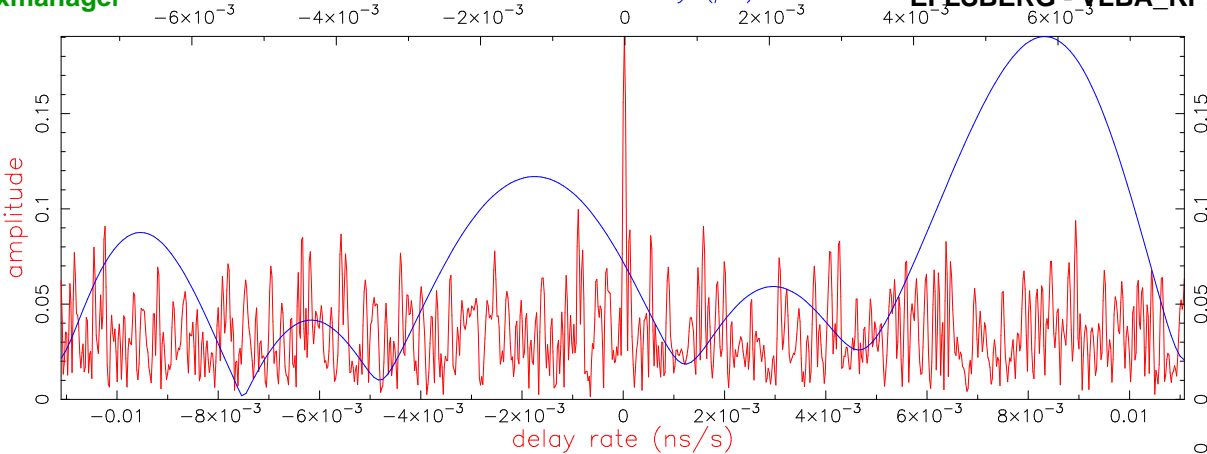
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bk

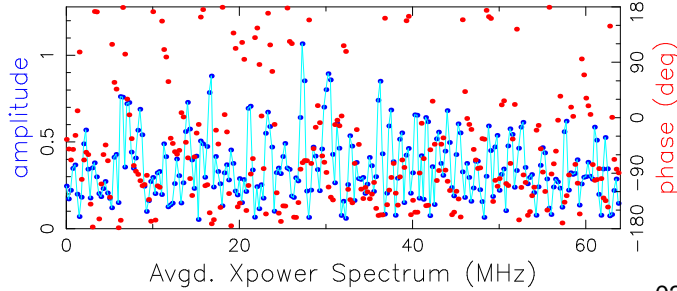
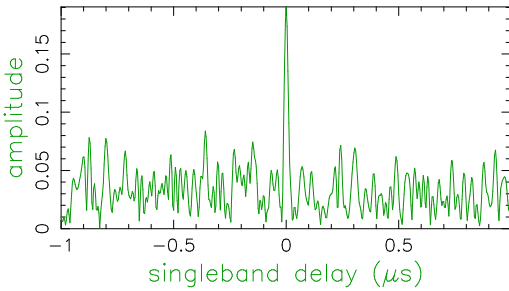
EFLSBERG - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)



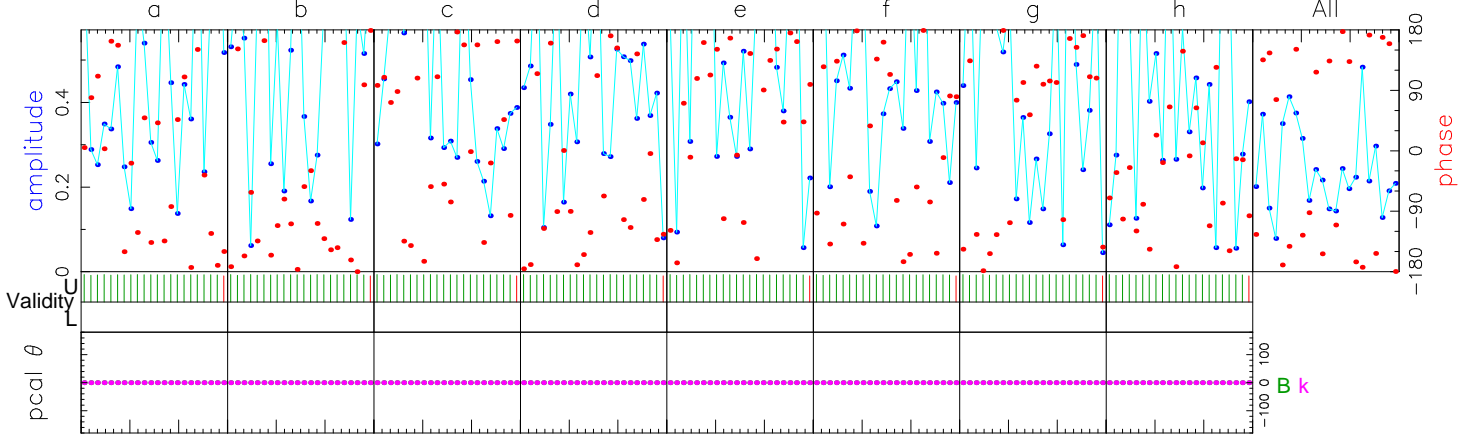
Fringe quality 0

SNR 6.9
 Int time 177.914
 Amp 0.191
 Phase -177.3
 PFD 5.5e-04
 Delays (us)
 SBD -0.000310
 MBD 0.005820
 Fringe rate (Hz)
 0.001664
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060625
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-168.0	-162.4	147.3	-152.4	139.9	-159.8	160.0	-71.7	Phase	-177.3
	0.2	0.4	0.2	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	122.6	257.6	306.2	36.2	258.2	381.4	258.2	280.7	Sbd box	256.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.45352849069E+02		Apriori delay (usec)		7.45347029060E+02		Resid mbdelay (usec)		5.82001E-03	+/- 1.6E-04
Sband delay (usec)	7.45346719310E+02		Apriori clock (usec)		9.7298737E+00		Resid sbdelay (usec)		-3.09750E-04	+/- 1.2E-03
Phase delay (usec)	7.45347023459E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-5.60126E-06	+/- 5.2E-07
Delay rate (us/s)	-1.90440357166E+00		Apriori rate (us/s)		-1.90440359058E+00		Resid rate (us/s)		1.89199E-08	+/- 5.0E-09
Total phase (deg)			Apriori accel (us/s/s)		3.95598657850E-06		Resid phase (deg)		-177.3	+/- 16.5

ph/seg (deg) 45.8 38.7 Search (1024X32) 0.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.8 67.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.6 23.3 Inc. seg. avg. 0.198 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.0 40.7 Inc. frq. avg. 0.219 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 253.5 el 34.4 pa 39.5 k: az 89.2 el 31.5 pa -62.3 u,v (fr/asec) 11623.562 2190.694 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bk..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bk.W.26.1JFKZ

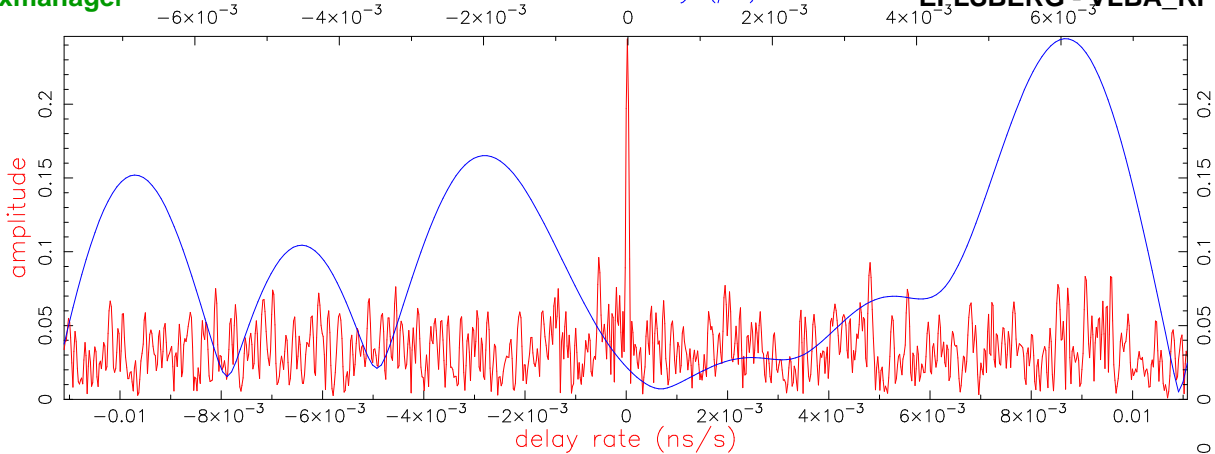
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bk

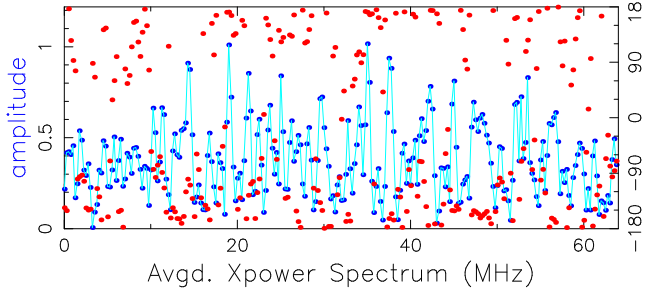
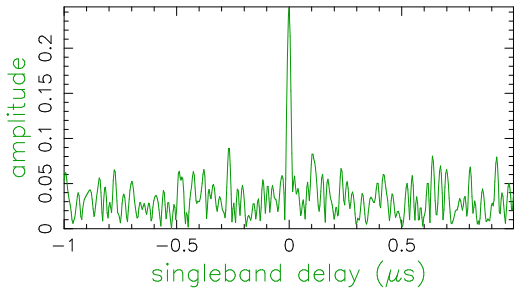
EFLSBERG - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)



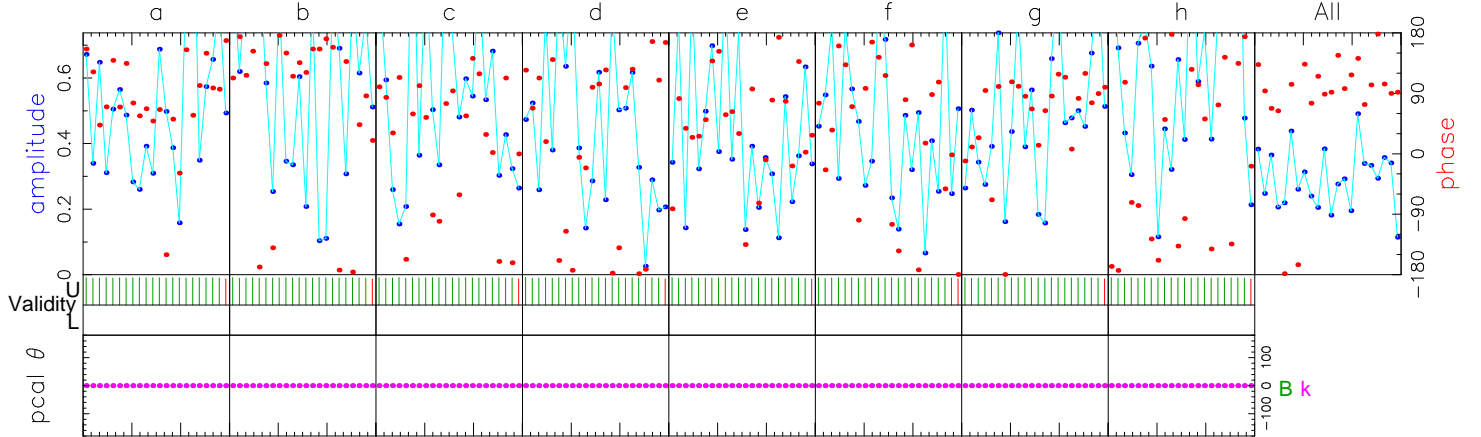
Fringe quality 9

SNR 9.0
 Int time 177.914
 Amp 0.246
 Phase 111.3
 PFD 5.7e-11
 Delays (us)
 SBD -0.001129
 MBD 0.006027
 Fringe rate (Hz) 0.001913
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060623
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.45353055756E+02		Apriori delay (usec)		7.45347029060E+02		Resid mbdelay (usec)		6.02670E-03	+/- 1.2E-04
Sband delay (usec)	7.45345900310E+02		Apriori clock (usec)		9.7298737E+00		Resid sbdelay (usec)		-1.12875E-03	+/- 9.6E-04
Phase delay (usec)	7.45347032576E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		3.51588E-06	+/- 4.0E-07
Delay rate (us/s)	-1.90440356883E+00		Apriori rate (us/s)		-1.90440359058E+00		Resid rate (us/s)		2.17544E-08	+/- 3.9E-09
Total phase (deg)	16.1		Apriori accel (us/s/s)		3.95598657850E-06		Resid phase (deg)		111.3	+/- 12.8

ph/seg (deg) 36.3 30.0 Search (1024X32) 0.239 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.1 52.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.2 18.1 Inc. seg. avg. 0.259 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.2 31.5 Inc. frq. avg. 0.289 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 253.5 el 34.4 pa 39.5 k: az 89.2 el 31.5 pa -62.3 u,v (fr/asec) 11623.562 2190.694 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bk..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bk.W.3.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

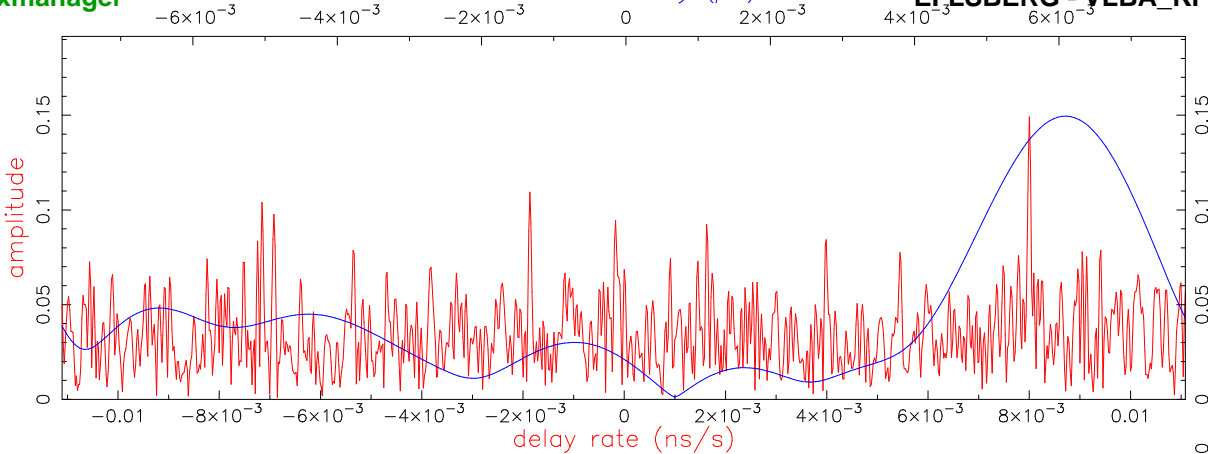
fxmanager

0235+164.1JFKZ, No0038, Bk

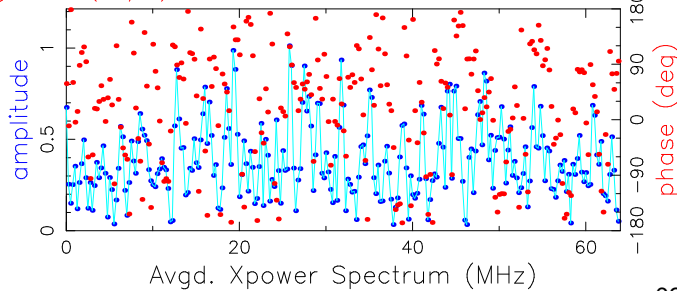
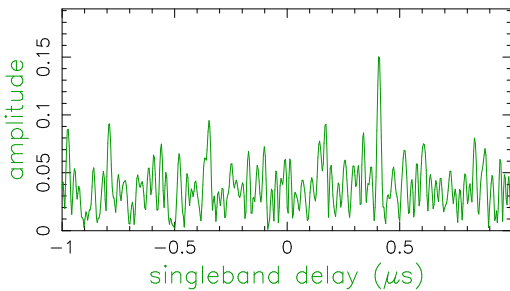
EFLSBERG - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

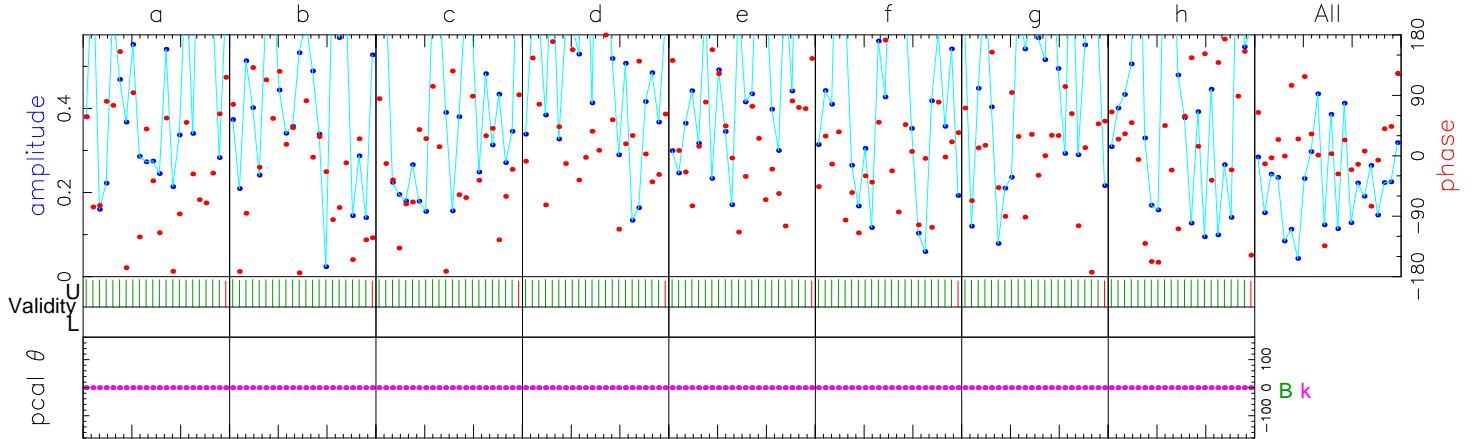


SNR 5.6
 Int time 177.914
 Amp 0.192
 Phase 19.2
 PFD 9.4e-01
 Delays (us)
 SBD 0.408067
 MBD 0.006007
 Fringe rate (Hz) 0.705692
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060627
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-5.9	29.2	19.3	22.8	40.4	-8.5	29.5	30.1	Phase	19.2
	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	322.1	442.4	106.6	276.0	359.1	363.3	363.0	383.1	Sbd box	361.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.4575928580E+02		Apriori delay (usec)		7.45347029060E+02		Resid mbdelay (usec)		6.00679E-03	+/- 1.9E-04
Sband delay (usec)	7.45755095810E+02		Apriori clock (usec)		9.7298737E+00		Resid sbdelay (usec)		4.08067E-01	+/- 1.5E-03
Phase delay (usec)	7.45347029665E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		6.05336E-07	+/- 6.5E-07
Delay rate (us/s)	-1.90439556588E+00		Apriori rate (us/s)		-1.90440359058E+00		Resid rate (us/s)		8.02470E-06	+/- 6.2E-09
Total phase (deg)	284.0		Apriori accel (us/s/s)		3.95598657850E-06		Resid phase (deg)		19.2	+/- 20.5

ph/seg (deg) 56.9 48.1 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.0 84.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.1 29.0 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.3 50.7 Inc. frq. avg. 0.173 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 253.5 el 34.4 pa 39.5 k: az 89.2 el 31.5 pa -62.3 u,v (fr/asec) 11623.562 2190.694 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bk..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bk.W.46.1JFKZ

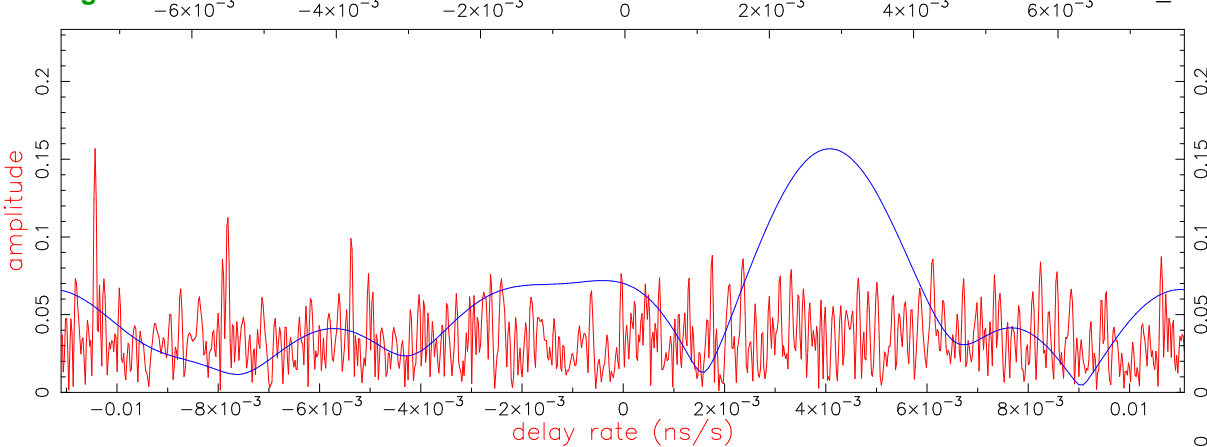
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bk

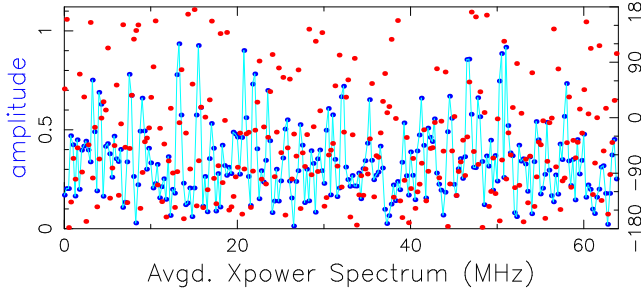
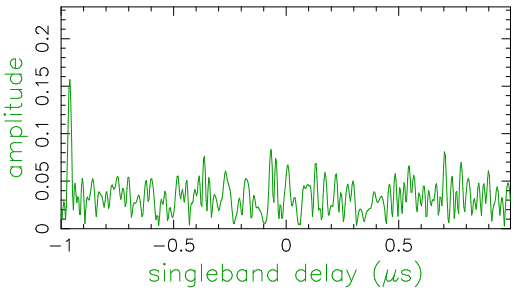
EFLSBERG - VLBA_KP, fgroup W, pol RL

multiband delay (μs)



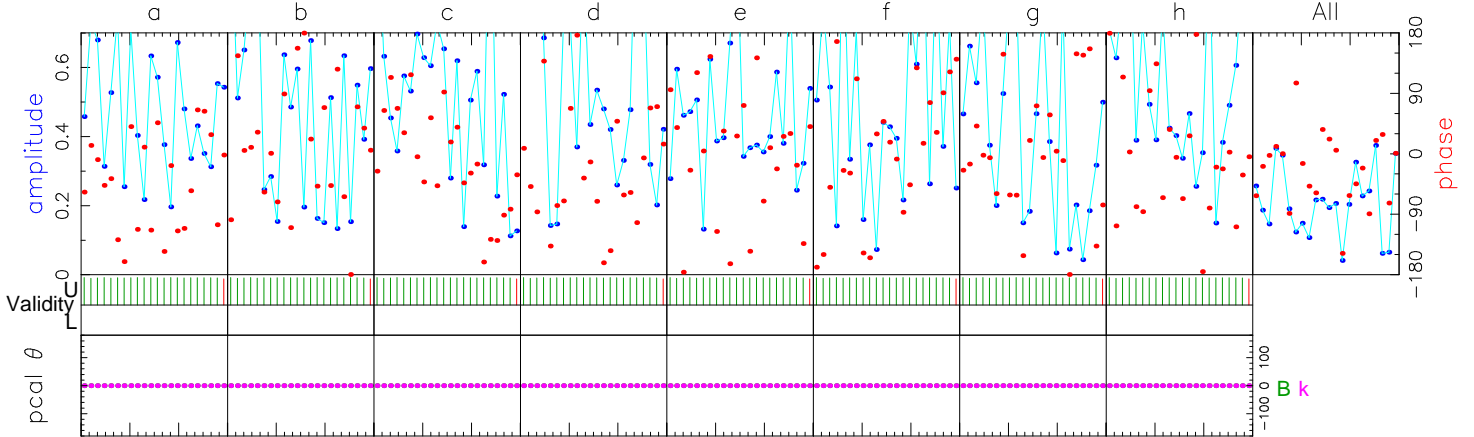
Fringe quality 0

SNR 5.7
 Int time 177.914
 Amp 0.234
 Phase -17.5
 PFD 7.0e-01
 Delays (us)
 SBD -0.961650
 MBD 0.002823
 Fringe rate (Hz)
 -0.919423
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060629
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-45.0	4.0	-3.5	-51.0	38.8	30.2	-16.9	-43.4	Phase	-17.5
	0.3	0.2	0.3	0.4	0.2	0.2	0.3	0.3	Ampl.	0.2
	67.7	152.9	262.0	12.2	419.3	71.9	243.5	17.7	Sbd box	10.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.44381101702E+02		Apriori delay (usec)		7.45347029060E+02		Resid mbdelay (usec)		2.82264E-03	+/- 1.9E-04
Sband delay (usec)	7.44385379060E+02		Apriori clock (usec)		9.7298737E+00		Resid sbdelay (usec)		-9.61650E-01	+/- 1.5E-03
Phase delay (usec)	7.45347028506E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-5.53562E-07	+/- 6.3E-07
Delay rate (us/s)	-1.90441404570E+00		Apriori rate (us/s)		-1.90440359058E+00		Resid rate (us/s)		-1.04551E-05	+/- 6.1E-09
Total phase (deg)	247.3		Apriori accel (us/s/s)		3.95598657850E-06		Resid phase (deg)		-17.5	+/- 20.0

RMS Theor. Amplitude 0.234 +/- 0.041
 ph/seg (deg) 53.6 46.9 Search (1024X32) 0.154
 amp/seg (%) 69.6 81.8 Interp. 0.000
 ph/frq (deg) 38.0 28.3 Inc. seg. avg. 0.233
 amp/frq (%) 29.2 49.3 Inc. frq. avg. 0.240

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 253.5 el 34.4 pa 39.5 k: az 89.2 el 31.5 pa -62.3 u,v (fr/asec) 11623.562 2190.694 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bk..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bk.W.60.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

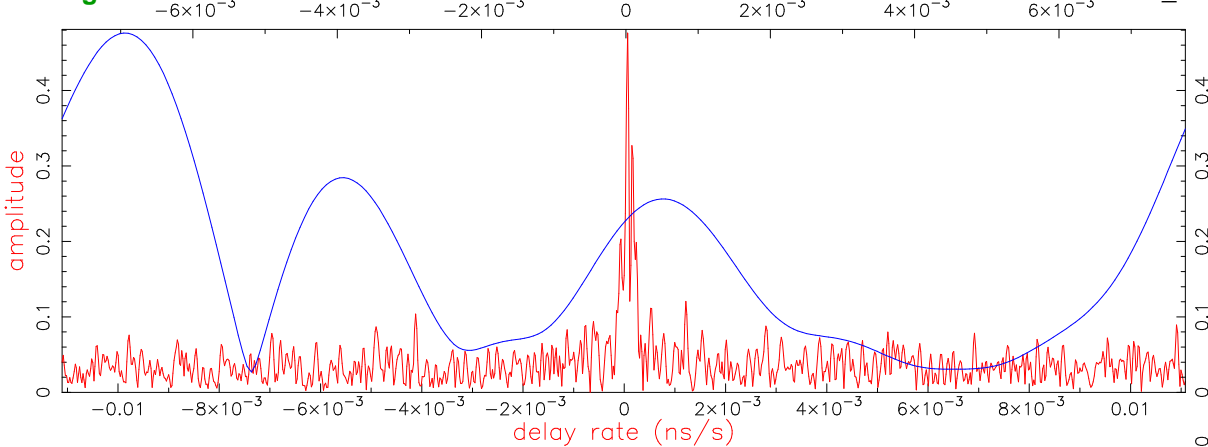
fxmanager

0235+164.1JFKZ, No0038, BI

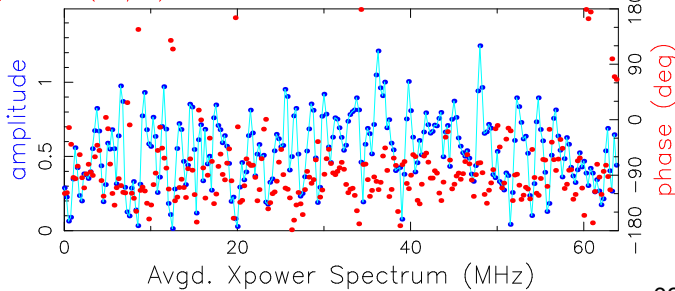
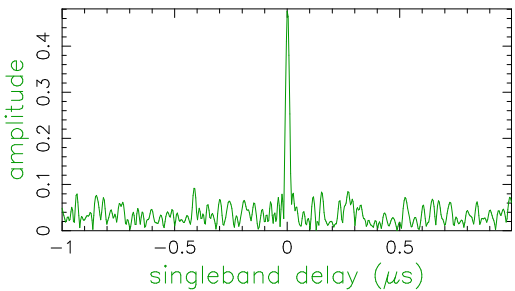
EFLSBERG - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 8

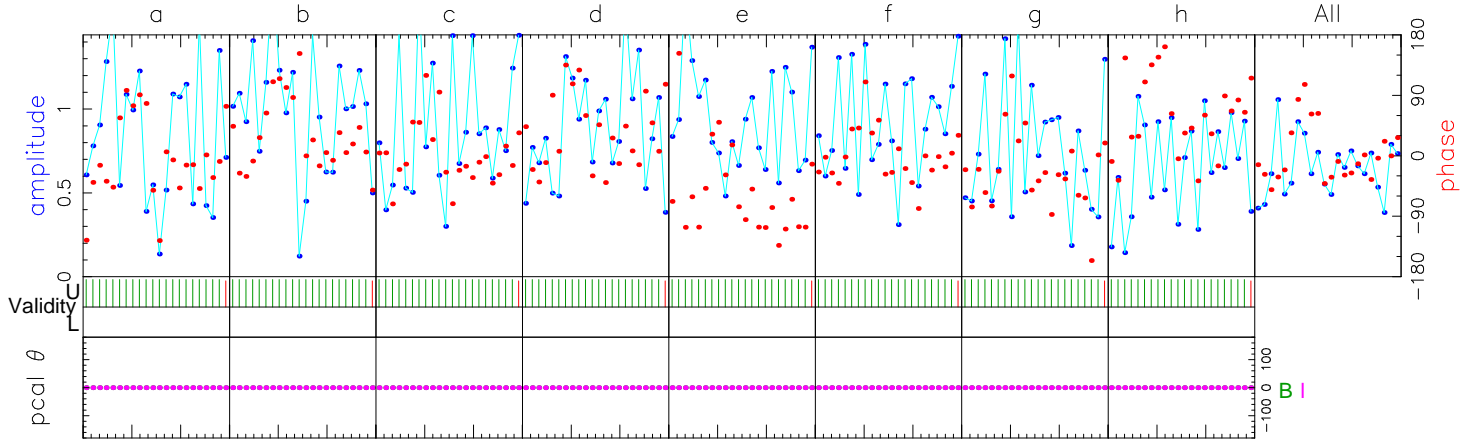


SNR 17.6
 Int time 179.778
 Amp 0.481
 Phase 1.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001371
 MBD -0.006911
 Fringe rate (Hz)
 0.005816
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060625
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		257.4
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:I	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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.82491045417E+02	Apriori delay (usec)	-5.82499759382E+02	Resid mbdelay (usec)	-6.91104E-03	+/-	6.2E-05
Sband delay (usec)	-5.82498388382E+02	Apriori clock (usec)	1.0493291E+01	Resid sbdelay (usec)	1.37100E-03	+/-	4.9E-04
Phase delay (usec)	-5.82499759335E+02	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	4.64180E-08	+/-	2.1E-07
Delay rate (us/s)	-1.79876370684E+00	Apriori rate (us/s)	-1.79876377298E+00	Resid rate (us/s)	6.61337E-08	+/-	2.0E-09
Total phase (deg)	-300.9	Apriori accel (us/s/s)	9.22705781800E-06	Resid phase (deg)	1.5	+/-	6.5

ph/seg (deg)	42.1	Theor.	15.2	Amplitude	0.481 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	49.4		26.6	Search (1024X32)	0.473	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	44.4		9.2	Inc. seg. avg.	0.629	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	30.1		16.0	Inc. frq. avg.	0.582	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 I: az 94.8 el 35.9 pa -57.5 u,v (fr/asec) 10982.092 1838.741 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BI.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BI.W.18.1JFKZ

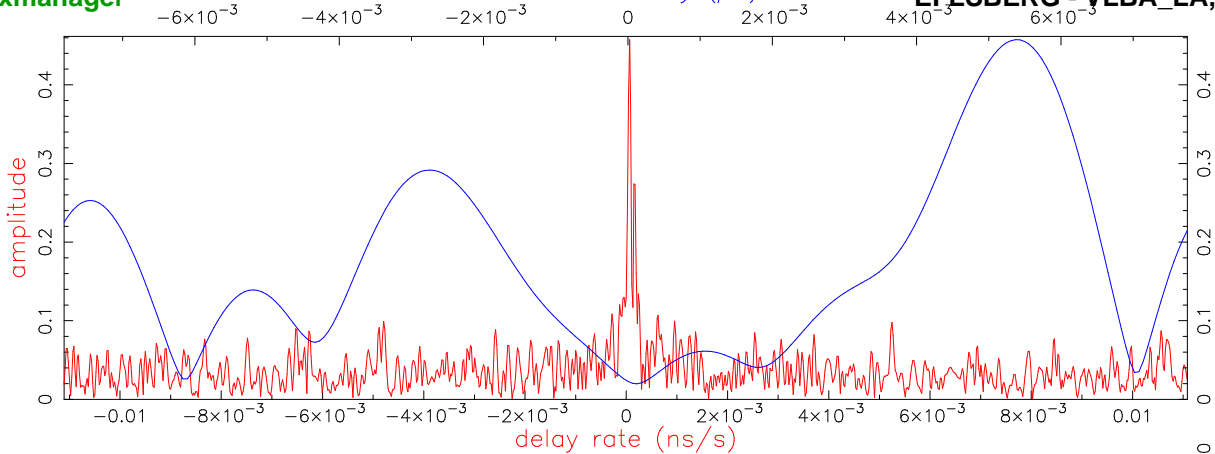
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BI

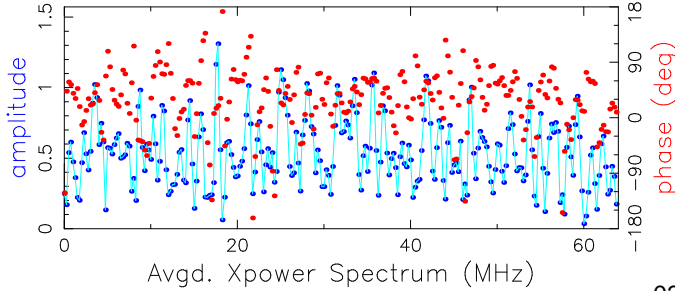
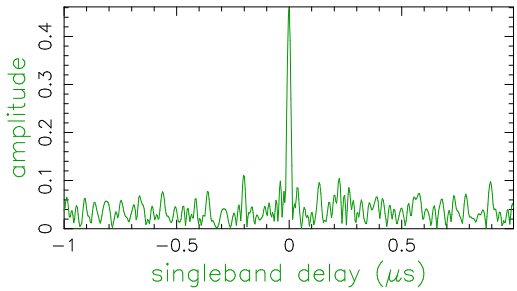
EFLSBERG - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)



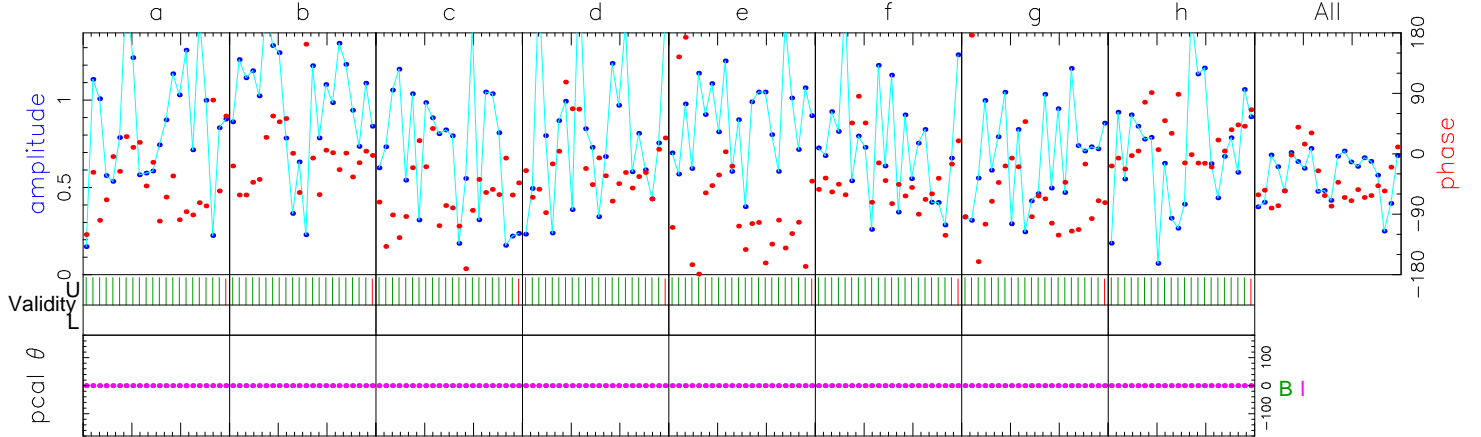
Fringe quality 8

SNR 16.9
 Int time 179.778
 Amp 0.462
 Phase -40.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001235
 MBD 0.005358
 Fringe rate (Hz)
 0.005487
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060627
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-45.5	-9.3	-70.8	-21.1	-113.6	-39.5	-76.5	16.9	Phase	-40.5
	0.6	0.8	0.5	0.6	0.5	0.6	0.5	0.6	Ampl.	0.6
	257.2	256.6	257.0	256.5	257.3	257.5	257.5	257.4	Sbd box	256.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.82494401698E+02		Apriori delay (usec)		-5.82499759382E+02		Resid mbdelay (usec)		5.35768E-03	+/- 6.4E-05
Sband delay (usec)	-5.82500994632E+02		Apriori clock (usec)		1.0493291E+01		Resid sbdelay (usec)		-1.23525E-03	+/- 5.1E-04
Phase delay (usec)	-5.82499760659E+02		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-1.27780E-06	+/- 2.1E-07
Delay rate (us/s)	-1.79876371058E+00		Apriori rate (us/s)		-1.79876377298E+00		Resid rate (us/s)		6.23983E-08	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		9.22705781800E-06		Resid phase (deg)		-40.5	+/- 6.8

ph/seg (deg) 35.6 15.9 Search (1024X32) 0.456 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.3 27.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.1 9.6 Inc. seg. avg. 0.548 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.1 16.7 Inc. frq. avg. 0.568 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 253.5 el 34.4 pa 39.5 I: az 94.8 el 35.9 pa -57.5 u,v (fr/asec) 10982.092 1838.741 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BI.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BI.W.37.1JFKZ

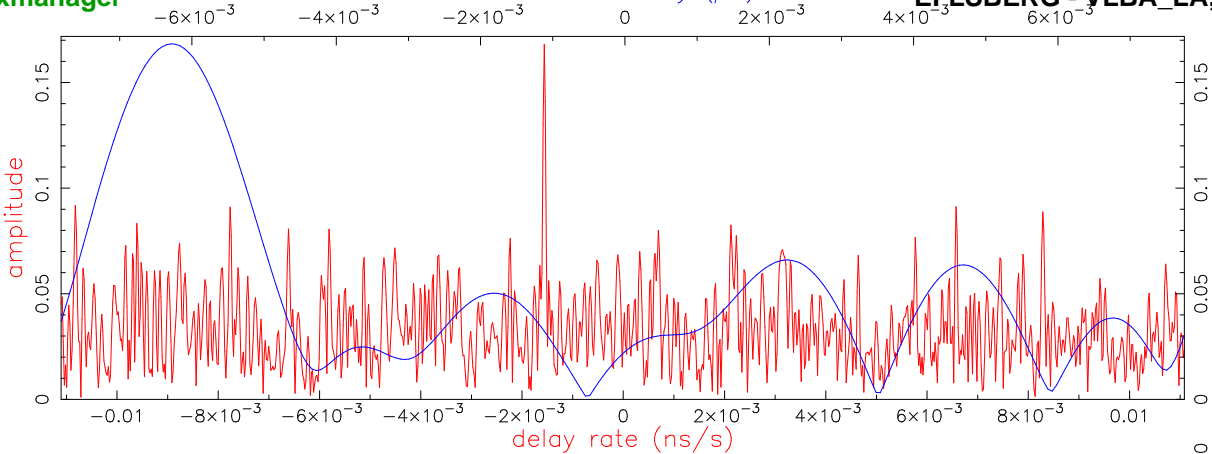
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BI

EFLSBERG - VLBA_LA, fgroup W, pol LR

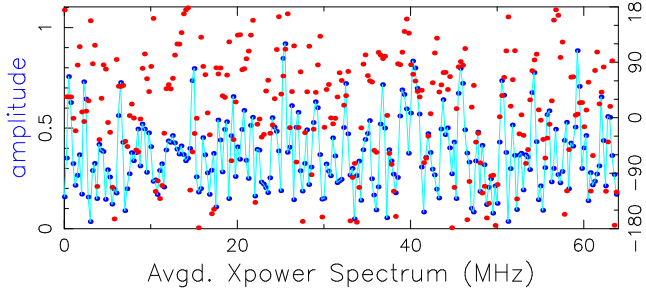
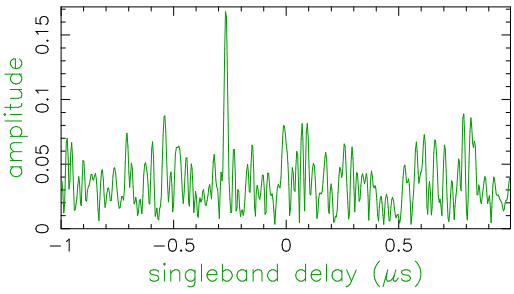
multiband delay (μs)



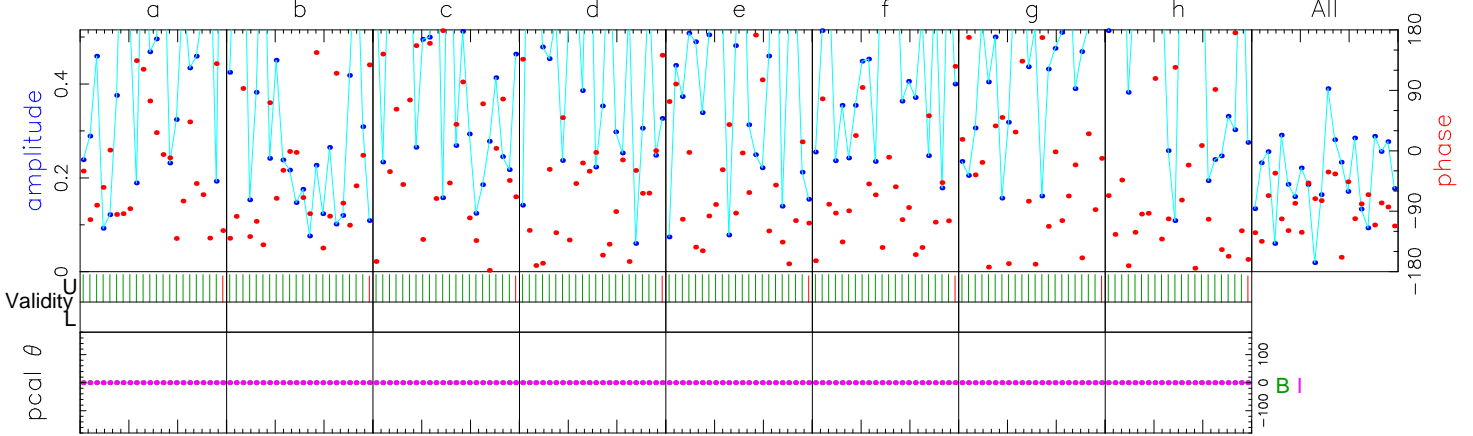
Fringe quality 0

SNR 6.2
Int time 179.778
Amp 0.172
Phase -85.9
PFD 5.4e-02
Delays (us)
SBD -0.268068
MBD -0.006212
Fringe rate (Hz) -0.138261
Ion TEC 0.000
Ref freq (MHz) 87940.0000
AP (sec) 0.512

Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 043000.00
Stop 043300.22
FRT 043130.00
Corr/FF/build
2021:039:055416
2021:039:060628
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:I	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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-5.82771596747E+02	Apriori delay (usec)	-5.82499759382E+02	Resid mbdelay (usec)	-6.21236E-03	+/-	1.7E-04
Sband delay (usec)	-5.82767826882E+02	Apriori clock (usec)	1.0493291E+01	Resid sbdelay (usec)	-2.68068E-01	+/-	1.4E-03
Phase delay (usec)	-5.82499762095E+02	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	-2.71388E-06	+/-	5.8E-07
Delay rate (us/s)	-1.79876534520E+00	Apriori rate (us/s)	-1.79876377298E+00	Resid rate (us/s)	-1.57222E-06	+/-	5.6E-09
Total phase (deg)		Apriori accel (us/s/s)	9.22705781800E-06	Resid phase (deg)	-85.9	+/-	18.3

ph/seg (deg)	RMS 34.2	Theor. 43.0	Amplitude	0.172 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	53.6	75.1	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	23.6	25.9	Inc. seg. avg.	0.161	Sample rate(MISamp/s): 128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.6	45.3	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00		

B: az 253.5 el 34.4 pa 39.5 I: az 94.8 el 35.9 pa -57.5 u,v (fr/asec) 10982.092 1838.741 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BI.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BI.W.53.1JFKZ

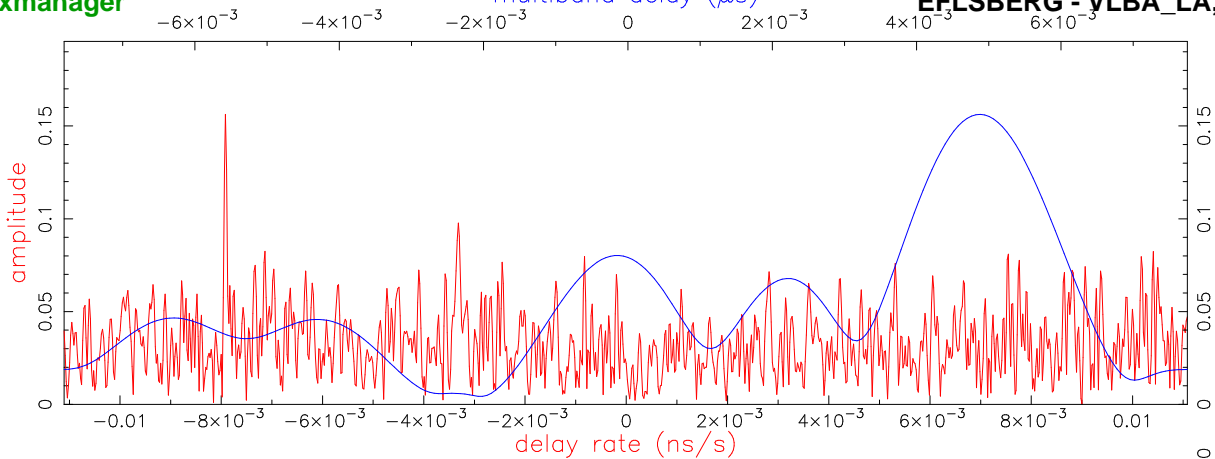
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BI

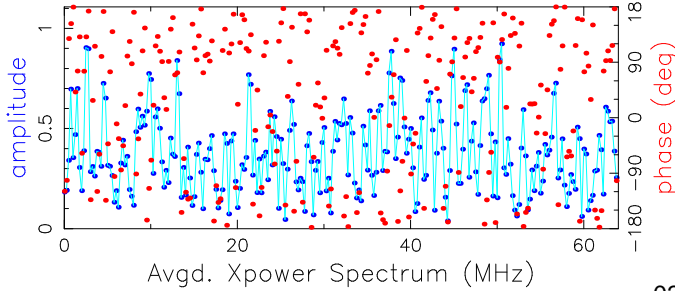
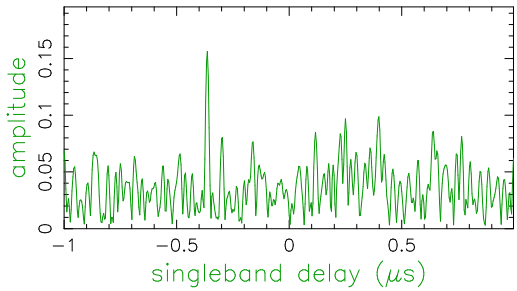
EFLSBERG - VLBA_LA, fgroup W, pol RL

multiband delay (μs)



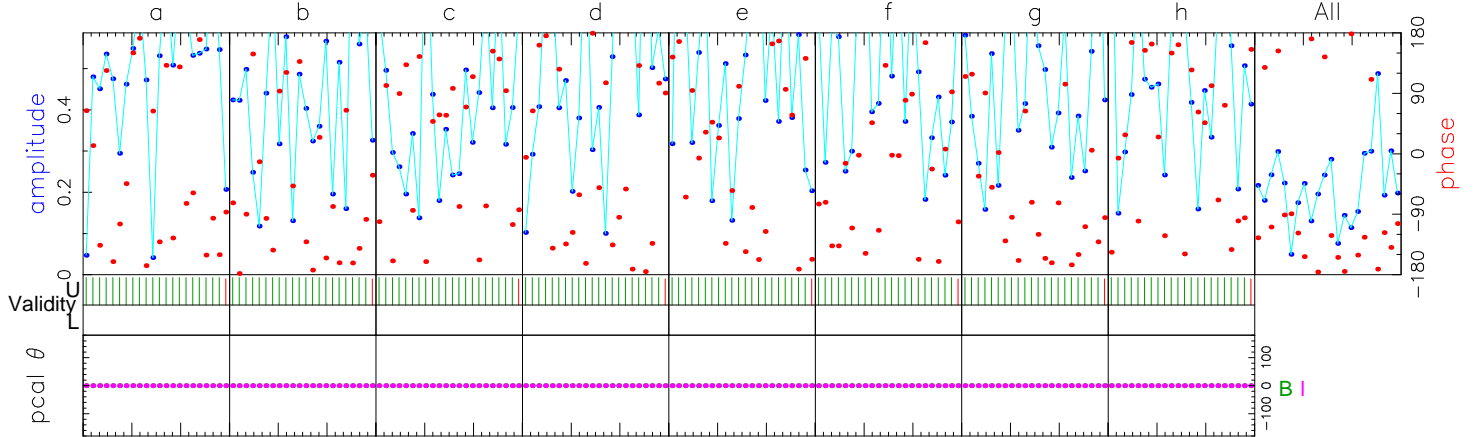
Fringe quality 0

SNR 5.8
 Int time 179.778
 Amp 0.196
 Phase -155.0
 PFD 6.4e-01
 Delays (us)
 SBD -0.364210
 MBD 0.004863
 Fringe rate (Hz)
 -0.696704
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060630
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-152.8	-145.2	173.5	-159.3	175.5	-100.1	-118.1	177.0	Phase	-155.0
	0.3	0.3	0.1	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	267.1	231.4	205.9	428.3	421.4	481.1	446.8	374.6	Sbd box	163.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.82869895908E+02		Apriori delay (usec)		-5.82499759382E+02		Resid mbdelay (usec)		4.86347E-03	+/- 1.9E-04
Sband delay (usec)	-5.82863968882E+02		Apriori clock (usec)		1.0493291E+01		Resid sbdelay (usec)		-3.64210E-01	+/- 1.5E-03
Phase delay (usec)	-5.82499764276E+02		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-4.89480E-06	+/- 6.3E-07
Delay rate (us/s)	-1.79877169547E+00		Apriori rate (us/s)		-1.79876377298E+00		Resid rate (us/s)		-7.92249E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		9.22705781800E-06		Resid phase (deg)		-155.0	+/- 19.9

	RMS	Theor.	Amplitude	0.196 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	44.4	46.6	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	68.9	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	34.5	28.1	Inc. seg. avg.	0.201	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.7	49.1	Inc. frq. avg.	0.190	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 253.5 el 34.4 pa 39.5 I: az 94.8 el 35.9 pa -57.5 u,v (fr/asec) 10982.092 1838.741 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BI.1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BI.W.68.1JFKZ

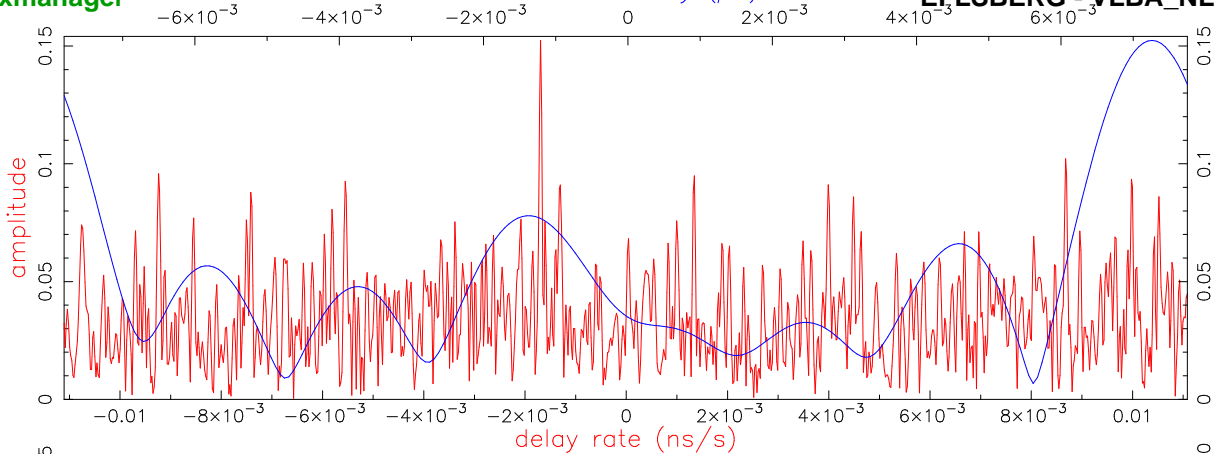
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bn

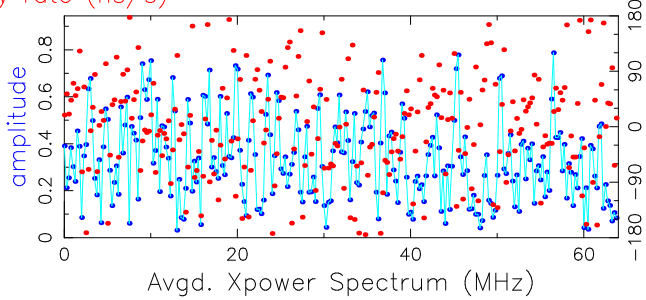
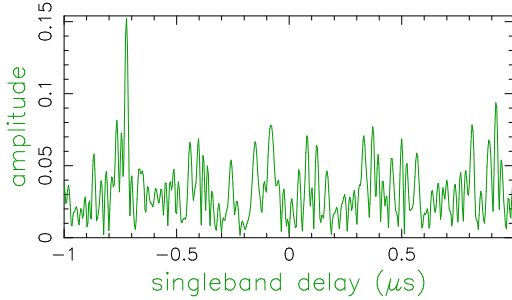
EFLSBERG - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)



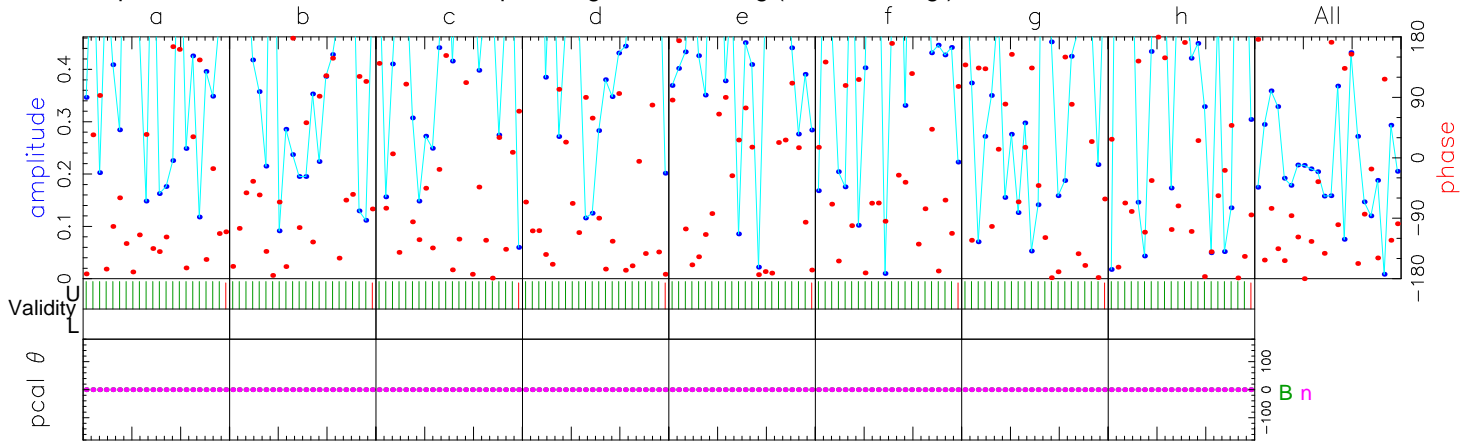
Fringe quality 0

SNR 5.6
 Int time 179.778
 Amp 0.154
 Phase -132.5
 PFD 9.3e-01
 Delays (us)
 SBD -0.723181
 MBD 0.007238
 Fringe rate (Hz)
 -0.148485
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060625
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-143.0	-119.9	-155.5	-123.0	124.7	-102.9	-151.3	-136.0	Phase	-132.5
	0.2	0.2	0.1	0.2	0.0	0.2	0.1	0.2	Ampl.	0.1
	457.8	371.2	282.4	11.8	404.3	205.5	194.0	210.2	Sbd box	71.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.32253117805E+03		Apriori delay (usec)		-3.32180404060E+03		Resid mbdelay (usec)		7.23755E-03	+/- 1.9E-04
Sband delay (usec)	-3.32252722135E+03		Apriori clock (usec)		9.8440371E+00		Resid sbdelay (usec)		-7.23181E-01	+/- 1.5E-03
Phase delay (usec)	-3.32180404479E+03		Apriori clockrate (us/s)		-7.0000001E-07		Resid phdelay (usec)		-4.18650E-06	+/- 6.5E-07
Delay rate (us/s)	-1.53393024862E+00		Apriori rate (us/s)		-1.53392856013E+00		Resid rate (us/s)		-1.68849E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		2.11500365739E-05		Resid phase (deg)		-132.5	+/- 20.5

	RMS	Theor.	Amplitude	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.3	48.0	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	76.7	83.8	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	46.0	29.0	Inc. seg. avg.	0.163	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	44.8	50.5	Inc. frq. avg.	0.144					

B: az 253.5 el 34.4 pa 39.5 n: az 111.3 el 45.7 pa -46.4 u,v (fr/asec) 9372.611 1421.396 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bn..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bn.W.20.1JFKZ

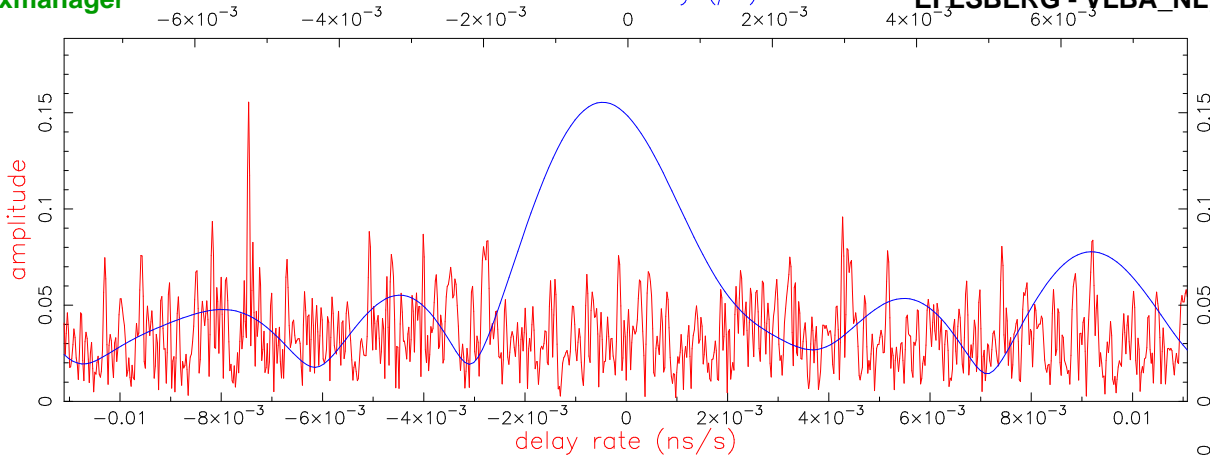
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bn

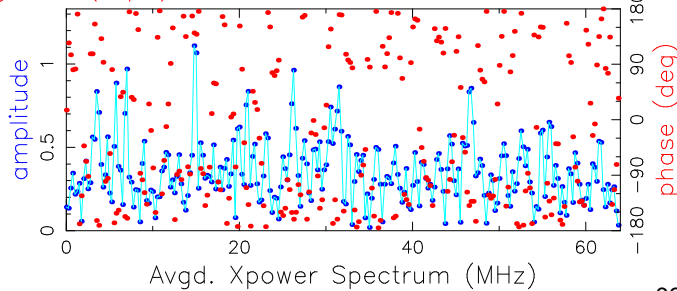
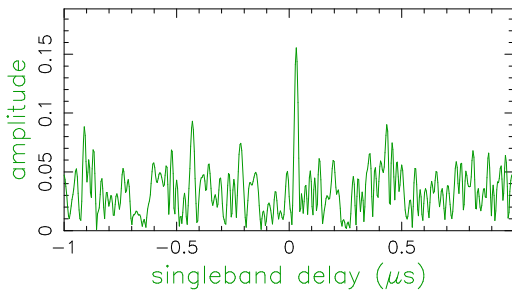
EFLSBERG - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)



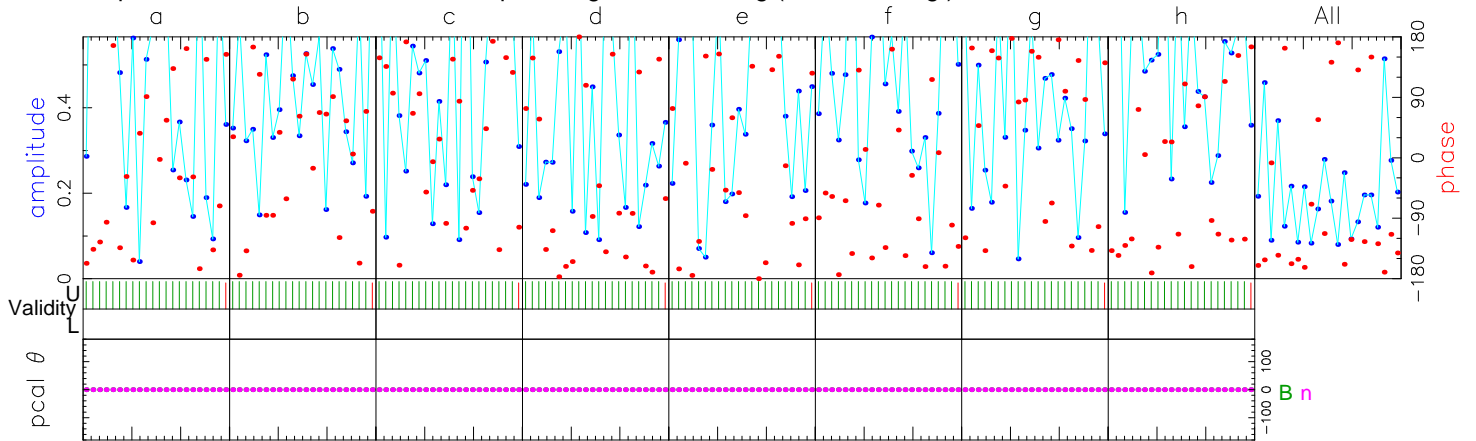
Fringe quality 0

SNR 5.7
 Int time 179.778
 Amp 0.189
 Phase -155.4
 PFD 7.7e-01
 Delays (us)
 SBD 0.031448
 MBD -0.000340
 Fringe rate (Hz)
 -0.656539
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060627
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-134.4	-156.6	159.9	-154.4	-179.7	-116.1	-170.9	-160.6	Phase	-155.4
	0.2	0.0	0.2	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	51.3	123.9	291.3	239.3	446.8	367.9	366.2	485.6	Sbd box	265.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.32177313025E+03		Apriori delay (usec)		-3.32180404060E+03		Resid mbdelay (usec)		-3.39650E-04	+/- 1.9E-04
Sband delay (usec)	-3.32177259260E+03		Apriori clock (usec)		9.8440371E+00		Resid sbdelay (usec)		3.14480E-02	+/- 1.5E-03
Phase delay (usec)	-3.32180404551E+03		Apriori clockrate (us/s)		-7.0000001E-07		Resid phdelay (usec)		-4.90930E-06	+/- 6.3E-07
Delay rate (us/s)	-1.53393602589E+00		Apriori rate (us/s)		-1.53392856013E+00		Resid rate (us/s)		-7.46576E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.11500365739E-05		Resid phase (deg)		-155.4	+/- 20.1

	RMS	Theor.	Amplitude	0.189 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.8	47.1	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	80.9	82.3	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.4	28.4	Inc. seg. avg.	0.186	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	46.8	49.6	Inc. frq. avg.	0.187					

B: az 253.5 el 34.4 pa 39.5 n: az 111.3 el 45.7 pa -46.4 u,v (fr/asec) 9372.611 1421.396 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bn..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bn.W.40.1JFKZ

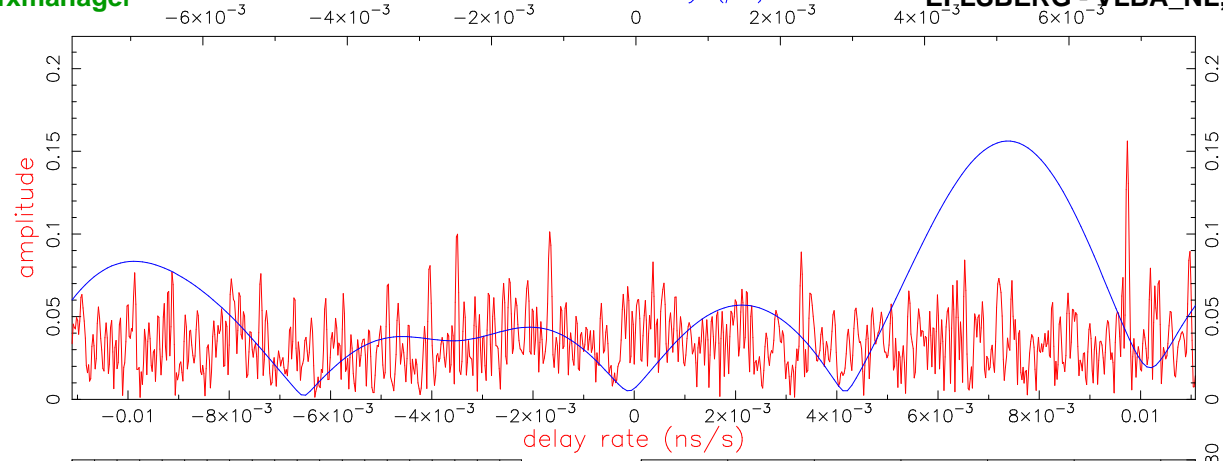
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bn

EFLSBERG - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0

SNR 5.7

Int time 179.778

Amp 0.219

Phase 35.4

PFD 7.1e-01

Delays (us)

SBD 0.933454

MBD 0.005149

Fringe rate (Hz)

0.857444

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 043000.00

Stop 043300.22

FRT 043130.00

Corr/FF/build

2021:039:055416

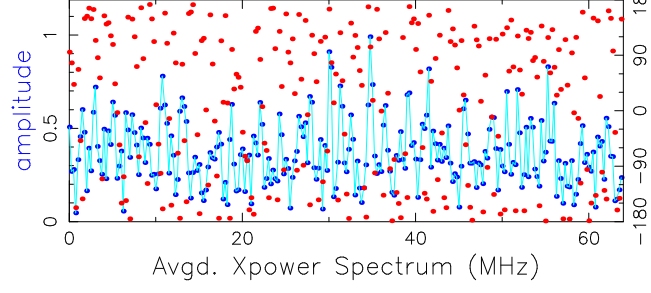
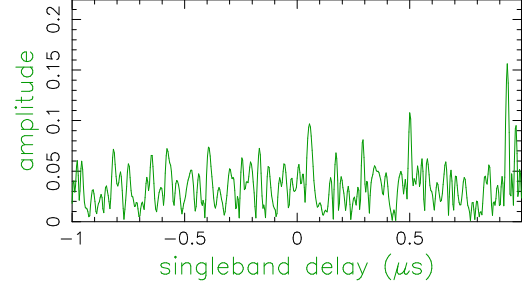
2021:039:060629

2020:247:085004

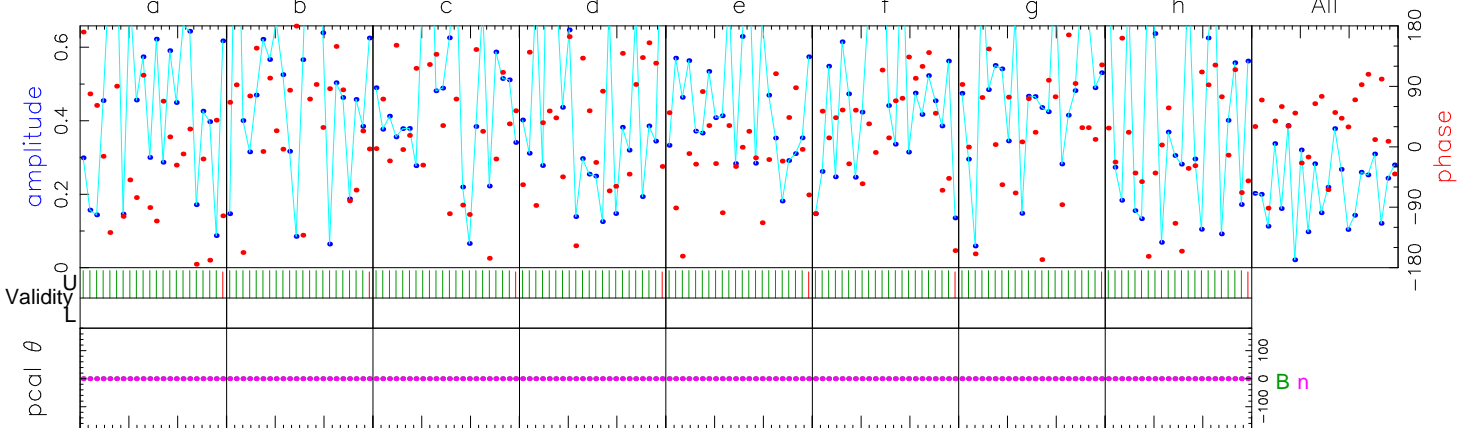
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-34.4	67.0	49.0	32.9	-7.9	48.8	55.6	11.0	Phase	35.4
	0.2	0.4	0.3	0.1	0.3	0.3	0.3	0.2	Ampl.	0.2
	32.6	272.1	12.5	107.1	256.3	374.8	288.4	236.4	Sbd box	496.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.32087701616E+03		Apriori delay (usec)		-3.32180404060E+03		Resid mbdelay (usec)		5.14945E-03	+/- 1.9E-04
Sband delay (usec)	-3.32087058710E+03		Apriori clock (usec)		9.8440371E+00		Resid sbdelay (usec)		9.33454E-01	+/- 1.5E-03
Phase delay (usec)	-3.32180403949E+03		Apriori clockrate (us/s)		-7.0000001E-07		Resid phdelay (usec)		1.11711E-06	+/- 6.3E-07
Delay rate (us/s)	-1.53391880980E+00		Apriori rate (us/s)		-1.53392856013E+00		Resid rate (us/s)		9.75033E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.11500365739E-05		Resid phase (deg)		35.4	+/- 20.0

ph/seg (deg) 51.2 46.9 Amplitude 0.219 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 73.9 81.9 Search (1024X32) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 39.0 28.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 42.8 49.4 Inc. seg. avg. 0.232 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 253.5 el 34.4 pa 39.5 n: az 111.3 el 45.7 pa -46.4 u,v (fr/asec) 9372.611 1421.396 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bn..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bn.W.58.1JFKZ

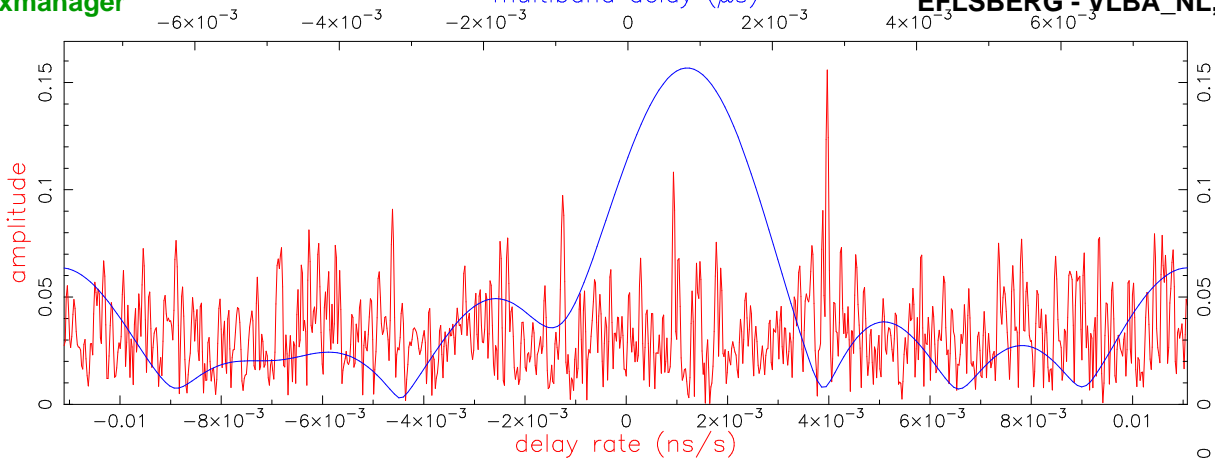
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bn

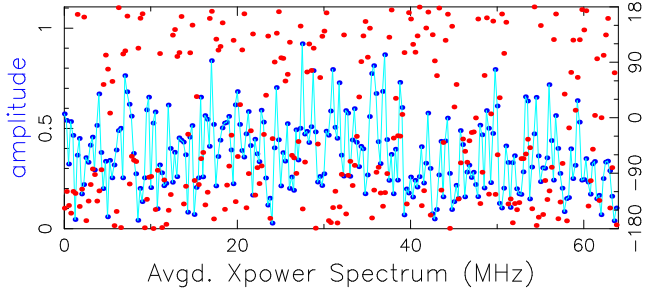
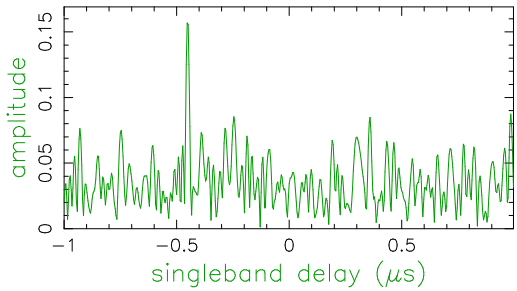
EFLSBERG - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)



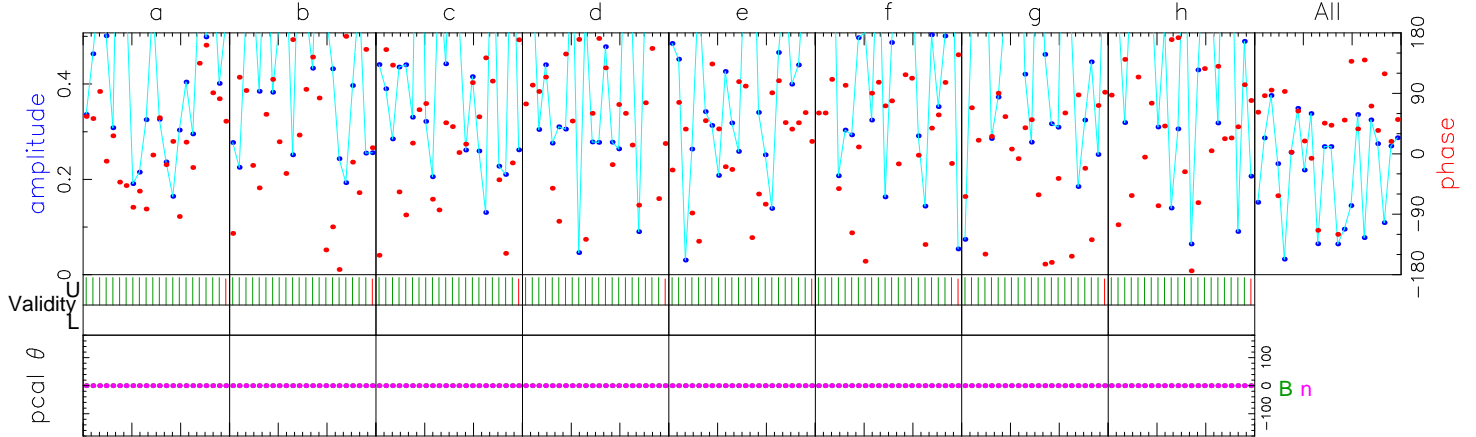
Fringe quality 0

SNR 5.9
 Int time 179.778
 Amp 0.169
 Phase 47.3
 PFD 4.1e-01
 Delays (us)
 SBD -0.451302
 MBD 0.000701
 Fringe rate (Hz)
 0.349409
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060630
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	20.6	44.6	40.7	72.7	39.2	72.9	28.3	48.7	Phase	47.3
	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	227.5	491.4	216.0	439.4	81.3	183.9	429.9	501.7	Sbd box	141.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.3222564452E+03		Apriori delay (usec)		-3.32180404060E+03		Resid mbdelay (usec)		7.01080E-04	+/- 1.8E-04
Sband delay (usec)	-3.32225534235E+03		Apriori clock (usec)		9.8440371E+00		Resid sbdelay (usec)		-4.51302E-01	+/- 1.5E-03
Phase delay (usec)	-3.32180403911E+03		Apriori clockrate (us/s)		-7.0000001E-07		Resid phdelay (usec)		1.49528E-06	+/- 6.2E-07
Delay rate (us/s)	-1.53392458686E+00		Apriori rate (us/s)		-1.53392856013E+00		Resid rate (us/s)		3.97327E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.11500365739E-05		Resid phase (deg)		47.3	+/- 19.5

ph/seg (deg) 68.0 45.7 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.0 79.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 27.6 Inc. seg. avg. 0.176 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 23.9 48.1 Inc. frq. avg. 0.156 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 253.5 el 34.4 pa 39.5 n: az 111.3 el 45.7 pa -46.4 u,v (fr/asec) 9372.611 1421.396 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bn..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bn.W.72.1JFKZ

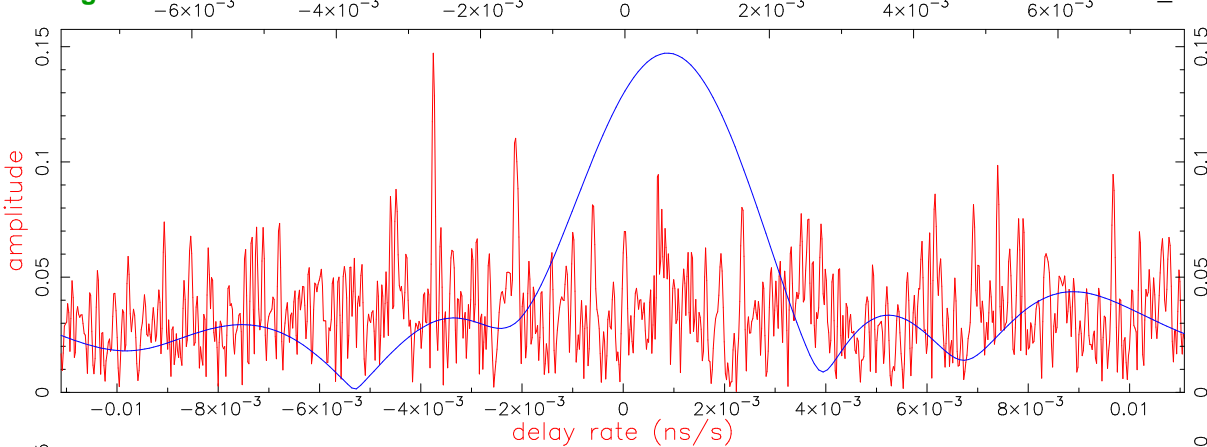
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bo

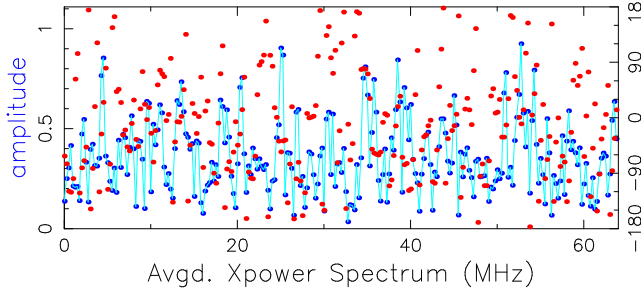
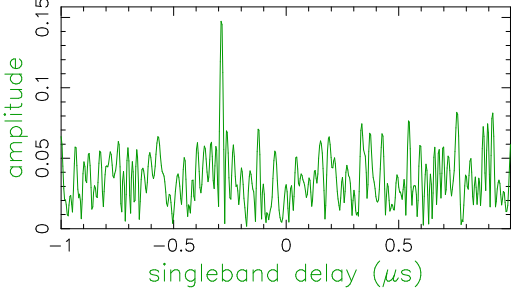
EFLSBERG - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



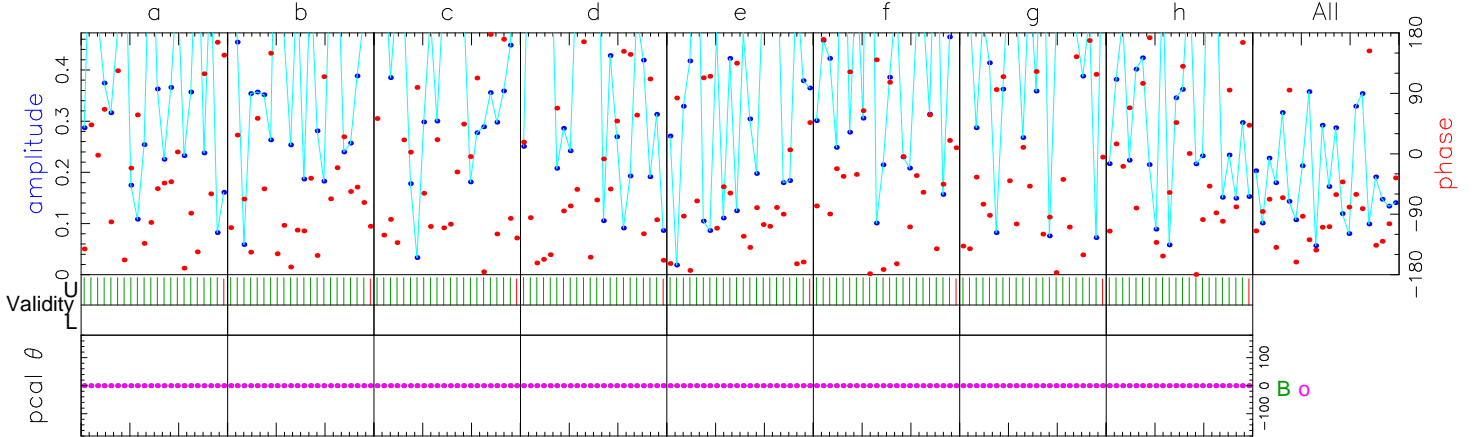
Fringe quality 0

SNR 5.5
 Int time 179.778
 Amp 0.158
 Phase -95.8
 PFD 9.9e-01
 Delays (us)
 SBD -0.287395
 MBD 0.000609
 Fringe rate (Hz)
 -0.330110
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060625
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-83.8	-89.0	-88.8	-115.9	-108.8	-76.7	-101.4	-58.9	Phase	-95.8
	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	324.0	285.7	99.0	140.3	182.8	216.9	171.3	459.9	Sbd box	183.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.47683475413E+03	Apriori delay (usec)	2.47711539494E+03	Resid mbdelay (usec)	6.09197E-04	+/-	2.0E-04
Sband delay (usec)	2.47682799994E+03	Apriori clock (usec)	-1.1312709E+01	Resid sbdelay (usec)	-2.87395E-01	+/-	1.6E-03
Phase delay (usec)	2.47711539191E+03	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	-3.02458E-06	+/-	6.6E-07
Delay rate (us/s)	-1.89208969987E+00	Apriori rate (us/s)	-1.89208594606E+00	Resid rate (us/s)	-3.75381E-06	+/-	6.3E-09
Total phase (deg)	203.3	Apriori accel (us/s/s)	-7.81826411157E-06	Resid phase (deg)	-95.8	+/-	20.8

ph/seg (deg)	54.5	Theor.	48.8	Amplitude	0.158 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.8	Search (1024X32)	0.147	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	20.7	Inc. seg. avg.	0.149	Inc. frq. avg.	0.141	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	40.2	Inc. frq. avg.	0.141			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 o: az 88.3 el 26.2 pa -56.2 u,v (fr/asec) 11543.220 1251.833 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bo..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bo.W.23.1JFKZ

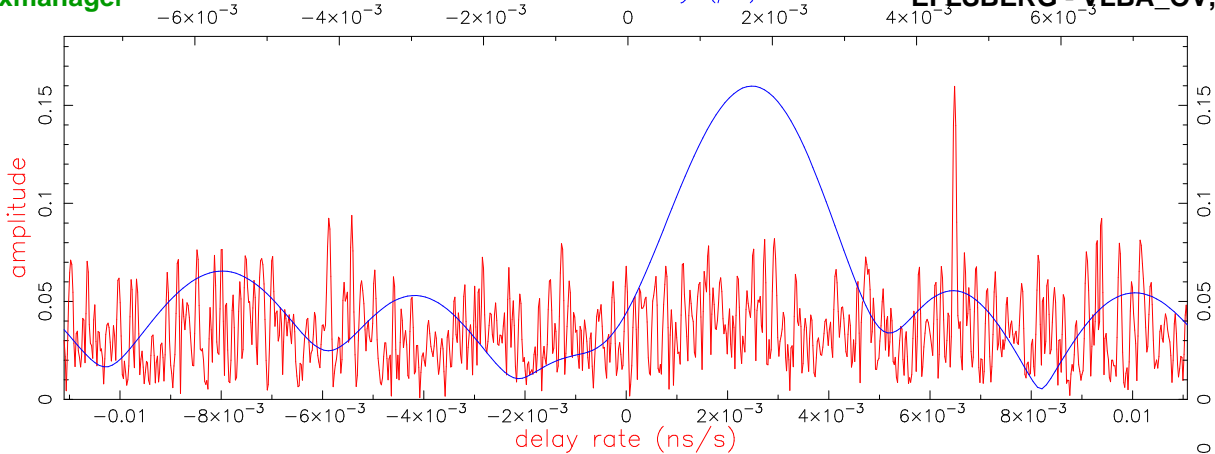
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bo

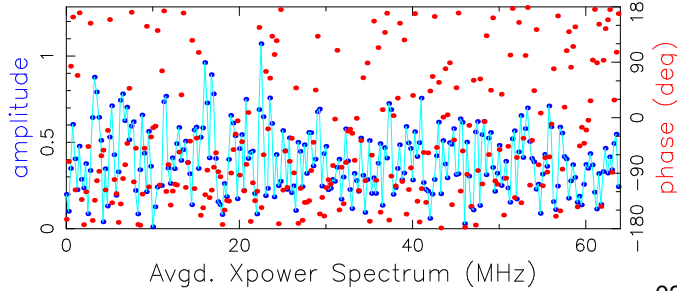
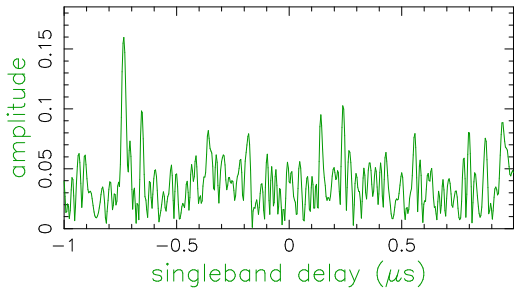
EFLSBERG - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)



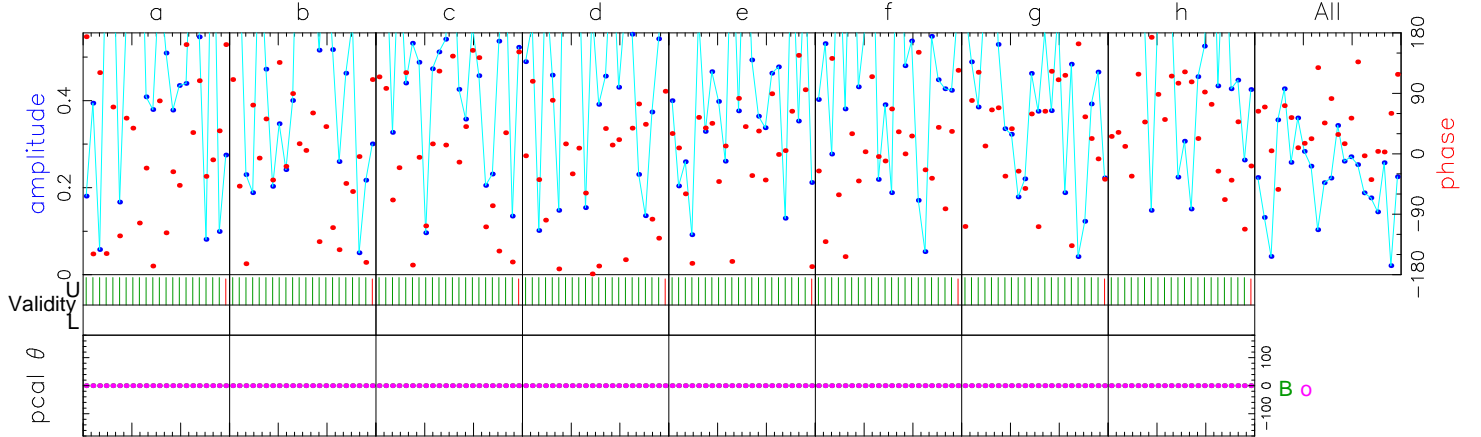
Fringe quality 0

SNR 5.9
 Int time 179.778
 Amp 0.185
 Phase 36.1
 PFD 4.1e-01
 Delays (us)
 SBD -0.735305
 MBD 0.001670
 Fringe rate (Hz)
 0.571226
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060627
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	2.47638269025E+03		Apriori delay (usec)		2.47711539494E+03		Resid mbdelay (usec)		1.67031E-03	+/- 1.8E-04
Sband delay (usec)	2.47638008944E+03		Apriori clock (usec)		-1.1312709E+01		Resid sbdelay (usec)		-7.35305E-01	+/- 1.5E-03
Phase delay (usec)	2.47711539608E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		1.14041E-06	+/- 6.2E-07
Delay rate (us/s)	-1.89207945043E+00		Apriori rate (us/s)		-1.89208594606E+00		Resid rate (us/s)		6.49563E-06	+/- 5.9E-09
Total phase (deg)	335.2		Apriori accel (us/s/s)		-7.81826411157E-06		Resid phase (deg)		36.1	+/- 19.5

ph/seg (deg) 48.5 45.7 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.0 79.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.8 27.6 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.2 48.1 Inc. frq. avg. 0.182 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 253.5 el 34.4 pa 39.5 o: az 88.3 el 26.2 pa -56.2 u,v (fr/asec) 11543.220 1251.833 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bo..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bo.W.41.1JFKZ

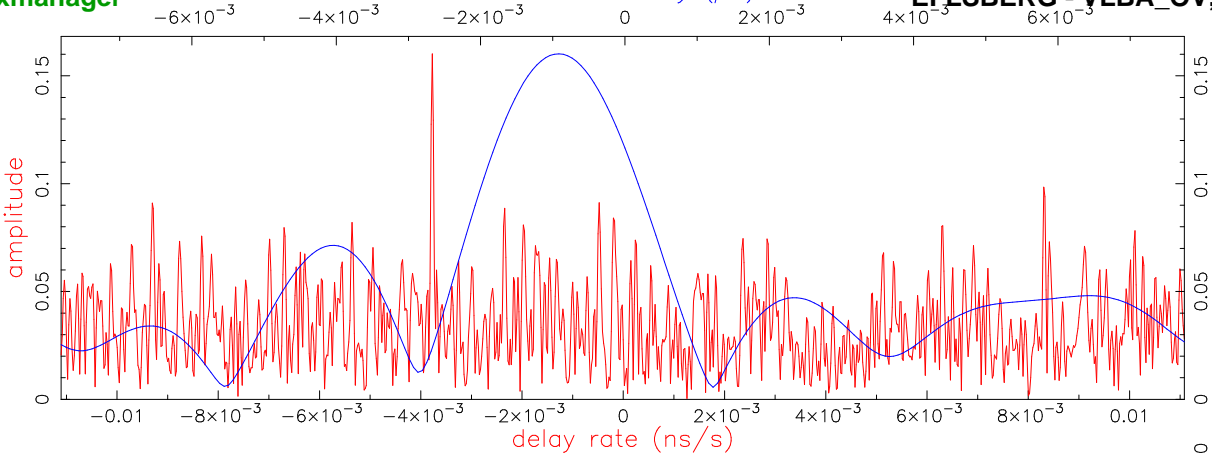
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bo

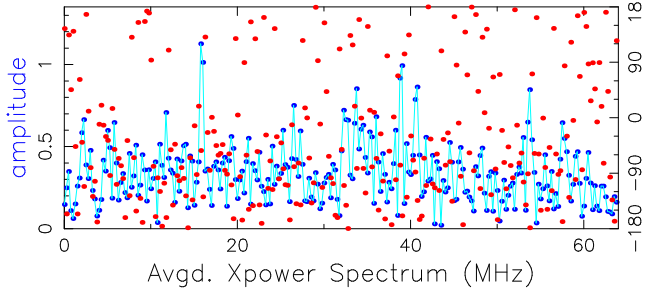
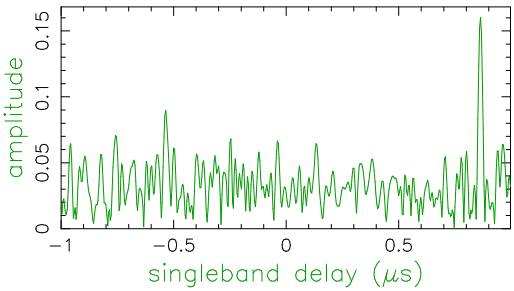
EFLSBERG - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)



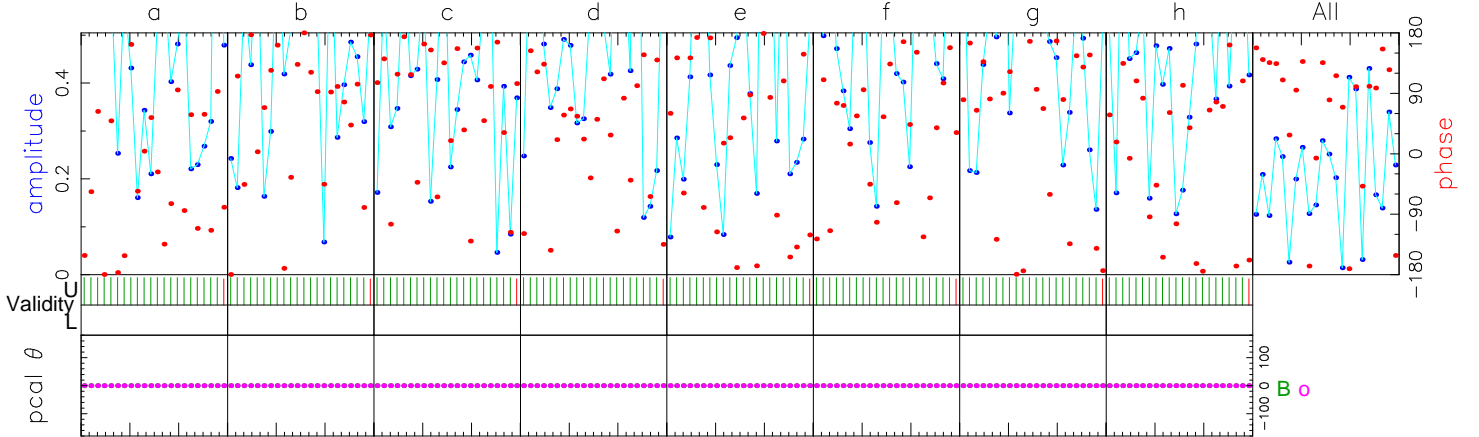
Fringe quality 0

SNR 5.9
 Int time 179.778
 Amp 0.168
 Phase 127.1
 PFD 4.1e-01
 Delays (us)
 SBD 0.862837
 MBD -0.000922
 Fringe rate (Hz)
 -0.332976
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060629
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
B:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:0	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.47797384787E+03				2.47711539494E+03				-9.22071E-04	+/- 1.8E-04
Sband delay (usec)	2.47797823244E+03				-1.1312709E+01				8.62837E-01	+/- 1.5E-03
Phase delay (usec)	2.47711539895E+03				-9.999998E-08				4.01520E-06	+/- 6.2E-07
Delay rate (us/s)	-1.89208973246E+00				-1.89208594606E+00				-3.78640E-06	+/- 5.9E-09
Total phase (deg)			66.2		-7.81826411157E-06				127.1	+/- 19.5
	RMS	Theor.	Amplitude	0.168 +/- 0.029						
ph/seg (deg)	62.0	45.7	Search (1024X32)	0.152						
amp/seg (%)	78.4	79.8	Interp.	0.000						
ph/frq (deg)	41.6	27.6	Inc. seg. avg.	0.168						
amp/frq (%)	44.5	48.1	Inc. frq. avg.	0.162						
B: az 253.5 el 34.4 pa 39.5		o: az 88.3 el 26.2 pa -56.2		u,v (fr/asec) 11543.220 1251.833						simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bo..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bo.W.64.1JFKZ

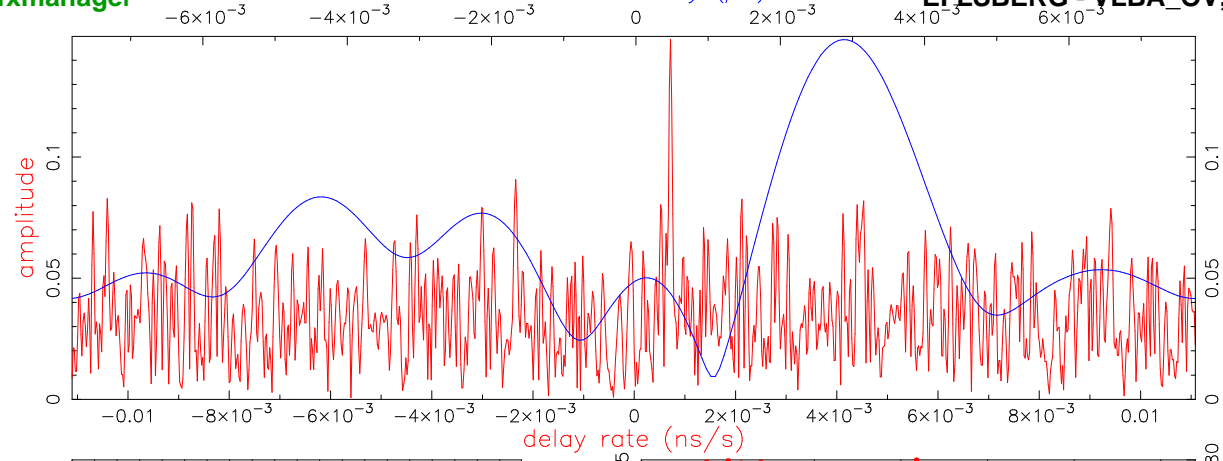
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bo

EFLSBERG - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.5

Int time 179.778

Amp 0.150

Phase 36.4

PFD 9.9e-01

Delays (us)

SBD 0.338621

MBD 0.002880

Fringe rate (Hz)

0.062874

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Yr:day 2020:286

Start 043000.00

Stop 043300.22

FRT 043130.00

Corr/FF/build

2021:039:055416

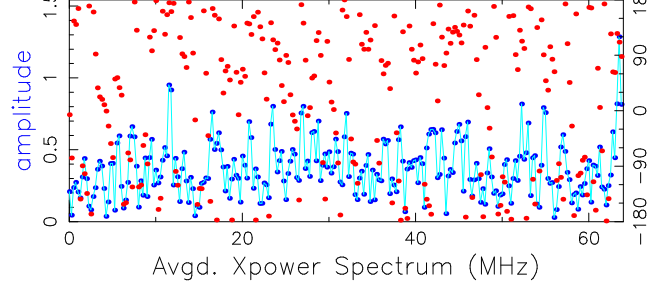
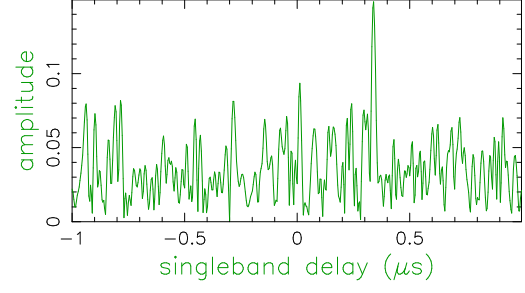
2021:039:060631

2020:247:085004

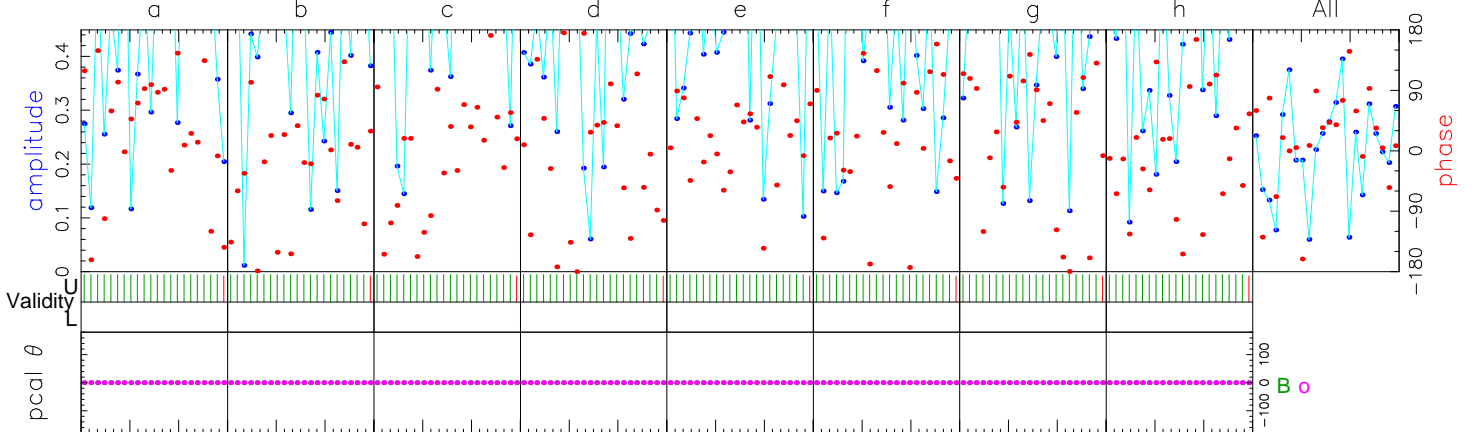
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	56.0	5.1	27.2	-147.8	29.0	36.4	89.4	0.3	Phase	36.4
	0.2	0.1	0.2	0.0	0.4	0.2	0.2	0.2	Ampl.	0.2
	246.6	18.7	466.9	491.8	343.4	294.5	18.7	135.4	Sbd box	343.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.47744640033E+03		Apriori delay (usec)		2.47711539494E+03		Resid mbdelay (usec)		2.88039E-03	+/- 2.0E-04
Sband delay (usec)	2.47745401644E+03		Apriori clock (usec)		-1.1312709E+01		Resid sbdelay (usec)		3.38621E-01	+/- 1.6E-03
Phase delay (usec)	2.47711539609E+03		Apriori clockrate (us/s)		-9.999998E-08		Resid phdelay (usec)		1.14870E-06	+/- 6.6E-07
Delay rate (us/s)	-1.89208523109E+00		Apriori rate (us/s)		-1.89208594606E+00		Resid rate (us/s)		7.14962E-07	+/- 6.3E-09
Total phase (deg)	335.4		Apriori accel (us/s/s)		-7.81826411157E-06		Resid phase (deg)		36.4	+/- 20.9

ph/seg (deg) 68.4 49.0 Search (1024X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 79.8 85.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 78.0 29.6 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 62.6 51.6 Inc. frq. avg. 0.155 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 253.5 el 34.4 pa 39.5 o: az 88.3 el 26.2 pa -56.2 u,v (fr/asec) 11543.220 1251.833 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bo..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bo.W.82.1JFKZ

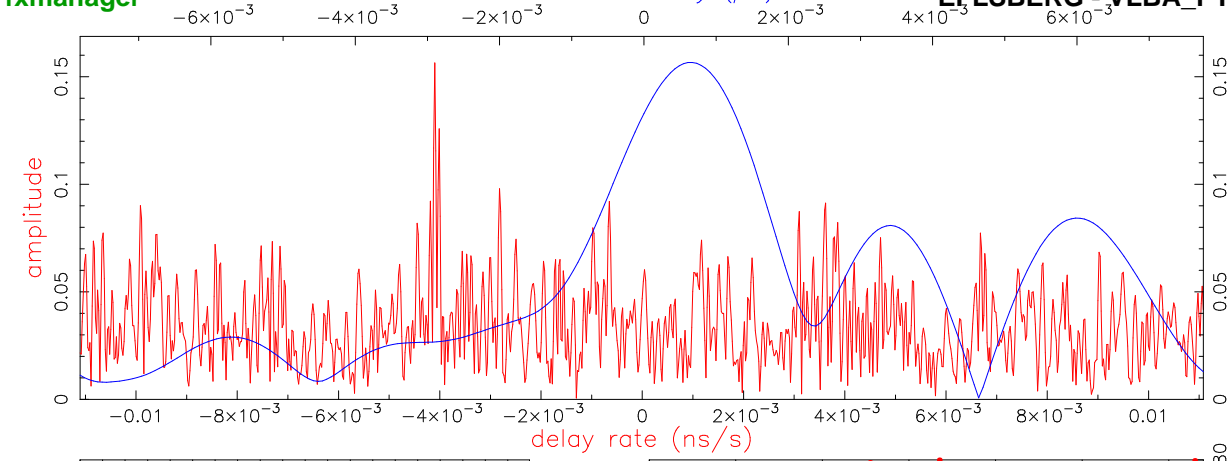
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

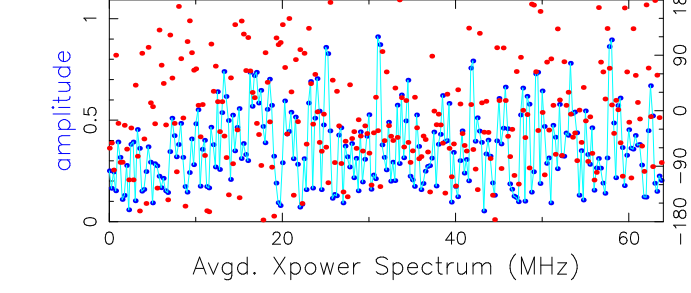
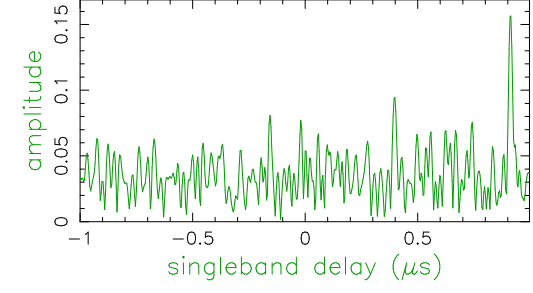
0235+164.1JFKZ, No0038, Bp

EFLSBERG - VLBA_PT, fgroup W, pol LL

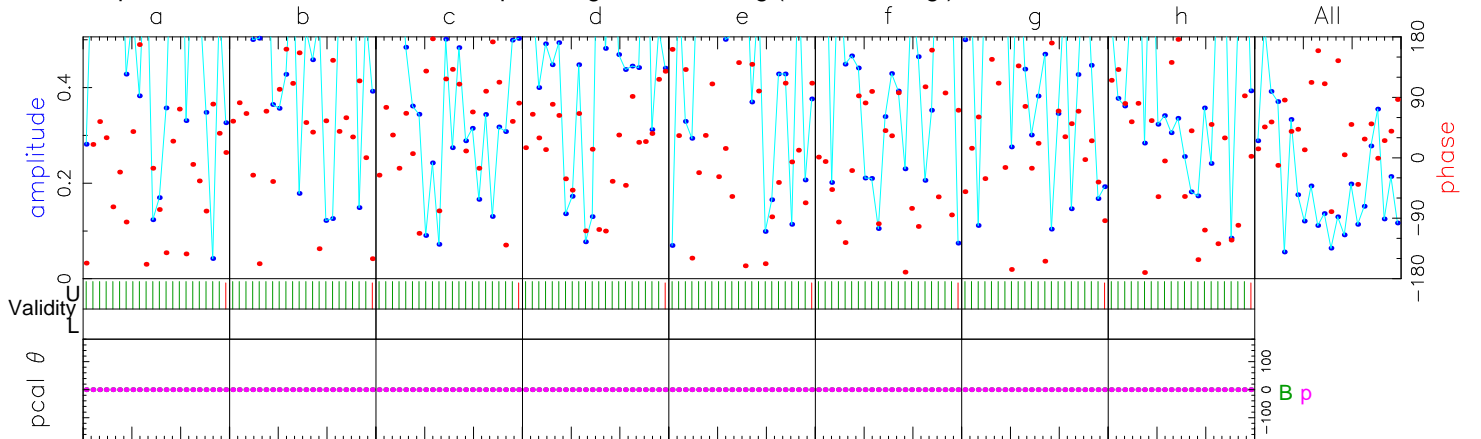
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 179.778
 Amp 0.169
 Phase 38.2
 PFD 4.7e-01
 Delays (us)
 SBD 0.912211
 MBD 0.000589
 Fringe rate (Hz) -0.361784
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060624
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.49758390006E+02								5.89232E-04	+/- 1.9E-04
Sband delay (usec)	-1.49753018238E+02								9.12211E-01	+/- 1.5E-03
Phase delay (usec)	-1.50665228030E+02								1.20801E-06	+/- 6.2E-07
Delay rate (us/s)	-1.83847940840E+00								-4.11398E-06	+/- 6.0E-09
Total phase (deg)			-55.1						38.2	+/- 19.6
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 55.8 46.0
 amp/seg (%) 82.3 80.3
 ph/frq (deg) 38.6 27.7
 amp/frq (%) 36.0 48.4
 RMS Theor. Amplitude 0.169 +/- 0.029
 Search (1024X32) 0.151
 Interp. 0.000
 Inc. seg. avg. 0.166
 Inc. frq. avg. 0.171
 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 B: az 253.5 el 34.4 pa 39.5 p: az 92.6 el 34.4 pa -59.4 u,v (fr/asec) 11223.411 1981.804
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bp..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bp.W.11.1JFKZ
 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

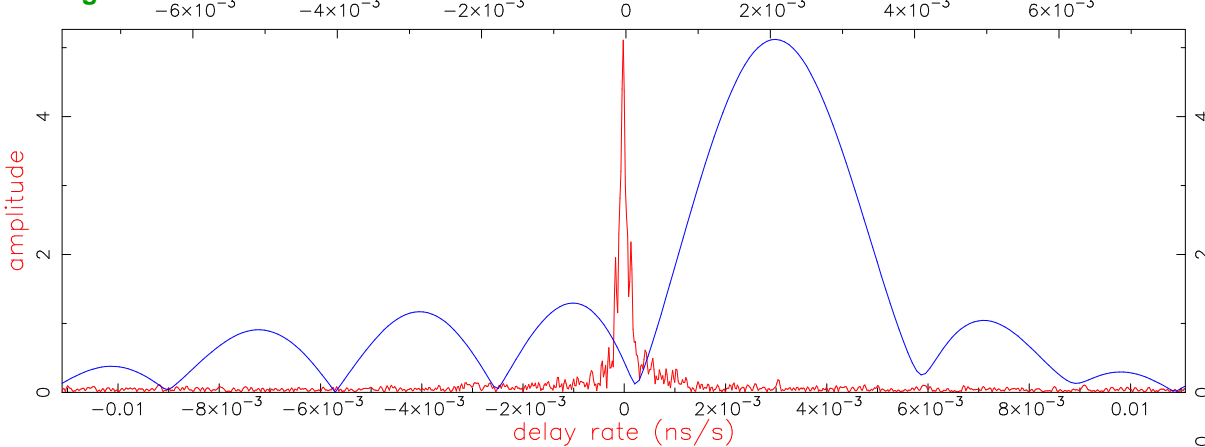
fxmanager

0235+164.1JFKZ, No0038, BP

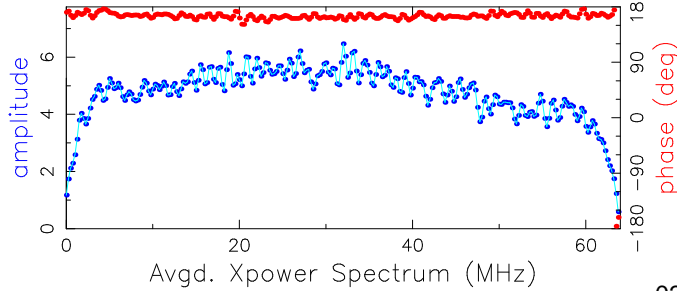
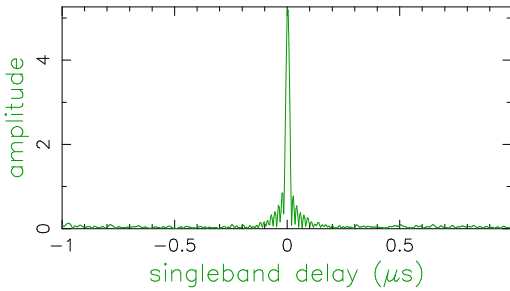
EFLSBERG - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 6

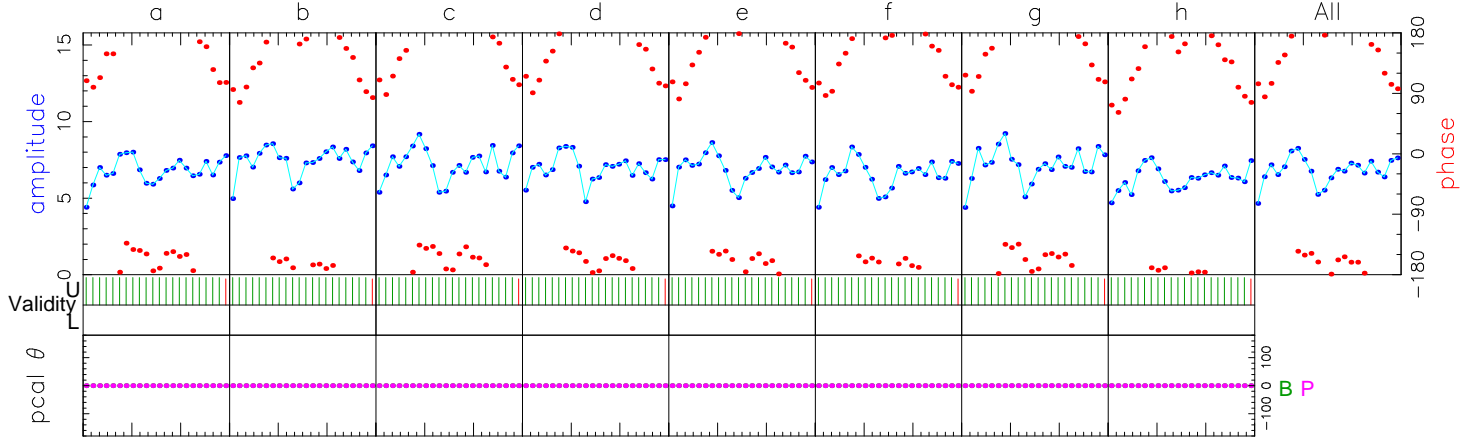


SNR 193.0
 Int time 179.588
 Amp 5.266
 Phase 165.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.002271
 MB 0.002137
 Fringe rate (Hz)
 -0.002696
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060624
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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	Manl 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.06937579538E+03	Apriori delay (usec)	-3.06937793202E+03	Resid mbdelay (usec)	2.13665E-03	+/-	5.6E-06
Sband delay (usec)	-3.06937566127E+03	Apriori clock (usec)	1.0325738E+01	Resid sbdelay (usec)	2.27075E-03	+/-	4.5E-05
Phase delay (usec)	-3.06937792680E+03	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	5.22763E-06	+/-	1.9E-08
Delay rate (us/s)	6.56685037696E-02	Apriori rate (us/s)	6.56685344273E-02	Resid rate (us/s)	-3.06578E-08	+/-	1.8E-10
Total phase (deg)	42.3	Apriori accel (us/s/s)	2.18594469395E-05	Resid phase (deg)	165.5	+/-	0.6

ph/seg (deg)	42.3	RMS	42.3	Theor.	1.4	Amplitude	5.266 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	33.5		2.4			Search (1024X32)	4.957	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	11.3		0.8			Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	4.8		1.5			Inc. seg. avg.	6.810	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	5.183	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 P: az 255.5 el 45.3 pa 53.6 u,v (fr/asec) -391.605 1991.056 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BP..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BP.W.15.1JFKZ

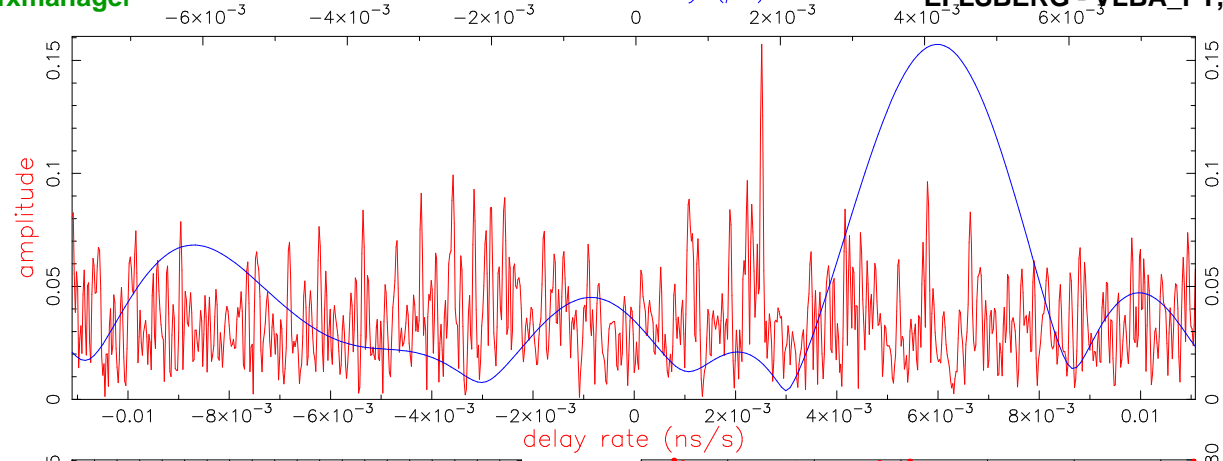
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJKZ, No0038, Bp

EFLSBERG - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)



Fringe quality 0

SNR 5.8

Int time 179.778

Amp 0.161

Phase 167.8

PFD 6.4e-01

Delays (us)

SBD -0.300429

MBD 0.004176

Fringe rate (Hz) 0.222198

Ion TEC 0.000

Ref freq (MHz) 87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 043000.00

Stop 043300.22

FRT 043130.00

Corr/FF/build

2021:039:055416

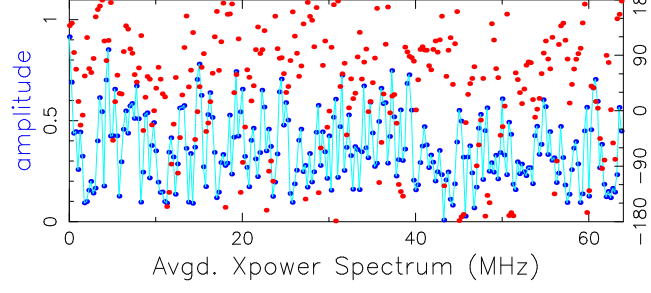
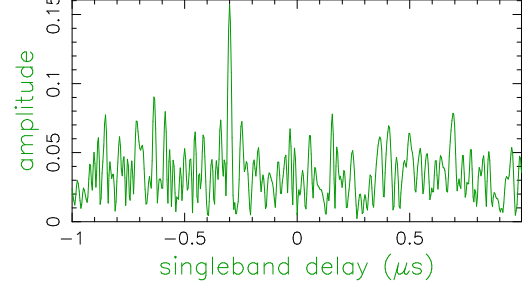
2021:039:060625

2020:247:085004

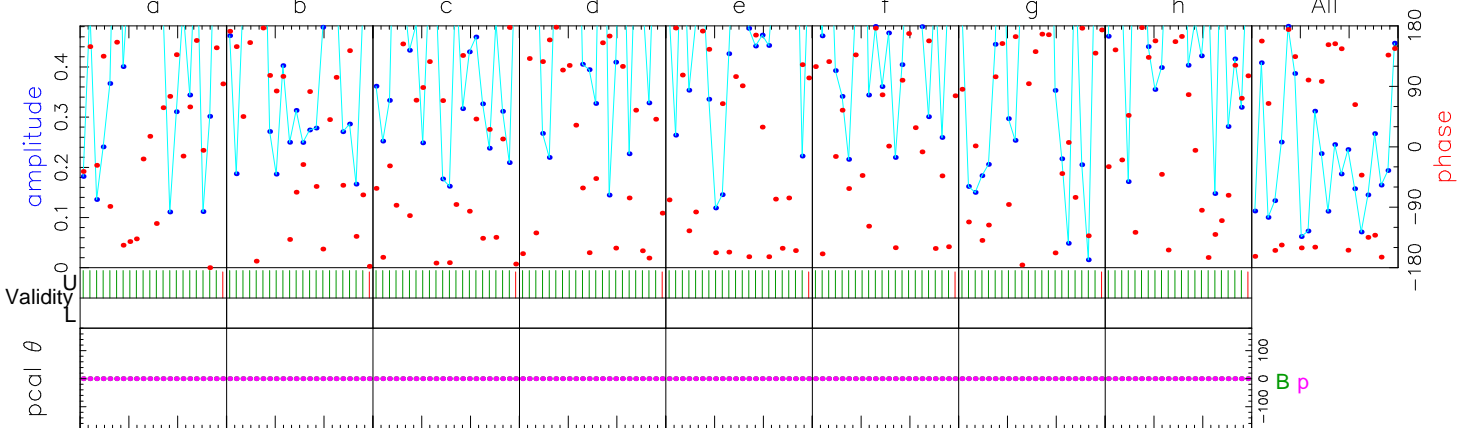
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.50957928501E+02									
Sband delay (usec)	-1.50965658238E+02									
Phase delay (usec)	-1.50665223939E+02									
Delay rate (us/s)	-1.83847276772E+00									
Total phase (deg)			74.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	58.4	46.6								
Theor.										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
B: az 253.5 el 34.4 pa 39.5										
p: az 92.6 el 34.4 pa -59.4										
u, v (fr/asec)										
simultaneous interpolator										

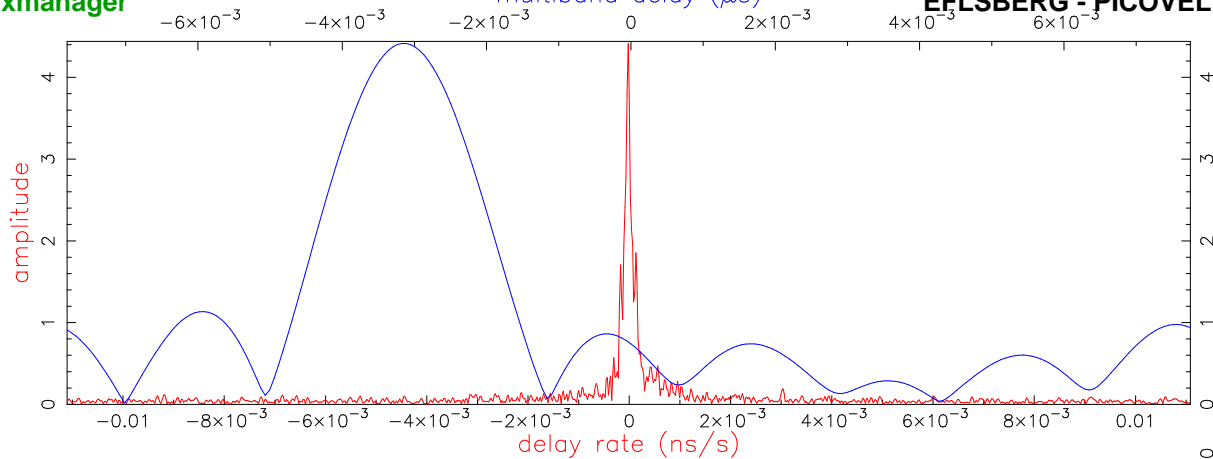
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJKZ, No0038, BP

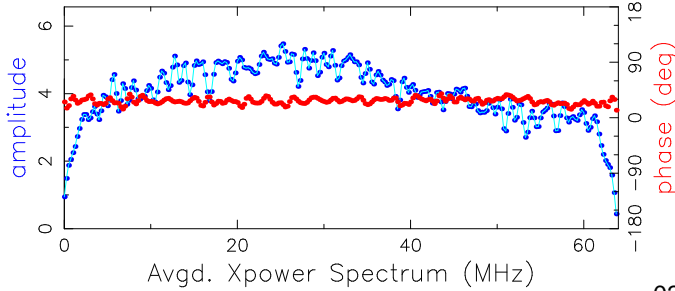
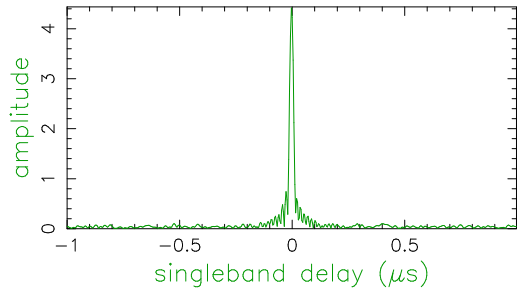
EFLSBERG - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



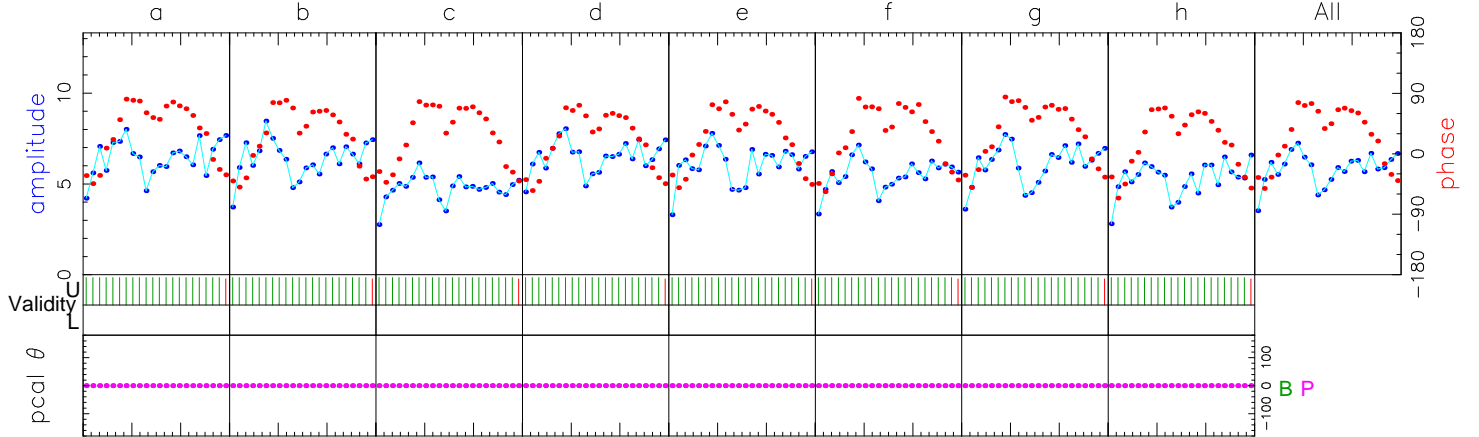
Fringe quality 6

SNR 162.7
 Int time 179.588
 Amp 4.440
 Phase 29.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.002904
 MBD -0.003117
 Fringe rate (Hz)
 -0.002718
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Yr:day 16383
 Start 2020:286
 Stop 2020:286
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060626
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	36.2	27.0	32.2	22.4	28.0	30.6	35.5	21.3	Ampl.	29.2
B	4.8	4.8	3.6	5.0	4.5	4.1	4.6	4.0	Ampl.	4.4
P	255.9	256.0	256.3	256.1	256.6	256.4	256.4	255.6	Sbd box	256.3
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.06938104900E+03		Apriori delay (usec)		-3.06937793202E+03		Resid mbdelay (usec)		-3.11698E-03	+/- 6.7E-06
Sband delay (usec)	-3.06938083602E+03		Apriori clock (usec)		1.0325738E+01		Resid sbdelay (usec)		-2.90400E-03	+/- 5.3E-05
Phase delay (usec)	-3.06937793110E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		9.20826E-07	+/- 2.2E-08
Delay rate (us/s)	6.56685035211E-02		Apriori rate (us/s)		6.56685344273E-02		Resid rate (us/s)		-3.09062E-08	+/- 2.1E-10
Total phase (deg)			Apriori accel (us/s/s)		2.18594469395E-05		Resid phase (deg)		29.2	+/- 0.7

ph/seg (deg) 42.3 1.7 Theor. Amplitude 4.440 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.0 2.9 Search (1024X32) 4.205 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.0 1.0 Inc. seg. avg. 5.851 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.1 1.7 Inc. frq. avg. 4.433 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 253.5 el 34.4 pa 39.5 P: az 255.5 el 45.3 pa 53.6 u,v (fr/asec) -391.605 1991.056 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BP..1JFJKZ Output file: /Exps/c202c/v1/1234/No0038/BP.W.29.1JFJKZ

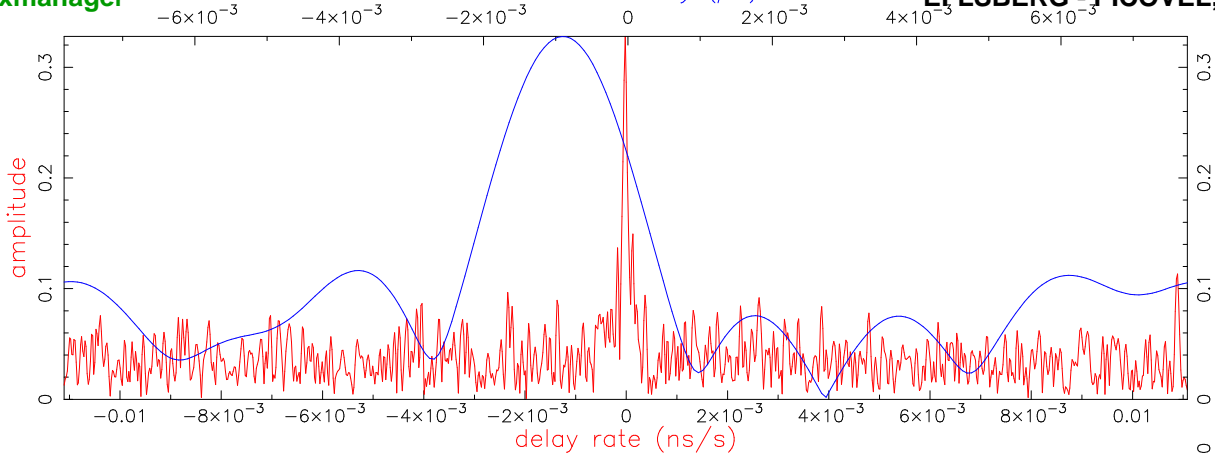
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BP

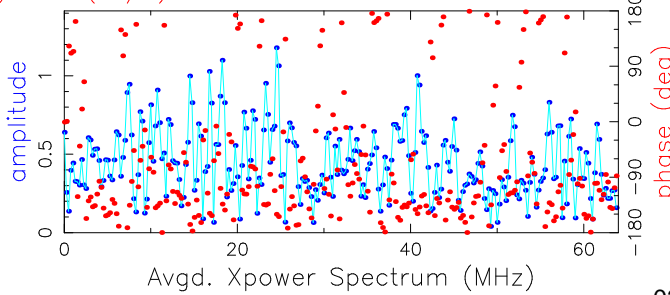
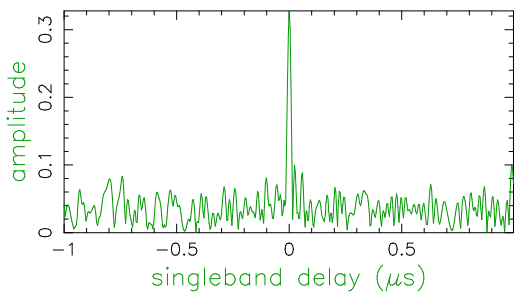
EFLSBERG - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



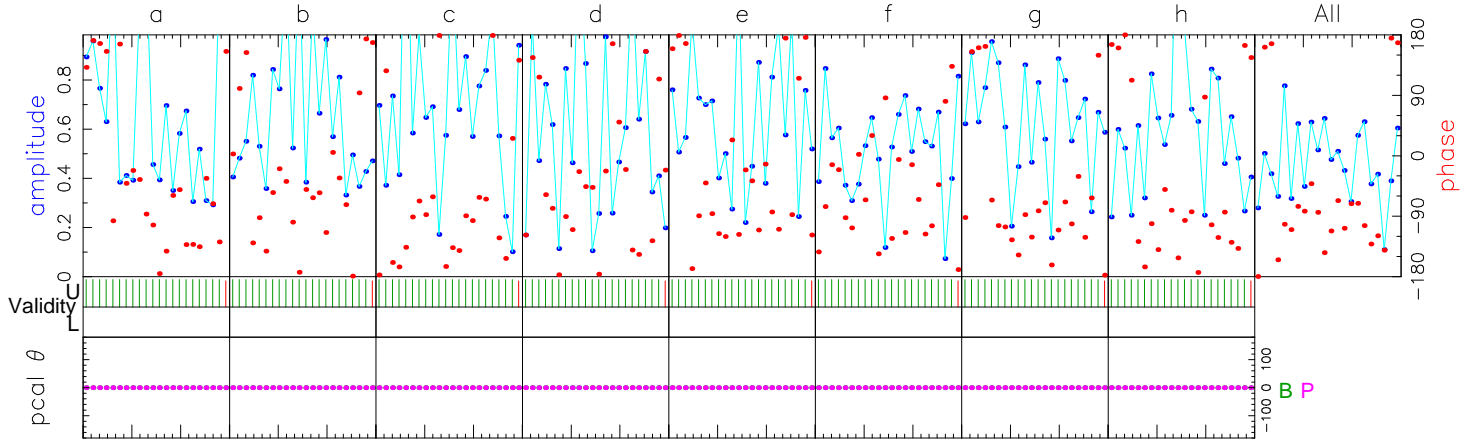
Fringe quality 9

SNR 12.0
 Int time 179.588
 Amp 0.328
 Phase -114.4
 PFD 7.5e-25
 Delays (us)
 SBD 0.000207
 MBD -0.000897
 Fringe rate (Hz)
 -0.002522
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060628
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-133.0	-84.8	-126.7	-92.7	-118.5	-73.6	-114.3	-131.5	Phase	-114.4
	0.4	0.3	0.5	0.2	0.4	0.3	0.4	0.4	Ampl.	0.3
	256.9	259.7	258.1	306.4	257.0	257.3	257.0	256.8	Sbd box	257.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	

Group delay (usec)(sbd)	-3.06937882900E+03	Apriori delay (usec)	-3.06937793202E+03	Resid mbdelay (usec)	-8.96978E-04	+/-	9.0E-05
Sband delay (usec)	-3.06937772552E+03	Apriori clock (usec)	1.0325738E+01	Resid sbdelay (usec)	2.06500E-04	+/-	7.2E-04
Phase delay (usec)	-3.06937793564E+03	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	-3.61380E-06	+/-	3.0E-07
Delay rate (us/s)	6.56685057462E-02	Apriori rate (us/s)	6.56685344273E-02	Resid rate (us/s)	-2.86811E-08	+/-	2.9E-09
Total phase (deg)		Apriori accel (us/s/s)	2.18594469395E-05	Resid phase (deg)	-114.4	+/-	9.5

ph/seg (deg)	46.2	RMS	22.4	Theor.	Amplitude	0.328 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	62.1	46.2	22.4	Search (1024X32)	0.322		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	25.2	62.1	39.0	Interp.	0.000		Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.8	25.2	13.5	Inc. seg. avg.	0.432		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 253.5 el 34.4 pa 39.5 P: az 255.5 el 45.3 pa 53.6 u,v (fr/asec) -391.605 1991.056 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BP..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BP.W.48.1JFKZ

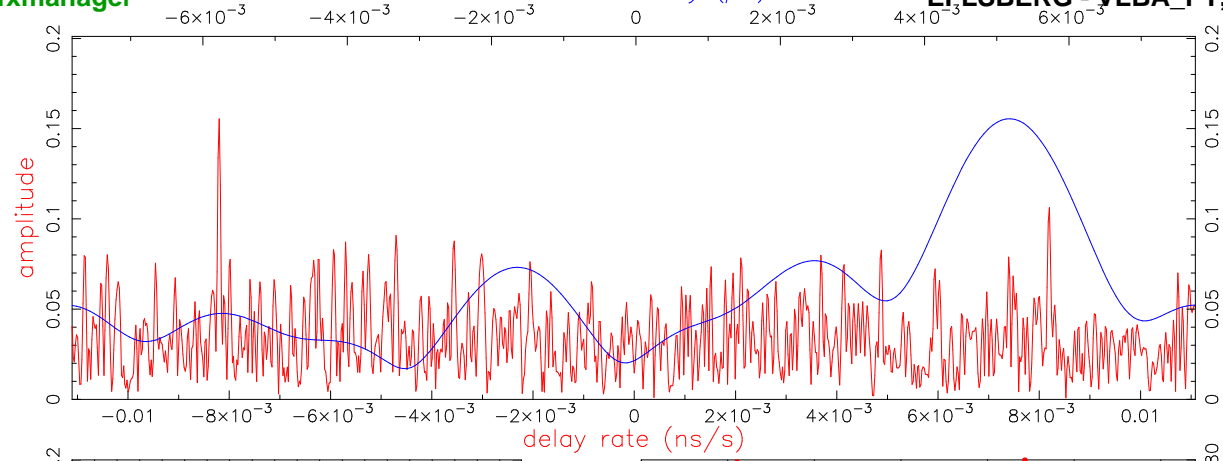
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bp

EFLSBERG - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0

SNR 5.8

Int time 179.778

Amp 0.201

Phase 47.6

PFD 5.2e-01

Delays (us)

SBD -0.462868

MBD 0.005214

Fringe rate (Hz)

-0.722346

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 043000.00

Stop 043300.22

FRT 043130.00

Corr/FF/build

2021:039:055416

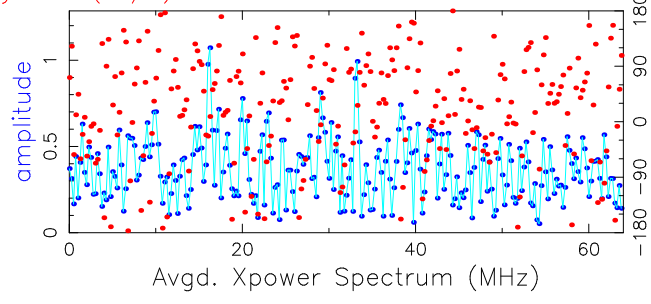
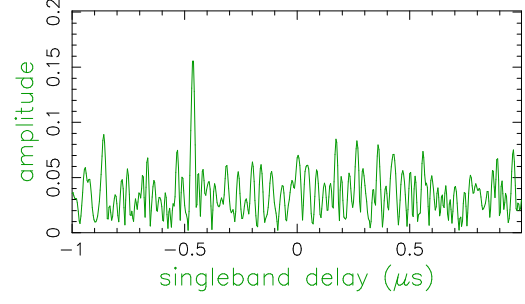
2021:039:060628

2020:247:085004

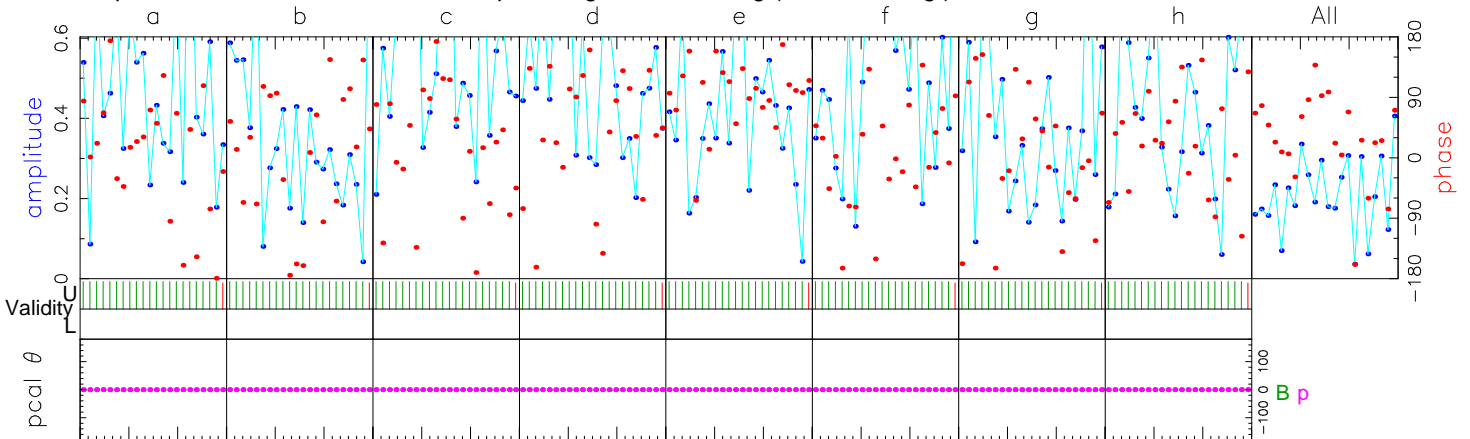
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	34.8	19.7	41.0	75.2	100.6	15.9	33.9	21.8	Phase	47.6
	0.3	0.1	0.2	0.2	0.4	0.3	0.1	0.2	Ampl.	0.2
	201.1	364.5	22.2	215.3	137.7	451.4	8.9	381.1	Sbd box	138.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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)	-1.51128765390E+02		Apriori delay (usec)		-1.50665229238E+02		Resid mbdelay (usec)		5.21385E-03	+/- 1.9E-04
Sband delay (usec)	-1.51128097488E+02		Apriori clock (usec)		9.9347458E+00		Resid sbdelay (usec)		-4.62868E-01	+/- 1.5E-03
Phase delay (usec)	-1.50665227734E+02		Apriori clockrate (us/s)		-5.9999998E-07		Resid phdelay (usec)		1.50480E-06	+/- 6.2E-07
Delay rate (us/s)	-1.83848350849E+00		Apriori rate (us/s)		-1.83847529442E+00		Resid rate (us/s)		-8.21407E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		7.60958157191E-06		Resid phase (deg)		47.6	+/- 19.7

ph/seg (deg) 60.7 46.1 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 65.9 80.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 32.7 27.8 Inc. seg. avg. 0.202 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 42.1 48.6 Inc. frq. avg. 0.207 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

B: az 253.5 el 34.4 pa 39.5 p: az 92.6 el 34.4 pa -59.4 u,v (fr/asec) 11223.411 1981.804 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bp..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bp.W.49.1JFKZ

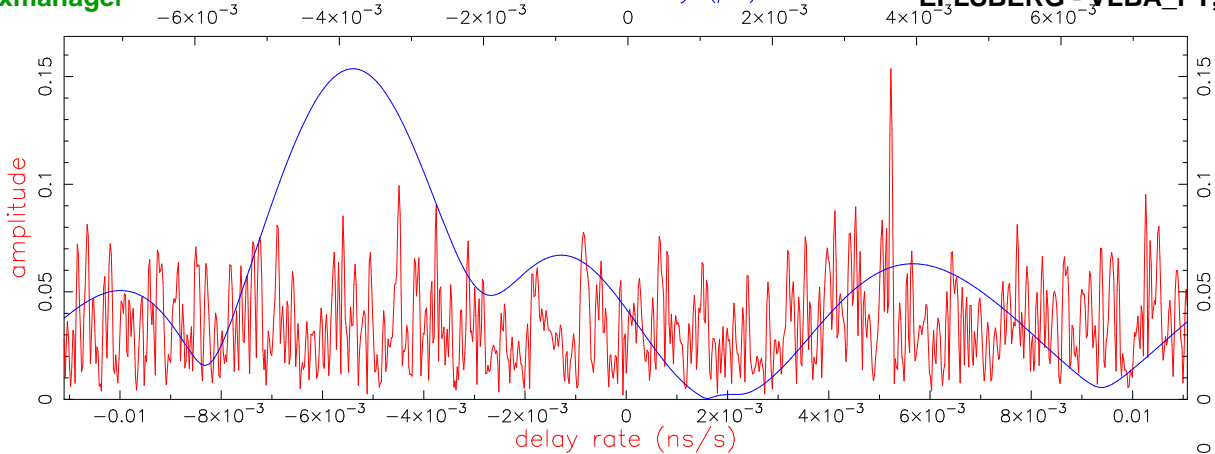
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, Bp

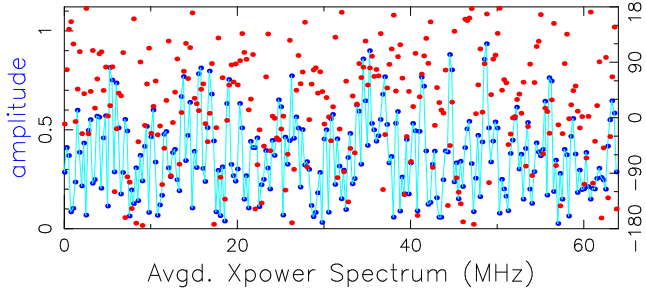
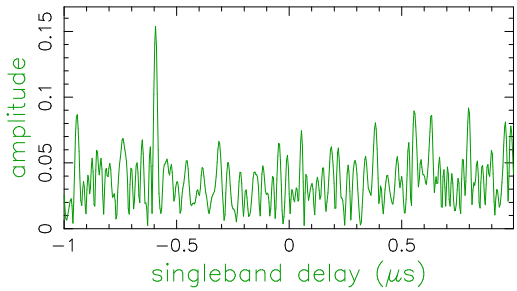
EFLSBERG - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



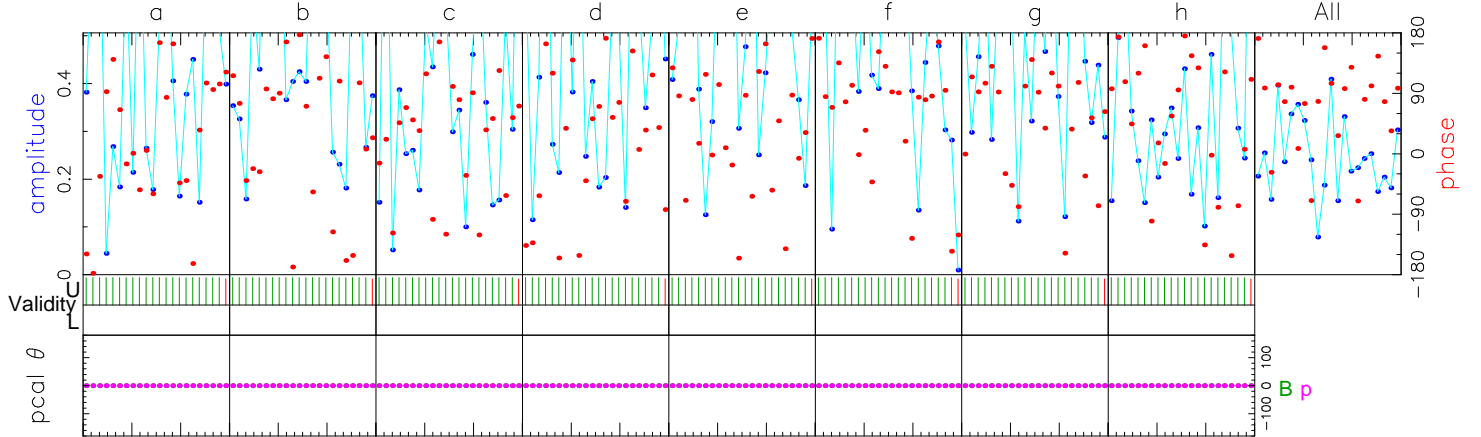
Fringe quality 0

SNR 5.6
Int time 179.778
Amp 0.169
Phase 88.1
PFD 8.8e-01
Delays (us)
SBD -0.593969
MBD -0.003817
Fringe rate (Hz)
0.459766
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 043000.00
Stop 043300.22
FRT 043130.00
Corr/FF/build
2021:039:055416
2021:039:060630
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.51262796325E+02									
Sband delay (usec)	-1.51259198238E+02									
Phase delay (usec)	-1.50665226457E+02									
Delay rate (us/s)	-1.83847006624E+00									
Total phase (deg)			-5.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									88.1	+/- 20.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

B: az 253.5 el 34.4 pa 39.5 p: az 92.6 el 34.4 pa -59.4 u,v (fr/asec) 11223.411 1981.804 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/Bp..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/Bp.W.69.1JFKZ

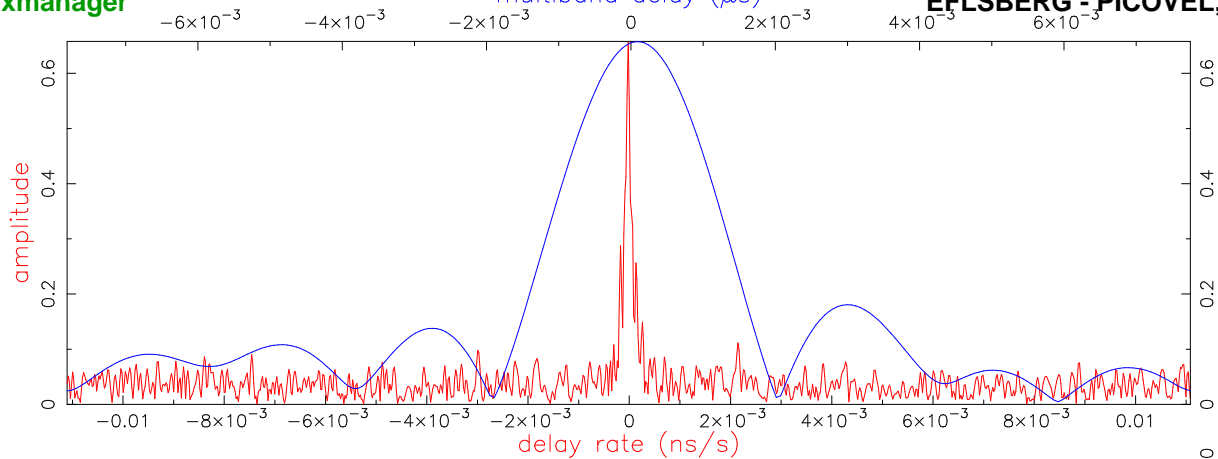
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BP

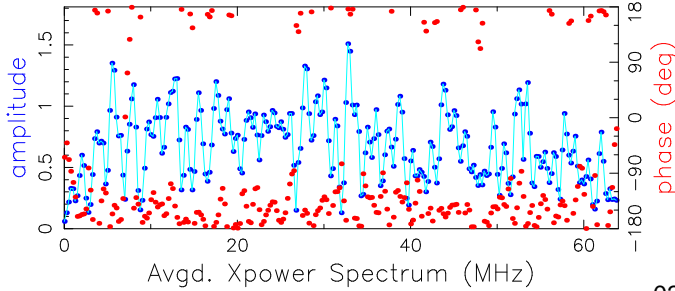
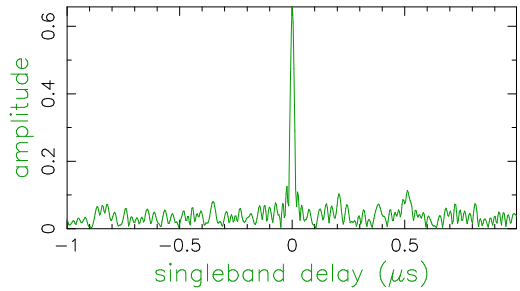
EFLSBERG - PICOVEL, fgroup W, pol RL

multiband delay (μ s)



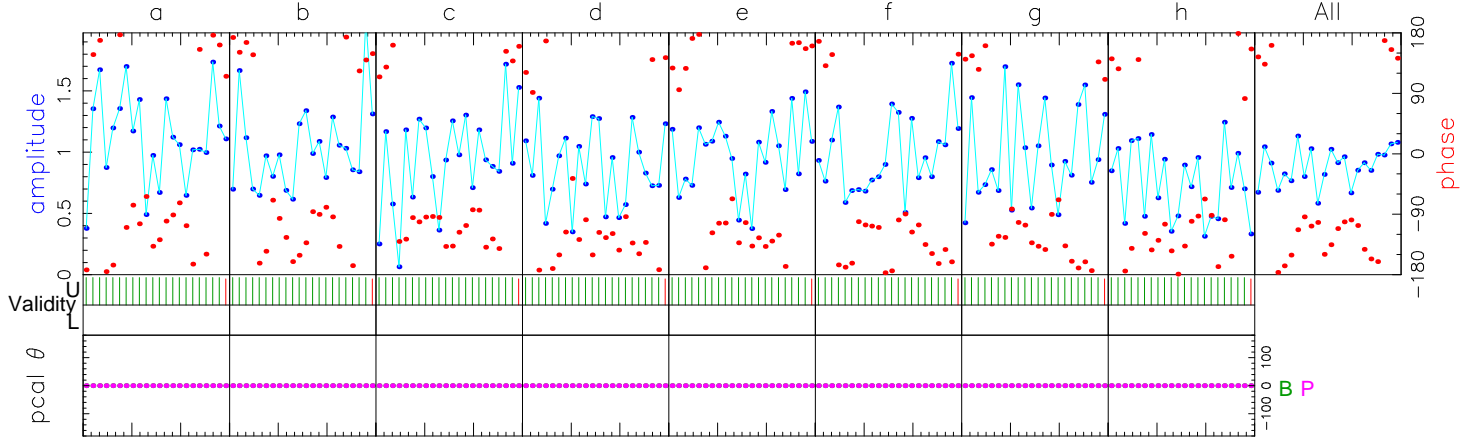
Fringe quality 7

SNR 24.1
 Int time 179.588
 Amp 0.658
 Phase -151.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000301
 MBD 0.000101
 Fringe rate (Hz)
 -0.002828
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060630
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-150.4	-158.0	-137.7	-151.8	-158.2	-151.4	-152.2	-150.0	Phase	-151.4
	0.8	0.7	0.6	0.6	0.7	0.8	0.7	0.5	Ampl.	0.7
	256.1	256.9	257.9	257.1	257.1	257.1	257.7	256.2	Sbd box	257.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.06937783116E+03		Apriori delay (usec)		-3.06937793202E+03		Resid mbdelay (usec)		1.00866E-04	+/- 4.5E-05
Sband delay (usec)	-3.06937763077E+03		Apriori clock (usec)		1.0325738E+01		Resid sbdelay (usec)		3.01250E-04	+/- 3.6E-04
Phase delay (usec)	-3.06937793680E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		-4.78099E-06	+/- 1.5E-07
Delay rate (us/s)	6.56685022676E-02		Apriori rate (us/s)		6.56685344273E-02		Resid rate (us/s)		-3.21597E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.18594469395E-05		Resid phase (deg)		-151.4	+/- 4.8

	RMS	Theor.	Amplitude	0.658 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	42.7	11.1	Search (1024X32)	0.630	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	41.6	19.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	6.8	6.7	Inc. seg. avg.	0.872	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	12.7	11.7	Inc. frq. avg.	0.657					

B: az 253.5 el 34.4 pa 39.5 P: az 255.5 el 45.3 pa 53.6 u,v (fr/asec) -391.605 1991.056 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BP..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BP.W.71.1JFKZ

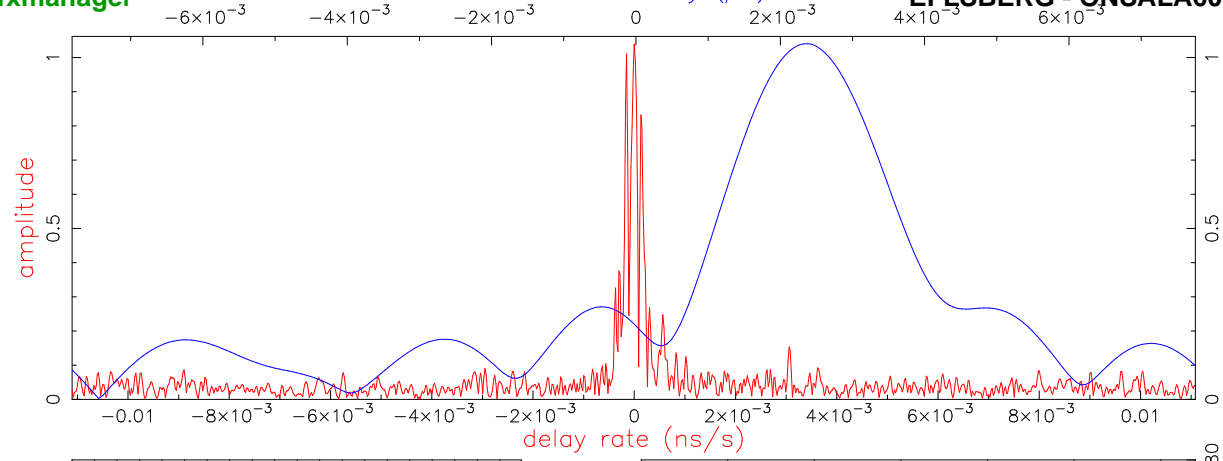
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

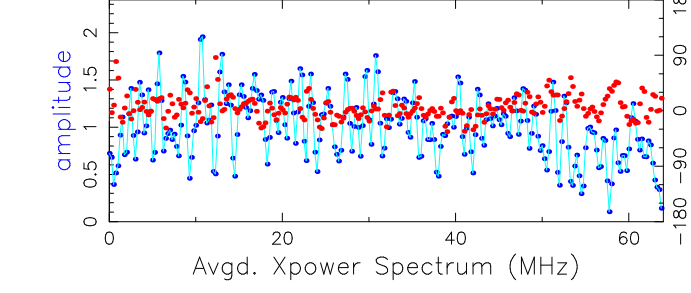
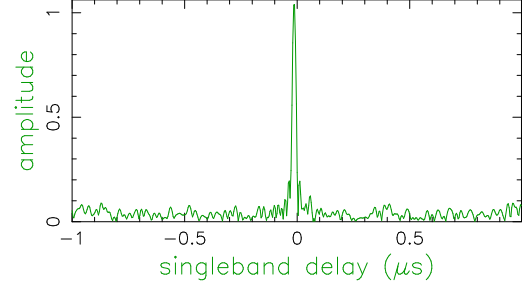
0235+164.1JFJKZ, No0038, BX

EFLSBERG - ONSALA60, fgroup W, pol LL

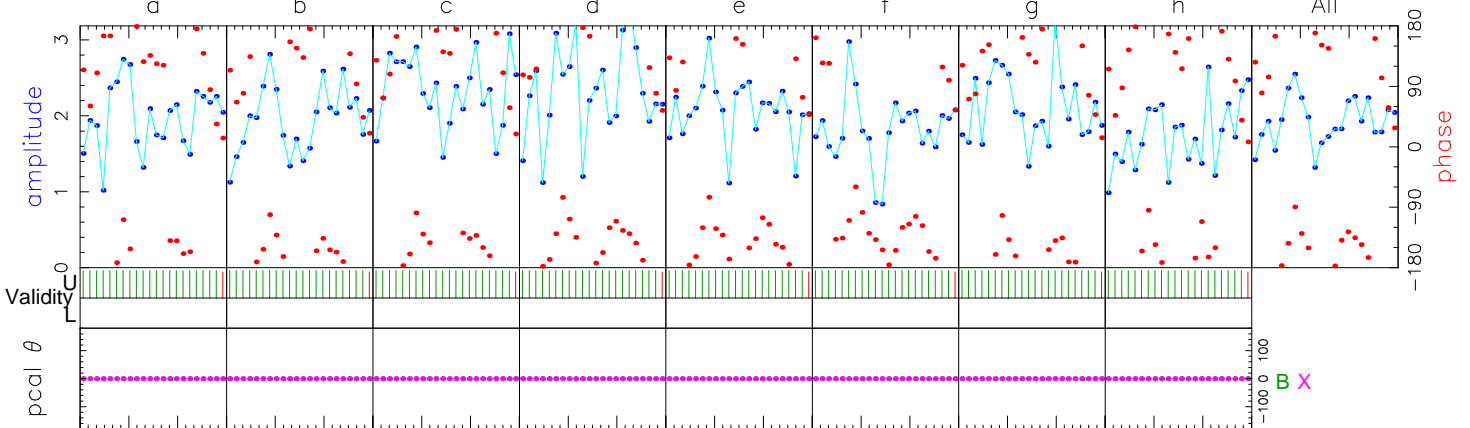
multiband delay (μ s)



Fringe quality 6
 SNR 38.9
 Int time 179.769
 Amp 1.062
 Phase -177.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.013625
 MBD 0.002300
 Fringe rate (Hz) 0.000882
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060624
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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)	1.46077058554E+03	Apriori delay (usec)	1.46078391016E+03	Resid mbdelay (usec)	2.30038E-03	+/-	2.8E-05
Sband delay (usec)	1.46077028541E+03	Apriori clock (usec)	-3.8349072E+01	Resid sbdelay (usec)	-1.36248E-02	+/-	2.2E-04
Phase delay (usec)	1.46078390454E+03	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-5.61227E-06	+/-	9.3E-08
Delay rate (us/s)	-8.25893353358E-02	Apriori rate (us/s)	-8.25893453704E-02	Resid rate (us/s)	1.00346E-08	+/-	8.9E-10
Total phase (deg)	-156.4	Apriori accel (us/s/s)	-1.02629533287E-05	Resid phase (deg)	-177.7	+/-	2.9

ph/seg (deg)	62.7	Theor.	6.9	Amplitude	1.062 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	86.3		12.0	Search (1024X32)	1.022	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	21.5		4.2	Inc. seg. avg.	1.914	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	13.7		7.3	Inc. frq. avg.	1.090	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

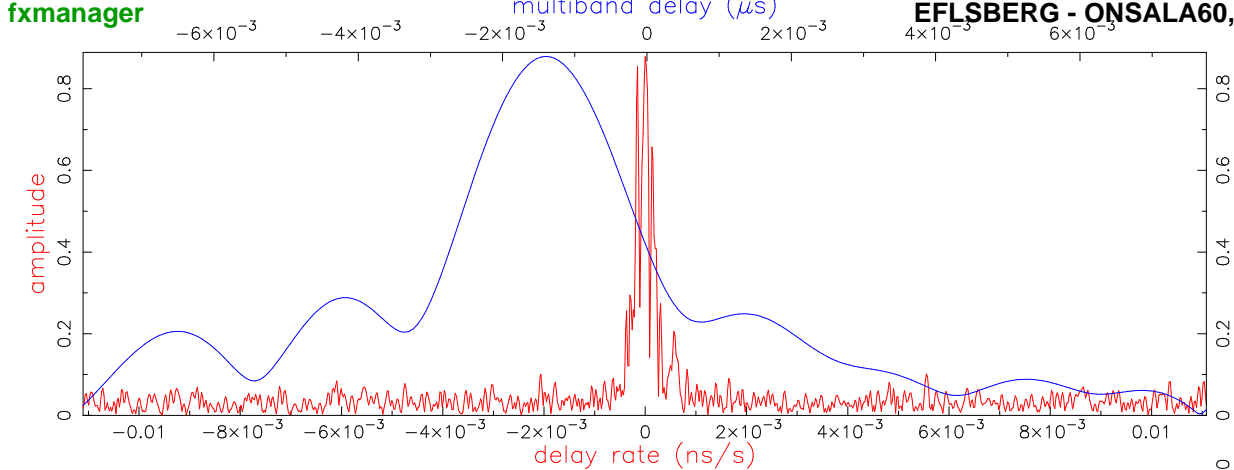
B: az 253.5 el 34.4 pa 39.5 X: az 254.0 el 29.7 pa 32.7 u,v (fr/asec) 499.681 -859.364 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BX..1JFJKZ Output file: /Exps/c202c/v1/1234/No0038/BX.W.13.1JFJKZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

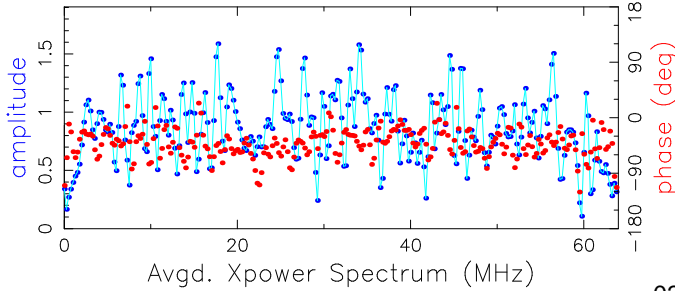
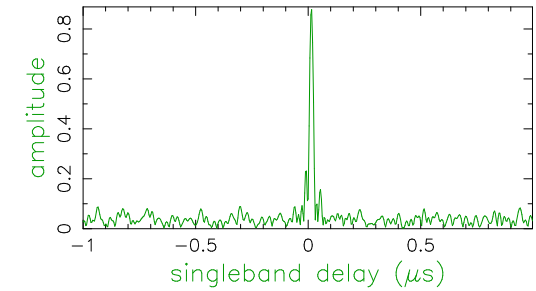
0235+164.1JFKZ, No0038, BX

EFLSBERG - ONSALA60, fgroup W, pol RR



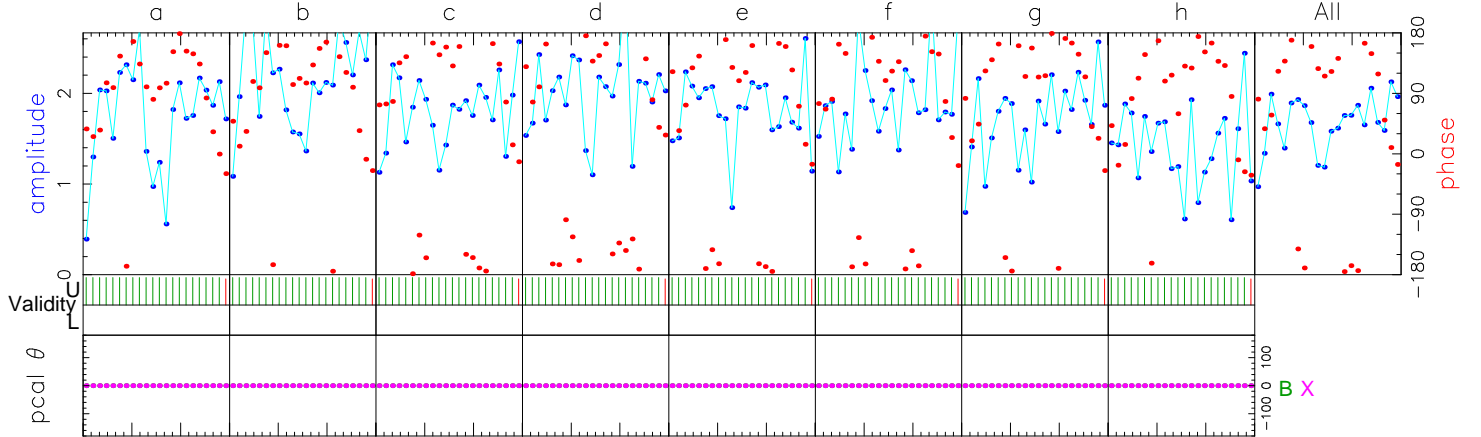
Fringe quality 5

SNR 32.6
 Int time 179.769
 Amp 0.889
 Phase 138.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.014181
 MBD -0.001457
 Fringe rate (Hz)
 0.000953
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060626
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	115.1	113.8	154.6	174.9	145.1	150.5	133.1	103.5	Phase	138.2
	1.0	1.1	1.0	1.1	1.0	1.0	0.9	0.6	Ampl.	0.9
	260.9	260.6	261.1	260.7	260.1	261.1	260.6	259.2	Sbd box	260.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.46079807813E+03		Apriori delay (usec)		1.46078391016E+03		Resid mbdelay (usec)		-1.45702E-03	+/- 3.3E-05
Sband delay (usec)	1.46079809091E+03		Apriori clock (usec)		-3.8349072E+01		Resid sbdelay (usec)		1.41807E-02	+/- 2.6E-04
Phase delay (usec)	1.46078391452E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		4.36406E-06	+/- 1.1E-07
Delay rate (us/s)	-8.25893345335E-02		Apriori rate (us/s)		-8.25893453704E-02		Resid rate (us/s)		1.08370E-08	+/- 1.1E-09
Total phase (deg)	159.4		Apriori accel (us/s/s)		-1.02629533287E-05		Resid phase (deg)		138.2	+/- 3.5

ph/seg (deg) 63.0 8.2 Search (1024X32) 0.869 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 93.9 14.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.3 5.0 Inc. seg. avg. 1.654 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.5 8.7 Inc. frq. avg. 0.945 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 253.5 el 34.4 pa 39.5 X: az 254.0 el 29.7 pa 32.7 u,v (fr/asec) 499.681 -859.364 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BX..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BX.W.27.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

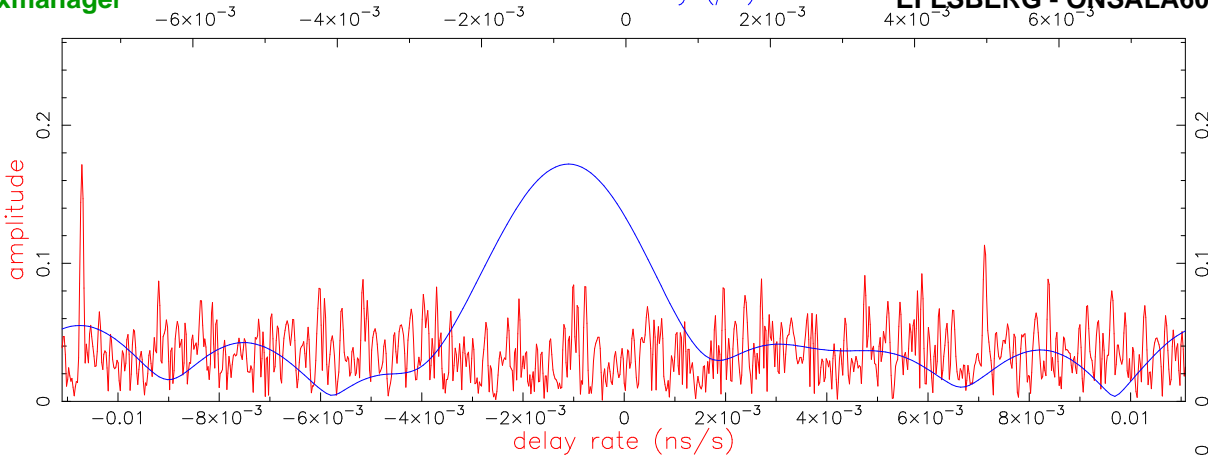
fxmanager

0235+164.1JFKZ, No0038, BX

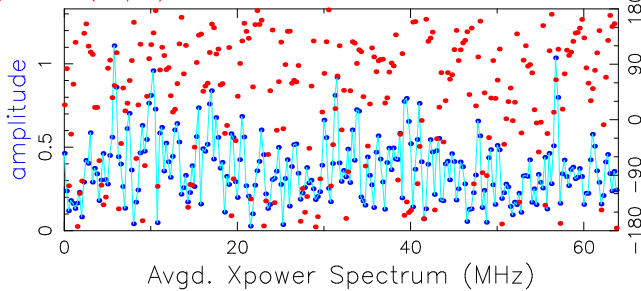
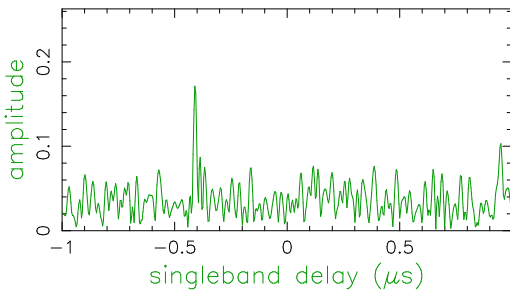
EFLSBERG - ONSALA60, fgroup W, pol LR

multiband delay (μs)

Fringe quality 0

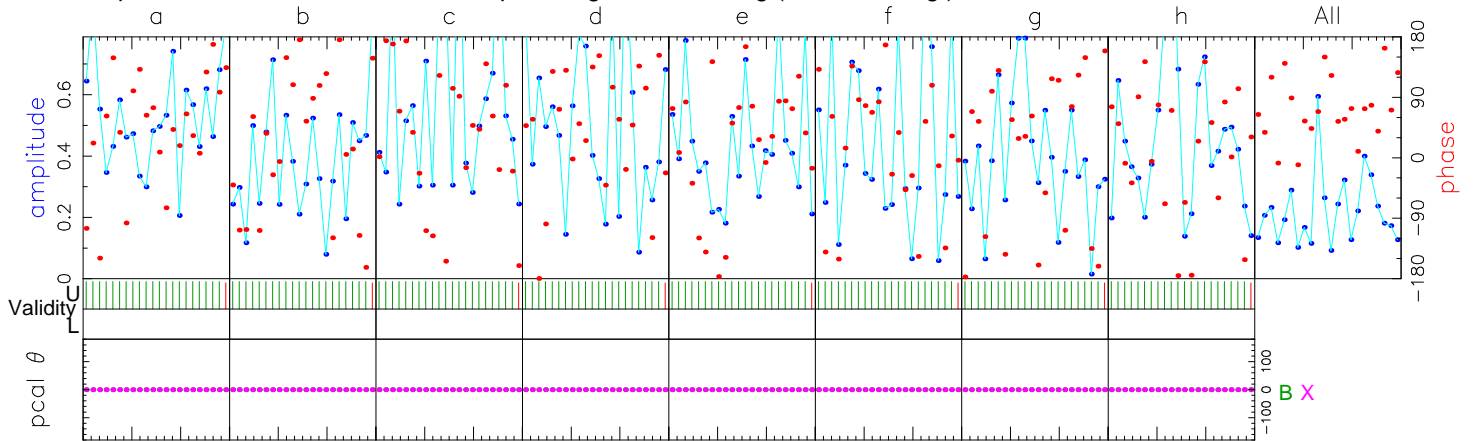


SNR 6.3
 Int time 179.769
 Amp 0.263
 Phase 73.8
 PFD 3.1e-02
 Delays (us)
 SBD -0.409049
 MBD -0.000710
 Fringe rate (Hz)
 -0.943931
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060627
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	354.1	317.9	144.7	268.3	345.2	153.1	192.6	291.8		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.46037695062E+03				1.46078391016E+03			Resid mbdelay (usec)	-7.09537E-04 +/- 1.7E-04
Sband delay (usec)		1.46037486141E+03				-3.8349072E+01			Resid sbdelay (usec)	-4.09049E-01 +/- 1.4E-03
Phase delay (usec)		1.46078391249E+03				-7.2800002E-07			Resid phdelay (usec)	2.33052E-06 +/- 5.7E-07
Delay rate (us/s)		-8.26000791788E-02				-8.25893453704E-02			Resid rate (us/s)	-1.07338E-05 +/- 5.5E-09
Total phase (deg)			95.0			-1.02629533287E-05			Resid phase (deg)	73.8 +/- 18.1
RMS	46.8	42.4			0.263 +/- 0.041				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	72.0	74.0			0.169				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	23.7	25.6			0.000				Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	32.9	44.6			0.265				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
					0.247				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 253.5 el 34.4 pa 39.5 X: az 254.0 el 29.7 pa 32.7 u,v (fr/asec) 499.681 -859.364 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BX..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BX.W.45.1JFKZ

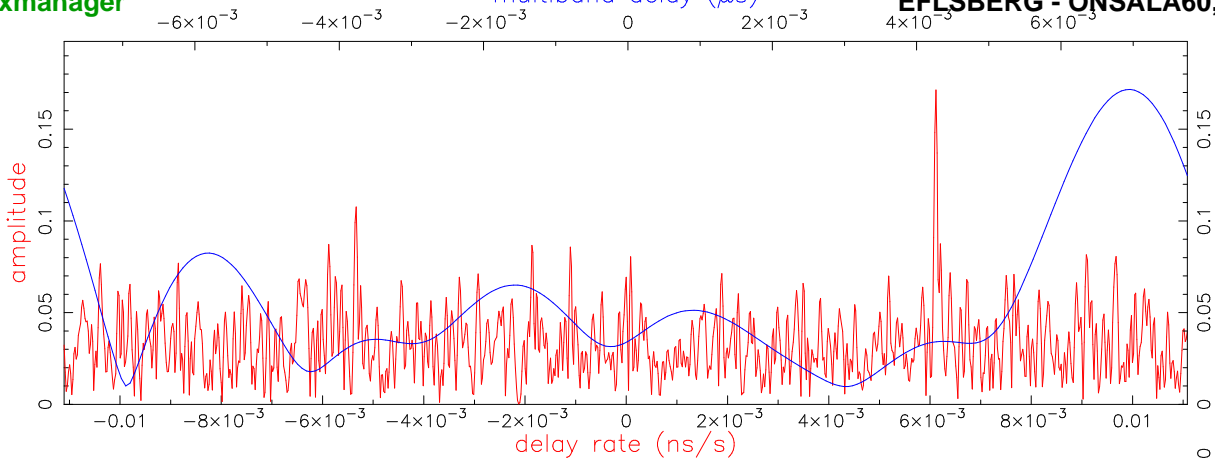
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BX

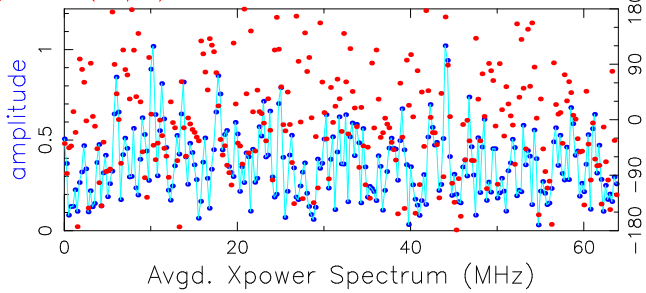
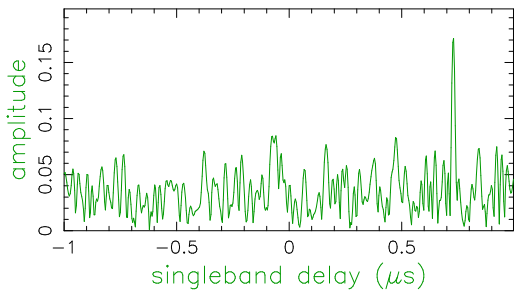
EFLSBERG - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



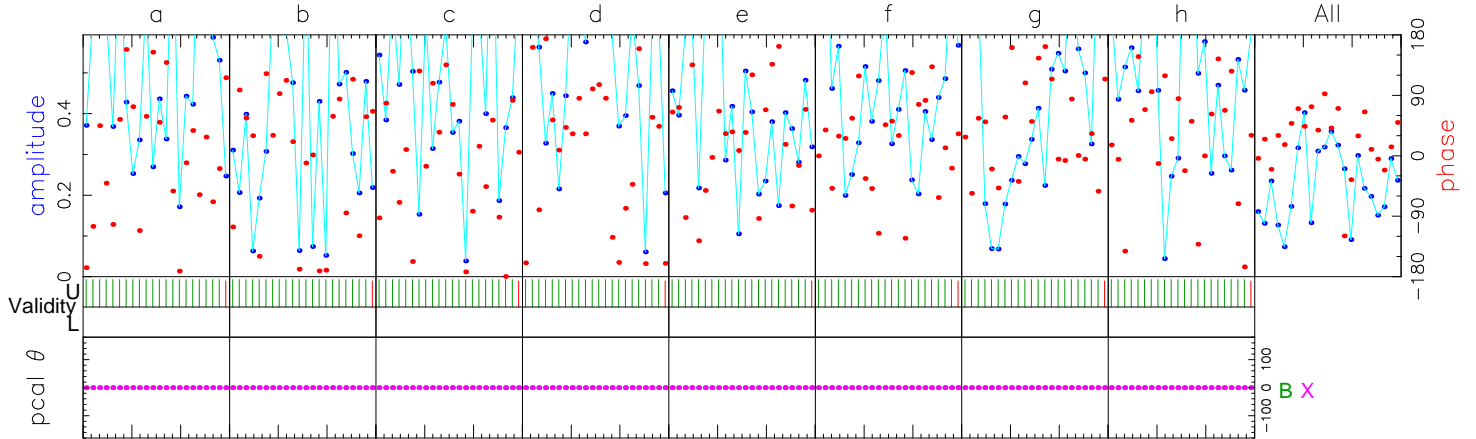
Fringe quality 0

SNR 6.4
 Int time 179.769
 Amp 0.198
 Phase 35.5
 PFD 2.4e-02
 Delays (μ s)
 SBD 0.728919
 MBD 0.006884
 Fringe rate (Hz) 0.537729
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060629
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-7.8	67.8	7.8	88.7	37.1	15.3	33.2	45.4	Phase	35.5
	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	508.5	471.2	487.1	185.0	320.0	443.4	10.7	217.9	Sbd box	443.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	

Group delay (usec)(sbd)	1.46150954456E+03	Apriori delay (usec)	1.46078391016E+03	Resid mbdelay (usec)	6.88441E-03	+/-	1.7E-04
Sband delay (usec)	1.46151282941E+03	Apriori clock (usec)	-3.8349072E+01	Resid sbdelay (usec)	7.28919E-01	+/-	1.3E-03
Phase delay (usec)	1.46078391128E+03	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	1.12035E-06	+/-	5.7E-07
Delay rate (us/s)	-8.25832306489E-02	Apriori rate (us/s)	-8.25893453704E-02	Resid rate (us/s)	6.11472E-06	+/-	5.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.02629533287E-05	Resid phase (deg)	35.5	+/-	18.0

ph/seg (deg)	RMS 47.1	Theor. 42.1	Amplitude Search (1024X32)	0.170	0.198 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	59.7	73.5	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	34.2	25.4	Inc. seg. avg.	0.202		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	20.8	44.3	Inc. frq. avg.	0.202		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 253.5 el 34.4 pa 39.5 X: az 254.0 el 29.7 pa 32.7 u,v (fr/asec) 499.681 -859.364 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BX..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BX.W.61.1JFKZ

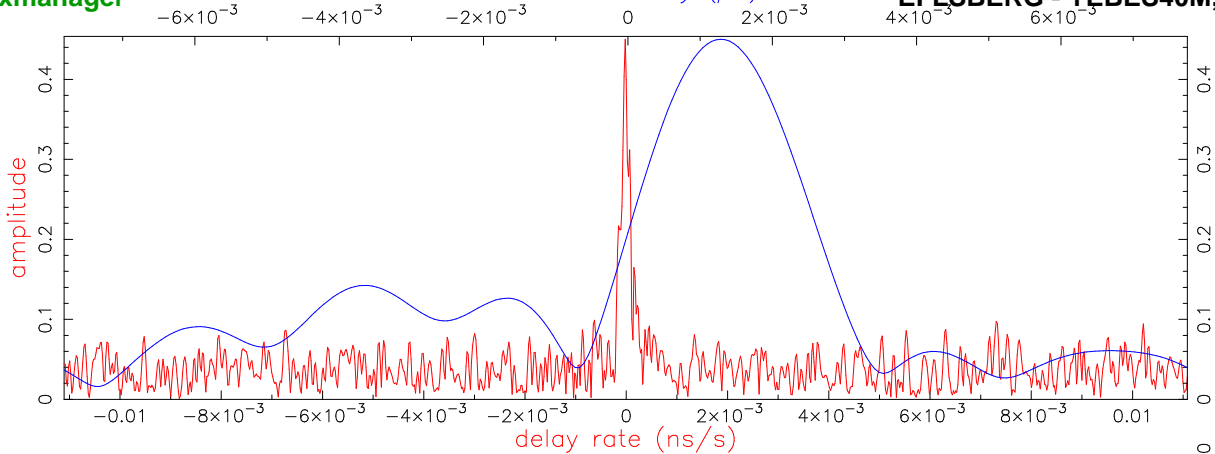
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BY

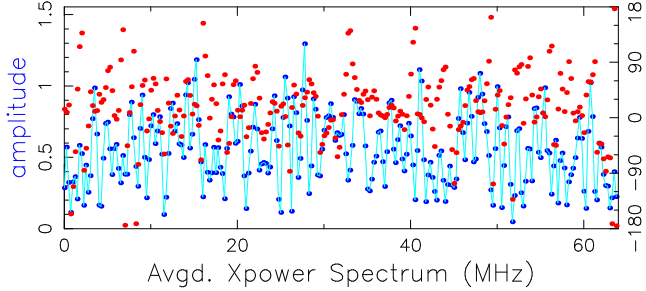
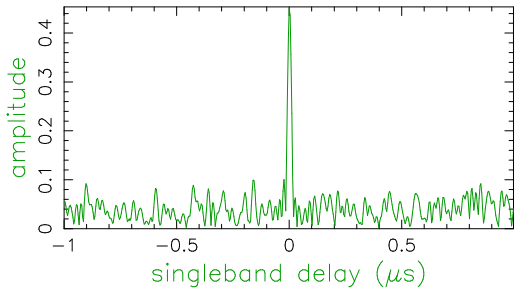
EFLSBERG - YEBES40M, fgroup W, pol RL

multiband delay (μ s)



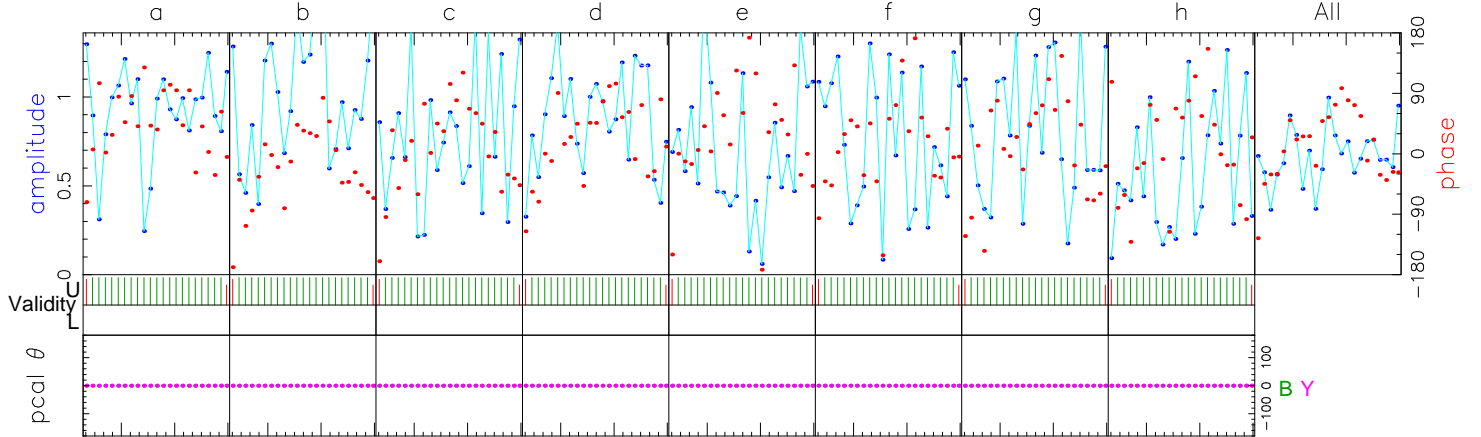
Fringe quality 9

SNR 15.8
 Int time 162.084
 Amp 0.454
 Phase 19.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001229
 MBD 0.001321
 Fringe rate (Hz)
 -0.002561
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043016.90
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060636
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	40.6	-7.3	13.4	31.3	23.7	7.9	29.9	6.3	Phase	19.2
	0.6	0.6	0.4	0.6	0.4	0.4	0.4	0.2	Ampl.	0.5
	257.0	256.9	258.0	256.6	257.6	257.5	257.9	503.0	Sbd box	257.3
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	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)	-2.76991747646E+03		Apriori delay (usec)		-2.76991879725E+03		Resid mbdelay (usec)		1.32080E-03	+/- 6.9E-05
Sband delay (usec)	-2.76991756800E+03		Apriori clock (usec)		-3.6298447E+00		Resid sbdelay (usec)		1.22925E-03	+/- 5.5E-04
Phase delay (usec)	-2.76991879665E+03		Apriori clockrate (us/s)		-3.1999999E-07		Resid phdelay (usec)		6.05971E-07	+/- 2.3E-07
Delay rate (us/s)	2.94732702745E-02		Apriori rate (us/s)		2.94732993942E-02		Resid rate (us/s)		-2.91198E-08	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86730978132E-05		Resid phase (deg)		19.2	+/- 7.3

	RMS	Theor.	Amplitude	0.454 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	51.8	17.4	Search (1024X32)	0.439	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	57.8	30.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	17.2	10.3	Inc. seg. avg.	0.638	Sample rate(MSamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	27.9	17.9	Inc. frq. avg.	0.461	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

B: az 253.5 el 34.4 pa 39.5 Y: az 252.5 el 44.1 pa 49.2 u,v (fr/asec) -171.761 1508.267 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BY..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BY.W.111.1JFKZ

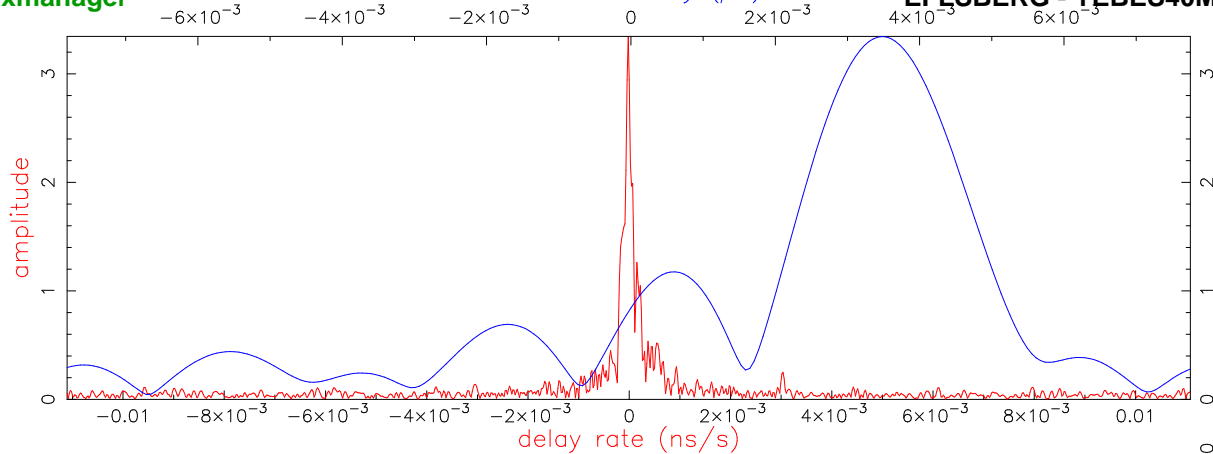
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BY

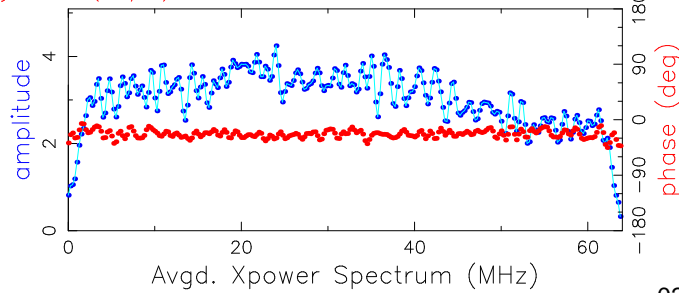
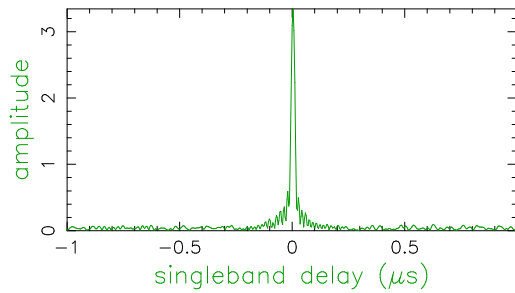
EFLSBERG - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



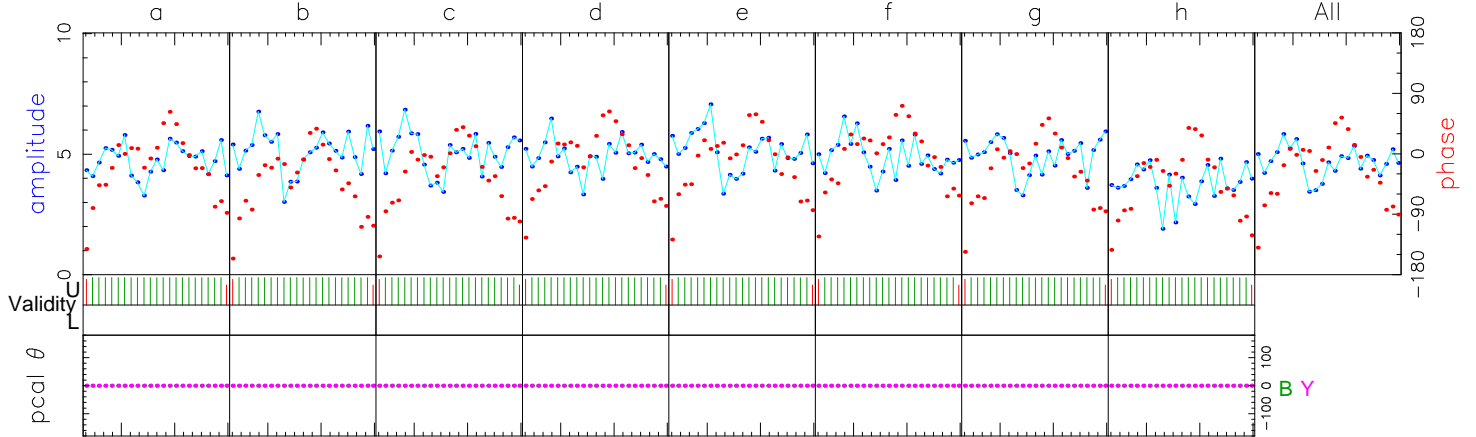
Fringe quality 4

SNR 116.5
 Int time 162.084
 Amp 3.345
 Phase -21.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003641
 MBD 0.003475
 Fringe rate (Hz)
 -0.001972
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043016.90
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060631
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-14.8	-39.4	-31.5	-9.6	-11.0	-0.1	-24.0	-43.4	Phase	-21.0
	3.4	3.7	3.5	3.5	3.7	3.6	3.5	2.7	Ampl.	3.4
	258.0	257.7	258.0	258.2	258.0	257.9	257.7	256.2	Sbd box	257.9
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	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	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.76991532249E+03	Apriori delay (usec)	-2.76991879725E+03	Resid mbdelay (usec)	3.47476E-03	+/-	9.3E-06
Sband delay (usec)	-2.76991515575E+03	Apriori clock (usec)	-3.6298447E+00	Resid sbdelay (usec)	3.64150E-03	+/-	7.4E-05
Phase delay (usec)	-2.76991879792E+03	Apriori clockrate (us/s)	-3.1999999E-07	Resid phdelay (usec)	-6.62761E-07	+/-	3.1E-08
Delay rate (us/s)	2.94732769749E-02	Apriori rate (us/s)	2.94732993942E-02	Resid rate (us/s)	-2.24193E-08	+/-	3.3E-10
Total phase (deg)	-32.0	Apriori accel (us/s/s)	1.86730978132E-05	Resid phase (deg)	-21.0	+/-	1.0

ph/seg (deg)	46.5	RMS	2.4	Theor.	3.345 +/- 0.029	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	43.9	Search (1024X32)	3.337	Amplitude	3.345 +/- 0.029	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	16.7	Inc. seg. avg.	4.684	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	9.6	Inc. frq. avg.	3.447	Inc. seg. avg.	4.684	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	3.447	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 253.5 el 34.4 pa 39.5 Y: az 252.5 el 44.1 pa 49.2 u,v (fr/asec) -171.761 1508.267 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BY..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BY.W.76.1JFKZ

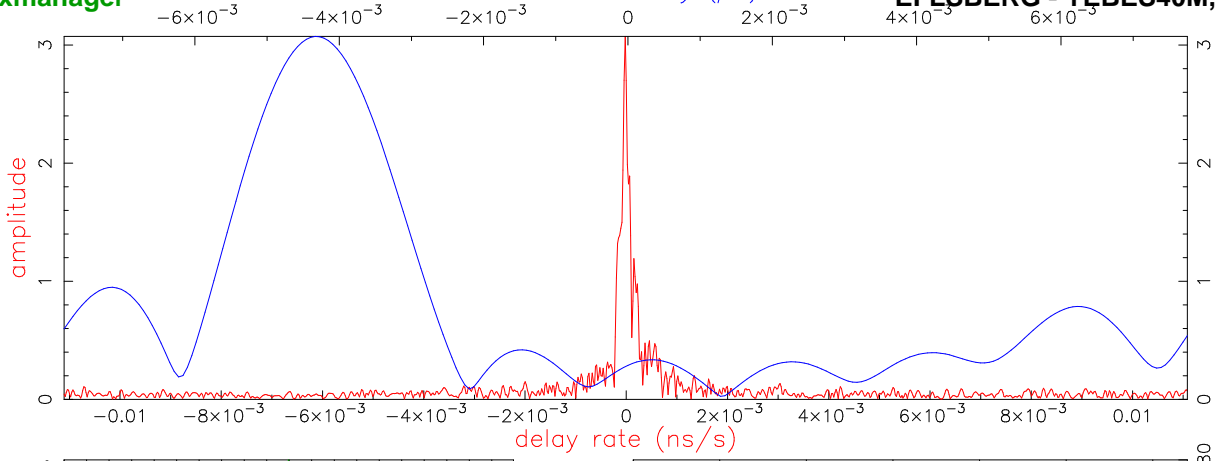
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

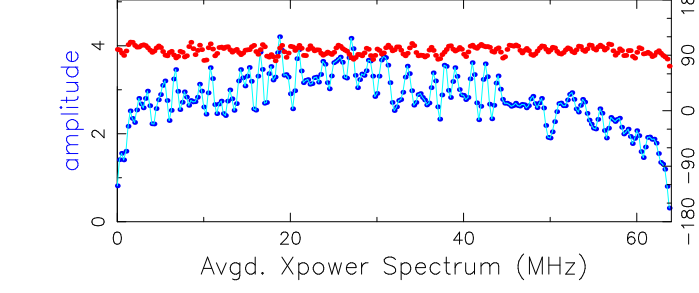
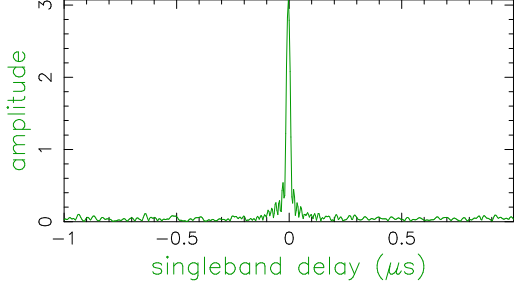
0235+164.1JFKZ, No0038, BY

EFLSBERG - YEBES40M, fgroup W, pol RR

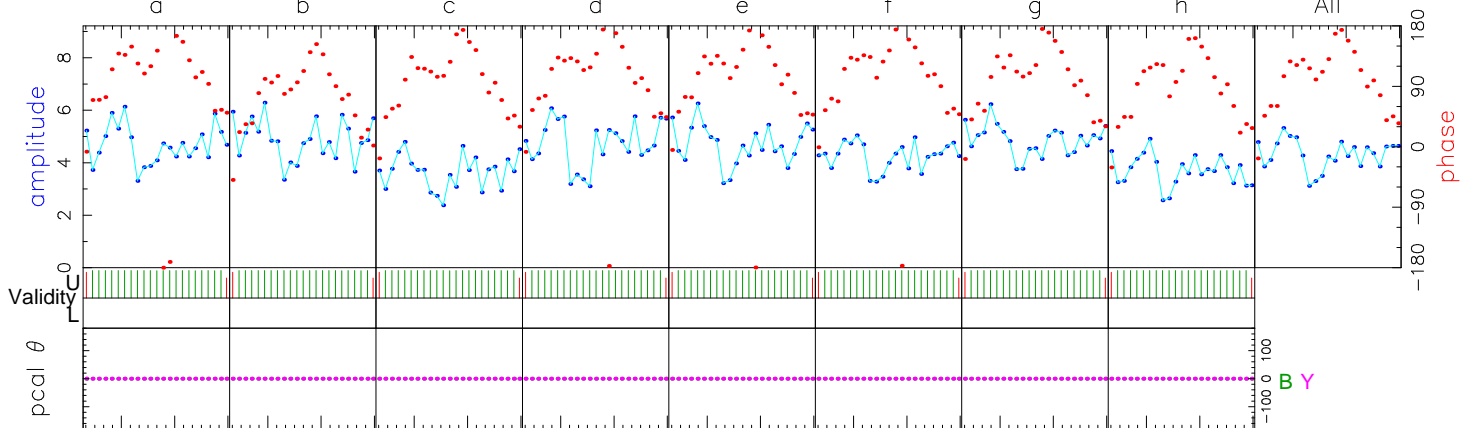
multiband delay (μ s)



Fringe quality 4
 SNR 107.0
 Int time 162.084
 Amp 3.073
 Phase 100.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.004075
 MBD -0.004323
 Fringe rate (Hz)
 -0.002001
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043016.90
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060632
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	112.7	76.0	97.2	107.7	106.3	110.1	99.0	90.9	Phase	100.4
	3.4	3.4	2.6	3.4	3.4	3.1	3.4	2.6	Ampl.	3.1
	255.7	255.5	256.4	255.8	256.0	256.0	256.1	254.9	Sbd box	256.0
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	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	
									Tracks	
Group delay (usec)(sbd)	-2.76992312040E+03		Apriori delay (usec)		-2.76991879725E+03		Resid mbdelay (usec)		-4.32314E-03	+/- 1.0E-05
Sband delay (usec)	-2.76992287225E+03		Apriori clock (usec)		-3.6298447E+00		Resid sbdelay (usec)		-4.07500E-03	+/- 8.1E-05
Phase delay (usec)	-2.76991879408E+03		Apriori clockrate (us/s)		-3.1999999E-07		Resid phdelay (usec)		3.16986E-06	+/- 3.4E-08
Delay rate (us/s)	2.94732766431E-02		Apriori rate (us/s)		2.94732993942E-02		Resid rate (us/s)		-2.27511E-08	+/- 3.6E-10
Total phase (deg)			Apriori accel (us/s/s)		1.86730978132E-05		Resid phase (deg)		100.4	+/- 1.1

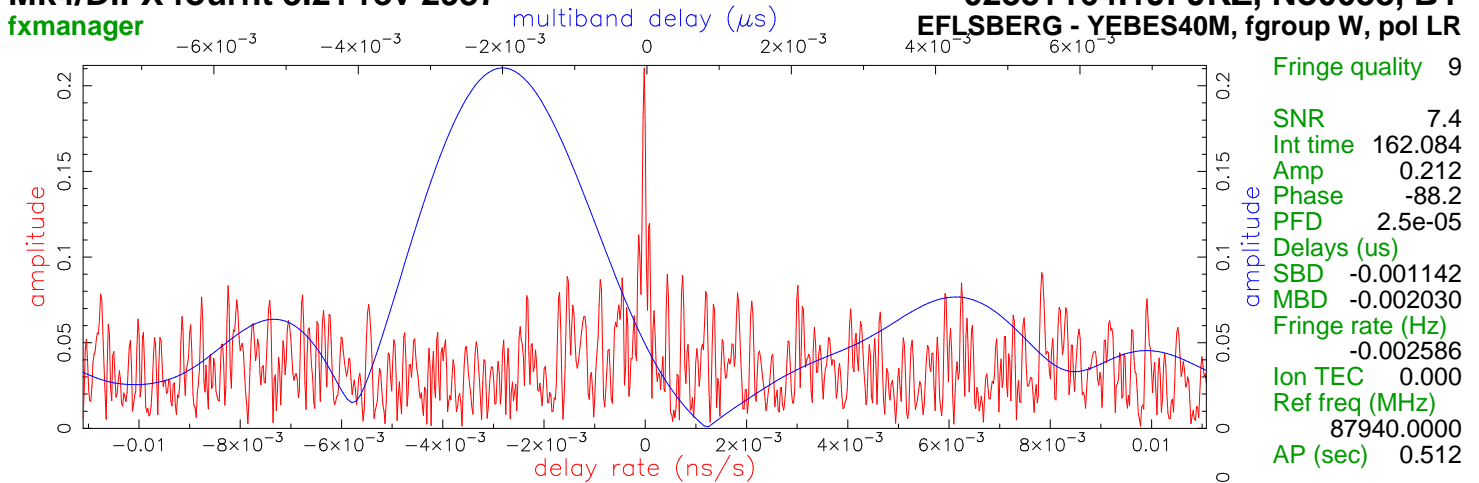
ph/seg (deg) 46.1 2.6 Search (1024X32) 3.063 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.5 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.1 1.5 Inc. seg. avg. 4.320 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.2 2.6 Inc. frq. avg. 3.135 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 253.5 el 34.4 pa 39.5 Y: az 252.5 el 44.1 pa 49.2 u,v (fr/asec) -171.761 1508.267 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BY..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BY.W.84.1JFKZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BY

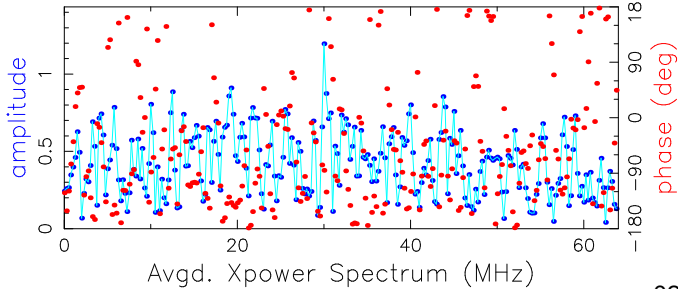
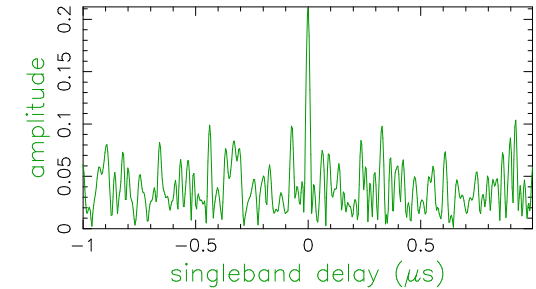
EFLSBERG - YEBES40M, fgroup W, pol LR



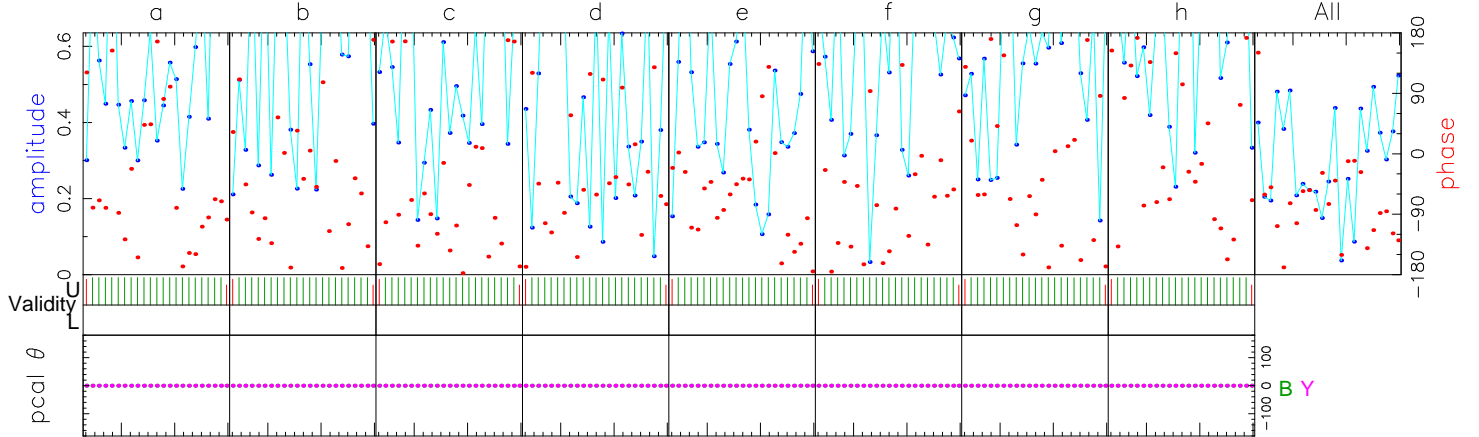
Fringe quality 9

SNR 7.4
 Int time 162.084
 Amp 0.212
 Phase -88.2
 PFD 2.5e-05
 Delays (us)
 SBD -0.001142
 MBD -0.002030
 Fringe rate (Hz)
 -0.002586
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043016.90
 Stop 043300.22
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060634
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-101.1	-61.8	-128.5	-68.1	-65.7	-89.7	-80.7	-127.1	Phase	-88.2
	0.3	0.2	0.3	0.3	0.3	0.3	0.1	0.1	Ampl.	0.2
	258.1	30.2	257.1	100.0	256.8	256.0	323.6	287.1	Sbd box	256.7
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.76992082743E+03		Apriori delay (usec)		-2.76991879725E+03		Resid mbdelay (usec)		-2.03017E-03	+/- 1.5E-04
Sband delay (usec)	-2.76991993925E+03		Apriori clock (usec)		-3.6298447E+00		Resid sbdelay (usec)		-1.14200E-03	+/- 1.2E-03
Phase delay (usec)	-2.76991880004E+03		Apriori clockrate (us/s)		-3.1999999E-07		Resid phdelay (usec)		-2.78715E-06	+/- 4.9E-07
Delay rate (us/s)	2.94732699885E-02		Apriori rate (us/s)		2.94732993942E-02		Resid rate (us/s)		-2.94057E-08	+/- 5.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86730978132E-05		Resid phase (deg)		-88.2	+/- 15.5

	RMS	Theor.	Amplitude	0.212 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.1	37.2	Search (1024X32)	0.206	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.1	65.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	28.8	22.0	Inc. seg. avg.	0.252	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	33.8	38.3	Inc. frq. avg.	0.215	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

B: az 253.5 el 34.4 pa 39.5 Y: az 252.5 el 44.1 pa 49.2 u,v (fr/asec) -171.761 1508.267 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BY..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BY.W.93.1JFKZ

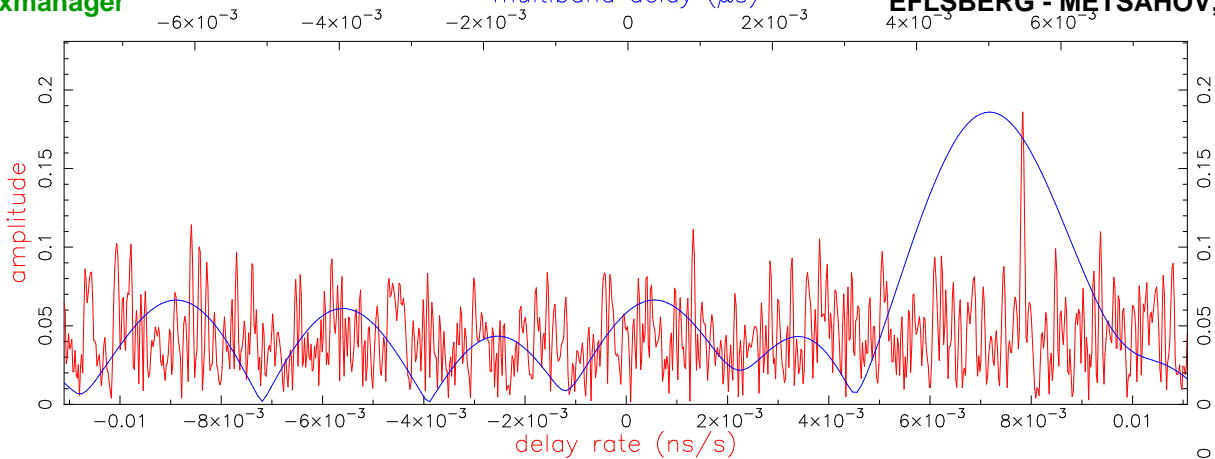
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BZ

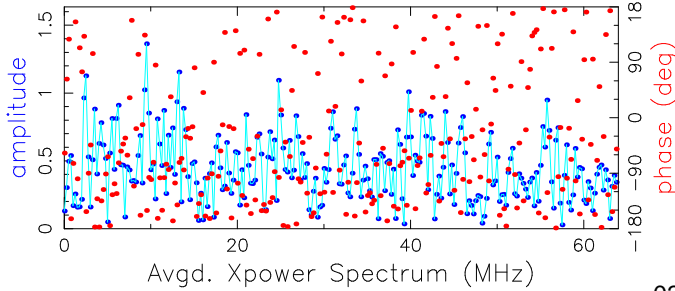
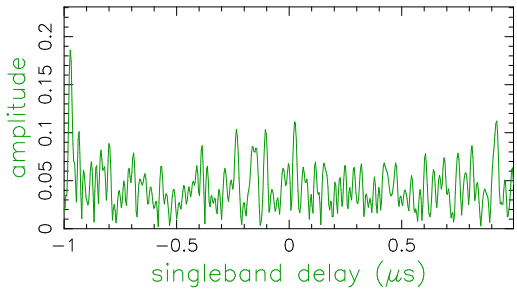
EFLSBERG - METSAHOV, fgroup W, pol RL

multiband delay (μ s)



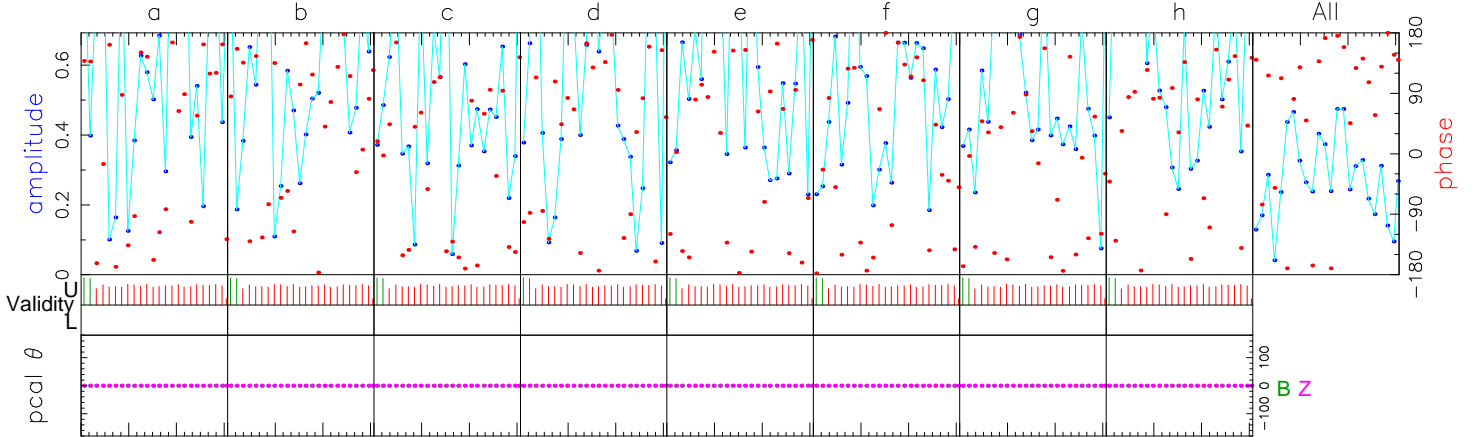
Fringe quality 0

SNR 5.8
 Int time 128.976
 Amp 0.231
 Phase 139.3
 PFD 5.8e-01
 Delays (us)
 SBD -0.972016
 MBD 0.005022
 Fringe rate (Hz)
 0.689262
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Yr:day 16383
 Start 2021:039:055416
 Stop 2021:039:060636
 FRT 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	137.8	127.3	130.8	149.9	145.7	160.5	134.1	121.5	Phase	139.3
	0.4	0.2	0.3	0.3	0.3	0.2	0.1	0.3	Ampl.	0.2
	161.2	459.6	384.1	483.1	9.9	317.9	31.8	461.1	Sbd box	8.2
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	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	

Group delay (usec)(sbd)	3.80039012631E+03	Apriori delay (usec)	3.80136947960E+03	Resid mbdelay (usec)	5.02171E-03	+/-	1.9E-04
Sband delay (usec)	3.80039746360E+03	Apriori clock (usec)	9.9308796E+00	Resid sbdelay (usec)	-9.72016E-01	+/-	1.5E-03
Phase delay (usec)	3.80136948400E+03	Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	4.40096E-06	+/-	6.3E-07
Delay rate (us/s)	-7.53775277504E-02	Apriori rate (us/s)	-7.53853656177E-02	Resid rate (us/s)	7.83787E-06	+/-	6.1E-09
Total phase (deg)	152.3	Apriori accel (us/s/s)	-2.32822299643E-05	Resid phase (deg)	139.3	+/-	19.8

ph/seg (deg)	65.1	Theor.	48.3	Amplitude	0.231 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	79.0	Search (1024X32)	0.182	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	13.9	Inc. seg. avg.	0.248	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	39.2	Inc. frq. avg.	0.210	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
				Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 253.5 el 34.4 pa 39.5 Z: az 263.9 el 22.8 pa 31.0 u,v (fr/asec) 449.340 -1394.422 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BZ..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BZ.W.114.1JFKZ

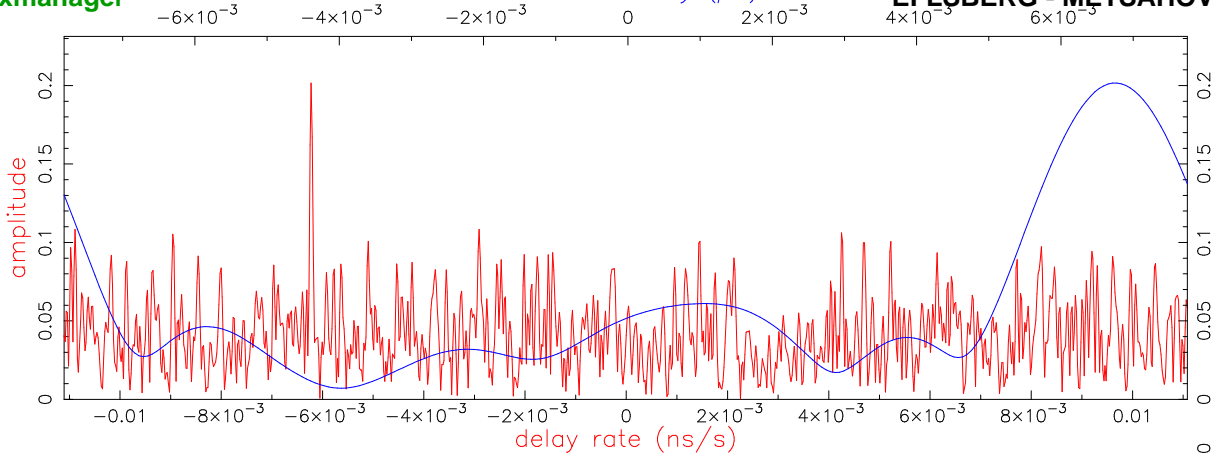
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BZ

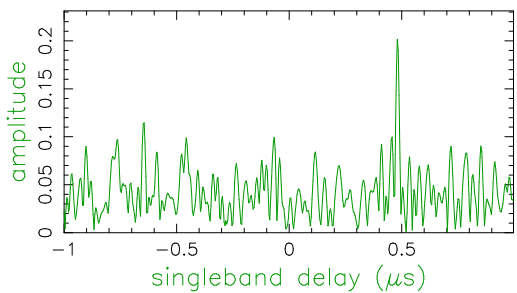
EFLSBERG - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

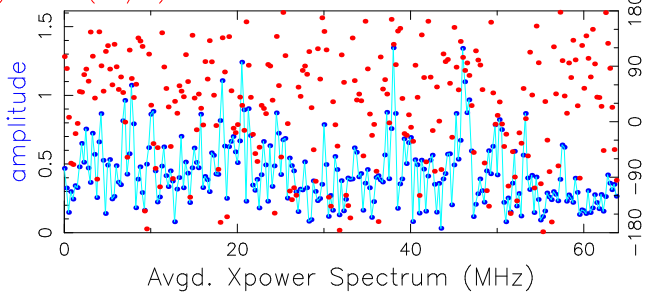


Fringe quality 0

SNR 6.3
Int time 128.976
Amp 0.231
Phase 128.7
PFD 4.2e-02
Delays (us)
SBD 0.481297
MBD 0.006772
Fringe rate (Hz)
-0.547747
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512

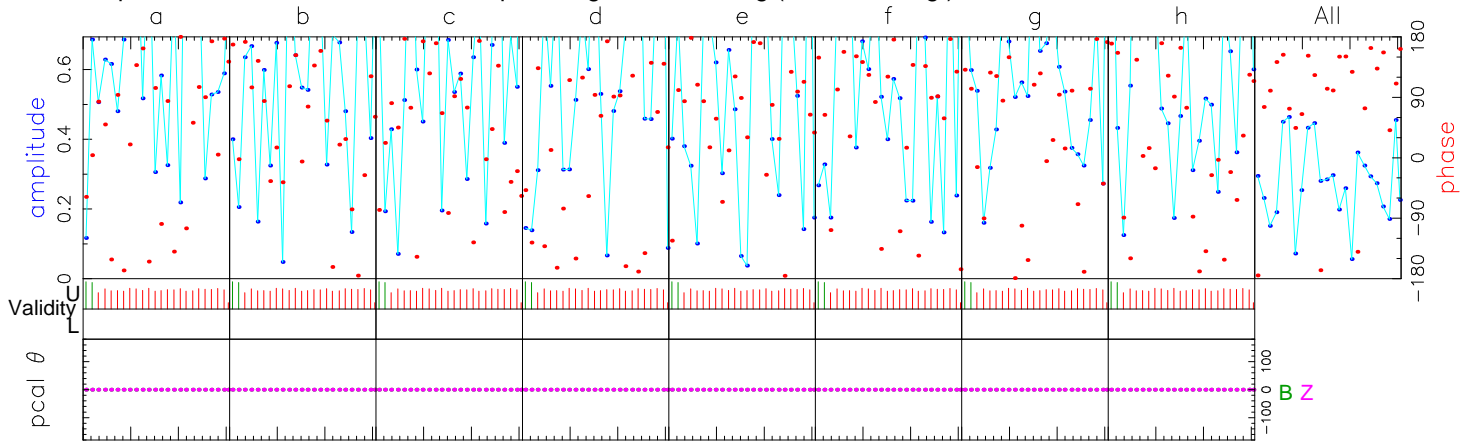


singleband delay (μ s)



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 043000.00
Stop 043259.20
FRT 043130.00
Corr/FF/build
2021:039:055416
2021:039:060631
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	147.3	104.9	144.5	147.2	100.4	138.7	119.4	136.8	Phase	128.7
B	0.2	0.2	0.1	0.3	0.3	0.4	0.3	0.2	Ampl.	0.2
Z	143.6	400.1	454.4	379.8	474.8	379.8	285.1	395.4	Sbd box	380.2
B:Z	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
B: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)	3.80184500174E+03	Apriori delay (usec)	3.80136947960E+03	Resid mbdelay (usec)	6.77214E-03	+/-	1.7E-04
Sband delay (usec)	3.80185077685E+03	Apriori clock (usec)	9.9308796E+00	Resid sbdelay (usec)	4.81297E-01	+/-	1.4E-03
Phase delay (usec)	3.80136948366E+03	Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	4.06395E-06	+/-	5.8E-07
Delay rate (us/s)	-7.53915942586E-02	Apriori rate (us/s)	-7.53853656177E-02	Resid rate (us/s)	-6.22864E-06	+/-	5.6E-09
Total phase (deg)	141.6	Apriori accel (us/s/s)	-2.32822299643E-05	Resid phase (deg)	128.7	+/-	18.2

ph/seg (deg)	46.9	RMS	44.4	Theor.	44.4	Amplitude	0.231 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	66.5	Search (1024X32)	0.199	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	20.7	Inc. seg. avg.	0.244	Inc. frq. avg.	0.220	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	31.6	Inc. frq. avg.	0.220	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
B: az 253.5 el 34.4 pa 39.5	Z: az 263.9 el 22.8 pa 31.0	u, v (fr/asec)	449.340 -1394.422	ion window (TEC)	0.00	0.00					

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BZ..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BZ.W.79.1JFKZ simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

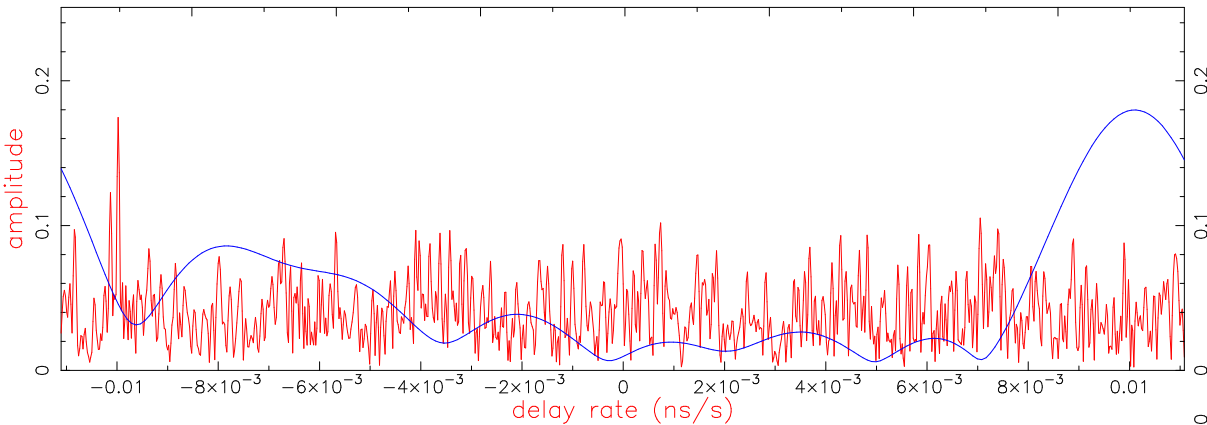
0235+164.1JFKZ, No0038, BZ

EFLSBERG - METSAHOV, fgroup W, pol RR

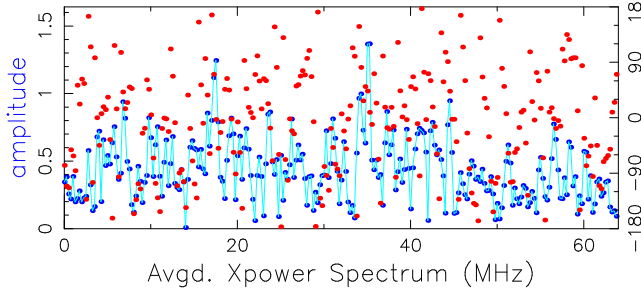
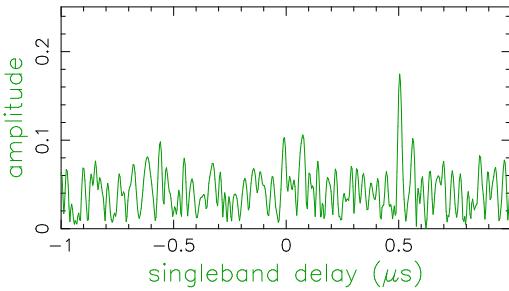
multiband delay (μ s)

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

Fringe quality 0

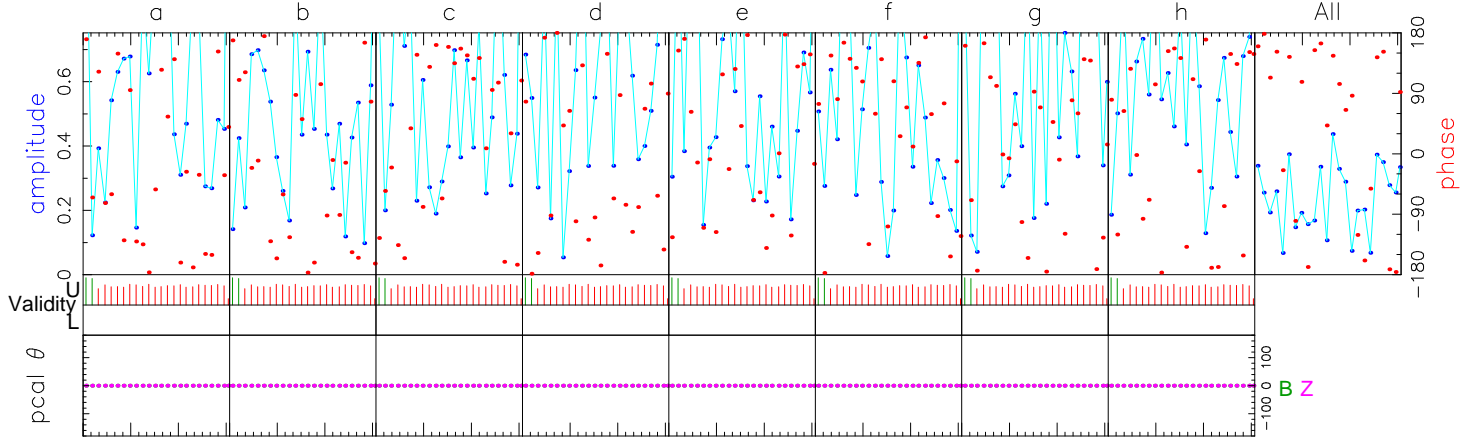


SNR 5.4
Int time 128.976
Amp 0.251
Phase 152.1
PFD 1.0e+00
Delays (us)
SBD 0.504582
MBD -0.008301
Fringe rate (Hz)
-0.879320
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 043000.00
Stop 043259.20
FRT 043130.00
Corr/FF/build
2021:039:055416
2021:039:060633
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	179.3	166.1	161.8	-176.6	121.1	119.5	131.4	159.2	Phase	152.1
	0.2	0.1	0.3	0.3	0.1	0.3	0.4	0.3	Ampl.	0.2
	261.8	90.0	151.6	425.4	440.8	284.1	447.7	122.9	Sbd box	386.2
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.80187680382E+03		Apriori delay (usec)		3.80136947960E+03		Resid mbdelay (usec)		-8.30078E-03	+/- 2.0E-04
Sband delay (usec)	3.80187406185E+03		Apriori clock (usec)		9.9308796E+00		Resid sbdelay (usec)		5.04582E-01	+/- 1.6E-03
Phase delay (usec)	3.80136948441E+03		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		4.80451E-06	+/- 6.7E-07
Delay rate (us/s)	-7.53953647097E-02		Apriori rate (us/s)		-7.53853656177E-02		Resid rate (us/s)		-9.99909E-06	+/- 6.5E-09
Total phase (deg)	165.1		Apriori accel (us/s/s)		-2.32822299643E-05		Resid phase (deg)		152.1	+/- 21.1

	RMS	Theor.	Amplitude	0.251 +/- 0.046	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	68.1	51.4	Search (1024X32)	0.177	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.1	89.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	27.4	29.8	Inc. seg. avg.	0.246	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.7	52.0	Inc. frq. avg.	0.240	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 253.5 el 34.4 pa 39.5 Z: az 263.9 el 22.8 pa 31.0 u,v (fr/asec) 449.340 -1394.422 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BZ..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BZ.W.86.1JFKZ

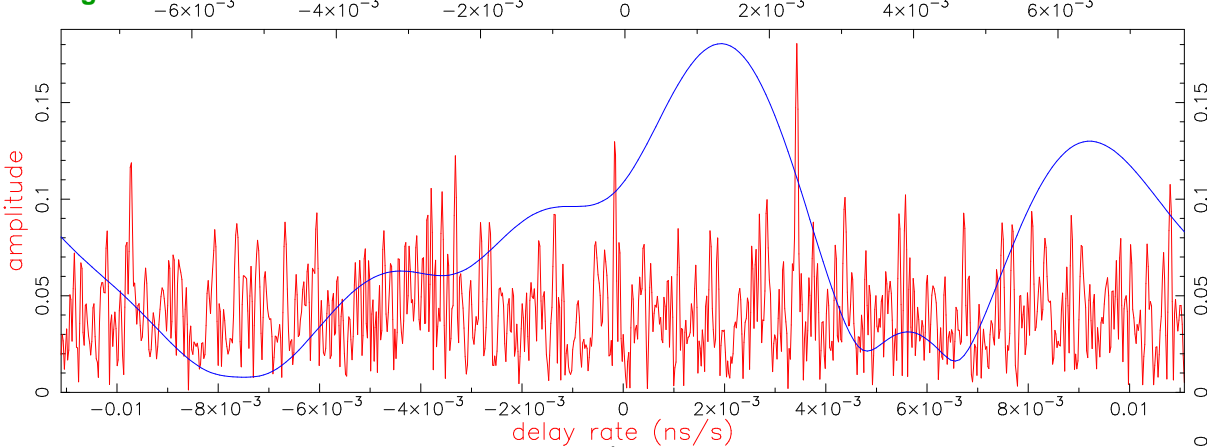
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFKZ, No0038, BZ

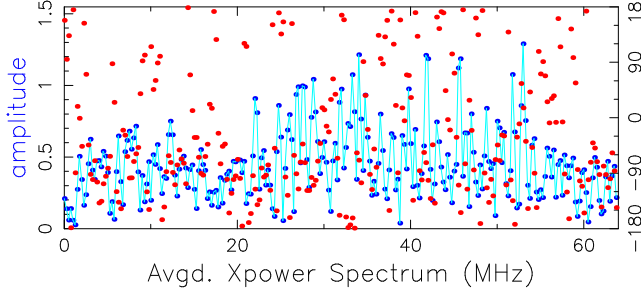
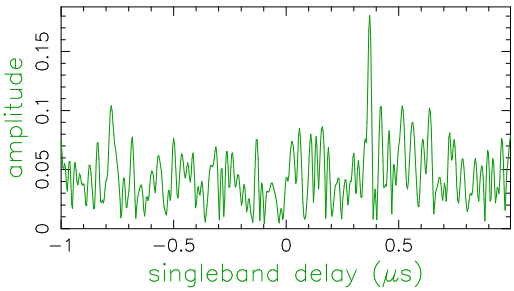
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



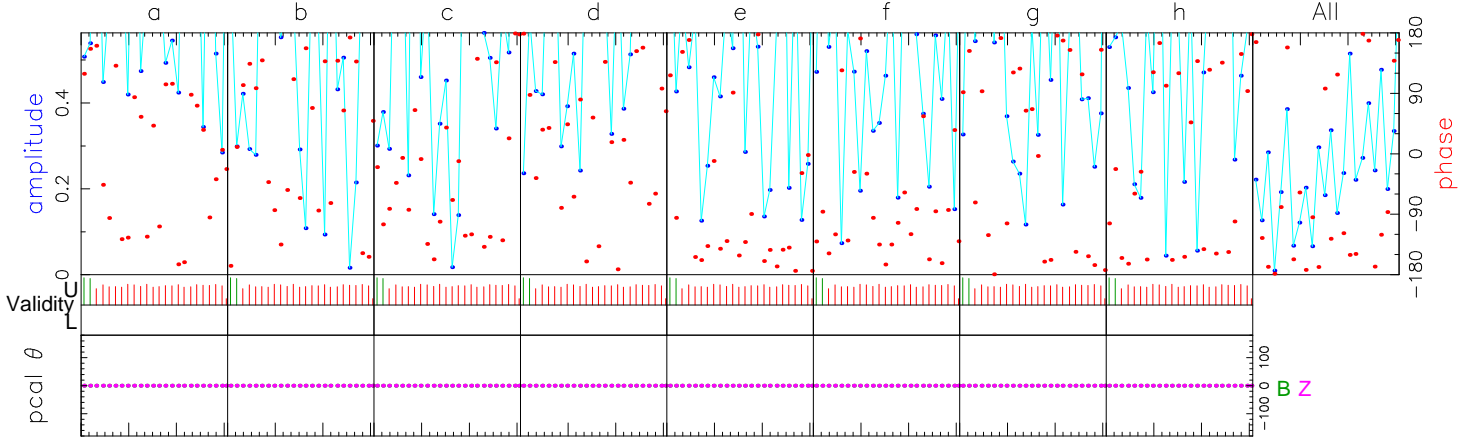
Fringe quality 0

SNR 5.6
 Int time 128.976
 Amp 0.188
 Phase -162.3
 PFD 9.2e-01
 Delays (us)
 SBD 0.370753
 MBD 0.001320
 Fringe rate (Hz) 0.301275
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 043000.00
 Stop 043259.20
 FRT 043130.00
 Corr/FF/build
 2021:039:055416
 2021:039:060635
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	155.9	-167.1	-109.9	118.4	-159.4	-105.1	172.6	-177.2	Phase	-162.3
	0.1	0.1	0.2	0.1	0.3	0.4	0.4	0.3	Ampl.	0.2
	110.5	362.4	52.8	442.2	352.0	471.1	352.1	348.9	Sbd box	351.9
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	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)	3.80174579977E+03		Apriori delay (usec)	3.80136947960E+03	Resid mbdelay (usec)	1.32017E-03	+/-	1.9E-04		
Sband delay (usec)	3.80174023285E+03		Apriori clock (usec)	9.9308796E+00	Resid sbdelay (usec)	3.70753E-01	+/-	1.5E-03		
Phase delay (usec)	3.80136947448E+03		Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	-5.12525E-06	+/-	6.5E-07		
Delay rate (us/s)	-7.53819397036E-02		Apriori rate (us/s)	-7.53853656177E-02	Resid rate (us/s)	3.42591E-06	+/-	6.3E-09		
Total phase (deg)		-149.3	Apriori accel (us/s/s)	-2.32822299643E-05	Resid phase (deg)	-162.3	+/-	20.4		

	RMS	Theor.	Amplitude	0.188 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	50.1	49.8	Search (1024X32)	0.179	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	82.1	87.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	49.9	28.9	Inc. seg. avg.	0.184	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	62.8	50.4	Inc. frq. avg.	0.213	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 253.5 el 34.4 pa 39.5 Z: az 263.9 el 22.8 pa 31.0 u,v (fr/asec) 449.340 -1394.422 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0038/BZ..1JFKZ Output file: /Exps/c202c/v1/1234/No0038/BZ.W.98.1JFKZ