

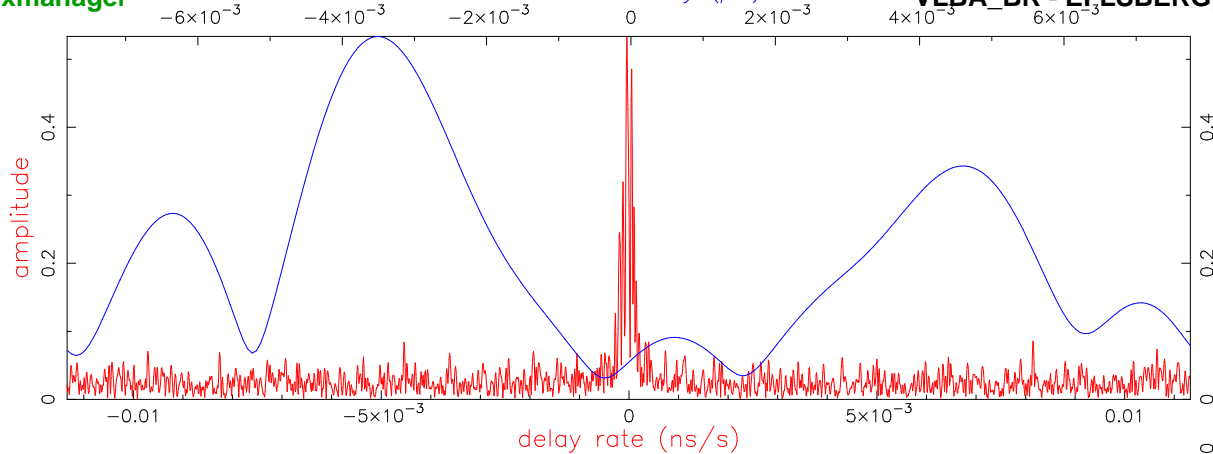
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, bB

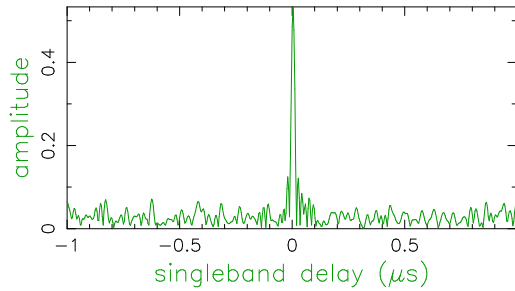
VLBA_BR - EFLSBERG, fgroup W, pol RR

multiband delay (μ s)

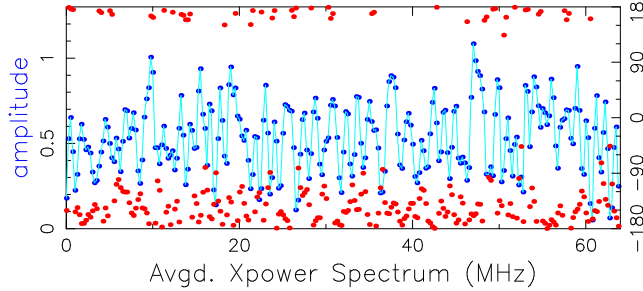


Fringe quality 6

SNR 26.5
 Int time 329.973
 Amp 0.533
 Phase -73.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.003741
 MBD -0.003510
 Fringe rate (Hz)
 -0.003782
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

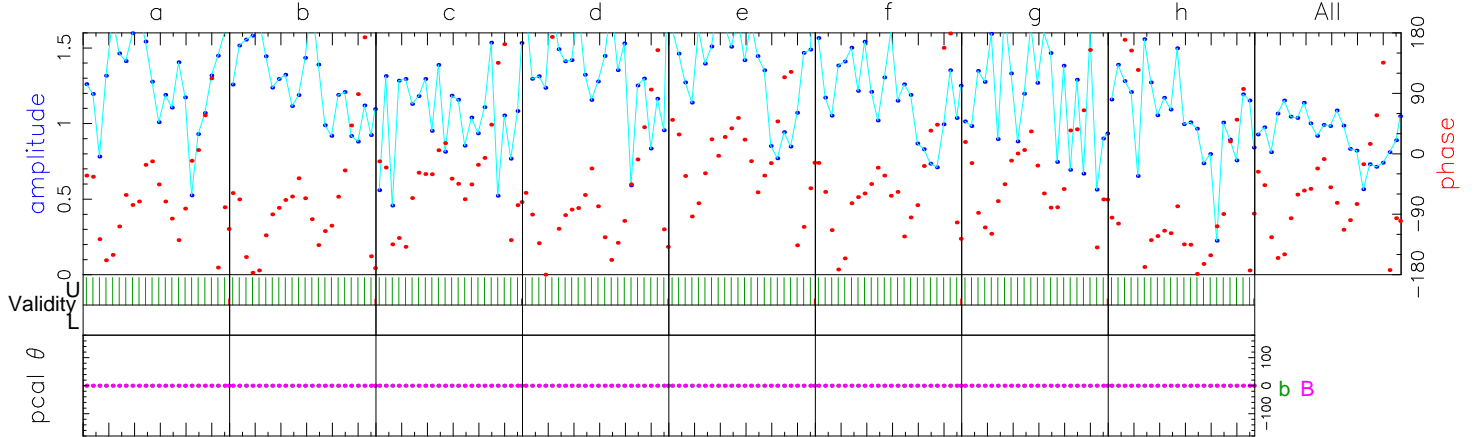


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044457
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-77.9	-101.1	-42.2	-103.8	-6.1	-75.4	-40.3	-141.4	Phase	-73.3
	0.7	0.8	0.6	0.8	0.8	0.7	0.6	0.6	Ampl.	0.7
	257.8	258.0	257.8	257.4	257.1	257.5	256.5	256.9	Sbd box	258.0
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	
									Tracks	
Group delay (usec)(sbd)	-5.57257927270E+03		Apriori delay (usec)		-5.57257576291E+03		Resid mbdelay (usec)		-3.50980E-03	+/- 4.1E-05
Sband delay (usec)	-5.57257202166E+03		Apriori clock (usec)		1.9095734E+01		Resid sbdelay (usec)		3.74125E-03	+/- 3.3E-04
Phase delay (usec)	-5.57257576527E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-2.36251E-06	+/- 1.4E-07
Delay rate (us/s)	1.53631522716E+00		Apriori rate (us/s)		1.53631527106E+00		Resid rate (us/s)		-4.39008E-08	+/- 7.3E-10
Total phase (deg)			Apriori accel (us/s/s)		2.82457736951E-05		Resid phase (deg)		-73.3	+/- 4.3

ph/seg (deg) 63.9 10.4 Search (2048X32) 0.532 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.7 18.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.4 6.1 Inc. seg. avg. 0.906 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.0 10.7 Inc. frq. avg. 0.685 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 77.0 el 28.1 pa -47.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) -10008.211 1077.853 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/bB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/bB.W.21.1W8CZP

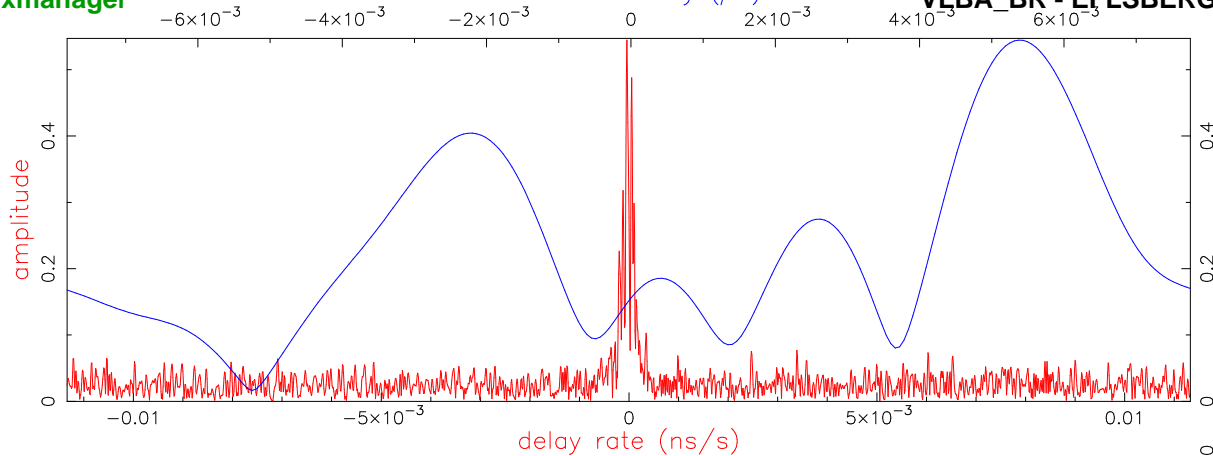
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, bB

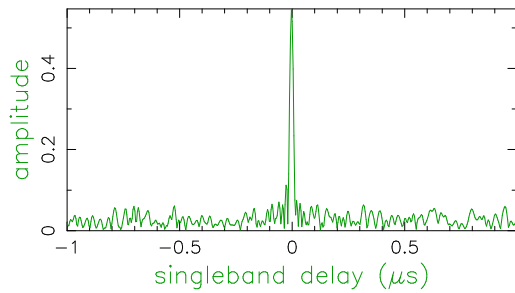
VLBA_BR - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)

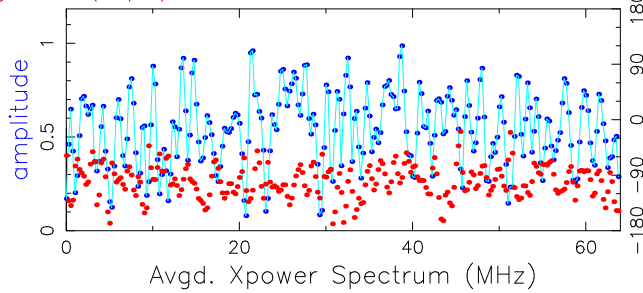


Fringe quality 6

SNR 27.2
 Int time 329.973
 Amp 0.547
 Phase 161.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.003027
 MBD 0.005411
 Fringe rate (Hz)
 -0.003888
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

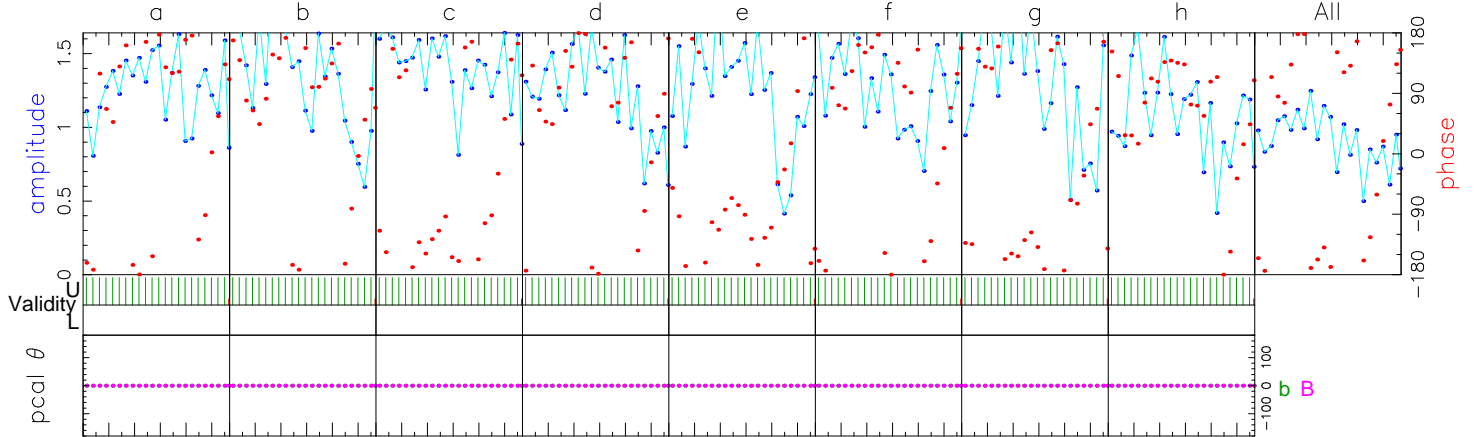


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044454
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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)	-5.57258597705E+03	Apriori delay (usec)	-5.57257576291E+03	Resid mbdelay (usec)	5.41086E-03	+/-	4.0E-05
Sband delay (usec)	-5.57257879041E+03	Apriori clock (usec)	1.9095734E+01	Resid sbdelay (usec)	-3.02750E-03	+/-	3.2E-04
Phase delay (usec)	-5.57257575769E+03	Apriori clockrate (us/s)	-9.999998E-08	Resid phdelay (usec)	5.21842E-06	+/-	1.4E-07
Delay rate (us/s)	1.53631522592E+00	Apriori rate (us/s)	1.53631527106E+00	Resid rate (us/s)	-4.51387E-08	+/-	7.1E-10
Total phase (deg)		Apriori accel (us/s/s)	2.82457736951E-05	Resid phase (deg)	161.8	+/-	4.2

ph/seg (deg)	61.4	RMS	10.1	Theor.	10.1	Amplitude	0.547 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.6	Search (2048X32)	0.544	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	51.5	Inc. seg. avg.	0.908	Inc. frq. avg.	0.739	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	38.9	Inc. frq. avg.	0.739	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00		

b: az 77.0 el 28.1 pa -47.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) -10008.211 1077.853 simultaneous interpolator

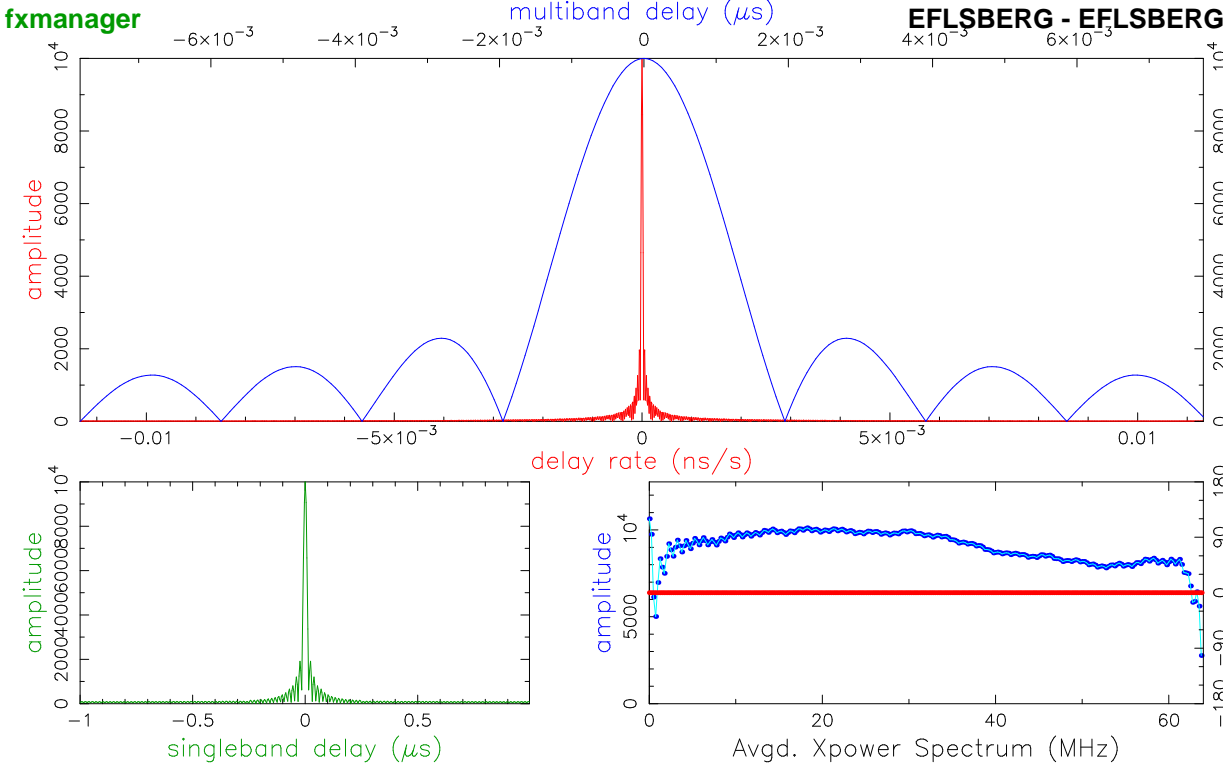
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/bB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/bB.W.2.1W8CZP

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fxmanager

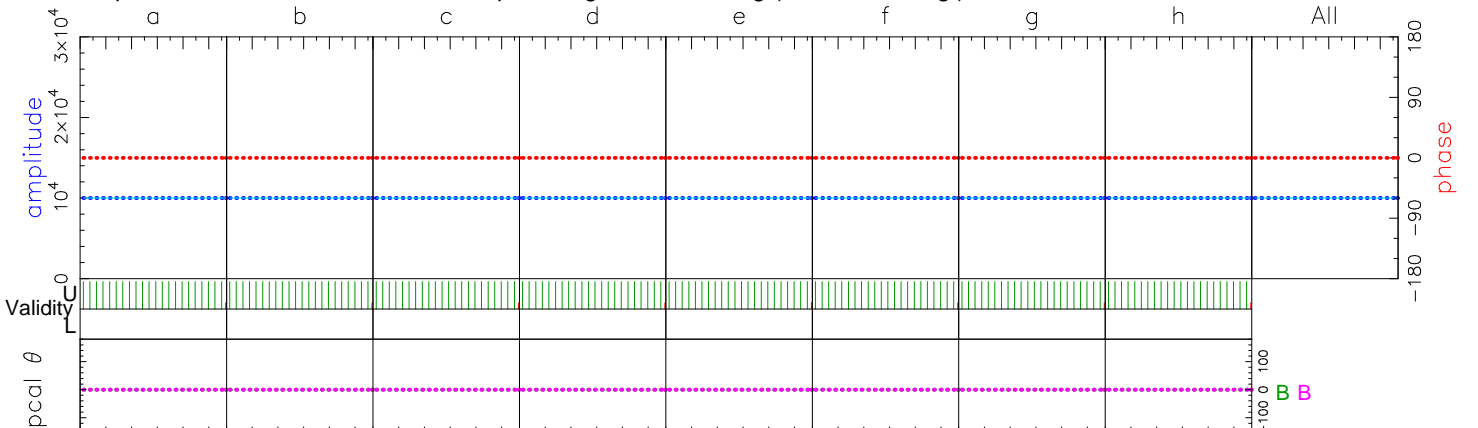
0234+285.1W8CZP, No0029, BB

EFLSBERG - EFLSBERG, fgroup W, pol RR



Fringe quality 9
 SNR 496748.6
 Int time 329.973
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044458
 2021:252:122852
 RA & Dec (J2000) 02h37m52.405678s +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	
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	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 2.2E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.7E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 7.4E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 3.9E-14
Total phase (deg)			0.0						Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 B: az 257.0 el 48.5 pa 44.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BB.W.24.1W8CZP simultaneous interpolator

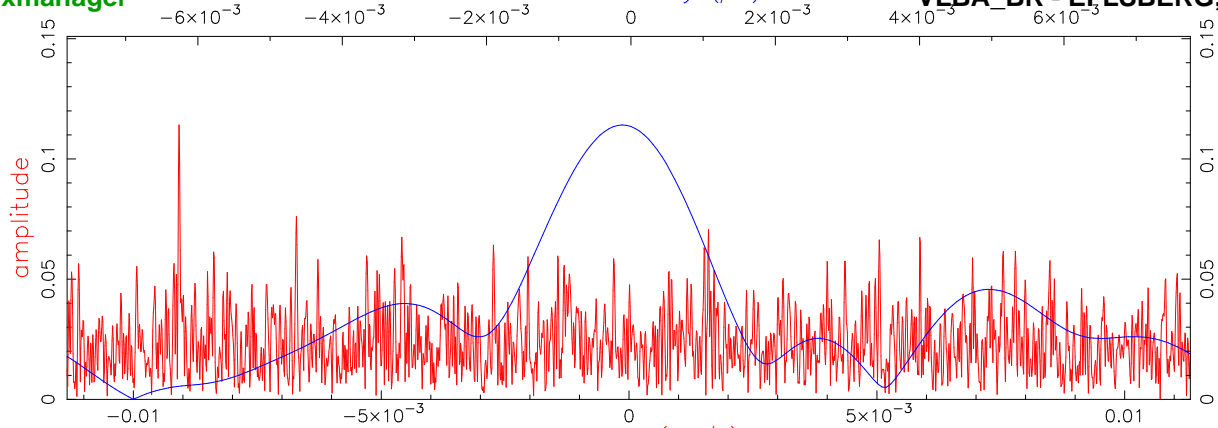
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, bB

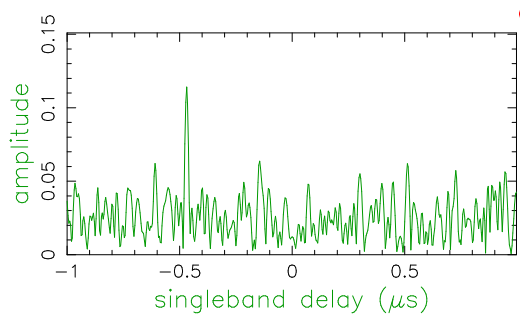
VLBA_BR - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)

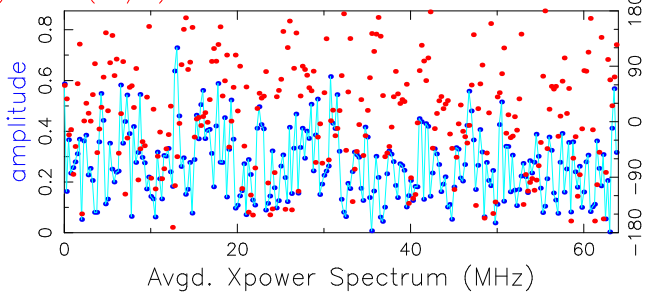


Fringe quality 0

SNR 5.7
 Int time 329.973
 Amp 0.151
 Phase 21.2
 PFD 9.7e-01
 Delays (us)
 SBD -0.468839
 MBD -0.000120
 Fringe rate (Hz)
 -0.782981
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

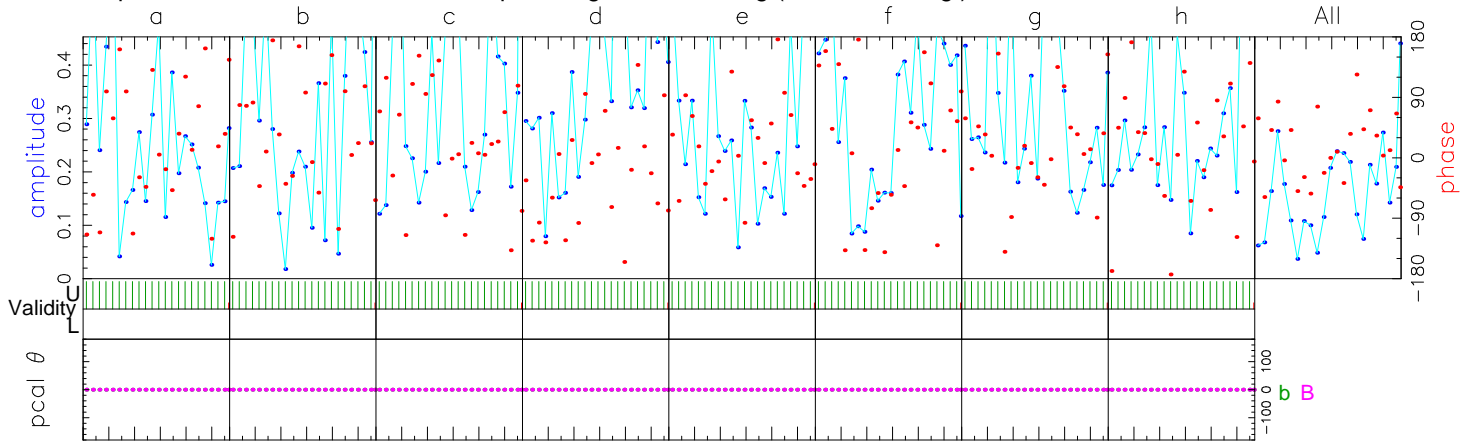


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044501
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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)	-5.57304463291E+03									
Sband delay (usec)	-5.57304460241E+03									
Phase delay (usec)	-5.57257576222E+03									
Delay rate (us/s)	1.53630618143E+00									
Total phase (deg)			-56.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
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 77.0 el 28.1 pa -47.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) -10008.211 1077.853 simultaneous interpolator

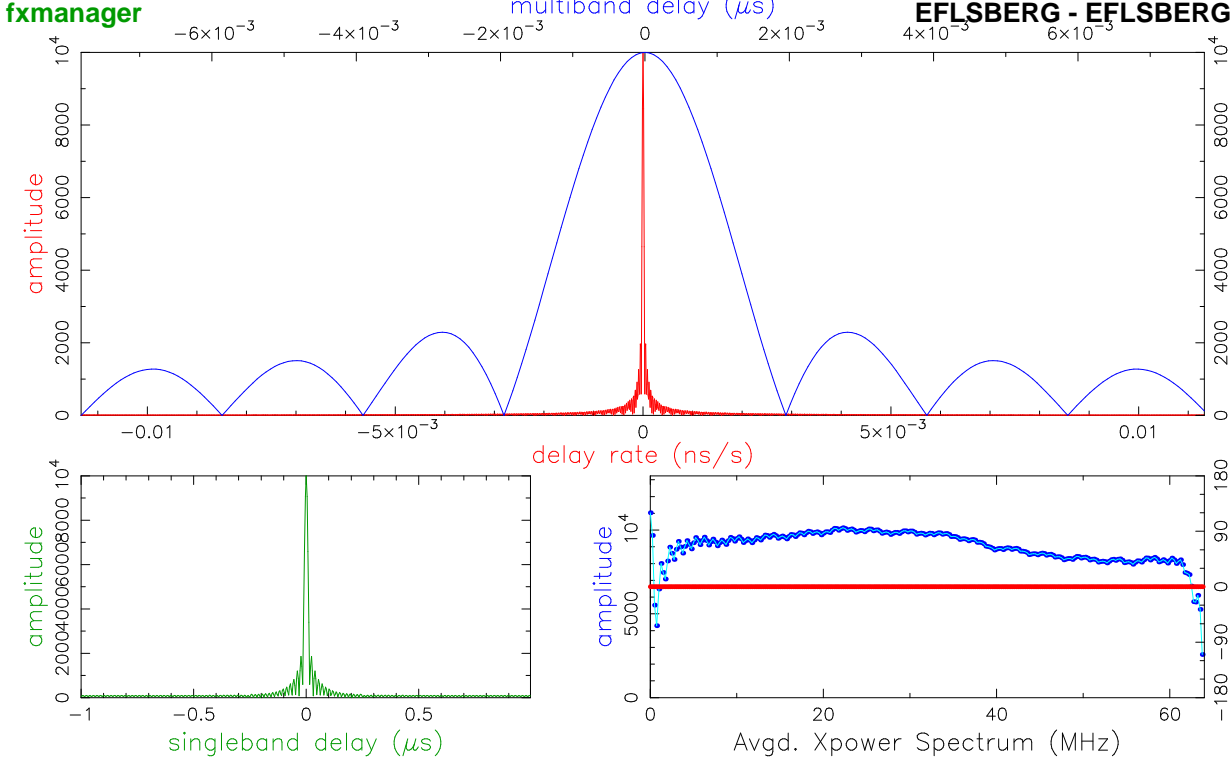
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/bB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/bB.W.42.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

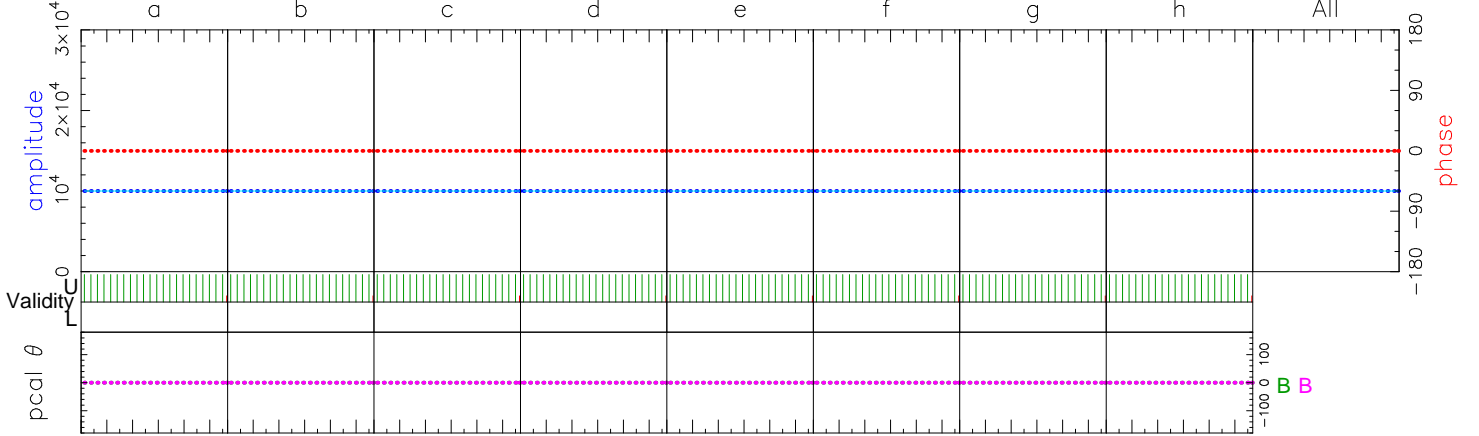
0234+285.1W8CZP, No0029, BB

EFLSBERG - EFLSBERG, fgroup W, pol LL



Fringe quality 9
 SNR 496748.6
 Int time 329.973
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044454
 2021:252:122852
 RA & Dec (J2000) 02h37m52.405678s +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.2E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.7E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 7.4E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.9E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BB.W.5.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

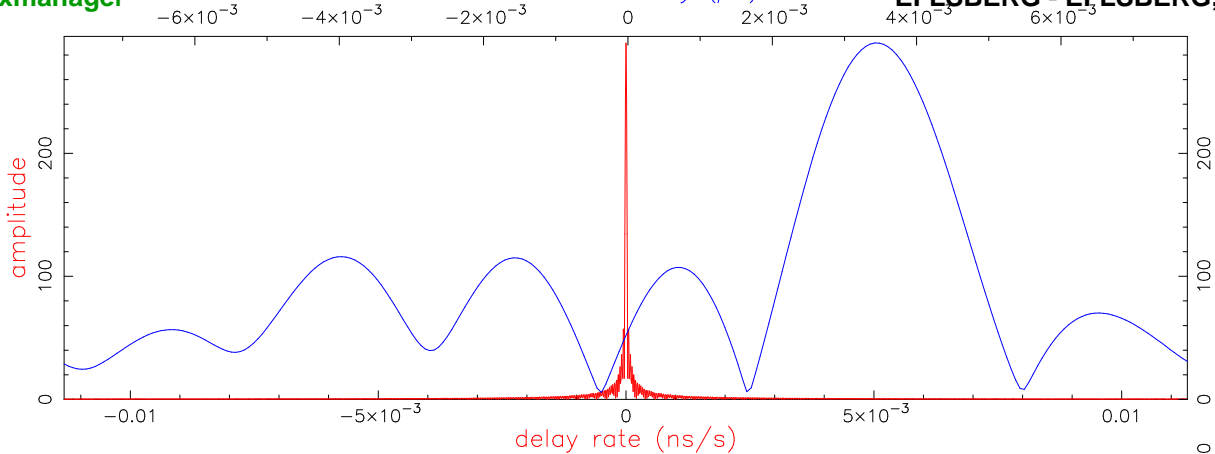
fxmanager

0234+285.1W8CZP, No0029, BB

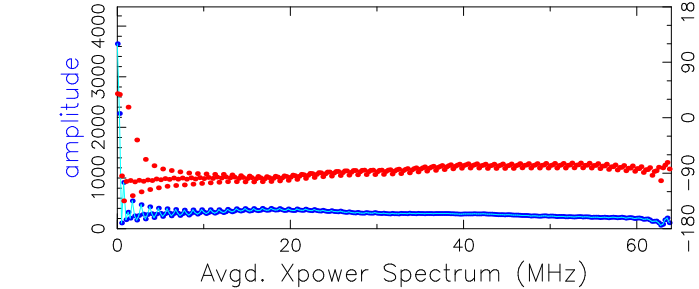
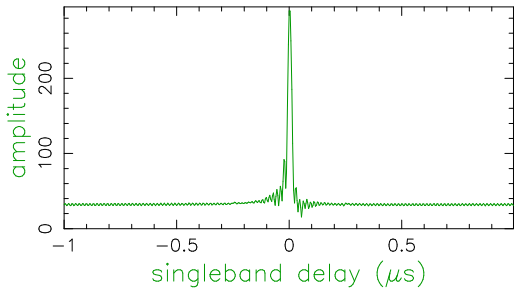
EFLSBERG - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 6

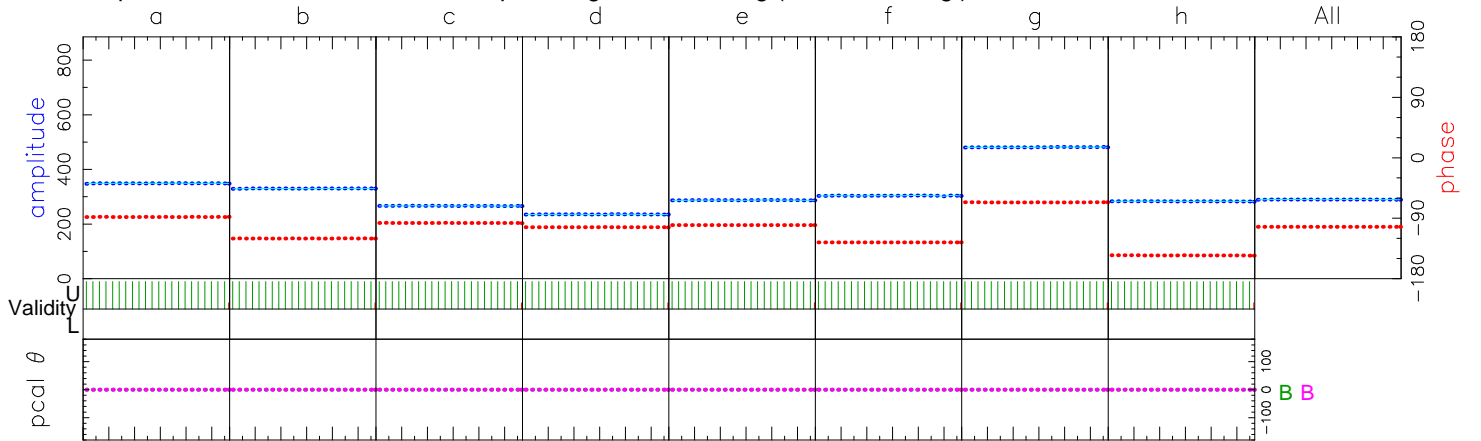


SNR 14658.4
 Int time 329.973
 Amp 295.087
 Phase -102.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.001915
 MBD 0.003492
 Fringe rate (Hz) 0.000001
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044503
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.49156250000E-03								3.49156E-03	+/- 7.4E-08
Sband delay (usec)	1.91450000000E-03								1.91450E-03	+/- 5.9E-07
Phase delay (usec)	-3.31073152088E-06								-3.31073E-06	+/- 2.5E-10
Delay rate (us/s)	1.20454795329E-11								1.20455E-11	+/- 1.3E-12
Total phase (deg)			-102.7						-102.7	+/- 0.0
Apriori delay (usec)					0.00000000000E+00				Resid mbdelay (usec)	
Apriori clock (usec)					0.0000000E+00				Resid sbdelay (usec)	
Apriori clockrate (us/s)					0.0000000E+00				Resid phdelay (usec)	
Apriori rate (us/s)					0.00000000000E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					0.00000000000E+00				Resid phase (deg)	
RMS	0.0	0.0	295.087 +/- 0.020						PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
Theor.	0.0	0.0	Search (2048X32)	289.724					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
Amplitude			Interp.	0.000					SampCntNorm: enabled	mb window (us) -0.008 0.008
Search (2048X32)			Inc. seg. avg.	289.553					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
Inc. seg. avg.			Inc. frq. avg.	317.162					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
Inc. frq. avg.									nlags: 256 t_cohere infinite	
ph/seg (deg)	0.0	0.0								
amp/seg (%)	1.9	0.0								
ph/frq (deg)	26.5	0.0								
amp/frq (%)	25.0	0.0								

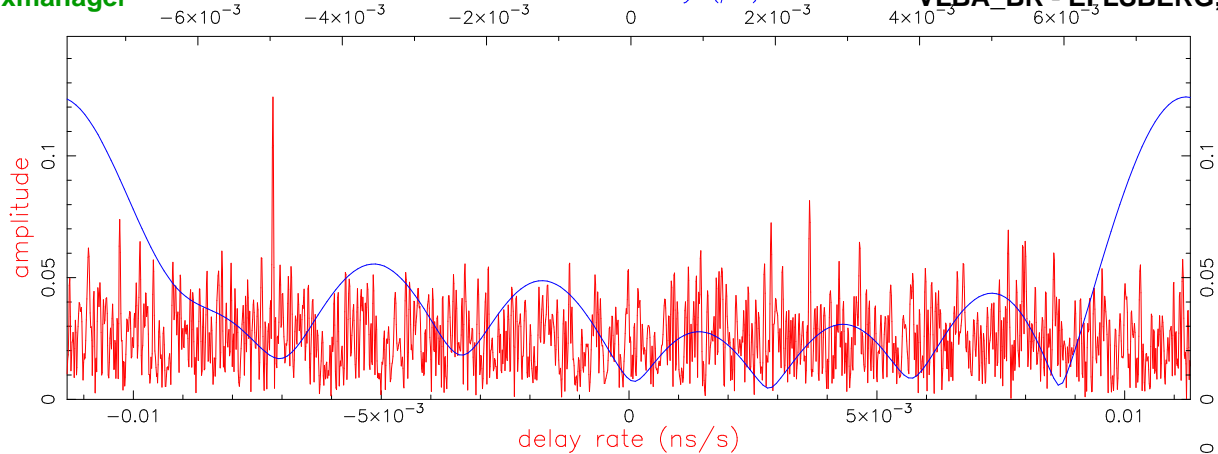
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, bB

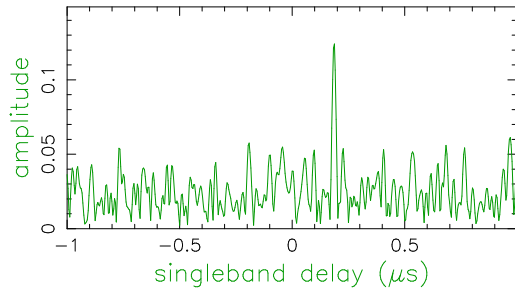
VLBA_BR - EFLSBERG, fgroup W, pol RL

multiband delay (μ s)

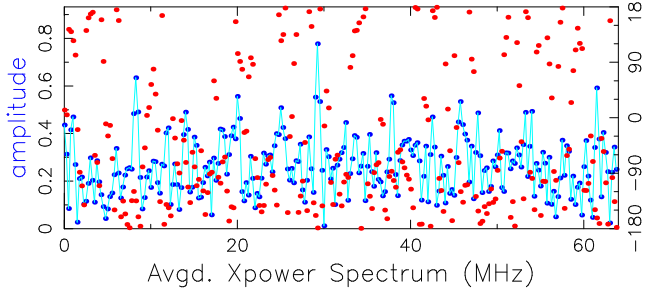


Fringe quality 0

SNR 6.2
 Int time 329.973
 Amp 0.149
 Phase -63.9
 PFD 1.1e-01
 Delays (us)
 SBD 0.186074
 MBD -0.007963
 Fringe rate (Hz)
 -0.620004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

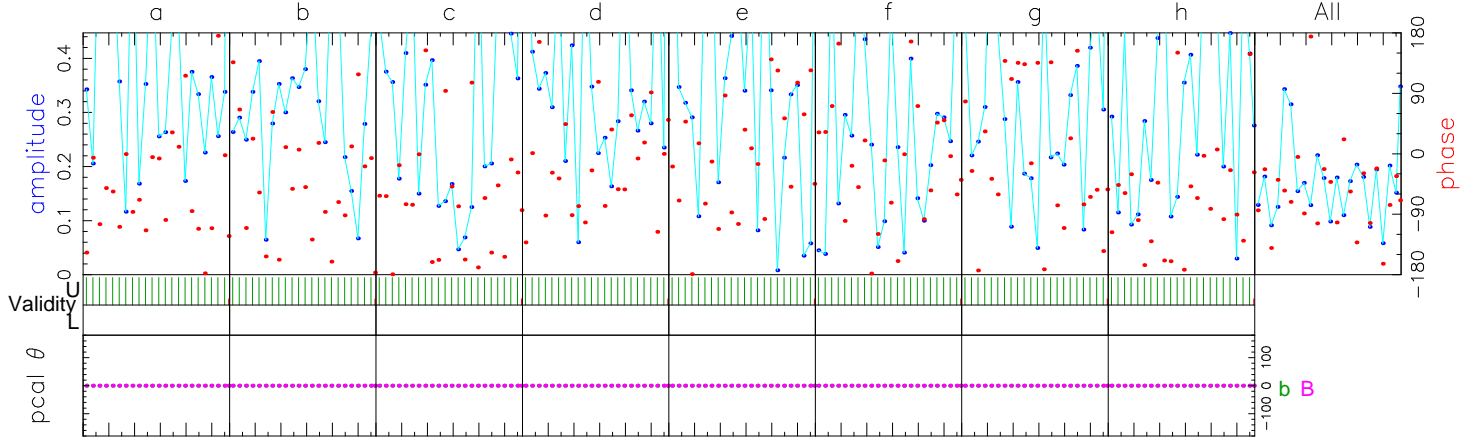


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044505
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-71.1	-54.4	-96.8	-52.9	-36.3	-26.3	-73.6	-84.4	Phase	-63.9
	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
	304.5	282.6	296.5	107.8	38.8	7.9	128.7	318.1	Sbd box	304.6
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-5.57239622625E+03	Apriori delay (usec)	-5.57257576291E+03	Resid mbdelay (usec)	-7.96334E-03	+/-	1.7E-04
Sband delay (usec)	-5.57238968891E+03	Apriori clock (usec)	1.9095734E+01	Resid sbdelay (usec)	1.86074E-01	+/-	1.4E-03
Phase delay (usec)	-5.57257576497E+03	Apriori clockrate (us/s)	-9.999998E-08	Resid phdelay (usec)	-2.06207E-06	+/-	5.9E-07
Delay rate (us/s)	1.53630807343E+00	Apriori rate (us/s)	1.53631527106E+00	Resid rate (us/s)	-7.19763E-06	+/-	3.1E-09
Total phase (deg)		Apriori accel (us/s/s)	2.82457736951E-05	Resid phase (deg)	-63.9	+/-	18.4

ph/seg (deg)	RMS 52.1	Theor. 44.1	Amplitude Search (2048X32)	0.123	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	64.5	76.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	25.9	26.0	Inc. seg. avg.	0.155	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	40.6	45.3	Inc. frq. avg.	0.144	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 77.0 el 28.1 pa -47.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) -10008.211 1077.853 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/bB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/bB.W.63.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

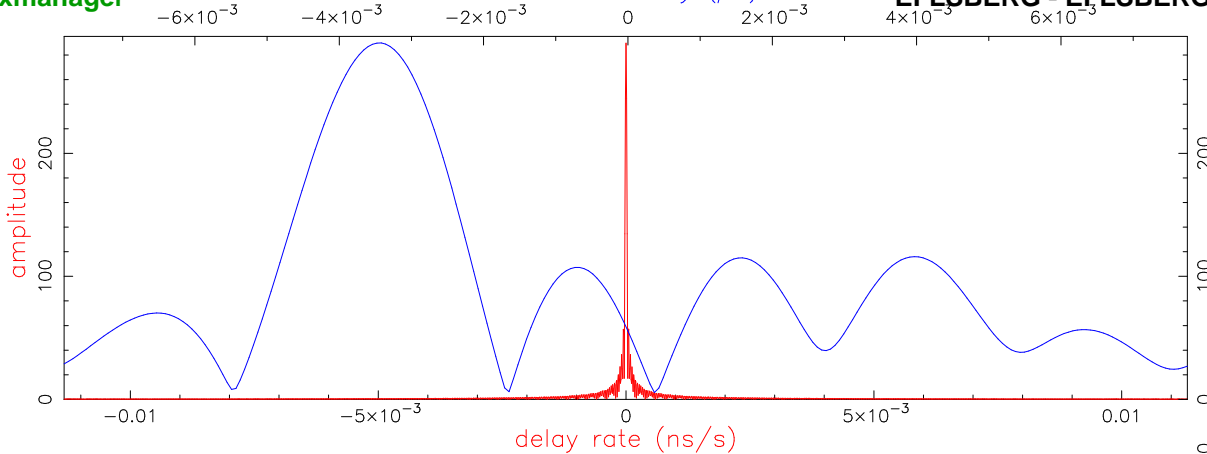
fxmanager

0234+285.1W8CZP, No0029, BB

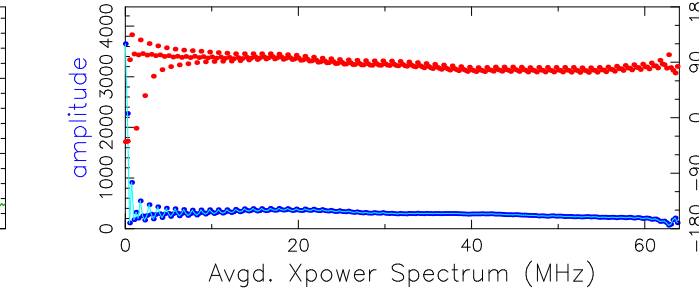
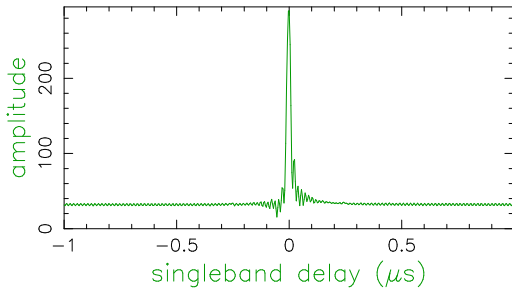
EFLSBERG - EFLSBERG, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 6

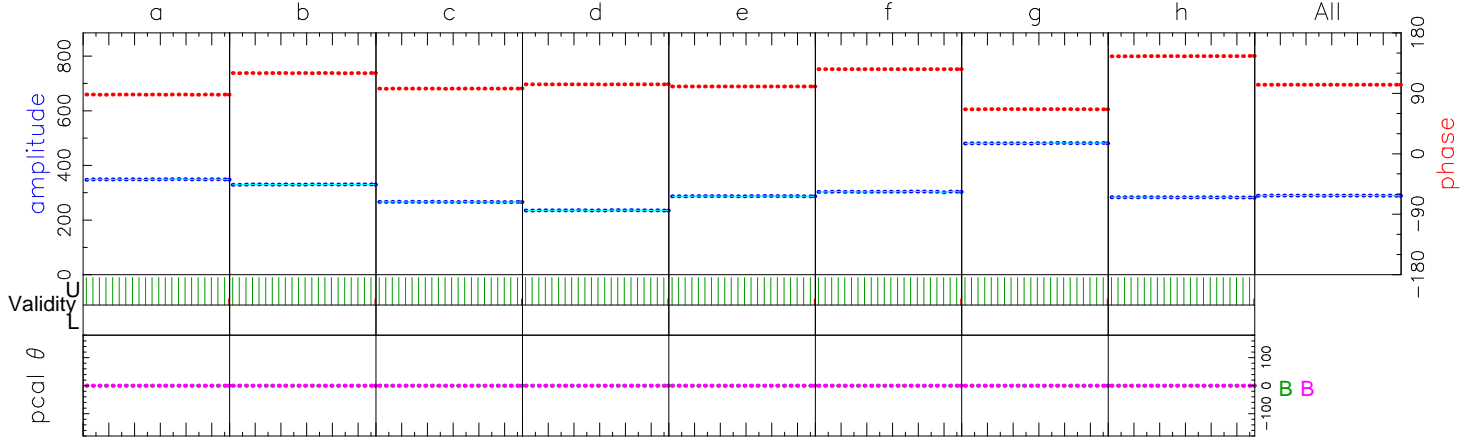


SNR 14658.4
 Int time 329.973
 Amp 295.087
 Phase 102.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001915
 MBD -0.003492
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044506
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	88.0	120.0	97.0	103.3	100.2	125.9	66.3	145.2	Phase	102.7
	349.1	330.2	266.5	235.6	287.5	303.7	481.3	283.3	Ampl.	317.2
	255.7	256.6	256.8	255.7	256.4	256.5	258.0	253.5	Sbd box	256.5
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.49156250000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.49156E-03	+/- 7.4E-08
Sband delay (usec)	-1.91450000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.91450E-03	+/- 5.9E-07
Phase delay (usec)	3.31073152085E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.31073E-06	+/- 2.5E-10
Delay rate (us/s)	-1.20454795329E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.20455E-11	+/- 1.3E-12
Total phase (deg)	102.7		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		102.7	+/- 0.0

	RMS	Theor.	Amplitude	295.087 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.0	0.0	Search (2048X32)	289.724	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	1.9	0.0	Interp.	0.000	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	26.5	0.0	Inc. seg. avg.	289.553	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	25.0	0.0	Inc. frq. avg.	317.162	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 B: az 257.0 el 48.5 pa 44.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BB..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BB.W.69.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

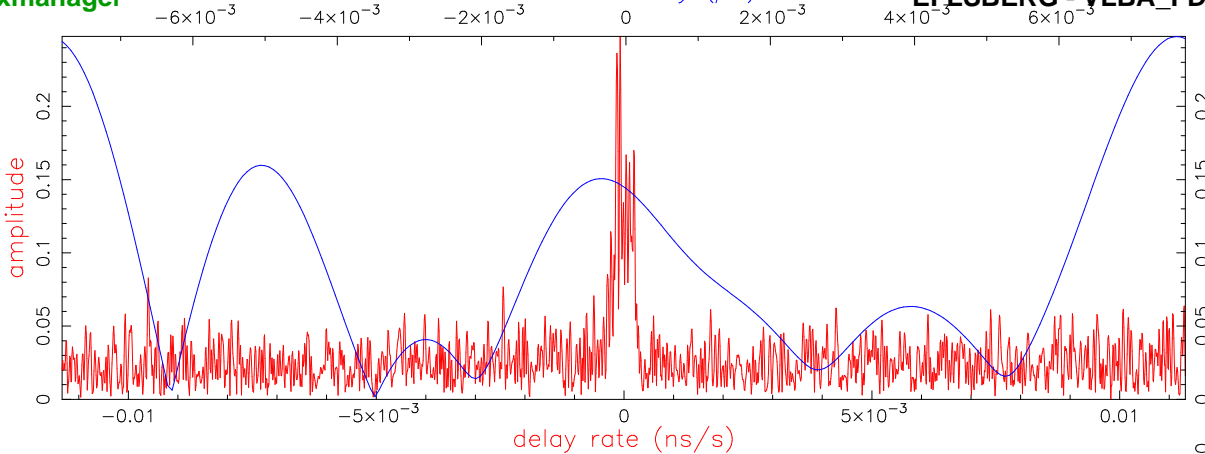
fxmanager

0234+285.1W8CZP, No0029, Bf

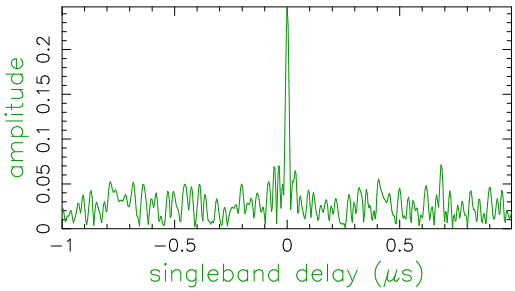
EFLSBERG - VLBA_FD, fgroup W, pol RR

multiband delay (μ s)

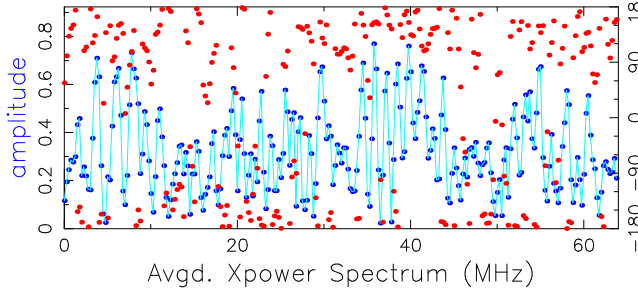
Fringe quality 9



SNR 12.3
 Int time 329.934
 Amp 0.248
 Phase -110.2
 PFD 4.4e-26
 Delays (us)
 SBD 0.000232
 MBD -0.007987
 Fringe rate (Hz)
 -0.006251
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

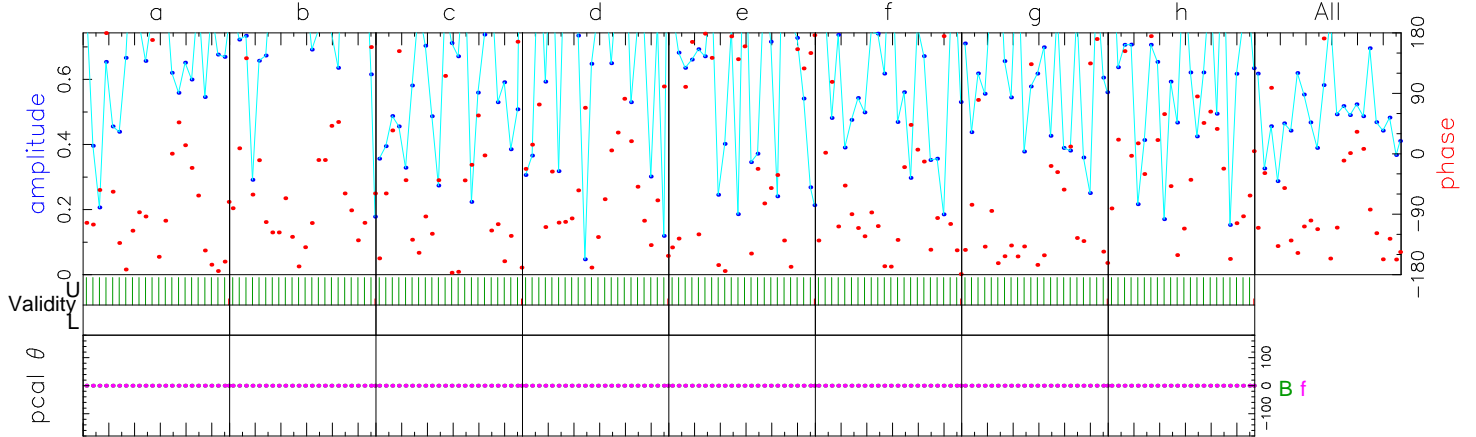


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044458
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.0	-91.5	-126.0	-55.9	-166.0	-104.9	-140.9	-34.8	Phase	-110.2
	0.4	0.4	0.2	0.3	0.4	0.3	0.4	0.2	Ampl.	0.3
	257.6	257.2	257.5	258.0	257.8	257.9	257.6	260.2	Sbd box	257.1
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.09483717729E+03		Apriori delay (usec)		3.09482953951E+03		Resid mbdelay (usec)		-7.98722E-03	+/- 8.8E-05
Sband delay (usec)	3.09482977101E+03		Apriori clock (usec)		-3.2288361E+01		Resid sbdelay (usec)		2.31500E-04	+/- 7.0E-04
Phase delay (usec)	3.09482953595E+03		Apriori clockrate (us/s)		-5.9999999E-08		Resid phdelay (usec)		-3.55384E-06	+/- 3.0E-07
Delay rate (us/s)	-1.68427790199E+00		Apriori rate (us/s)		-1.68427782942E+00		Resid rate (us/s)		-7.25712E-08	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.33016818321E-06		Resid phase (deg)		-110.2	+/- 9.3

	RMS	Theor.	Amplitude	0.248 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	69.2	22.3	Search (2048X32)	0.236	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	110.8	39.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	47.2	13.2	Inc. seg. avg.	0.463	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.0	23.0	Inc. frq. avg.	0.305	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 257.0 el 48.5 pa 44.9 f: az 74.6 el 35.8 pa -71.2 u,v (fr/asec) 11009.783 1862.217 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bf..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bf.W.25.1W8CZP

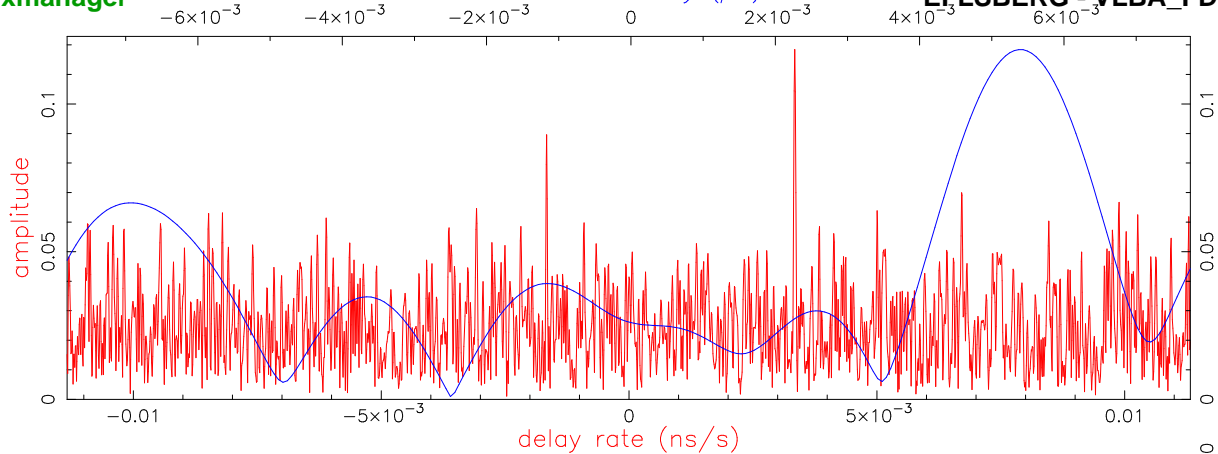
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bf

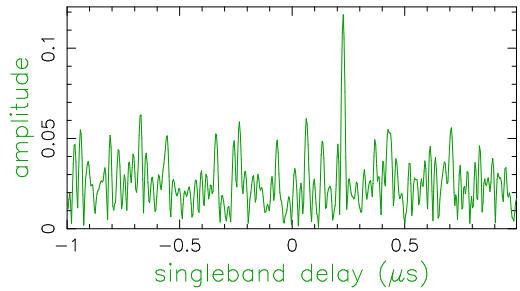
EFLSBERG - VLBA_FD, fgroup W, pol LL

multiband delay (μ s)

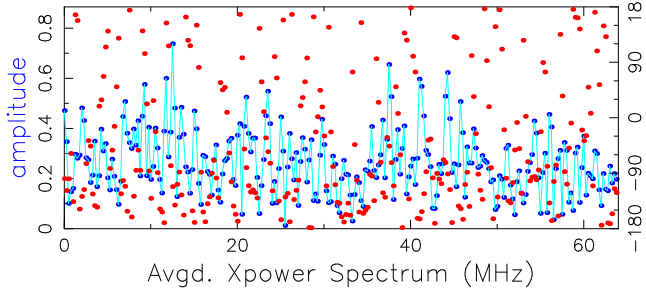


Fringe quality 0

SNR 5.9
Int time 329.935
Amp 0.123
Phase -97.3
PFD 6.3e-01
Delays (us)
SBD 0.226256
MBD 0.005381
Fringe rate (Hz)
0.288699
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

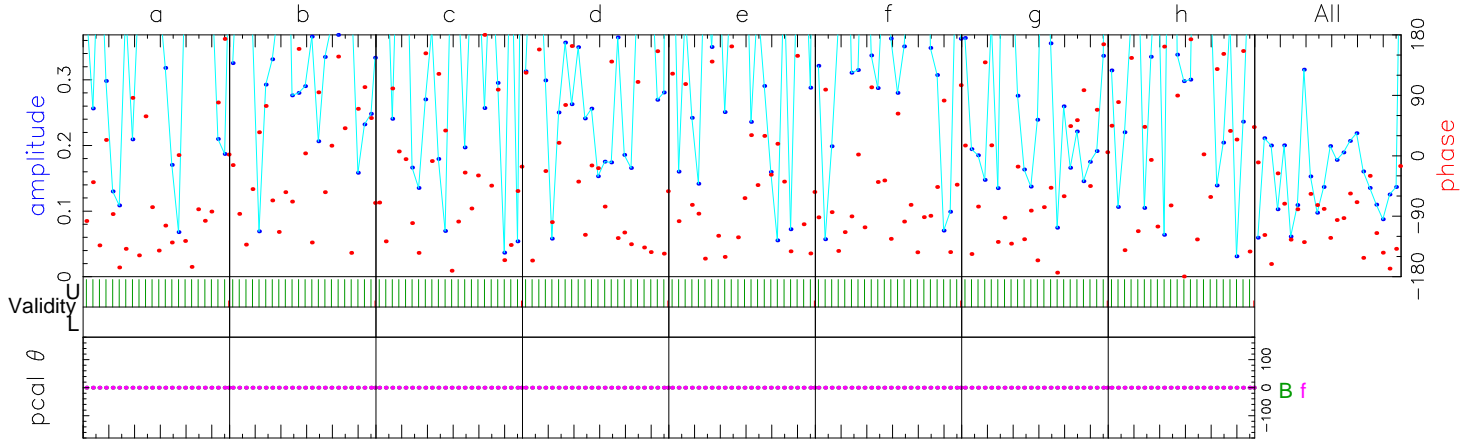


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044454
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.2	-62.7	-69.7	-150.7	-123.4	-87.6	-68.3	-115.3	Phase	-97.3
	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	313.8	65.3	143.1	413.5	247.9	314.2	380.2	374.6	Sbd box	314.9
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.09505367019E+03		Apriori delay (usec)		3.09482953951E+03		Resid mbdelay (usec)		5.38068E-03	+/- 1.8E-04
Sband delay (usec)	3.09505579551E+03		Apriori clock (usec)		-3.2288361E+01		Resid sbdelay (usec)		2.26256E-01	+/- 1.5E-03
Phase delay (usec)	3.09482953637E+03		Apriori clockrate (us/s)		-5.9999999E-08		Resid phdelay (usec)		-3.13675E-06	+/- 6.3E-07
Delay rate (us/s)	-1.68427447791E+00		Apriori rate (us/s)		-1.68427782942E+00		Resid rate (us/s)		3.35151E-06	+/- 3.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.33016818321E-06		Resid phase (deg)		-97.3	+/- 19.5

	RMS	Theor.	Amplitude	0.123 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	44.4	46.7	Search (2048X32)	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	68.5	81.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	34.0	27.5	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.6	48.0	Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 f: az 74.6 el 35.8 pa -71.2 u,v (fr/asec) 11009.783 1862.217 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bf..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bf.W.4.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

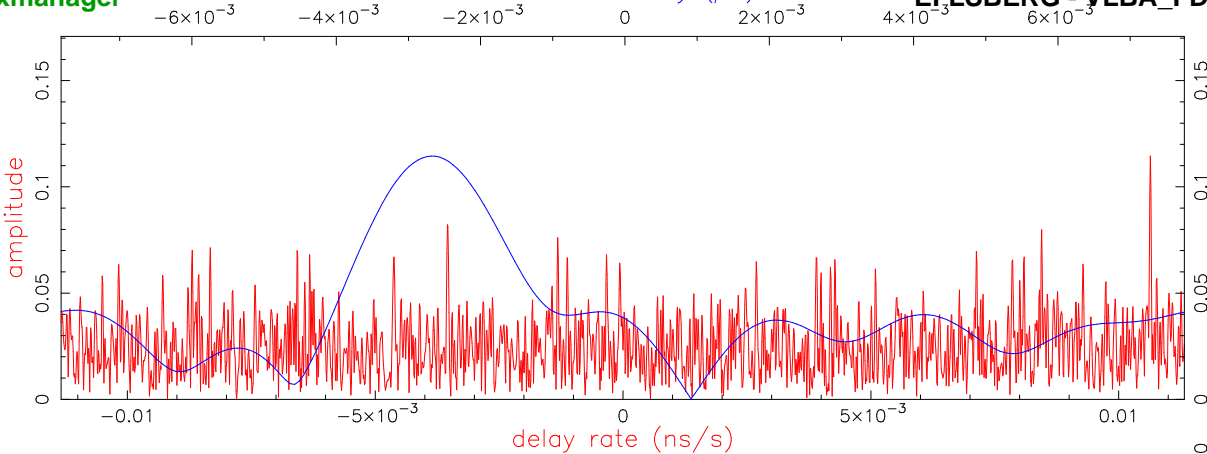
fxmanager

0234+285.1W8CZP, No0029, Bf

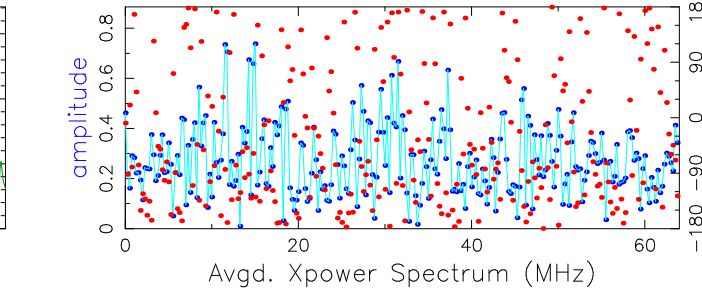
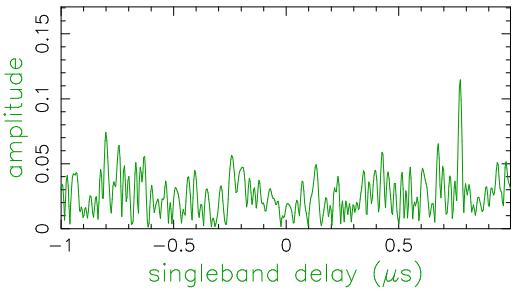
EFLSBERG - VLBA_FD, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

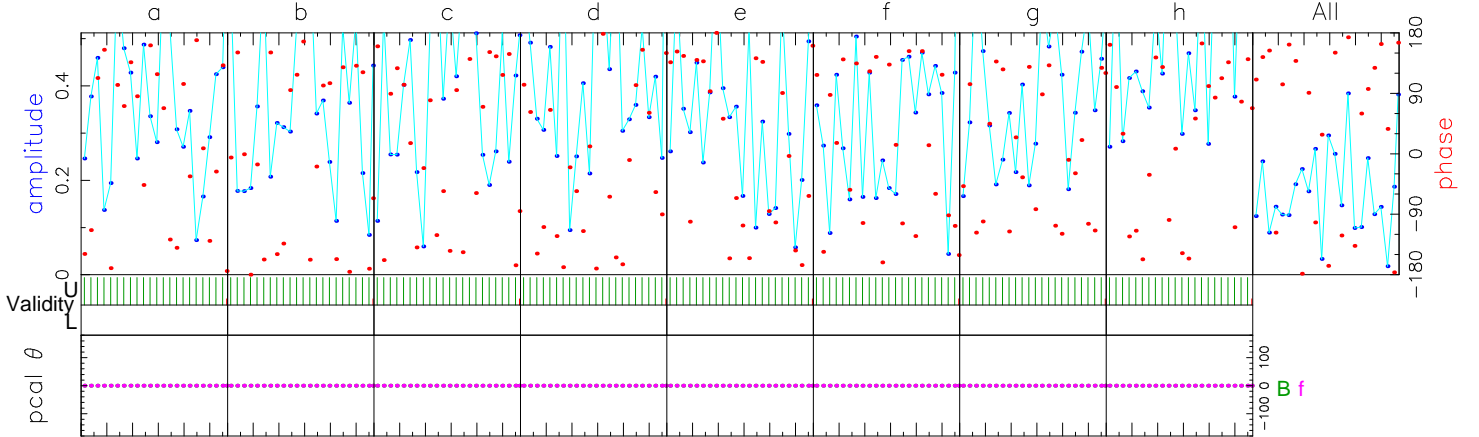


SNR 5.7
 Int time 329.934
 Amp 0.171
 Phase 161.9
 PFD 9.3e-01
 Delays (us)
 SBD 0.772479
 MBD -0.002686
 Fringe rate (Hz)
 0.918045
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044502
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0				
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)	3.09560810335E+03		Apriori delay (usec)		3.09482953951E+03		Resid mbdelay (usec)		-2.68616E-03	+/- 1.9E-04		
Sband delay (usec)	3.09560201876E+03		Apriori clock (usec)		-3.2288361E+01		Resid sbdelay (usec)		7.72479E-01	+/- 1.5E-03		
Phase delay (usec)	3.09482954473E+03		Apriori clockrate (us/s)		-5.9999999E-08		Resid phdelay (usec)		5.21975E-06	+/- 6.5E-07		
Delay rate (us/s)	-1.68426717182E+00		Apriori rate (us/s)		-1.68427782942E+00		Resid rate (us/s)		1.06576E-05	+/- 3.4E-09		
Total phase (deg)	353.8		Apriori accel (us/s/s)		-2.33016818321E-06		Resid phase (deg)		161.9	+/- 20.0		
RMS	63.2	48.0	Amplitude		0.171 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	90.9	83.8	Search (2048X32)		0.112		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	37.4	49.4	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	40.6	28.3	Inc. seg. avg.		0.189		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)	37.4	49.4	Inc. frq. avg.		0.169		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 257.0 el 48.5 pa 44.9 f: az 74.6 el 35.8 pa -71.2 u,v (fr/asec) 11009.783 1862.217 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bf..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bf.W.45.1W8CZP

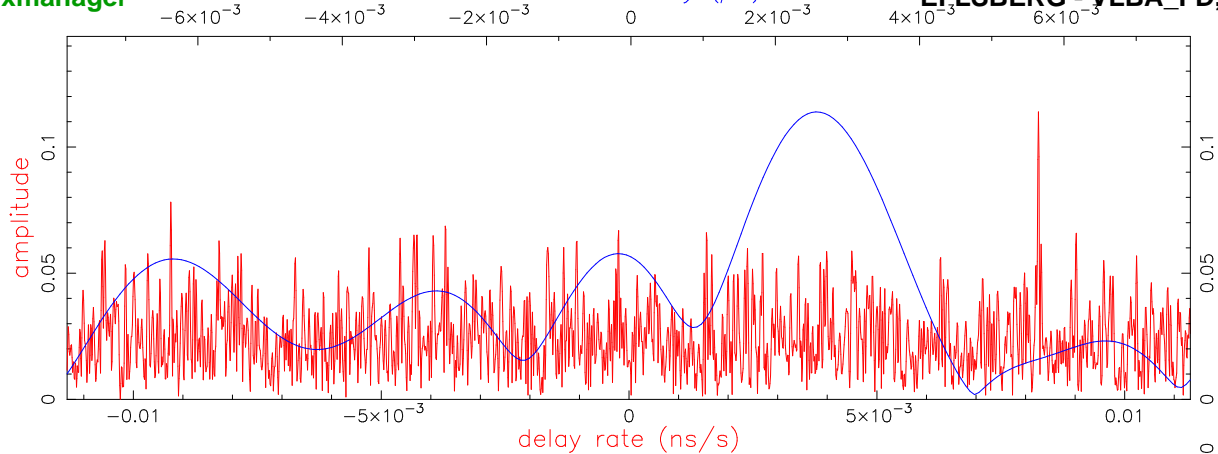
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bf

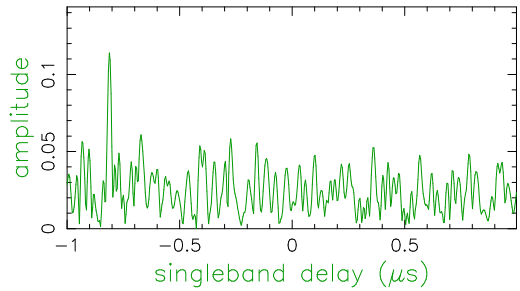
EFLSBERG - VLBA_FD, fgroup W, pol RL

multiband delay (μ s)

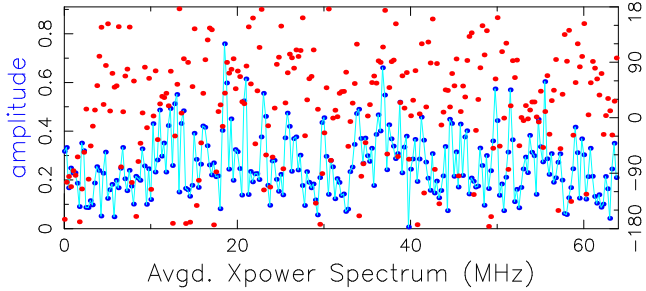


Fringe quality 0

SNR 5.7
 Int time 329.935
 Amp 0.144
 Phase 33.1
 PFD 9.6e-01
 Delays (us)
 SBD -0.811564
 MBD 0.002598
 Fringe rate (Hz)
 0.712138
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

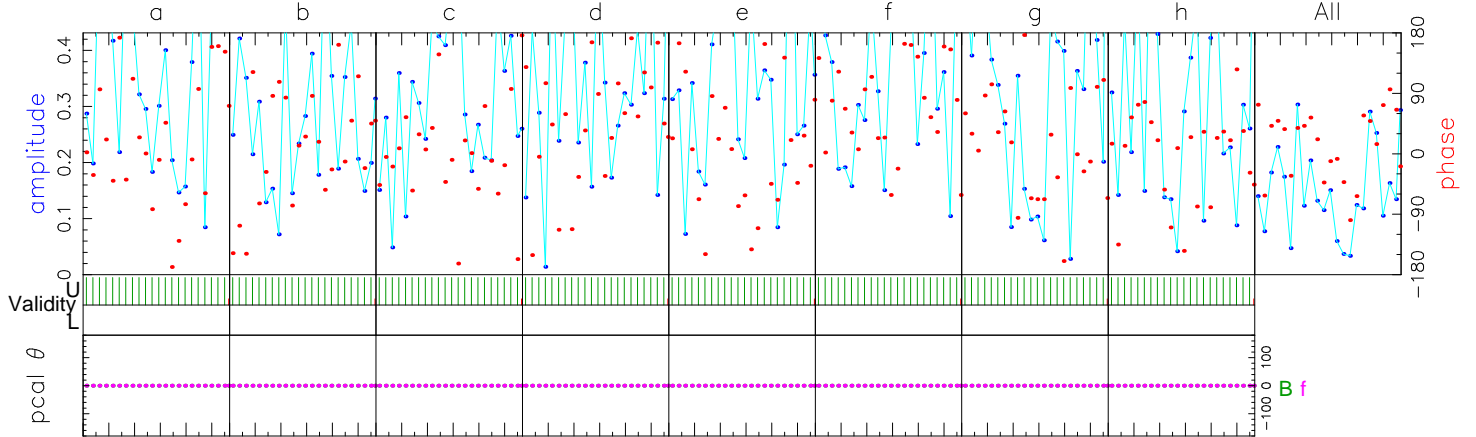


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044506
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.09401963722E+03		Apriori delay (usec)		3.09482953951E+03		Resid mbdelay (usec)		2.59772E-03	+/- 1.9E-04
Sband delay (usec)	3.09401797576E+03		Apriori clock (usec)		-3.2288361E+01		Resid sbdelay (usec)		-8.11564E-01	+/- 1.5E-03
Phase delay (usec)	3.09482954058E+03		Apriori clockrate (us/s)		-5.9999999E-08		Resid phdelay (usec)		1.06772E-06	+/- 6.5E-07
Delay rate (us/s)	-1.68426956220E+00		Apriori rate (us/s)		-1.68427782942E+00		Resid rate (us/s)		8.26722E-06	+/- 3.4E-09
Total phase (deg)	225.1		Apriori accel (us/s/s)		-2.33016818321E-06		Resid phase (deg)		33.1	+/- 20.2

	RMS	Theor.	Amplitude	0.144 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.5	48.4	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.6	84.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	35.5	28.5	Inc. seg. avg.	0.136	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.2	49.8	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 f: az 74.6 el 35.8 pa -71.2 u,v (fr/asec) 11009.783 1862.217 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bf..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bf.W.67.1W8CZP

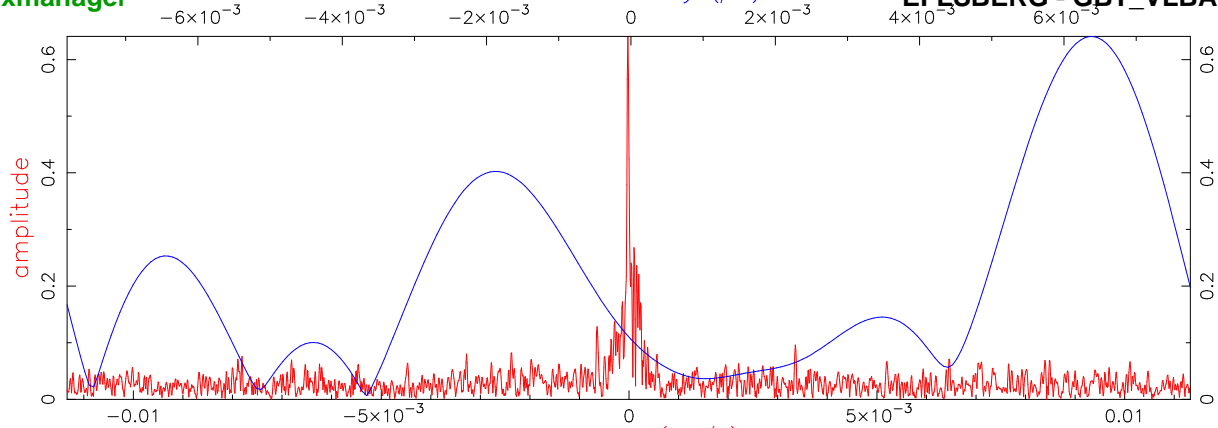
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BG

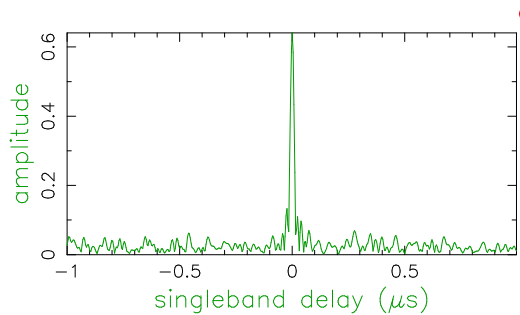
EFLSBERG - GBT_VLBA, fgroup W, pol LL

multiband delay (μ s)

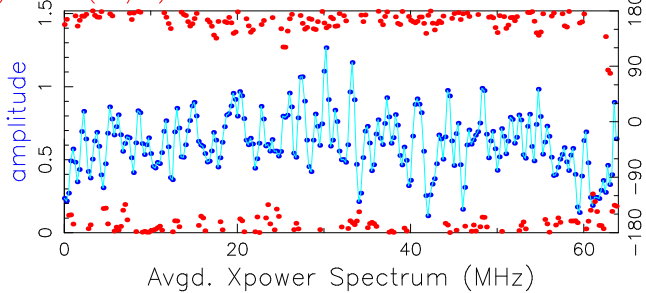


Fringe quality 4

SNR 31.8
Int time 329.973
Amp 0.641
Phase 102.1
PFD 0.0e+00
Delays (us)
SBD -0.000010
MBD 0.006380
Fringe rate (Hz)
-0.001902
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

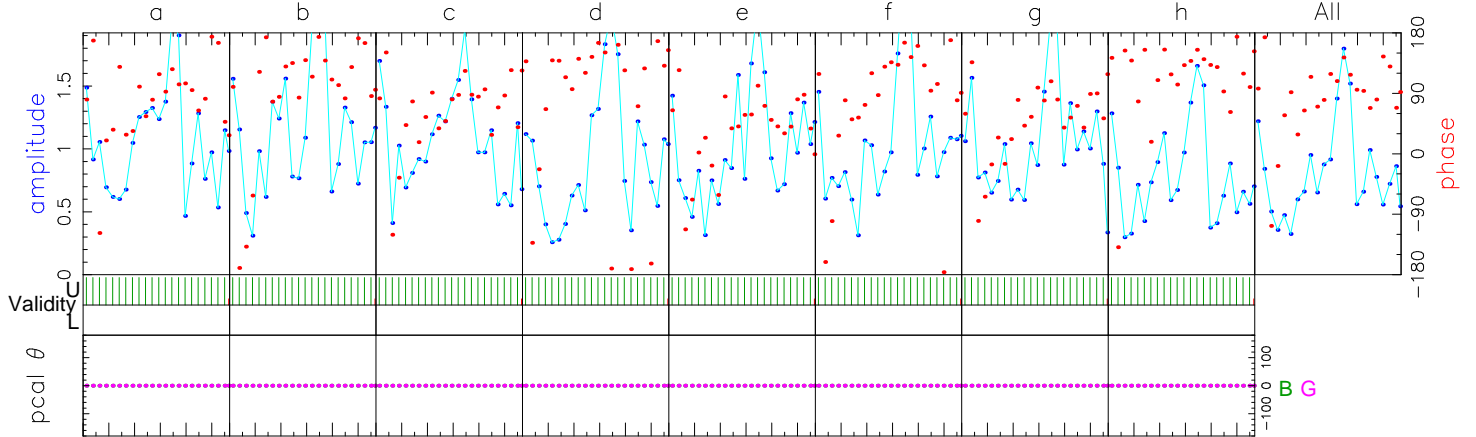


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044456
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.7	126.2	75.3	148.8	55.4	127.2	66.0	129.9	Phase	102.1
	0.8	0.9	0.8	0.7	0.8	0.8	0.7	0.6	Ampl.	0.8
	257.8	257.0	257.6	257.4	257.2	257.3	257.4	257.1	Sbd box	257.0
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.06152235876E+03	Apriori delay (usec)	-2.06152873884E+03	Resid mbdelay (usec)	6.38007E-03	+/-	3.4E-05
Sband delay (usec)	-2.06152874859E+03	Apriori clock (usec)	-7.7827334E+00	Resid sbdelay (usec)	-9.75000E-06	+/-	2.7E-04
Phase delay (usec)	-2.06152873554E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	3.29138E-06	+/-	1.2E-07
Delay rate (us/s)	-1.30767112528E+00	Apriori rate (us/s)	-1.30767110319E+00	Resid rate (us/s)	-2.20836E-08	+/-	6.1E-10
Total phase (deg)	-100.7	Apriori accel (us/s/s)	1.91192242989E-05	Resid phase (deg)	102.1	+/-	3.6

ph/seg (deg)	52.2	RMS	8.6	Theor.	0.641 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	63.9	Search (2048X32)	0.640	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	37.6	Inc. seg. avg.	0.816	Inc. frq. avg.	0.753	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	21.5	Inc. frq. avg.	0.753			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 257.0 el 48.5 pa 44.9 G: az 94.5 el 56.3 pa -62.9 u,v (fr/asec) 8577.977 1939.787 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BG..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BG.W.15.1W8CZP

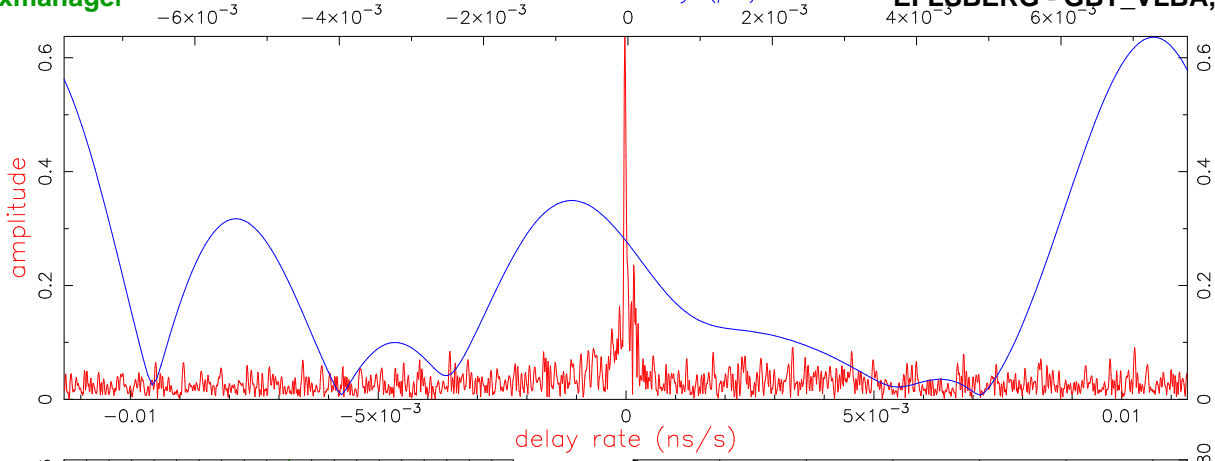
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BG

EFLSBERG - GBT_VLBA, fgroup W, pol RR

multiband delay (μ s)



Fringe quality 4

SNR 31.7

Int time 329.973

Amp 0.638

Phase -65.8

PFD 0.0e+00

Delays (us)

SBD 0.000607

MBD 0.007295

Fringe rate (Hz)

-0.001760

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:113

Start 151500.00

Stop 152030.24

FRT 151745.00

Corr/FF/build

2021:288:021115

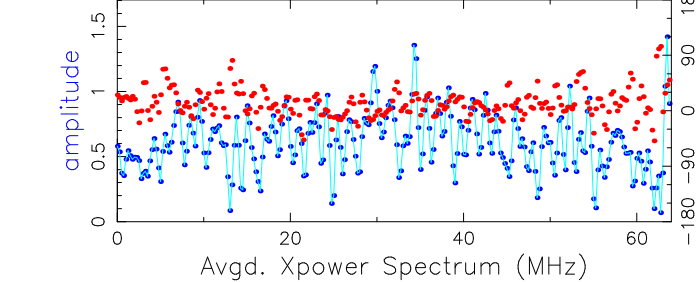
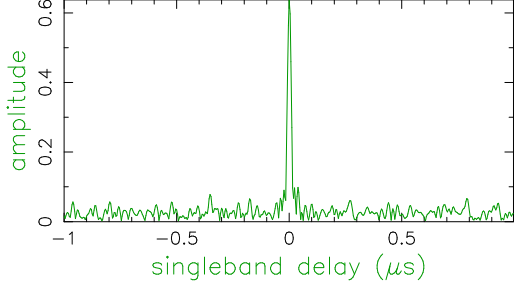
2021:288:044500

2021:252:122852

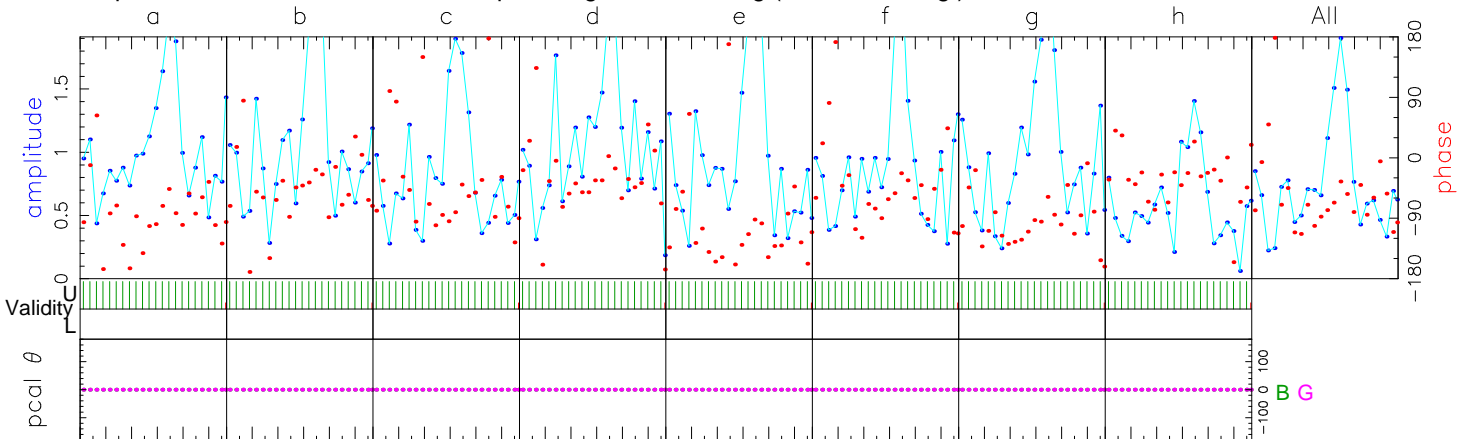
RA & Dec (J2000)

02h37m52.405678s

+28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.7	-41.6	-68.0	-27.3	-119.5	-52.8	-93.0	-25.3	Phase	-65.8
	0.8	0.8	0.6	0.9	0.8	0.7	0.9	0.5	Ampl.	0.7
	257.4	257.4	257.7	257.2	257.6	257.5	257.5	257.3	Sbd box	257.2
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:G	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	
G	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.06152144392E+03				-2.06152873884E+03				Resid mbdelay (usec)	7.29491E-03 +/- 3.4E-05
Sband delay (usec)	-2.06152813184E+03				-7.7827334E+08				Resid sbdelay (usec)	6.07000E-04 +/- 2.7E-04
Phase delay (usec)	-2.06152874096E+03				9.9999998E-08				Resid phdelay (usec)	-2.12159E-06 +/- 1.2E-07
Delay rate (us/s)	-1.30767112362E+00				-1.30767110319E+00				Resid rate (us/s)	-2.04270E-08 +/- 6.1E-10
Total phase (deg)		-268.6			1.91192242989E-05				Resid phase (deg)	-65.8 +/- 3.6

ph/seg (deg) 45.2 8.7 Search (2048X32) 0.634 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 66.3 15.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 36.3 5.1 Inc. seg. avg. 0.737 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 26.6 8.9 Inc. frq. avg. 0.743 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 257.0 el 48.5 pa 44.9 G: az 94.5 el 56.3 pa -62.9 u,v (fr/asec) 8577.977 1939.787 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BG..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BG.W.35.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

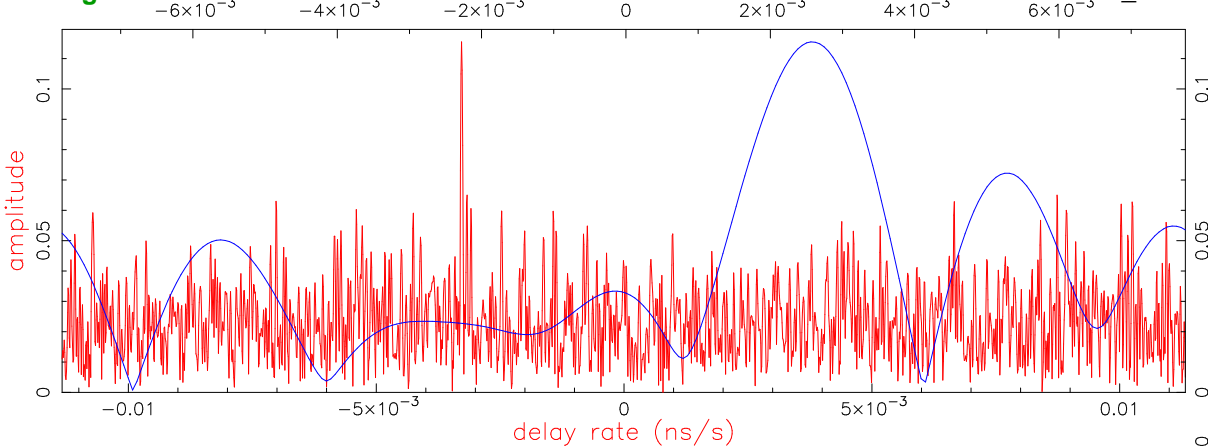
fxmanager

0234+285.1W8CZP, No0029, BG

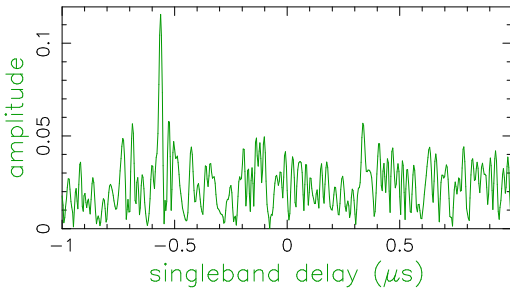
EFLSBERG - GBT_VLBA, fgroup W, pol LR

multiband delay (μ s)

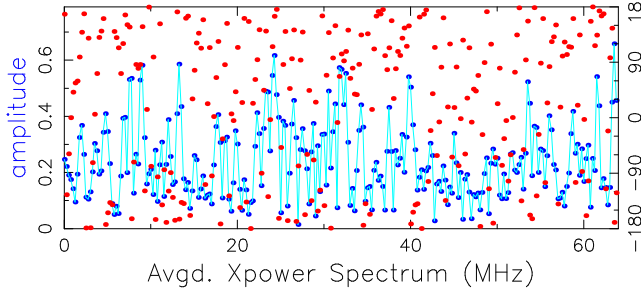
Fringe quality 0



SNR 5.7
 Int time 329.973
 Amp 0.120
 Phase 118.0
 PFD 9.1e-01
 Delays (us)
 SBD -0.562447
 MBD 0.002581
 Fringe rate (Hz)
 -0.283181
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

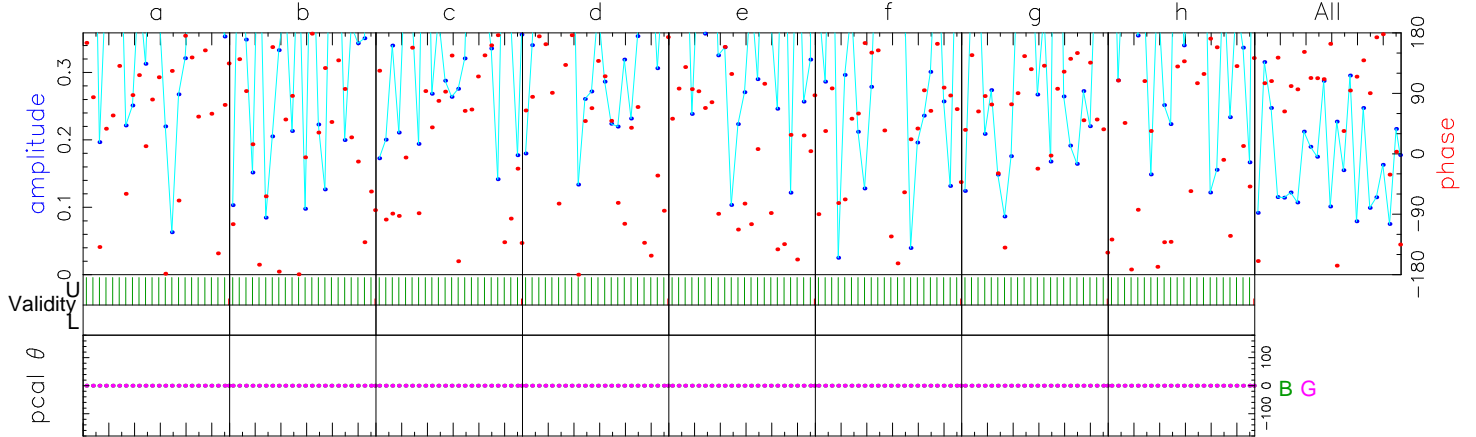


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044503
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	Ampl.	0.1
B	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	113.0
G	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
G	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.06208865763E+03	Apriori delay (usec)	-2.06152873884E+03	Resid mbdelay (usec)	2.58120E-03	+/-	1.9E-04
Sband delay (usec)	-2.06209118559E+03	Apriori clock (usec)	-7.7827334E+08	Resid sbdelay (usec)	-5.62447E-01	+/-	1.5E-03
Phase delay (usec)	-2.06152873503E+03	Apriori clockrate (us/s)	9.999998E-08	Resid phdelay (usec)	3.80457E-06	+/-	6.4E-07
Delay rate (us/s)	-1.30767439064E+00	Apriori rate (us/s)	-1.30767110319E+00	Resid rate (us/s)	-3.28745E-06	+/-	3.4E-09
Total phase (deg)	-84.8	Apriori accel (us/s/s)	1.91192242989E-05	Resid phase (deg)	118.0	+/-	20.0

ph/seg (deg)	57.7	Theor.	47.9	Amplitude	0.120 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	79.3	Search (2048X32)	0.113	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.7	Inc. seg. avg.	0.131	Inc. frq. avg.	0.116	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.2	Inc. frq. avg.	0.116			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 257.0 el 48.5 pa 44.9 G: az 94.5 el 56.3 pa -62.9 u,v (fr/asec) 8577.977 1939.787 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BG..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BG.W.55.1W8CZP

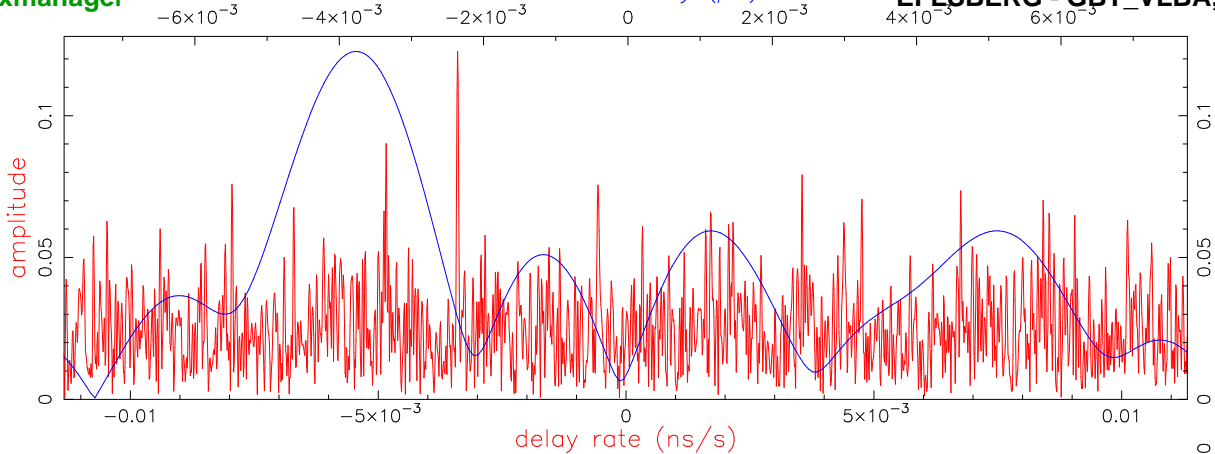
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BG

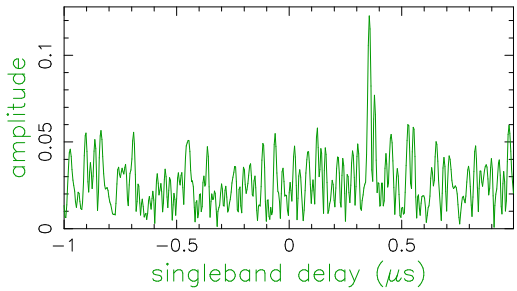
EFLSBERG - GBT_VLBA, fgroup W, pol RL

multiband delay (μ s)

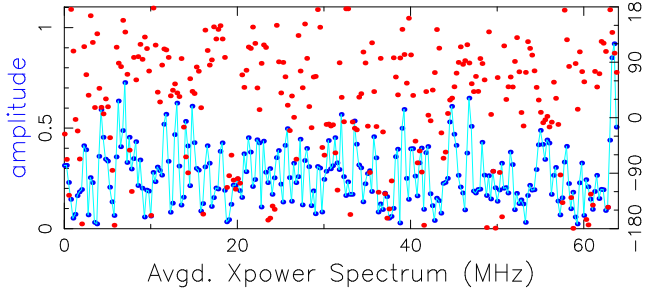


Fringe quality 0

SNR 6.1
 Int time 329.973
 Amp 0.128
 Phase -102.4
 PFD 2.2e-01
 Delays (us)
 SBD 0.356317
 MBD -0.003759
 Fringe rate (Hz)
 -0.293015
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

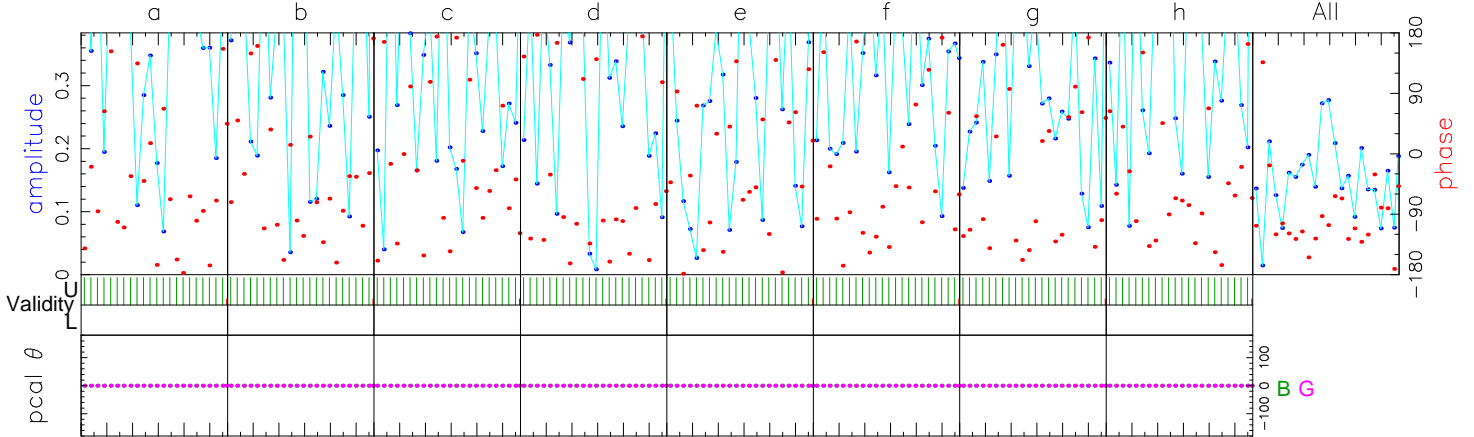


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044507
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-104.2	-97.2	-58.4	-124.5	-75.4	-106.1	-149.9	-83.8	Phase	-102.4
	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.2	Ampl.	0.1
	348.0	348.0	4.7	506.9	24.4	139.7	241.2	289.0	Sbd box	348.2
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
G	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.06117312312E+03	Apriori delay (usec)	-2.06152873884E+03	Resid mbdelay (usec)	-3.75929E-03	+/-	1.8E-04
Sband delay (usec)	-2.06117242159E+03	Apriori clock (usec)	-7.7827334E+00	Resid sbdelay (usec)	3.56317E-01	+/-	1.4E-03
Phase delay (usec)	-2.06152874214E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-3.30125E-06	+/-	6.0E-07
Delay rate (us/s)	-1.30767450480E+00	Apriori rate (us/s)	-1.30767110319E+00	Resid rate (us/s)	-3.40161E-06	+/-	3.2E-09
Total phase (deg)	-305.1	Apriori accel (us/s/s)	1.91192242989E-05	Resid phase (deg)	-102.4	+/-	18.7

ph/seg (deg)	43.9	Theor.	44.9	Amplitude	0.128 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	54.8		78.3	Search (2048X32)	0.119	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.1		26.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	50.2		46.2	Inc. seg. avg.	0.120	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.124	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 257.0 el 48.5 pa 44.9 G: az 94.5 el 56.3 pa -62.9 u,v (fr/asec) 8577.977 1939.787 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BG..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BG.W.76.1W8CZP

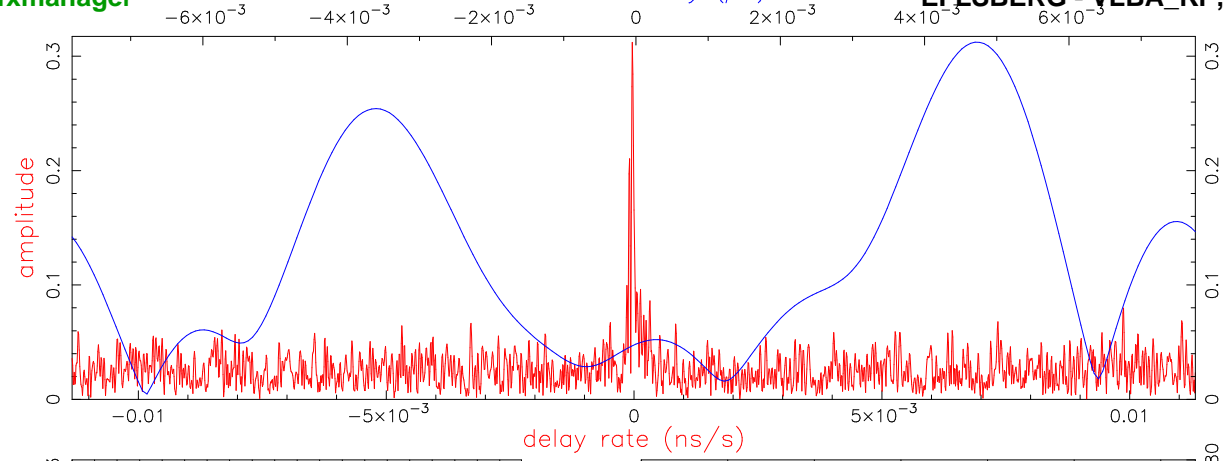
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

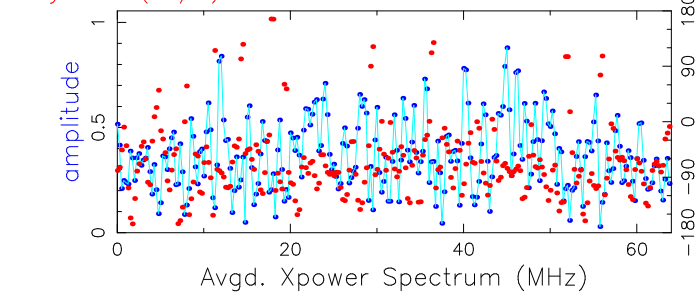
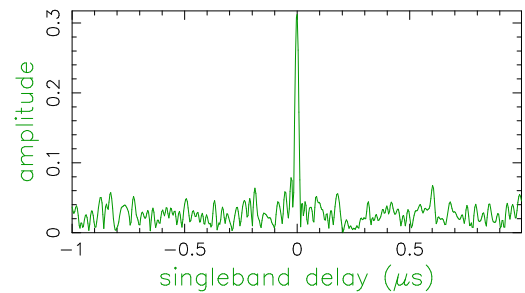
0234+285.1W8CZP, No0029, Bk

EFLSBERG - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

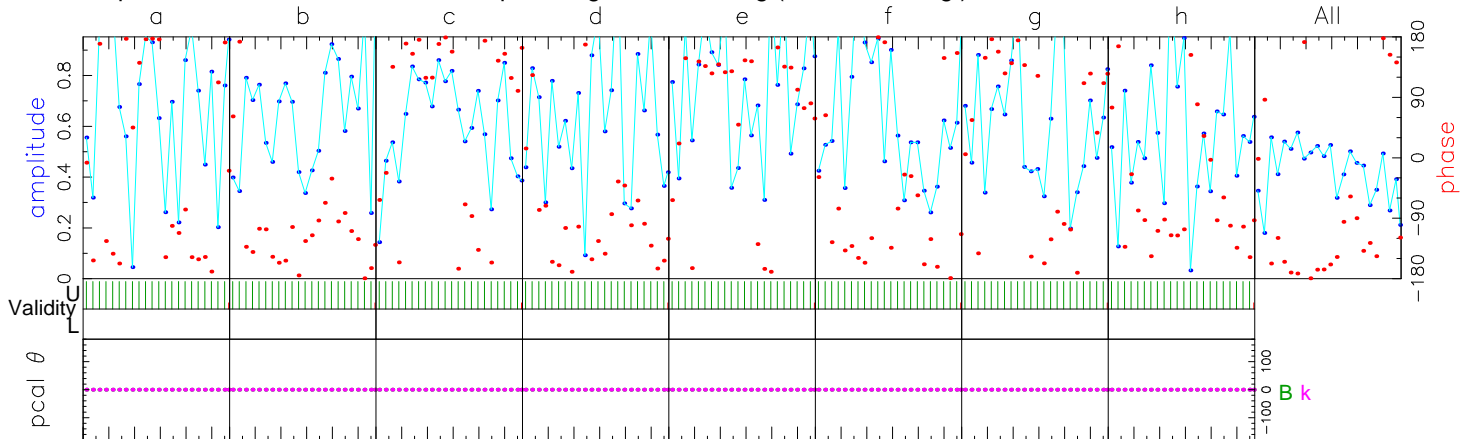


Fringe quality 8
 SNR 15.8
 Int time 329.973
 Amp 0.317
 Phase -154.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001654
 MBD 0.004683
 Fringe rate (Hz) -0.002534
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044457
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	4.94188317782E+03				4.94187849473E+03				4.68309E-03	+/- 6.9E-05
Sband delay (usec)	4.94187684123E+03				-2.2382000E+01				-1.65350E-03	+/- 5.5E-04
Phase delay (usec)	4.94187848975E+03				0.0000000E+00				-4.97601E-06	+/- 2.3E-07
Delay rate (us/s)	-1.73215940658E+00				-1.73215937716E+00				-2.94179E-08	+/- 1.2E-09
Total phase (deg)			38.6		-1.31733852850E-05				-154.3	+/- 7.3
ph/seg (deg)	55.1	17.4			0.317 +/- 0.020					
amp/seg (%)	48.7	30.4			0.304					
ph/frq (deg)	46.9	10.3			0.000					
amp/frq (%)	37.7	17.9			0.413					
Search (2048X32)					0.406					
Interp.					0.000					
Inc. seg. avg.					0.413					
Inc. frq. avg.					0.406					
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					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
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 257.0 el 48.5 pa 44.9 k: az 72.6 el 29.8 pa -67.8 u,v (fr/asec) 11307.930 1237.324 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bk..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bk.W.23.1W8CZP

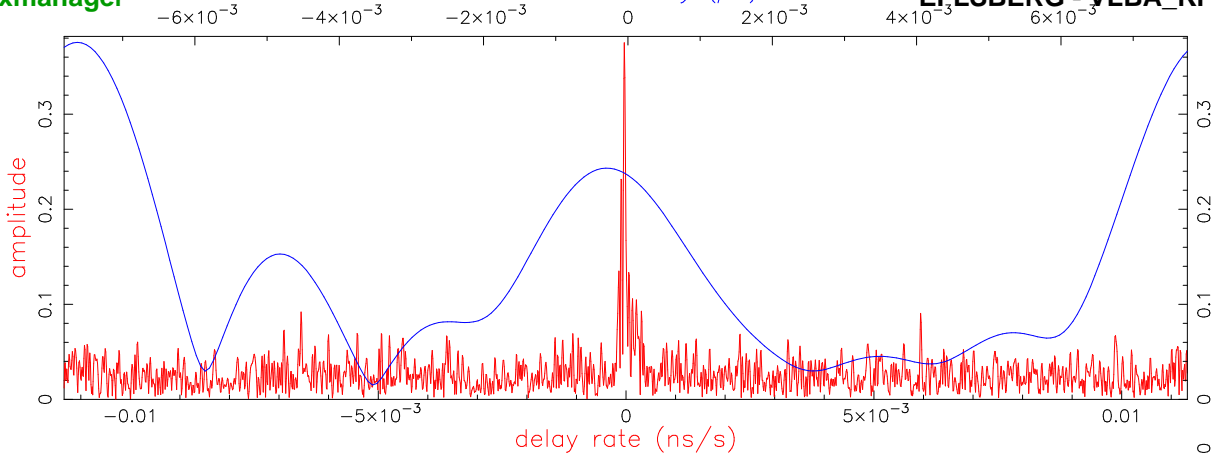
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bk

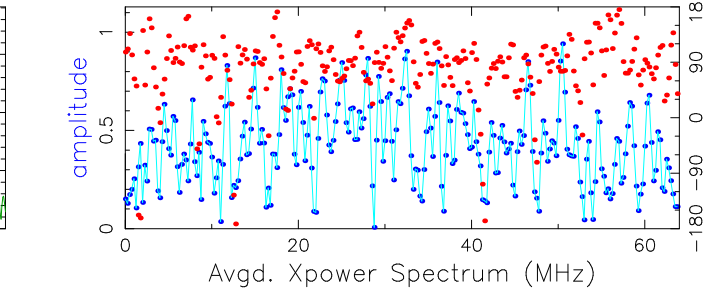
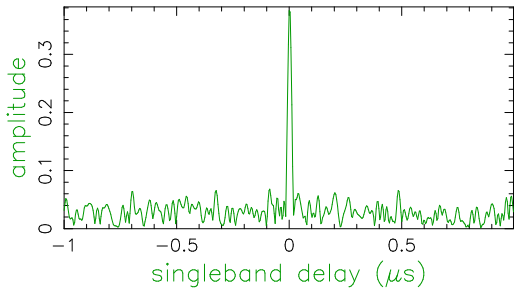
EFLSBERG - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)



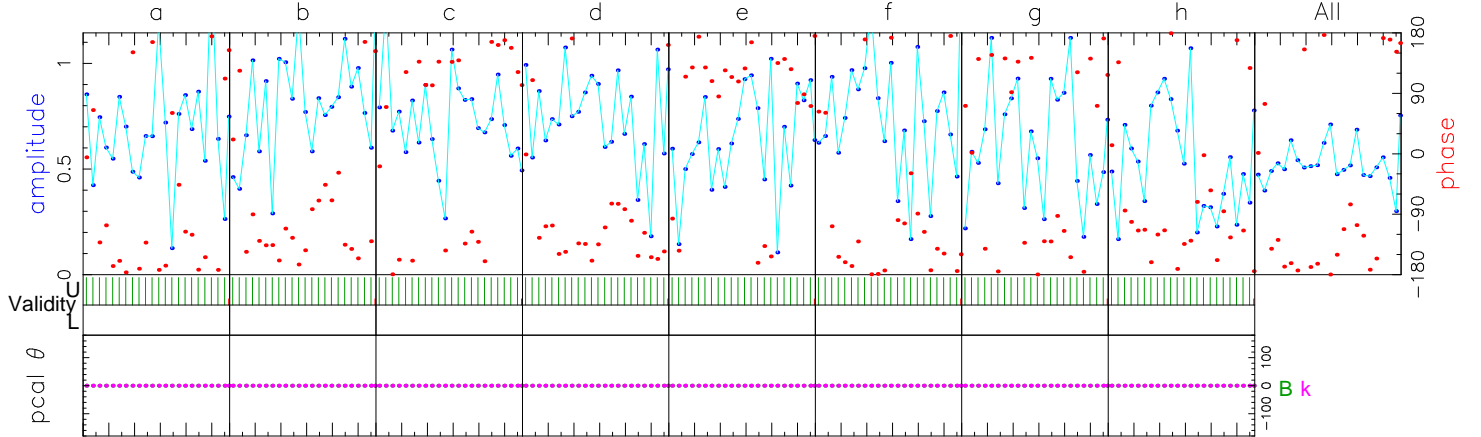
Fringe quality 8

SNR 19.0
Int time 329.973
Amp 0.382
Phase -159.8
PFD 0.0e+00
Delays (us)
SBD 0.001802
MBD -0.007578
Fringe rate (Hz)
-0.002683
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044454
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	4.94188654167E+03	Apriori delay (usec)	4.94187849473E+03	Resid mbdelay (usec)	-7.57806E-03	+/-	5.7E-05
Sband delay (usec)	4.94188029648E+03	Apriori clock (usec)	-2.2382000E+01	Resid sbdelay (usec)	1.80175E-03	+/-	4.5E-04
Phase delay (usec)	4.94187848957E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.15442E-06	+/-	1.9E-07
Delay rate (us/s)	-1.73215940831E+00	Apriori rate (us/s)	-1.73215937716E+00	Resid rate (us/s)	-3.11418E-08	+/-	1.0E-09
Total phase (deg)	33.1	Apriori accel (us/s/s)	-1.31733852850E-05	Resid phase (deg)	-159.8	+/-	6.0

ph/seg (deg)	54.0	Theor.	14.5	Amplitude	0.382 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	43.2	Search (2048X32)	0.369	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	41.4	Inc. seg. avg.	0.504	Inc. frq. avg.	0.452	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	26.8	Inc. frq. avg.	0.452	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
										ion window (TEC)	0.00 0.00

B: az 257.0 el 48.5 pa 44.9 k: az 72.6 el 29.8 pa -67.8 u,v (fr/asec) 11307.930 1237.324 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bk..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bk.W.3.1W8CZP

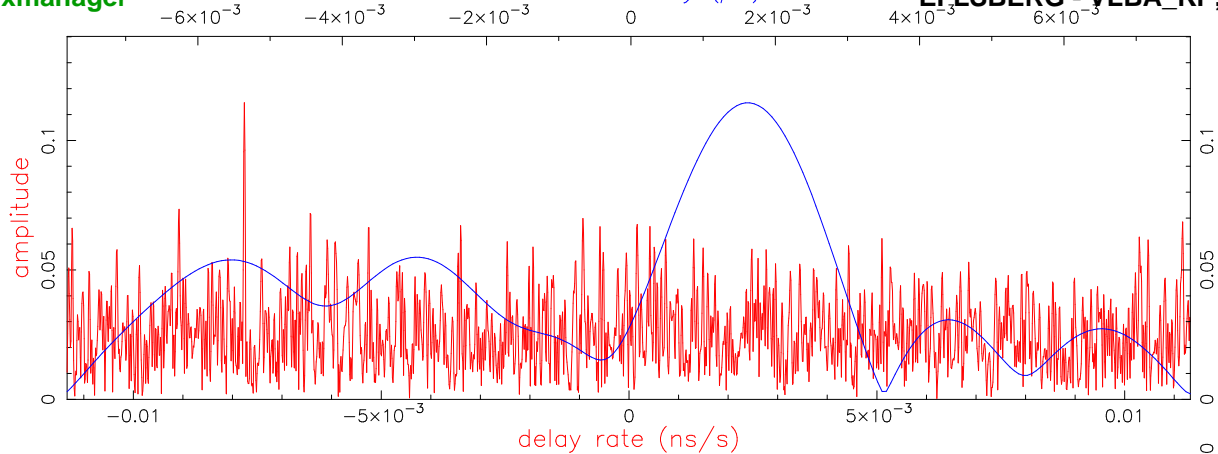
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bk

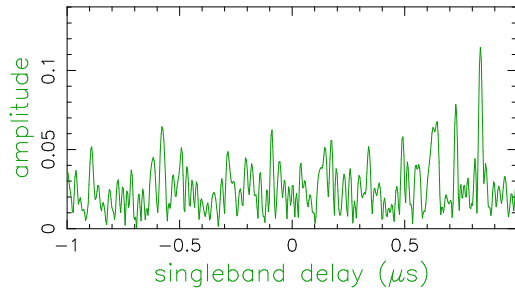
EFLSBERG - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

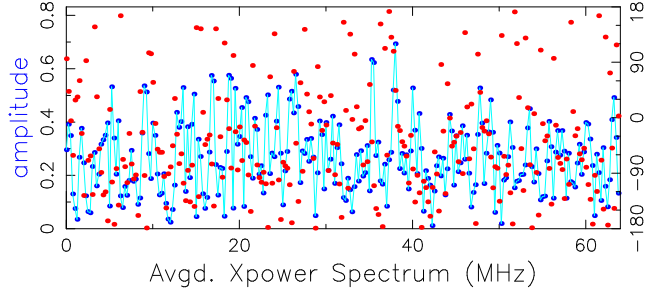


Fringe quality 0

SNR 5.7
 Int time 329.973
 Amp 0.140
 Phase -179.5
 PFD 9.5e-01
 Delays (us)
 SBD 0.836241
 MBD 0.001623
 Fringe rate (Hz)
 -0.669496
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

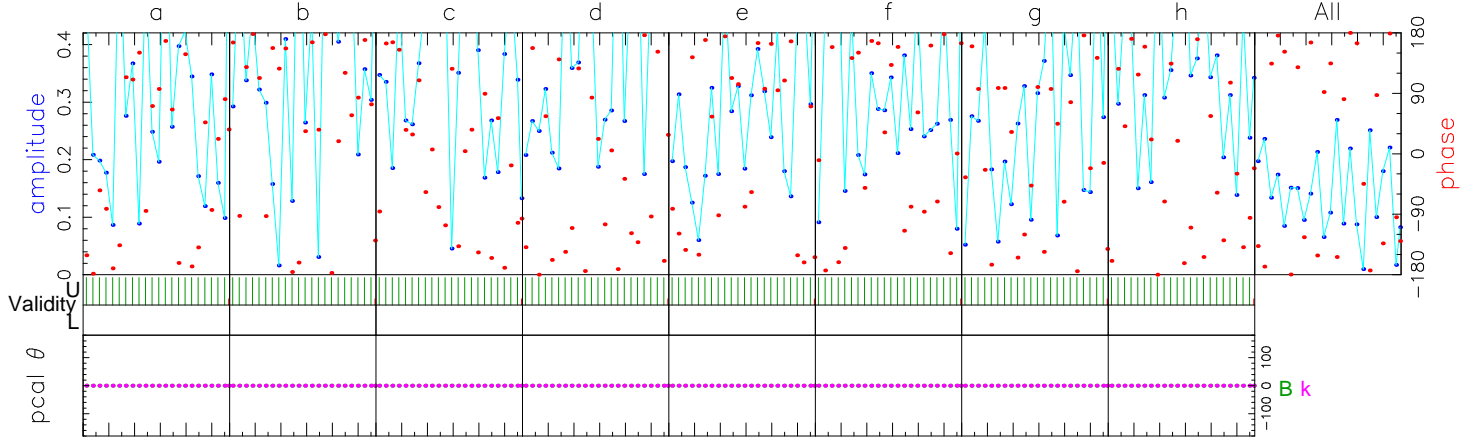


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044501
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.0	158.3	-63.3	-161.6	164.7	179.5	152.0	-172.7	Phase	-179.5
	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	Ampl.	0.1
	411.9	423.2	442.6	471.5	322.8	449.3	422.3	336.1	Sbd box	471.1
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	4.94270824278E+03	Apriori delay (usec)	4.94187849473E+03	Resid mbdelay (usec)	1.62305E-03	+/-	1.9E-04
Sband delay (usec)	4.94271473598E+03	Apriori clock (usec)	-2.2382000E+01	Resid sbdelay (usec)	8.36241E-01	+/-	1.5E-03
Phase delay (usec)	4.94187848894E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.78858E-06	+/-	6.5E-07
Delay rate (us/s)	-1.73216714935E+00	Apriori rate (us/s)	-1.73215937716E+00	Resid rate (us/s)	-7.77218E-06	+/-	3.4E-09
Total phase (deg)	13.4	Apriori accel (us/s/s)	-1.31733852850E-05	Resid phase (deg)	-179.5	+/-	20.1

ph/seg (deg)	RMS 55.8	Theor. 48.3	Amplitude Search (2048X32)	0.140 +/- 0.025	0.114	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.7	84.2	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	50.7	28.5	Inc. seg. avg.	0.131	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	42.6	49.7	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00	

B: az 257.0 el 48.5 pa 44.9 k: az 72.6 el 29.8 pa -67.8 u,v (fr/asec) 11307.930 1237.324 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bk..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bk.W.40.1W8CZP

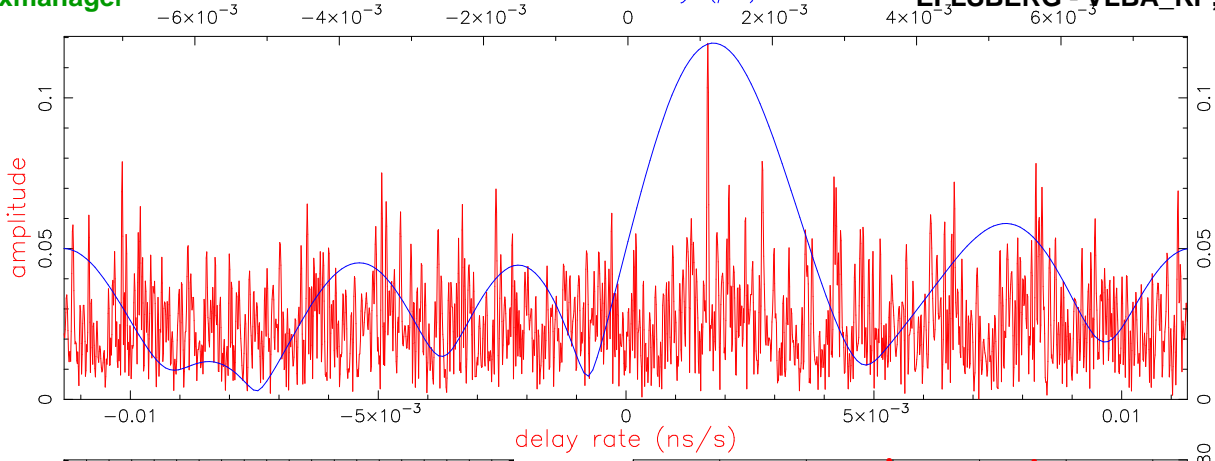
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bk

EFLSBERG - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.9

Int time 329.973

Amp 0.120

Phase 80.1

PFD 5.5e-01

Delays (us)

SBD 0.885409

MBD 0.001147

Fringe rate (Hz)

0.142227

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:113

Start 151500.00

Stop 152030.24

FRT 151745.00

Corr/FF/build

2021:288:021115

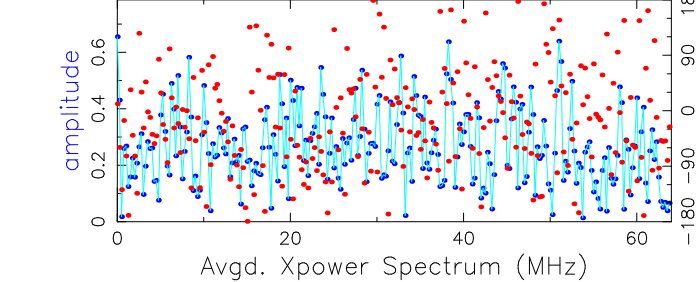
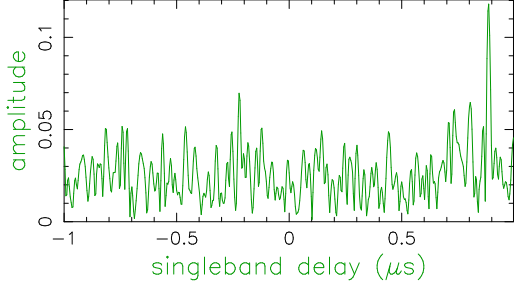
2021:288:044505

2021:252:122852

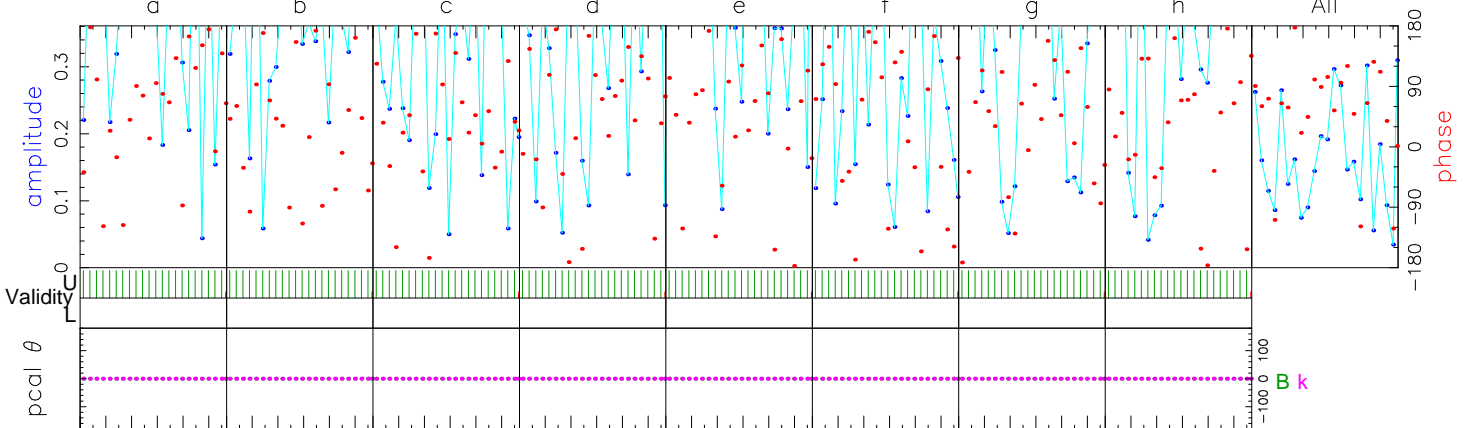
RA & Dec (J2000)

02h37m52.405678s

+28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	109.4	29.6	45.5	93.7	94.1	143.4	55.7	83.5	Phase	80.1
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	489.9	430.5	458.8	297.4	482.8	200.9	438.6	479.9	Sbd box	483.7
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	PC amp	
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)	4.94277026659E+03		Apriori delay (usec)		4.94187849473E+03		Resid mbdelay (usec)		1.14686E-03	+/- 1.8E-04
Sband delay (usec)	4.94276390323E+03		Apriori clock (usec)		-2.2382000E+01		Resid sbdelay (usec)		8.85409E-01	+/- 1.5E-03
Phase delay (usec)	4.94187849731E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.58242E-06	+/- 6.2E-07
Delay rate (us/s)	-1.73215772605E+00		Apriori rate (us/s)		-1.73215937716E+00		Resid rate (us/s)		1.65112E-06	+/- 3.3E-09
Total phase (deg)	273.0		Apriori accel (us/s/s)		-1.31733852850E-05		Resid phase (deg)		80.1	+/- 19.3

	RMS	Theor.	Amplitude	0.120 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	69.4	46.4	Search (2048X32)	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	74.6	80.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	40.0	27.3	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.1	47.7	Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 k: az 72.6 el 29.8 pa -67.8 u,v (fr/asec) 11307.930 1237.324 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bk..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bk.W.62.1W8CZP

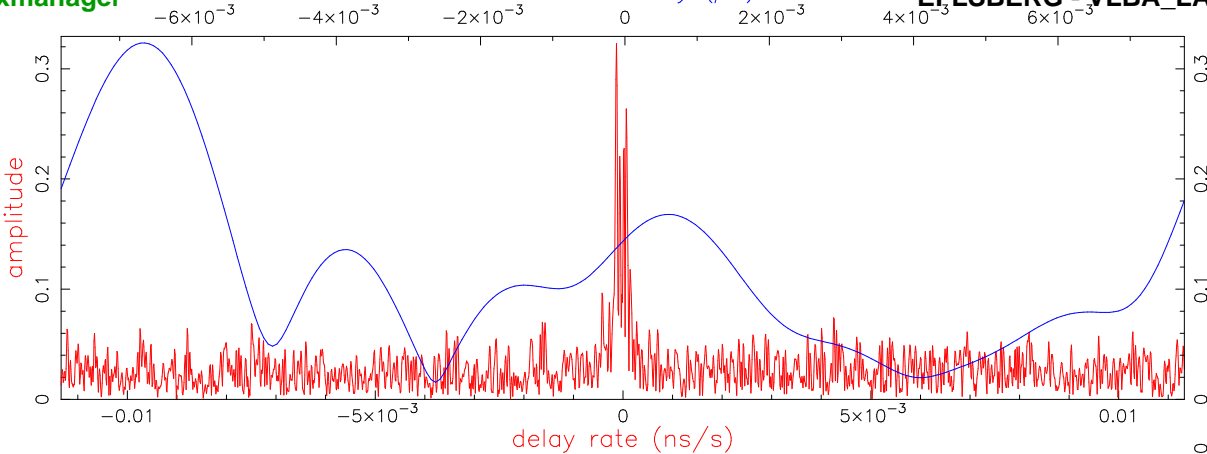
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BI

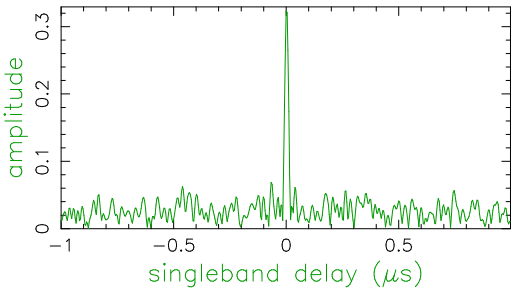
EFLSBERG - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

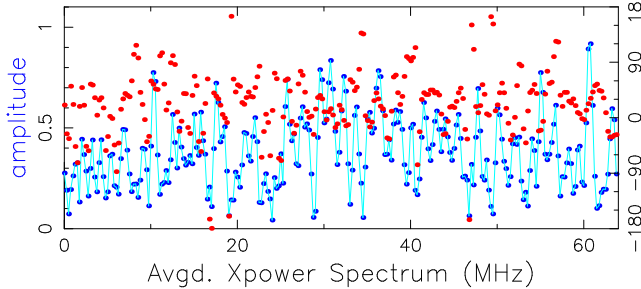


Fringe quality 8

SNR 16.4
 Int time 329.973
 Amp 0.329
 Phase 123.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001832
 MBD -0.006606
 Fringe rate (Hz)
 -0.011483
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

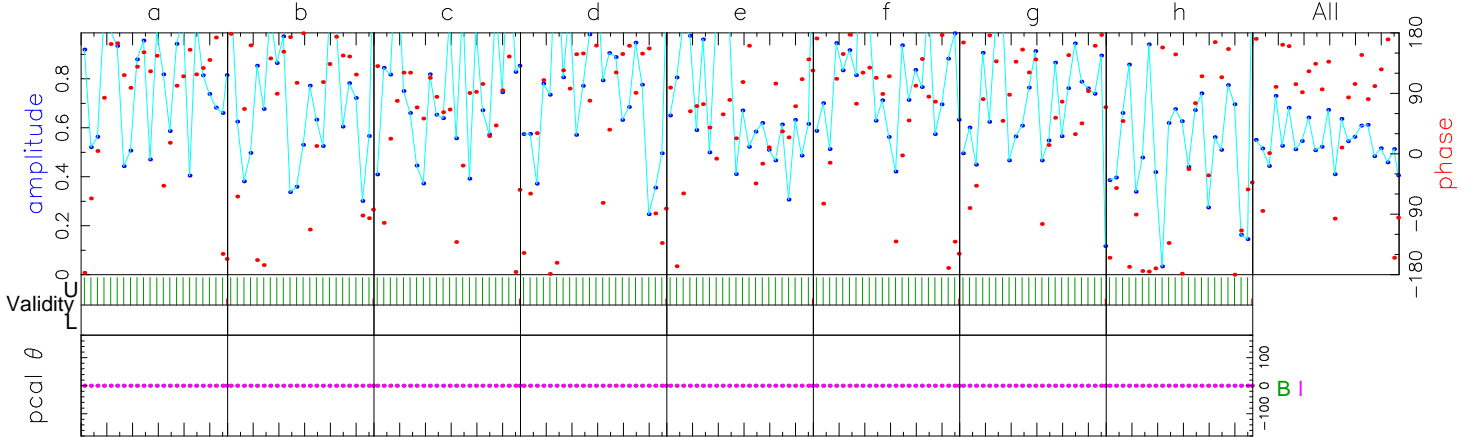


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044455
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	135.1	160.6	86.4	143.4	60.8	124.9	108.6	172.8	Phase	123.2
B	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.2	Ampl.	0.4
I	258.2	257.7	257.5	257.9	258.6	257.9	258.3	259.4	Sbd box	257.5
B	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 3.30477561220E+03 Apriori delay (usec) 3.30476659314E+03 Resid mbdelay (usec) -6.60595E-03 +/- 6.6E-05
 Sband delay (usec) 3.30476842539E+03 Apriori clock (usec) -1.9487518E+01 Resid sbdelay (usec) 1.83225E-03 +/- 5.3E-04
 Phase delay (usec) 3.30476659712E+03 Apriori clockrate (us/s) 2.8600001E-07 Resid phdelay (usec) 3.97390E-06 +/- 2.3E-07
 Delay rate (us/s) -1.64516018667E+00 Apriori rate (us/s) -1.64516005337E+00 Resid rate (us/s) -1.33302E-07 +/- 1.2E-09
 Total phase (deg) 243.3 Apriori accel (us/s/s) -7.46760857343E-06 Resid phase (deg) 123.2 +/- 7.0

RMS Theor. Amplitude 0.329 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.1 16.8 Search (2048X32) 0.318 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 72.2 29.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 40.6 9.9 Inc. seg. avg. 0.530 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.7 17.3 Inc. frq. avg. 0.380 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 I: az 77.2 el 35.1 pa -64.8 u,v (fr/asec) 10747.545 1059.262 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BI..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BI.W.10.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

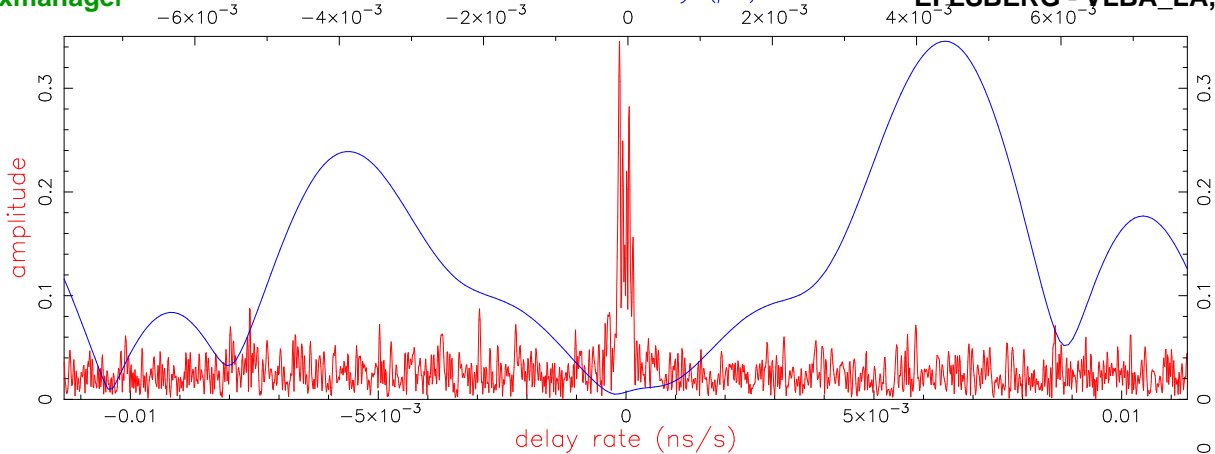
fxmanager

0234+285.1W8CZP, No0029, BI

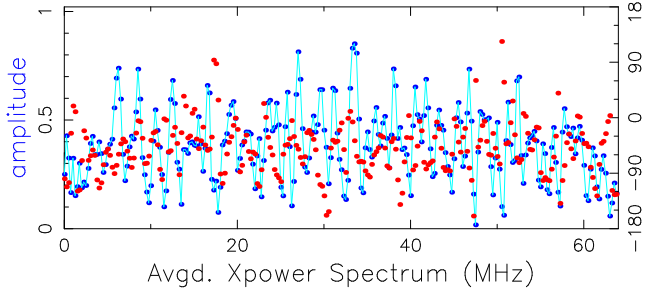
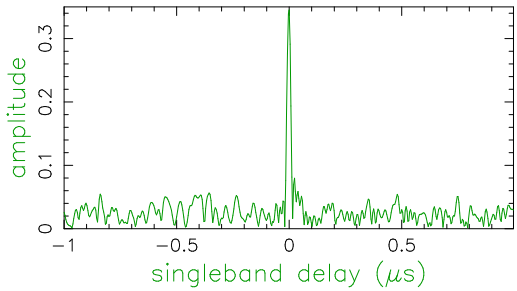
EFLSBERG - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 8

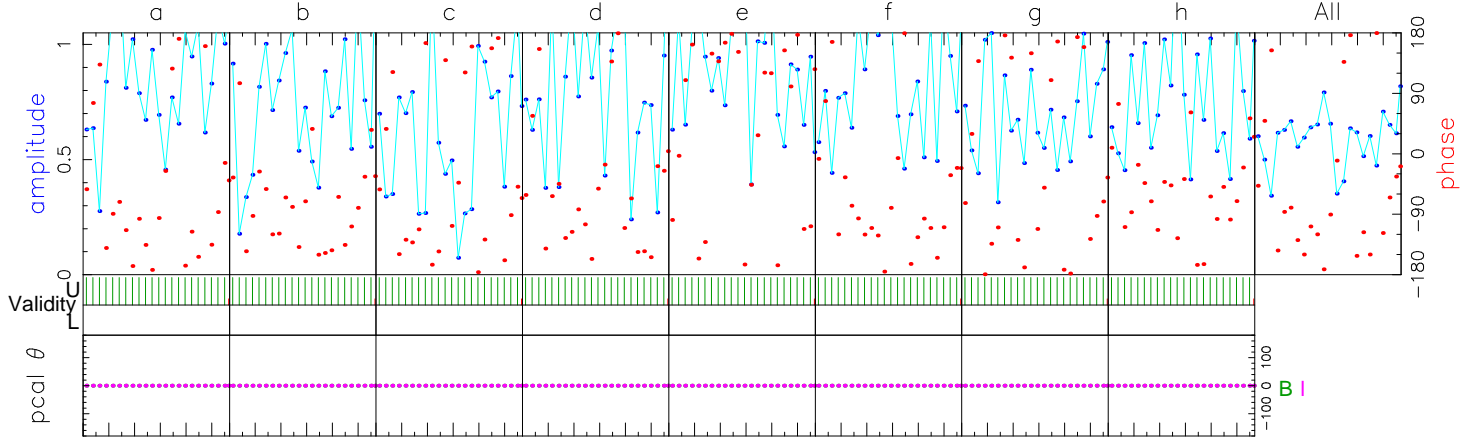


SNR 17.4
 Int time 329.973
 Amp 0.350
 Phase -119.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.001553
 MBD 0.004350
 Fringe rate (Hz)
 -0.011277
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044459
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.0	-83.8	-144.2	-108.7	167.1	-101.9	-158.7	-65.8	Phase	-119.9
	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4	Ampl.	0.4
	256.7	257.1	256.8	256.5	257.2	256.8	257.4	257.3	Sbd box	256.6
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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)	3.30477094351E+03		Apriori delay (usec)		3.30476659314E+03		Resid mbdelay (usec)		4.35036E-03	+/- 6.2E-05
Sband delay (usec)	3.30476503964E+03		Apriori clock (usec)		-1.9487518E+01		Resid sbdelay (usec)		-1.55350E-03	+/- 5.0E-04
Phase delay (usec)	3.30476658928E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		-3.86586E-06	+/- 2.1E-07
Delay rate (us/s)	-1.64516018428E+00		Apriori rate (us/s)		-1.64516005337E+00		Resid rate (us/s)		-1.30910E-07	+/- 1.1E-09
Total phase (deg)	0.2		Apriori accel (us/s/s)		-7.46760857343E-06		Resid phase (deg)		-119.9	+/- 6.6

	RMS	Theor.	Amplitude	0.350 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.1	15.8	Search (2048X32)	0.344	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	74.2	27.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	44.9	9.3	Inc. seg. avg.	0.564	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	28.8	16.3	Inc. frq. avg.	0.435	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 I: az 77.2 el 35.1 pa -64.8 u,v (fr/asec) 10747.545 1059.262 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BI..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BI.W.31.1W8CZP

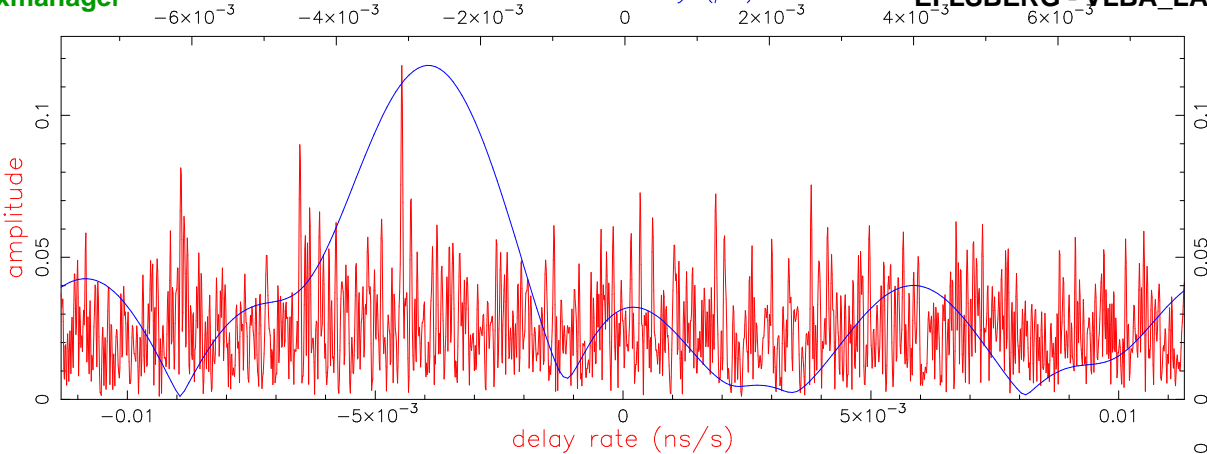
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BI

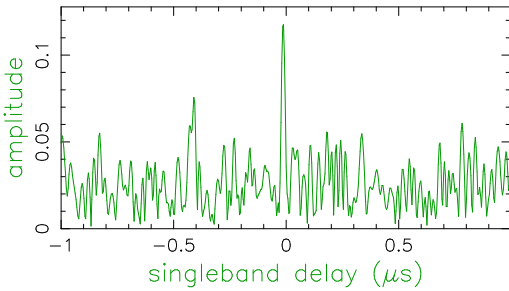
EFLSBERG - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

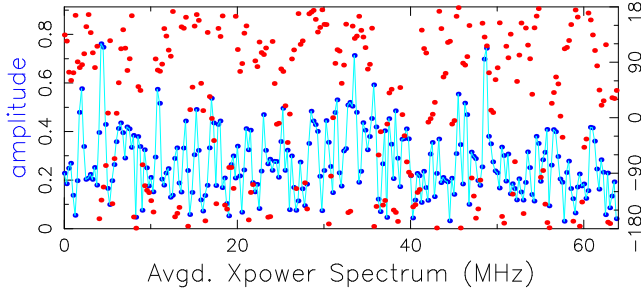


Fringe quality 0

SNR 6.0
Int time 329.973
Amp 0.128
Phase 14.2
PFD 5.0e-01
Delays (us)
SBD -0.013502
MBD -0.002751
Fringe rate (Hz)
-0.384858
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

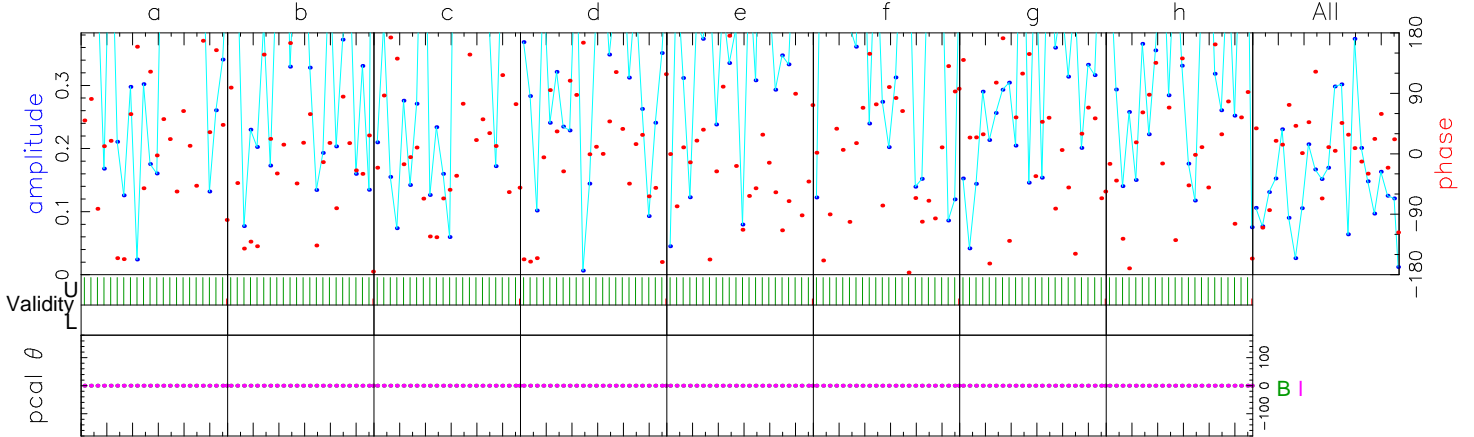


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044503
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		3.30474821697E+03			3.30476659314E+03					
Sband delay (usec)		3.30475309139E+03			-1.9487518E+01					
Phase delay (usec)		3.30476659360E+03			2.8600001E-07					
Delay rate (us/s)		-1.64516452118E+00			-1.64516005337E+00					
Total phase (deg)			134.3		-7.46760857343E-06					
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	52.1	46.2			0.128 +/- 0.021					
Theor.	46.2									
Amplitude										
Search (2048X32)										
Interp.					0.000					
Inc. seg. avg.					0.127					
Inc. frq. avg.					0.120					
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

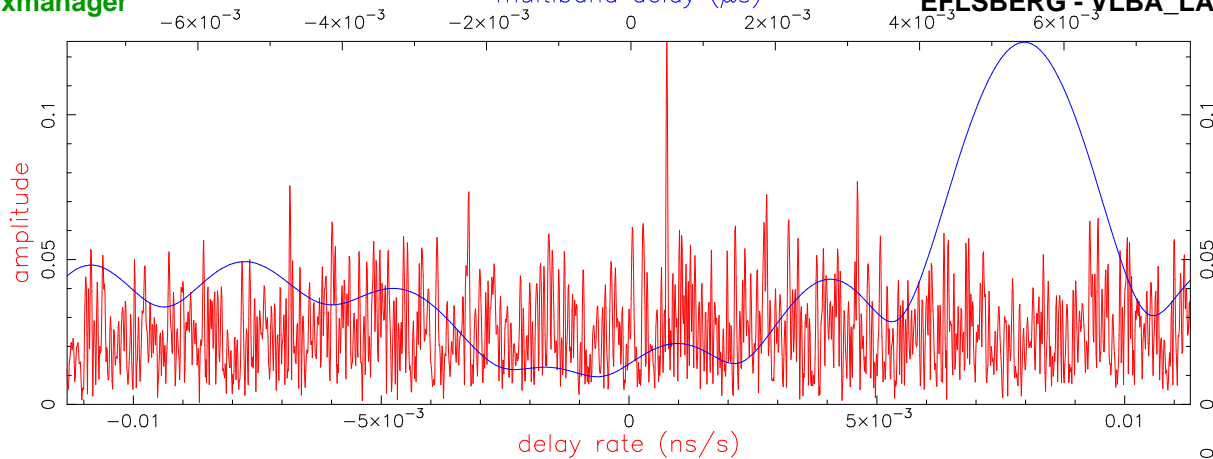
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BI

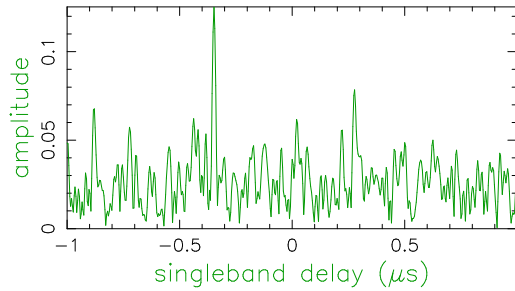
EFLSBERG - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

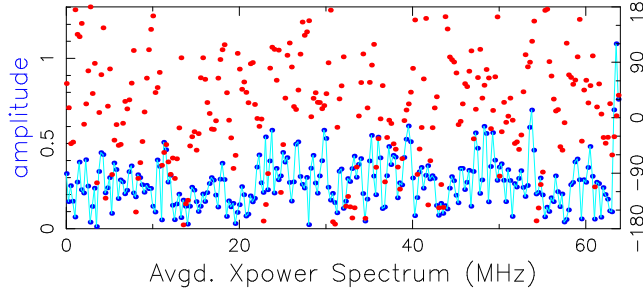


Fringe quality 0

SNR 6.2
 Int time 329.973
 Amp 0.125
 Phase -77.4
 PFD 1.3e-01
 Delays (us)
 SBD -0.347510
 MBD 0.005450
 Fringe rate (Hz)
 0.065670
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

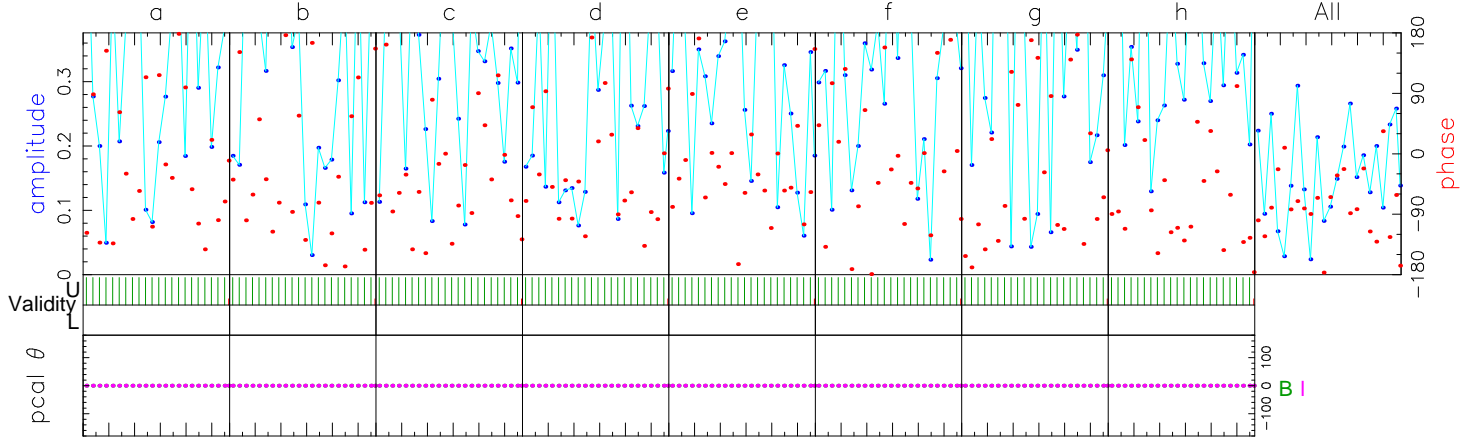


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044506
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-87.6	-107.3	-70.3	-54.4	-50.6	-30.0	-117.7	-78.8	Phase	-77.4
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	326.5	317.5	32.6	274.2	167.5	326.9	169.1	158.3	Sbd box	168.0
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	
									Tracks	
Group delay (usec)(sbd)	3.30441266806E+03		Apriori delay (usec)		3.30476659314E+03		Resid mbdelay (usec)		5.44991E-03	+/- 1.7E-04
Sband delay (usec)	3.30441908339E+03		Apriori clock (usec)		-1.9487518E+01		Resid sbdelay (usec)		-3.47510E-01	+/- 1.4E-03
Phase delay (usec)	3.30476659065E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		-2.49482E-06	+/- 5.9E-07
Delay rate (us/s)	-1.64515929101E+00		Apriori rate (us/s)		-1.64516005337E+00		Resid rate (us/s)		7.62360E-07	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.46760857343E-06		Resid phase (deg)		-77.4	+/- 18.4

RMS Theor. Amplitude 0.125 +/- 0.020
 ph/seg (deg) 48.6 44.2 Search (2048X32) 0.124
 amp/seg (%) 66.5 77.2 Interp. 0.000
 ph/frq (deg) 32.1 26.1 Inc. seg. avg. 0.124
 amp/frq (%) 32.9 45.5 Inc. frq. avg. 0.127

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

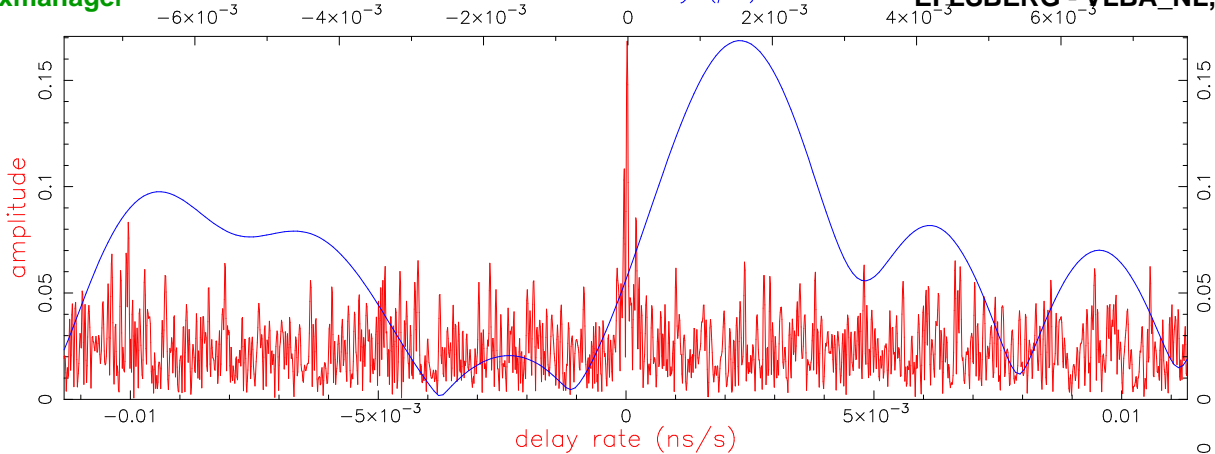
sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 I: az 77.2 el 35.1 pa -64.8 u,v (fr/asec) 10747.545 1059.262 simultaneous interpolator

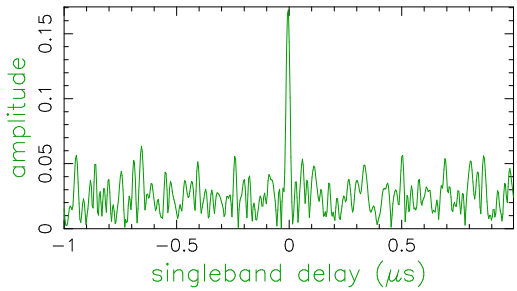
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BI..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BI.W.68.1W8CZP

multiband delay (μ s)

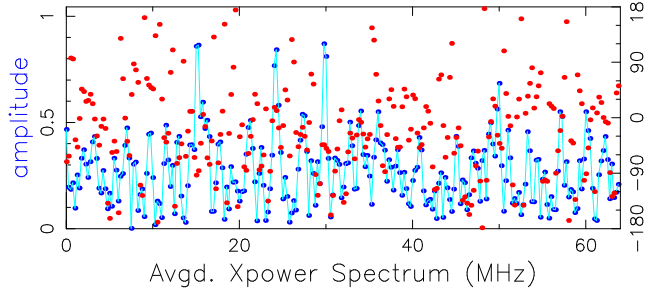
Fringe quality 9



SNR 8.5
 Int time 329.973
 Amp 0.171
 Phase -103.4
 PFD 8.3e-09
 Delays (us)
 SBD -0.005420
 MBD 0.001488
 Fringe rate (Hz)
 0.001502
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

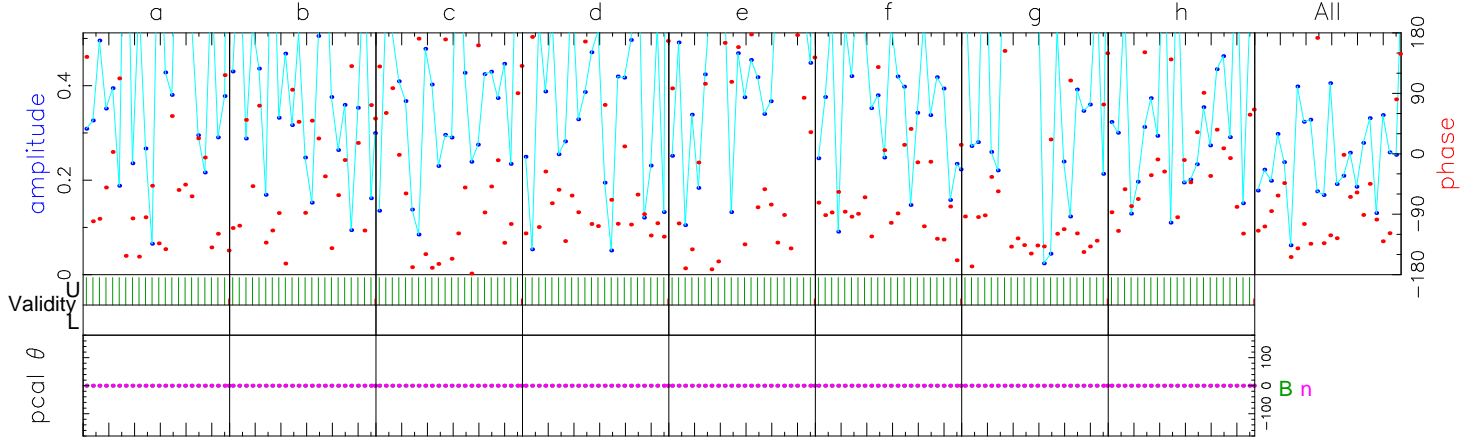


delay rate (ns/s)



Exp. c211a
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044458
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-105.9	-64.9	-143.8	-92.8	-159.4	-85.2	-130.0	-31.8	Phase	-103.4
	0.2	0.1	0.1	0.3	0.2	0.3	0.3	0.2	Ampl.	0.2
	256.4	29.9	80.3	255.7	257.1	256.5	257.0	226.0	Sbd box	255.6
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.57327964539E+00			Apriori delay (usec)	-7.57476773072E+00			Resid mbdelay (usec)	1.48809E-03	+/- 1.3E-04
Sband delay (usec)	-7.58018823072E+00			Apriori clock (usec)	-2.7457800E+01			Resid sbdelay (usec)	-5.42050E-03	+/- 1.0E-03
Phase delay (usec)	-7.57477106564E+00			Apriori clockrate (us/s)	-2.9999999E-07			Resid phdelay (usec)	-3.33492E-06	+/- 4.4E-07
Delay rate (us/s)	-1.42491902094E+00			Apriori rate (us/s)	-1.42491903837E+00			Resid rate (us/s)	1.74312E-08	+/- 2.3E-09
Total phase (deg)		-280.7		Apriori accel (us/s/s)	5.66646057060E-06			Resid phase (deg)	-103.4	+/- 13.5

	RMS	Theor.	Amplitude	0.171 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	56.7	32.4	Search (2048X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	69.6	56.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	45.7	19.1	Inc. seg. avg.	0.216	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	47.8	33.4	Inc. frq. avg.	0.198	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	

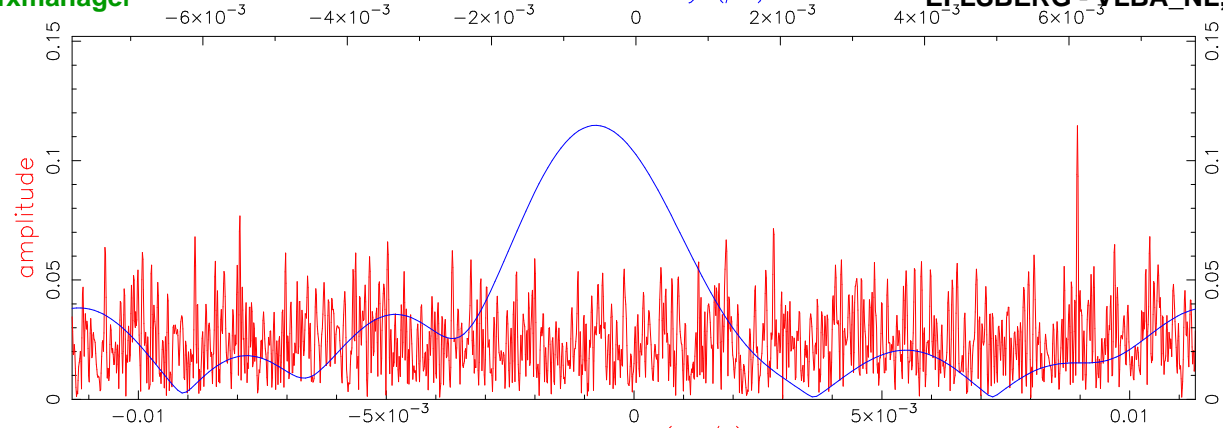
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

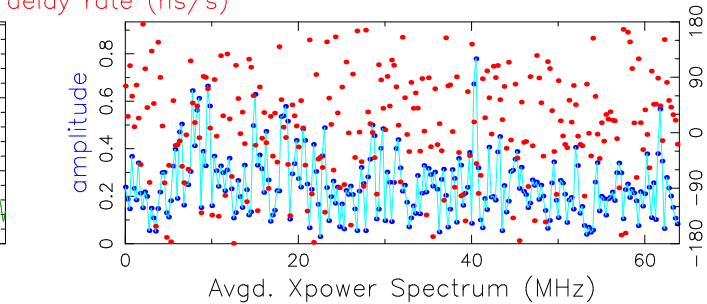
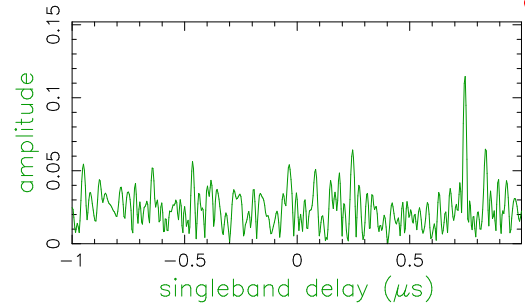
0234+285.1W8CZP, No0029, Bn

EFLSBERG - VLBA_NL, fgroup W, pol LR

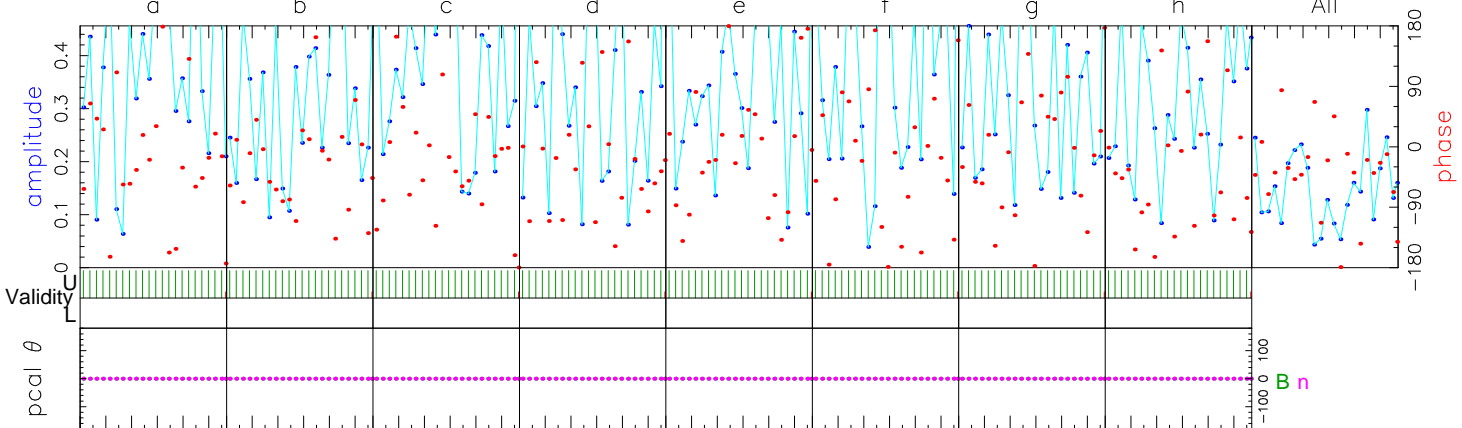
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 329.973
 Amp 0.152
 Phase -32.2
 PFD 8.8e-01
 Delays (us)
 SBD 0.744877
 MBD -0.000612
 Fringe rate (Hz) 0.771581
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044502
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.2	-38.1	-30.1	-53.3	-18.0	-26.7	31.4	-53.9	Phase	-32.2
	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	401.9	507.0	284.5	448.2	277.0	319.8	279.7	165.2	Sbd box	447.7
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	
									Tracks	
Group delay (usec)(sbd)	-6.82537987027E+00		Apriori delay (usec)		-7.57476773072E+00		Resid mbdelay (usec)		-6.12140E-04	+/- 1.9E-04
Sband delay (usec)	-6.82989098072E+00		Apriori clock (usec)		-2.7457800E+01		Resid sbdelay (usec)		7.44877E-01	+/- 1.5E-03
Phase delay (usec)	-7.57476876964E+00		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-1.03892E-06	+/- 6.4E-07
Delay rate (us/s)	-1.42491008108E+00		Apriori rate (us/s)		-1.42491903837E+00		Resid rate (us/s)		8.95729E-06	+/- 3.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.66646057060E-06		Resid phase (deg)		-32.2	+/- 19.9

	RMS	Theor.	Amplitude	0.152 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.6	47.7	Search (2048X32)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	65.8	83.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	29.6	28.1	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	27.4	49.1	Inc. frq. avg.	0.144	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 n: az 90.6 el 47.1 pa -58.3 u,v (fr/asec) 9326.416 1006.441 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bn..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bn.W.44.1W8CZP

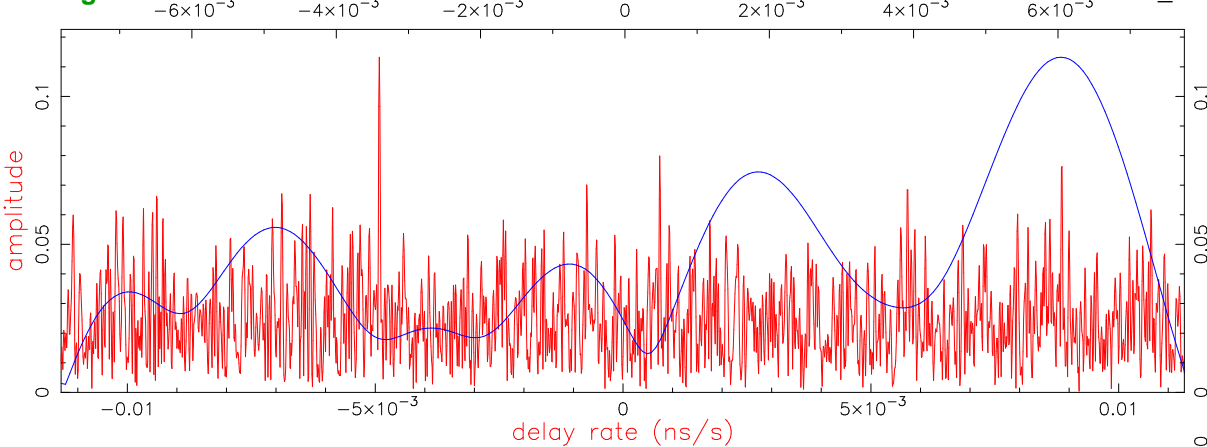
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bn

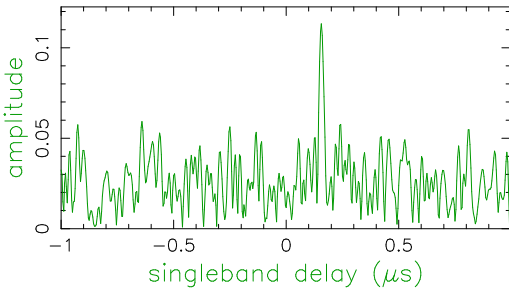
EFLSBERG - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

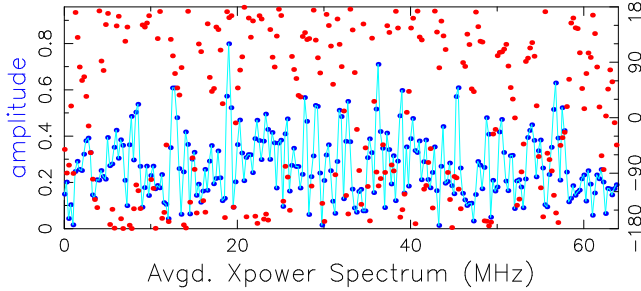


Fringe quality 0

SNR 5.6
 Int time 329.973
 Amp 0.123
 Phase 89.6
 PFD 9.9e-01
 Delays (μ s)
 SBD 0.155717
 MBD 0.006024
 Fringe rate (Hz)
 -0.424287
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

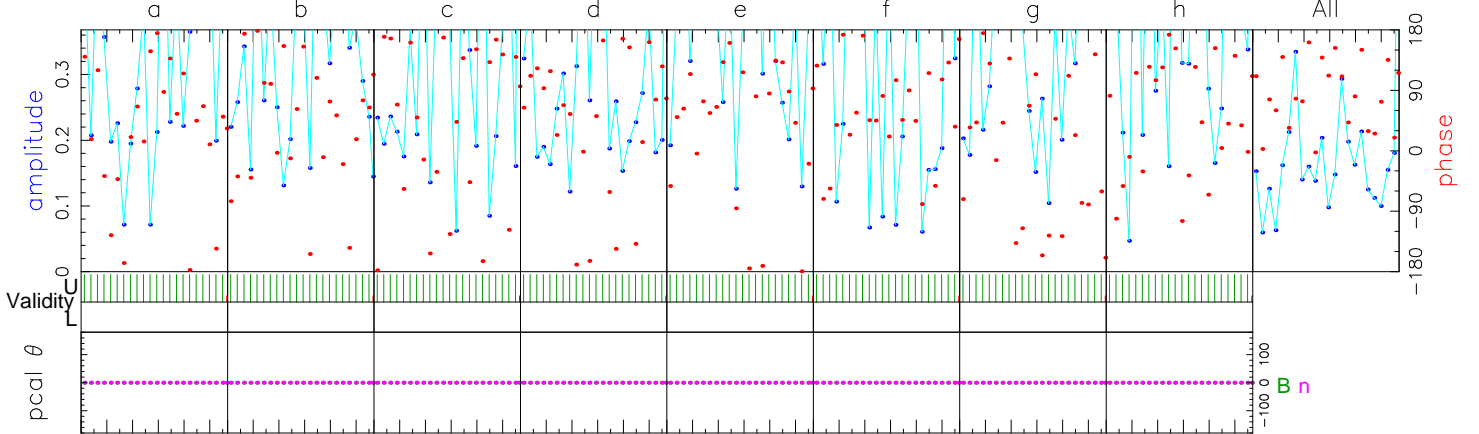


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044506
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.41249393579E+00								6.02379E-03	+/- 1.9E-04
Sband delay (usec)	-7.41905073072E+00								1.55717E-01	+/- 1.5E-03
Phase delay (usec)	-7.57476484182E+00								2.88890E-06	+/- 6.6E-07
Delay rate (us/s)	-1.42492396392E+00								-4.92555E-06	+/- 3.4E-09
Total phase (deg)			-87.7						89.6	+/- 20.4
Apriori delay (usec)					-7.57476773072E+00				Resid mbdelay (usec)	
Apriori clock (usec)					0.112				Resid sbdelay (usec)	
Apriori clockrate (us/s)					0.000				Resid phdelay (usec)	
Apriori rate (us/s)					0.131				Resid rate (us/s)	
Apriori accel (us/s/s)					0.128				Resid phase (deg)	
ph/seg (deg)	50.7	48.8							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	82.4	85.2							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	76.7	28.8							Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	58.2	50.2							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

B: az 257.0 el 48.5 pa 44.9 n: az 90.6 el 47.1 pa -58.3 u,v (fr/asec) 9326.416 1006.441 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bn..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bn.W.65.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

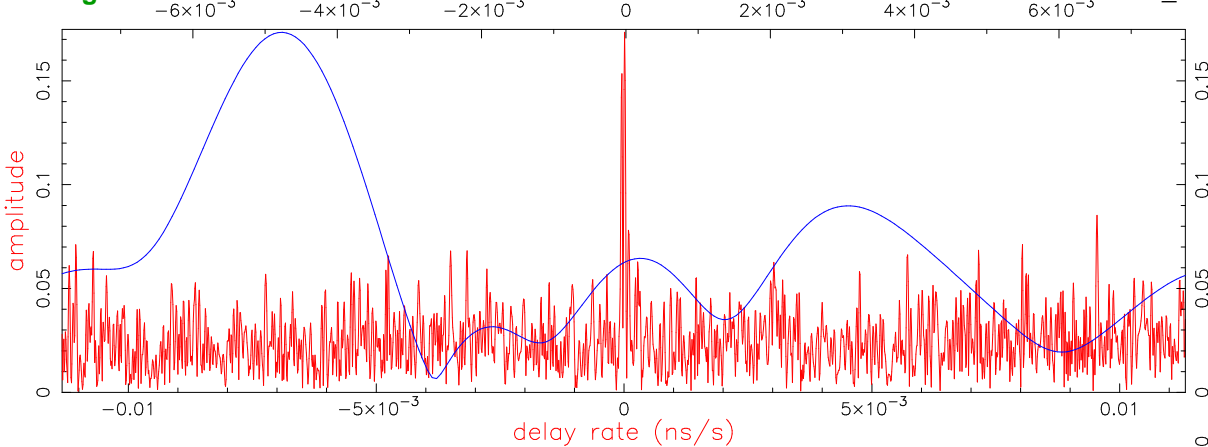
fxmanager

0234+285.1W8CZP, No0029, Bn

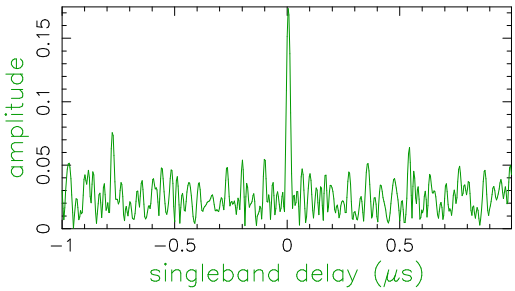
EFLSBERG - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

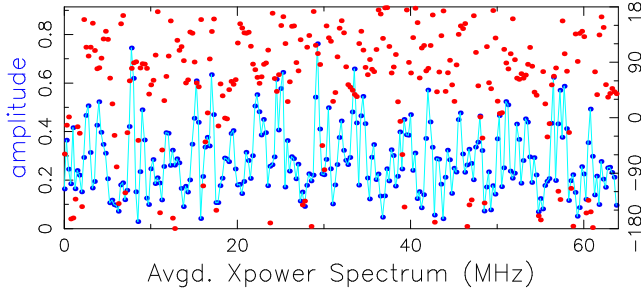
Fringe quality 9



SNR 8.7
Int time 329.973
Amp 0.175
Phase -149.6
PFD 1.4e-09
Delays (us)
SBD 0.005149
MBD -0.004784
Fringe rate (Hz)
0.000921
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

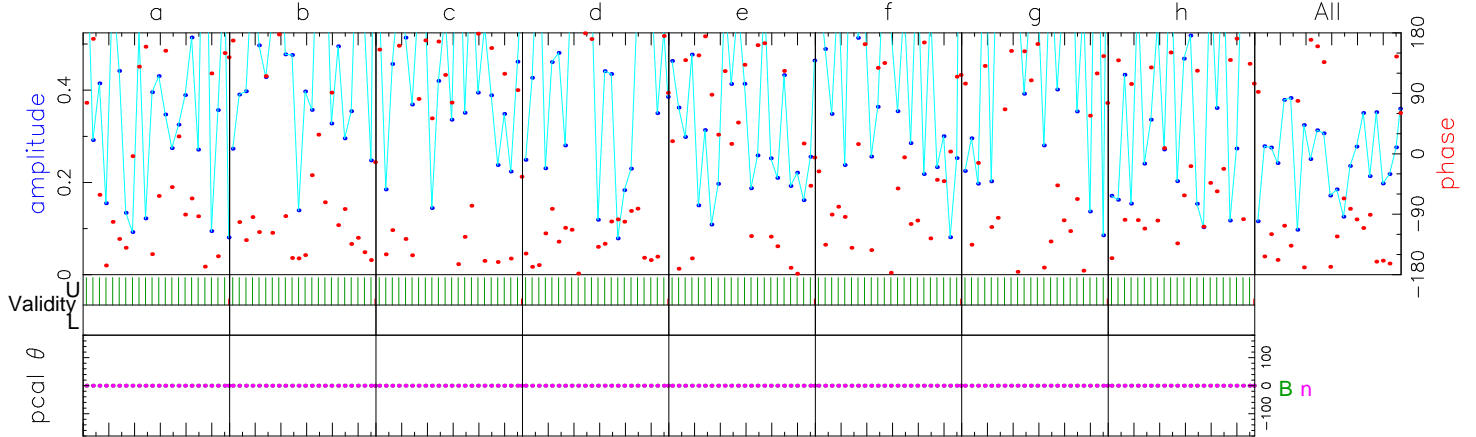


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044455
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.7	-121.6	176.1	-144.6	141.7	-116.4	-177.1	-96.4	Phase	-149.6
	0.1	0.3	0.3	0.4	0.1	0.2	0.1	0.1	Ampl.	0.2
	230.7	258.6	258.5	257.9	145.5	191.2	258.9	65.9	Sbd box	258.3
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.56392703181E+00		Apriori delay (usec)		-7.57476773072E+00		Resid mbdelay (usec)		-4.78430E-03	+/- 1.3E-04
Sband delay (usec)	-7.56961923072E+00		Apriori clock (usec)		-2.7457800E+01		Resid sbdelay (usec)		5.14850E-03	+/- 9.9E-04
Phase delay (usec)	-7.57477255647E+00		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-4.82575E-06	+/- 4.3E-07
Delay rate (us/s)	-1.42491902768E+00		Apriori rate (us/s)		-1.42491903837E+00		Resid rate (us/s)		1.06886E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		5.66646057060E-06		Resid phase (deg)		-149.6	+/- 13.2

ph/seg (deg) 57.8 31.7 Search (2048X32) 0.173 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.9 55.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.6 18.7 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.6 32.6 Inc. frq. avg. 0.195 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 257.0 el 48.5 pa 44.9 n: az 90.6 el 47.1 pa -58.3 u,v (fr/asec) 9326.416 1006.441 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bn..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bn.W.9.1W8CZP

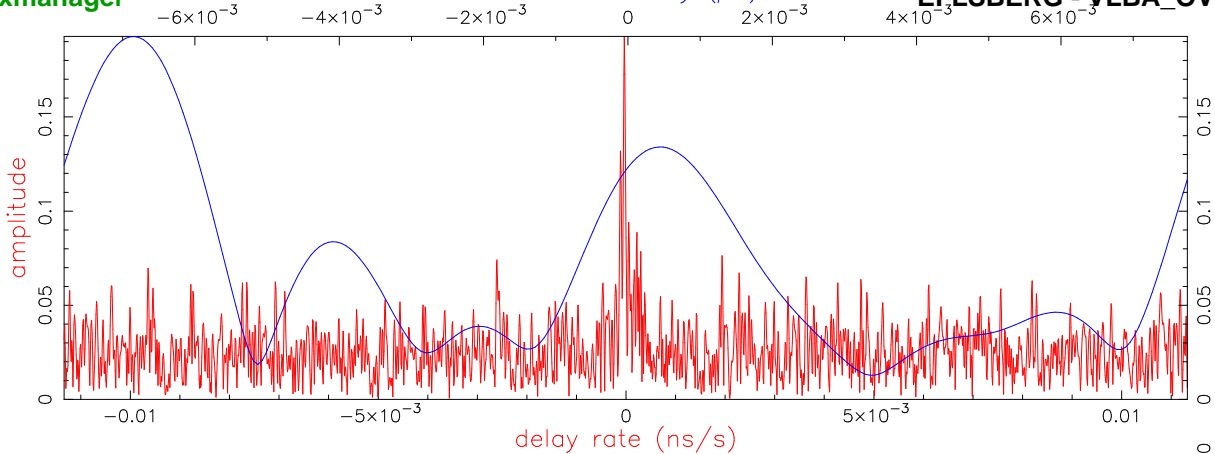
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bo

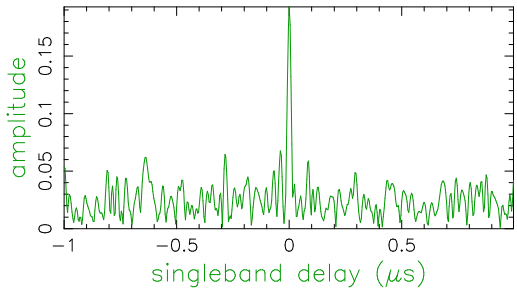
EFLSBERG - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

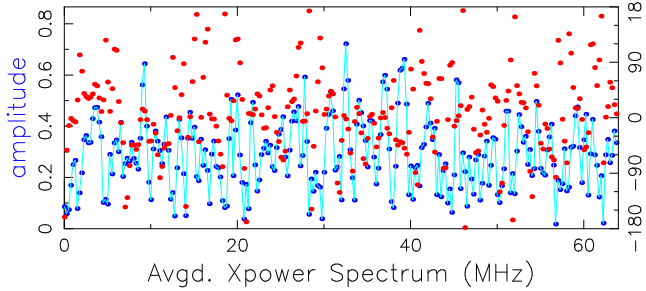


Fringe quality 9

SNR 9.6
Int time 329.952
Amp 0.193
Phase 86.0
PFD 4.1e-13
Delays (us)
SBD 0.000209
MBD -0.006847
Fringe rate (Hz)
-0.002524
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

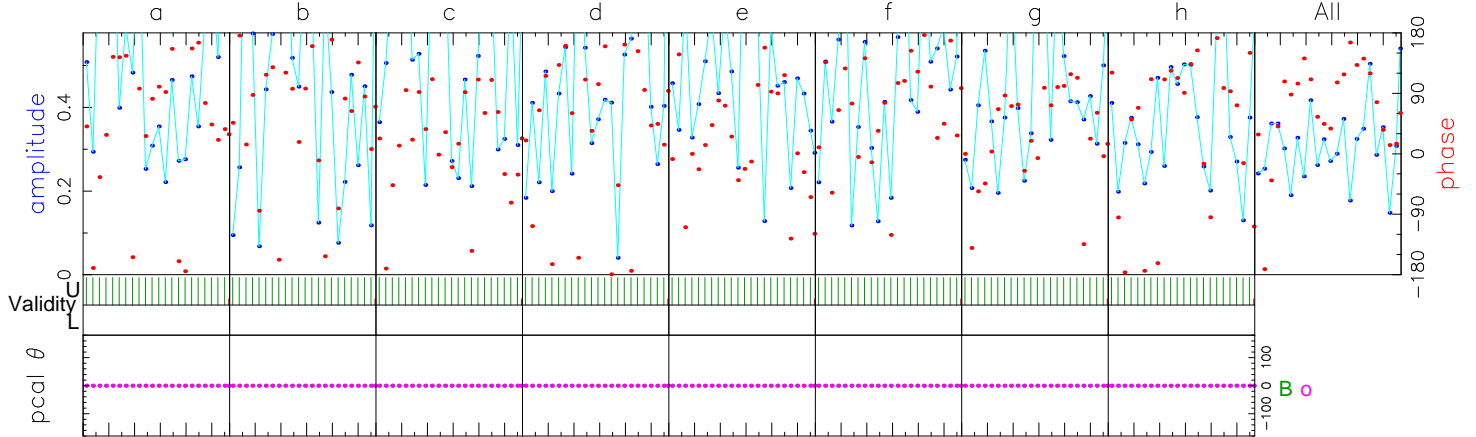


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:113
Start 151500.00
Stop 152030.24
FRT 151745.00
Corr/FF/build
2021:288:021115
2021:288:044455
2021:252:122852
RA & Dec (J2000)
02h37m52.405678s
+28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:o	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	6.14892841578E+03		Apriori delay (usec)		6.14893526232E+03		Resid mbdelay (usec)		-6.84653E-03	+/- 1.1E-04
Sband delay (usec)	6.14893547157E+03		Apriori clock (usec)		-2.5695160E+01		Resid sbdelay (usec)		2.09250E-04	+/- 9.0E-04
Phase delay (usec)	6.14893526509E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		2.77430E-06	+/- 3.9E-07
Delay rate (us/s)	-1.70151353043E+00		Apriori rate (us/s)		-1.70151350112E+00		Resid rate (us/s)		-2.93059E-08	+/- 2.0E-09
Total phase (deg)	264.6		Apriori accel (us/s/s)		-2.37339059441E-05		Resid phase (deg)		86.0	+/- 12.0

ph/seg (deg) 55.5 28.7 Search (2048X32) 0.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.2 50.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.8 16.9 Inc. seg. avg. 0.271 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.1 29.5 Inc. frq. avg. 0.231 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 257.0 el 48.5 pa 44.9 o: az 72.4 el 26.2 pa -60.1 u,v (fr/asec) 11093.481 193.930 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bo..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bo.W.11.1W8CZP

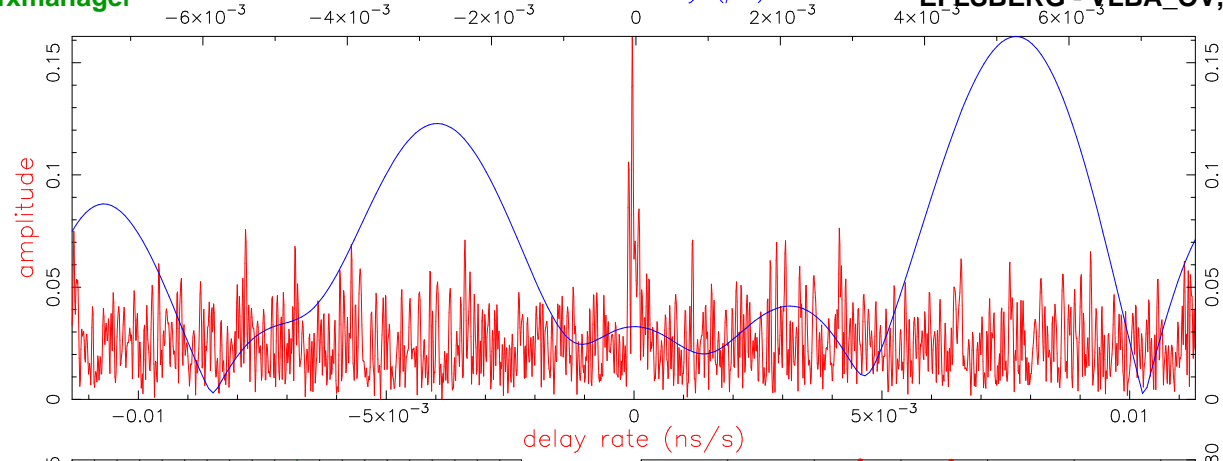
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

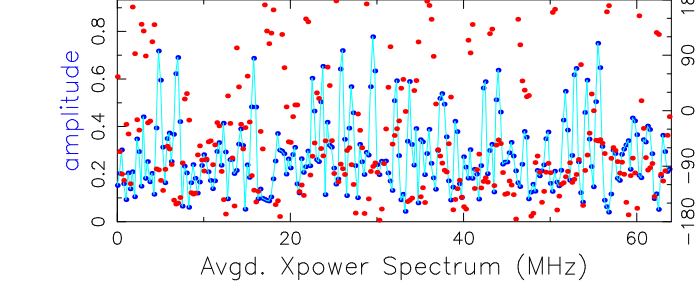
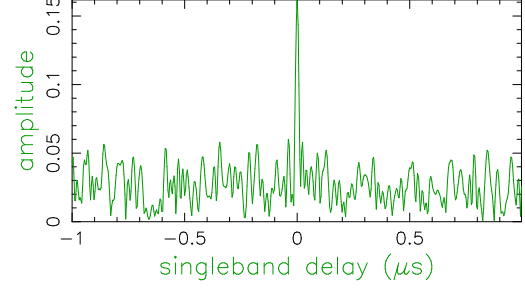
0234+285.1W8CZP, No0029, Bo

EFLSBERG - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

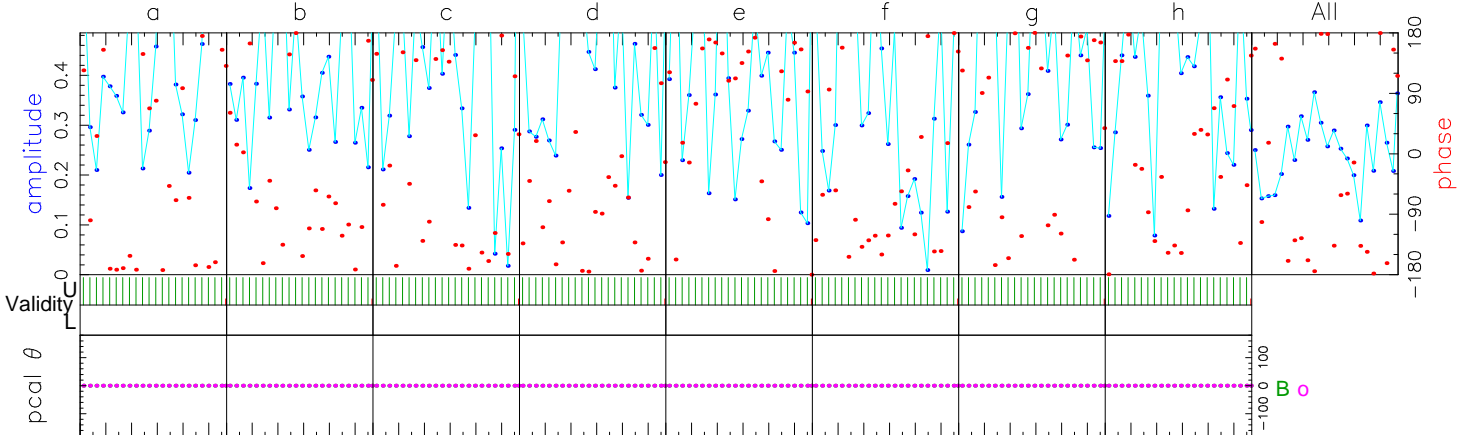


Fringe quality 9
 SNR 8.0
 Int time 329.953
 Amp 0.162
 Phase -158.4
 PFD 3.2e-07
 Delays (us)
 SBD -0.000232
 MBD 0.005259
 Fringe rate (Hz) -0.003269
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044459
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-178.8	-114.3	179.0	-97.4	147.5	-137.9	177.7	-81.2	Phase	-158.4
	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.1	Ampl.	0.2
	257.5	257.1	257.5	323.1	258.0	257.9	257.5	65.8	Sbd box	256.9
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.14894052113E+03		Apriori delay (usec)		6.14893526232E+03		Resid mbdelay (usec)		5.25881E-03	+/- 1.4E-04
Sband delay (usec)	6.14893503082E+03		Apriori clock (usec)		-2.5695160E+01		Resid sbdelay (usec)		-2.31500E-04	+/- 1.1E-03
Phase delay (usec)	6.14893525721E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-5.10819E-06	+/- 4.6E-07
Delay rate (us/s)	-1.70151353907E+00		Apriori rate (us/s)		-1.70151350112E+00		Resid rate (us/s)		-3.79503E-08	+/- 2.4E-09
Total phase (deg)	20.2		Apriori accel (us/s/s)		-2.37339059441E-05		Resid phase (deg)		-158.4	+/- 14.3

ph/seg (deg) 63.8 34.2 Search (2048X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.7 59.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.4 20.2 Inc. seg. avg. 0.209 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.9 35.2 Inc. frq. avg. 0.195 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 257.0 el 48.5 pa 44.9 o: az 72.4 el 26.2 pa -60.1 u,v (fr/asec) 11093.481 193.930 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bo..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bo.W.32.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

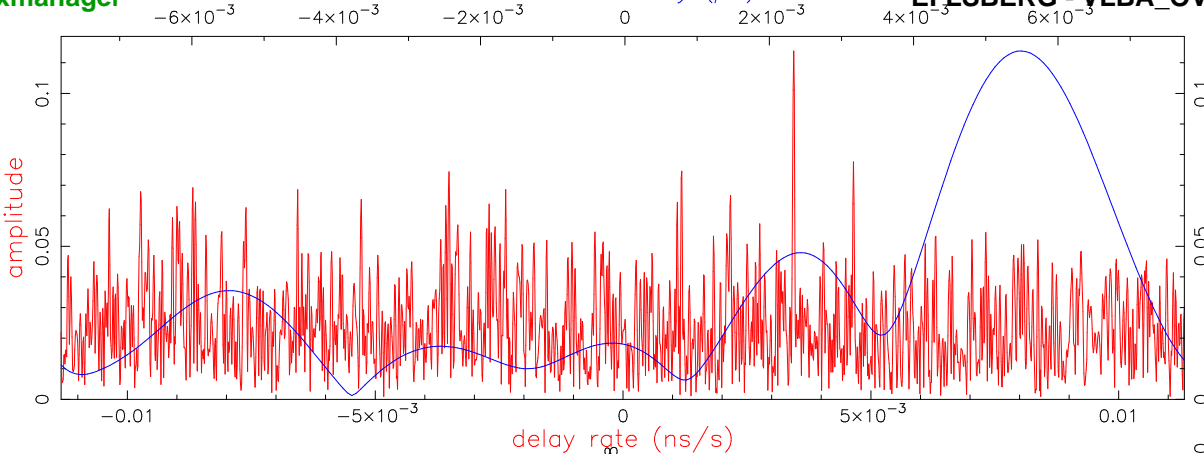
fxmanager

0234+285.1W8CZP, No0029, Bo

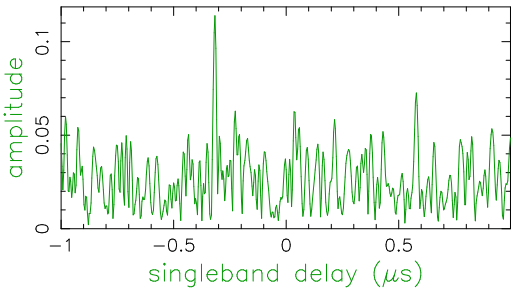
EFLSBERG - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

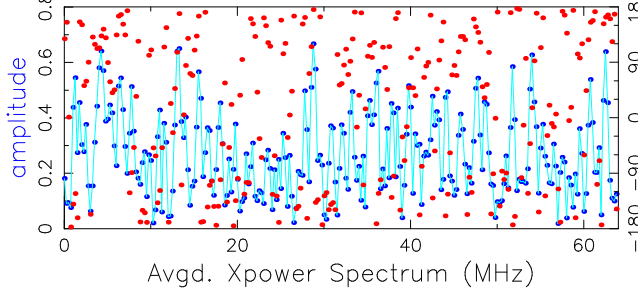
Fringe quality 0



SNR 5.7
 Int time 329.953
 Amp 0.119
 Phase 39.5
 PFD 9.7e-01
 Delays (us)
 SBD -0.316994
 MBD 0.005466
 Fringe rate (Hz)
 0.296587
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

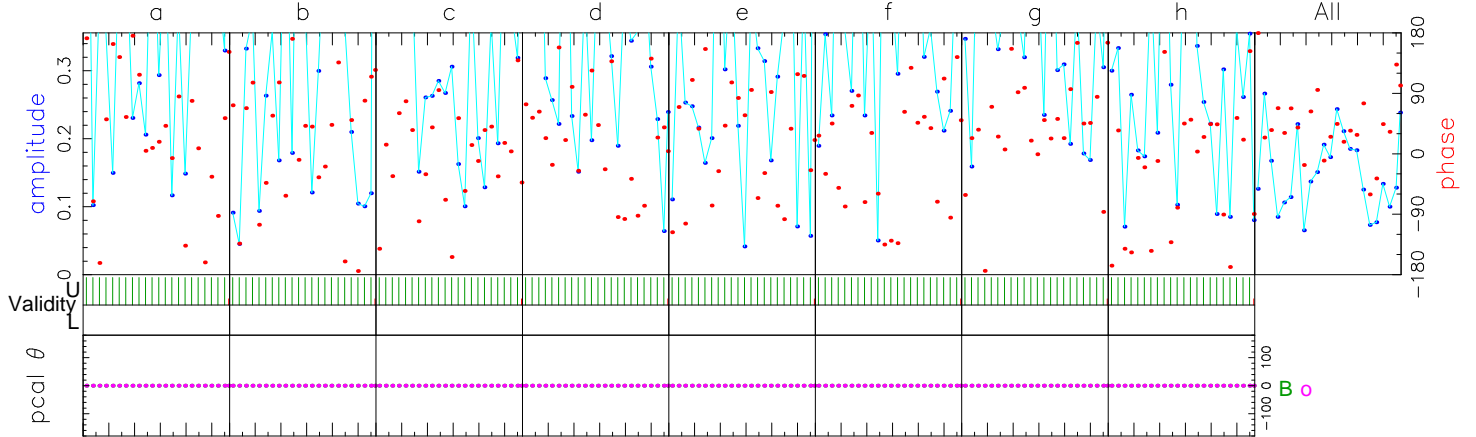


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:113
 Stop 2021:113
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044503
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.9	43.2	15.7	28.7	35.5	41.5	47.6	54.1	Phase	39.5
	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	244.3	370.0	175.4	326.6	406.6	167.8	175.5	266.3	Sbd box	175.8
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.14861260315E+03		Apriori delay (usec)		6.14893526232E+03		Resid mbdelay (usec)		5.46583E-03	+/- 1.9E-04
Sband delay (usec)	6.14861826857E+03		Apriori clock (usec)		-2.5695160E+01		Resid sbdelay (usec)		-3.16994E-01	+/- 1.5E-03
Phase delay (usec)	6.14893526359E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		1.27415E-06	+/- 6.5E-07
Delay rate (us/s)	-1.70151005804E+00		Apriori rate (us/s)		-1.70151350112E+00		Resid rate (us/s)		3.44308E-06	+/- 3.4E-09
Total phase (deg)	218.1		Apriori accel (us/s/s)		-2.37339059441E-05		Resid phase (deg)		39.5	+/- 20.2

	RMS	Theor.	Amplitude	0.119 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.2	48.5	Search (2048X32)	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	57.5	84.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	20.6	28.6	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.1	49.9	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 o: az 72.4 el 26.2 pa -60.1 u,v (fr/asec) 11093.481 193.930 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bo..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bo.W.48.1W8CZP

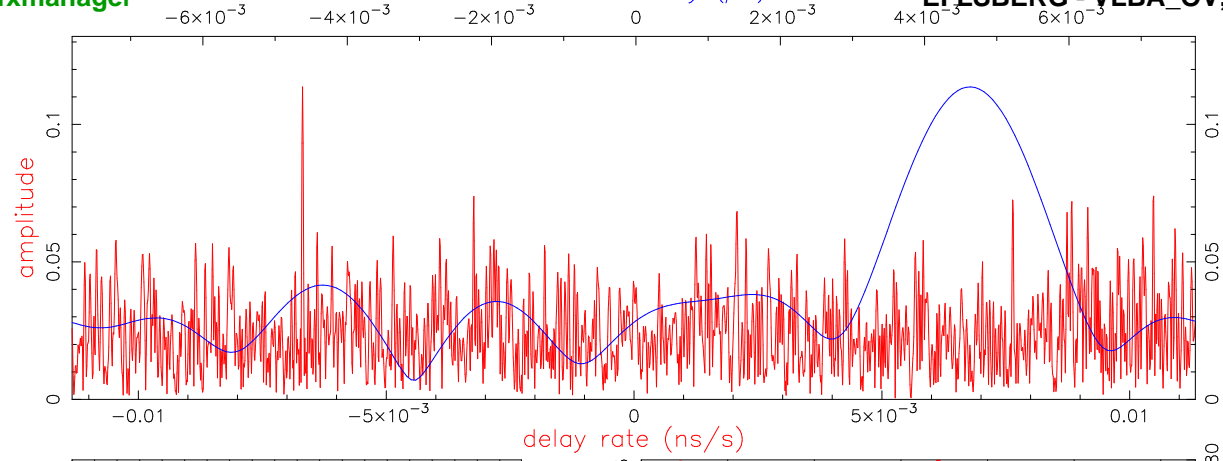
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bo

EFLSBERG - VLBA_OV, fgroup W, pol RL

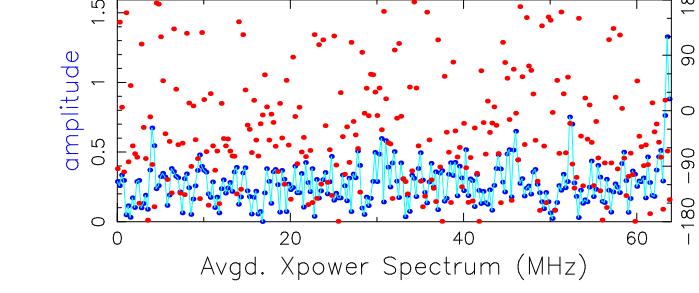
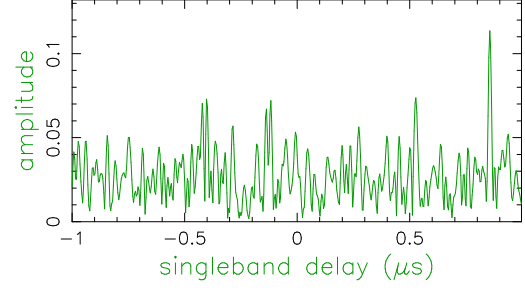
multiband delay (μ s)



Fringe quality 0

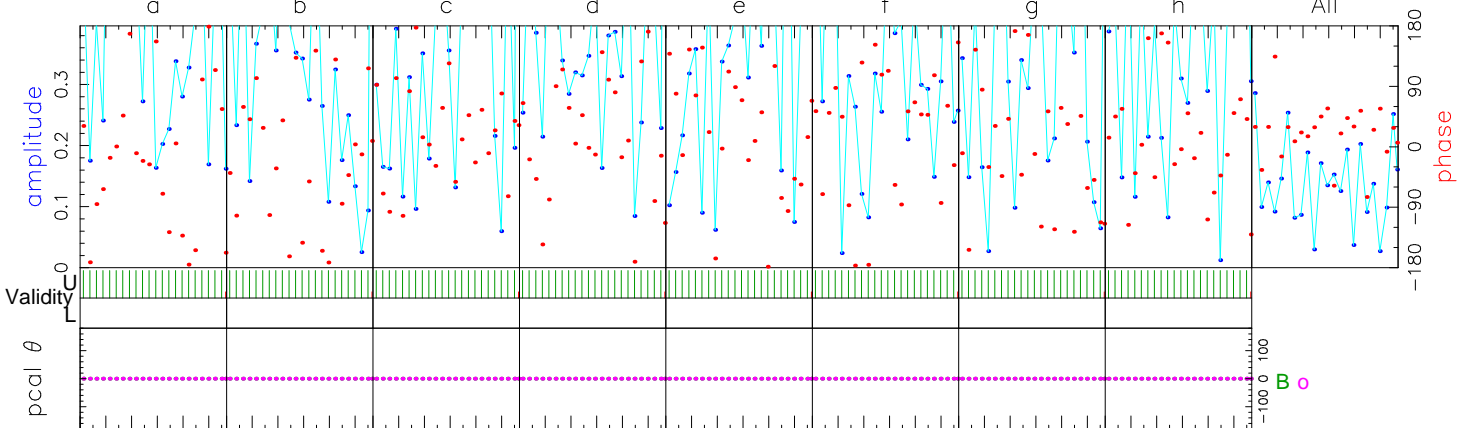
SNR 5.7
 Int time 329.952
 Amp 0.132
 Phase 22.8
 PFD 9.8e-01
 Delays (us)
 SBD 0.855985
 MBD 0.004647
 Fringe rate (Hz)
 -0.576920
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044506
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	476.1
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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	6.14978365907E+03		Apriori delay (usec)		6.14893526232E+03		Resid mbdelay (usec)		4.64675E-03	+/- 1.9E-04
Sband delay (usec)	6.14979124682E+03		Apriori clock (usec)		-2.5695160E+01		Resid sbdelay (usec)		8.55985E-01	+/- 1.5E-03
Phase delay (usec)	6.14893526305E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		7.35347E-07	+/- 6.5E-07
Delay rate (us/s)	-1.70152019859E+00		Apriori rate (us/s)		-1.70151350112E+00		Resid rate (us/s)		-6.69747E-06	+/- 3.4E-09
Total phase (deg)	201.4		Apriori accel (us/s/s)		-2.37339059441E-05		Resid phase (deg)		22.8	+/- 20.3

ph/seg (deg) 41.8 48.6 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.4 84.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.0 28.6 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.4 50.0 Inc. frq. avg. 0.125 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 257.0 el 48.5 pa 44.9 o: az 72.4 el 26.2 pa -60.1 u,v (fr/asec) 11093.481 193.930 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bo..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bo.W.66.1W8CZP

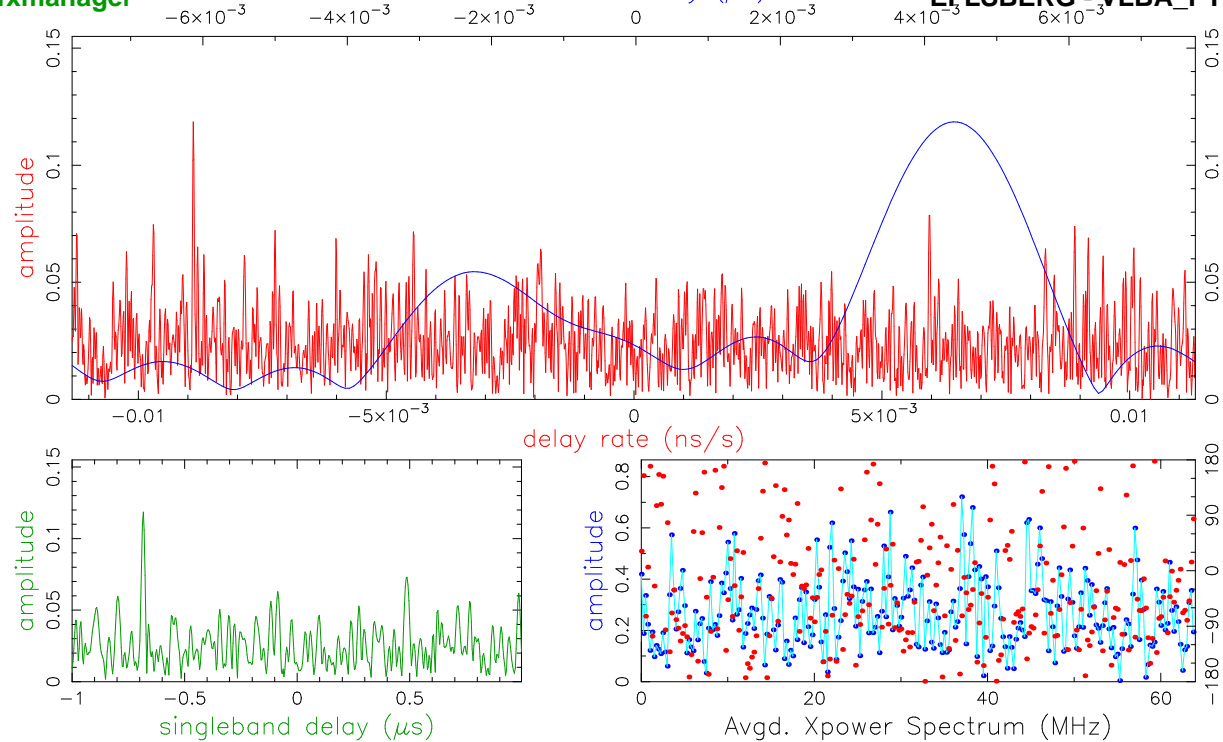
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bp

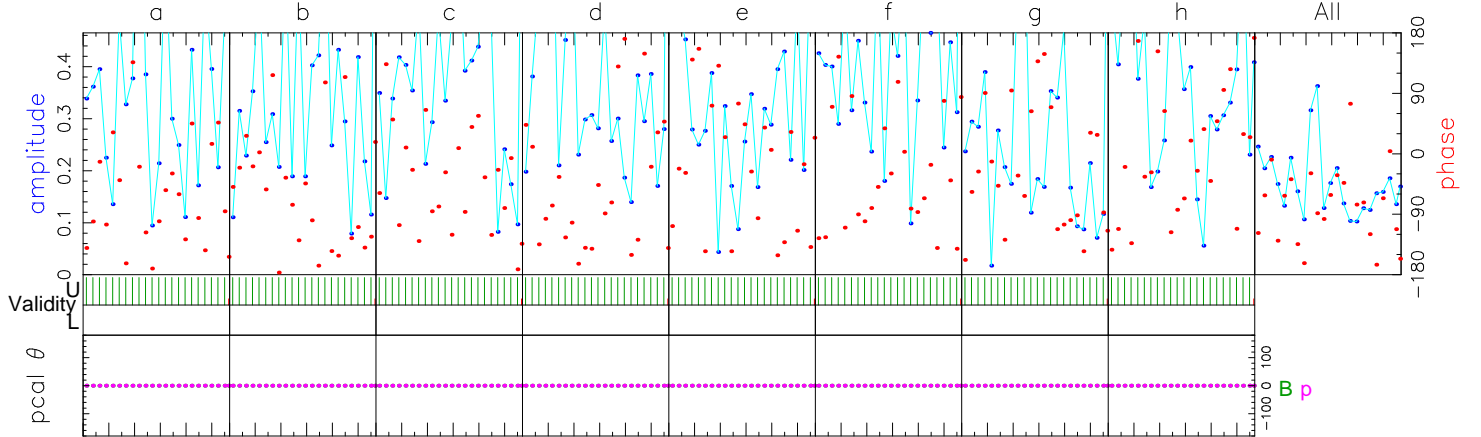
EFLSBERG - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 329.973
 Amp 0.155
 Phase -72.5
 PFD 6.2e-01
 Delays (us)
 SBD -0.683891
 MBD 0.004394
 Fringe rate (Hz)
 -0.766816
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044456
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.8	-89.9	-50.2	-102.2	-67.9	-68.9	-65.5	-66.7	Phase	-72.5
	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	349.8	389.8	176.0	81.0	426.4	53.2	448.1	432.9	Sbd box	81.9
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.85279891749E+03		Apriori delay (usec)		3.85348202348E+03		Resid mbdelay (usec)		4.39401E-03	+/- 1.8E-04
Sband delay (usec)	3.85279813248E+03		Apriori clock (usec)		-2.7607281E+01		Resid sbdelay (usec)		-6.83891E-01	+/- 1.5E-03
Phase delay (usec)	3.85348202114E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-2.33908E-06	+/- 6.3E-07
Delay rate (us/s)	-1.67847530060E+00		Apriori rate (us/s)		-1.67846639863E+00		Resid rate (us/s)		-8.90197E-06	+/- 3.3E-09
Total phase (deg)	108.4		Apriori accel (us/s/s)		-9.28266914644E-06		Resid phase (deg)		-72.5	+/- 19.4

	RMS	Theor.	Amplitude	0.155 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.9	46.6	Search (2048X32)	0.118	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	73.9	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	17.5	27.5	Inc. seg. avg.	0.174	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	35.5	48.0	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 257.0 el 48.5 pa 44.9 p: az 75.4 el 33.3 pa -66.1 u,v (fr/asec) 10962.601 1142.257 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bp..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bp.W.18.1W8CZP

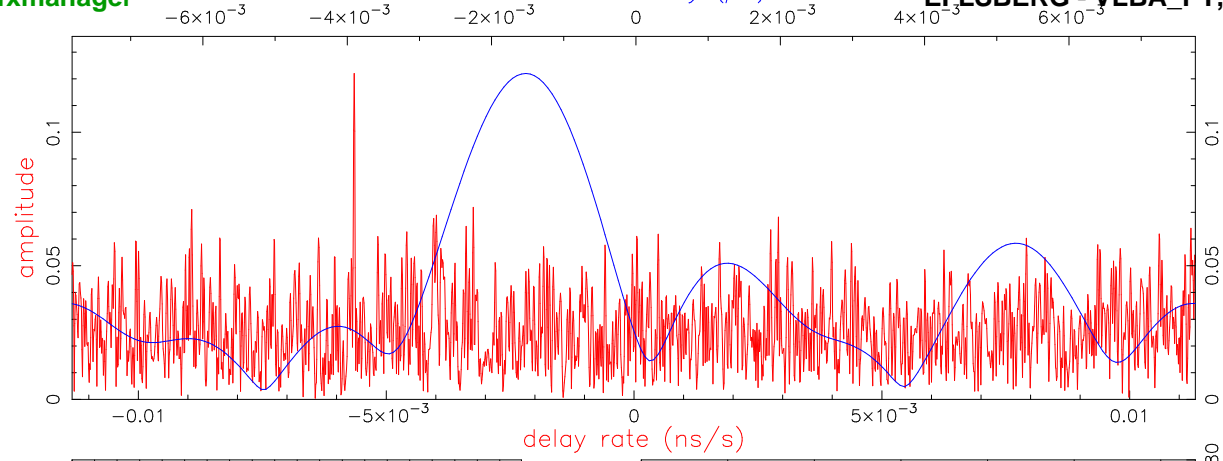
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bp

EFLSBERG - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)



Fringe quality 0

SNR 6.1

Int time 329.973

Amp 0.136

Phase -80.2

PFD 2.7e-01

Delays (us)

SBD -0.223375

MBD -0.001550

Fringe rate (Hz)

-0.486698

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:113

Start 151500.00

Stop 152030.24

FRT 151745.00

Corr/FF/build

2021:288:021115

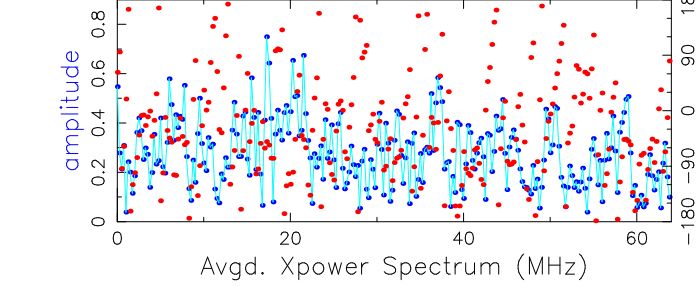
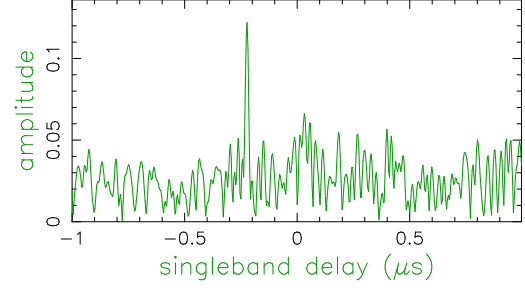
2021:288:044500

2021:252:122852

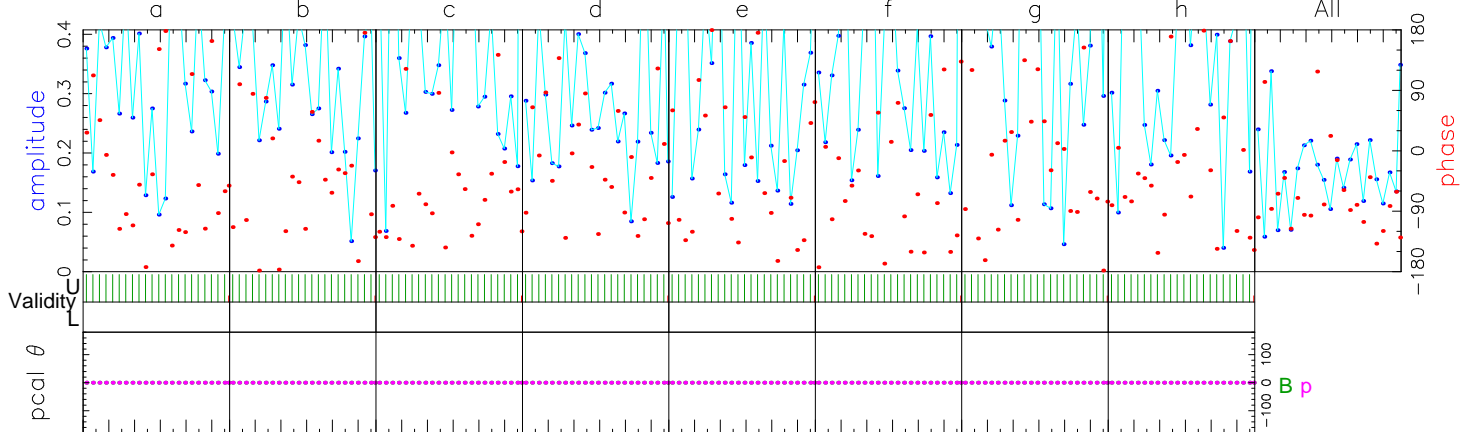
RA & Dec (J2000)

02h37m52.405678s

+28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-81.9	-76.6	-89.7	-34.5	-88.6	-98.2	-106.1	-64.6	Phase	-80.2
	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	462.0	157.8	200.0	260.0	216.9	138.8	8.3	413.7	Sbd box	199.8
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.85326172319E+03		Apriori delay (usec)		3.85348202348E+03		Resid mbdelay (usec)		-1.55029E-03	+/- 1.8E-04
Sband delay (usec)	3.85325864823E+03		Apriori clock (usec)		-2.7607281E+01		Resid sbdelay (usec)		-2.23375E-01	+/- 1.4E-03
Phase delay (usec)	3.85348202090E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-2.58515E-06	+/- 6.1E-07
Delay rate (us/s)	-1.67847204872E+00		Apriori rate (us/s)		-1.67846639863E+00		Resid rate (us/s)		-5.65009E-06	+/- 3.2E-09
Total phase (deg)	100.8		Apriori accel (us/s/s)		-9.28266914644E-06		Resid phase (deg)		-80.2	+/- 18.8

	RMS	Theor.	Amplitude	0.136 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.0	45.2	Search (2048X32)	0.119	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	64.8	78.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	24.2	26.6	Inc. seg. avg.	0.142	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.7	46.5	Inc. frq. avg.	0.129	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 p: az 75.4 el 33.3 pa -66.1 u,v (fr/asec) 10962.601 1142.257 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bp..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bp.W.38.1W8CZP

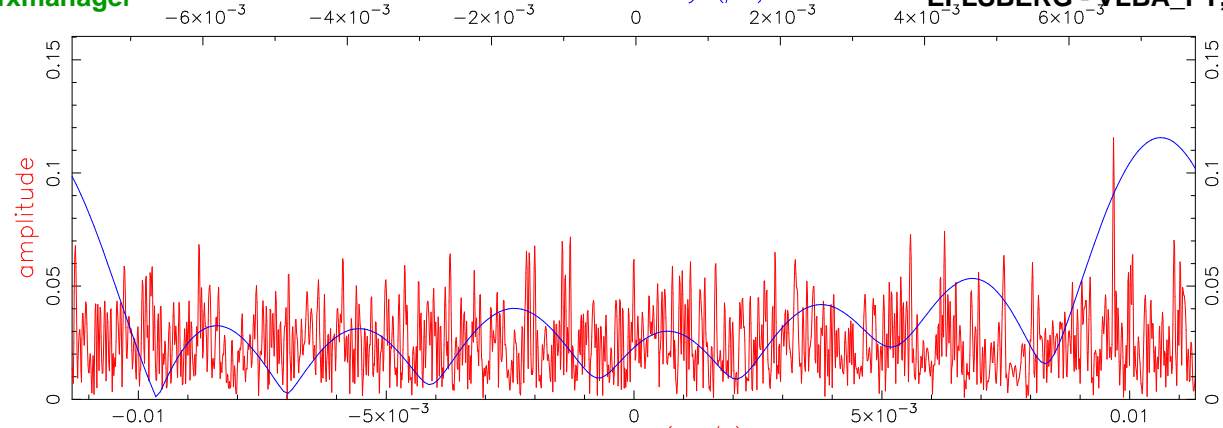
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bp

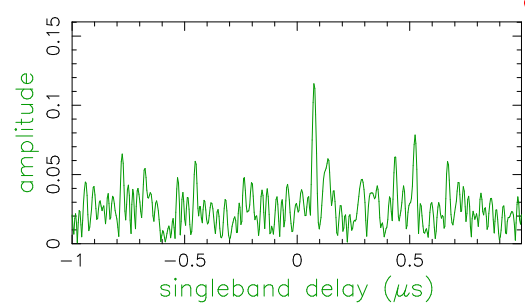
EFLSBERG - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

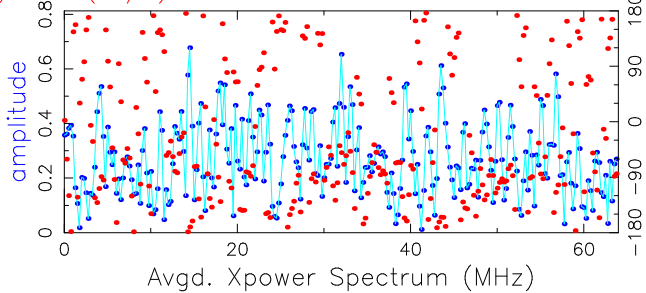


Fringe quality 0

SNR 5.8
 Int time 329.973
 Amp 0.160
 Phase -55.7
 PFD 8.5e-01
 Delays (us)
 SBD 0.075383
 MBD 0.007307
 Fringe rate (Hz)
 0.834566
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

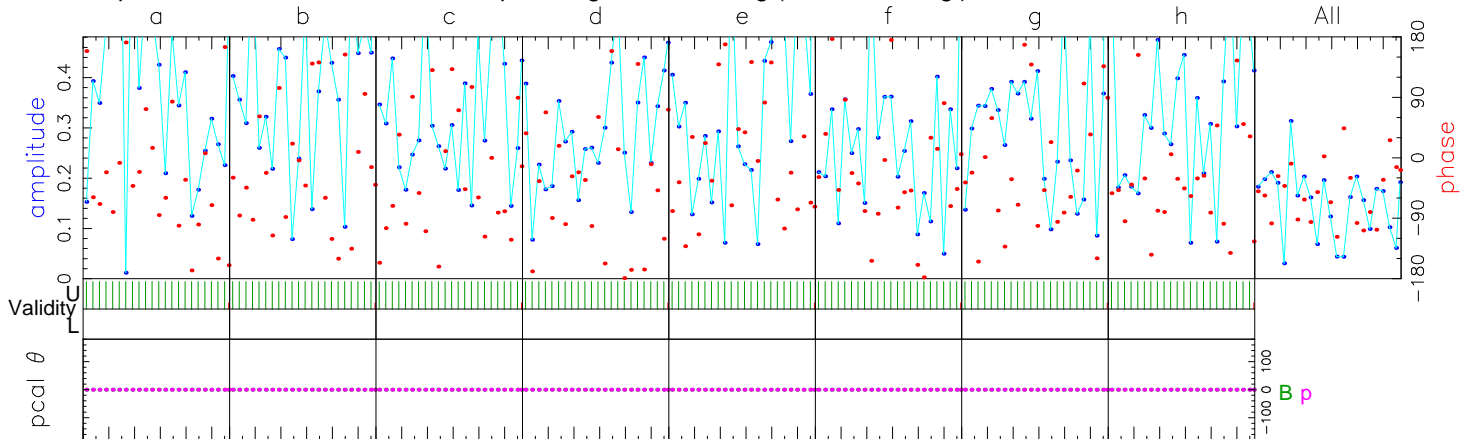


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044505
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.4	-63.6	-78.8	-55.7	-54.2	-53.5	-60.0	-54.4	Phase	-55.7
	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	275.7	310.4	59.9	343.2	257.2	216.7	479.4	390.7	Sbd box	276.3
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.85355183031E+03		Apriori delay (usec)		3.85348202348E+03		Resid mbdelay (usec)		7.30683E-03	+/- 1.9E-04
Sband delay (usec)	3.85355740673E+03		Apriori clock (usec)		-2.7607281E+01		Resid sbdelay (usec)		7.53833E-02	+/- 1.5E-03
Phase delay (usec)	3.85348202168E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-1.79621E-06	+/- 6.4E-07
Delay rate (us/s)	-1.67845671014E+00		Apriori rate (us/s)		-1.67846639863E+00		Resid rate (us/s)		9.68849E-06	+/- 3.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-9.28266914644E-06		Resid phase (deg)		-55.7	+/- 19.8

ph/seg (deg) 43.9 47.5 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.9 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.4 28.0 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.5 48.9 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 257.0 el 48.5 pa 44.9 p: az 75.4 el 33.3 pa -66.1 u,v (fr/asec) 10962.601 1142.257 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/Bp..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/Bp.W.61.1W8CZP

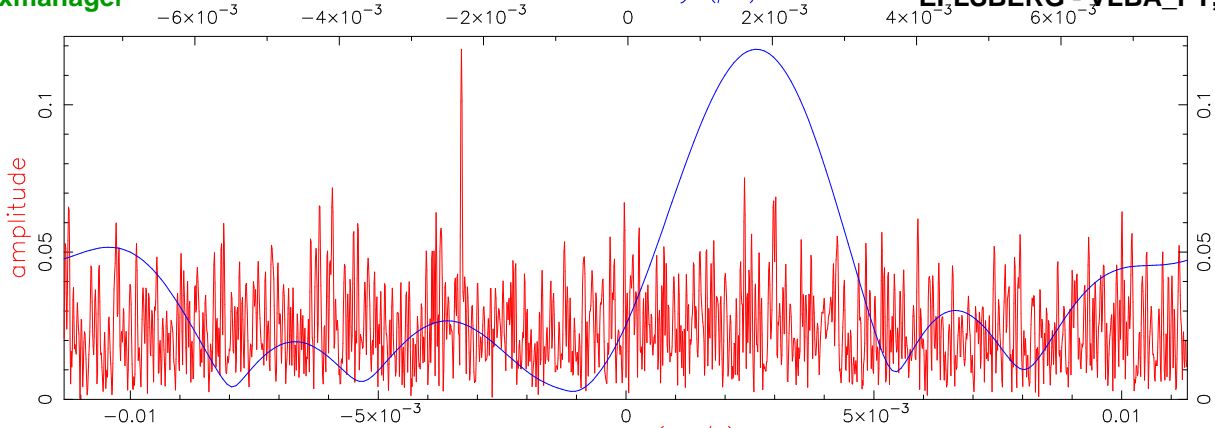
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, Bp

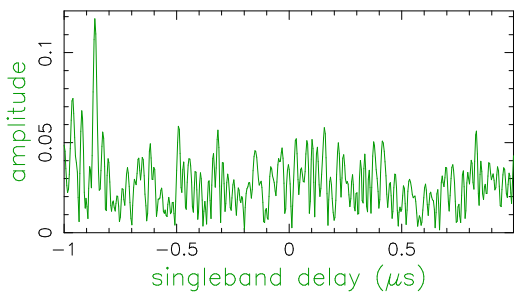
EFLSBERG - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

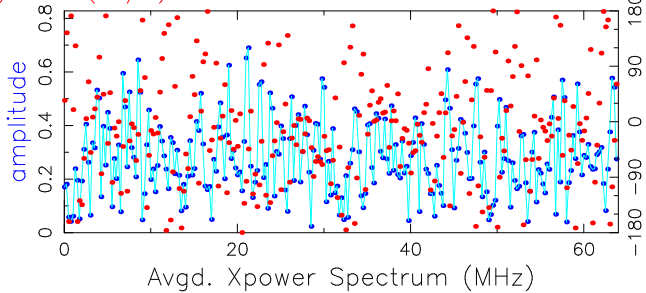


Fringe quality 0

SNR 5.9
 Int time 329.973
 Amp 0.123
 Phase 96.0
 PFD 5.9e-01
 Delays (us)
 SBD -0.863014
 MBD 0.001792
 Fringe rate (Hz)
 -0.286770
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

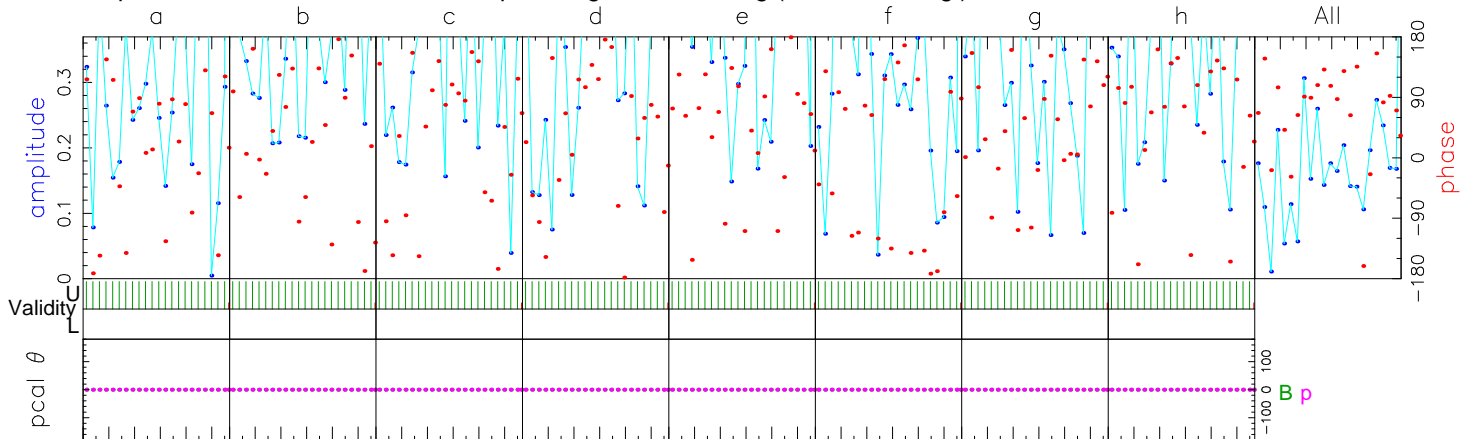


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044508
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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)	3.85262443998E+03		Apriori delay (usec)		3.85348202348E+03		Resid mbdelay (usec)		1.79150E-03	+/- 1.8E-04
Sband delay (usec)	3.85261900973E+03		Apriori clock (usec)		-2.7607281E+01		Resid sbdelay (usec)		-8.63014E-01	+/- 1.5E-03
Phase delay (usec)	3.85348202658E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		3.09626E-06	+/- 6.3E-07
Delay rate (us/s)	-1.67846972774E+00		Apriori rate (us/s)		-1.67846639863E+00		Resid rate (us/s)		-3.32911E-06	+/- 3.3E-09
Total phase (deg)	277.0		Apriori accel (us/s/s)		-9.28266914644E-06		Resid phase (deg)		96.0	+/- 19.4
ph/seg (deg)	RMS 56.9	Theor. 46.5	Amplitude 0.123 +/- 0.021	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	78.8	81.2	Search (2048X32) 0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	24.4	27.4	Interp. 0.000	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.7	47.9	Inc. seg. avg. 0.130	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.119	u,v (fr/asec) 10962.601 1142.257						

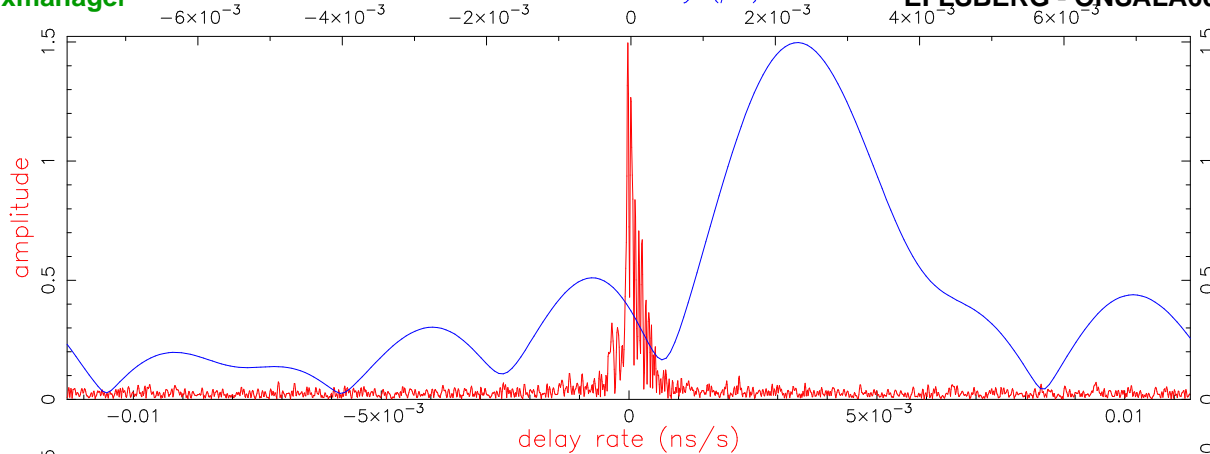
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BX

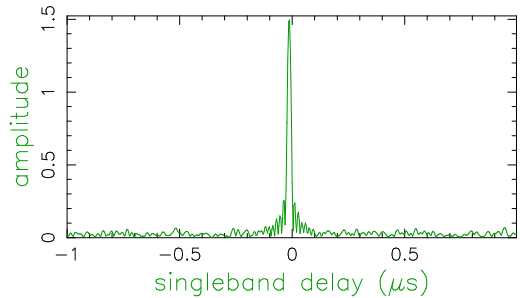
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

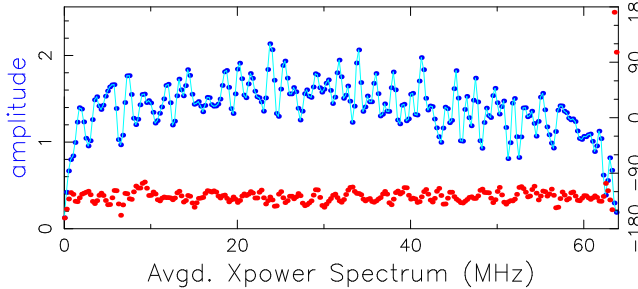


Fringe quality 3

SNR 75.7
 Int time 329.957
 Amp 1.524
 Phase 51.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.013486
 MBD 0.002253
 Fringe rate (Hz)
 -0.002367
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

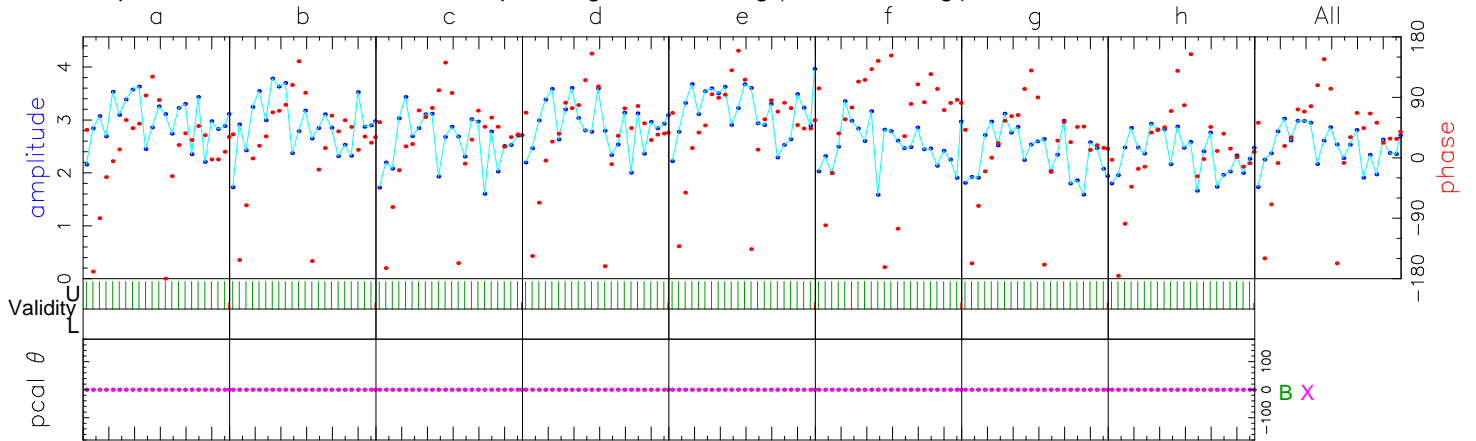


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044457
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.08280746847E+03	Apriori delay (usec)	1.08282084068E+03	Resid mbdelay (usec)	2.25279E-03	+/-	1.4E-05
Sband delay (usec)	1.08280735468E+03	Apriori clock (usec)	-7.8428963E+01	Resid sbdelay (usec)	-1.34860E-02	+/-	1.1E-04
Phase delay (usec)	1.08282084233E+03	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	1.64738E-06	+/-	4.9E-08
Delay rate (us/s)	-5.78518588084E-02	Apriori rate (us/s)	-5.78518313348E-02	Resid rate (us/s)	-2.74736E-08	+/-	2.6E-10
Total phase (deg)	128.9	Apriori accel (us/s/s)	-1.00262145331E-05	Resid phase (deg)	51.1	+/-	1.5

ph/seg (deg)	63.9	RMS	Theor.	Amplitude	1.524 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.6	63.9	3.6	Search (2048X32)	1.438	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.5	68.6	6.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	12.8	26.5	2.1	Inc. seg. avg.	2.501	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
		12.8	3.7	Inc. frq. avg.	1.612	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 257.0 el 48.5 pa 44.9 X: az 254.8 el 43.9 pa 36.4 u,v (fr/asec) 365.065 -985.107 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BX..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BX.W.19.1W8CZP

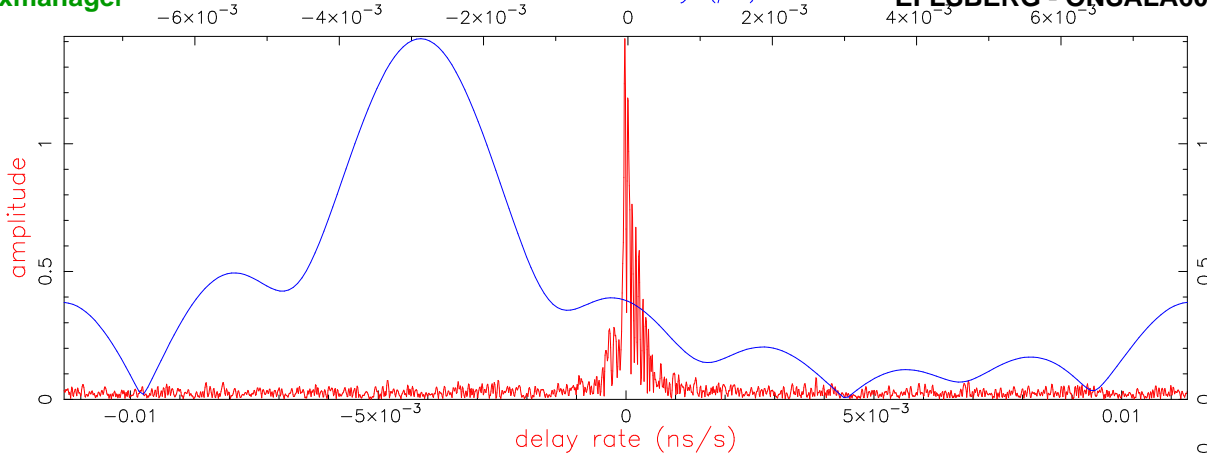
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BX

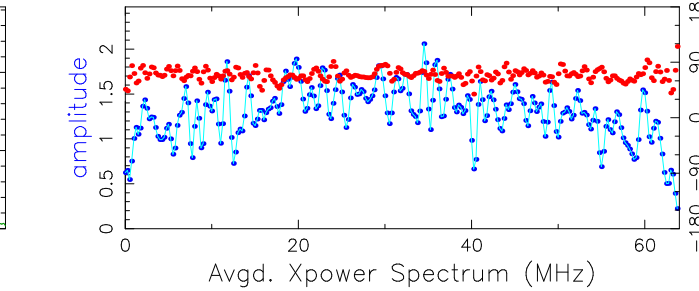
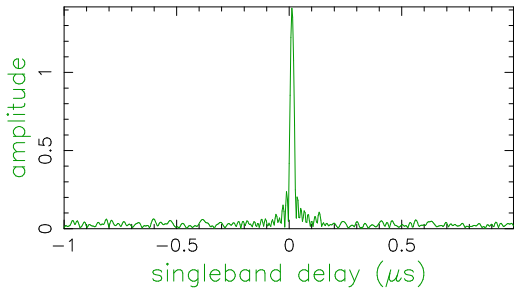
EFLSBERG - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



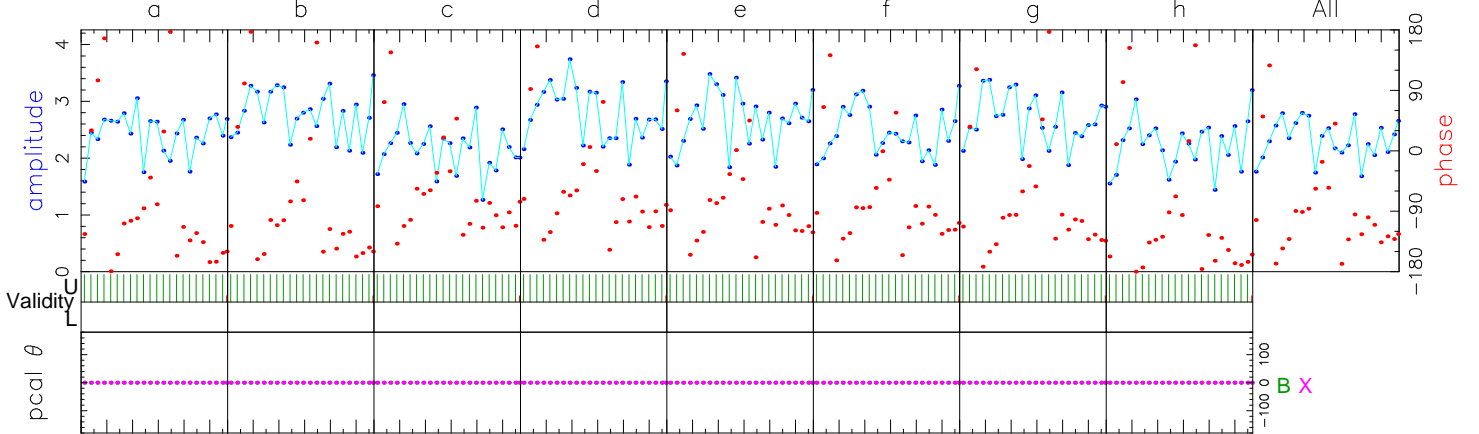
Fringe quality 3

SNR 70.5
 Int time 329.957
 Amp 1.420
 Phase -110.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.012787
 MBD -0.002839
 Fringe rate (Hz)
 -0.002378
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044500
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.08283362706E+03			1.08282084068E+03					
Sband delay (usec)		1.08283362743E+03			-7.8428963E+01					
Phase delay (usec)		1.08282083710E+03			-5.2800001E-07					
Delay rate (us/s)		-5.78518589431E-02			-5.78518313348E-02					
Total phase (deg)			-33.1		-1.00262145331E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 64.0 3.9 Search (2048X32) 1.359 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.5 6.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.0 2.3 Inc. seg. avg. 2.314 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.8 4.0 Inc. frq. avg. 1.529 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 257.0 el 48.5 pa 44.9 X: az 254.8 el 43.9 pa 36.4 u,v (fr/asec) 365.065 -985.107 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BX..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BX.W.37.1W8CZP

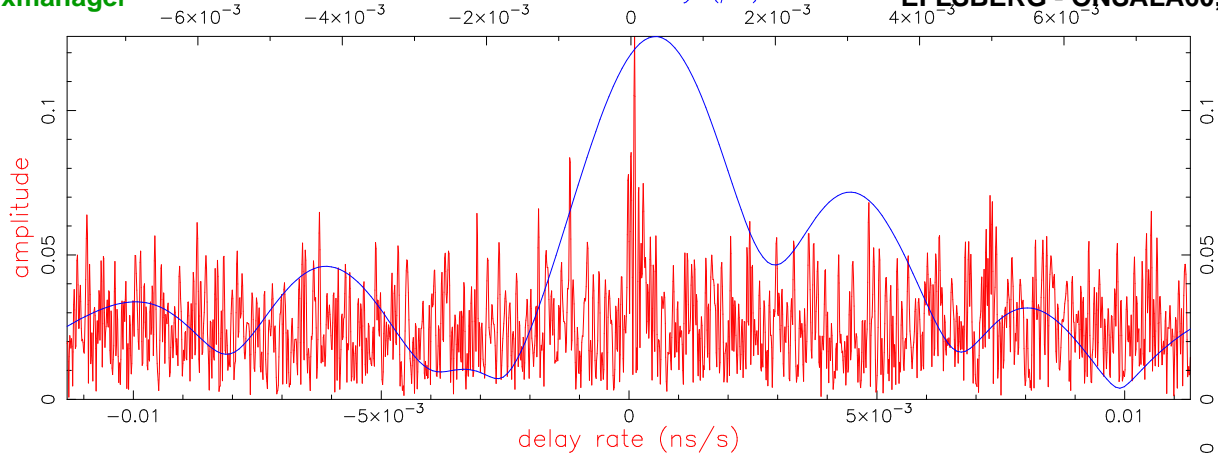
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BX

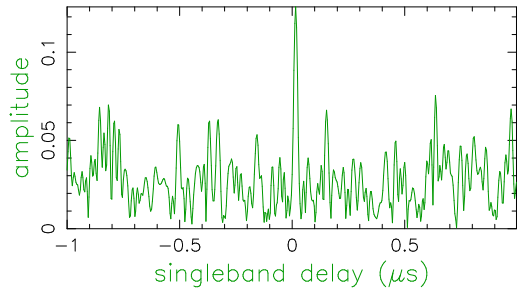
EFLSBERG - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

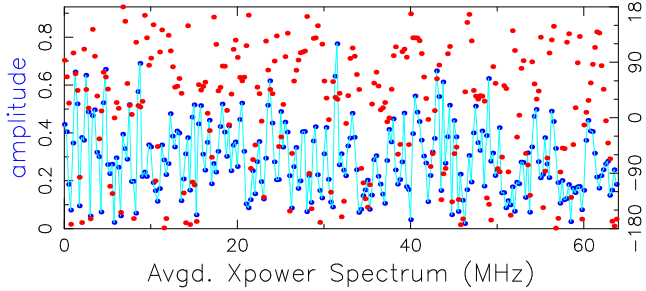


Fringe quality 0

SNR 6.2
 Int time 329.957
 Amp 0.126
 Phase -114.6
 PFD 1.1e-01
 Delays (us)
 SBD 0.015391
 MBD 0.000333
 Fringe rate (Hz)
 0.009540
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

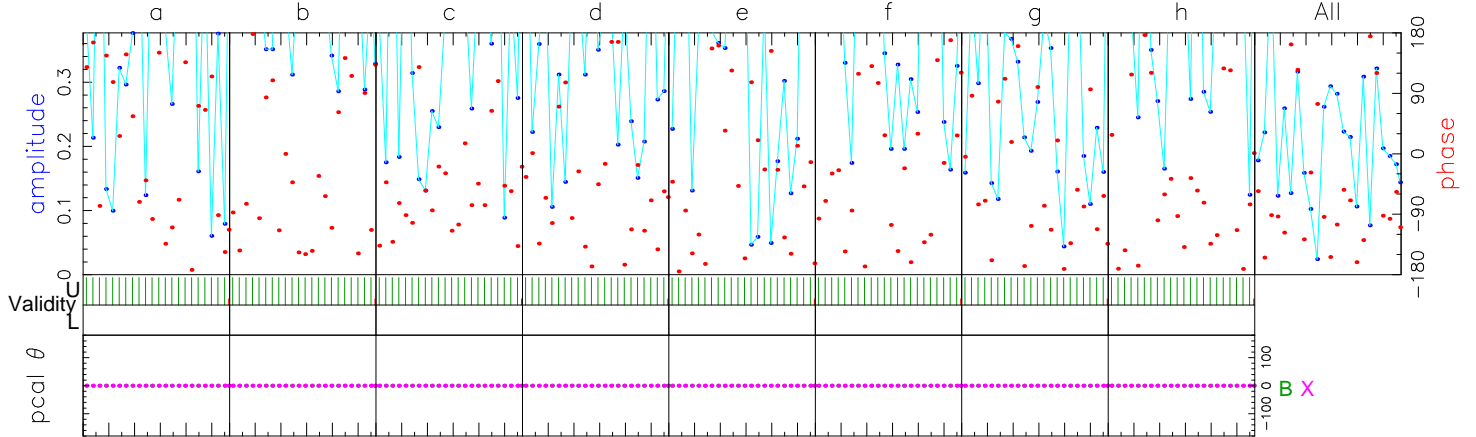


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044504
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-154.3	-135.8	-81.7	-87.7	-104.6	-146.2	-92.4	-132.6	Phase	-114.6
	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	95.5	55.1	2.7	445.0	140.9	60.2	295.3	406.0	Sbd box	260.9
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 1.08283679836E+03 Apriori delay (usec) 1.08282084068E+03 Resid mbdelay (usec) 3.32677E-04 +/- 1.7E-04
 Sband delay (usec) 1.08283623118E+03 Apriori clock (usec) -7.8428963E+01 Resid sbdelay (usec) 1.53905E-02 +/- 1.4E-03
 Phase delay (usec) 1.08282083698E+03 Apriori clockrate (us/s) -5.2800001E-07 Resid phdelay (usec) -3.69655E-06 +/- 5.9E-07
 Delay rate (us/s) -5.78517205823E-02 Apriori rate (us/s) -5.78518313348E-02 Resid rate (us/s) 1.10753E-07 +/- 3.1E-09
 Total phase (deg) -36.8 Apriori accel (us/s/s) -1.00262145331E-05 Resid phase (deg) -114.6 +/- 18.4

RMS Theor. Amplitude 0.126 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.8 44.0 Search (2048X32) 0.124 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 105.4 76.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 31.0 26.0 Inc. seg. avg. 0.163 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 41.1 45.3 Inc. frq. avg. 0.127 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 X: az 254.8 el 43.9 pa 36.4 u,v (fr/asec) 365.065 -985.107 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BX..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BX.W.58.1W8CZP

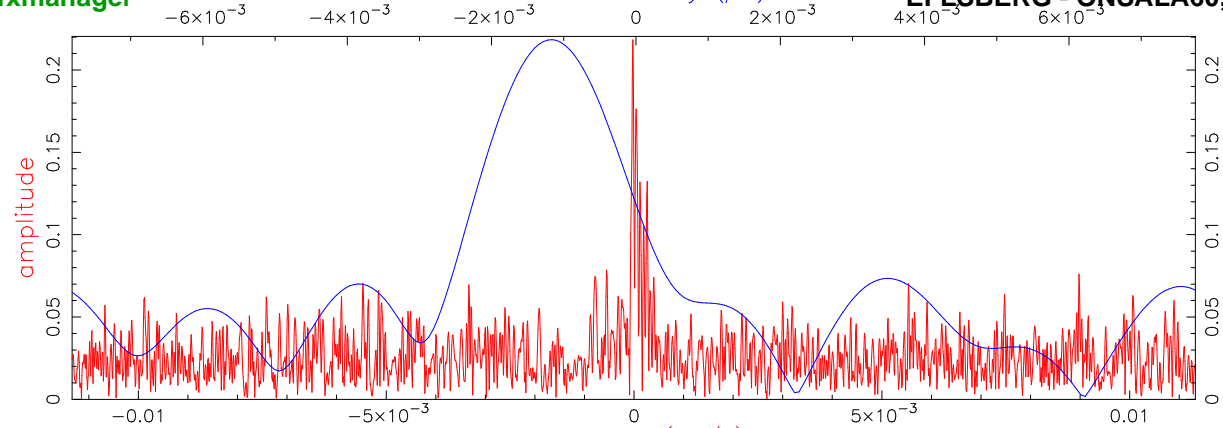
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

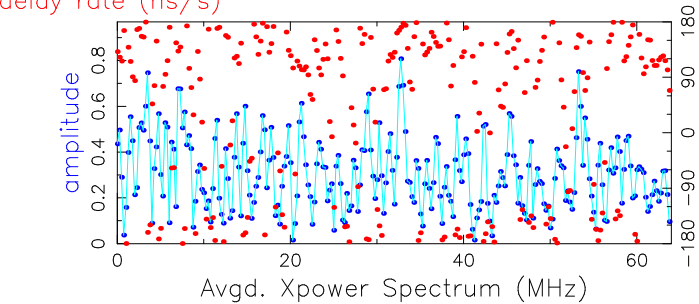
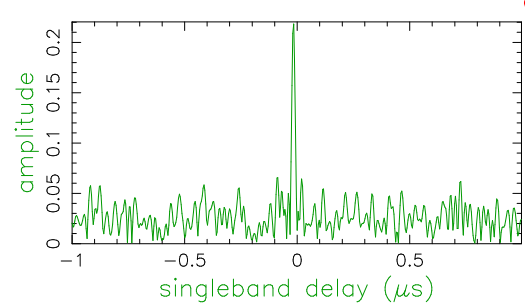
0234+285.1W8CZP, No0029, BX

EFLSBERG - ONSALA60, fgroup W, pol RL

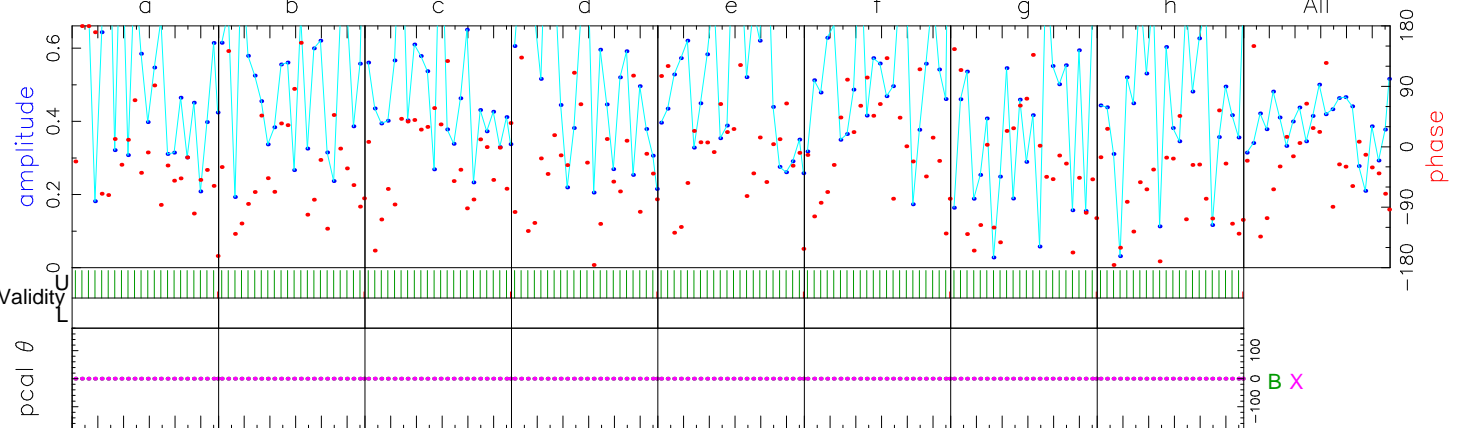
multiband delay (μ s)



Fringe quality 9
 SNR 10.9
 Int time 329.957
 Amp 0.220
 Phase -28.0
 PFD 3.1e-19
 Delays (us)
 SBD -0.016791
 MBD -0.001210
 Fringe rate (Hz)
 -0.002074
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151500.00
 Stop 152030.24
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044507
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-45.8	-51.1	-4.5	-38.5	-3.9	6.3	-34.7	-53.4	Phase	-28.0
	0.3	0.2	0.3	0.2	0.3	0.2	0.1	0.3	Ampl.	0.2
	252.2	321.3	253.4	252.2	252.6	252.5	56.5	251.6	Sbd box	252.7
U/L	645/0	645/0	645/0	645/0	645/0	645/0	645/0	645/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.08280400600E+03		Apriori delay (usec)		1.08282084068E+03		Resid mbdelay (usec)		-1.20968E-03	+/- 9.9E-05
Sband delay (usec)	1.08280404968E+03		Apriori clock (usec)		-7.8428963E+01		Resid sbdelay (usec)		-1.67910E-02	+/- 7.9E-04
Phase delay (usec)	1.08282083978E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-9.03299E-07	+/- 3.4E-07
Delay rate (us/s)	-5.78518554130E-02		Apriori rate (us/s)		-5.78518313348E-02		Resid rate (us/s)		-2.40782E-08	+/- 1.8E-09
Total phase (deg)	49.8		Apriori accel (us/s/s)		-1.00262145331E-05		Resid phase (deg)		-28.0	+/- 10.5

ph/seg (deg) 67.1 25.1 Amplitude 0.220 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.4 43.8 Search (2048X32) 0.214 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.7 14.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.9 25.8 Inc. seg. avg. 0.356 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 B: az 257.0 el 48.5 pa 44.9 X: az 254.8 el 43.9 pa 36.4 u,v (fr/asec) 365.065 -985.107 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BX..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BX.W.77.1W8CZP simultaneous interpolator

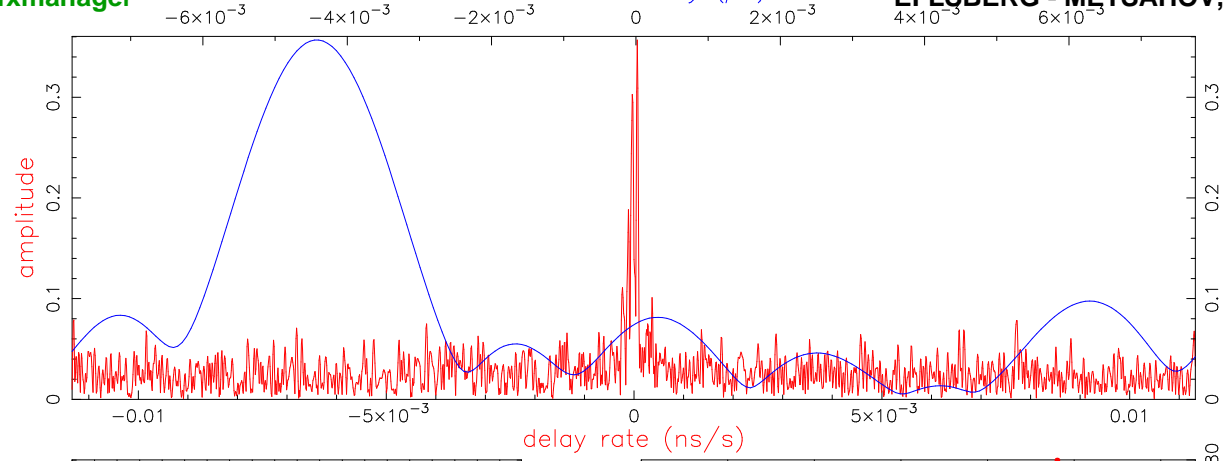
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BZ

EFLSBERG - METSAHOV, fgroup W, pol RR

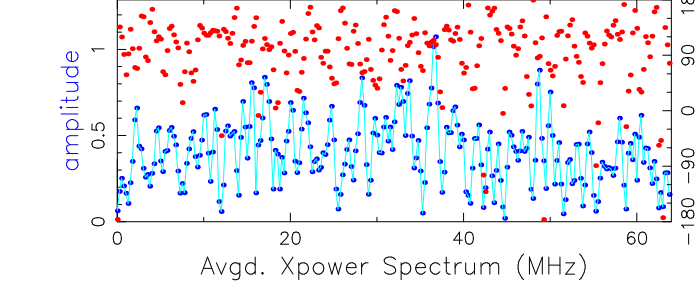
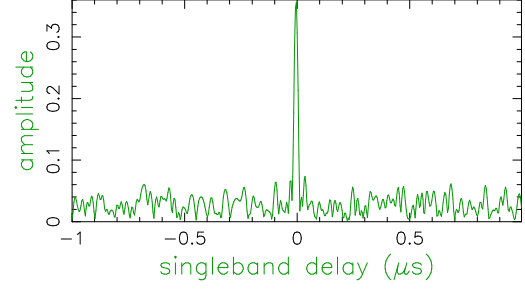
multiband delay (μ s)



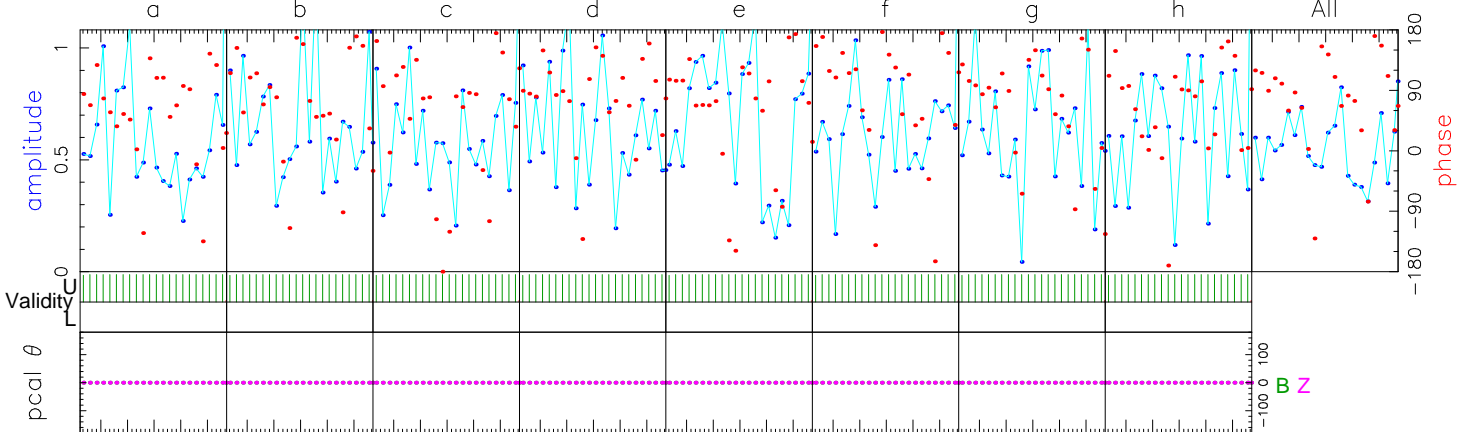
Fringe quality 9

SNR 17.5
 Int time 315.492
 Amp 0.360
 Phase 95.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.005244
 MBD -0.004458
 Fringe rate (Hz) 0.006116
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151513.31
 Stop 152029.73
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044514
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"



Amp. and Phase vs. time for each freq., 23 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	618/0	618/0	618/0	618/0	618/0	618/0	618/0	618/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.08414192195E+03		Apriori delay (usec)		3.08414637952E+03		Resid mbdelay (usec)		-4.45757E-03	+/- 6.2E-05
Sband delay (usec)	3.08414113577E+03		Apriori clock (usec)		-2.1346363E+01		Resid sbdelay (usec)		-5.24375E-03	+/- 4.9E-04
Phase delay (usec)	3.08414638260E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		3.08161E-06	+/- 2.1E-07
Delay rate (us/s)	-2.97792250652E-02		Apriori rate (us/s)		-2.97792960634E-02		Resid rate (us/s)		7.09982E-08	+/- 1.2E-09
Total phase (deg)	143.0		Apriori accel (us/s/s)		-2.17599341575E-05		Resid phase (deg)		95.6	+/- 6.5

ph/seg (deg) 62.1 15.7 Search (2048X32) 0.347 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.9 27.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.7 9.3 Inc. seg. avg. 0.530 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 15.1 16.2 Inc. frq. avg. 0.362 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 257.0 el 48.5 pa 44.9 Z: az 264.2 el 37.1 pa 34.3 u,v (fr/asec) 165.256 -1691.024 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BZ..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BZ.W.100.1W8CZP

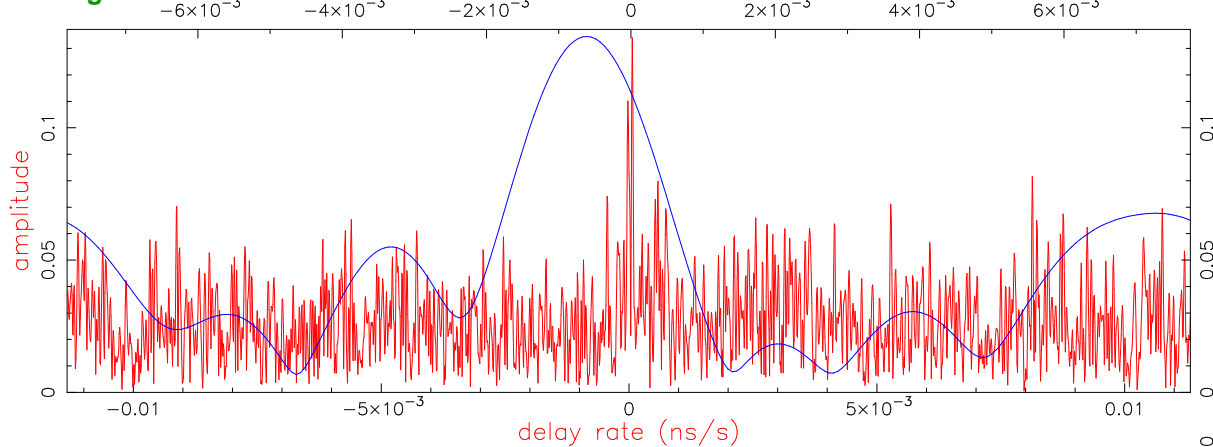
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BZ

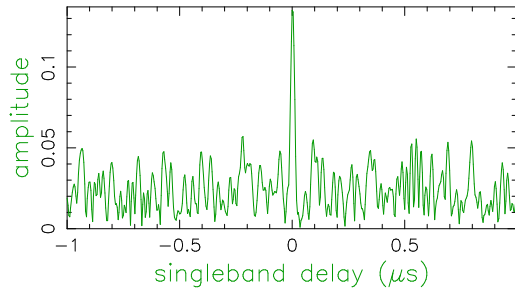
EFLSBERG - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

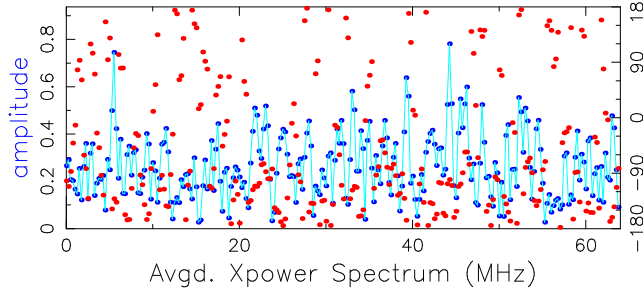


Fringe quality 0

SNR 6.7
 Int time 315.492
 Amp 0.137
 Phase -101.0
 PFD 7.6e-03
 Delays (us)
 SBD 0.001747
 MBD -0.000714
 Fringe rate (Hz)
 0.005922
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

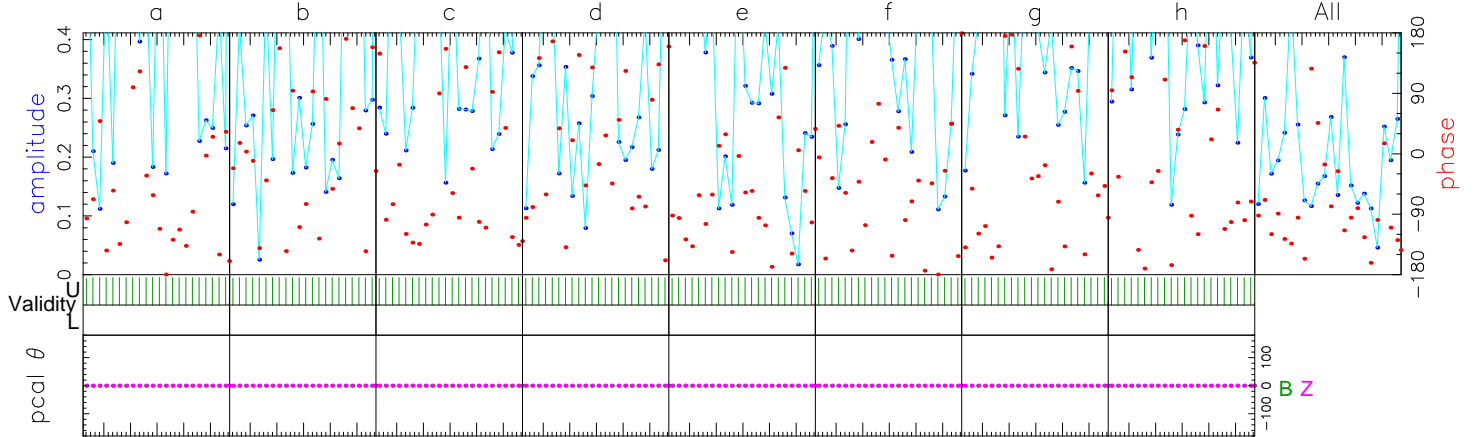


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151513.31
 Stop 152029.73
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044518
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-114.0	140.8	-106.0	-78.9	-84.5	-79.4	-106.6	-115.8	Phase	-101.0
	0.3	0.0	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	257.2	200.1	432.1	504.9	257.3	456.2	256.2	251.3	Sbd box	257.4
U/L	618/0	618/0	618/0	618/0	618/0	618/0	618/0	618/0	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)	3.08414566592E+03		Apriori delay (usec)		3.08414637952E+03		Resid mbdelay (usec)		-7.13597E-04	+/- 1.6E-04
Sband delay (usec)	3.08414812652E+03		Apriori clock (usec)		-2.1346363E+01		Resid sbdelay (usec)		1.74700E-03	+/- 1.3E-03
Phase delay (usec)	3.08414637626E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		-3.25637E-06	+/- 5.5E-07
Delay rate (us/s)	-2.97792273128E-02		Apriori rate (us/s)		-2.97792960634E-02		Resid rate (us/s)		6.87506E-08	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.17599341575E-05		Resid phase (deg)		-101.0	+/- 17.2

	RMS	Theor.	Amplitude	0.137 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.6	41.2	Search (2048X32)	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	85.2	72.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	51.1	24.3	Inc. seg. avg.	0.159	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	53.3	42.4	Inc. frq. avg.	0.130	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 257.0 el 48.5 pa 44.9 Z: az 264.2 el 37.1 pa 34.3 u,v (fr/asec) 165.256 -1691.024 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BZ..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BZ.W.119.1W8CZP

Mk4/DiFX fourfit 3.21 rev 2937

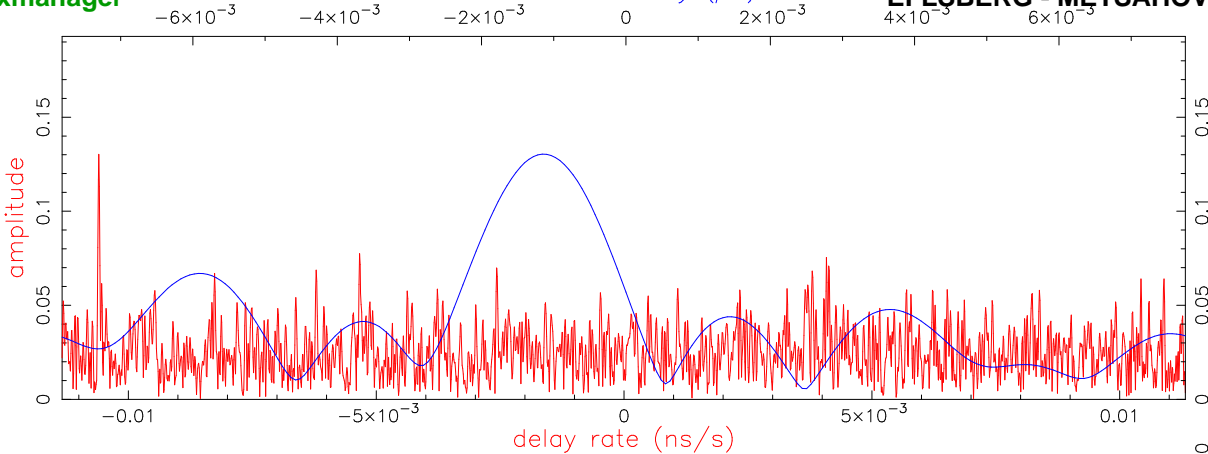
fxmanager

0234+285.1W8CZP, No0029, BZ

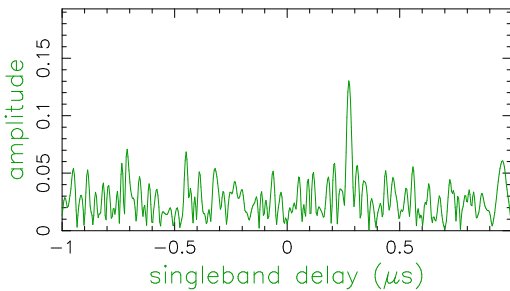
EFLSBERG - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

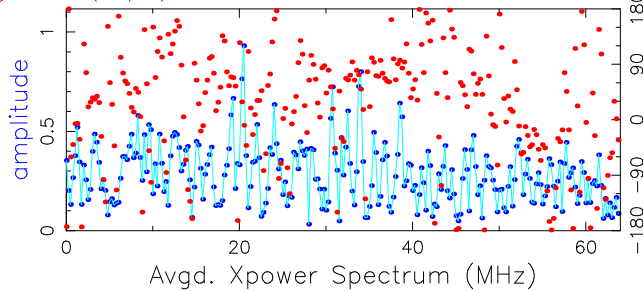
Fringe quality 0



SNR 6.3
 Int time 315.492
 Amp 0.193
 Phase -11.5
 PFD 5.9e-02
 Delays (us)
 SBD 0.274316
 MBD -0.001111
 Fringe rate (Hz)
 -0.913668
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

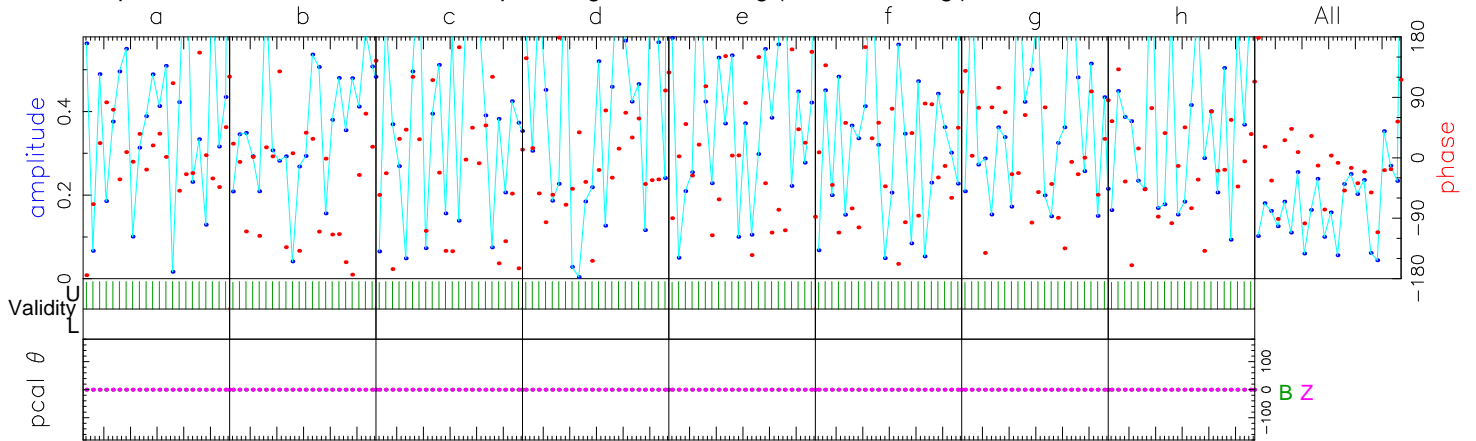


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151513.31
 Stop 152029.73
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044522
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	618/0	618/0	618/0	618/0	618/0	618/0	618/0	618/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.08442651896E+03				3.08414637952E+03			Resid mbdelay (usec)	-1.11056E-03 +/- 1.7E-04
Sband delay (usec)		3.08442069602E+03				-2.1346363E+01			Resid sbdelay (usec)	2.74316E-01 +/- 1.4E-03
Phase delay (usec)		3.08414637915E+03				-1.6000000E-08			Resid phdelay (usec)	-3.70886E-07 +/- 5.8E-07
Delay rate (us/s)		-2.97899028450E-02				-2.97792960634E-02			Resid rate (us/s)	-1.06068E-05 +/- 3.2E-09
Total phase (deg)			35.9			-2.17599341575E-05			Resid phase (deg)	-11.5 +/- 18.1
	RMS	Theor.	Amplitude	0.193 +/- 0.030					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.6	43.3	Search (2048X32)	0.129					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	75.6	75.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	20.3	25.5	Inc. seg. avg.	0.200					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.8	44.6	Inc. frq. avg.	0.181					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.0 el 48.5 pa 44.9 Z: az 264.2 el 37.1 pa 34.3 u,v (fr/asec) 165.256 -1691.024 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BZ..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BZ.W.141.1W8CZP

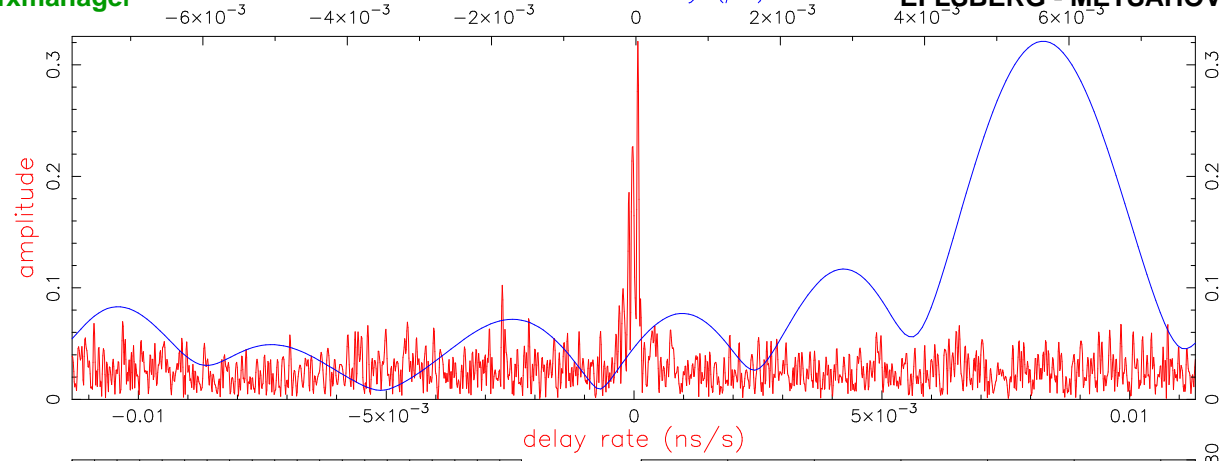
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0234+285.1W8CZP, No0029, BZ

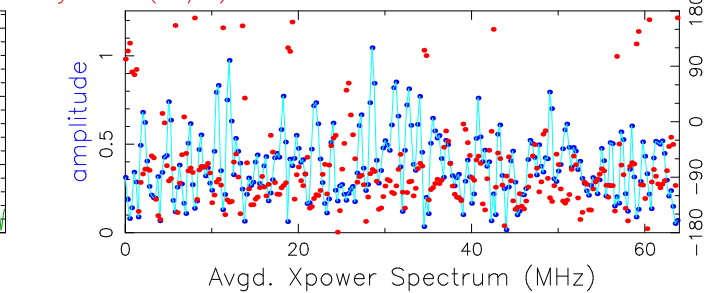
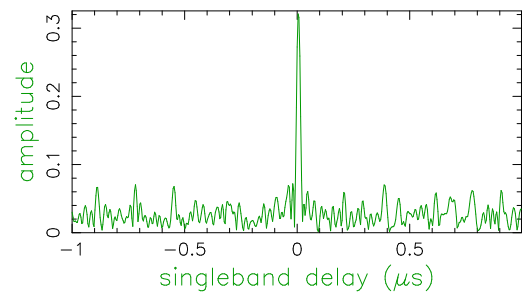
EFLSBERG - METSAHOV, fgroup W, pol LL

multiband delay (μ s)



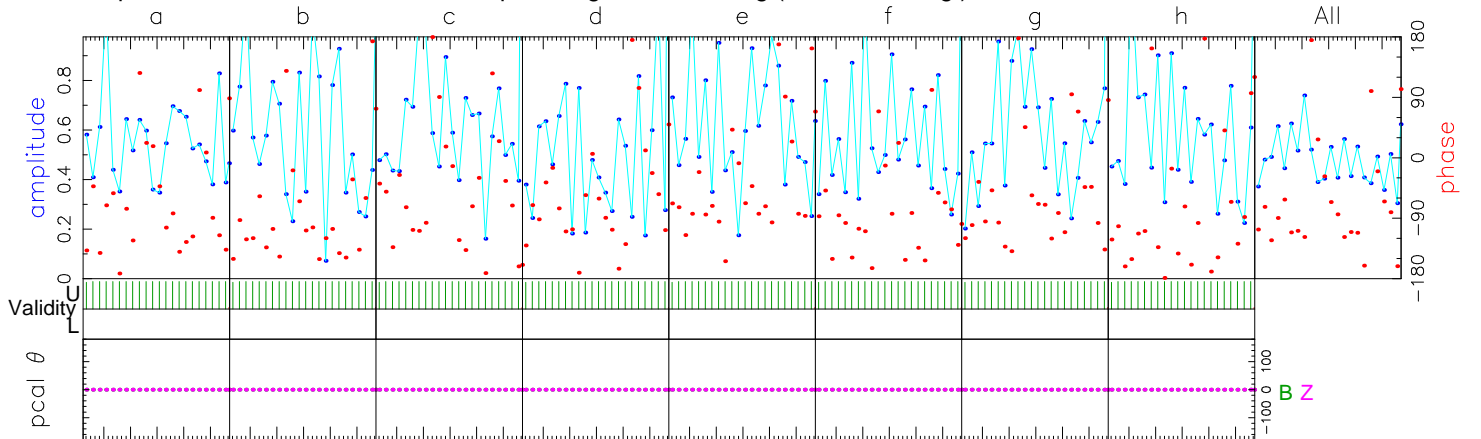
Fringe quality 9

SNR 15.8
 Int time 315.492
 Amp 0.326
 Phase -97.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.005476
 MBD 0.005683
 Fringe rate (Hz) 0.006398
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:113
 Start 151513.31
 Stop 152029.73
 FRT 151745.00
 Corr/FF/build
 2021:288:021115
 2021:288:044509
 2021:252:122852
 RA & Dec (J2000)
 02h37m52.405678s
 +28°48'08.989988"

Amp. and Phase vs. time for each freq., 23 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	618/0	618/0	618/0	618/0	618/0	618/0	618/0	618/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.08415206235E+03	Apriori delay (usec)	3.08414637952E+03	Resid mbdelay (usec)	5.68283E-03	+/-	6.9E-05
Sband delay (usec)	3.08415185527E+03	Apriori clock (usec)	-2.1346363E+01	Resid sbdelay (usec)	5.47575E-03	+/-	5.4E-04
Phase delay (usec)	3.08414637636E+03	Apriori clockrate (us/s)	-1.6000000E-08	Resid phdelay (usec)	-3.15538E-06	+/-	2.3E-07
Delay rate (us/s)	-2.97792217888E-02	Apriori rate (us/s)	-2.97792960634E-02	Resid rate (us/s)	7.42746E-08	+/-	1.3E-09
Total phase (deg)	-50.4	Apriori accel (us/s/s)	-2.17599341575E-05	Resid phase (deg)	-97.8	+/-	7.2

ph/seg (deg)	59.1	RMS	17.4	Theor.	17.4	Amplitude	0.326 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	56.1	Search (2048X32)	0.311	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	19.4	Inc. seg. avg.	0.457	Inc. frq. avg.	0.330	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	19.0	Inc. frq. avg.	0.330	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

B: az 257.0 el 48.5 pa 44.9 Z: az 264.2 el 37.1 pa 34.3 u,v (fr/asec) 165.256 -1691.024 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0029/BZ..1W8CZP Output file: /Exps/c211a/v2/1234/No0029/BZ.W.81.1W8CZP