

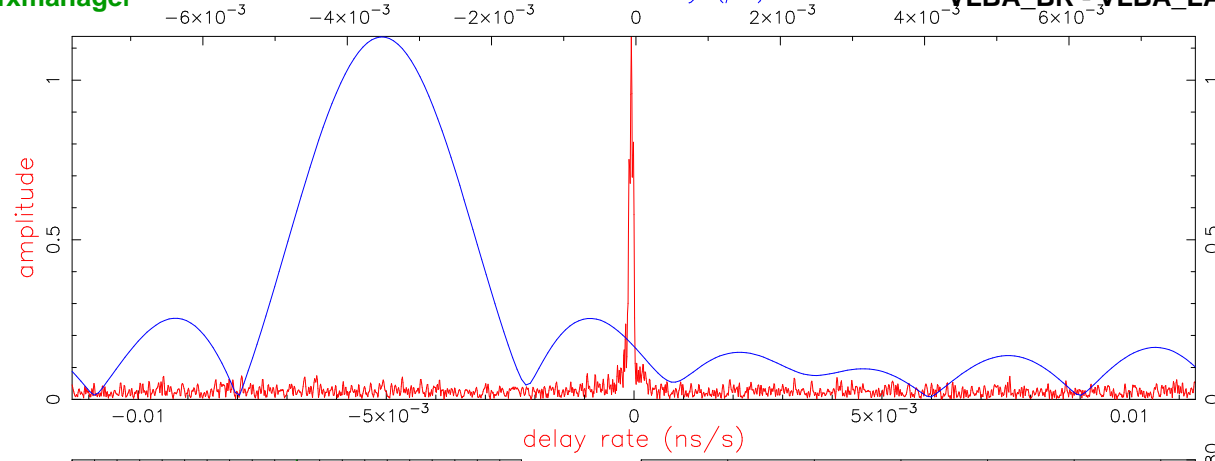
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, bl

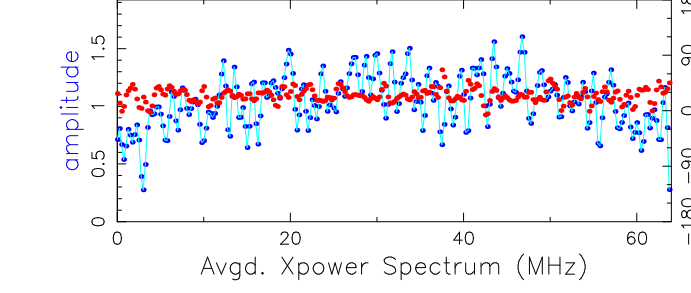
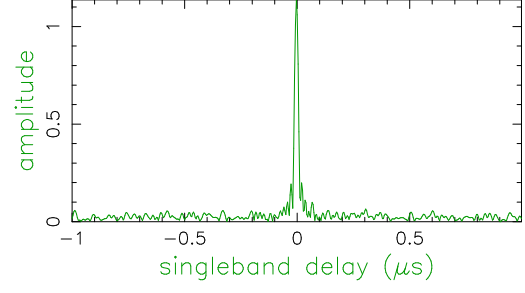
VLBA_BR - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)



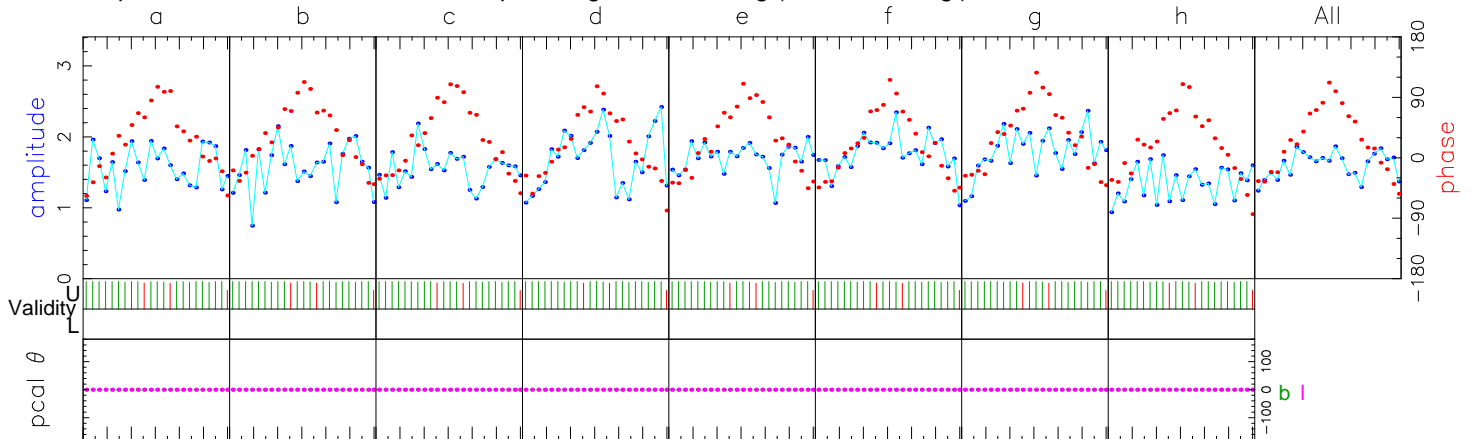
Fringe quality 5

SNR 58.7
 Int time 356.253
 Amp 1.137
 Phase 25.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.003411
 MBD -0.003507
 Fringe rate (Hz)
 -0.004543
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134828
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	701/0	701/0	701/0	701/0	701/0	701/0	701/0	701/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.17126681838E+03									
Sband delay (usec)	-1.17126672226E+03									
Phase delay (usec)	-1.17126331093E+03									
Delay rate (us/s)	5.12418519990E-02									
Total phase (deg)			-217.1							
Apriori delay (usec)					-1.17126331176E+03					
Apriori clock (usec)					-3.7738037E-01					
Apriori clockrate (us/s)					1.8600001E-07					
Apriori rate (us/s)					5.12419047426E-02					
Apriori accel (us/s/s)					1.83920211557E-05					
Resid mbdelay (usec)									-3.50662E-03	+/- 1.8E-05
Resid sbdelay (usec)									-3.41050E-03	+/- 1.5E-04
Resid phdelay (usec)									8.34961E-07	+/- 6.3E-08
Resid rate (us/s)									-5.27436E-08	+/- 3.0E-10
Resid phase (deg)									25.9	+/- 2.0
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (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	
u,v (fr/asec)	-357.473		2370.293						simultaneous interpolator	

b: az 82.2 el 57.1 pa -63.4 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -357.473 2370.293 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/bl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/bl.W.11.1W57LH

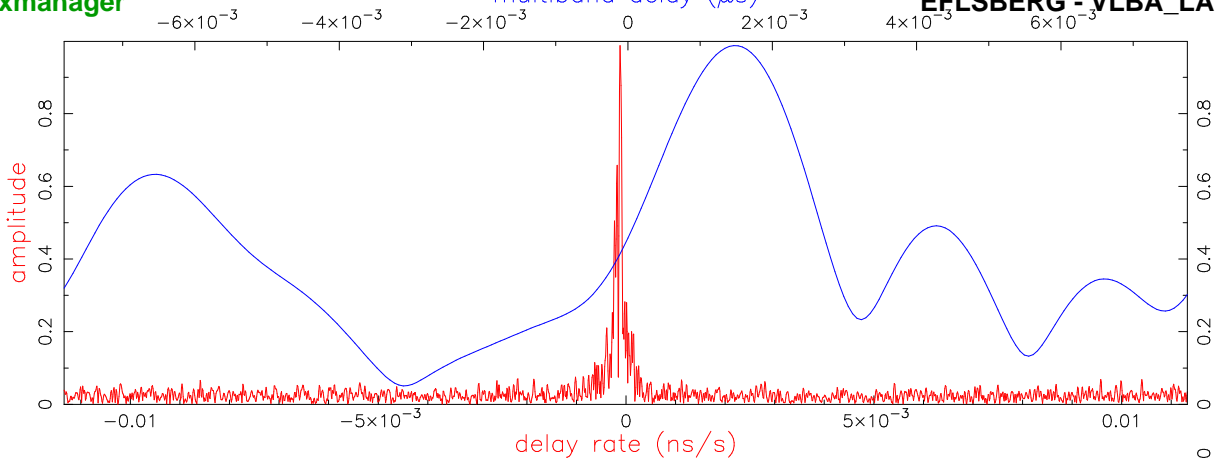
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, BI

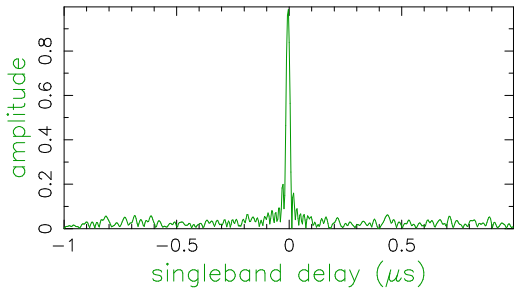
EFLSBERG - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

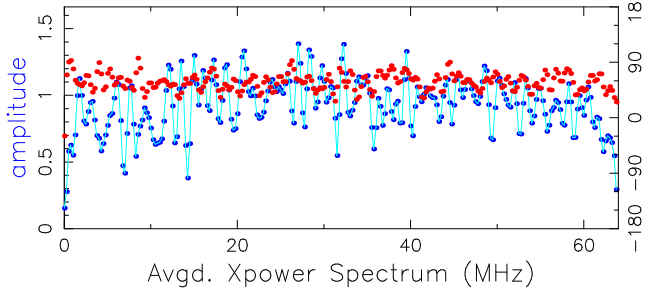


Fringe quality 2

SNR 51.8
 Int time 359.916
 Amp 0.999
 Phase -19.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.005301
 MBD 0.001451
 Fringe rate (Hz)
 -0.010140
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

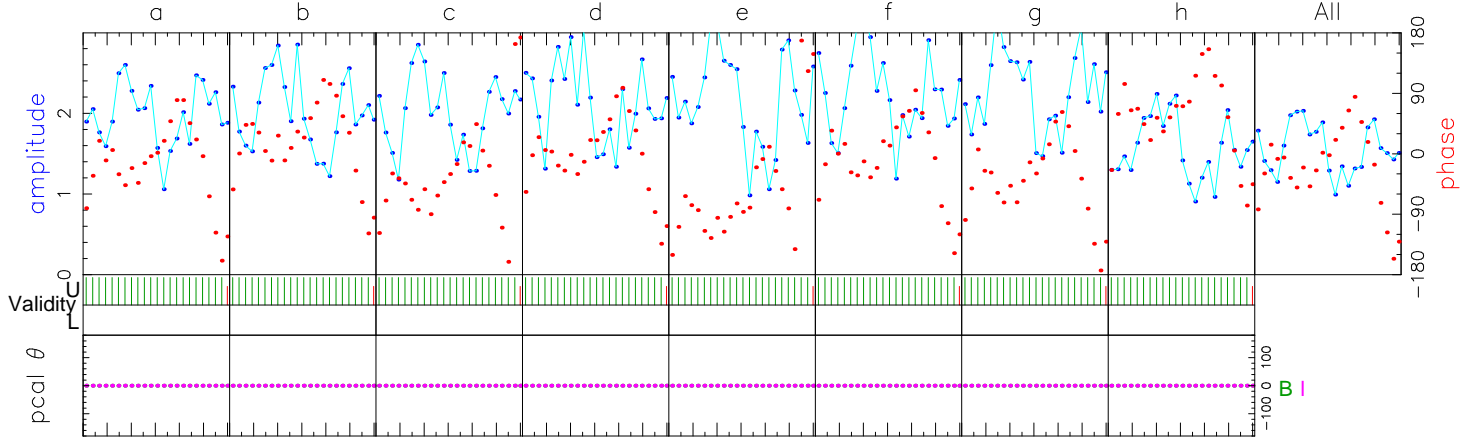


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134829
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) -6.53816702361E+03 Apriori delay (usec) -6.53816847411E+03 Resid mbdelay (usec) 1.45051E-03 +/- 2.1E-05
 Sband delay (usec) -6.53817377536E+03 Apriori clock (usec) -1.9465372E+01 Resid sbdelay (usec) -5.30125E-03 +/- 1.7E-04
 Phase delay (usec) -6.53816847475E+03 Apriori clockrate (us/s) 2.8600001E-07 Resid phdelay (usec) -6.41169E-07 +/- 7.1E-08
 Delay rate (us/s) -1.21845751277E+00 Apriori rate (us/s) -1.21845739505E+00 Resid rate (us/s) -1.17718E-07 +/- 3.4E-10
 Total phase (deg) -149.5 Apriori accel (us/s/s) 4.89042479277E-05 Resid phase (deg) -19.9 +/- 2.2

ph/seg (deg) 58.1 5.3 Search (2048X32) 0.970 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.6 9.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.2 3.1 Inc. seg. avg. 1.551 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.6 5.5 Inc. frq. avg. 1.302 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 294.2 el 37.1 pa 51.8 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 9546.863 4597.128 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/BI..1W57LH Output file: /Exps/c211a/v2/1234/No0237/BI.W.14.1W57LH

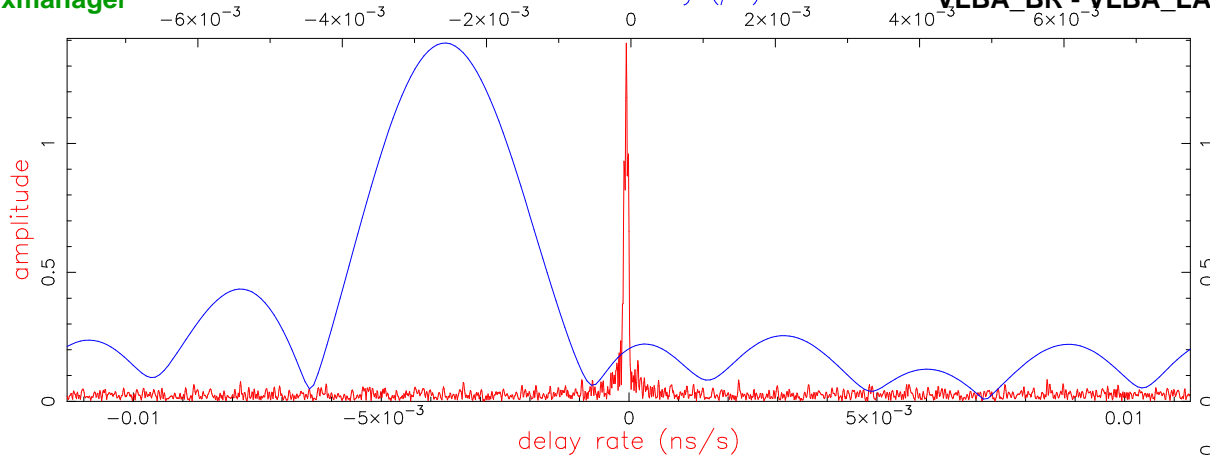
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, bl

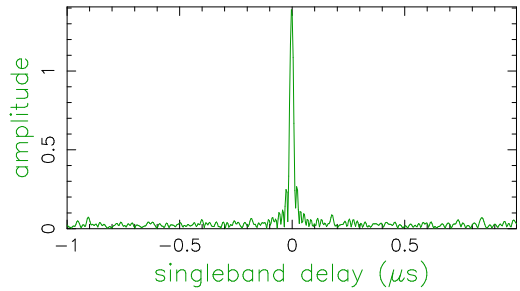
VLBA_BR - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

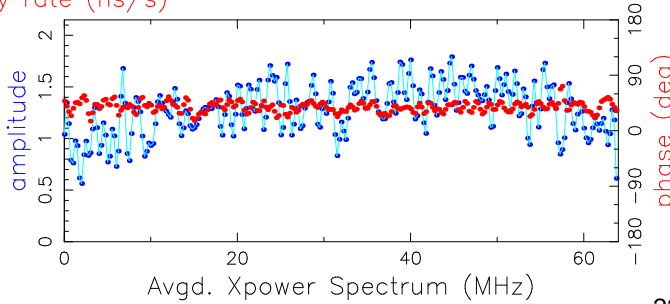


Fringe quality 5

SNR 72.6
 Int time 356.253
 Amp 1.407
 Phase 40.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.002434
 MBD -0.002542
 Fringe rate (Hz)
 -0.004501
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

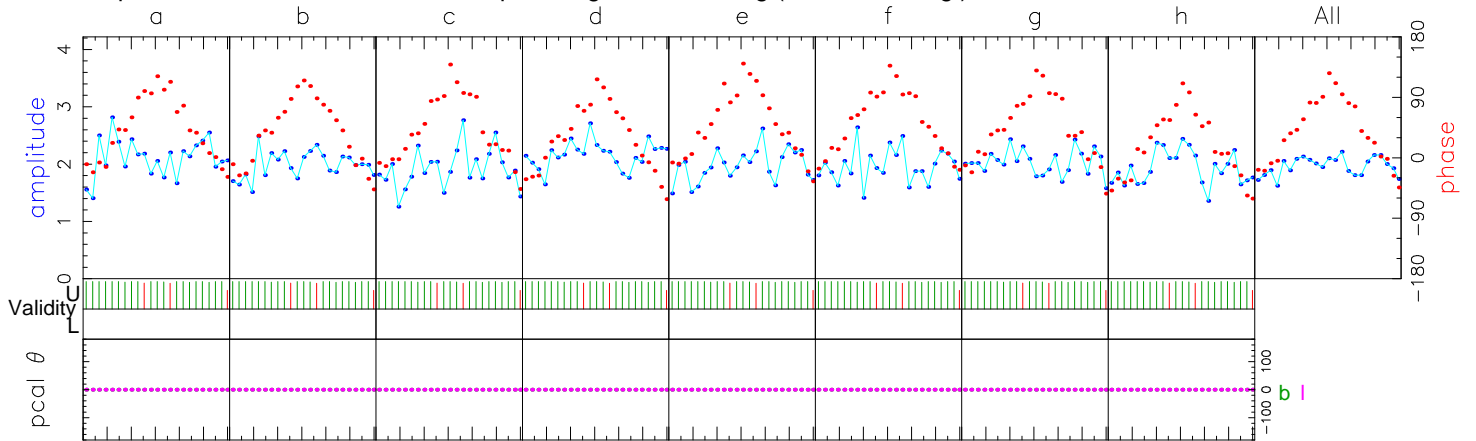


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134832
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	701/0	701/0	701/0	701/0	701/0	701/0	701/0	701/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-1.17126585403E+03								Resid mbdelay (usec)	-2.54227E-03 +/- 1.5E-05
Sband delay (usec)	-1.17126574551E+03								Resid sbdelay (usec)	-2.43375E-03 +/- 1.2E-04
Phase delay (usec)	-1.17126331046E+03								Resid phdelay (usec)	1.29548E-06 +/- 5.1E-08
Delay rate (us/s)	5.12418524900E-02								Resid rate (us/s)	-5.22526E-08 +/- 2.5E-10
Total phase (deg)			-202.8						Resid phase (deg)	40.2 +/- 1.6
	RMS	Theor.	Amplitude	1.407 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.5	3.8	Search (2048X32)	1.358					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	41.3	6.6	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	11.2	2.2	Inc. seg. avg.	1.963					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	4.9	3.9	Inc. frq. avg.	1.407					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 82.2 el 57.1 pa -63.4 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -357.473 2370.293 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/bl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/bl.W.31.1W57LH

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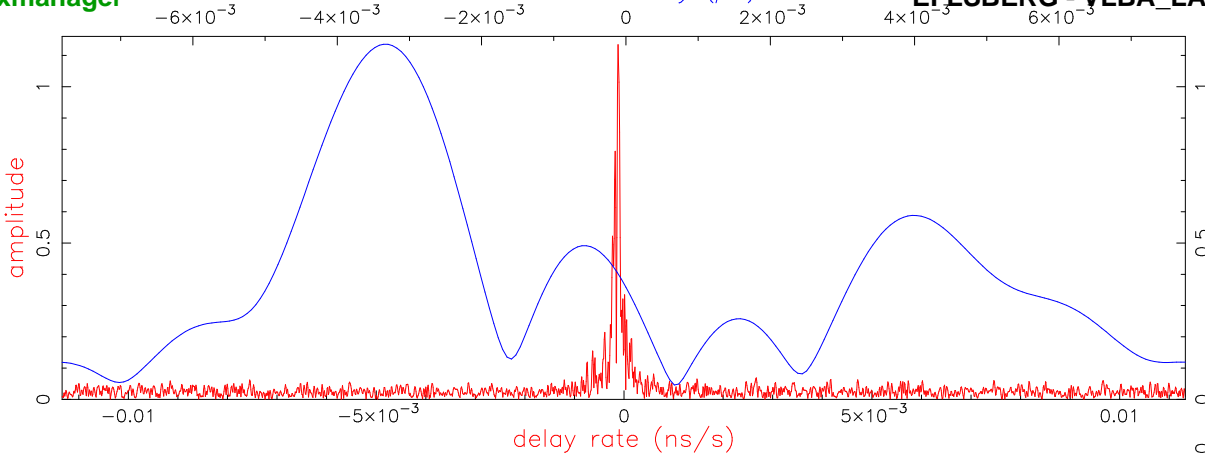
fxmanager

BLLAC.1W57LH, No0237, BI

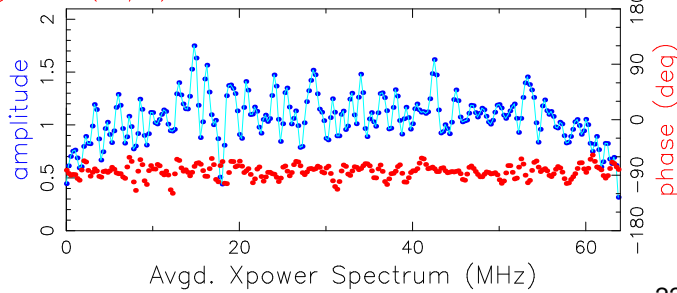
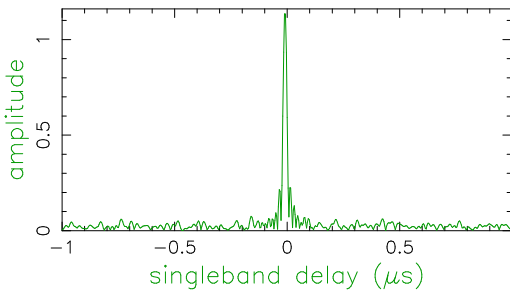
EFLSBERG - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 3

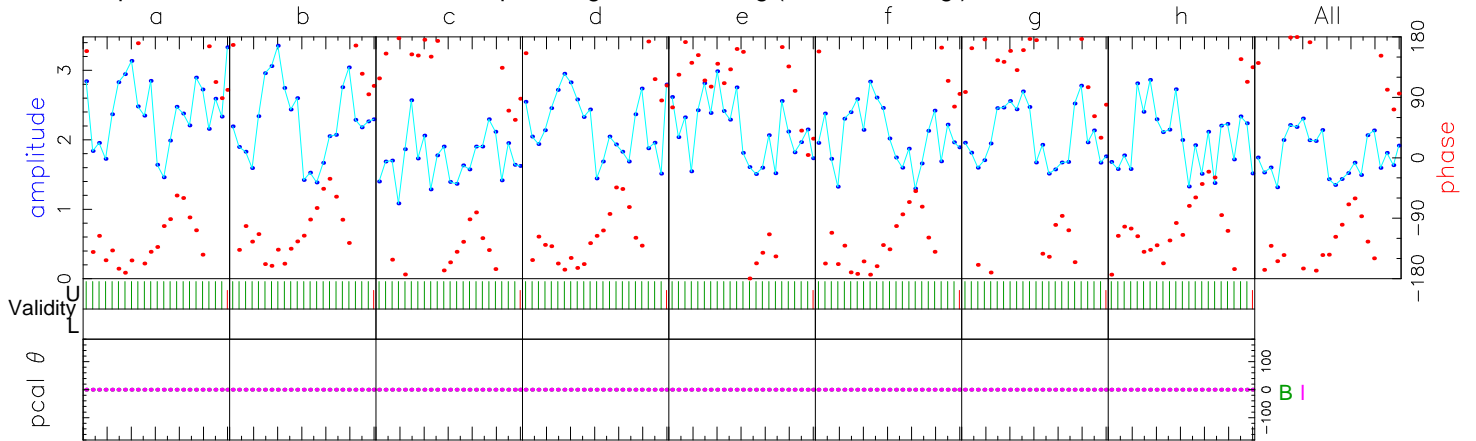


SNR 60.2
 Int time 359.916
 Amp 1.161
 Phase -158.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.009778
 MBD -0.003273
 Fringe rate (Hz)
 -0.010199
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134832
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-6.53817174714E+03	-6.53817825186E+03	-6.53816847923E+03	-6.53817174714E+03	-6.53816847411E+03	-6.53816847411E+03	-6.53816847411E+03	-6.53816847411E+03		
Sband delay (usec)	-149.4	-133.9	-177.2	-142.4	138.1	-148.9	166.7	-118.7		
Phase delay (usec)	1.5	1.4	1.1	1.4	1.4	1.3	1.3	1.3		
Delay rate (us/s)	254.7	254.4	254.7	254.9	255.2	254.9	255.3	255.3		
Total phase (deg)			-288.2							
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										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

Mk4/DiFX fourfit 3.21 rev 2937

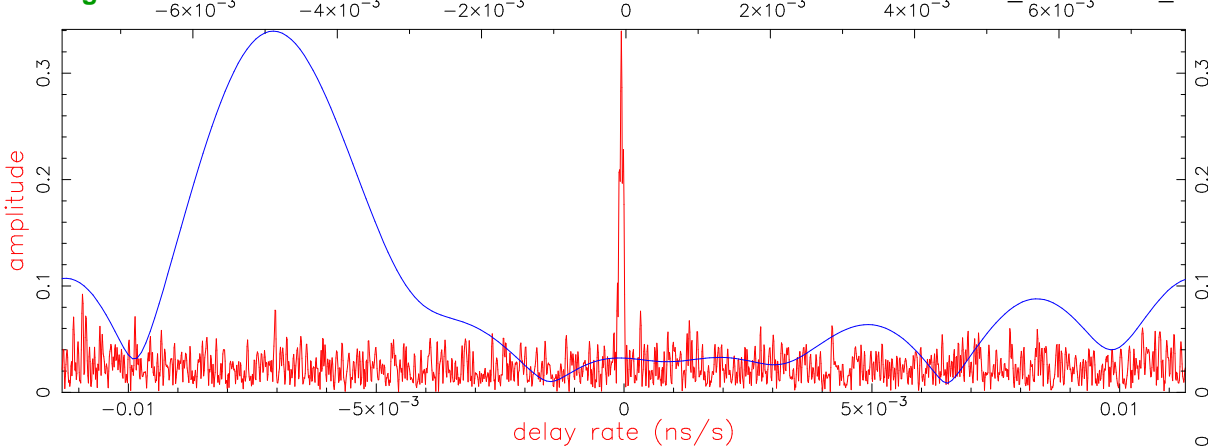
fxmanager

BLLAC.1W57LH, No0237, bl

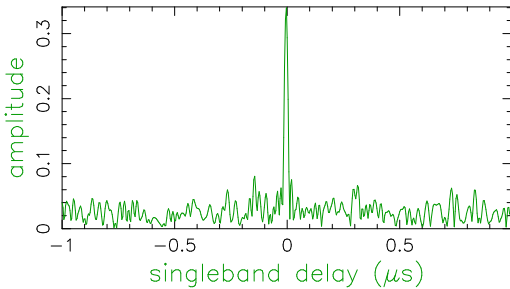
VLBA_BR - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

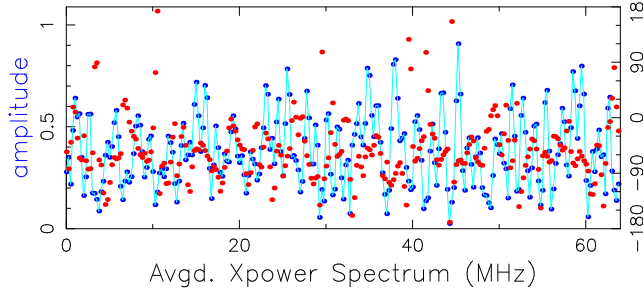
Fringe quality 8



SNR 17.6
 Int time 356.253
 Amp 0.341
 Phase -58.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.004786
 MBD -0.004916
 Fringe rate (Hz)
 -0.004387
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

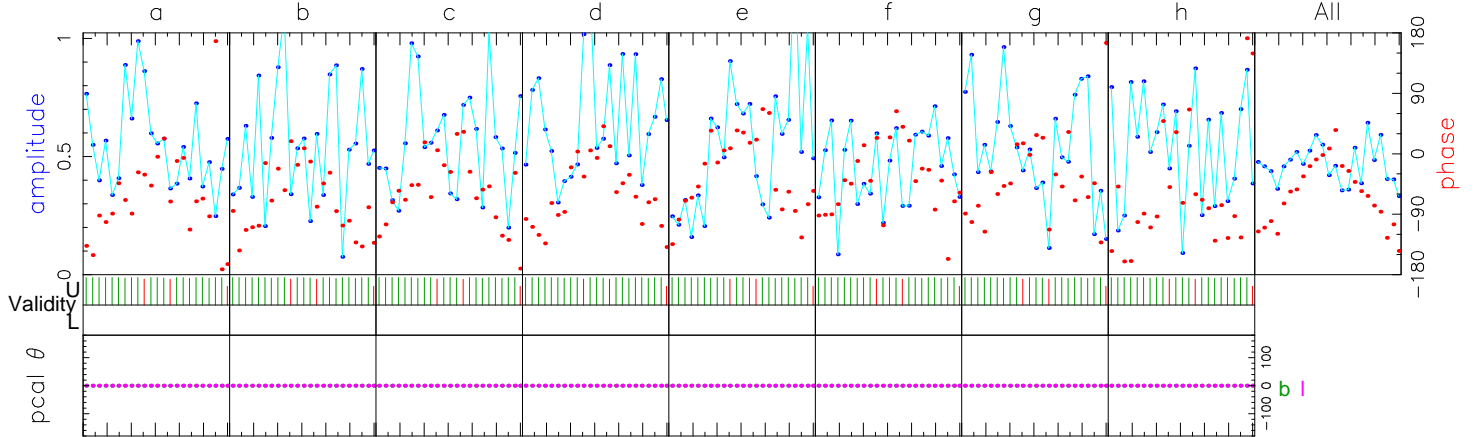


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134836
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	701/0	701/0	701/0	701/0	701/0	701/0	701/0	701/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.17126822800E+03									
Sband delay (usec)	-1.17126809751E+03									
Phase delay (usec)	-1.17126331363E+03									
Delay rate (us/s)	5.12418538122E-02									
Total phase (deg)			-301.0							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode										
PC period (AP's)										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.341 +/- 0.019										
0.329										
0.000										
0.451										
0.355										
1.8600001E-07										
5.12419047426E-02										
1.83920211557E-05										
-4.91624E-03										
-4.78575E-03										
-1.86874E-06										
-5.09304E-08										
-58.0										
+/- 6.2E-05										
+/- 4.9E-04										
+/- 2.1E-07										
+/- 1.0E-09										
+/- 6.5										
ph/seg (deg)	46.2	15.6								
amp/seg (%)	43.9	27.2								
ph/frq (deg)	24.6	9.2								
amp/frq (%)	16.6	16.1								
b: az 82.2 el 57.1 pa -63.4										
l: az 65.4 el 63.4 pa -93.6										
u,v (fr/asec) -357.473 2370.293										
Control file: cf_1234_gmva										
Input file: /Exps/c211a/v2/1234/No0237/bl..1W57LH										
Output file: /Exps/c211a/v2/1234/No0237/bl.W5.1W57LH										

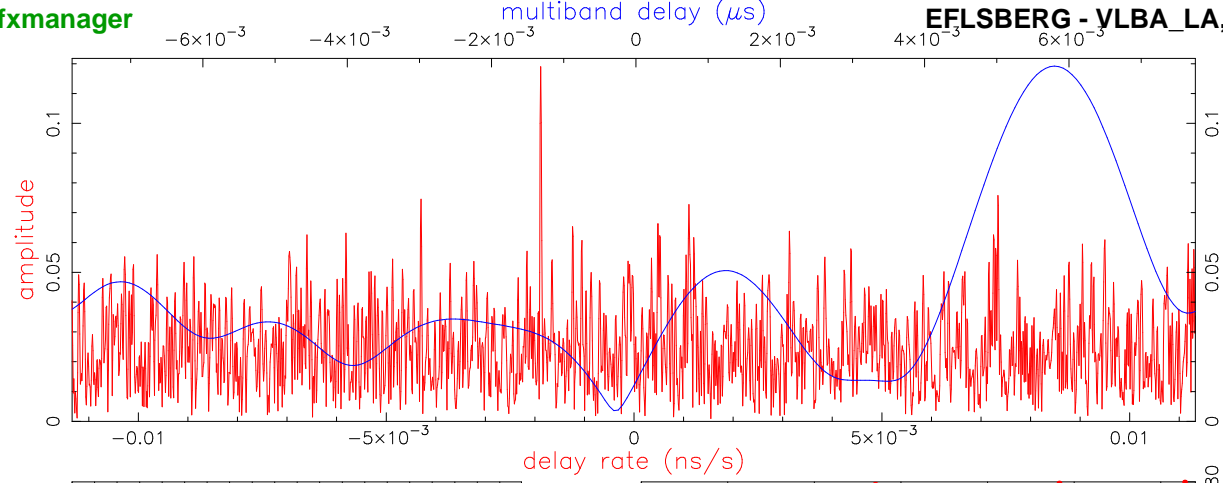
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, BI

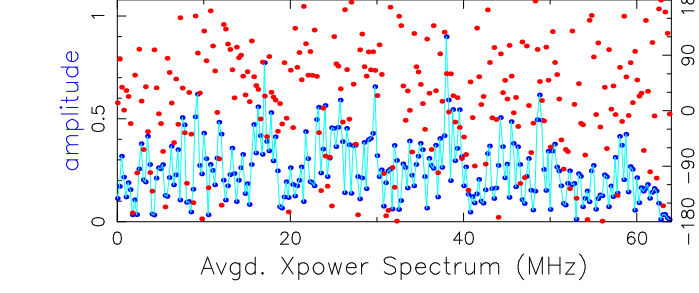
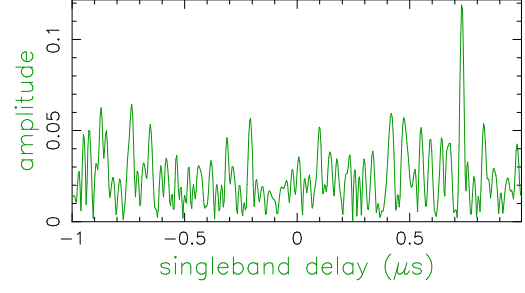
EFLSBERG - VLBA_LA, fgroup W, pol LR



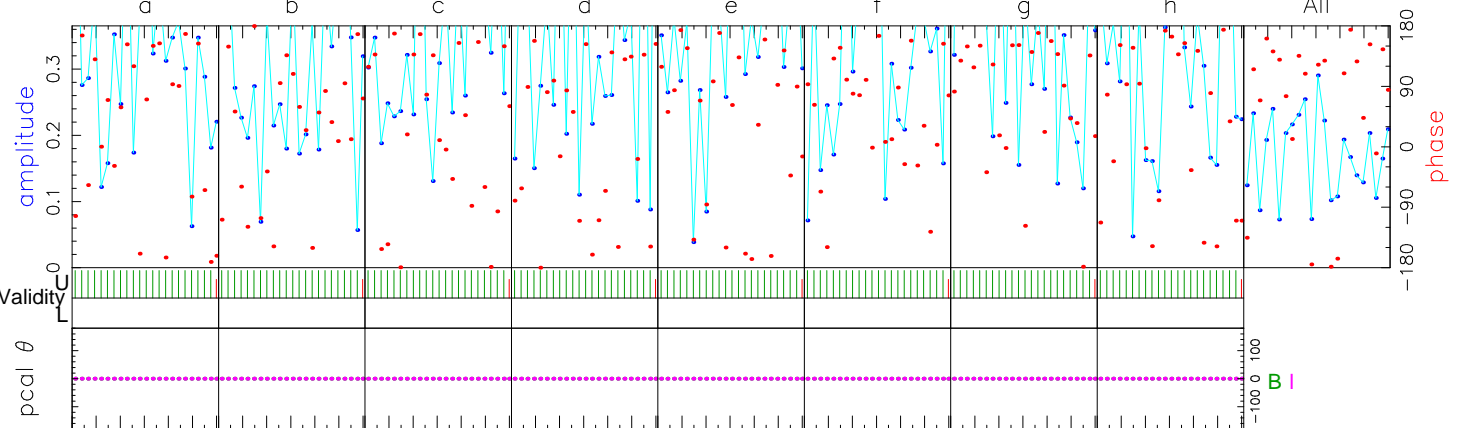
Fringe quality 0

SNR 6.2
 Int time 359.916
 Amp 0.122
 Phase 125.0
 PFD 1.1e-01
 Delays (us)
 SBD 0.731943
 MBD 0.005860
 Fringe rate (Hz)
 -0.162139
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134836
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

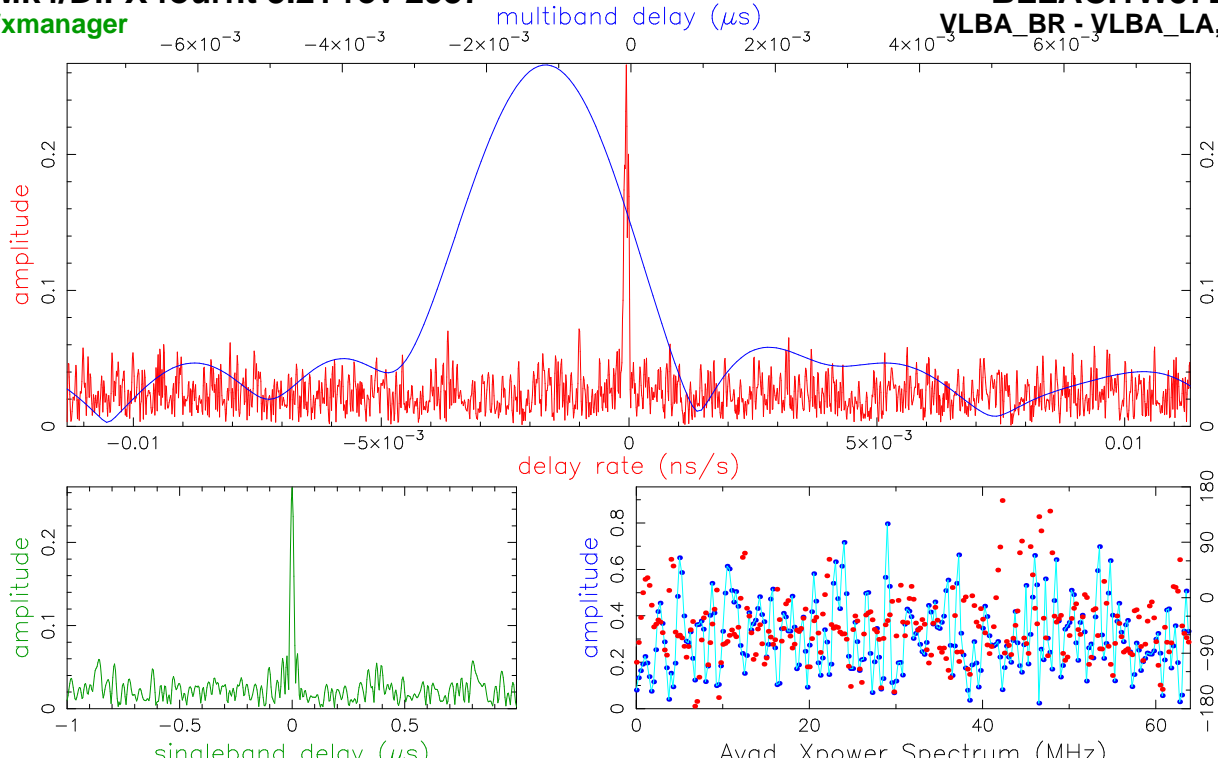


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	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)	-6.53744386383E+03									
Sband delay (usec)	-6.53743653086E+03									
Phase delay (usec)	-6.53816847008E+03									
Delay rate (us/s)	-1.21845927733E+00									
Total phase (deg)			-4.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/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								
pcal θ										

ph/seg (deg) 56.3 44.0 Search (2048X32) 0.117 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.7 76.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.6 25.9 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.5 45.3 Inc. frq. avg. 0.123 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 294.2 el 37.1 pa 51.8 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 9546.863 4597.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/BI..1W57LH Output file: /Exps/c211a/v2/1234/No0237/BI.W.54.1W57LH

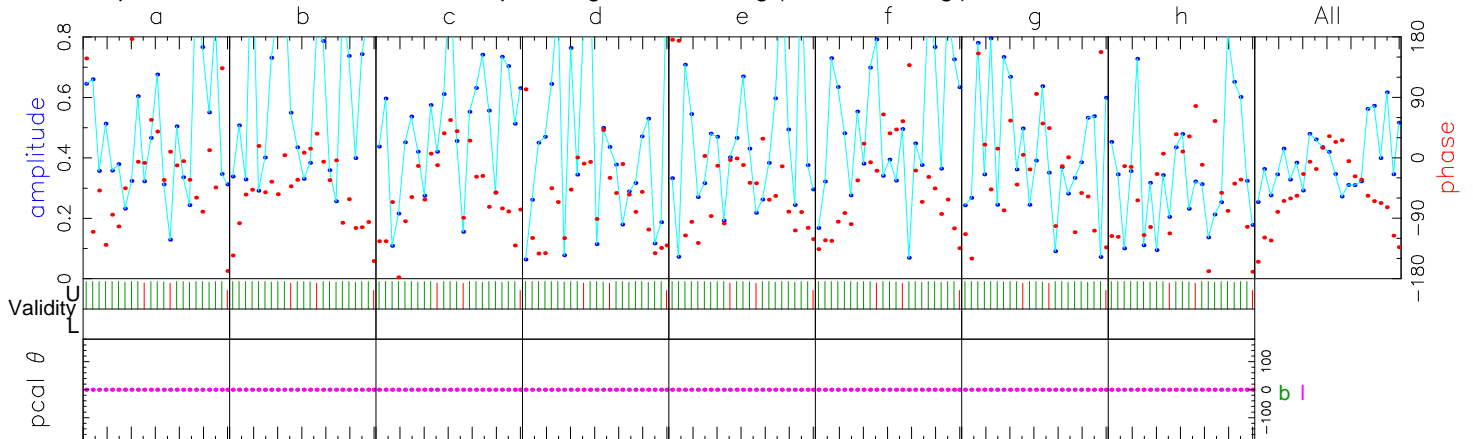


Fringe quality 9

SNR 13.8
Int time 356.253
Amp 0.267
Phase -49.5
PFD 2.0×10^{-34}
Delays (us)
SBD -0.000825
MBD -0.001189
Fringe rate (Hz) -0.004690
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124500.00
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134840
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	701/0	701/0	701/0	701/0	701/0	701/0	701/0	701/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.17126450106E+03				-1.17126331176E+03					
Sband delay (usec)	-1.17126413701E+03				-3.7738037E-01					
Phase delay (usec)	-1.17126331336E+03				1.8600001E-07					
Delay rate (us/s)	5.12418502906E-02				5.12419047426E-02					
Total phase (deg)			-292.5		1.83920211557E-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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

b: az 82.2 el 57.1 pa -63.4 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -357.473 2370.293 simultaneous interpolator

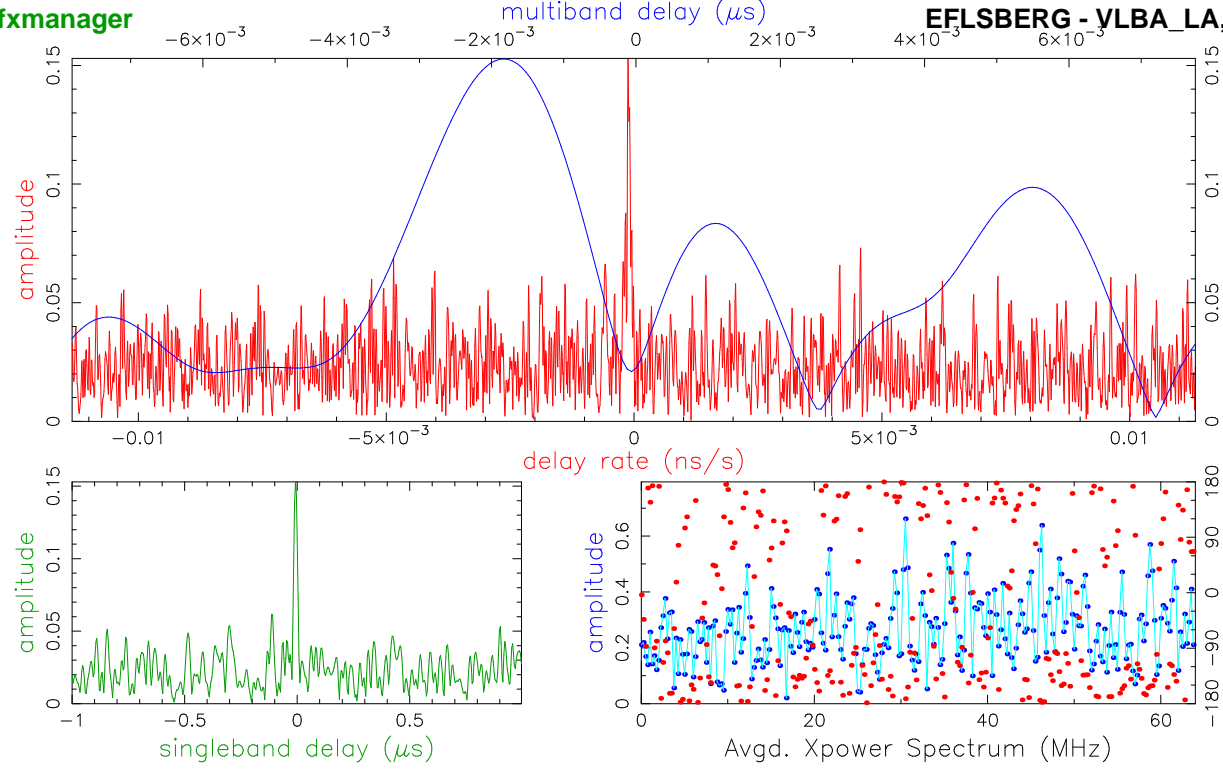
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/bl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/bl.W0.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

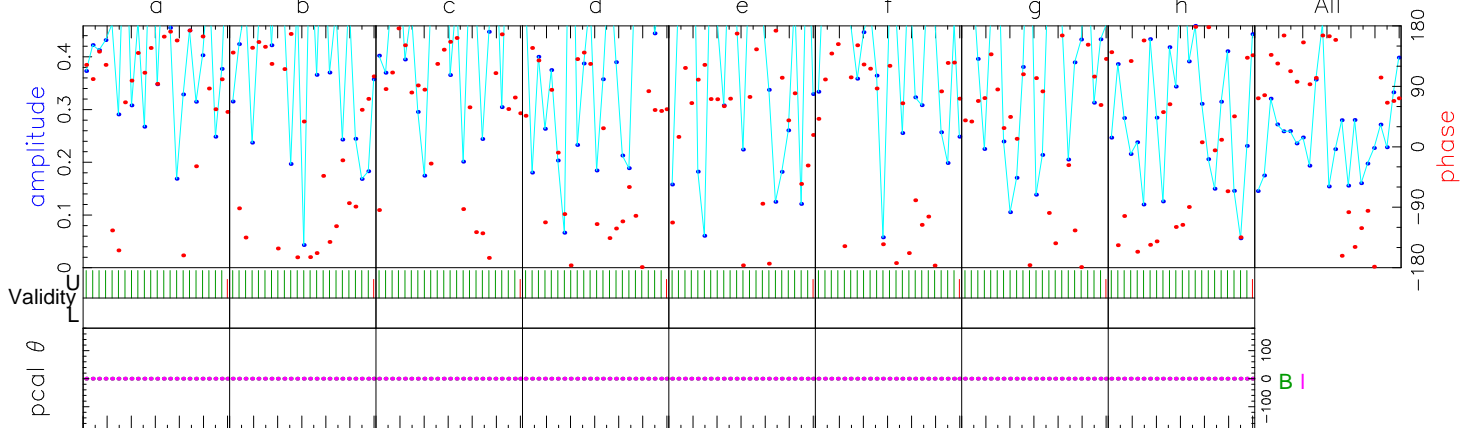
BLLAC.1W57LH, No0237, BI

EFLSBERG - VLBA_LA, fgroup W, pol RL



Fringe quality 9
 SNR 7.9
 Int time 359.916
 Amp 0.153
 Phase 134.1
 PFD 7.1e-07
 Delays (us)
 SBD -0.007275
 MBD -0.001816
 Fringe rate (Hz)
 -0.010834
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134840
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-6.53817029029E+03									
Sband delay (usec)	-6.53817574911E+03									
Phase delay (usec)	-6.53816846979E+03									
Delay rate (us/s)	-1.21845752082E+00									
Total phase (deg)			4.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 61.3 34.6 Search (2048X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.2 60.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.0 20.4 Inc. seg. avg. 0.213 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.6 35.6 Inc. frq. avg. 0.179 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 294.2 el 37.1 pa 51.8 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 9546.863 4597.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/BI..1W57LH Output file: /Exps/c211a/v2/1234/No0237/BI.W.71.1W57LH

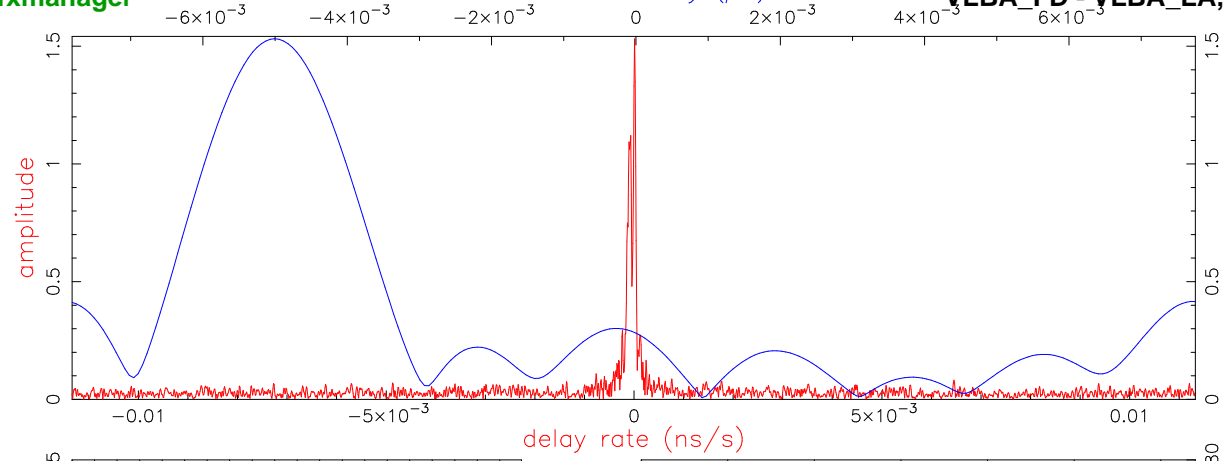
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, fl

VLBA_FD - VLBA_LA, fgroup W, pol RR

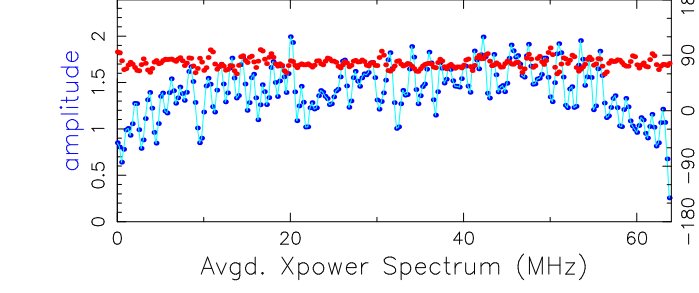
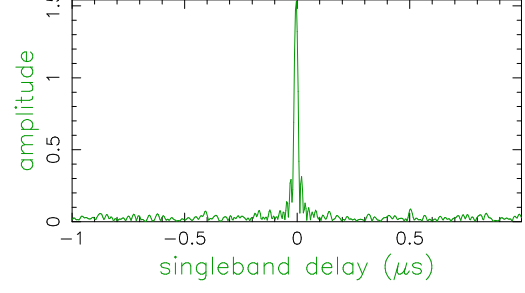
multiband delay (μ s)



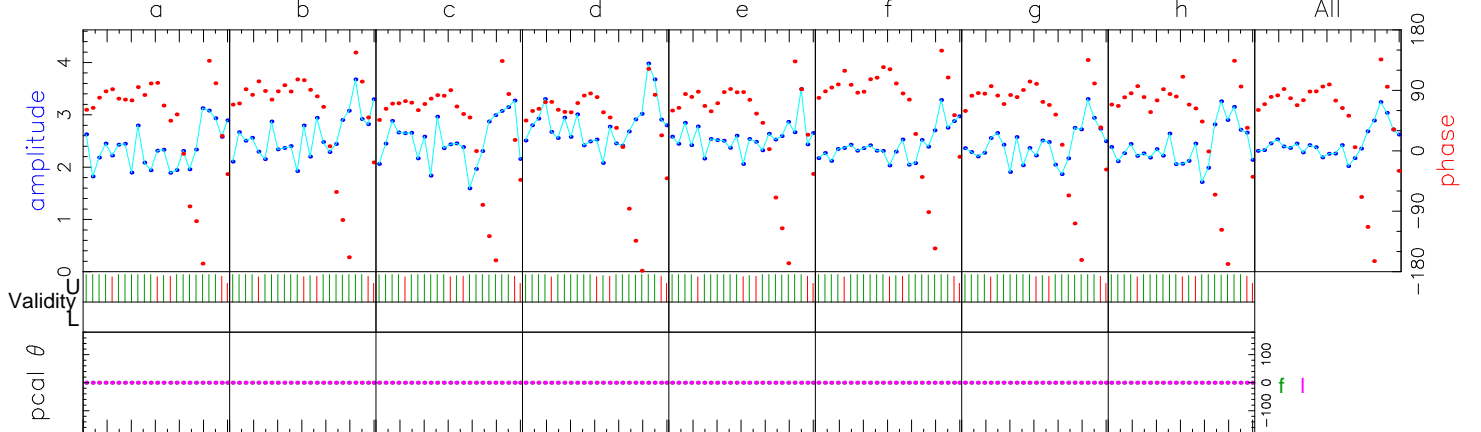
Fringe quality 5

SNR 79.4
 Int time 354.365
 Amp 1.542
 Phase 77.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.004991
 MBD -0.005036
 Fringe rate (Hz) 0.000617
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134849
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	697/0	697/0	697/0	697/0	697/0	697/0	697/0	697/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.29061149514E+02				-1.29056113993E+02				Resid mbdelay (usec)	-5.03552E-03 +/- 1.4E-05
Sband delay (usec)	-1.29061105243E+02				1.2827635E+01				Resid sbdelay (usec)	-4.99125E-03 +/- 1.1E-04
Phase delay (usec)	-1.29056111491E+02				3.4600000E-07				Resid phdelay (usec)	2.50216E-06 +/- 4.7E-08
Delay rate (us/s)	-3.97287056121E-03				-3.97287772756E-03				Resid rate (us/s)	7.16635E-09 +/- 2.3E-10
Total phase (deg)		-159.8			-4.94971918241E-06				Resid phase (deg)	77.6 +/- 1.4
	RMS	Theor.	Amplitude	1.542 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.6	3.4	Search (2048X32)	1.496					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	62.8	6.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	10.5	2.0	Inc. seg. avg.	2.463					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	7.7	3.6	Inc. frq. avg.	1.550					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 56.0 el 62.6 pa -104.4			l: az 65.4 el 63.4 pa -93.6						u,v (fr/asec) 19.825 -846.012	simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/fl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/fl.W.106.1W57LH

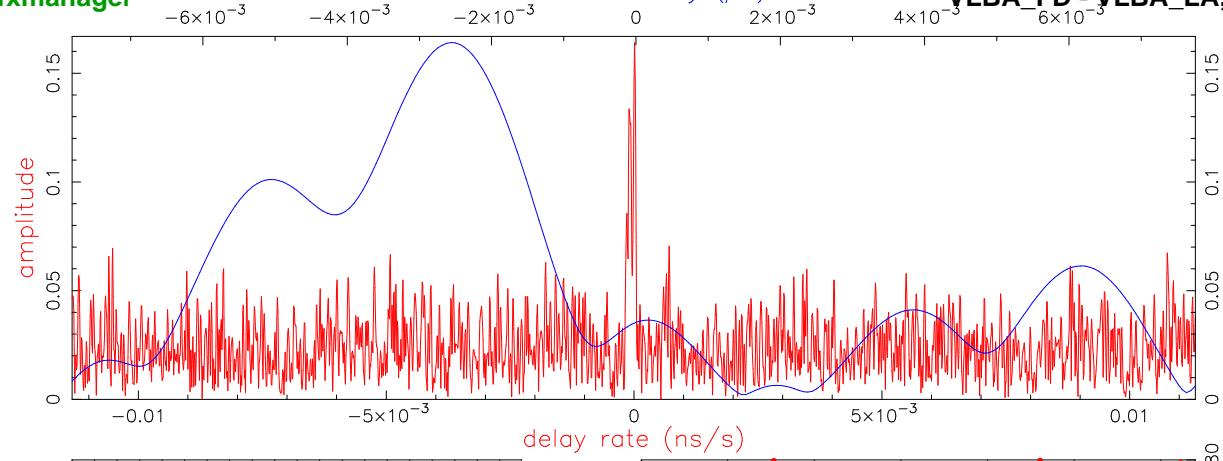
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

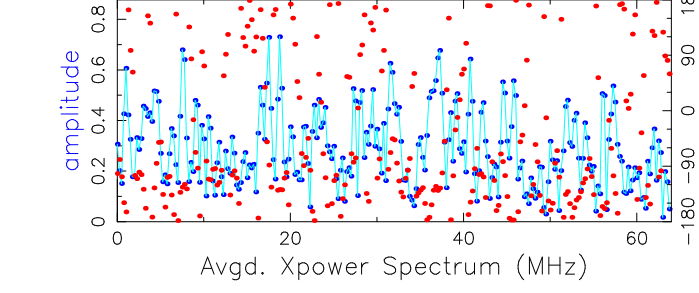
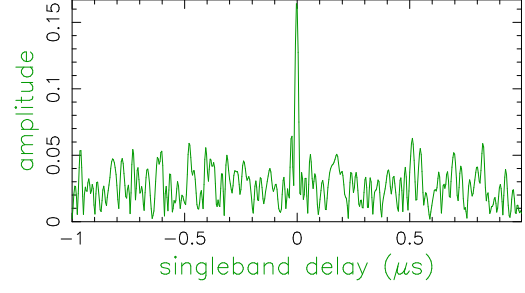
BLLAC.1W57LH, No0237, fl

VLBA_FD - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

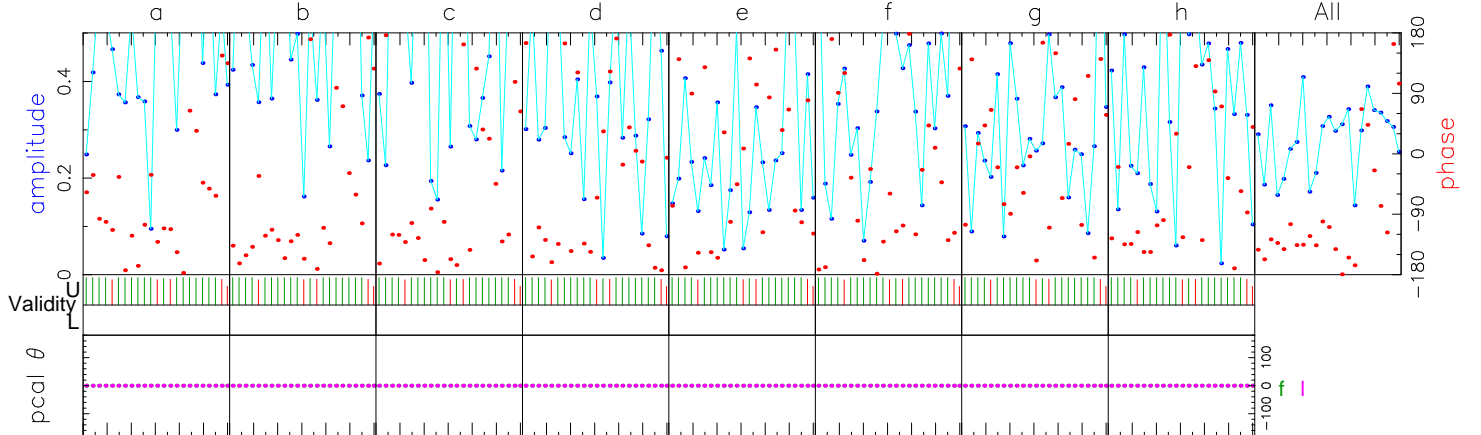


Fringe quality 9
 SNR 8.6
 Int time 354.364
 Amp 0.167
 Phase -132.4
 PFD 3.1e-09
 Delays (us)
 SBD -0.002291
 MBD -0.002522
 Fringe rate (Hz) 0.000830
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134852
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	697/0	697/0	697/0	697/0	697/0	697/0	697/0	697/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02	-1.29058635764E+02		
Sband delay (usec)	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02	-1.29058404993E+02		
Phase delay (usec)	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02	-1.29056118263E+02		
Delay rate (us/s)	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03	-3.97286808763E-03		
Total phase (deg)			-9.8							
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	64.2	31.8								
amp/seg (%)	81.5	55.6								
ph/frq (deg)	37.2	18.9								
amp/frq (%)	55.9	32.9								
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.167 +/- 0.019										
0.163										
0.000										
0.244										
0.166										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
f: az 56.0 el 62.6 pa -104.4										
l: az 65.4 el 63.4 pa -93.6										
u,v (fr/asec) 19.825 -846.012										
simultaneous interpolator										

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/fl.1W57LH Output file: /Exps/c211a/v2/1234/No0237/fl.W.123.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

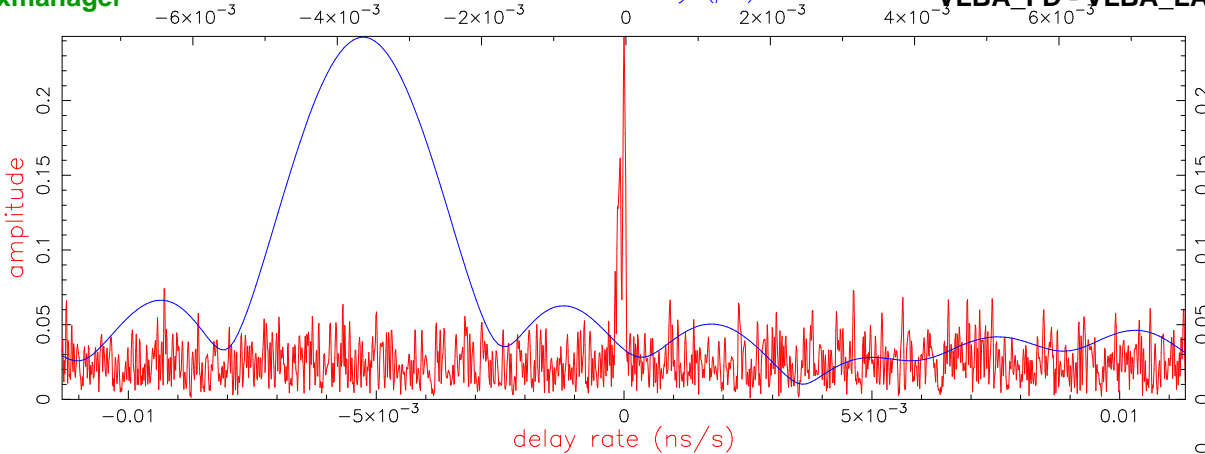
fxmanager

BLLAC.1W57LH, No0237, fl

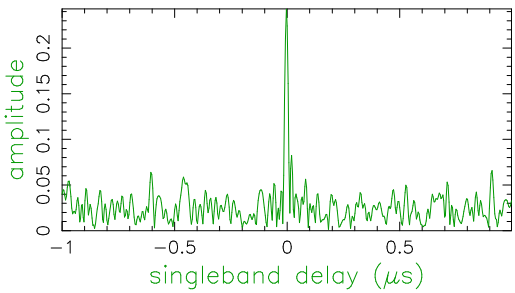
VLBA_FD - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

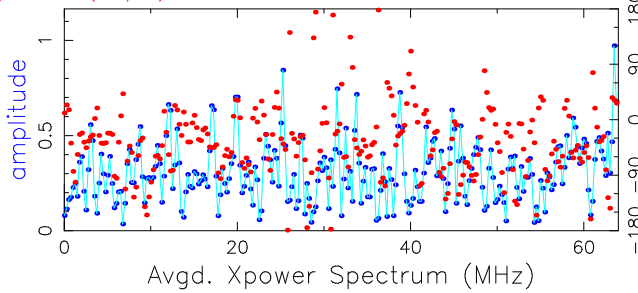
Fringe quality 9



SNR 12.5
 Int time 354.365
 Amp 0.243
 Phase -34.0
 PFD 3.5e-27
 Delays (us)
 SBD -0.003343
 MBD -0.003631
 Fringe rate (Hz)
 0.000297
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

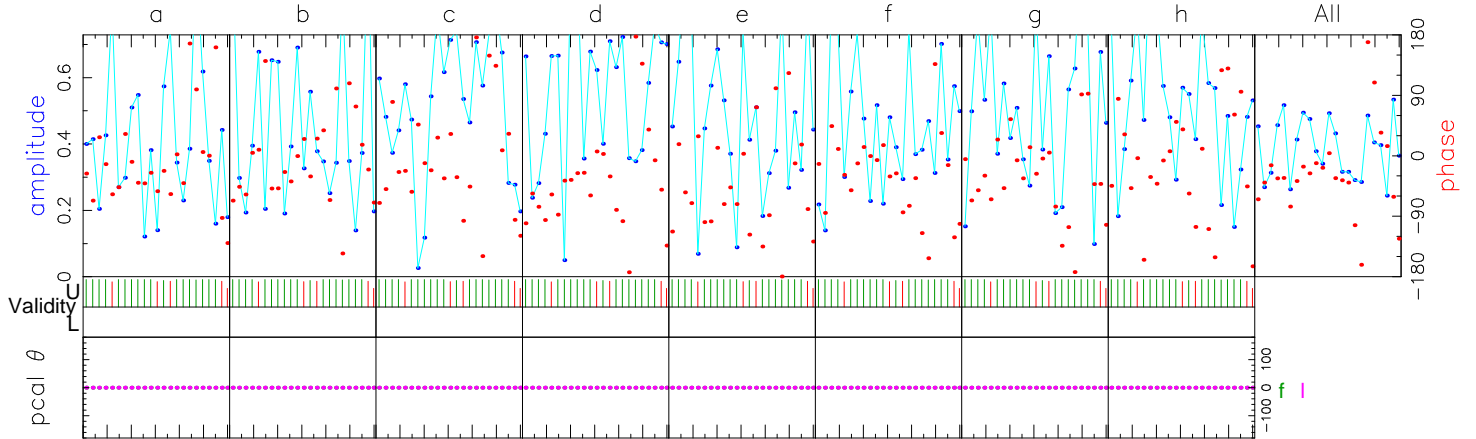


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134856
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	697/0	697/0	697/0	697/0	697/0	697/0	697/0	697/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.29059745181E+02				-1.29056113993E+02				Resid mbdelay (usec)	-3.63119E-03 +/- 8.7E-05
Sband delay (usec)	-1.29059457243E+02				1.2827635E+01				Resid sbdelay (usec)	-3.34325E-03 +/- 6.9E-04
Phase delay (usec)	-1.29056115091E+02				3.4600000E-07				Resid phdelay (usec)	-1.09777E-06 +/- 3.0E-07
Delay rate (us/s)	-3.97287427901E-03				-3.97287772756E-03				Resid rate (us/s)	3.44855E-09 +/- 1.4E-09
Total phase (deg)		-271.4			-4.94971918241E-06				Resid phase (deg)	-34.0 +/- 9.2
RMS	61.6	21.9			0.234 +/- 0.019				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.6	21.9			0.234				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	69.8	38.2			0.000				Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	15.7	13.0			0.361				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	19.6	22.6			0.244				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

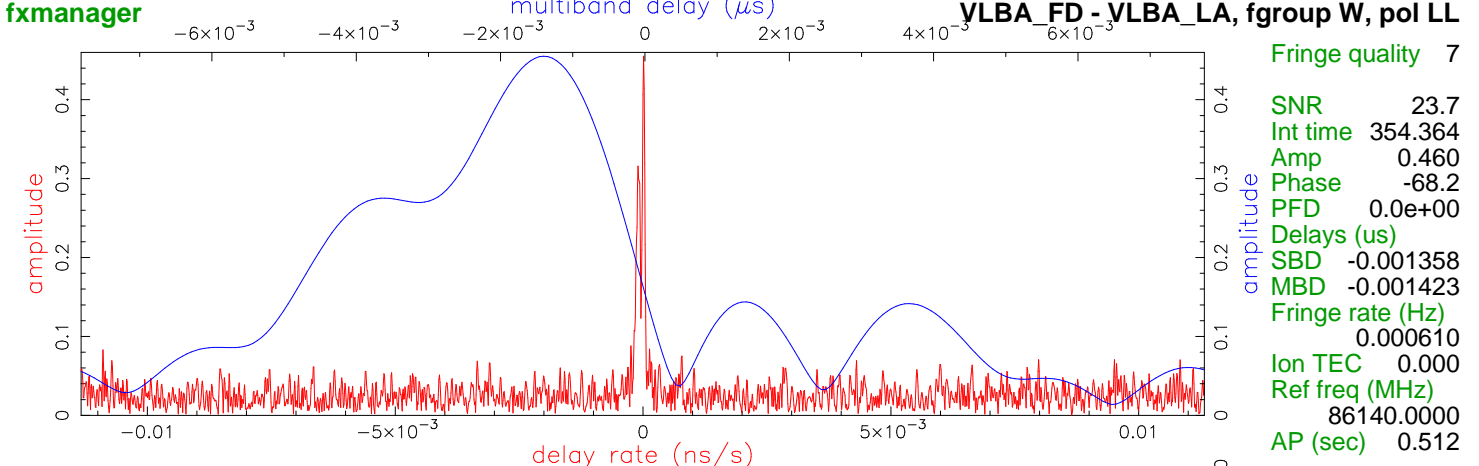
f: az 56.0 el 62.6 pa -104.4 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 19.825 -846.012 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/fl.1W57LH Output file: /Exps/c211a/v2/1234/No0237/fl.W.143.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, fl

VLBA_FD - VLBA_LA, fgroup W, pol LL



Fringe quality 7

SNR 23.7

Int time 354.364

Amp 0.460

Phase -68.2

PFD 0.0e+00

Delays (us)

SBD -0.001358

MBD -0.001423

Fringe rate (Hz)

0.000610

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:114

Start 124500.00

Stop 125059.94

FRT 124816.00

Corr/FF/build

2021:286:092156

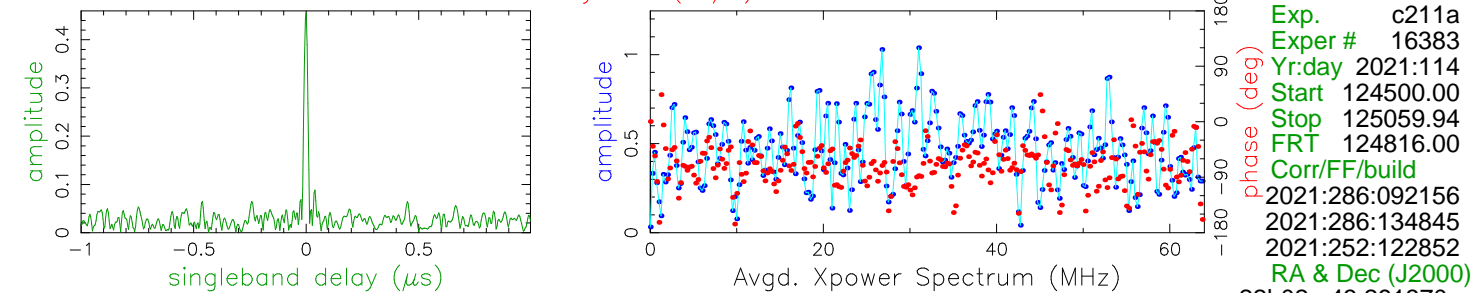
2021:286:134845

2021:252:122852

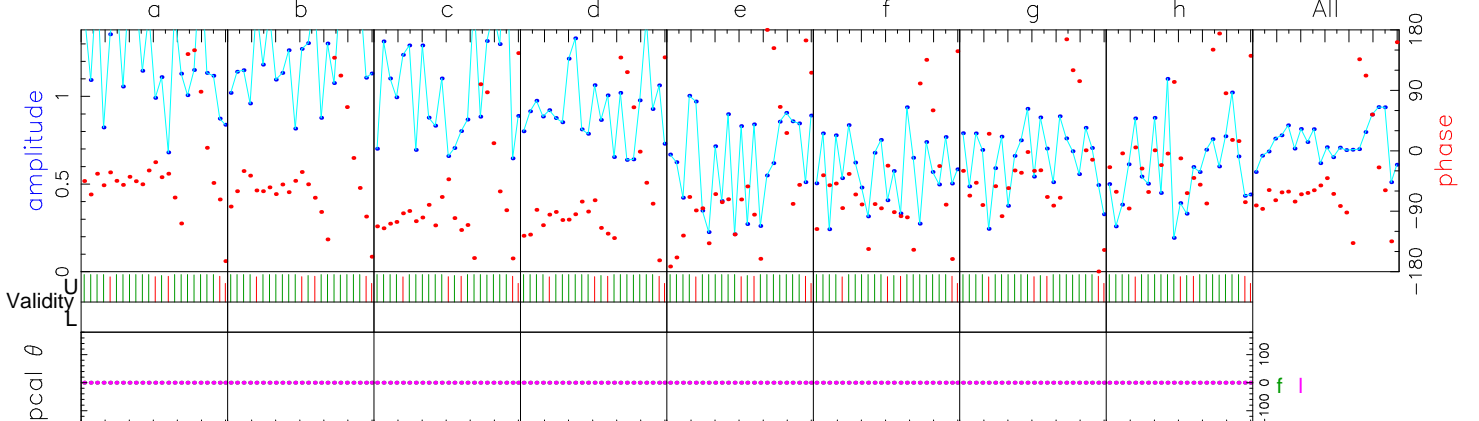
RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.9	-56.3	-99.4	-101.8	-95.4	-80.5	-45.5	-17.8	Phase	-68.2
	0.8	0.8	0.7	0.6	0.3	0.3	0.4	0.3	Ampl.	0.5
	256.9	256.2	256.8	256.8	257.2	257.1	256.6	257.3	Sbd box	256.7
U/L	697/0	697/0	697/0	697/0	697/0	697/0	697/0	697/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.29057537451E+02		Apriori delay (usec)		-1.29056113993E+02		Resid mbdelay (usec)		-1.42346E-03	+/- 4.6E-05
Sband delay (usec)	-1.29057471993E+02		Apriori clock (usec)		1.2827635E+01		Resid sbdelay (usec)		-1.35800E-03	+/- 3.6E-04
Phase delay (usec)	-1.29056116191E+02		Apriori clockrate (us/s)		3.4600000E-07		Resid phdelay (usec)		-2.19781E-06	+/- 1.6E-07
Delay rate (us/s)	-3.97287065048E-03		Apriori rate (us/s)		-3.97287772756E-03		Resid rate (us/s)		7.07707E-09	+/- 7.6E-10
Total phase (deg)	-305.5		Apriori accel (us/s/s)		-4.94971918241E-06		Resid phase (deg)		-68.2	+/- 4.8

ph/seg (deg) 65.5 11.6 Search (2048X32) 0.449 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 64.0 20.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 33.6 6.8 Inc. seg. avg. 0.719 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 45.2 11.9 Inc. frq. avg. 0.509 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

f: az 56.0 el 62.6 pa -104.4 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 19.825 -846.012 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/fl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/fl.W.88.1W57LH

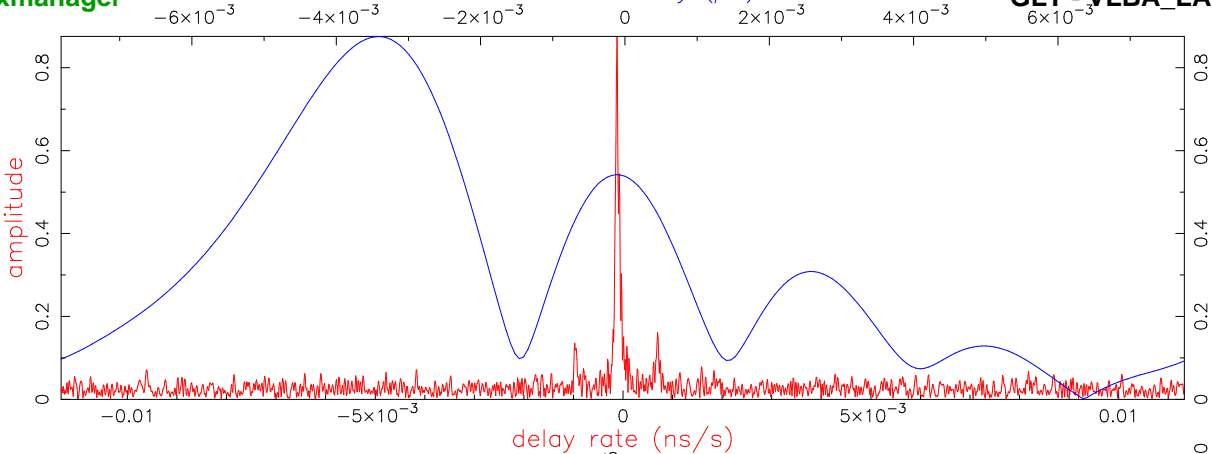
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, gl

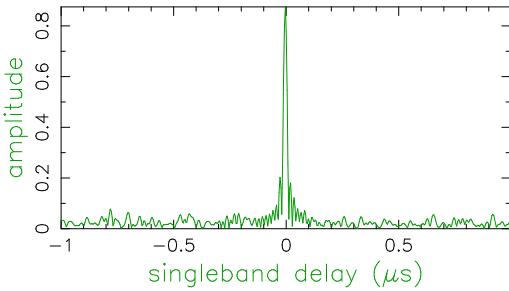
GLT - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

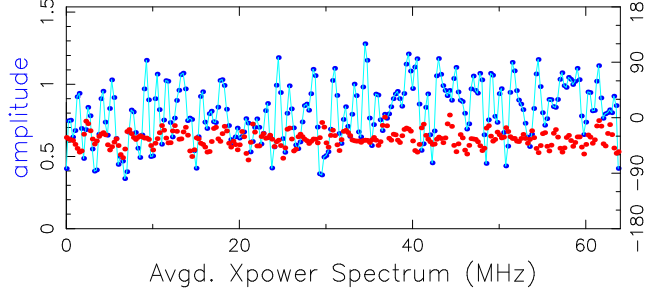


Fringe quality 4

SNR 43.3
 Int time 327.680
 Amp 0.876
 Phase -43.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.004138
 MBD -0.003428
 Fringe rate (Hz)
 -0.010851
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

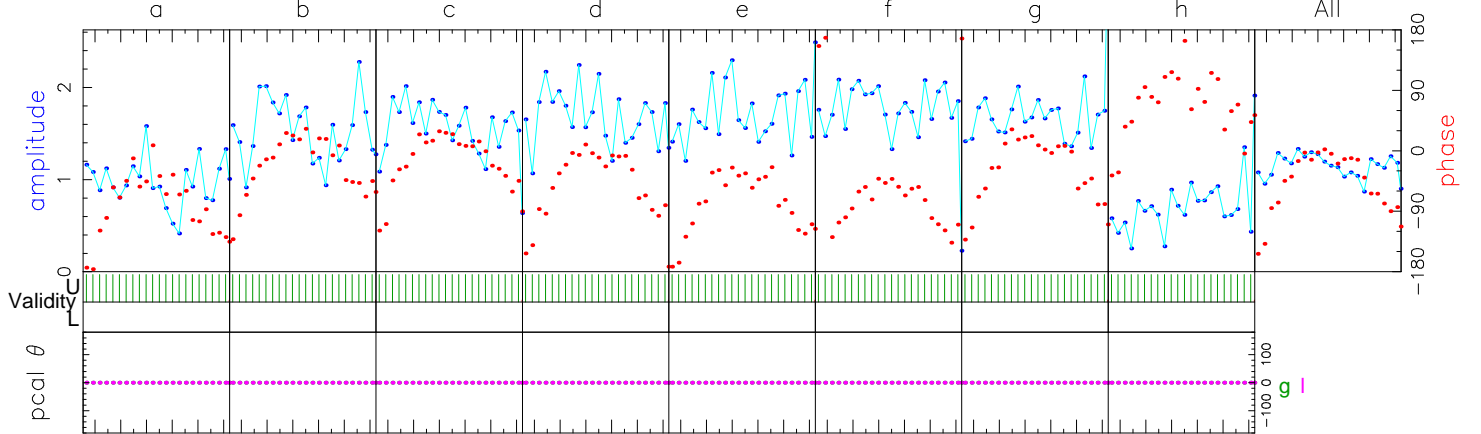


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124532.26
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134859
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

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

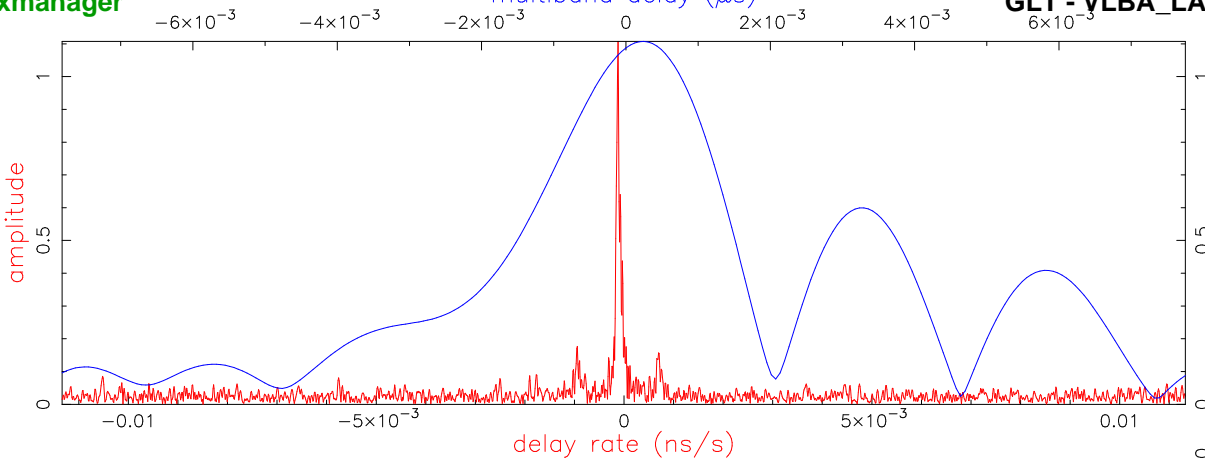


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	640/0	640/0	640/0	640/0	640/0	640/0	640/0	640/0			
g	0	0	0	0	0	0	0	0	PC freqs		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
l	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
Group delay (usec)(sbd)	-1.57748236067E+03										
Sband delay (usec)	-1.57748307058E+03										
Phase delay (usec)	-1.57747893421E+03										
Delay rate (us/s)	-5.22181298872E-01										
Total phase (deg)			-141.5								
Apriori delay (usec)					-1.57747893283E+03				Resid mbdelay (usec)	-3.42785E-03	+/- 2.5E-05
Apriori clock (usec)						3.0266323E+00			Resid sbdelay (usec)	-4.13775E-03	+/- 2.0E-04
Apriori clockrate (us/s)						3.4600000E-07			Resid phdelay (usec)	-1.38687E-06	+/- 8.5E-08
Apriori rate (us/s)						-5.22181172905E-01			Resid rate (us/s)	-1.25967E-07	+/- 4.5E-10
Apriori accel (us/s/s)						3.79538514819E-05			Resid phase (deg)	-43.0	+/- 2.6
RMS	43.8	6.3			0.876 +/- 0.020				PCal mode: MANUAL, MANUAL		
ph/seg (deg)	43.8	6.3			0.858				PCal rate: 0.000E+00, 0.000E+00 (us/s)		
amp/seg (%)	34.4	11.1			0.000				SampCntNorm: enabled		
ph/frq (deg)	56.9	3.7			1.147				mb window (us)	-1.000	1.000
amp/frq (%)	42.6	6.5			1.092				dr window (ns/s)	-0.008	0.008
									ion window (TEC)	0.00	0.00

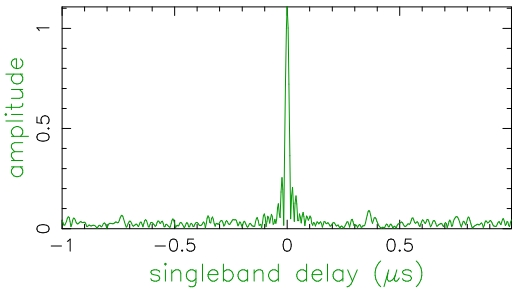
g: az 185.5 el 55.8 pa 1.6 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 4129.527 5205.840 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/gl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/gl.W.158.1W57LH

multiband delay (μ s)

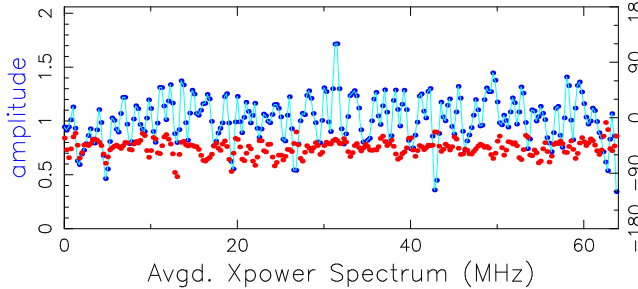
Fringe quality 3



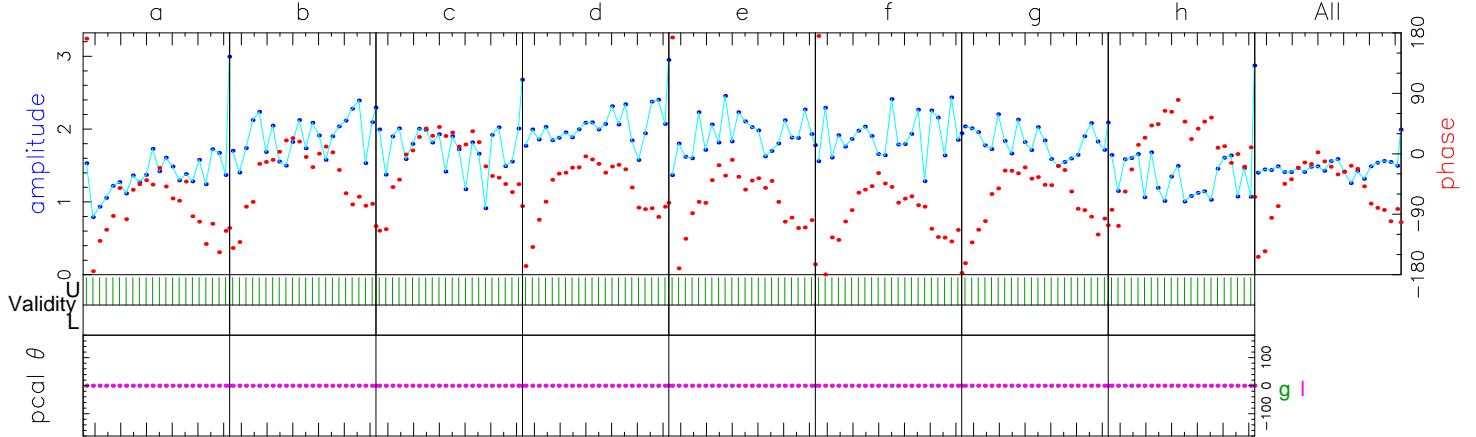
SNR 54.8
Int time 327.680
Amp 1.107
Phase -51.7
PFD 0.0e+00
Delays (us)
SBD 0.000004
MBD 0.000236
Fringe rate (Hz)
-0.010804
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124532.26
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134903
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"



delay rate (ns/s)



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
	-84.7	-32.3	-8.8	-49.4	-69.4	-91.5	-65.4	13.3	Phase	-51.7
	1.0	1.4	1.3	1.5	1.4	1.5	1.4	0.9	Ampl.	1.3
	258.9	257.1	256.4	256.9	256.8	256.8	257.2	259.1	Sbd box	257.0
U/L	640/0	640/0	640/0	640/0	640/0	640/0	640/0	640/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.57747869696E+03		Apriori delay (usec)		-1.57747893283E+03		Resid mbdelay (usec)		2.35871E-04	+/- 2.0E-05
Sband delay (usec)	-1.57747892858E+03		Apriori clock (usec)		3.0266323E+00		Resid sbdelay (usec)		4.25000E-06	+/- 1.6E-04
Phase delay (usec)	-1.57747893449E+03		Apriori clockrate (us/s)		3.4600000E-07		Resid phdelay (usec)		-1.66695E-06	+/- 6.7E-08
Delay rate (us/s)	-5.22181298328E-01		Apriori rate (us/s)		-5.22181172905E-01		Resid rate (us/s)		-1.25423E-07	+/- 3.6E-10
Total phase (deg)			Apriori accel (us/s/s)		3.79538514819E-05		Resid phase (deg)		-51.7	+/- 2.1

RMS Theor. Amplitude 1.107 +/- 0.020
 ph/seg (deg) 42.6 5.0 Search (2048X32) 1.070
 amp/seg (%) 32.7 8.7 Interp. 0.000
 ph/frq (deg) 40.0 3.0 Inc. seg. avg. 1.454
 amp/frq (%) 25.6 5.2 Inc. frq. avg. 1.302
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 185.5 el 55.8 pa 1.6 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 4129.527 5205.840 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/gl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/gl.W.173.1W57LH

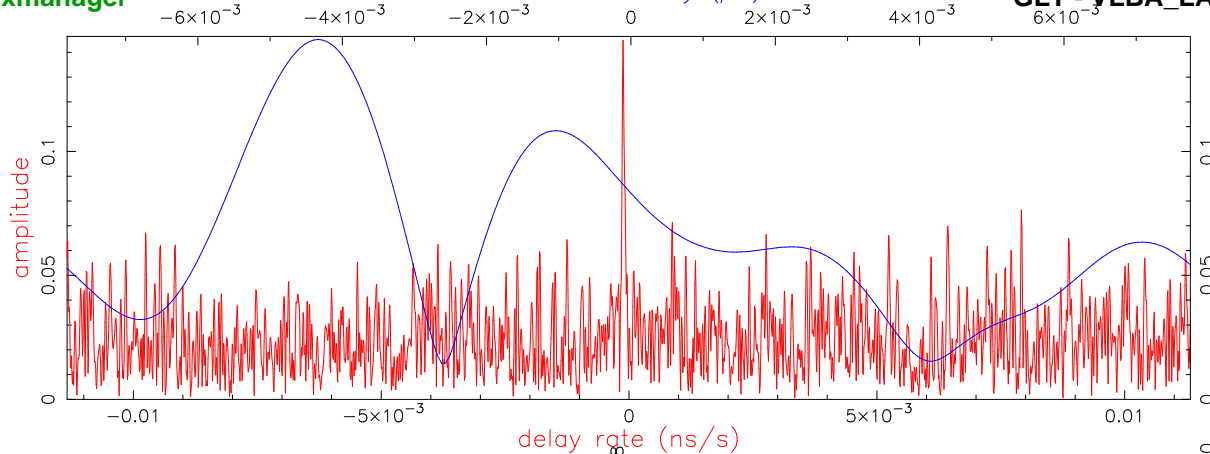
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, gl

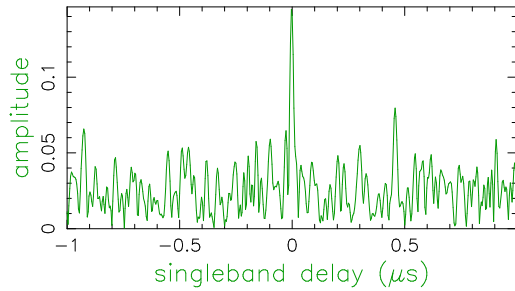
GLT - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

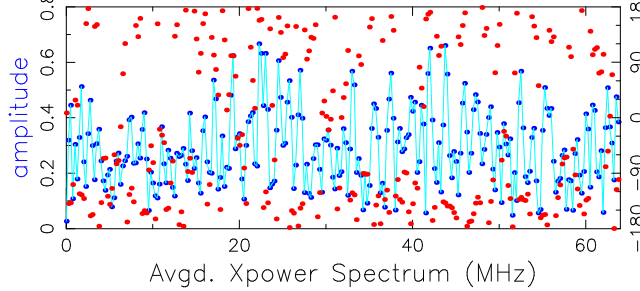


Fringe quality 0

SNR 7.2
 Int time 327.680
 Amp 0.146
 Phase -145.5
 PFD 1.3e-04
 Delays (us)
 SBD -0.002541
 MBD -0.004252
 Fringe rate (Hz)
 -0.010975
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

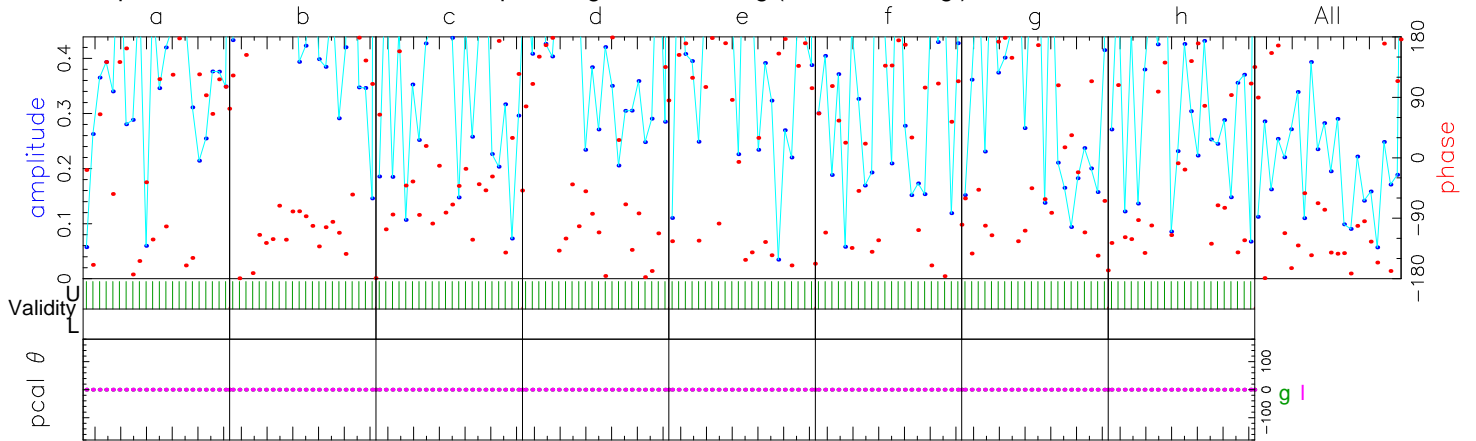


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124532.26
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134907
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

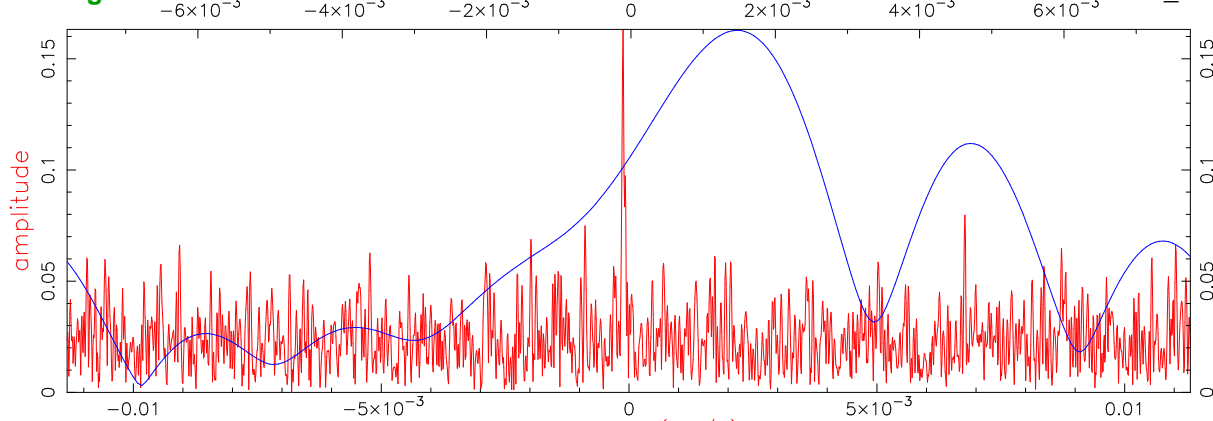
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	640/0	640/0	640/0	640/0	640/0	640/0	640/0	640/0		
g	0	0	0	0	0	0	0	0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.57748318521E+03	-1.57748147408E+03	-1.57747893752E+03	-1.57747893283E+03	-1.57747893283E+03	-1.57747893283E+03	-1.57747893283E+03	-1.57747893283E+03		
Sband delay (usec)	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03	-1.57748147408E+03		
Phase delay (usec)	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03	-1.57747893752E+03		
Delay rate (us/s)	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01	-5.22181300309E-01		
Total phase (deg)			-244.1							
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										
Chan ids										
Tracks										
Chan ids										
Tracks										
RMS	53.0	37.9								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.146 +/- 0.020										
0.142										
0.000										
0.170										
0.183										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
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)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
g: az 185.5 el 55.8 pa 1.6										
l: az 65.4 el 63.4 pa -93.6										
u,v (fr/asec) 4129.527 5205.840										
Control file: cf_1234_gmva										
Input file: /Exps/c211a/v2/1234/No0237/gl..1W57LH										
Output file: /Exps/c211a/v2/1234/No0237/gl.W.193.1W57LH										

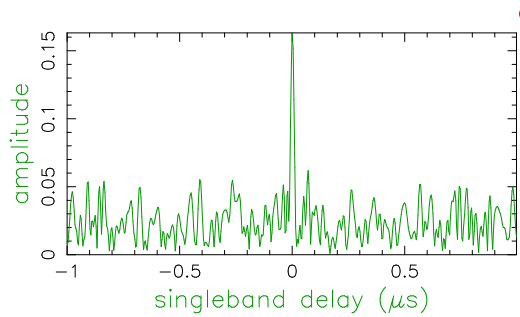
simultaneous interpolator

multiband delay (μs)



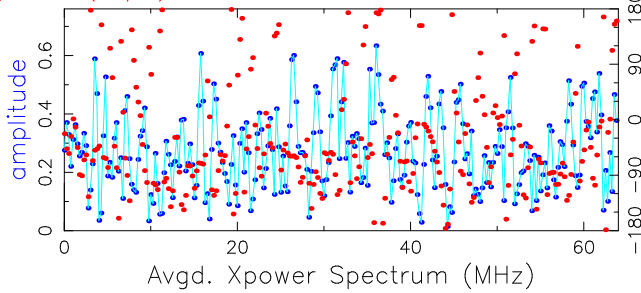
Fringe quality 9

SNR 8.1
Int time 327.680
Amp 0.163
Phase -82.2
PFD 2.3e-07
Delays (us)
SBD 0.000635
MBD 0.001500
Fringe rate (Hz)
-0.010935
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



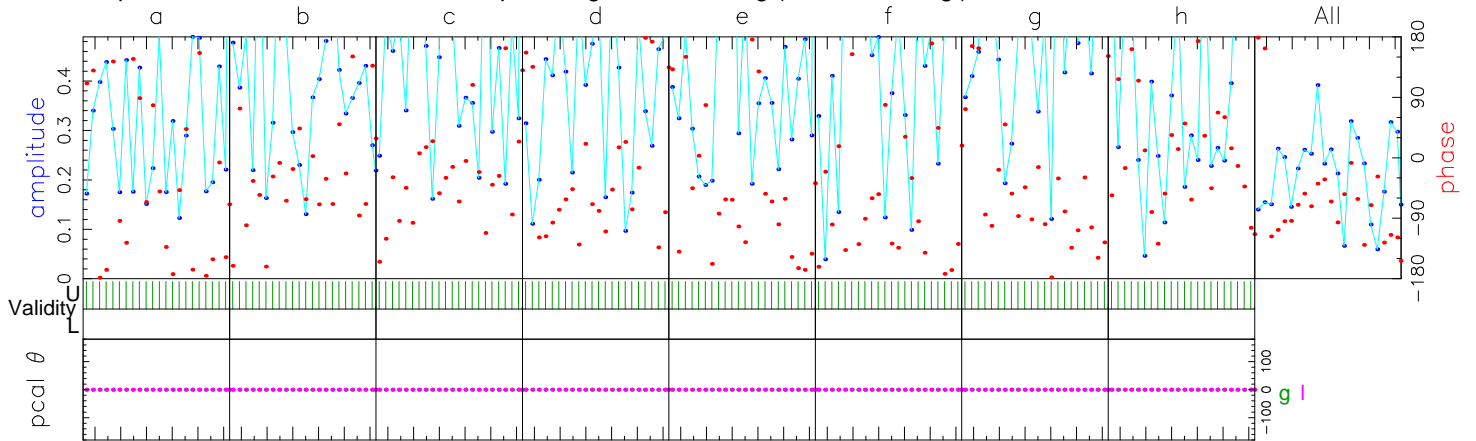
singleband delay (μs)

delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124532.26
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134912
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

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
	-176.8	-46.2	-47.0	-82.9	-107.0	-128.8	-89.3	-16.3	Phase	-82.2
	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	286.2	257.8	257.4	256.4	256.2	257.2	257.9	258.9	Sbd box	257.2
U/L	640/0	640/0	640/0	640/0	640/0	640/0	640/0	640/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.57747743277E+03	Apriori delay (usec)	-1.57747893283E+03	Resid mbdelay (usec)	1.50006E-03	+/-	1.3E-04
Sband delay (usec)	-1.57747829783E+03	Apriori clock (usec)	3.0266323E+00	Resid sbdelay (usec)	6.35000E-04	+/-	1.1E-03
Phase delay (usec)	-1.57747893548E+03	Apriori clockrate (us/s)	3.4600000E-07	Resid phdelay (usec)	-2.65219E-06	+/-	4.6E-07
Delay rate (us/s)	-5.22181299849E-01	Apriori rate (us/s)	-5.22181172905E-01	Resid rate (us/s)	-1.26944E-07	+/-	2.4E-09
Total phase (deg)	-180.8	Apriori accel (us/s/s)	3.79538514819E-05	Resid phase (deg)	-82.2	+/-	14.2

ph/seg (deg)	46.6	Theor.	34.0	Amplitude	0.163 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	60.8	Search (2048X32)	0.158	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	55.8	Inc. seg. avg.	0.185	Inc. frq. avg.	0.201	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.201			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	

g: az 185.5 el 55.8 pa 1.6 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 4129.527 5205.840 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/gl..1W57LH Output file: /Exps/c211a/v2/1234/No0237/gl.W.216.1W57LH

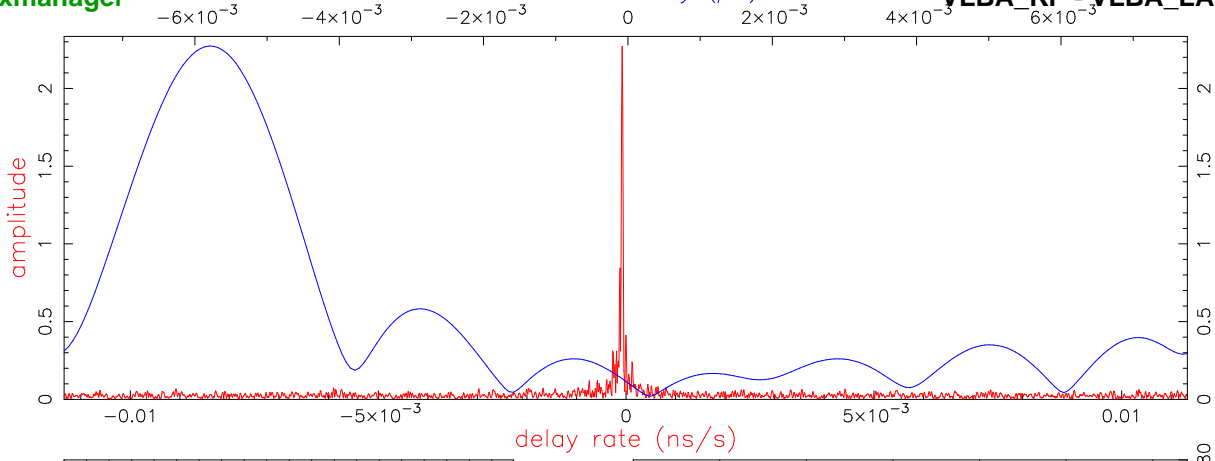
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, kl

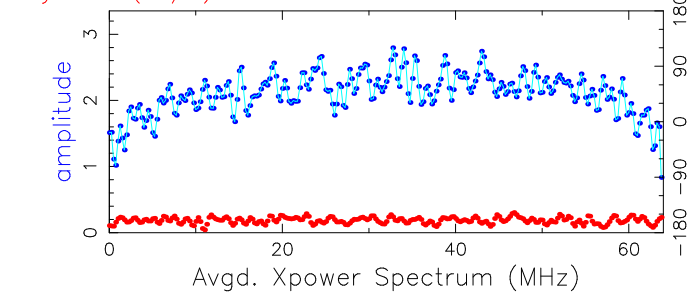
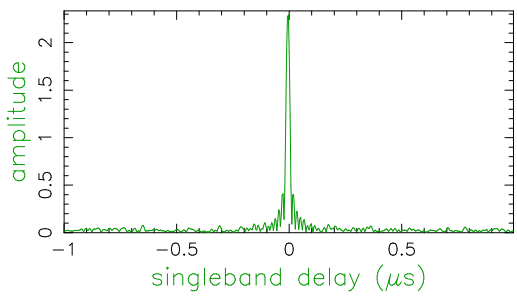
VLBA_KP - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)



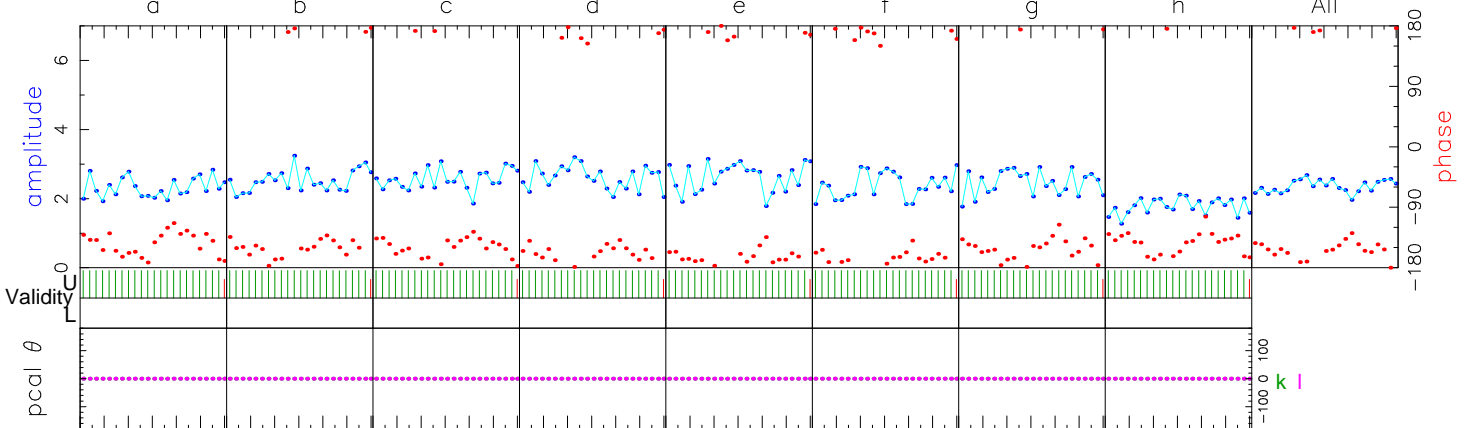
Fringe quality 7

SNR 121.1
 Int time 359.728
 Amp 2.335
 Phase -159.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.005672
 MBD -0.005738
 Fringe rate (Hz)
 -0.006437
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134903
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) -1.01325401030E+03 Apriori delay (usec) -1.01324827250E+03 Resid mbdelay (usec) -5.73780E-03 +/- 9.0E-06
 Sband delay (usec) -1.01325394475E+03 Apriori clock (usec) 2.9166279E+00 Resid sbdelay (usec) -5.67225E-03 +/- 7.1E-05
 Phase delay (usec) -1.01324827763E+03 Apriori clockrate (us/s) 2.8600001E-07 Resid phdelay (usec) -5.12942E-06 +/- 3.1E-08
 Delay rate (us/s) 9.73543126525E-02 Apriori rate (us/s) 9.73543873834E-02 Resid rate (us/s) -7.47309E-08 +/- 1.5E-10
 Total phase (deg) -228.7 Apriori accel (us/s/s) 1.19792807028E-06 Resid phase (deg) -159.1 +/- 0.9

ph/seg (deg) 16.3 2.3 Amplitude 2.335 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 7.8 4.0 Interp. 2.235 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.3 1.3 Inc. seg. avg. 2.362 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.6 2.3 Inc. frq. avg. 2.308 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.0 el 57.7 pa -95.8 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -752.553 -265.639 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/kl.1W57LH Output file: /Exps/c211a/v2/1234/No0237/kl.W.171.1W57LH

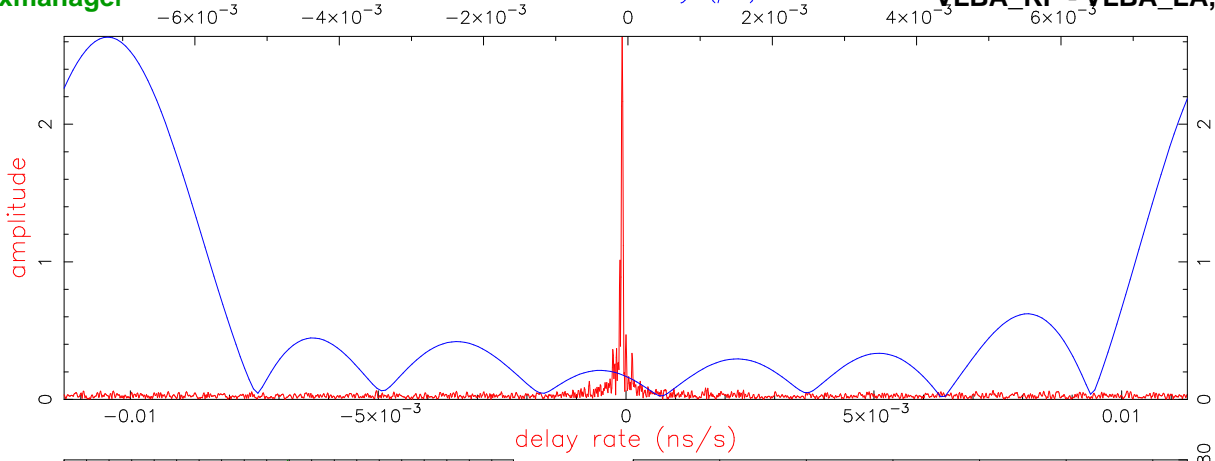
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

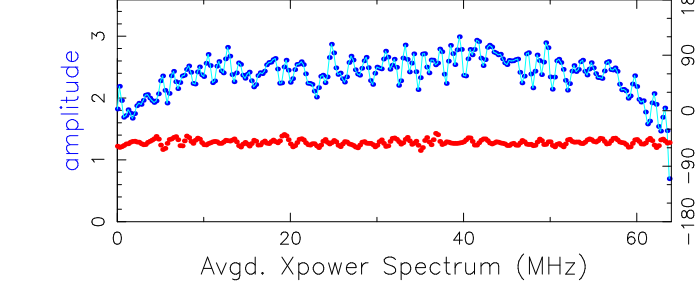
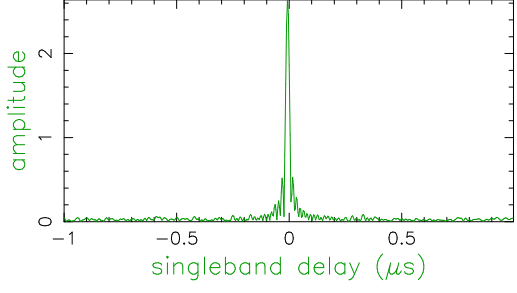
BLLAC.1W57LH, No0237, kl

VLBA_KP - VLBA_LA, fgroup W, pol RR

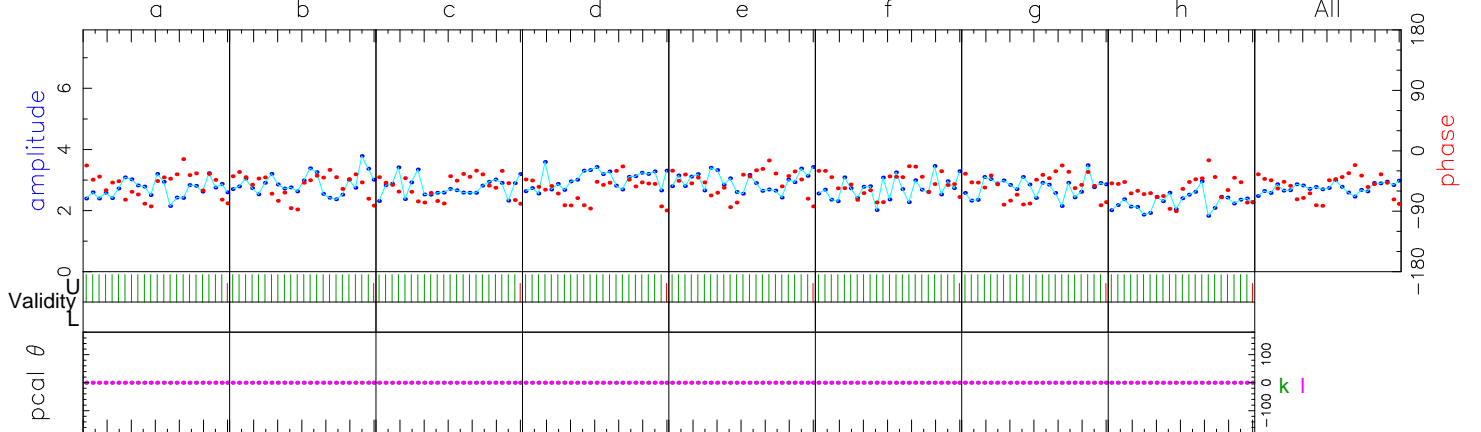
multiband delay (μ s)



Fringe quality 8
 SNR 136.8
 Int time 359.728
 Amp 2.638
 Phase -52.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.007244
 MBD -0.007196
 Fringe rate (Hz)
 -0.006396
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134908
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-49.8	-51.0	-53.4	-57.2	-47.2	-48.5	-52.1	-57.0	Phase	-52.0
	2.6	2.8	2.6	2.9	2.8	2.6	2.6	2.2	Ampl.	2.6
	255.2	255.0	255.0	255.4	254.9	255.4	255.0	255.3	Sbd box	255.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.01325546814E+03		Apriori delay (usec)		-1.01324827250E+03		Resid mbdelay (usec)		-7.19564E-03	+/- 7.9E-06
Sband delay (usec)	-1.01325551650E+03		Apriori clock (usec)		2.9166279E+00		Resid sbdelay (usec)		-7.24400E-03	+/- 6.3E-05
Phase delay (usec)	-1.01324827418E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		-1.67536E-06	+/- 2.7E-08
Delay rate (us/s)	9.73543131329E-02		Apriori rate (us/s)		9.73543873834E-02		Resid rate (us/s)		-7.42505E-08	+/- 1.3E-10
Total phase (deg)			Apriori accel (us/s/s)		1.19792807028E-06		Resid phase (deg)		-52.0	+/- 0.8

RMS Theor. Amplitude 2.638 +/- 0.019
 ph/seg (deg) 16.5 2.0 Search (2048X32) 2.566 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 6.8 3.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.0 1.2 Inc. seg. avg. 2.743 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.4 2.1 Inc. frq. avg. 2.637 Sample rate(MISamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.0 el 57.7 pa -95.8 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -752.553 -265.639 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/kl.1W57LH Output file: /Exps/c211a/v2/1234/No0237/kl.W.195.1W57LH

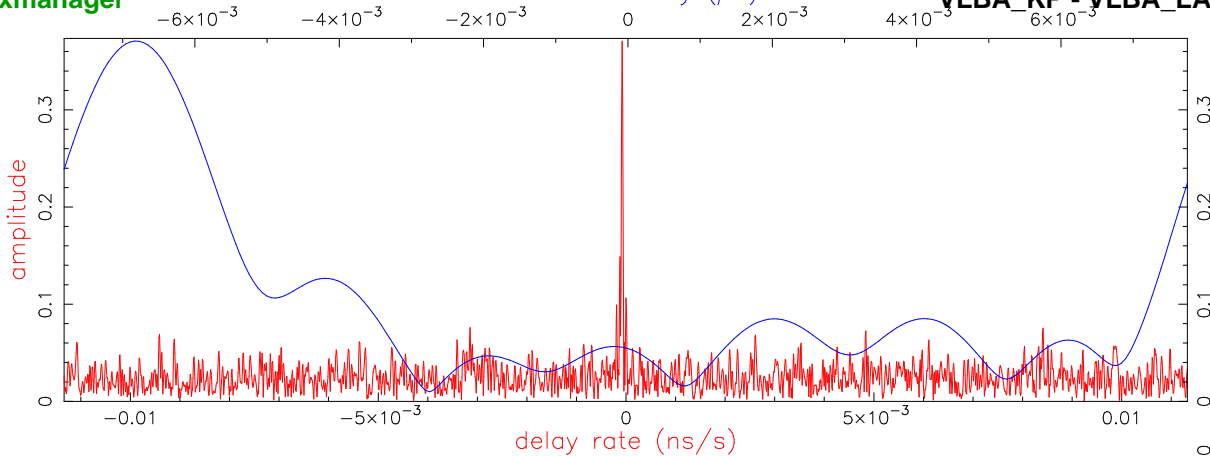
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, kl

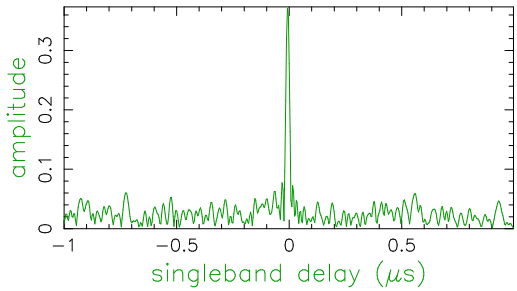
VLBA_KP - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

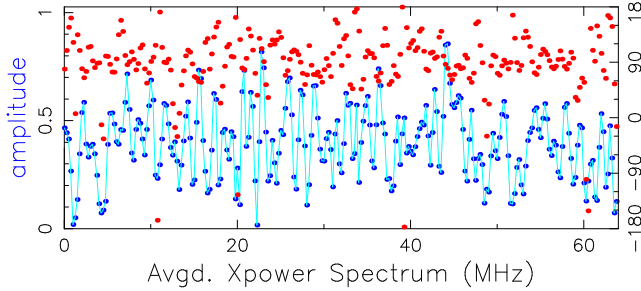


Fringe quality 9

SNR 19.4
 Int time 359.728
 Amp 0.374
 Phase 95.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.006699
 MBD -0.006790
 Fringe rate (Hz)
 -0.006268
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

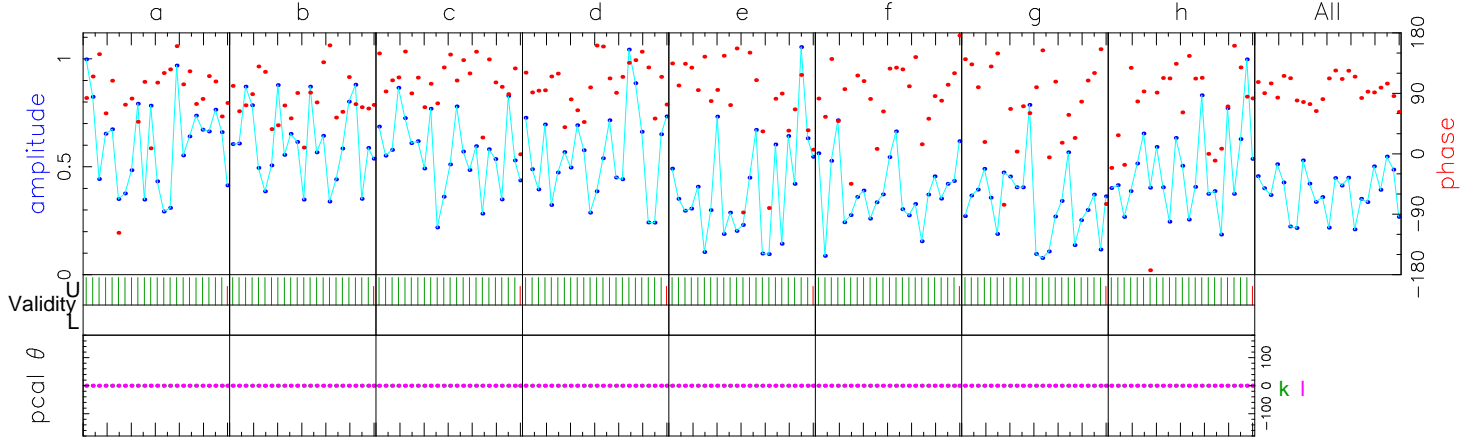


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134911
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.01325506295E+03									
Sband delay (usec)	-1.01325497175E+03									
Phase delay (usec)	-1.01324826942E+03									
Delay rate (us/s)	9.73543146188E-02									
Total phase (deg)			26.1							
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)									95.7	+/- 5.9
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	17.6	14.2								
amp/seg (%)	27.4	24.8								
ph/frq (deg)	14.4	8.4								
amp/frq (%)	30.6	14.6								
k: az 60.0 el 57.7 pa -95.8										
l: az 65.4 el 63.4 pa -93.6										
u,v (fr/asec) -752.553 -265.639										
Control file: cf_1234_gmva										
Input file: /Exps/c211a/v2/1234/No0237/kl.1W57LH										
Output file: /Exps/c211a/v2/1234/No0237/kl.W.214.1W57LH										

simultaneous interpolator

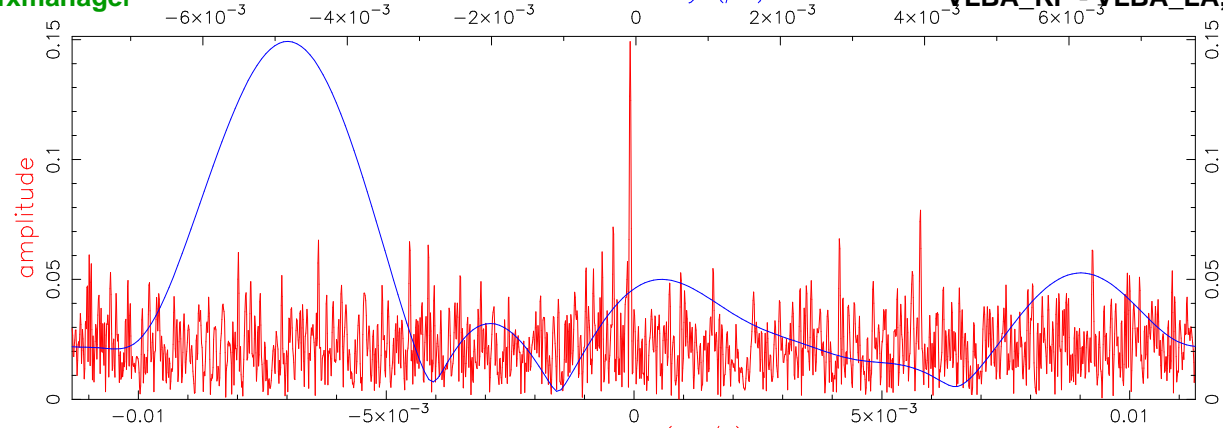
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, kl

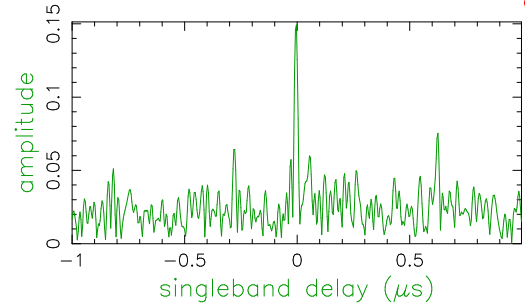
VLBA_KP - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

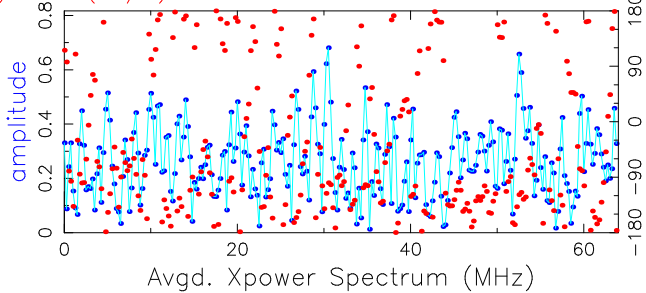


Fringe quality 9

SNR 7.8
 Int time 359.728
 Amp 0.151
 Phase -141.2
 PFD 1.4e-06
 Delays (us)
 SBD -0.005427
 MBD -0.004859
 Fringe rate (Hz)
 -0.006394
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

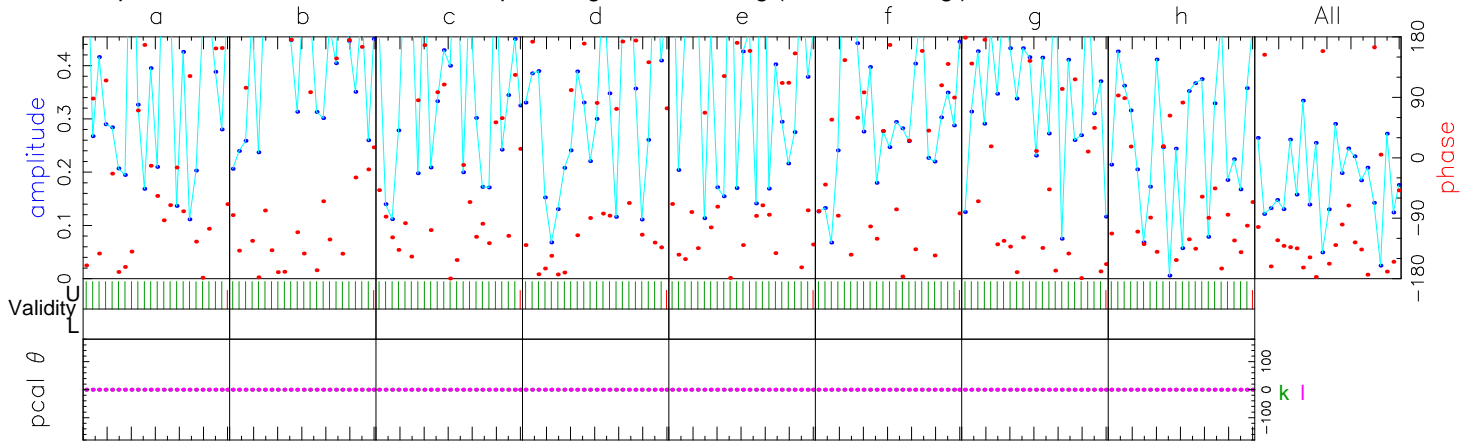


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134915
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-128.7	-150.3	-142.0	-147.7	-130.8	173.6	-148.2	-109.0	Phase	-141.2
	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	473.0	255.3	503.3	21.1	255.8	242.0	493.7	468.9	Sbd box	255.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.01325313136E+03	Apriori delay (usec)	-1.01324827250E+03	Resid mbdelay (usec)	-4.85886E-03	+/-	1.4E-04
Sband delay (usec)	-1.01325369925E+03	Apriori clock (usec)	2.9166279E+07	Resid sbdelay (usec)	-5.42675E-03	+/-	1.1E-03
Phase delay (usec)	-1.01324827706E+03	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	-4.55323E-06	+/-	4.7E-07
Delay rate (us/s)	9.73543131499E-02	Apriori rate (us/s)	9.73543873834E-02	Resid rate (us/s)	-7.42335E-08	+/-	2.3E-09
Total phase (deg)	-210.8	Apriori accel (us/s/s)	1.19792807028E-06	Resid phase (deg)	-141.2	+/-	14.6

ph/seg (deg)	47.8	Theor.	35.0	Amplitude	0.151 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.5	Search (2048X32)	0.147	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	24.2	Inc. seg. avg.	0.155	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	35.4	Inc. frq. avg.	0.147	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011	0.011
				Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00		

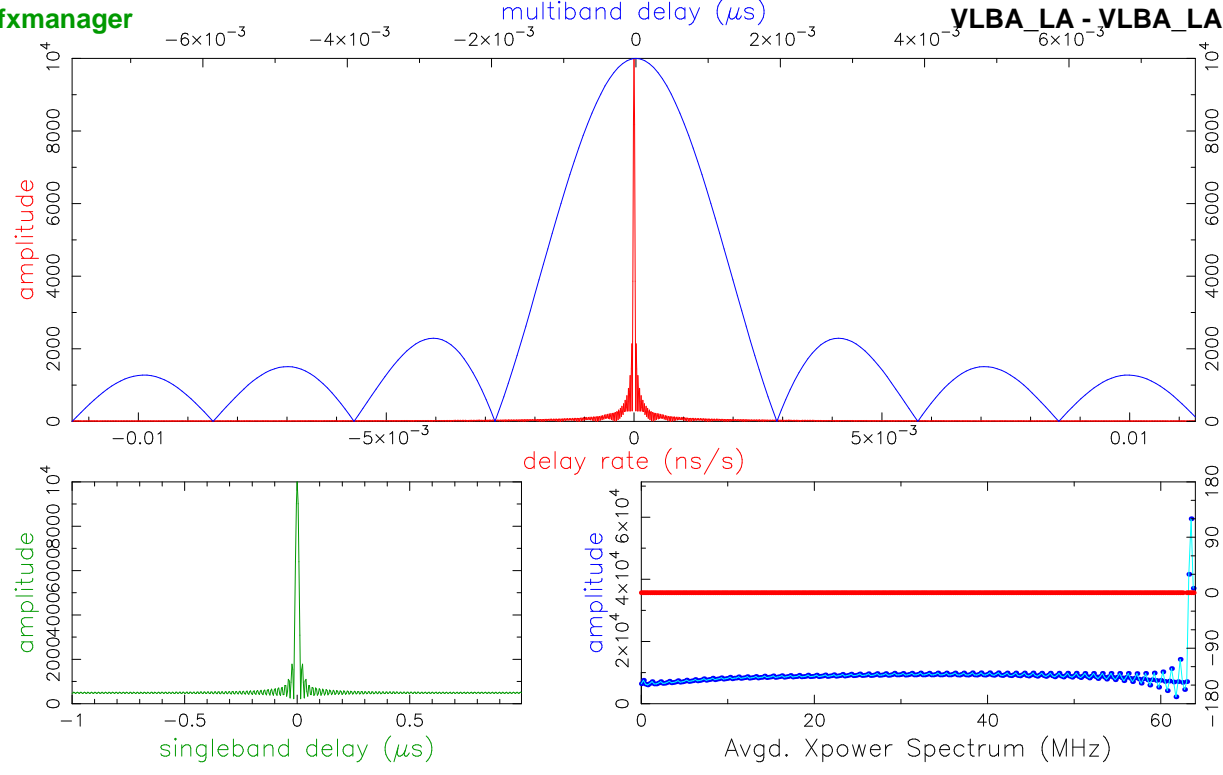
k: az 60.0 el 57.7 pa -95.8 l: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) -752.553 -265.639 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/kl.1W57LH Output file: /Exps/c211a/v2/1234/No0237/kl.W.231.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, II

VLBA_LA - VLBA_LA, fgroup W, pol LL

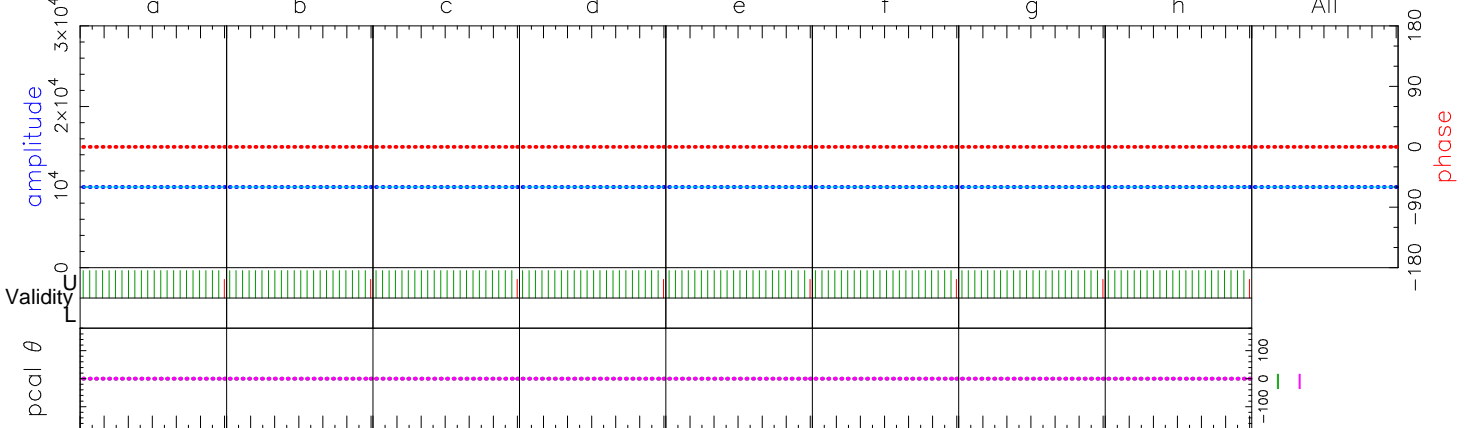


Fringe quality 9

SNR 518798.6
 Int time 359.917
 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 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134915
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.1E-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 +/- 7.1E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.4E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.019 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
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

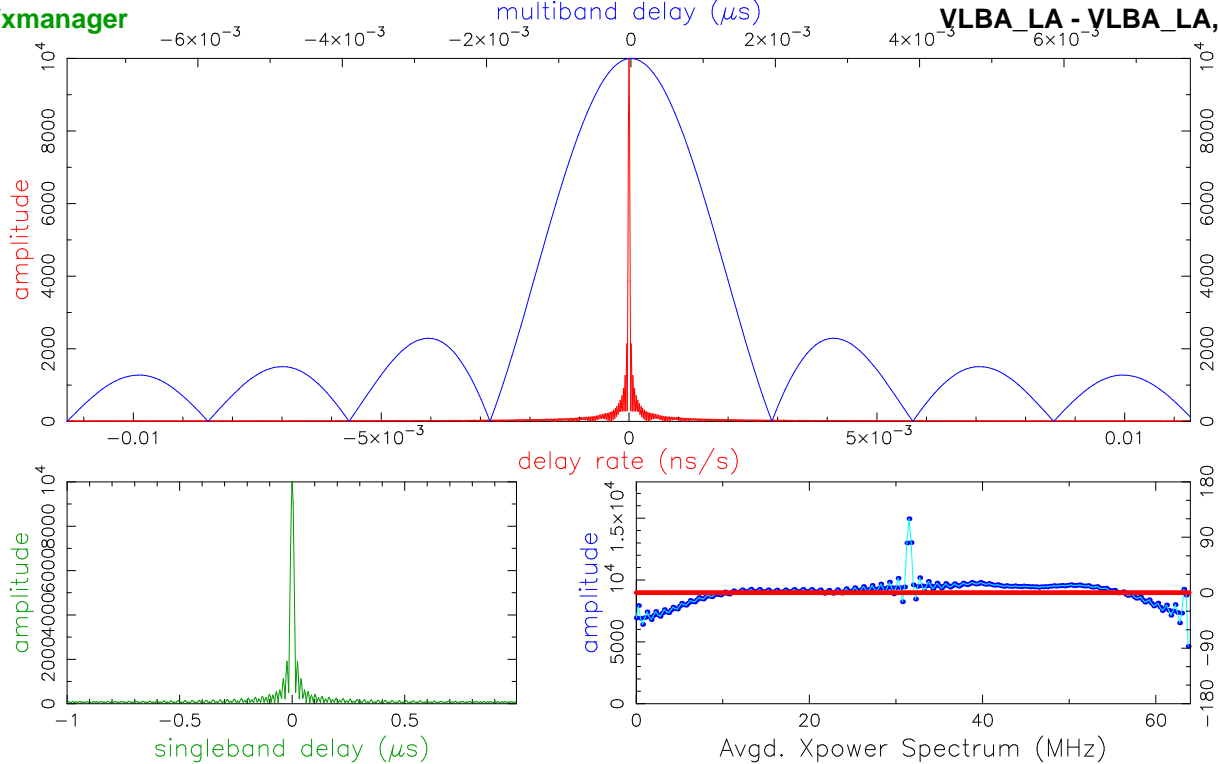
I: az 65.4 el 63.4 pa -93.6 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/ll..1W57LH Output file: /Exps/c211a/v2/1234/No0237/ll.W.232.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, II

VLBA_LA - VLBA_LA, fgroup W, pol RR

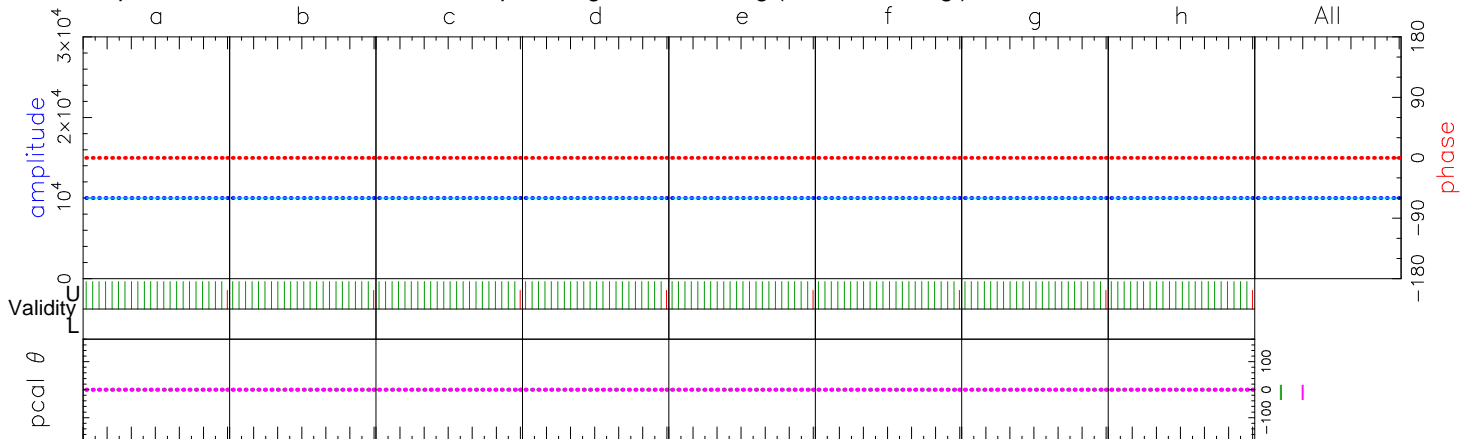


Fringe quality 9

SNR 518798.6
 Int time 359.917
 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 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134918
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.1E-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 +/- 7.1E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.4E-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 +/- 0.019 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

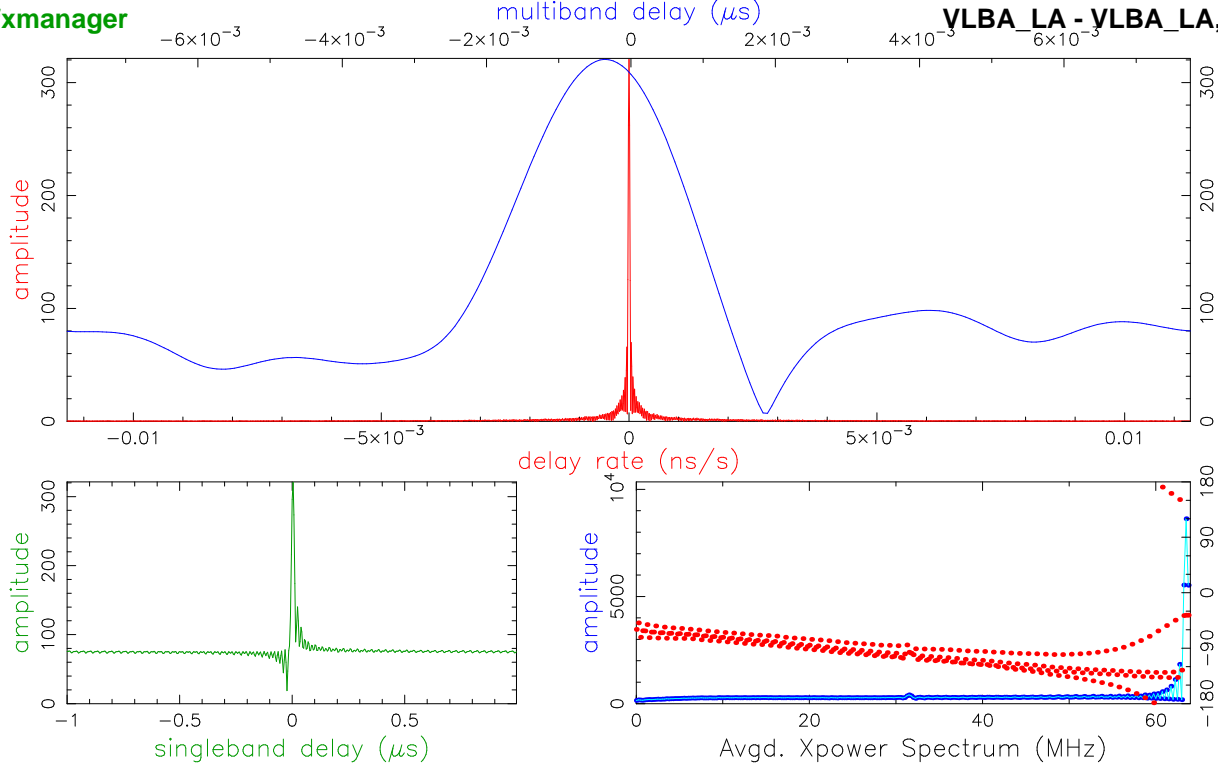
l: az 65.4 el 63.4 pa -93.6 i: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/ll..1W57LH Output file: /Exps/c211a/v2/1234/No0237/ll.W.245.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, II

VLBA_LA - VLBA_LA, fgroup W, pol LR

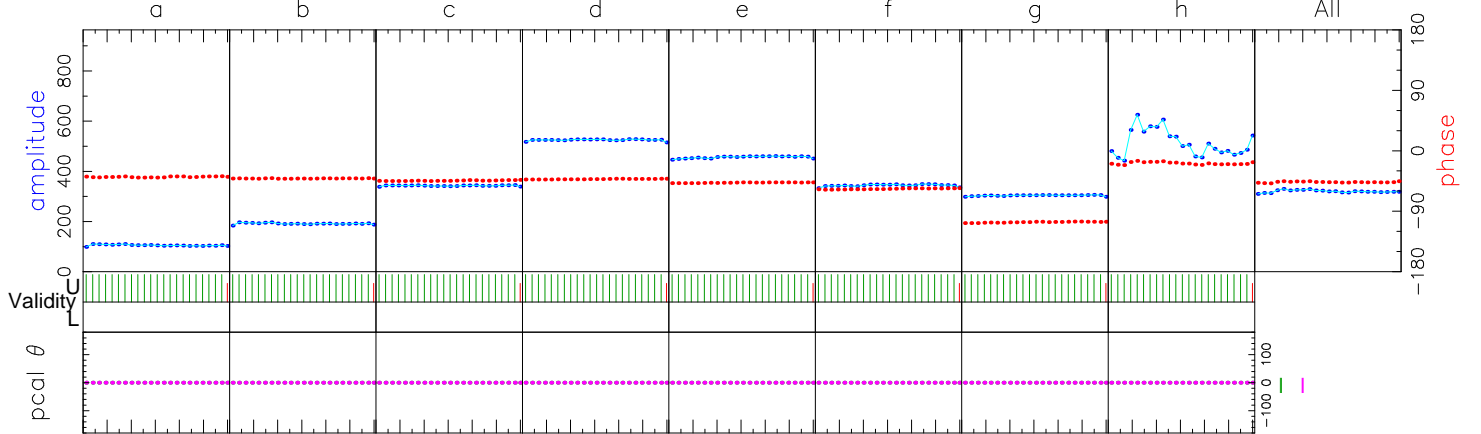


Fringe quality 5

SNR 16673.8
 Int time 359.917
 Amp 321.393
 Phase -46.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.003297
 MBD -0.000347
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134921
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)		-3.46843750000E-04				0.00000000000E+00			Resid mbdelay (usec)	-3.46844E-04 +/- 6.5E-08
Sband delay (usec)		3.29725000000E-03				0.0000000E+00			Resid sbdelay (usec)	3.29725E-03 +/- 5.2E-07
Phase delay (usec)		-1.50373892980E-06				0.0000000E+00			Resid phdelay (usec)	-1.50374E-06 +/- 2.2E-10
Delay rate (us/s)		-5.45589367080E-11				0.00000000000E+00			Resid rate (us/s)	-5.45589E-11 +/- 1.1E-12
Total phase (deg)			-46.6			0.00000000000E+00			Resid phase (deg)	-46.6 +/- 0.0

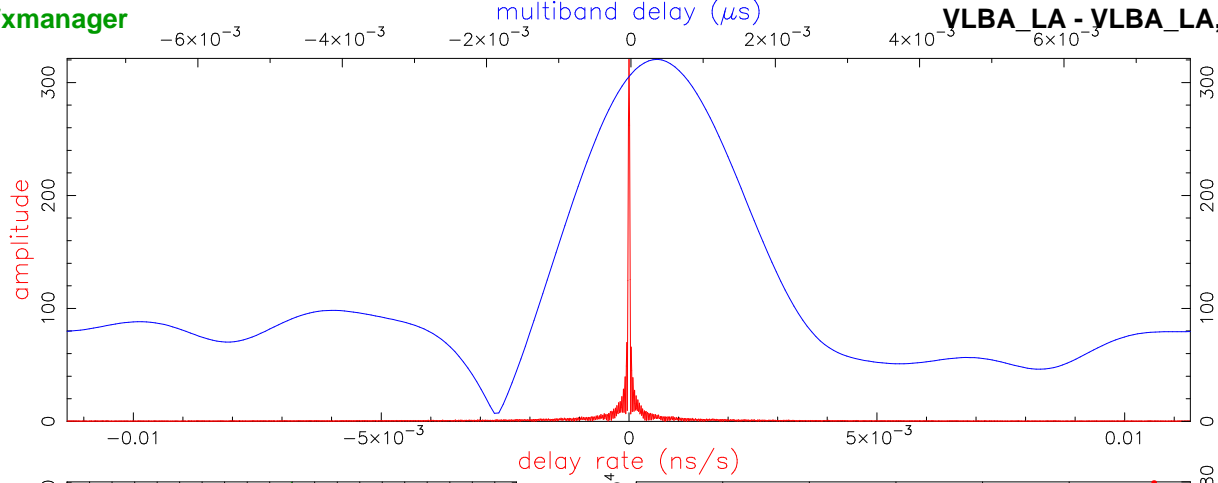
ph/seg (deg) 0.8 0.0 Search (2048X32) 321.393 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.6 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.6 0.0 Inc. seg. avg. 320.519 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.2 0.0 Inc. frq. avg. 347.994 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 65.4 el 63.4 pa -93.6 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/II..1W57LH Output file: /Exps/c211a/v2/1234/No0237/II.W.257.1W57LH simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

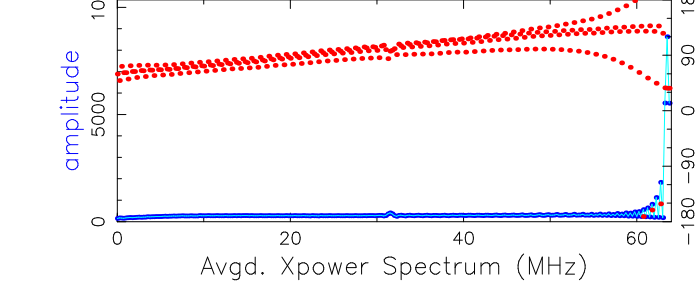
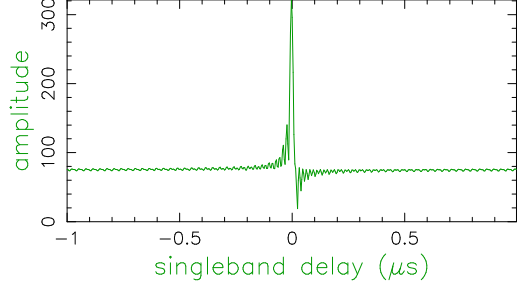
fxmanager

BLLAC.1W57LH, No0237, II

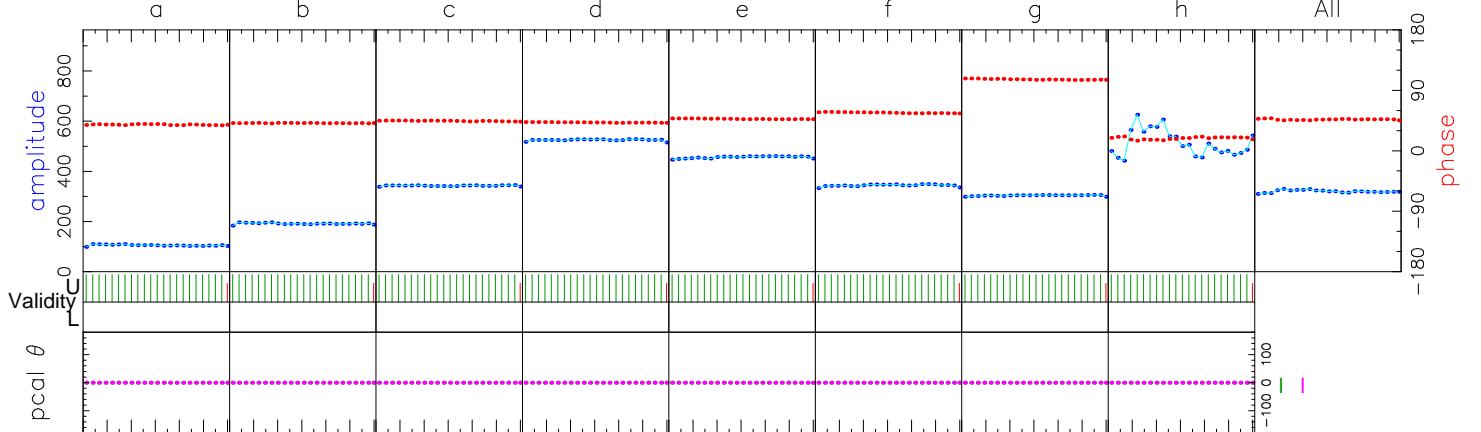
VLBA_LA - VLBA_LA, fgroup W, pol RL



Fringe quality 5
 SNR 16673.8
 Int time 359.917
 Amp 321.393
 Phase 46.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.003297
 MBD 0.000347
 Fringe rate (Hz) 0.000005
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134925
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
!:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
!:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	3.46843750000E-04		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.46844E-04	+/- 6.5E-08
Sband delay (usec)	-3.29725000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.29725E-03	+/- 5.2E-07
Phase delay (usec)	1.50373892981E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		1.50374E-06	+/- 2.2E-10
Delay rate (us/s)	5.45589367080E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.45589E-11	+/- 1.1E-12
Total phase (deg)	46.6		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		46.6	+/- 0.0

ph/seg (deg) 0.8 0.0 Theor. Amplitude 321.393 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.6 0.0 Search (2048X32) 318.686 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.2 0.0 Inc. seg. avg. 320.519 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 I: az 65.4 el 63.4 pa -93.6 I: az 65.4 el 63.4 pa -93.6 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/II..1W57LH Output file: /Exps/c211a/v2/1234/No0237/II.W.274.1W57LH simultaneous interpolator

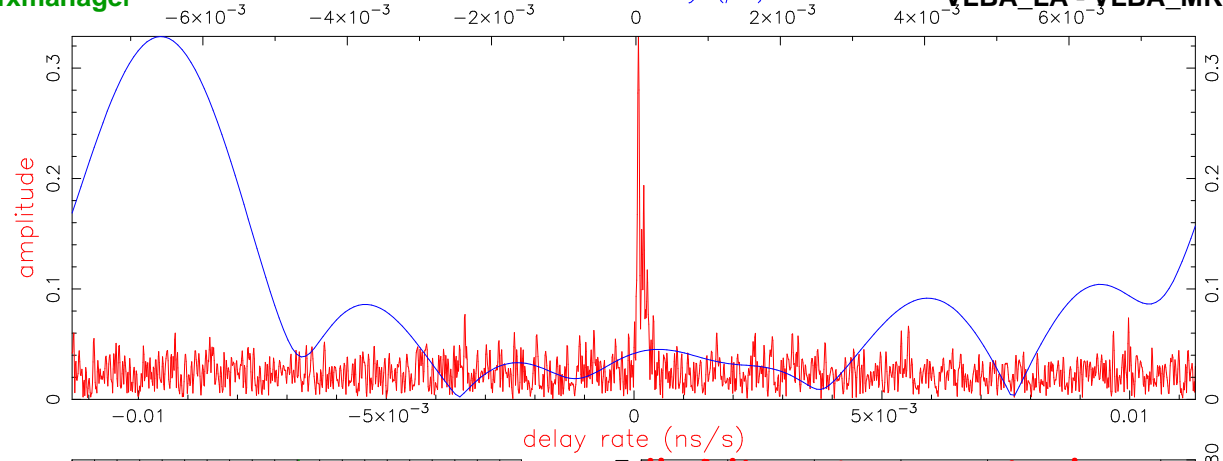
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, Im

VLBA_LA - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

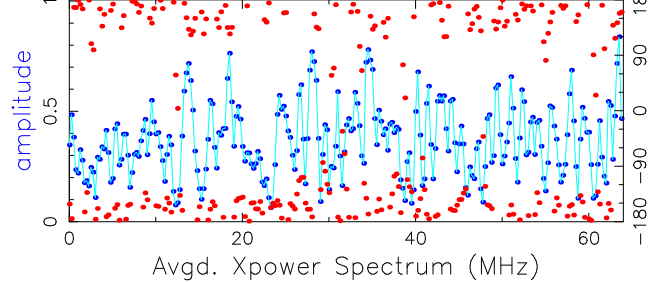
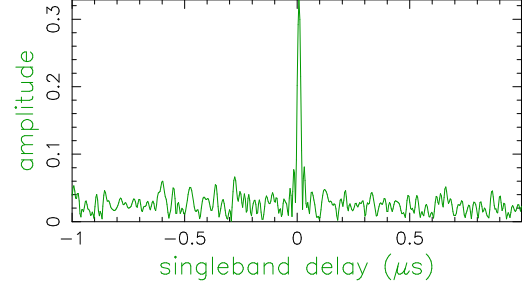


Fringe quality 9

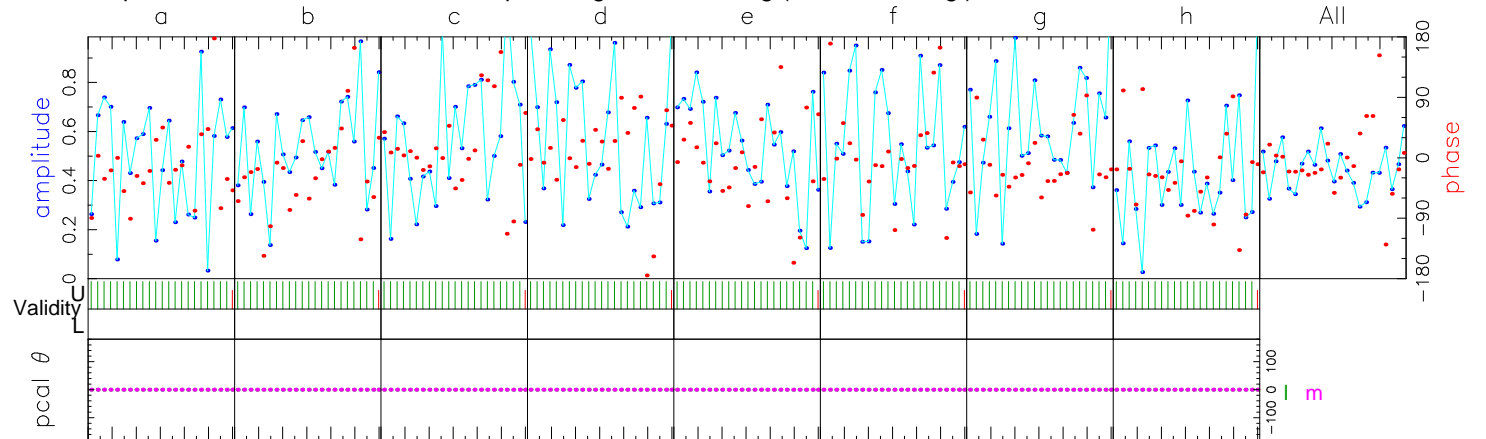
SNR 17.1
 Int time 359.917
 Amp 0.329
 Phase -9.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.008044
 MBD -0.006579
 Fringe rate (Hz) 0.007936
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134917
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.2	-23.2	-0.5	18.5	-5.4	2.5	-15.6	-34.5	Phase	-9.7
	0.4	0.3	0.3	0.4	0.3	0.3	0.5	0.3	Ampl.	0.3
	258.7	259.2	258.7	259.2	259.8	259.0	258.9	258.8	Sbd box	259.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21000817672E+04		Apriori delay (usec)		1.21000727210E+04		Resid mbdelay (usec)		-6.57882E-03	+/- 6.4E-05
Sband delay (usec)	1.21000807653E+04		Apriori clock (usec)		-1.8259459E+01		Resid sbdelay (usec)		8.04425E-03	+/- 5.1E-04
Phase delay (usec)	1.21000727207E+04		Apriori clockrate (us/s)		-6.0400003E-07		Resid phdelay (usec)		-3.12384E-07	+/- 2.2E-07
Delay rate (us/s)	-5.69919957843E-01		Apriori rate (us/s)		-5.69920049973E-01		Resid rate (us/s)		9.21295E-08	+/- 1.0E-09
Total phase (deg)	58.6		Apriori accel (us/s/s)		-4.57794837239E-05		Resid phase (deg)		-9.7	+/- 6.7

ph/seg (deg) 51.6 16.1 Search (2048X32) 0.315 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.1 28.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.1 9.5 Inc. seg. avg. 0.431 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.5 16.6 Inc. frq. avg. 0.338 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 65.4 el 63.4 pa -93.6 m: az 50.6 el 18.5 pa -79.6 u,v (fr/asec) 4324.248 -1735.138 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lm..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lm.W.236.1W57LH simultaneous interpolator

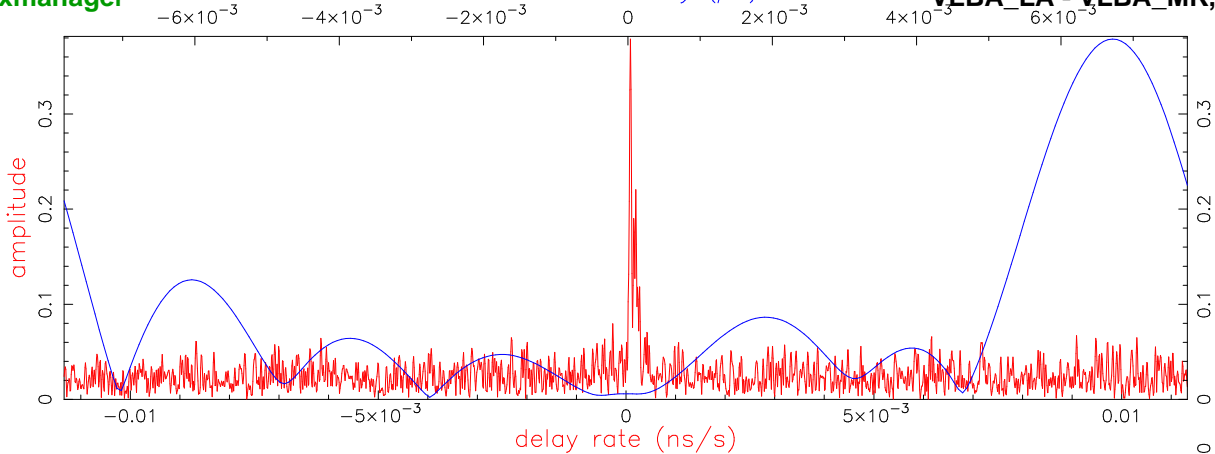
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, Im

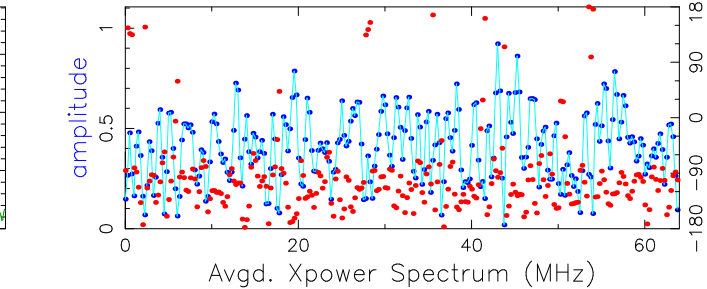
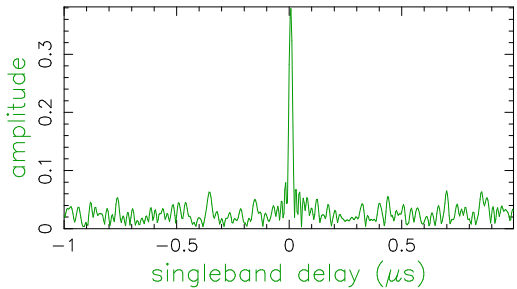
VLBA_LA - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)



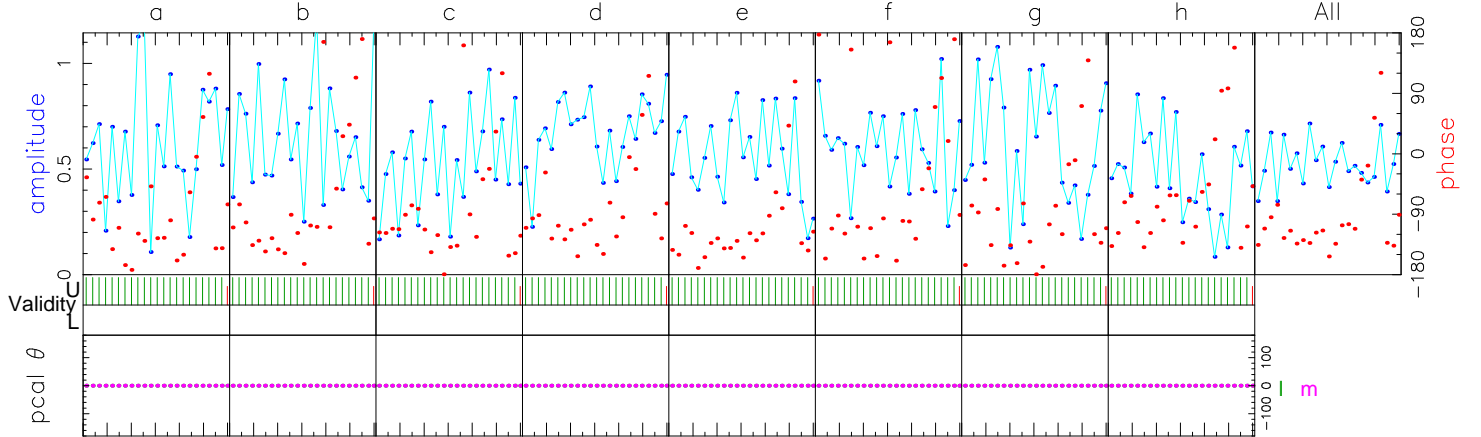
Fringe quality 9

SNR 19.8
 Int time 359.917
 Amp 0.382
 Phase -116.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.006708
 MBD 0.006684
 Fringe rate (Hz) 0.007987
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134920
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.21000794046E+04			1.21000727210E+04				6.68362E-03	+/- 5.5E-05
Sband delay (usec)		1.21000794285E+04			-1.8259459E+01				6.70750E-03	+/- 4.4E-04
Phase delay (usec)		1.21000727173E+04			-6.0400003E-07				-3.74966E-06	+/- 1.9E-07
Delay rate (us/s)		-5.69919957250E-01			-5.69920049973E-01				9.27226E-08	+/- 9.0E-10
Total phase (deg)			-48.0						-116.3	+/- 5.8
	RMS	Theor.	Amplitude	0.382 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	54.0	13.9	Search (2048X32)	0.367	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	47.2	24.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	12.3	8.2	Inc. seg. avg.	0.511	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	11.4	14.3	Inc. frq. avg.	0.381	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 65.4 el 63.4 pa -93.6 m: az 50.6 el 18.5 pa -79.6 u,v (fr/asec) 4324.248 -1735.138 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lm..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lm.W.251.1W57LH

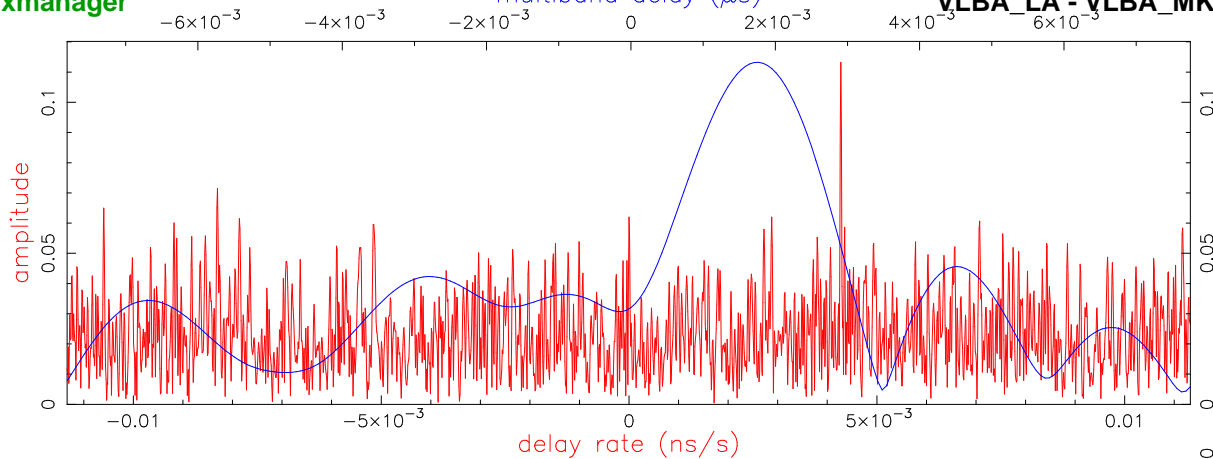
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, Im

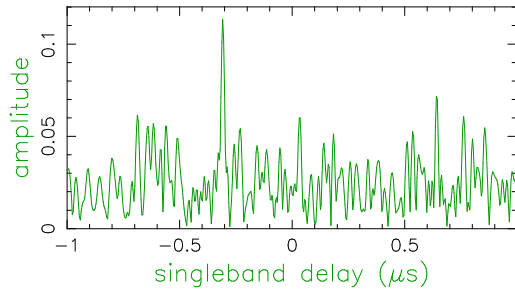
VLBA_LA - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

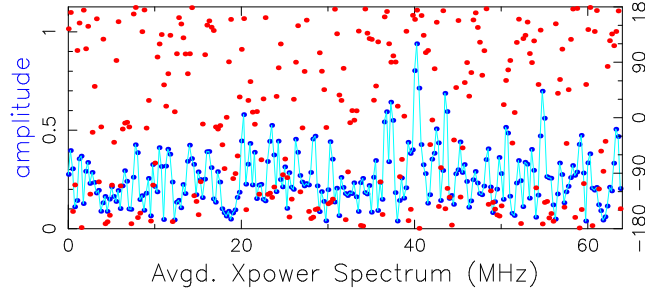


Fringe quality 0

SNR 5.9
 Int time 359.917
 Amp 0.120
 Phase -170.1
 PFD 6.6e-01
 Delays (us)
 SBD -0.308469
 MBD 0.001752
 Fringe rate (Hz)
 0.368333
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

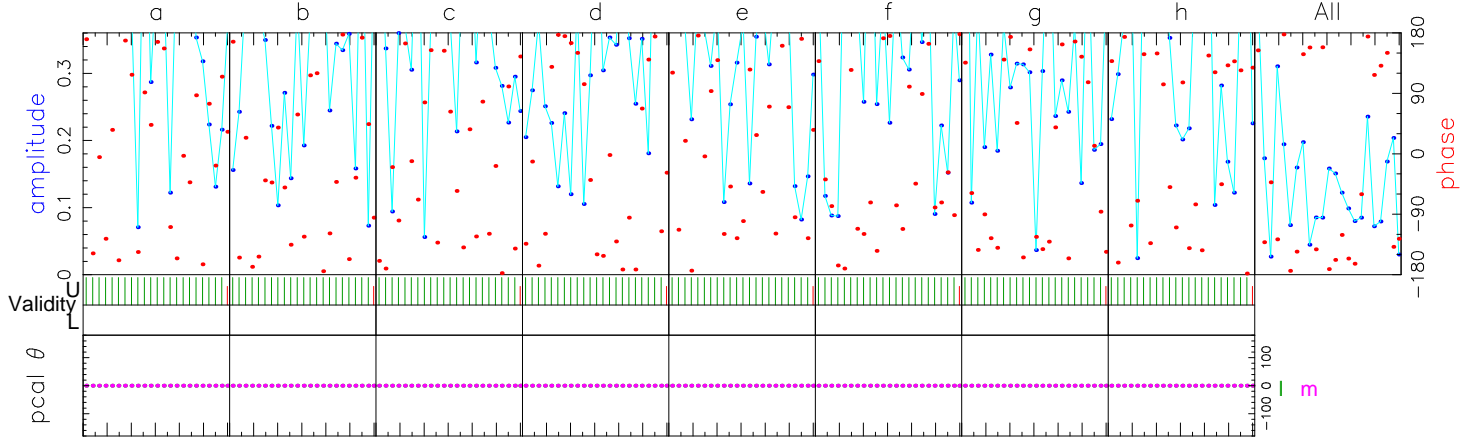


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134924
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.20997619734E+04	Apriori delay (usec)	1.21000727210E+04	Resid mbdelay (usec)	1.75235E-03	+/-	1.8E-04
Sband delay (usec)	1.20997642520E+04	Apriori clock (usec)	-1.8259459E+01	Resid sbdelay (usec)	-3.08469E-01	+/-	1.5E-03
Phase delay (usec)	1.21000727155E+04	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	-5.48429E-06	+/-	6.3E-07
Delay rate (us/s)	-5.69915773989E-01	Apriori rate (us/s)	-5.69920049973E-01	Resid rate (us/s)	4.27598E-06	+/-	3.0E-09
Total phase (deg)	-101.8	Apriori accel (us/s/s)	-4.57794837239E-05	Resid phase (deg)	-170.1	+/-	19.5

ph/seg (deg)	48.8	Theor.	46.8	Amplitude	0.120 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	84.4	Search (2048X32)	0.111	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.9	Inc. seg. avg.	0.114	Inc. seg. avg.	0.114	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.7	Inc. frq. avg.	0.115	Inc. frq. avg.	0.115	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		

l: az 65.4 el 63.4 pa -93.6 m: az 50.6 el 18.5 pa -79.6 u,v (fr/asec) 4324.248 -1735.138 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lm..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lm.W.266.1W57LH

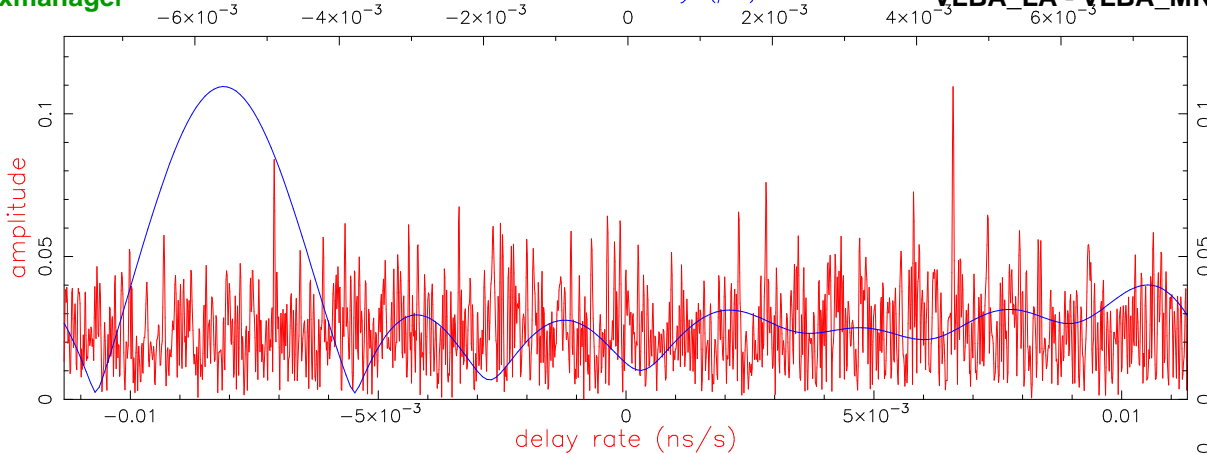
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, Im

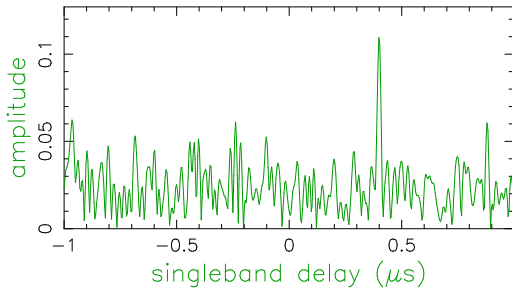
VLBA_LA - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

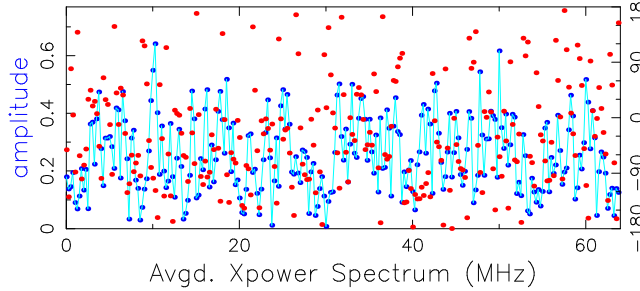


Fringe quality 0

SNR 5.7
 Int time 359.917
 Amp 0.127
 Phase -64.1
 PFD 9.4e-01
 Delays (us)
 SBD 0.399422
 MBD -0.005570
 Fringe rate (Hz)
 0.569333
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

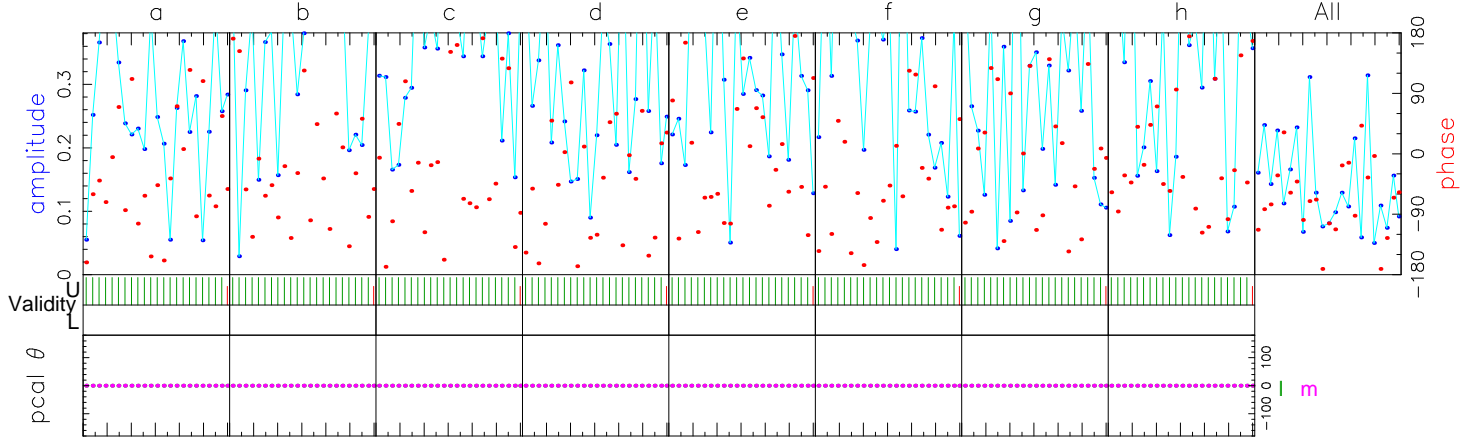


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134927
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-52.3	-57.2	-90.1	-64.5	-42.3	-64.8	-102.7	-57.3	Phase	-64.1
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	341.8	329.7	45.0	189.9	423.8	457.5	103.2	384.1	Sbd box	359.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21004734009E+04		Apriori delay (usec)		1.21000727210E+04		Resid mbdelay (usec)		-5.57016E-03	+/- 1.9E-04
Sband delay (usec)	1.21004721435E+04		Apriori clock (usec)		-1.8259459E+01		Resid sbdelay (usec)		3.99422E-01	+/- 1.5E-03
Phase delay (usec)	1.21000727190E+04		Apriori clockrate (us/s)		-6.0400003E-07		Resid phdelay (usec)		-2.06548E-06	+/- 6.5E-07
Delay rate (us/s)	-5.69913440576E-01		Apriori rate (us/s)		-5.69920049973E-01		Resid rate (us/s)		6.60940E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.57794837239E-05		Resid phase (deg)		-64.1	+/- 20.1

	RMS	Theor.	Amplitude	0.127 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.3	48.1	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.1	84.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.9	28.4	Inc. seg. avg.	0.125	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	31.4	49.5	Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 65.4 el 63.4 pa -93.6 m: az 50.6 el 18.5 pa -79.6 u,v (fr/asec) 4324.248 -1735.138 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lm..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lm.W.286.1W57LH

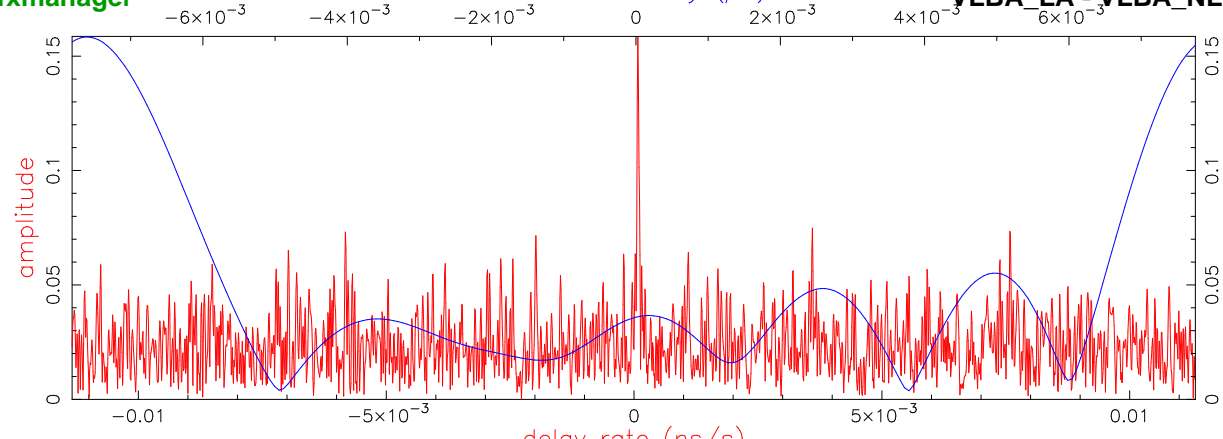
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

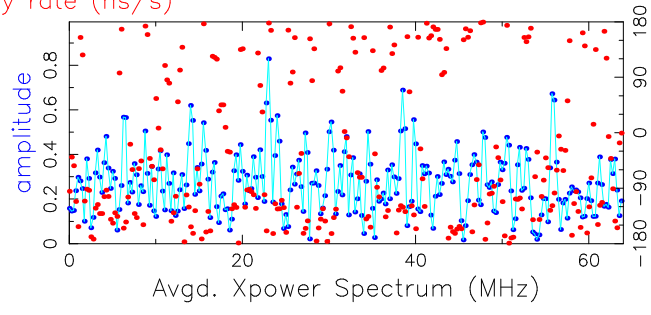
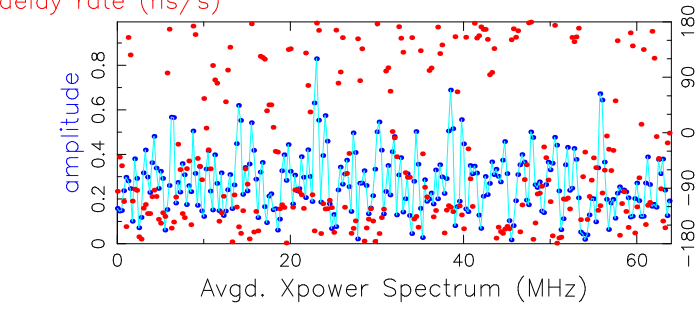
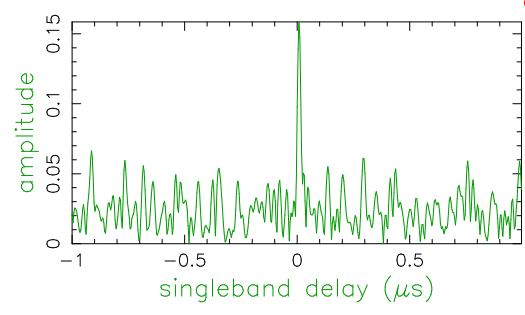
BLLAC.1W57LH, No0237, In

VLBA_LA - VLBA_NL, fgroup W, pol LL

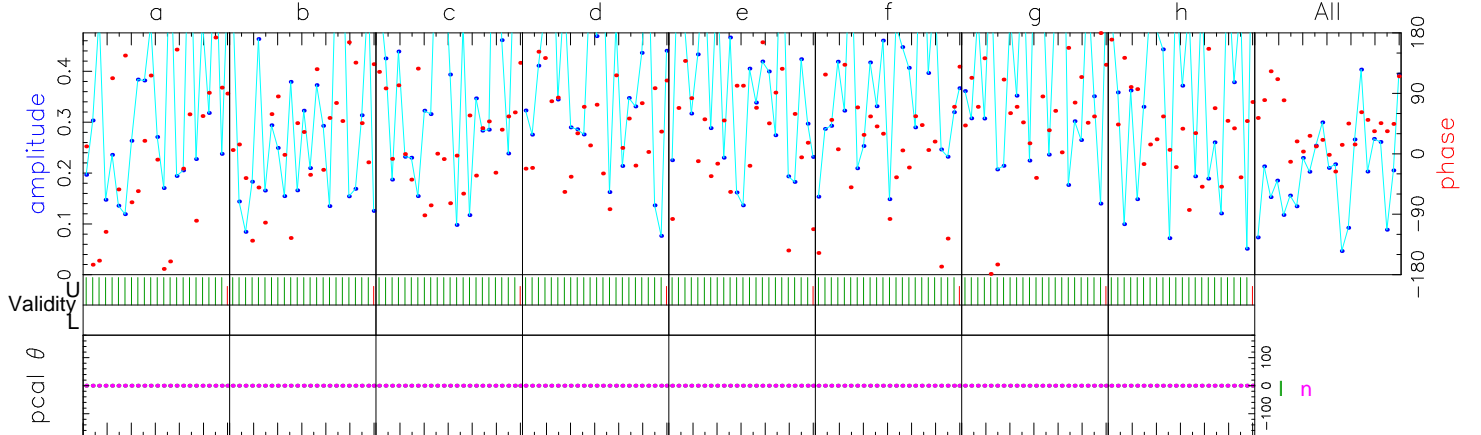
multiband delay (μ s)



Fringe quality 9
 SNR 8.2
 Int time 359.915
 Amp 0.159
 Phase 39.3
 PFD 6.7e-08
 Delays (us)
 SBD 0.008318
 MBD -0.007587
 Fringe rate (Hz) 0.006349
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134917
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.56662526688E+03									
Sband delay (usec)	-1.56662498702E+03									
Phase delay (usec)	-1.56663330326E+03									
Delay rate (us/s)	2.38332382191E-01									
Total phase (deg)		-267.3								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MSamp/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	0.159 +/- 0.019									
pcal mode	MANUAL, MANUAL									
pcal rate	0.000E+00, 0.000E+00 (us/s)									
bits/sample	2x2									
sample rate	128 MSamp/s									
data rate	2048 Mb/s									
nlags	256									
t_cohere	infinite									
sb window	-1.000 1.000									
mb window	-0.008 0.008									
dr window	-0.011 0.011									
ion window	0.00 0.00									
simultaneous interpolator										

l: az 65.4 el 63.4 pa -93.6 n: az 81.2 el 76.1 pa -86.1 u,v (fr/asec) -1843.566 -356.571
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/In..1W57LH Output file: /Exps/c211a/v2/1234/No0237/In.W.238.1W57LH

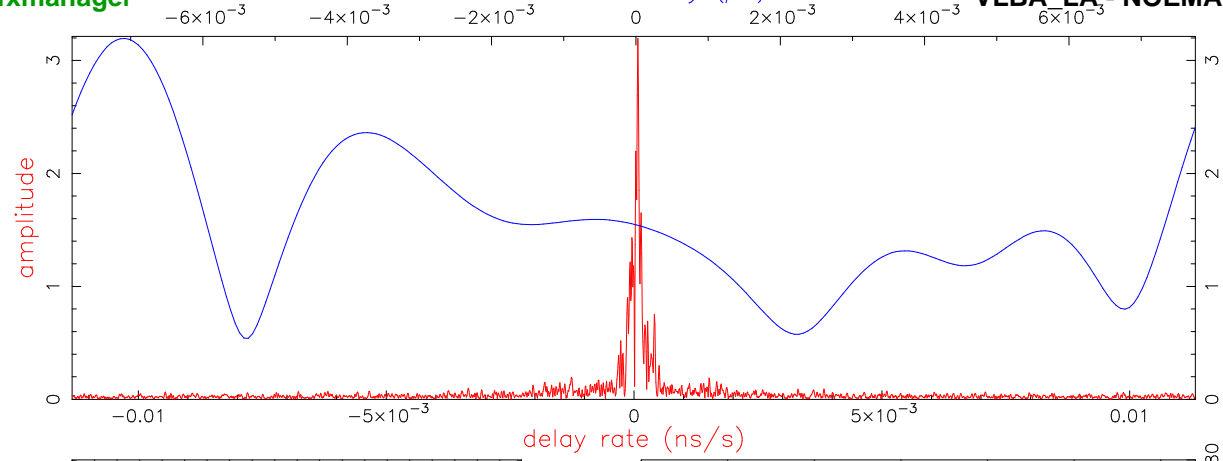
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

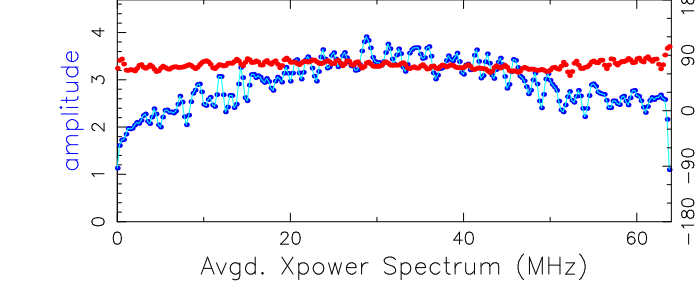
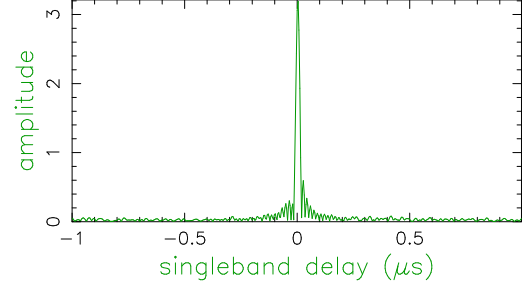
BLLAC.1W57LH, No0237, IN

VLBA LA- NOEMA, fgroup W, pol LL

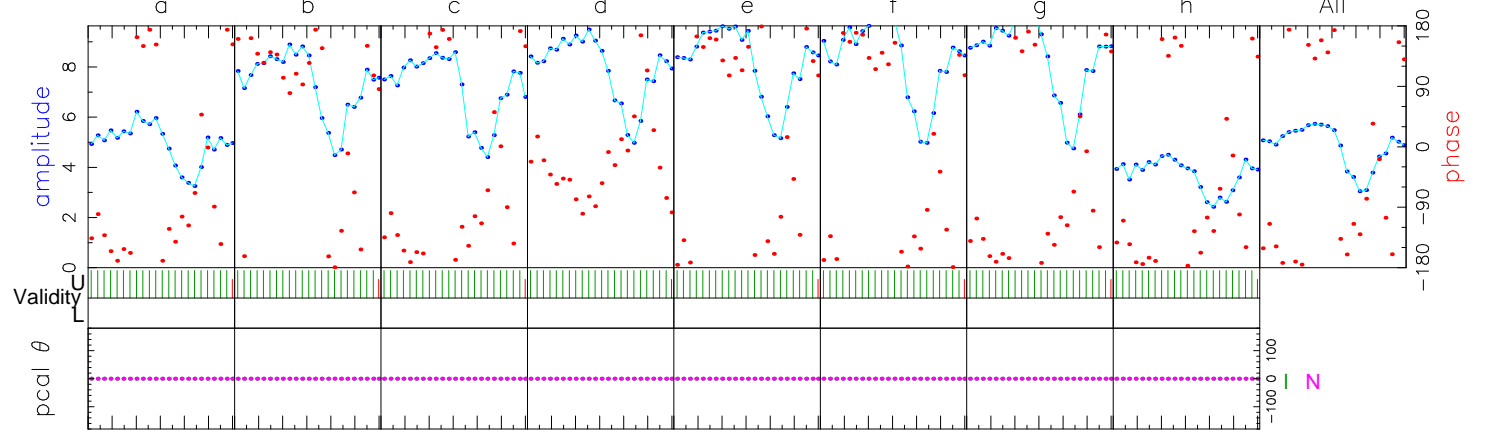
multiband delay (μ s)



Fringe quality 1
 SNR 166.7
 Int time 359.917
 Amp 3.213
 Phase -170.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002892
 MBD -0.007130
 Fringe rate (Hz) 0.006682
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134918
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-154.2	139.5	-154.2	-41.2	164.2	170.4	-159.6	-163.2	Phase	-170.6
	3.2	4.8	4.8	5.3	5.4	5.5	5.6	2.5	Ampl.	4.7
	256.0	257.9	258.6	258.4	258.3	258.2	257.7	255.5	Sbd box	257.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.13988132827E+03		Apriori delay (usec)		7.13987283373E+03		Resid mbdelay (usec)		-7.13046E-03	+/- 6.5E-06
Sband delay (usec)	7.13987572523E+03		Apriori clock (usec)		1.0652083E+01		Resid sbdelay (usec)		2.89150E-03	+/- 5.2E-05
Phase delay (usec)	7.13987282823E+03		Apriori clockrate (us/s)		-9.5400007E-06		Resid phdelay (usec)		-5.50262E-06	+/- 2.2E-08
Delay rate (us/s)	1.30212945177E+00		Apriori rate (us/s)		1.30212937420E+00		Resid rate (us/s)		7.75701E-08	+/- 1.1E-10
Total phase (deg)	152.4		Apriori accel (us/s/s)		-4.68892650292E-05		Resid phase (deg)		-170.6	+/- 0.7

ph/seg (deg) 60.3 1.6 Search (2048X32) 3.127 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.4 2.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.1 1.0 Inc. seg. avg. 4.833 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.3 1.7 Inc. frq. avg. 4.653 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 65.4 el 63.4 pa -93.6 N: az 297.6 el 35.2 pa 58.9 u,v (fr/asec) -10190.609 -3990.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IN..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IN.W.240.1W57LH

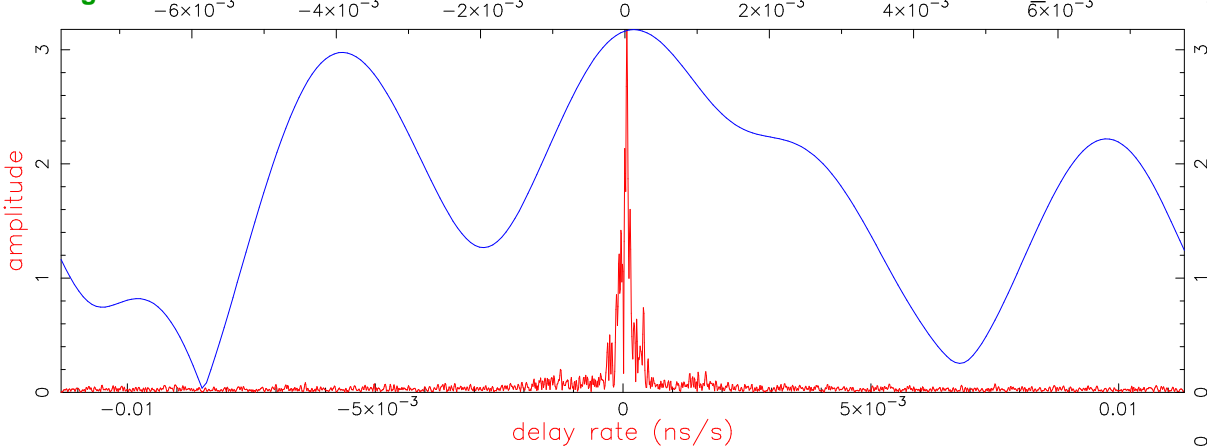
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IN

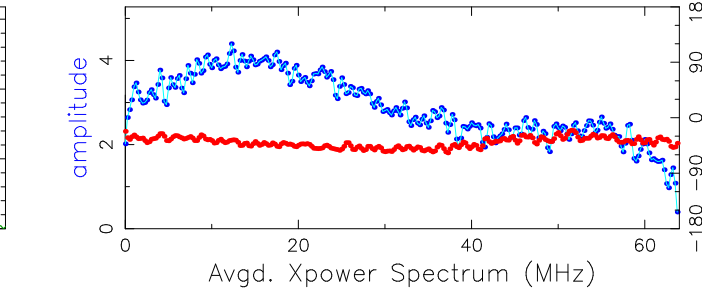
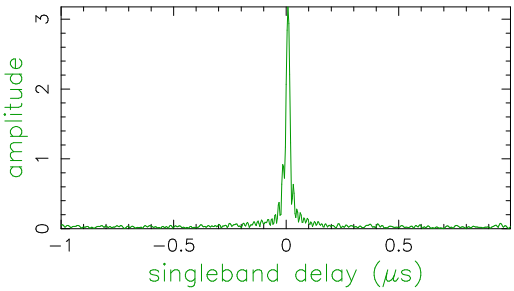
VLBA_LA - NOEMA, fgroup W, pol RR

multiband delay (μ s)



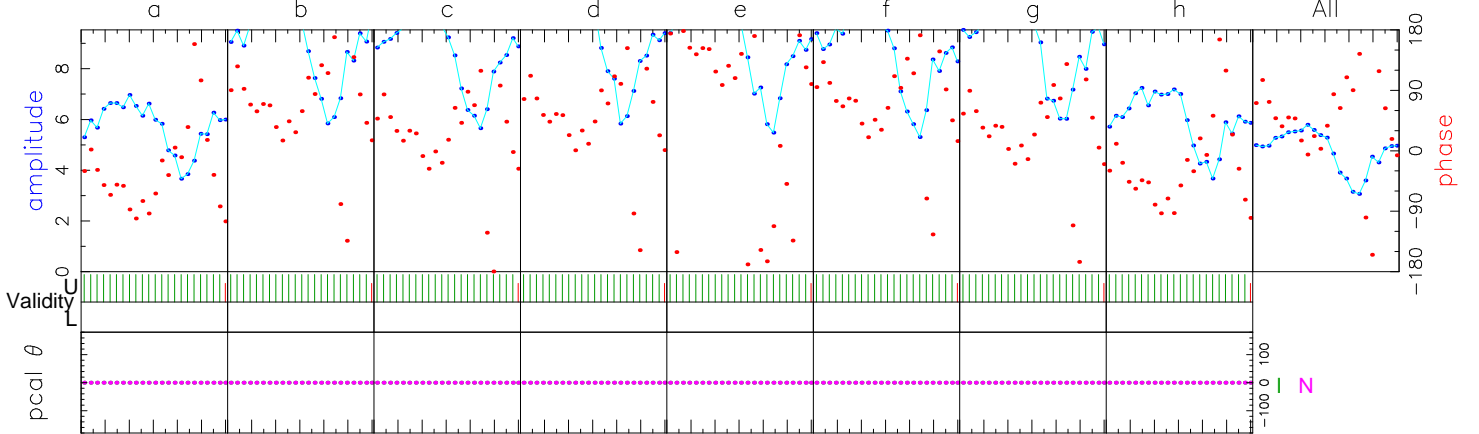
Fringe quality 1

SNR 164.9
 Int time 359.917
 Amp 3.178
 Phase 51.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.008147
 MBD 0.000125
 Fringe rate (Hz)
 0.006653
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134921
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	7.13988858368E+03	Apriori delay (usec)	7.13987283373E+03	Resid mbdelay (usec)	1.24951E-04	+/-	6.6E-06
Sband delay (usec)	7.13988098048E+03	Apriori clock (usec)	1.0652083E+01	Resid sbdelay (usec)	8.14675E-03	+/-	5.2E-05
Phase delay (usec)	7.13987283539E+03	Apriori clockrate (us/s)	-9.5400007E-06	Resid phdelay (usec)	1.66193E-06	+/-	2.2E-08
Delay rate (us/s)	1.30212945143E+00	Apriori rate (us/s)	1.30212937420E+00	Resid rate (us/s)	7.72392E-08	+/-	1.1E-10
Total phase (deg)	14.6	Apriori accel (us/s/s)	-4.68892650292E-05	Resid phase (deg)	51.5	+/-	0.7

ph/seg (deg)	59.8	RMS	3.178 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.9	Theor.	3.162	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	72.6	Search (2048X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	75.7	Interp.	4.770	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	5.421	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.		nlags:	256	t_cohere	infinite	

I: az 65.4 el 63.4 pa -93.6 N: az 297.6 el 35.2 pa 58.9 u,v (fr/asec) -10190.609 -3990.825 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IN..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IN.W.255.1W57LH

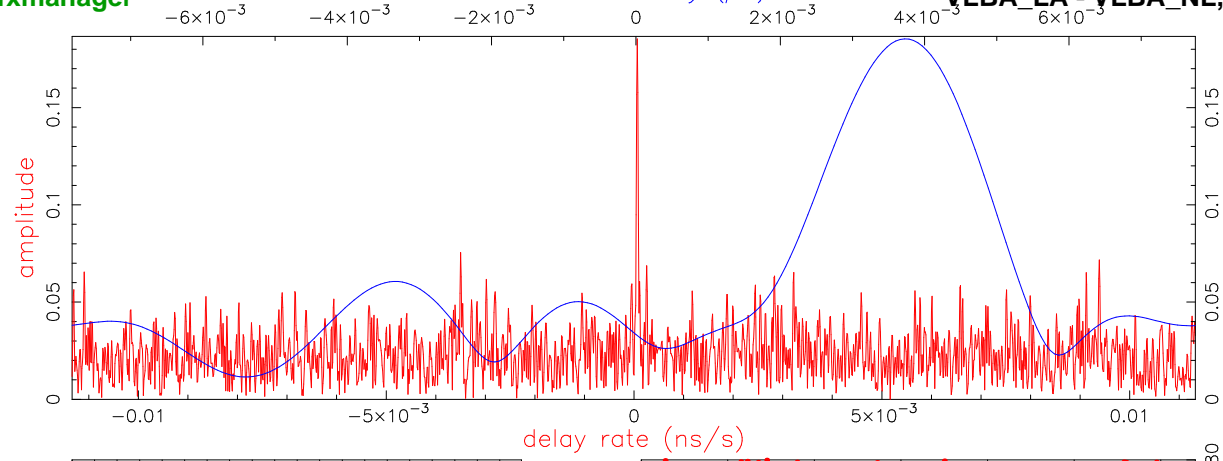
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, In

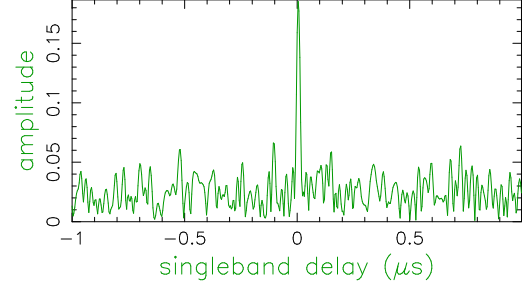
VLBA_LA - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

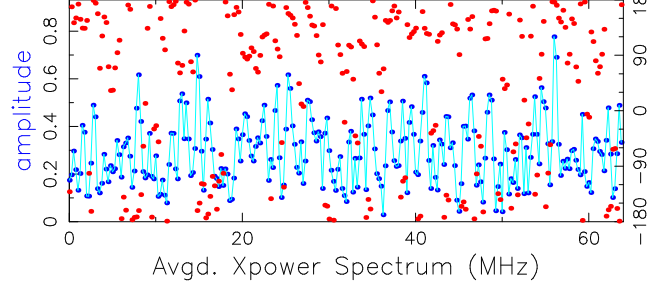


Fringe quality 9

SNR 9.7
 Int time 359.915
 Amp 0.187
 Phase 166.8
 PFD 1.5e-13
 Delays (us)
 SBD 0.004943
 MBD 0.003719
 Fringe rate (Hz) 0.006023
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

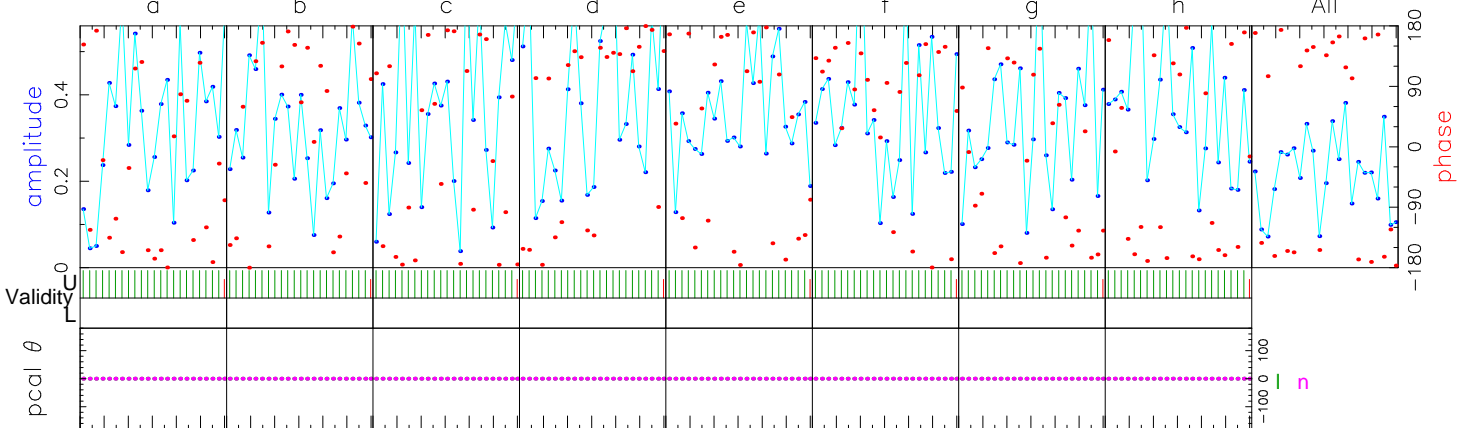


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134922
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.56662958568E+03	Apriori delay (usec)	-1.5666330452E+03	Resid mbdelay (usec)	3.71885E-03	+/-	1.1E-04
Sband delay (usec)	-1.56662836202E+03	Apriori clock (usec)	-8.0156574E+00	Resid sbdelay (usec)	4.94250E-03	+/-	8.9E-04
Phase delay (usec)	-1.56663329915E+03	Apriori clockrate (us/s)	-5.8600000E-07	Resid phdelay (usec)	5.37834E-06	+/-	3.8E-07
Delay rate (us/s)	2.38332378413E-01	Apriori rate (us/s)	2.38332308491E-01	Resid rate (us/s)	6.99226E-08	+/-	1.8E-09
Total phase (deg)	-139.8	Apriori accel (us/s/s)	2.09883992435E-06	Resid phase (deg)	166.8	+/-	11.8

ph/seg (deg)	36.1	Theor.	28.4	Amplitude	0.187 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	50.1		49.5	Search (2048X32)	0.180	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.2		16.7	Inc. seg. avg.	0.194	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.2		29.2	Inc. frq. avg.	0.193	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

l: az 65.4 el 63.4 pa -93.6 n: az 81.2 el 76.1 pa -86.1 u,v (fr/asec) -1843.566 -356.571 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/In..1W57LH Output file: /Exps/c211a/v2/1234/No0237/In.W.263.1W57LH

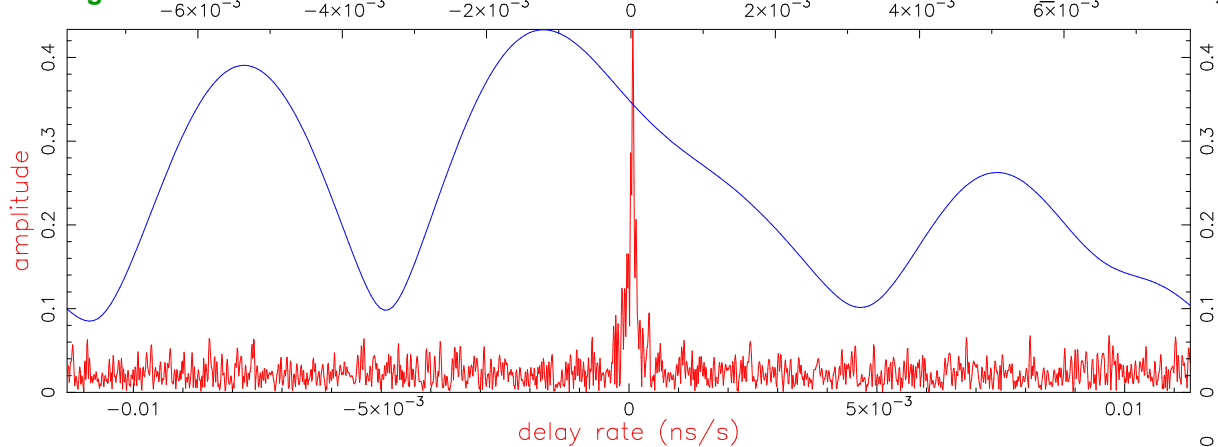
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IN

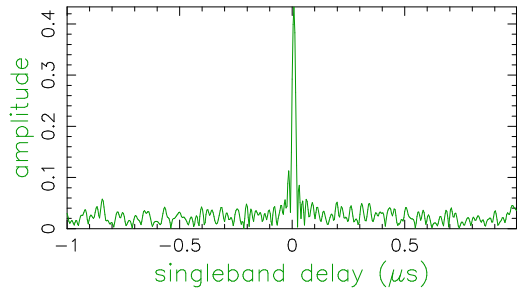
VLBA_LA- NOEMA, fgroup W, pol LR

multiband delay (μ s)

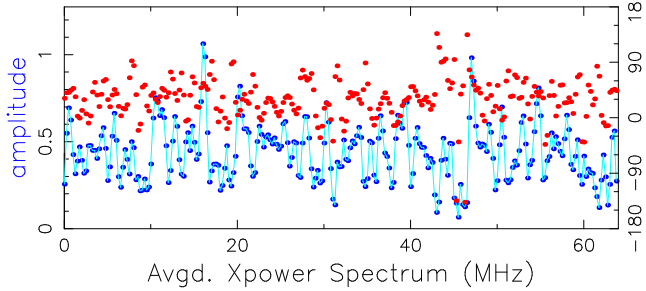


Fringe quality 7

SNR 22.5
 Int time 359.917
 Amp 0.434
 Phase 131.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.007412
 MBD -0.001211
 Fringe rate (Hz)
 0.006883
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

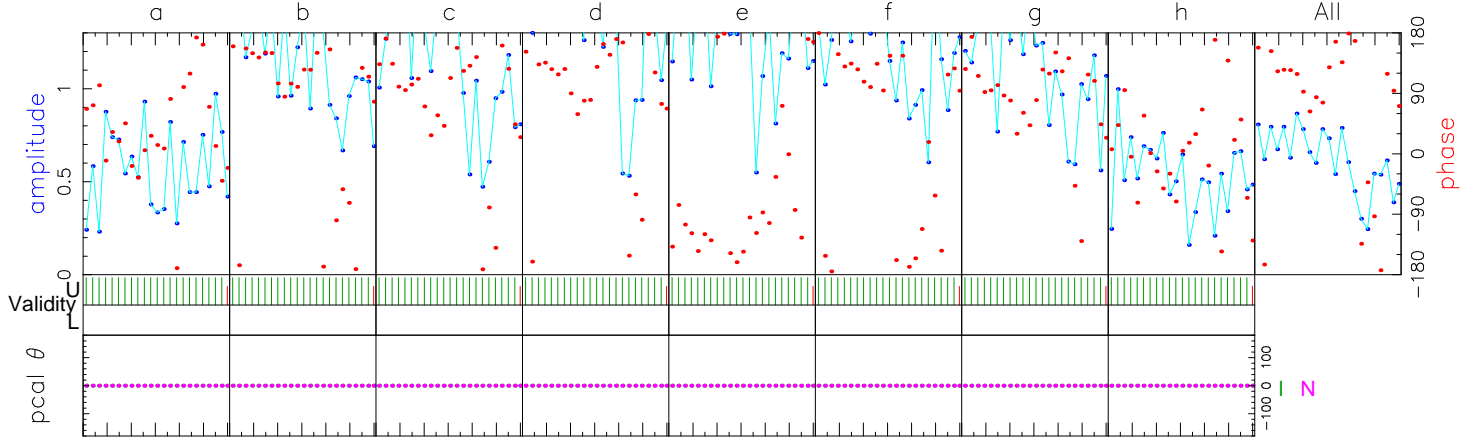


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134924
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 7.13988724768E+03 Apriori delay (usec) 7.13987283373E+03 Resid mbdelay (usec) -1.21105E-03 +/- 4.8E-05
 Sband delay (usec) 7.13988024598E+03 Apriori clock (usec) 1.0652083E+01 Resid sbdelay (usec) 7.41225E-03 +/- 3.8E-04
 Phase delay (usec) 7.13987283798E+03 Apriori clockrate (us/s) -9.5400007E-06 Resid phdelay (usec) 4.24803E-06 +/- 1.6E-07
 Delay rate (us/s) 1.30212945410E+00 Apriori rate (us/s) 1.30212937420E+00 Resid rate (us/s) 7.99062E-08 +/- 7.9E-10
 Total phase (deg) 94.8 Apriori accel (us/s/s) -4.68892650292E-05 Resid phase (deg) 131.7 +/- 5.1

RMS Theor. Amplitude 0.434 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 61.8 12.2 Search (2048X32) 0.424 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 57.6 21.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 80.5 7.2 Inc. seg. avg. 0.608 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 82.8 12.6 Inc. frq. avg. 0.695 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 N: az 297.6 el 35.2 pa 58.9 u,v (fr/asec) -10190.609 -3990.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IN..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IN.W.271.1W57LH

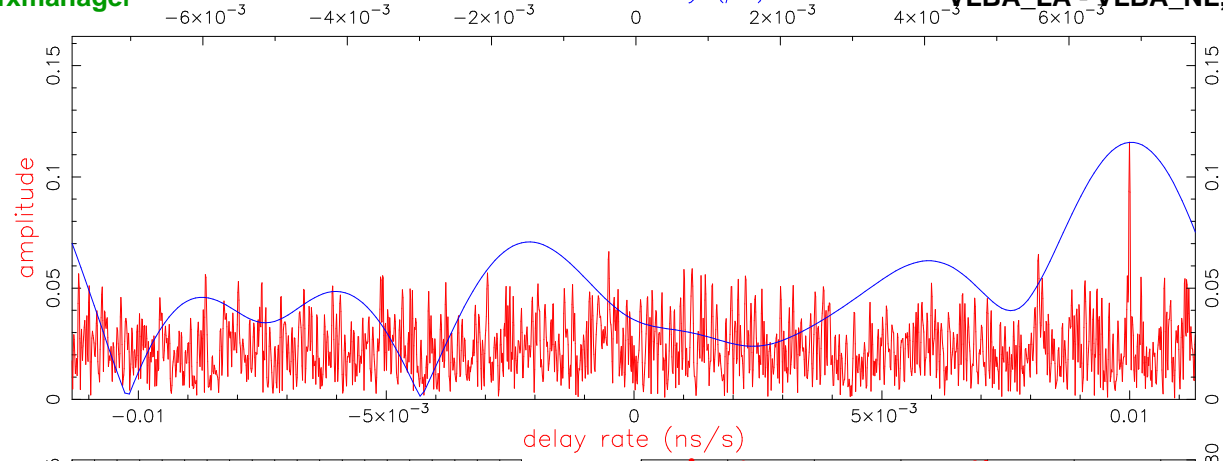
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

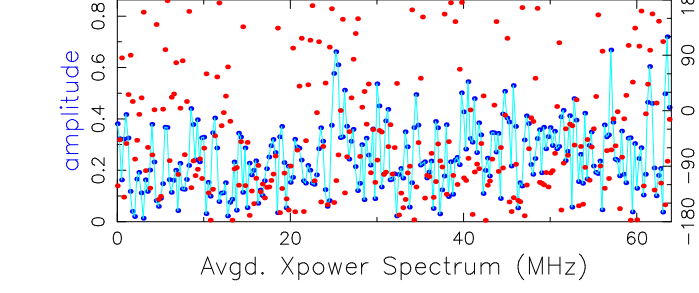
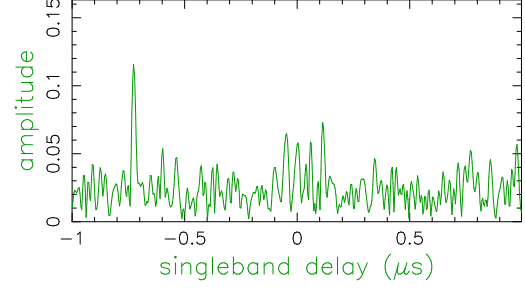
BLLAC.1W57LH, No0237, In

VLBA_LA - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

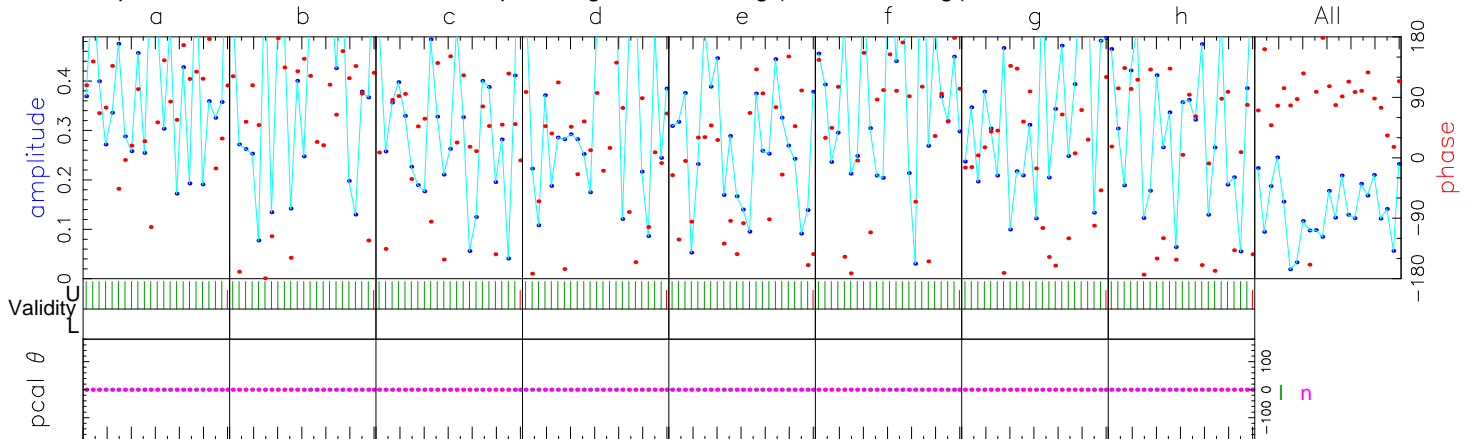


Fringe quality 0
 SNR 6.0
 Int time 359.915
 Amp 0.163
 Phase 94.6
 PFD 4.0e-01
 Delays (us)
 SBD -0.726386
 MBD 0.006869
 Fringe rate (Hz) 0.862826
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134926
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
n	1000	1000	1000	1000	1000	1000	1000	1000		1000
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.56736081090E+03								Resid mbdelay (usec)	6.86862E-03 +/- 1.8E-04
Sband delay (usec)	-1.56735969102E+03								Resid sbdelay (usec)	-7.26386E-01 +/- 1.4E-03
Phase delay (usec)	-1.56663330147E+03								Resid phdelay (usec)	3.04955E-06 +/- 6.2E-07
Delay rate (us/s)	2.38342325050E-01								Resid rate (us/s)	1.00166E-05 +/- 3.0E-09
Total phase (deg)		-212.0							Resid phase (deg)	94.6 +/- 19.1
	RMS	Theor.	Amplitude	0.163 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	41.8	45.8	Search (2048X32)	0.113					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	56.6	80.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	49.4	27.0	Inc. seg. avg.	0.149					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	54.4	47.2	Inc. frq. avg.	0.182					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite
l: az 65.4 el 63.4 pa -93.6			n: az 81.2 el 76.1 pa -86.1							
									u,v (fr/asec) -1843.566 -356.571	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c211a/v2/1234/No0237/In..1W57LH						Output file: /Exps/c211a/v2/1234/No0237/In.W.282.1W57LH	

Mk4/DiFX fourfit 3.21 rev 2937

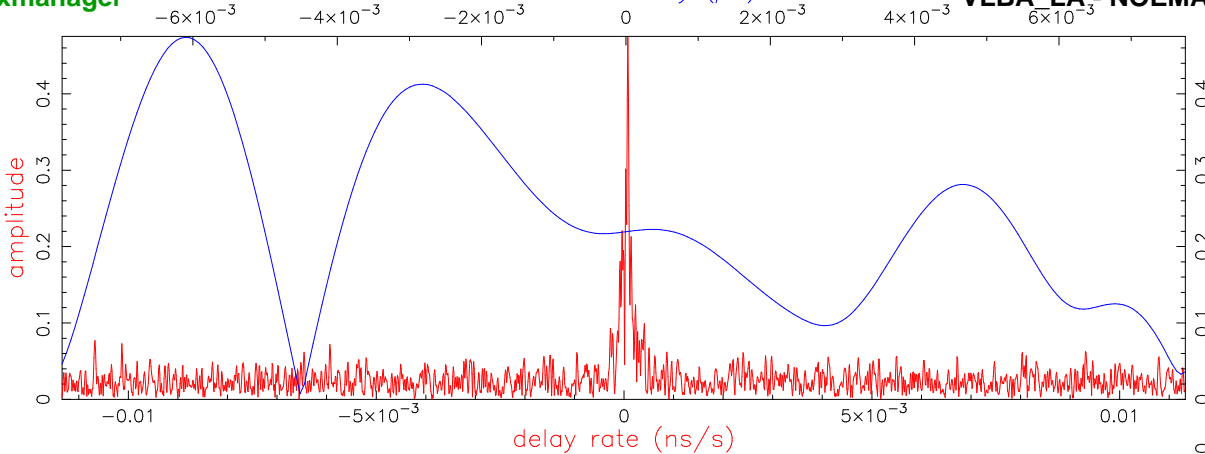
fxmanager

BLLAC.1W57LH, No0237, IN

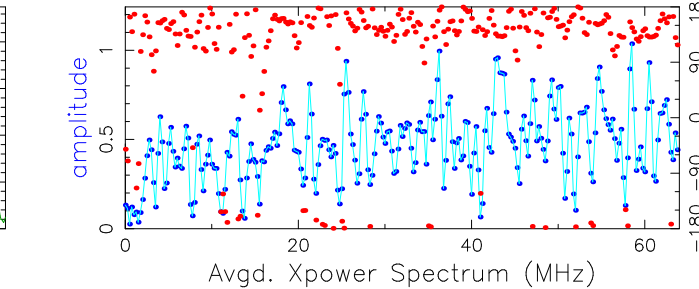
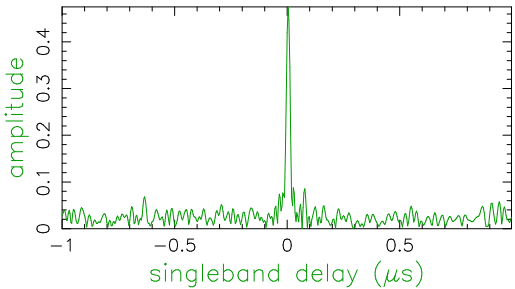
VLBA_LA- NOEMA, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 5

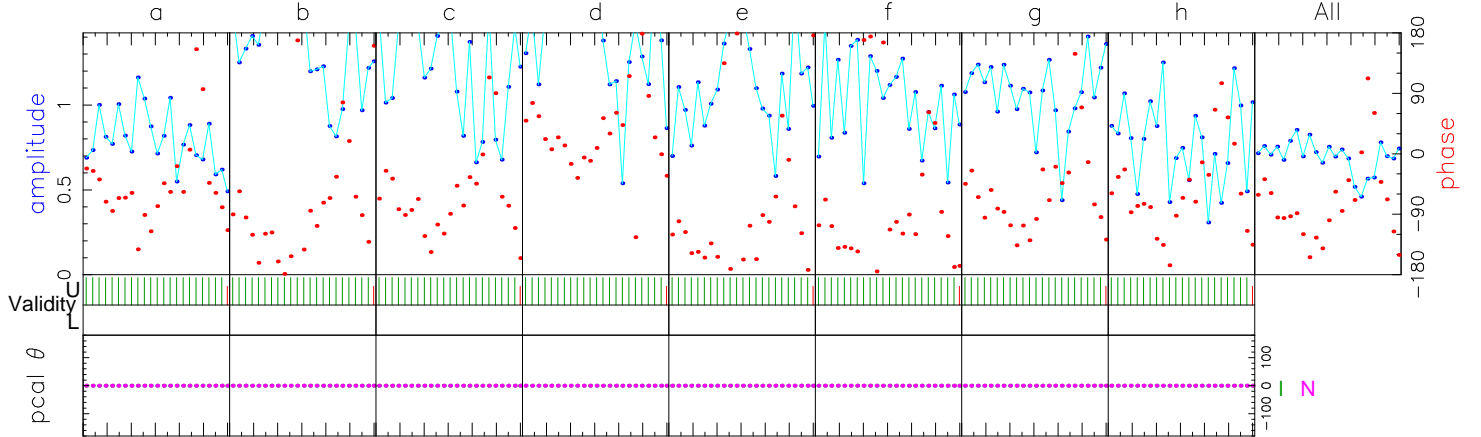


SNR 24.6
 Int time 359.917
 Amp 0.475
 Phase -85.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.004563
 MBD -0.006079
 Fringe rate (Hz)
 0.006721
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134928
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-64.0	-117.1	-82.2	21.9	-138.1	-130.6	-71.7	-64.0	Phase	-85.5
	0.6	0.8	0.8	0.9	0.7	0.7	0.7	0.5	Ampl.	0.7
	256.3	258.5	258.8	258.3	258.5	258.6	258.2	256.2	Sbd box	258.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.13988237955E+03		Apriori delay (usec)		7.13987283373E+03		Resid mbdelay (usec)		-6.07917E-03	+/- 4.4E-05
Sband delay (usec)	7.13987739673E+03		Apriori clock (usec)		1.0652083E+01		Resid sbdelay (usec)		4.56300E-03	+/- 3.5E-04
Phase delay (usec)	7.13987283097E+03		Apriori clockrate (us/s)		-9.5400007E-06		Resid phdelay (usec)		-2.75597E-06	+/- 1.5E-07
Delay rate (us/s)	1.30212945222E+00		Apriori rate (us/s)		1.30212937420E+00		Resid rate (us/s)		7.80214E-08	+/- 7.2E-10
Total phase (deg)	237.6		Apriori accel (us/s/s)		-4.68892650292E-05		Resid phase (deg)		-85.5	+/- 4.6

	RMS	Theor.	Amplitude	0.475 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	59.1	11.1	Search (2048X32)	0.460	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	50.7	19.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	55.5	6.6	Inc. seg. avg.	0.685	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	58.6	11.5	Inc. frq. avg.	0.708	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

I: az 65.4 el 63.4 pa -93.6 N: az 297.6 el 35.2 pa 58.9 u,v (fr/asec) -10190.609 -3990.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IN..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IN.W.291.1W57LH

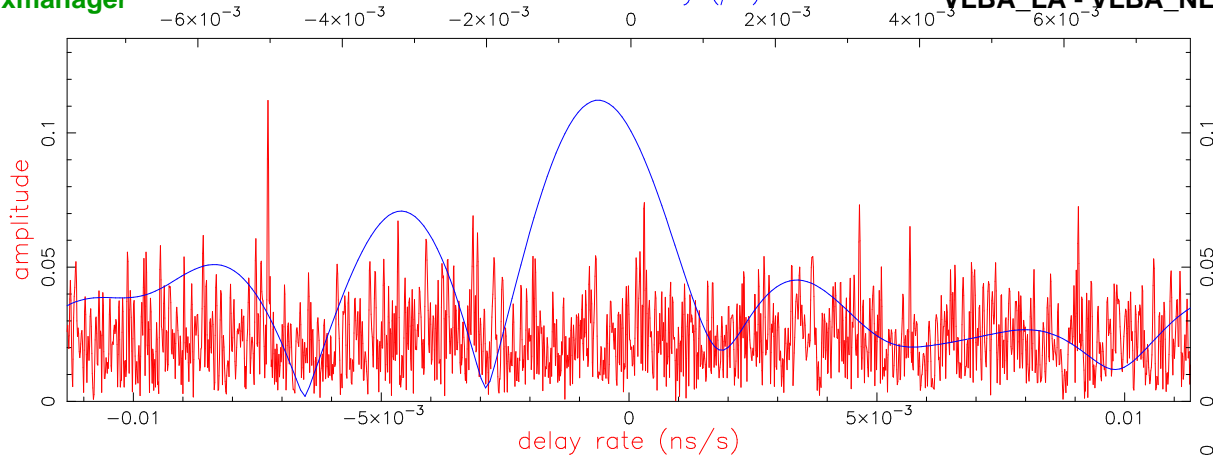
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, In

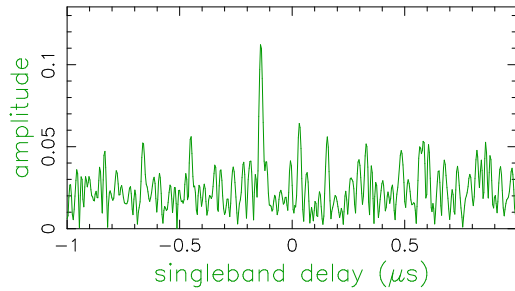
VLBA_LA - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

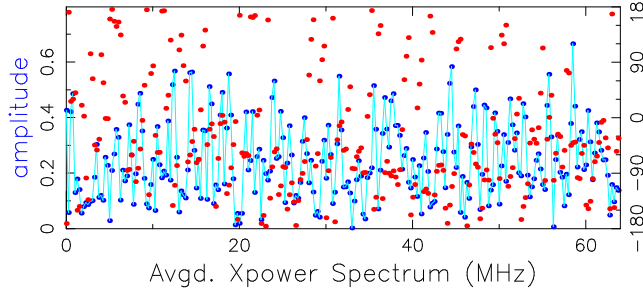


Fringe quality 0

SNR 5.9
 Int time 359.915
 Amp 0.135
 Phase 128.8
 PFD 6.5e-01
 Delays (us)
 SBD -0.139214
 MBD -0.000418
 Fringe rate (Hz)
 -0.628786
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

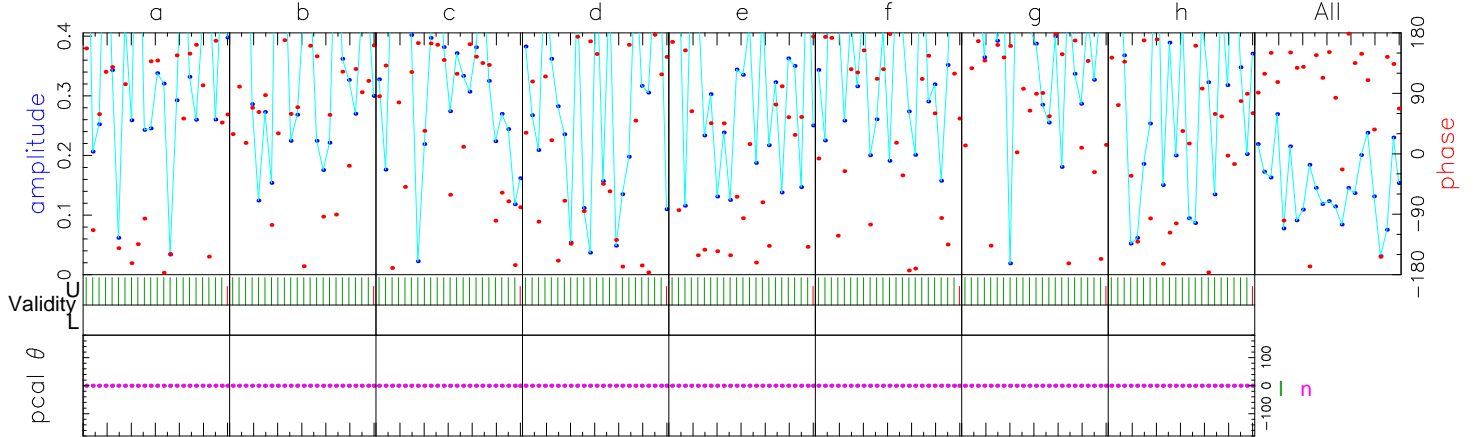


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134930
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.56677434735E+03								Resid mbdelay (usec)	-4.17822E-04 +/- 1.8E-04
Sband delay (usec)	-1.56677251852E+03								Resid sbdelay (usec)	-1.39214E-01 +/- 1.5E-03
Phase delay (usec)	-1.56663330037E+03								Resid phdelay (usec)	4.15313E-06 +/- 6.3E-07
Delay rate (us/s)	2.38325008905E-01								Resid rate (us/s)	-7.29959E-06 +/- 3.0E-09
Total phase (deg)			-177.8						Resid phase (deg)	128.8 +/- 19.5
RMS	56.1	46.7							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.1	46.7							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.1	81.6							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	53.1	27.6							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.5	48.1							Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 65.4 el 63.4 pa -93.6 n: az 81.2 el 76.1 pa -86.1 u,v (fr/asec) -1843.566 -356.571 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/In..1W57LH Output file: /Exps/c211a/v2/1234/No0237/In.W.302.1W57LH

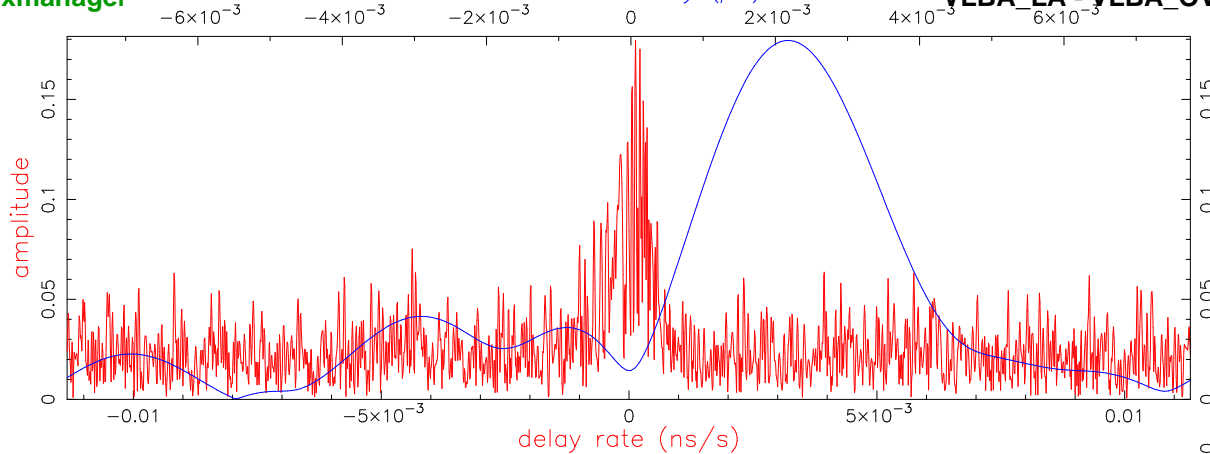
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lo

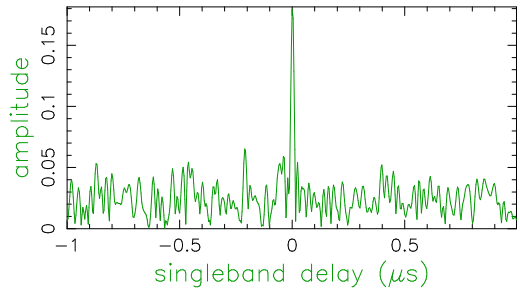
VLBA_LA - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

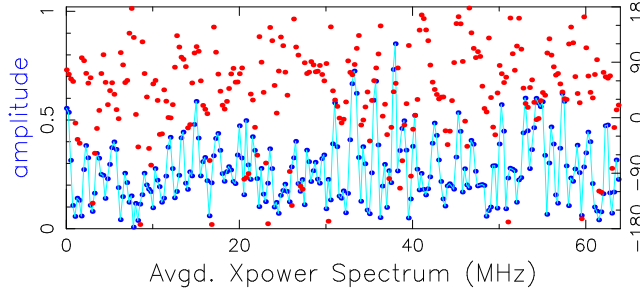


Fringe quality 9

SNR 9.4
 Int time 359.913
 Amp 0.181
 Phase 47.7
 PFD 1.9e-12
 Delays (us)
 SBD 0.001238
 MBD 0.002196
 Fringe rate (Hz) 0.011746
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

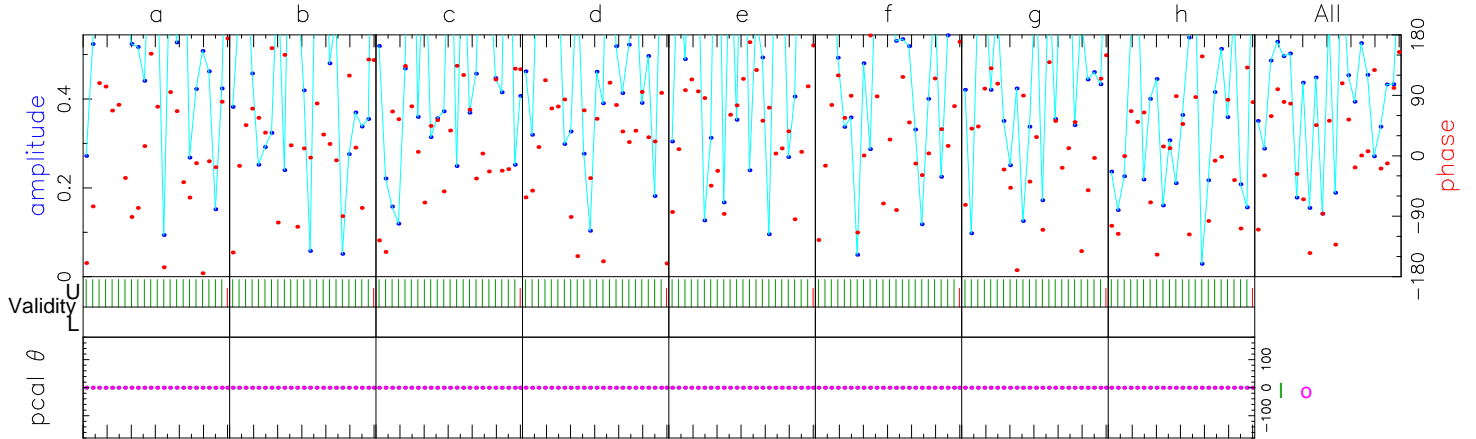


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134919
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.53290470360E+03	Apriori delay (usec)	1.53290250728E+03	Resid mbdelay (usec)	2.19632E-03	+/-	1.2E-04
Sband delay (usec)	1.53290374528E+03	Apriori clock (usec)	-6.2576637E+00	Resid sbdelay (usec)	1.23800E-03	+/-	9.1E-04
Phase delay (usec)	1.53290250882E+03	Apriori clockrate (us/s)	-6.4600002E-07	Resid phdelay (usec)	1.53751E-06	+/-	3.9E-07
Delay rate (us/s)	-1.40978880491E-01	Apriori rate (us/s)	-1.40979016851E-01	Resid rate (us/s)	1.36360E-07	+/-	1.9E-09
Total phase (deg)	39.5	Apriori accel (us/s/s)	-9.73246056231E-06	Resid phase (deg)	47.7	+/-	12.2

ph/seg (deg)	86.2	Theor.	Amplitude	0.181 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	150.0	86.2	Search (2048X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	17.0	50.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.0	17.2	Inc. seg. avg.	0.362	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
		30.0	Inc. frq. avg.	0.178	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

l: az 65.4 el 63.4 pa -93.6 o: az 67.0 el 55.2 pa -82.6 u,v (fr/asec) 1072.237 -845.719 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lo..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lo.W.247.1W57LH

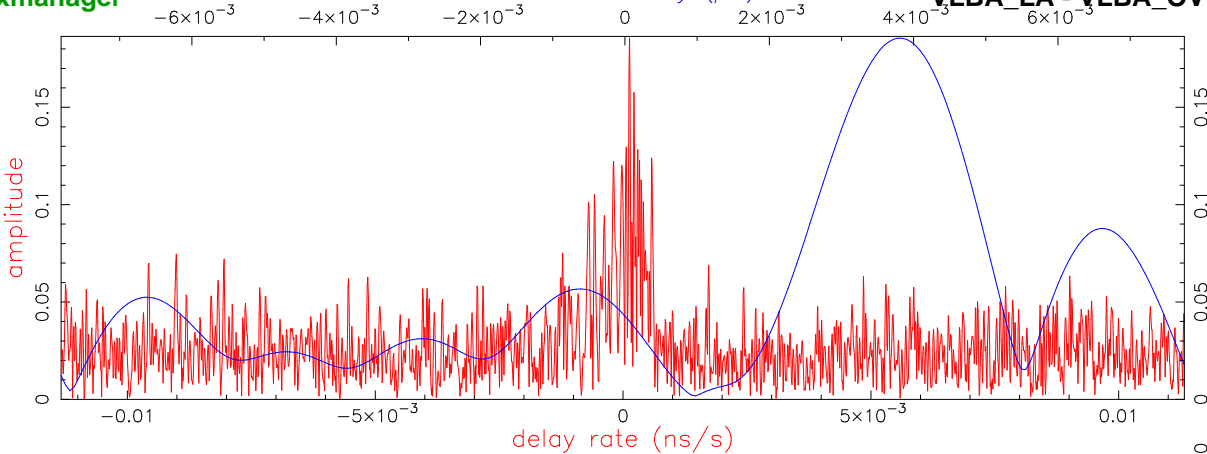
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lo

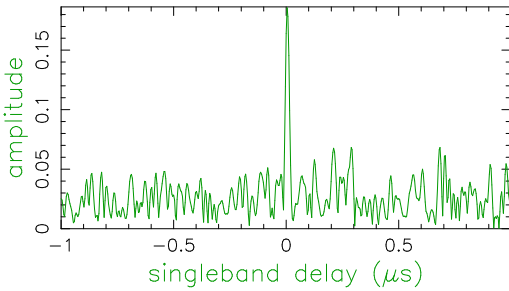
VLBA_LA - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

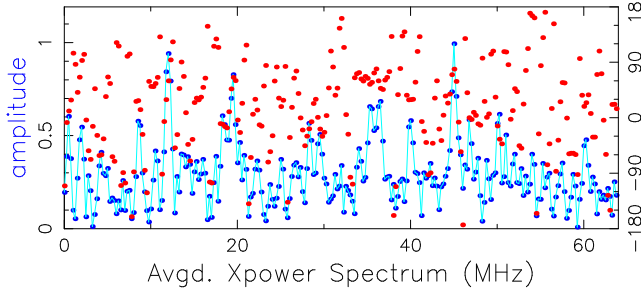


Fringe quality 9

SNR 9.7
 Int time 359.913
 Amp 0.186
 Phase 41.5
 PFD 1.6e-13
 Delays (us)
 SBD 0.004860
 MBD 0.003835
 Fringe rate (Hz) 0.011442
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

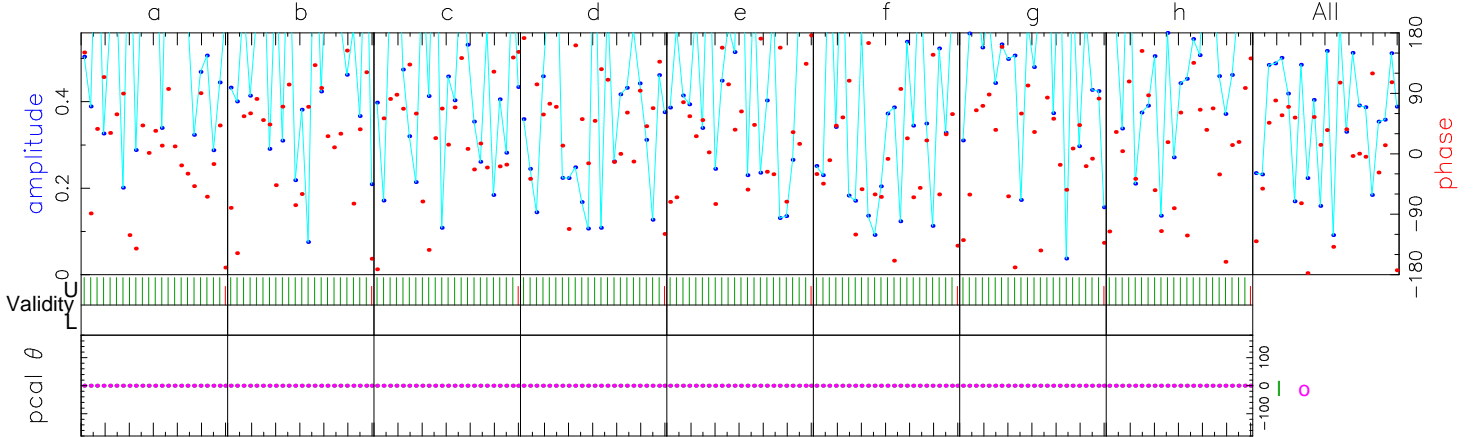


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134922
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.53290634276E+03				1.53290250728E+03			Resid mbdelay (usec)	3.83547E-03 +/- 1.1E-04
Sband delay (usec)		1.53290736703E+03				-6.2576637E+00			Resid sbdelay (usec)	4.85975E-03 +/- 8.9E-04
Phase delay (usec)		1.53290250862E+03				-6.4600002E-07			Resid phdelay (usec)	1.33777E-06 +/- 3.8E-07
Delay rate (us/s)		-1.40978884020E-01				-1.40979016851E-01			Resid rate (us/s)	1.32830E-07 +/- 1.8E-09
Total phase (deg)			33.3			-9.73246056231E-06			Resid phase (deg)	41.5 +/- 11.8
	RMS	Theor.	Amplitude	0.186 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	80.7	28.4	Search (2048X32)	0.184					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	121.2	49.6	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	27.0	16.8	Inc. seg. avg.	0.326					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	14.8	29.2	Inc. frq. avg.	0.192					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 65.4 el 63.4 pa -93.6 o: az 67.0 el 55.2 pa -82.6 u,v (fr/asec) 1072.237 -845.719 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lo..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lo.W.261.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

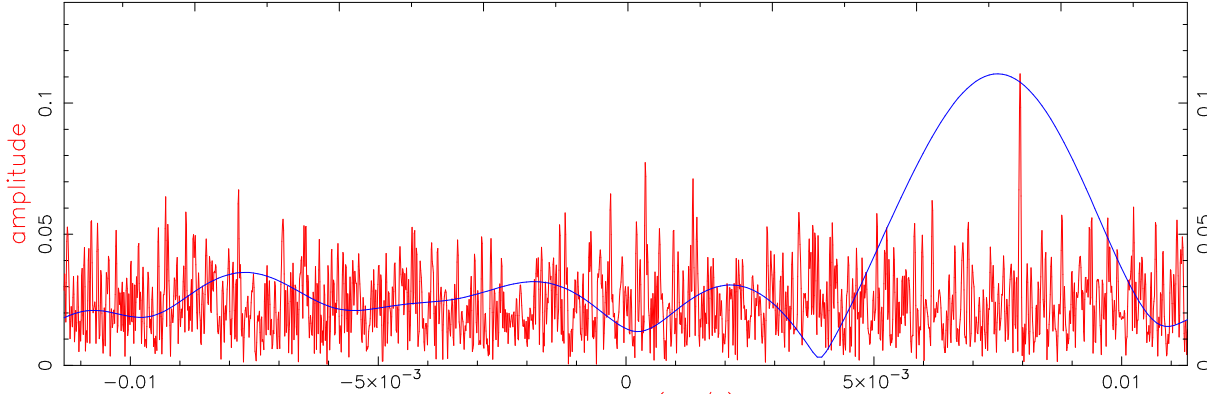
BLLAC.1W57LH, No0237, lo

VLBA_LA - VLBA_OV, fgroup W, pol LR

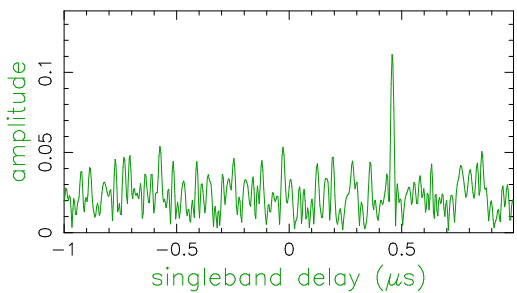
multiband delay (μ s)

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

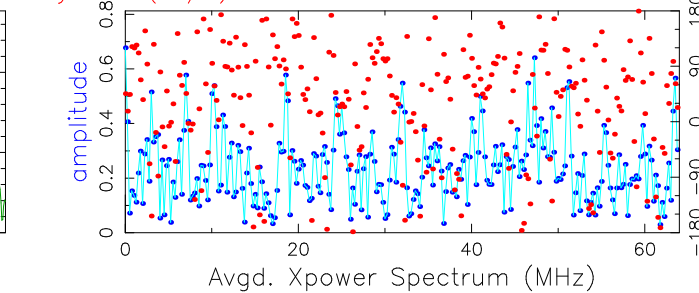
Fringe quality 0



SNR 5.8
 Int time 359.913
 Amp 0.138
 Phase -113.4
 PFD 7.9e-01
 Delays (us)
 SBD 0.458054
 MBD 0.005122
 Fringe rate (Hz)
 0.685501
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



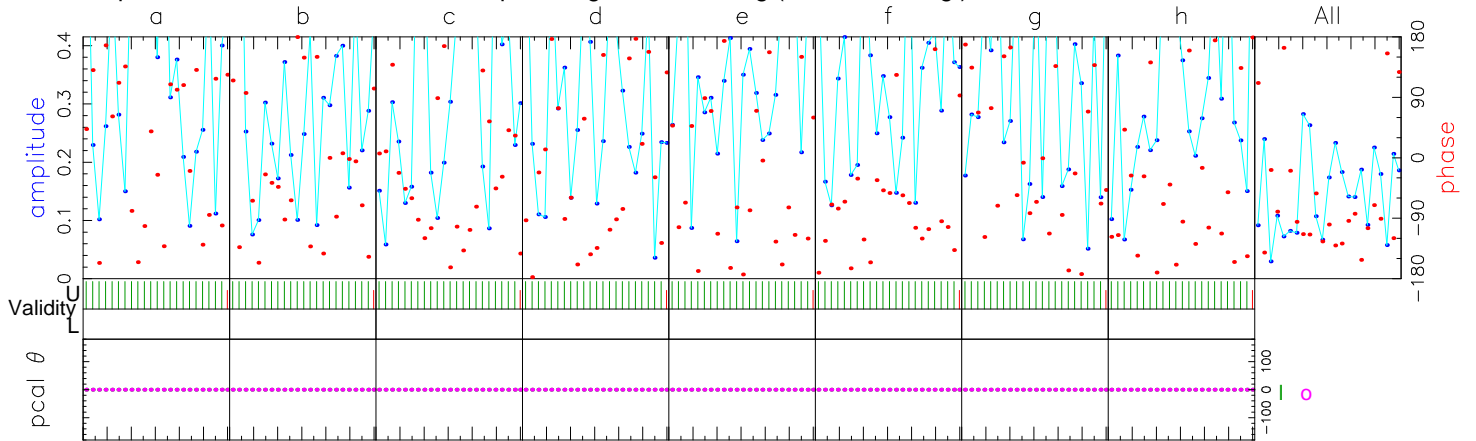
singleband delay (μ s)



delay rate (ns/s)

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134926
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.53336075407E+03	Apriori delay (usec)	1.53290250728E+03	Resid mbdelay (usec)	5.12179E-03	+/-	1.9E-04
Sband delay (usec)	1.53336056103E+03	Apriori clock (usec)	-6.2576637E+00	Resid sbdelay (usec)	4.58054E-01	+/-	1.5E-03
Phase delay (usec)	1.53290250362E+03	Apriori clockrate (us/s)	-6.4600002E-07	Resid phdelay (usec)	-3.65796E-06	+/-	6.4E-07
Delay rate (us/s)	-1.40971058858E-01	Apriori rate (us/s)	-1.40979016851E-01	Resid rate (us/s)	7.95799E-06	+/-	3.1E-09
Total phase (deg)	238.4	Apriori accel (us/s/s)	-9.73246056231E-06	Resid phase (deg)	-113.4	+/-	19.7

ph/seg (deg)	56.7	Theor.	47.3	Amplitude	0.138 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	71.9		82.5	Search (2048X32)	0.109	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	36.7		27.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	49.8		48.7	Inc. seg. avg.	0.137	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.131	Data rate(Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 65.4 el 63.4 pa -93.6 o: az 67.0 el 55.2 pa -82.6 u,v (fr/asec) 1072.237 -845.719 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lo..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lo.W.283.1W57LH

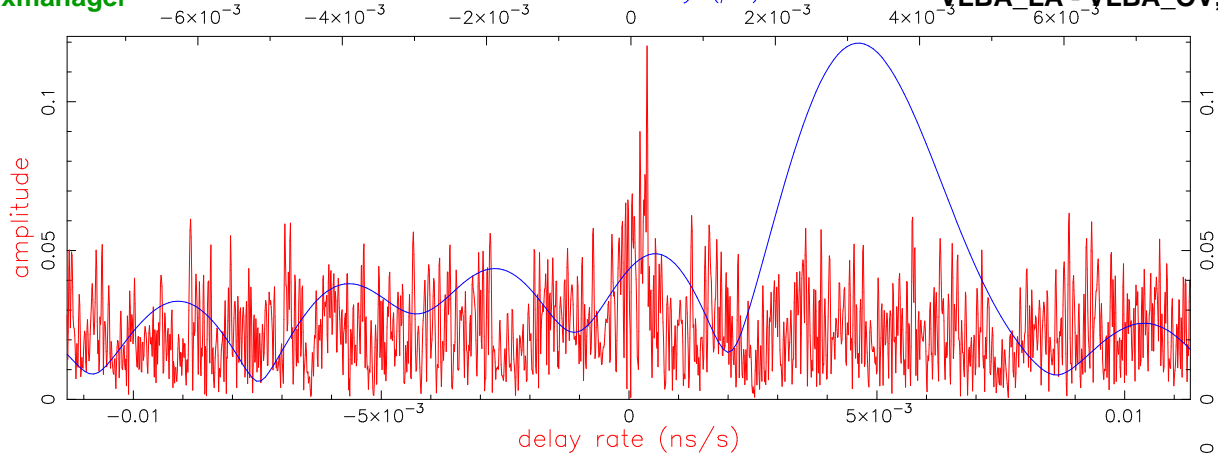
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lo

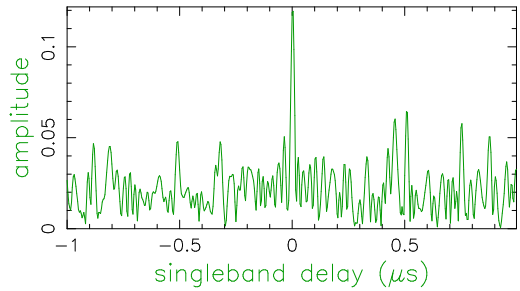
VLBA_LA - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

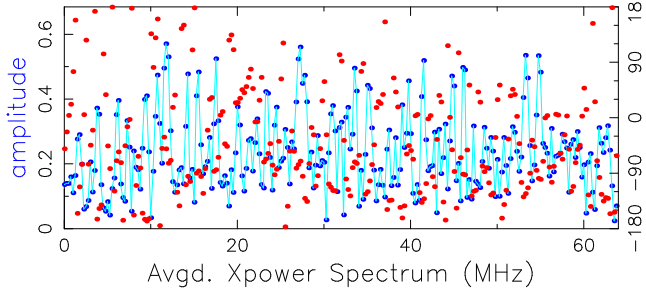


Fringe quality 0

SNR 6.3
Int time 359.913
Amp 0.122
Phase -94.3
PFD 6.7e-02
Delays (us)
SBD 0.002092
MBD 0.003295
Fringe rate (Hz) 0.031201
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

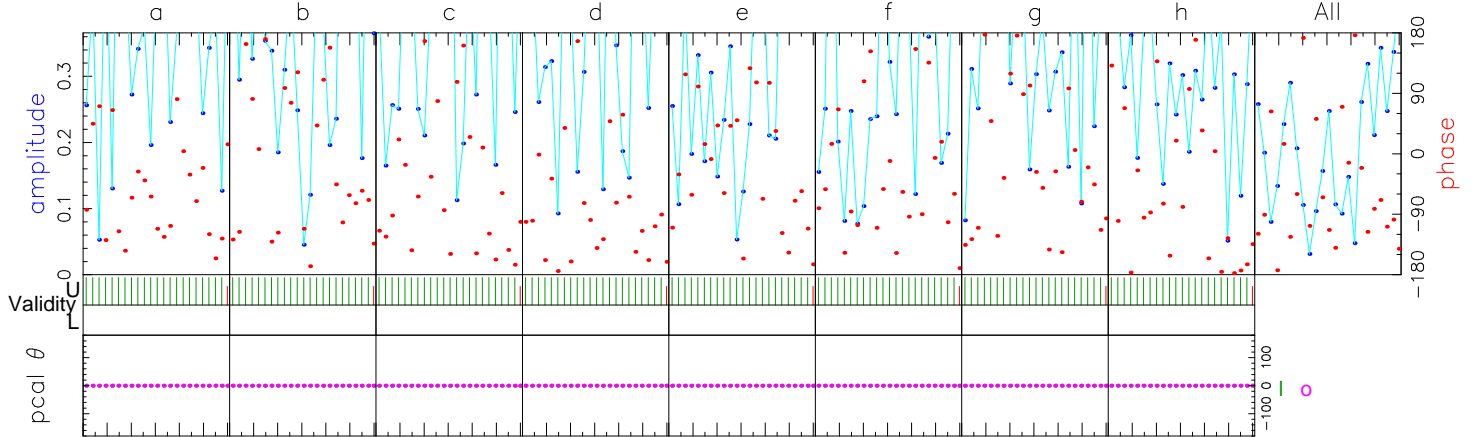


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124500.00
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134930
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.53290580192E+03	Apriori delay (usec)	1.53290250728E+03	Resid mbdelay (usec)	3.29464E-03	+/-	1.7E-04
Sband delay (usec)	1.53290459978E+03	Apriori clock (usec)	-6.2576637E+00	Resid sbdelay (usec)	2.09250E-03	+/-	1.4E-03
Phase delay (usec)	1.53290250424E+03	Apriori clockrate (us/s)	-6.4600002E-07	Resid phdelay (usec)	-3.04071E-06	+/-	5.8E-07
Delay rate (us/s)	-1.40978654641E-01	Apriori rate (us/s)	-1.40979016851E-01	Resid rate (us/s)	3.62210E-07	+/-	2.8E-09
Total phase (deg)	257.5	Apriori accel (us/s/s)	-9.73246056231E-06	Resid phase (deg)	-94.3	+/-	18.1

ph/seg (deg)	75.4	Theor.	43.5	Amplitude	0.122 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	101.0	Search (2048X32)	0.115	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	30.0	Inc. seg. avg.	0.151	Inc. frq. avg.	0.119	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	37.8	Inc. frq. avg.	0.119			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

l: az 65.4 el 63.4 pa -93.6 o: az 67.0 el 55.2 pa -82.6 u, v (fr/asec) 1072.237 -845.719 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lo..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lo.W.304.1W57LH

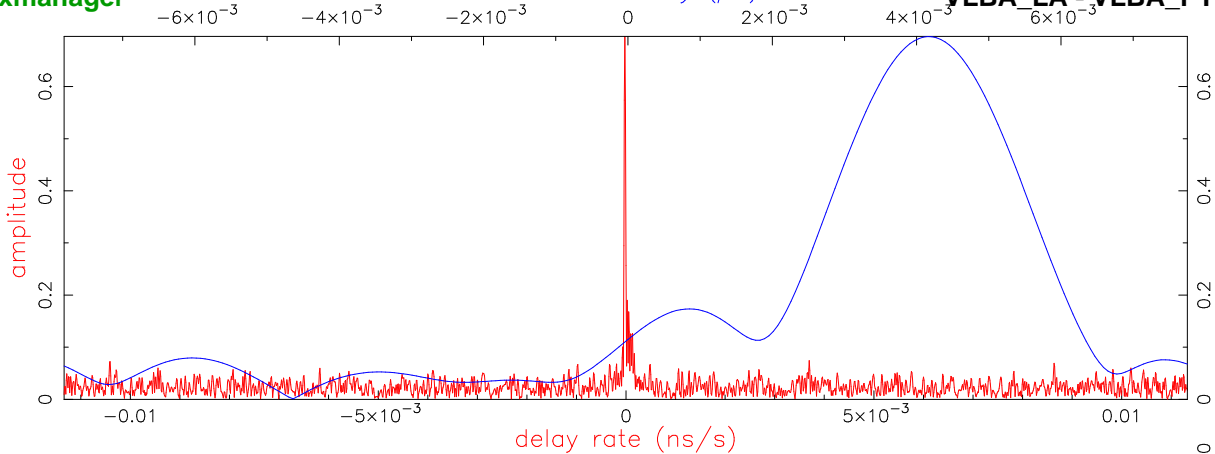
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lp

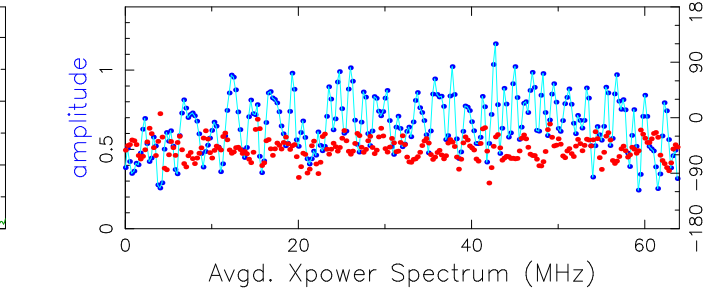
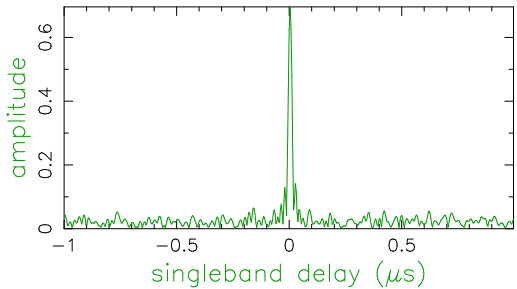
VLBA_LA - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



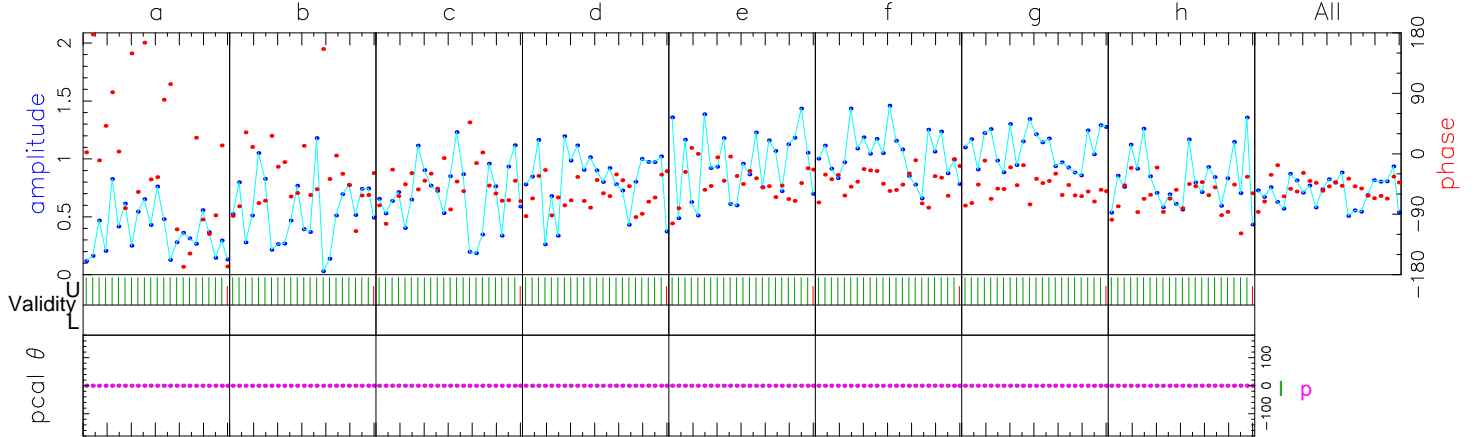
Fringe quality 7

SNR 36.1
 Int time 359.917
 Amp 0.696
 Phase -50.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.004193
 MBD 0.004177
 Fringe rate (Hz)
 -0.001469
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134917
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-53.2	-50.9	-49.4	-61.0	-43.8	-42.0	-50.1	-59.7	Phase	-50.5
	0.1	0.5	0.6	0.8	0.9	1.0	1.0	0.8	Ampl.	0.7
	210.4	258.0	257.9	258.2	258.1	257.8	258.1	258.2	Sbd box	258.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.29231748675E+02		Apriori delay (usec)		3.29227571885E+02		Resid mbdelay (usec)		4.17679E-03	+/- 3.0E-05
Sband delay (usec)	3.29231764885E+02		Apriori clock (usec)		-8.1326160E+00		Resid sbdelay (usec)		4.19300E-03	+/- 2.4E-04
Phase delay (usec)	3.29227570255E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-1.62921E-06	+/- 1.0E-07
Delay rate (us/s)	-3.49814169895E-02		Apriori rate (us/s)		-3.49813999324E-02		Resid rate (us/s)		-1.70571E-08	+/- 4.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.95462984197E-07		Resid phase (deg)		-50.5	+/- 3.2

	RMS	Theor.	Amplitude	0.696 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	15.5	7.6	Search (2048X32)	0.658	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	17.6	13.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	7.3	4.5	Inc. seg. avg.	0.715	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	42.2	7.8	Inc. frq. avg.	0.699	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

l: az 65.4 el 63.4 pa -93.6 p: az 63.0 el 61.4 pa -95.1 u,v (fr/asec) 270.906 119.799 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lp..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lp.W.239.1W57LH

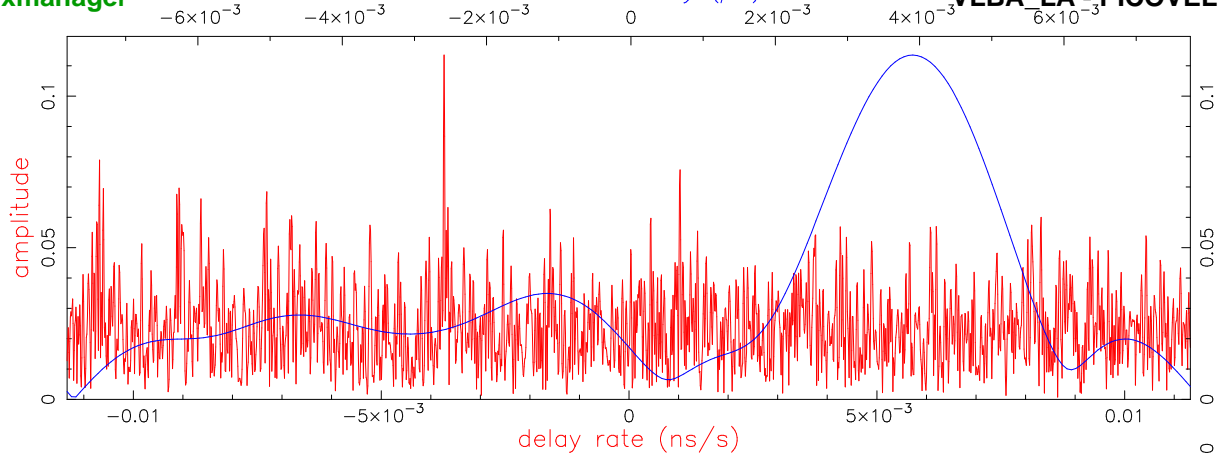
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IP

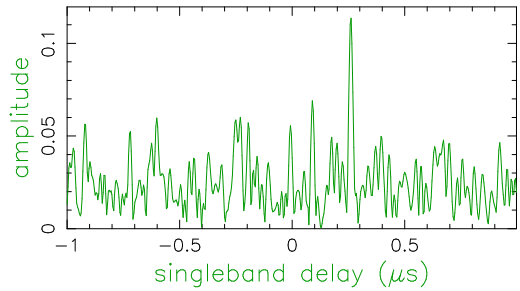
VLBA_LA - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

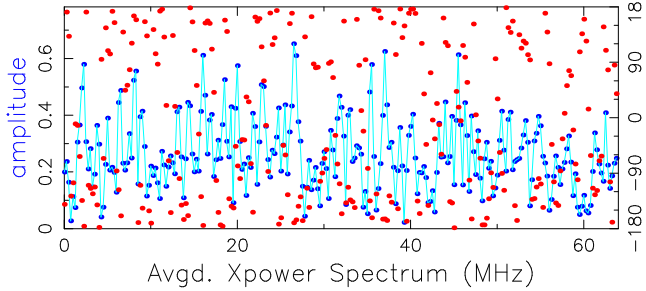


Fringe quality 0

SNR 5.9
Int time 359.917
Amp 0.120
Phase -89.7
PFD 5.3e-01
Delays (us)
SBD 0.260482
MBD 0.003901
Fringe rate (Hz)
-0.321393
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

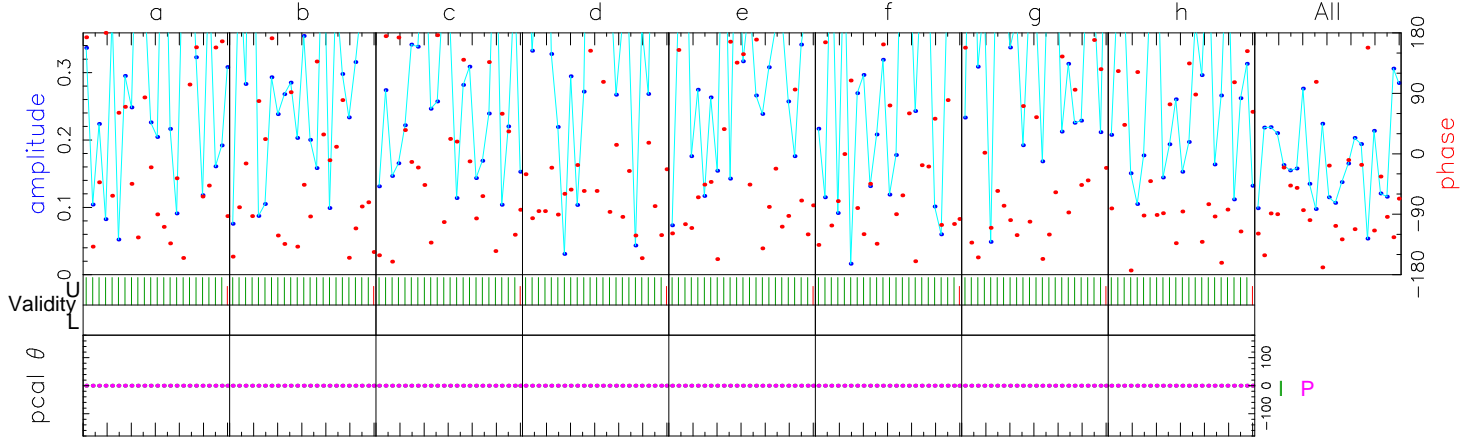


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124500.00
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134918
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-123.0	-80.2	-91.3	-72.4	-104.0	-73.9	-92.4	-112.3	Phase	-89.7
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	7.3	434.4	30.2	324.4	404.7	132.1	37.5	29.2	Sbd box	323.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	6.34819469081E+03	Apriori delay (usec)	6.34794079023E+03	Resid mbdelay (usec)	3.90059E-03	+/-	1.8E-04
Sband delay (usec)	6.34820127198E+03	Apriori clock (usec)	-1.6325703E+00	Resid sbdelay (usec)	2.60482E-01	+/-	1.5E-03
Phase delay (usec)	6.34794078734E+03	Apriori clockrate (us/s)	3.1399997E-07	Resid phdelay (usec)	-2.89343E-06	+/-	6.2E-07
Delay rate (us/s)	1.36143287427E+00	Apriori rate (us/s)	1.36143660533E+00	Resid rate (us/s)	-3.73106E-06	+/-	3.0E-09
Total phase (deg)	151.6	Apriori accel (us/s/s)	-3.51488594935E-05	Resid phase (deg)	-89.7	+/-	19.3

ph/seg (deg)	60.5	Theor.	46.3	Amplitude	0.120 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.1		80.8	Search (2048X32)	0.111	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.3		27.3	Inc. seg. avg.	0.135	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.9		47.6	Inc. frq. avg.	0.111	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	

I: az 65.4 el 63.4 pa -93.6 P: az 298.9 el 37.8 pa 71.4 u,v (fr/asec) -10624.887 -2489.640 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IP..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IP.W.243.1W57LH

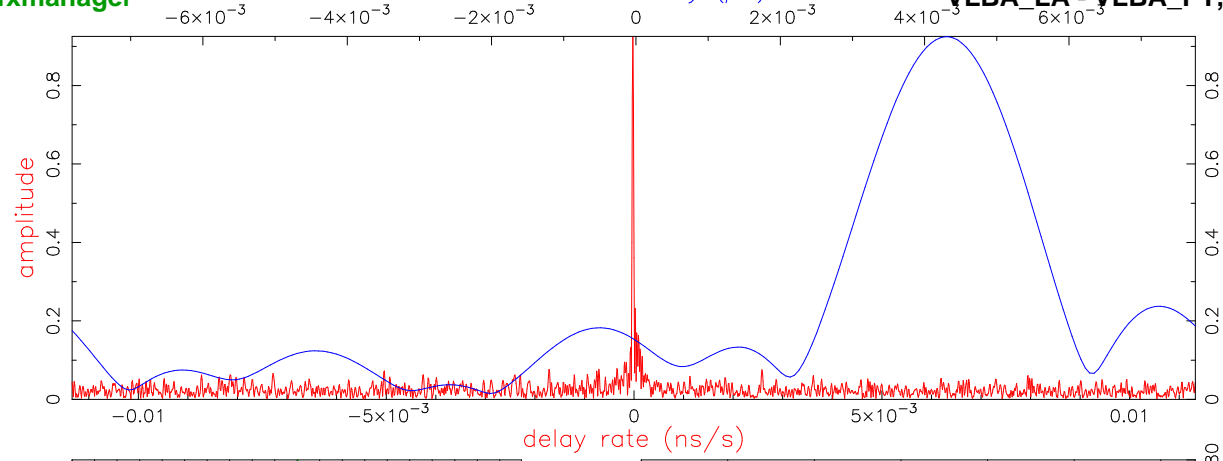
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lp

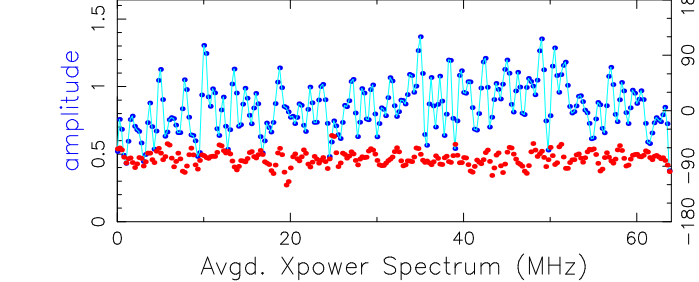
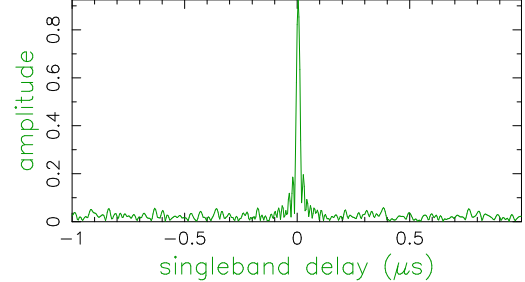
VLBA_LA - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)



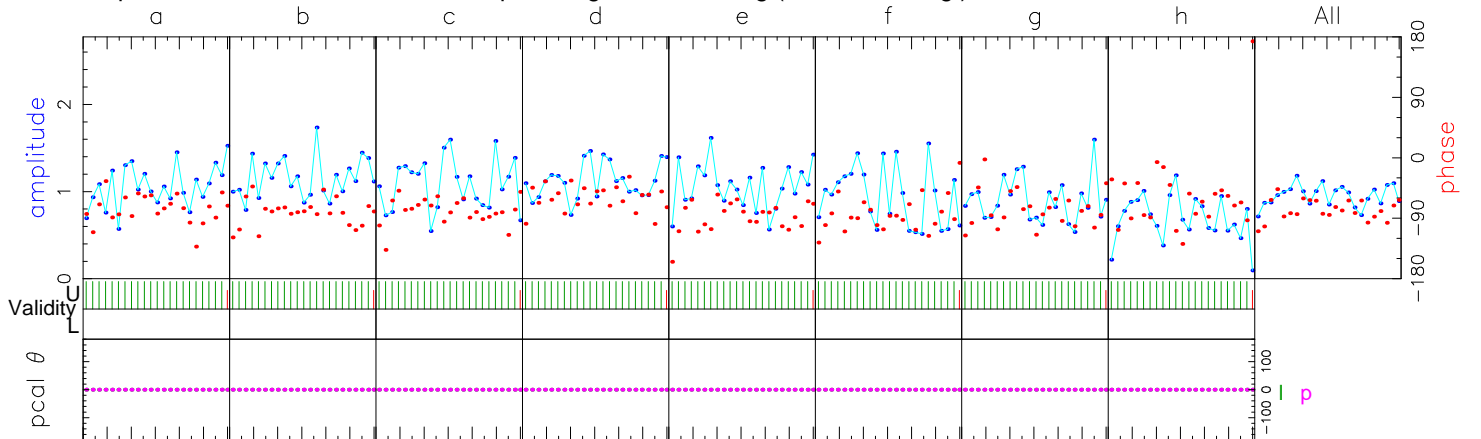
Fringe quality 8

SNR 48.0
 Int time 359.917
 Amp 0.925
 Phase -77.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.004279
 MBD 0.004314
 Fringe rate (Hz)
 -0.001475
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134921
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		3.29231885457E+02			3.29227571885E+02				4.31357E-03	+/- 2.3E-05
Sband delay (usec)		3.29231851385E+02			-8.1326160E+00				4.27950E-03	+/- 1.8E-04
Phase delay (usec)		3.29227569380E+02			-1.6600001E-07				-2.50494E-06	+/- 7.7E-08
Delay rate (us/s)		-3.49814170610E-02			-3.49813999324E-02				-1.71287E-08	+/- 3.7E-10
Total phase (deg)			-62.5		-1.95462984197E-07				-77.7	+/- 2.4
	RMS	Theor.	Amplitude	0.925 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	15.1	5.7	Search (2048X32)	0.887	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	13.2	10.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	10.1	3.4	Inc. seg. avg.	0.951	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	16.4	5.9	Inc. frq. avg.	0.934	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00	

l: az 65.4 el 63.4 pa -93.6 p: az 63.0 el 61.4 pa -95.1 u,v (fr/asec) 270.906 119.799 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lp..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lp.W.253.1W57LH

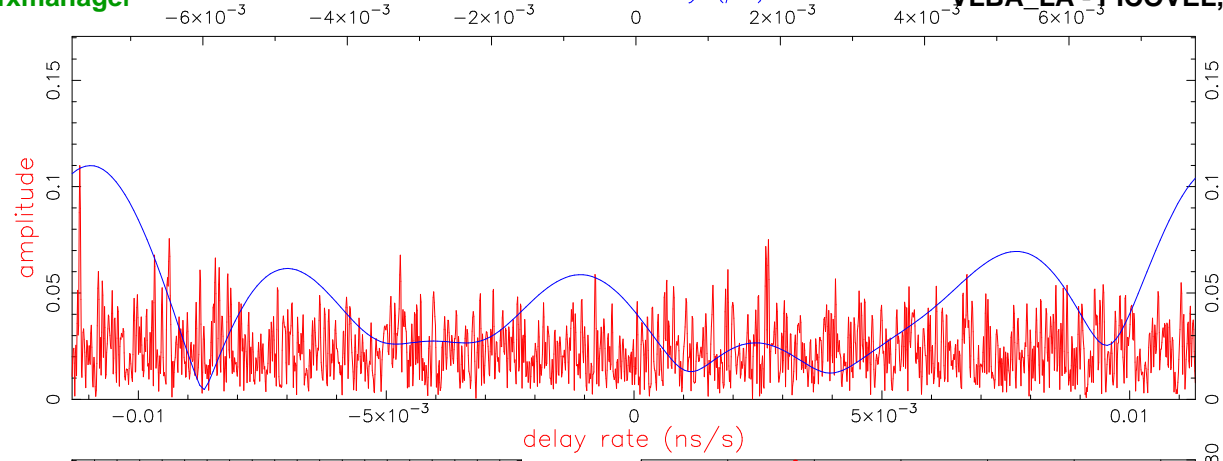
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

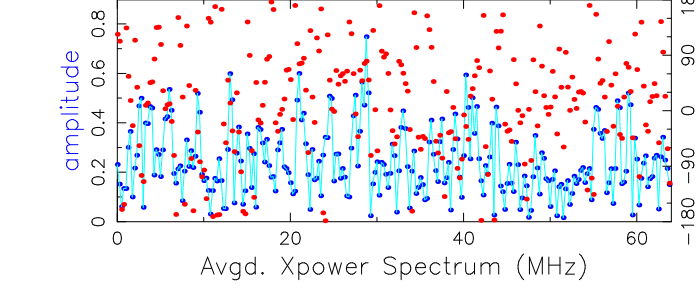
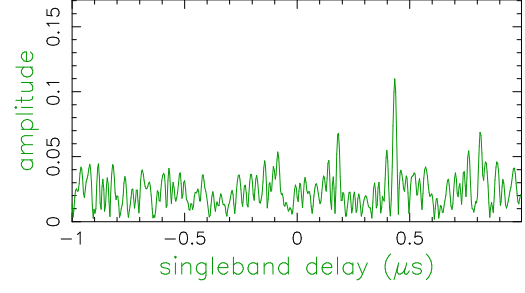
BLLAC.1W57LH, No0237, IP

VLBA_LA - PICOVEL, fgroup W, pol RR

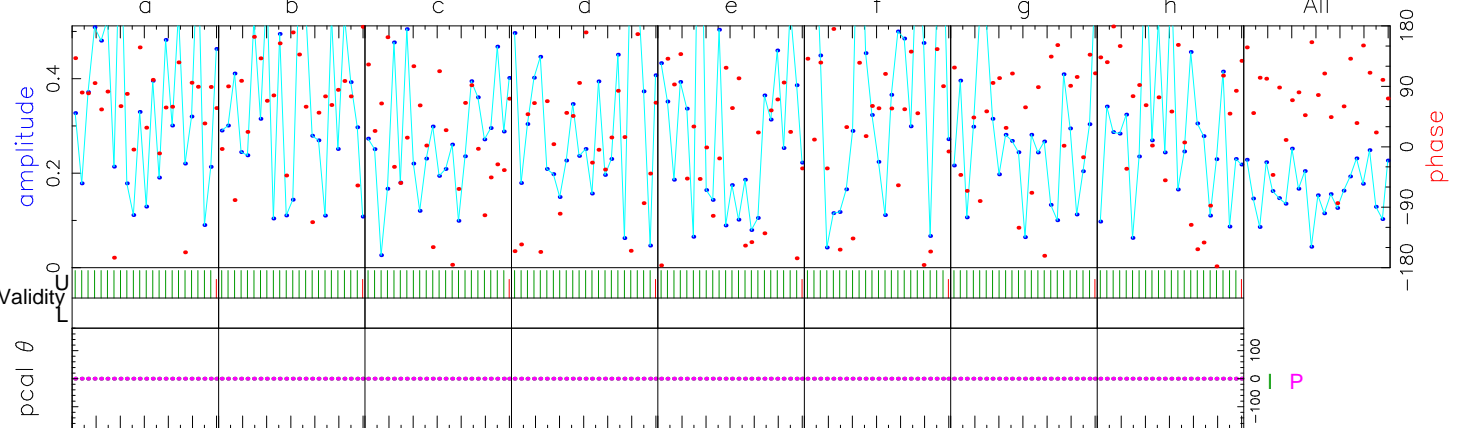
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 359.917
 Amp 0.171
 Phase 78.7
 PFD 9.5e-01
 Delays (us)
 SBD 0.433607
 MBD -0.007558
 Fringe rate (Hz)
 -0.965023
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134922
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	6.34837073182E+03		Apriori delay (usec)		6.34794079023E+03		Resid mbdelay (usec)		-7.55841E-03	+/- 1.9E-04
Sband delay (usec)	6.34837439748E+03		Apriori clock (usec)		-1.6325703E+00		Resid sbdelay (usec)		4.33607E-01	+/- 1.5E-03
Phase delay (usec)	6.34794079277E+03		Apriori clockrate (us/s)		3.1399997E-07		Resid phdelay (usec)		2.53811E-06	+/- 6.5E-07
Delay rate (us/s)	1.36142540237E+00		Apriori rate (us/s)		1.36143660533E+00		Resid rate (us/s)		-1.12030E-05	+/- 3.1E-09
Total phase (deg)			320.0		Apriori accel (us/s/s)		-3.51488594935E-05		78.7	+/- 20.1

ph/seg (deg) 58.1 48.2 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.6 84.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.4 28.4 Inc. seg. avg. 0.190 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 69.1 49.6 Inc. frq. avg. 0.168 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_coherence infinite dr window (ns/s) -0.011 0.011
 I: az 65.4 el 63.4 pa -93.6 P: az 298.9 el 37.8 pa 71.4 u,v (fr/asec) -10624.887 -2489.640 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IP..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IP.W.259.1W57LH

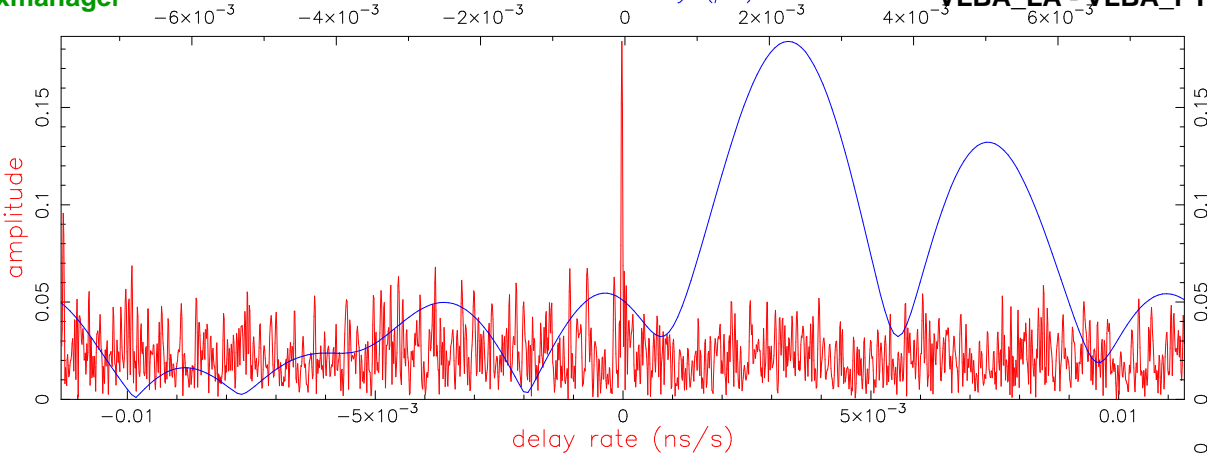
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, lp

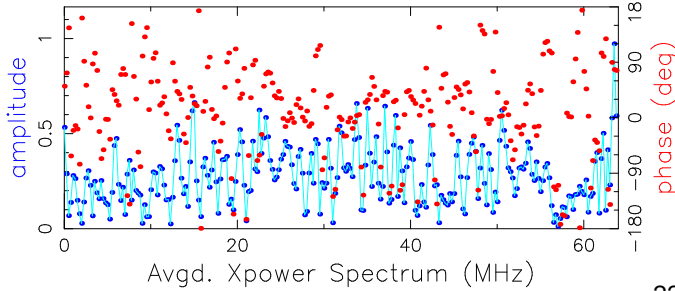
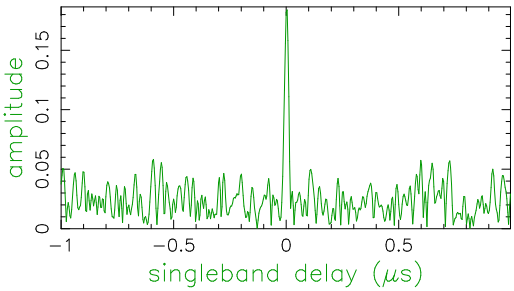
VLBA_LA - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



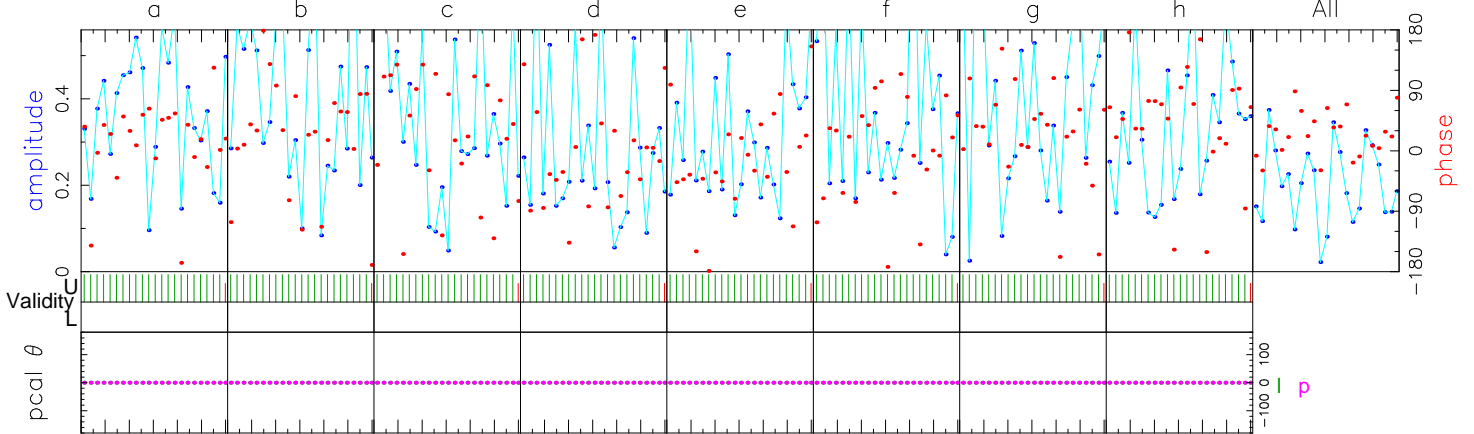
Fringe quality 9

SNR 9.7
 Int time 359.917
 Amp 0.187
 Phase 26.7
 PFD 1.6e-13
 Delays (us)
 SBD 0.002248
 MBD 0.002249
 Fringe rate (Hz)
 -0.001779
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134924
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	26.5	39.5	74.5	-3.9	-21.6	3.9	34.2	58.6	Phase	26.7
	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	257.7	257.9	410.2	375.2	257.1	257.4	258.3	258.0	Sbd box	257.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	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)	3.29229820925E+02		Apriori delay (usec)		3.29227571885E+02		Resid mbdelay (usec)		2.24904E-03	+/- 1.1E-04
Sband delay (usec)	3.29229819635E+02		Apriori clock (usec)		-8.1326160E+00		Resid sbdelay (usec)		2.24775E-03	+/- 8.9E-04
Phase delay (usec)	3.29227572744E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		8.59750E-07	+/- 3.8E-07
Delay rate (us/s)	-3.49814205790E-02		Apriori rate (us/s)		-3.49813999324E-02		Resid rate (us/s)		-2.06467E-08	+/- 1.8E-09
Total phase (deg)	41.8		Apriori accel (us/s/s)		-1.95462984197E-07		Resid phase (deg)		26.7	+/- 11.8

	RMS	Theor.	Amplitude	0.187 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	31.6	28.4	Search (2048X32)	0.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	48.8	49.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.9	16.7	Inc. seg. avg.	0.181	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.1	29.2	Inc. frq. avg.	0.197	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 65.4 el 63.4 pa -93.6 p: az 63.0 el 61.4 pa -95.1 u,v (fr/asec) 270.906 119.799 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lp..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lp.W.268.1W57LH

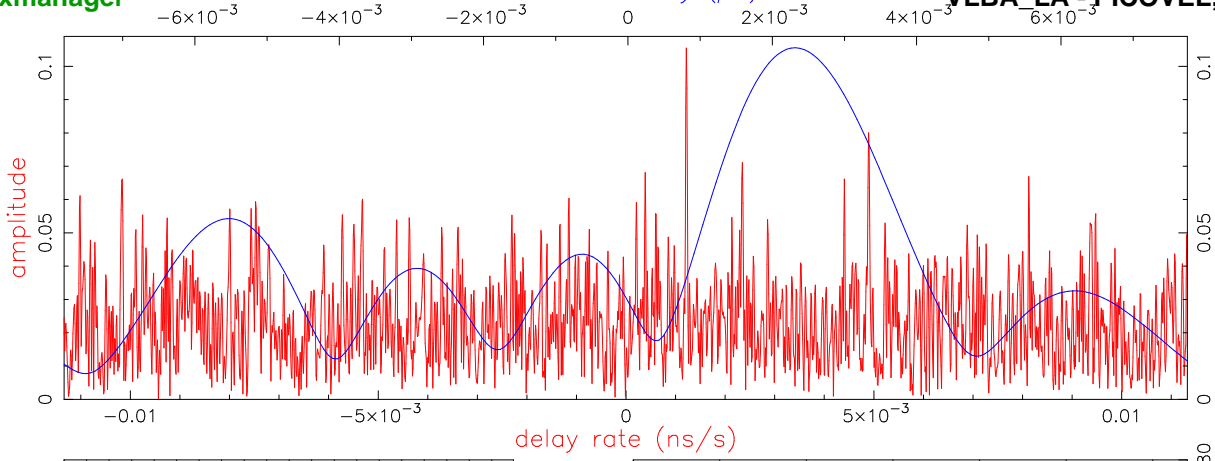
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IP

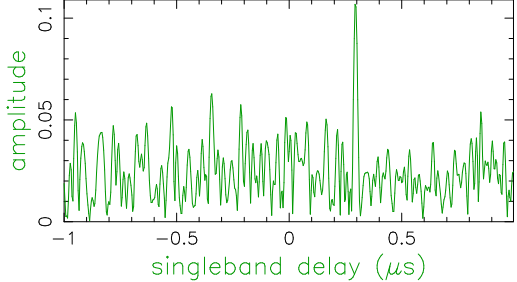
VLBA_LA - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

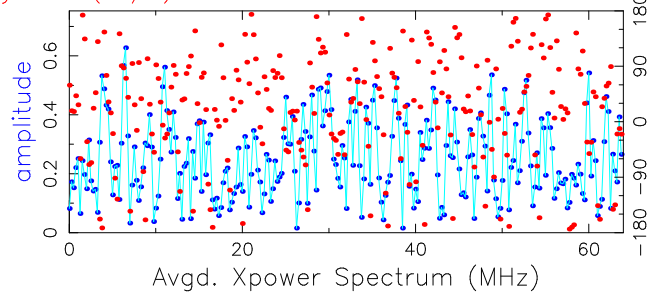


Fringe quality 0

SNR 5.6
Int time 359.917
Amp 0.109
Phase 175.9
PFD 9.9e-01
Delays (us)
SBD 0.294636
MBD 0.002264
Fringe rate (Hz) 0.104646
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

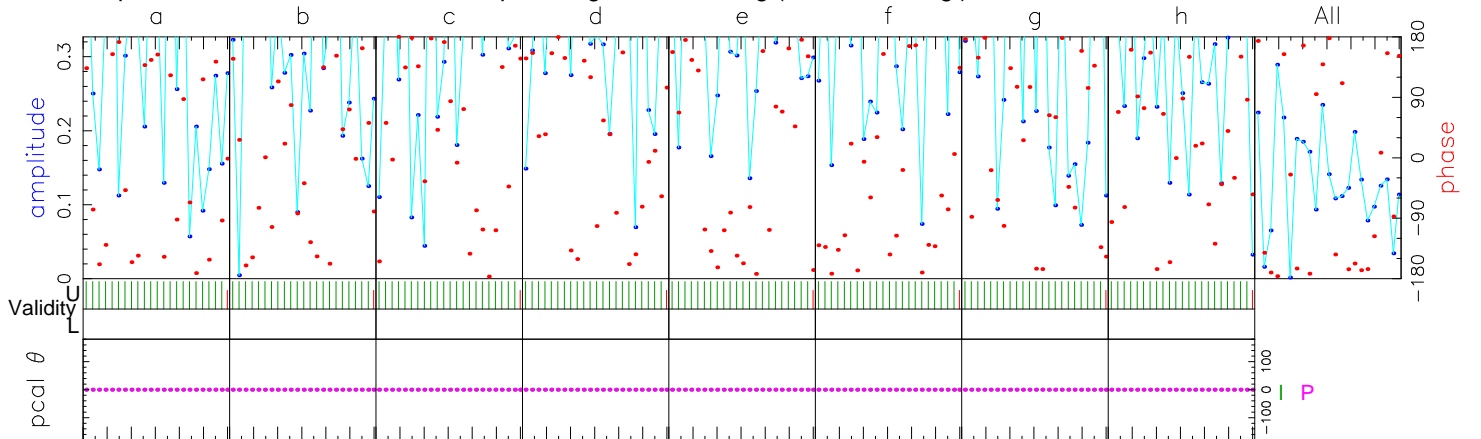


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124500.00
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134926
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		6.34823992933E+03		Apriori delay (usec)	6.34794079023E+03		Resid mbdelay (usec)	2.26410E-03	+/-	1.9E-04
Sband delay (usec)		6.34823542623E+03		Apriori clock (usec)	-1.6325703E+00		Resid sbdelay (usec)	2.94636E-01	+/-	1.5E-03
Phase delay (usec)		6.34794079590E+03		Apriori clockrate (us/s)	3.1399997E-07		Resid phdelay (usec)	5.67300E-06	+/-	6.6E-07
Delay rate (us/s)		1.36143782017E+00		Apriori rate (us/s)	1.36143660533E+00		Resid rate (us/s)	1.21484E-06	+/-	3.2E-09
Total phase (deg)			57.2	Apriori accel (us/s/s)	-3.51488594935E-05		Resid phase (deg)	175.9	+/-	20.4

	RMS	Theor.	Amplitude	0.109 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.0	48.8	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	69.8	85.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	49.7	28.8	Inc. seg. avg.	0.099	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.5	50.3	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 P: az 298.9 el 37.8 pa 71.4 u,v (fr/asec) -10624.887 -2489.640 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IP..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IP.W.280.1W57LH

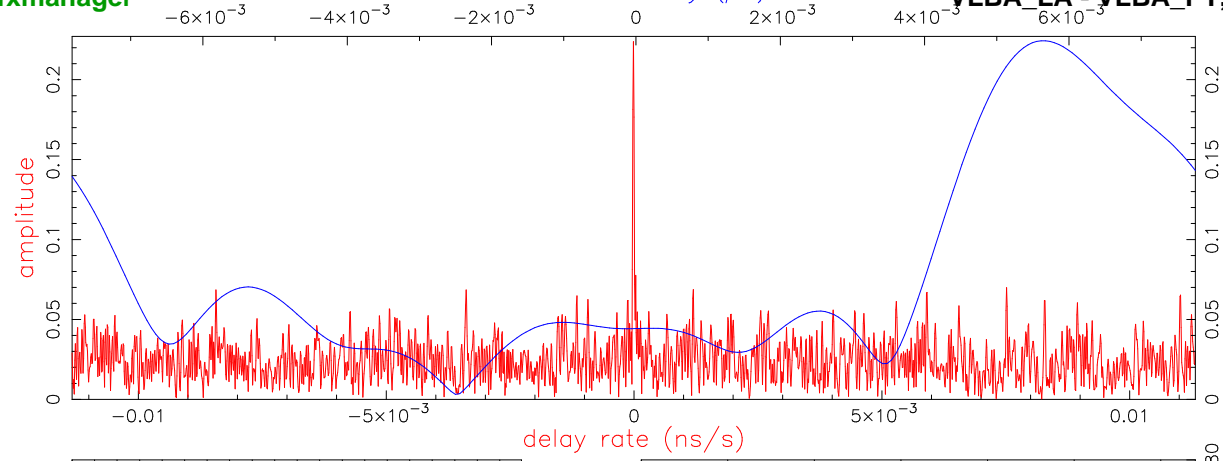
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

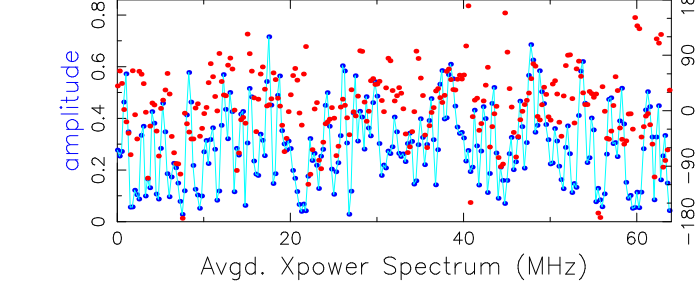
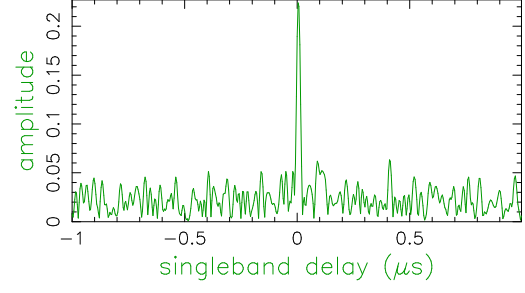
BLLAC.1W57LH, No0237, lp

VLBA_LA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

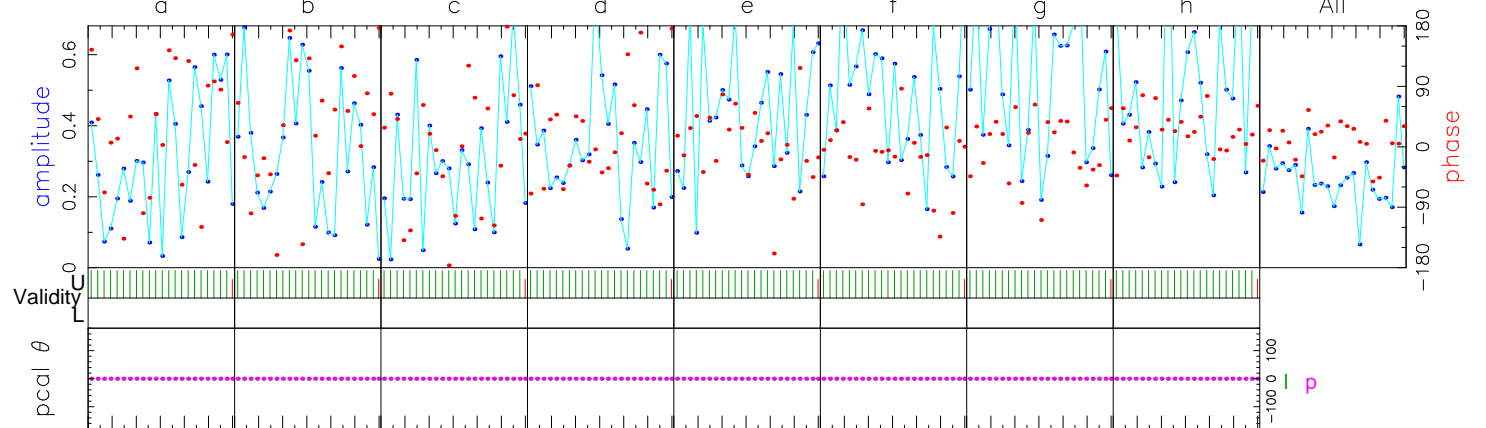


Fringe quality 9
 SNR 11.8
 Int time 359.917
 Amp 0.227
 Phase 10.8
 PFD 2.4e-23
 Delays (us)
 SBD 0.005477
 MBD 0.005741
 Fringe rate (Hz) -0.001428
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134927
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.29233313332E+02				3.29227571885E+02			Resid mbdelay (usec)	5.74145E-03 +/- 9.2E-05
Sband delay (usec)		3.29233048885E+02				-8.1326160E+00			Resid sbdelay (usec)	5.47700E-03 +/- 7.3E-04
Phase delay (usec)		3.29227572233E+02				-1.6600001E-07			Resid phdelay (usec)	3.48194E-07 +/- 3.1E-07
Delay rate (us/s)		-3.49814165140E-02				-3.49813999324E-02			Resid rate (us/s)	-1.65817E-08 +/- 1.5E-09
Total phase (deg)			26.0			-1.95462984197E-07			Resid phase (deg)	10.8 +/- 9.7
RMS	28.5	23.3		0.227 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	37.9	40.7		0.212					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.6	13.8		0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	62.9	24.0		0.232					Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
amp/frq (%)				0.241					Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
									nlags: 256	t_cohere infinite
										ion window (TEC) 0.00 0.00

l: az 65.4 el 63.4 pa -93.6 p: az 63.0 el 61.4 pa -95.1 u,v (fr/asec) 270.906 119.799 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/lp..1W57LH Output file: /Exps/c211a/v2/1234/No0237/lp.W.288.1W57LH

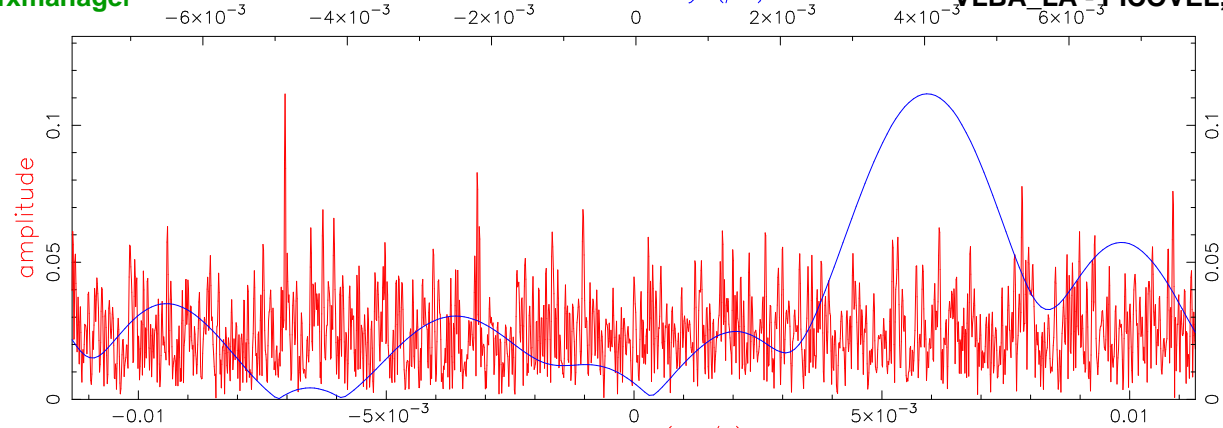
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

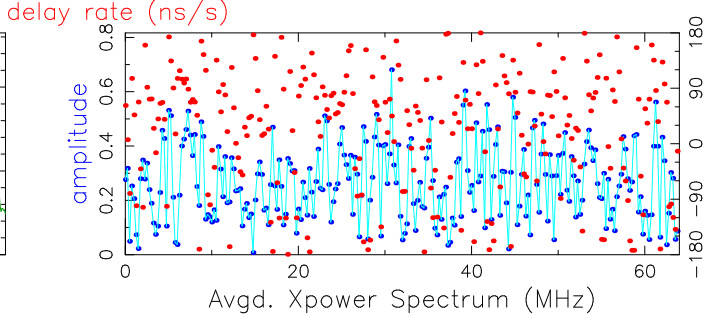
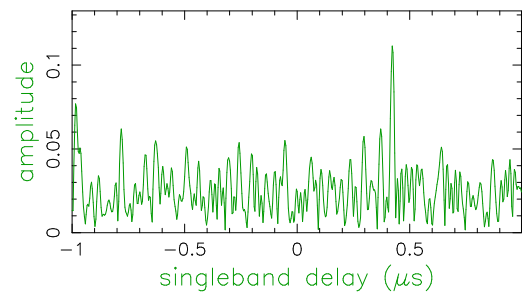
BLLAC.1W57LH, No0237, IP

VLBA_LA - PICOVEL, fgroup W, pol RL

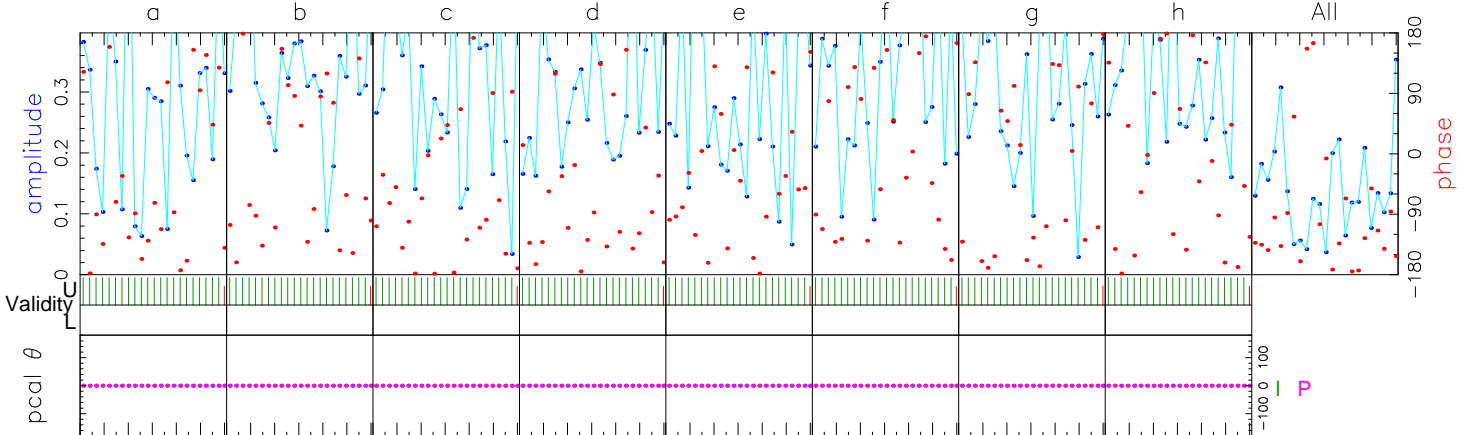
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 359.917
 Amp 0.132
 Phase -133.2
 PFD 7.6e-01
 Delays (us)
 SBD 0.423079
 MBD 0.004080
 Fringe rate (Hz) -0.607624
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134929
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	6.34836674474E+03	Apriori delay (usec)	6.34794079023E+03	Resid mbdelay (usec)	4.07951E-03	+/-	1.9E-04
Sband delay (usec)	6.34836386923E+03	Apriori clock (usec)	-1.6325703E+00	Resid sbdelay (usec)	4.23079E-01	+/-	1.5E-03
Phase delay (usec)	6.34794078593E+03	Apriori clockrate (us/s)	3.1399997E-07	Resid phdelay (usec)	-4.29421E-06	+/-	6.3E-07
Delay rate (us/s)	1.36142955142E+00	Apriori rate (us/s)	1.36143660533E+00	Resid rate (us/s)	-7.05391E-06	+/-	3.1E-09
Total phase (deg)	108.1	Apriori accel (us/s/s)	-3.51488594935E-05	Resid phase (deg)	-133.2	+/-	19.7

ph/seg (deg)	58.8	Theor.	47.2	Amplitude	0.132 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	71.1		82.3	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	29.5		27.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	18.7		48.5	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.130	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 P: az 298.9 el 37.8 pa 71.4 u, v (fr/asec) -10624.887 -2489.640 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IP..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IP.W.300.1W57LH

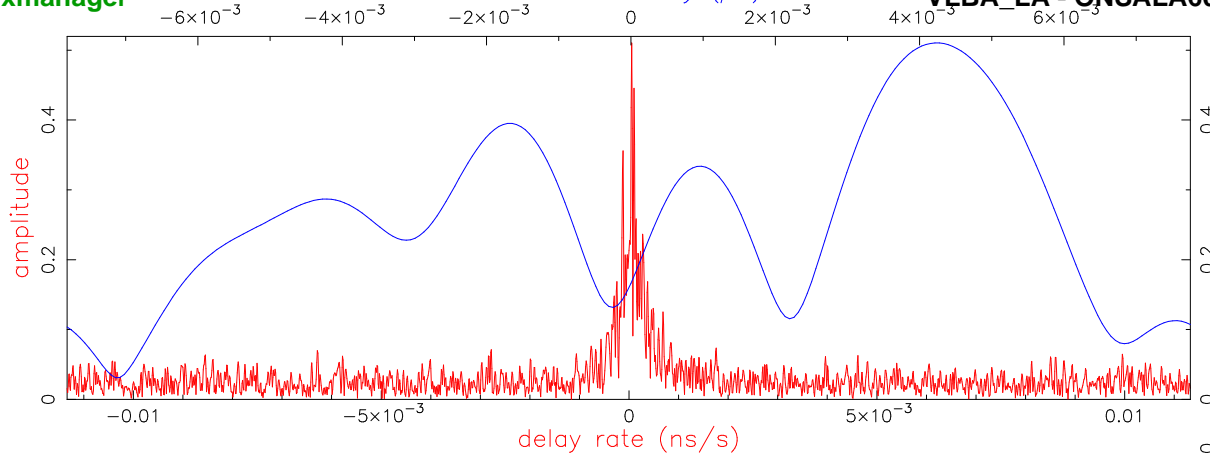
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IX

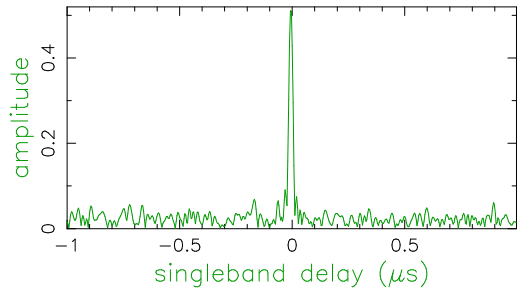
VLBA_LA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

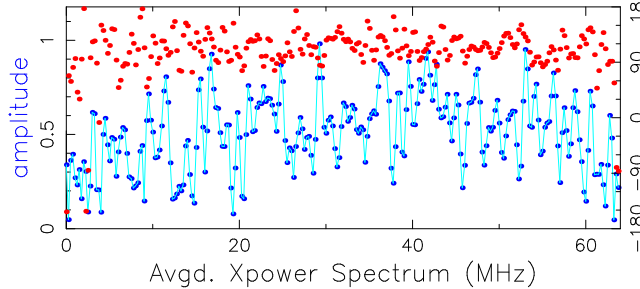


Fringe quality 5

SNR 27.0
 Int time 359.899
 Amp 0.520
 Phase -2.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.005960
 MBD 0.004233
 Fringe rate (Hz)
 0.004585
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

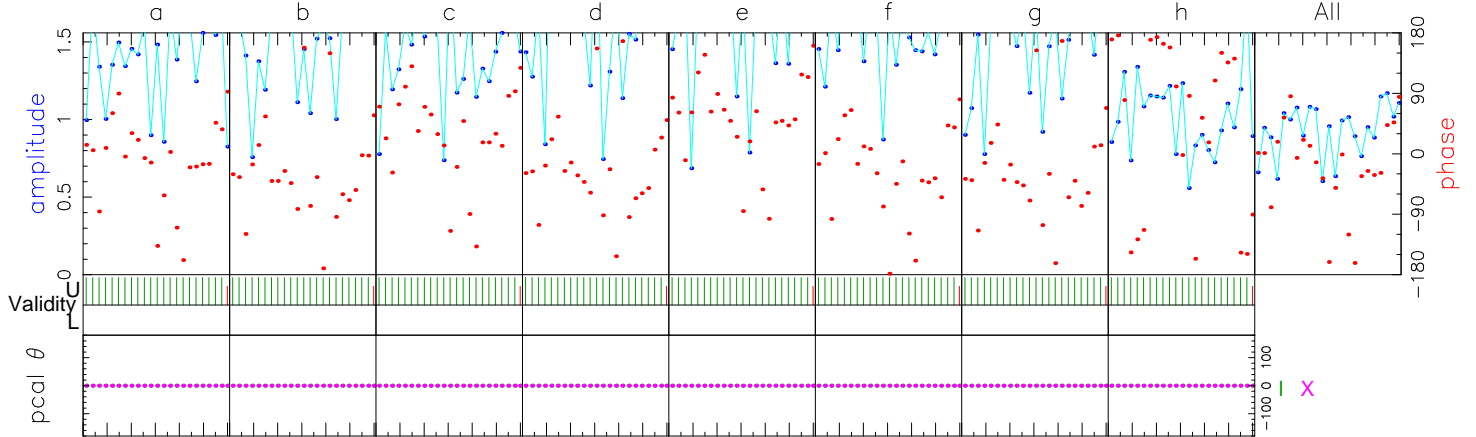


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134918
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

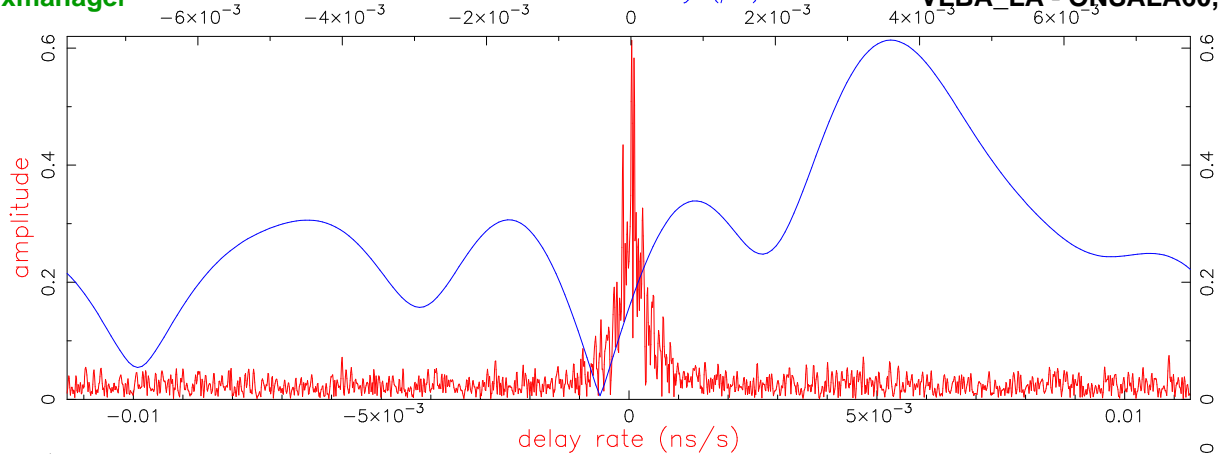
Group delay (usec)(sbd)	6.43420432992E+03	Apriori delay (usec)	6.43421572196E+03	Resid mbdelay (usec)	4.23296E-03	+/-	4.0E-05
Sband delay (usec)	6.43420976196E+03	Apriori clock (usec)	-5.9004478E+01	Resid sbdelay (usec)	-5.96000E-03	+/-	3.2E-04
Phase delay (usec)	6.43421572188E+03	Apriori clockrate (us/s)	-8.1400002E-07	Resid phdelay (usec)	-8.18701E-03	+/-	1.4E-07
Delay rate (us/s)	1.11509082626E+00	Apriori rate (us/s)	1.11509077304E+00	Resid rate (us/s)	5.32219E-08	+/-	6.6E-10
Total phase (deg)	101.7	Apriori accel (us/s/s)	-5.41410961402E-05	Resid phase (deg)	-2.5	+/-	4.2

ph/seg (deg)	66.0	RMS	10.2	Theor.	10.2	Amplitude	0.520 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.0	Search (2048X32)	0.502	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	81.3	Inc. seg. avg.	0.914	Inc. frq. avg.	0.793	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	58.0	Inc. frq. avg.	0.793	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	
										ion window (TEC)	0.00	0.00

I: az 65.4 el 63.4 pa -93.6 X: az 292.6 el 37.1 pa 42.1 u,v (fr/asec) -8757.258 -5445.911 simultaneous interpolator

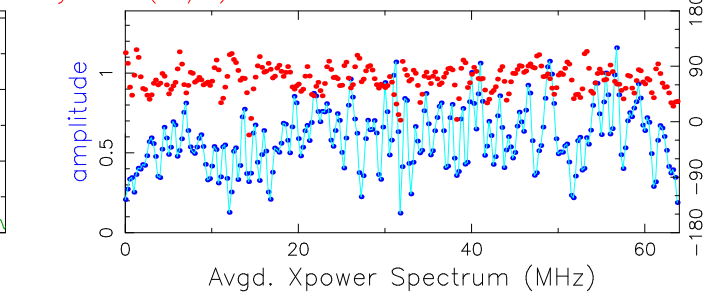
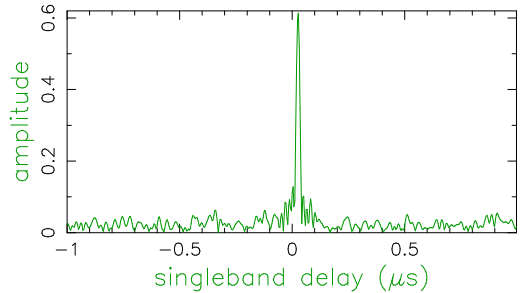
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IX..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IX.W.246.1W57LH

multiband delay (μ s)

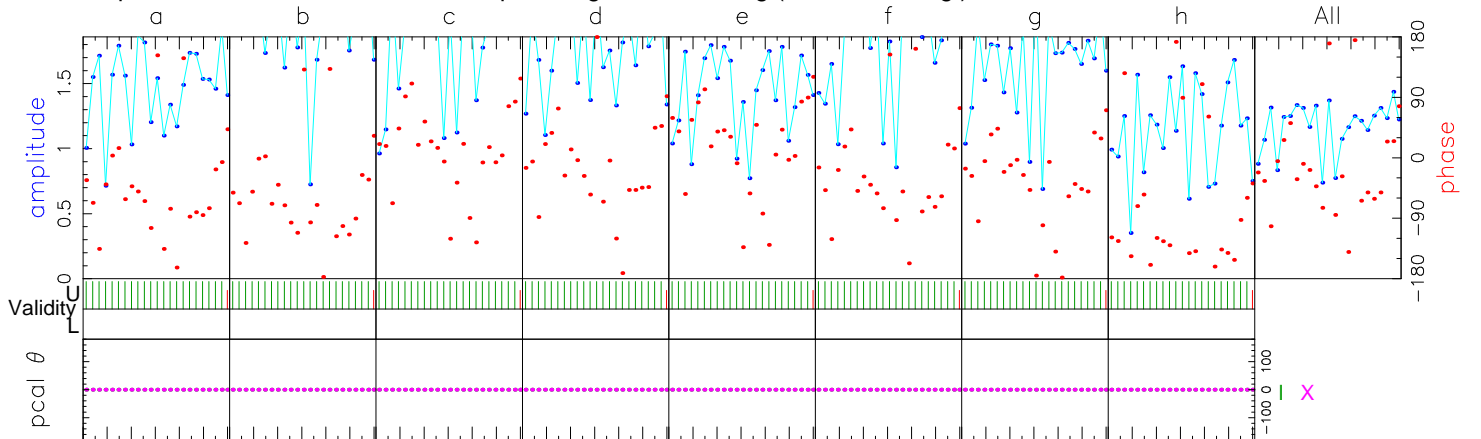


Fringe quality 3

SNR 32.2
 Int time 359.899
 Amp 0.620
 Phase -32.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.026025
 MBD 0.003556
 Fringe rate (Hz)
 0.004551
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124500.00
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134922
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-64.6	-74.2	21.0	-17.3	34.3	-41.3	-23.2	-138.1		Phase
	0.8	1.1	1.0	1.0	0.7	0.9	0.9	0.6		Ampl.
	263.7	263.9	263.8	263.1	262.5	263.1	262.8	261.8		Sbd box
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		APs used
I	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
I	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	6.43423490289E+03		Apriori delay (usec)		6.43421572196E+03		Resid mbdelay (usec)		3.55593E-03	+/- 3.4E-05
Sband delay (usec)	6.43424174696E+03		Apriori clock (usec)		-5.9004478E+01		Resid sbdelay (usec)		2.60250E-02	+/- 2.7E-04
Phase delay (usec)	6.43421572090E+03		Apriori clockrate (us/s)		-8.1400002E-07		Resid phdelay (usec)		-1.05568E-06	+/- 1.1E-07
Delay rate (us/s)	1.11509082587E+00		Apriori rate (us/s)		1.11509077304E+00		Resid rate (us/s)		5.28322E-08	+/- 5.5E-10
Total phase (deg)	71.5		Apriori accel (us/s/s)		-5.41410961402E-05		Resid phase (deg)		-32.7	+/- 3.6

	RMS	Theor.	Amplitude	0.620 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.8	8.5	Search (2048X32)	0.600	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	94.0	14.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	60.0	5.0	Inc. seg. avg.	1.158	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	47.4	8.8	Inc. frq. avg.	0.874	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 X: az 292.6 el 37.1 pa 42.1 u,v (fr/asec) -8757.258 -5445.911 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IX..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IX.W.262.1W57LH

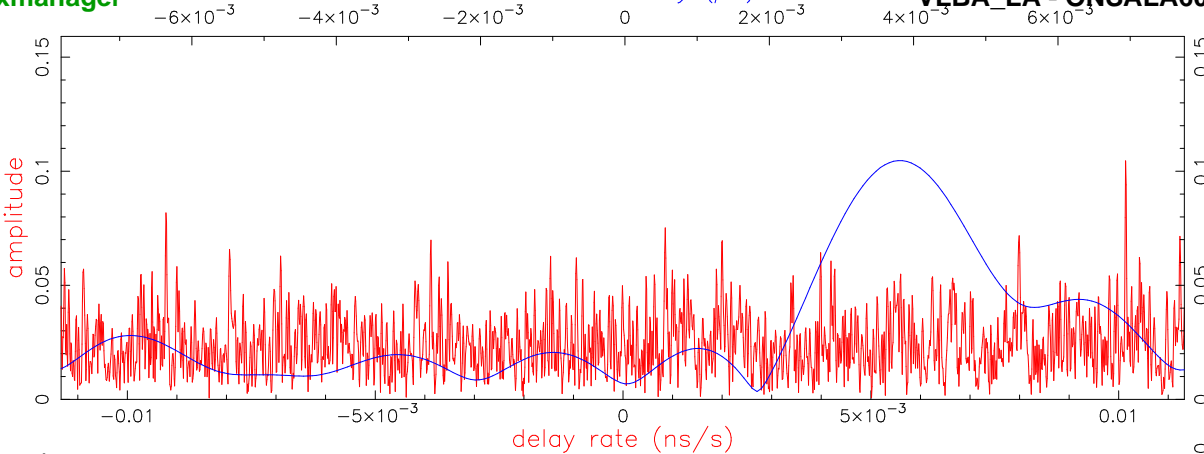
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IX

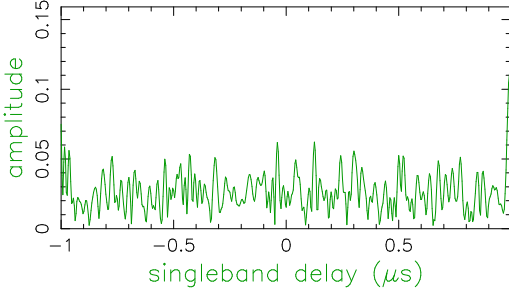
VLBA_LA - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

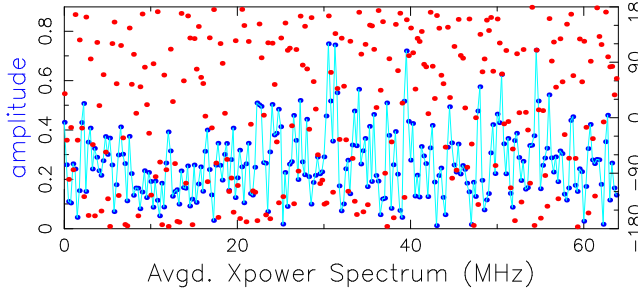


Fringe quality 0

SNR 5.8
Int time 359.899
Amp 0.159
Phase 13.7
PFD 8.3e-01
Delays (us)
SBD 0.992056
MBD 0.003857
Fringe rate (Hz)
0.874595
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

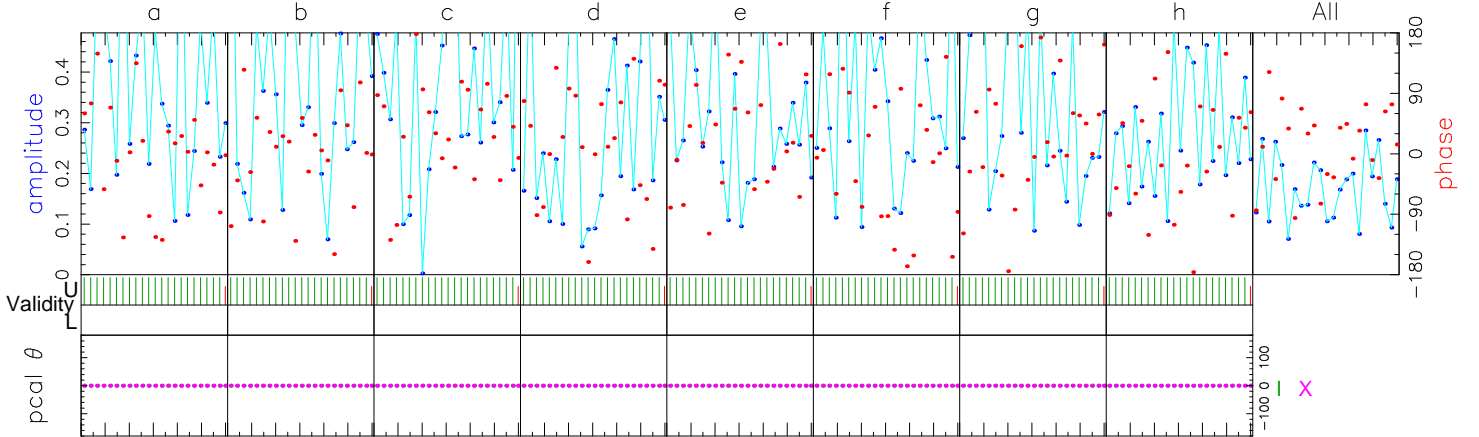


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 124500.00
Stop 125059.94
FRT 124816.00
Corr/FF/build
2021:286:092156
2021:286:134925
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-9.3	8.9	32.4	36.8	19.3	41.0	4.5	-17.5	Phase	13.7
	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	213.8	509.5	287.8	424.7	318.6	139.3	245.2	327.2	Sbd box	511.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	6.43520395402E+03	Apriori delay (usec)	6.43421572196E+03	Resid mbdelay (usec)	3.85706E-03	+/-	1.9E-04
Sband delay (usec)	6.43520777821E+03	Apriori clock (usec)	-5.9004478E+01	Resid sbdelay (usec)	9.92056E-01	+/-	1.5E-03
Phase delay (usec)	6.43421572240E+03	Apriori clockrate (us/s)	-8.1400002E-07	Resid phdelay (usec)	4.40851E-07	+/-	6.4E-07
Delay rate (us/s)	1.11510092622E+00	Apriori rate (us/s)	1.11509077304E+00	Resid rate (us/s)	1.01532E-05	+/-	3.1E-09
Total phase (deg)	117.9	Apriori accel (us/s/s)	-5.41410961402E-05	Resid phase (deg)	13.7	+/-	19.8

ph/seg (deg)	RMS 56.4	Theor. 47.5	Amplitude Search (2048X32)	0.159 +/- 0.027	0.110	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	77.4	82.8	Interp.	0.000	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	23.4	28.0	Inc. seg. avg.	0.181	0.110	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	30.0	48.9	Inc. frq. avg.	0.141	0.110	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 X: az 292.6 el 37.1 pa 42.1 u,v (fr/asec) -8757.258 -5445.911 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IX..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IX.W.278.1W57LH

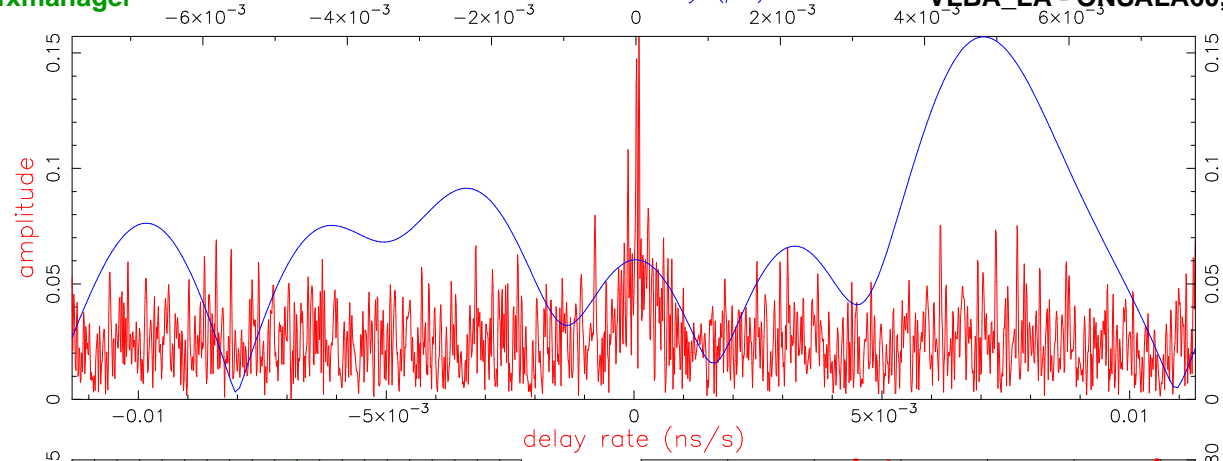
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IX

VLBA_LA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 9

SNR 8.2

Int time 359.899

Amp 0.157

Phase -77.4

PFD 1.2e-07

Delays (us)

SBD -0.004333

MBD 0.004805

Fringe rate (Hz)

0.008478

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:114

Start 124500.00

Stop 125059.94

FRT 124816.00

Corr/FF/build

2021:286:092156

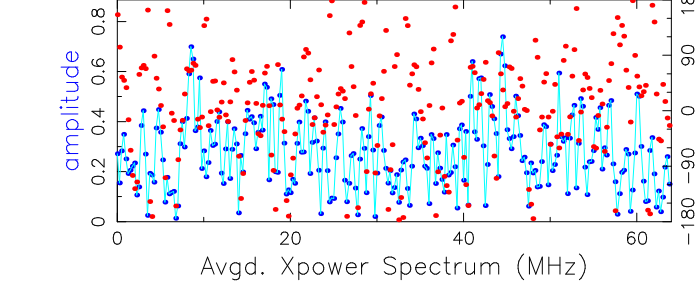
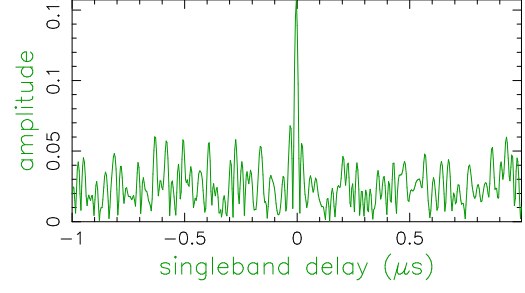
2021:286:134929

2021:252:122852

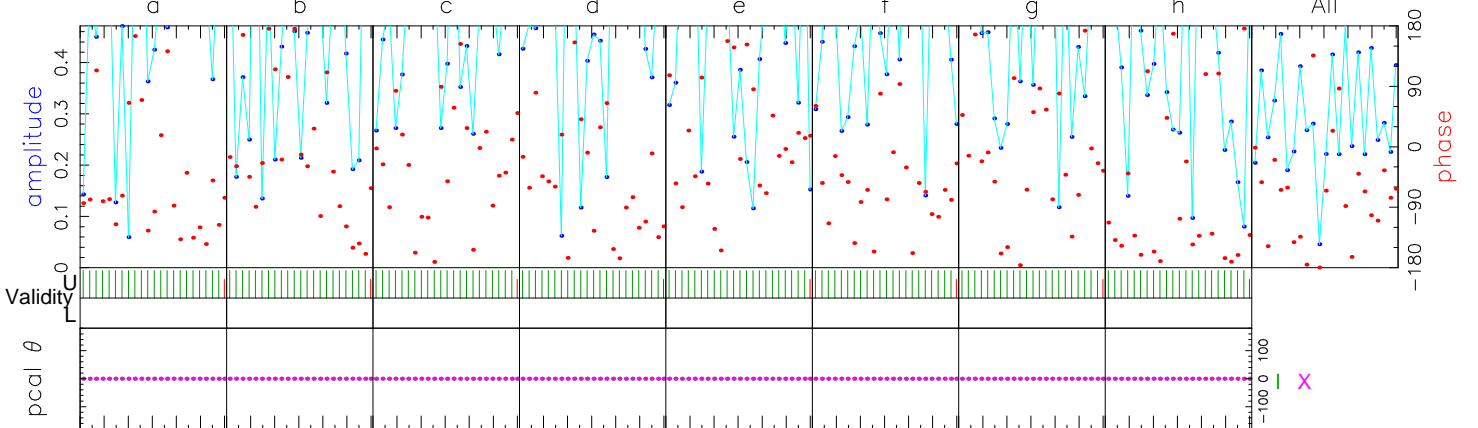
RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.0	-86.8	-28.1	-100.2	-27.9	-71.4	-19.0	-148.7	Phase	-77.4
	0.3	0.1	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	255.6	360.7	202.2	255.5	254.7	255.3	341.9	252.5	Sbd box	255.9
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	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)	6.43420490231E+03		Apriori delay (usec)		6.43421572196E+03		Resid mbdelay (usec)		4.80535E-03	+/- 1.3E-04
Sband delay (usec)	6.43421138921E+03		Apriori clock (usec)		-5.9004478E+01		Resid sbdelay (usec)		-4.33275E-03	+/- 1.1E-03
Phase delay (usec)	6.43421571946E+03		Apriori clockrate (us/s)		-8.1400002E-07		Resid phdelay (usec)		-2.49677E-06	+/- 4.5E-07
Delay rate (us/s)	1.11509087145E+00		Apriori rate (us/s)		1.11509077304E+00		Resid rate (us/s)		9.84158E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.41410961402E-05		Resid phase (deg)		-77.4	+/- 14.1

	RMS	Theor.	Amplitude	0.157 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	70.9	33.7	Search (2048X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	109.9	58.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	49.4	19.9	Inc. seg. avg.	0.252	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.8	34.7	Inc. frq. avg.	0.196	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 65.4 el 63.4 pa -93.6 X: az 292.6 el 37.1 pa 42.1 u,v (fr/asec) -8757.258 -5445.911 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IX..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IX.W.297.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

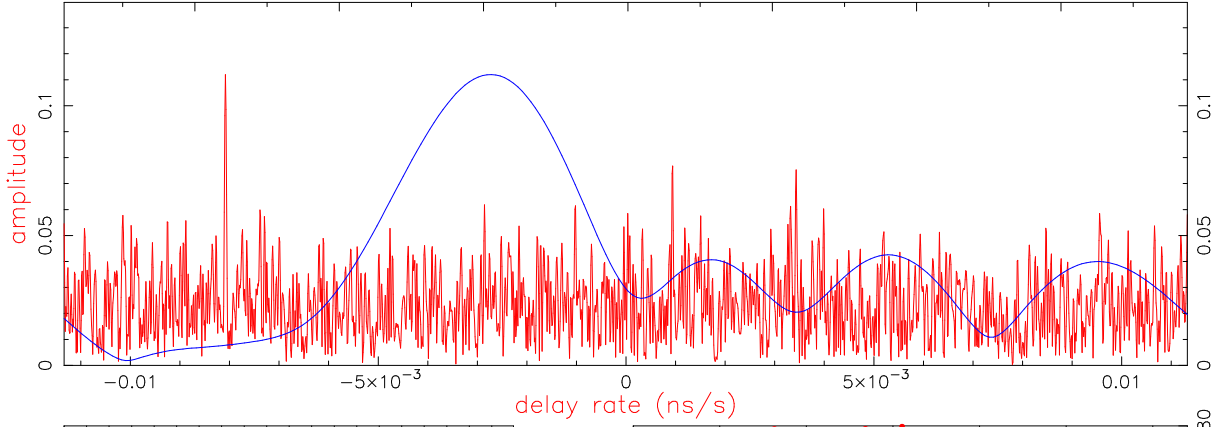
BLLAC.1W57LH, No0237, IZ

VLBA_LA - METSAHOV, fgroup W, pol LL

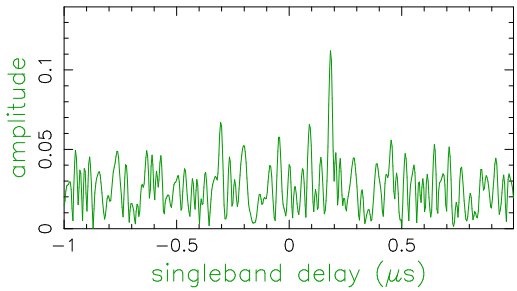
multiband delay (μ s)

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

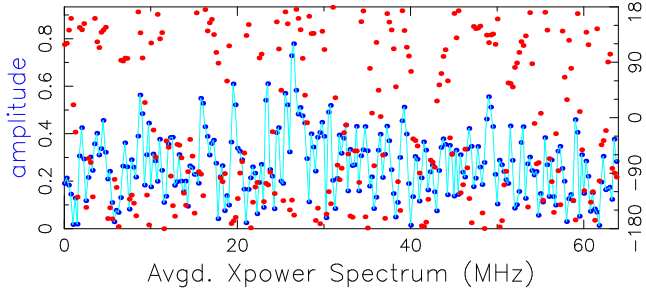
Fringe quality 0



SNR 5.7
 Int time 345.932
 Amp 0.140
 Phase 167.1
 PFD 9.4e-01
 Delays (us)
 SBD 0.184234
 MBD -0.001893
 Fringe rate (Hz)
 -0.697528
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

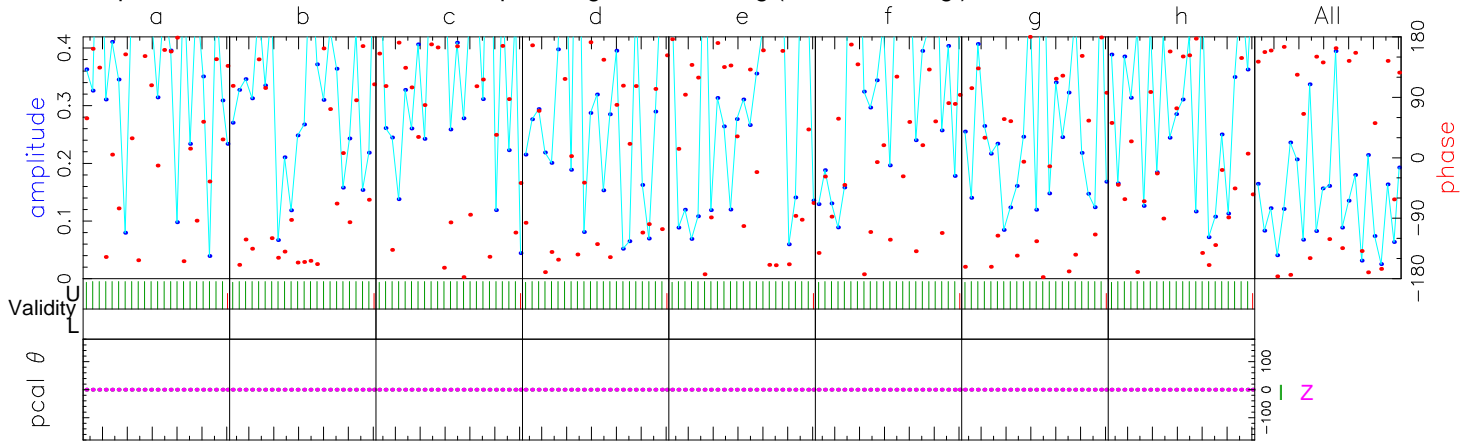


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124513.31
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134919
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	142.1	-169.4	167.8	174.7	-177.2	94.8	171.1	-129.7	Phase	167.1
	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.0	Ampl.	0.1
	336.9	311.3	305.0	282.6	72.0	394.2	94.3	63.2	Sbd box	304.2
U/L	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	7.87172453934E+03	Apriori delay (usec)	7.87153893202E+03	Resid mbdelay (usec)	-1.89268E-03	+/-	1.9E-04
Sband delay (usec)	7.87172316627E+03	Apriori clock (usec)	-1.8822308E+00	Resid sbdelay (usec)	1.84234E-01	+/-	1.5E-03
Phase delay (usec)	7.87153893741E+03	Apriori clockrate (us/s)	-3.0200002E-07	Resid phdelay (usec)	5.39009E-06	+/-	6.5E-07
Delay rate (us/s)	1.06235308765E+00	Apriori rate (us/s)	1.06236118526E+00	Resid rate (us/s)	-8.09761E-06	+/-	3.2E-09
Total phase (deg)	24.6	Apriori accel (us/s/s)	-6.34265883661E-05	Resid phase (deg)	167.1	+/-	20.1

ph/seg (deg)	52.4	Theor.	48.1	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	86.2		84.0	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	42.3		28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.0		49.5	Inc. seg. avg.	0.133	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.139	Data rate(Mb/s): 2048	nlags: 256			

I: az 65.4 el 63.4 pa -93.6 Z: az 299.6 el 32.6 pa 35.9 u,v (fr/asec) -8368.100 -6284.329 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IZ..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IZ.W.248.1W57LH

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

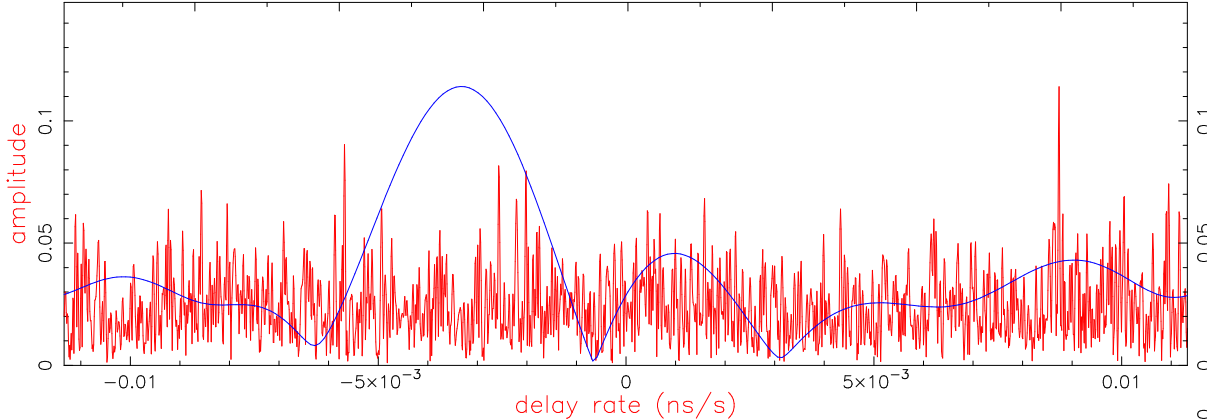
BLLAC.1W57LH, No0237, IZ

VLBA_LA - METSAHOV, fgroup W, pol RR

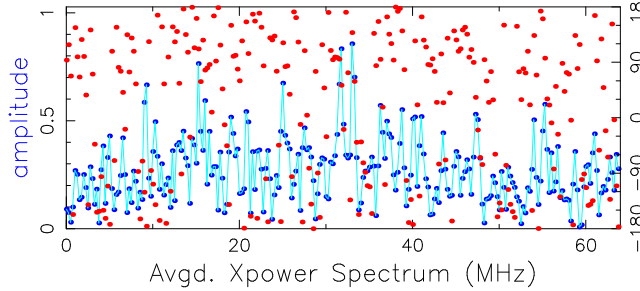
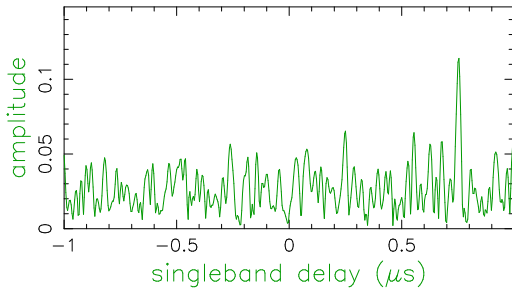
multiband delay (μ s)

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

Fringe quality 0

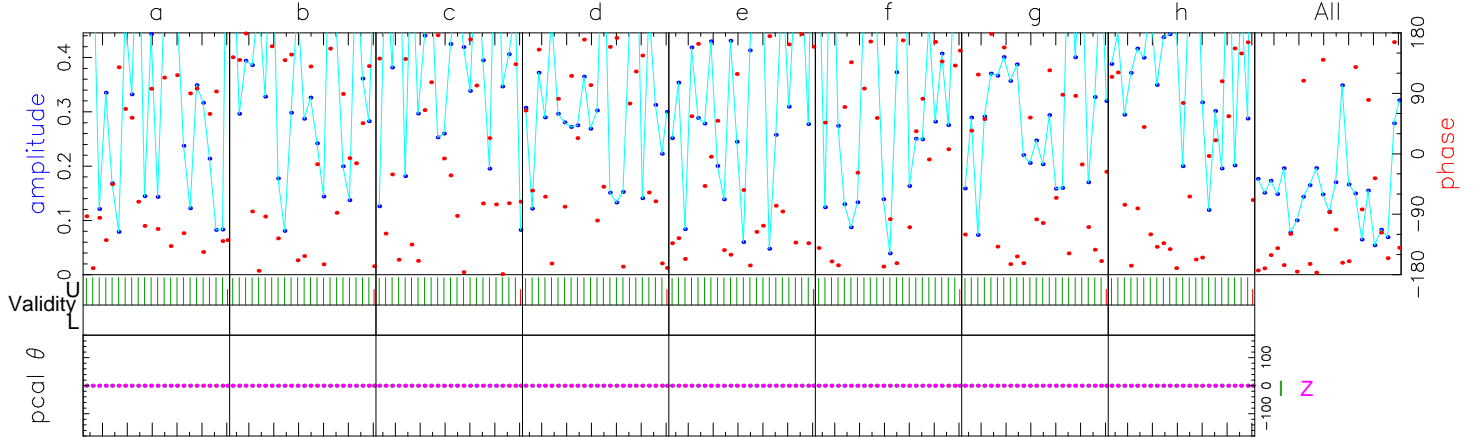


SNR 5.8
 Int time 345.932
 Amp 0.148
 Phase -166.7
 PFD 7.4e-01
 Delays (us)
 SBD 0.752684
 MBD -0.002343
 Fringe rate (Hz)
 0.753169
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124513.31
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134923
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.6	176.4	-142.0	170.8	-138.4	155.4	-159.1	-154.3	Phase	-166.7
	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1
	274.0	78.0	25.0	432.2	280.7	320.4	511.5	446.4	Sbd box	449.7
U/L	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.87228658865E+03		Apriori delay (usec)		7.87153893202E+03		Resid mbdelay (usec)		-2.34337E-03	+/- 1.9E-04
Sband delay (usec)	7.87229161577E+03		Apriori clock (usec)		-1.8822308E+00		Resid sbdelay (usec)		7.52684E-01	+/- 1.5E-03
Phase delay (usec)	7.87153892664E+03		Apriori clockrate (us/s)		-3.0200002E-07		Resid phdelay (usec)		-5.37458E-06	+/- 6.3E-07
Delay rate (us/s)	1.06236992880E+00		Apriori rate (us/s)		1.06236118526E+00		Resid rate (us/s)		8.74354E-06	+/- 3.2E-09
Total phase (deg)	50.8		Apriori accel (us/s/s)		-6.34265883661E-05		Resid phase (deg)		-166.7	+/- 19.6

	RMS	Theor.	Amplitude	0.148 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	54.7	47.1	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	71.7	82.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	25.3	27.8	Inc. seg. avg.	0.151	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	38.0	48.5	Inc. frq. avg.	0.144	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

I: az 65.4 el 63.4 pa -93.6 Z: az 299.6 el 32.6 pa 35.9 u,v (fr/asec) -8368.100 -6284.329 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IZ..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IZ.W.265.1W57LH

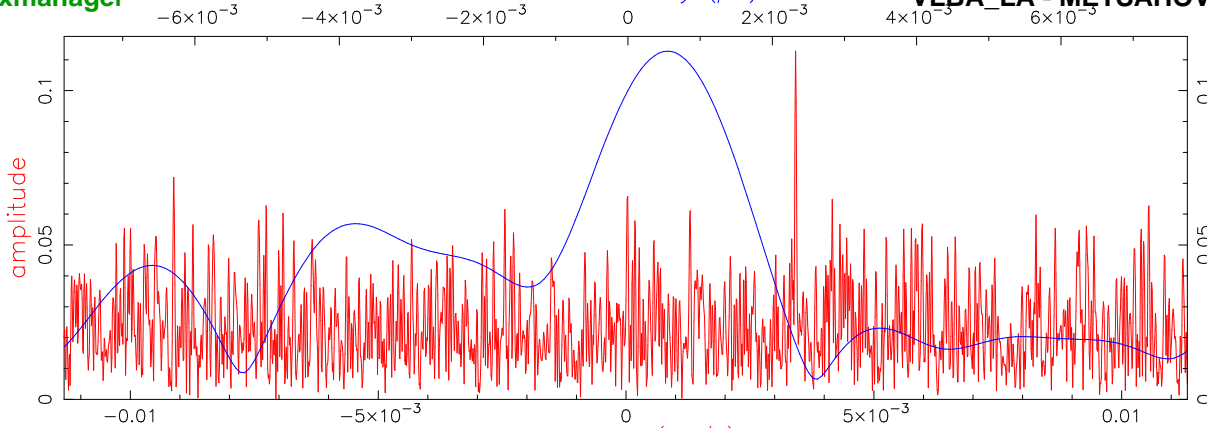
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W57LH, No0237, IZ

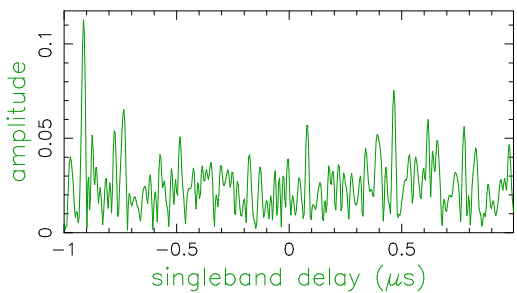
VLBA_LA - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

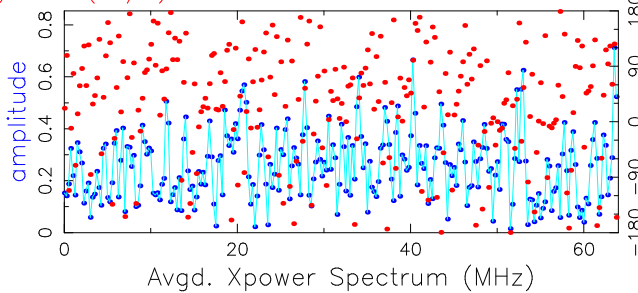


Fringe quality 0

SNR 5.8
 Int time 345.932
 Amp 0.118
 Phase -18.2
 PFD 8.8e-01
 Delays (us)
 SBD -0.913291
 MBD 0.000562
 Fringe rate (Hz)
 0.294774
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

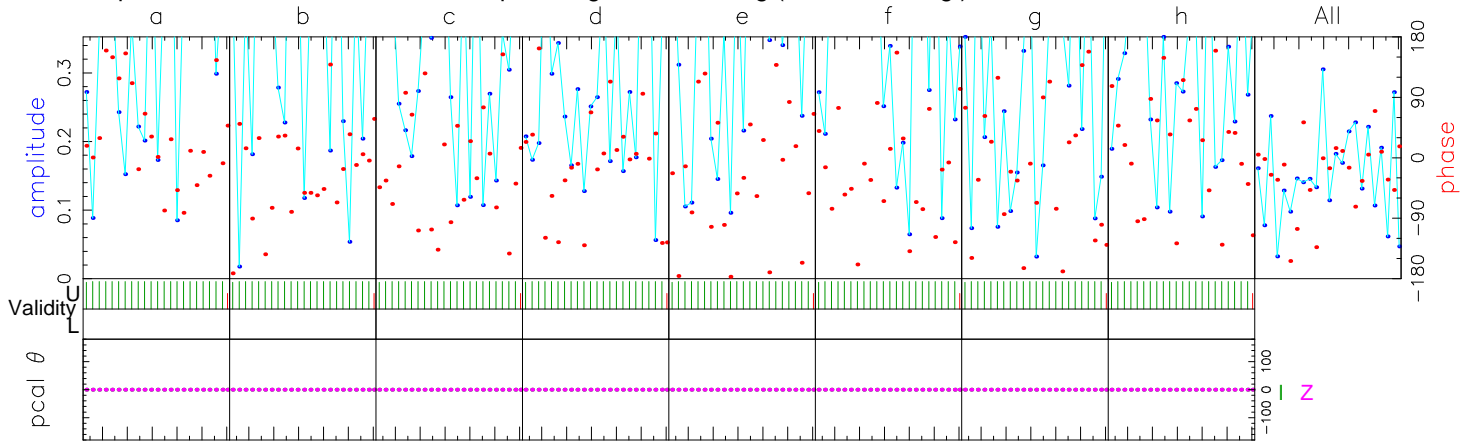


delay rate (ns/s)



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 2021:114
 FRT 124513.31
 125059.94
 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134926
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	7.87063324409E+03	Apriori delay (usec)	7.87153893202E+03	Resid mbdelay (usec)	5.62069E-04	+/-	1.9E-04
Sband delay (usec)	7.87062564127E+03	Apriori clock (usec)	-1.8822308E+00	Resid sbdelay (usec)	-9.13291E-01	+/-	1.5E-03
Phase delay (usec)	7.87153893143E+03	Apriori clockrate (us/s)	-3.0200002E-07	Resid phdelay (usec)	-5.86522E-07	+/-	6.4E-07
Delay rate (us/s)	1.06236460730E+00	Apriori rate (us/s)	1.06236118526E+00	Resid rate (us/s)	3.42203E-06	+/-	3.2E-09
Total phase (deg)	199.3	Apriori accel (us/s/s)	-6.34265883661E-05	Resid phase (deg)	-18.2	+/-	19.9

ph/seg (deg)	52.6	Theor.	47.7	Amplitude	0.118 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	71.0	Search (2048X32)	0.111	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	31.5	Inc. seg. avg.	0.120	Inc. frq. avg.	0.116	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	50.0	Inc. frq. avg.	0.116			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

I: az 65.4 el 63.4 pa -93.6 Z: az 299.6 el 32.6 pa 35.9 u,v (fr/asec) -8368.100 -6284.329 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IZ..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IZ.W.284.1W57LH

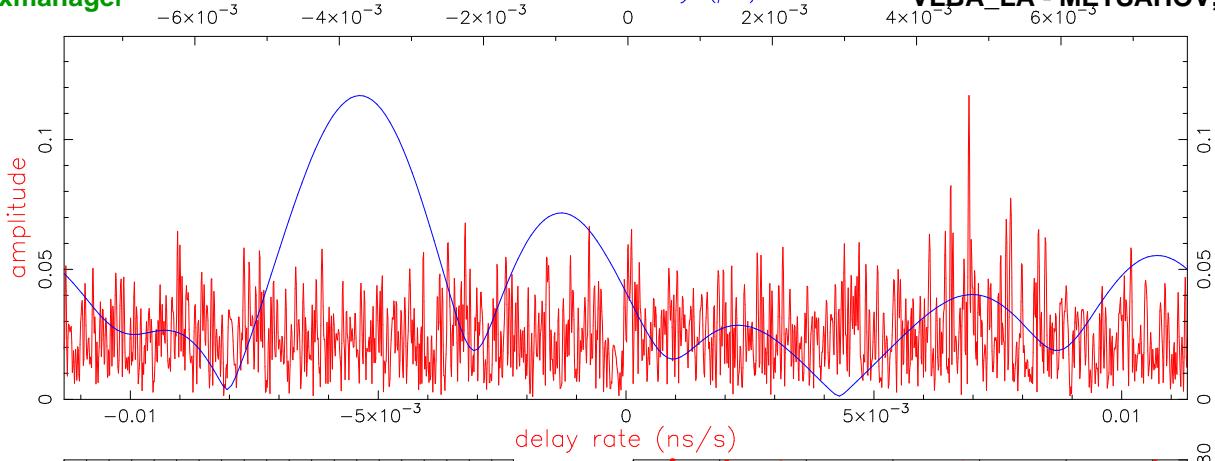
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

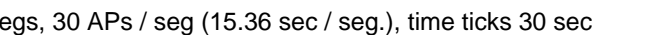
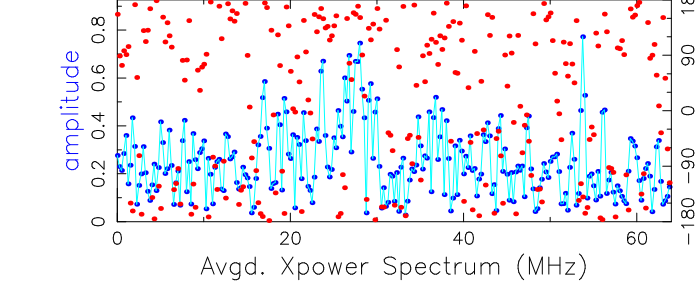
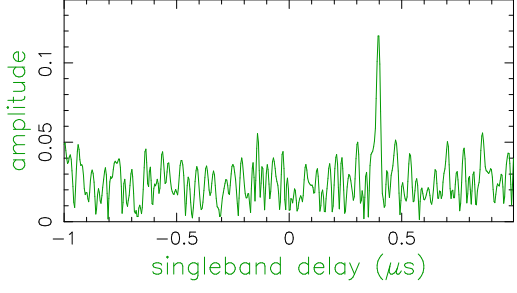
BLLAC.1W57LH, No0237, IZ

VLBA_LA - METSAHOV, fgroup W, pol RL

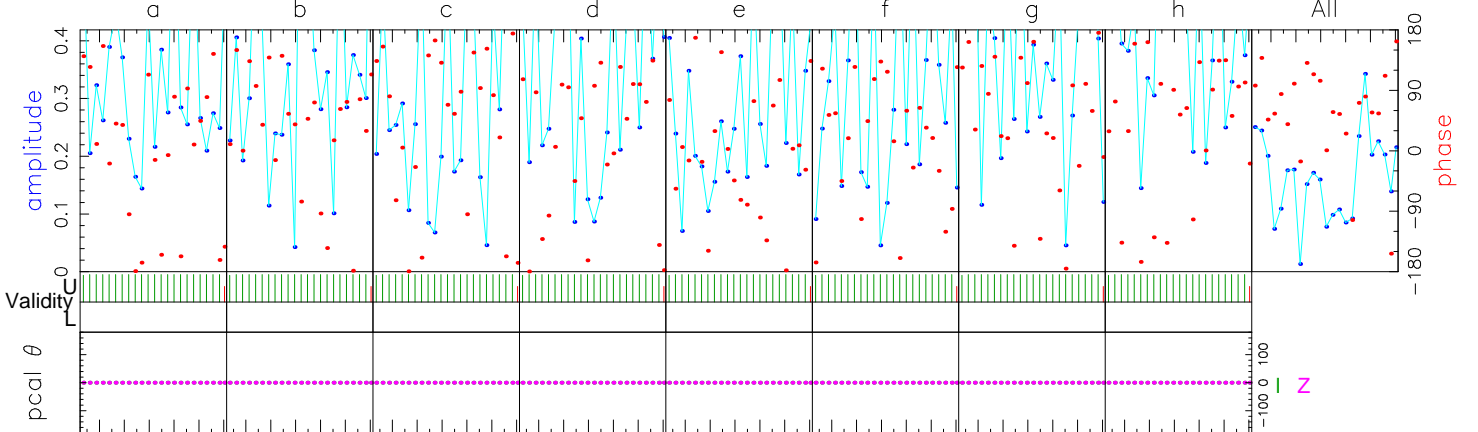
multiband delay (μ s)



Fringe quality 0
 SNR 6.1
 Int time 345.932
 Amp 0.140
 Phase 85.8
 PFD 3.0e-01
 Delays (us)
 SBD 0.396496
 MBD -0.003720
 Fringe rate (Hz)
 0.597234
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 124513.31
 Stop 125059.94
 FRT 124816.00
 Corr/FF/build
 2021:286:092156
 2021:286:134930
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0				
I	1000	1000	1000	1000	1000	1000	1000	1000	APs used			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC			
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
Z	1000	1000	1000	1000	1000	1000	1000	1000				
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
Group delay (usec)(sbd)	7.87194146235E+03		Apriori delay (usec)		7.87153893202E+03		Resid mbdelay (usec)		-3.71967E-03	+/- 1.8E-04		
Sband delay (usec)	7.87193542777E+03		Apriori clock (usec)		-1.8822308E+00		Resid sbdelay (usec)		3.96496E-01	+/- 1.4E-03		
Phase delay (usec)	7.87153893479E+03		Apriori clockrate (us/s)		-3.0200002E-07		Resid phdelay (usec)		2.76806E-06	+/- 6.1E-07		
Delay rate (us/s)	1.06236811855E+00		Apriori rate (us/s)		1.06236118526E+00		Resid rate (us/s)		6.93329E-06	+/- 3.0E-09		
Total phase (deg)			Apriori accel (us/s/s)		-6.34265883661E-05		Resid phase (deg)		85.8	+/- 18.9		
RMS	60.9	45.3	Amplitude		0.140 +/- 0.023		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	71.4	79.1	Search (2048X32)		0.114		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	39.9	26.7	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	37.8	46.7	Inc. seg. avg.		0.145		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)			Inc. frq. avg.		0.141		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 65.4 el 63.4 pa -93.6 Z: az 299.6 el 32.6 pa 35.9 u,v (fr/asec) -8368.100 -6284.329 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0237/IZ..1W57LH Output file: /Exps/c211a/v2/1234/No0237/IZ.W.301.1W57LH