

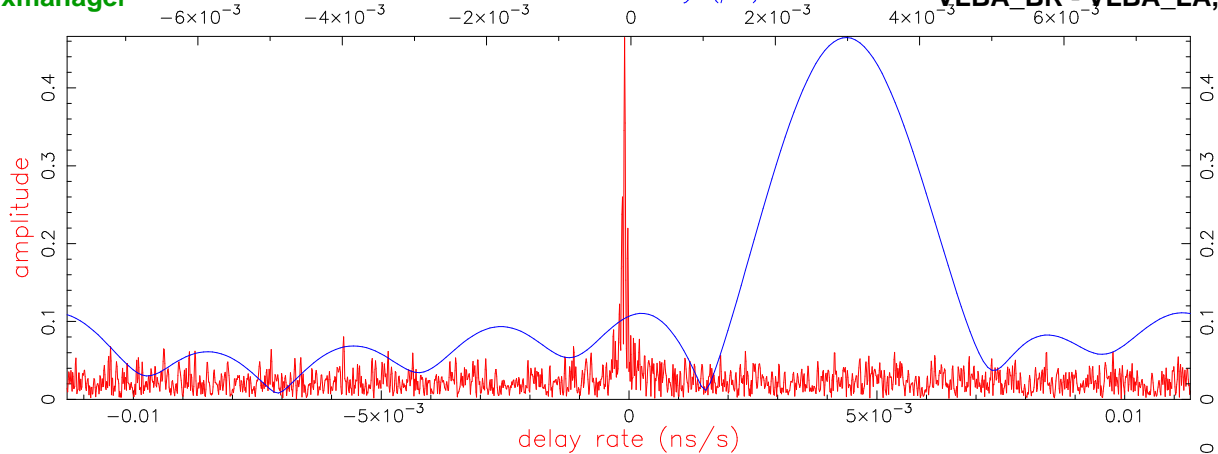
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, bl

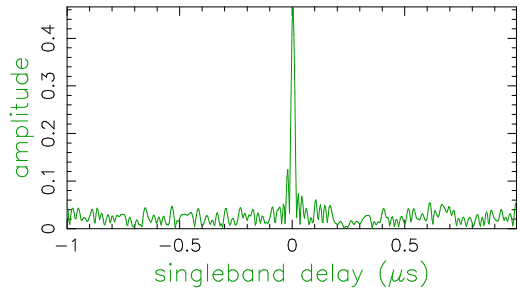
VLBA\_BR - VLBA\_LA, fgroup W, pol RR

multiband delay ( $\mu$ s)

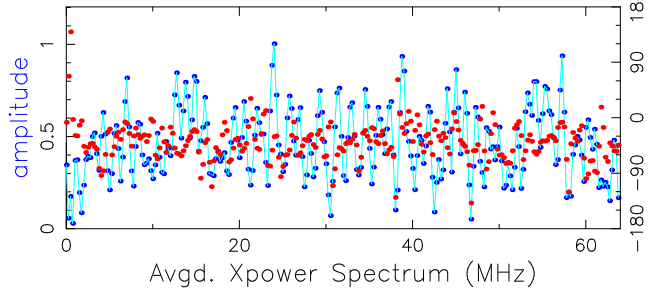


Fringe quality 8

SNR 26.1  
 Int time 417.823  
 Amp 0.466  
 Phase -37.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.003171  
 MBD 0.002959  
 Fringe rate (Hz)  
 -0.007362  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

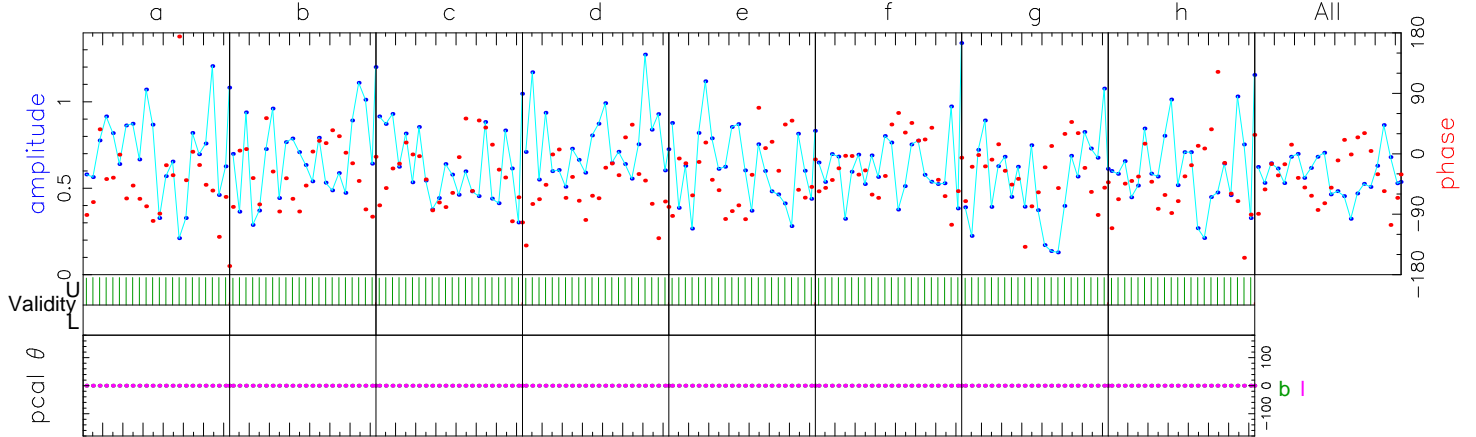


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001501.54  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133632  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-49.8	-29.0	-27.6	-50.5	-35.8	-20.3	-29.7	-51.2	Phase	-37.4
	0.6	0.5	0.5	0.6	0.4	0.4	0.4	0.4	Ampl.	0.5
	257.4	257.9	257.8	257.9	258.1	257.7	257.6	257.5	Sbd box	257.8
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.30286962048E+03		Apriori delay (usec)		3.3028666179E+03		Resid mbdelay (usec)		2.95868E-03	+/- 4.2E-05
Sband delay (usec)	3.30286983304E+03		Apriori clock (usec)		-3.5353851E-01		Resid sbdelay (usec)		3.17125E-03	+/- 3.3E-04
Phase delay (usec)	3.3028666059E+03		Apriori clockrate (us/s)		1.8600001E-07		Resid phdelay (usec)		-1.20593E-06	+/- 1.4E-07
Delay rate (us/s)	2.49073303601E-01		Apriori rate (us/s)		2.49073389061E-01		Resid rate (us/s)		-8.54598E-08	+/- 5.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-5.58345610303E-06		Resid phase (deg)		-37.4	+/- 4.4

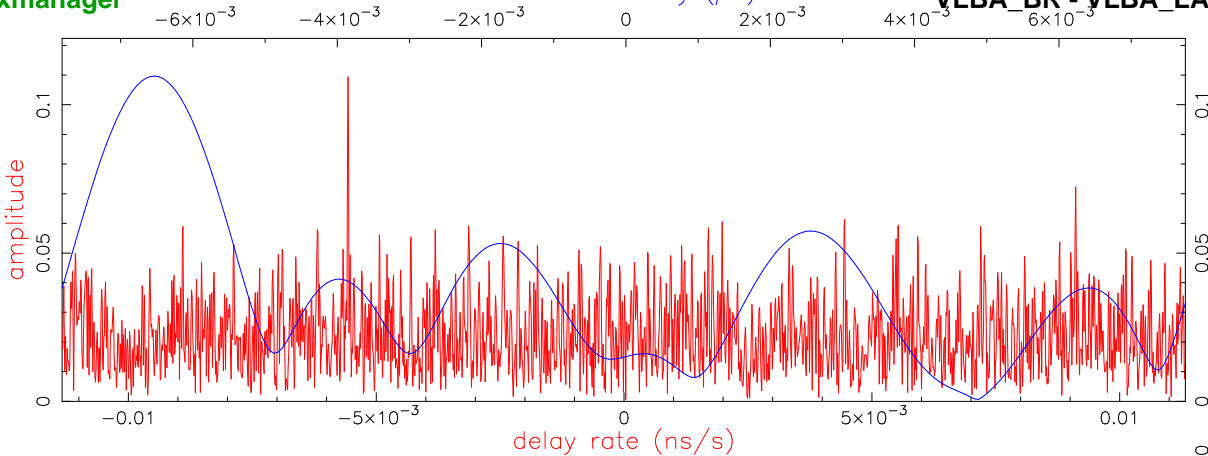
	RMS	Theor.	Amplitude	0.466 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	38.3	10.5	Search (2048X32)	0.453	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	34.9	18.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	13.2	6.2	Inc. seg. avg.	0.573	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	13.3	10.9	Inc. frq. avg.	0.471	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 277.7 el 55.4 pa 62.1 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -1919.709 692.327 simultaneous interpolator

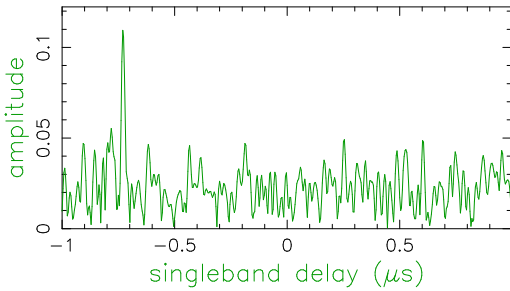
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/bl.1X10VA Output file: /Exps/c211c/v1/1234/No0118/bl.W.24.1X10VA

multiband delay ( $\mu$ s)

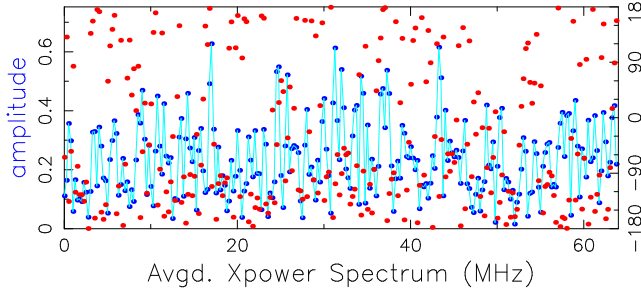
Fringe quality 0



SNR 6.2  
Int time 417.823  
Amp 0.122  
Phase 175.0  
PFD 1.6e-01  
Delays (us)  
SBD -0.729192  
MBD -0.006463  
Fringe rate (Hz)  
-0.480659  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

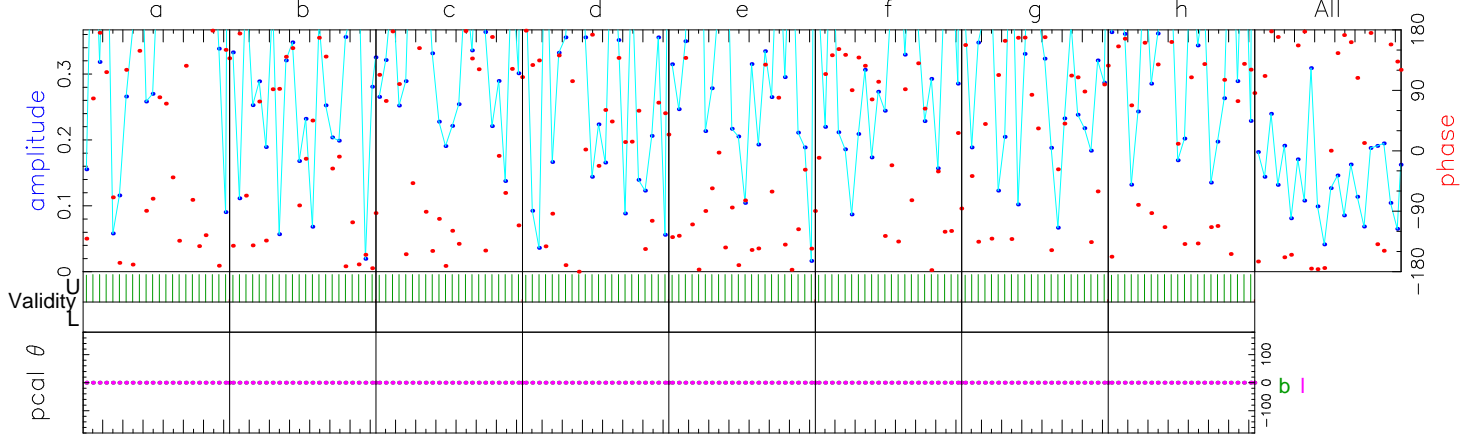


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001501.54  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133636  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0				
b	0	0	0	0	0	0	0	0				
l	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: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)		3.30214144927E+03				3.30286666179E+03			Resid mbdelay (usec)	-6.46253E-03 +/- 1.8E-04		
Sband delay (usec)		3.30213747004E+03				-3.5353851E-01			Resid sbdelay (usec)	-7.29192E-01 +/- 1.4E-03		
Phase delay (usec)		3.30286666744E+03				1.8600001E-07			Resid phdelay (usec)	5.64448E-06 +/- 6.0E-07		
Delay rate (us/s)		2.49067809089E-01				2.49073389061E-01			Resid rate (us/s)	-5.57997E-06 +/- 2.5E-09		
Total phase (deg)			263.9			-5.58345610303E-06			Resid phase (deg)	175.0 +/- 18.5		
	RMS	Theor.	Amplitude	0.122 +/- 0.020		Pcal mode: MANUAL, MANUAL			PC period (AP's)	5, 5		
ph/seg (deg)	58.4	44.5	Search (2048X32)	0.109		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000		
amp/seg (%)	63.0	77.6	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	30.7	26.2	Inc. seg. avg.	0.122		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011		
amp/frq (%)	40.9	45.8	Inc. frq. avg.	0.121		Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

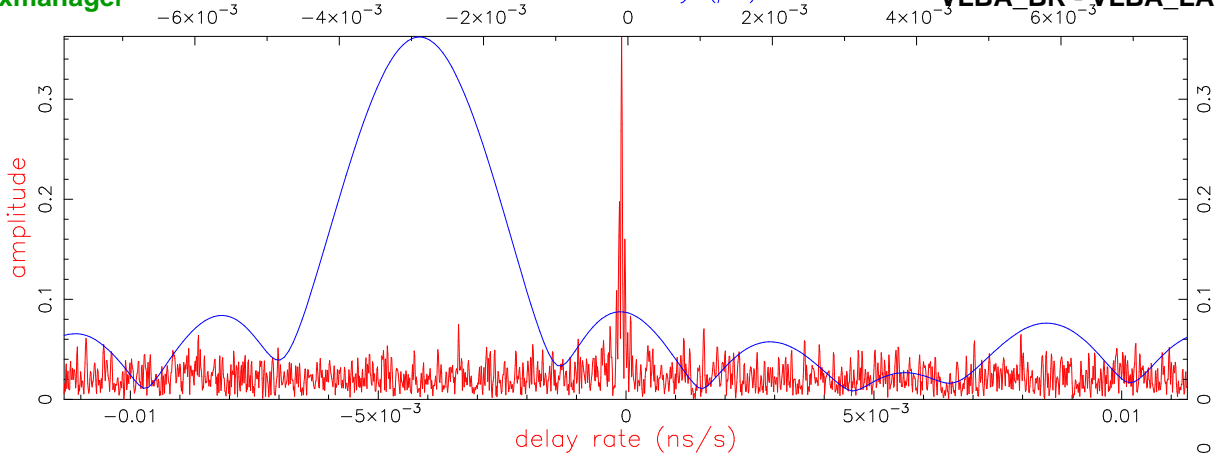
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, bl

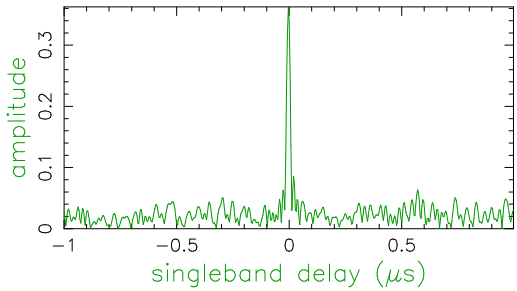
VLBA\_BR - VLBA\_LA, fgroup W, pol LL

multiband delay ( $\mu$ s)

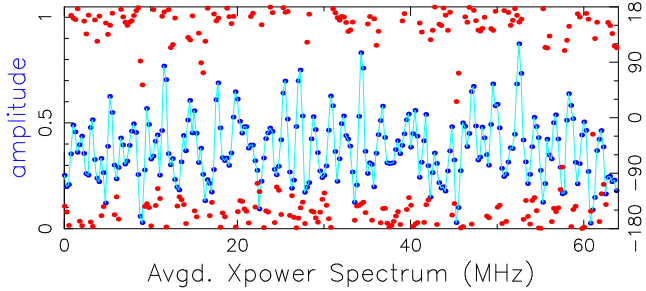


Fringe quality 9

SNR 20.3  
 Int time 417.823  
 Amp 0.363  
 Phase 176.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.003387  
 MBD -0.002872  
 Fringe rate (Hz)  
 -0.007365  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

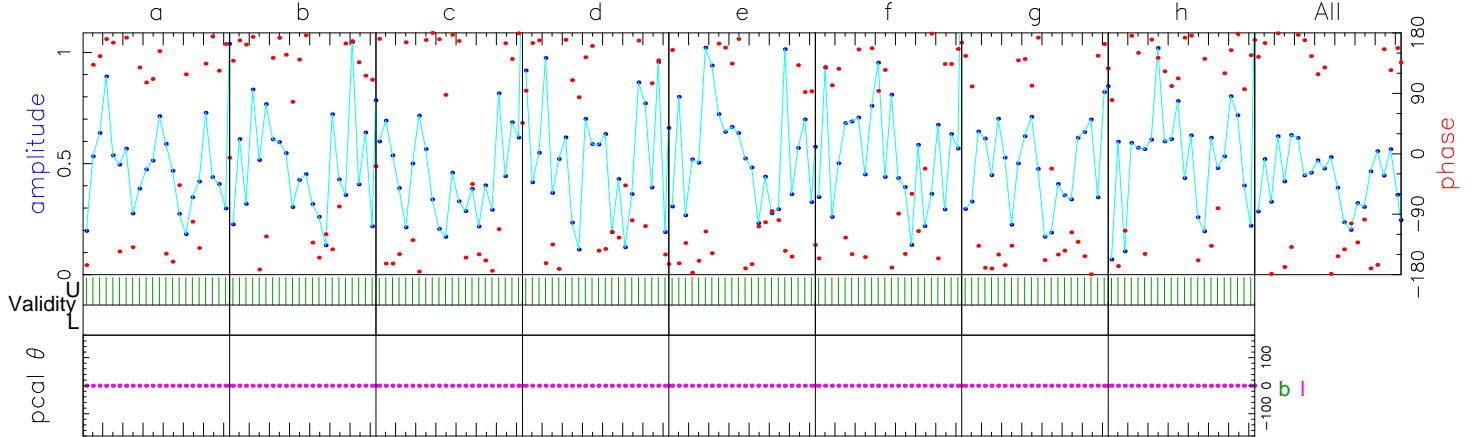


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001501.54  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133629  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	0	0	0	0	0	0	0	0		
l	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: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)	3.30286378935E+03	Apriori delay (usec)	3.3028666179E+03	Resid mbdelay (usec)	-2.87244E-03	+/-	5.4E-05
Sband delay (usec)	3.30286327479E+03	Apriori clock (usec)	-3.5353851E-01	Resid sbdelay (usec)	-3.38700E-03	+/-	4.2E-04
Phase delay (usec)	3.30286666748E+03	Apriori clockrate (us/s)	1.8600001E-07	Resid phdelay (usec)	5.68452E-06	+/-	1.8E-07
Delay rate (us/s)	2.49073303558E-01	Apriori rate (us/s)	2.49073389061E-01	Resid rate (us/s)	-8.55024E-08	+/-	7.5E-10
Total phase (deg)	265.2	Apriori accel (us/s/s)	-5.58345610303E-06	Resid phase (deg)	176.3	+/-	5.7

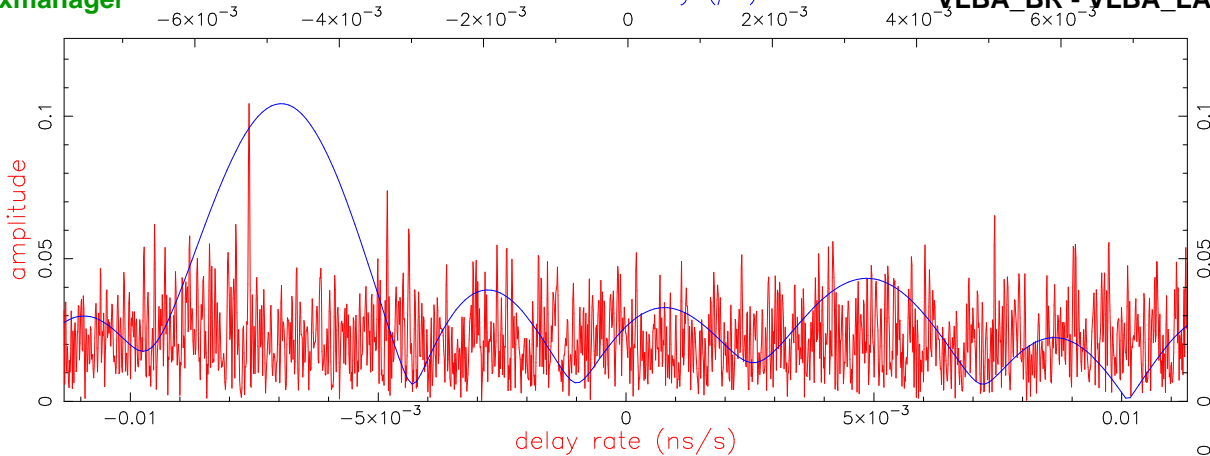
ph/seg (deg)	38.9	RMS	13.6	Theor.	0.363 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	39.9	Search (2048X32)	0.353	Amplitude		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	12.1	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	5.0	Inc. seg. avg.	0.428	Inc. seg. avg.		Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.365	Inc. frq. avg.		Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 277.7 el 55.4 pa 62.1 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -1919.709 692.327 simultaneous interpolator

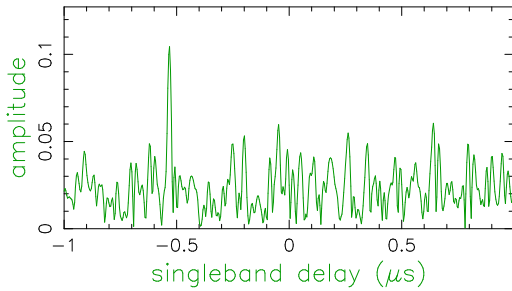
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/bl.1X10VA Output file: /Exps/c211c/v1/1234/No0118/bl.W.6.1X10VA

multiband delay ( $\mu$ s)

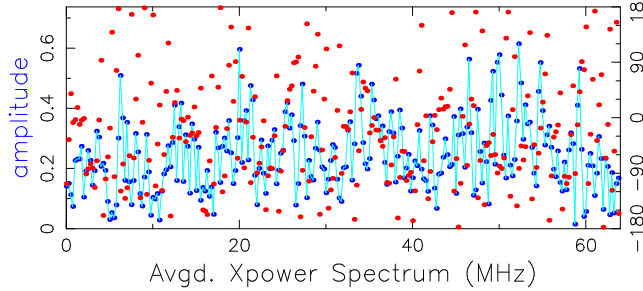
Fringe quality 0



SNR 5.9  
 Int time 417.823  
 Amp 0.127  
 Phase 0.4  
 PFD 6.8e-01  
 Delays (us)  
 SBD -0.532200  
 MBD -0.004816  
 Fringe rate (Hz)  
 -0.655959  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

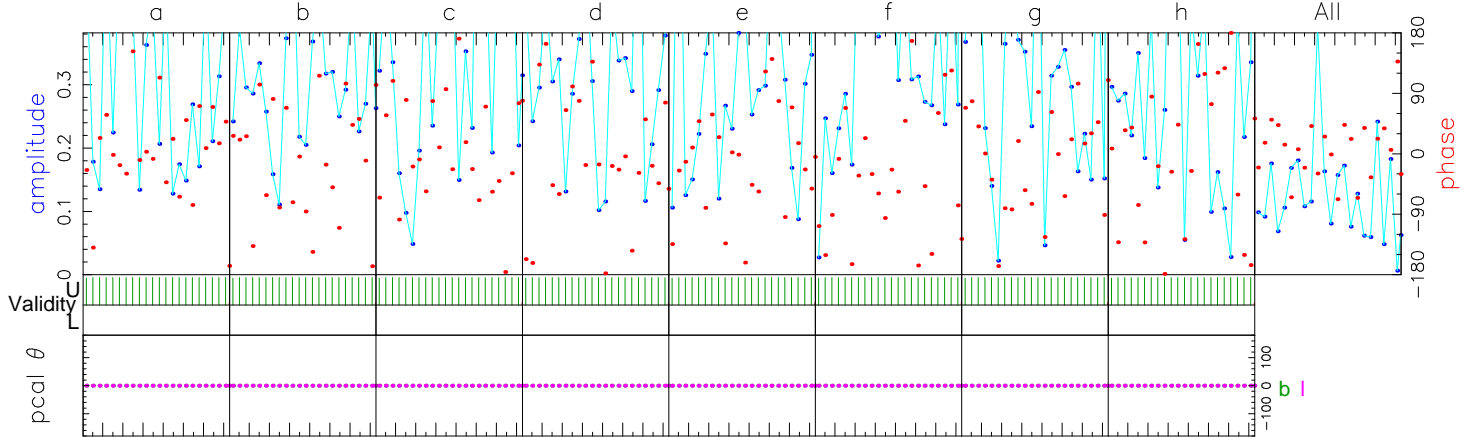


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001501.54  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133640  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



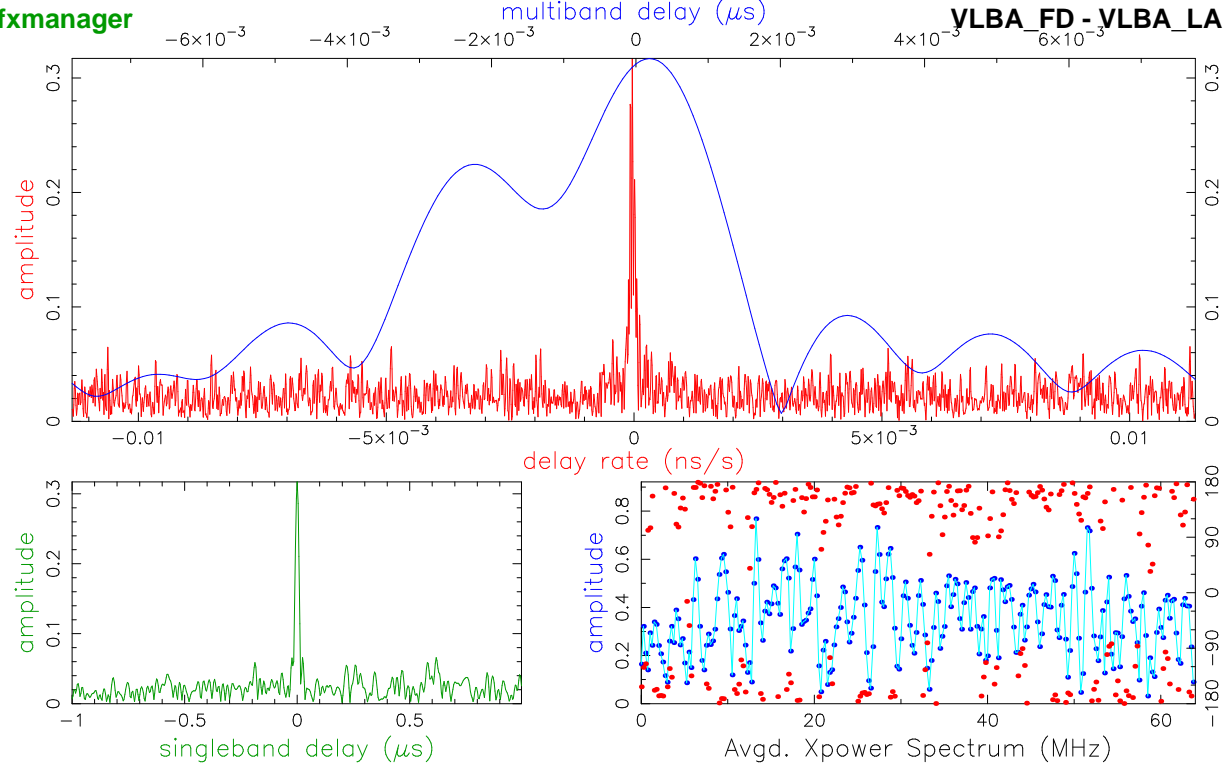
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0				
b	0	0	0	0	0	0	0	0				
l	0	0	0	0	0	0	0	0				
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
b	1000	1000	1000	1000	1000	1000	1000	1000				
l	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks		
Group delay (usec)(sbd)		3.30233059575E+03				3.30286666179E+03			Resid mbdelay (usec)	-4.81604E-03 +/- 1.8E-04		
Sband delay (usec)		3.30233446204E+03				-3.5353851E-01			Resid sbdelay (usec)	-5.32200E-01 +/- 1.5E-03		
Phase delay (usec)		3.30286666181E+03				1.8600001E-07			Resid phdelay (usec)	1.14288E-08 +/- 6.3E-07		
Delay rate (us/s)		2.49065774027E-01				2.49073389061E-01			Resid rate (us/s)	-7.61503E-06 +/- 2.6E-09		
Total phase (deg)			89.3			-5.58345610303E-06			Resid phase (deg)	0.4 +/- 19.5		
	RMS	Theor.	Amplitude	0.127 +/- 0.022					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	46.6	46.8	Search (2048X32)	0.102					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	79.8	81.7	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	16.1	27.6	Inc. seg. avg.	0.119					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	46.1	48.2	Inc. frq. avg.	0.117					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, fl

VLBA\_FD - VLBA\_LA, fgroup W, pol LL

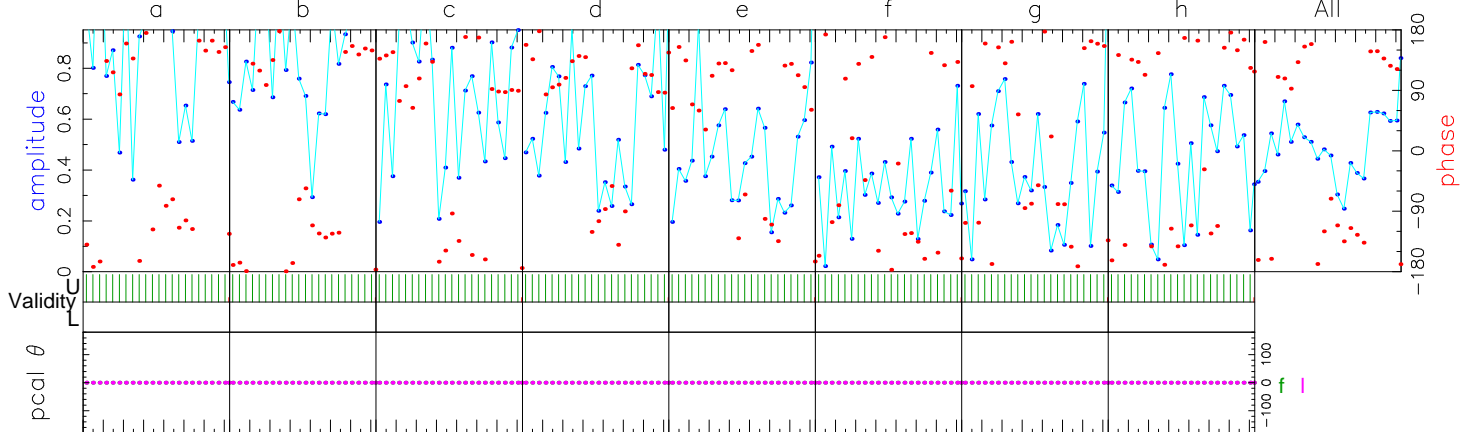


Fringe quality 7

SNR 17.8  
 Int time 419.826  
 Amp 0.317  
 Phase 163.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000279  
 MBD 0.000183  
 Fringe rate (Hz) -0.002494  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133630  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	0	0	0	0	0	0	0	0		
l	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: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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.19049051512E+03				-1.19049069774E+03				1.82627E-04	+/- 6.1E-05
Sband delay (usec)	-1.19049097674E+03				1.2896751E+01				-2.79000E-04	+/- 4.8E-04
Phase delay (usec)	-1.19049069246E+03				3.4600000E-07				5.28602E-06	+/- 2.1E-07
Delay rate (us/s)	-6.80018498549E-02				-6.80018209018E-02				-2.89531E-08	+/- 8.6E-10
Total phase (deg)			-89.4		7.81284871366E-07				163.9	+/- 6.4
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

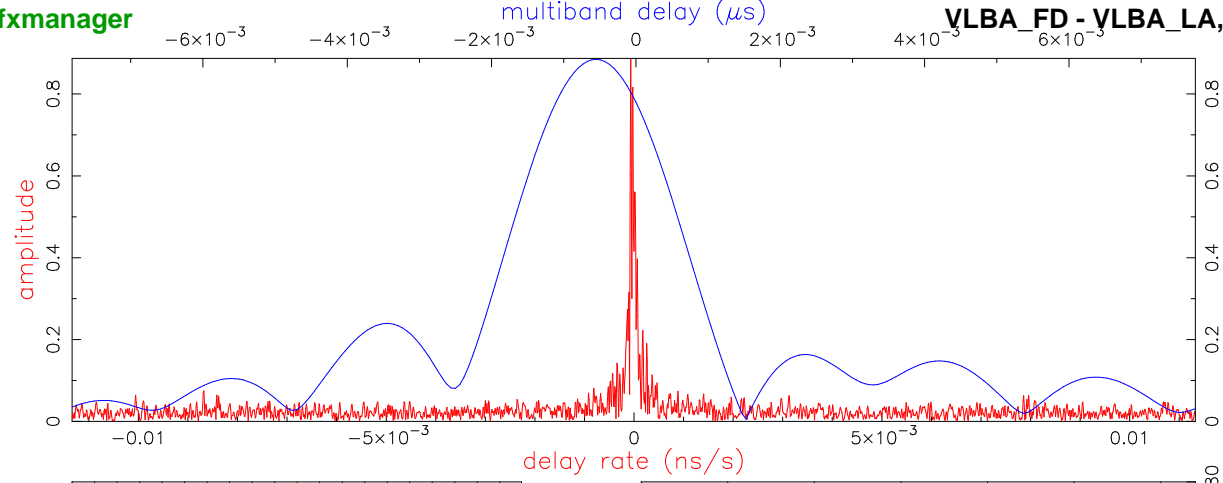
ph/seg (deg) 55.2 15.5 Search (2048X32) 0.295 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.7 27.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.6 9.1 Inc. seg. avg. 0.473 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.7 15.9 Inc. frq. avg. 0.355 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 301.1 el 38.0 pa 79.7 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 523.106 -448.470 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/fl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/fl.W.16.1X10VA

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, fl

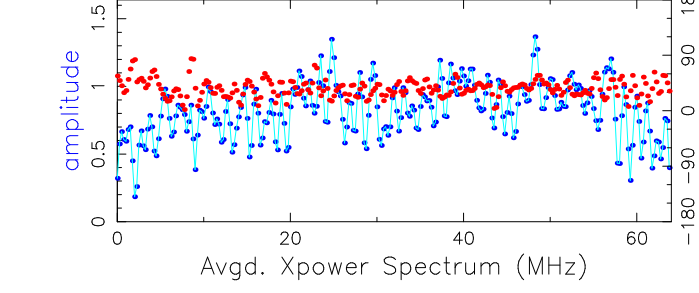
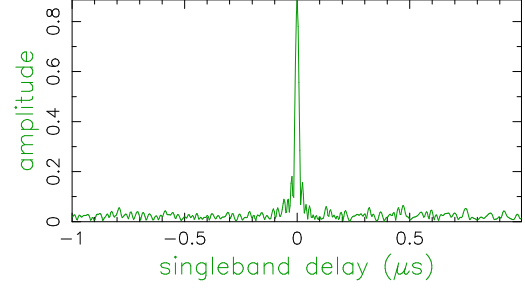
VLBA\_FD - VLBA\_LA, fgroup W, pol RR



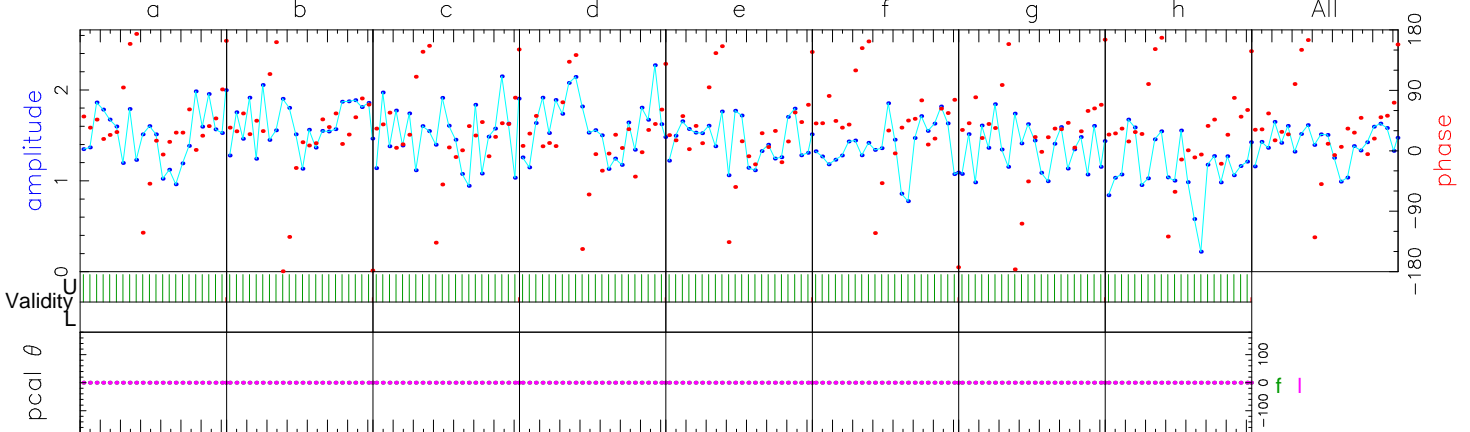
Fringe quality 5

SNR 49.7  
 Int time 419.826  
 Amp 0.887  
 Phase 34.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000657  
 MBD -0.000569  
 Fringe rate (Hz)  
 -0.005798  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133634  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
f	0	0	0	0	0	0	0	0	PC freqs		
l	0	0	0	0	0	0	0	0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	-1.19049126671E+03				-1.19049069774E+03				Resid mbdelay (usec)	-5.68964E-04 +/- 2.2E-05	
Sband delay (usec)	-1.19049135474E+03				1.2896751E+01				Resid sbdelay (usec)	-6.57000E-04 +/- 1.7E-04	
Phase delay (usec)	-1.19049069663E+03				3.4600000E-07				Resid phdelay (usec)	1.11683E-06 +/- 7.4E-08	
Delay rate (us/s)	-6.80018882099E-02				-6.80018209018E-02				Resid rate (us/s)	-6.73080E-08 +/- 3.1E-10	
Total phase (deg)		-218.7			7.81284871366E-07				Resid phase (deg)	34.6 +/- 2.3	
	RMS	Theor.	Amplitude	0.887 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	59.6	5.5	Search (2048X32)	0.879	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	62.4	9.6	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	9.0	3.3	Inc. seg. avg.	1.405	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	12.1	5.7	Inc. frq. avg.	0.892	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00	

f: az 301.1 el 38.0 pa 79.7 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 523.106 -448.470 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/fl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/fl.W.32.1X10VA

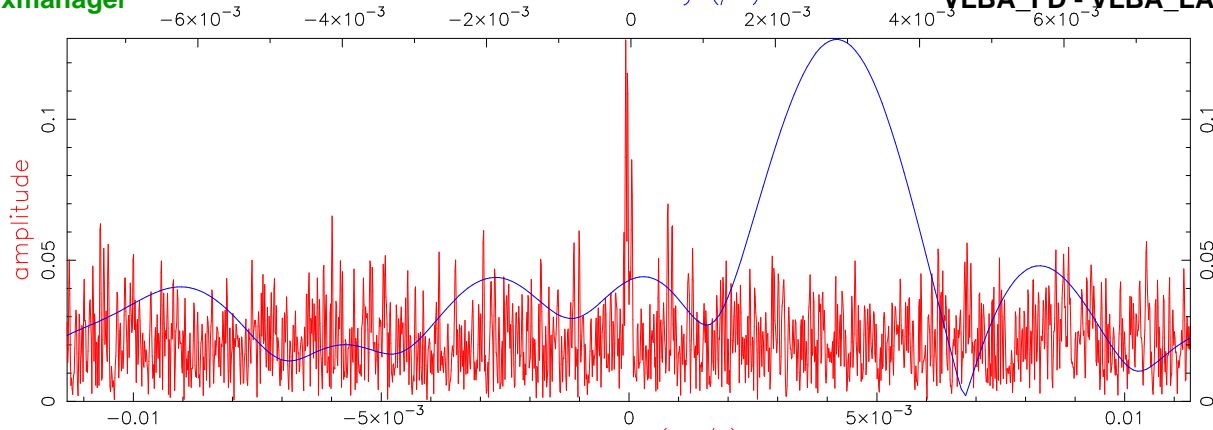
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, fl

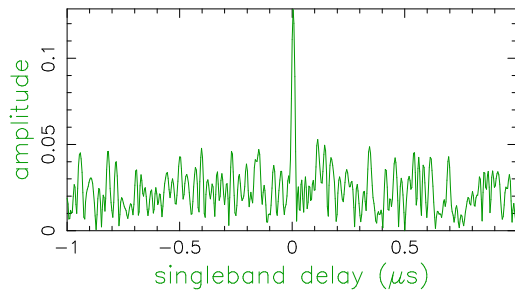
VLBA\_FD - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)

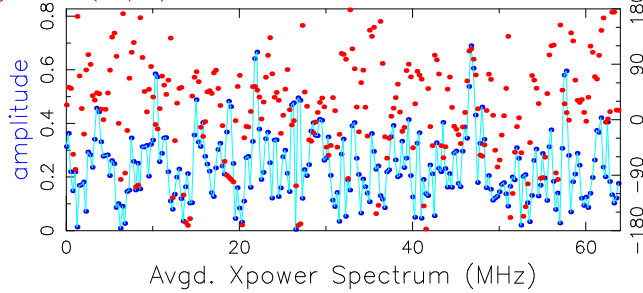


Fringe quality 0

SNR 7.2  
 Int time 419.826  
 Amp 0.129  
 Phase 54.1  
 PFD 1.8e-04  
 Delays (us)  
 SBD 0.004690  
 MBD 0.002904  
 Fringe rate (Hz)  
 -0.005610  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

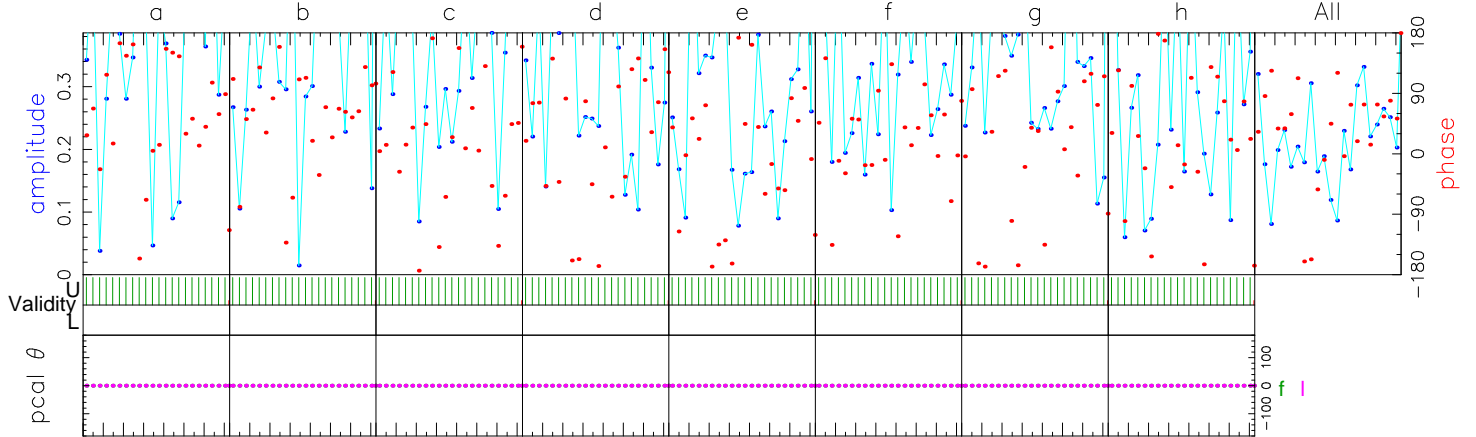


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133638  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.0	63.3	24.2	79.6	47.1	26.0	77.8	61.1	Phase	54.1
	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	258.8	257.0	394.6	414.9	380.8	256.2	297.6	489.9	Sbd box	258.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.19048779396E+03	Apriori delay (usec)	-1.19049069774E+03	Resid mbdelay (usec)	2.90379E-03	+/-	1.5E-04
Sband delay (usec)	-1.19048600824E+03	Apriori clock (usec)	1.2896751E+01	Resid sbdelay (usec)	4.68950E-03	+/-	1.2E-03
Phase delay (usec)	-1.19049069600E+03	Apriori clockrate (us/s)	3.4600000E-07	Resid phdelay (usec)	1.74561E-06	+/-	5.1E-07
Delay rate (us/s)	-6.80018860282E-02	Apriori rate (us/s)	-6.80018209018E-02	Resid rate (us/s)	-6.51264E-08	+/-	2.1E-09
Total phase (deg)	-199.2	Apriori accel (us/s/s)	7.81284871366E-07	Resid phase (deg)	54.1	+/-	15.9

ph/seg (deg)	61.6	Theor.	38.1	Amplitude	0.129 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	84.2	Search (2048X32)	0.127	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	23.5	Inc. seg. avg.	0.174	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	34.4	Inc. frq. avg.	0.127	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

f: az 301.1 el 38.0 pa 79.7 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 523.106 -448.470 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/fl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/fl.W.52.1X10VA

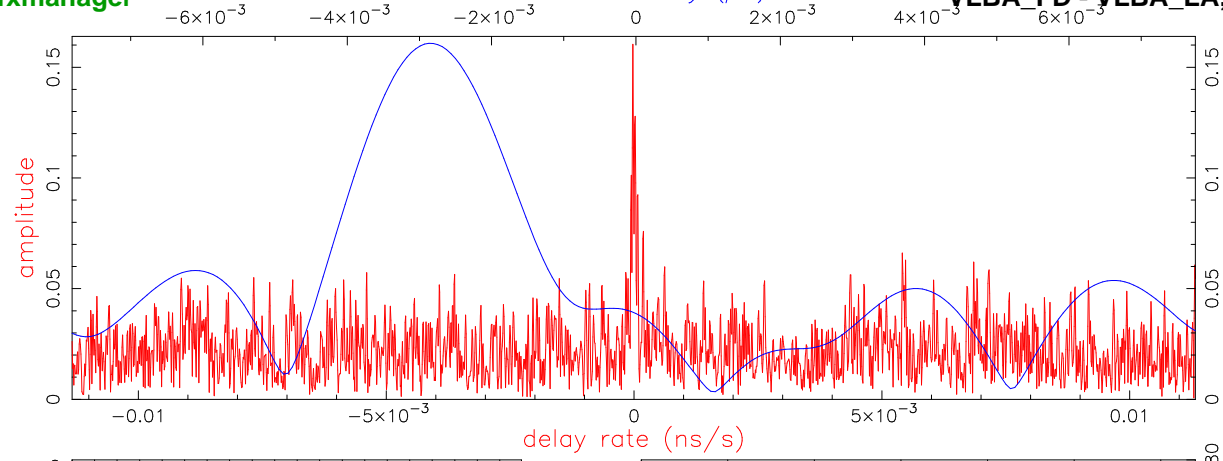
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

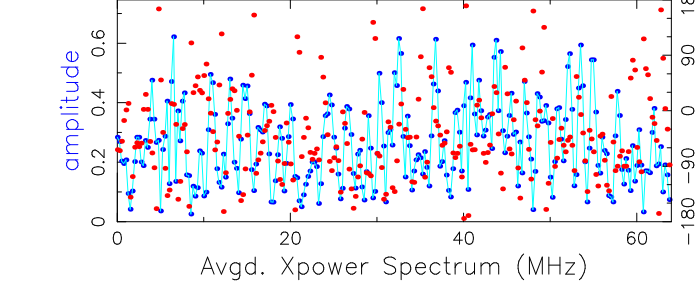
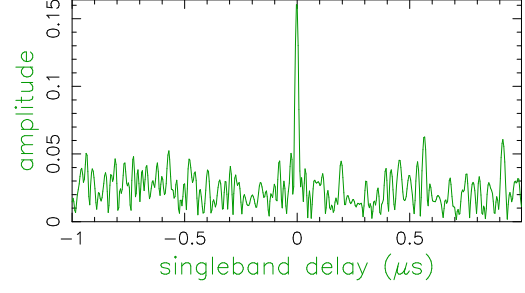
3C84.1X10VA, No0118, fl

VLBA\_FD - VLBA\_LA, fgroup W, pol RL

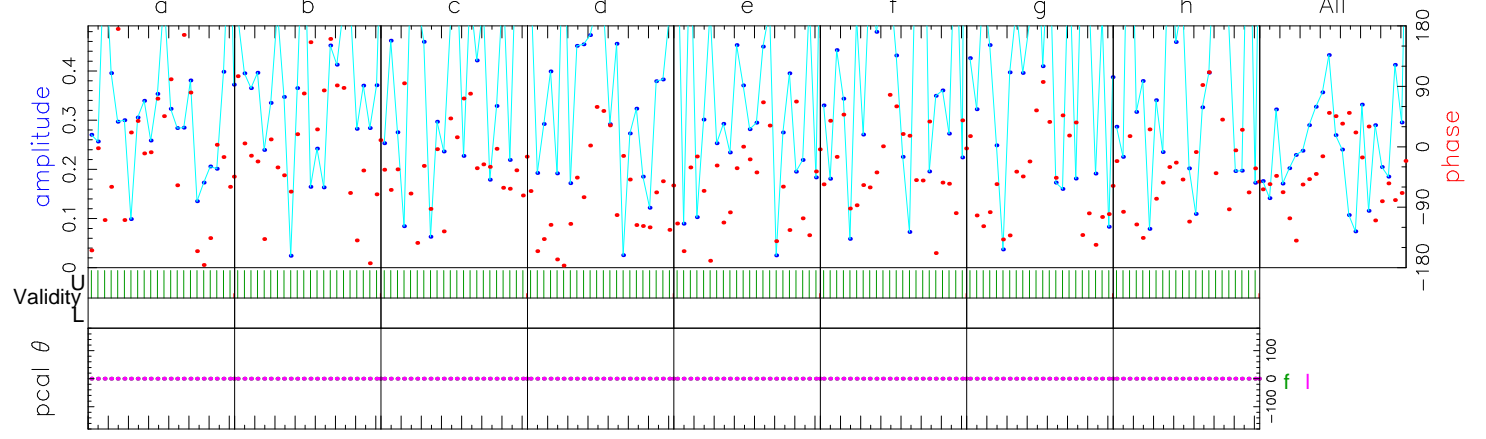
multiband delay ( $\mu$ s)



Fringe quality 9  
 SNR 9.2  
 Int time 419.826  
 Amp 0.164  
 Phase -40.7  
 PFD 1.6e-11  
 Delays (us)  
 SBD -0.002046  
 MBD -0.002756  
 Fringe rate (Hz)  
 -0.002340  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133641  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



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



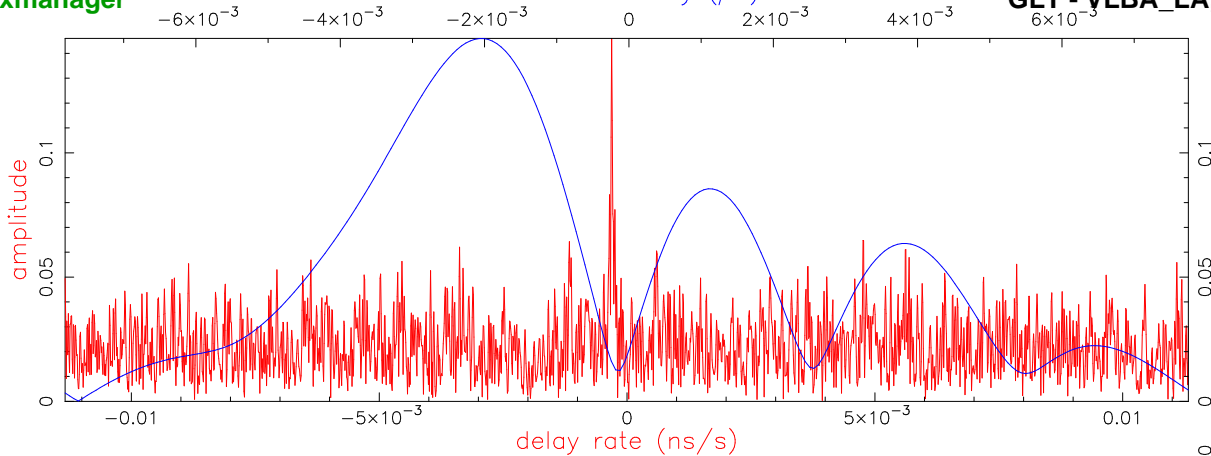
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-32.9	17.2	-33.8	-83.5	-61.1	-32.7	-49.6	-35.5	Phase	-40.7
	0.1	0.1	0.3	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	465.5	106.2	256.4	19.9	403.9	256.8	4.3	256.0	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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	
									Tracks	
Group delay (usec)(sbd)	-1.19049345414E+03		Apriori delay (usec)		-1.19049069774E+03		Resid mbdelay (usec)		-2.75639E-03	+/- 1.2E-04
Sband delay (usec)	-1.19049274374E+03		Apriori clock (usec)		1.2896751E+01		Resid sbdelay (usec)		-2.04600E-03	+/- 9.4E-04
Phase delay (usec)	-1.19049069906E+03		Apriori clockrate (us/s)		3.4600000E-07		Resid phdelay (usec)		-1.31147E-06	+/- 4.0E-07
Delay rate (us/s)	-6.80018480665E-02		Apriori rate (us/s)		-6.80018209018E-02		Resid rate (us/s)		-2.71647E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		7.81284871366E-07		Resid phase (deg)		-40.7	+/- 12.5

ph/seg (deg) 54.0 29.9 Search (2048X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.6 52.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.3 17.6 Inc. seg. avg. 0.219 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.5 30.8 Inc. frq. avg. 0.166 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 301.1 el 38.0 pa 79.7 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 523.106 -448.470 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/fl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/fl.W.72.1X10VA

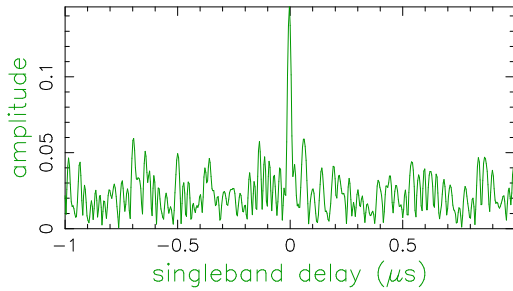


multiband delay ( $\mu\text{s}$ )

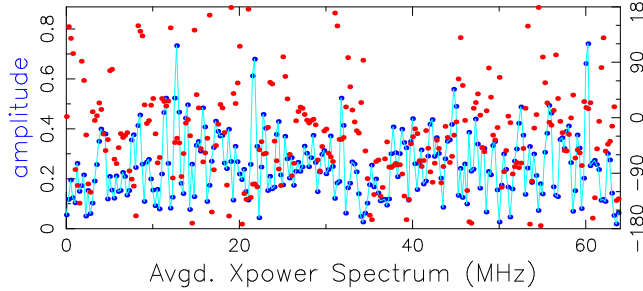
Fringe quality 9



SNR 8.2  
Int time 419.826  
Amp 0.146  
Phase -59.7  
PFD 9.9e-08  
Delays (us)  
SBD -0.003906  
MBD -0.002046  
Fringe rate (Hz)  
-0.026816  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

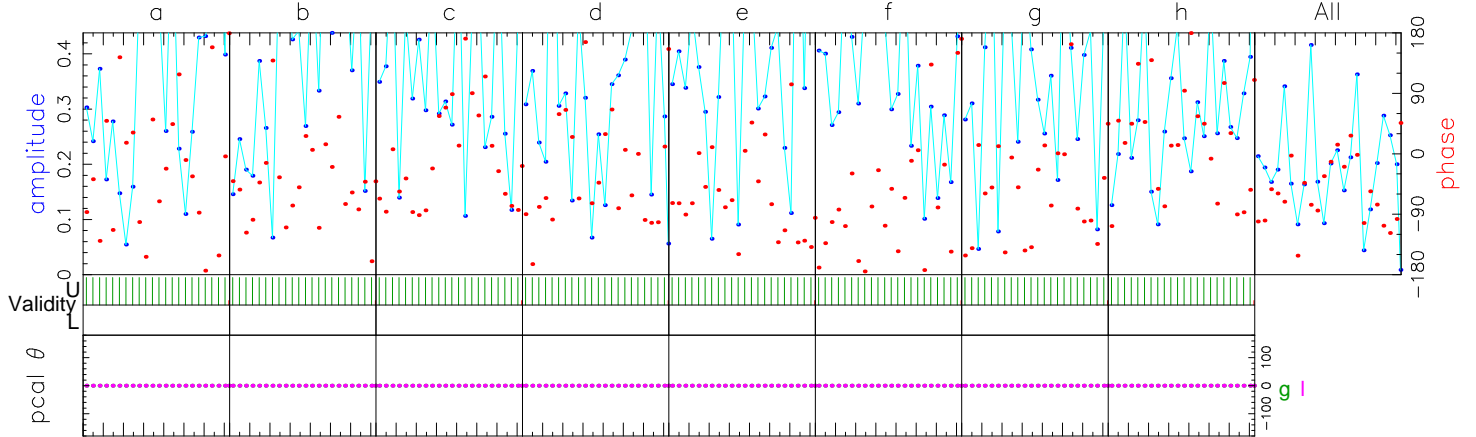


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133650  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

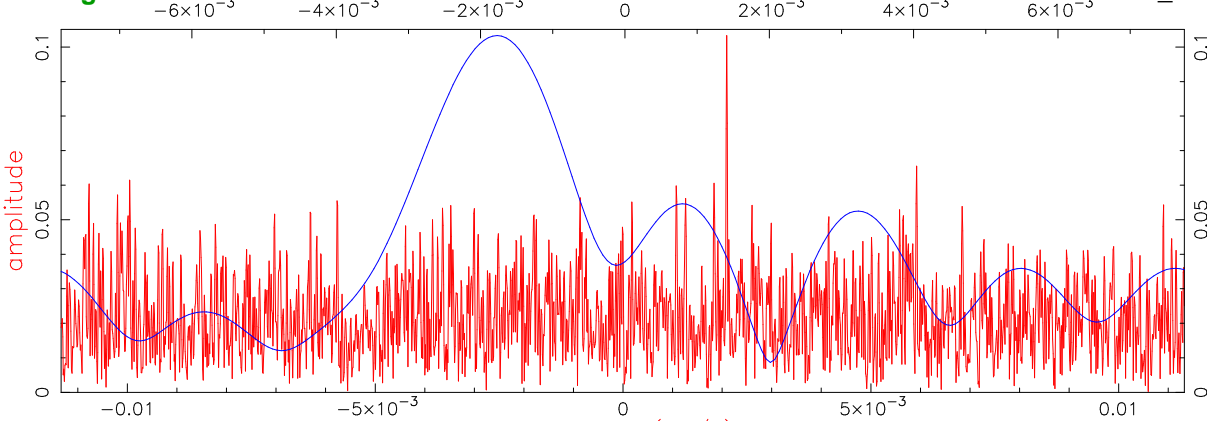
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-99.6	-48.3	-16.9	-64.9	-79.7	-99.3	-74.7	22.8	Phase	-59.7
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	259.3	255.2	255.4	258.0	256.0	256.6	255.4	258.1	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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)	-1.03390269718E+03		Apriori delay (usec)		-1.03390065085E+03		Resid mbdelay (usec)		-2.04633E-03	+/- 1.3E-04
Sband delay (usec)	-1.03390455660E+03		Apriori clock (usec)		3.0745220E+00		Resid sbdelay (usec)		-3.90575E-03	+/- 1.1E-03
Phase delay (usec)	-1.03390065278E+03		Apriori clockrate (us/s)		3.5800001E-07		Resid phdelay (usec)		-1.92572E-06	+/- 4.5E-07
Delay rate (us/s)	5.76071674108E-01		Apriori rate (us/s)		5.76071985414E-01		Resid rate (us/s)		-3.11306E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		3.46156289101E-05		Resid phase (deg)		-59.7	+/- 14.0

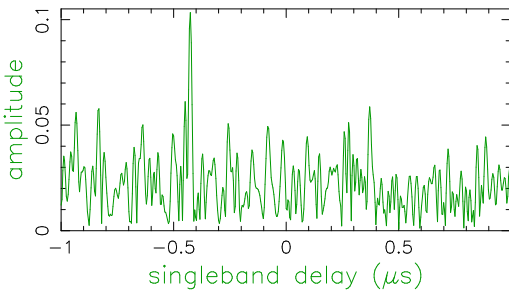
ph/seg (deg) 46.6 33.6 Search (2048X32) 0.144 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 71.3 58.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 45.8 19.8 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 41.5 34.6 Inc. frq. avg. 0.167 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 290.6 el 38.0 pa 16.9 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -4348.953 5036.708 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/gl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/gl.W.107.1X10VA

multiband delay ( $\mu$ s)

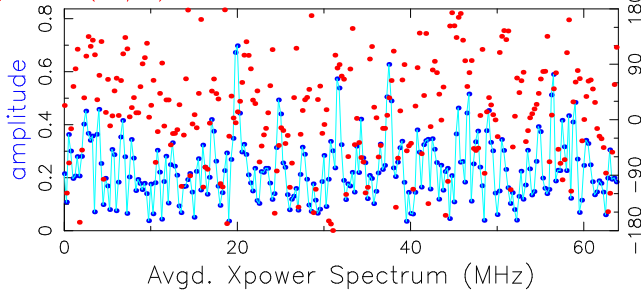


Fringe quality 0

SNR 5.8  
 Int time 419.822  
 Amp 0.105  
 Phase -178.3  
 PFD 8.0e-01  
 Delays (us)  
 SBD -0.426442  
 MBD -0.001778  
 Fringe rate (Hz)  
 0.180295  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

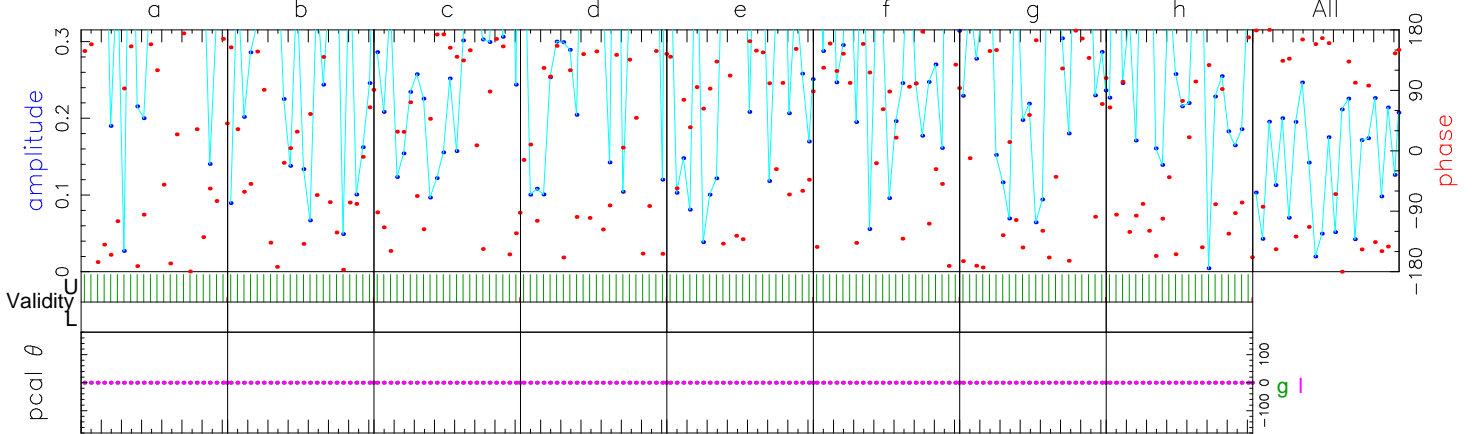


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133654  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-170.1	-72.2	-177.7	168.5	150.1	147.4	-177.6	-118.7	Phase	-178.3
	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	147.9	3.7	274.4	443.5	153.3	246.5	329.0	352.4	Sbd box	147.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.03432430347E+03	Apriori delay (usec)	-1.03390065085E+03	Resid mbdelay (usec)	-1.77762E-03	+/-	1.9E-04
Sband delay (usec)	-1.03432709285E+03	Apriori clock (usec)	3.0745220E+00	Resid sbdelay (usec)	-4.26442E-01	+/-	1.5E-03
Phase delay (usec)	-1.03390065660E+03	Apriori clockrate (us/s)	3.5800001E-07	Resid phdelay (usec)	-5.74961E-06	+/-	6.4E-07
Delay rate (us/s)	5.76074078465E-01	Apriori rate (us/s)	5.76071985414E-01	Resid rate (us/s)	2.09305E-06	+/-	2.6E-09
Total phase (deg)	-201.4	Apriori accel (us/s/s)	3.46156289101E-05	Resid phase (deg)	-178.3	+/-	19.7

ph/seg (deg)	51.2	Theor.	47.3	Amplitude	0.105 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.7	Search (2048X32)	0.100	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	53.6	Inc. seg. avg.	0.107	Inc. frq. avg.	0.113	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.3	Inc. frq. avg.	0.113			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	

g: az 290.6 el 38.0 pa 16.9 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -4348.953 5036.708 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/gl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/gl.W.126.1X10VA

Mk4/DiFX fourfit 3.21 rev 2937

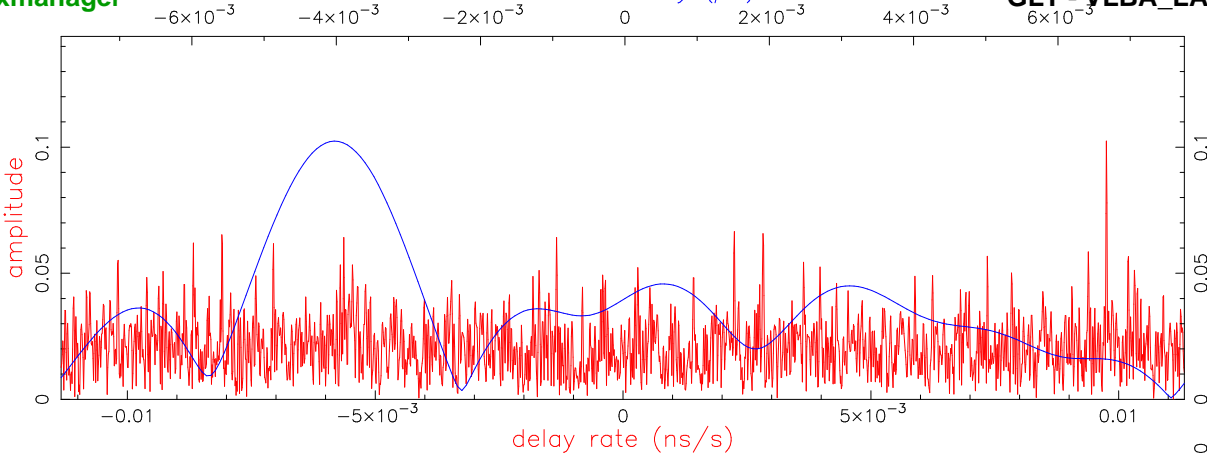
fxmanager

3C84.1X10VA, No0118, gl

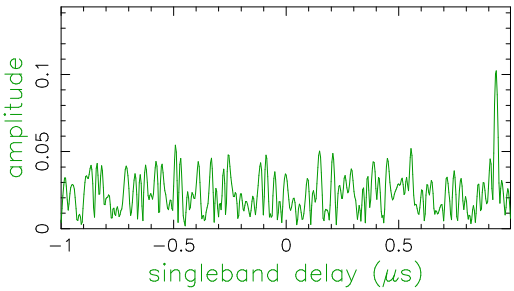
GLT - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu\text{s}$ )

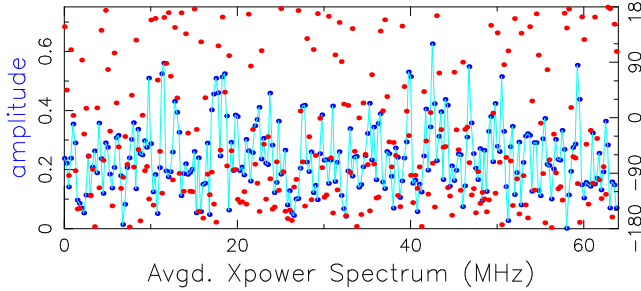
Fringe quality 0



SNR 5.8  
 Int time 419.826  
 Amp 0.144  
 Phase -133.8  
 PFD 7.7e-01  
 Delays (us)  
 SBD 0.932050  
 MBD -0.004034  
 Fringe rate (Hz)  
 0.841160  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

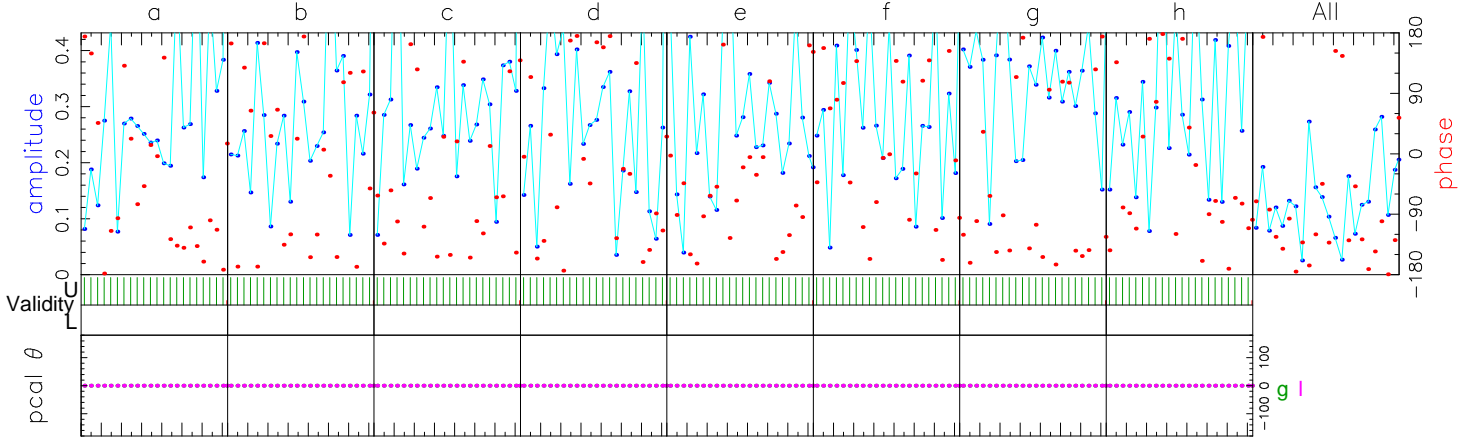


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133658  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-125.4	176.1	-129.1	-150.8	-98.6	-145.0	-153.7	-116.3	Phase	-133.8
	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.2	Ampl.	0.1
	373.5	472.8	494.8	73.7	494.2	175.4	495.5	336.1	Sbd box	495.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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	

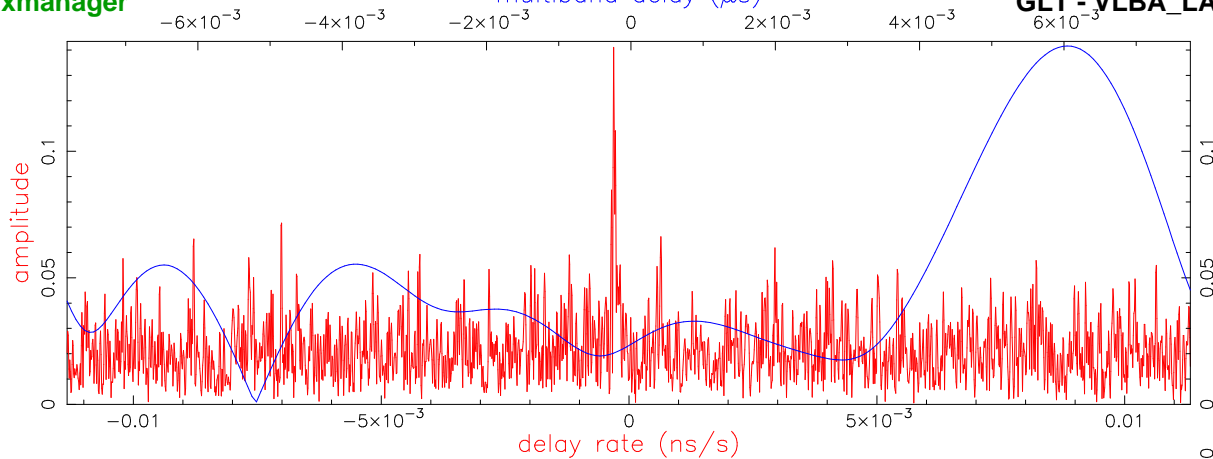
Group delay (usec)(sbd)	-1.03296718483E+03	Apriori delay (usec)	-1.03390065085E+03	Resid mbdelay (usec)	-4.03398E-03	+/-	1.9E-04
Sband delay (usec)	-1.03296860110E+03	Apriori clock (usec)	3.0745220E+00	Resid sbdelay (usec)	9.32050E-01	+/-	1.5E-03
Phase delay (usec)	-1.03390065516E+03	Apriori clockrate (us/s)	3.5800001E-07	Resid phdelay (usec)	-4.31513E-06	+/-	6.3E-07
Delay rate (us/s)	5.76081750445E-01	Apriori rate (us/s)	5.76071985414E-01	Resid rate (us/s)	9.76503E-06	+/-	2.6E-09
Total phase (deg)	-156.9	Apriori accel (us/s/s)	3.46156289101E-05	Resid phase (deg)	-133.8	+/-	19.7

ph/seg (deg)	47.8	Theor.	47.2	Amplitude	0.144 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	73.3		82.4	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	28.7		27.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	46.9		48.6	Inc. seg. avg.	0.139	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.137	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 290.6 el 38.0 pa 16.9 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -4348.953 5036.708 simultaneous interpolator

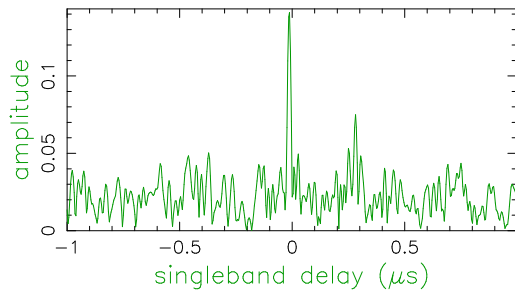
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/gl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/gl.W.147.1X10VA

multiband delay ( $\mu$ s)

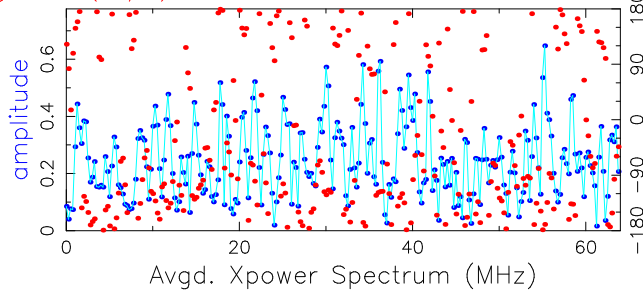


Fringe quality 9

SNR 8.0  
Int time 419.822  
Amp 0.143  
Phase -4.2  
PFD 3.3e-07  
Delays (us)  
SBD -0.013276  
MBD 0.005924  
Fringe rate (Hz)  
-0.026877  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

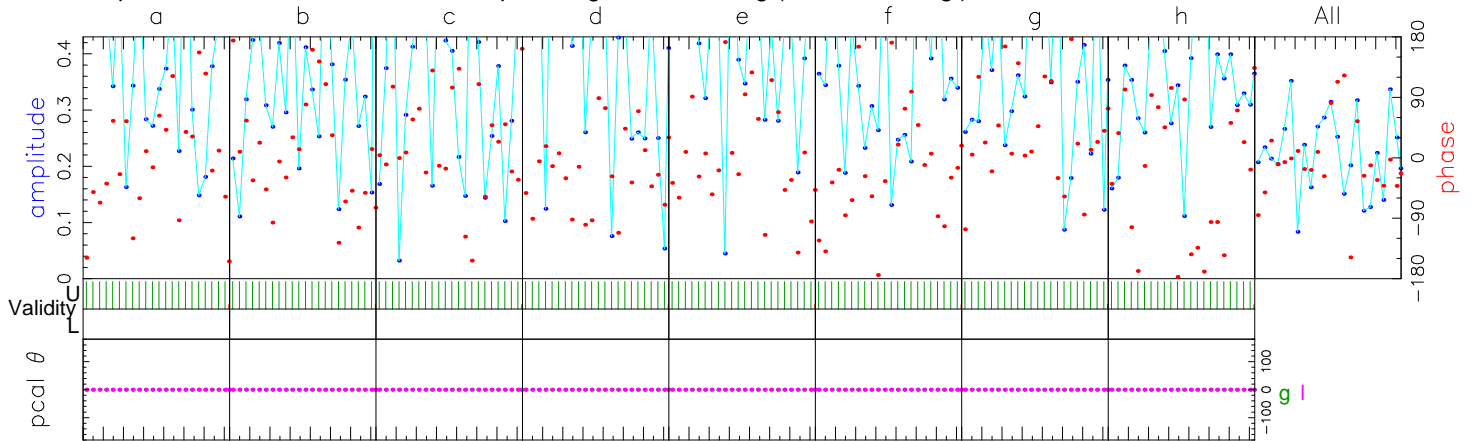


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133645  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	-1.03391035165E+03	Apriori delay (usec)	-1.03390065085E+03	Resid mbdelay (usec)	5.92420E-03	+/-	1.4E-04
Sband delay (usec)	-1.03391392635E+03	Apriori clock (usec)	3.0745220E+00	Resid sbdelay (usec)	-1.32755E-02	+/-	1.1E-03
Phase delay (usec)	-1.03390065099E+03	Apriori clockrate (us/s)	3.5800001E-07	Resid phdelay (usec)	-1.35791E-07	+/-	4.6E-07
Delay rate (us/s)	5.76071673393E-01	Apriori rate (us/s)	5.76071985414E-01	Resid rate (us/s)	-3.12020E-07	+/-	1.9E-09
Total phase (deg)	-27.3	Apriori accel (us/s/s)	3.46156289101E-05	Resid phase (deg)	-4.2	+/-	14.3

ph/seg (deg)	58.8	Theor.	34.2	Amplitude	0.143 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	75.7		59.7	Search (2048X32)	0.138	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	63.5		20.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.0		35.2	Inc. seg. avg.	0.191	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.154	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 290.6 el 38.0 pa 16.9 l: az 296.8 el 42.2 pa 75.9 u, v (fr/asec) -4348.953 5036.708 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/gl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/gl.W.83.1X10VA

Mk4/DiFX fourfit 3.21 rev 2937

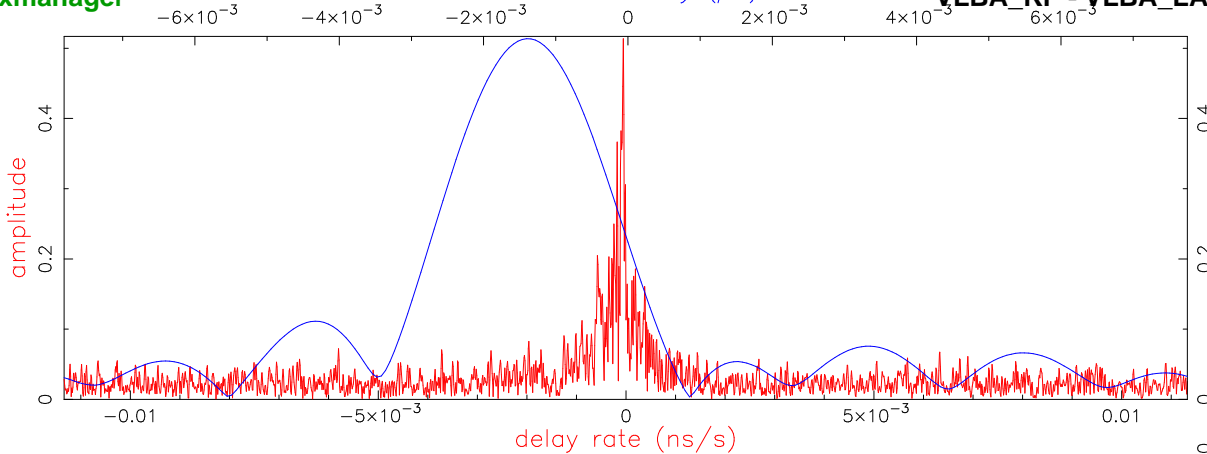
fxmanager

3C84.1X10VA, No0118, kl

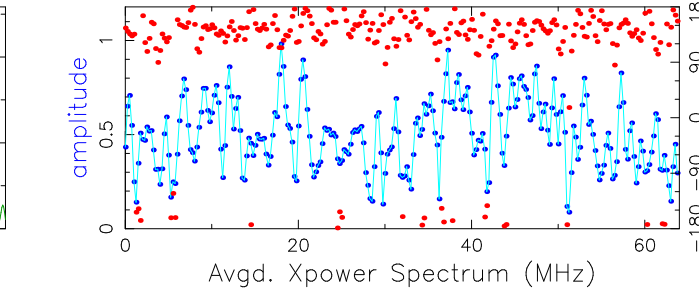
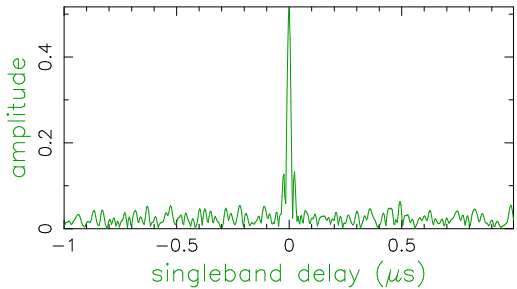
VLBA\_KP - VLBA\_LA, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 7

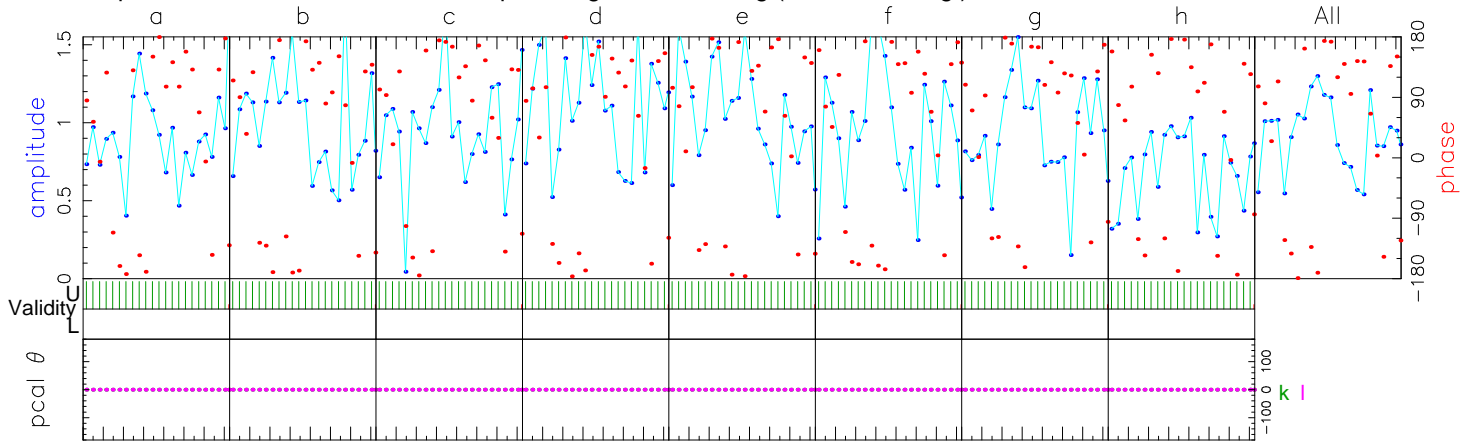


SNR 29.0  
 Int time 419.825  
 Amp 0.517  
 Phase 150.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001014  
 MBD -0.001414  
 Fringe rate (Hz)  
 -0.004365  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133651  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	0	0	0	0	0	0	0	0	APs used	
l	0	0	0	0	0	0	0	0	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		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	5.91565897430E+02		Apriori delay (usec)		5.91567311228E+02		Resid mbdelay (usec)		-1.41380E-03	+/- 3.7E-05
Sband delay (usec)	5.91566296978E+02		Apriori clock (usec)		2.9548912E+00		Resid sbdelay (usec)		-1.01425E-03	+/- 3.0E-04
Phase delay (usec)	5.91567316076E+02		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		4.84821E-06	+/- 1.3E-07
Delay rate (us/s)	6.92749106248E-03		Apriori rate (us/s)		6.92754173639E-03		Resid rate (us/s)		-5.06739E-08	+/- 5.3E-10
Total phase (deg)	218.4		Apriori accel (us/s/s)		-7.27168687250E-06		Resid phase (deg)		150.3	+/- 4.0

	RMS	Theor.	Amplitude	0.517 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.5	9.5	Search (2048X32)	0.496	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	89.5	16.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	6.6	5.6	Inc. seg. avg.	0.908	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	15.2	9.8	Inc. frq. avg.	0.514	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 299.0 el 44.3 pa 82.8 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -66.273 -872.730 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/kl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/kl.W.113.1X10VA

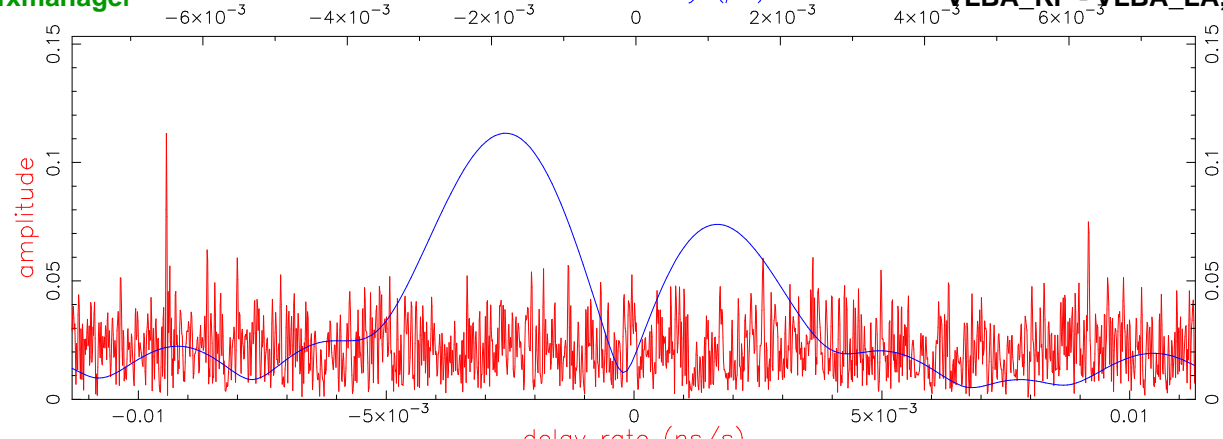
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

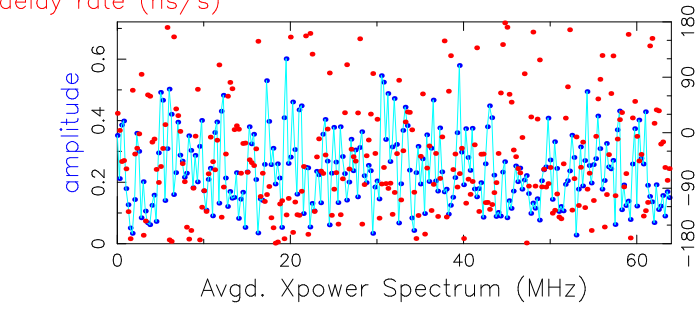
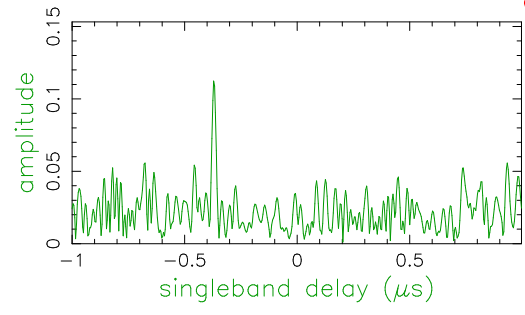
3C84.1X10VA, No0118, kl

VLBA\_KP - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)

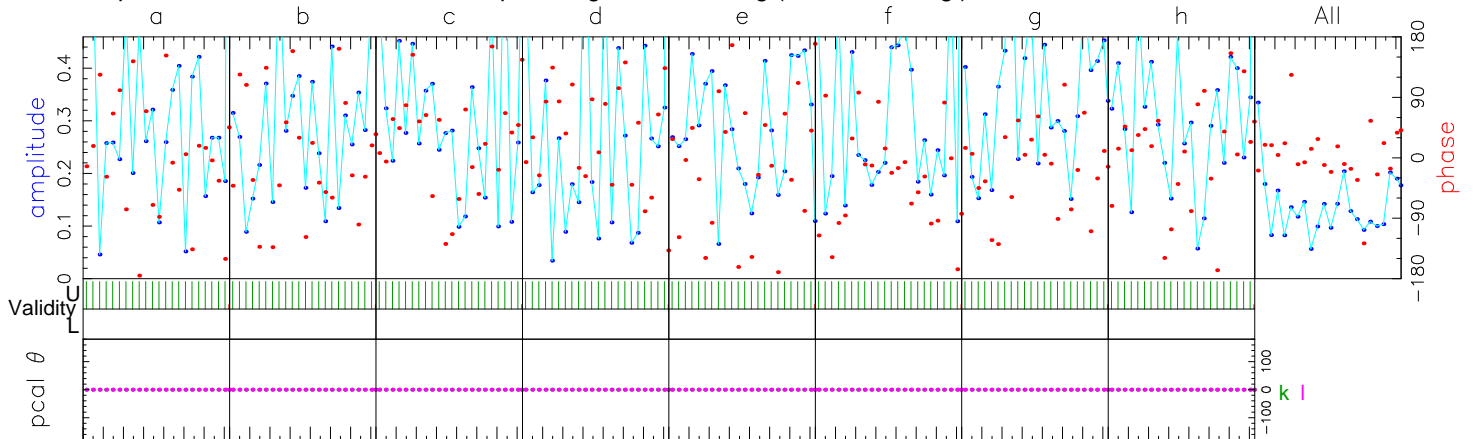


Fringe quality 0  
 SNR 6.3  
 Int time 419.825  
 Amp 0.153  
 Phase 2.2  
 PFD 6.3e-02  
 Delays (us)  
 SBD -0.369914  
 MBD -0.001766  
 Fringe rate (Hz)  
 -0.813921  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133655  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-13.1	-12.6	41.7	38.7	4.9	-32.5	-8.2	16.8	Phase	2.2
	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.2	Ampl.	0.2
	391.2	346.5	465.2	31.6	276.7	200.4	162.6	45.6	Sbd box	162.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.91190544959E+02		Apriori delay (usec)		5.91567311228E+02		Resid mbdelay (usec)		-1.76627E-03	+/- 1.7E-04
Sband delay (usec)	5.91197397228E+02		Apriori clock (usec)		2.9548912E+00		Resid sbdelay (usec)		-3.69914E-01	+/- 1.4E-03
Phase delay (usec)	5.91567311298E+02		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		7.02444E-08	+/- 5.8E-07
Delay rate (us/s)	6.91809291647E-03		Apriori rate (us/s)		6.92754173639E-03		Resid rate (us/s)		-9.44882E-06	+/- 2.4E-09
Total phase (deg)	70.3		Apriori accel (us/s/s)		-7.27168687250E-06		Resid phase (deg)		2.2	+/- 18.1

	RMS	Theor.	Amplitude	0.153 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.6	43.4	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	56.1	75.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	28.5	25.6	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.6	44.7	Inc. frq. avg.	0.152	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 299.0 el 44.3 pa 82.8 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -66.273 -872.730 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/kl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/kl.W.130.1X10VA

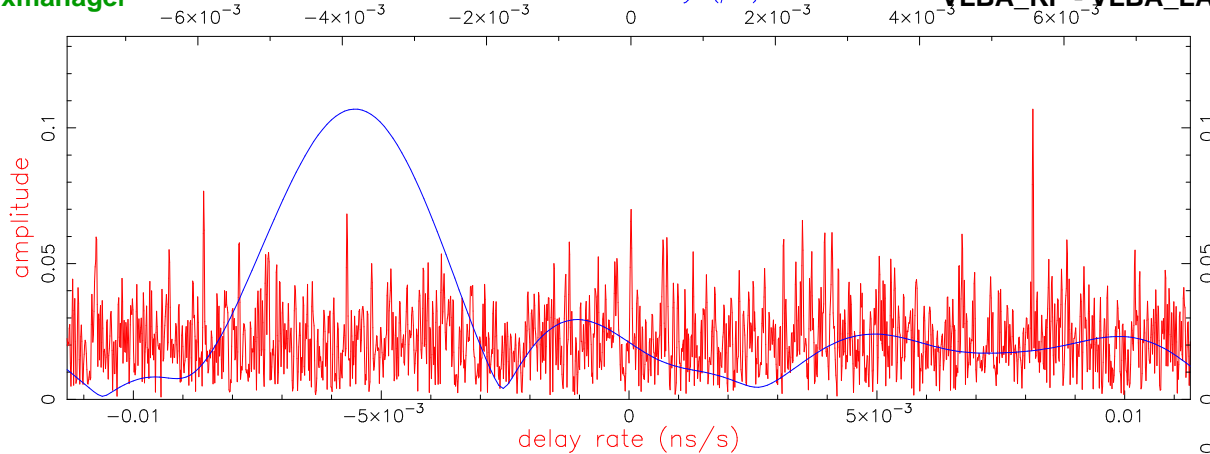
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, kl

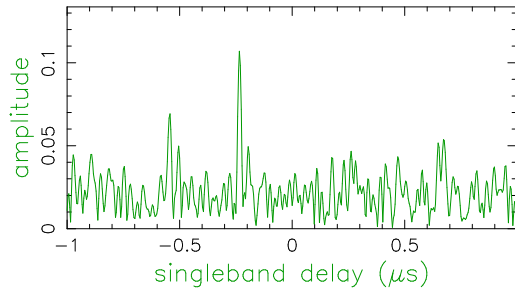
VLBA\_KP - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu$ s)

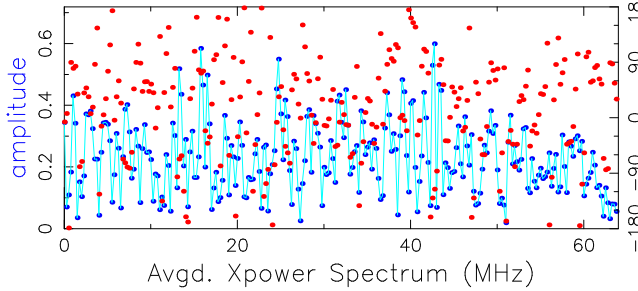


Fringe quality 0

SNR 6.0  
 Int time 419.825  
 Amp 0.134  
 Phase -103.0  
 PFD 4.1e-01  
 Delays (us)  
 SBD -0.234052  
 MBD -0.003804  
 Fringe rate (Hz)  
 0.702990  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

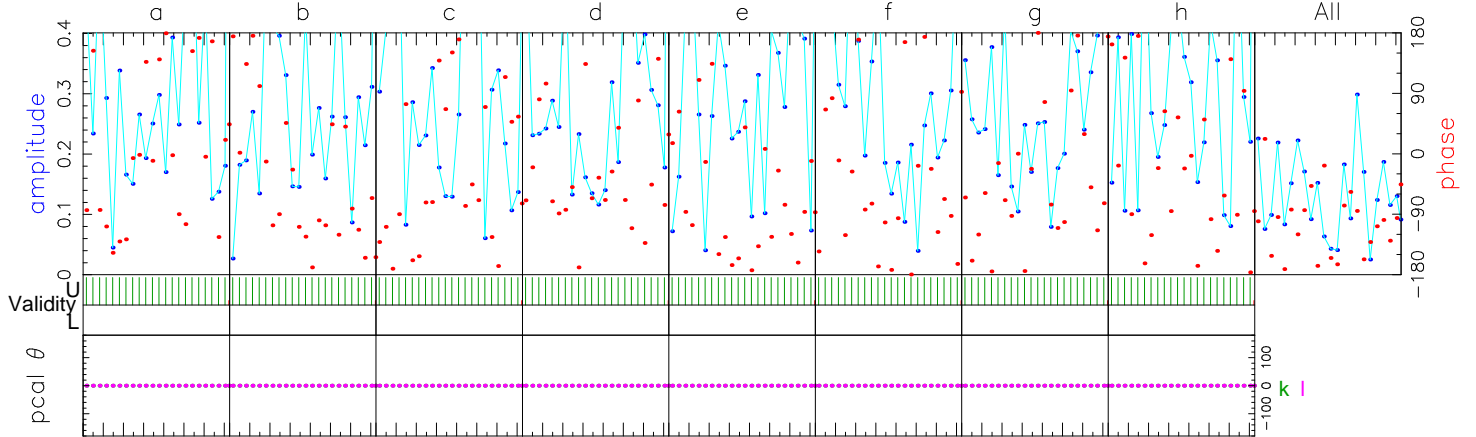


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133658  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



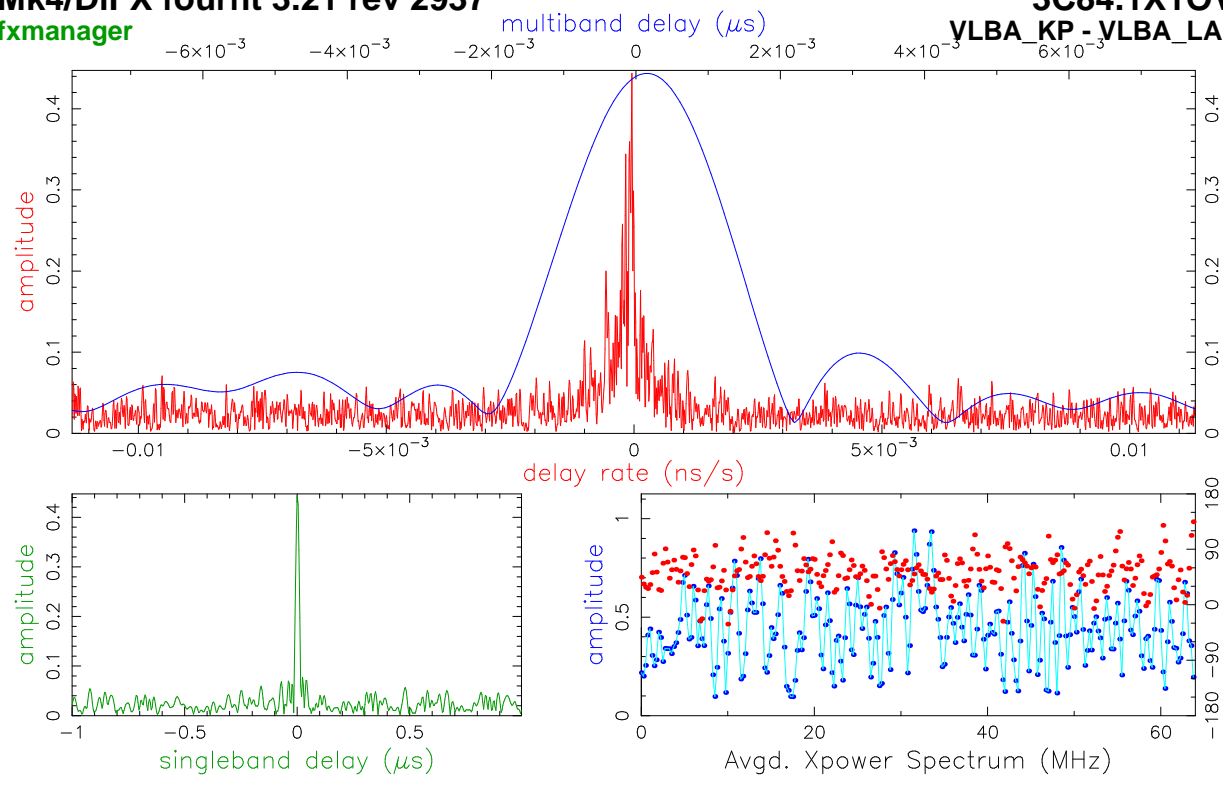
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.8	-96.3	-111.4	-71.0	-118.8	-125.7	-102.7	-91.2	Phase	-103.0
	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	7.5	441.9	46.7	233.2	463.8	404.7	238.0	412.3	Sbd box	197.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	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		
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)	5.91329132412E+02	Apriori delay (usec)	5.91567311228E+02	Resid mbdelay (usec)	-3.80382E-03	+/-	1.8E-04
Sband delay (usec)	5.91333258978E+02	Apriori clock (usec)	2.9548912E+00	Resid sbdelay (usec)	-2.34052E-01	+/-	1.4E-03
Phase delay (usec)	5.91567307906E+02	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	-3.32148E-06	+/-	6.2E-07
Delay rate (us/s)	6.93570275426E-03	Apriori rate (us/s)	6.92754173639E-03	Resid rate (us/s)	8.16102E-06	+/-	2.5E-09
Total phase (deg)	-34.9	Apriori accel (us/s/s)	-7.27168687250E-06	Resid phase (deg)	-103.0	+/-	19.1

ph/seg (deg)	48.9	RMS	45.8	Theor.	45.8	Amplitude	0.134 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	69.1		80.0		80.0	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	18.4		27.0		27.0	Inc. seg. avg.	0.127	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	26.2		47.2		47.2	Inc. frq. avg.	0.125	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

k: az 299.0 el 44.3 pa 82.8 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -66.273 -872.730 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/kl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/kl.W.149.1X10VA

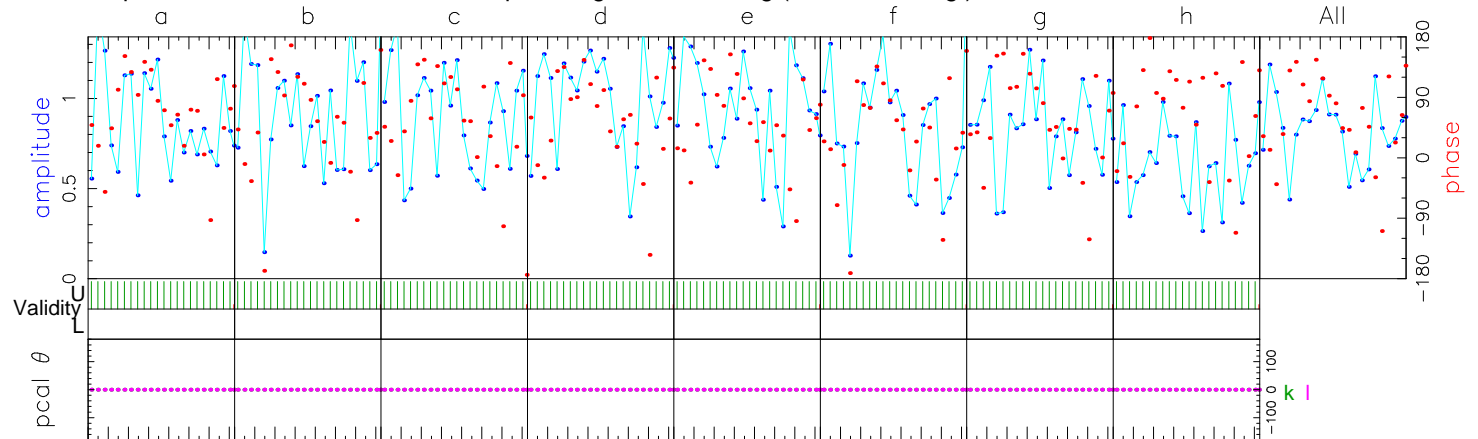


Fringe quality 7

SNR 25.1  
Int time 419.825  
Amp 0.447  
Phase 62.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.001141  
MBD 0.000173  
Fringe rate (Hz)  
-0.004132  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133647  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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

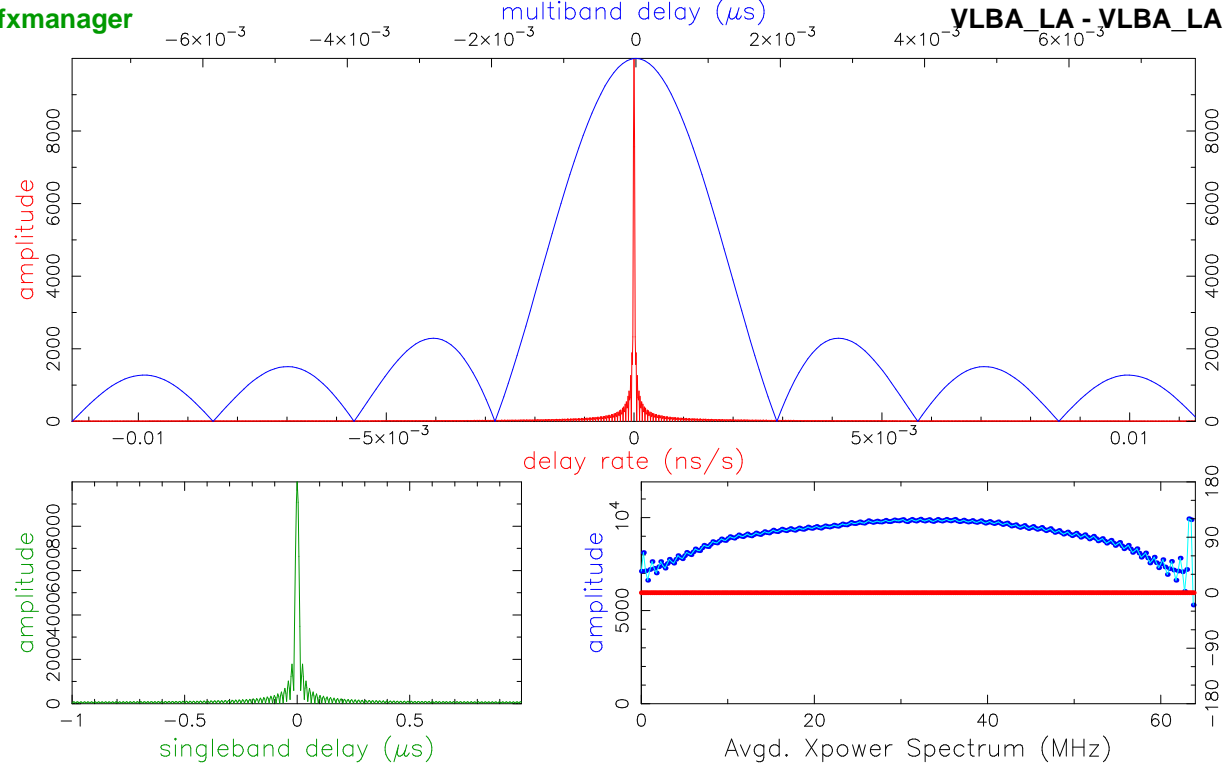


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
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)		5.91567484283E+02			5.91567311228E+02				1.73055E-04	+/- 4.3E-05
Sband delay (usec)		5.91568451978E+02			2.9548912E+00				1.14075E-03	+/- 3.4E-04
Phase delay (usec)		5.91567313252E+02			2.8600001E-07				2.02396E-06	+/- 1.5E-07
Delay rate (us/s)		6.92749376633E-03			6.92754173639E-03				-4.79701E-08	+/- 6.1E-10
Total phase (deg)			130.9		-7.27168687250E-06				62.8	+/- 4.6
pcal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate(MSamp/s):					128					
Data rate(Mb/s):					2048					
PC period (AP's)					5, 5					
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

k: az 299.0 el 44.3 pa 82.8      l: az 296.8 el 42.2 pa 75.9      u,v (fr/asec) -66.273 -872.730      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c211c/v1/1234/No0118/kl.1X10VA    Output file: /Exps/c211c/v1/1234/No0118/kl.W.93.1X10VA



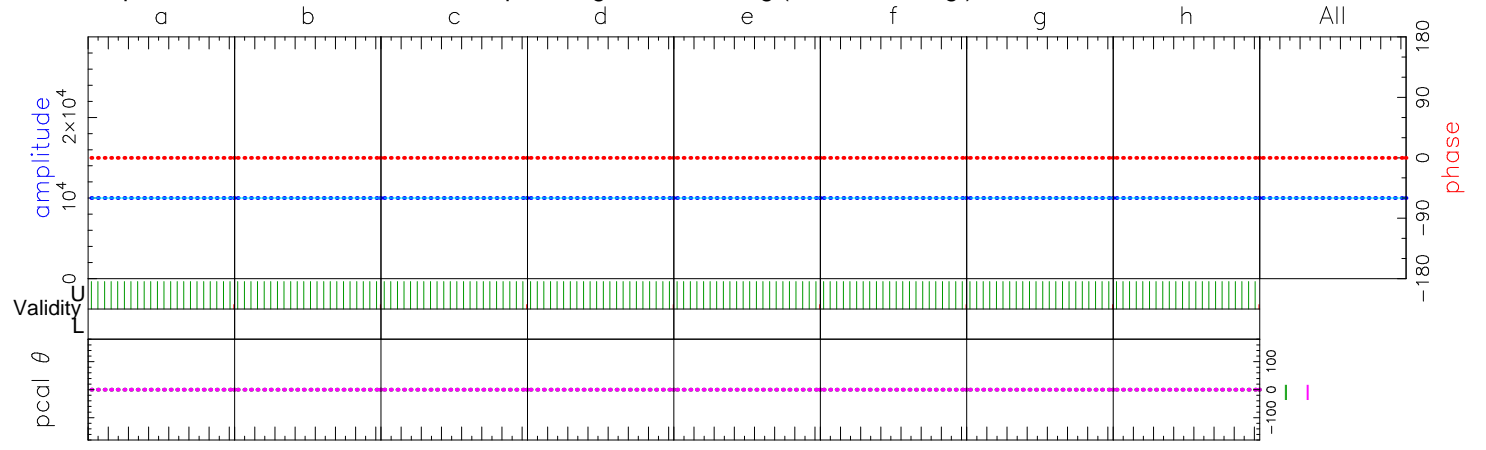


Fringe quality 9

SNR 560314.9  
Int time 419.826  
Amp 9999.999  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c211c  
Yr:day 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133701  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
Ampl.	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		10000.0	
Phase	0.0	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			
PC phase	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
PC amp	1000	1000	1000	1000	1000	1000	1000	1000			
Chan ids	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Tracks	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	1.9E-09	
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	1.5E-08	
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	6.6E-12	
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	2.7E-14	
Total phase (deg)			0.0							+/-	0.0

ph/seg (deg) 0.0 0.0  
amp/seg (%) 0.0 0.0  
ph/frq (deg) 0.0 0.0  
amp/frq (%) 0.0 0.0

l: az 296.8 el 42.2 pa 75.9  
Control file: cf\_1234\_gmva

l: az 296.8 el 42.2 pa 75.9  
Input file: /Exps/c211c/v1/1234/No0118/ll..1X10VA

u,v (fr/asec) 0.000 0.000  
Output file: /Exps/c211c/v1/1234/No0118/ll.W.162.1X10VA

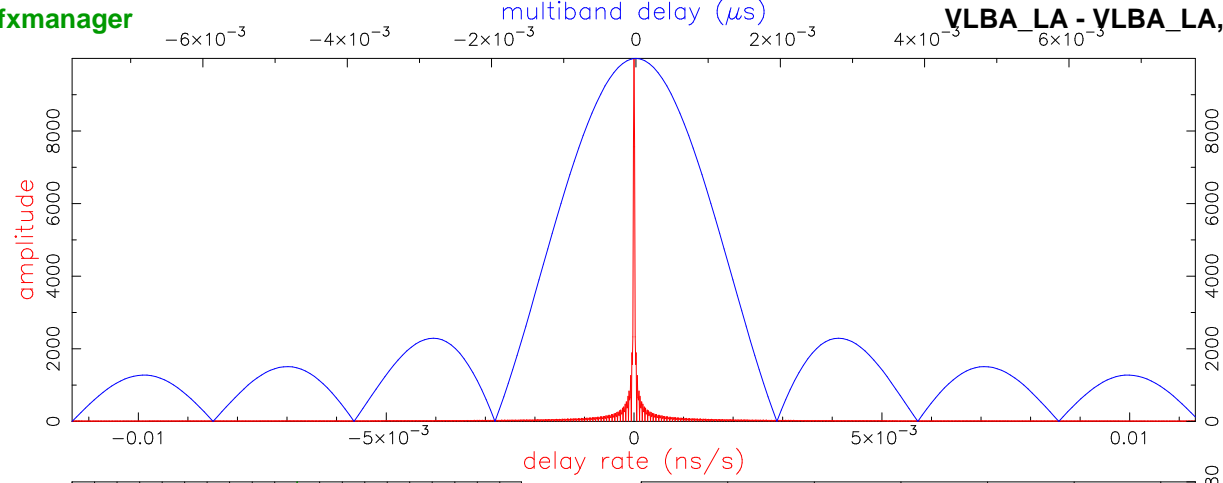
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, II

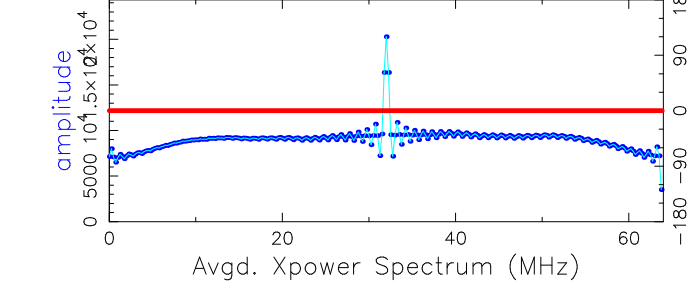
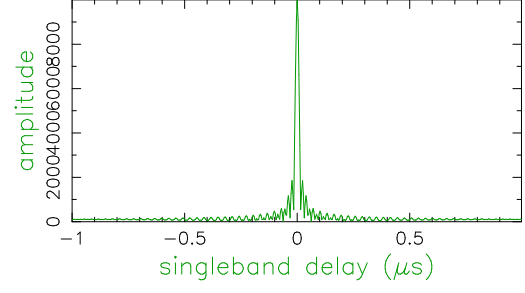
VLBA\_LA - VLBA\_LA, fgroup W, pol RR



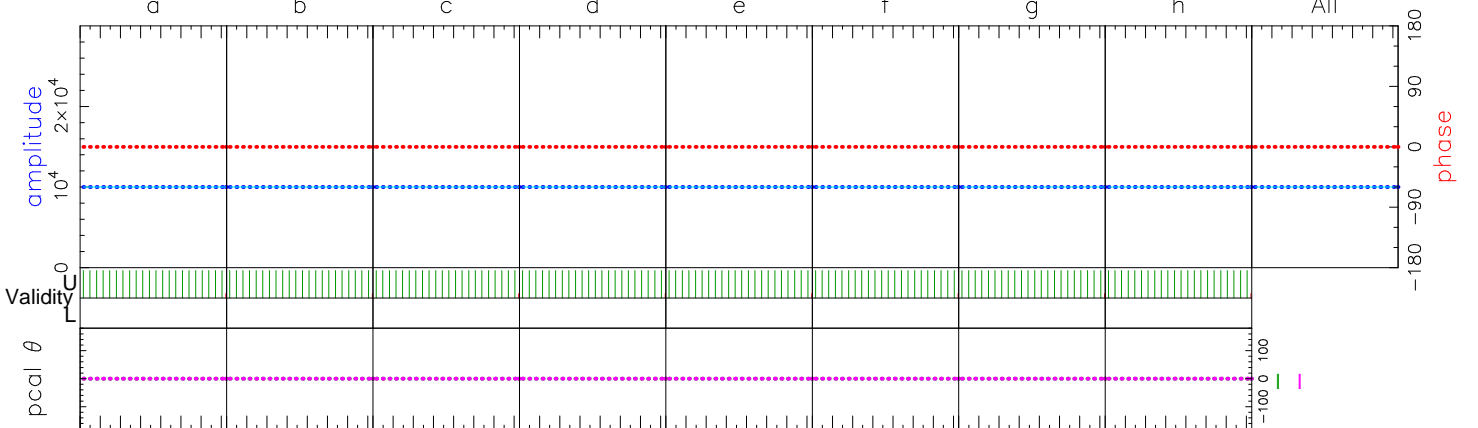
Fringe quality 9

SNR 560314.9  
 Int time 419.826  
 Amp 9999.999  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133706  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



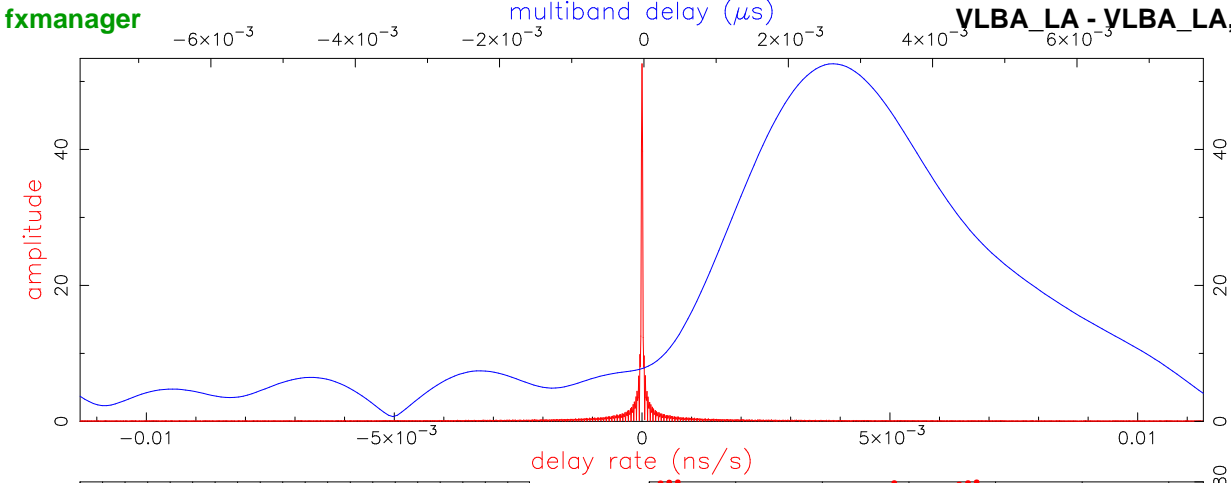
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0		
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0		
257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0		
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
0	0	0	0	0	0	0	0	PC freqs			
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	Mani PC			
1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
Group delay (usec)(sbd) 0.0000000000E+00									Apriori delay (usec) 0.0000000000E+00	Resid mbdelay (usec) 0.00000E+00	+/- 1.9E-09
Sband delay (usec) 0.0000000000E+00									Apriori clock (usec) 0.0000000E+00	Resid sbdelay (usec) 0.00000E+00	+/- 1.5E-08
Phase delay (usec) 0.0000000000E+00									Apriori clockrate (us/s) 0.0000000E+00	Resid phdelay (usec) 0.00000E+00	+/- 6.6E-12
Delay rate (us/s) 0.0000000000E+00									Apriori rate (us/s) 0.0000000000E+00	Resid rate (us/s) 0.00000E+00	+/- 2.7E-14
Total phase (deg) 0.0									Apriori accel (us/s/s) 0.0000000000E+00	Resid phase (deg) 0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

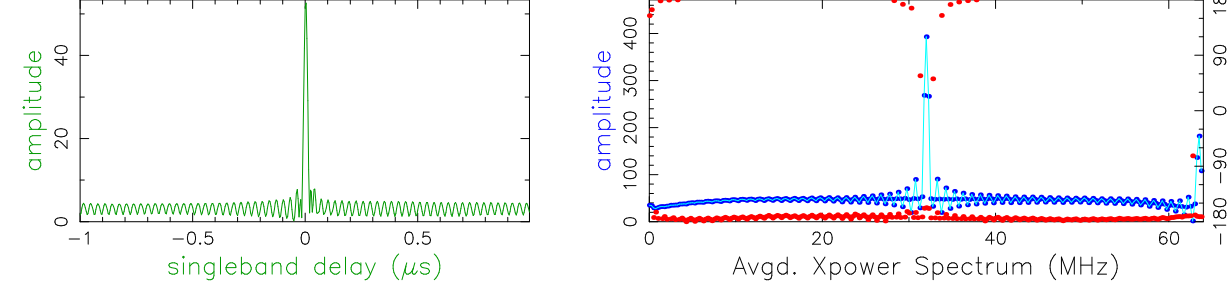
I: az 296.8 el 42.2 pa 75.9 I: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/ll..1X10VA Output file: /Exps/c211c/v1/1234/No0118/ll.W.184.1X10VA



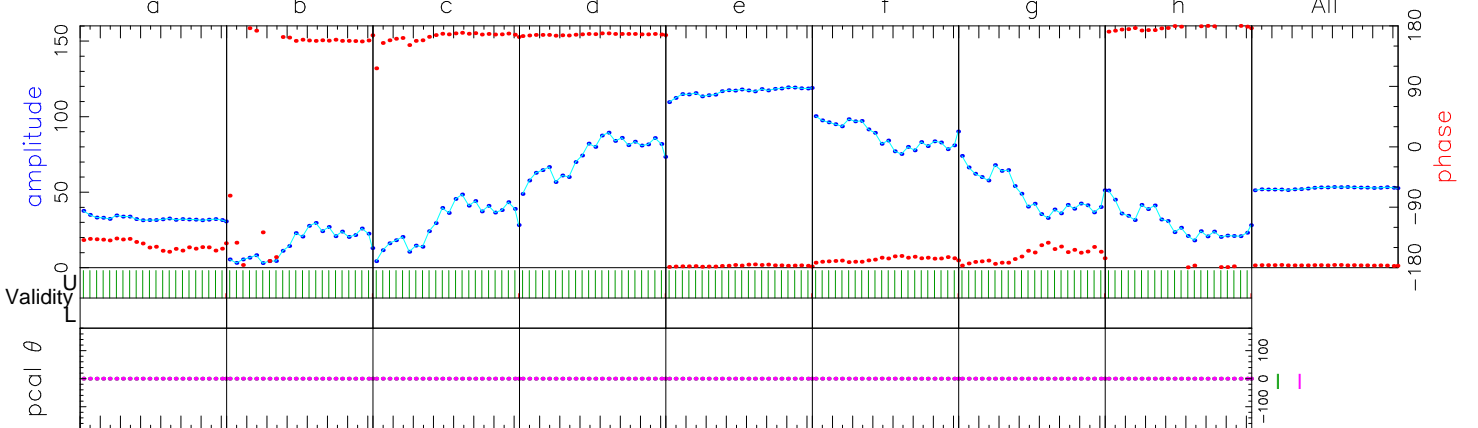
Fringe quality 6

SNR 2991.3  
Int time 419.826  
Amp 53.386  
Phase -176.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.002336  
MBD 0.002595  
Fringe rate (Hz)  
0.000017  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133710  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.6	162.0	165.9	167.2	-177.0	-167.6	-163.5	176.6	Phase	-176.3
	32.5	15.4	29.6	73.9	116.5	87.3	48.7	29.4	Ampl.	54.2
	257.6	257.3	257.5	257.8	257.7	257.6	257.7	257.6	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
	0	0	0	0	0	0	0	0	PC freqs	
	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	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	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)	2.59515625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.59516E-03	+/- 3.6E-07
Sband delay (usec)	2.33575000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.33575E-03	+/- 2.9E-06
Phase delay (usec)	-5.68653186713E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.68653E-06	+/- 1.2E-09
Delay rate (us/s)	1.97687575864E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.97688E-10	+/- 5.1E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-176.3	+/- 0.0

ph/seg (deg) 0.3 0.1 Search (2048X32) 52.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 2.0 0.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 19.5 0.1 Inc. seg. avg. 52.590 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 61.4 0.1 Inc. frq. avg. 54.159 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 296.8 el 42.2 pa 75.9 i: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/ll..1X10VA Output file: /Exps/c211c/v1/1234/No0118/ll.W.204.1X10VA

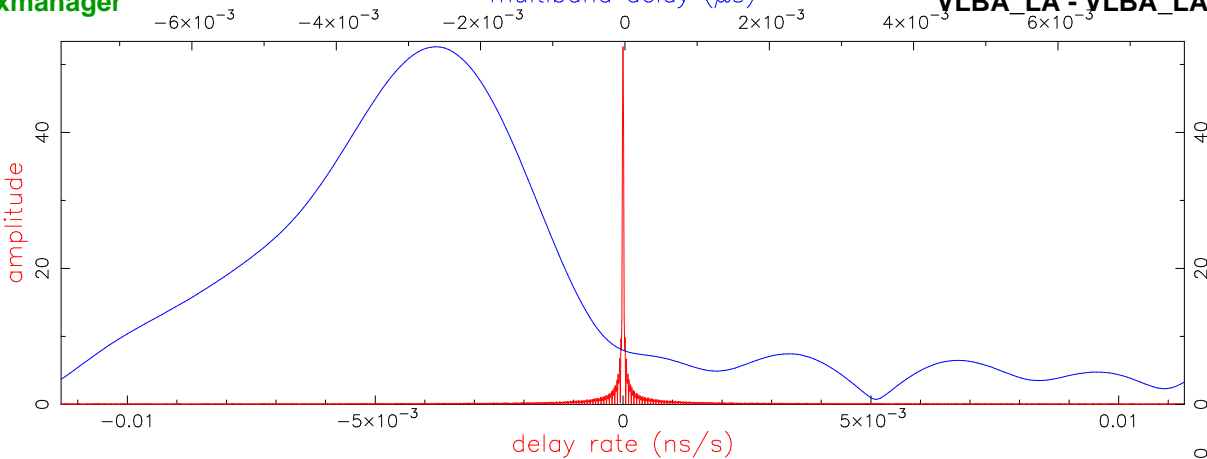
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, II

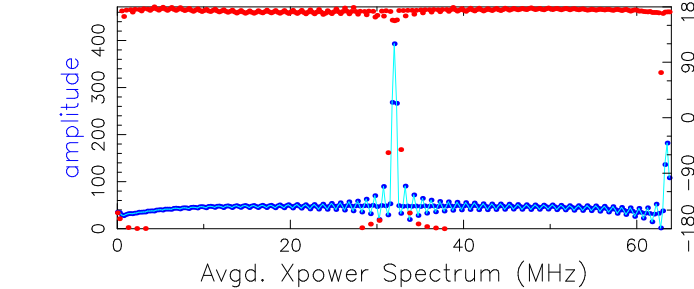
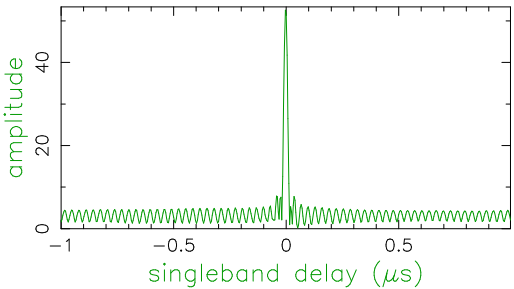
VLBA\_LA - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu$ s)



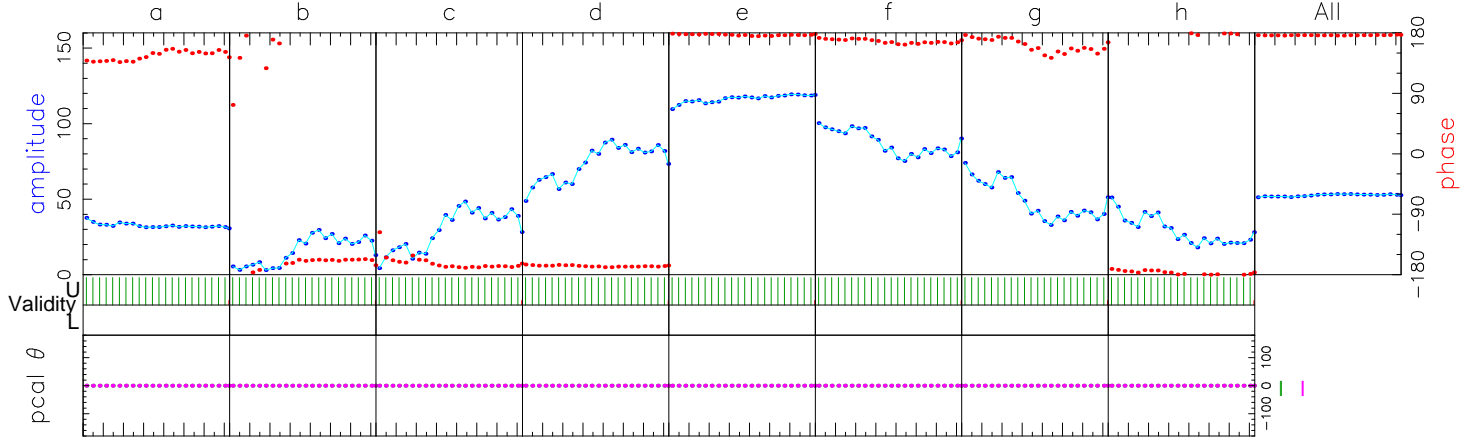
Fringe quality 6

SNR 2991.3  
 Int time 419.826  
 Amp 53.386  
 Phase 176.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.002336  
 MBD -0.002595  
 Fringe rate (Hz)  
 -0.000017  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133714  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	-2.59515625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.59516E-03	+/-	3.6E-07
Sband delay (usec)	-2.33575000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.33575E-03	+/-	2.9E-06
Phase delay (usec)	5.68653186720E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.68653E-06	+/-	1.2E-09
Delay rate (us/s)	-1.97687575864E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.97688E-10	+/-	5.1E-12
Total phase (deg)	176.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	176.3	+/-	0.0

ph/seg (deg)	0.3	0.1	Amplitude	53.386 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.0	0.2	Search (2048X32)	52.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	19.5	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	61.4	0.1	Inc. seg. avg.	52.590	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
			Inc. frq. avg.	54.159	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 296.8 el 42.2 pa 75.9      l: az 296.8 el 42.2 pa 75.9      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c211c/v1/1234/No0118/II..1X10VA      Output file: /Exps/c211c/v1/1234/No0118/II.W.223.1X10VA

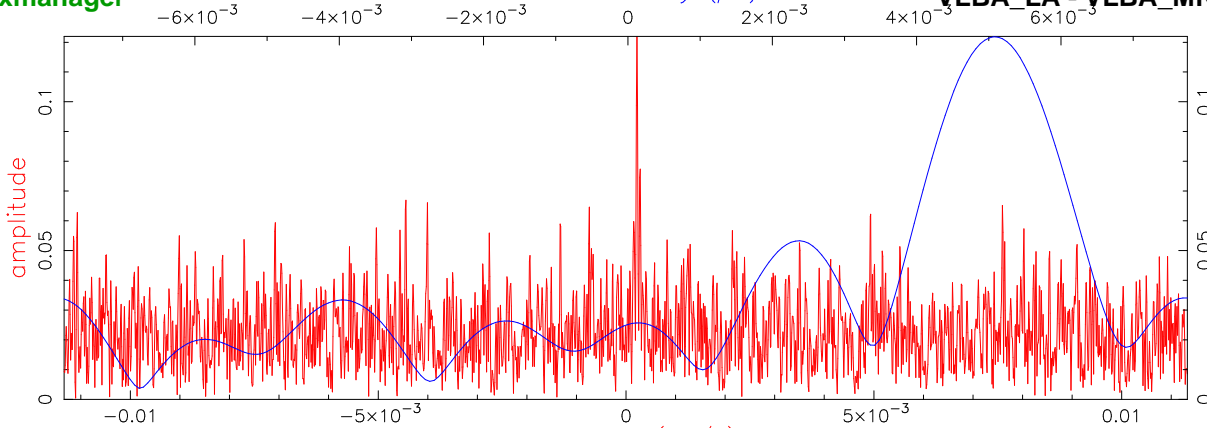
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

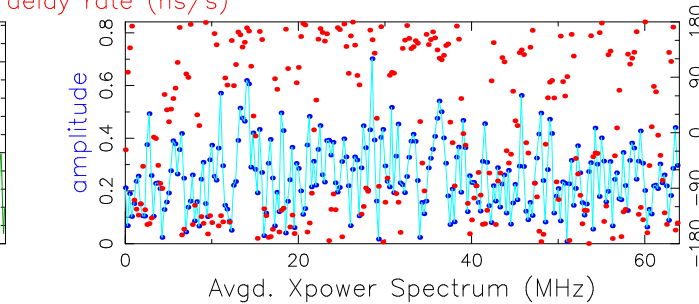
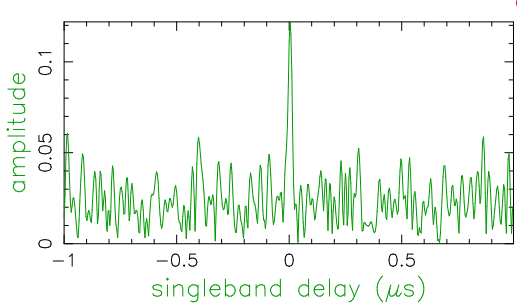
3C84.1X10VA, No0118, Im

VLBA\_LA - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

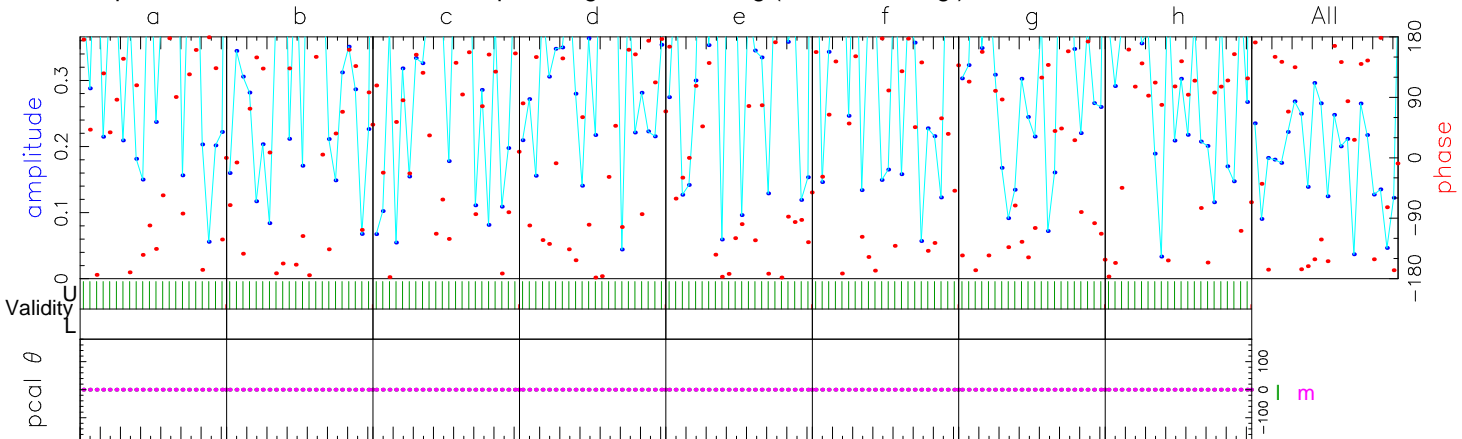


Fringe quality 0  
 SNR 6.8  
 Int time 419.821  
 Amp 0.122  
 Phase 167.9  
 PFD 2.4e-03  
 Delays (us)  
 SBD 0.004362  
 MBD 0.005089  
 Fringe rate (Hz) 0.018819  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133701  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	159.8	167.6	143.6	-163.2	-157.1	163.4	177.2	145.9	Phase	167.9
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	300.8	476.8	79.4	243.1	342.8	505.1	438.5	482.2	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	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	

Group delay (usec)(sbd)	-5.28888460971E+03	Apriori delay (usec)	-5.28888969912E+03	Resid mbdelay (usec)	5.08941E-03	+/-	1.6E-04
Sband delay (usec)	-5.28888533712E+03	Apriori clock (usec)	-1.8350845E+01	Resid sbdelay (usec)	4.36200E-03	+/-	1.3E-03
Phase delay (usec)	-5.28888969370E+03	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	5.41559E-06	+/-	5.4E-07
Delay rate (us/s)	-5.76238256932E-01	Apriori rate (us/s)	-5.76238475398E-01	Resid rate (us/s)	2.18467E-07	+/-	2.2E-09
Total phase (deg)	-77.5	Apriori accel (us/s/s)	4.64017824873E-05	Resid phase (deg)	167.9	+/-	16.8

ph/seg (deg)	RMS 65.9	Theor. 40.2	Amplitude Search (2048X32)	0.122 +/- 0.018	0.117	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	79.1	70.2	Interp.	0.000	0.117	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	23.5	23.7	Inc. seg. avg.	0.149	0.117	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	14.8	41.4	Inc. frq. avg.	0.119	0.119	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 296.8 el 42.2 pa 75.9 m: az 336.0 el 65.6 pa 148.6 u,v (fr/asec) 4497.491 4811.228 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lm..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lm.W.161.1X10VA

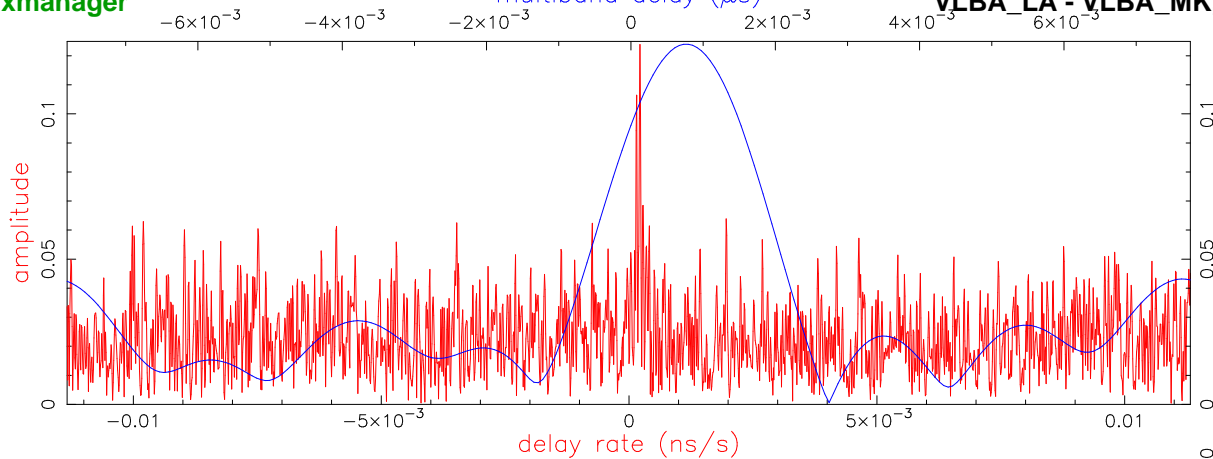
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, Im

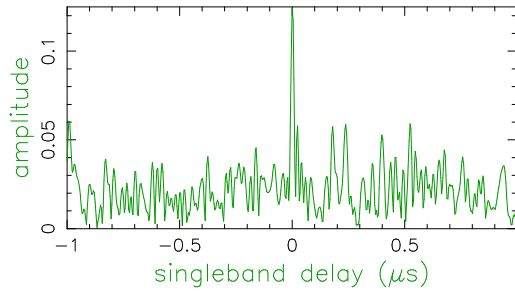
VLBA\_LA - VLBA\_MK, fgroup W, pol RR

multiband delay ( $\mu$ s)

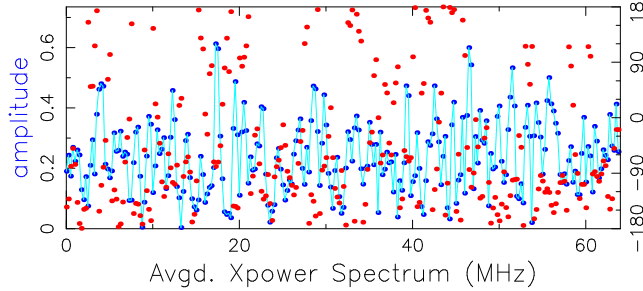


Fringe quality 0

SNR 7.0  
 Int time 419.821  
 Amp 0.125  
 Phase -113.8  
 PFD 7.7e-04  
 Delays (us)  
 SBD 0.001061  
 MBD 0.000813  
 Fringe rate (Hz) 0.018706  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

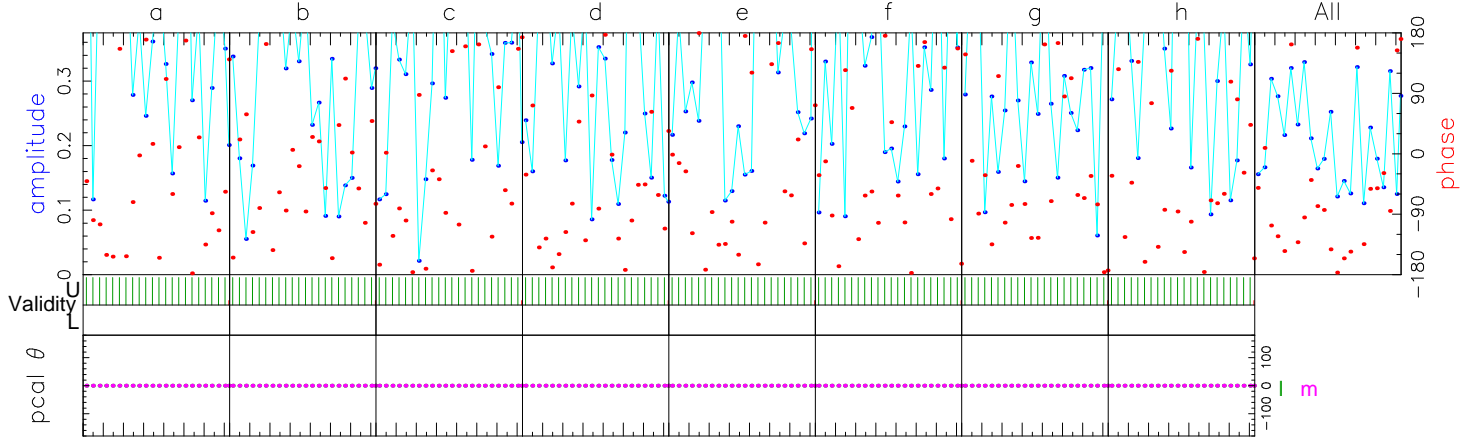


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133705  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.2	-74.9	-127.8	-103.7	-135.7	-111.6	-105.3	-120.5	Phase	-113.8
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	191.1	392.5	153.4	316.1	66.9	451.5	140.7	75.8	Sbd box	257.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.2888888624E+03		Apriori delay (usec)		-5.28888969912E+03		Resid mbdelay (usec)		8.12880E-04	+/- 1.6E-04
Sband delay (usec)	-5.28888863837E+03		Apriori clock (usec)		-1.8350845E+01		Resid sbdelay (usec)		1.06075E-03	+/- 1.2E-03
Phase delay (usec)	-5.2888970279E+03		Apriori clockrate (us/s)		-6.0400003E-07		Resid phdelay (usec)		-3.67021E-06	+/- 5.3E-07
Delay rate (us/s)	-5.76238258242E-01		Apriori rate (us/s)		-5.76238475398E-01		Resid rate (us/s)		2.17156E-07	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		4.64017824873E-05		Resid phase (deg)		-113.8	+/- 16.4

ph/seg (deg) 58.8 39.3 Search (2048X32) 0.118 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 89.8 68.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.4 23.2 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 17.1 40.4 Inc. frq. avg. 0.120 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 296.8 el 42.2 pa 75.9 m: az 336.0 el 65.6 pa 148.6 u,v (fr/asec) 4497.491 4811.228 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lm..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lm.W.179.1X10VA simultaneous interpolator

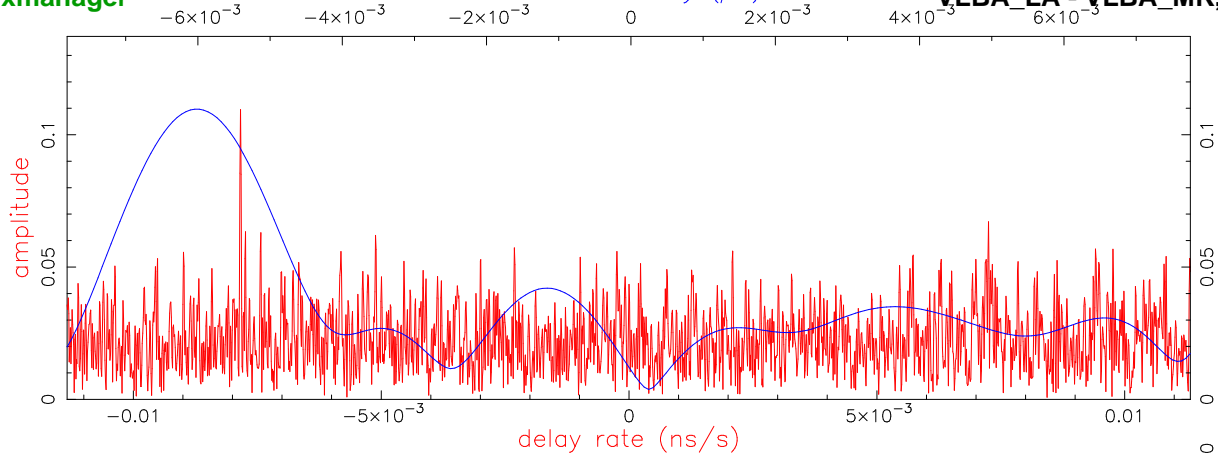
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, Im

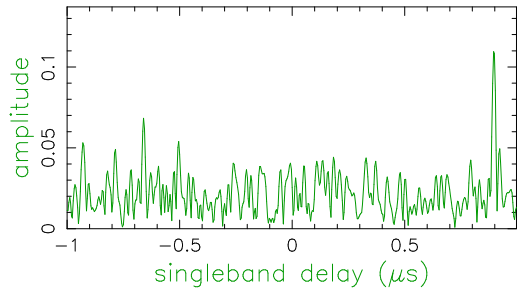
VLBA\_LA - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

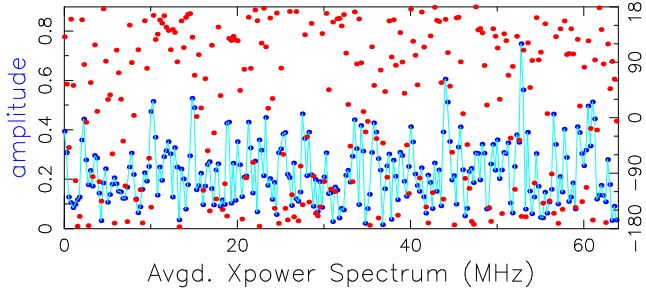


Fringe quality 0

SNR 6.3  
Int time 419.821  
Amp 0.137  
Phase 101.0  
PFD 1.0e-01  
Delays (us)  
SBD 0.896248  
MBD -0.005950  
Fringe rate (Hz)  
-0.676204  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

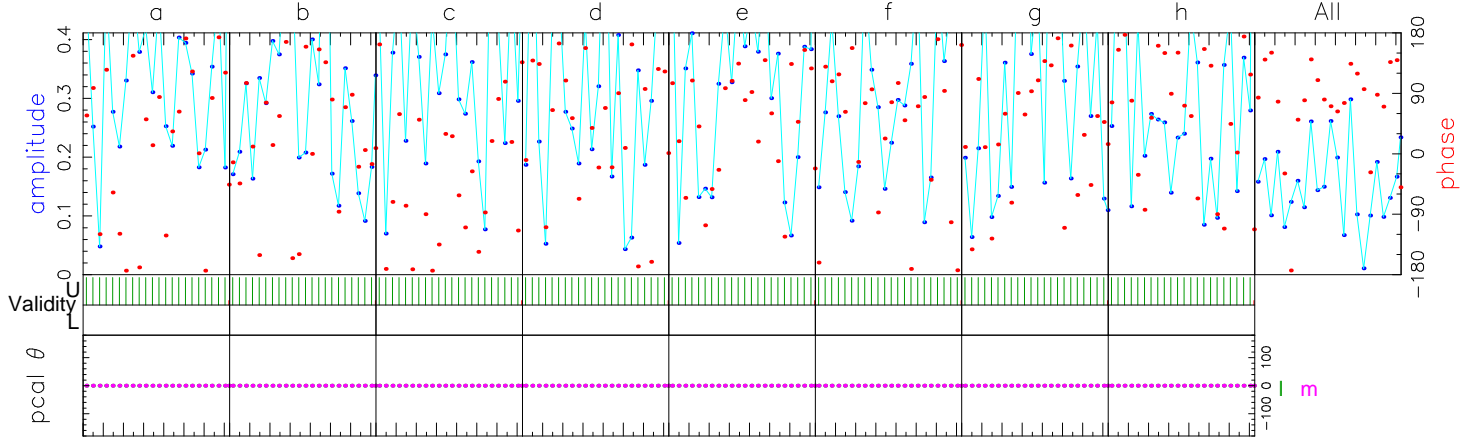


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133709  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	116.4	107.3	6.1	110.9	91.2	114.0	76.0	127.1	Phase	101.0
l	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
m	90.3	190.9	351.8	486.8	485.7	86.9	493.8	285.3	Sbd box	486.4
l:m	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.28798939866E+03	Apriori delay (usec)	-5.28888969912E+03	Resid mbdelay (usec)	-5.94954E-03	+/-	1.7E-04
Sband delay (usec)	-5.28799345137E+03	Apriori clock (usec)	-1.8350845E+01	Resid sbdelay (usec)	8.96248E-01	+/-	1.4E-03
Phase delay (usec)	-5.28888969586E+03	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	3.25629E-06	+/-	5.9E-07
Delay rate (us/s)	-5.76246325459E-01	Apriori rate (us/s)	-5.76238475398E-01	Resid rate (us/s)	-7.85006E-06	+/-	2.4E-09
Total phase (deg)	-144.5	Apriori accel (us/s/s)	4.64017824873E-05	Resid phase (deg)	101.0	+/-	18.3

ph/seg (deg)	53.2	RMS	43.9	Theor.	53.2	Amplitude	0.137 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	70.4	Search (2048X32)	0.109	Search	0.109	Search	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	42.7	Inc. seg. avg.	0.144	Inc. seg. avg.	0.144	Inc. seg. avg.	0.144	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	37.2	Inc. frq. avg.	0.134	Inc. frq. avg.	0.134	Inc. frq. avg.	0.134	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 296.8 el 42.2 pa 75.9 m: az 336.0 el 65.6 pa 148.6 u,v (fr/asec) 4497.491 4811.228 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lm..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lm.W.198.1X10VA

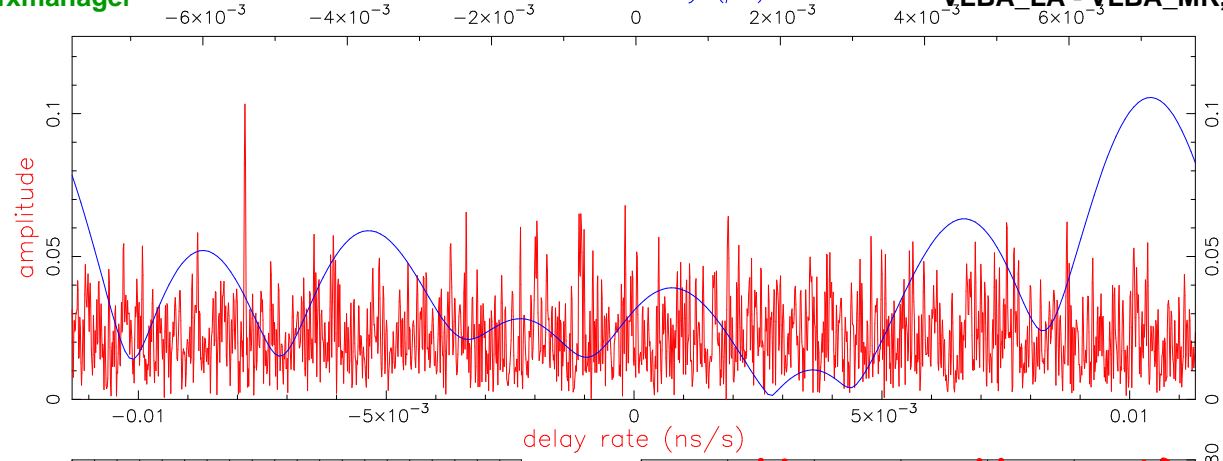
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, Im

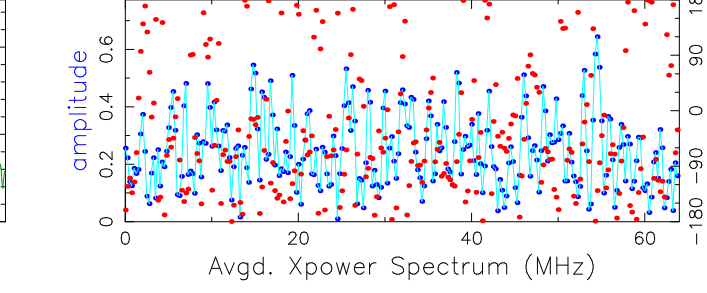
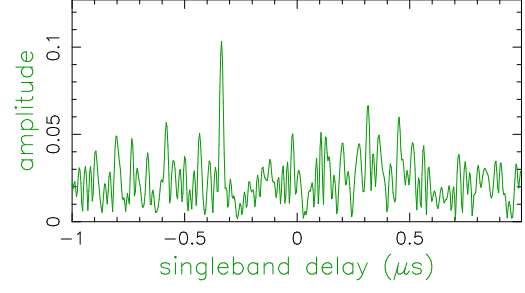
VLBA\_LA - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)



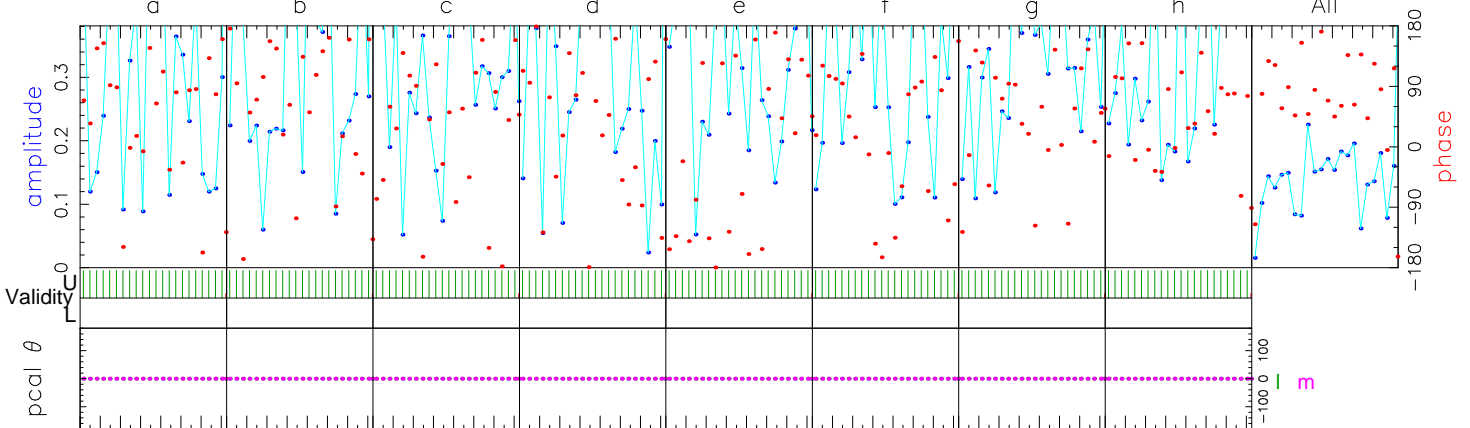
Fringe quality 0

SNR 5.8  
 Int time 419.821  
 Amp 0.127  
 Phase 87.8  
 PFD 8.2e-01  
 Delays (us)  
 SBD -0.336337  
 MBD -0.008301  
 Fringe rate (Hz)  
 -0.677094  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133714  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	87.9	108.6	72.7	86.6	163.3	78.3	55.0	63.6	Phase	87.8
	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	170.8	260.2	151.7	372.1	223.5	349.3	473.4	170.8	Sbd box	170.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	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	

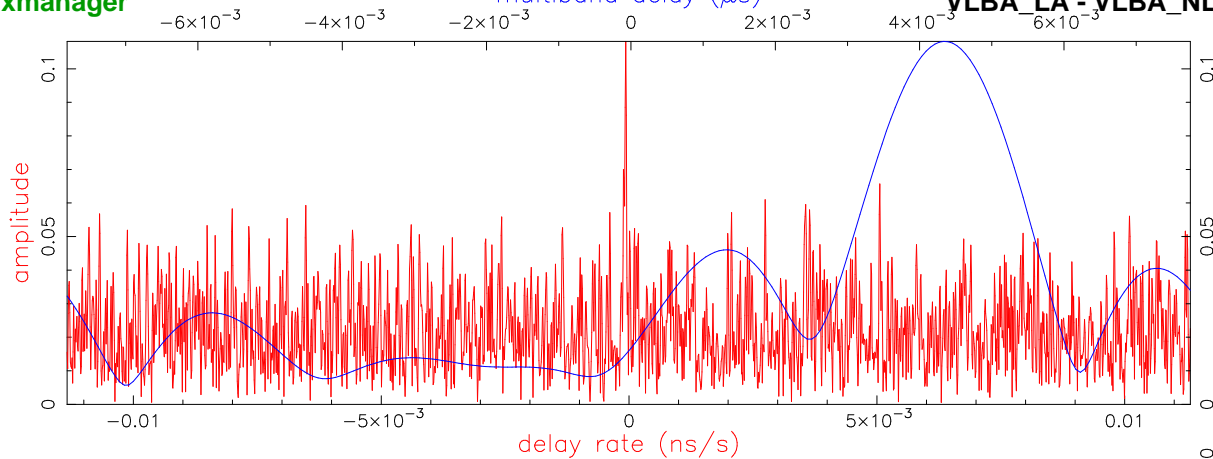
Group delay (usec)(sbd)	-5.28922612490E+03	Apriori delay (usec)	-5.28888969912E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.9E-04
Sband delay (usec)	-5.28922603637E+03	Apriori clock (usec)	-1.8350845E+01	Resid sbdelay (usec)	-3.36337E-01	+/-	1.5E-03
Phase delay (usec)	-5.28888969629E+03	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	2.83057E-06	+/-	6.4E-07
Delay rate (us/s)	-5.76246335783E-01	Apriori rate (us/s)	-5.76238475398E-01	Resid rate (us/s)	-7.86038E-06	+/-	2.6E-09
Total phase (deg)	-157.7	Apriori accel (us/s/s)	4.64017824873E-05	Resid phase (deg)	87.8	+/-	19.8

ph/seg (deg)	RMS 54.6	Theor. 47.4	Amplitude Search (2048X32)	0.127 +/- 0.022	0.104	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	61.8	82.8	Interp.	0.000	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	36.8	28.0	Inc. seg. avg.	0.127	0.104	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	46.3	48.8	Inc. frq. avg.	0.134	0.104	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

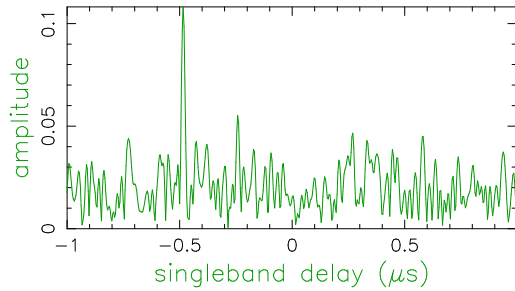
l: az 296.8 el 42.2 pa 75.9 m: az 336.0 el 65.6 pa 148.6 u,v (fr/asec) 4497.491 4811.228 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lm..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lm.W.218.1X10VA



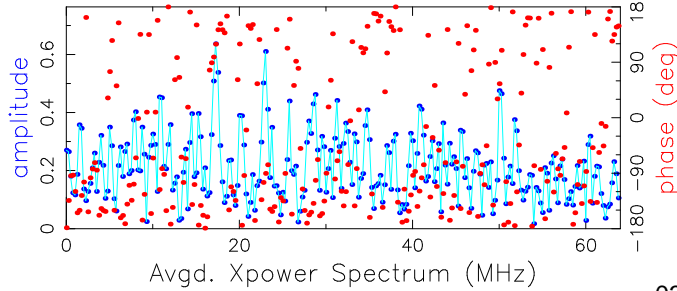
multiband delay ( $\mu$ s)



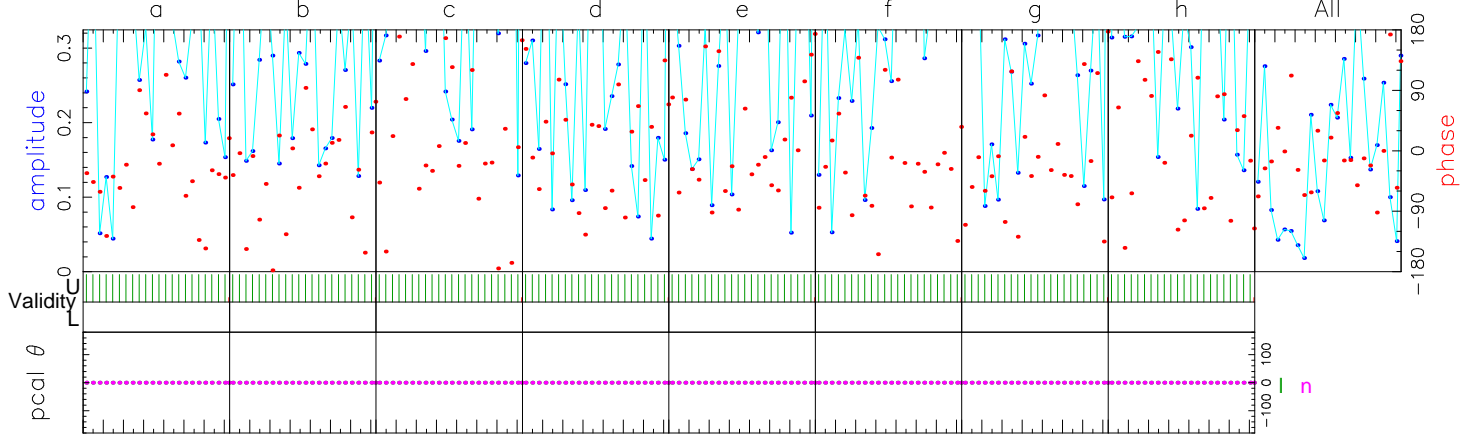
Fringe quality 0  
SNR 6.1  
Int time 419.826  
Amp 0.108  
Phase -19.3  
PFD 3.0e-01  
Delays (us)  
SBD -0.484295  
MBD 0.004351  
Fringe rate (Hz)  
-0.005670  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133701  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
n	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: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)	2.17741698958E+03	Apriori delay (usec)		2.17789701373E+03	Resid mbdelay (usec)		4.35085E-03	+/-	1.8E-04
Sband delay (usec)	2.17741271823E+03	Apriori clock (usec)		-8.1191845E+00	Resid sbdelay (usec)		-4.84295E-01	+/-	1.4E-03
Phase delay (usec)	2.17789701311E+03	Apriori clockrate (us/s)		-5.8600000E-07	Resid phdelay (usec)		-6.22847E-07	+/-	6.1E-07
Delay rate (us/s)	5.43643800995E-03	Apriori rate (us/s)		5.43650382929E-03	Resid rate (us/s)		-6.58193E-08	+/-	2.5E-09
Total phase (deg)	255.3	Apriori accel (us/s/s)		-1.77193447831E-05	Resid phase (deg)		-19.3	+/-	18.9

	RMS	Theor.	Amplitude	0.108 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.7	45.3	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	100.4	79.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.0	26.7	Inc. seg. avg.	0.115	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	36.8	46.7	Inc. frq. avg.	0.102	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 296.8 el 42.2 pa 75.9 n: az 297.7 el 34.7 pa 62.1 u,v (fr/asec) -74.589 -1773.863 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/In..1X10VA Output file: /Exps/c211c/v1/1234/No0118/In.W.164.1X10VA

Mk4/DiFX fourfit 3.21 rev 2937

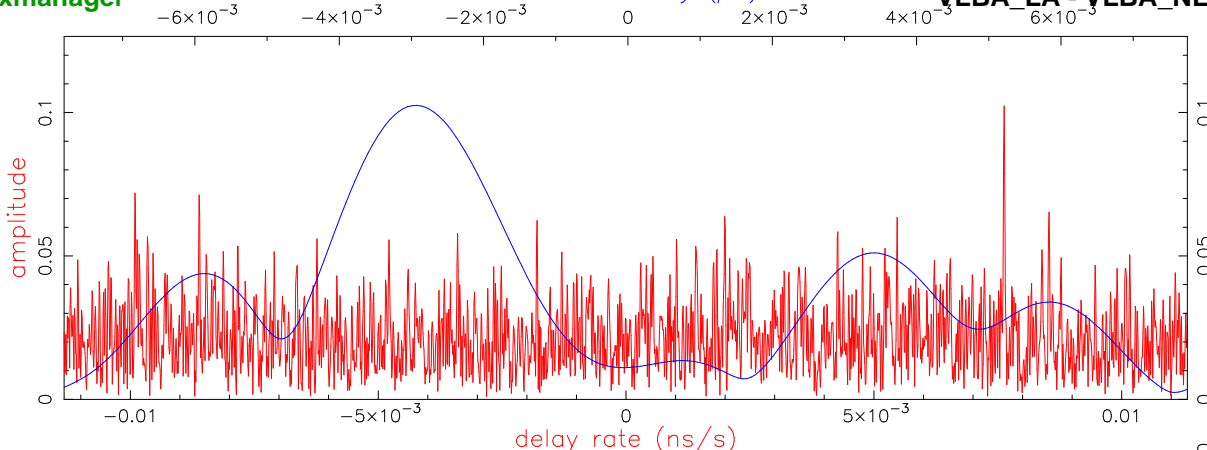
fxmanager

3C84.1X10VA, No0118, In

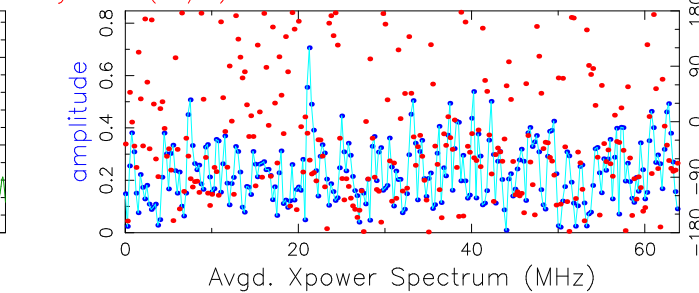
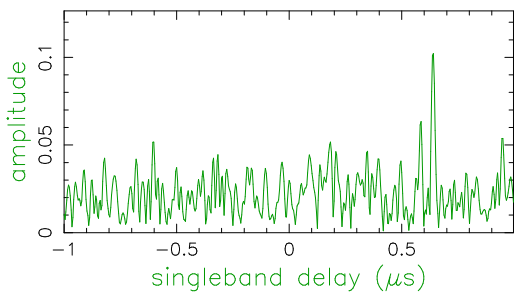
VLBA\_LA - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

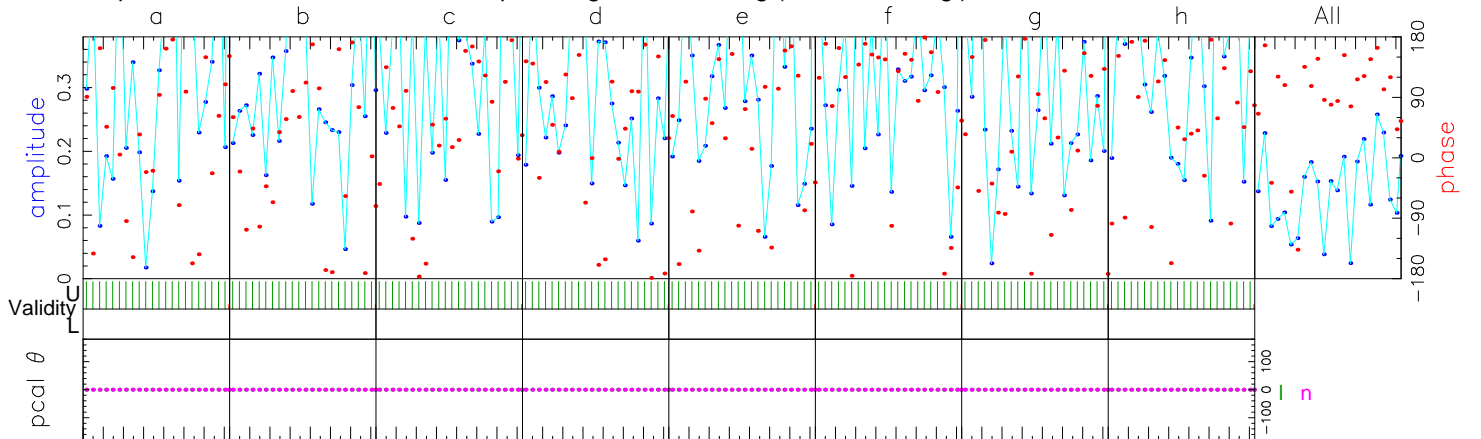


SNR 5.8  
Int time 419.826  
Amp 0.127  
Phase 120.9  
PFD 7.3e-01  
Delays (us)  
SBD 0.638869  
MBD -0.003025  
Fringe rate (Hz) 0.657925  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133706  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	132.8	77.2	91.4	133.8	135.0	141.9	95.6	105.9	Phase	120.9	
	0.1	0.1	0.1	0.1	0.1	0.3	0.0	0.1	Ampl.	0.1	
	196.3	298.6	208.9	384.0	85.4	420.4	408.6	152.6	Sbd box	420.6	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
l	0	0	0	0	0	0	0	0	PC freqs		
n	0	0	0	0	0	0	0	0	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	Manl 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	2.17853461337E+03		Apriori delay (usec)		2.17789701373E+03		Resid mbdelay (usec)		-3.02536E-03	+/- 1.9E-04	
Sband delay (usec)	2.17853588248E+03		Apriori clock (usec)		-8.1191845E+00		Resid sbdelay (usec)		6.38869E-01	+/- 1.5E-03	
Phase delay (usec)	2.17789701763E+03		Apriori clockrate (us/s)		-5.8600000E-07		Resid phdelay (usec)		3.89952E-06	+/- 6.3E-07	
Delay rate (us/s)	5.44414168647E-03		Apriori rate (us/s)		5.43650382929E-03		Resid rate (us/s)		7.63786E-06	+/- 2.6E-09	
Total phase (deg)			Apriori accel (us/s/s)		-1.77193447831E-05		Resid phase (deg)		120.9	+/- 19.6	
	RMS	Theor.	Amplitude	0.127 +/- 0.022		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	63.2	47.1	Search (2048X32)	0.101		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	69.3	82.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	27.7	27.8	Inc. seg. avg.	0.126		Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	53.6	48.4	Inc. frq. avg.	0.120		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00

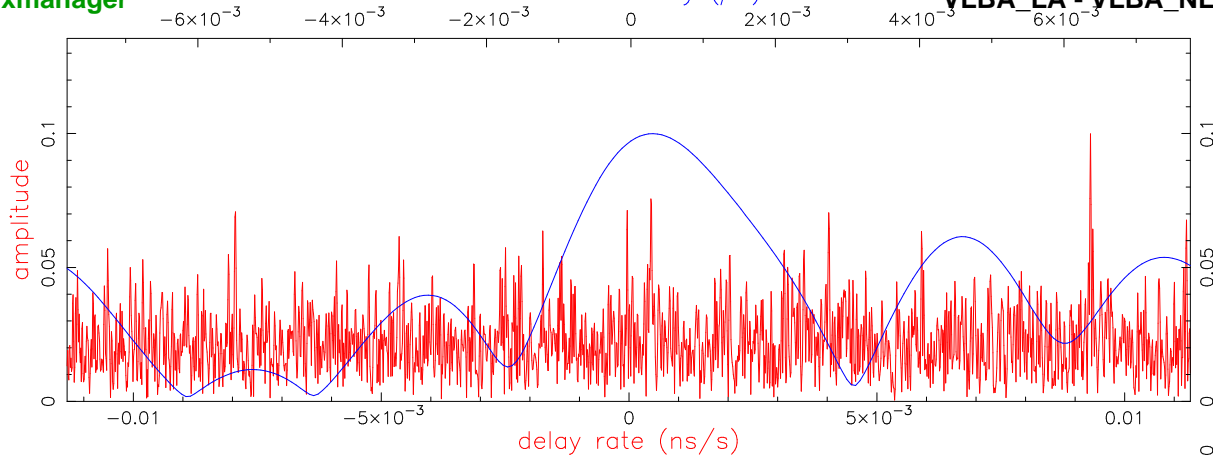
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, In

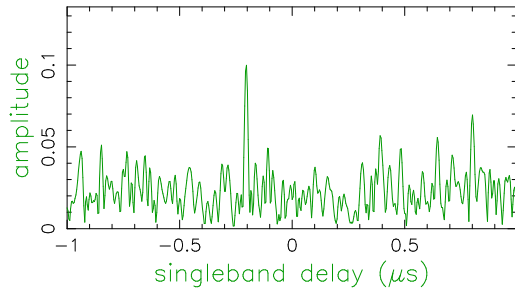
VLBA\_LA - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

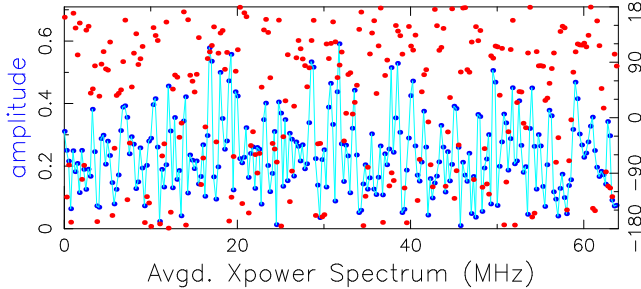


Fringe quality 0

SNR 5.7  
 Int time 419.826  
 Amp 0.136  
 Phase -68.1  
 PFD 9.8e-01  
 Delays (us)  
 SBD -0.204350  
 MBD 0.000248  
 Fringe rate (Hz)  
 0.803075  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

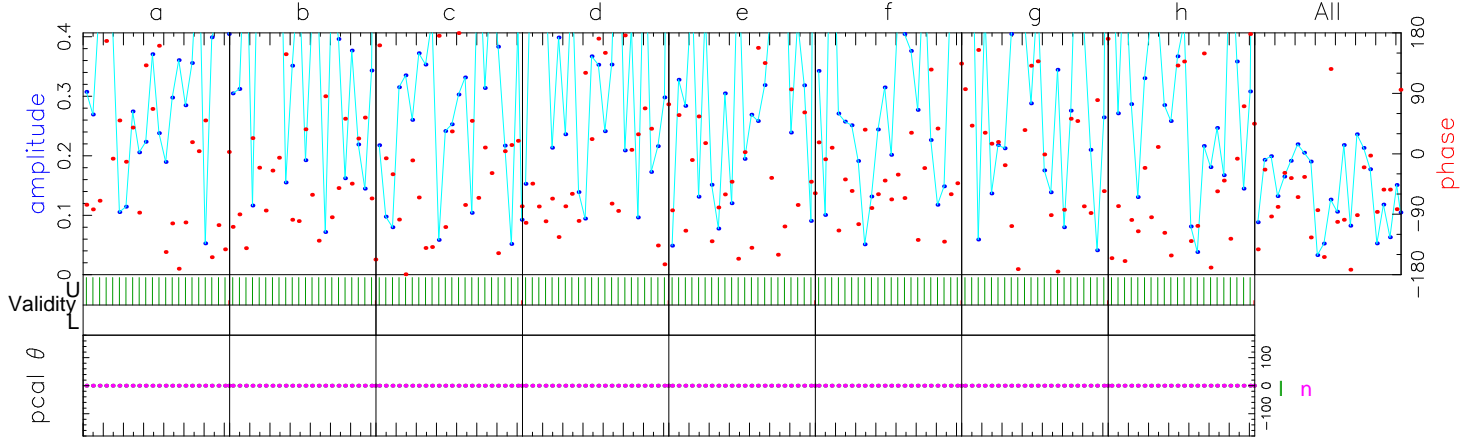


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133709  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



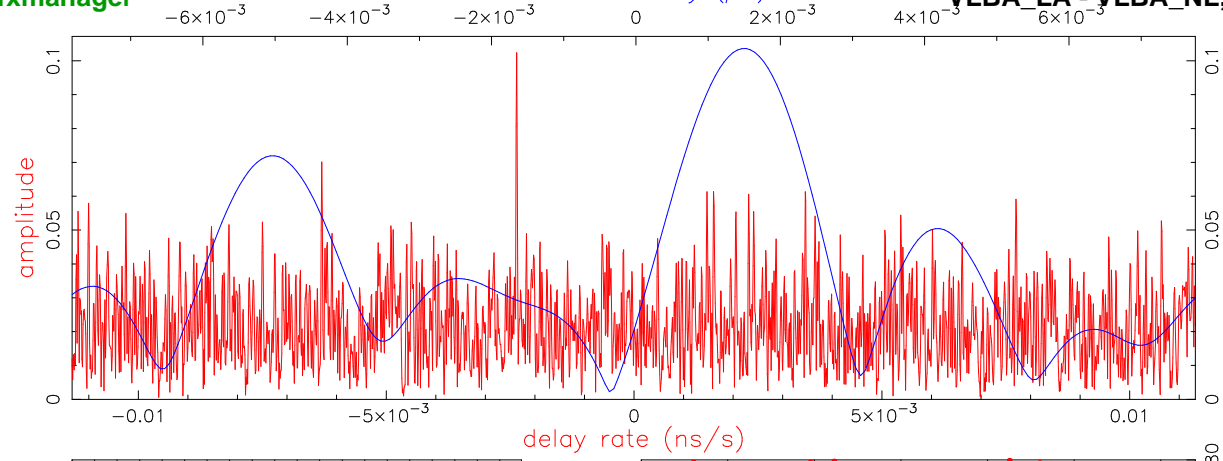
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.2	-63.7	-74.1	-75.6	-81.4	-37.7	47.8	-129.0	Phase	-68.1
	0.1	0.3	0.1	0.2	0.1	0.3	0.1	0.2	Ampl.	0.1
	358.2	204.5	439.0	18.6	64.4	204.6	497.9	259.1	Sbd box	204.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	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	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	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	

Group delay (usec)(sbd) 2.17769413689E+03 Apriori delay (usec) 2.17789701373E+03 Resid mbdelay (usec) 2.48163E-04 +/- 1.9E-04  
 Sband delay (usec) 2.17769266398E+03 Apriori clock (usec) -8.1191845E+00 Resid sbdelay (usec) -2.04350E-01 +/- 1.5E-03  
 Phase delay (usec) 2.17789701154E+03 Apriori clockrate (us/s) -5.8600000E-07 Resid phdelay (usec) -2.19471E-06 +/- 6.5E-07  
 Delay rate (us/s) 5.44582673002E-03 Apriori rate (us/s) 5.43650382929E-03 Resid rate (us/s) 9.32290E-06 +/- 2.7E-09  
 Total phase (deg) 206.5 Apriori accel (us/s/s) -1.77193447831E-05 Resid phase (deg) -68.1 +/- 20.3

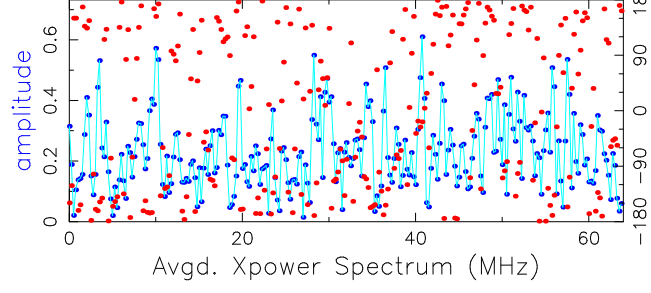
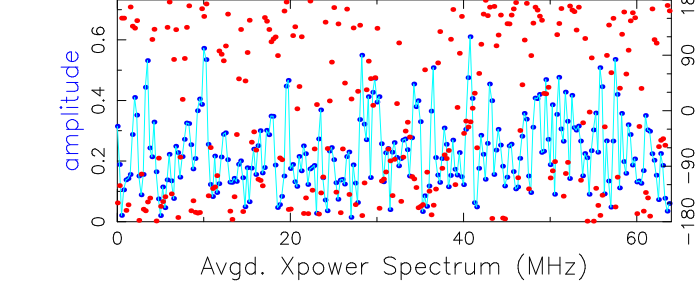
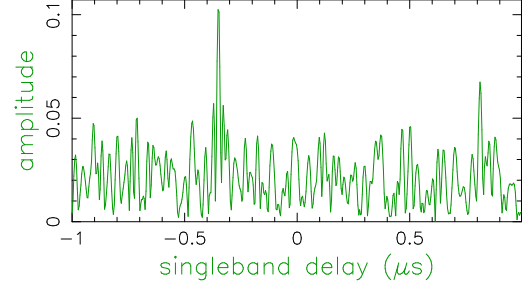
RMS Theor. Amplitude 0.136 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 58.4 48.6 Search (2048X32) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 75.8 84.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 56.3 28.7 Inc. seg. avg. 0.144 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 56.8 50.0 Inc. frq. avg. 0.150 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

l: az 296.8 el 42.2 pa 75.9 n: az 297.7 el 34.7 pa 62.1 u,v (fr/asec) -74.589 -1773.863 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/In..1X10VA Output file: /Exps/c211c/v1/1234/No0118/In.W.200.1X10VA

multiband delay ( $\mu$ s)

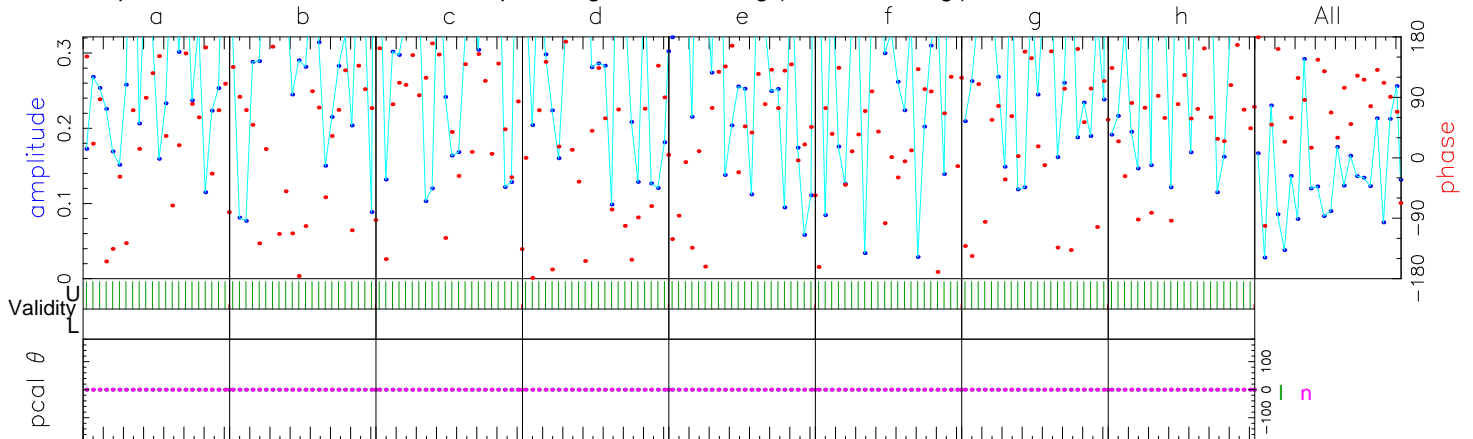


Fringe quality 0  
SNR 5.9  
Int time 419.826  
Amp 0.107  
Phase 89.1  
PFD 6.0e-01  
Delays (us)  
SBD -0.349768  
MBD 0.001653  
Fringe rate (Hz)  
-0.204258  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133714  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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

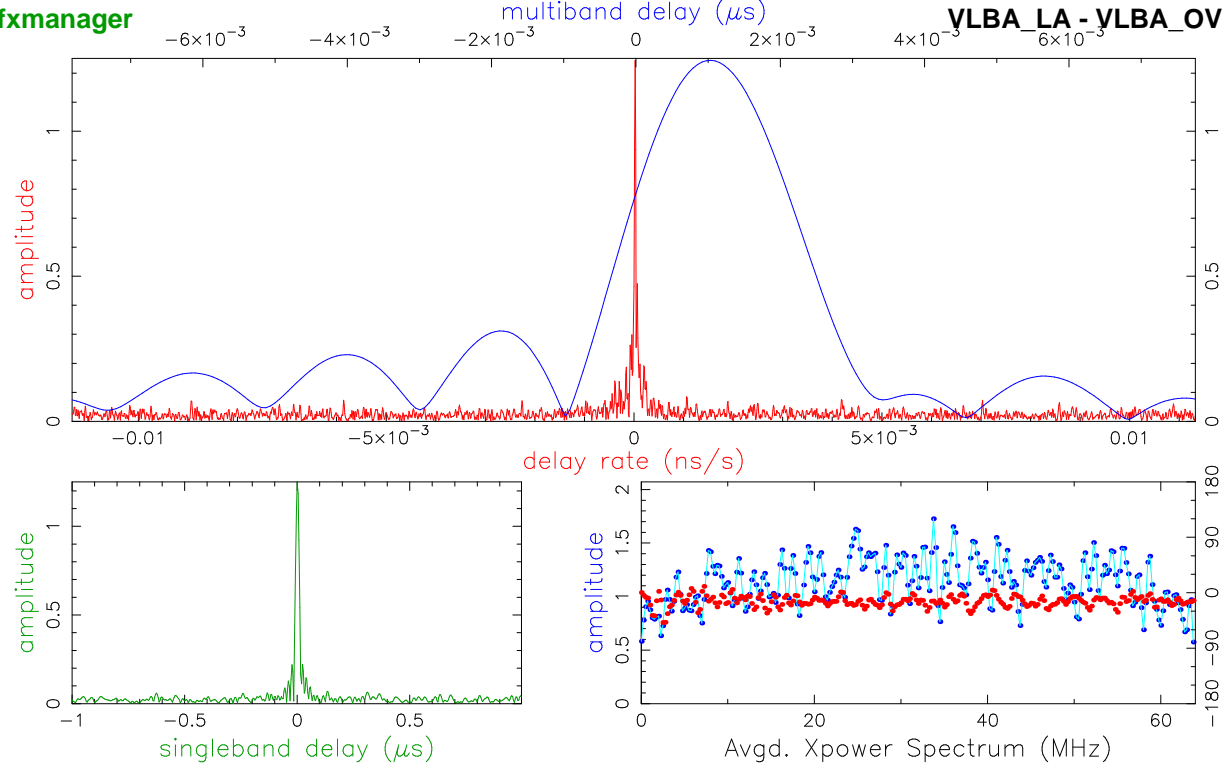


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	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)	2.17755491670E+03	Apriori delay (usec)		2.17789701373E+03	Resid mbdelay (usec)		1.65297E-03	+/- 1.8E-04	
Sband delay (usec)	2.17754724548E+03	Apriori clock (usec)		-8.1191845E+00	Resid sbdelay (usec)		-3.49768E-01	+/- 1.5E-03	
Phase delay (usec)	2.17789701660E+03	Apriori clockrate (us/s)		-5.8600000E-07	Resid phdelay (usec)		2.87282E-06	+/- 6.3E-07	
Delay rate (us/s)	5.43413259870E-03	Apriori rate (us/s)		5.43650382929E-03	Resid rate (us/s)		-2.37123E-06	+/- 2.6E-09	
Total phase (deg)	3.7		Apriori accel (us/s/s)		-1.77193447831E-05	Resid phase (deg)		89.1	+/- 19.4

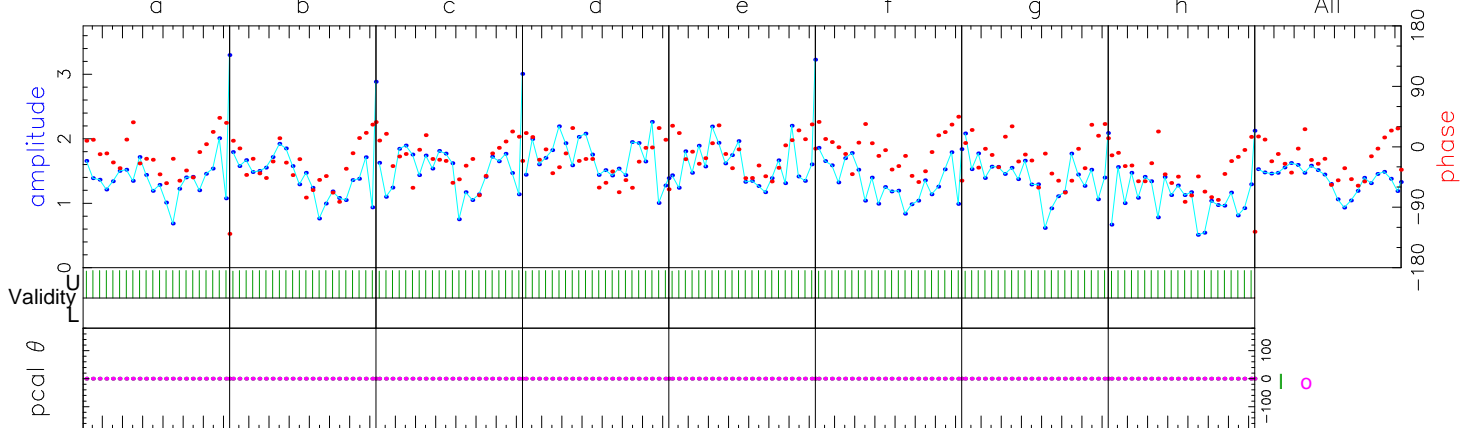
ph/seg (deg)	58.0	Theor. 46.6	Amplitude 0.107 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	71.6	81.3	Search (2048X32) 0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	30.2	27.5	Interp. 0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	60.3	47.9	Inc. seg. avg. 0.107	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.102						

l: az 296.8 el 42.2 pa 75.9 n: az 297.7 el 34.7 pa 62.1 u,v (fr/asec) -74.589 -1773.863 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/ln..1X10VA Output file: /Exps/c211c/v1/1234/No0118/In.W.219.1X10VA



Fringe quality 6  
SNR 69.8  
Int time 416.823  
Amp 1.251  
Phase -15.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000952  
MBD 0.001054  
Fringe rate (Hz) 0.001770  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001502.56  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build 2021:303:221812  
2021:304:133703  
2021:252:122852  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

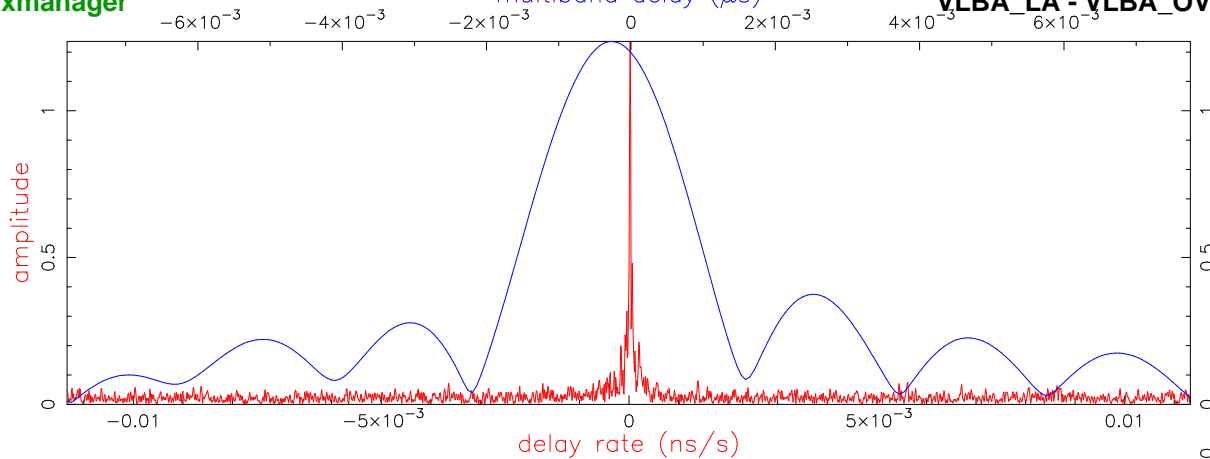
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
l	0	0	0	0	0	0	0	0		
o	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: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)	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	-2.42207301212E+03	1.05381E-03	+/- 1.6E-05
Sband delay (usec)	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	-2.42207311418E+03	9.51750E-04	+/- 1.2E-04
Phase delay (usec)	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-2.42207406641E+03	-4.83817E-07	+/- 5.3E-08
Delay rate (us/s)	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	-1.20544330106E-01	2.05468E-08	+/- 2.2E-10
Total phase (deg)			-29.1						-15.0	+/- 1.6
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

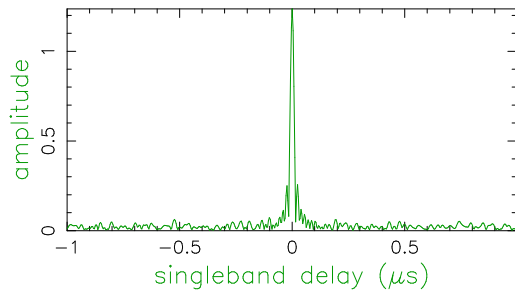
ph/seg (deg) 27.0 3.9 Search (2048X32) 1.236 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 18.4 6.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 12.1 2.3 Inc. seg. avg. 1.382 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 13.1 4.1 Inc. frq. avg. 1.261 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 296.8 el 42.2 pa 75.9 o: az 292.6 el 51.6 pa 79.0 u,v (fr/asec) 944.883 643.835 ion window (TEC) 0.00 0.00 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lo..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lo.W.165.1X10VA

multiband delay ( $\mu$ s)

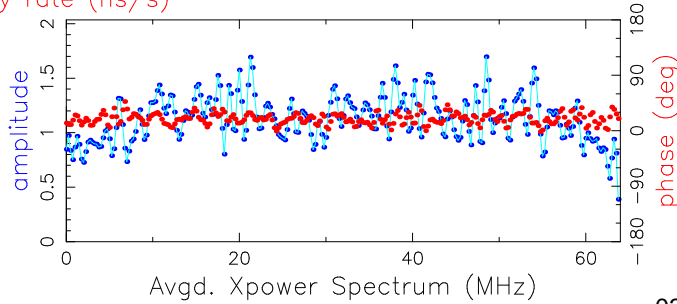


Fringe quality 7

SNR 69.0  
Int time 416.823  
Amp 1.236  
Phase 20.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.000157  
MBD -0.000270  
Fringe rate (Hz)  
0.001808  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

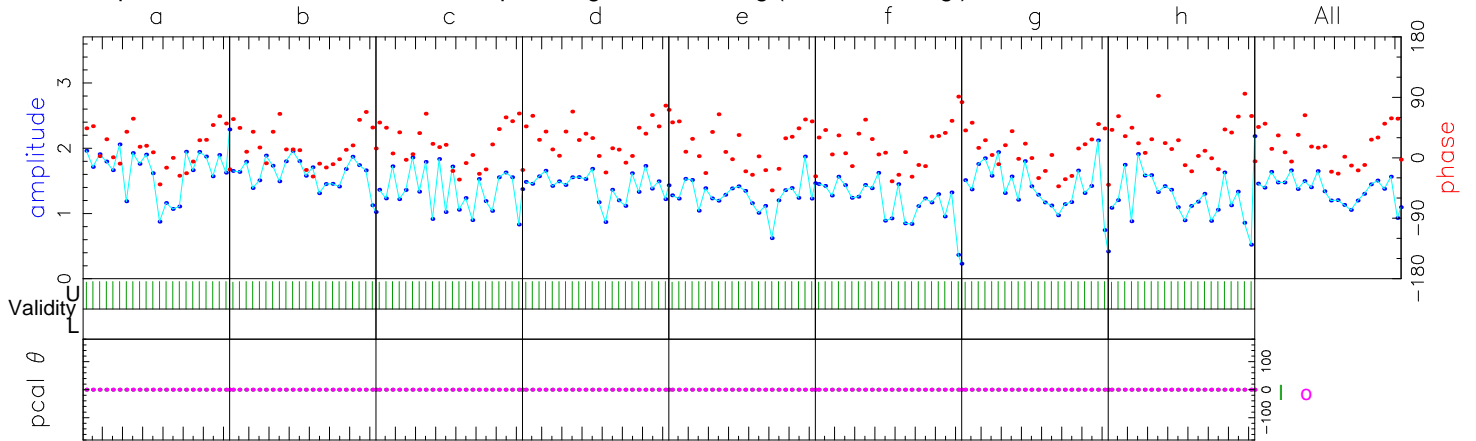


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001502.56  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133707  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
l	0	0	0	0	0	0	0	0		
o	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: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)	-2.42207433587E+03									
Sband delay (usec)	-2.42207422293E+03									
Phase delay (usec)	-2.42207406527E+03									
Delay rate (us/s)	-1.20544329660E-01									
Total phase (deg)			6.5							
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	27.1	4.0								
Theor.	4.0									
Amplitude	1.236									
Search (2048X32)	1.206									
Interp.	0.000									
Inc. seg. avg.	1.374									
Inc. frq. avg.	1.242									
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)										
pcal θ										
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								
l: az 296.8 el 42.2 pa 75.9										
o: az 292.6 el 51.6 pa 79.0										
u, v (fr/asec) 944.883 643.835										
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0118/lo..1X10VA										
Output file: /Exps/c211c/v1/1234/No0118/lo.W.185.1X10VA										

simultaneous interpolator

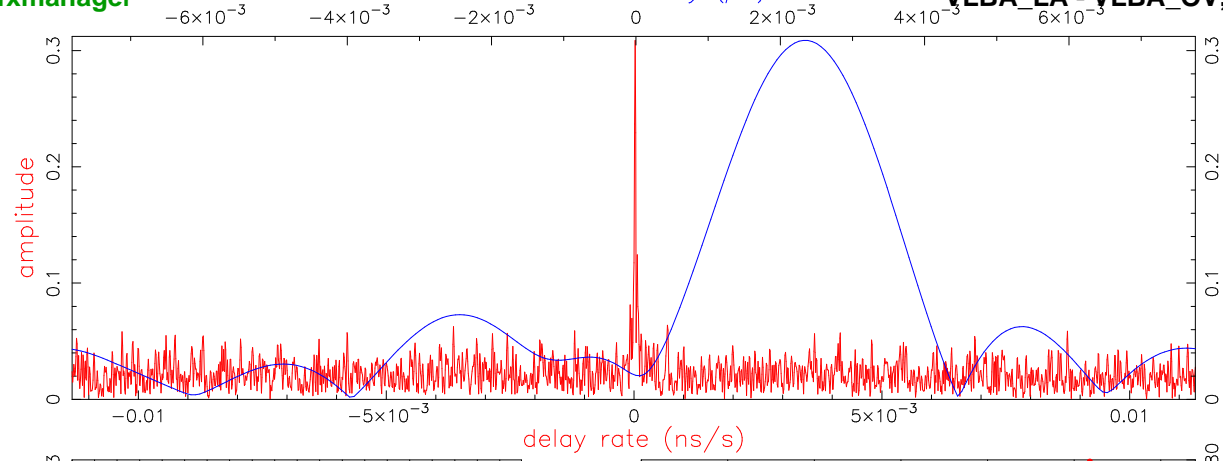
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

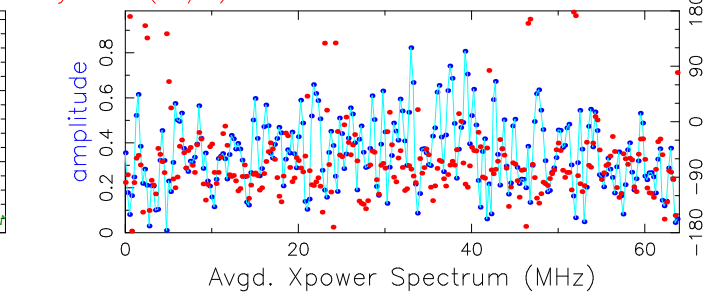
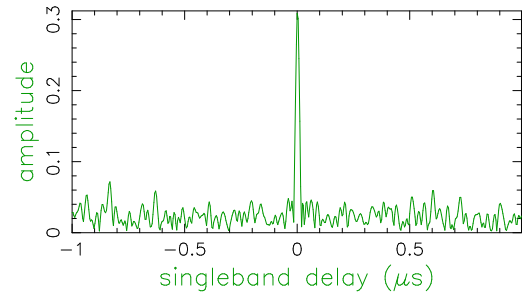
3C84.1X10VA, No0118, lo

VLBA\_LA - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

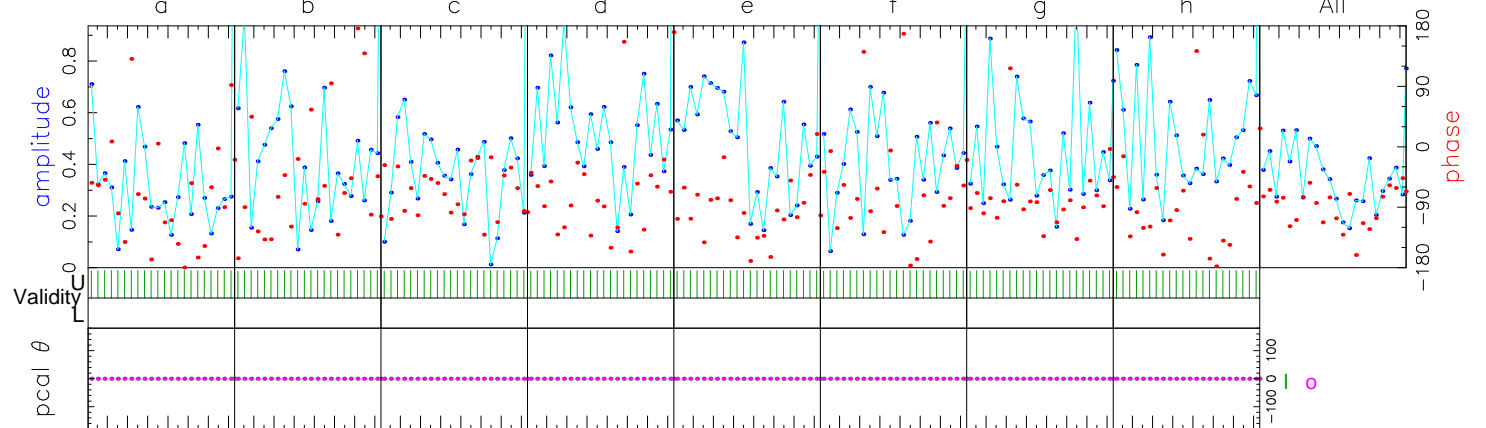


Fringe quality 9  
 SNR 17.4  
 Int time 416.823  
 Amp 0.312  
 Phase -87.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001418  
 MBD 0.002381  
 Fringe rate (Hz) 0.001810  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001502.56  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133711  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.0	-98.1	-64.6	-84.7	-91.3	-86.8	-85.7	-95.4	Phase	-87.0
	0.2	0.3	0.3	0.4	0.4	0.3	0.4	0.3	Ampl.	0.3
	78.0	257.6	257.4	257.0	256.9	257.6	258.0	256.9	Sbd box	257.4
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.42207168484E+03		Apriori delay (usec)		-2.42207406593E+03		Resid mbdelay (usec)		2.38109E-03	+/- 6.2E-05
Sband delay (usec)	-2.42207264818E+03		Apriori clock (usec)		-6.3900433E+00		Resid sbdelay (usec)		1.41775E-03	+/- 4.9E-04
Phase delay (usec)	-2.42207406874E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-2.80634E-06	+/- 2.1E-07
Delay rate (us/s)	-1.20544329644E-01		Apriori rate (us/s)		-1.20544350653E-01		Resid rate (us/s)		2.10087E-08	+/- 8.8E-10
Total phase (deg)			Apriori accel (us/s/s)		1.13208426468E-05		Resid phase (deg)		-87.0	+/- 6.6

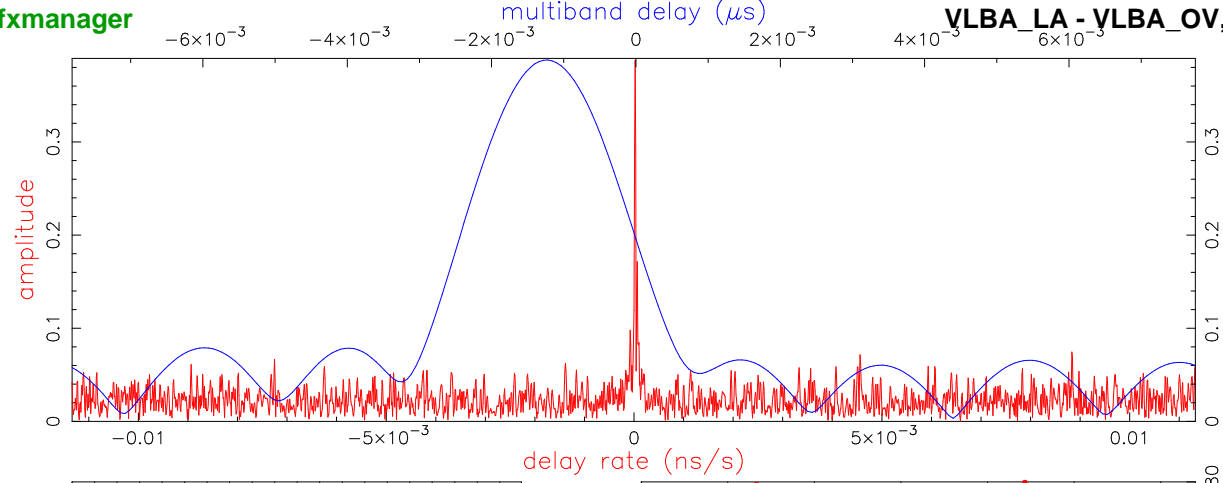
ph/seg (deg) 28.6 15.8 Theor. Amplitude 0.312 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 36.7 27.5 Search (2048X32) 0.307 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 11.1 9.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 23.4 16.2 Inc. seg. avg. 0.333 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 l: az 296.8 el 42.2 pa 75.9 o: az 292.6 el 51.6 pa 79.0 u,v (fr/asec) 944.883 643.835 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lo..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lo.W.205.1X10VA simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, lo

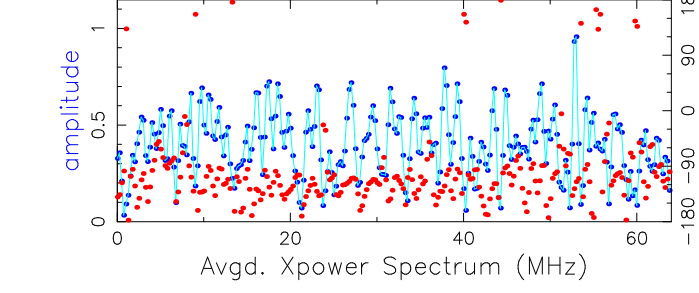
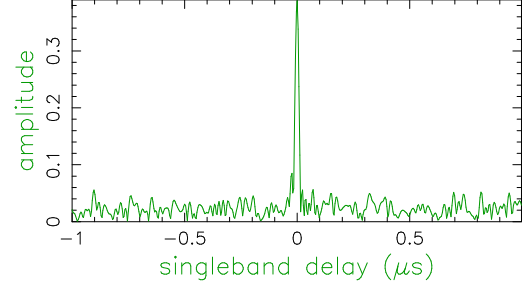
VLBA\_LA - VLBA\_OV, fgroup W, pol RL



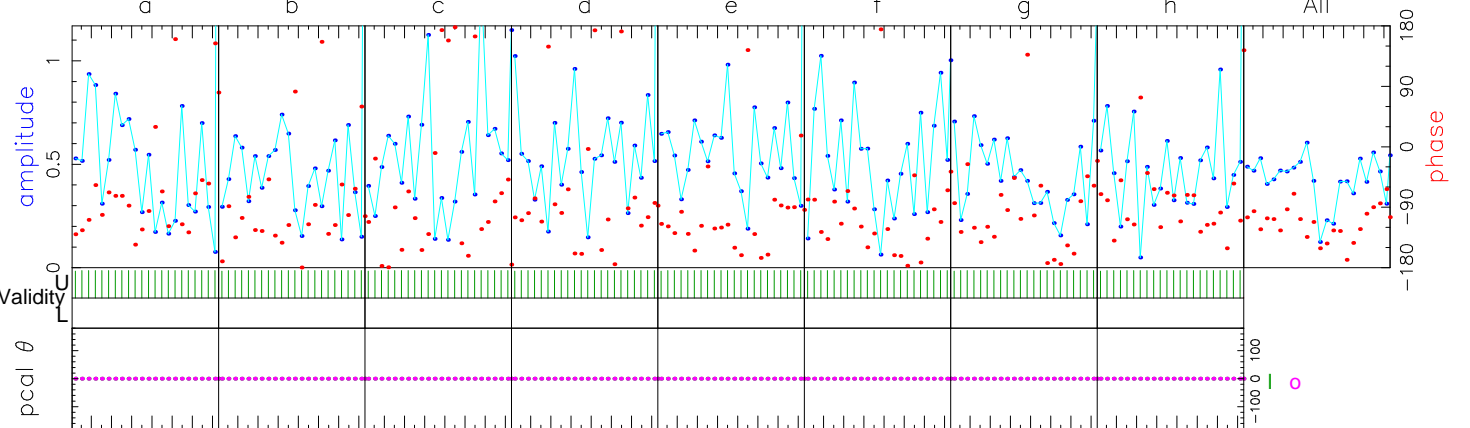
Fringe quality 9

SNR 21.8  
 Int time 416.823  
 Amp 0.390  
 Phase -111.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000880  
 MBD -0.001261  
 Fringe rate (Hz) 0.001780  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001502.56  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133714  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.4	-114.8	-125.1	-117.8	-118.0	-117.4	-105.7	-95.2	Phase	-111.1
	0.4	0.3	0.4	0.4	0.5	0.4	0.3	0.4	Ampl.	0.4
	257.1	256.6	256.6	256.8	257.1	257.0	256.6	256.7	Sbd box	256.8
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.42207532728E+03		Apriori delay (usec)		-2.42207406593E+03		Resid mbdelay (usec)		-1.26135E-03	+/- 5.0E-05
Sband delay (usec)	-2.42207494618E+03		Apriori clock (usec)		-6.3900433E+00		Resid sbdelay (usec)		-8.80250E-04	+/- 4.0E-04
Phase delay (usec)	-2.42207406951E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-3.58311E-06	+/- 1.7E-07
Delay rate (us/s)	-1.20544329985E-01		Apriori rate (us/s)		-1.20544350653E-01		Resid rate (us/s)		2.06679E-08	+/- 7.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.13208426468E-05		Resid phase (deg)		-111.1	+/- 5.3

ph/seg (deg) 25.5 12.6 Search (2048X32) 0.379 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 30.5 22.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.8 7.4 Inc. seg. avg. 0.413 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 11.0 13.0 Inc. frq. avg. 0.392 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 296.8 el 42.2 pa 75.9 o: az 292.6 el 51.6 pa 79.0 u,v (fr/asec) 944.883 643.835 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lo..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lo.W.224.1X10VA



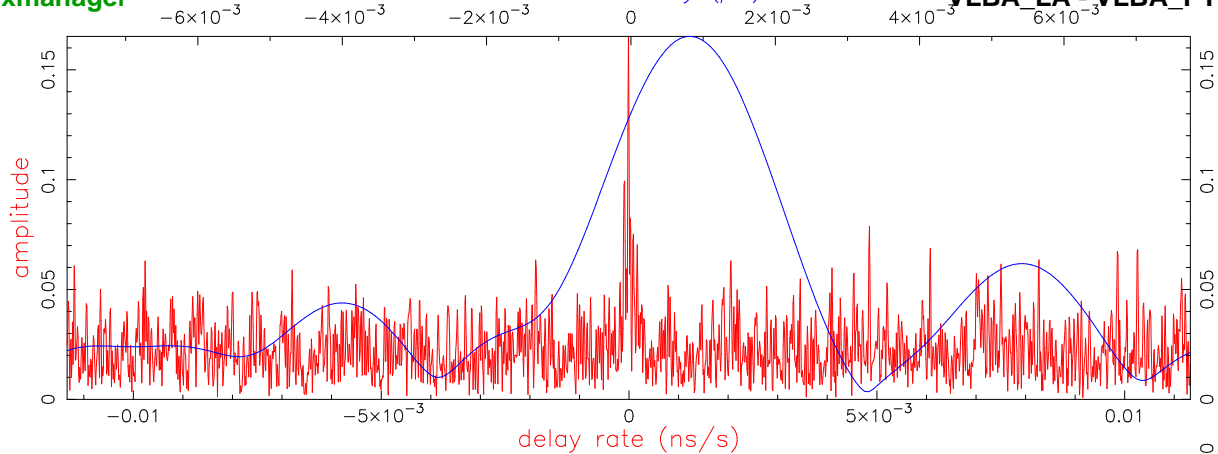
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, lp

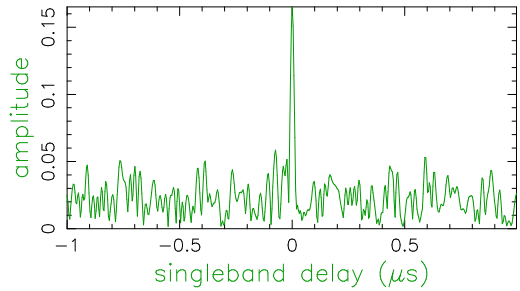
VLBA LA - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

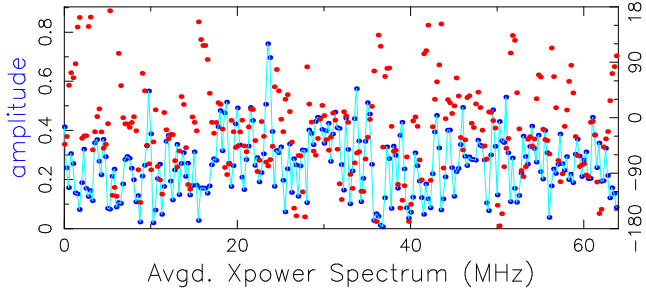


Fringe quality 9

SNR 9.3  
 Int time 419.826  
 Amp 0.165  
 Phase -37.7  
 PFD 8.3e-12  
 Delays (us)  
 SBD -0.000018  
 MBD 0.000815  
 Fringe rate (Hz)  
 -0.000641  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

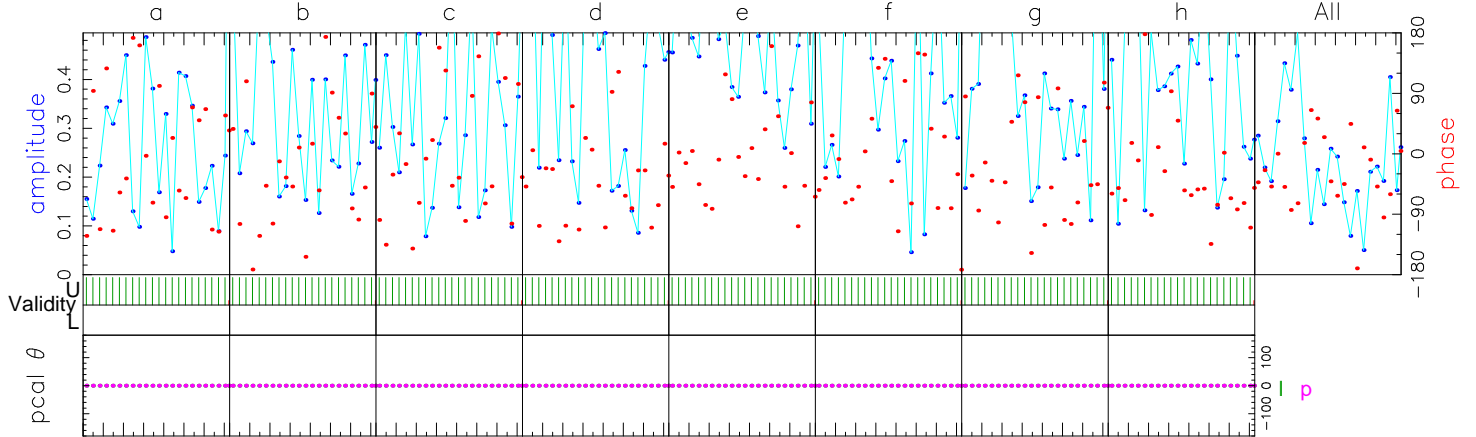


delay rate (ns/s)



Exp. c211c  
 Yr:day 16383  
 Start 2021:117  
 Stop 2021:117  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133705  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-47.5	-35.2	-64.1	-40.2	-20.1	-35.4	-35.3	-47.8	Phase	-37.7
	0.1	0.1	0.1	0.3	0.3	0.1	0.2	0.3	Ampl.	0.2
	38.5	1.5	444.2	257.3	257.4	467.9	22.2	257.8	Sbd box	257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
lp	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	Manl 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	

Group delay (usec)(sbd)	-1.99124588323E+02	Apriori delay (usec)	-1.99125403064E+02	Resid mbdelay (usec)	8.14740E-04	+/-	1.2E-04
Sband delay (usec)	-1.99125421314E+02	Apriori clock (usec)	-8.1671753E+00	Resid sbdelay (usec)	-1.82500E-05	+/-	9.3E-04
Phase delay (usec)	-1.99125404280E+02	Apriori clockrate (us/s)	-1.6600001E-07	Resid phdelay (usec)	-1.21607E-06	+/-	4.0E-07
Delay rate (us/s)	7.57610096610E-04	Apriori rate (us/s)	7.57617543550E-04	Resid rate (us/s)	-7.44694E-09	+/-	1.6E-09
Total phase (deg)	-116.9	Apriori accel (us/s/s)	2.58962401426E-06	Resid phase (deg)	-37.7	+/-	12.4

ph/seg (deg)	57.6	Theor.	29.7	Amplitude	0.165 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.0		51.8	Search (2048X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	14.3		17.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	47.2		30.6	Inc. seg. avg.	0.209	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

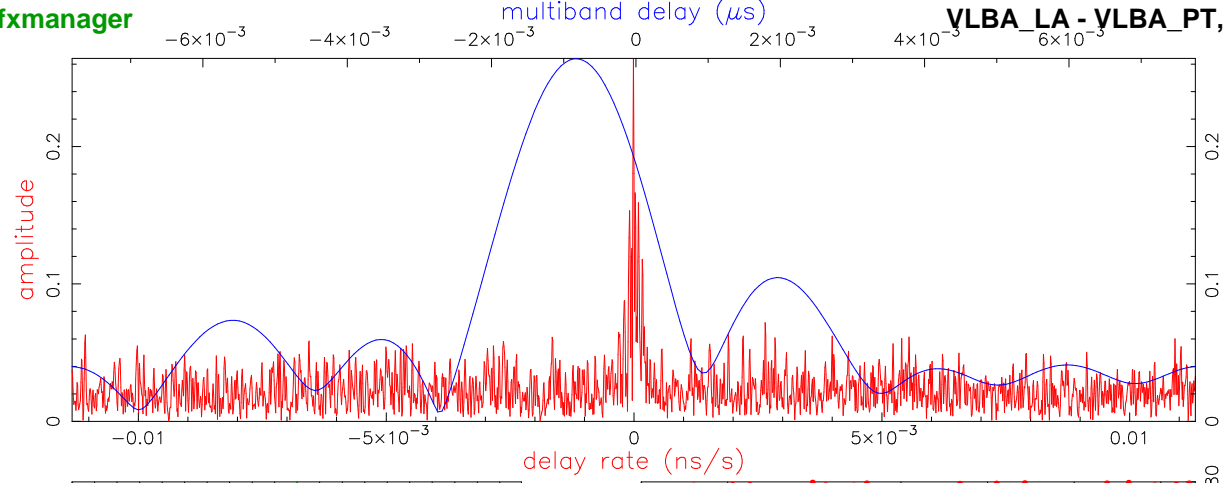
l: az 296.8 el 42.2 pa 75.9

p: az 297.6 el 42.9 pa 77.8

u, v (fr/asec) -1.105 319.856

simultaneous interpolator

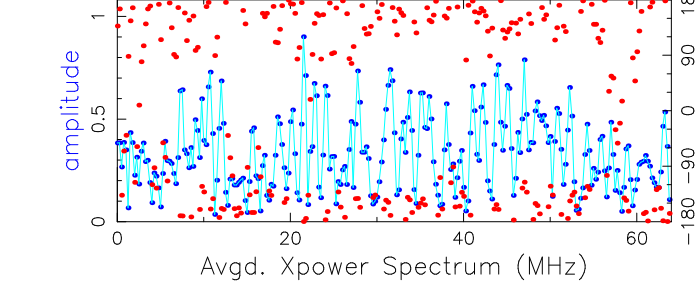
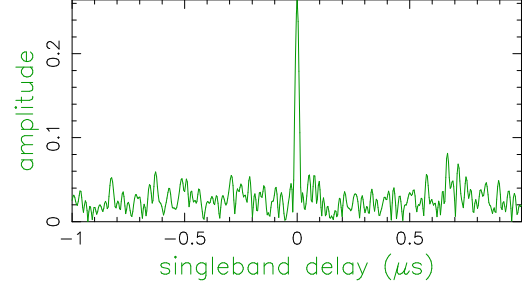
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lp..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lp.W.173.1X10VA



Fringe quality 9

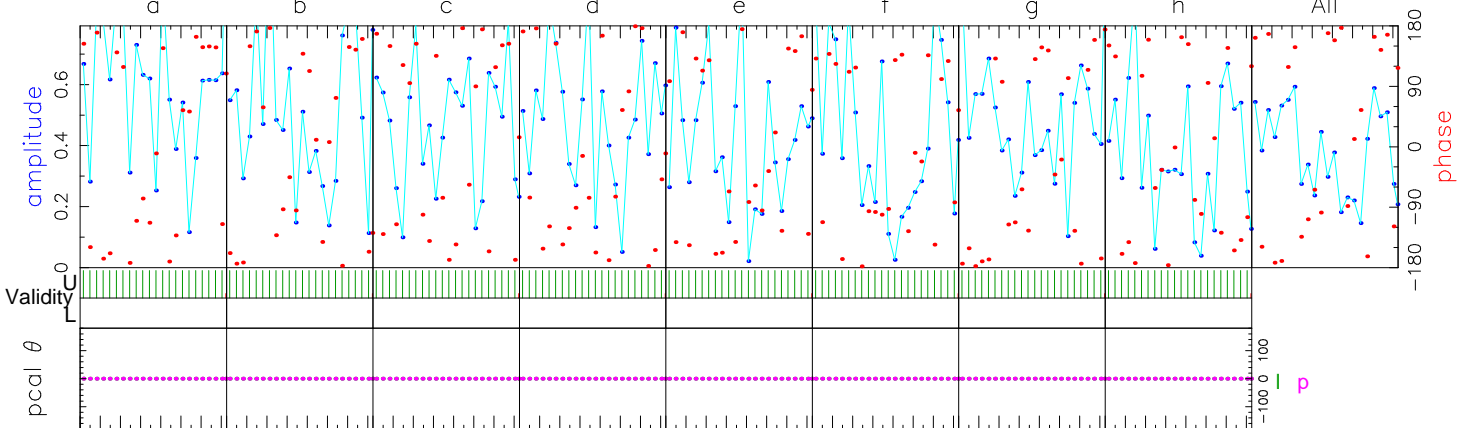
SNR 14.8  
Int time 419.826  
Amp 0.264  
Phase -179.3  
PFD 9.1e-41  
Delays (us)  
SBD -0.000471  
MBD -0.000843  
Fringe rate (Hz)  
-0.000832  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133708  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
p	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		
lp	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)	-1.99126246105E+02				-1.99125403064E+02					
Sband delay (usec)	-1.99125874064E+02				-8.1671753E+00					
Phase delay (usec)	-1.99125408844E+02				-1.6600001E-07					
Delay rate (us/s)	7.57607889453E-04				7.57617543550E-04					
Total phase (deg)		-258.4			2.58962401426E-06					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode:	MANUAL	MANUAL								
PCal rate:	0.000E+00	0.000E+00								
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								

ph/seg (deg) 64.9 18.6 Search (2048X32) 0.260 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 70.3 32.4 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 17.2 10.9 Inc. seg. avg. 0.370 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 17.5 19.1 Inc. frq. avg. 0.267 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
l: az 296.8 el 42.2 pa 75.9 p: az 297.6 el 42.9 pa 77.8 u,v (fr/asec) -1.105 319.856 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lp..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lp.W.193.1X10VA

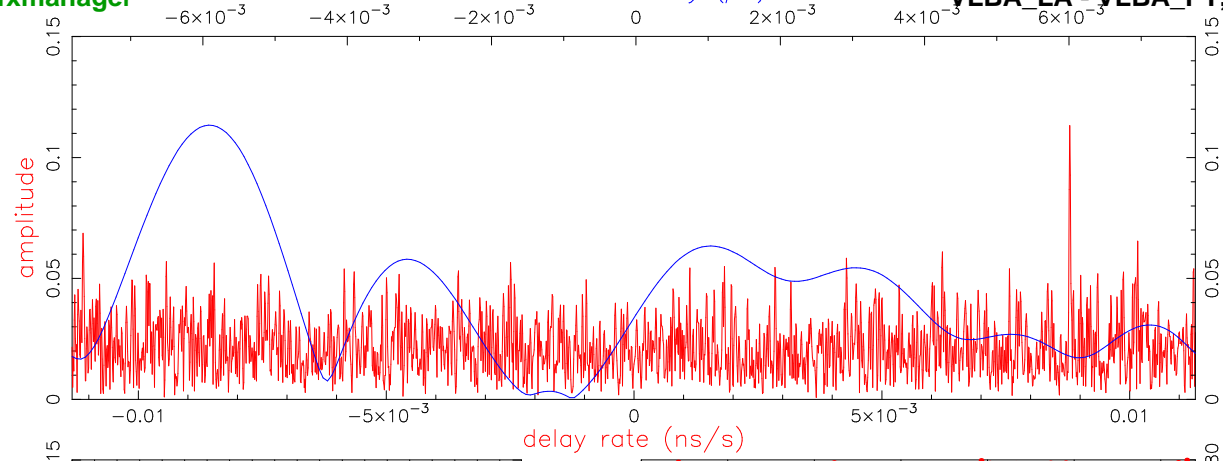
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, lp

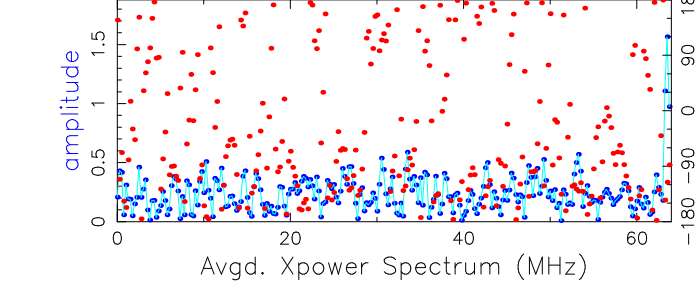
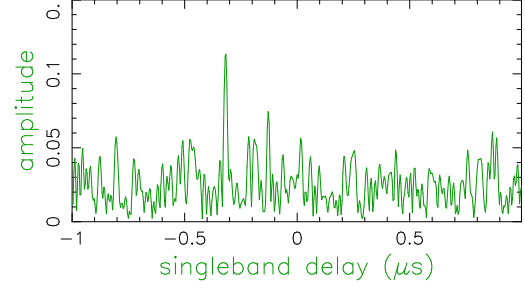
VLBA\_LA - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)



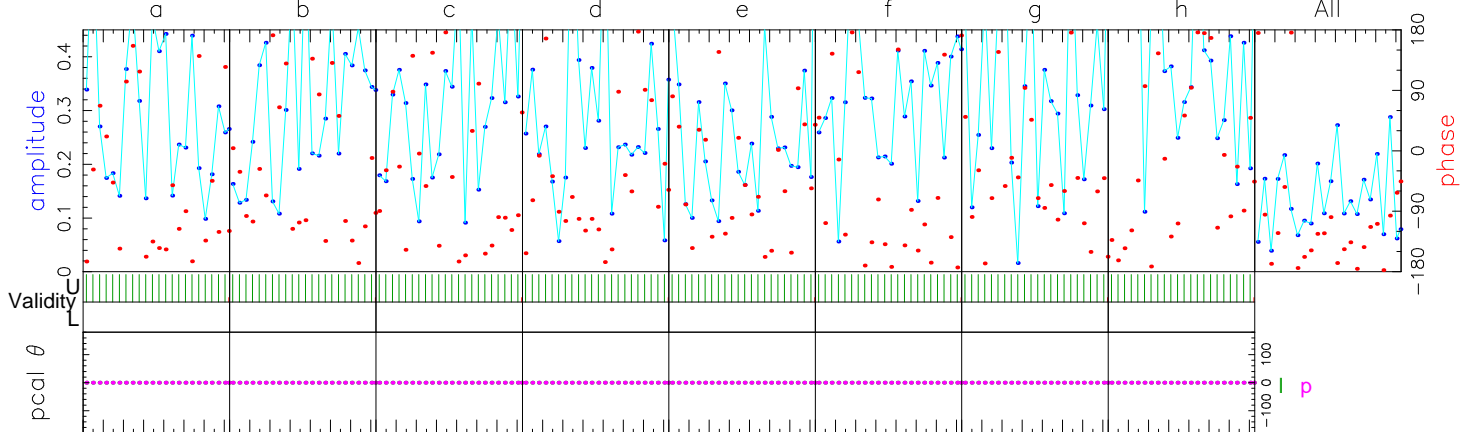
Fringe quality 0

SNR 6.5  
 Int time 419.826  
 Amp 0.150  
 Phase -126.8  
 PFD 2.6e-02  
 Delays (us)  
 SBD -0.318132  
 MBD -0.005862  
 Fringe rate (Hz) 0.758376  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133712  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-152.2	-115.5	-115.5	-104.5	-40.5	-155.3	-73.0	-142.2	Phase	-126.8	
	0.1	0.2	0.2	0.2	0.0	0.3	0.1	0.3	Ampl.	0.2	
	141.9	51.5	135.8	360.5	501.2	175.5	239.5	115.1	Sbd box	175.6	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
l	0	0	0	0	0	0	0	0	PC freqs		
p	0	0	0	0	0	0	0	0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	-1.99443765072E+02		Apriori delay (usec)		-1.99125403064E+02		Resid mbdelay (usec)		-5.86201E-03	+/- 1.7E-04	
Sband delay (usec)	-1.99443535314E+02		Apriori clock (usec)		-8.1671753E+00		Resid sbdelay (usec)		-3.18132E-01	+/- 1.3E-03	
Phase delay (usec)	-1.99125407151E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-4.08761E-06	+/- 5.7E-07	
Delay rate (us/s)	7.66421532816E-04		Apriori rate (us/s)		7.57617543550E-04		Resid rate (us/s)		8.80399E-06	+/- 2.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.58962401426E-06		Resid phase (deg)		-126.8	+/- 17.7	
	RMS	Theor.	Amplitude	0.150 +/- 0.023	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	38.7	42.4	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	62.1	74.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	46.1	25.0	Inc. seg. avg.	0.142	Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	51.3	43.7	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

l: az 296.8 el 42.2 pa 75.9 p: az 297.6 el 42.9 pa 77.8 u,v (fr/asec) -1.105 319.856 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lp..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lp.W.211.1X10VA

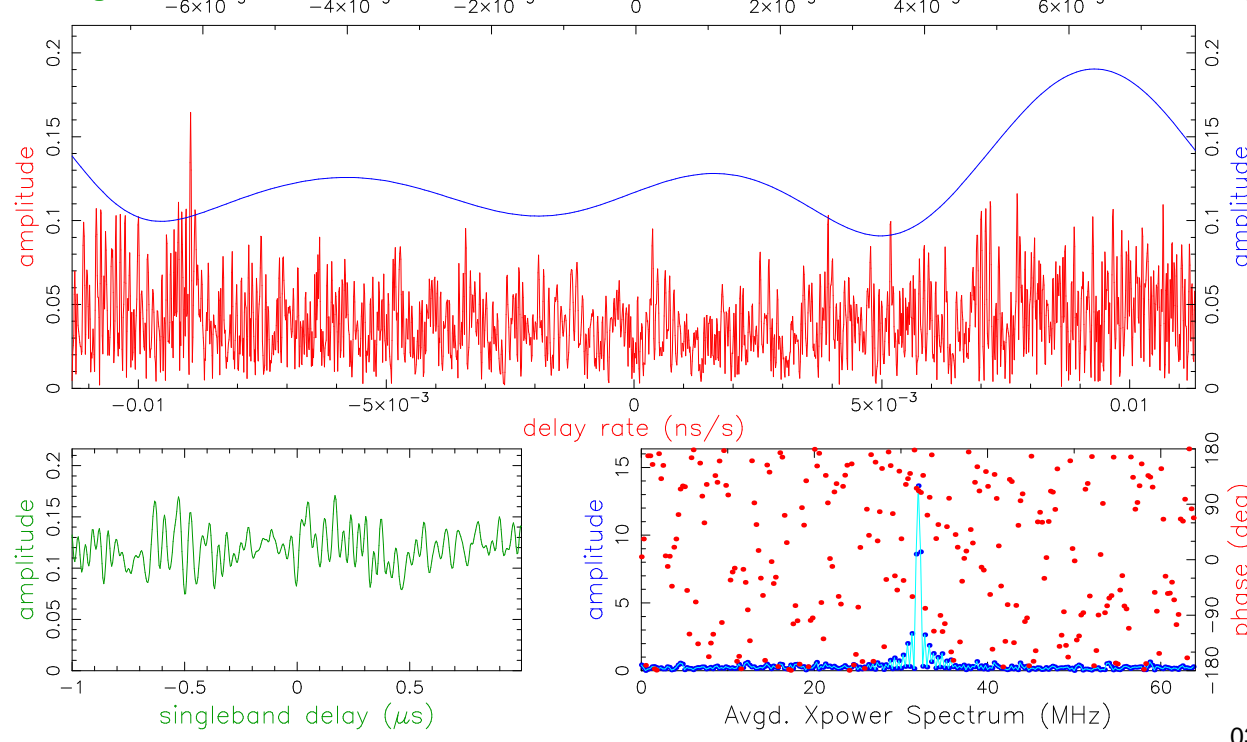
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, Ip

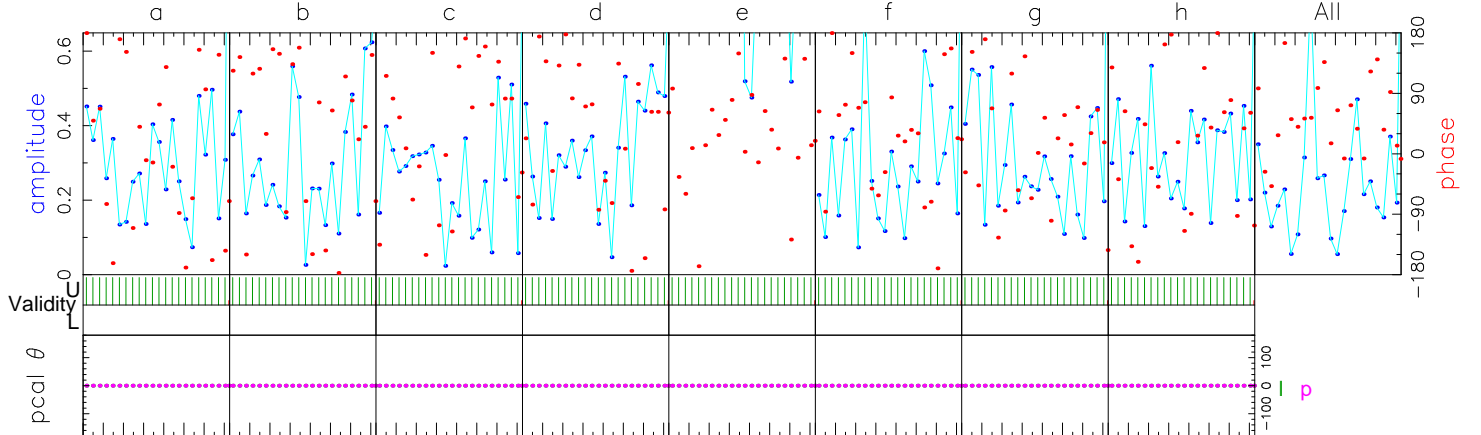
VLBA\_LA - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)



Fringe quality 9  
 SNR 9.2  
 Int time 419.826  
 Amp 0.216  
 Phase 59.4  
 PFD 9.3e-12  
 Delays (us)  
 SBD 0.048347  
 MBD -0.008301  
 Fringe rate (Hz)  
 -0.771284  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133716  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	161.1	122.6	122.8	85.4	42.6	66.9	28.1	42.2	Phase	59.4
	0.1	0.2	0.1	0.1	1.3	0.1	0.1	0.0	Ampl.	0.2
	388.3	269.4	321.1	164.6	468.4	301.0	191.8	346.1	Sbd box	269.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.99071203845E+02		Apriori delay (usec)		-1.99125403064E+02		Resid mbdelay (usec)		-8.30078E-03	+/- 1.2E-04
Sband delay (usec)	-1.99077055814E+02		Apriori clock (usec)		-8.1671753E+00		Resid sbdelay (usec)		4.83472E-02	+/- 9.3E-04
Phase delay (usec)	-1.99125401148E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		1.91545E-06	+/- 4.0E-07
Delay rate (us/s)	7.48663704268E-04		Apriori rate (us/s)		7.57617543550E-04		Resid rate (us/s)		-8.95384E-06	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.58962401426E-06		Resid phase (deg)		59.4	+/- 12.4

ph/seg (deg) 55.0 29.7 Search (2048X32) 0.184 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 109.6 51.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 58.7 17.5 Inc. seg. avg. 0.287 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 182.4 30.6 Inc. frq. avg. 0.248 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 296.8 el 42.2 pa 75.9 p: az 297.6 el 42.9 pa 77.8 u, v (fr/asec) -1.105 319.856 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/lp..1X10VA Output file: /Exps/c211c/v1/1234/No0118/lp.W.231.1X10VA

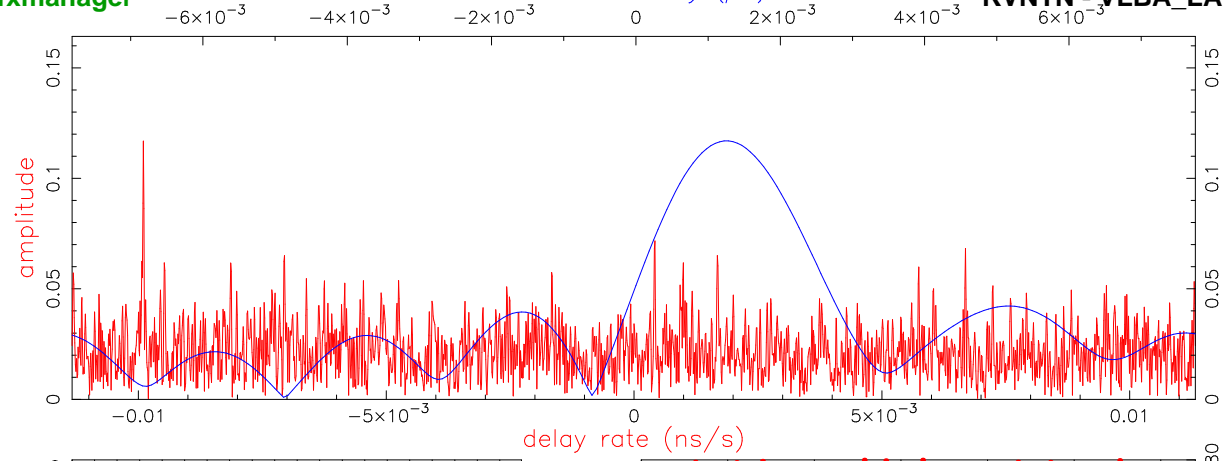
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

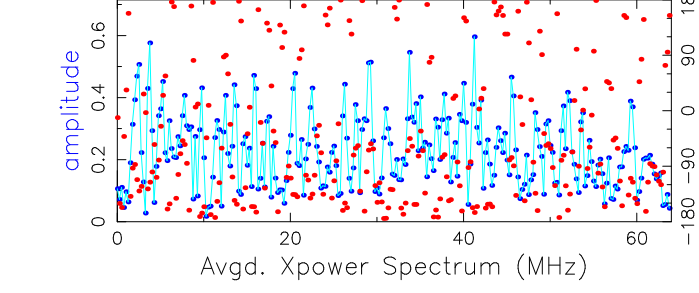
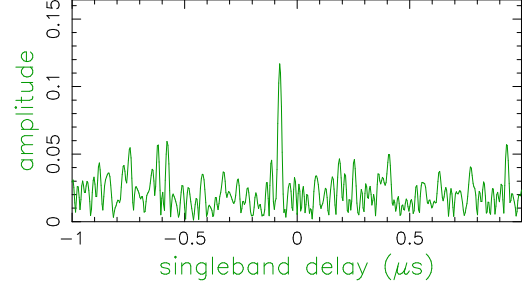
3C84.1X10VA, No0118, tl

KVNTN - VLBA\_LA, fgroup W, pol LL

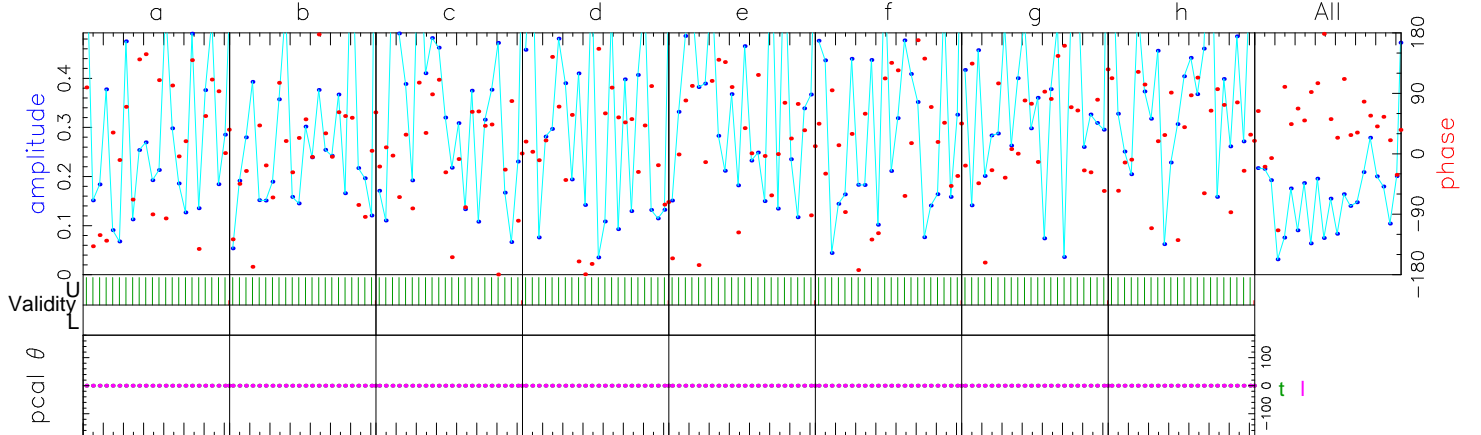
multiband delay ( $\mu$ s)



Fringe quality 0  
 SNR 6.6  
 Int time 419.826  
 Amp 0.164  
 Phase 46.9  
 PFD 1.4e-02  
 Delays (us)  
 SBD -0.077424  
 MBD 0.001299  
 Fringe rate (Hz)  
 -0.854124  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133705  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.73840734570E+02									
Sband delay (usec)	-4.73841332513E+02									
Phase delay (usec)	-4.73763906999E+02									
Delay rate (us/s)	1.71498311697E+00									
Total phase (deg)			18.4							
Apriori delay (usec)					-4.73763908513E+02				1.29894E-03	+/- 1.7E-04
Apriori clock (usec)					2.3661766E+00				-7.74240E-02	+/- 1.3E-03
Apriori clockrate (us/s)					2.3600002E-07				1.51386E-06	+/- 5.6E-07
Apriori rate (us/s)					1.71499303251E+00				-9.91553E-06	+/- 2.3E-09
Apriori accel (us/s/s)					-1.53564392626E-07				46.9	+/- 17.4
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 57.2 41.8 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.2 73.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.2 24.7 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 26.4 43.1 Inc. frq. avg. 0.162 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 t: az 60.6 el 38.9 pa -76.4 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -13129.541 -102.966 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/tl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/tl.W.178.1X10VA simultaneous interpolator

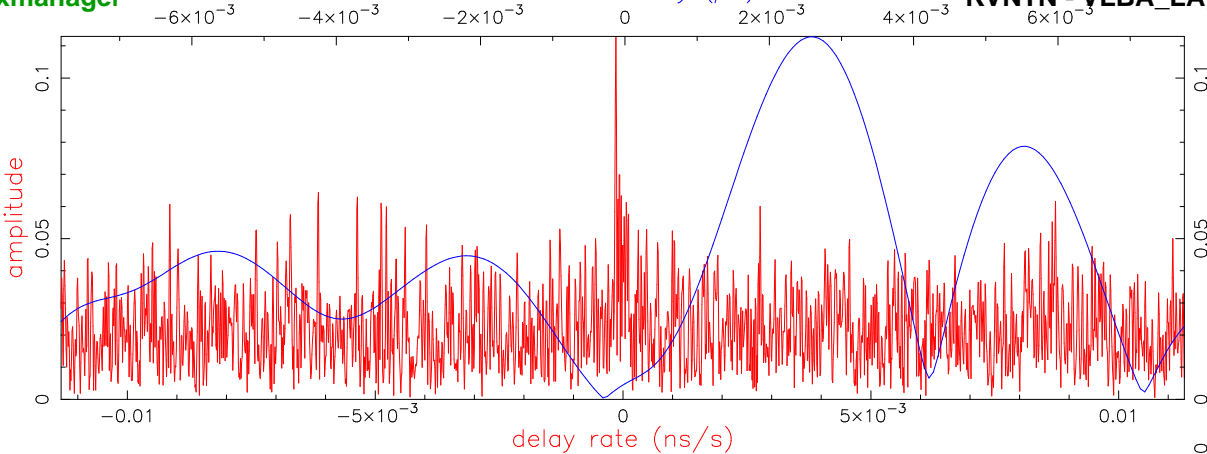
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, tl

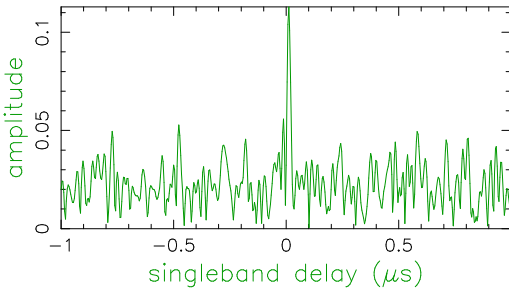
KVNTN - VLBA\_LA, fgroup W, pol RR

multiband delay ( $\mu$ s)

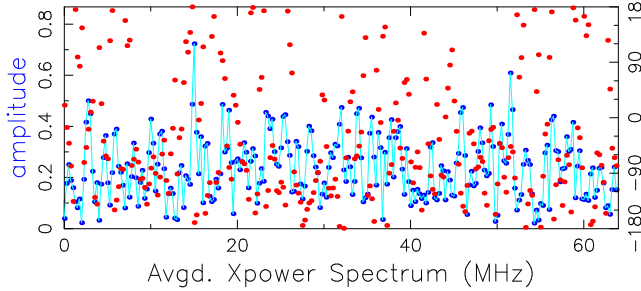


Fringe quality 0

SNR 6.3  
Int time 419.826  
Amp 0.113  
Phase 7.8  
PFD 6.5e-02  
Delays (us)  
SBD 0.011320  
MBD 0.002574  
Fringe rate (Hz)  
-0.012261  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

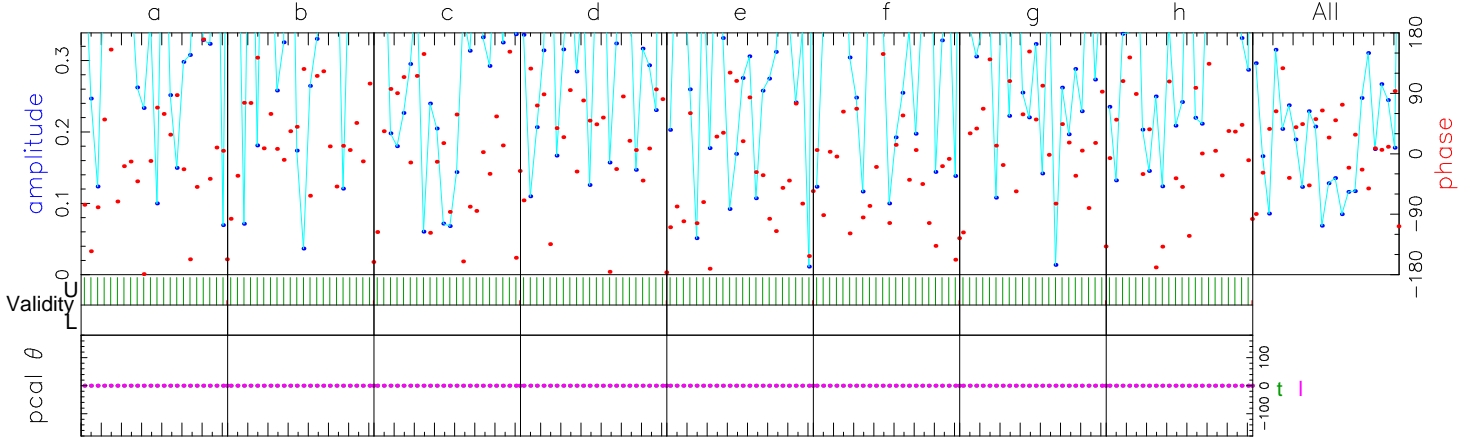


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133709  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-19.3	21.6	6.9	52.7	-45.2	-32.7	16.2	36.5	Phase	7.8
	0.1	0.2	0.0	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	128.5	259.6	147.5	258.6	62.0	258.9	246.1	228.4	Sbd box	259.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	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)	-4.73745709263E+02			Apriori delay (usec)	-4.73763908513E+02			Resid mbdelay (usec)	2.57425E-03	+/- 1.7E-04
Sband delay (usec)	-4.73752588513E+02			Apriori clock (usec)	2.3661766E+00			Resid sbdelay (usec)	1.13200E-02	+/- 1.4E-03
Phase delay (usec)	-4.73763908262E+02			Apriori clockrate (us/s)	2.3600002E-07			Resid phdelay (usec)	2.51310E-07	+/- 5.8E-07
Delay rate (us/s)	1.71499289017E+00			Apriori rate (us/s)	1.71499303251E+00			Resid rate (us/s)	-1.42339E-07	+/- 2.4E-09
Total phase (deg)			-20.8	Apriori accel (us/s/s)	-1.53564392626E-07			Resid phase (deg)	7.8	+/- 18.1

ph/seg (deg) 53.3 43.4 Search (2048X32) 0.110 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 98.6 75.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.2 25.6 Inc. seg. avg. 0.148 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.6 44.7 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 t: az 60.6 el 38.9 pa -76.4 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -13129.541 -102.966 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/tl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/tl.W.199.1X10VA simultaneous interpolator

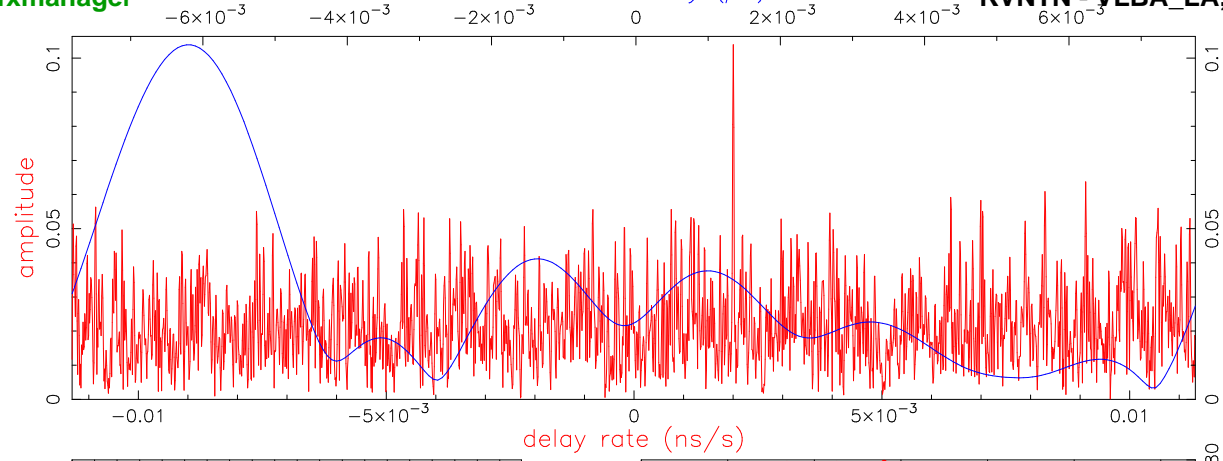
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

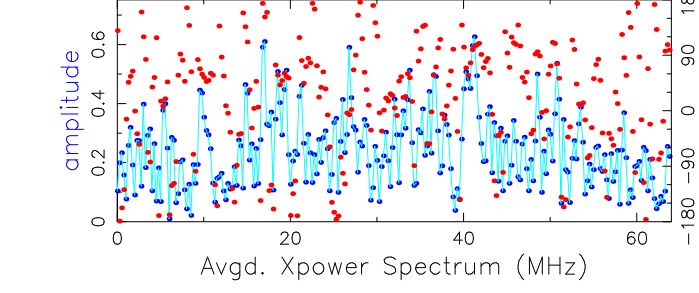
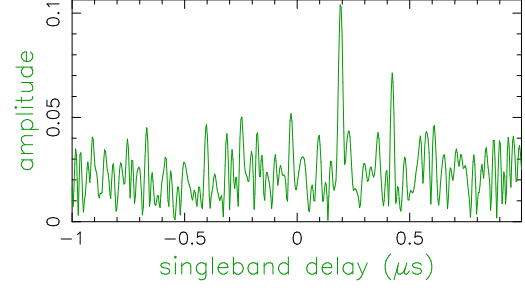
3C84.1X10VA, No0118, tl

KVNTN - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)

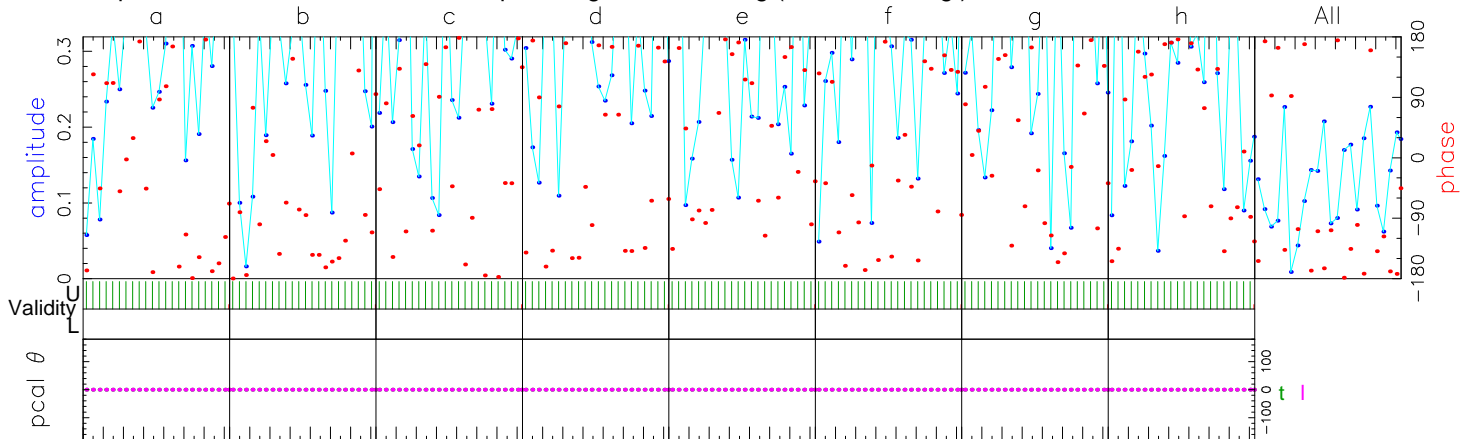


Fringe quality 0  
 SNR 5.9  
 Int time 419.826  
 Amp 0.106  
 Phase -160.7  
 PFD 6.4e-01  
 Delays (us)  
 SBD 0.192984  
 MBD -0.006195  
 Fringe rate (Hz)  
 0.173319  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133713  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

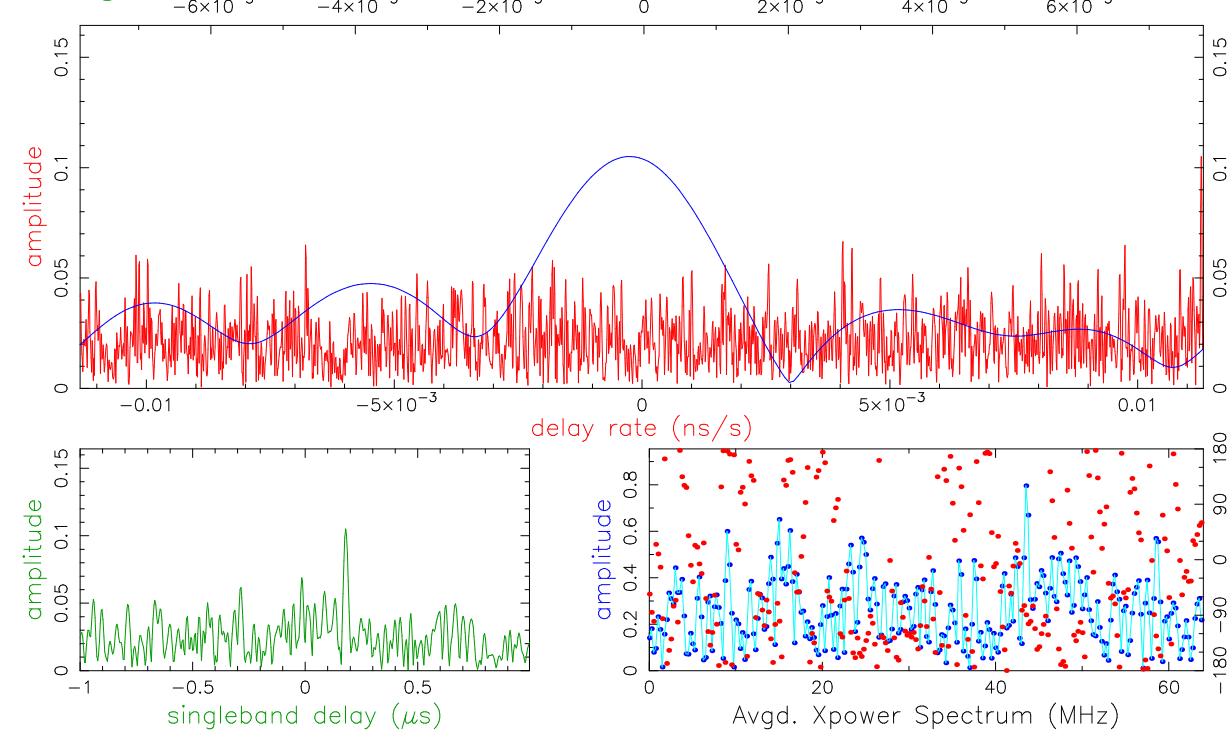
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.73566978512E+02									
Sband delay (usec)	-4.73570924513E+02									
Phase delay (usec)	-4.73763913694E+02									
Delay rate (us/s)	1.71499504457E+00									
Total phase (deg)			-189.2							
Apriori delay (usec)					-4.73763908513E+02					
Apriori clock (usec)					2.3661766E+00					
Apriori clockrate (us/s)					2.3600002E-07					
Apriori rate (us/s)					1.71499303251E+00					
Apriori accel (us/s/s)					-1.53564392626E-07					
Resid mbdelay (usec)									-6.19500E-03	+/- 1.8E-04
Resid sbdelay (usec)									1.92984E-01	+/- 1.5E-03
Resid phdelay (usec)									-5.18052E-06	+/- 6.3E-07
Resid rate (us/s)									2.01207E-06	+/- 2.6E-09
Resid phase (deg)									-160.7	+/- 19.5
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

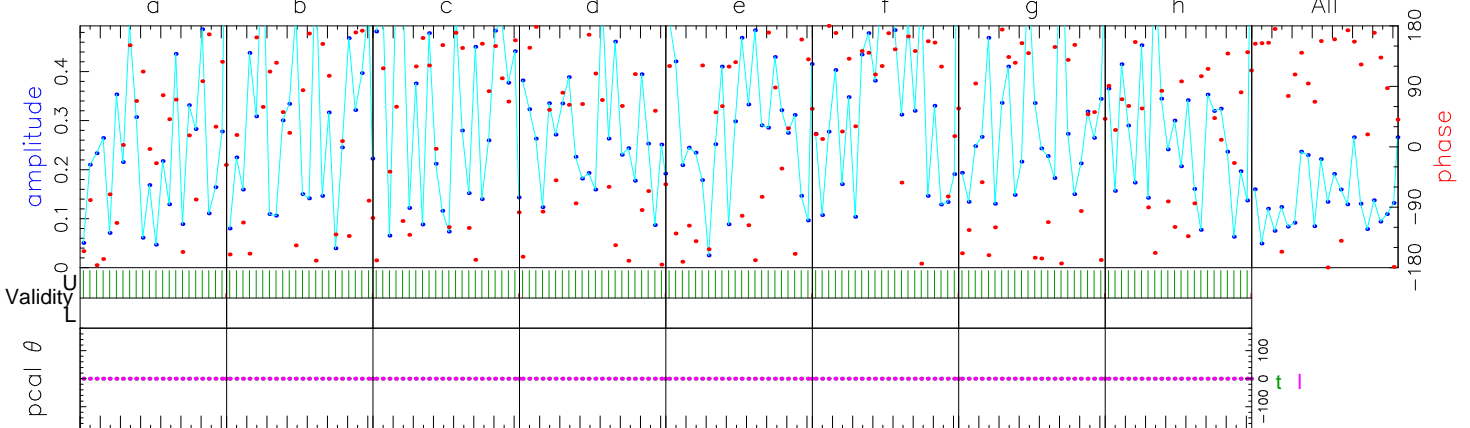
ph/seg (deg) 45.8 46.7 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 60.2 81.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.9 27.6 Inc. seg. avg. 0.095 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.1 48.1 Inc. frq. avg. 0.101 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 t: az 60.6 el 38.9 pa -76.4 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -13129.541 -102.966 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/tl..1X10VA Output file: /Exps/c211c/v1/1234/No0118/tl.W.217.1X10VA simultaneous interpolator

multiband delay ( $\mu$ s)



Fringe quality 0  
SNR 5.9  
Int time 419.826  
Amp 0.164  
Phase 147.1  
PFD 6.3e-01  
Delays (us)  
SBD 0.180012  
MBD -0.000197  
Fringe rate (Hz)  
0.972819  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133717  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	-4.73576605763E+02	Apriori delay (usec)	-4.73763908513E+02	Resid mbdelay (usec)	-1.97250E-04	+/-	1.8E-04
Sband delay (usec)	-4.73583896013E+02	Apriori clock (usec)	2.3661766E+00	Resid sbdelay (usec)	1.80012E-01	+/-	1.5E-03
Phase delay (usec)	-4.73763903768E+02	Apriori clockrate (us/s)	2.3600002E-07	Resid phdelay (usec)	4.74506E-06	+/-	6.3E-07
Delay rate (us/s)	1.71500432597E+00	Apriori rate (us/s)	1.71499303251E+00	Resid rate (us/s)	1.12935E-05	+/-	2.6E-09
Total phase (deg)	118.6	Apriori accel (us/s/s)	-1.53564392626E-07	Resid phase (deg)	147.1	+/-	19.5

ph/seg (deg)	48.5	Theor.	46.7	Amplitude	0.164 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	64.0	Search (2048X32)	0.104	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	Inc. seg. avg.	0.164	Inc. frq. avg.	0.163	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	57.8	Inc. frq. avg.	0.163			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	



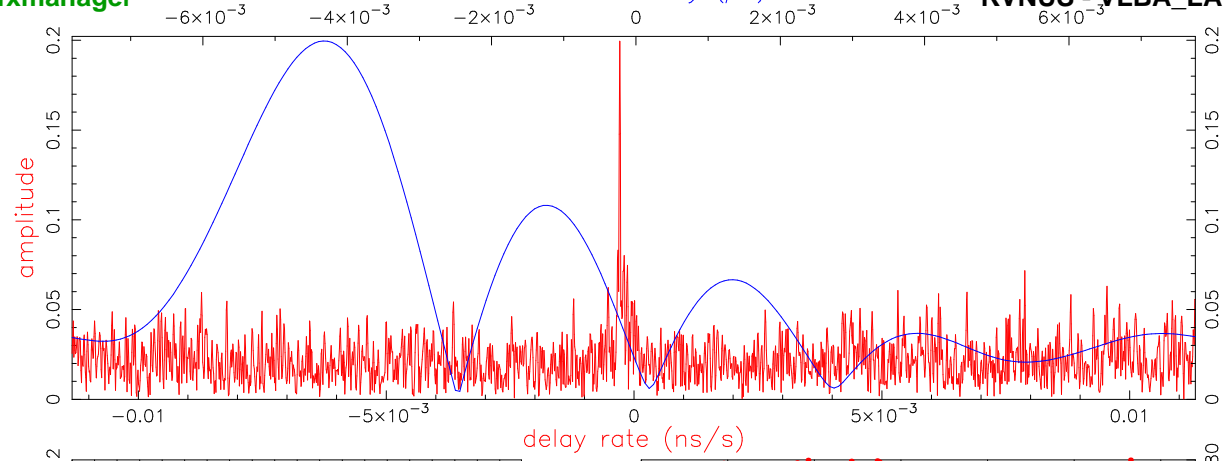
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

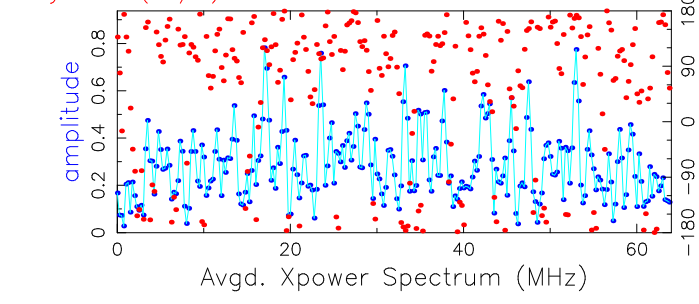
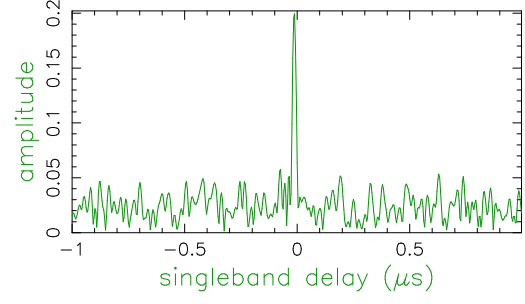
3C84.1X10VA, No0118, ul

KVNUS - VLBA\_LA, fgroup W, pol LL

multiband delay ( $\mu$ s)

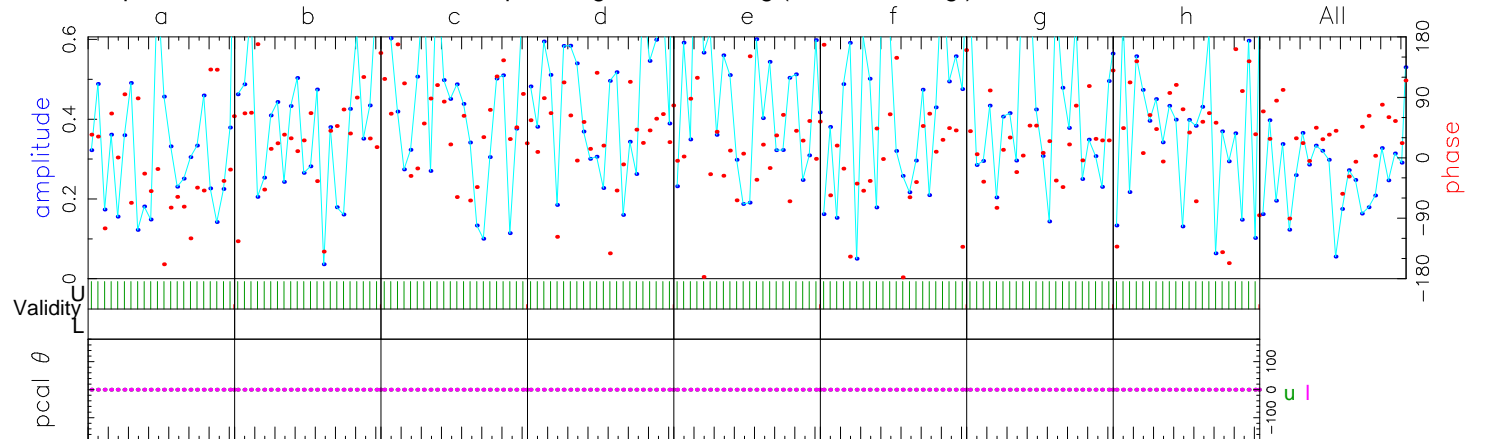


Fringe quality 9  
 SNR 11.3  
 Int time 419.826  
 Amp 0.202  
 Phase 35.1  
 PFD 4.8e-21  
 Delays (us)  
 SBD -0.013251  
 MBD -0.004368  
 Fringe rate (Hz)  
 -0.024587  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133719  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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

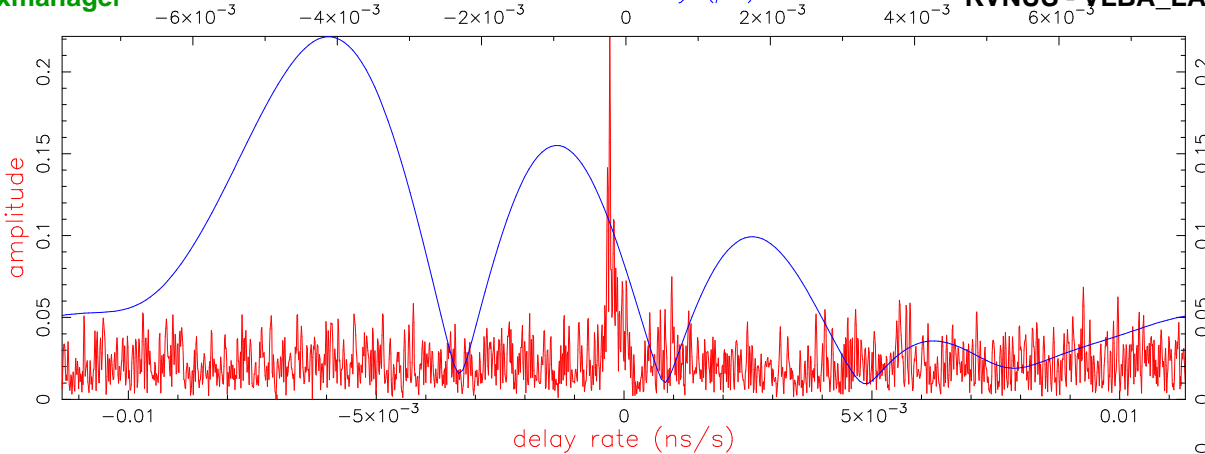


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-26.7	41.3	73.8	49.9	14.3	5.3	21.9	78.3	Phase	35.1
	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	405.1	253.8	253.8	253.5	253.8	242.0	253.7	253.1	Sbd box	253.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
u	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)	4.03451586310E+02		Apriori delay (usec)		4.03471578810E+02		Resid mbdelay (usec)		-4.36750E-03	+/- 9.6E-05
Sband delay (usec)	4.03458327810E+02		Apriori clock (usec)		1.7397121E+01		Resid sbdelay (usec)		-1.32510E-02	+/- 7.6E-04
Phase delay (usec)	4.03471579941E+02		Apriori clockrate (us/s)		1.4129999E-06		Resid phdelay (usec)		1.13113E-06	+/- 3.3E-07
Delay rate (us/s)	1.67064044773E+00		Apriori rate (us/s)		1.67064073316E+00		Resid rate (us/s)		-2.85432E-07	+/- 1.3E-09
Total phase (deg)	322.6		Apriori accel (us/s/s)		-2.30902553679E-06		Resid phase (deg)		35.1	+/- 10.1

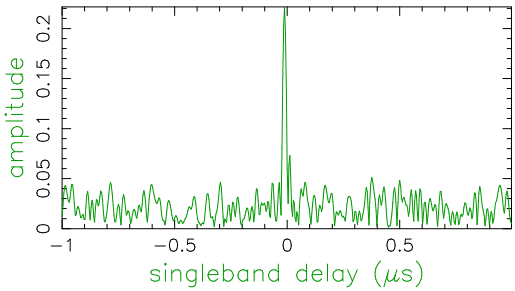
ph/seg (deg) 45.2 24.3 Search (2048X32) 0.194 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 50.3 42.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.6 14.3 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 31.9 25.0 Inc. frq. avg. 0.221 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 u: az 63.0 el 41.9 pa -76.1 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -12794.548 -41.958 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/ul..1X10VA Output file: /Exps/c211c/v1/1234/No0118/ul.W.244.1X10VA

multiband delay ( $\mu$ s)

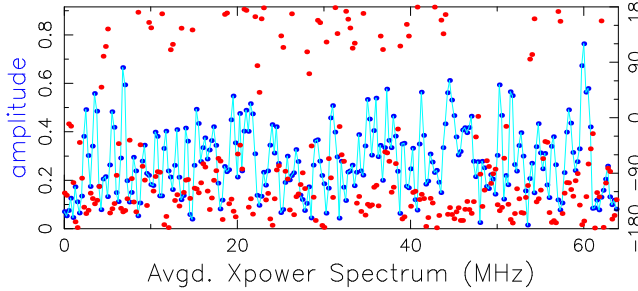
Fringe quality 9



SNR 12.4  
 Int time 419.826  
 Amp 0.222  
 Phase 130.1  
 PFD 1.1e-26  
 Delays (us)  
 SBD -0.012068  
 MBD -0.004140  
 Fringe rate (Hz)  
 -0.024521  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

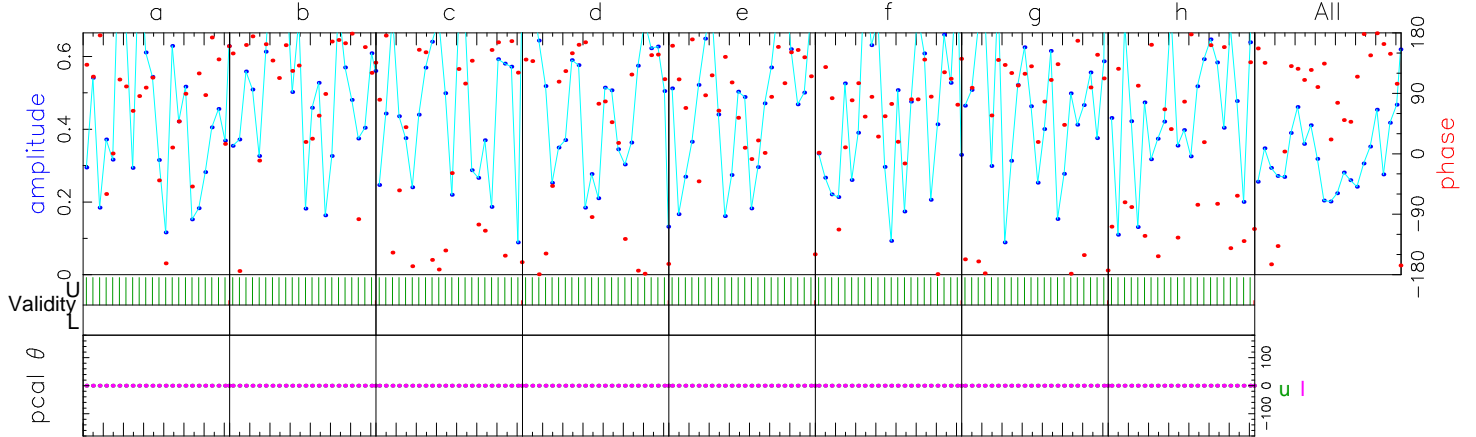


delay rate (ns/s)

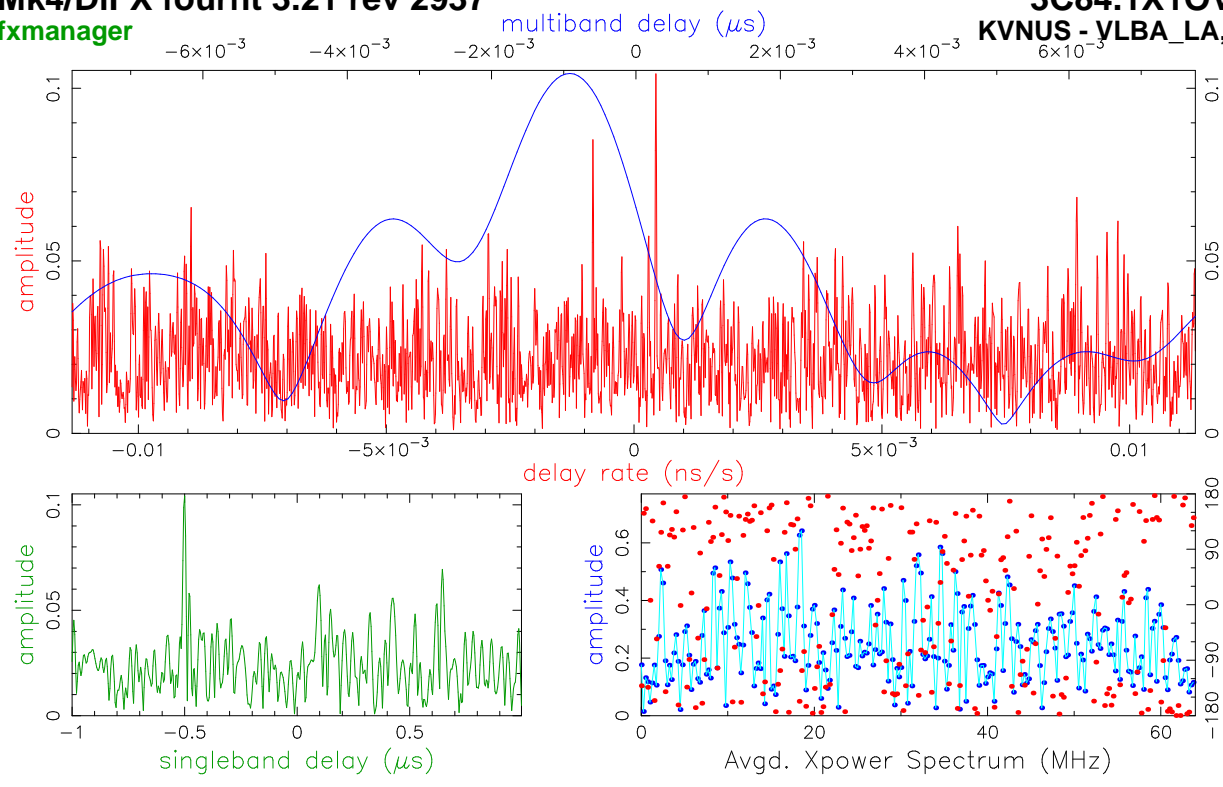


Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133723  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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

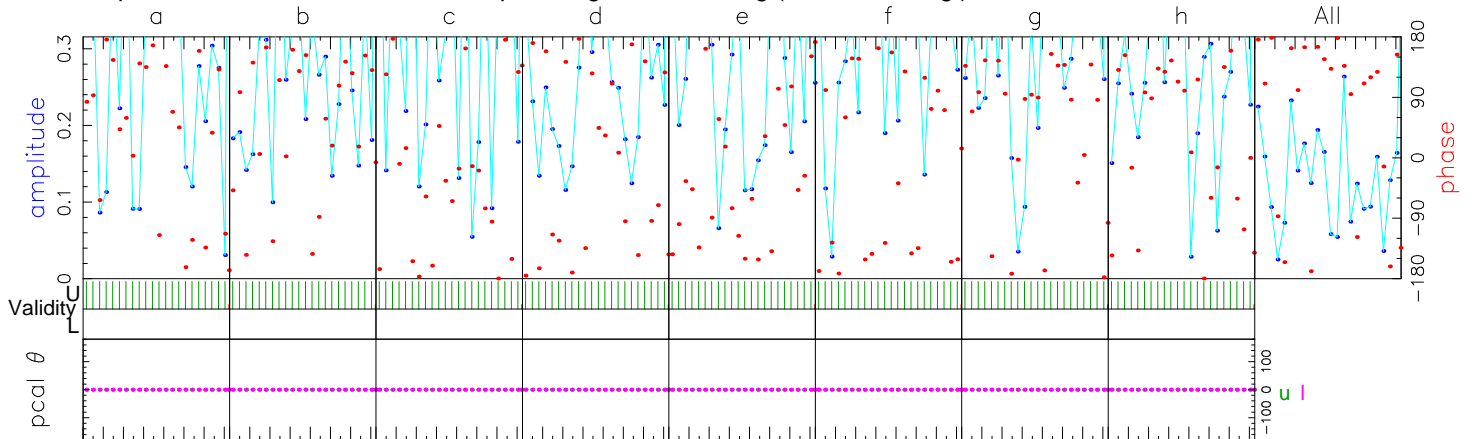


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
u	1000	1000	1000	1000	1000	1000	1000	1000			
l	0	0	0	0	0	0	0	0			
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
u	1000	1000	1000	1000	1000	1000	1000	1000			
l	1000	1000	1000	1000	1000	1000	1000	1000			
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		4.03451813748E+02			4.03471578810E+02				Resid mbdelay (usec)	-4.14006E-03	+/- 8.7E-05
Sband delay (usec)		4.03459510810E+02			1.7397121E+01				Resid sbdelay (usec)	-1.20680E-02	+/- 6.9E-04
Phase delay (usec)		4.03471583005E+02			1.4129999E-06				Resid phdelay (usec)	4.19513E-06	+/- 3.0E-07
Delay rate (us/s)		1.67064044850E+00			1.67064073316E+00				Resid rate (us/s)	-2.84662E-07	+/- 1.2E-09
Total phase (deg)			57.6		-2.30902553679E-06				Resid phase (deg)	130.1	+/- 9.2
ph/seg (deg)	RMS 55.1	Theor. 22.1	Amplitude 2.22 +/- 0.018	Search (2048X32) 0.213	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000	1.000
amp/seg (%)	59.7	38.6	Interp. 0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled			mb window (us)	-0.008	0.008
ph/frq (deg)	54.8	13.1	Inc. seg. avg. 0.301	0.272	Bits/sample: 2x2	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.0	22.8	Inc. frq. avg. 0.272	0.272	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		ion window (TEC)	0.00	0.00
u: az 63.0 el 41.9 pa -76.1		l: az 296.8 el 42.2 pa 75.9		u, v (fr/asec) -12794.548 -41.958							simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c211c/v1/1234/No0118/ul..1X10VA		Output file: /Exps/c211c/v1/1234/No0118/ul.W.261.1X10VA							



Fringe quality 0  
SNR 5.9  
Int time 419.826  
Amp 0.105  
Phase 155.8  
PFD 6.2e-01  
Delays (us)  
SBD -0.501055  
MBD -0.000966  
Fringe rate (Hz)  
0.038179  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133727  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	113.8	130.4	-148.7	-177.6	-119.2	169.0	124.1	138.5	Phase	155.8		
	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1		
	127.8	40.8	213.6	495.5	371.0	128.5	128.6	351.9	Sbd box	128.7		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
l	0	0	0	0	0	0	0	0	PC freqs			
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
l	1000	1000	1000	1000	1000	1000	1000	1000				
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	4.02970613070E+02		Apriori delay (usec)		4.03471578810E+02		Resid mbdelay (usec)		-9.65740E-04	+/- 1.8E-04		
Sband delay (usec)	4.02970523310E+02		Apriori clock (usec)		1.7397121E+01		Resid sbdelay (usec)		-5.01055E-01	+/- 1.5E-03		
Phase delay (usec)	4.03471583833E+02		Apriori clockrate (us/s)		1.4129999E-06		Resid phdelay (usec)		5.02301E-06	+/- 6.3E-07		
Delay rate (us/s)	1.67064117638E+00		Apriori rate (us/s)		1.67064073316E+00		Resid rate (us/s)		4.43223E-07	+/- 2.6E-09		
Total phase (deg)	83.3		Apriori accel (us/s/s)		-2.30902553679E-06		Resid phase (deg)		155.8	+/- 19.5		
	RMS	Theor.	Amplitude	0.105 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	56.8	46.6	Search (2048X32)	0.103		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	68.1	81.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	49.9	27.5	Inc. seg. avg.	0.099		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	42.8	48.0	Inc. frq. avg.	0.118		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
u: az 63.0 el 41.9 pa -76.1	l: az 296.8 el 42.2 pa 75.9		u, v (fr/asec)		-12794.548 -41.958				simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c211c/v1/1234/No0118/ul..1X10VA		Output file: /Exps/c211c/v1/1234/No0118/ul.W.279.1X10VA									

Mk4/DiFX fourfit 3.21 rev 2937

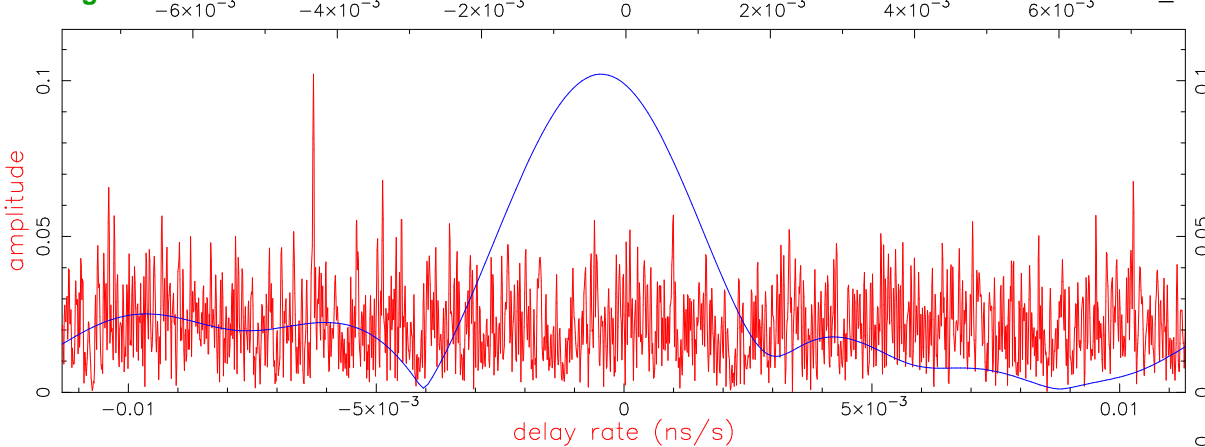
fxmanager

3C84.1X10VA, No0118, ul

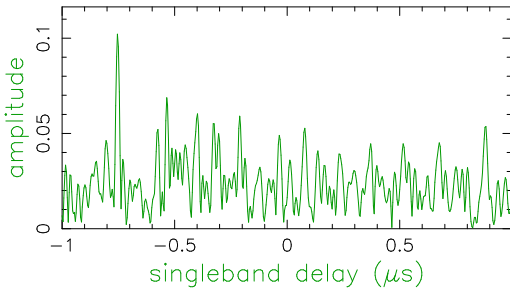
KVNUS - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu$ s)

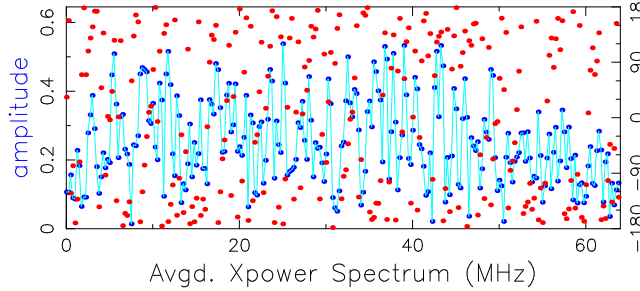
Fringe quality 0



SNR 5.7  
 Int time 419.826  
 Amp 0.116  
 Phase 132.9  
 PFD 9.1e-01  
 Delays (us)  
 SBD -0.753326  
 MBD -0.000349  
 Fringe rate (Hz)  
 -0.540763  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

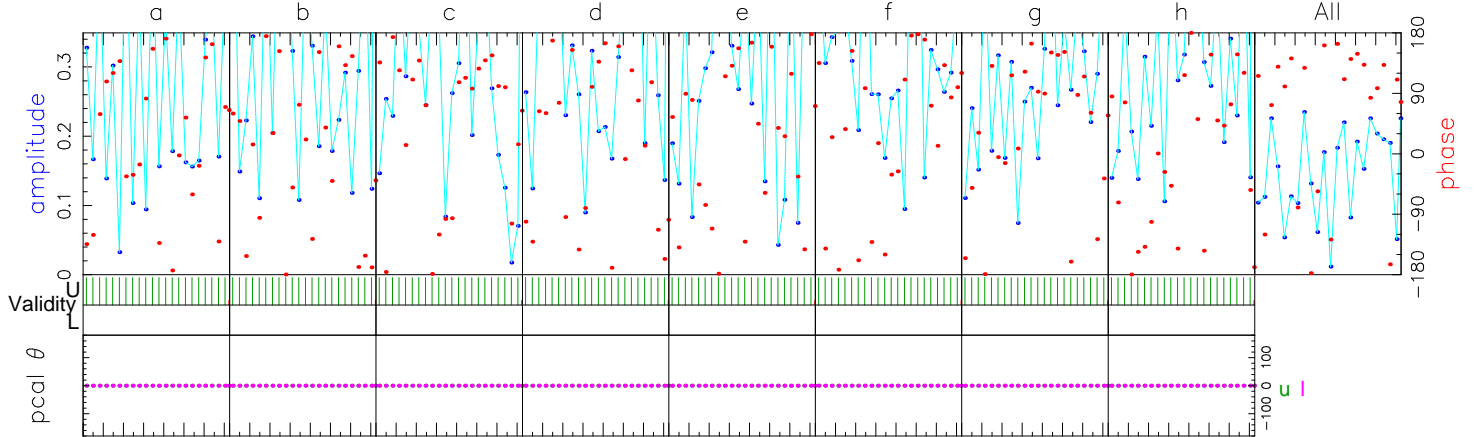


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133730  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All			
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0					
u	1000	1000	1000	1000	1000	1000	1000	1000					
l	0	0	0	0	0	0	0	0					
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
u	1000	1000	1000	1000	1000	1000	1000	1000					
l	1000	1000	1000	1000	1000	1000	1000	1000					
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL					
Group delay (usec)(sbd)		4.02721230199E+02			4.03471578810E+02				Resid mbdelay (usec)	-3.48611E-04	+/- 1.9E-04		
Sband delay (usec)		4.02718253060E+02			1.7397121E+01				Resid sbdelay (usec)	-7.53326E-01	+/- 1.5E-03		
Phase delay (usec)		4.03471583097E+02			1.4129999E-06				Resid phdelay (usec)	4.28706E-06	+/- 6.4E-07		
Delay rate (us/s)		1.67063445544E+00			1.67064073316E+00				Resid rate (us/s)	-6.27772E-06	+/- 2.7E-09		
Total phase (deg)			60.5		-2.30902553679E-06				Resid phase (deg)	132.9	+/- 20.0		
	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5				
ph/seg (deg)	64.1	47.9	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000	1.000		
amp/seg (%)	75.8	83.7	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.0	28.3	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011	0.011		
amp/frq (%)	41.4	49.3	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048				nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
u: az 63.0 el 41.9 pa -76.1			l: az 296.8 el 42.2 pa 75.9		u,v (fr/asec) -12794.548 -41.958							simultaneous interpolator	

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/ul..1X10VA Output file: /Exps/c211c/v1/1234/No0118/ul.W.295.1X10VA

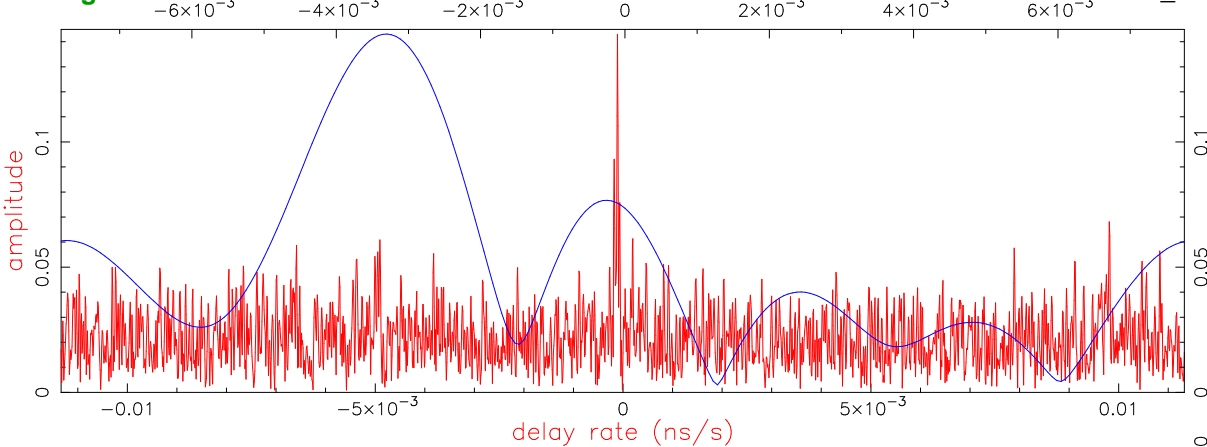
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X10VA, No0118, yl

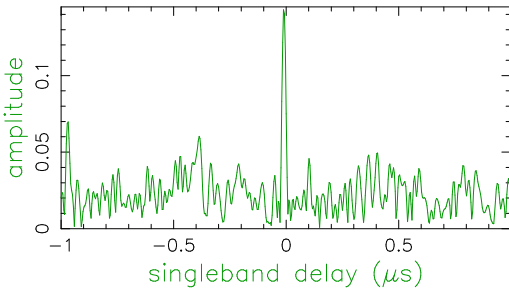
KVNYS - VLBA\_LA, fgroup W, pol LL

multiband delay ( $\mu$ s)

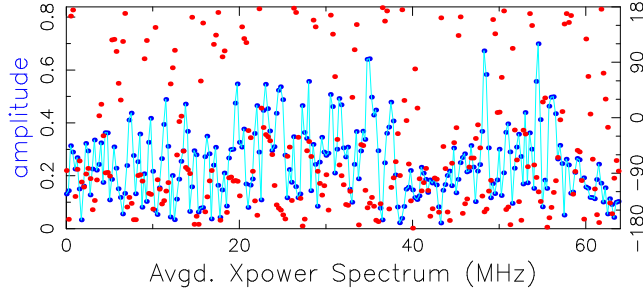


Fringe quality 9

SNR 8.1  
 Int time 419.489  
 Amp 0.145  
 Phase 155.3  
 PFD 1.7e-07  
 Delays (us)  
 SBD -0.010174  
 MBD -0.003259  
 Fringe rate (Hz)  
 -0.009595  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

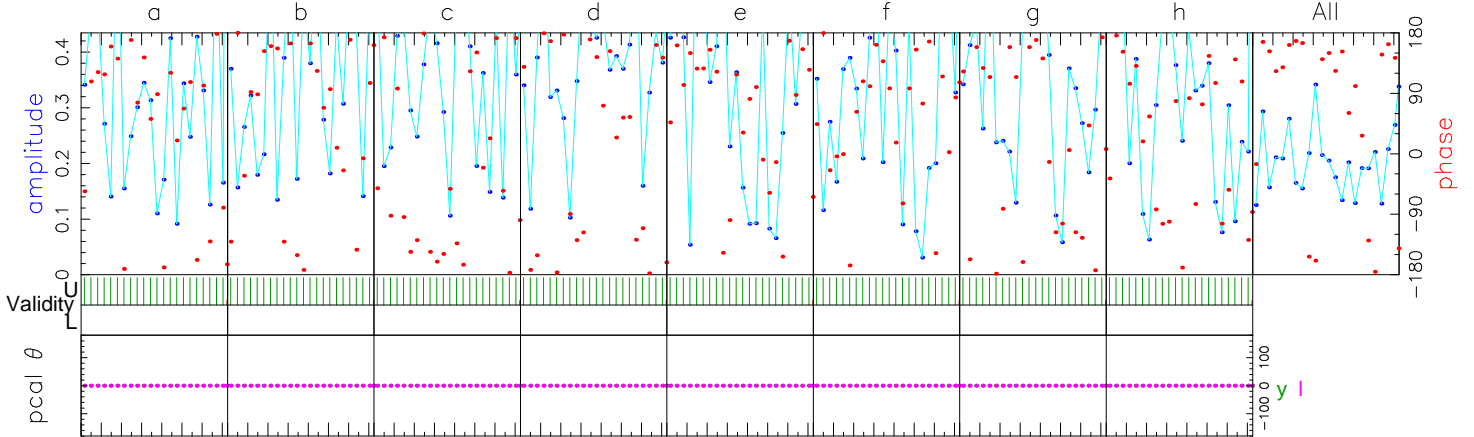


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133722  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



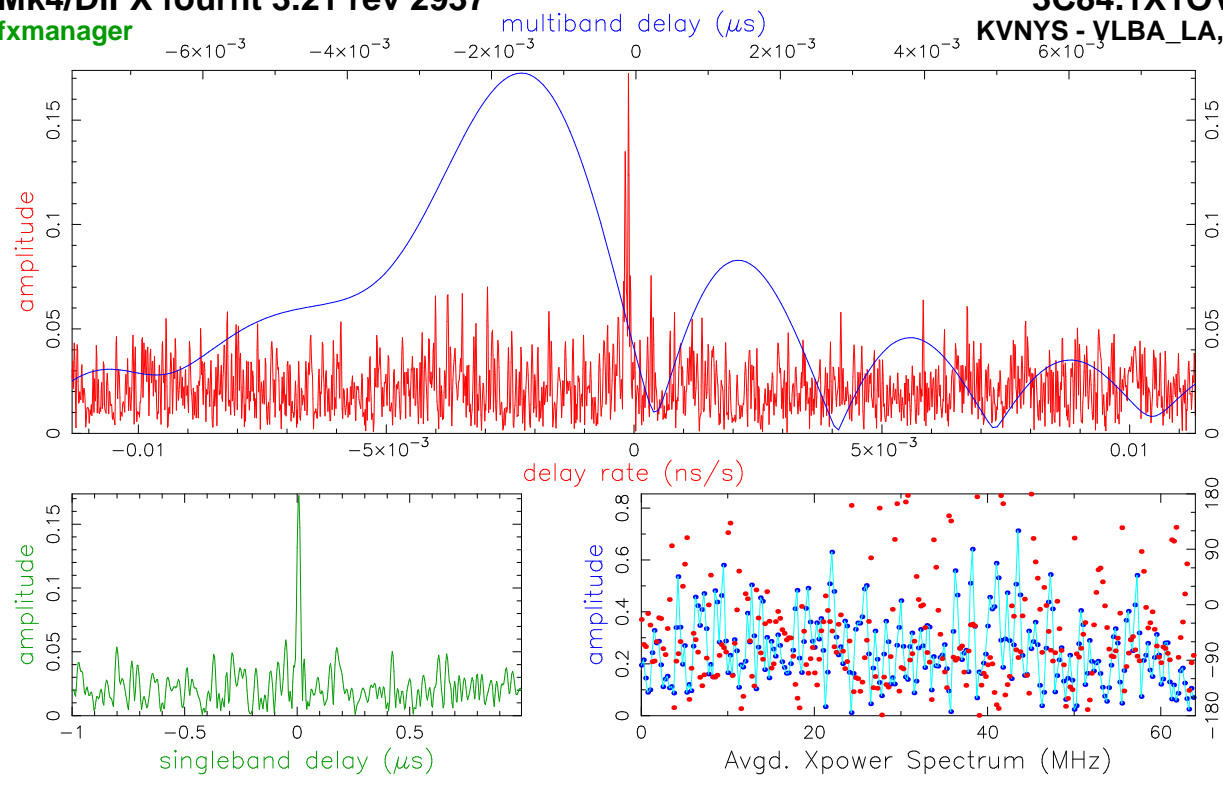
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000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

Group delay (usec)(sbd)	1.76684199994E+02	Apriori delay (usec)	1.76687459215E+02	Resid mbdelay (usec)	-3.25922E-03	+/-	1.3E-04
Sband delay (usec)	1.76677285215E+02	Apriori clock (usec)	3.3378925E+00	Resid sbdelay (usec)	-1.01740E-02	+/-	1.1E-03
Phase delay (usec)	1.76687464223E+02	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	5.00759E-06	+/-	4.6E-07
Delay rate (us/s)	1.66656855061E+00	Apriori rate (us/s)	1.66656866201E+00	Resid rate (us/s)	-1.11392E-07	+/-	1.9E-09
Total phase (deg)	60.5	Apriori accel (us/s/s)	9.41221571760E-07	Resid phase (deg)	155.3	+/-	14.1

ph/seg (deg)	57.4	RMS	33.9	Theor.	Amplitude	0.145 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	56.0	Search (2048X32)	0.141	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	38.7	Inc. seg. avg.	0.173	Bits/sample: 2x2	Inc. frq. avg.	0.158	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	35.7	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048			nlags: 256	ion window (TEC)	0.00	0.00	

y: az 63.9 el 41.2 pa -72.6 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -12757.511 371.751 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/yl.1X10VA Output file: /Exps/c211c/v1/1234/No0118/yl.W.257.1X10VA

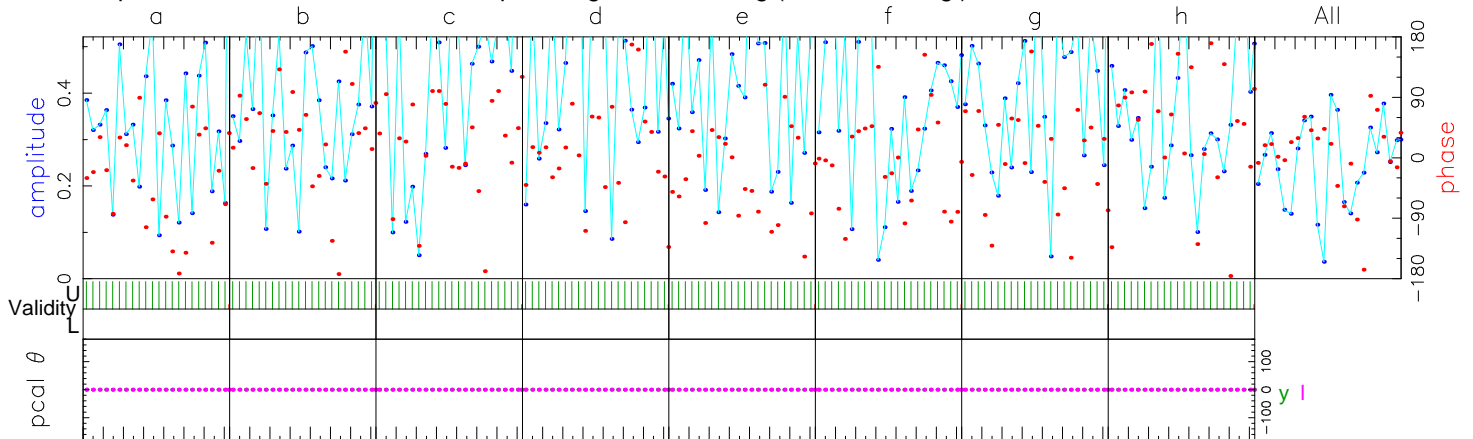


Fringe quality 9

SNR 9.7  
Int time 419.489  
Amp 0.174  
Phase 17.4  
PFD 8.9e-14  
Delays (us)  
SBD 0.006648  
MBD -0.001644  
Fringe rate (Hz)  
-0.009222  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 001500.00  
Stop 002159.84  
FRT 001830.00  
Corr/FF/build  
2021:303:221812  
2021:304:133726  
2021:252:122852  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-23.5	50.0	44.8	10.8	-22.8	-9.1	9.0	72.7	Phase	17.4
	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	260.9	258.3	258.6	258.5	258.9	257.9	258.7	258.6	Sbd box	258.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	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)	1.76701439931E+02		Apriori delay (usec)		1.76687459215E+02		Resid mbdelay (usec)		-1.64428E-03	+/- 1.1E-04
Sband delay (usec)	1.76694106715E+02		Apriori clock (usec)		3.3378925E+00		Resid sbdelay (usec)		6.64750E-03	+/- 8.8E-04
Phase delay (usec)	1.76687459775E+02		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		5.60313E-07	+/- 3.8E-07
Delay rate (us/s)	1.6665685495E+00		Apriori rate (us/s)		1.66656866201E+00		Resid rate (us/s)		-1.07054E-07	+/- 1.6E-09
Total phase (deg)	282.6		Apriori accel (us/s/s)		9.41221571760E-07		Resid phase (deg)		17.4	+/- 11.8

ph/seg (deg) 56.2 28.2 Search (2048X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 68.8 49.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 38.7 16.6 Inc. seg. avg. 0.222 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.1 29.1 Inc. frq. avg. 0.194 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
y: az 63.9 el 41.2 pa -72.6 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -12757.511 371.751 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/yl.1X10VA Output file: /Exps/c211c/v1/1234/No0118/yl.W.272.1X10VA

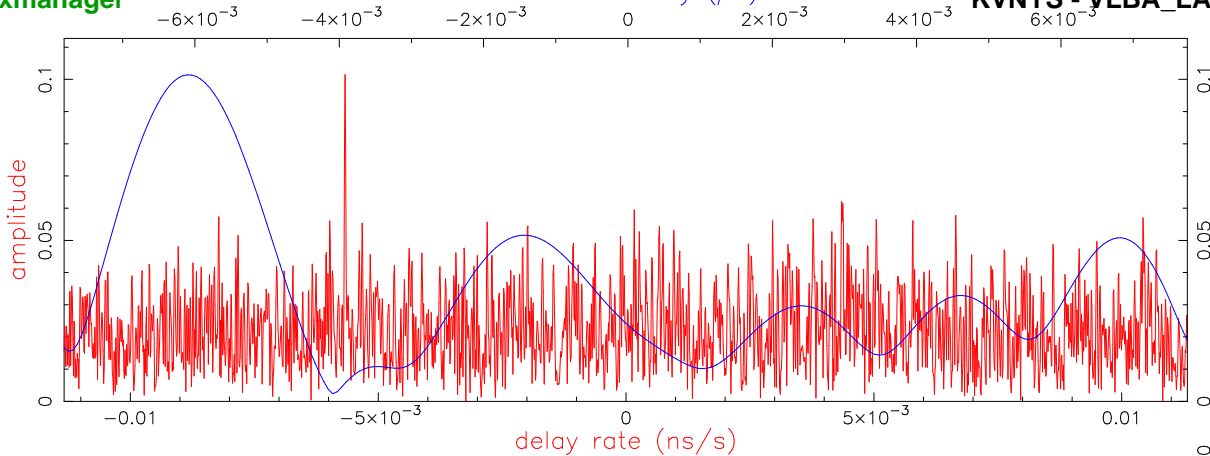
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

multiband delay ( $\mu$ s)

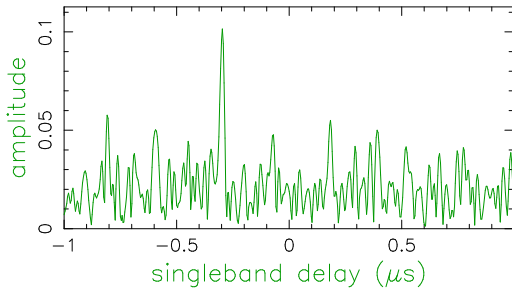
3C84.1X10VA, No0118, yl

KVNS - VLBA\_LA, fgroup W, pol LR

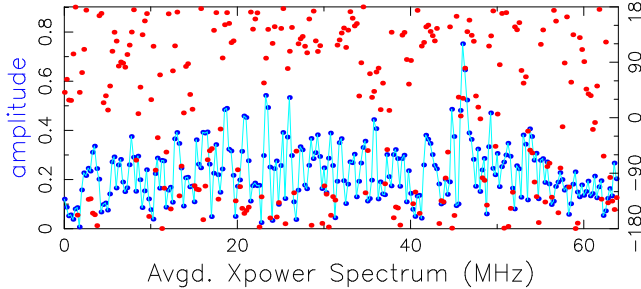


Fringe quality 0

SNR 5.7  
 Int time 419.489  
 Amp 0.113  
 Phase 43.4  
 PFD 9.6e-01  
 Delays (us)  
 SBD -0.297088  
 MBD -0.006088  
 Fringe rate (Hz)  
 -0.489189  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

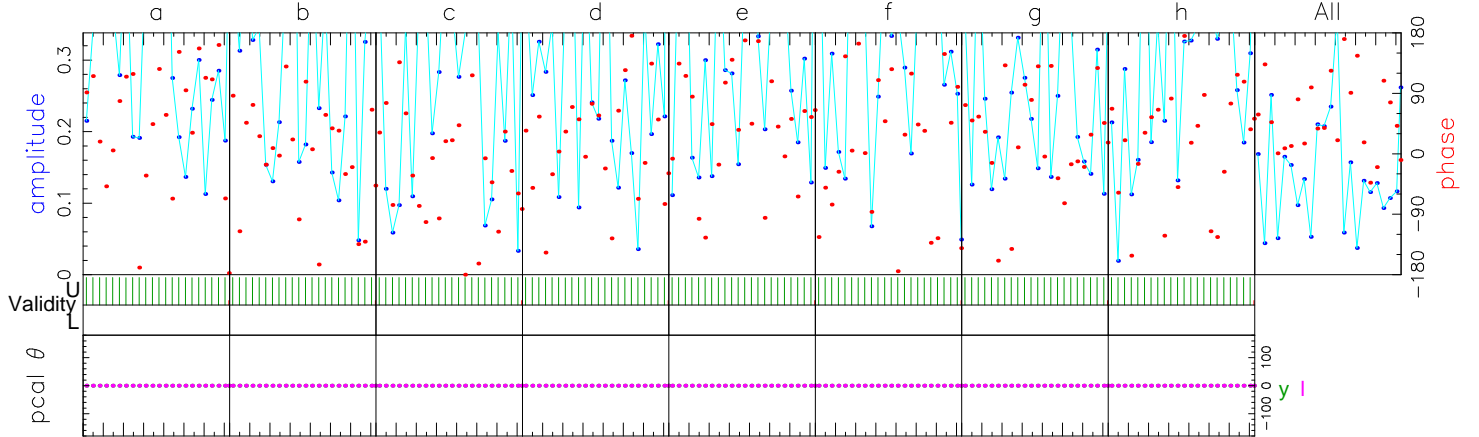


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 001500.00  
 Stop 002159.84  
 FRT 001830.00  
 Corr/FF/build  
 2021:303:221812  
 2021:304:133729  
 2021:252:122852  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.76384496655E+02	Apriori delay (usec)		1.76687459215E+02	Resid mbdelay (usec)		-6.08756E-03	+/-	1.9E-04	
Sband delay (usec)	1.76390371215E+02	Apriori clock (usec)		0.100	Resid sbdelay (usec)		-2.97088E-01	+/-	1.5E-03	
Phase delay (usec)	1.76687460613E+02	Apriori clockrate (us/s)		2.8600001E-07	Resid phdelay (usec)		1.39825E-06	+/-	6.5E-07	
Delay rate (us/s)	1.66656298300E+00	Apriori rate (us/s)		1.66656866201E+00	Resid rate (us/s)		-5.67900E-06	+/-	2.7E-09	
Total phase (deg)	308.6		Apriori accel (us/s/s)		9.41221571760E-07	Resid phase (deg)		43.4	+/-	20.2

ph/seg (deg)	RMS 56.9	Theor. 48.4	Amplitude Search (2048X32)	0.113 +/- 0.020	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	85.8	84.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	33.3	28.5	Inc. seg. avg.	0.115	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	40.7	49.8	Inc. frq. avg.	0.112	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

y: az 63.9 el 41.2 pa -72.6 l: az 296.8 el 42.2 pa 75.9 u,v (fr/asec) -12757.511 371.751 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0118/yl.1X10VA Output file: /Exps/c211c/v1/1234/No0118/yl.W.288.1X10VA

