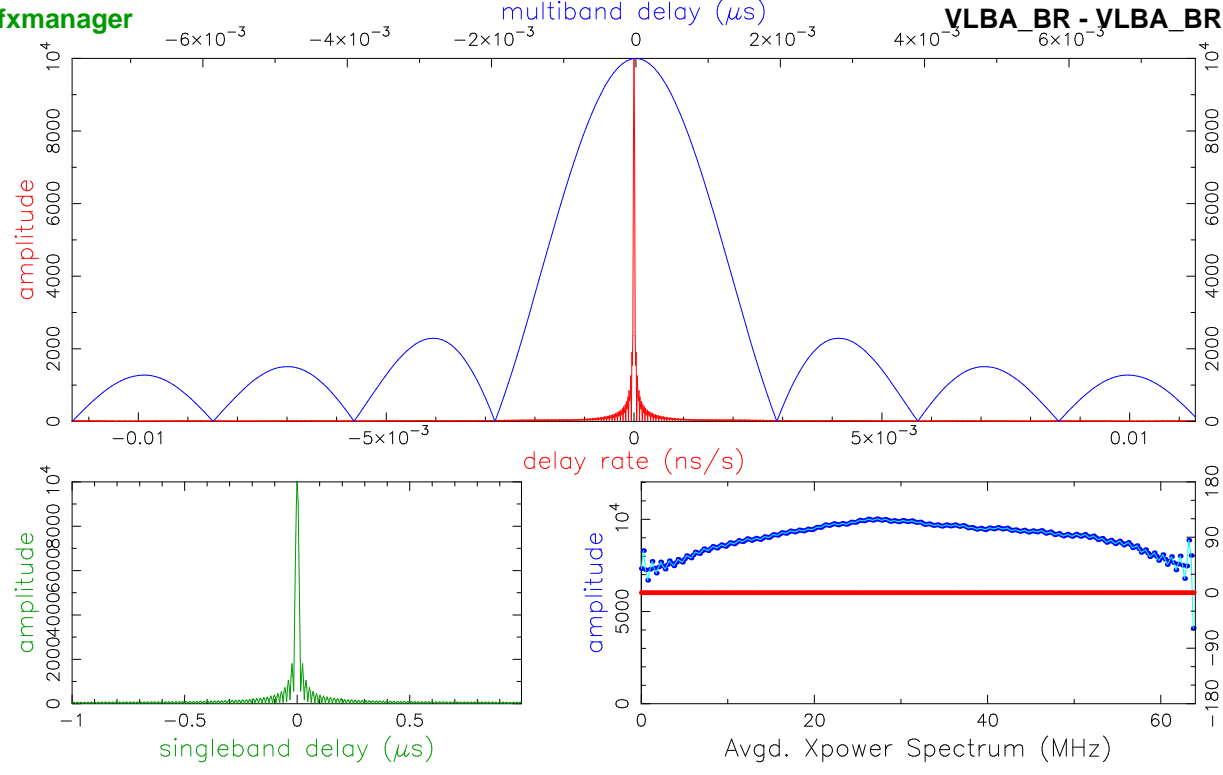


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bb

VLBA_BR - VLBA_BR, fgroup W, pol LL

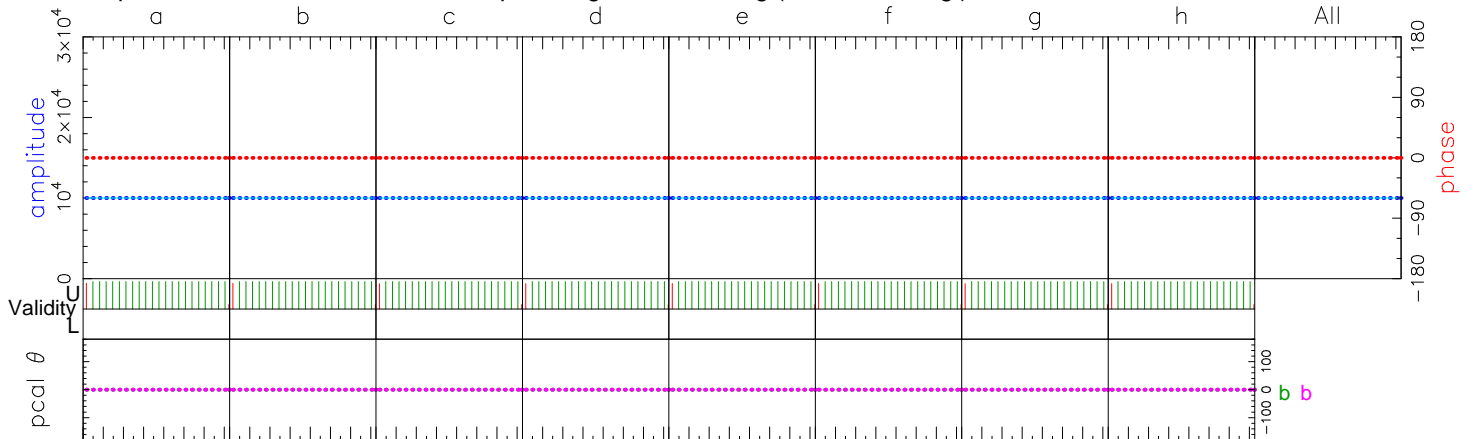


Fringe quality 9

SNR 559397.7
 Int time 418.452
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133847
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
b	0	0	0	0	0	0	0	0	Ampl.	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.9E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.5E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

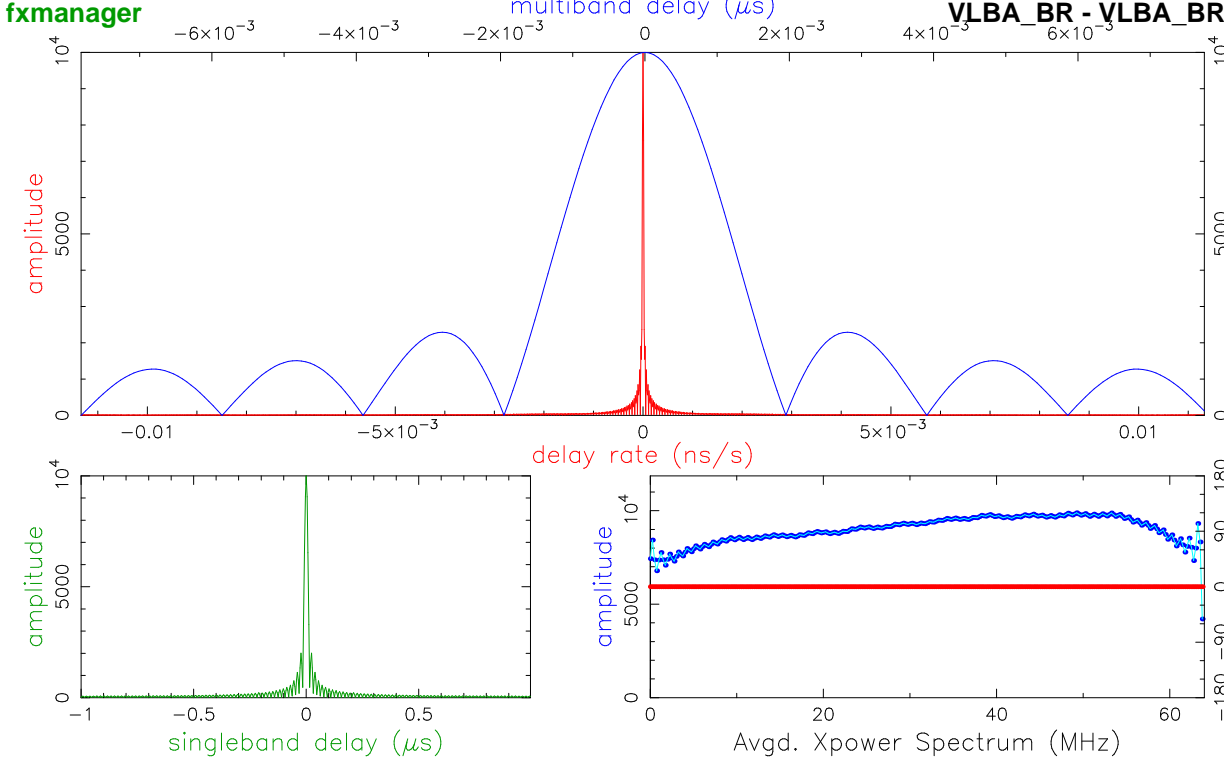
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 az 293.2 el 60.3 pa 77.2 b: az 293.2 el 60.3 pa 77.2 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bb..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bb.W.1.1X1QEV simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bb

VLBA_BR - VLBA_BR, fgroup W, pol RR

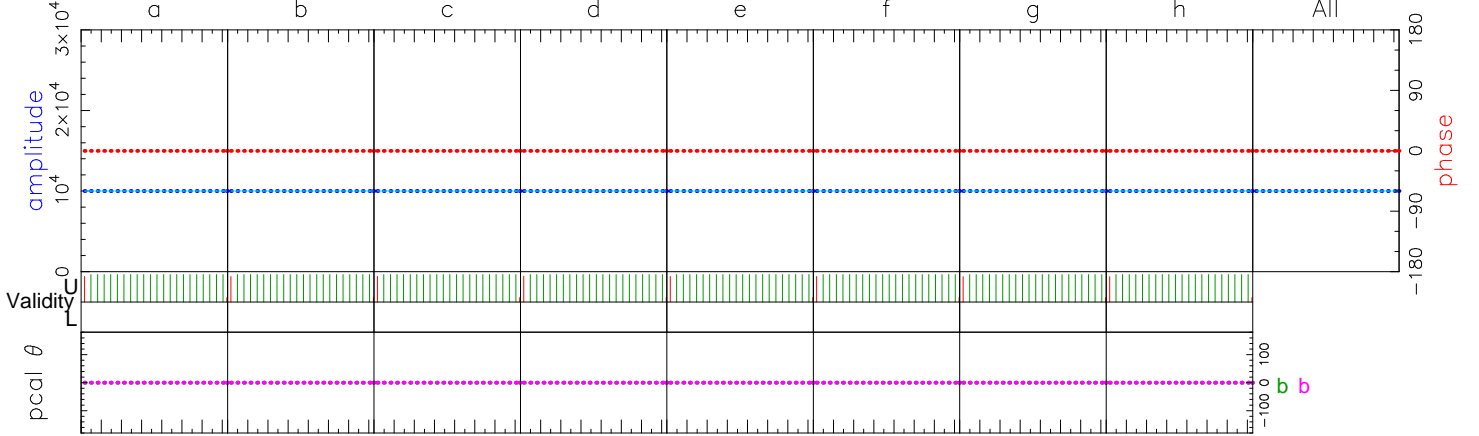


Fringe quality 9

SNR 559397.8
 Int time 418.452
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Yr:day 16383
 Start 2021:117
 Stop 2021:117
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133851
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0	
b	0	0	0	0	0	0	0	0	Ampl.	10000.0	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Apriori delay (usec)	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	Apriori clock (usec)	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	Apriori clockrate (us/s)	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	Apriori rate (us/s)	0.000000000000E+00	+/- 2.7E-14
Total phase (deg)			0.0						Apriori accel (us/s/s)	0.000000000000E+00	+/- 0.0

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

b: az 293.2 el 60.3 pa 77.2 b: az 293.2 el 60.3 pa 77.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bb..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bb.W.21.1X1QEV

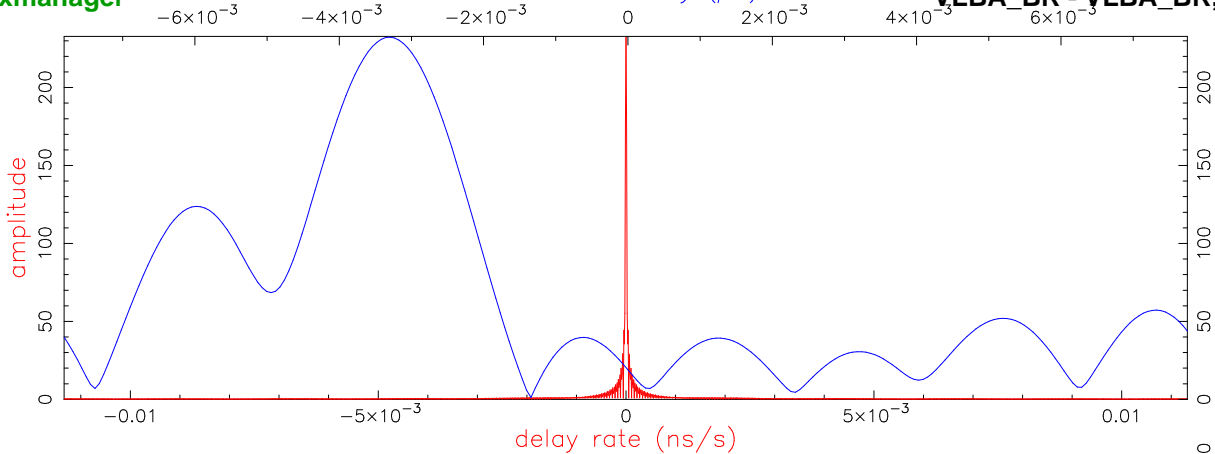
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bb

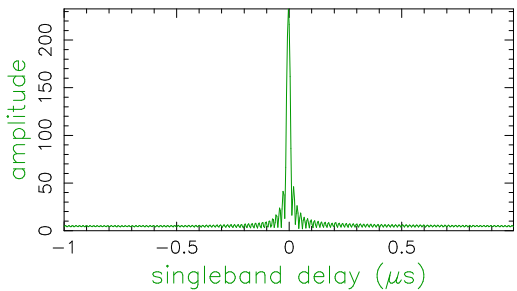
VLBA_BR - VLBA_BR, fgroup W, pol LR

multiband delay (μ s)

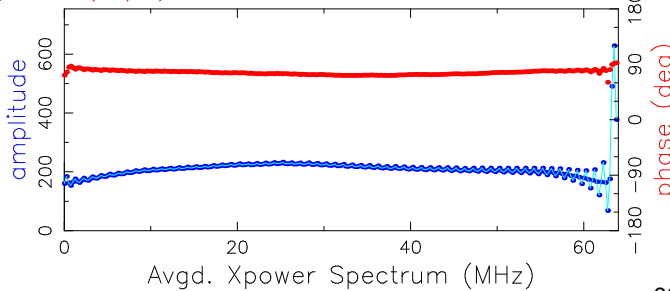


Fringe quality 7

SNR 13022.3
 Int time 418.452
 Amp 232.792
 Phase 76.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.003327
 MBD -0.003293
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

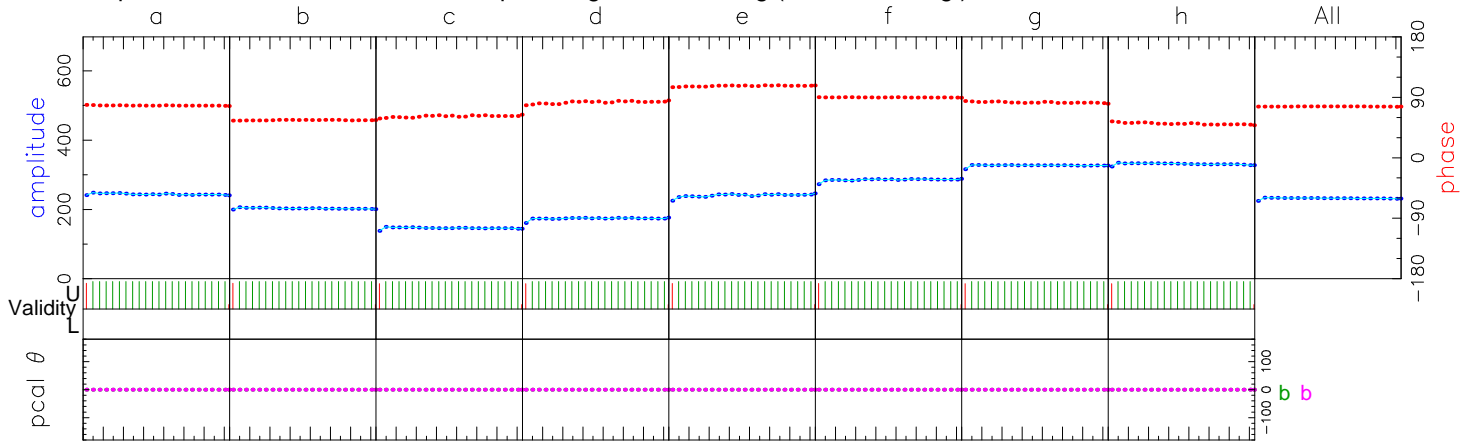


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133855
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd) -3.29312500000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -3.29312E-03 +/- 8.3E-08
 Sband delay (usec) -3.32700000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -3.32700E-03 +/- 6.6E-07
 Phase delay (usec) 2.45989134501E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.45989E-06 +/- 2.8E-10
 Delay rate (us/s) 8.50269143501E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 8.50269E-12 +/- 1.2E-12
 Total phase (deg) 76.3 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 76.3 +/- 0.0

RMS Theor. Amplitude 232.792 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (2048X32) 230.903 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 20.3 0.0 Inc. seg. avg. 232.287 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.8 0.0 Inc. frq. avg. 244.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bb..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bb.W.41.1X1QEV

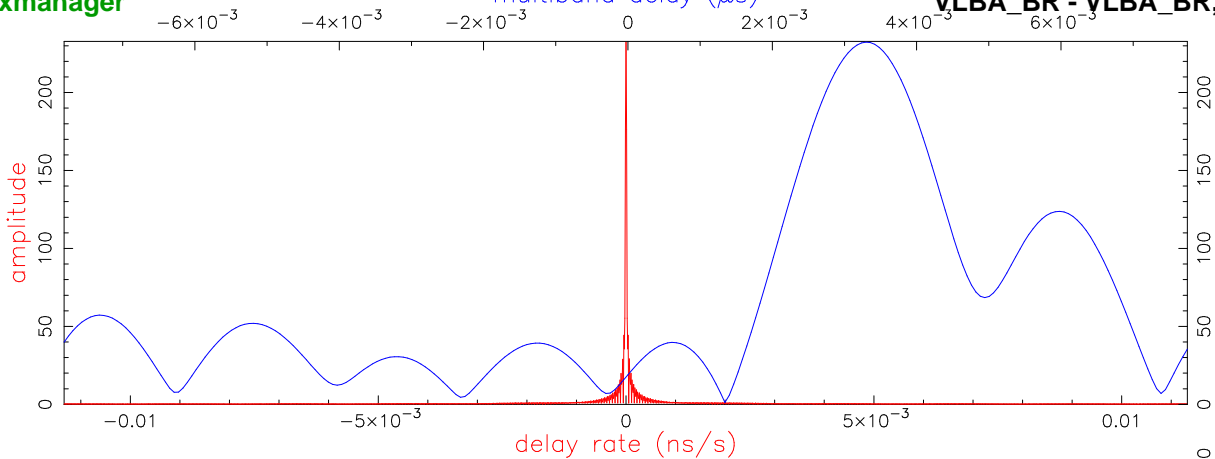
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bb

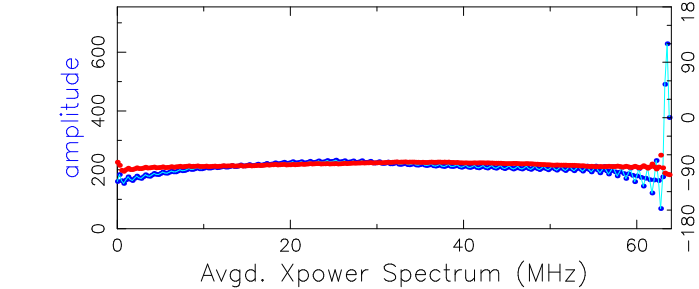
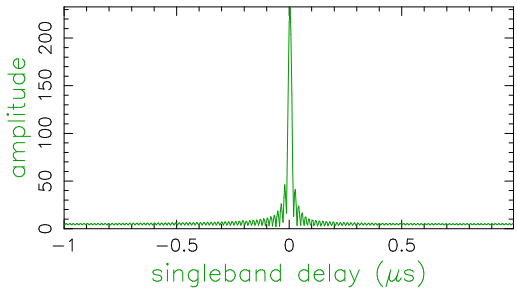
VLBA_BR - VLBA_BR, fgroup W, pol RL

multiband delay (μ s)



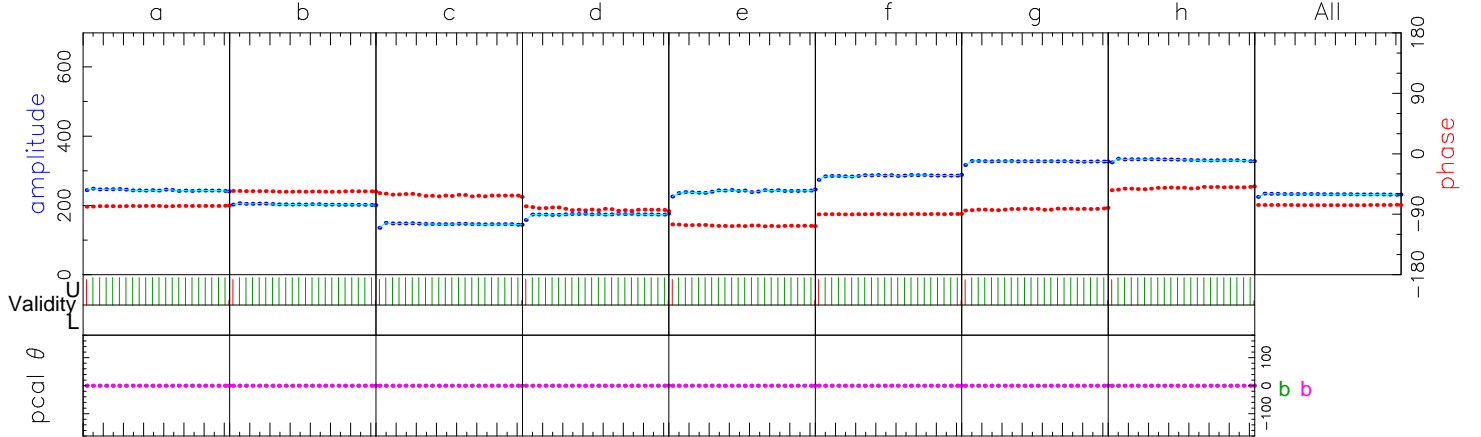
Fringe quality 7

SNR 13022.3
 Int time 418.452
 Amp 232.792
 Phase -76.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.003327
 MBD 0.003293
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133859
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-77.7	-56.0	-61.6	-82.5	-106.9	-89.8	-82.5	-50.9		Phase	-76.3
	244.4	203.2	146.3	173.7	240.5	285.7	327.1	331.3		Ampl.	244.0
	258.2	258.1	257.7	257.4	257.9	258.0	258.0	258.1		Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
b	0	0	0	0	0	0	0	0		PC freqs	
b	0	0	0	0	0	0	0	0		PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Tracks	
Group delay (usec)(sbd)	3.29312500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.29312E-03	+/-	8.3E-08
Sband delay (usec)	3.32700000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.32700E-03	+/-	6.6E-07
Phase delay (usec)	-2.45989134503E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.45989E-06	+/-	2.8E-10
Delay rate (us/s)	-8.50269143501E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-8.50269E-12	+/-	1.2E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-76.3	+/-	0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 232.792 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.8 0.0 Search (2048X32) 230.903 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.8 0.0 Inc. seg. avg. 232.287 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 244.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 b: az 293.2 el 60.3 pa 77.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bb..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bb.W.61.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

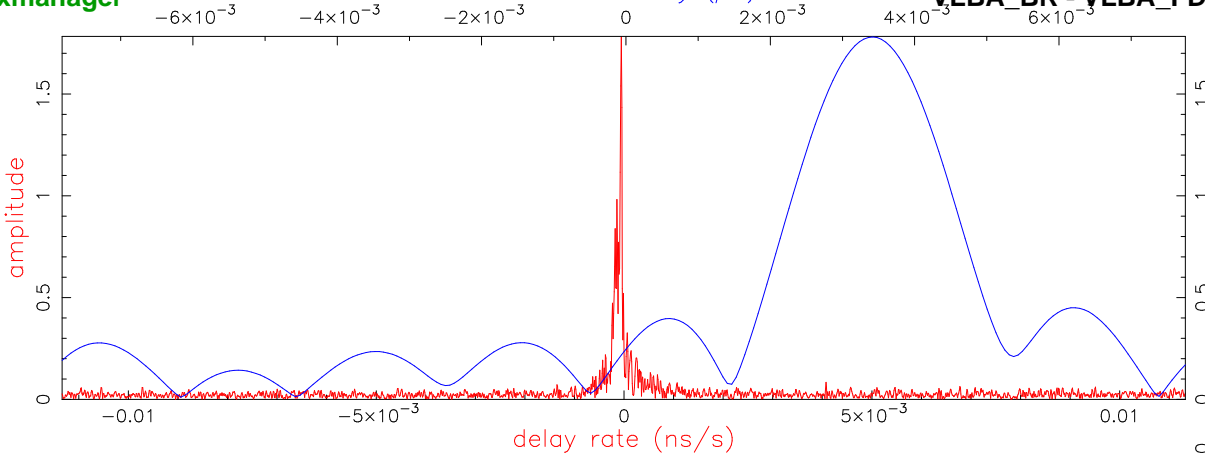
fxmanager

NRAO150.1X1QEV, No0120, bf

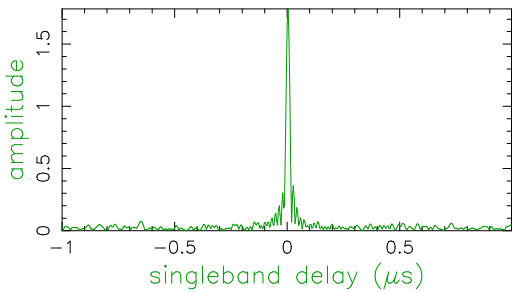
VLBA_BR - VLBA_FD, fgroup W, pol RR

multiband delay (μ s)

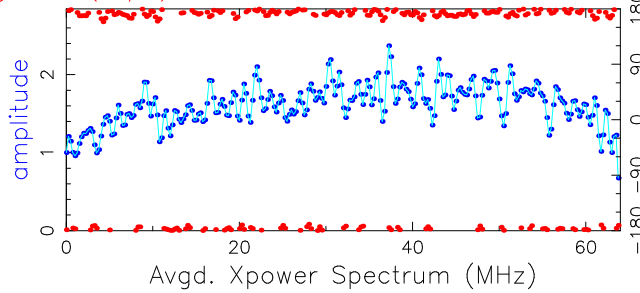
Fringe quality 5



SNR 99.8
Int time 418.452
Amp 1.783
Phase 175.5
PFD 0.0e+00
Delays (us)
SBD 0.003367
MBD 0.003401
Fringe rate (Hz)
-0.004704
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

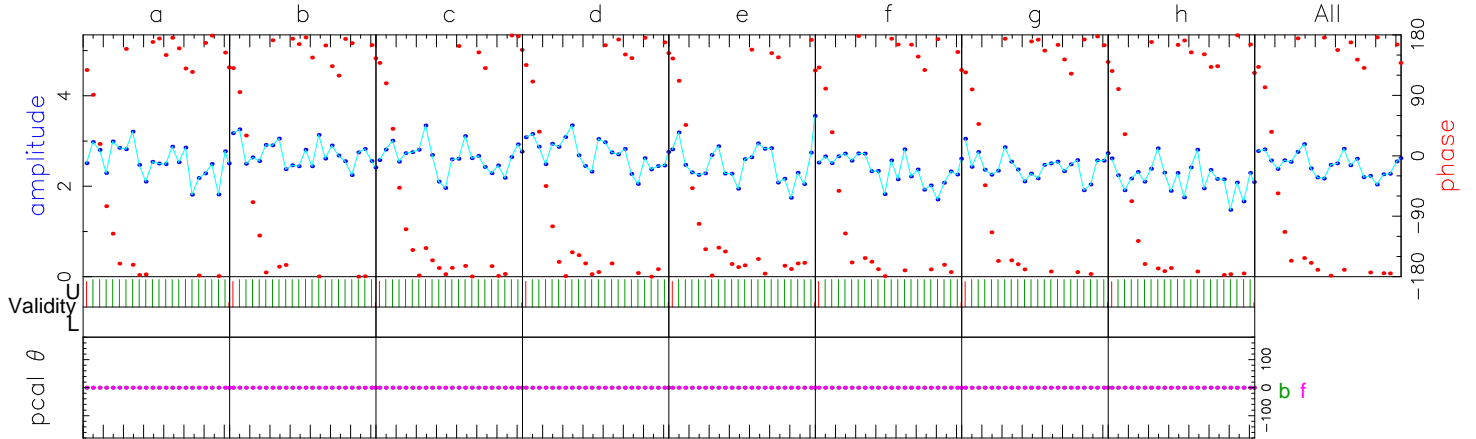


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133851
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
f	0	0	0	0	0	0	0	0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	4.71263836964E+03	Apriori delay (usec)		4.71263496903E+03	Resid mbdelay (usec)		3.40061E-03	+/- 1.1E-05	
Sband delay (usec)	4.71263833578E+03	Apriori clock (usec)		-1.3250582E+01	Resid sbdelay (usec)		3.36675E-03	+/- 8.6E-05	
Phase delay (usec)	4.71263497469E+03	Apriori clockrate (us/s)		-1.6000000E-07	Resid phdelay (usec)		5.65797E-06	+/- 3.7E-08	
Delay rate (us/s)	2.69540648890E-01	Apriori rate (us/s)		2.69540703494E-01	Resid rate (us/s)		-5.46043E-08	+/- 1.5E-10	
Total phase (deg)	259.0	Apriori accel (us/s/s)		-4.51738728225E-06	Resid phase (deg)		175.5	+/- 1.1	

ph/seg (deg)	50.1	2.8	Search (2048X32)	1.774	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	41.4	4.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
ph/frq (deg)	8.1	1.6	Inc. seg. avg.	2.478	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	6.9	2.8	Inc. frq. avg.	1.793	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 293.2 el 60.3 pa 77.2 f: az 313.0 el 40.5 pa 88.9 u,v (fr/asec) -2467.260 902.290 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bf..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bf.W.23.1X1QEV

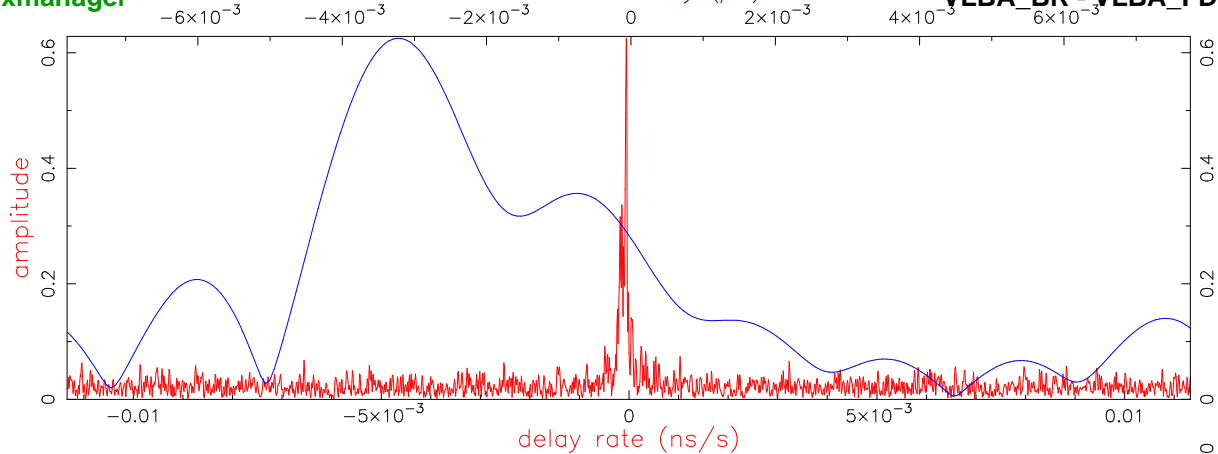
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bf

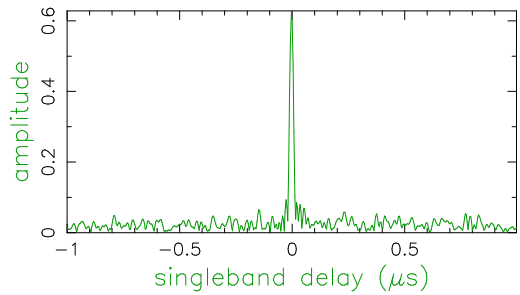
VLBA_BR - VLBA_FD, fgroup W, pol LL

multiband delay (μ s)

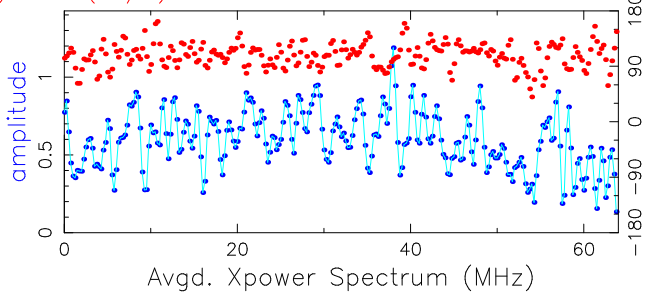


Fringe quality 3

SNR 35.1
 Int time 418.452
 Amp 0.628
 Phase 109.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002956
 MBD -0.003201
 Fringe rate (Hz)
 -0.004752
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

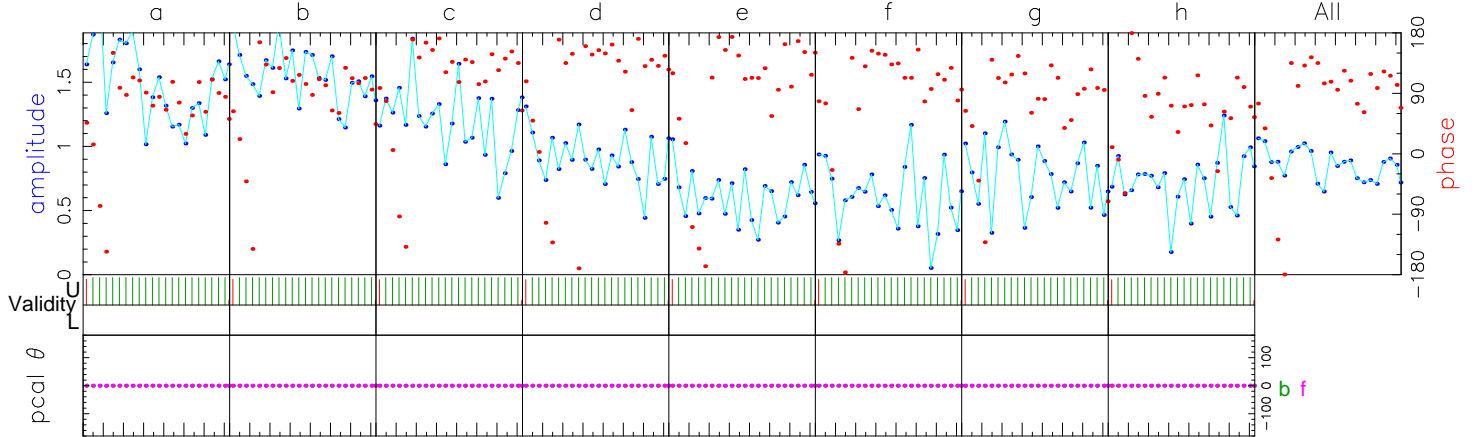


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133847
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	85.0	103.3	137.8	143.6	134.4	115.2	96.3	69.3	Phase	109.3
	1.0	1.1	0.8	0.6	0.4	0.5	0.5	0.5	Ampl.	0.7
	256.1	256.7	256.5	256.3	255.3	256.0	255.8	255.2	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
f	0	0	0	0	0	0	0	0	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.71263176789E+03	Apriori delay (usec)	4.71263496903E+03	Resid mbdelay (usec)	-3.20114E-03	+/-	3.1E-05
Sband delay (usec)	4.71263201353E+03	Apriori clock (usec)	-1.3250582E+01	Resid sbdelay (usec)	-2.95550E-03	+/-	2.5E-04
Phase delay (usec)	4.71263497255E+03	Apriori clockrate (us/s)	-1.6000000E-07	Resid phdelay (usec)	3.52461E-06	+/-	1.1E-07
Delay rate (us/s)	2.69540648330E-01	Apriori rate (us/s)	2.69540703494E-01	Resid rate (us/s)	-5.51640E-08	+/-	4.3E-10
Total phase (deg)	192.9	Apriori accel (us/s/s)	-4.51738728225E-06	Resid phase (deg)	109.3	+/-	3.3

ph/seg (deg)	50.0	RMS	7.8	Theor.	Amplitude	0.628 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	41.9		13.6		Search (2048X32)	0.612	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.0		4.6		Interp.	0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.2		8.0		Inc. seg. avg.	0.857	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
					Inc. frq. avg.	0.681		t_cohere infinite			

b: az 293.2 el 60.3 pa 77.2 f: az 313.0 el 40.5 pa 88.9 u,v (fr/asec) -2467.260 902.290 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bf..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bf.W.3.1X1QEV

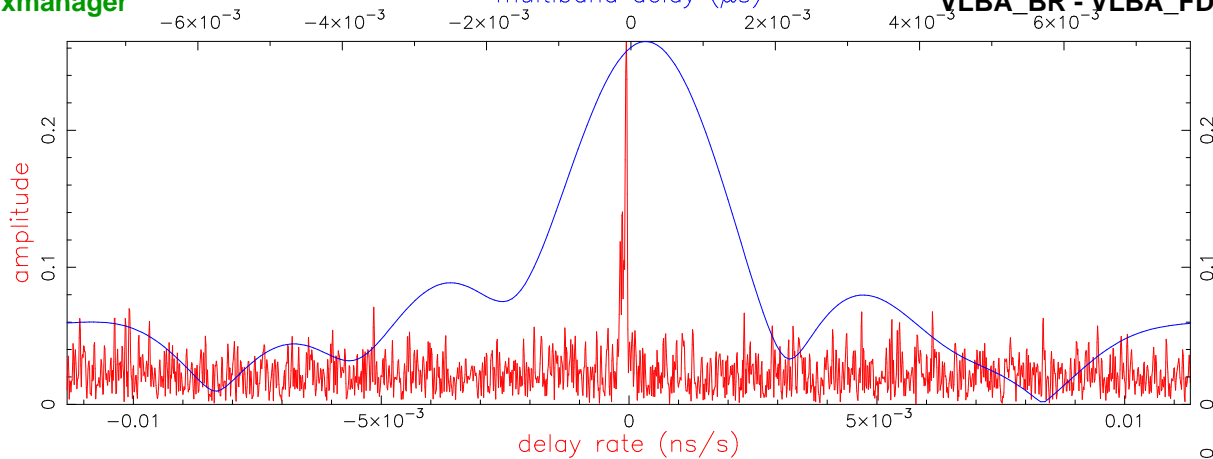
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bf

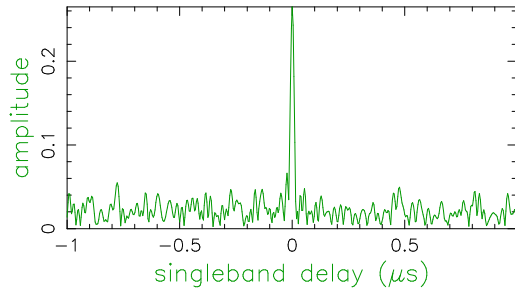
VLBA_BR - VLBA_FD, fgroup W, pol LR

multiband delay (μ s)

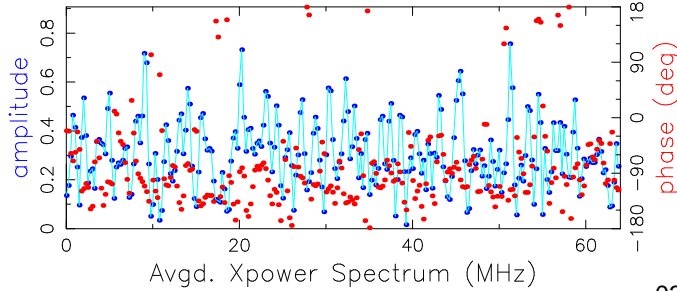


Fringe quality 8

SNR 14.8
 Int time 418.452
 Amp 0.265
 Phase -103.7
 PFD 7.3e-41
 Delays (us)
 SBD 0.000168
 MBD 0.000210
 Fringe rate (Hz)
 -0.004985
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

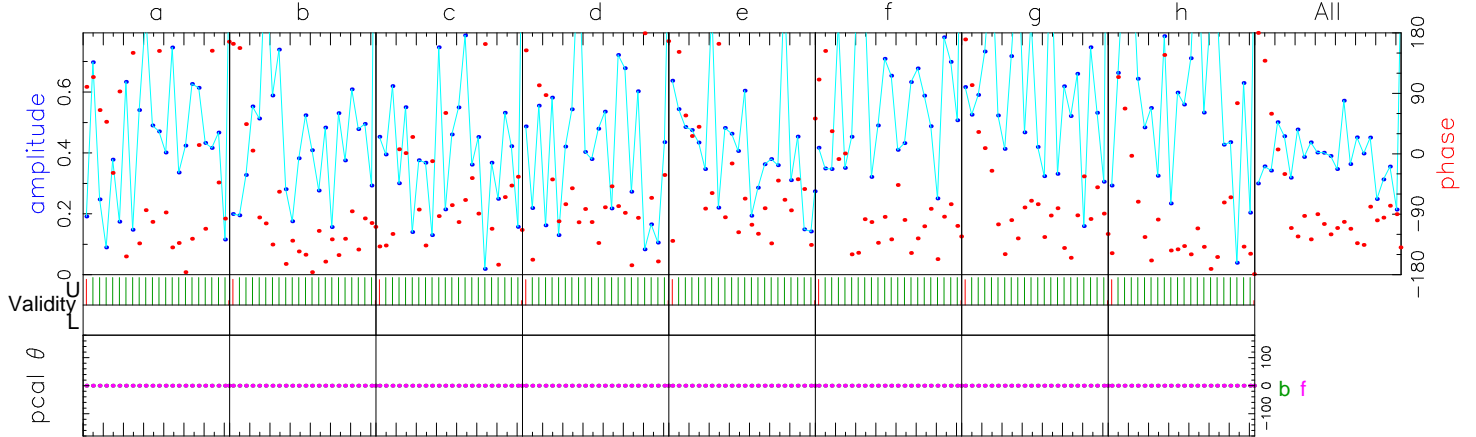


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133856
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.5	-119.3	-82.3	-91.9	-71.9	-106.8	-90.7	-139.4	Phase	-103.7
	0.2	0.3	0.3	0.3	0.2	0.4	0.4	0.3	Ampl.	0.3
	257.1	257.4	257.3	256.6	256.8	256.9	256.8	255.9	Sbd box	257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
f	0	0	0	0	0	0	0	0	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.71263517892E+03		Apriori delay (usec)		4.71263496903E+03		Resid mbdelay (usec)		2.09889E-04 +/- 7.3E-05	
Sband delay (usec)	4.71263513678E+03		Apriori clock (usec)		-1.3250582E+01		Resid sbdelay (usec)		1.67750E-04 +/- 5.8E-04	
Phase delay (usec)	4.71263496568E+03		Apriori clockrate (us/s)		-1.6000000E-07		Resid phdelay (usec)		-3.34544E-06 +/- 2.5E-07	
Delay rate (us/s)	2.69540645621E-01		Apriori rate (us/s)		2.69540703494E-01		Resid rate (us/s)		-5.78729E-08 +/- 1.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		-4.51738728225E-06		Resid phase (deg)		-103.7 +/- 7.7	

ph/seg (deg) 55.9 18.5 Search (2048X32) 0.259 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.1 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) 26.4 10.9 Inc. seg. avg. 0.370 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.7 19.1 Inc. frq. avg. 0.279 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 f: az 313.0 el 40.5 pa 88.9 u,v (fr/asec) -2467.260 902.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bf..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bf.W.48.1X1QEV

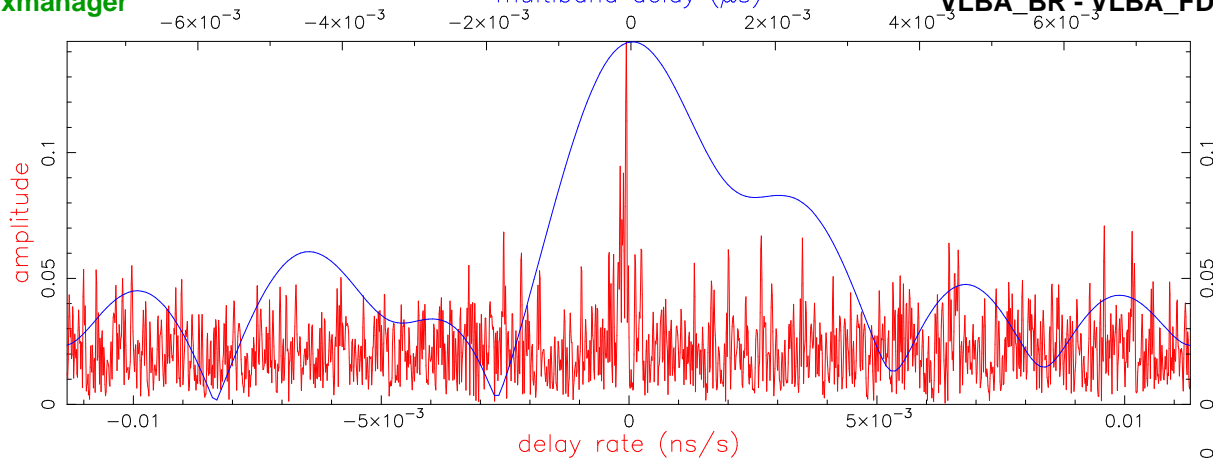
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bf

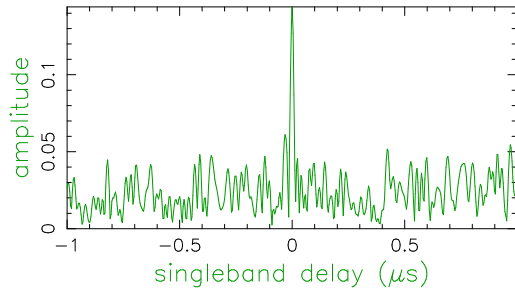
VLBA_BR - VLBA_FD, fgroup W, pol RL

multiband delay (μ s)

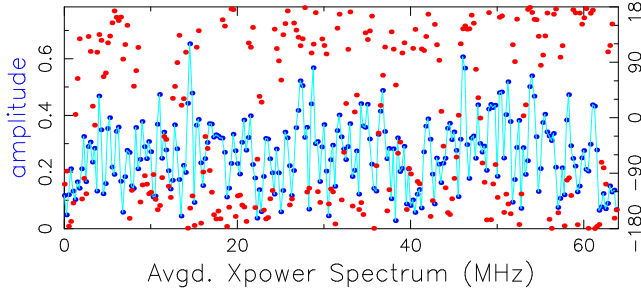


Fringe quality 9

SNR 8.1
 Int time 418.452
 Amp 0.144
 Phase 171.1
 PFD 2.6e-07
 Delays (us)
 SBD -0.000430
 MBD 0.000015
 Fringe rate (Hz)
 -0.004763
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

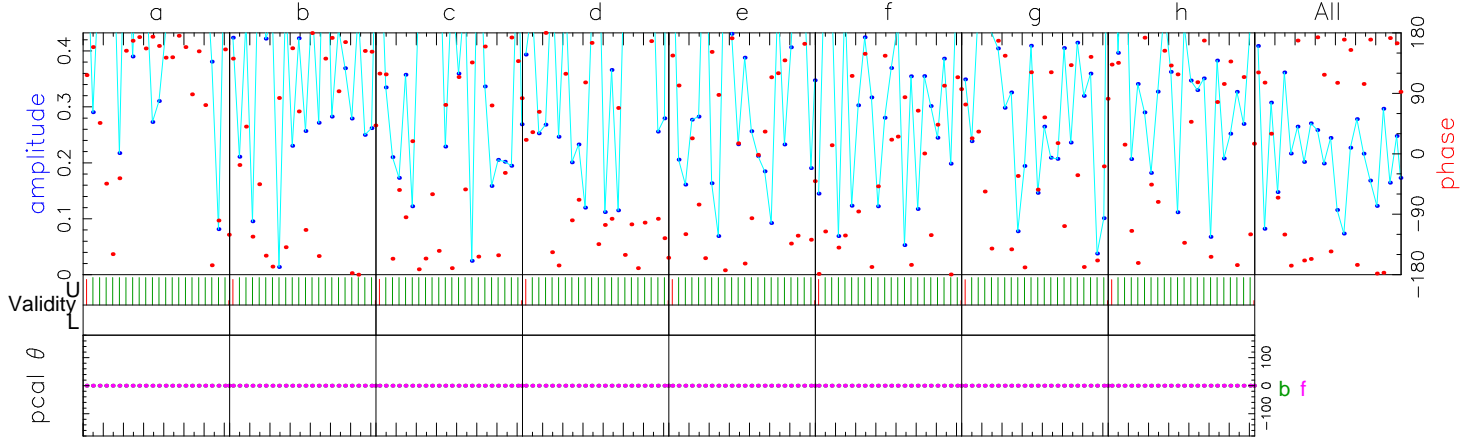


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133900
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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

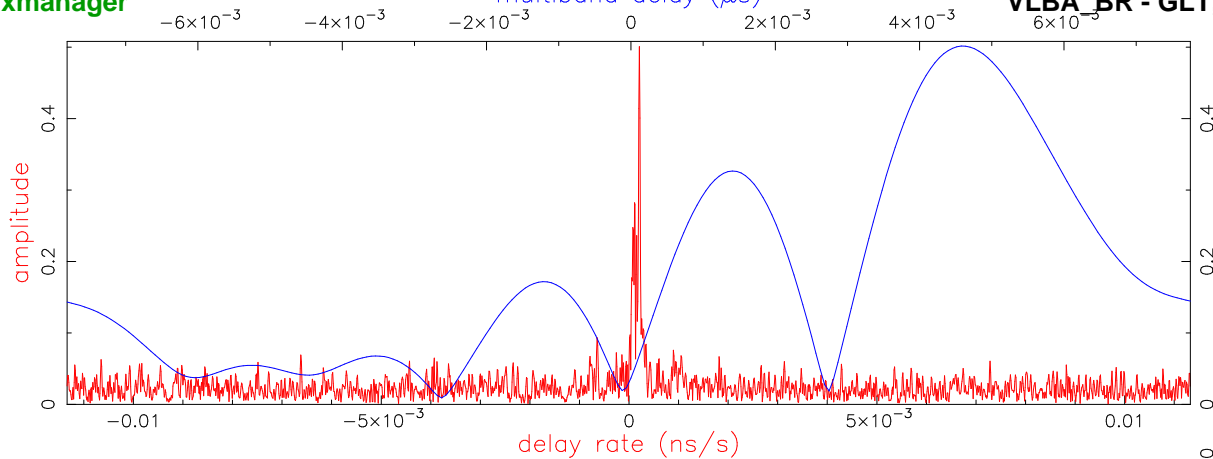


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	152.2	168.5	-171.8	-150.7	-173.9	144.8	149.9	145.9	Phase	171.1
	0.3	0.2	0.2	0.2	0.2	0.0	0.0	0.1	Ampl.	0.1
	256.9	258.3	290.7	256.7	257.0	267.2	426.8	363.4	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
f	0	0	0	0	0	0	0	0	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.71263498398E+03		Apriori delay (usec)		4.71263496903E+03		Resid mbdelay (usec)		1.49519E-05	+/- 1.3E-04
Sband delay (usec)	4.71263453928E+03		Apriori clock (usec)		-1.3250582E+01		Resid sbdelay (usec)		-4.29750E-04	+/- 1.1E-03
Phase delay (usec)	4.71263497455E+03		Apriori clockrate (us/s)		-1.6000000E-07		Resid phdelay (usec)		5.51853E-06	+/- 4.6E-07
Delay rate (us/s)	2.69540648206E-01		Apriori rate (us/s)		2.69540703494E-01		Resid rate (us/s)		-5.52880E-08	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.51738728225E-06		Resid phase (deg)		171.1	+/- 14.2

ph/seg (deg) 54.2 34.1 Amplitude 0.144 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.1 59.5 Search (2048X32) 0.144 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.2 20.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 60.2 35.1 Inc. seg. avg. 0.187 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.146 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

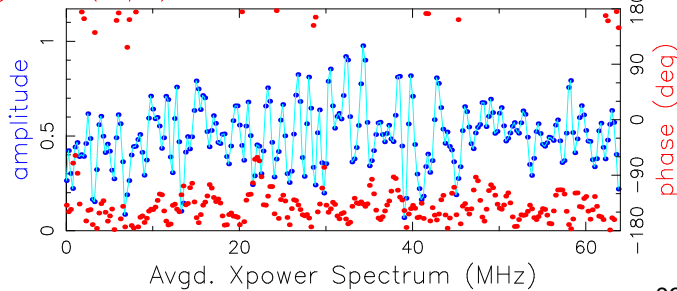
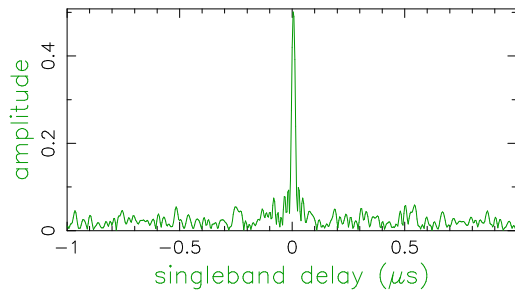
b: az 293.2 el 60.3 pa 77.2 f: az 313.0 el 40.5 pa 88.9 u,v (fr/asec) -2467.260 902.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bf..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bf.W.67.1X1QEV

multiband delay (μ s)



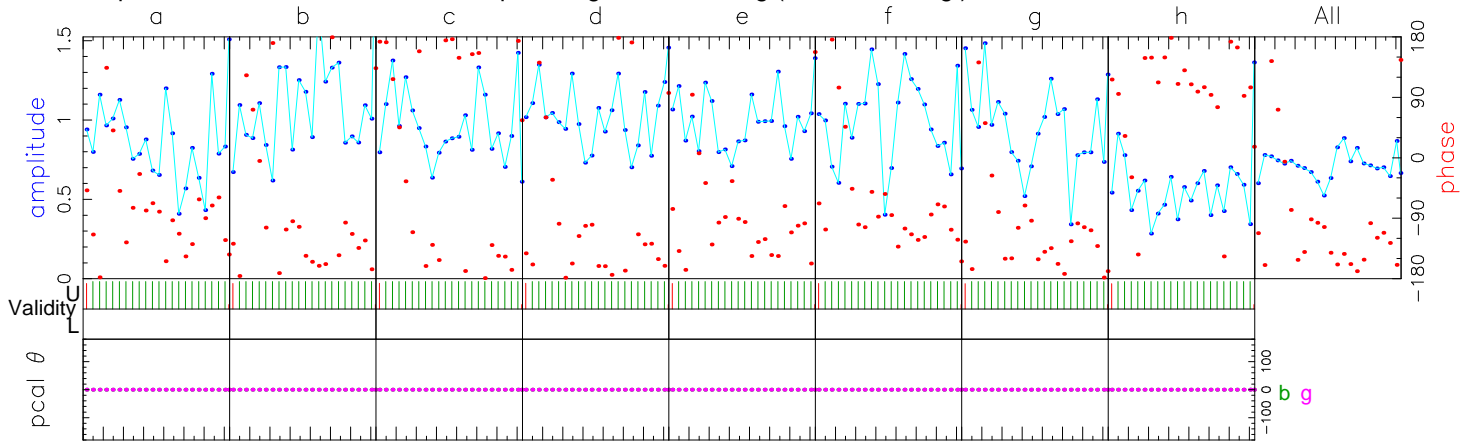
Fringe quality 4

SNR 28.4
Int time 418.452
Amp 0.508
Phase -135.6
PFD 0.0e+00
Delays (us)
SBD 0.005420
MBD 0.004669
Fringe rate (Hz)
0.017845
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



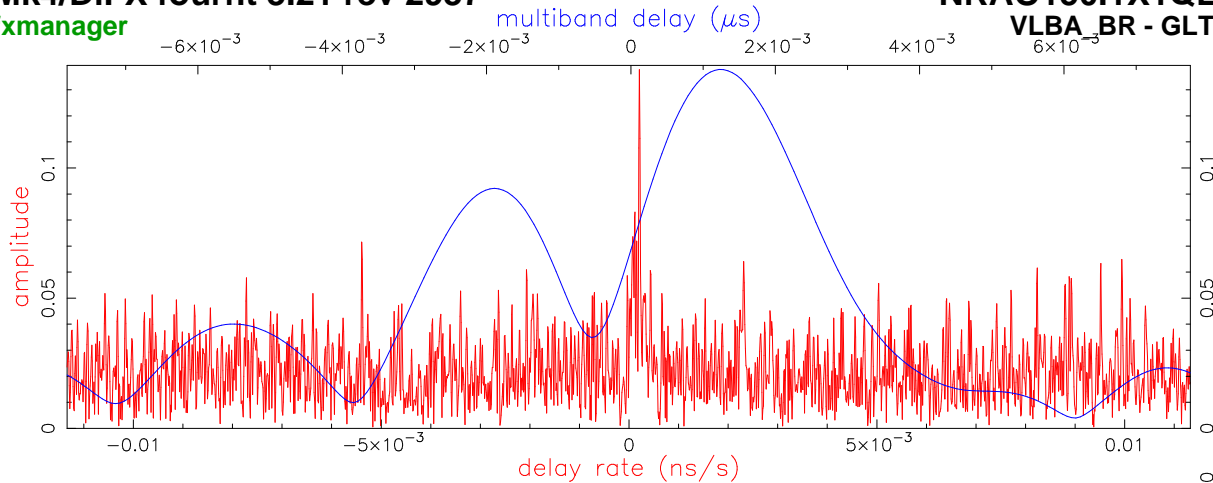
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133852
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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

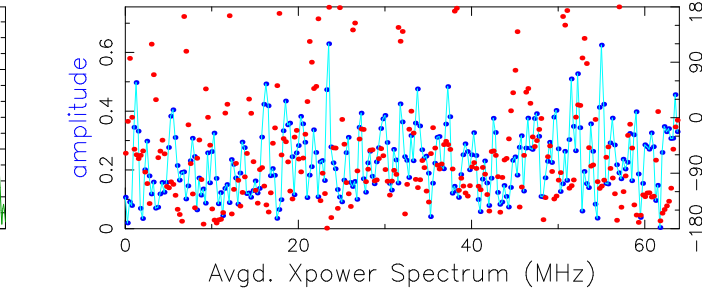
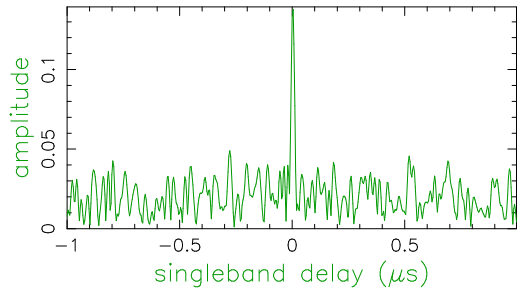


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.8	-145.0	-177.7	-151.8	-111.9	-96.0	-132.3	120.8	Phase	-135.6
	0.5	0.7	0.7	0.7	0.7	0.7	0.6	0.4	Ampl.	0.6
	256.4	258.2	258.4	258.7	258.6	258.4	257.5	255.7	Sbd box	258.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.73847245817E+03		Apriori delay (usec)		2.73846778898E+03		Resid mbdelay (usec)		4.66918E-03	+/- 3.8E-05
Sband delay (usec)	2.73847320873E+03		Apriori clock (usec)		-3.4283714E+00		Resid sbdelay (usec)		5.41975E-03	+/- 3.0E-04
Phase delay (usec)	2.73846778461E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-4.37328E-06	+/- 1.3E-07
Delay rate (us/s)	-2.54947912231E-01		Apriori rate (us/s)		-2.54948119398E-01		Resid rate (us/s)		2.07167E-07	+/- 5.4E-10
Total phase (deg)			Apriori accel (us/s/s)		-3.46315181459E-05		Resid phase (deg)		-135.6	+/- 4.0

ph/seg (deg) 53.1 9.7 Search (2048X32) 0.485 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.0 16.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.7 5.7 Inc. seg. avg. 0.710 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.5 10.0 Inc. frq. avg. 0.624 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 g: az 292.5 el 47.5 pa 19.9 u,v (fr/asec) 2248.672 -4664.811 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bg..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bg.W.25.1X1QEV

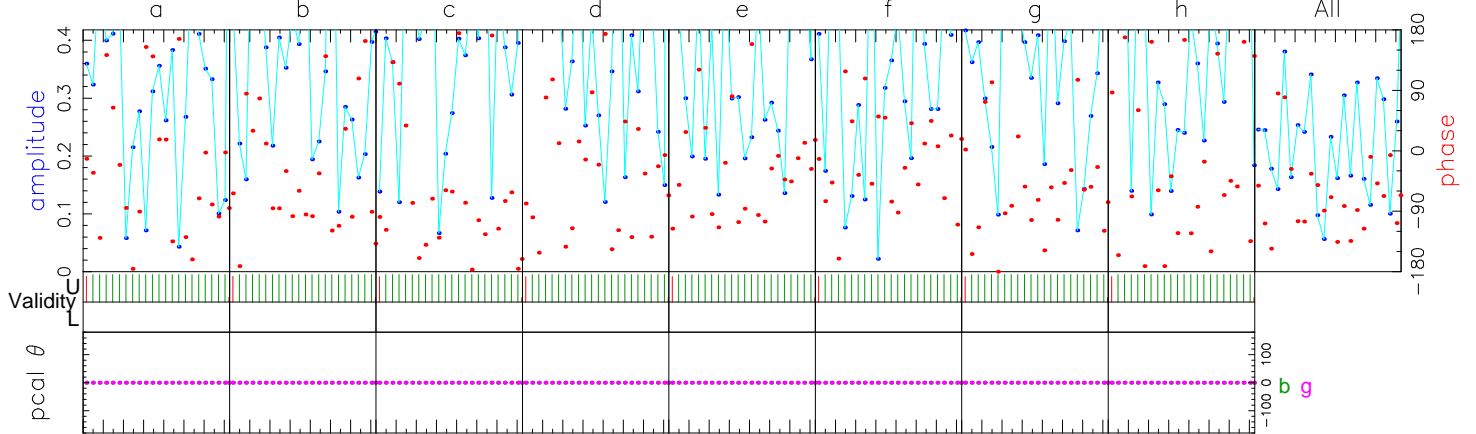


Fringe quality 9
SNR 7.8
Int time 418.452
Amp 0.139
Phase -76.8
PFD 2.1e-06
Delays (us)
SBD 0.002591
MBD 0.001218
Fringe rate (Hz) 0.017721
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133856
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



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
	-80.3	-72.4	-114.7	-70.0	-45.4	-38.6	-70.2	-140.6	Phase	-76.8
	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.2
	393.9	257.0	257.9	267.8	256.6	257.7	257.3	451.6	Sbd box	257.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.73846900720E+03		Apriori delay (usec)		2.73846778898E+03		Resid mbdelay (usec)		1.21821E-03	+/- 1.4E-04
Sband delay (usec)	2.73847037948E+03		Apriori clock (usec)		-3.4283714E+00		Resid sbdelay (usec)		2.59050E-03	+/- 1.1E-03
Phase delay (usec)	2.73846778651E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-2.47709E-06	+/- 4.7E-07
Delay rate (us/s)	-2.54947913677E-01		Apriori rate (us/s)		-2.54948119398E-01		Resid rate (us/s)		2.05722E-07	+/- 2.0E-09
Total phase (deg)	46.7		Apriori accel (us/s/s)		-3.46315181459E-05		Resid phase (deg)		-76.8	+/- 14.7

ph/seg (deg) 61.6 35.2 Search (2048X32) 0.130 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 86.8 61.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 36.7 20.8 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 41.1 36.3 Inc. frq. avg. 0.153 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 293.2 el 60.3 pa 77.2 g: az 292.5 el 47.5 pa 19.9 u,v (fr/asec) 2248.672 -4664.811 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bg..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bg.W.44.1X1QEV

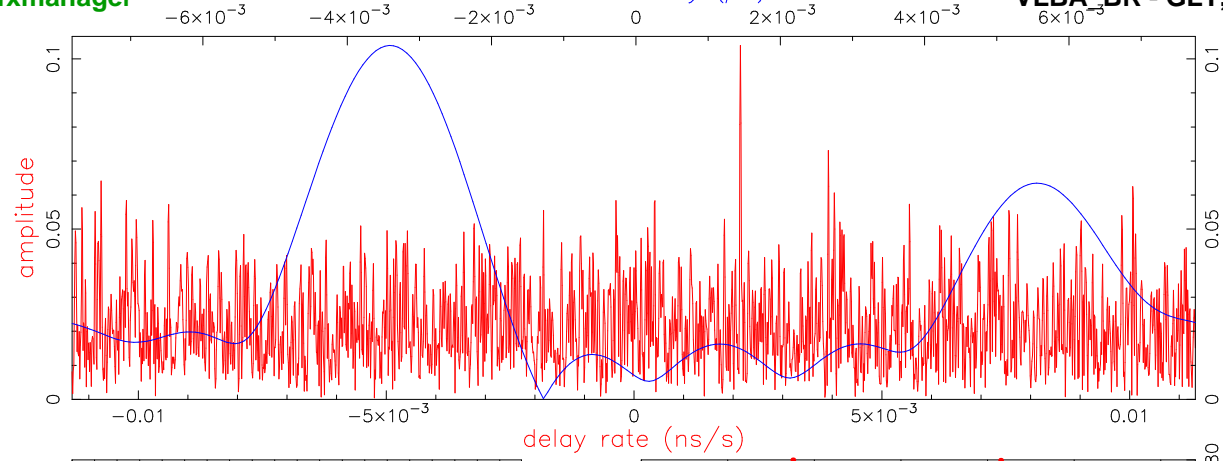
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

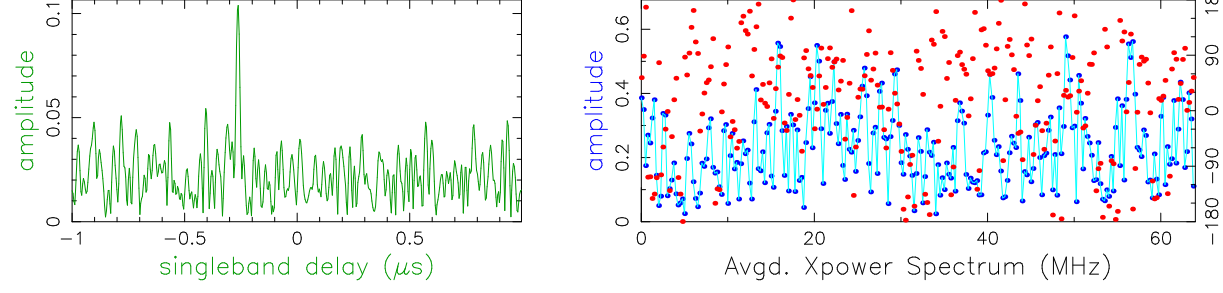
NRAO150.1X1QEV, No0120, bg

VLBA_BR - GLT, fgroup W, pol RL

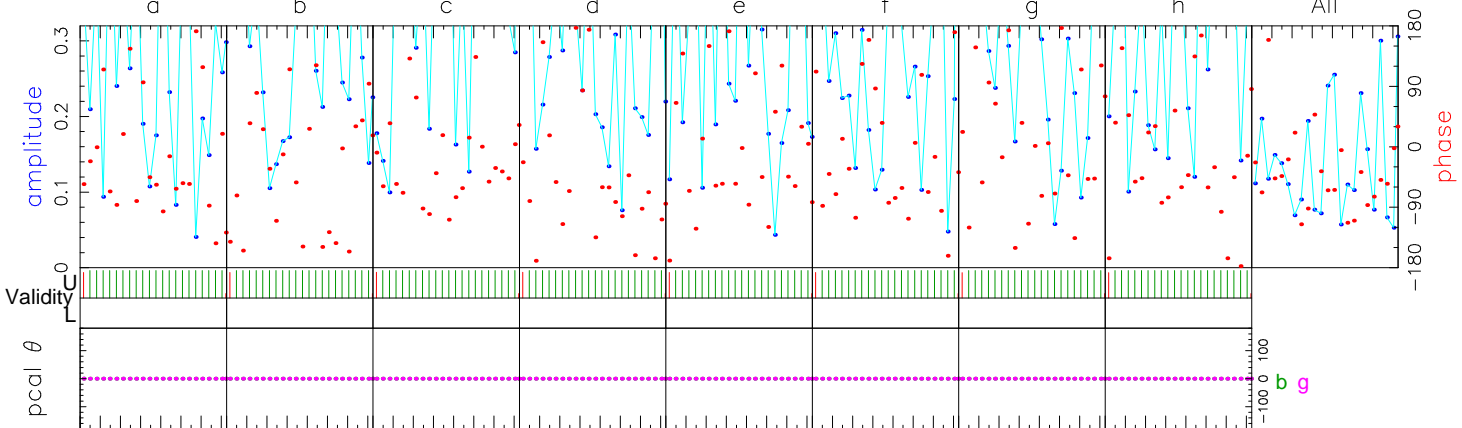
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 418.452
 Amp 0.107
 Phase -57.5
 PFD 6.6e-01
 Delays (us)
 SBD -0.263138
 MBD -0.003407
 Fringe rate (Hz)
 0.185033
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133900
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-55.5	-66.2	-39.6	-96.2	-35.7	-65.1	-40.9	-55.0	Phase	-57.5
	0.2	0.0	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	418.5	156.3	189.0	115.9	143.7	458.2	409.5	387.5	Sbd box	189.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.73819875698E+03		Apriori delay (usec)		2.73846778898E+03		Resid mbdelay (usec)		-3.40701E-03	+/- 1.8E-04
Sband delay (usec)	2.73820465098E+03		Apriori clock (usec)		-3.4283714E+00		Resid sbdelay (usec)		-2.63138E-01	+/- 1.5E-03
Phase delay (usec)	2.73846778713E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-1.85582E-06	+/- 6.3E-07
Delay rate (us/s)	-2.54945971348E-01		Apriori rate (us/s)		-2.54948119398E-01		Resid rate (us/s)		2.14805E-06	+/- 2.6E-09
Total phase (deg)	66.0		Apriori accel (us/s/s)		-3.46315181459E-05		Resid phase (deg)		-57.5	+/- 19.5

ph/seg (deg) 52.3 46.8 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.3 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.3 27.6 Inc. seg. avg. 0.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.6 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
 b: az 293.2 el 60.3 pa 77.2 g: az 292.5 el 47.5 pa 19.9 u,v (fr/asec) 2248.672 -4664.811 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bg..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bg.W.68.1X1QEV

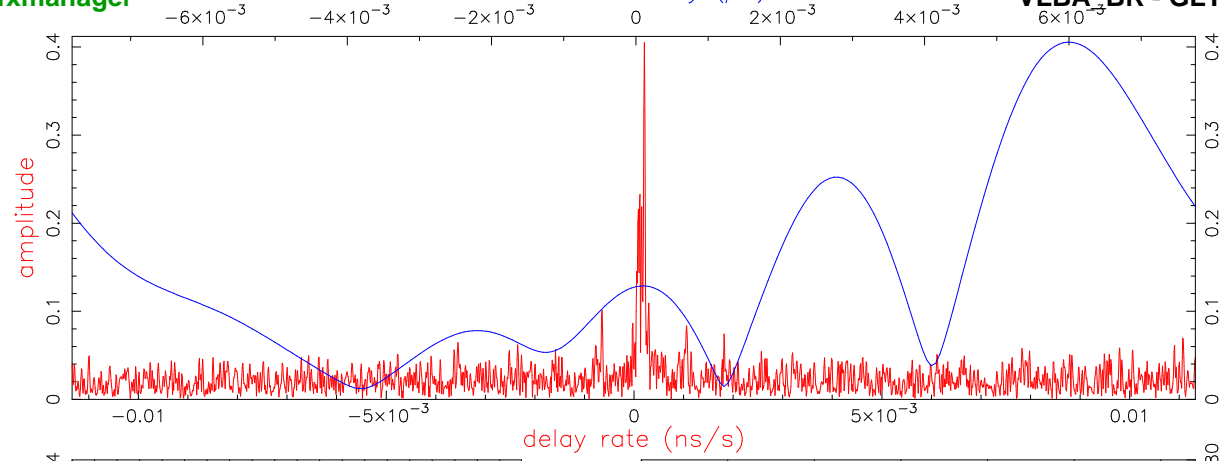
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bg

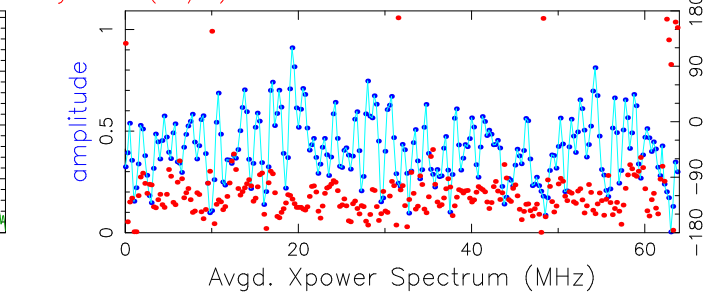
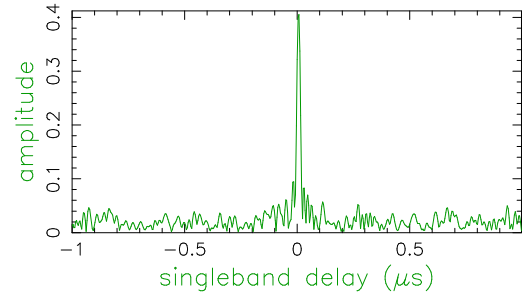
VLBA_BR - GLT, fgroup W, pol LL

multiband delay (μ s)



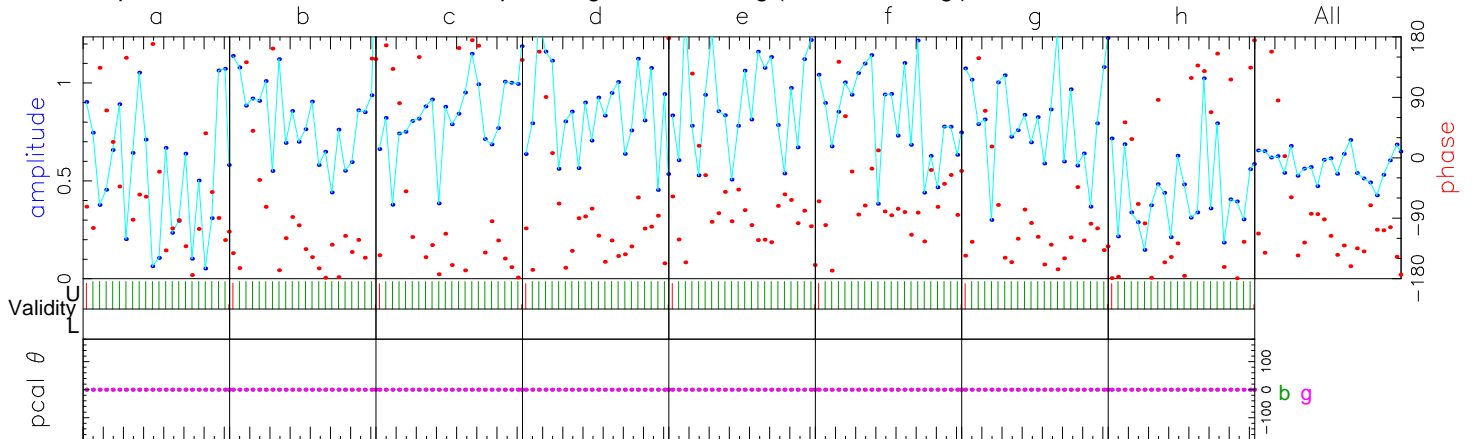
Fringe quality 8

SNR 23.0
 Int time 418.452
 Amp 0.412
 Phase -120.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.006166
 MBD 0.005942
 Fringe rate (Hz) 0.017721
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133848
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

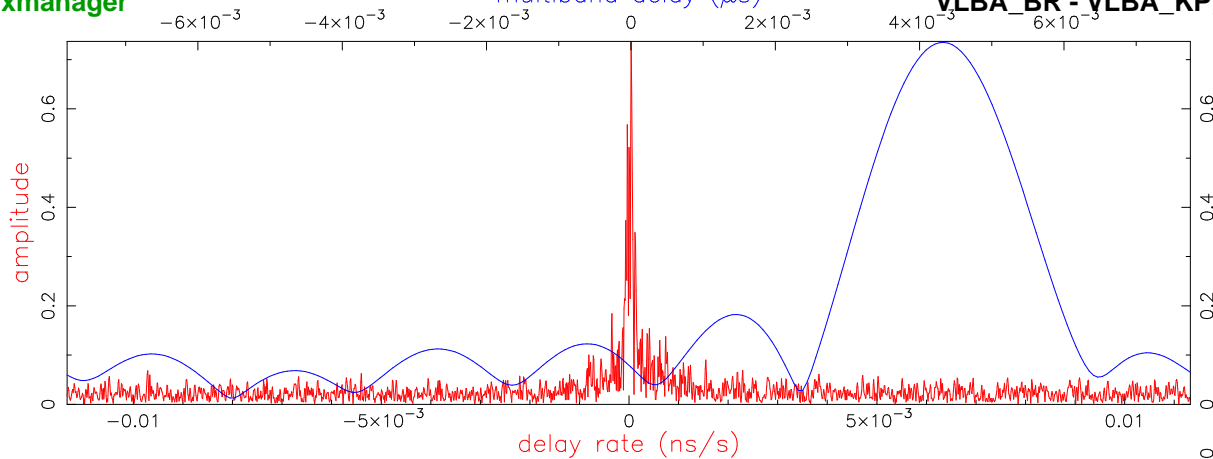
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.6	-145.4	-160.6	-123.8	-91.3	-67.3	-127.7	154.5	Phase	-120.5
	0.3	0.5	0.6	0.5	0.7	0.5	0.6	0.2	Ampl.	0.5
	256.8	258.2	258.9	258.8	259.1	258.9	257.7	255.6	Sbd box	258.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.73847373079E+03		Apriori delay (usec)		2.73846778898E+03		Resid mbdelay (usec)		5.94181E-03	+/- 4.7E-05
Sband delay (usec)	2.73847395523E+03		Apriori clock (usec)		-3.4283714E+00		Resid sbdelay (usec)		6.16625E-03	+/- 3.7E-04
Phase delay (usec)	2.73846778510E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-3.88615E-06	+/- 1.6E-07
Delay rate (us/s)	-2.54947913671E-01		Apriori rate (us/s)		-2.54948119398E-01		Resid rate (us/s)		2.05728E-07	+/- 6.6E-10
Total phase (deg)	3.0		Apriori accel (us/s/s)		-3.46315181459E-05		Resid phase (deg)		-120.5	+/- 5.0

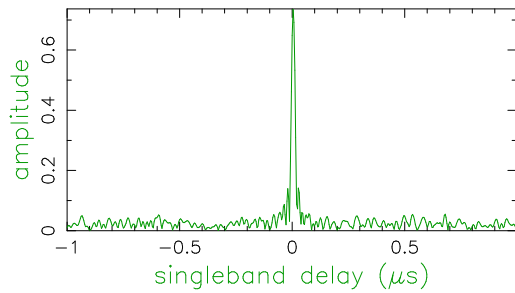
ph/seg (deg) 52.7 11.9 Search (2048X32) 0.385 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.9 20.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.9 7.0 Inc. seg. avg. 0.570 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.3 12.3 Inc. frq. avg. 0.499 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 g: az 292.5 el 47.5 pa 19.9 u,v (fr/asec) 2248.672 -4664.811 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bg..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bg.W.7.1X1QEV

multiband delay (μ s)

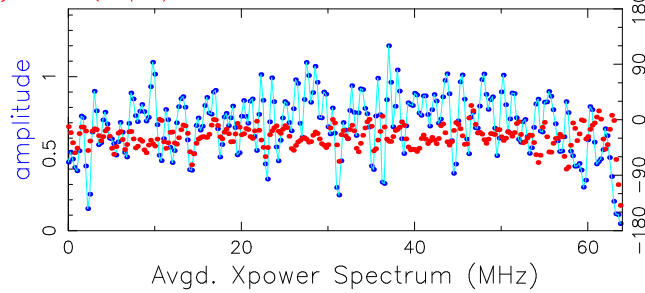


Fringe quality 7

SNR 41.2
Int time 418.447
Amp 0.737
Phase -24.8
PFD 0.0e+00
Delays (us)
SBD 0.004577
MBD 0.004338
Fringe rate (Hz)
0.003810
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

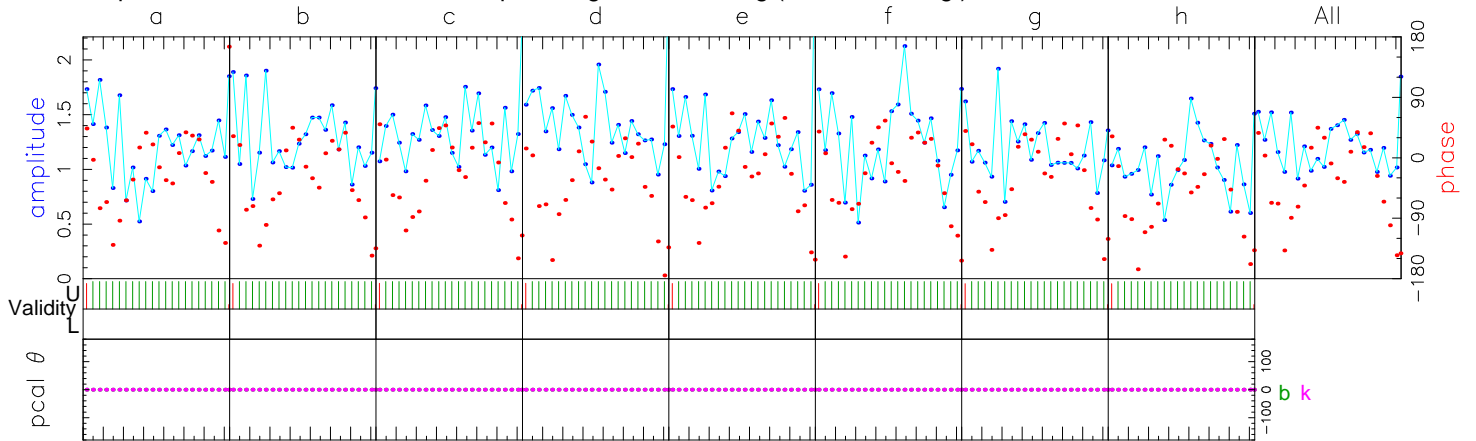


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133851
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.0	-28.8	-17.6	-30.1	-17.4	-14.6	-19.7	-45.2	Phase	-24.8
	0.7	0.8	0.8	0.9	0.7	0.8	0.7	0.6	Ampl.	0.7
	258.3	258.3	258.5	257.9	258.6	257.8	257.9	257.7	Sbd box	258.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.16196245647E+03		Apriori delay (usec)		3.16195811846E+03		Resid mbdelay (usec)		4.33801E-03	+/- 2.6E-05
Sband delay (usec)	3.16196269496E+03		Apriori clock (usec)		-3.3086109E+00		Resid sbdelay (usec)		4.57650E-03	+/- 2.1E-04
Phase delay (usec)	3.16195811766E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-7.99893E-07	+/- 9.0E-08
Delay rate (us/s)	2.02619515963E-01		Apriori rate (us/s)		2.02619471737E-01		Resid rate (us/s)		4.42260E-08	+/- 3.7E-10
Total phase (deg)			Apriori accel (us/s/s)		2.05251738127E-06		Resid phase (deg)		-24.8	+/- 2.8

ph/seg (deg) 57.0 6.7 Theor. Amplitude 0.737 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.4 11.6 Search (2048X32) 0.732 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.9 3.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.9 6.9 Inc. seg. avg. 1.199 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.742 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 k: az 312.3 el 46.3 pa 94.2 u,v (fr/asec) -1843.352 1422.441 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bk..1X1QE Output file: /Exps/c211c/v1/1234/No0120/bk.W.24.1X1QE

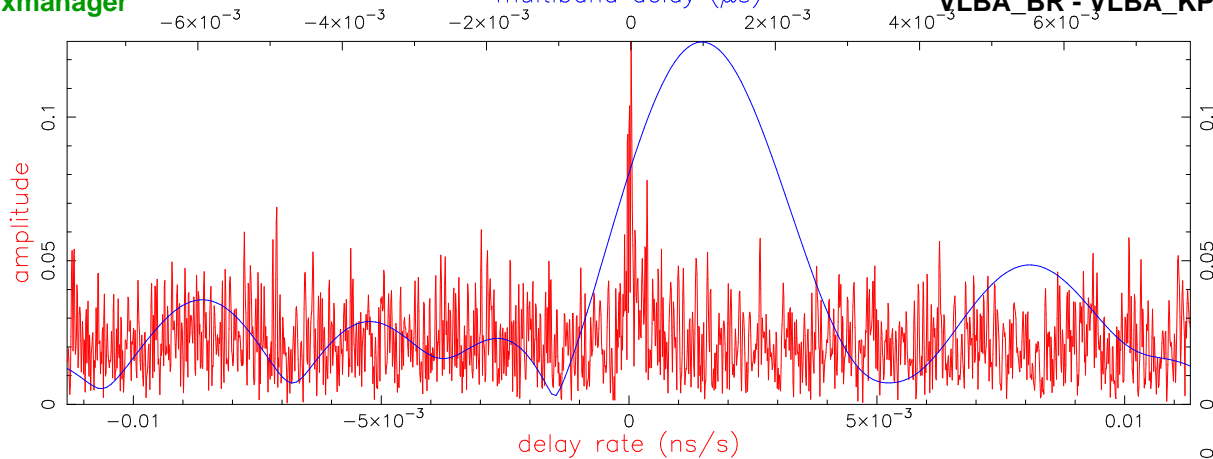
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bk

VLBA_BR - VLBA_KP, fgroup W, pol LR

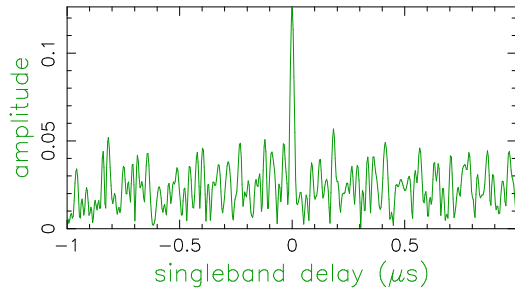
multiband delay (μ s)



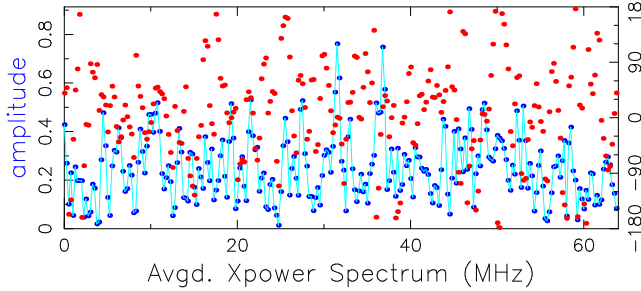
Fringe quality 0

SNR 7.1
 Int time 418.447
 Amp 0.126
 Phase -2.4
 PFD 4.8e-04
 Delays (us)
 SBD -0.000634
 MBD 0.000960
 Fringe rate (Hz)
 0.003573
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

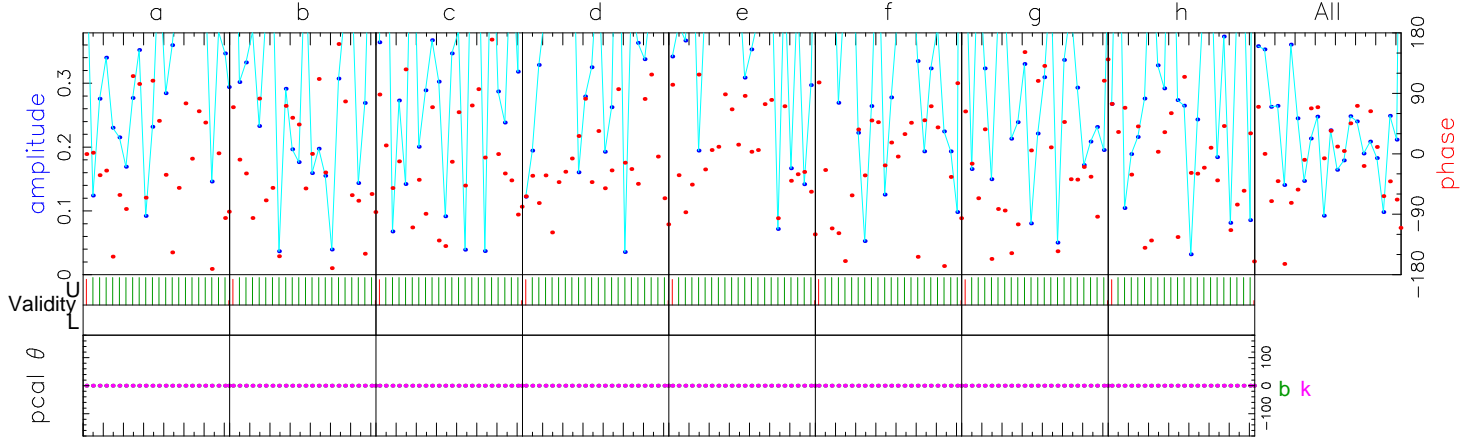
Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133855
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0	Phase	-2.4
k	0	0	0	0	0	0	0	0	Ampl.	0.1
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	256.8
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	3.16195907812E+03		Apriori delay (usec)		3.16195811846E+03		Resid mbdelay (usec)		9.59663E-04	+/- 1.5E-04
Sband delay (usec)	3.16195748421E+03		Apriori clock (usec)		-3.3086109E+00		Resid sbdelay (usec)		-6.34250E-04	+/- 1.2E-03
Phase delay (usec)	3.16195811838E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-7.66449E-08	+/- 5.2E-07
Delay rate (us/s)	2.02619513219E-01		Apriori rate (us/s)		2.02619471737E-01		Resid rate (us/s)		4.14825E-08	+/- 2.2E-09
Total phase (deg)	114.3		Apriori accel (us/s/s)		2.05251738127E-06		Resid phase (deg)		-2.4	+/- 16.2

	RMS	Theor.	Amplitude	0.126 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.2	38.9	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	102.4	67.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	19.0	22.9	Inc. seg. avg.	0.183	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.6	40.0	Inc. frq. avg.	0.122	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 k: az 312.3 el 46.3 pa 94.2 u,v (fr/asec) -1843.352 1422.441 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bk..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bk.W.43.1X1QEV

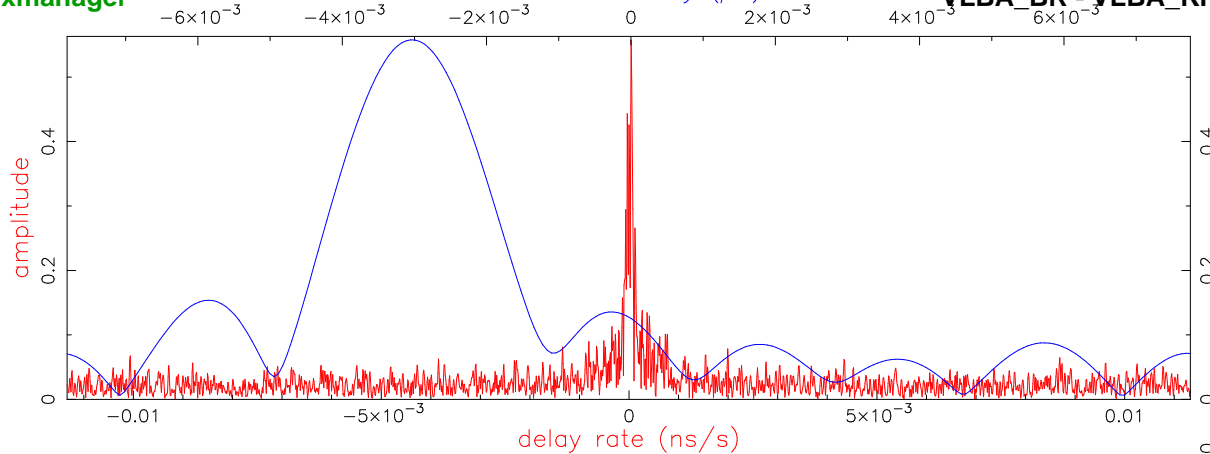
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bk

VLBA_BR - VLBA_KP, fgroup W, pol LL

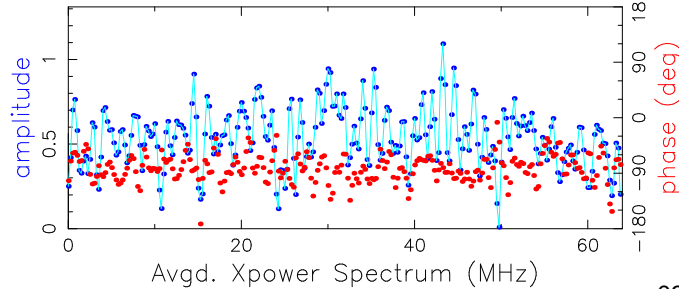
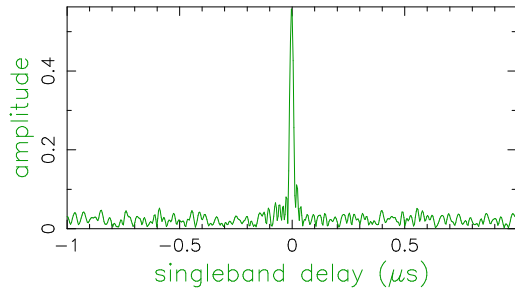
multiband delay (μ s)



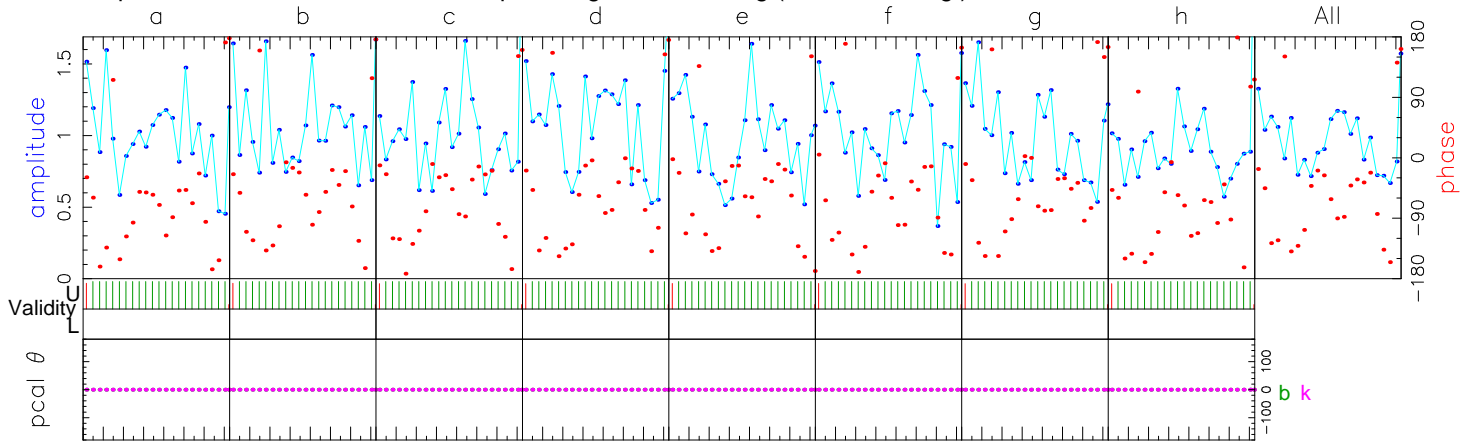
Fringe quality 7

SNR 31.5
 Int time 418.447
 Amp 0.563
 Phase -78.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.002638
 MBD -0.002991
 Fringe rate (Hz)
 0.003886
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133848
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"



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



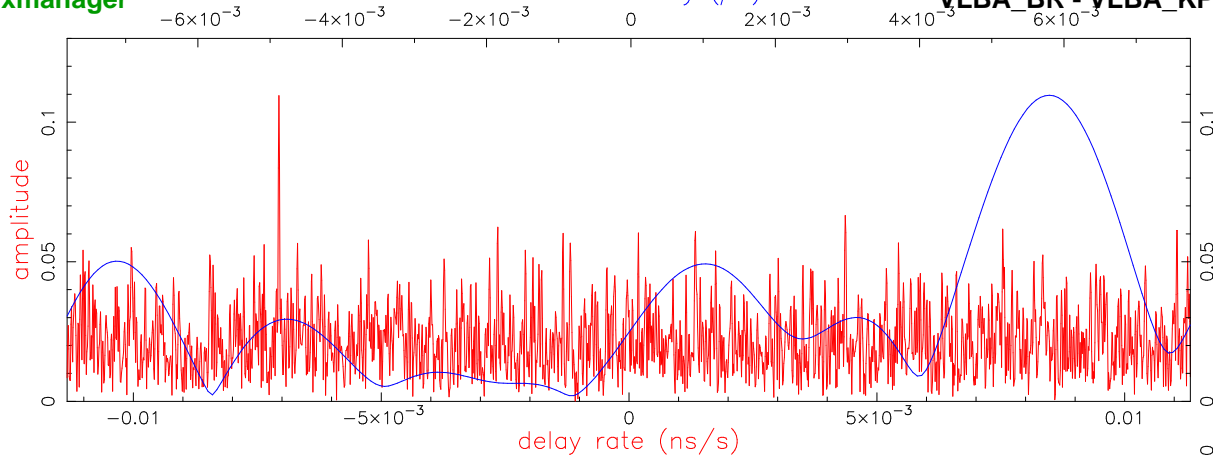
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.0	-76.7	-74.7	-71.9	-64.4	-78.1	-80.3	-97.6	Phase	-78.5
	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.5	Ampl.	0.6
	256.4	256.6	256.6	256.2	256.6	256.3	256.1	255.0	Sbd box	256.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.16195512740E+03		Apriori delay (usec)		3.16195811846E+03		Resid mbdelay (usec)		-2.99106E-03	+/- 3.4E-05
Sband delay (usec)	3.16195547996E+03		Apriori clock (usec)		-3.3086109E+00		Resid sbdelay (usec)		-2.63850E-03	+/- 2.7E-04
Phase delay (usec)	3.16195811593E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		-2.53191E-06	+/- 1.2E-07
Delay rate (us/s)	2.02619516848E-01		Apriori rate (us/s)		2.02619471737E-01		Resid rate (us/s)		4.51110E-08	+/- 4.8E-10
Total phase (deg)	38.1		Apriori accel (us/s/s)		2.05251738127E-06		Resid phase (deg)		-78.5	+/- 3.6

	RMS	Theor.	Amplitude	0.563 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.6	8.7	Search (2048X32)	0.554	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	77.0	15.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	10.7	5.1	Inc. seg. avg.	0.943	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	8.0	9.0	Inc. frq. avg.	0.562	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 k: az 312.3 el 46.3 pa 94.2 u,v (fr/asec) -1843.352 1422.441 simultaneous interpolator

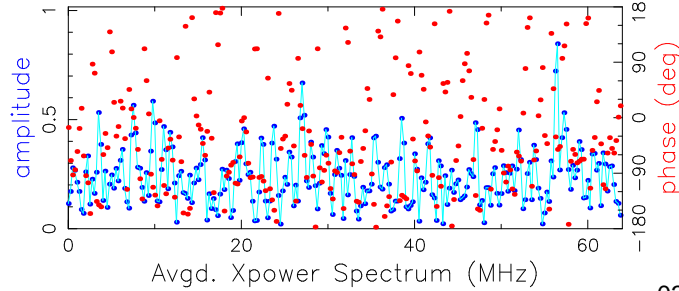
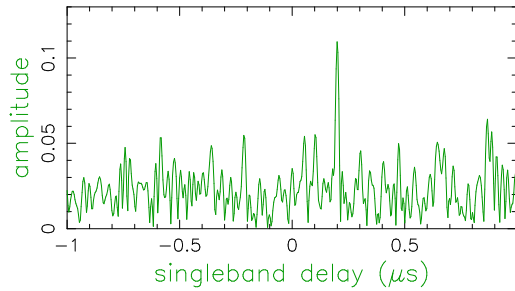
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bk..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bk.W.5.1X1QEV

multiband delay (μ s)



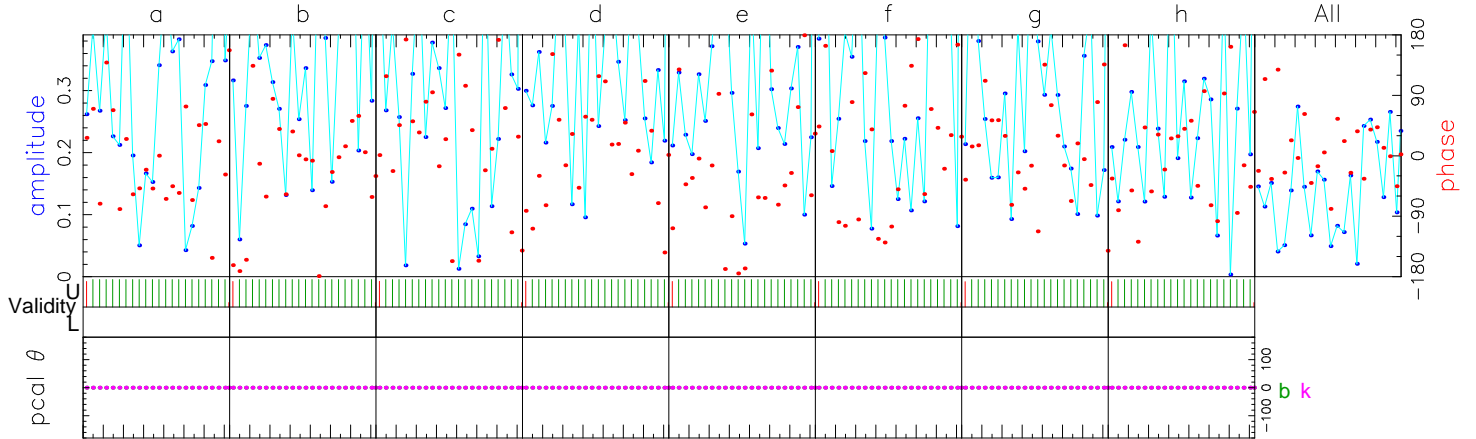
Fringe quality 0

SNR 6.2
 Int time 418.447
 Amp 0.130
 Phase 4.2
 PFD 1.7e-01
 Delays (us)
 SBD 0.200132
 MBD 0.005844
 Fringe rate (Hz)
 -0.609517
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133859
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-5.2	8.8	31.4	10.0	-32.6	21.1	3.9	-4.2	Phase	4.2
	0.2	0.2	0.1	0.2	0.1	0.0	0.2	0.1	Ampl.	0.1
	316.6	477.0	414.3	232.8	24.2	259.9	137.6	214.9	Sbd box	308.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.16215146206E+03	Apriori delay (usec)	3.16195811846E+03	Resid mbdelay (usec)	5.84360E-03	+/-	1.8E-04
Sband delay (usec)	3.16215825021E+03	Apriori clock (usec)	-3.3086109E+00	Resid sbdelay (usec)	2.00132E-01	+/-	1.4E-03
Phase delay (usec)	3.16195811859E+03	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	1.35546E-07	+/-	6.0E-07
Delay rate (us/s)	2.02612395844E-01	Apriori rate (us/s)	2.02619471737E-01	Resid rate (us/s)	-7.07589E-06	+/-	2.5E-09
Total phase (deg)	120.9	Apriori accel (us/s/s)	2.05251738127E-06	Resid phase (deg)	4.2	+/-	18.6

ph/seg (deg)	RMS 49.9	Theor. 44.6	Amplitude Search (2048X32)	0.130 +/- 0.021	0.108	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	72.6	77.8	Interp.	0.000	0.108	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	20.8	26.3	Inc. seg. avg.	0.126	0.126	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	40.2	45.9	Inc. frq. avg.	0.121	0.121	Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 k: az 312.3 el 46.3 pa 94.2 u,v (fr/asec) -1843.352 1422.441 simultaneous interpolator

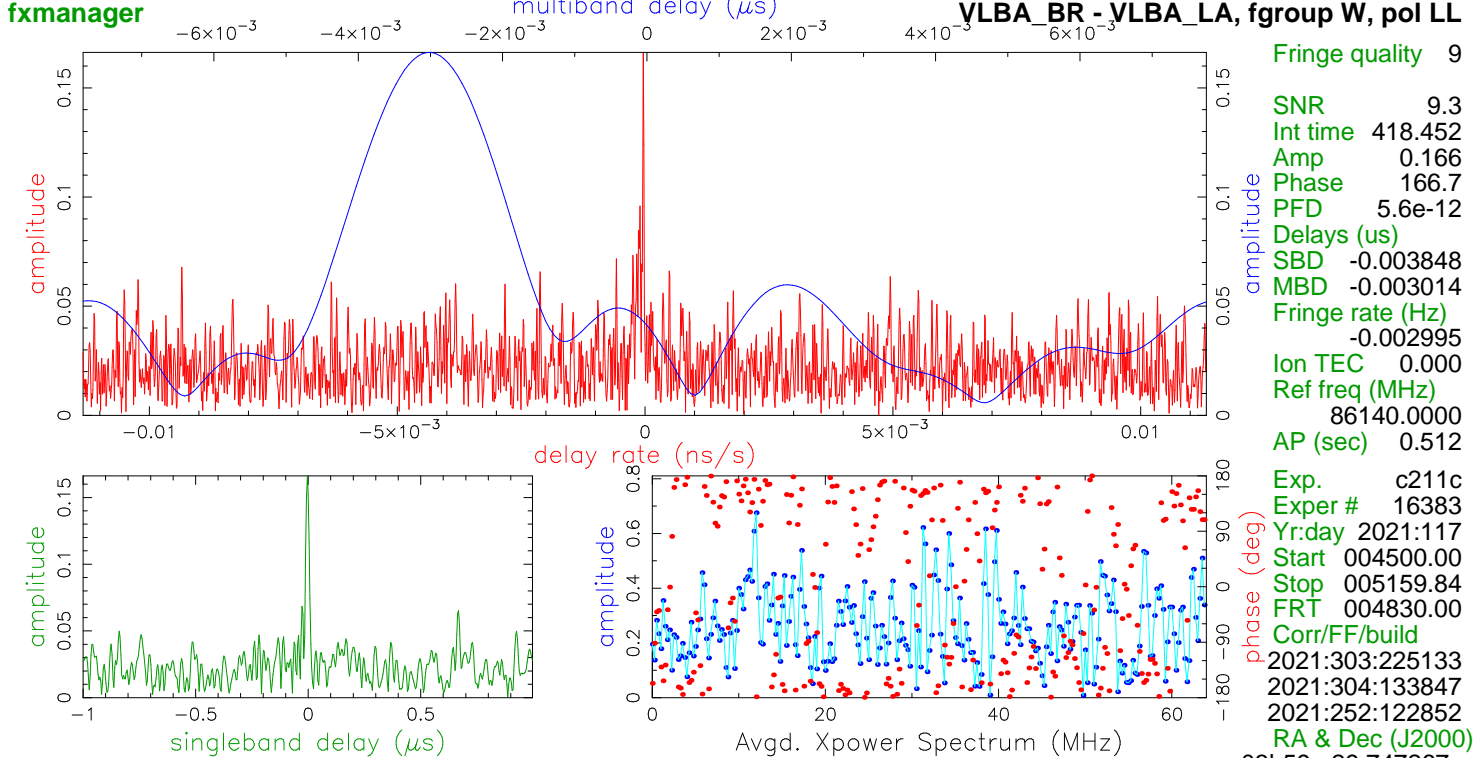
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bk..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bk.W.62.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

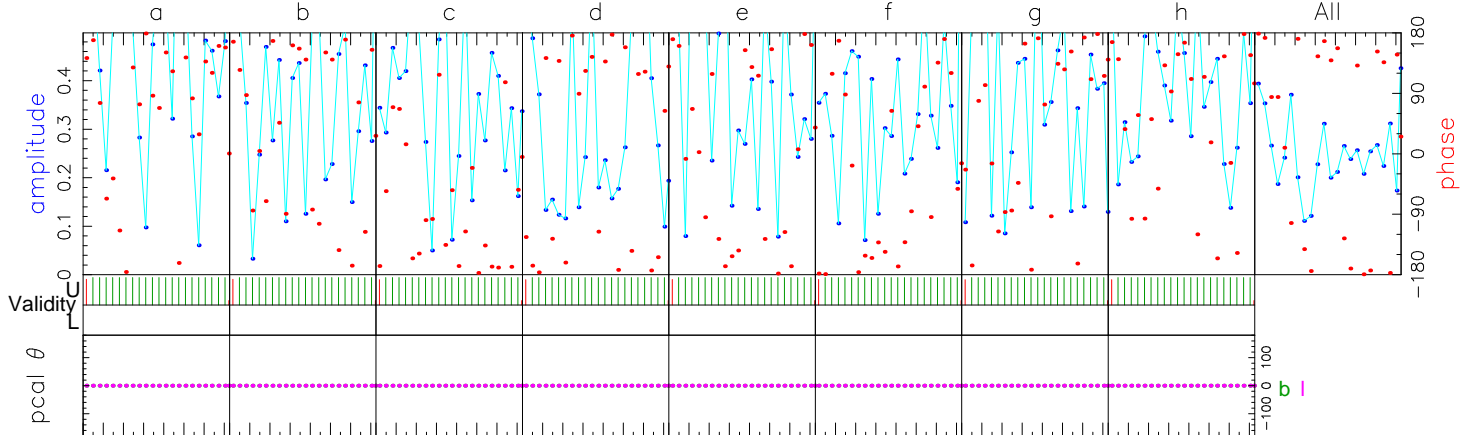
NRAO150.1X1QEV, No0120, bl

VLBA_BR - VLBA_LA, fgroup W, pol LL



Fringe quality 9
 SNR 9.3
 Int time 418.452
 Amp 0.166
 Phase 166.7
 PFD 5.6e-12
 Delays (us)
 SBD -0.003848
 MBD -0.003014
 Fringe rate (Hz)
 -0.002995
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133847
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

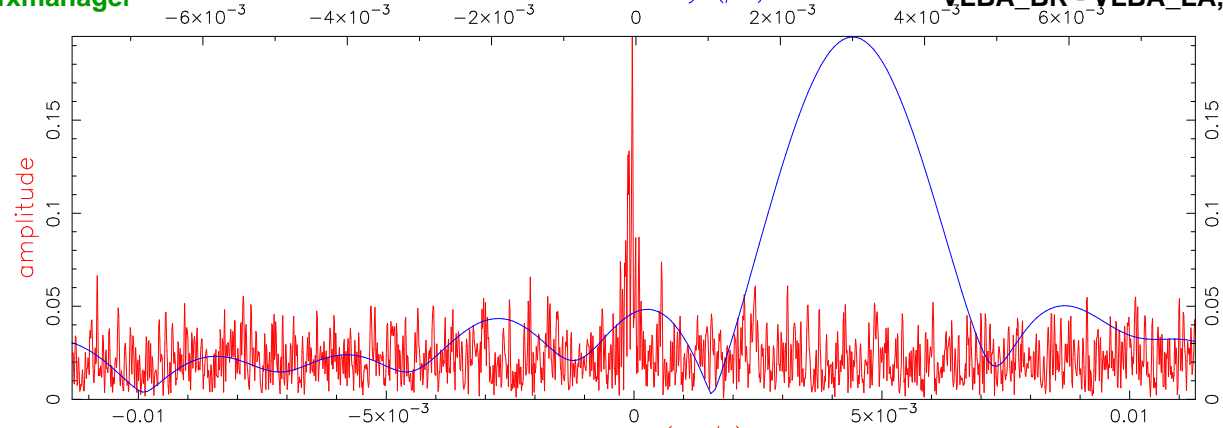
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	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)	3.39821833104E+03		Apriori delay (usec)		3.39822134522E+03		Resid mbdelay (usec)		-3.01419E-03	+/- 1.2E-04
Sband delay (usec)	3.39821749722E+03		Apriori clock (usec)		-3.5320473E-01		Resid sbdelay (usec)		-3.84800E-03	+/- 9.3E-04
Phase delay (usec)	3.39822135060E+03		Apriori clockrate (us/s)		1.8600001E-07		Resid phdelay (usec)		5.37646E-06	+/- 4.0E-07
Delay rate (us/s)	2.12020883611E-01		Apriori rate (us/s)		2.12020918382E-01		Resid rate (us/s)		-3.47703E-08	+/- 1.6E-09
Total phase (deg)	50.7		Apriori accel (us/s/s)		-4.03901089794E-06		Resid phase (deg)		166.7	+/- 12.3

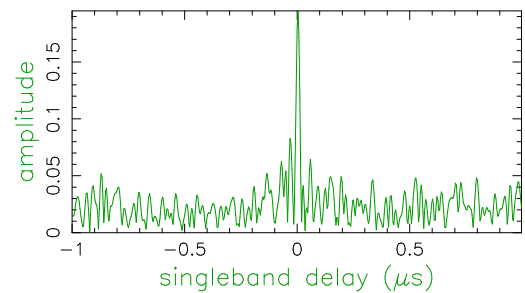
ph/seg (deg) 53.4 29.5 Amplitude 0.166 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.5 51.6 Search (2048X32) 0.165 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.1 17.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.3 30.4 Inc. seg. avg. 0.217 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.167 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 293.2 el 60.3 pa 77.2 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -1941.437 524.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bl.1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bl.W.2.1X1QEV

multiband delay (μ s)

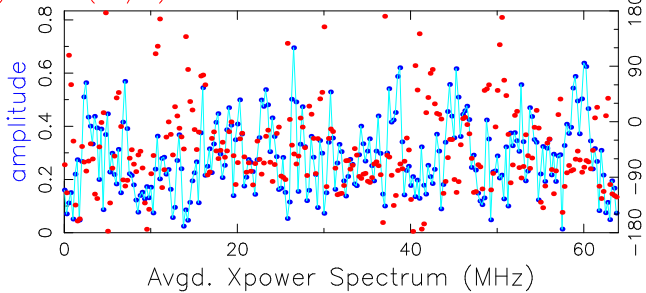


Fringe quality 9

SNR 10.9
 Int time 418.452
 Amp 0.195
 Phase -53.0
 PFD 4.9e-19
 Delays (us)
 SBD 0.003392
 MBD 0.002992
 Fringe rate (Hz)
 -0.002894
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

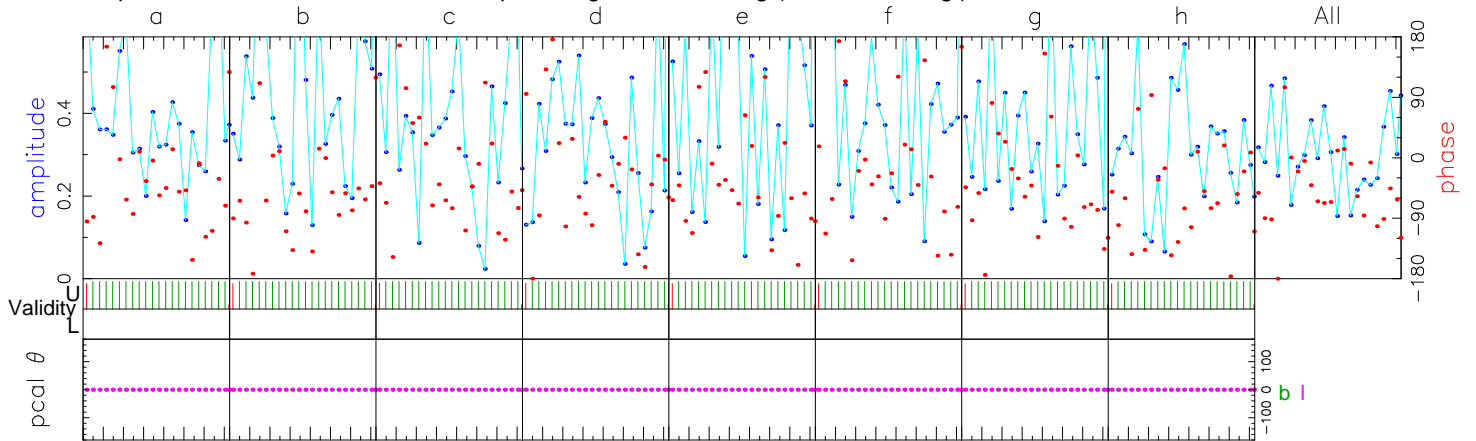


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133852
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.9	-55.3	-50.3	-34.4	-56.9	-50.7	-44.2	-66.5	Phase	-53.0
	0.2	0.3	0.2	0.1	0.3	0.2	0.2	0.1	Ampl.	0.2
	257.6	258.3	278.4	509.0	257.9	357.3	379.3	491.6	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	
									Tracks	
Group delay (usec)(sbd)	3.39822433682E+03		Apriori delay (usec)		3.39822134522E+03		Resid mbdelay (usec)		2.99160E-03	+/- 1.0E-04
Sband delay (usec)	3.39822473747E+03		Apriori clock (usec)		-3.5320473E-01		Resid sbdelay (usec)		3.39225E-03	+/- 7.9E-04
Phase delay (usec)	3.39822134351E+03		Apriori clockrate (us/s)		1.8600001E-07		Resid phdelay (usec)		-1.70996E-06	+/- 3.4E-07
Delay rate (us/s)	2.12020884788E-01		Apriori rate (us/s)		2.12020918382E-01		Resid rate (us/s)		-3.35934E-08	+/- 1.4E-09
Total phase (deg)	190.9		Apriori accel (us/s/s)		-4.03901089794E-06		Resid phase (deg)		-53.0	+/- 10.5

ph/seg (deg) 55.9 25.2 Search (2048X32) 0.194 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.6 44.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.7 14.9 Inc. seg. avg. 0.276 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.5 25.9 Inc. frq. avg. 0.190 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -1941.437 524.026 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bl.1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bl.W.27.1X1QEV

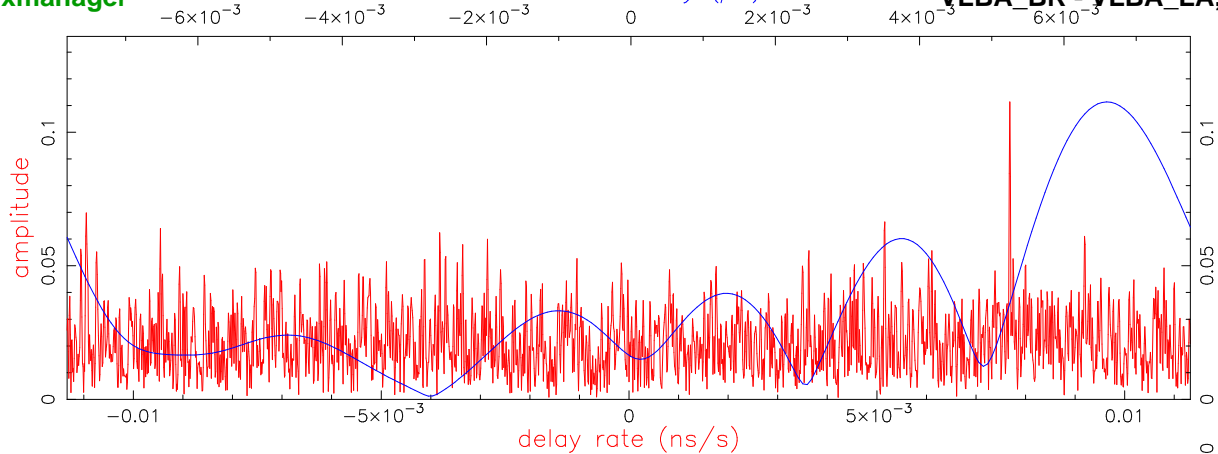
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bl

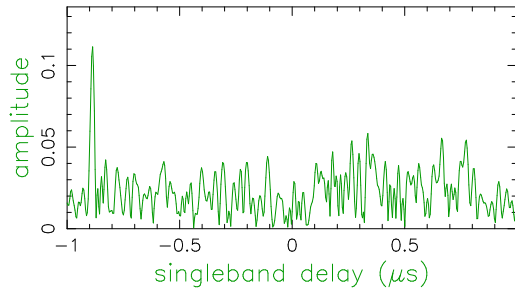
VLBA_BR - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

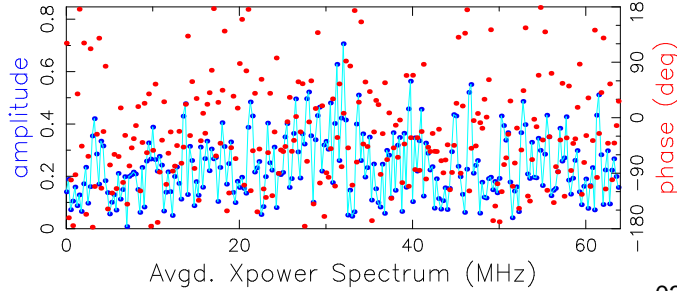


Fringe quality 0

SNR 6.2
 Int time 418.452
 Amp 0.136
 Phase 98.3
 PFD 1.1e-01
 Delays (us)
 SBD -0.887298
 MBD 0.006591
 Fringe rate (Hz)
 0.662714
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

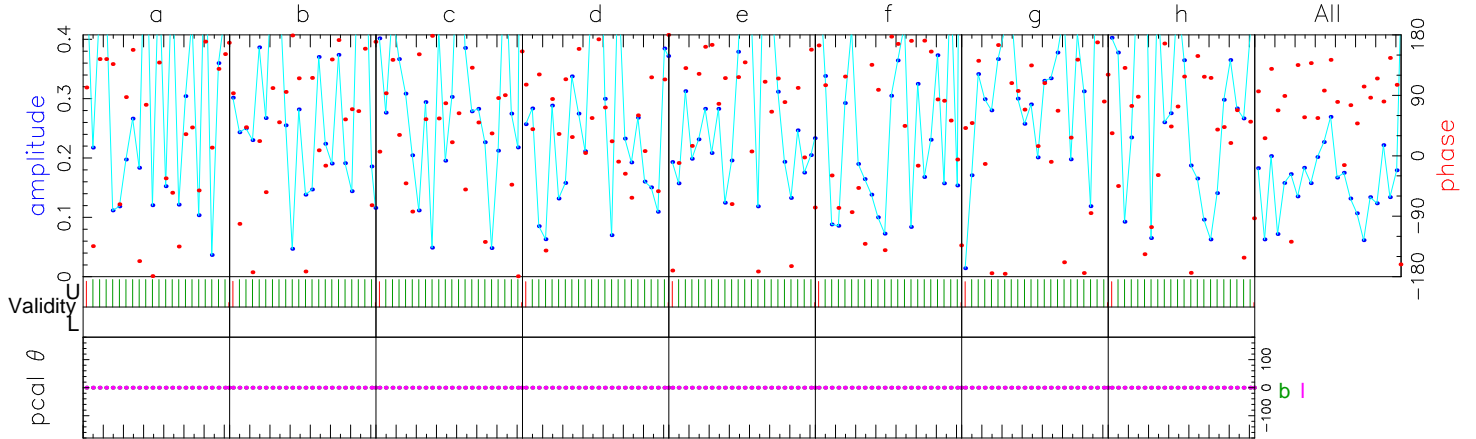


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133856
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	130.8	87.1	60.4	67.2	109.5	122.1	123.8	70.2	Phase	98.3
	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	122.3	62.7	207.3	210.1	211.2	448.4	429.1	45.0	Sbd box	29.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	3.39733731169E+03		Apriori delay (usec)		3.39822134522E+03		Resid mbdelay (usec)		6.59147E-03	+/- 1.7E-04
Sband delay (usec)	3.39733404747E+03		Apriori clock (usec)		-3.5320473E-01		Resid sbdelay (usec)		-8.87298E-01	+/- 1.4E-03
Phase delay (usec)	3.39822134839E+03		Apriori clockrate (us/s)		1.8600001E-07		Resid phdelay (usec)		3.17003E-06	+/- 5.9E-07
Delay rate (us/s)	2.12028611837E-01		Apriori rate (us/s)		2.12020918382E-01		Resid rate (us/s)		7.69346E-06	+/- 2.4E-09
Total phase (deg)	342.2		Apriori accel (us/s/s)		-4.03901089794E-06		Resid phase (deg)		98.3	+/- 18.4

ph/seg (deg) 49.5 44.0 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.7 76.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.9 26.0 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.0 45.3 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -1941.437 524.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bl.1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bl.W.47.1X1QEV

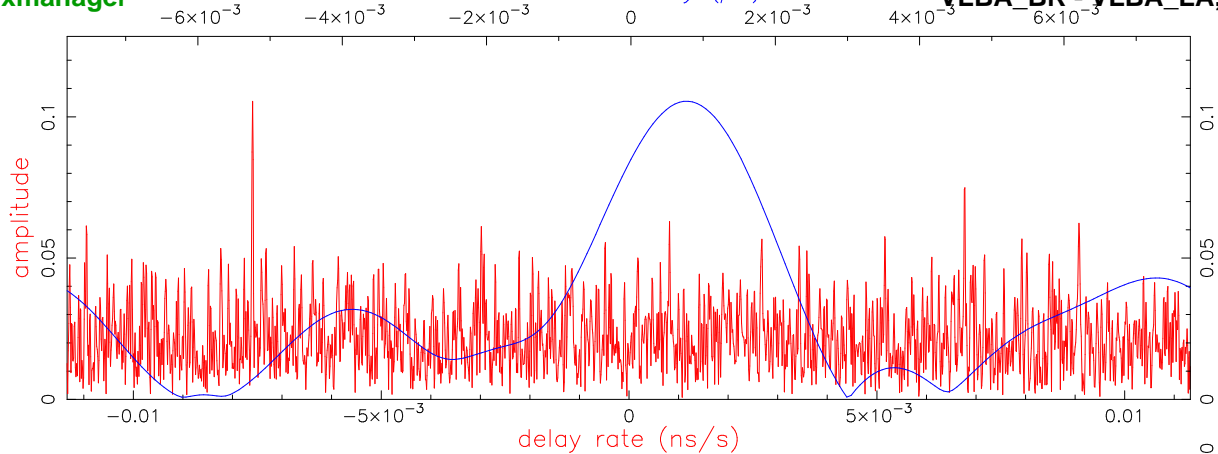
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bl

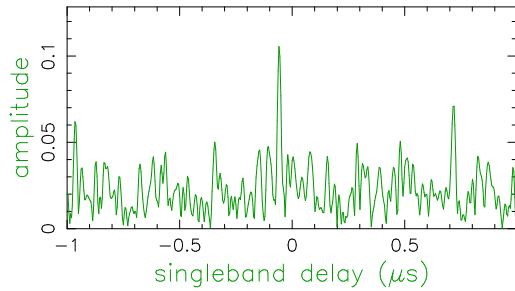
VLBA_BR - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

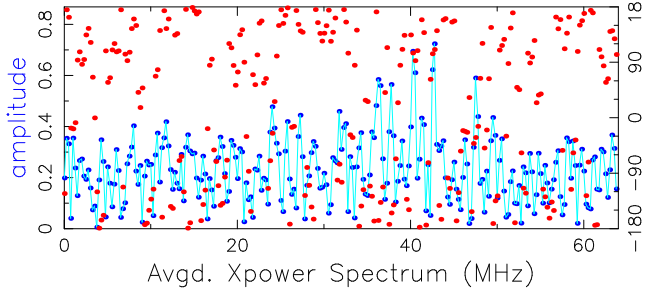


Fringe quality 0

SNR 5.9
 Int time 418.452
 Amp 0.128
 Phase -154.8
 PFD 5.4e-01
 Delays (us)
 SBD -0.057744
 MBD 0.000799
 Fringe rate (Hz)
 -0.654907
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

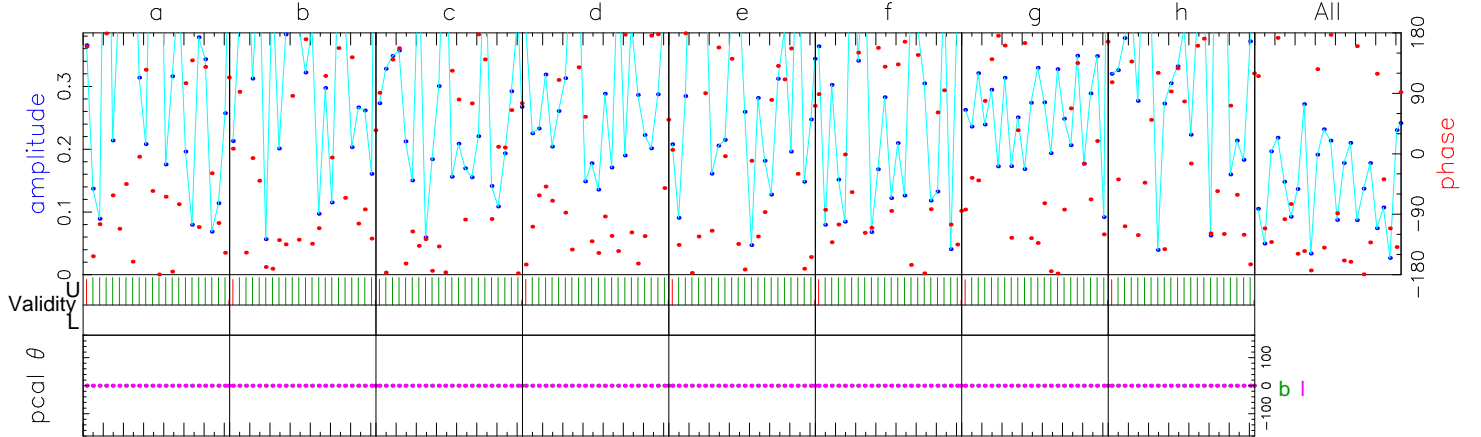


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133900
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
b	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				
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	3.39815964418E+03		Apriori delay (usec)		3.39822134522E+03		Resid mbdelay (usec)		7.98953E-04	+/- 1.8E-04		
Sband delay (usec)	3.39816360072E+03		Apriori clock (usec)		-3.5320473E-01		Resid sbdelay (usec)		-5.77445E-02	+/- 1.5E-03		
Phase delay (usec)	3.39822134023E+03		Apriori clockrate (us/s)		1.8600001E-07		Resid phdelay (usec)		-4.99115E-06	+/- 6.2E-07		
Delay rate (us/s)	2.12013315563E-01		Apriori rate (us/s)		2.12020918382E-01		Resid rate (us/s)		-7.60282E-06	+/- 2.6E-09		
Total phase (deg)	89.2		Apriori accel (us/s/s)		-4.03901089794E-06		Resid phase (deg)		-154.8	+/- 19.3		
ph/seg (deg)	RMS 52.8	Theor. 46.3	Amplitude Search (2048X32)		0.128 +/- 0.022		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	75.9	80.9	Interp.		0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	23.7	27.3	Inc. seg. avg.		0.134		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	39.4	47.7	Inc. frq. avg.		0.123		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
							Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 293.2 el 60.3 pa 77.2 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -1941.437 524.026 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bl.1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bl.W.69.1X1QEV

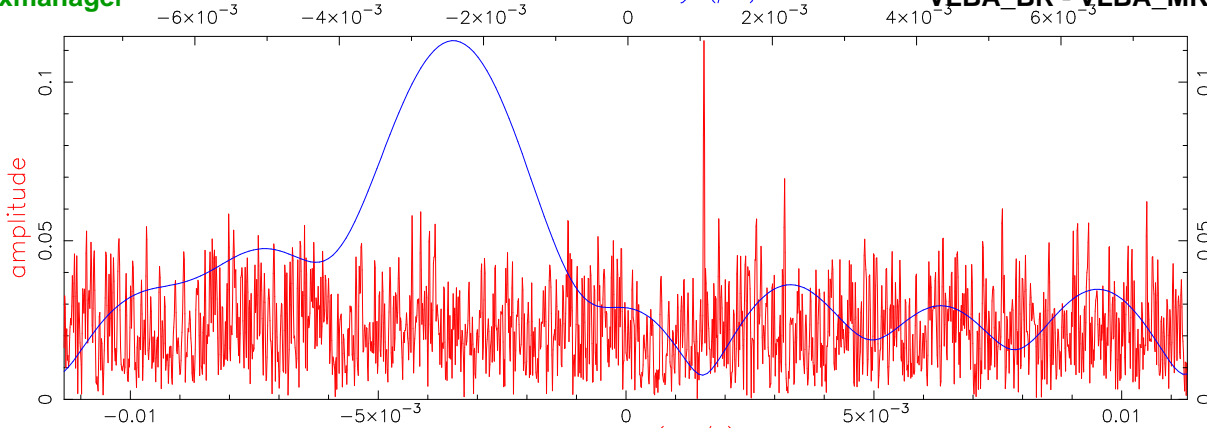
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

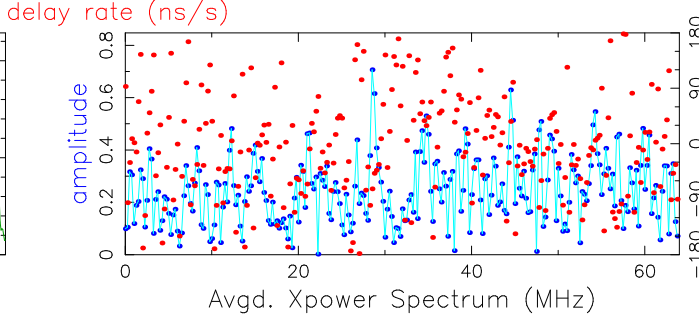
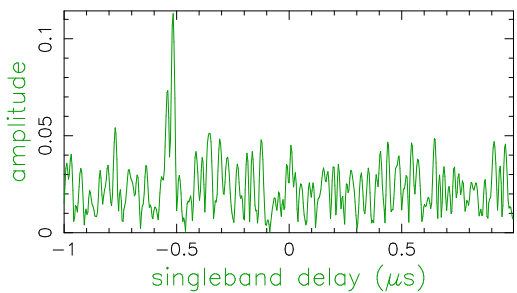
NRAO150.1X1QEV, No0120, bm

VLBA_BR - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

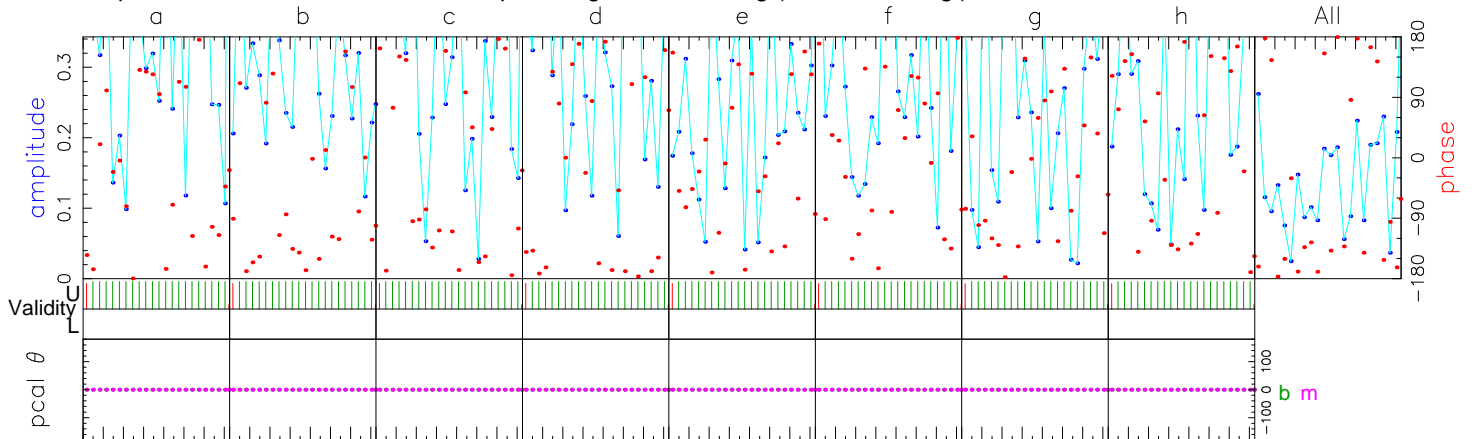


Fringe quality 0
 SNR 6.3
 Int time 418.450
 Amp 0.114
 Phase -170.9
 PFD 5.8e-02
 Delays (us)
 SBD -0.516468
 MBD -0.002460
 Fringe rate (Hz)
 0.135376
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133852
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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
	177.8	-150.5	-166.9	174.5	-167.7	176.4	-117.3	-171.1	Phase	-170.9
	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	Ampl.	0.1
	56.2	90.6	126.0	125.4	75.3	203.2	281.4	199.8	Sbd box	124.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.78753157143E+02		Apriori delay (usec)		3.79271242184E+02		Resid mbdelay (usec)		-2.46004E-03	+/- 1.7E-04
Sband delay (usec)	3.78754774684E+02		Apriori clock (usec)		-1.8705137E+01		Resid sbdelay (usec)		-5.16468E-01	+/- 1.4E-03
Phase delay (usec)	3.79271236671E+02		Apriori clockrate (us/s)		-4.1800000E-07		Resid phdelay (usec)		-5.51241E-06	+/- 5.8E-07
Delay rate (us/s)	-2.94983086435E-01		Apriori rate (us/s)		-2.94984658011E-01		Resid rate (us/s)		1.57158E-06	+/- 2.4E-09
Total phase (deg)	117.7		Apriori accel (us/s/s)		3.34388349607E-05		Resid phase (deg)		-170.9	+/- 18.0

ph/seg (deg) 48.6 43.3 Search (2048X32) 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.5 75.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.2 25.5 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.2 44.6 Inc. frq. avg. 0.108 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 m: az 347.6 el 57.7 pa 160.9 u,v (fr/asec) 2752.574 5471.030 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bm..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bm.W.28.1X1QEV

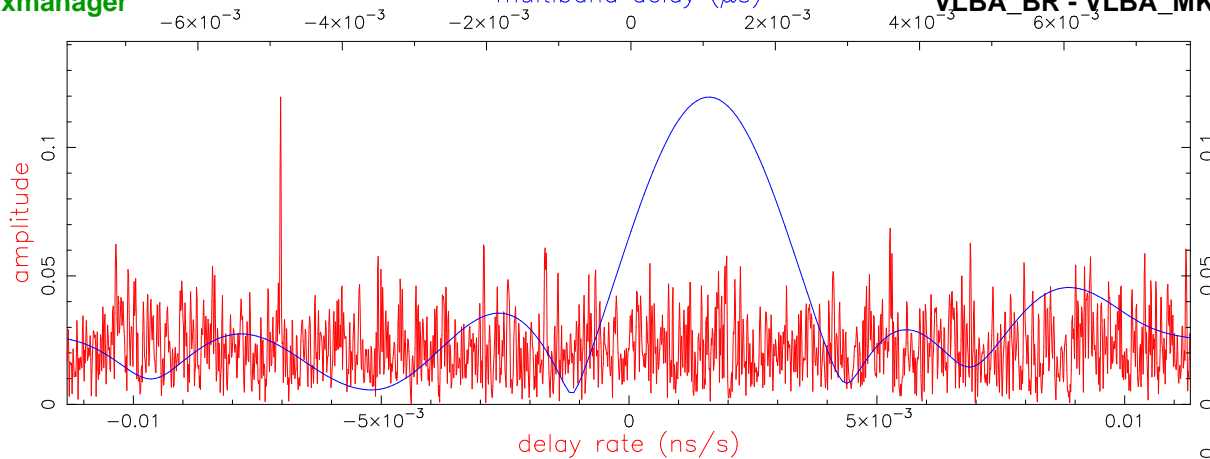
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bm

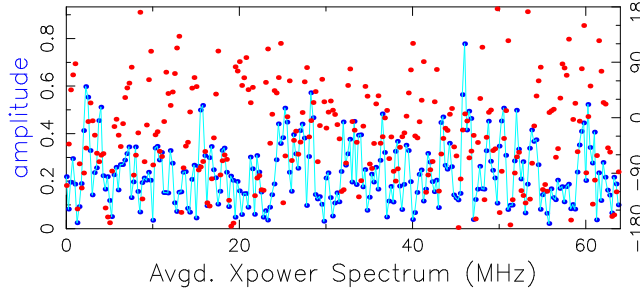
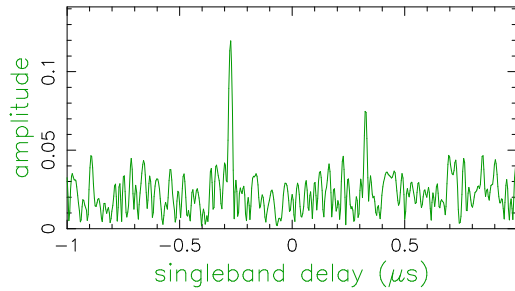
VLBA_BR - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)



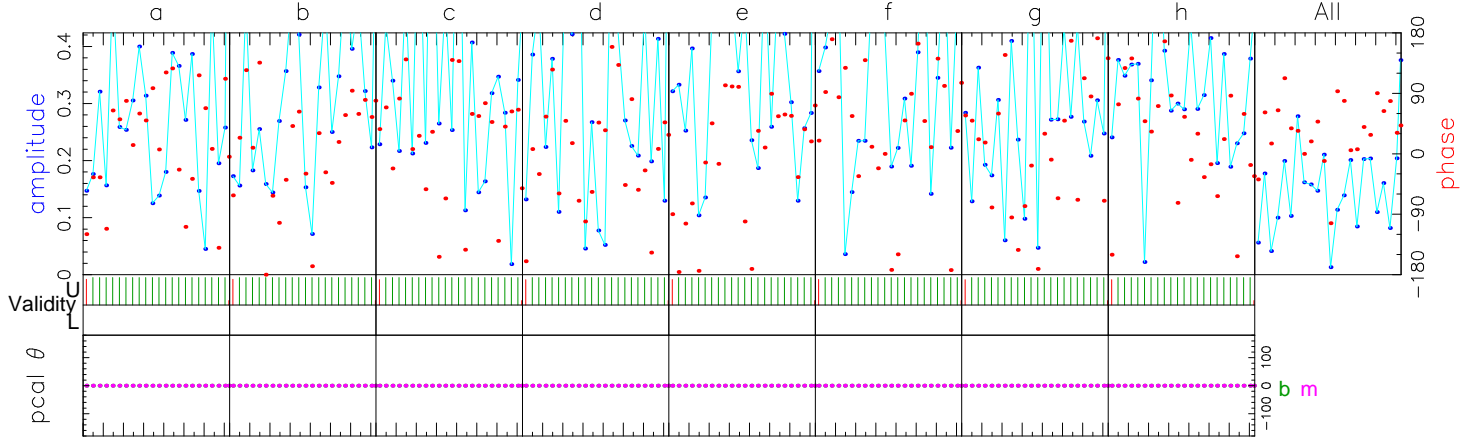
Fringe quality 0

SNR 6.7
 Int time 418.450
 Amp 0.141
 Phase 40.6
 PFD 5.6e-03
 Delays (us)
 SBD -0.274168
 MBD 0.001052
 Fringe rate (Hz)
 -0.606293
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133856
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	31.6	40.4	57.3	4.1	41.9	69.6	5.0	47.3	Phase	40.6
	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	307.4	185.9	341.1	314.8	412.1	249.3	85.2	260.1	Sbd box	186.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.78991043971E+02		Apriori delay (usec)		3.79271242184E+02		Resid mbdelay (usec)		1.05179E-03	+/- 1.6E-04
Sband delay (usec)	3.78997074684E+02		Apriori clock (usec)		-1.8705137E+01		Resid sbdelay (usec)		-2.74168E-01	+/- 1.3E-03
Phase delay (usec)	3.79271243494E+02		Apriori clockrate (us/s)		-4.1800000E-07		Resid phdelay (usec)		1.31022E-06	+/- 5.5E-07
Delay rate (us/s)	-2.94991696476E-01		Apriori rate (us/s)		-2.94984658011E-01		Resid rate (us/s)		-7.03846E-06	+/- 2.3E-09
Total phase (deg)	329.2		Apriori accel (us/s/s)		3.34388349607E-05		Resid phase (deg)		40.6	+/- 17.1

ph/seg (deg) 47.3 41.0 Search (2048X32) 0.116 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.2 71.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.3 24.2 Inc. seg. avg. 0.136 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.3 42.2 Inc. frq. avg. 0.138 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 m: az 347.6 el 57.7 pa 160.9 u,v (fr/asec) 2752.574 5471.030 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bm..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bm.W.46.1X1QEV

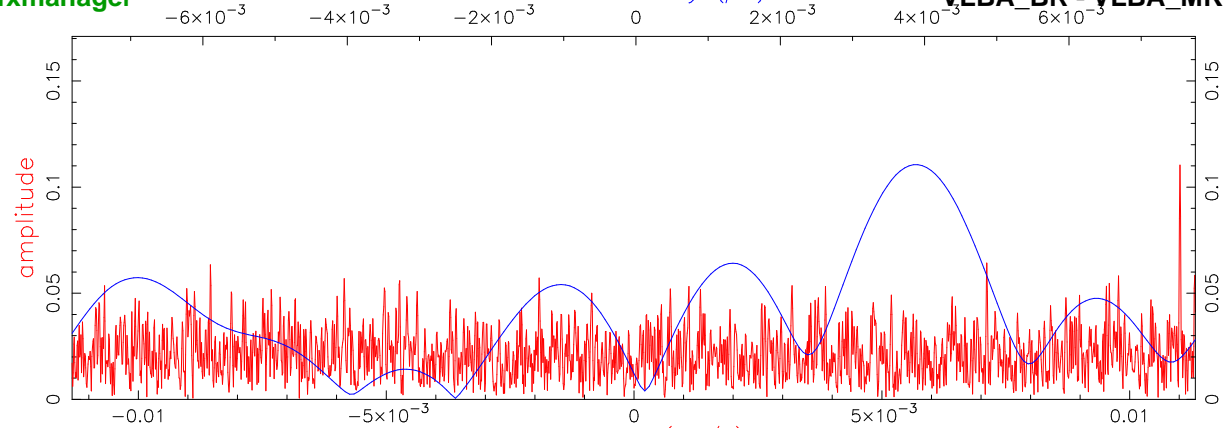
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bm

VLBA_BR - VLBA_MK, fgroup W, pol LL

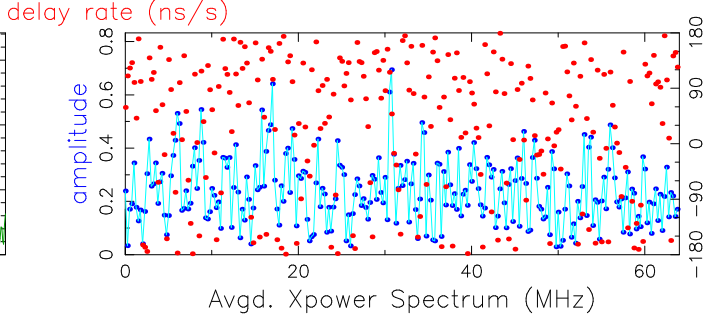
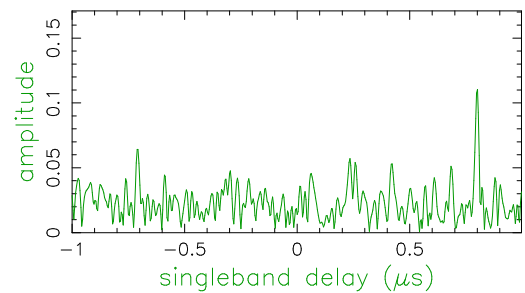
multiband delay (μ s)



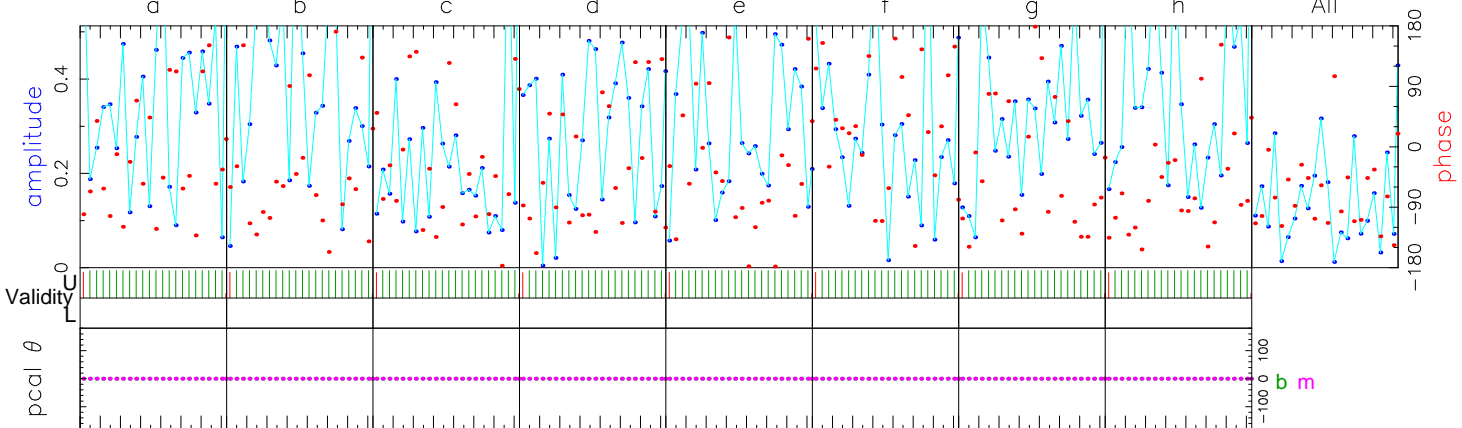
Fringe quality 0

SNR 6.3
 Int time 418.450
 Amp 0.171
 Phase -76.7
 PFD 1.0e-01
 Delays (us)
 SBD 0.799385
 MBD 0.003825
 Fringe rate (Hz) 0.950451
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build 2021:303:225133
 2021:304:133848
 2021:252:122852
 RA & Dec (J2000) 03h59m29.747267s
 +50°57'59.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.6	-88.5	-83.4	-90.8	-73.2	66.2	-87.5	-70.0	Phase	-76.7
	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.3	Ampl.	0.2
	272.5	461.7	431.0	123.7	497.2	172.1	34.1	461.8	Sbd box	461.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 3.80071942650E+02 Apriori delay (usec) 3.79271242184E+02 Resid mbdelay (usec) 3.82547E-03 +/- 1.7E-04
 Sband delay (usec) 3.80070627184E+02 Apriori clock (usec) -1.8705137E+01 Resid sbdelay (usec) 7.99385E-01 +/- 1.4E-03
 Phase delay (usec) 3.79271239711E+02 Apriori clockrate (us/s) -4.1800000E-07 Resid phdelay (usec) -2.47249E-06 +/- 5.9E-07
 Delay rate (us/s) -2.94973624215E-01 Apriori rate (us/s) -2.94984658011E-01 Resid rate (us/s) 1.10338E-05 +/- 2.4E-09
 Total phase (deg) 211.9 Apriori accel (us/s/s) 3.34388349607E-05 Resid phase (deg) -76.7 +/- 18.3

RMS Theor. Amplitude 0.171 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 53.6 44.0 Search (2048X32) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 83.3 76.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 59.2 25.9 Inc. seg. avg. 0.161 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.7 45.2 Inc. frq. avg. 0.174 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 m: az 347.6 el 57.7 pa 160.9 u,v (fr/asec) 2752.574 5471.030 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bm..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bm.W.6.1X1QEV

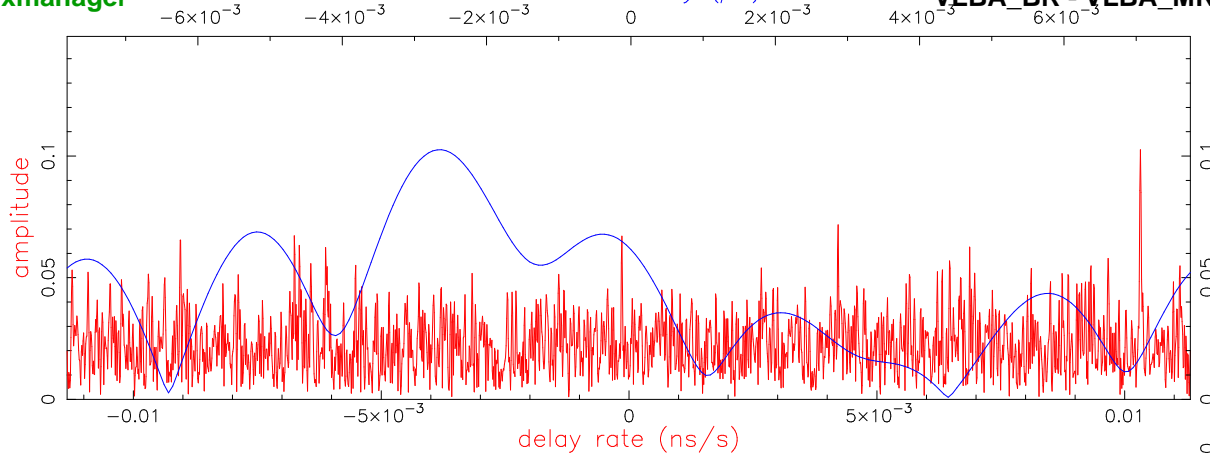
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bm

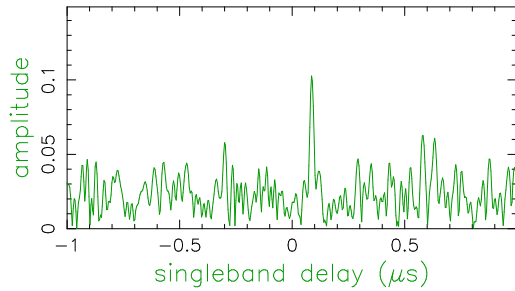
VLBA_BR - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

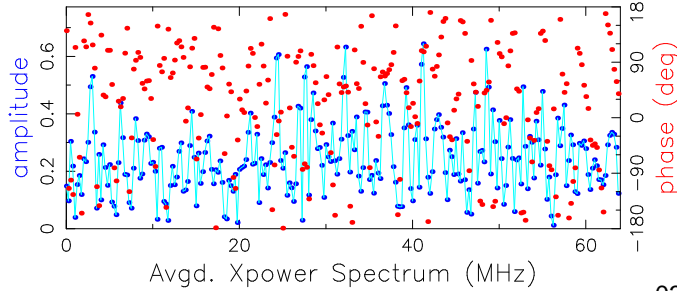


Fringe quality 0

SNR 5.8
 Int time 418.450
 Amp 0.149
 Phase 24.4
 PFD 8.6e-01
 Delays (us)
 SBD 0.087051
 MBD -0.002628
 Fringe rate (Hz)
 0.889747
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

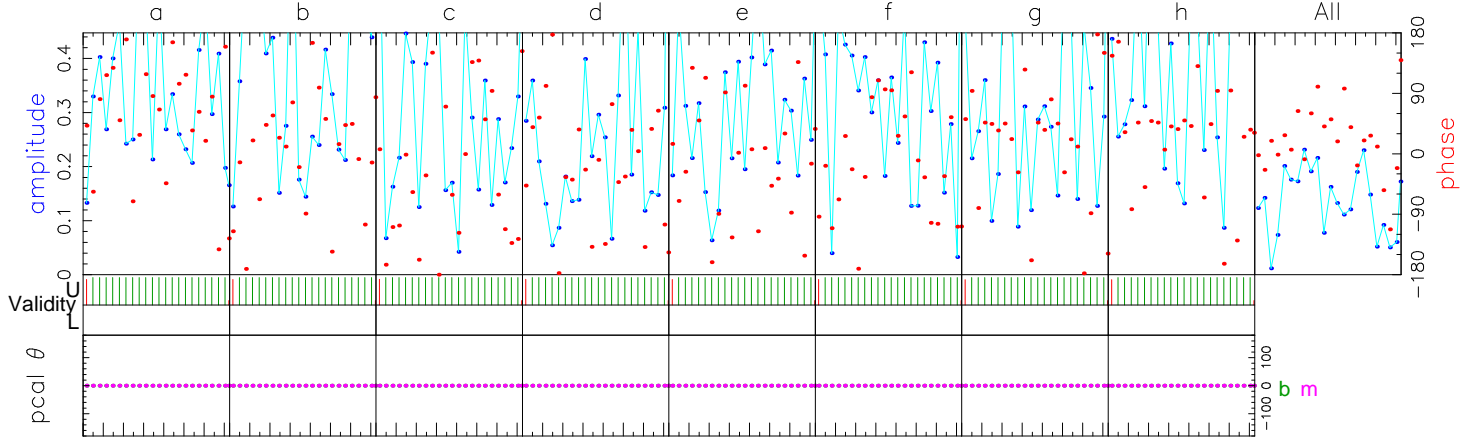


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133859
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.9	23.1	-57.2	-21.1	-23.3	-13.8	40.5	48.5	Phase	24.4
	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.3	Ampl.	0.2
	364.7	279.6	358.0	388.4	245.9	224.8	243.8	278.5	Sbd box	279.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.79362364316E+02	Apriori delay (usec)	3.79271242184E+02	Resid mbdelay (usec)	-2.62787E-03	+/-	1.9E-04
Sband delay (usec)	3.79358292934E+02	Apriori clock (usec)	-1.8705137E+01	Resid sbdelay (usec)	8.70508E-02	+/-	1.5E-03
Phase delay (usec)	3.79271242969E+02	Apriori clockrate (us/s)	-4.1800000E-07	Resid phdelay (usec)	7.85676E-07	+/-	6.4E-07
Delay rate (us/s)	-2.94974328926E-01	Apriori rate (us/s)	-2.94984658011E-01	Resid rate (us/s)	1.03291E-05	+/-	2.6E-09
Total phase (deg)	313.0	Apriori accel (us/s/s)	3.34388349607E-05	Resid phase (deg)	24.4	+/-	19.8

ph/seg (deg)	48.1	Theor.	47.6	Amplitude	0.149 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	67.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	52.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.5	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.167	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

b: az 293.2 el 60.3 pa 77.2 m: az 347.6 el 57.7 pa 160.9 u,v (fr/asec) 2752.574 5471.030 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bm..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bm.W.64.1X1QEV

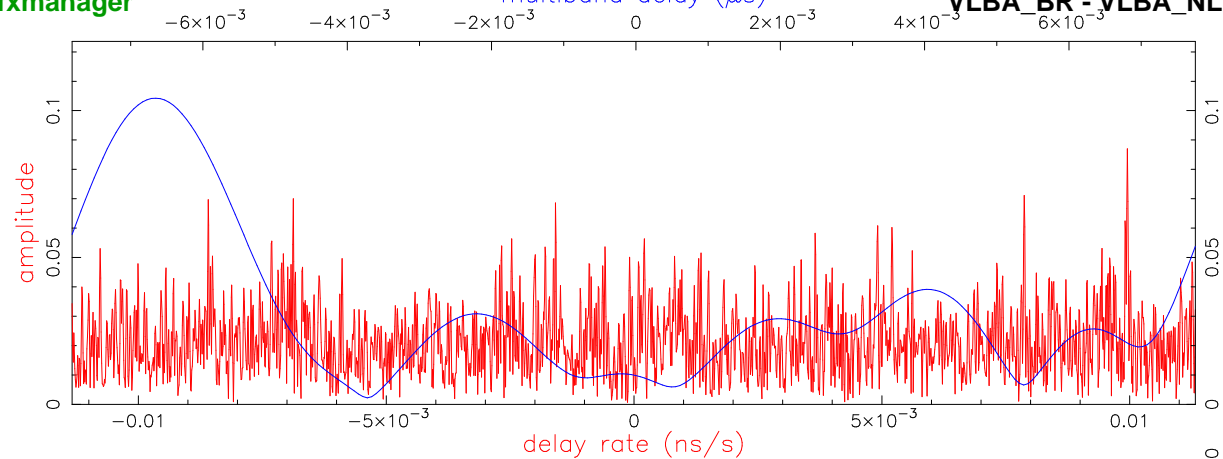
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bn

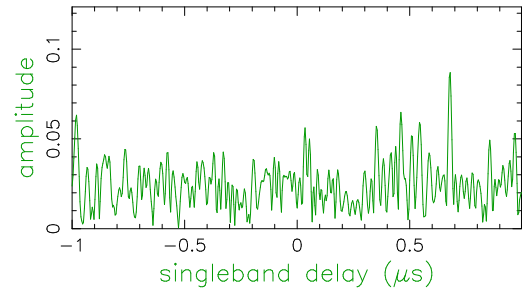
VLBA_BR - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

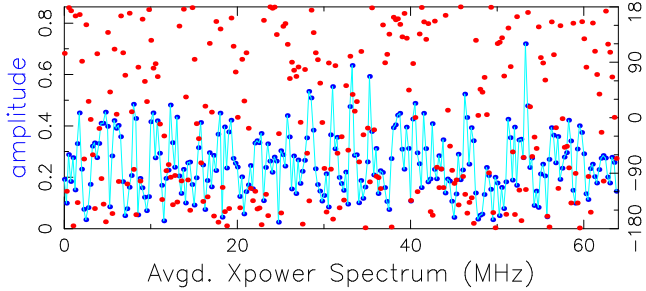


Fringe quality 0

SNR 4.9
 Int time 418.452
 Amp 0.124
 Phase -13.5
 PFD 1.0e+00
 Delays (us)
 SBD 0.678383
 MBD 0.008301
 Fringe rate (Hz)
 0.858253
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

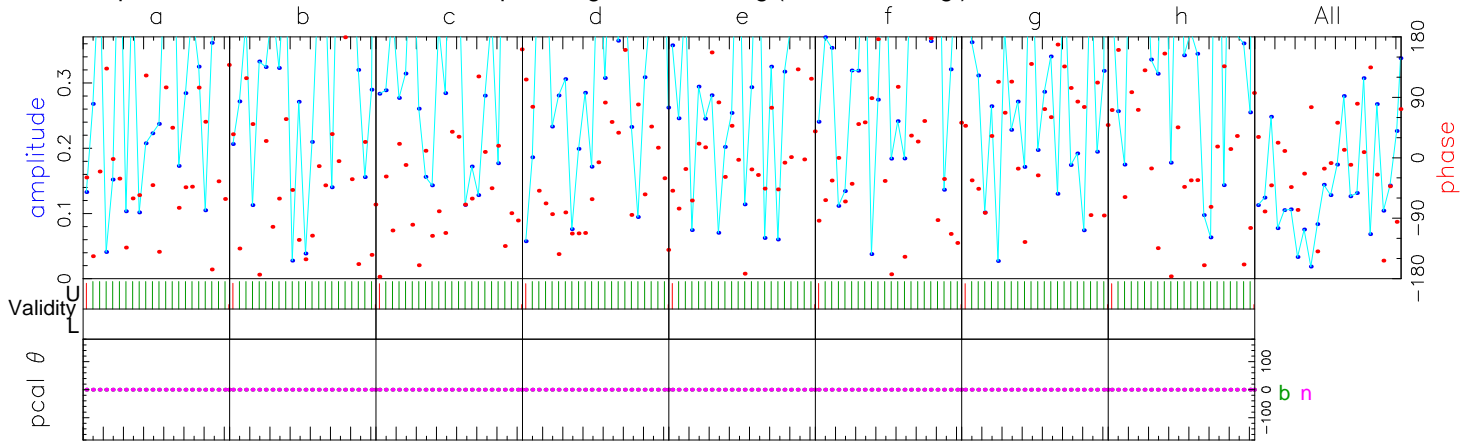


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133849
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.4	-51.4	-64.8	-27.7	7.6	-26.4	58.9	51.0	Phase	-13.5
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	179.7	105.9	240.8	35.5	31.5	460.8	134.2	506.4	Sbd box	430.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.84534887266E+03		Apriori delay (usec)		4.84466869687E+03		Resid mbdelay (usec)		8.30078E-03	+/- 2.2E-04
Sband delay (usec)	4.84534707962E+03		Apriori clock (usec)		-8.4734440E+00		Resid sbdelay (usec)		6.78383E-01	+/- 1.8E-03
Phase delay (usec)	4.84466869644E+03		Apriori clockrate (us/s)		-3.9999999E-07		Resid phdelay (usec)		-4.34765E-07	+/- 7.5E-07
Delay rate (us/s)	2.25324272099E-01		Apriori rate (us/s)		2.25314308635E-01		Resid rate (us/s)		9.96346E-06	+/- 3.1E-09
Total phase (deg)	184.1		Apriori accel (us/s/s)		-1.89125823816E-05		Resid phase (deg)		-13.5	+/- 23.3

ph/seg (deg) 68.0 55.9 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 108.9 97.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.3 33.0 Inc. seg. avg. 0.135 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.8 57.5 Inc. frq. avg. 0.138 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -2093.780 -1371.729 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bn.W.14.1X1QEV

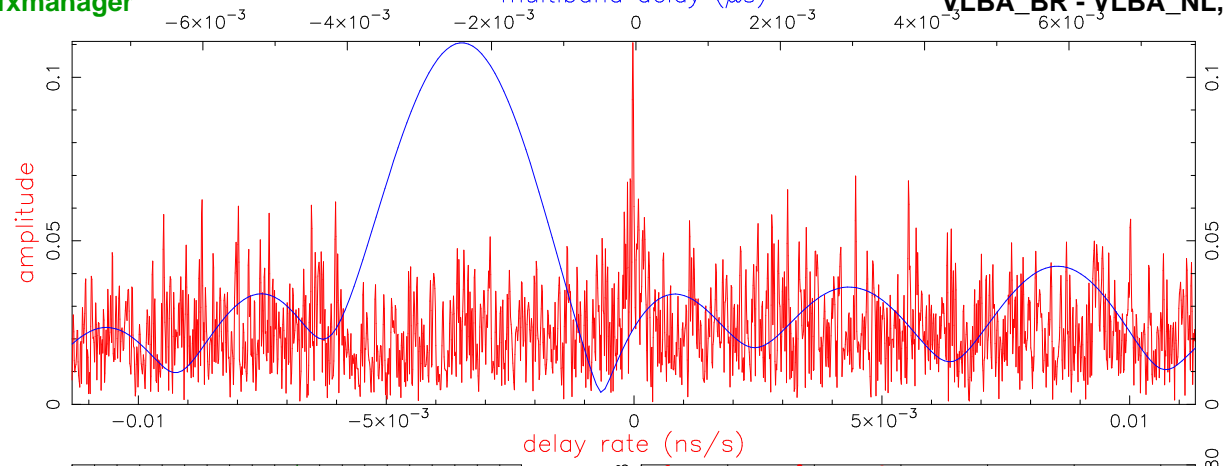
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

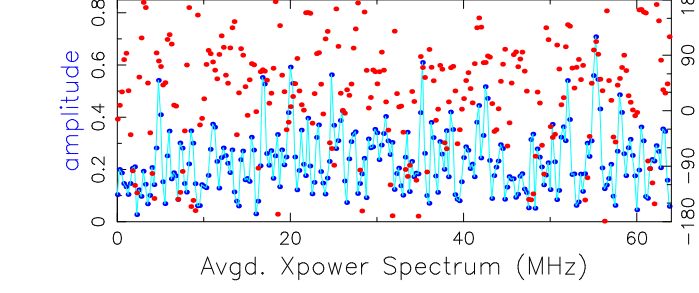
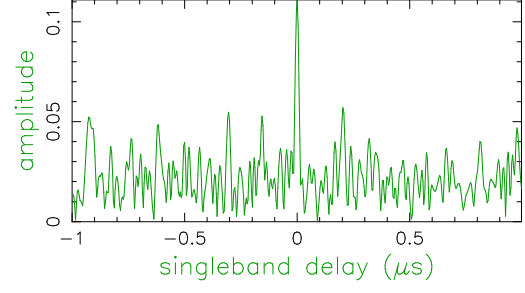
NRAO150.1X1QEV, No0120, bn

VLBA_BR - VLBA_NL, fgroup W, pol RR

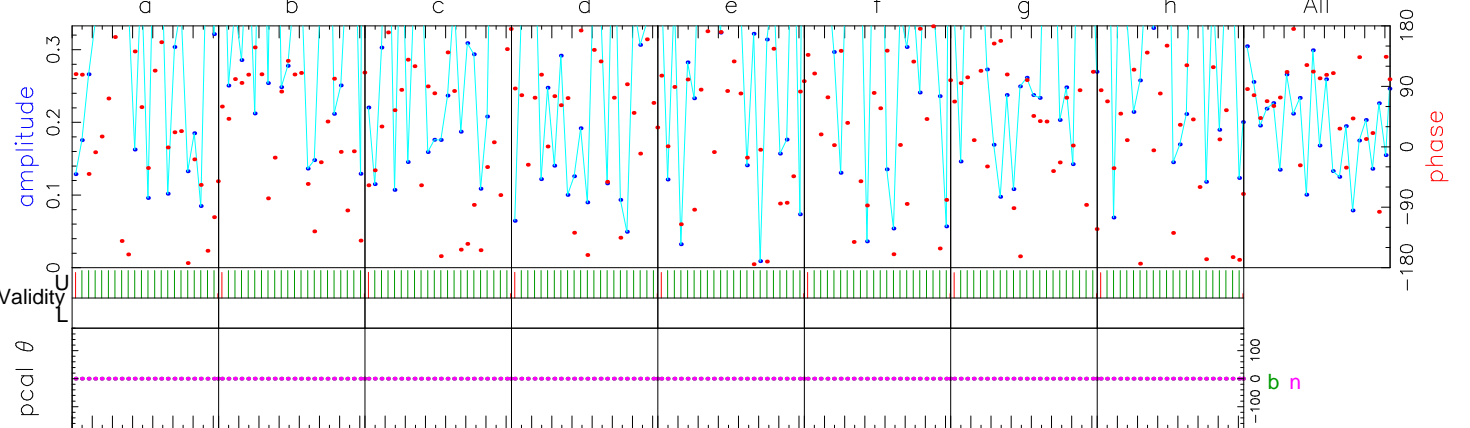
multiband delay (μ s)



Fringe quality 0
 SNR 6.2
 Int time 418.452
 Amp 0.111
 Phase 79.7
 PFD 1.3e-01
 Delays (us)
 SBD -0.000822
 MBD -0.002421
 Fringe rate (Hz)
 -0.002335
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133852
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	4.84466627564E+03		Apriori delay (usec)		4.84466869687E+03		Resid mbdelay (usec)		-2.42124E-03	+/- 1.7E-04
Sband delay (usec)	4.84466787437E+03		Apriori clock (usec)		-8.4734440E+00		Resid sbdelay (usec)		-8.22500E-04	+/- 1.4E-03
Phase delay (usec)	4.84466869944E+03		Apriori clockrate (us/s)		-3.9999999E-07		Resid phdelay (usec)		2.56960E-06	+/- 6.0E-07
Delay rate (us/s)	2.25314281527E-01		Apriori rate (us/s)		2.25314308635E-01		Resid rate (us/s)		-2.71073E-08	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.89125823816E-05		Resid phase (deg)		79.7	+/- 18.5

ph/seg (deg) 63.9 44.3 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 93.7 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.7 26.1 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.0 45.6 Inc. frq. avg. 0.105 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -2093.780 -1371.729 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bn.W.31.1X1QEV simultaneous interpolator

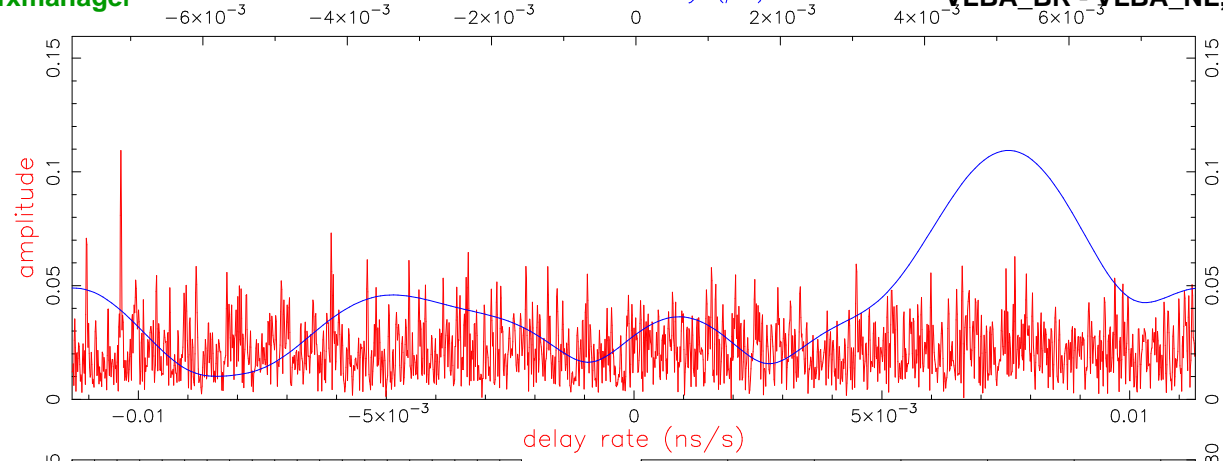
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

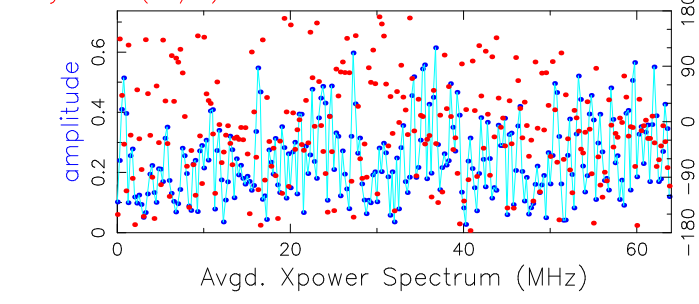
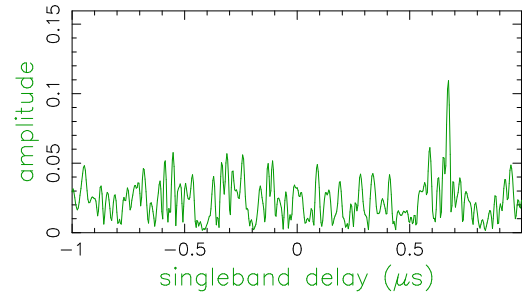
NRAO150.1X1QEV, No0120, bn

VLBA_BR - VLBA_NL, fgroup W, pol LR

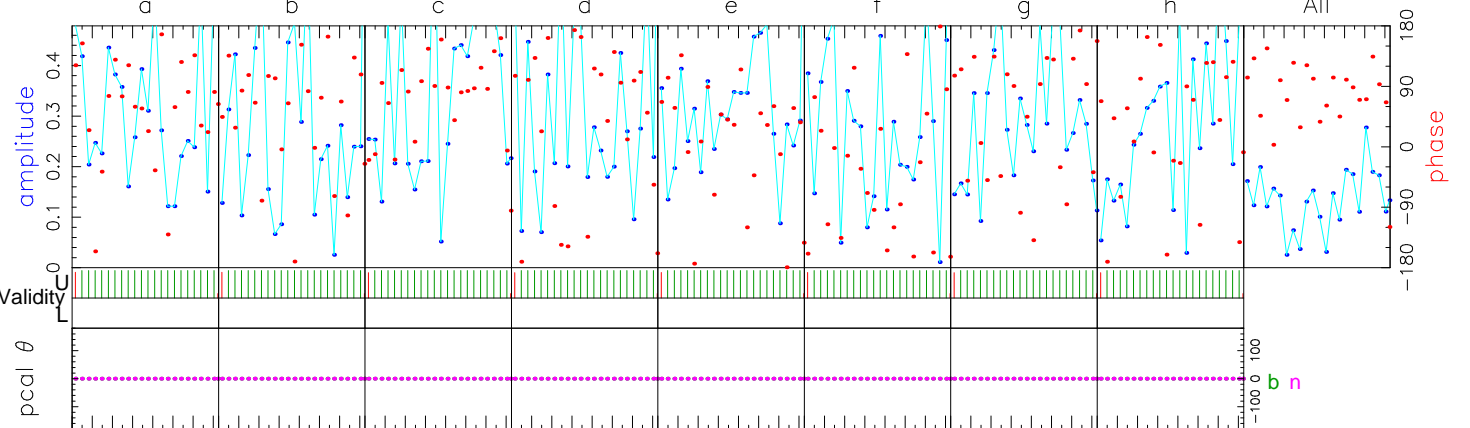
multiband delay (μ s)



Fringe quality 0
 SNR 6.2
 Int time 418.452
 Amp 0.160
 Phase 88.2
 PFD 1.8e-01
 Delays (us)
 SBD 0.670944
 MBD 0.005142
 Fringe rate (Hz) -0.892628
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133857
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	4.84534571340E+03		Apriori delay (usec)		4.84466869687E+03		Resid mbdelay (usec)		5.14153E-03	+/- 1.8E-04
Sband delay (usec)	4.84533964062E+03		Apriori clock (usec)		-8.4734440E+00		Resid sbdelay (usec)		6.70944E-01	+/- 1.4E-03
Phase delay (usec)	4.84466869972E+03		Apriori clockrate (us/s)		-3.9999999E-07		Resid phdelay (usec)		2.84353E-06	+/- 6.0E-07
Delay rate (us/s)	2.25303946108E-01		Apriori rate (us/s)		2.25314308635E-01		Resid rate (us/s)		-1.03625E-05	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.89125823816E-05		Resid phase (deg)		88.2	+/- 18.6

ph/seg (deg) 39.1 44.6 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.4 77.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.7 26.3 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.5 45.9 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
 b: az 293.2 el 60.3 pa 77.2 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -2093.780 -1371.729 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bn.W.53.1X1QEV

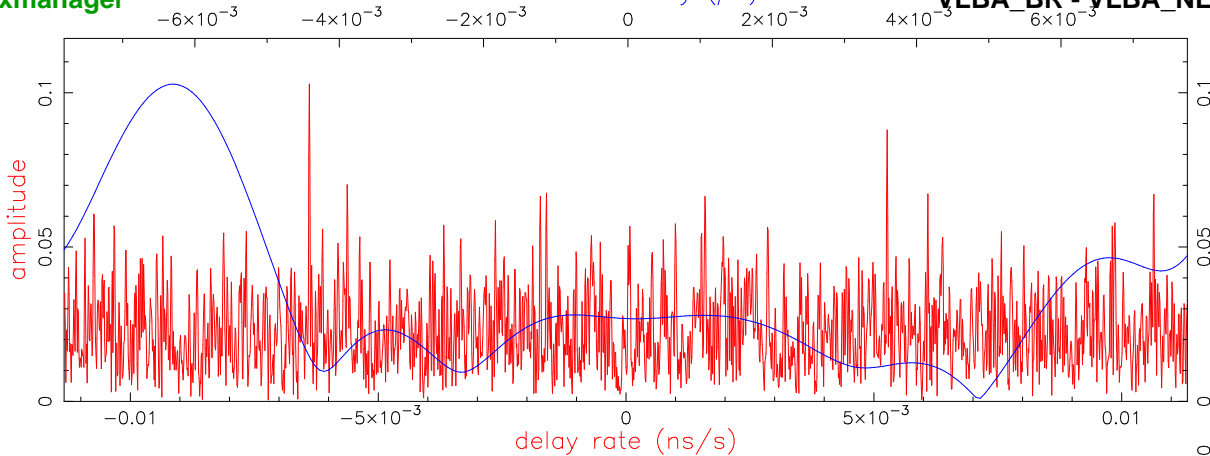
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bn

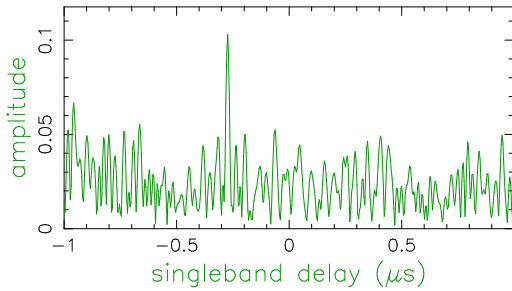
VLBA_BR - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

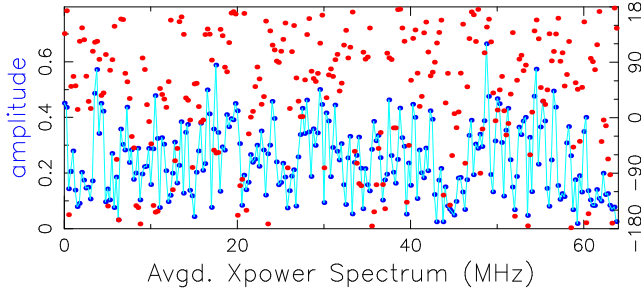


Fringe quality 0

SNR 5.7
Int time 418.452
Amp 0.118
Phase -99.8
PFD 8.9e-01
Delays (us)
SBD -0.273468
MBD -0.006304
Fringe rate (Hz)
-0.551242
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

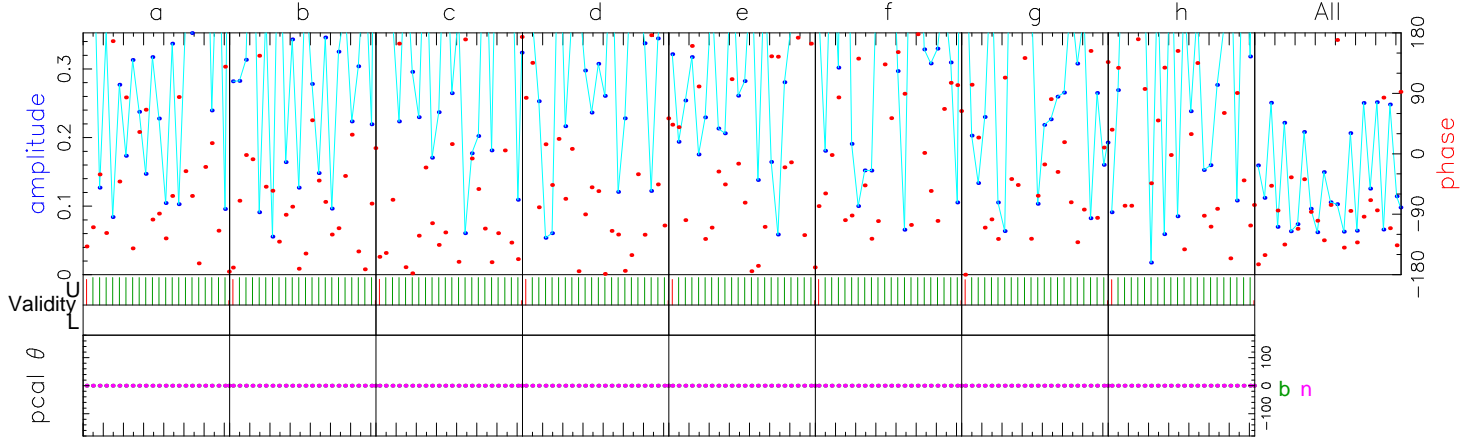


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133901
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-89.0	-82.1	-121.5	-92.5	-140.0	-95.2	-82.3	-88.0	Phase	-99.8		
	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	Ampl.	0.1		
	456.9	312.1	187.6	259.0	480.1	6.1	297.8	10.6	Sbd box	187.0		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
b	0	0	0	0	0	0	0	0	PC freqs			
n	0	0	0	0	0	0	0	0	PC freqs			
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
n	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec)(sbd)	4.84439676772E+03		Apriori delay (usec)		4.84466869687E+03		Resid mbdelay (usec)		-6.30415E-03	+/- 1.9E-04		
Sband delay (usec)	4.84439522837E+03		Apriori clock (usec)		-8.4734440E+00		Resid sbdelay (usec)		-2.73468E-01	+/- 1.5E-03		
Phase delay (usec)	4.84466869366E+03		Apriori clockrate (us/s)		-3.9999999E-07		Resid phdelay (usec)		-3.21748E-06	+/- 6.4E-07		
Delay rate (us/s)	2.25307909265E-01		Apriori rate (us/s)		2.25314308635E-01		Resid rate (us/s)		-6.39937E-06	+/- 2.7E-09		
Total phase (deg)			Apriori accel (us/s/s)		-1.89125823816E-05		Resid phase (deg)		-99.8	+/- 19.9		
	RMS	Theor.	Amplitude	0.118 +/- 0.020		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	56.3	47.8	Search (2048X32)	0.101		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	77.0	83.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	22.5	28.2	Inc. seg. avg.	0.118		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	50.8	49.2	Inc. frq. avg.	0.111		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 293.2 el 60.3 pa 77.2 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -2093.780 -1371.729 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bn.W.76.1X1QEV

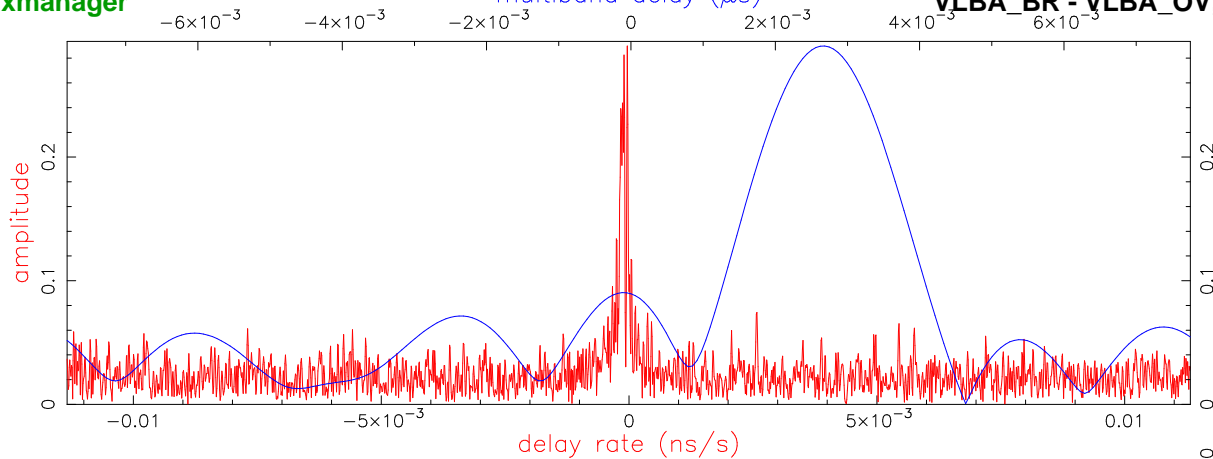
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bo

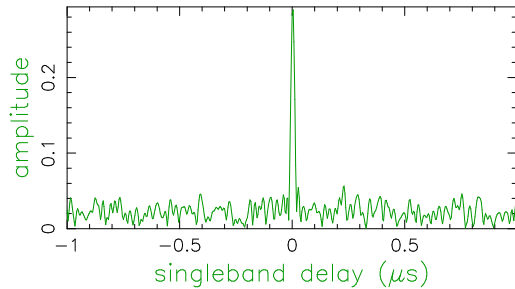
VLBA_BR - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

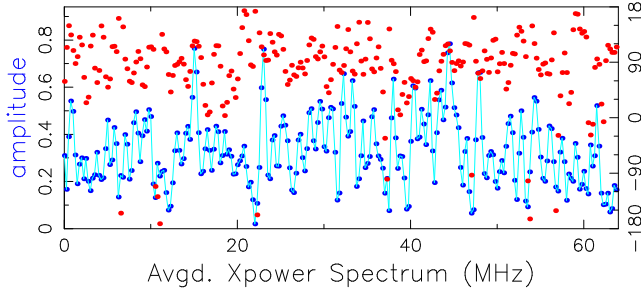


Fringe quality 9

SNR 16.4
 Int time 418.452
 Amp 0.294
 Phase 90.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.002400
 MBD 0.002635
 Fringe rate (Hz)
 -0.002740
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

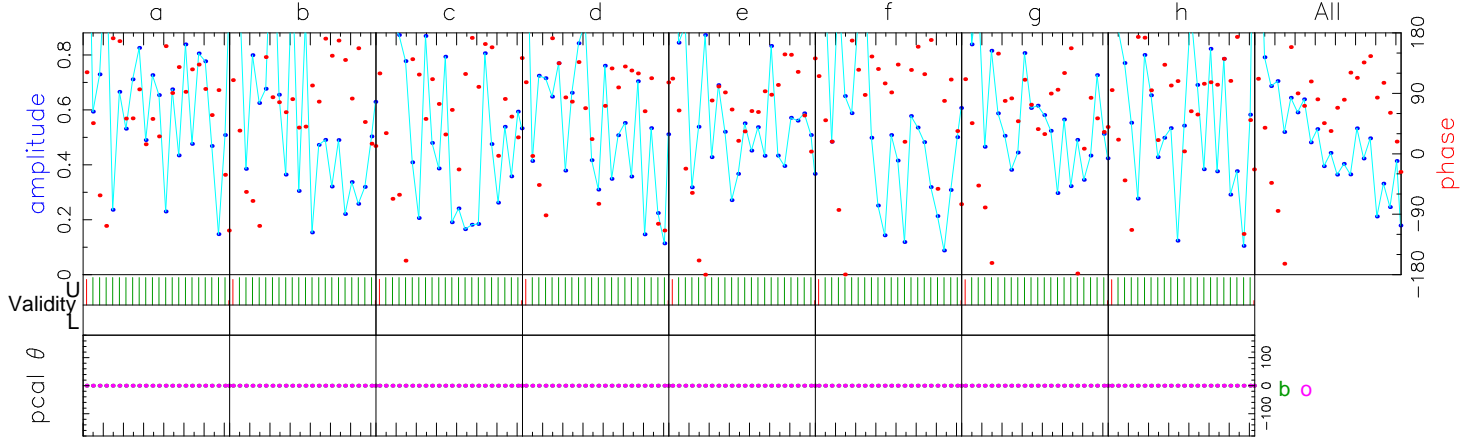


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133851
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

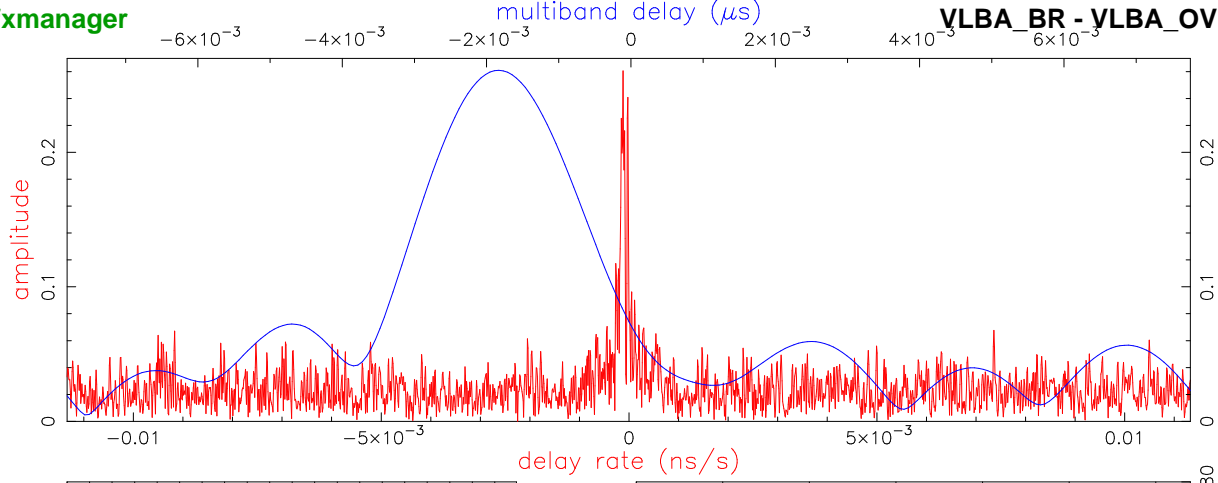
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
b	0	0	0	0	0	0	0	0	APs used			
o	0	0	0	0	0	0	0	0	PC freqs			
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
o	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
Group delay (usec)(sbd)		1.32663277896E+03				1.32663014393E+03			Resid mbdelay (usec)	2.63503E-03 +/- 6.6E-05		
Sband delay (usec)		1.32663254368E+03				-6.7444115E+00			Resid sbdelay (usec)	2.39975E-03 +/- 5.2E-04		
Phase delay (usec)		1.32663014685E+03				-4.5999999E-07			Resid phdelay (usec)	2.92558E-06 +/- 2.3E-07		
Delay rate (us/s)		1.05164607645E-01				1.05164639458E-01			Resid rate (us/s)	-3.18128E-08 +/- 9.3E-10		
Total phase (deg)			305.9			5.15710631731E-06			Resid phase (deg)	90.7 +/- 7.0		
	RMS	Theor.	Amplitude	0.294 +/- 0.018					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	63.6	16.7	Search (2048X32)	0.282					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	117.2	29.2	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	13.3	9.9	Inc. seg. avg.	0.506					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	15.1	17.2	Inc. frq. avg.	0.291					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -948.217 1290.875 simultaneous interpolator

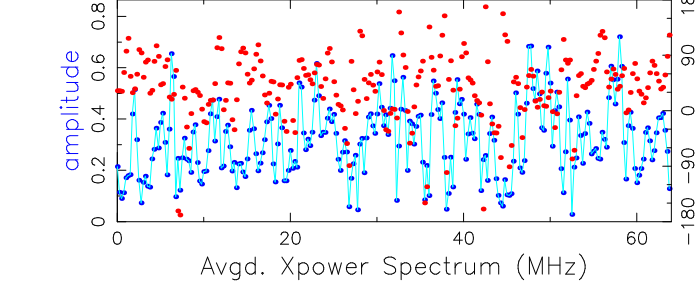
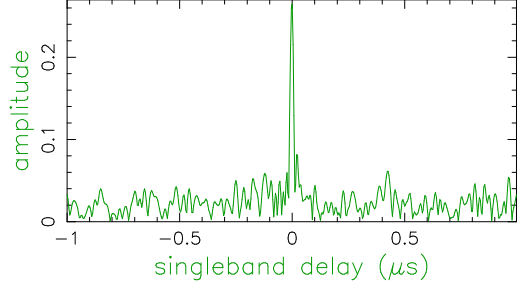
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bo.W.22.1X1QEV



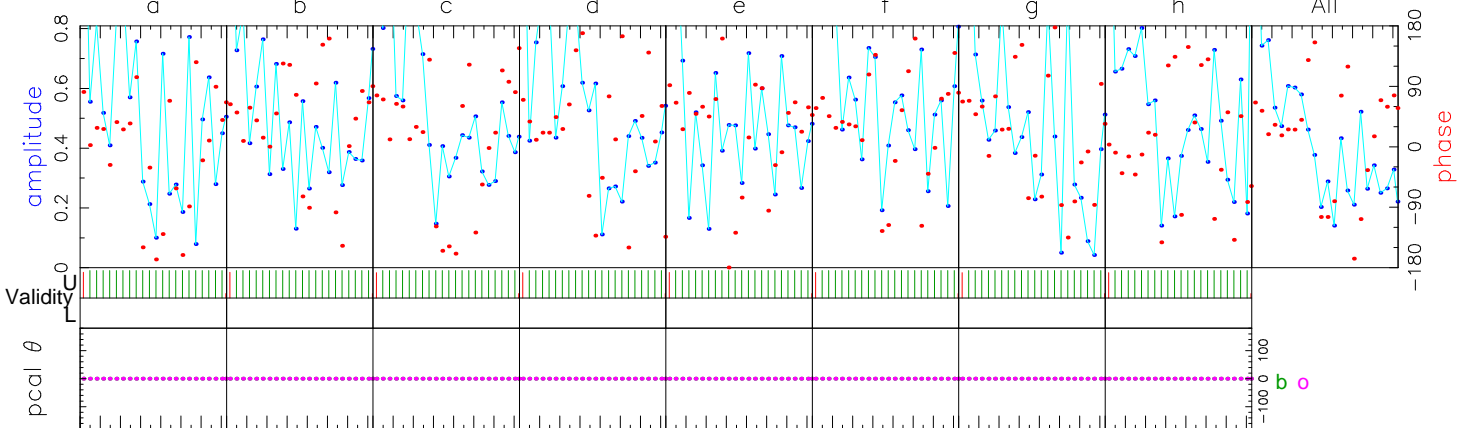
Fringe quality 8

SNR 15.1
Int time 418.452
Amp 0.270
Phase 47.0
PFD 1.2e-42
Delays (us)
SBD -0.001657
MBD -0.001769
Fringe rate (Hz)
-0.010854
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133848
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'59.161694"



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



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

Group delay (usec)(sbd)	1.32662837532E+03	Apriori delay (usec)	1.32663014393E+03	Resid mbdelay (usec)	-1.76861E-03	+/-	7.2E-05
Sband delay (usec)	1.32662848718E+03	Apriori clock (usec)	-6.7444115E+00	Resid sbdelay (usec)	-1.65675E-03	+/-	5.7E-04
Phase delay (usec)	1.32663014544E+03	Apriori clockrate (us/s)	-4.5999999E-07	Resid phdelay (usec)	1.51598E-06	+/-	2.4E-07
Delay rate (us/s)	1.05164513453E-01	Apriori rate (us/s)	1.05164639458E-01	Resid rate (us/s)	-1.26004E-07	+/-	1.0E-09
Total phase (deg)	262.2	Apriori accel (us/s/s)	5.15710631731E-06	Resid phase (deg)	47.0	+/-	7.6

ph/seg (deg)	80.9	RMS	18.2	Theor.	18.2	Amplitude	0.270 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	125.2	Search (2048X32)	0.251	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	24.7	Inc. seg. avg.	0.435	Inc. frq. avg.	0.273	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	13.4	Inc. frq. avg.	0.273	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 293.2 el 60.3 pa 77.2 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -948.217 1290.875 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bo.W.4.1X1QEV

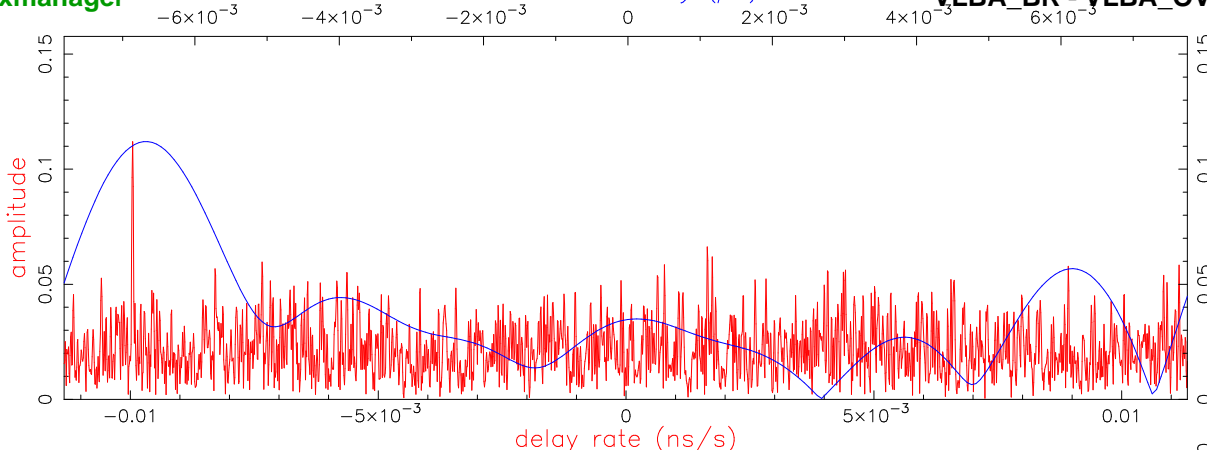
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

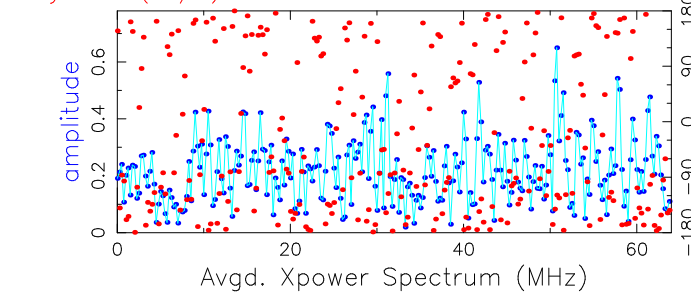
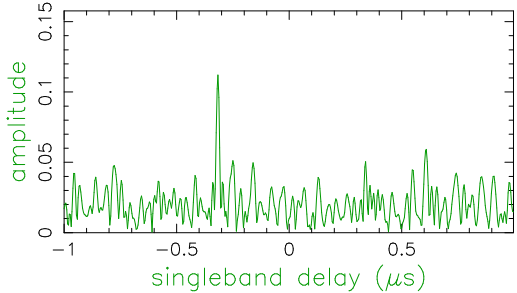
NRAO150.1X1QEV, No0120, bo

VLBA_BR - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

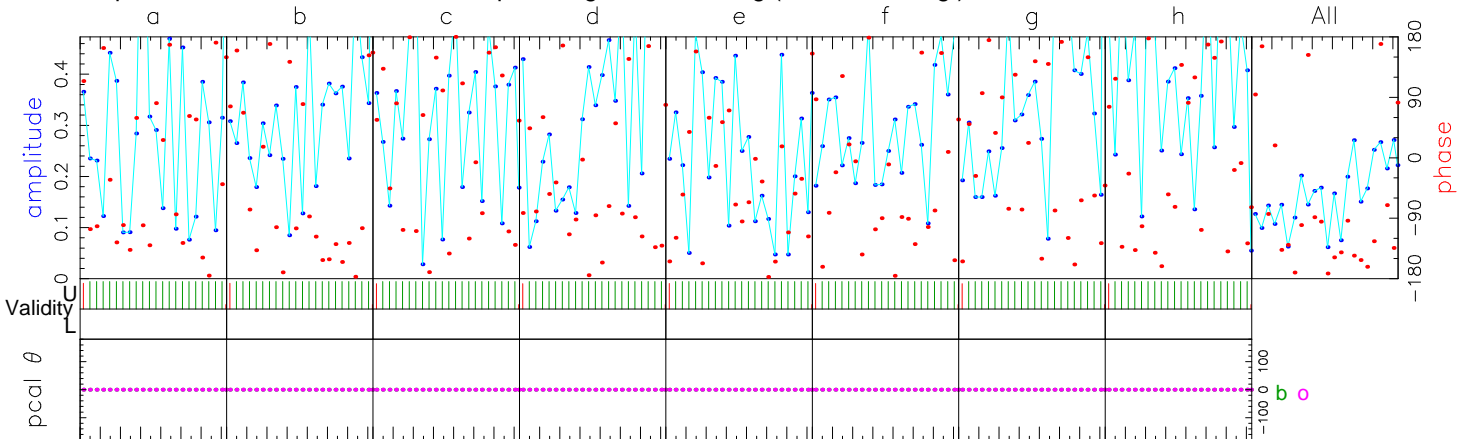


Fringe quality 0
 SNR 6.3
 Int time 418.452
 Amp 0.158
 Phase -134.7
 PFD 9.0e-02
 Delays (us)
 SBD -0.316872
 MBD -0.006701
 Fringe rate (Hz)
 -0.858190
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133856
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"



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
	-129.6	-146.9	-167.9	-112.4	-61.5	-123.6	-134.2	-151.2	Phase	-134.7
	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.2
	13.3	14.4	486.8	374.4	85.7	415.5	182.0	193.6	Sbd box	175.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.32631094336E+03		Apriori delay (usec)		1.32663014393E+03		Resid mbdelay (usec)		-6.70056E-03	+/- 1.7E-04
Sband delay (usec)	1.32631327218E+03		Apriori clock (usec)		-6.7444115E+00		Resid sbdelay (usec)		-3.16872E-01	+/- 1.4E-03
Phase delay (usec)	1.32663013958E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-4.34373E-06	+/- 5.9E-07
Delay rate (us/s)	1.05154676726E-01		Apriori rate (us/s)		1.05164639458E-01		Resid rate (us/s)		-9.96273E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.15710631731E-06		Resid phase (deg)		-134.7	+/- 18.3

ph/seg (deg) 57.2 43.8 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.2 76.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.4 25.8 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.2 45.1 Inc. frq. avg. 0.159 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -948.217 1290.875 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bo.W.45.1X1QEV

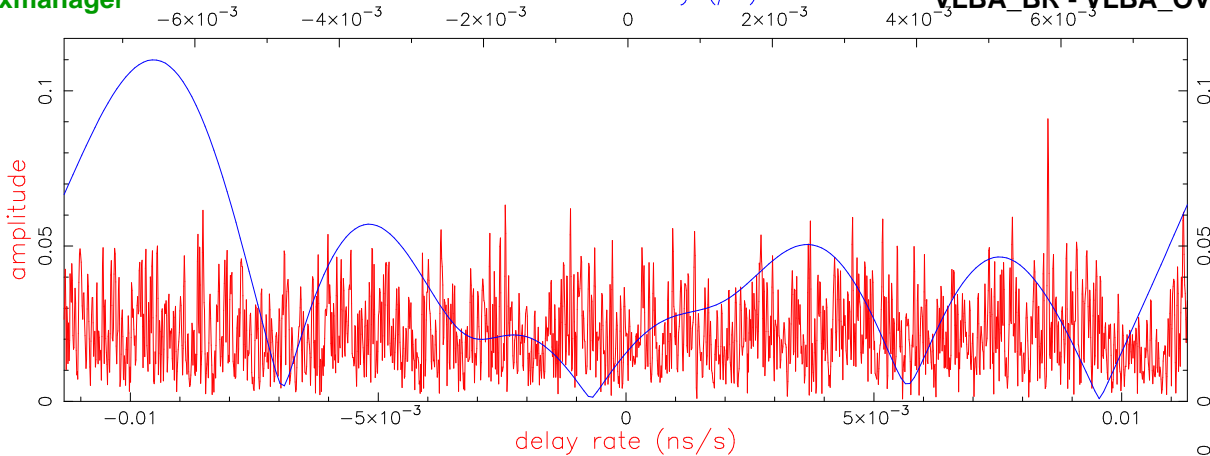
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bo

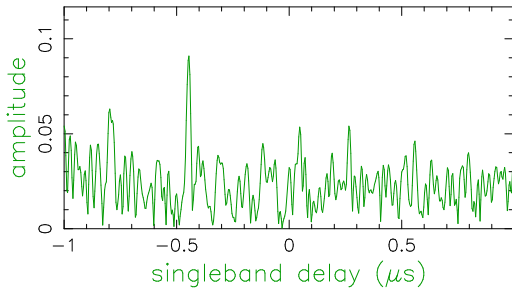
VLBA_BR - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

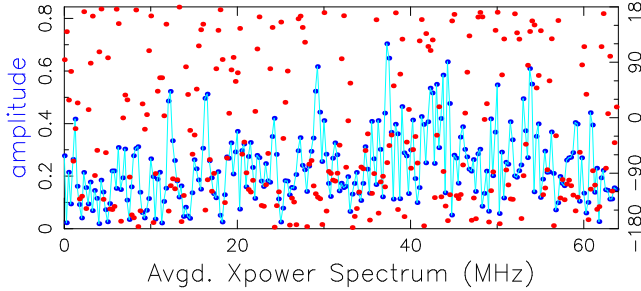


Fringe quality 0

SNR 5.1
 Int time 418.452
 Amp 0.117
 Phase 16.9
 PFD 1.0e+00
 Delays (us)
 SBD -0.446477
 MBD 0.008301
 Fringe rate (Hz)
 0.734936
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

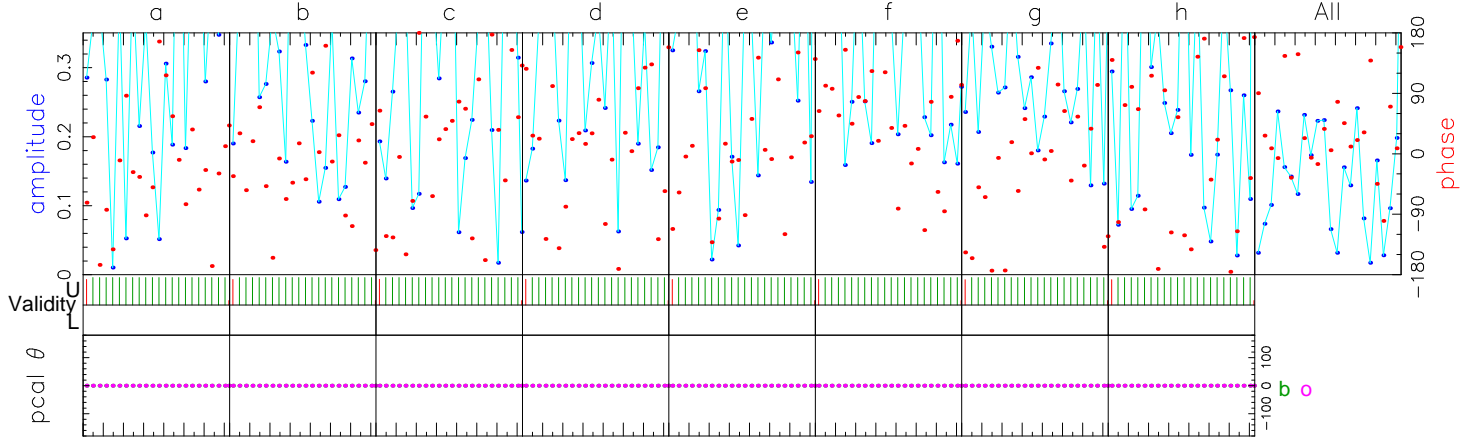


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133900
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-21.9	-10.1	50.6	24.7	7.7	54.4	13.7	163.3	Phase	16.9
	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	56.4	143.4	114.5	51.1	7.2	143.6	241.5	45.0	Sbd box	142.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.32618531971E+03		Apriori delay (usec)		1.32663014393E+03		Resid mbdelay (usec)		8.30078E-03	+/- 2.1E-04
Sband delay (usec)	1.32618366693E+03		Apriori clock (usec)		-6.7444115E+00		Resid sbdelay (usec)		-4.46477E-01	+/- 1.7E-03
Phase delay (usec)	1.32663014447E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		5.45939E-07	+/- 7.2E-07
Delay rate (us/s)	1.05173171337E-01		Apriori rate (us/s)		1.05164639458E-01		Resid rate (us/s)		8.53188E-06	+/- 3.0E-09
Total phase (deg)	232.1		Apriori accel (us/s/s)		5.15710631731E-06		Resid phase (deg)		16.9	+/- 22.4

	RMS	Theor.	Amplitude	0.117 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	63.0	53.7	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	99.5	93.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	66.3	31.7	Inc. seg. avg.	0.121	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	66.6	55.3	Inc. frq. avg.	0.142	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

b: az 293.2 el 60.3 pa 77.2 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -948.217 1290.875 simultaneous interpolator

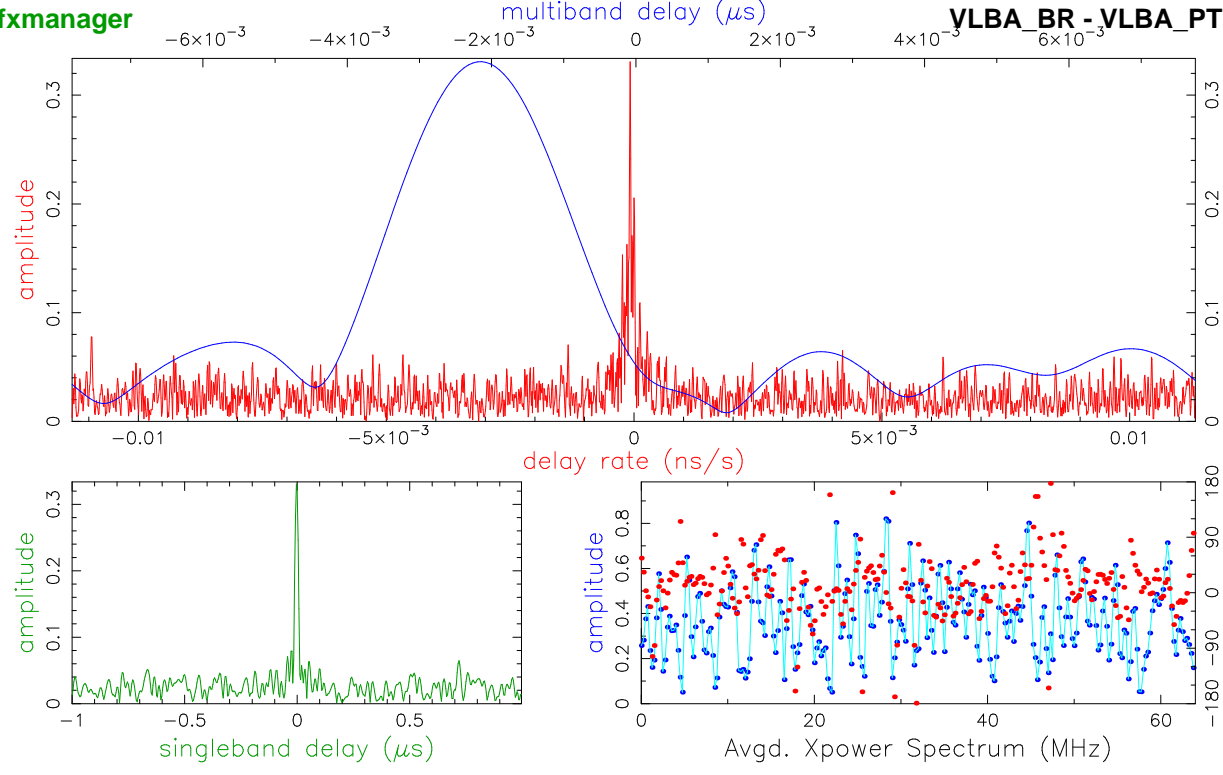
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bo.W.65.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

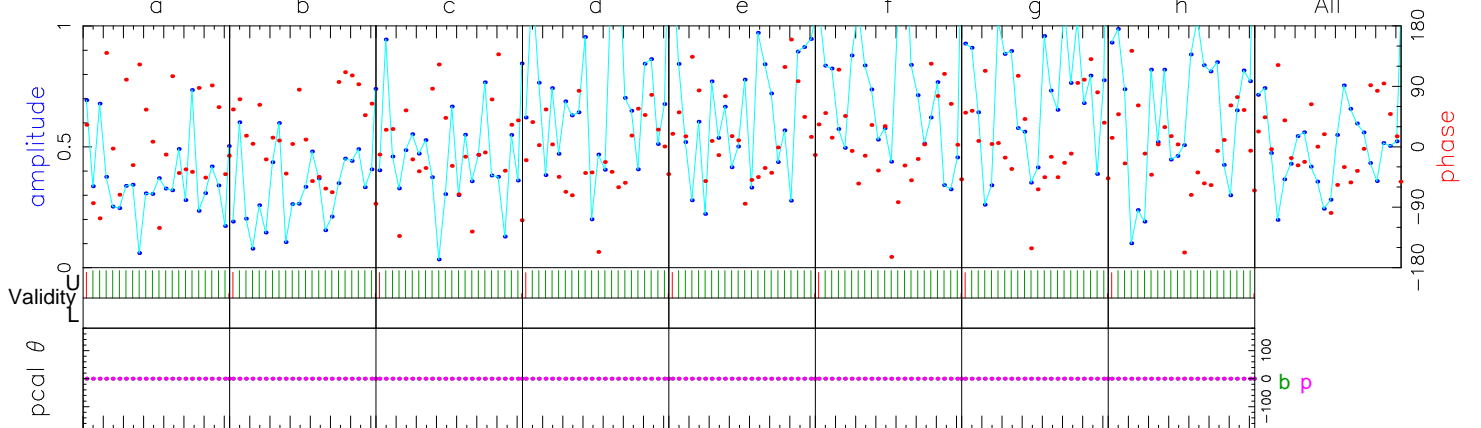
NRAO150.1X1QEV, No0120, bp

VLBA_BR - VLBA_PT, fgroup W, pol LL



Fringe quality 9
 SNR 18.7
 Int time 418.452
 Amp 0.334
 Phase 5.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002715
 MBD -0.002124
 Fringe rate (Hz) -0.006796
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133849
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-9.6	38.5	2.4	-8.9	16.0	3.4	16.6	-5.4		5.3
	0.1	0.2	0.3	0.5	0.4	0.4	0.4	0.4	Ampl.	0.3
	116.8	256.8	256.2	256.3	256.9	256.4	255.9	255.6	Sbd box	256.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.32723363450E+03		Apriori delay (usec)		3.32723575881E+03		Resid mbdelay (usec)		-2.12432E-03	+/- 5.8E-05
Sband delay (usec)	3.32723304356E+03		Apriori clock (usec)		-8.5206795E+00		Resid sbdelay (usec)		-2.71525E-03	+/- 4.6E-04
Phase delay (usec)	3.32723575899E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		1.70772E-07	+/- 2.0E-07
Delay rate (us/s)	2.11382123549E-01		Apriori rate (us/s)		2.11382202438E-01		Resid rate (us/s)		-7.88894E-08	+/- 8.2E-10
Total phase (deg)	100.4		Apriori accel (us/s/s)		-1.86122475254E-06		Resid phase (deg)		5.3	+/- 6.1

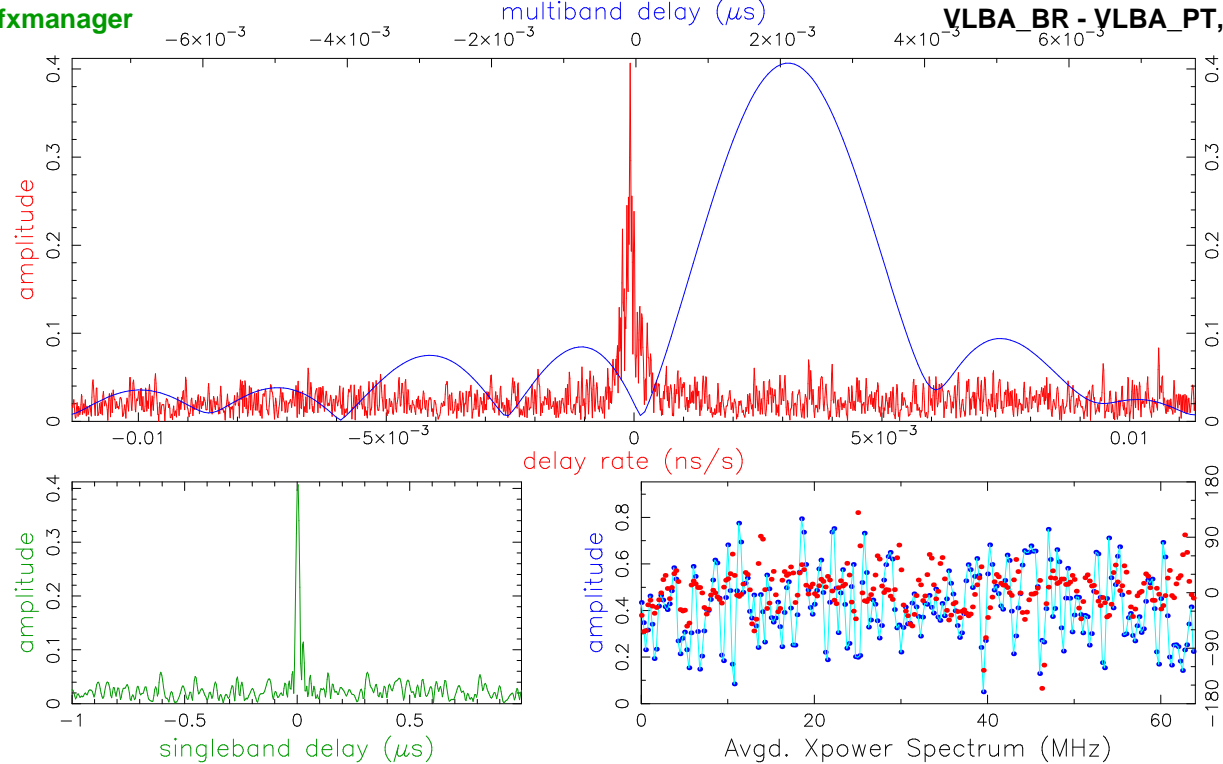
ph/seg (deg) 55.3 14.7 Search (2048X32) 0.325 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.9 25.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.8 8.7 Inc. seg. avg. 0.478 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.1 15.1 Inc. frq. avg. 0.336 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -1931.174 852.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bp.W.13.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

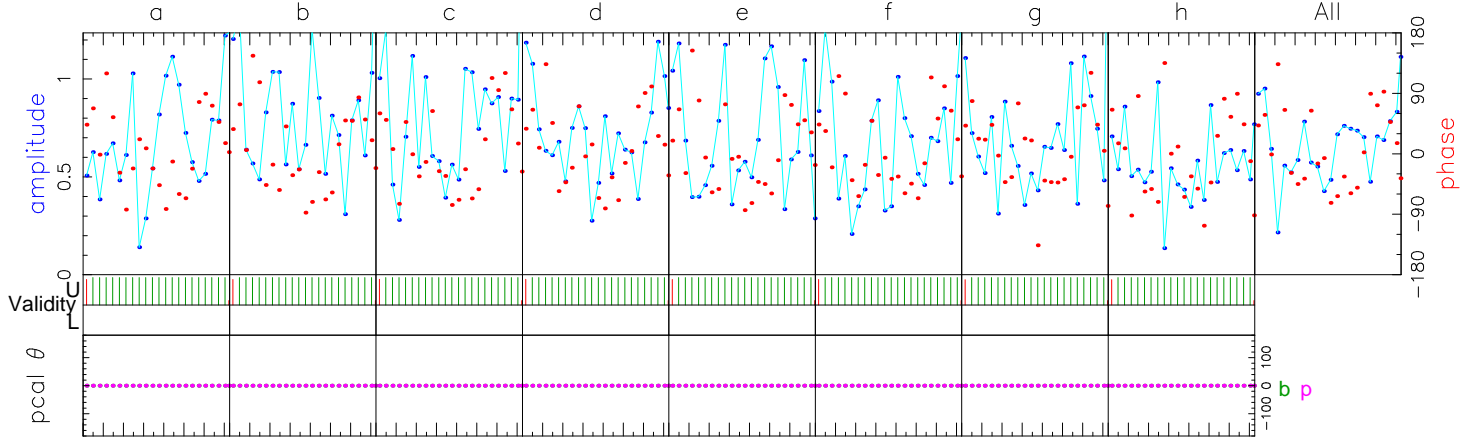
NRAO150.1X1QEV, No0120, bp

VLBA_BR - VLBA_PT, fgroup W, pol RR



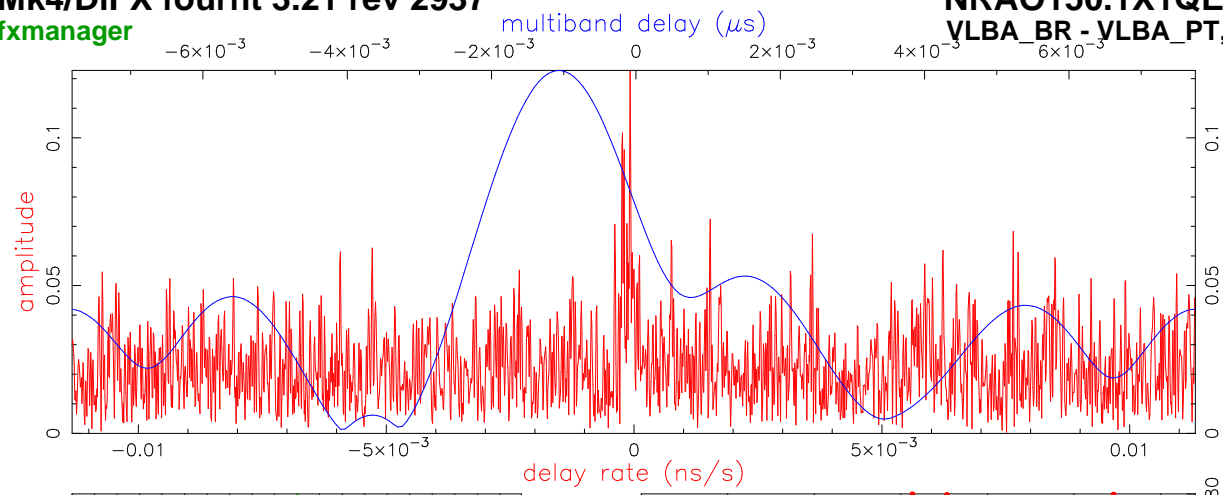
Fringe quality 9
 SNR 23.1
 Int time 418.452
 Amp 0.412
 Phase 6.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.002448
 MBD 0.002073
 Fringe rate (Hz)
 -0.006815
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133853
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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

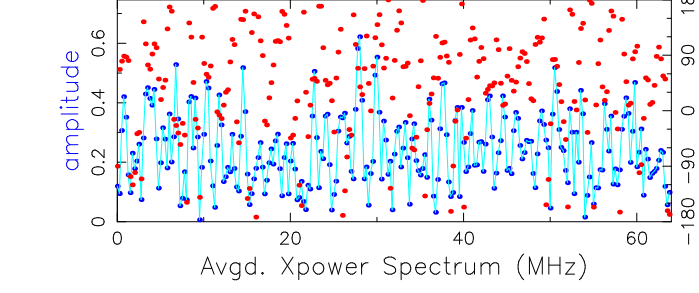
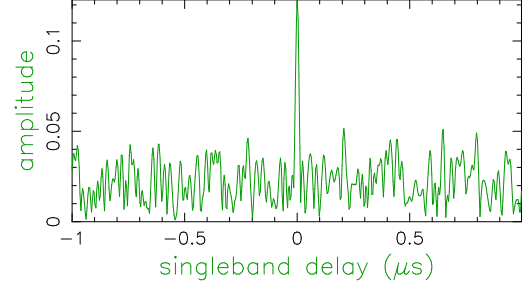


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-1.5	-0.3	12.1	15.8	3.6	10.0	15.8	-4.8		6.8
	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3		0.4
	257.3	257.5	257.7	257.7	257.6	257.3	257.5	257.8		257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	3.32723783203E+03		Apriori delay (usec)		3.32723575881E+03		Resid mbdelay (usec)		2.07321E-03	+/- 4.7E-05
Sband delay (usec)	3.32723820731E+03		Apriori clock (usec)		-8.5206795E+00		Resid sbdelay (usec)		2.44850E-03	+/- 3.7E-04
Phase delay (usec)	3.32723575903E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		2.19156E-07	+/- 1.6E-07
Delay rate (us/s)	2.11382123321E-01		Apriori rate (us/s)		2.11382202438E-01		Resid rate (us/s)		-7.91175E-08	+/- 6.6E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.86122475254E-06		Resid phase (deg)		6.8	+/- 5.0

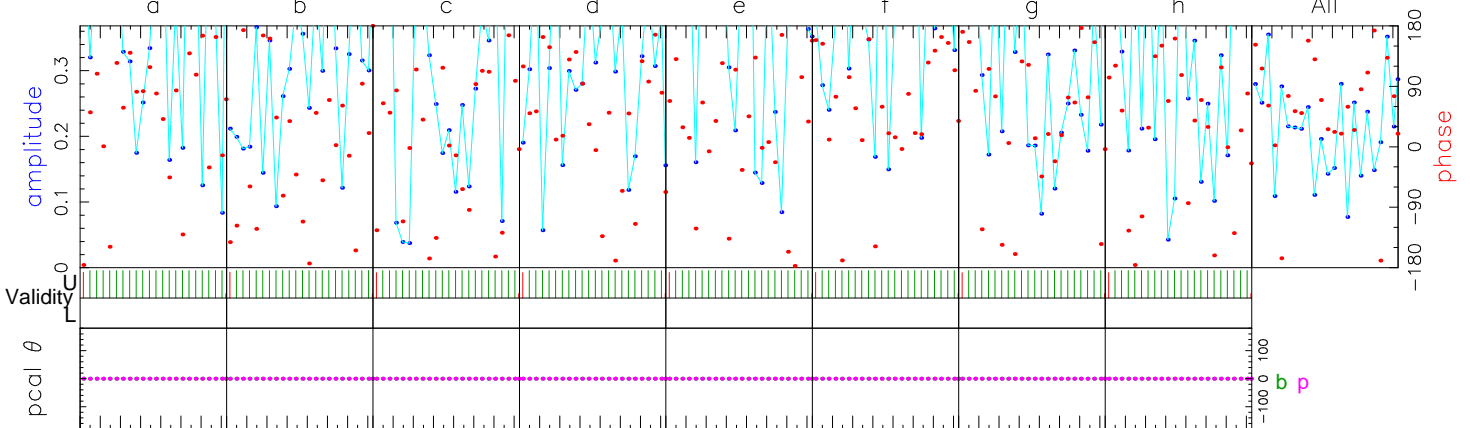
ph/seg (deg) 57.8 11.9 Search (2048X32) 0.397 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.3 20.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.8 7.0 Inc. seg. avg. 0.642 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.2 12.3 Inc. frq. avg. 0.407 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -1931.174 852.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bp.W.34.1X1QEV



Fringe quality 0
SNR 6.9
Int time 418.452
Amp 0.123
Phase 89.7
PFD 1.9e-03
Delays (us)
SBD 0.000150
MBD -0.001064
Fringe rate (Hz)
-0.006699
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133857
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'59.161694"



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

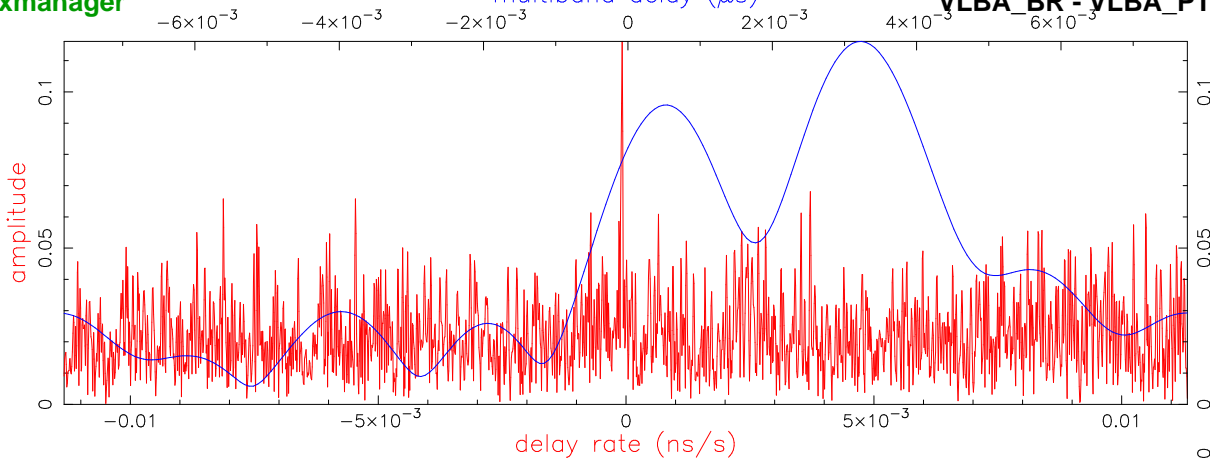


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0	Phase	89.7
p	0	0	0	0	0	0	0	0	Ampl.	0.1
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
									PC amp	
Group delay (usec)(sbd)	3.32723469456E+03		Apriori delay (usec)		3.32723575881E+03		Resid mbdelay (usec)		-1.06425E-03	+/- 1.6E-04
Sband delay (usec)	3.32723590881E+03		Apriori clock (usec)		-8.5206795E+00		Resid sbdelay (usec)		1.50000E-04	+/- 1.3E-03
Phase delay (usec)	3.32723576171E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		2.89416E-06	+/- 5.4E-07
Delay rate (us/s)	2.11382124666E-01		Apriori rate (us/s)		2.11382202438E-01		Resid rate (us/s)		-7.77720E-08	+/- 2.2E-09
Total phase (deg)	184.9		Apriori accel (us/s/s)		-1.86122475254E-06		Resid phase (deg)		89.7	+/- 16.7

	RMS	Theor.	Amplitude	0.123 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.3	40.0	Search (2048X32)	0.122	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	93.4	69.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	54.7	23.6	Inc. seg. avg.	0.170	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.5	41.2	Inc. frq. avg.	0.124	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

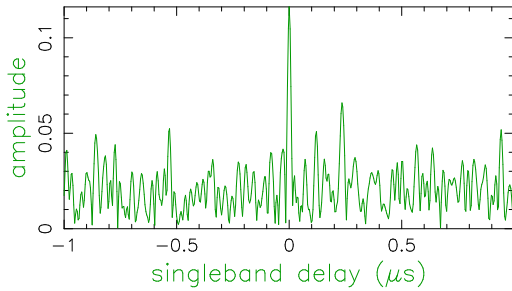
b: az 293.2 el 60.3 pa 77.2 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -1931.174 852.490 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bp.W.56.1X1QEV

multiband delay (μ s)

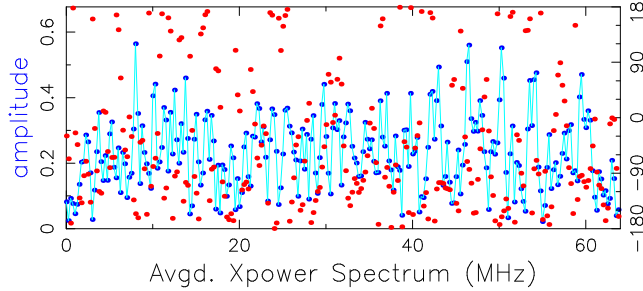


Fringe quality 0

SNR 6.5
 Int time 418.452
 Amp 0.116
 Phase -151.0
 PFD 2.2e-02
 Delays (us)
 SBD -0.000049
 MBD 0.003220
 Fringe rate (Hz)
 -0.007054
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

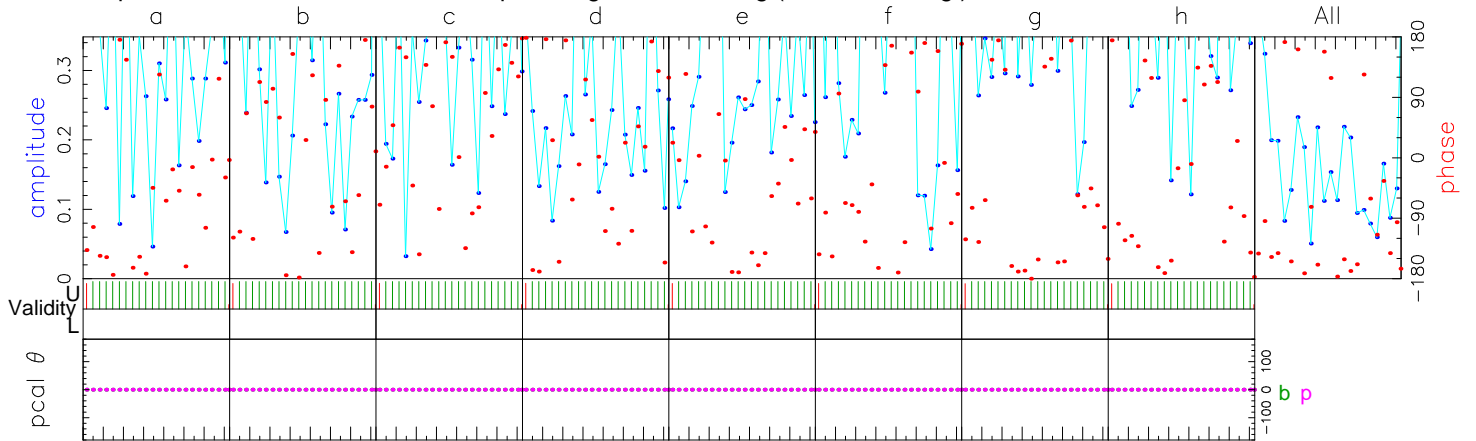


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133901
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.0	173.7	158.9	-174.7	-70.7	-141.2	-147.5	-164.4	Phase	-151.0
	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.2	Ampl.	0.1
	402.0	503.2	454.4	483.2	57.6	256.2	257.1	249.9	Sbd box	257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.32723897856E+03	Apriori delay (usec)	3.32723575881E+03	Resid mbdelay (usec)	3.21975E-03	+/-	1.7E-04
Sband delay (usec)	3.32723570981E+03	Apriori clock (usec)	-8.5206795E+00	Resid sbdelay (usec)	-4.90000E-05	+/-	1.3E-03
Phase delay (usec)	3.32723575394E+03	Apriori clockrate (us/s)	2.0000000E-08	Resid phdelay (usec)	-4.87008E-06	+/-	5.7E-07
Delay rate (us/s)	2.11382120551E-01	Apriori rate (us/s)	2.11382202438E-01	Resid rate (us/s)	-8.18873E-08	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.86122475254E-06	Resid phase (deg)	-151.0	+/-	17.6

ph/seg (deg)	51.6	Theor.	42.3	Amplitude	0.116 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	82.1		73.8	Search (2048X32)	0.111	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	43.9		24.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	67.2		43.5	Inc. seg. avg.	0.127	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.119	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 293.2 el 60.3 pa 77.2 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -1931.174 852.490 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bp.W.74.1X1QEV

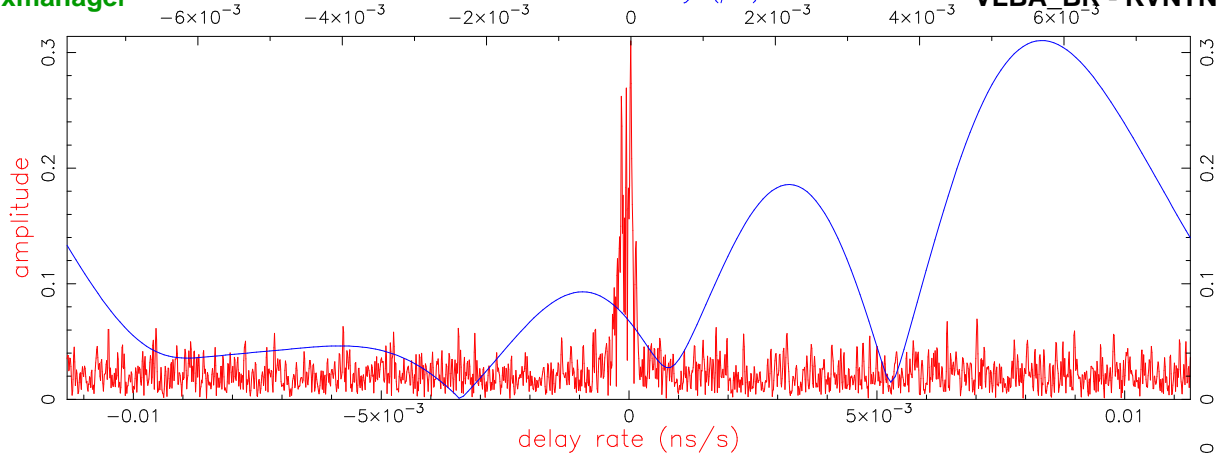
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bt

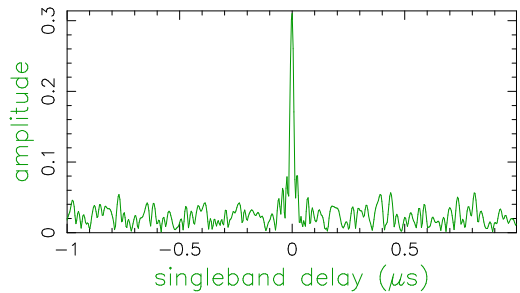
VLBA_BR - KVNTN, fgroup W, pol LL

multiband delay (μ s)

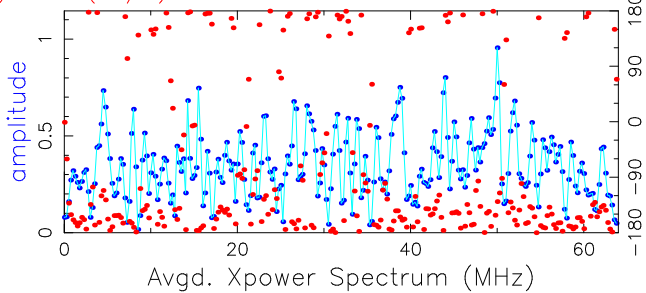


Fringe quality 7

SNR 17.6
 Int time 418.452
 Amp 0.314
 Phase 120.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.001411
 MBD 0.005621
 Fringe rate (Hz)
 0.002935
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

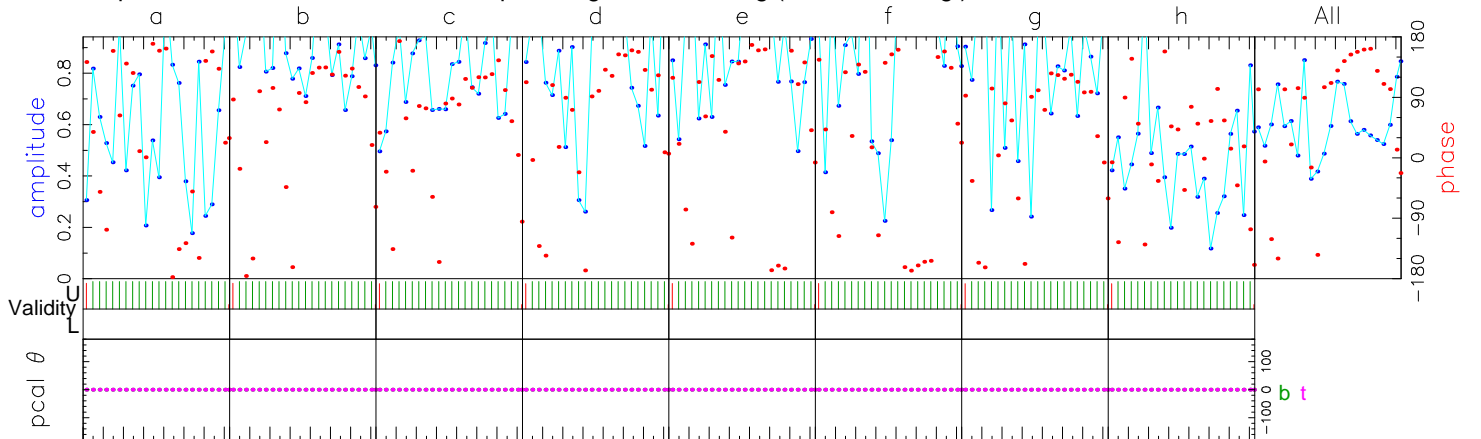


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133849
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec)(sbd)	4.80762747056E+03									
Sband delay (usec)	4.80762043787E+03									
Phase delay (usec)	4.80762185302E+03									
Delay rate (us/s)	-1.22899111922E+00									
Total phase (deg)		150.9								
Apriori delay (usec)					4.80762184912E+03				5.62144E-03	+/- 6.2E-05
Apriori clock (usec)					-2.7198067E+08				-1.41125E-03	+/- 4.9E-04
Apriori clockrate (us/s)					-4.9999999E-08				3.89865E-06	+/- 2.1E-07
Apriori rate (us/s)					-1.22899115329E+00				3.40717E-08	+/- 8.7E-10
Apriori accel (us/s/s)					-8.40081922651E-06				120.9	+/- 6.5
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)	67.2	15.6								
amp/seg (%)	98.9	27.3								
ph/frq (deg)	59.1	9.2								
amp/frq (%)	48.6	16.1								
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.314 +/- 0.018										
0.308										
0.000										
0.579										
0.368										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

b: az 293.2 el 60.3 pa 77.2 t: az 48.3 el 38.9 pa -82.3 u,v (fr/asec) 11167.241 134.959 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bt..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bt.W.16.1X1QEV

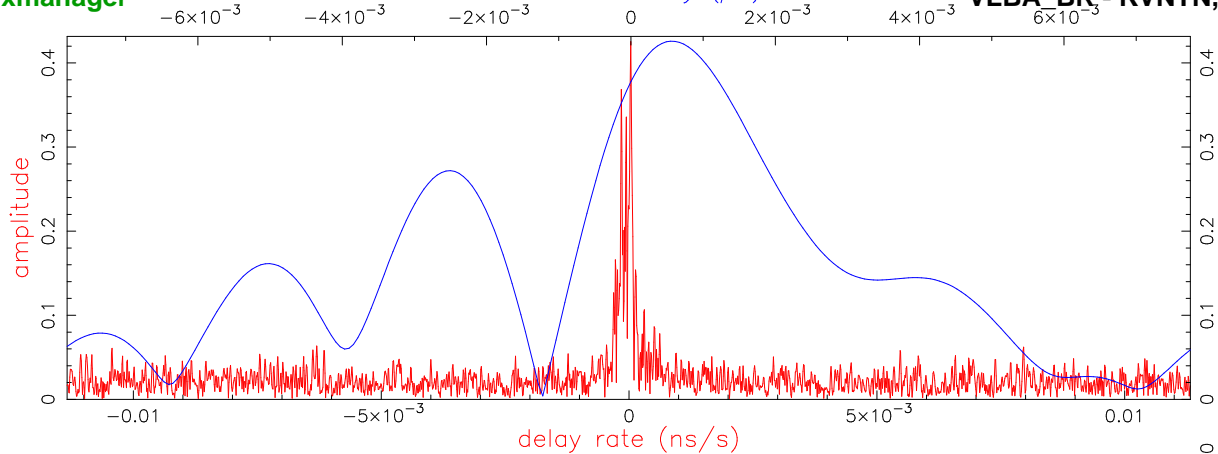
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bt

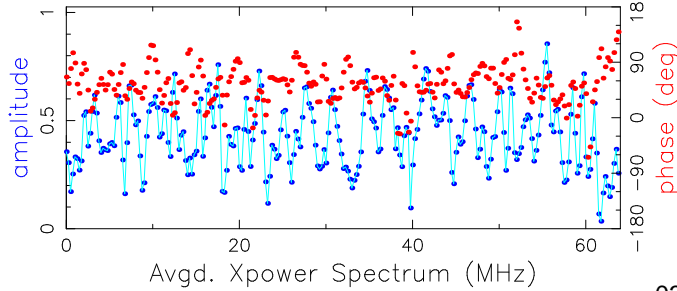
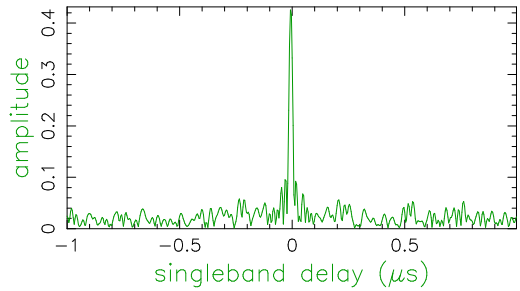
VLBA_BR - KVNTN, fgroup W, pol RR

multiband delay (μ s)



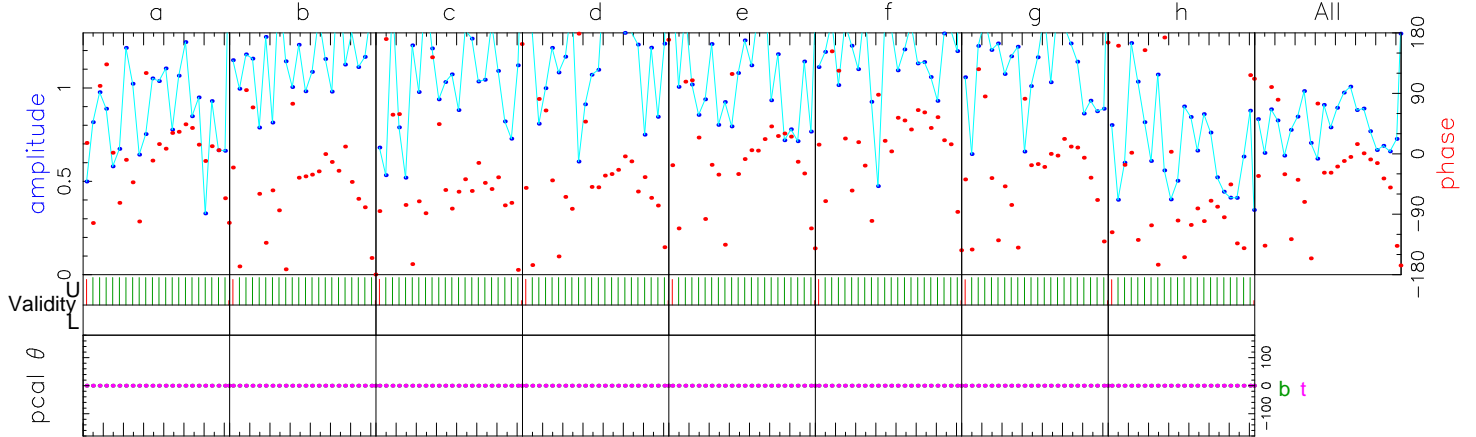
Fringe quality 6

SNR 24.1
 Int time 418.452
 Amp 0.432
 Phase -26.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.006298
 MBD 0.000635
 Fringe rate (Hz)
 0.003059
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133853
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	8.1	-44.0	-60.5	-48.7	0.0	21.9	-23.9	-115.9		
Sband delay (usec)	0.5	0.5	0.5	0.7	0.6	0.7	0.5	0.3		
Phase delay (usec)	253.6	255.2	255.8	255.1	255.8	255.4	254.8	253.0		
Delay rate (us/s)		-1.22899111779E+00								
Total phase (deg)			3.8							
Apriori delay (usec)						4.80762184912E+03			6.34560E-04	+/- 4.5E-05
Apriori clock (usec)						-2.7198067E+08			-6.29800E-03	+/- 3.6E-04
Apriori clockrate (us/s)						-4.9999999E-08			-8.44185E-07	+/- 1.5E-07
Apriori rate (us/s)						-1.22899115329E+00			3.55065E-08	+/- 6.3E-10
Apriori accel (us/s/s)						-8.40081922651E-06			-26.2	+/- 4.7
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
pcal θ										
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
pcal θ										
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
pcal θ										
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

b: az 293.2 el 60.3 pa 77.2 t: az 48.3 el 38.9 pa -82.3 u,v (fr/asec) 11167.241 134.959 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bt..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bt.W.32.1X1QEV

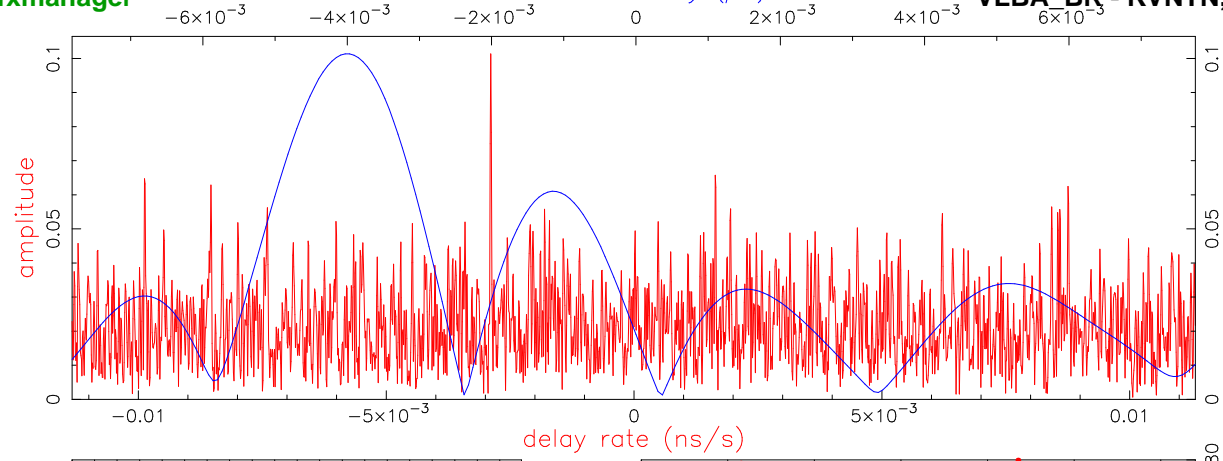
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bt

VLBA_BR - KVNTN, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.8

Int time 418.452

Amp 0.106

Phase -143.3

PFD 8.2e-01

Delays (us)

SBD 0.638484

MBD -0.003973

Fringe rate (Hz)

-0.249254

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211c

Exper # 16383

Yr:day 2021:117

Start 004500.00

Stop 005159.84

FRT 004830.00

Corr/FF/build

2021:303:225133

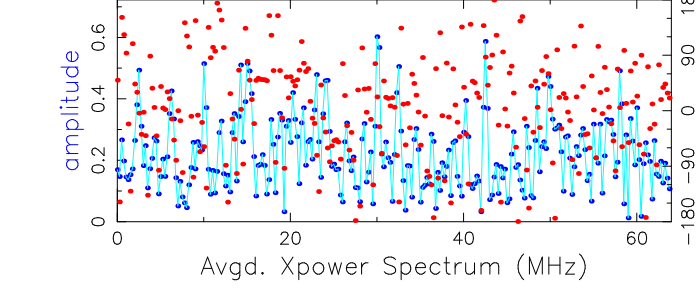
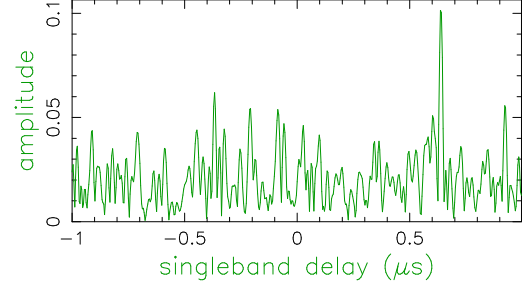
2021:304:133900

2021:252:122852

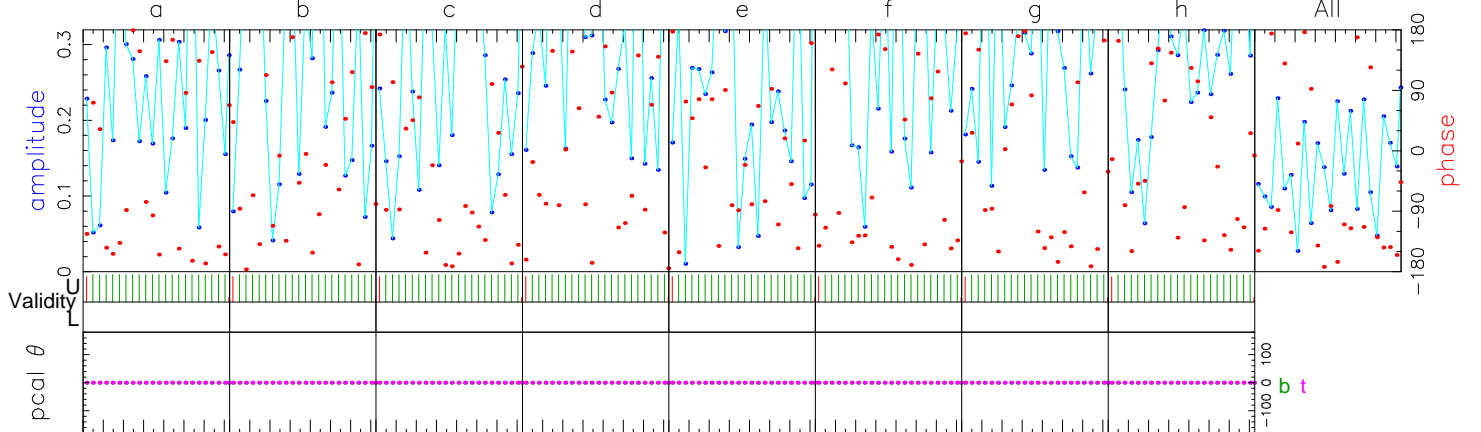
RA & Dec (J2000)

03h59m29.747267s

+50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-157.0	-120.4	-118.4	-168.9	-100.0	-165.5	-144.2	-131.8	Phase	-143.3
	0.2	0.1	0.1	0.1	0.0	0.2	0.2	0.1	Ampl.	0.1
	420.6	279.7	262.8	217.1	341.7	420.8	163.2	163.3	Sbd box	420.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.80825850130E+03				4.80762184912E+03				Resid mbdelay (usec)	-3.97282E-03 +/- 1.9E-04
Sband delay (usec)	4.80826033362E+03				-2.7198067E+00				Resid sbdelay (usec)	6.38484E-01 +/- 1.5E-03
Phase delay (usec)	4.80762184450E+03				-4.9999999E-08				Resid phdelay (usec)	-4.62136E-06 +/- 6.4E-07
Delay rate (us/s)	-1.22899404689E+00				-1.22899115329E+00				Resid rate (us/s)	-2.89360E-06 +/- 2.6E-09
Total phase (deg)			-113.3		-8.40081922651E-06				Resid phase (deg)	-143.3 +/- 19.8
	RMS	Theor.	Amplitude	0.106 +/- 0.018					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.3	47.4	Search (2048X32)	0.097					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	66.4	82.7	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	27.4	28.0	Inc. seg. avg.	0.105					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	43.0	48.8	Inc. frq. avg.	0.099					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

b: az 293.2 el 60.3 pa 77.2 t: az 48.3 el 38.9 pa -82.3 u,v (fr/asec) 11167.241 134.959 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bt..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bt.W.66.1X1QEV

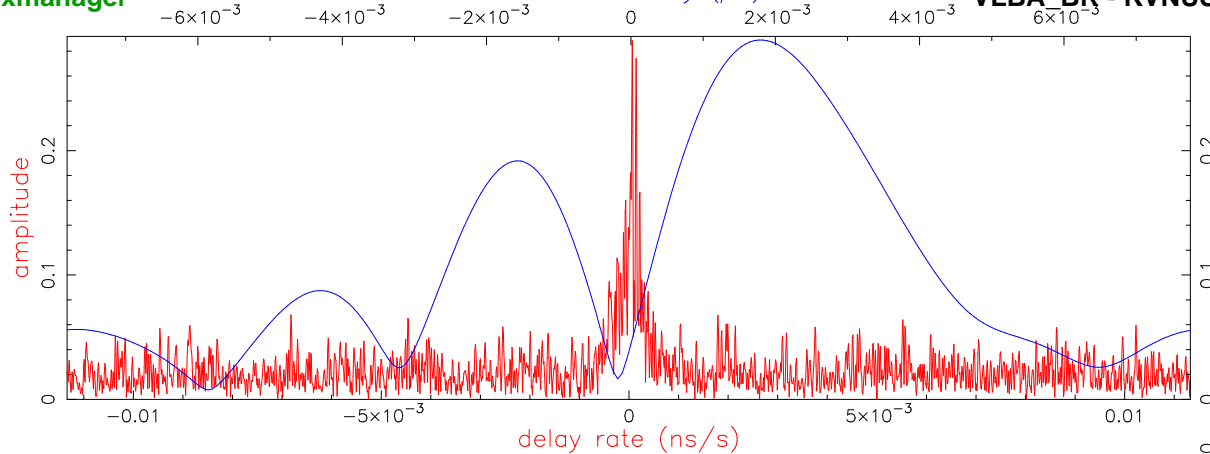
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bu

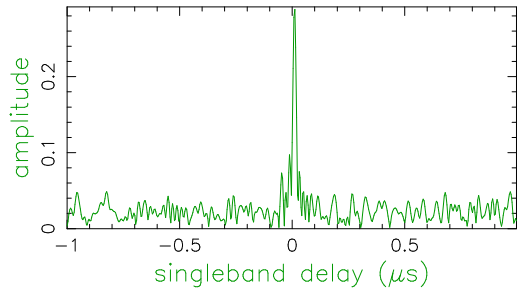
VLBA_BR - KVNUS, fgroup W, pol LL

multiband delay (μ s)

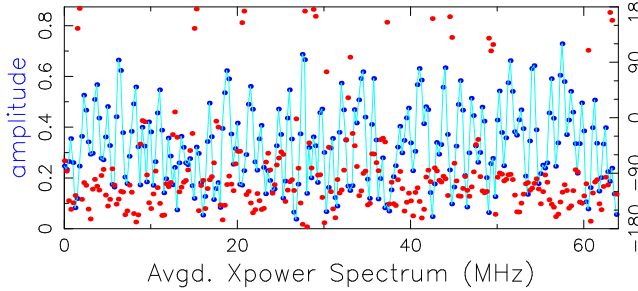


Fringe quality 7

SNR 16.3
 Int time 418.452
 Amp 0.292
 Phase -16.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.010425
 MBD 0.001709
 Fringe rate (Hz) 0.005287
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

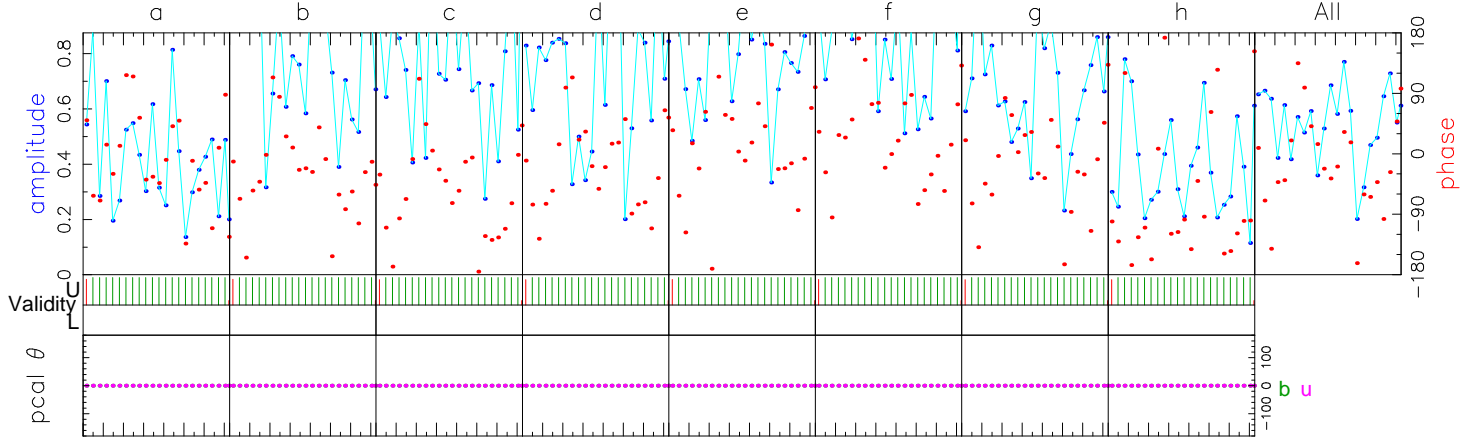


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133848
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.89511195686E+03									
Sband delay (usec)	3.89510504786E+03									
Phase delay (usec)	3.89509462232E+03									
Delay rate (us/s)	-1.19278794165E+00									
Total phase (deg)			276.0							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
amplitude										
phase										
Validity										
pcal θ										
Group delay (usec)										
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)										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
b: az 293.2 el 60.3 pa 77.2										
u: az 50.0 el 42.1 pa -83.3										
u,v (fr/asec) 10842.344 145.376										
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0120/bu..1X1QEV										
Output file: /Exps/c211c/v1/1234/No0120/bu.W.10.1X1QEV										

simultaneous interpolator

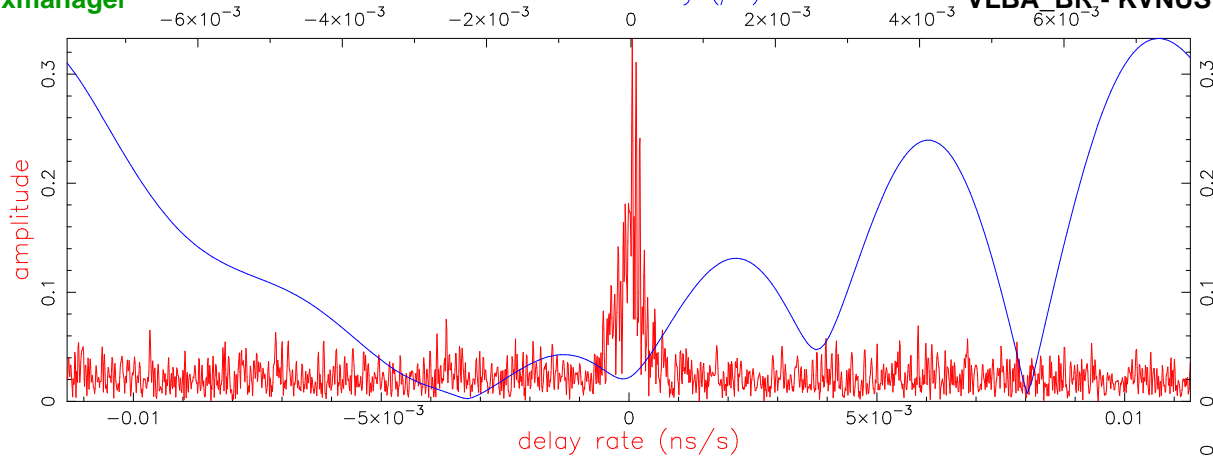
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, bu

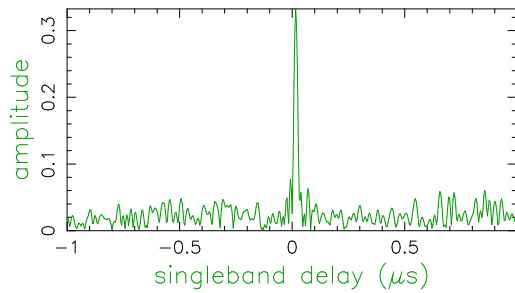
VLBA_BR- KVNUS, fgroup W, pol RR

multiband delay (μ s)

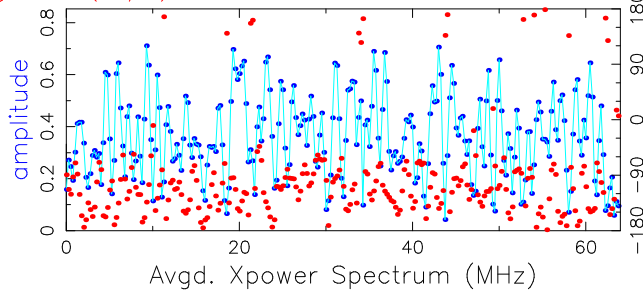


Fringe quality 7

SNR 18.6
 Int time 418.452
 Amp 0.333
 Phase -20.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.015806
 MBD 0.007320
 Fringe rate (Hz) 0.005380
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

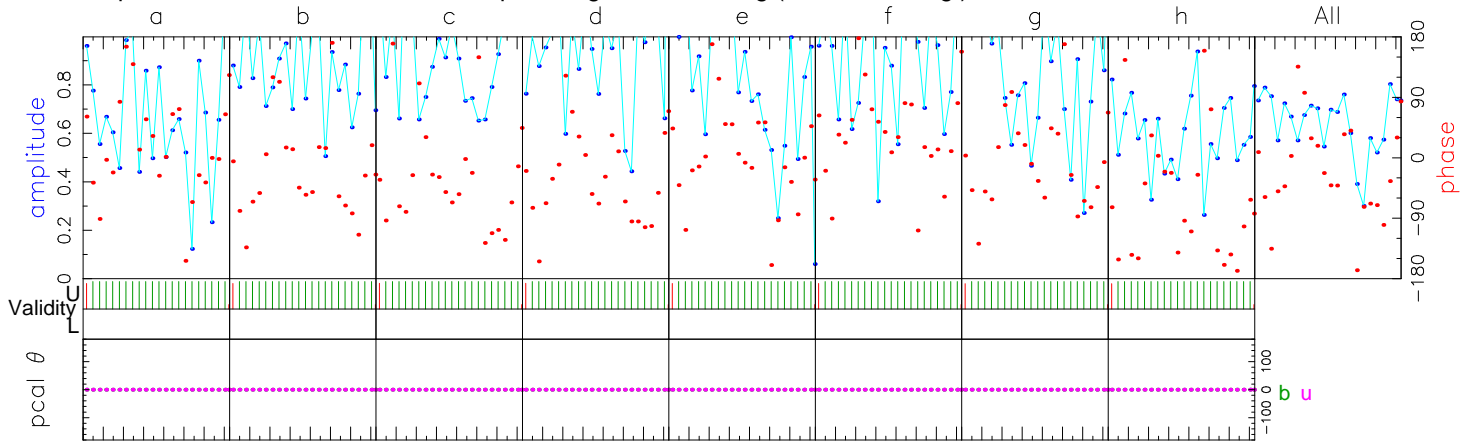


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133852
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	27.2	-36.4	-60.2	-35.9	8.4	39.9	-22.2	-104.1	Phase	-20.7
	0.3	0.5	0.5	0.5	0.4	0.5	0.3	0.3	Ampl.	0.4
	258.5	261.3	261.4	261.4	261.9	261.5	260.3	258.4	Sbd box	261.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.89511756758E+03		Apriori delay (usec)		3.89509462286E+03		Resid mbdelay (usec)		7.31971E-03	+/- 5.8E-05
Sband delay (usec)	3.89511042911E+03		Apriori clock (usec)		-1.7752867E+01		Resid sbdelay (usec)		1.58063E-02	+/- 4.6E-04
Phase delay (usec)	3.89509462220E+03		Apriori clockrate (us/s)		-1.2269999E-06		Resid phdelay (usec)		-6.66449E-07	+/- 2.0E-07
Delay rate (us/s)	-1.19278794057E+00		Apriori rate (us/s)		-1.19278800303E+00		Resid rate (us/s)		6.24523E-08	+/- 8.2E-10
Total phase (deg)	272.1		Apriori accel (us/s/s)		-6.47365586411E-06		Resid phase (deg)		-20.7	+/- 6.2

ph/seg (deg) 69.5 14.8 Search (2048X32) 0.319 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 100.0 25.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.3 8.7 Inc. seg. avg. 0.621 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.6 15.2 Inc. frq. avg. 0.427 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 293.2 el 60.3 pa 77.2 u: az 50.0 el 42.1 pa -83.3 u,v (fr/asec) 10842.344 145.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bu..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bu.W.30.1X1QEV

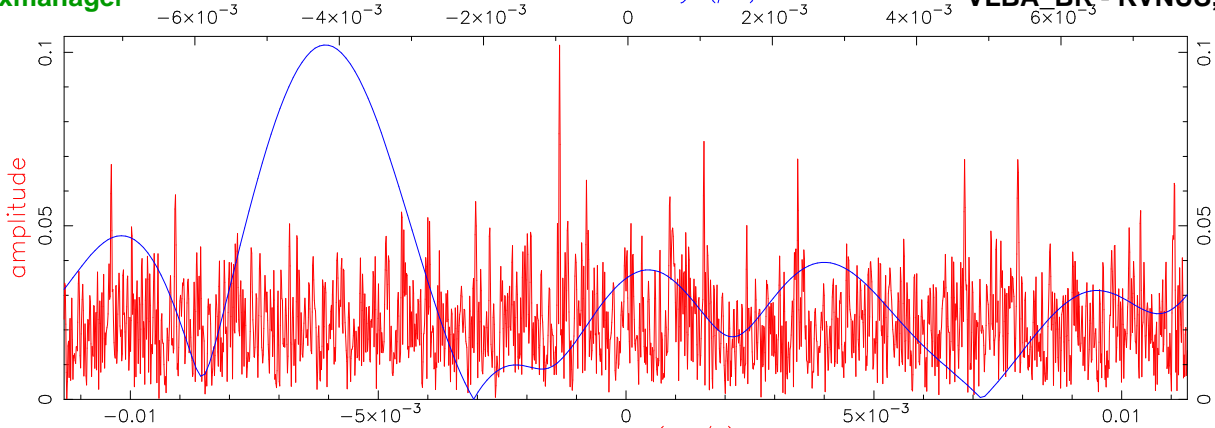
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

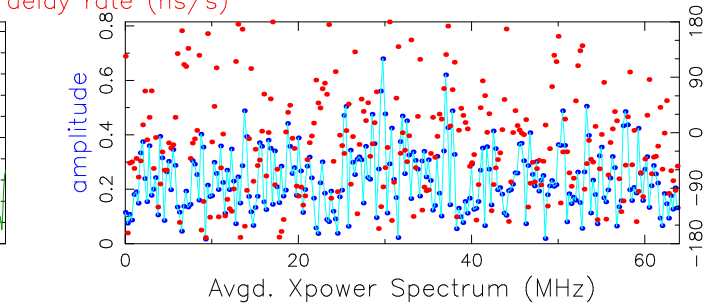
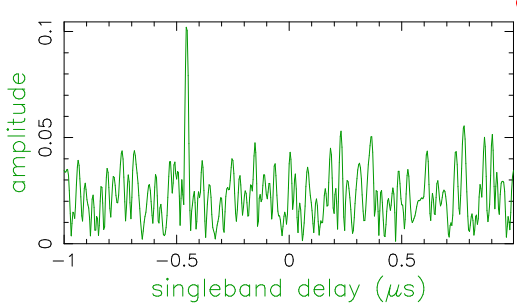
NRAO150.1X1QEV, No0120, bu

VLBA_BR - KVNUS, fgroup W, pol LR

multiband delay (μ s)

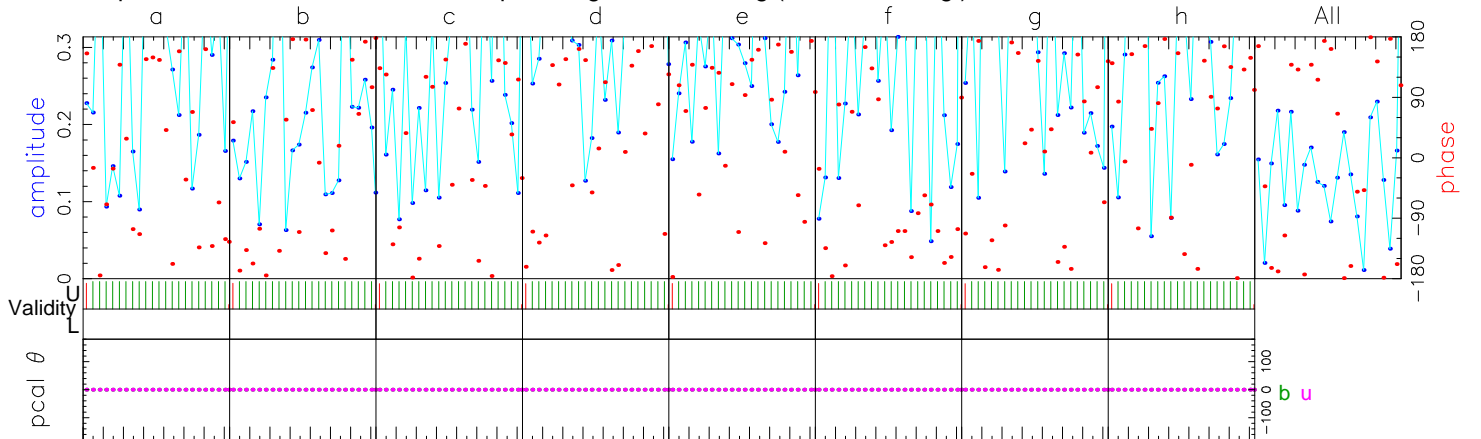


Fringe quality 0
 SNR 5.8
 Int time 418.452
 Amp 0.105
 Phase 168.2
 PFD 7.8e-01
 Delays (us)
 SBD -0.455378
 MBD -0.004142
 Fringe rate (Hz)
 -0.115553
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 004500.00
 Stop 005159.84
 FRT 004830.00
 Corr/FF/build
 2021:303:225133
 2021:304:133856
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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

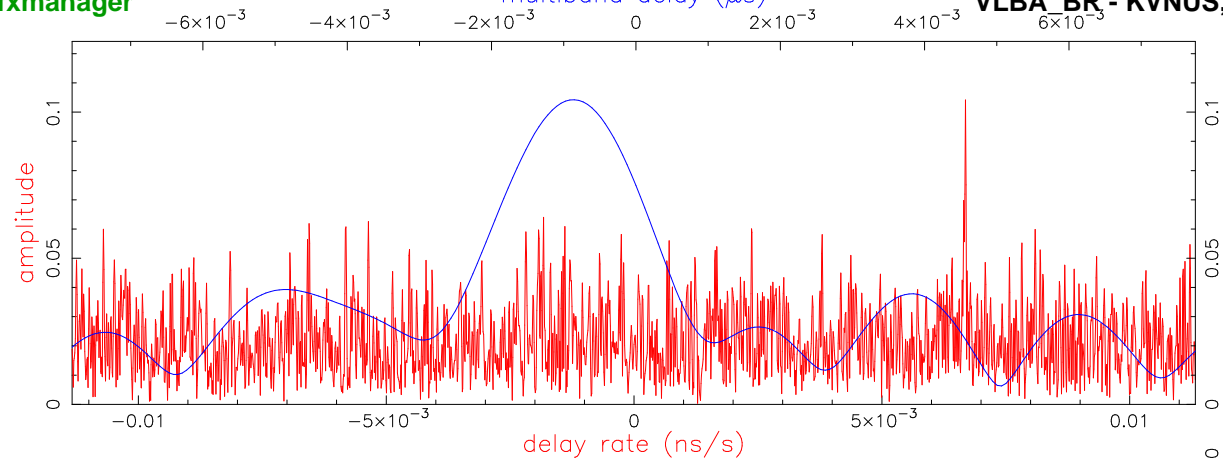


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	178.3	-177.7	140.9	166.2	145.8	-139.7	169.4	153.1	Phase	168.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	386.9	256.6	426.1	415.7	298.7	252.4	66.5	140.3	Sbd box	140.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.89463735595E+03		Apriori delay (usec)		3.89509462286E+03		Resid mbdelay (usec)		-4.14191E-03	+/- 1.9E-04
Sband delay (usec)	3.89463924486E+03		Apriori clock (usec)		-1.7752867E+01		Resid sbdelay (usec)		-4.55378E-01	+/- 1.5E-03
Phase delay (usec)	3.89509462829E+03		Apriori clockrate (us/s)		-1.2269999E-06		Resid phdelay (usec)		5.42506E-06	+/- 6.4E-07
Delay rate (us/s)	-1.19278934448E+00		Apriori rate (us/s)		-1.19278800303E+00		Resid rate (us/s)		-1.34145E-06	+/- 2.6E-09
Total phase (deg)	101.0		Apriori accel (us/s/s)		-6.47365586411E-06		Resid phase (deg)		168.2	+/- 19.7

	RMS	Theor.	Amplitude	0.105 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	64.1	47.2	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.6	82.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	27.4	27.9	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	35.2	48.6	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

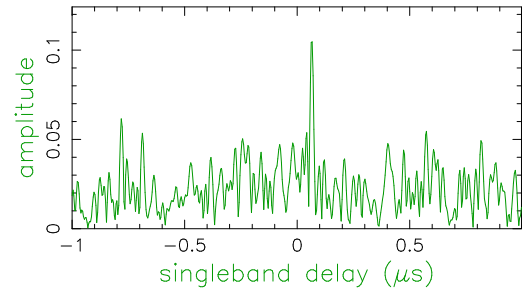
b: az 293.2 el 60.3 pa 77.2 u: az 50.0 el 42.1 pa -83.3 u,v (fr/asec) 10842.344 145.376 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bu..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bu.W.49.1X1QEV

multiband delay (μs)

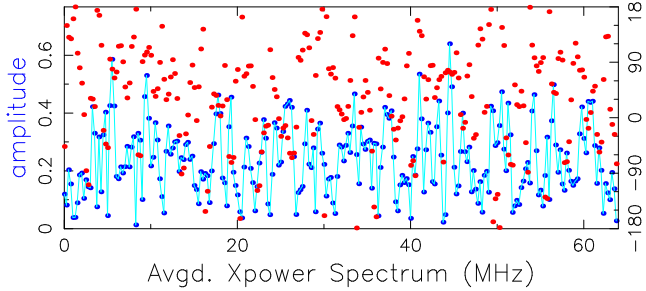


Fringe quality 0

SNR 6.0
Int time 418.452
Amp 0.124
Phase 81.5
PFD 4.1e-01
Delays (us)
SBD 0.064520
MBD -0.000818
Fringe rate (Hz)
0.576769
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

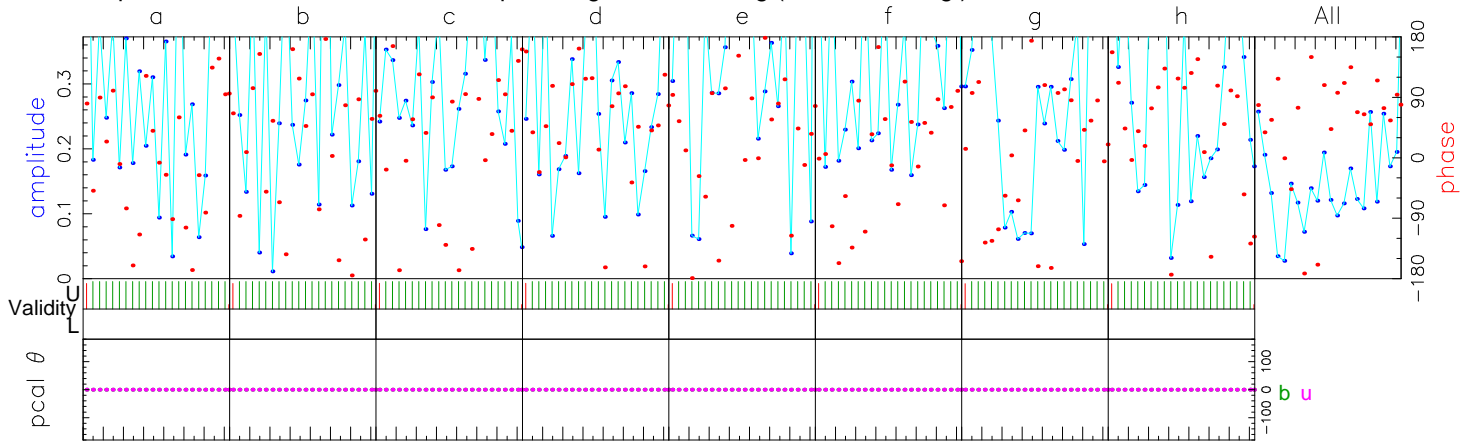


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133901
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'59.161694"

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

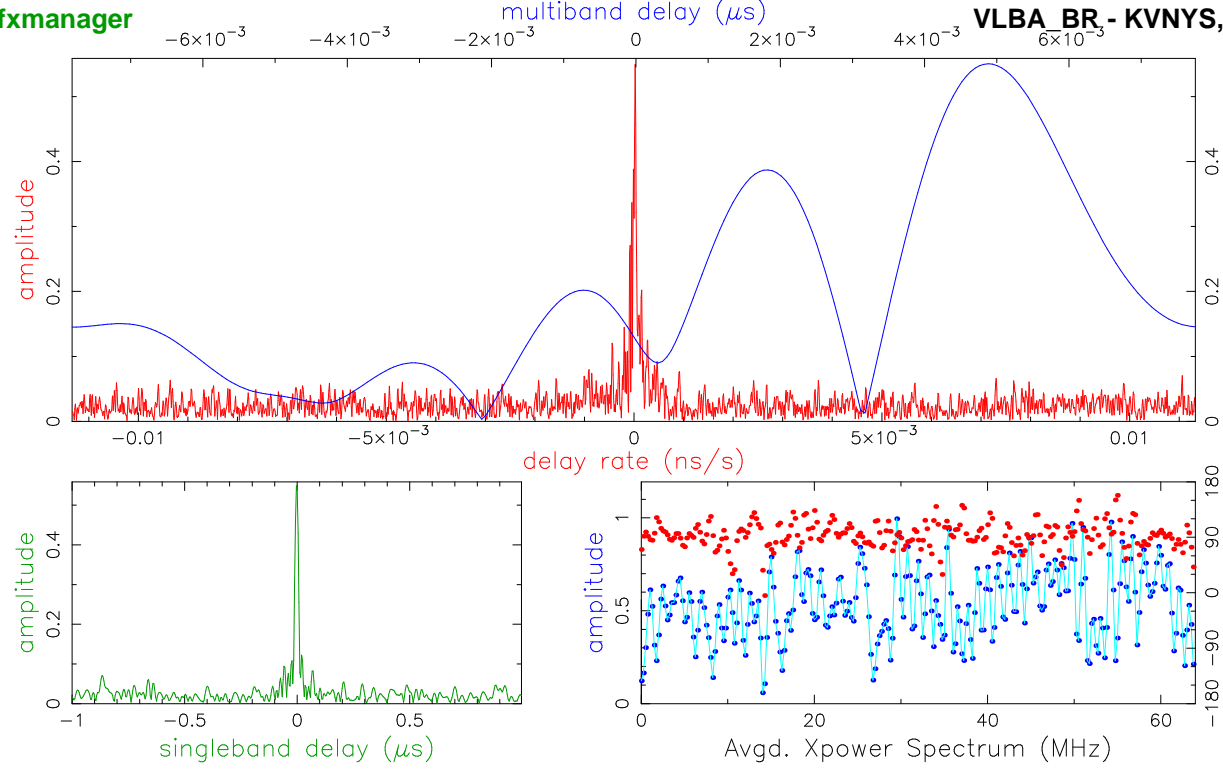


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	81.8	140.3	84.8	80.4	59.0	43.7	84.3	96.3	Phase	81.5
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	167.9	309.6	357.5	274.4	106.3	276.3	362.9	273.6	Sbd box	273.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.89515630509E+03		Apriori delay (usec)		3.89509462286E+03		Resid mbdelay (usec)		-8.17773E-04	+/- 1.8E-04
Sband delay (usec)	3.89515914311E+03		Apriori clock (usec)		-1.7752867E+01		Resid sbdelay (usec)		6.45202E-02	+/- 1.4E-03
Phase delay (usec)	3.89509462549E+03		Apriori clockrate (us/s)		-1.2269999E-06		Resid phdelay (usec)		2.62671E-06	+/- 6.2E-07
Delay rate (us/s)	-1.19278130731E+00		Apriori rate (us/s)		-1.19278800303E+00		Resid rate (us/s)		6.69572E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.47365586411E-06		Resid phase (deg)		81.5	+/- 19.1

	RMS	Theor.	Amplitude	0.124 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.1	45.8	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.6	80.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	30.6	27.0	Inc. seg. avg.	0.128	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	39.2	47.2	Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

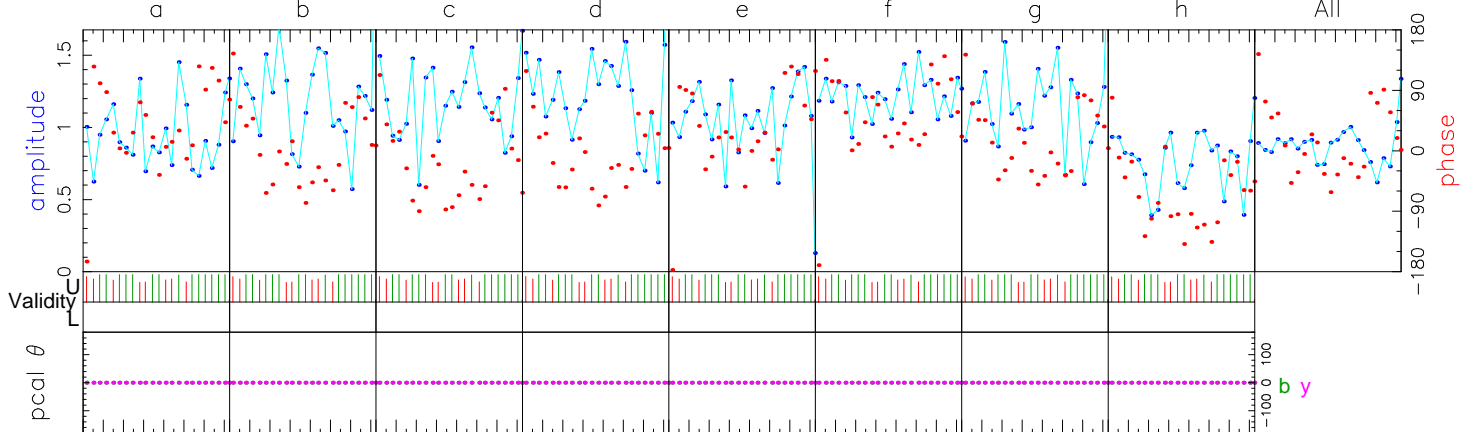
b: az 293.2 el 60.3 pa 77.2 u: az 50.0 el 42.1 pa -83.3 u,v (fr/asec) 10842.344 145.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/bu..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/bu.W.73.1X1QEV



Fringe quality 4
SNR 30.1
Int time 387.015
Amp 0.559
Phase 10.4
PFD 0.0e+00
Delays (us)
SBD -0.002290
MBD 0.004963
Fringe rate (Hz)
0.002227
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133852
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

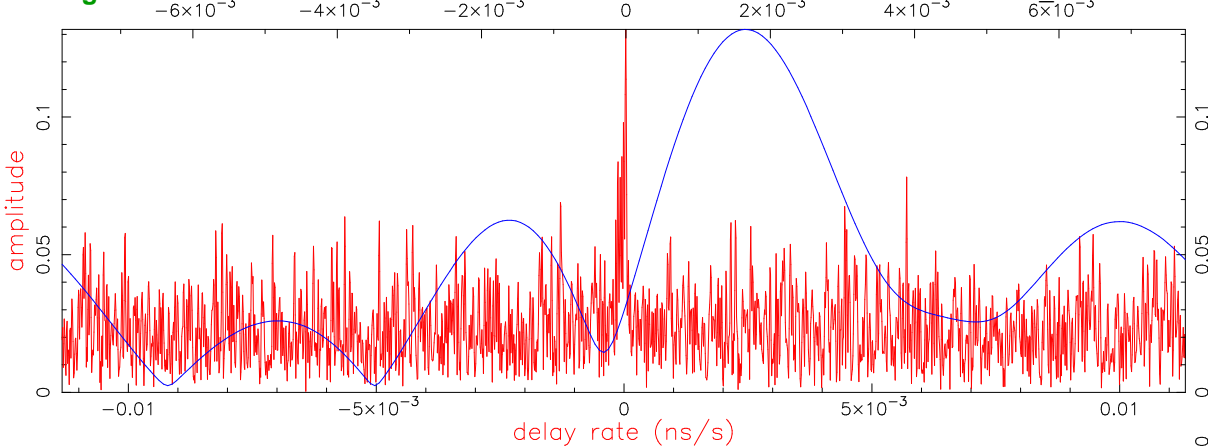
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	3.95396901325E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		4.96343E-03	+/- 3.6E-05
Sband delay (usec)	3.95396175982E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-2.29000E-03	+/- 2.9E-04
Phase delay (usec)	3.95396405016E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		3.36745E-07	+/- 1.2E-07
Delay rate (us/s)	-1.18776585529E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		2.58560E-08	+/- 5.4E-10
Total phase (deg)	101.0		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		10.4	+/- 3.8

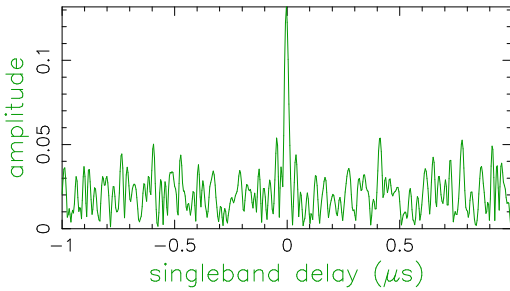
ph/seg (deg) 54.3 8.8 Search (2048X32) 0.538 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.0 15.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 47.2 5.4 Inc. seg. avg. 0.849 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 30.6 9.4 Inc. frq. avg. 0.685 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QE, Output file: /Exps/c211c/v1/1234/No0120/by.W.26.1X1QE

multiband delay (μ s)

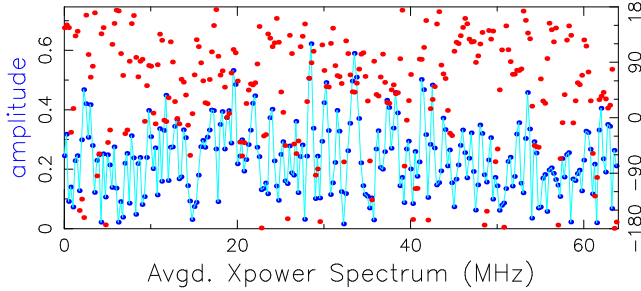


Fringe quality 0

SNR 7.1
Int time 387.015
Amp 0.132
Phase 12.8
PFD 4.1e-04
Delays (us)
SBD -0.003970
MBD 0.001655
Fringe rate (Hz)
0.002858
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

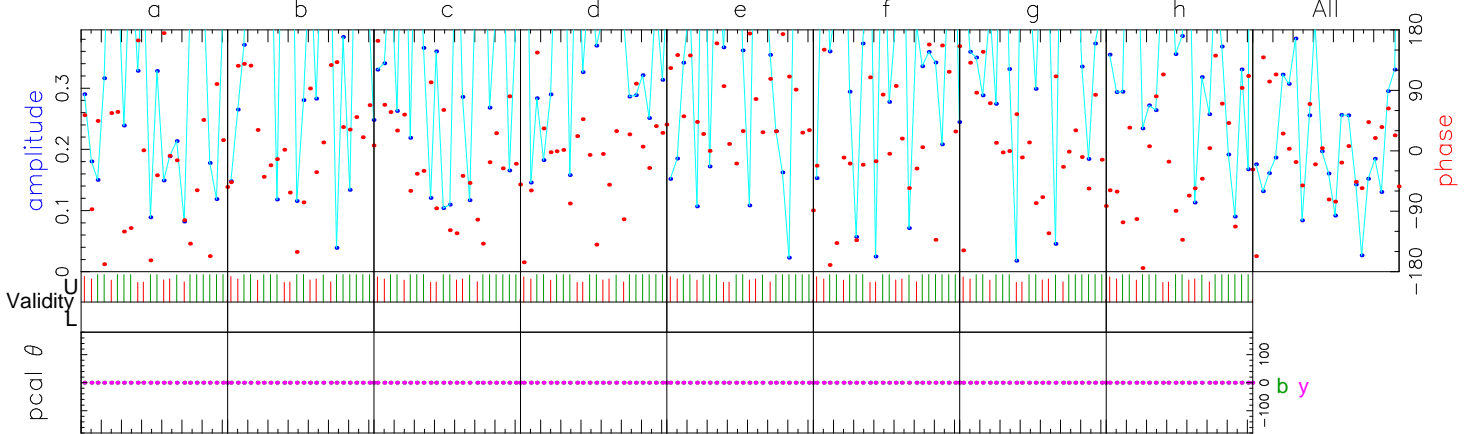


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133855
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'59.161694"

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



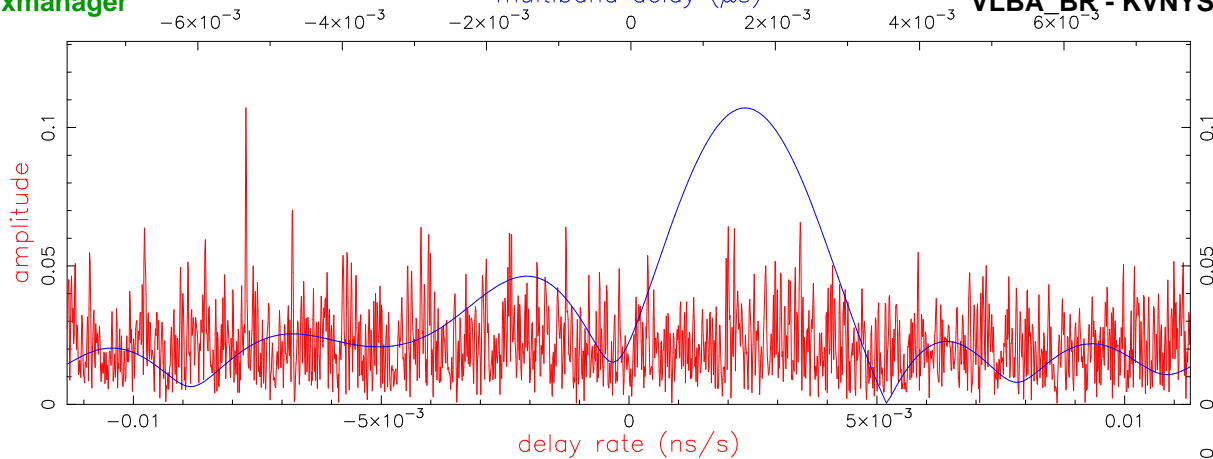
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.2	25.0	-25.6	-1.8	54.7	56.4	-3.0	-22.4	Phase	12.8
	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	136.0	256.8	58.4	58.9	256.3	423.0	255.0	252.0	Sbd box	256.0
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.95396570479E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		1.65497E-03	+/- 1.5E-04
Sband delay (usec)	3.95396007982E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-3.97000E-03	+/- 1.2E-03
Phase delay (usec)	3.95396405023E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		4.12233E-07	+/- 5.2E-07
Delay rate (us/s)	-1.18776584797E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		3.31754E-08	+/- 2.3E-09
Total phase (deg)	103.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		12.8	+/- 16.2

	RMS	Theor.	Amplitude	0.132 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	67.3	37.5	Search (2048X32)	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	97.4	65.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.0	22.9	Inc. seg. avg.	0.172	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	48.5	39.9	Inc. frq. avg.	0.140	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator

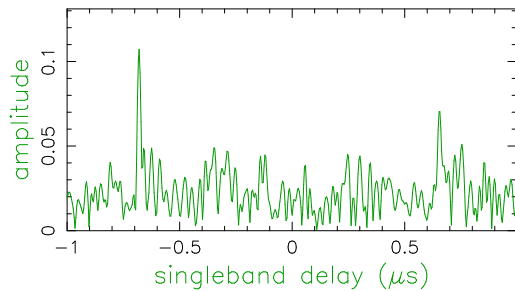
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/by.W.42.1X1QE

multiband delay (μ s)

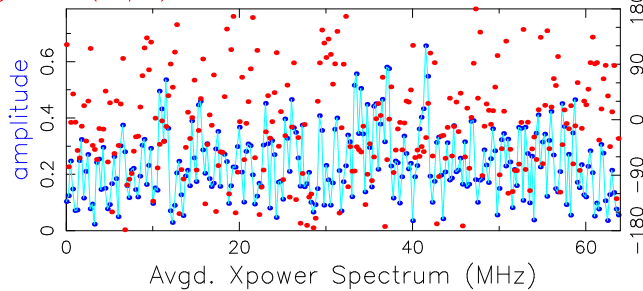


Fringe quality 0

SNR 5.8
Int time 387.015
Amp 0.131
Phase 49.7
PFD 8.5e-01
Delays (us)
SBD -0.680357
MBD 0.001558
Fringe rate (Hz)
-0.666717
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

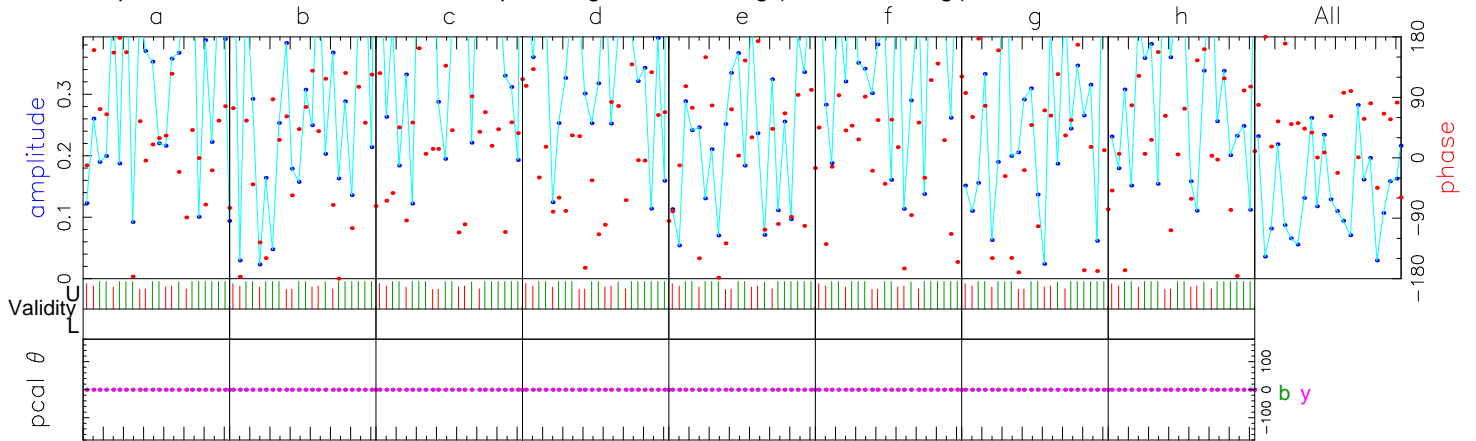


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133859
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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

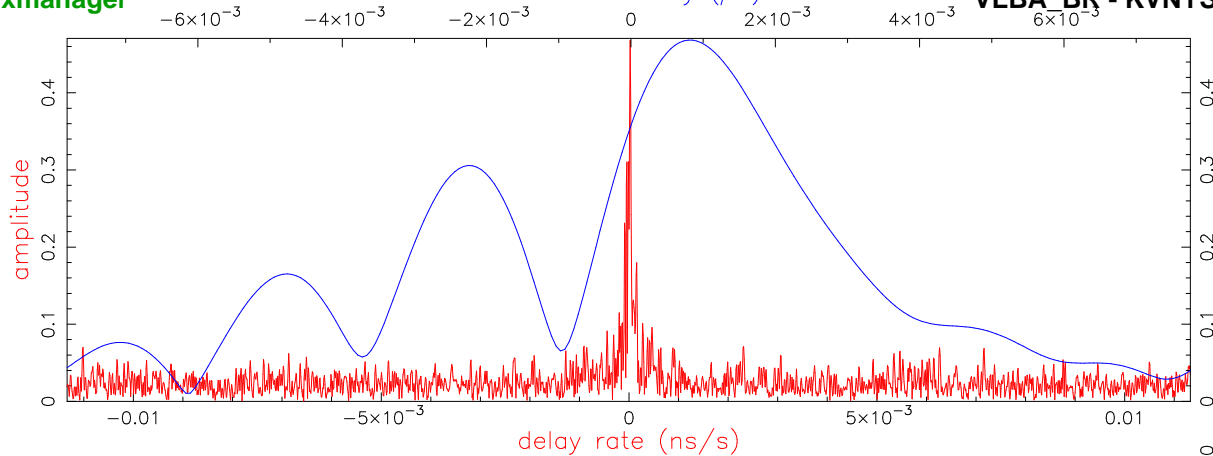


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
b	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.95327810775E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		1.55793E-03	+/- 1.9E-04
Sband delay (usec)	3.95328369307E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-6.80357E-01	+/- 1.5E-03
Phase delay (usec)	3.95396405142E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		1.60365E-06	+/- 6.4E-07
Delay rate (us/s)	-1.18777362107E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		-7.73992E-06	+/- 2.8E-09
Total phase (deg)	140.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		49.7	+/- 19.8

	RMS	Theor.	Amplitude	0.131 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.3	46.0	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.7	80.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.9	28.1	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	27.1	49.0	Inc. frq. avg.	0.124	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

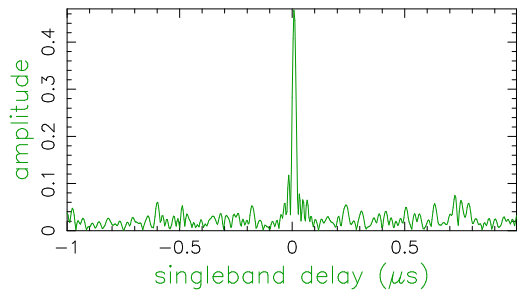
b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/by.W.63.1X1QEV

multiband delay (μ s)

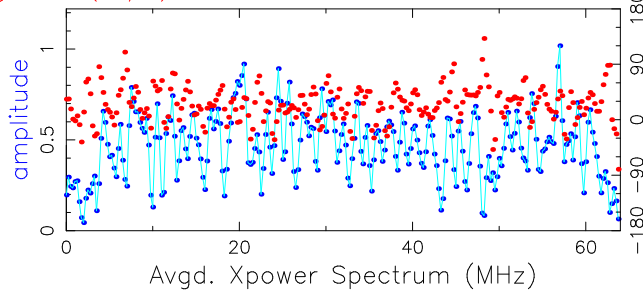


Fringe quality 6

SNR 25.3
Int time 387.015
Amp 0.471
Phase 115.8
PFD 0.0e+00
Delays (us)
SBD 0.008722
MBD 0.000858
Fringe rate (Hz)
0.002285
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

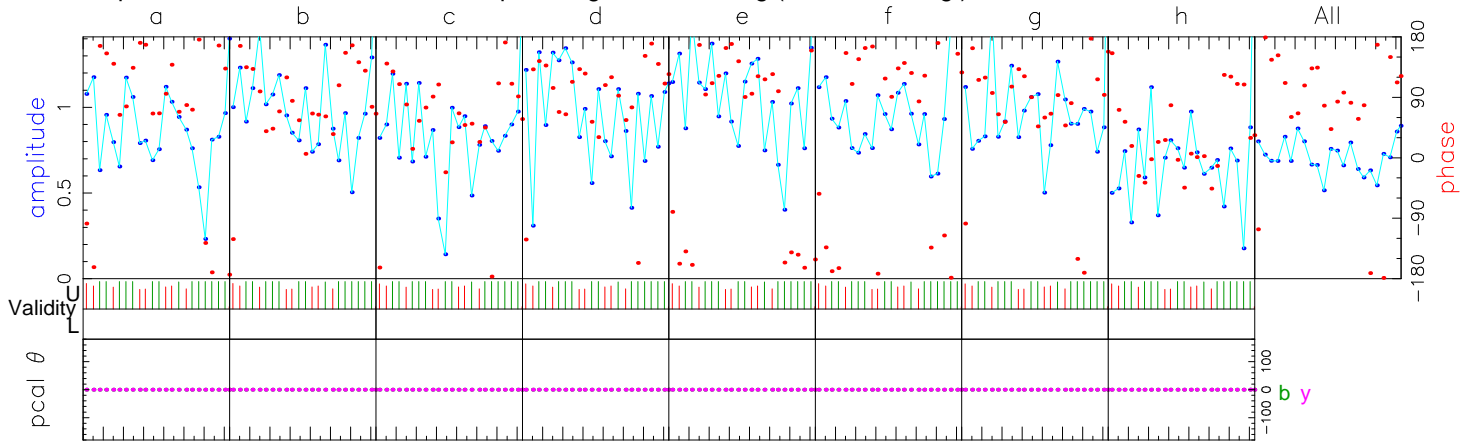


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 004500.00
Stop 005159.84
FRT 004830.00
Corr/FF/build
2021:303:225133
2021:304:133848
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	130.6	92.5	87.5	114.3	157.3	160.8	105.5	21.2	Phase	115.8
	0.5	0.6	0.5	0.6	0.7	0.7	0.6	0.4	Ampl.	0.6
	257.3	259.3	259.7	259.6	259.3	259.4	258.4	256.3	Sbd box	259.2
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.95398053312E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		8.58300E-04	+/- 4.3E-05
Sband delay (usec)	3.95397277157E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		8.72175E-03	+/- 3.4E-04
Phase delay (usec)	3.95396405355E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		3.73341E-06	+/- 1.5E-07
Delay rate (us/s)	-1.18776585462E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		2.65284E-08	+/- 6.4E-10
Total phase (deg)	206.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		115.8	+/- 4.5

	RMS	Theor.	Amplitude	0.471 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.1	10.5	Search (2048X32)	0.449	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	54.9	18.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	48.9	6.4	Inc. seg. avg.	0.698	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.7	11.2	Inc. frq. avg.	0.583	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QE Output file: /Exps/c211c/v1/1234/No0120/by.W.8.1X1QE