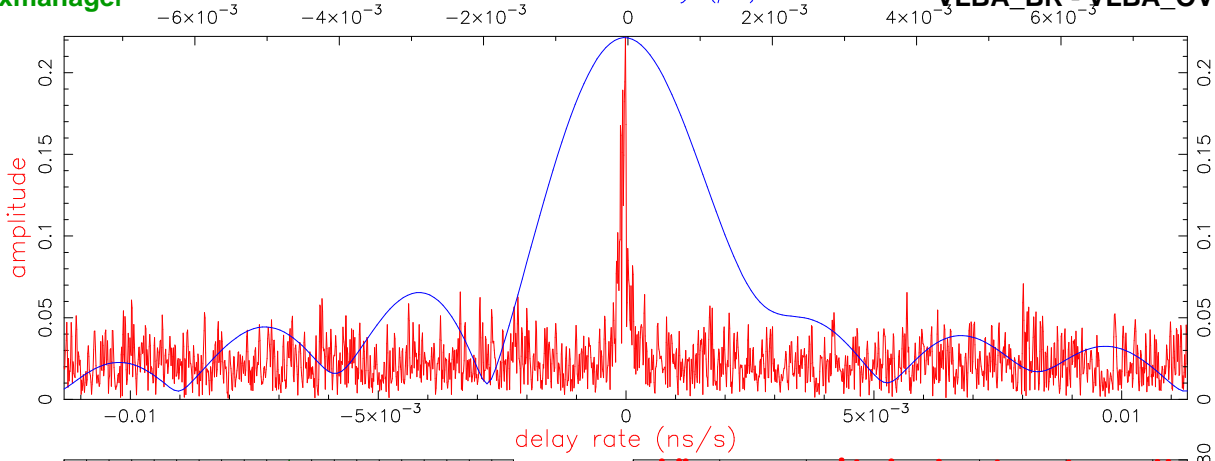
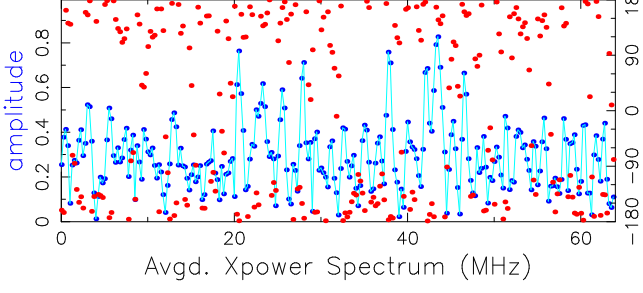
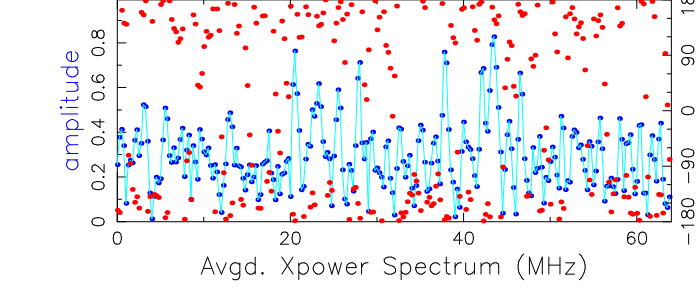
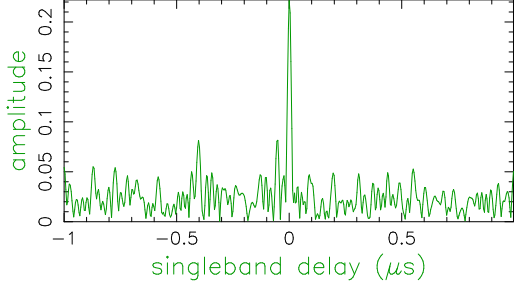


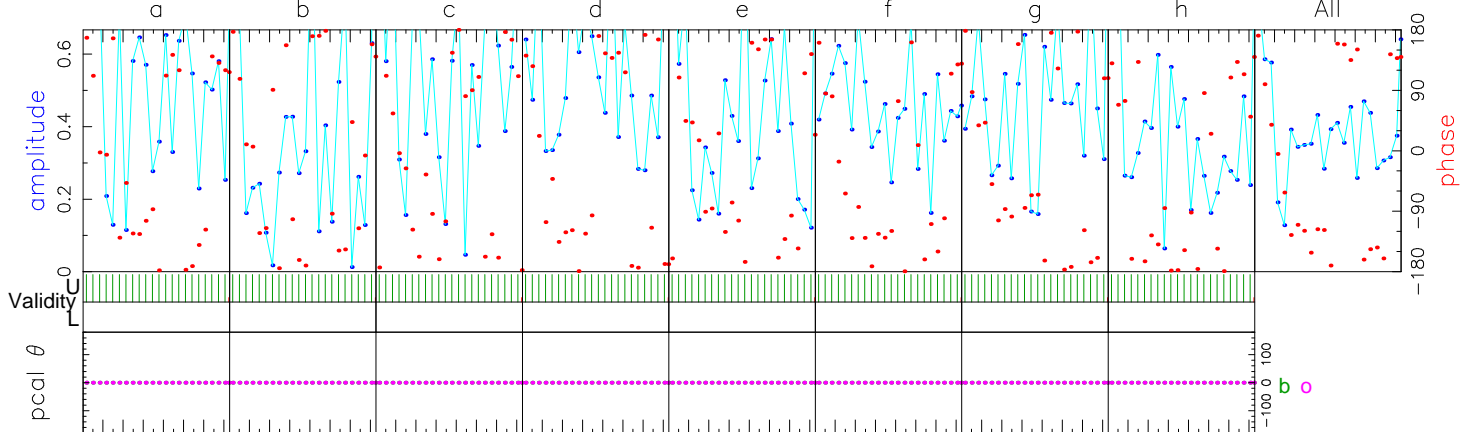
multiband delay (μ s)



Fringe quality 9
SNR 12.5
Int time 419.747
Amp 0.222
Phase -176.3
PFD 7.2e-27
Delays (us)
SBD 0.000779
MBD -0.000013
Fringe rate (Hz)
-0.001190
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120445
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"



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
	179.9	-175.9	177.0	-172.1	-160.1	-156.8	-171.9	155.5	Phase	-176.3
	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	256.3	256.4	256.6	257.1	258.1	258.3	257.9	256.5	Sbd box	257.2
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	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.60299366422E+03		Apriori delay (usec)		-2.60299365074E+03		Resid mbdelay (usec)		-1.34784E-05	+/- 8.7E-05
Sband delay (usec)	-2.60299287174E+03		Apriori clock (usec)		-6.7245407E+00		Resid sbdelay (usec)		7.79000E-04	+/- 6.9E-04
Phase delay (usec)	-2.60299365642E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-5.68399E-06	+/- 3.0E-07
Delay rate (us/s)	9.92194865423E-02		Apriori rate (us/s)		9.92195003599E-02		Resid rate (us/s)		-1.38176E-08	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.27492270882E-05		Resid phase (deg)		-176.3	+/- 9.2

ph/seg (deg) 67.1 22.1 Amplitude 0.222 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 96.3 38.5 Search (2048X32) 0.218 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 16.0 13.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 21.0 22.7 Inc. seg. avg. 0.360 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 204.4 el 35.2 pa 16.1 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -547.203 1167.549 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/bo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/bo.W.1.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

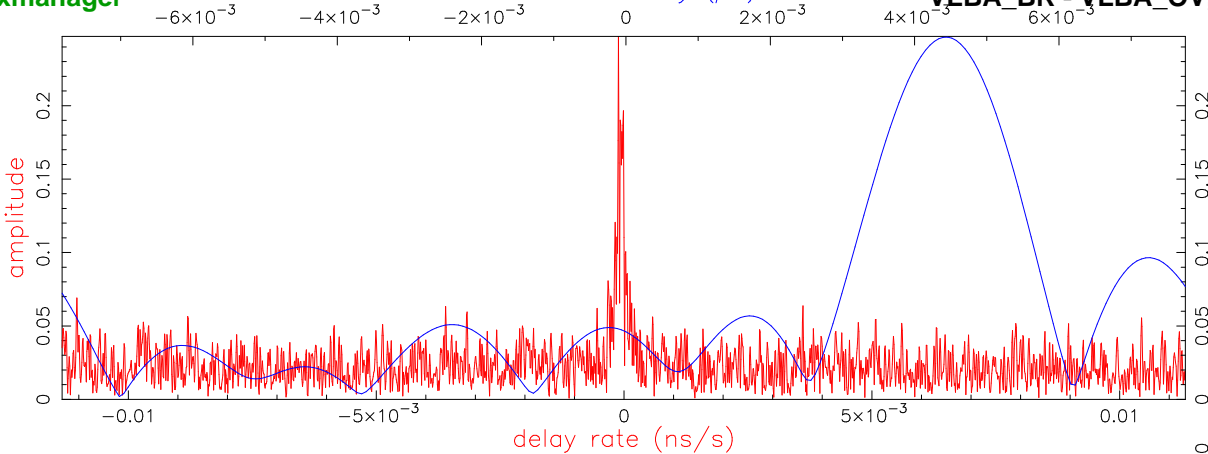
fxmanager

1741-038.1X09UZ, No0068, bo

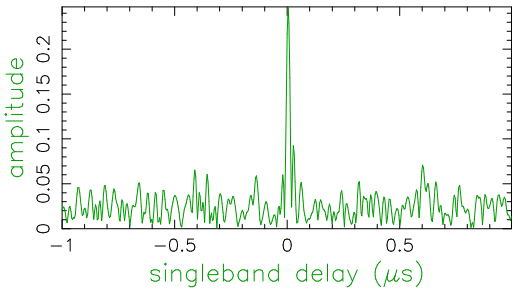
VLBA_BR - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

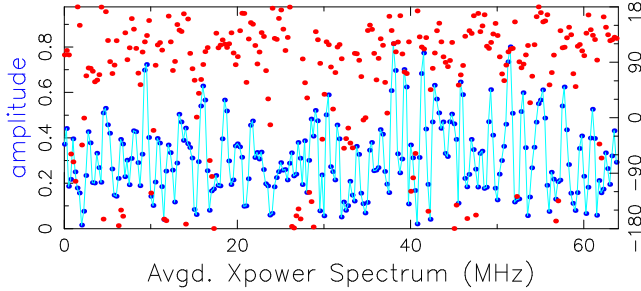
Fringe quality 9



SNR 13.8
 Int time 419.747
 Amp 0.247
 Phase 123.4
 PFD 7.5e-35
 Delays (us)
 SBD 0.004429
 MBD 0.004444
 Fringe rate (Hz)
 -0.009156
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

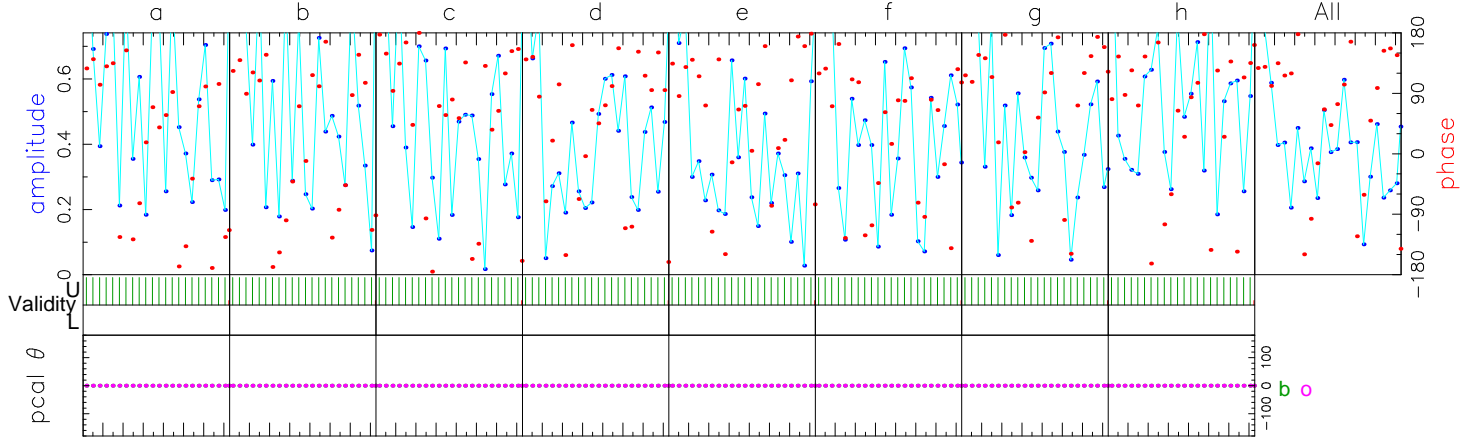


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120448
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	-2.60298920649E+03		Apriori delay (usec)		-2.60299365074E+03		Resid mbdelay (usec)		4.44425E-03	+/- 7.8E-05
Sband delay (usec)	-2.60298922174E+03		Apriori clock (usec)		-6.7245407E+00		Resid sbdelay (usec)		4.42900E-03	+/- 6.2E-04
Phase delay (usec)	-2.60299364676E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		3.97996E-06	+/- 2.7E-07
Delay rate (us/s)	9.92193940692E-02		Apriori rate (us/s)		9.92195003599E-02		Resid rate (us/s)		-1.06291E-07	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		1.27492270882E-05		Resid phase (deg)		123.4	+/- 8.3

	RMS	Theor.	Amplitude	0.247 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	73.1	19.8	Search (2048X32)	0.232	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	103.2	34.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	12.4	11.7	Inc. seg. avg.	0.388	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	12.7	20.4	Inc. frq. avg.	0.246	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 204.4 el 35.2 pa 16.1 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -547.203 1167.549 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/bo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/bo.W.21.1X09UZ

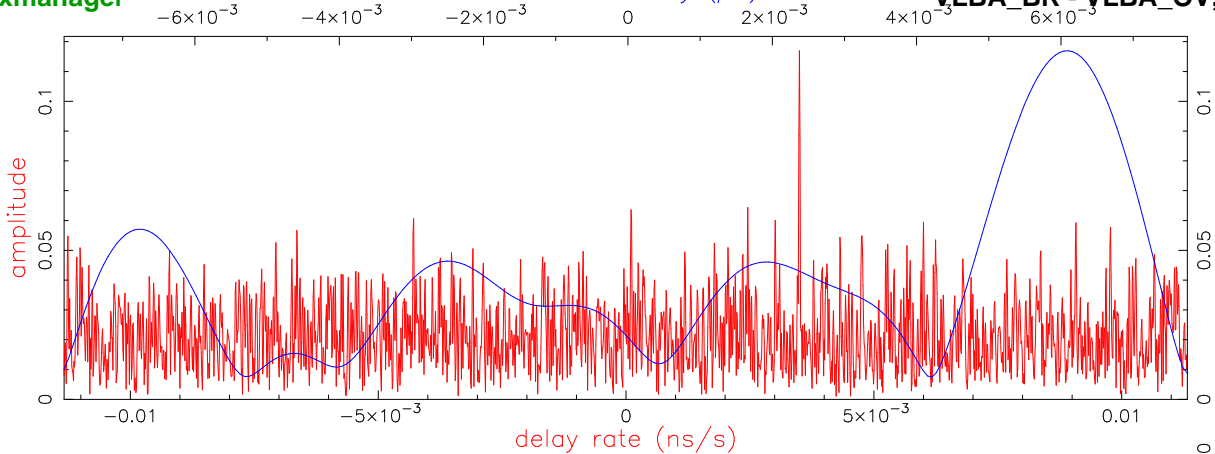
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, bo

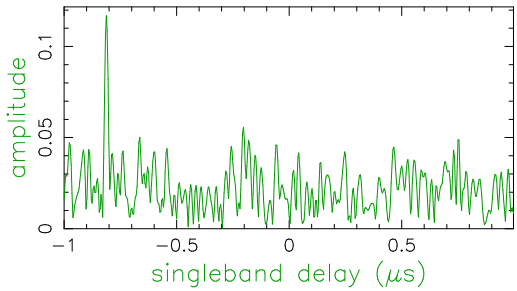
VLBA_BR - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

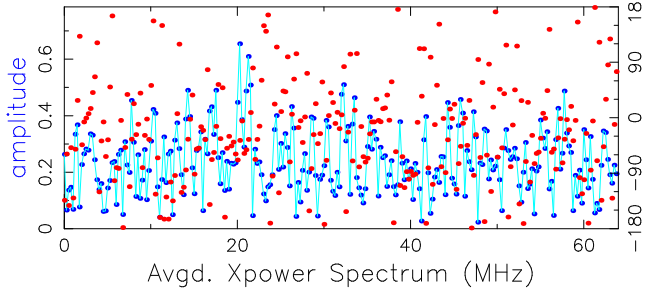


Fringe quality 0

SNR 6.6
Int time 419.747
Amp 0.122
Phase -95.4
PFD 1.5e-02
Delays (us)
SBD -0.812105
MBD 0.006102
Fringe rate (Hz)
0.301430
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

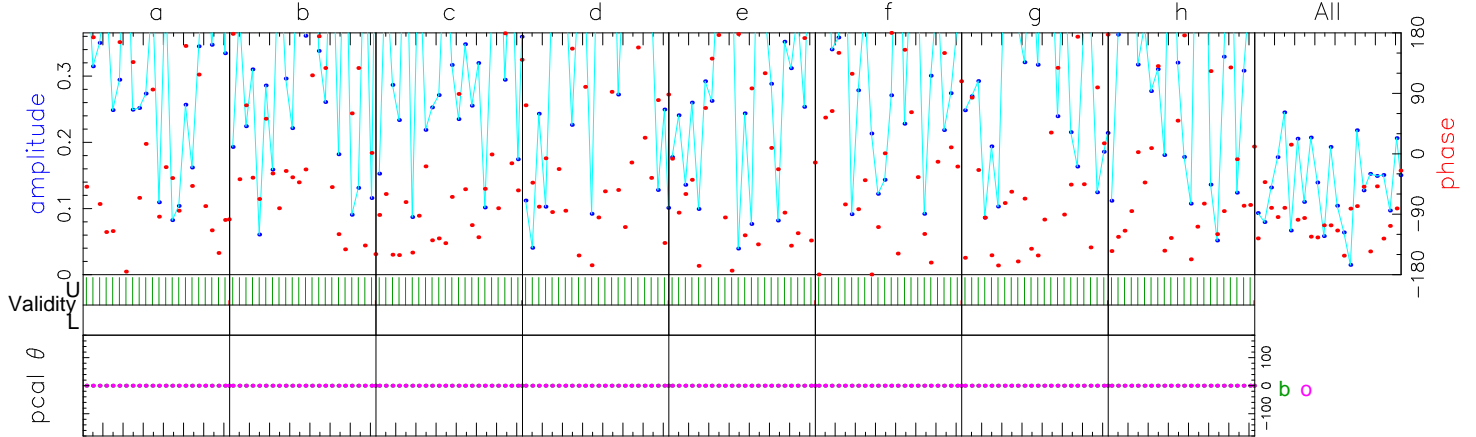


delay rate (ns/s)



Exp. c211c
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120452
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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

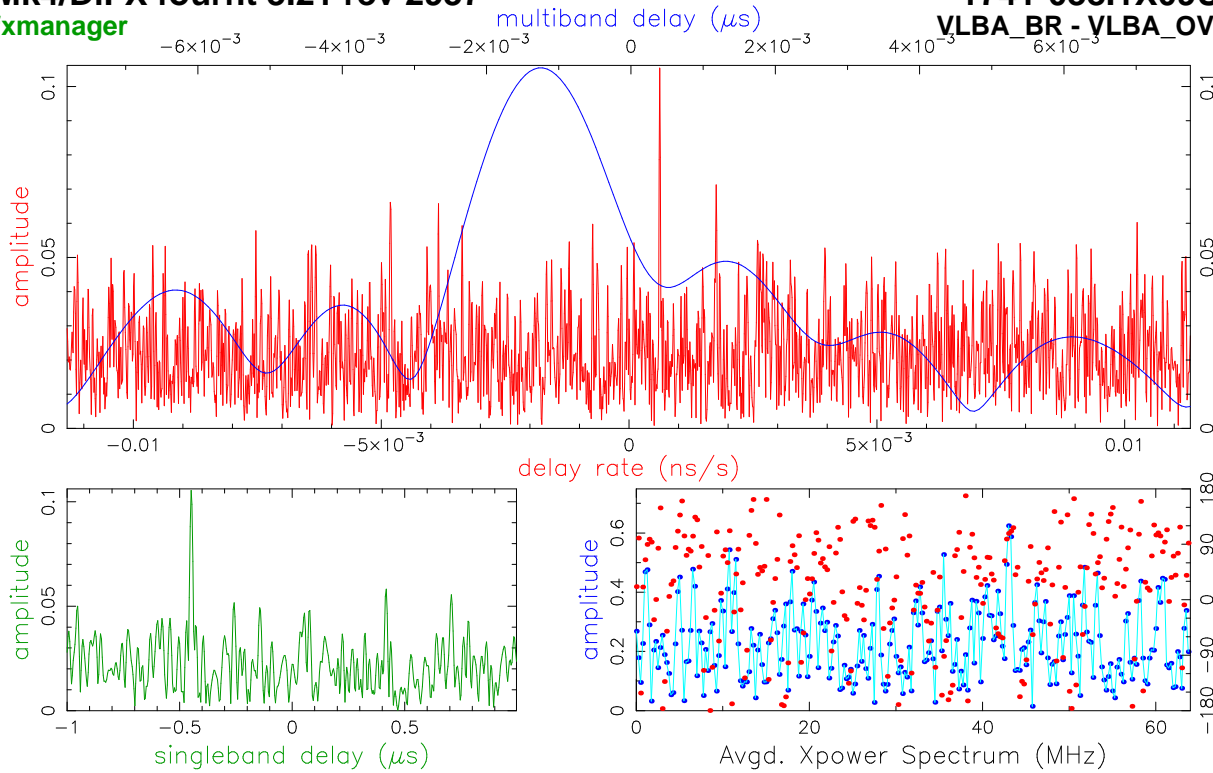


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.1	-69.5	-85.9	-64.3	-134.5	-71.8	-95.3	-95.9	Phase	-95.4
	0.1	0.1	0.2	0.1	0.1	0.0	0.2	0.2	Ampl.	0.1
	276.8	145.8	48.6	344.8	58.1	7.0	193.5	294.6	Sbd box	49.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.60380004854E+03		Apriori delay (usec)		-2.60299365074E+03		Resid mbdelay (usec)		6.10220E-03	+/- 1.7E-04
Sband delay (usec)	-2.60380575599E+03		Apriori clock (usec)		-6.7245407E+00		Resid sbdelay (usec)		-8.12105E-01	+/- 1.3E-03
Phase delay (usec)	-2.60299365381E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-3.07525E-06	+/- 5.6E-07
Delay rate (us/s)	9.92229996681E-02		Apriori rate (us/s)		9.92195003599E-02		Resid rate (us/s)		3.49931E-06	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		1.27492270882E-05		Resid phase (deg)		-95.4	+/- 17.5

	RMS	Theor.	Amplitude	0.122 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	37.4	41.9	Search (2048X32)	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	53.3	73.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.7	24.7	Inc. seg. avg.	0.112	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	46.4	43.1	Inc. frq. avg.	0.119	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

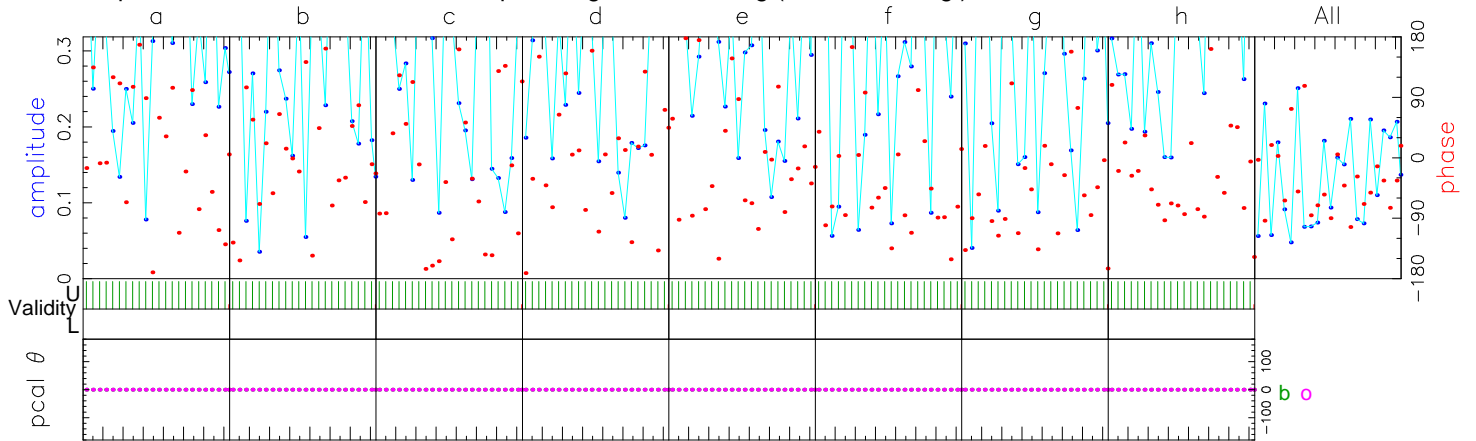
b: az 204.4 el 35.2 pa 16.1 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -547.203 1167.549 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/bo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/bo.W.41.1X09UZ



Fringe quality 0
SNR 5.9
Int time 419.747
Amp 0.106
Phase -47.8
PFD 5.1e-01
Delays (us)
SBD -0.448319
MBD -0.001207
Fringe rate (Hz)
0.053094
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120456
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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



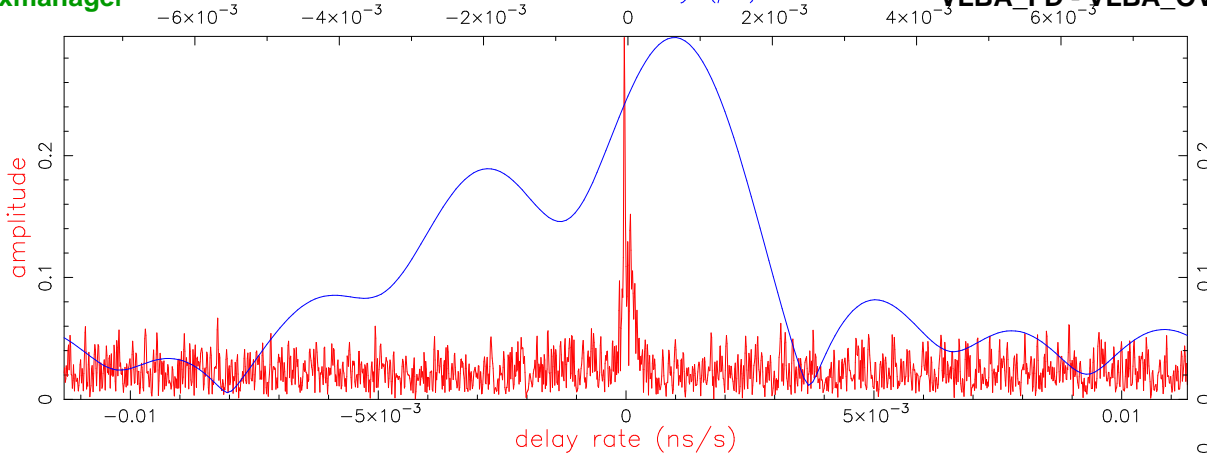
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-16.5	-33.0	-104.5	-3.4	-59.1	-67.1	-56.8	-32.3	Phase	-47.8
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	360.9	377.0	59.3	479.9	110.2	140.5	142.4	142.3	Sbd box	142.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
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)	-2.60344798314E+03		Apriori delay (usec)		-2.60299365074E+03		Resid mbdelay (usec)		-1.20740E-03	+/- 1.8E-04
Sband delay (usec)	-2.60344196949E+03		Apriori clock (usec)		-6.7245407E+00		Resid sbdelay (usec)		-4.48319E-01	+/- 1.4E-03
Phase delay (usec)	-2.60299365228E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-1.54253E-06	+/- 6.2E-07
Delay rate (us/s)	9.92201167236E-02		Apriori rate (us/s)		9.92195003599E-02		Resid rate (us/s)		6.16364E-07	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.27492270882E-05		Resid phase (deg)		-47.8	+/- 19.3

	RMS	Theor.	Amplitude	0.106 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.5	46.2	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	67.4	80.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.6	27.3	Inc. seg. avg.	0.102	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.4	47.6	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

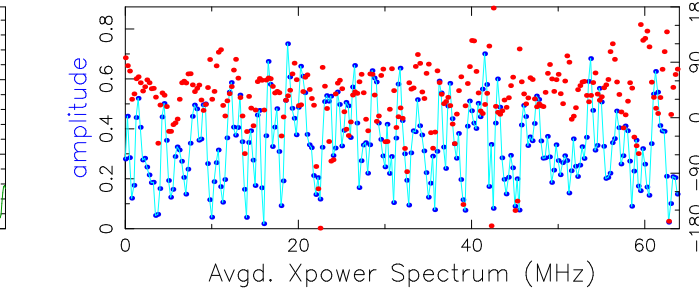
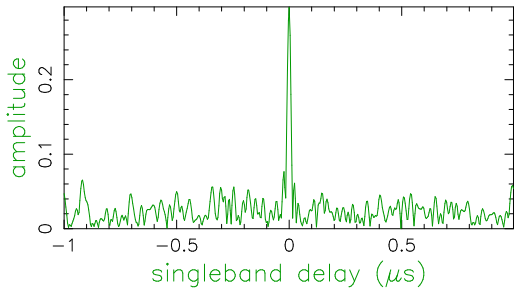
b: az 204.4 el 35.2 pa 16.1 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -547.203 1167.549 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/bo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/bo.W.61.1X09UZ

multiband delay (μ s)

Fringe quality 7

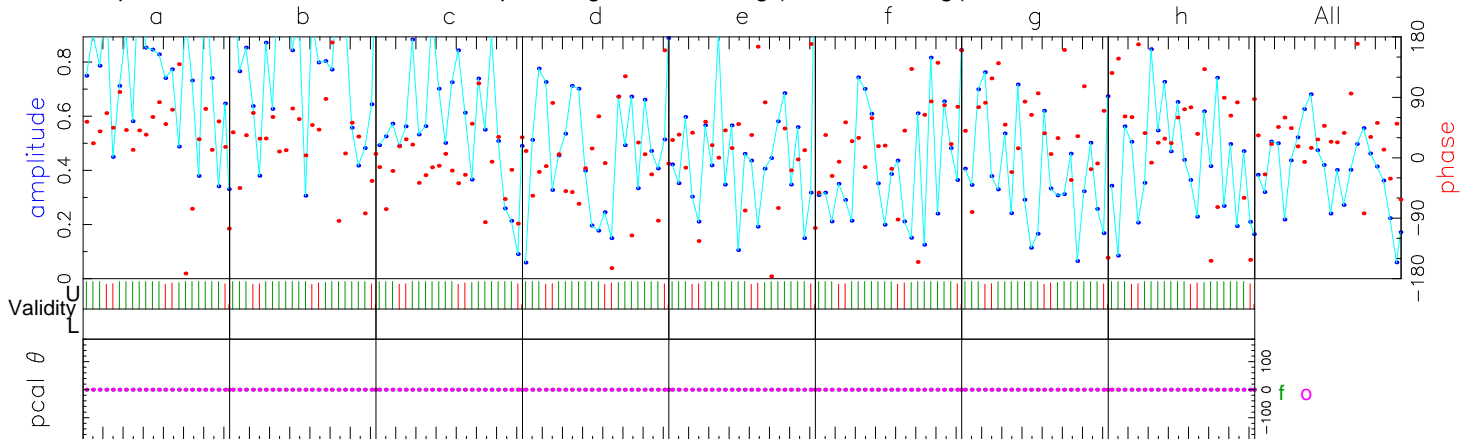


SNR 16.5
Int time 411.298
Amp 0.298
Phase 24.8
PFD 0.0e+00
Delays (us)
SBD -0.000712
MBD 0.000629
Fringe rate (Hz)
-0.003159
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120446
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0		
f	0	0	0	0	0	0	0	0		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) -8.44727563677E+02 Apriori delay (usec) -8.44728192211E+02 Resid mbdelay (usec) 6.28534E-04 +/- 6.6E-05
 Sband delay (usec) -8.44728904461E+02 Apriori clock (usec) 6.5191269E+00 Resid sbdelay (usec) -7.12250E-04 +/- 5.2E-04
 Phase delay (usec) -8.44728191410E+02 Apriori clockrate (us/s) -3.0000002E-07 Resid phdelay (usec) 8.00712E-07 +/- 2.2E-07
 Delay rate (us/s) -3.27251374836E-01 Apriori rate (us/s) -3.27251338160E-01 Resid rate (us/s) -3.66764E-08 +/- 9.4E-10
 Total phase (deg) -146.9 Apriori accel (us/s/s) 5.24790876866E-06 Resid phase (deg) 24.8 +/- 6.9

ph/seg (deg) 47.7 16.5 Theor. Amplitude 0.298 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.3 28.8 Search (2048X32) 0.288 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.1 9.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 17.1 Inc. seg. avg. 0.392 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.324 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

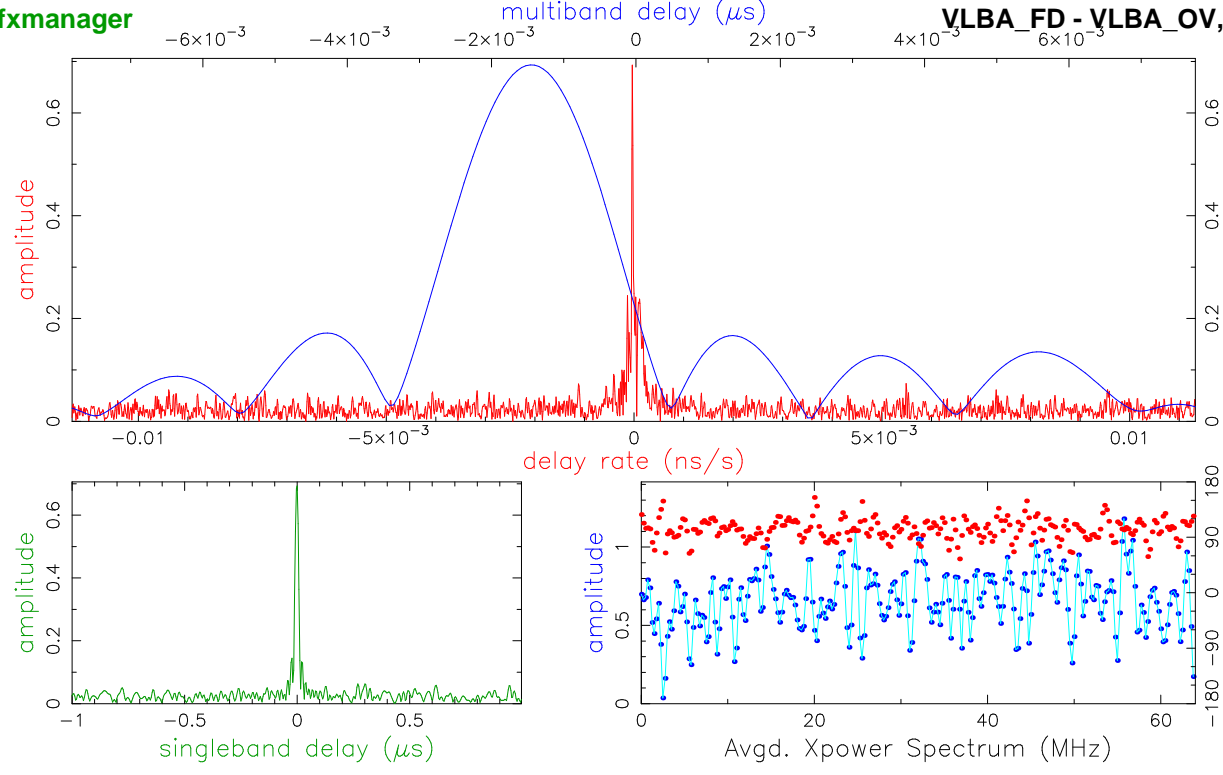
f: az 230.9 el 41.7 pa 42.5 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 1884.256 -872.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/fo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/fo.W.15.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, fo

VLBA_FD - VLBA_OV, fgroup W, pol RR

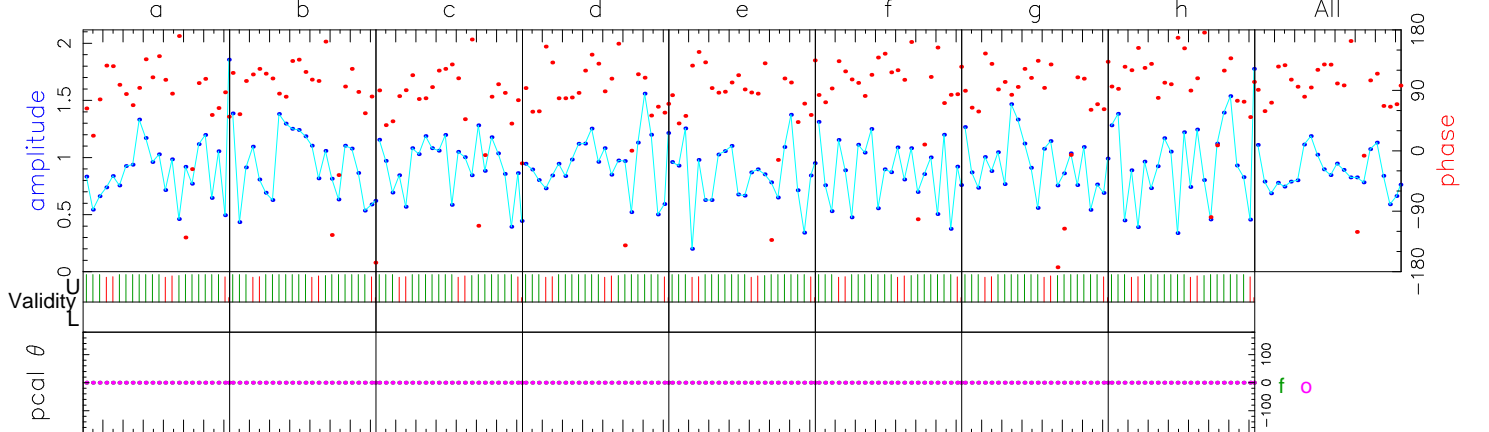


Fringe quality 8

SNR 39.2
 Int time 411.298
 Amp 0.706
 Phase 100.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.001704
 MBD -0.001489
 Fringe rate (Hz)
 -0.003177
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120450
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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
	95.9	109.6	88.1	100.2	90.1	106.6	99.5	108.3	Phase	100.1
	0.6	0.8	0.7	0.7	0.7	0.7	0.7	0.7	Ampl.	0.7
	256.5	256.2	256.4	256.7	256.5	256.6	256.9	256.9	Sbd box	256.6
U/L	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.44729681021E+02		Apriori delay (usec)		-8.44728192211E+02		Resid mbdelay (usec)		-1.48881E-03	+/- 2.8E-05
Sband delay (usec)	-8.44729896461E+02		Apriori clock (usec)		6.5191269E+00		Resid sbdelay (usec)		-1.70425E-03	+/- 2.2E-04
Phase delay (usec)	-8.44728188983E+02		Apriori clockrate (us/s)		-3.0000002E-07		Resid phdelay (usec)		3.22786E-06	+/- 9.4E-08
Delay rate (us/s)	-3.27251375045E-01		Apriori rate (us/s)		-3.27251338160E-01		Resid rate (us/s)		-3.68854E-08	+/- 4.0E-10
Total phase (deg)			Apriori accel (us/s/s)		5.24790876866E-06		Resid phase (deg)		100.1	+/- 2.9

ph/seg (deg) 45.2 7.0 Search (2048X32) 0.673 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.5 12.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.7 4.1 Inc. seg. avg. 0.873 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.4 7.2 Inc. frq. avg. 0.697 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 230.9 el 41.7 pa 42.5 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 1884.256 -872.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/fo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/fo.W.35.1X09UZ

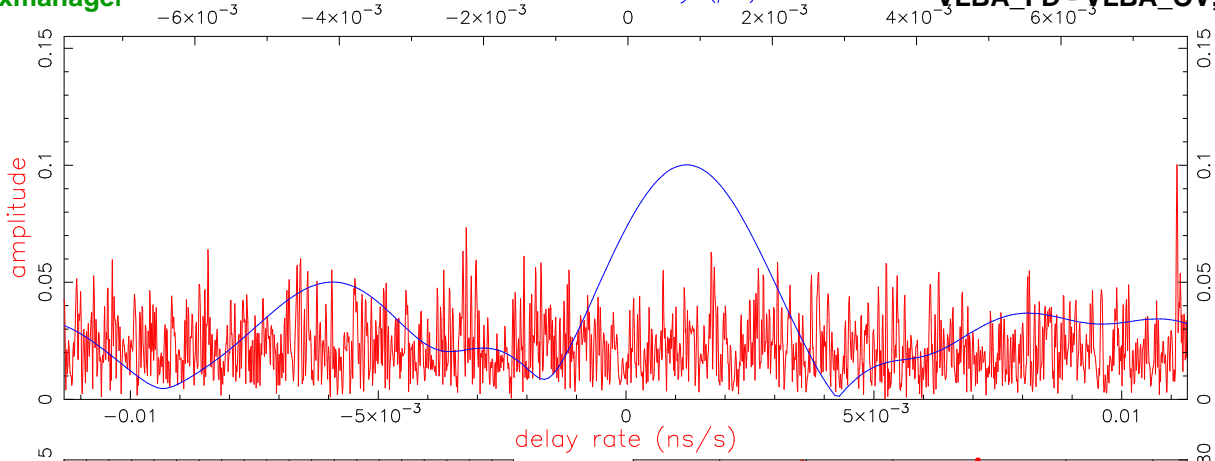
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

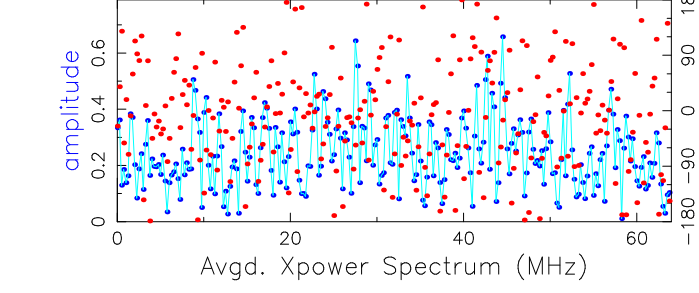
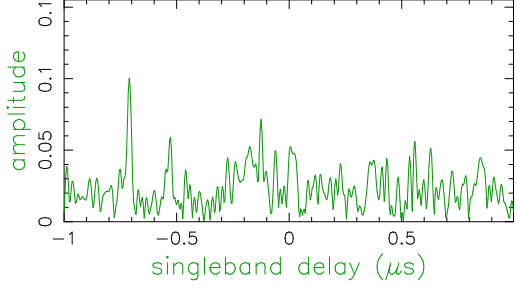
1741-038.1X09UZ, No0068, fo

VLBA_FD - VLBA_OV, fgroup W, pol LR

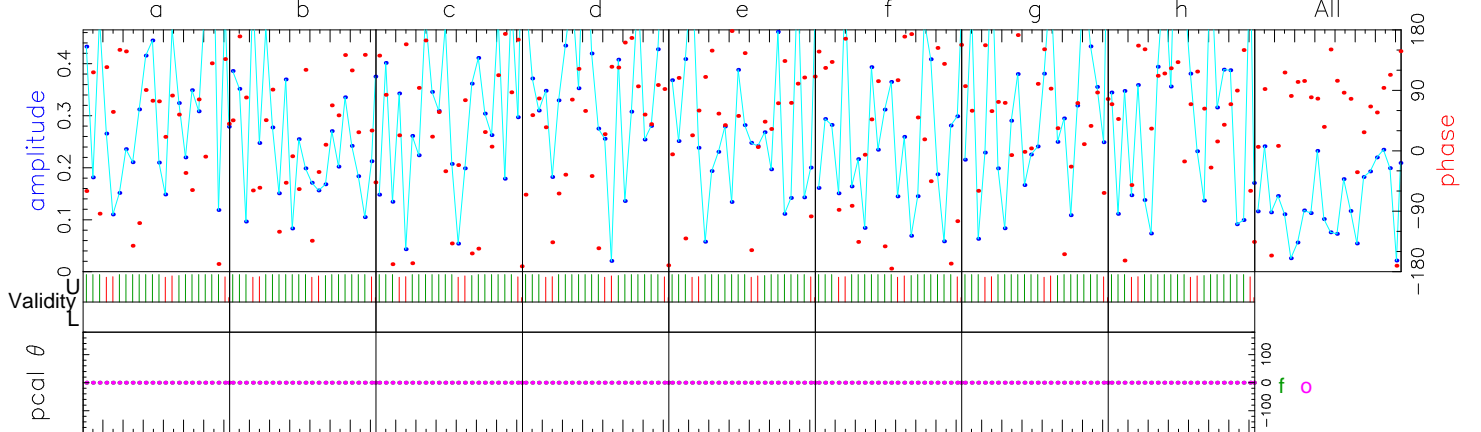
multiband delay (μ s)



Fringe quality 0
 SNR 5.6
 Int time 411.298
 Amp 0.155
 Phase 78.8
 PFD 1.0e+00
 Delays (us)
 SBD -0.710214
 MBD 0.000813
 Fringe rate (Hz) 0.959158
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build 2021:303:035626
 2021:303:120454
 2021:252:122852
 RA & Dec (J2000) 17h43m58.856136s --3°50'04.616734"



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	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0			
f	0	0	0	0	0	0	0	0			
o	0	0	0	0	0	0	0	0			
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
f	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-8.45446128877E+02				-8.44728192211E+02				8.13334E-04	+/- 1.9E-04	
Sband delay (usec)	-8.45438406461E+02				6.5191269E+00				-7.10214E-01	+/- 1.5E-03	
Phase delay (usec)	-8.44728189670E+02				-3.0000002E-07				2.54084E-06	+/- 6.6E-07	
Delay rate (us/s)	-3.27240203289E-01				-3.27251338160E-01				1.11349E-05	+/- 2.8E-09	
Total phase (deg)			-93.0		5.24790876866E-06				78.8	+/- 20.6	
	RMS	Theor.	Amplitude	0.155 +/- 0.028	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	54.6	48.9	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	74.5	85.4	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	42.0	29.1	Inc. seg. avg.	0.151	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	38.0	50.8	Inc. frq. avg.	0.156	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
f: az 230.9 el 41.7 pa 42.5			o: az 210.3 el 44.4 pa 24.5		u,v (fr/asec) 1884.256 -872.153					simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c211c/v1/1234/No0068/fo..1X09UZ		Output file: /Exps/c211c/v1/1234/No0068/fo.W.52.1X09UZ						

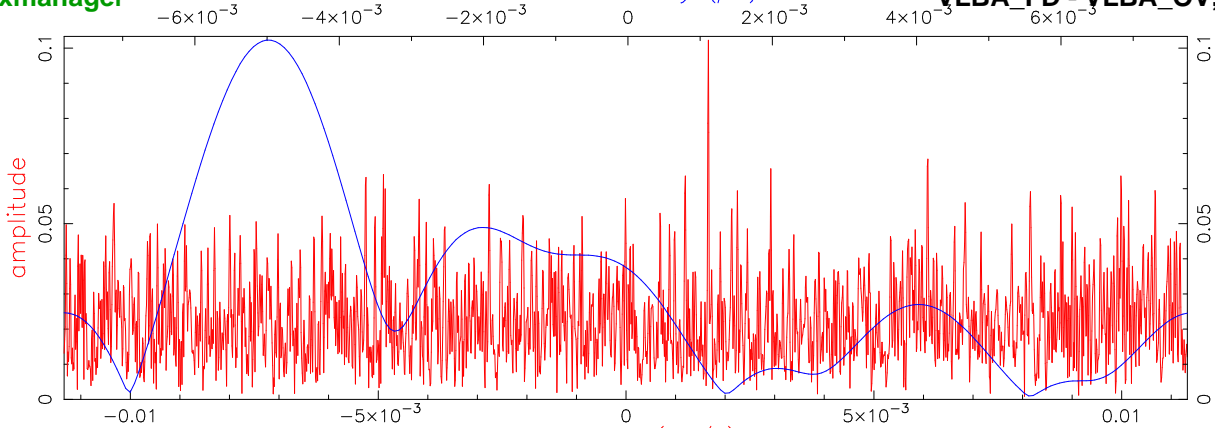
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, fo

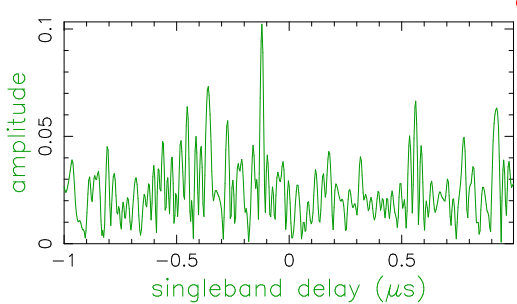
VLBA_FD - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

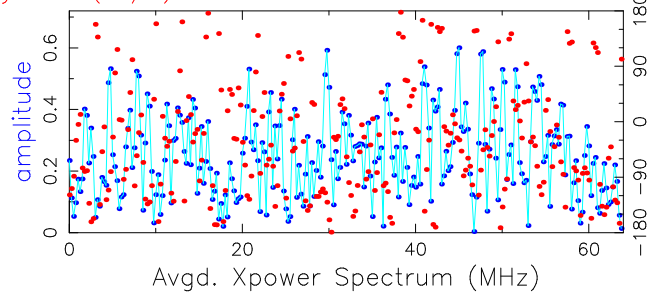


Fringe quality 0

SNR 5.7
 Int time 411.298
 Amp 0.103
 Phase 28.2
 PFD 9.6e-01
 Delays (us)
 SBD -0.121606
 MBD -0.005019
 Fringe rate (Hz)
 0.142971
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

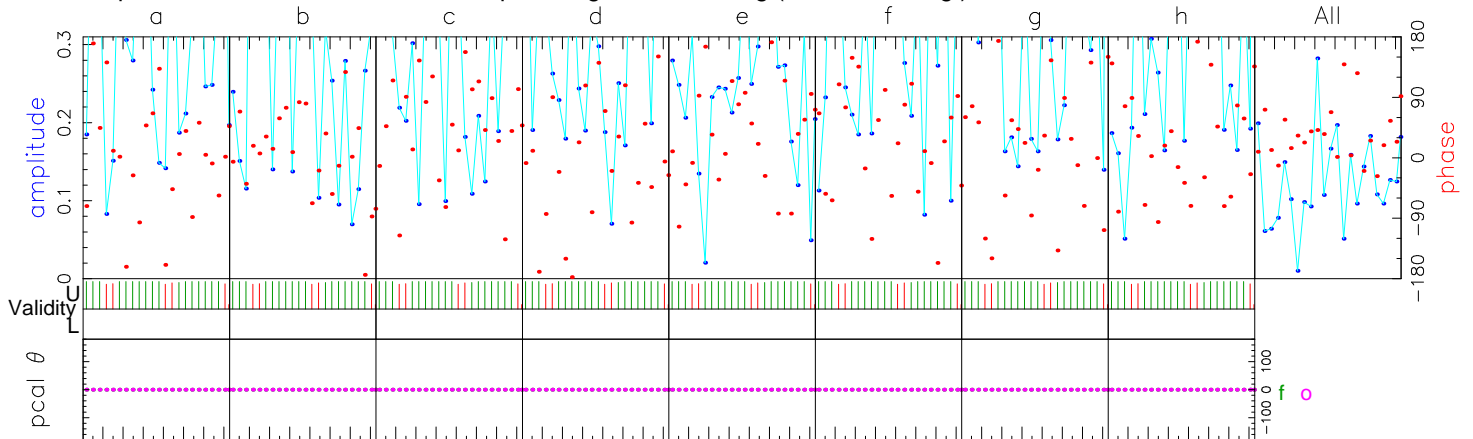


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120458
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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
	-3.2	34.3	60.7	-14.6	28.8	28.6	43.1	17.2	Phase	28.2
	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	Ampl.	0.1
	371.7	231.4	366.3	149.7	5.0	265.7	287.0	491.8	Sbd box	225.9
U/L	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.44842586018E+02	Apriori delay (usec)	-8.44728192211E+02	Resid mbdelay (usec)	-5.01881E-03	+/-	1.9E-04
Sband delay (usec)	-8.44849798461E+02	Apriori clock (usec)	6.5191269E+00	Resid sbdelay (usec)	-1.21606E-01	+/-	1.5E-03
Phase delay (usec)	-8.44728191302E+02	Apriori clockrate (us/s)	-3.0000002E-07	Resid phdelay (usec)	9.08672E-07	+/-	6.5E-07
Delay rate (us/s)	-3.27249678406E-01	Apriori rate (us/s)	-3.27251338160E-01	Resid rate (us/s)	1.65975E-06	+/-	2.7E-09
Total phase (deg)	-143.6	Apriori accel (us/s/s)	5.24790876866E-06	Resid phase (deg)	28.2	+/-	20.2

ph/seg (deg)	40.8	Theor.	48.0	Amplitude	0.103 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	60.8	Search (2048X32)	0.101	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	26.6	Inc. seg. avg.	0.091	Inc. frq. avg.	0.098	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.3	Inc. frq. avg.	0.098			Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

f: az 230.9 el 41.7 pa 42.5 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 1884.256 -872.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/fo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/fo.W.74.1X09UZ

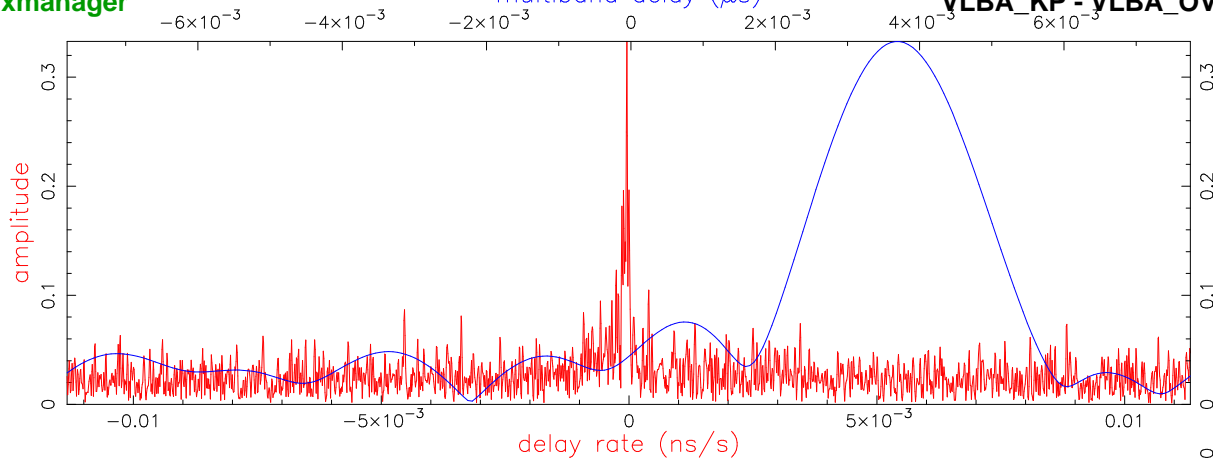
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, ko

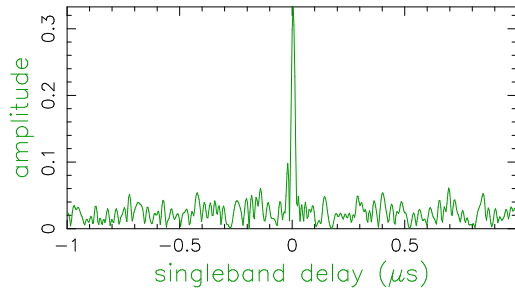
VLBA_KP - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

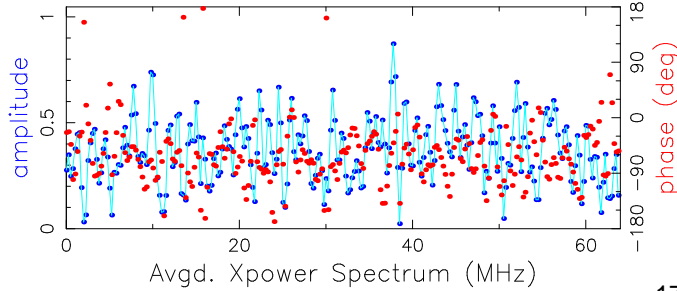


Fringe quality 9

SNR 18.6
 Int time 419.791
 Amp 0.333
 Phase -60.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.004106
 MBD 0.003695
 Fringe rate (Hz)
 -0.003362
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

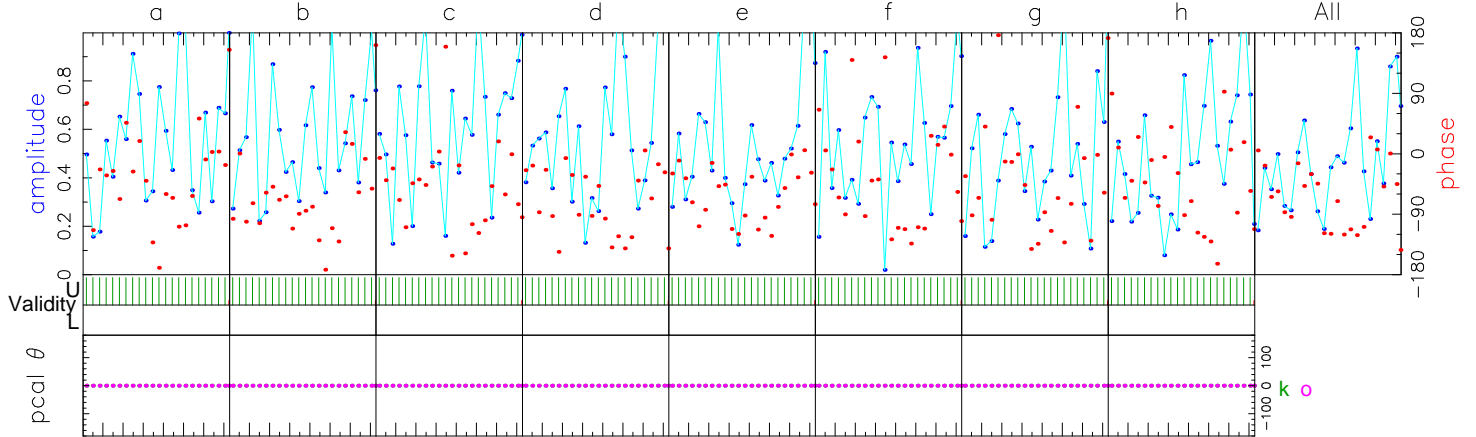


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120447
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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
	-41.7	-69.5	-63.8	-71.7	-50.3	-57.2	-64.4	-57.0	Phase	-60.0
	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	Ampl.	0.3
	258.3	257.9	257.6	257.7	258.5	258.8	258.3	257.7	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.21506175611E+02	Apriori delay (usec)	2.21502480399E+02	Resid mbdelay (usec)	3.69521E-03	+/-	5.8E-05
Sband delay (usec)	2.21506586149E+02	Apriori clock (usec)	-3.4202499E+00	Resid sbdelay (usec)	4.10575E-03	+/-	4.6E-04
Phase delay (usec)	2.21502478464E+02	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	-1.93485E-06	+/-	2.0E-07
Delay rate (us/s)	-1.68476912980E-01	Apriori rate (us/s)	-1.68476873950E-01	Resid rate (us/s)	-3.90302E-08	+/-	8.2E-10
Total phase (deg)	178.2	Apriori accel (us/s/s)	-6.23642429818E-07	Resid phase (deg)	-60.0	+/-	6.1

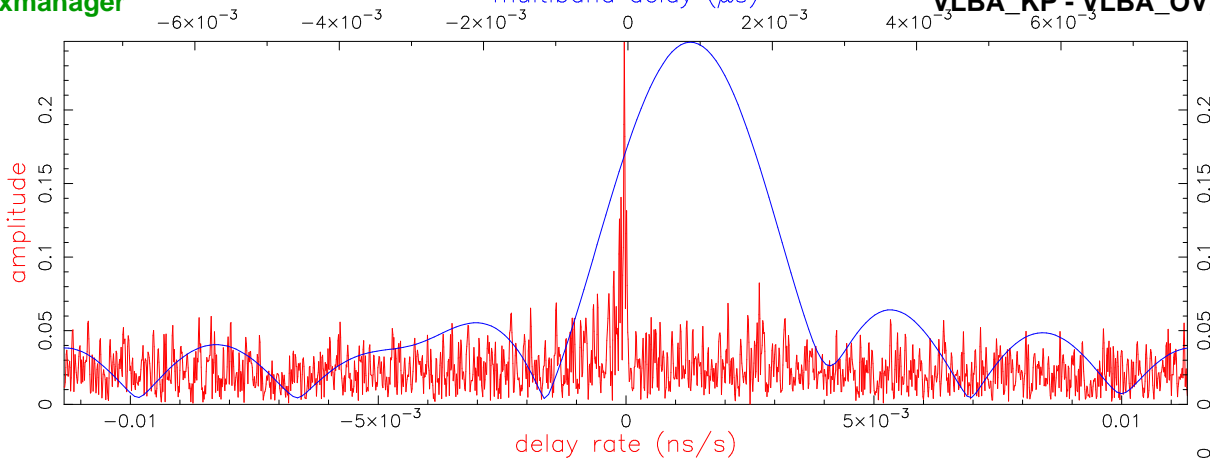
ph/seg (deg)	46.3	Theor.	14.7	Search (2048X32)	0.307	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.5		25.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	10.9		8.7	Inc. seg. avg.	0.455	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.4		15.2	Inc. frq. avg.	0.333	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 221.7 el 45.5 pa 35.2 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 964.457 -666.292 simultaneous interpolator

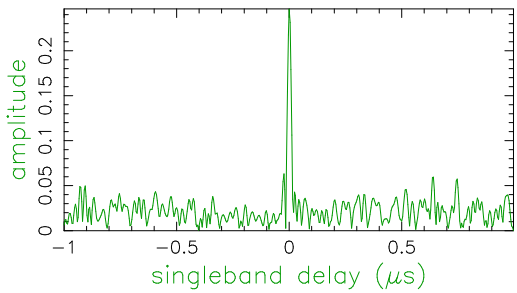
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/ko..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/ko.W.18.1X09UZ

multiband delay (μ s)

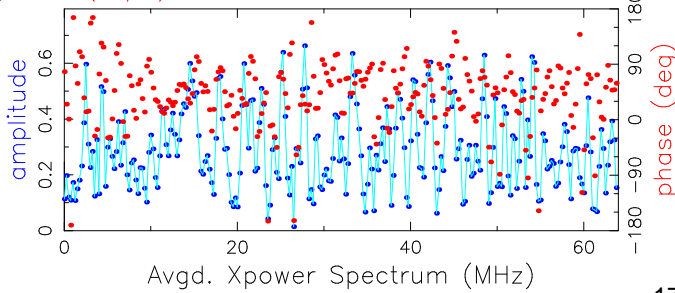
Fringe quality 9



SNR 13.8
Int time 419.791
Amp 0.247
Phase 44.3
PFD 1.2e-34
Delays (us)
SBD 0.000626
MBD 0.000881
Fringe rate (Hz)
-0.003234
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

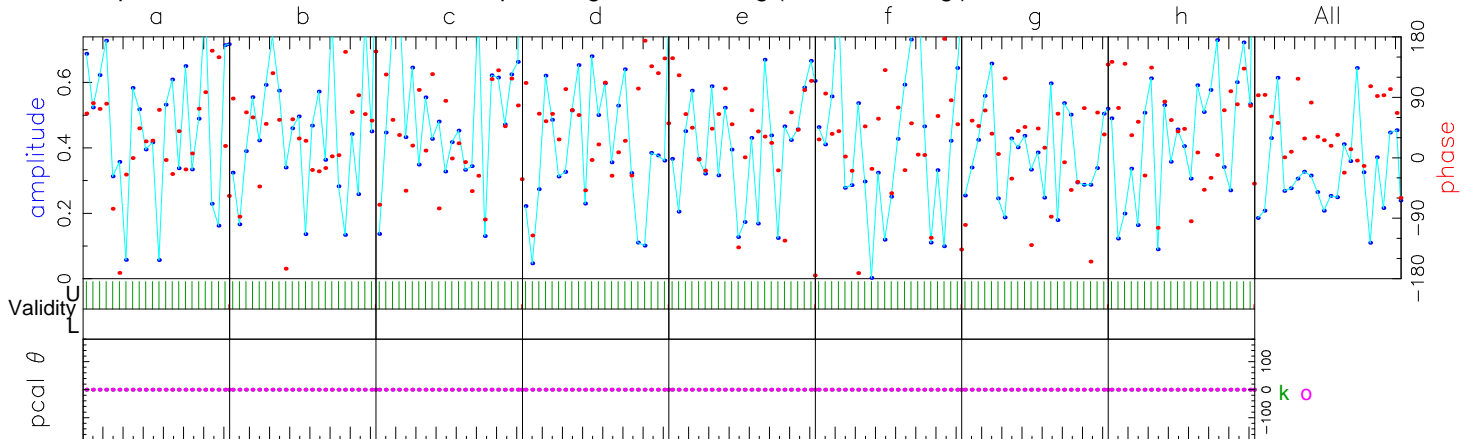


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120451
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

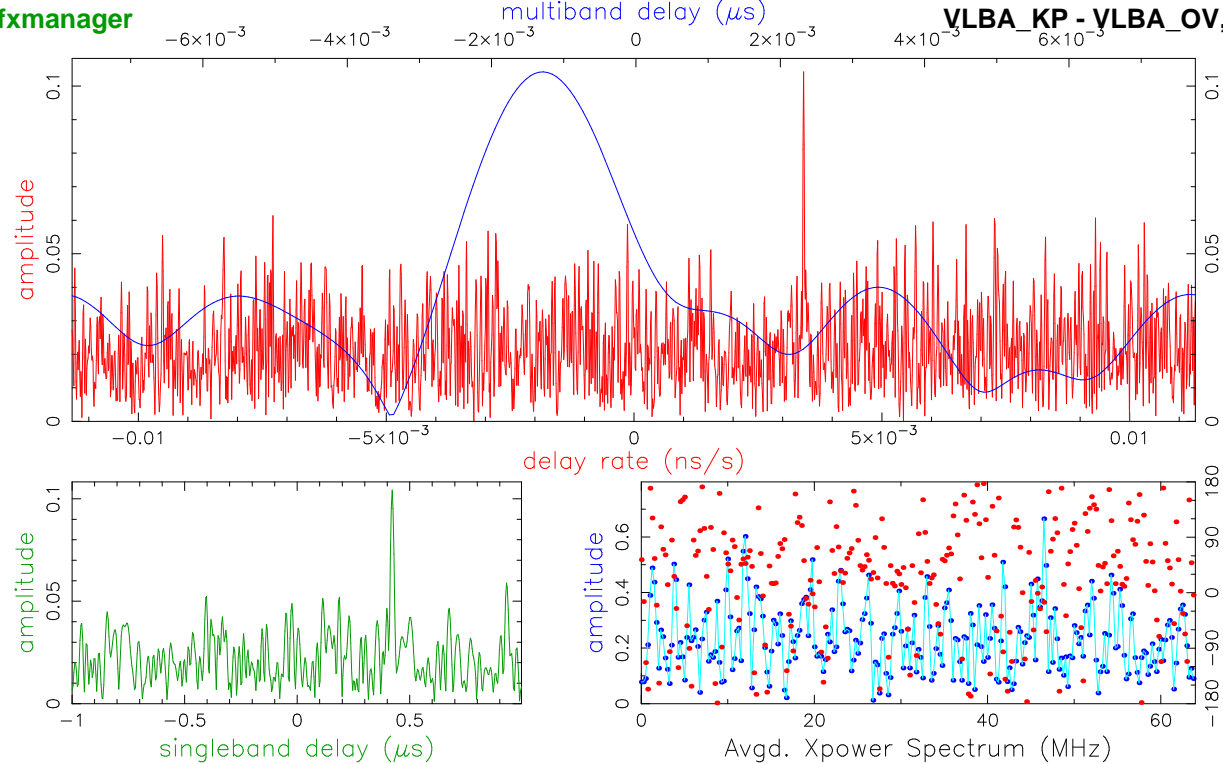
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	40.8	44.5	41.6	54.3	60.7	36.9	21.7	51.8	Phase	44.3
	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	257.7	256.3	257.4	257.3	257.4	257.7	257.2	256.2	Sbd box	257.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.21503361277E+02		Apriori delay (usec)		2.21502480399E+02		Resid mbdelay (usec)		8.80877E-04	+/- 7.9E-05
Sband delay (usec)	2.21503106899E+02		Apriori clock (usec)		-3.4202499E+00		Resid sbdelay (usec)		6.26500E-04	+/- 6.2E-04
Phase delay (usec)	2.21502481829E+02		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		1.43004E-06	+/- 2.7E-07
Delay rate (us/s)	-1.68476911491E-01		Apriori rate (us/s)		-1.68476873950E-01		Resid rate (us/s)		-3.75415E-08	+/- 1.1E-09
Total phase (deg)	282.5		Apriori accel (us/s/s)		-6.23642429818E-07		Resid phase (deg)		44.3	+/- 8.3

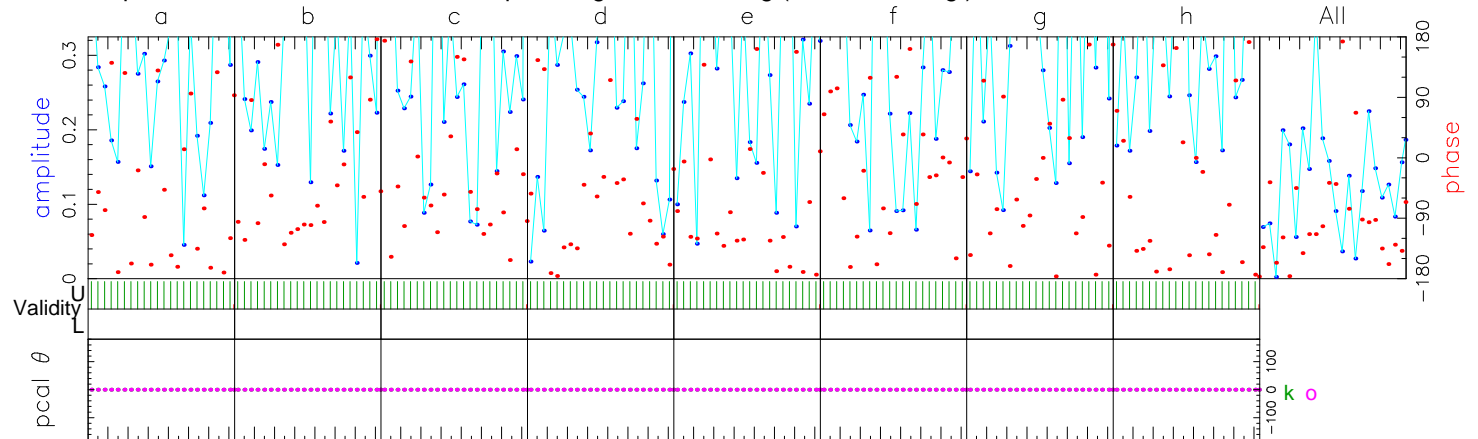
	RMS	Theor.	Amplitude	0.247 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.3	19.9	Search (2048X32)	0.234	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.8	34.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	13.0	11.7	Inc. seg. avg.	0.310	Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	12.3	20.5	Inc. frq. avg.	0.245	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 221.7 el 45.5 pa 35.2 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 964.457 -666.292 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/ko..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/ko.W.36.1X09UZ



Fringe quality 0
SNR 5.8
Int time 419.791
Amp 0.108
Phase -110.4
PFD 7.3e-01
Delays (us)
SBD 0.421789
MBD -0.001295
Fringe rate (Hz) 0.294906
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build 2021:303:035626
2021:303:120455
2021:252:122852
RA & Dec (J2000) 17h43m58.856136s --3°50'04.616734"

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
	-158.7	-89.2	-95.8	-102.6	-122.4	-45.1	-90.0	-151.2	Phase	-110.4
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	472.9	364.7	283.9	375.5	243.1	305.7	496.1	25.6	Sbd box	365.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.21923060247E+02		Apriori delay (usec)		2.21502480399E+02		Resid mbdelay (usec)		-1.29515E-03	+/- 1.9E-04
Sband delay (usec)	2.21924269399E+02		Apriori clock (usec)		-3.4202499E+00		Resid sbdelay (usec)		4.21789E-01	+/- 1.5E-03
Phase delay (usec)	2.21502476839E+02		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-3.56065E-06	+/- 6.3E-07
Delay rate (us/s)	-1.68473450383E-01		Apriori rate (us/s)		-1.68476873950E-01		Resid rate (us/s)		3.42357E-06	+/- 2.6E-09
Total phase (deg)	127.8		Apriori accel (us/s/s)		-6.23642429818E-07		Resid phase (deg)		-110.4	+/- 19.6

ph/seg (deg) 57.0 47.0 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 78.9 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 39.9 27.7 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 32.7 48.4 Inc. frq. avg. 0.112 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 221.7 el 45.5 pa 35.2 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 964.457 -666.292 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/ko..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/ko.W.59.1X09UZ

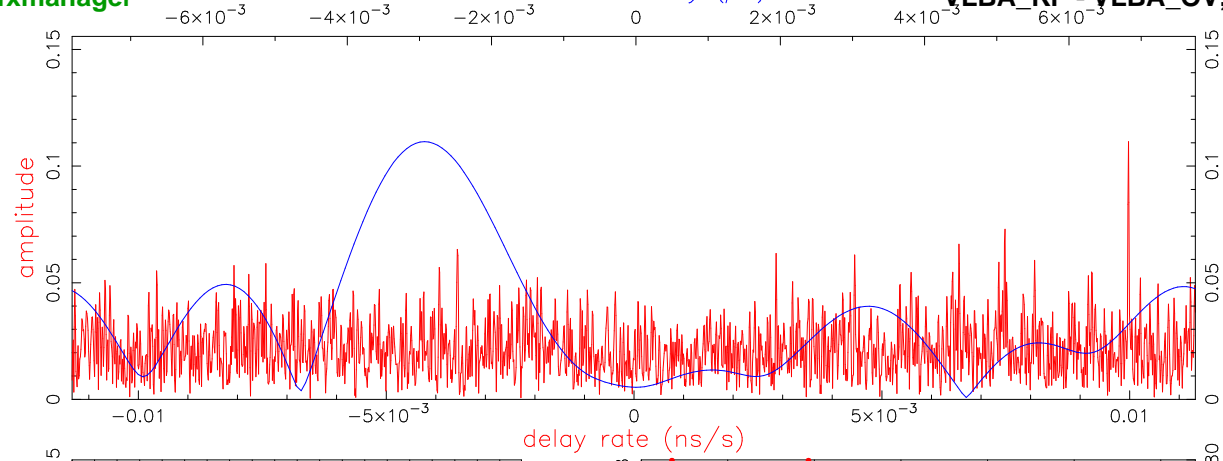
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

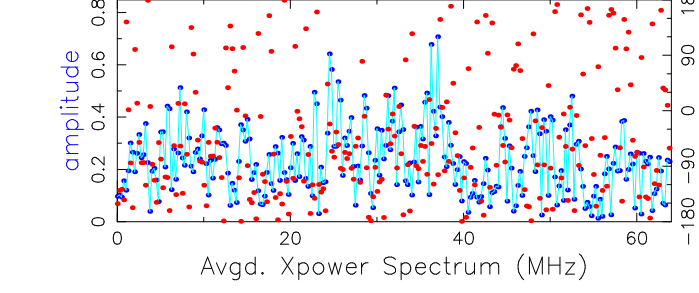
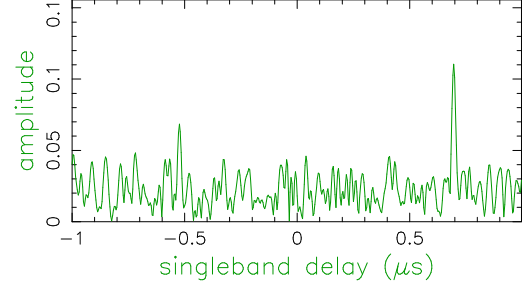
1741-038.1X09UZ, No0068, ko

VLBA_KP - VLBA_OV, fgroup W, pol RL

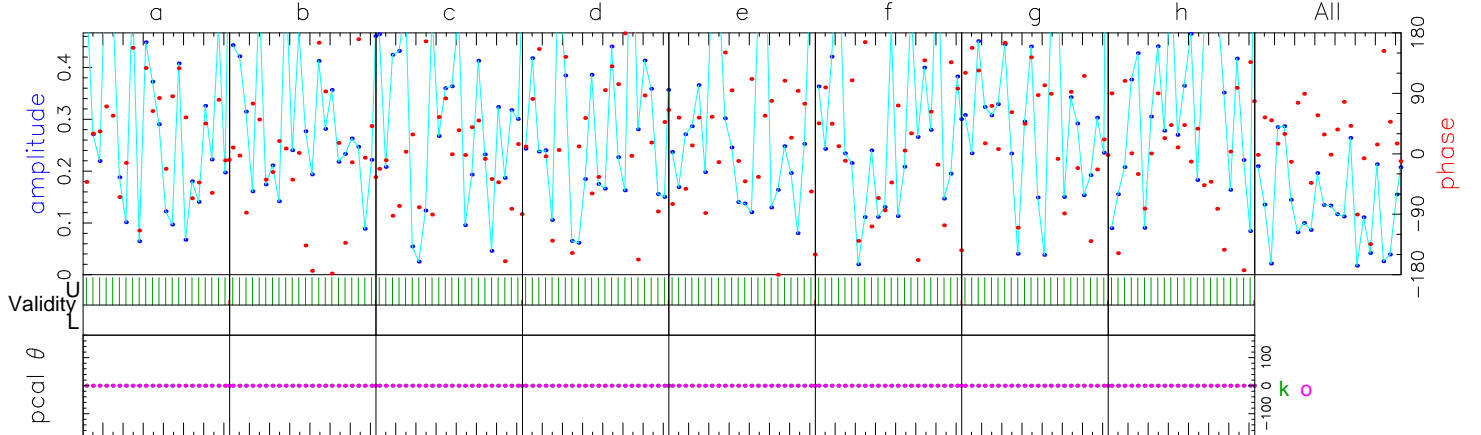
multiband delay (μ s)



Fringe quality 0
 SNR 6.2
 Int time 419.791
 Amp 0.156
 Phase 26.0
 PFD 1.5e-01
 Delays (us)
 SBD 0.695057
 MBD -0.002944
 Fringe rate (Hz) 0.860357
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build 2021:303:035626
 2021:303:120459
 2021:252:122852
 RA & Dec (J2000) 17h43m58.856136s --3°50'04.616734"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	0	0	0	0	0	0	0	0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	2.22202661233E+02				2.21502480399E+02				Resid mbdelay (usec)	-2.94417E-03 +/- 1.8E-04
Sband delay (usec)	2.22197537149E+02				-3.4202499E+00				Resid sbdelay (usec)	6.95057E-01 +/- 1.4E-03
Phase delay (usec)	2.21502481239E+02				-3.6000001E-07				Resid phdelay (usec)	8.39460E-07 +/- 6.0E-07
Delay rate (us/s)	-1.68466886060E-01				-1.68476873950E-01				Resid rate (us/s)	9.98789E-06 +/- 2.5E-09
Total phase (deg)		264.2			-6.23642429818E-07				Resid phase (deg)	26.0 +/- 18.5
RMS	59.0	44.4			0.156 +/- 0.025				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	75.4	77.5			0.108				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	30.8	26.2			0.000				Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.3	45.7			0.144				SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
amp/frq (%)					0.158				Sample rate(MISamp/s): 128	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	
									nlags: 256	
									t_cohere infinite	

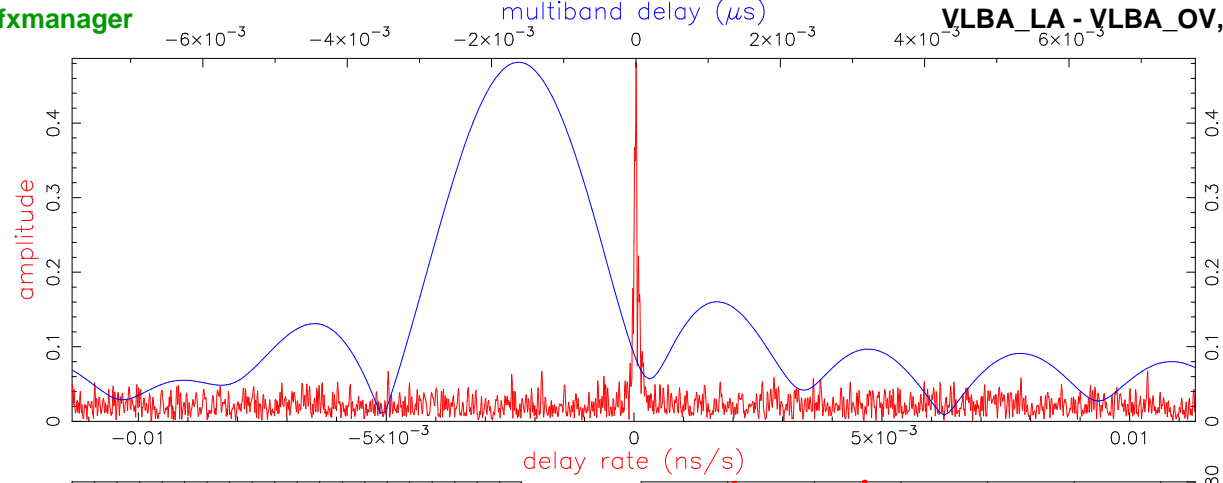
k: az 221.7 el 45.5 pa 35.2 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 964.457 -666.292 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/ko..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/ko.W.78.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, lo

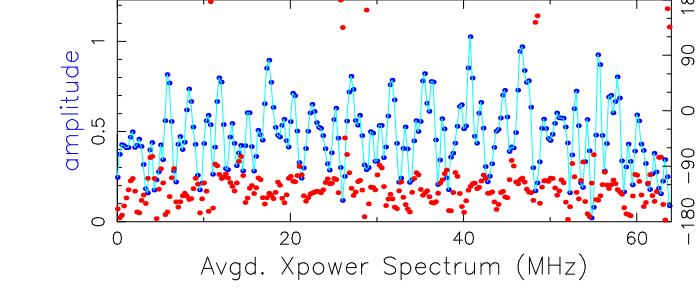
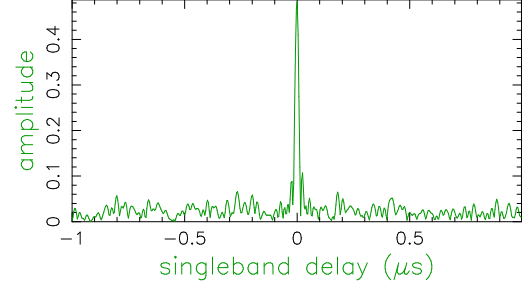
VLBA_LA - VLBA_OV, fgroup W, pol RR



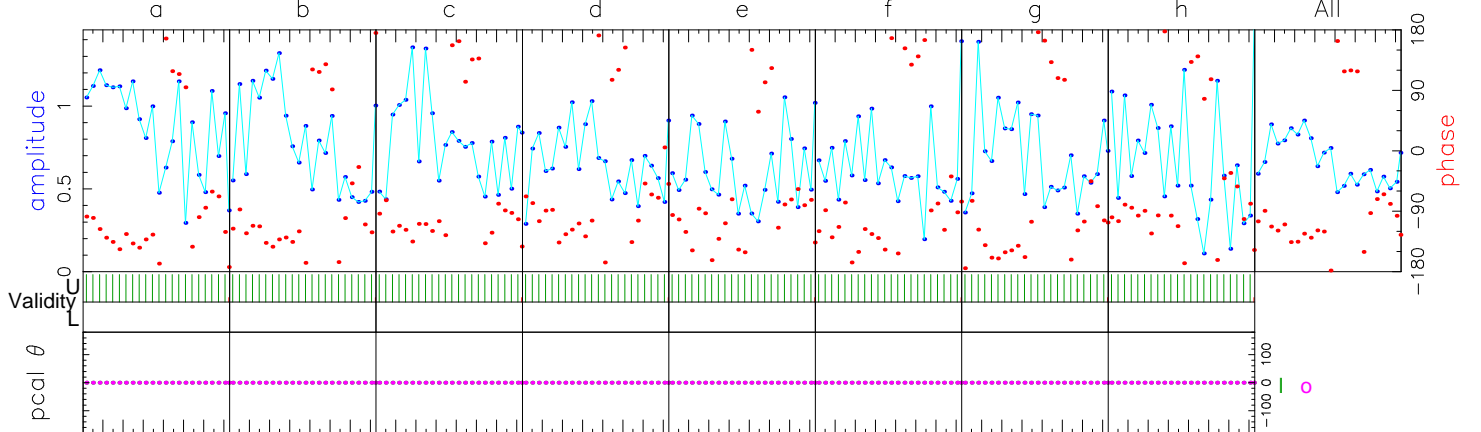
Fringe quality 7

SNR 27.3
 Int time 419.792
 Amp 0.487
 Phase -125.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.001348
 MBD -0.001664
 Fringe rate (Hz) 0.003394
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build 2021:303:035626
 2021:303:120505
 2021:252:122852
 RA & Dec (J2000) 17h43m58.856136s
 --3°50'04.616734"

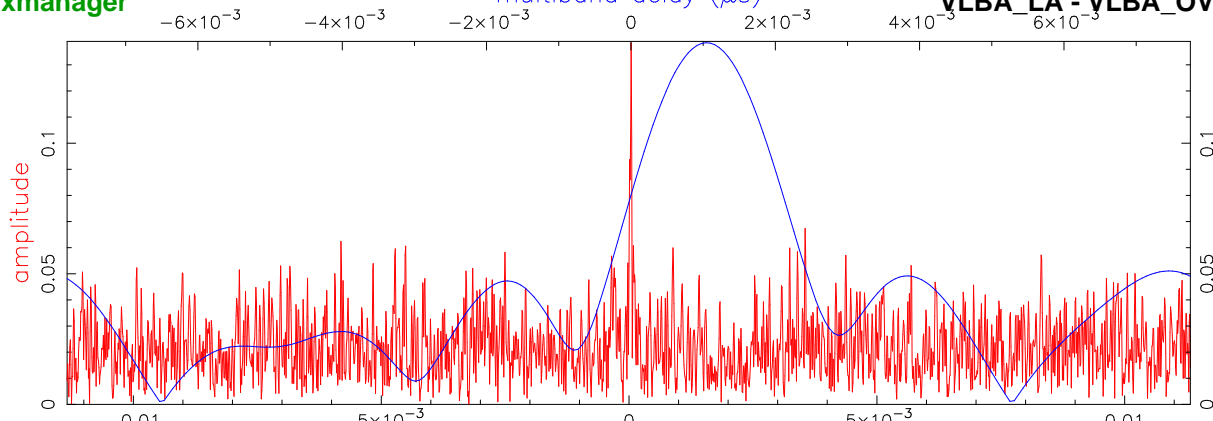


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



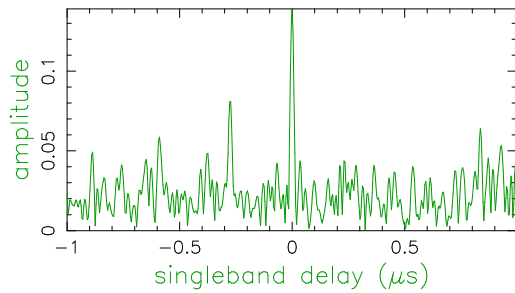
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.39501288425E+03				-1.39501121997E+03					
Sband delay (usec)	-1.39501256797E+03				-6.3633003E+00					
Phase delay (usec)	-1.39501122402E+03				-6.4600002E-07					
Delay rate (us/s)	-2.40956935347E-01				-2.40956974749E-01					
Total phase (deg)			-301.2		7.53804616659E-06					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	0.487 +/- 0.018									
Search (2048X32)	0.449									
Interp.	0.000									
Inc. seg. avg.	0.656									
Inc. frq. avg.	0.487									
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
simultaneous interpolator										

multiband delay (μ s)

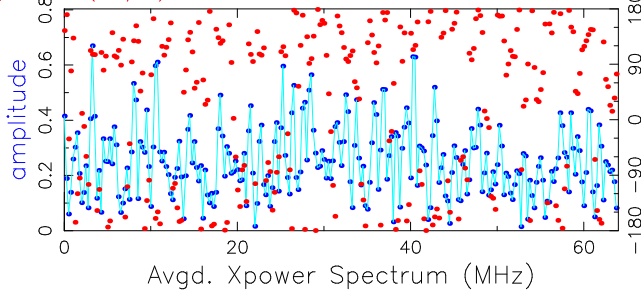


Fringe quality 9

SNR 7.8
Int time 419.792
Amp 0.139
Phase 127.5
PFD 2.3e-06
Delays (us)
SBD -0.000825
MBD 0.001021
Fringe rate (Hz) 0.003345
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

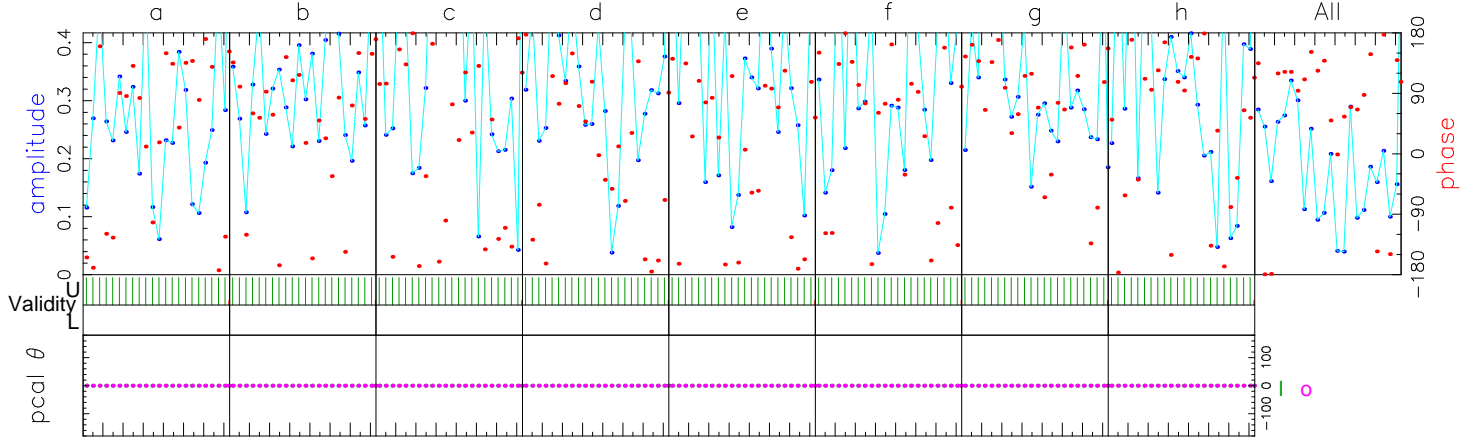


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build 2021:303:035626
2021:303:120508
2021:252:122852
RA & Dec (J2000) 17h43m58.856136s
--3°50'04.616734"

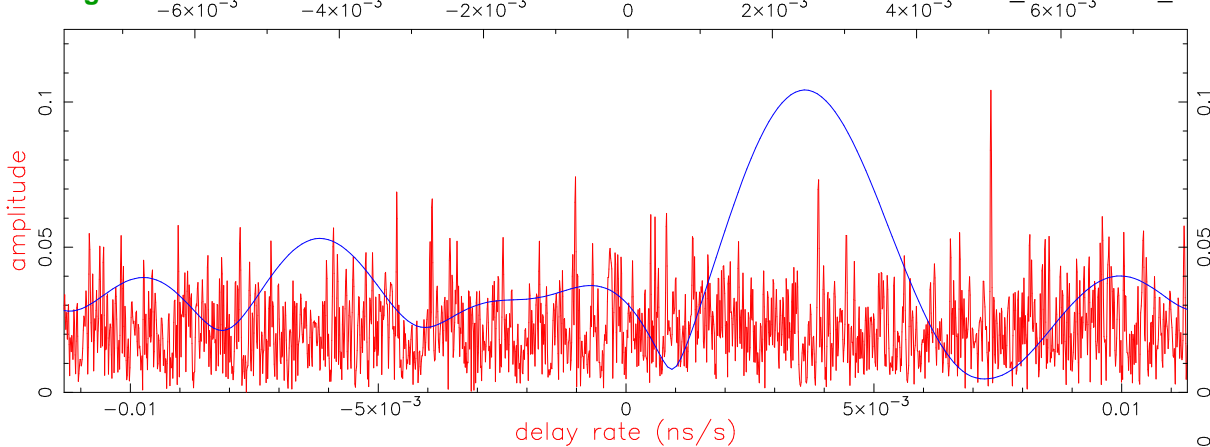
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



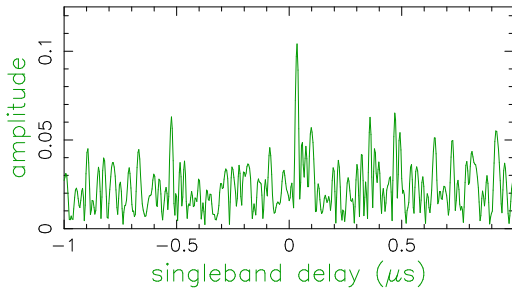
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.39501019903E+03				-1.39501121997E+03				1.02094E-03	+/- 1.4E-04
Sband delay (usec)	-1.39501204472E+03				-6.3633003E+00				-8.24750E-04	+/- 1.1E-03
Phase delay (usec)	-1.39501121586E+03				-6.4600002E-07				4.11203E-06	+/- 4.7E-07
Delay rate (us/s)	-2.40956935921E-01				-2.40956974749E-01				3.88282E-08	+/- 2.0E-09
Total phase (deg)			-48.3		7.53804616659E-06				127.5	+/- 14.7
	RMS	Theor.	Amplitude	0.139 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	53.0	35.3	Search (2048X32)	0.129	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	74.1	61.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	21.1	20.8	Inc. seg. avg.	0.157	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	33.9	36.3	Inc. frq. avg.	0.137	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

multiband delay (μ s)

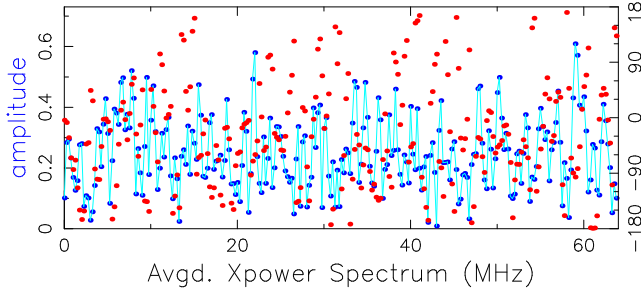
Fringe quality 0



SNR 5.8
Int time 419.792
Amp 0.125
Phase -30.0
PFD 7.2e-01
Delays (us)
SBD 0.034500
MBD 0.002408
Fringe rate (Hz)
0.635026
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

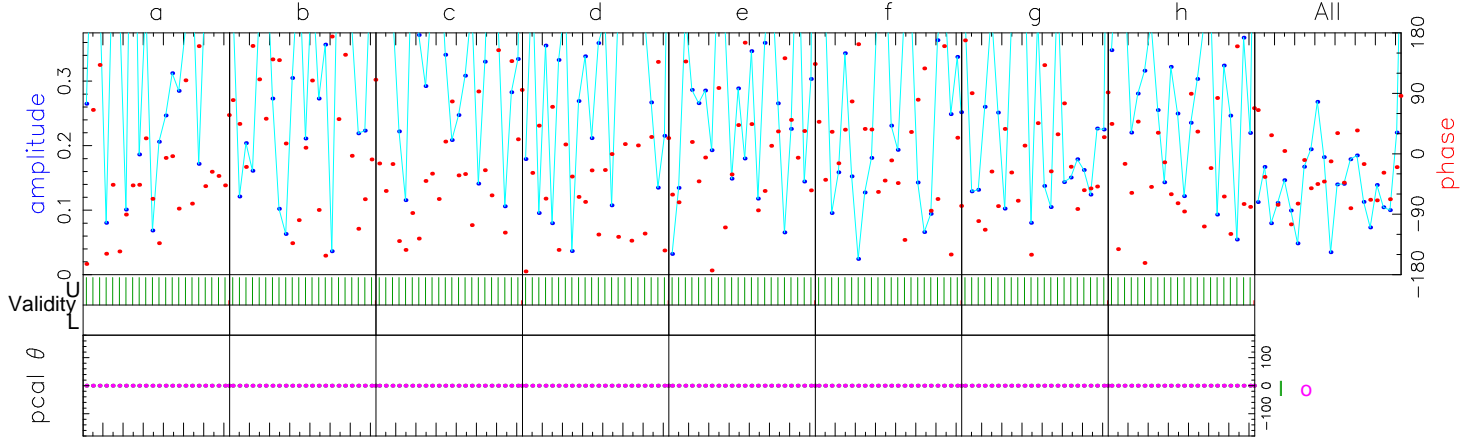


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120511
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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



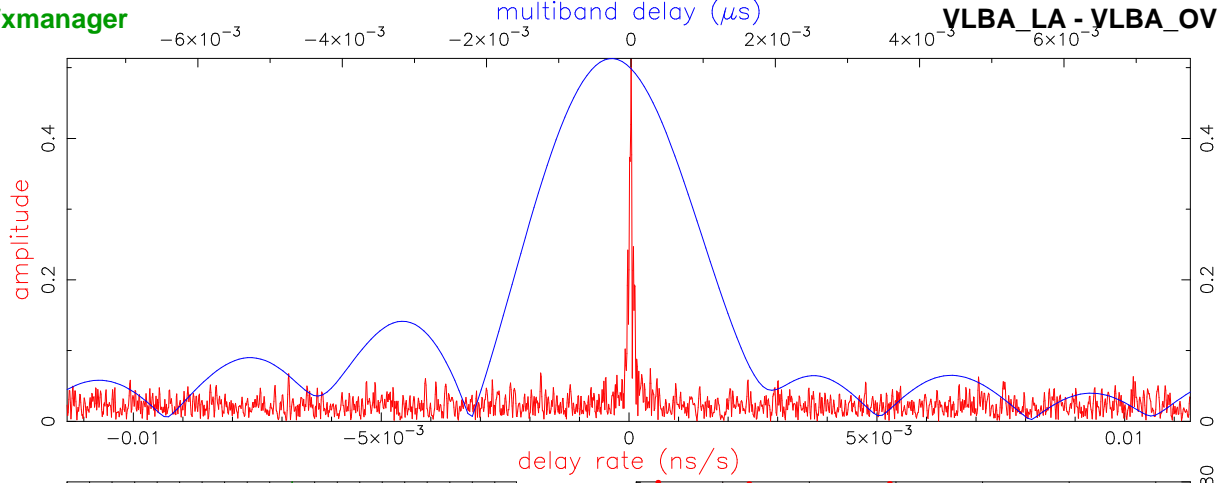
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-40.5	81.6	-49.8	-53.1	10.5	-11.3	-17.4	-49.0	Phase	-30.0		
	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1		
	101.2	63.0	265.6	441.1	424.0	483.0	186.6	261.9	Sbd box	265.8		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
l	0	0	0	0	0	0	0	0	PC freqs			
o	0	0	0	0	0	0	0	0	PC freqs			
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
o	1000	1000	1000	1000	1000	1000	1000	1000				
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	-1.39497756247E+03		Apriori delay (usec)		-1.39501121997E+03		Resid mbdelay (usec)		2.40750E-03	+/- 1.9E-04		
Sband delay (usec)	-1.39497671947E+03		Apriori clock (usec)		-6.3633003E+00		Resid sbdelay (usec)		3.45005E-02	+/- 1.5E-03		
Phase delay (usec)	-1.39501122094E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-9.68019E-07	+/- 6.3E-07		
Delay rate (us/s)	-2.40949602732E-01		Apriori rate (us/s)		-2.40956974749E-01		Resid rate (us/s)		7.37202E-06	+/- 2.6E-09		
Total phase (deg)			Apriori accel (us/s/s)		7.53804616659E-06		Resid phase (deg)		-30.0	+/- 19.6		
	RMS	Theor.	Amplitude	0.125 +/- 0.021		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	43.7	47.0	Search (2048X32)	0.103		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	68.8	82.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	51.6	27.7	Inc. seg. avg.	0.125		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	38.4	48.4	Inc. frq. avg.	0.132		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

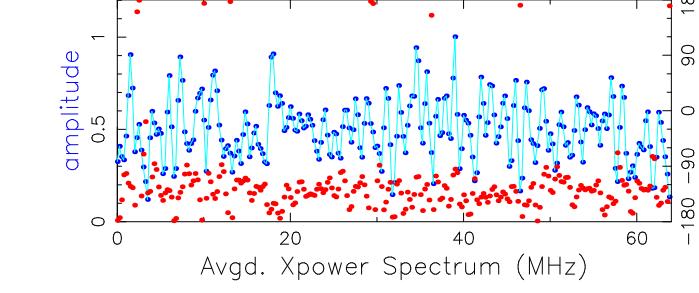
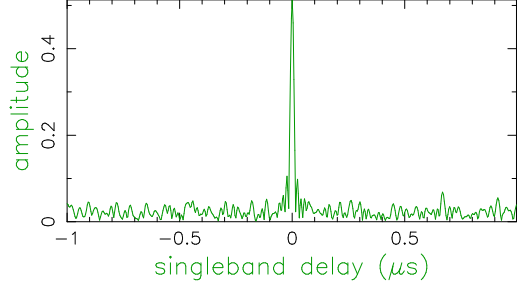
1741-038.1X09UZ, No0068, lo

VLBA_LA - VLBA_OV, fgroup W, pol LL



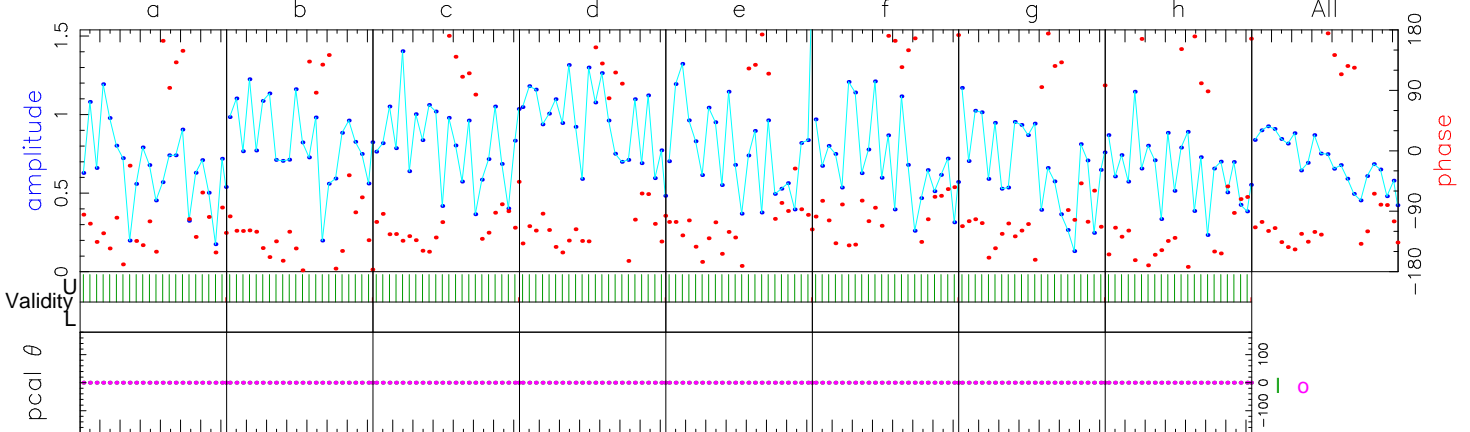
Fringe quality 7

SNR 28.8
 Int time 419.792
 Amp 0.513
 Phase -132.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000243
 MBD -0.000273
 Fringe rate (Hz)
 0.003399
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120501
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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



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

Group delay (usec)(sbd)	-1.39501149293E+03	Apriori delay (usec)	-1.39501121997E+03	Resid mbdelay (usec)	-2.72962E-04	+/-	3.8E-05
Sband delay (usec)	-1.39501146322E+03	Apriori clock (usec)	-6.3633003E+00	Resid sbdelay (usec)	-2.43250E-04	+/-	3.0E-04
Phase delay (usec)	-1.39501122424E+03	Apriori clockrate (us/s)	-6.4600002E-07	Resid phdelay (usec)	-4.26863E-06	+/-	1.3E-07
Delay rate (us/s)	-2.40956935287E-01	Apriori rate (us/s)	-2.40956974749E-01	Resid rate (us/s)	3.94617E-08	+/-	5.3E-10
Total phase (deg)	-308.2	Apriori accel (us/s/s)	7.53804616659E-06	Resid phase (deg)	-132.4	+/-	4.0

ph/seg (deg)	50.8	Theor.	9.6	Amplitude	0.513 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	47.7		16.7	Search (2048X32)	0.477	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	10.8		5.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	10.1		9.8	Inc. seg. avg.	0.702	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.517	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 225.2 el 39.6 pa 35.9 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 1393.945 -220.727 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/lo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/lo.W.84.1X09UZ

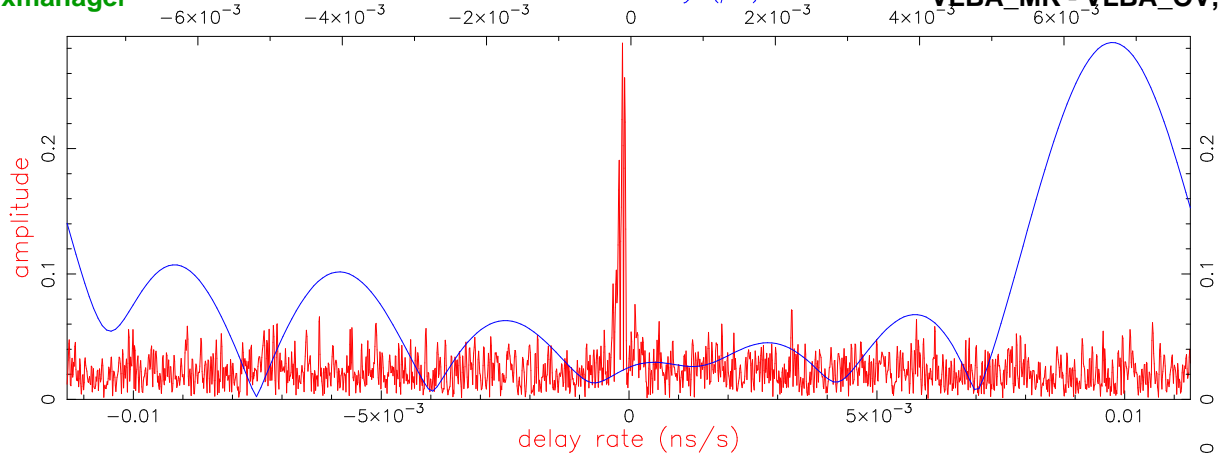
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, mo

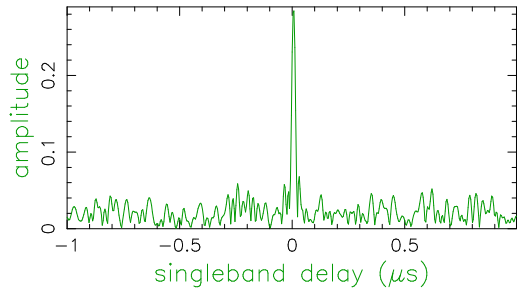
VLBA_MK - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

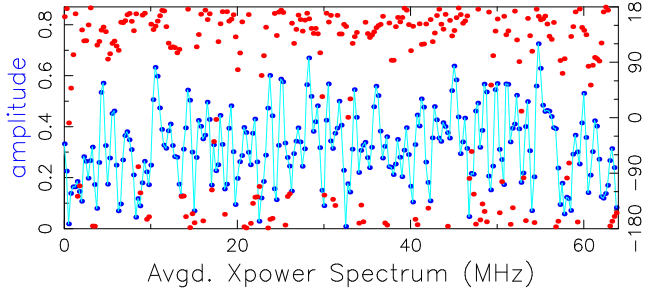


Fringe quality 9

SNR 16.2
 Int time 419.788
 Amp 0.290
 Phase 152.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.006048
 MBD 0.006607
 Fringe rate (Hz) -0.011638
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

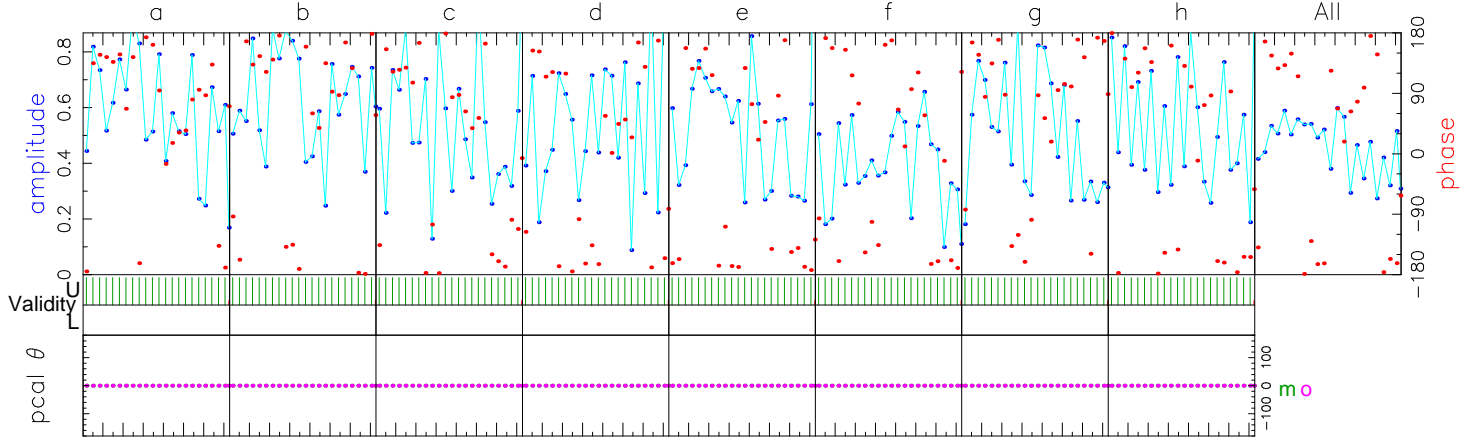


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120506
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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
	129.8	159.6	147.3	166.5	161.9	161.6	132.2	159.8	Phase	152.0
	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.3	Ampl.	0.3
	259.2	258.7	258.6	258.9	258.9	258.1	258.1	258.1	Sbd box	258.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.05543543268E+03		Apriori delay (usec)		4.05542882561E+03		Resid mbdelay (usec)		6.60707E-03	+/- 6.7E-05
Sband delay (usec)	4.05543487336E+03		Apriori clock (usec)		1.1962540E+01		Resid sbdelay (usec)		6.04775E-03	+/- 5.3E-04
Phase delay (usec)	4.05542883052E+03		Apriori clockrate (us/s)		-4.2000013E-08		Resid phdelay (usec)		4.90277E-06	+/- 2.3E-07
Delay rate (us/s)	8.42568595518E-01		Apriori rate (us/s)		8.42568730623E-01		Resid rate (us/s)		-1.35106E-07	+/- 9.4E-10
Total phase (deg)	165.8		Apriori accel (us/s/s)		-1.94903569898E-05		Resid phase (deg)		152.0	+/- 7.1

	RMS	Theor.	Amplitude	0.290 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	56.3	16.9	Search (2048X32)	0.278	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	69.4	29.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	15.4	10.0	Inc. seg. avg.	0.448	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	24.2	17.4	Inc. frq. avg.	0.288	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

m: az 144.7 el 61.6 pa -32.9 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -4869.802 -2242.910 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/mo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/mo.W.108.1X09UZ

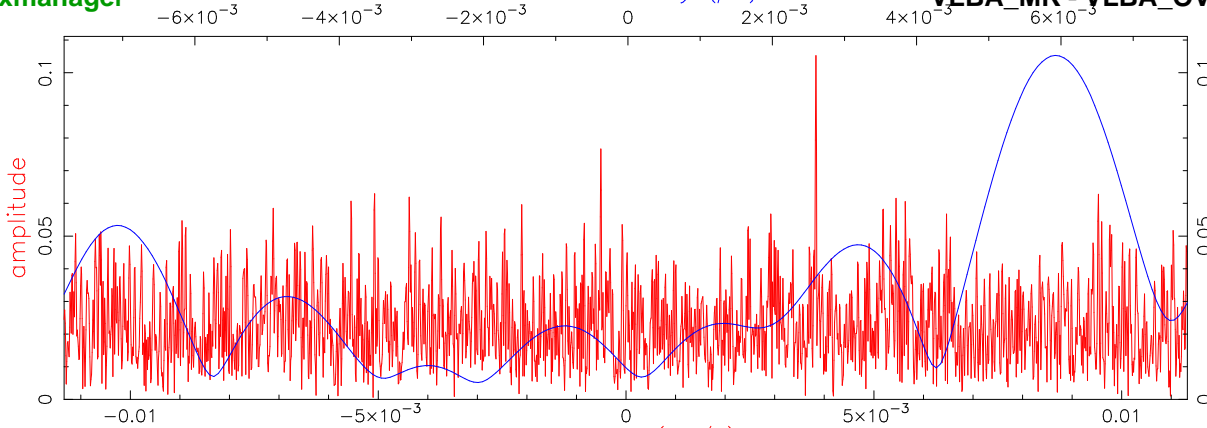
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, mo

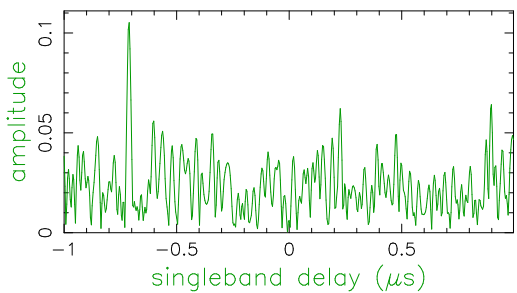
VLBA_MK - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

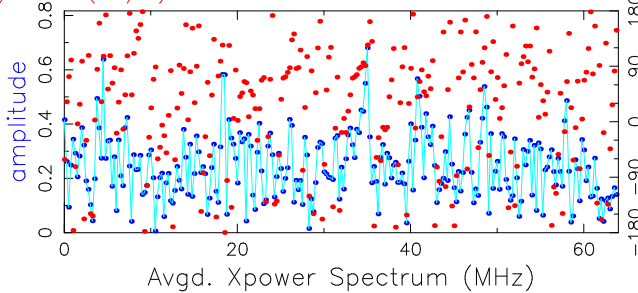


Fringe quality 0

SNR 5.9
 Int time 419.788
 Amp 0.111
 Phase 86.8
 PFD 5.2e-01
 Delays (us)
 SBD -0.712093
 MBD 0.005890
 Fringe rate (Hz)
 0.330153
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

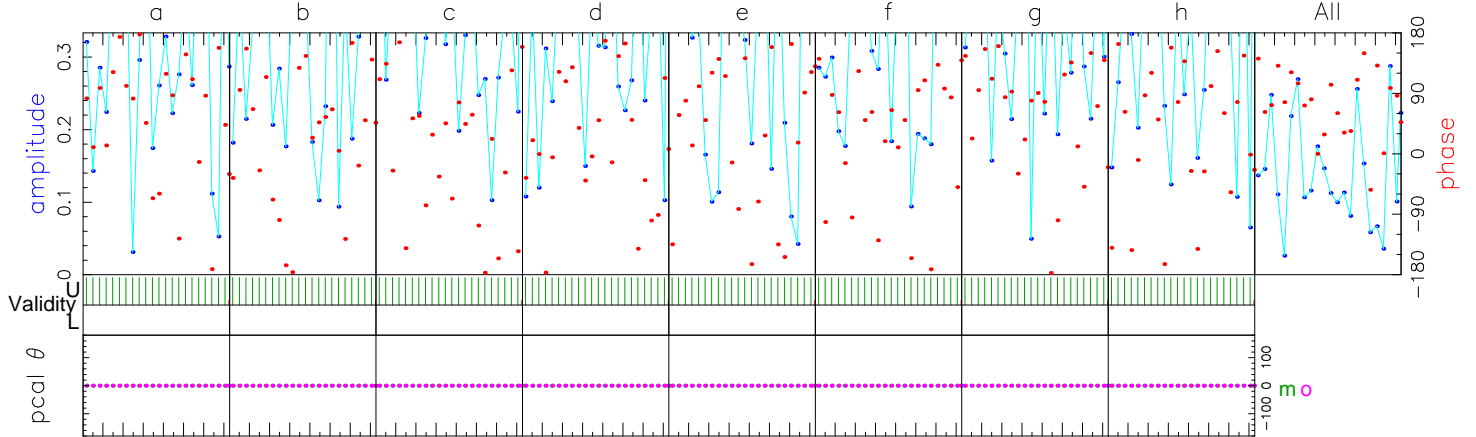


delay rate (ns/s)



Exp. c211c
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 124501.00
 Corr/FF/build
 2021:303:035626
 2021:303:120509
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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		
m	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 4.05471596554E+03 Apriori delay (usec) 4.05542882561E+03 Resid mbdelay (usec) 5.88992E-03 +/- 1.8E-04
 Sband delay (usec) 4.05471673311E+03 Apriori clock (usec) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Phase delay (usec) 4.05542882841E+03 Apriori clockrate (us/s) -4.2000013E-08 Resid sbdelay (usec) -7.12093E-01 +/- 1.5E-03
 Delay rate (us/s) 8.42572563370E-01 Apriori rate (us/s) 8.42568730623E-01 Resid phdelay (usec) 2.79870E-06 +/- 6.2E-07
 Total phase (deg) 100.6 Apriori accel (us/s/s) -1.94903569898E-05 Resid rate (us/s) 3.83275E-06 +/- 2.6E-09
 Resid phase (deg) 86.8 +/- 19.3

RMS 51.7 Theor. 46.3 Amplitude 0.111 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 51.7 46.3 Search (2048X32) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.2 80.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.0 27.3 Inc. seg. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 42.0 47.6 Inc. frq. avg. 0.102 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 144.7 el 61.6 pa -32.9 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -4869.802 -2242.910 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/mo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/mo.W.126.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

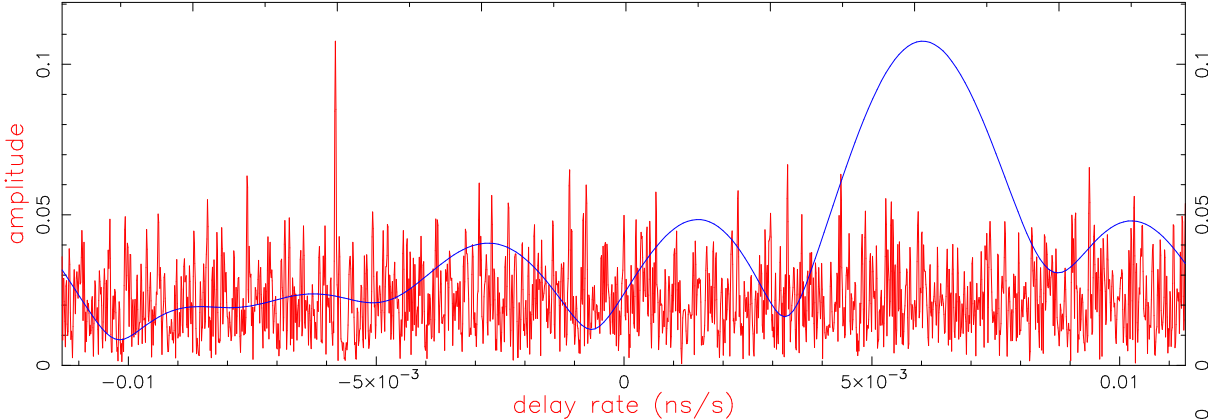
1741-038.1X09UZ, No0068, mo

VLBA_MK - VLBA_OV, fgroup W, pol RL

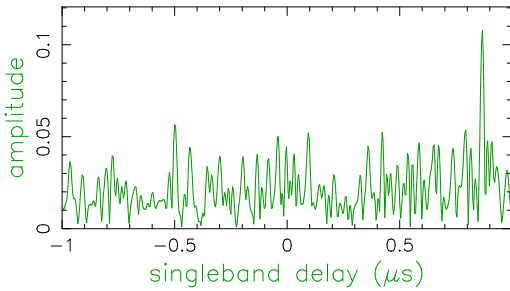
multiband delay (μ s)

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

Fringe quality 0

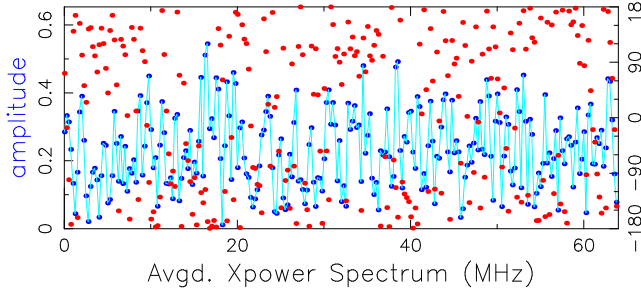


SNR 6.0
 Int time 419.788
 Amp 0.121
 Phase 22.2
 PFD 3.2e-01
 Delays (us)
 SBD 0.866646
 MBD 0.004098
 Fringe rate (Hz)
 -0.501959
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



singleband delay (μ s)

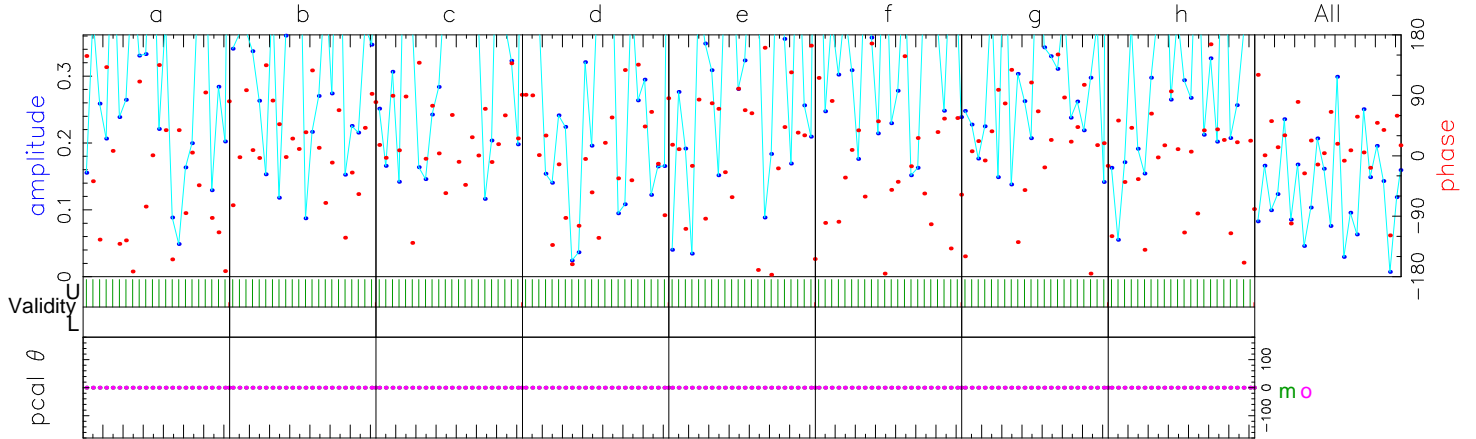
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120513
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

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
	-42.1	23.6	28.2	18.3	38.3	-46.6	49.9	1.1	Phase	22.2
	0.0	0.2	0.2	0.1	0.1	0.0	0.2	0.1	Ampl.	0.1
	301.0	479.9	478.3	109.6	5.9	244.2	505.3	250.0	Sbd box	478.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.05629229868E+03	Apriori delay (usec)	4.05542882561E+03	Resid mbdelay (usec)	4.09806E-03	+/-	1.8E-04
Sband delay (usec)	4.05629547161E+03	Apriori clock (usec)	1.1962540E+01	Resid sbdelay (usec)	8.66646E-01	+/-	1.4E-03
Phase delay (usec)	4.05542882633E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	7.16273E-07	+/-	6.1E-07
Delay rate (us/s)	8.42562903380E-01	Apriori rate (us/s)	8.42568730623E-01	Resid rate (us/s)	-5.82724E-06	+/-	2.5E-09
Total phase (deg)	36.0	Apriori accel (us/s/s)	-1.94903569898E-05	Resid phase (deg)	22.2	+/-	19.0

ph/seg (deg)	52.8	Theor.	45.5	Amplitude	0.121 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.6	Search (2048X32)	0.104	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	41.6	Inc. seg. avg.	0.112	Inc. frq. avg.	0.118	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.6	Inc. frq. avg.	0.118			Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 144.7 el 61.6 pa -32.9 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -4869.802 -2242.910 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/mo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/mo.W.142.1X09UZ

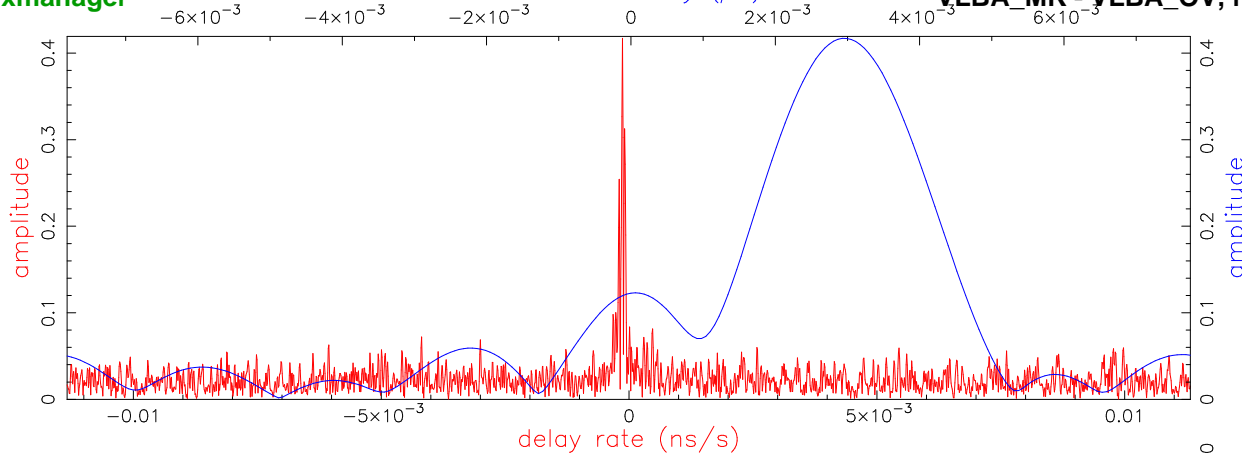
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, mo

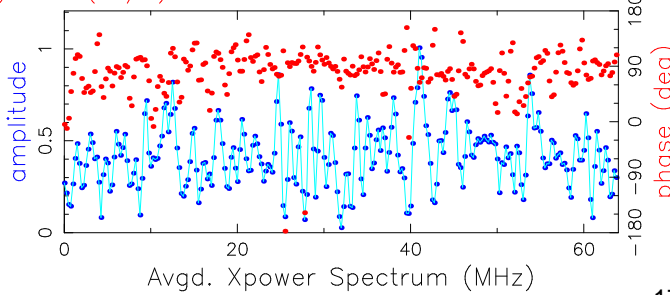
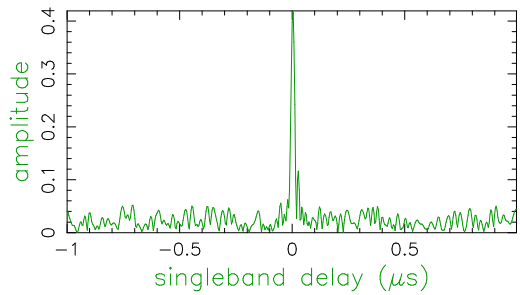
VLBA_MK - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



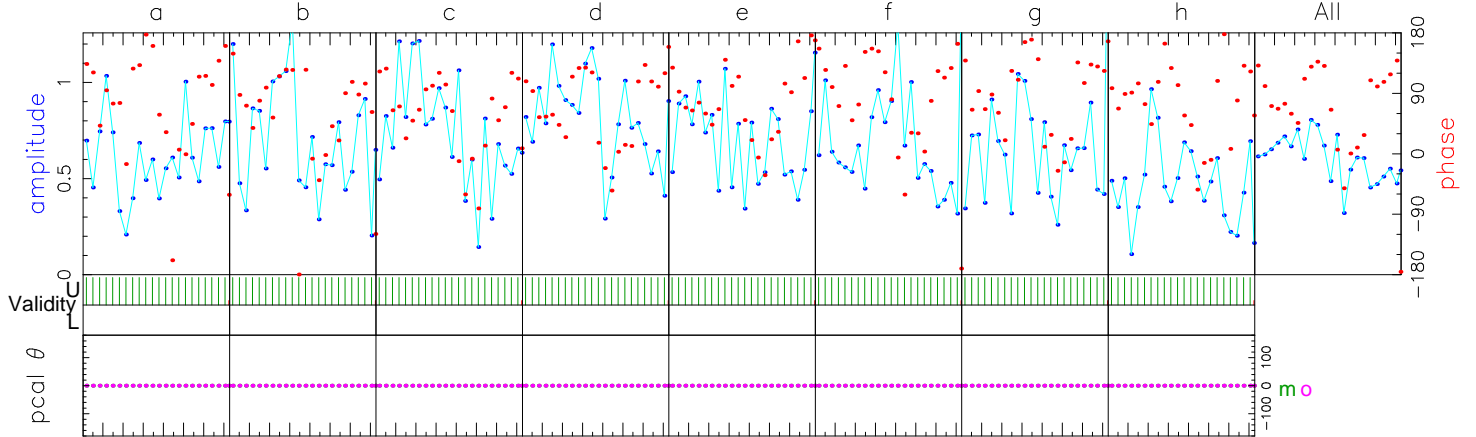
Fringe quality 9

SNR 23.5
 Int time 419.788
 Amp 0.419
 Phase 83.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.002983
 MBD 0.002941
 Fringe rate (Hz)
 -0.011664
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120502
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	99.3	88.6	68.6	72.9	78.3	95.1	97.2	82.2	Phase	83.8
	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	Ampl.	0.4
	257.1	257.8	258.1	257.8	257.9	257.9	257.4	257.8	Sbd box	257.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.05543176672E+03	Apriori delay (usec)	4.05542882561E+03	Resid mbdelay (usec)	2.94110E-03	+/-	4.6E-05
Sband delay (usec)	4.05543180861E+03	Apriori clock (usec)	1.1962540E+01	Resid sbdelay (usec)	2.98300E-03	+/-	3.7E-04
Phase delay (usec)	4.05542882832E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	2.70323E-06	+/-	1.6E-07
Delay rate (us/s)	8.42568595216E-01	Apriori rate (us/s)	8.42568730623E-01	Resid rate (us/s)	-1.35407E-07	+/-	6.5E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.94903569898E-05	Resid phase (deg)	83.8	+/-	4.9

ph/seg (deg)	52.3	Theor.	11.7	Amplitude	0.419 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	52.6		20.4	Search (2048X32)	0.409	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	12.6		6.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	18.8		12.0	Inc. seg. avg.	0.594	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.422	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

m: az 144.7 el 61.6 pa -32.9 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) -4869.802 -2242.910 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/mo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/mo.W.91.1X09UZ

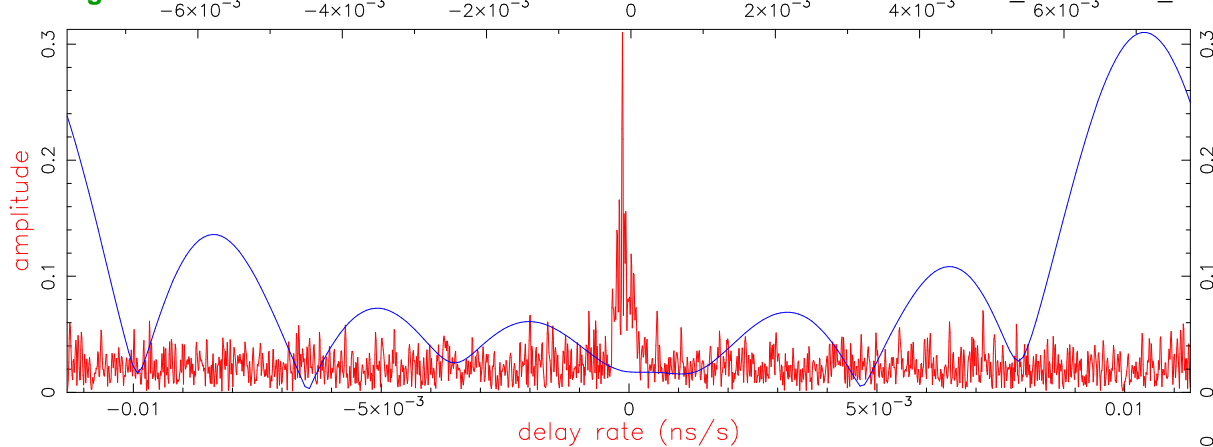
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, no

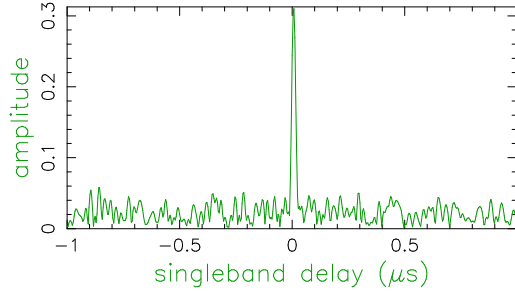
VLBA_NL - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

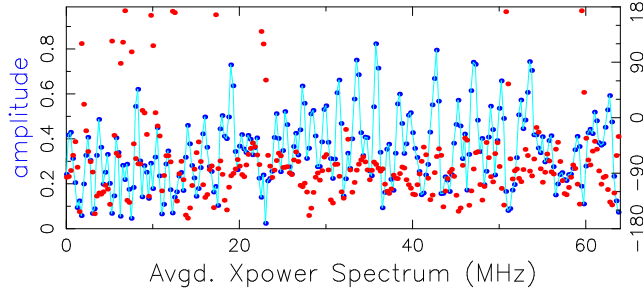


Fringe quality 9

SNR 17.5
Int time 419.792
Amp 0.313
Phase -97.4
PFD 0.0e+00
Delays (us)
SBD 0.006564
MBD 0.007090
Fringe rate (Hz)
-0.011121
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

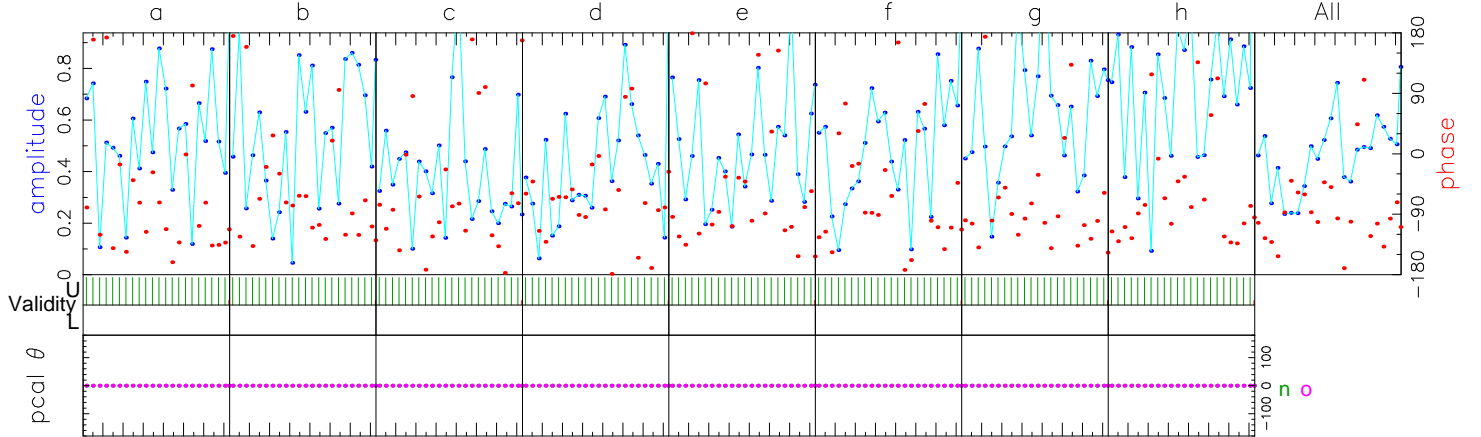


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120506
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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
	-105.9	-95.2	-96.2	-75.1	-108.9	-89.8	-102.7	-92.6	Phase	-97.4
	0.3	0.4	0.2	0.2	0.3	0.2	0.5	0.4	Ampl.	0.3
	258.9	258.6	259.2	440.7	258.5	257.3	258.8	259.0	Sbd box	258.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.34420309676E+03		Apriori delay (usec)		-5.34421018692E+03		Resid mbdelay (usec)		7.09017E-03	+/- 6.2E-05
Sband delay (usec)	-5.34420362292E+03		Apriori clock (usec)		1.7316246E+00		Resid sbdelay (usec)		6.56400E-03	+/- 4.9E-04
Phase delay (usec)	-5.34421019006E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-3.14123E-06	+/- 2.1E-07
Delay rate (us/s)	-4.04216188356E-01		Apriori rate (us/s)		-4.04216059252E-01		Resid rate (us/s)		-1.29104E-07	+/- 8.7E-10
Total phase (deg)			Apriori accel (us/s/s)		2.79648308299E-05		Resid phase (deg)		-97.4	+/- 6.5

ph/seg (deg) 55.5 15.7 Search (2048X32) 0.292 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.9 27.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.7 9.3 Inc. seg. avg. 0.441 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.3 16.1 Inc. frq. avg. 0.310 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 236.2 el 27.0 pa 38.8 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 2363.723 390.364 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/no..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/no.W.106.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

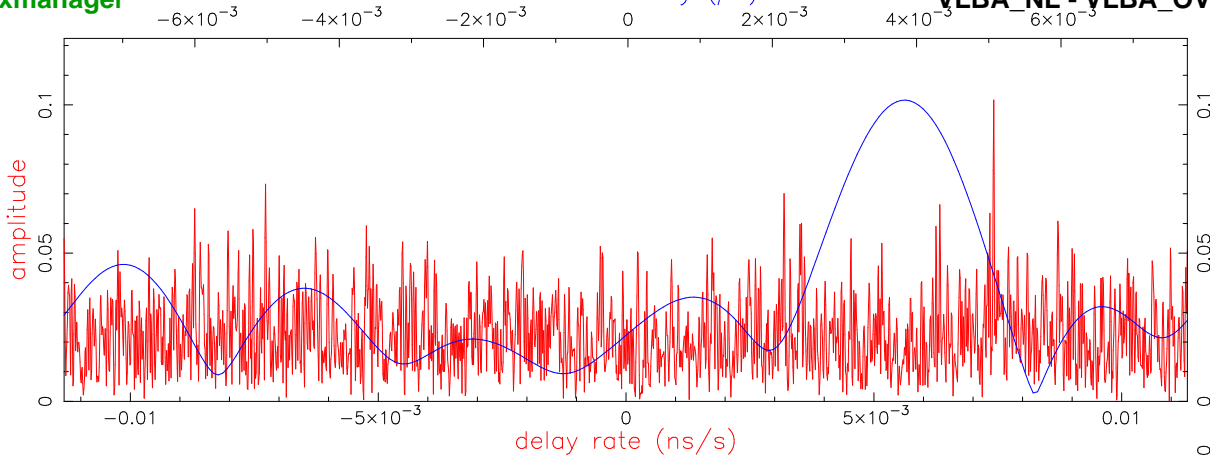
fxmanager

1741-038.1X09UZ, No0068, no

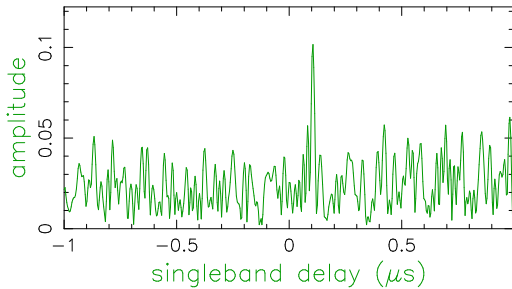
VLBA_NL - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

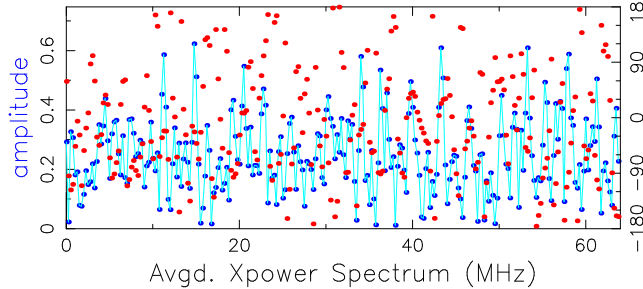
Fringe quality 0



SNR 5.7
 Int time 419.792
 Amp 0.122
 Phase 57.0
 PFD 9.4e-01
 Delays (us)
 SBD 0.104785
 MBD 0.003828
 Fringe rate (Hz)
 0.639771
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

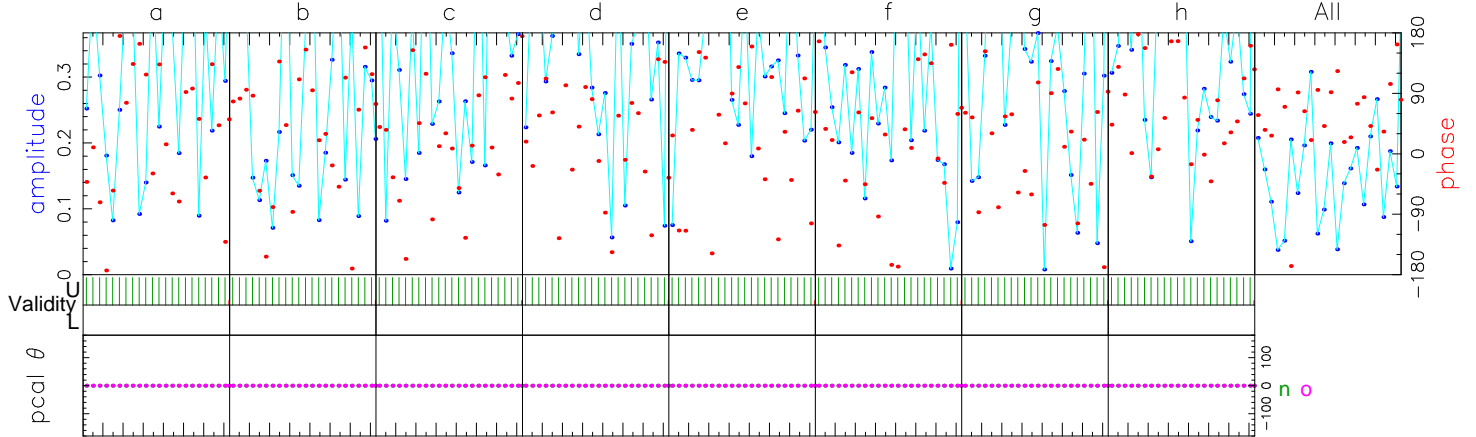


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120509
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

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
	42.2	90.7	47.1	43.0	59.3	84.5	14.6	76.2	Phase	57.0
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	155.3	194.5	89.1	507.6	147.2	56.2	44.7	283.9	Sbd box	283.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.34411260897E+03	Apriori delay (usec)	-5.34421018692E+03	Resid mbdelay (usec)	3.82796E-03	+/-	1.9E-04
Sband delay (usec)	-5.34410540217E+03	Apriori clock (usec)	1.7316246E+00	Resid sbdelay (usec)	1.04785E-01	+/-	1.5E-03
Phase delay (usec)	-5.34421018508E+03	Apriori clockrate (us/s)	-6.0000019E-08	Resid phdelay (usec)	1.83887E-06	+/-	6.5E-07
Delay rate (us/s)	-4.04208632145E-01	Apriori rate (us/s)	-4.04216059252E-01	Resid rate (us/s)	7.42711E-06	+/-	2.7E-09
Total phase (deg)	-123.6	Apriori accel (us/s/s)	2.79648308299E-05	Resid phase (deg)	57.0	+/-	20.1

ph/seg (deg)	50.2	Theor.	48.1	Amplitude	0.122 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	86.8		84.0	Search (2048X32)	0.100	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.6		28.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.1		49.5	Inc. seg. avg.	0.134	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

n: az 236.2 el 27.0 pa 38.8 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 2363.723 390.364 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/no..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/no.W.122.1X09UZ

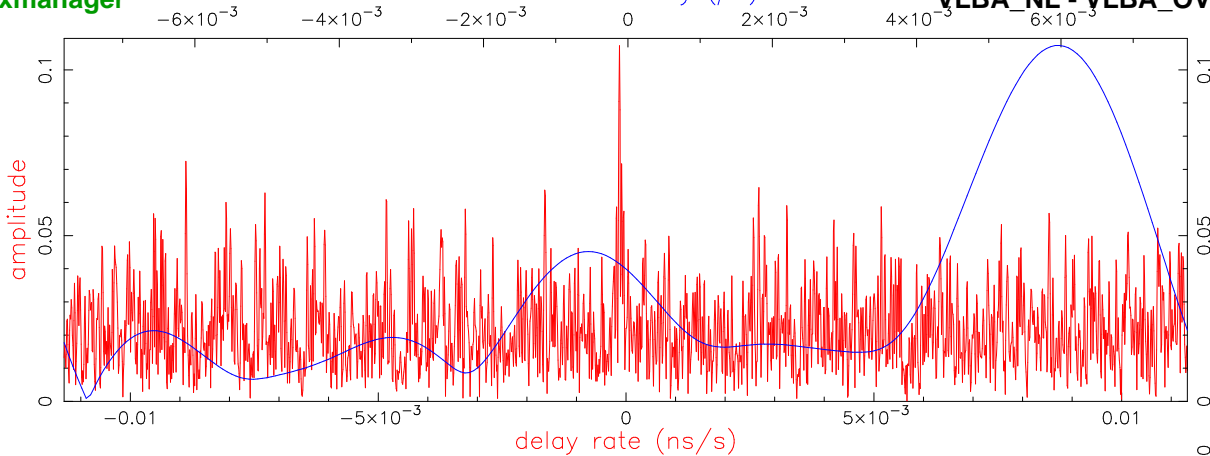
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X09UZ, No0068, no

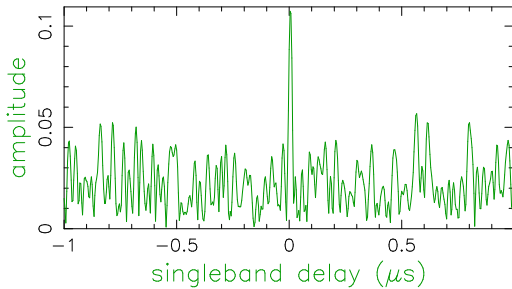
VLBA_NL - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

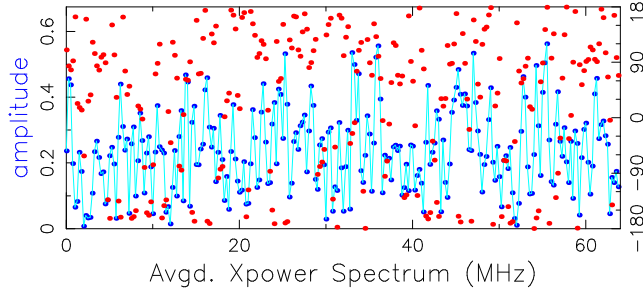


Fringe quality 0

SNR 6.1
 Int time 419.792
 Amp 0.109
 Phase 128.8
 PFD 2.0e-01
 Delays (us)
 SBD 0.005682
 MBD 0.006019
 Fringe rate (Hz)
 -0.011544
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

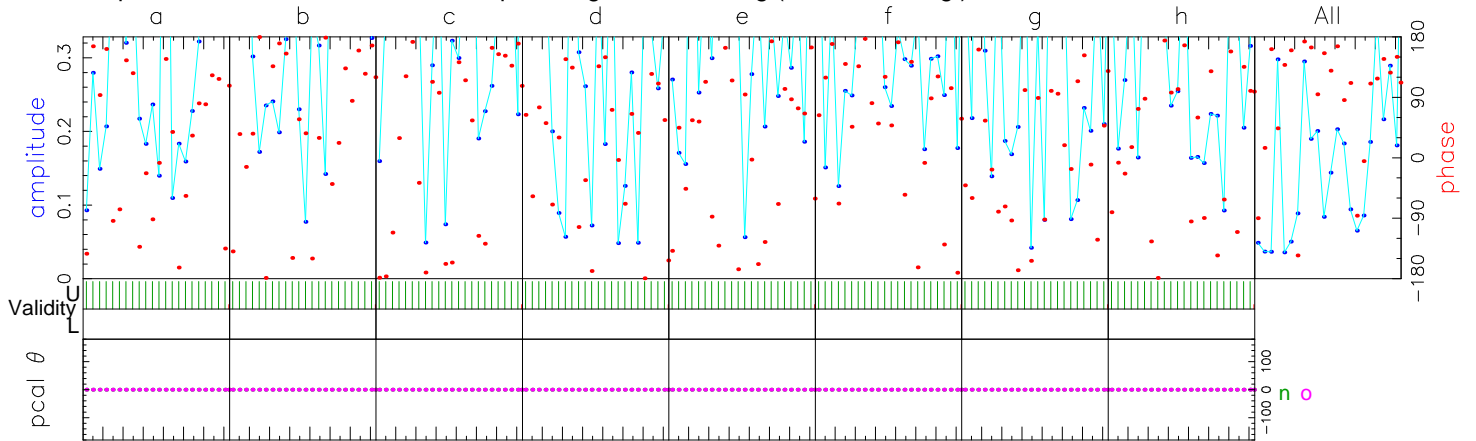


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120512
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

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



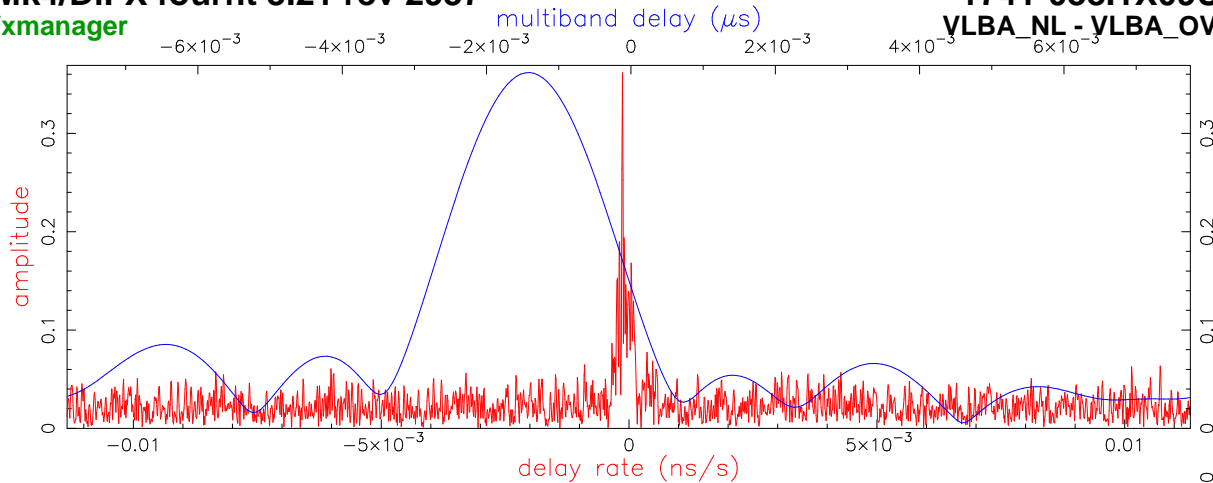
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	147.1	121.2	143.8	93.4	137.2	120.7	93.8	156.8	Phase	128.8
	0.1	0.1	0.2	0.1	0.1	0.2	0.0	0.1	Ampl.	0.1
	15.7	296.6	258.2	260.3	435.6	400.6	479.0	340.2	Sbd box	258.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-5.34420416841E+03	Apriori delay (usec)	-5.34421018692E+03	Resid mbdelay (usec)	6.01851E-03	+/-	1.8E-04
Sband delay (usec)	-5.34420450517E+03	Apriori clock (usec)	1.7316246E+00	Resid sbdelay (usec)	5.68175E-03	+/-	1.4E-03
Phase delay (usec)	-5.34421018277E+03	Apriori clockrate (us/s)	-6.000019E-08	Resid phdelay (usec)	4.15325E-06	+/-	6.0E-07
Delay rate (us/s)	-4.04216193264E-01	Apriori rate (us/s)	-4.04216059252E-01	Resid rate (us/s)	-1.34012E-07	+/-	2.5E-09
Total phase (deg)	-51.8	Apriori accel (us/s/s)	2.79648308299E-05	Resid phase (deg)	128.8	+/-	18.7

ph/seg (deg)	66.7	Theor.	44.8	Amplitude	0.109 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	100.0	Search (2048X32)	0.106	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.9	Inc. seg. avg.	0.119	Inc. frq. avg.	0.103	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.8	Inc. frq. avg.	0.103			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

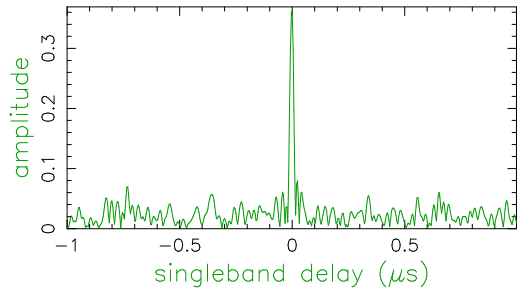
n: az 236.2 el 27.0 pa 38.8 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 2363.723 390.364 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/no..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/no.W.138.1X09UZ

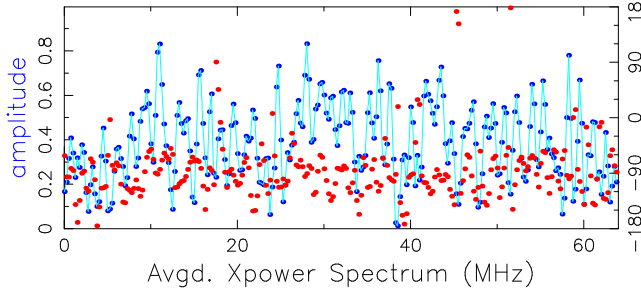


Fringe quality 9

SNR 20.7
Int time 419.792
Amp 0.369
Phase -98.7
PFD 0.0e+00
Delays (us)
SBD -0.001885
MBD -0.001471
Fringe rate (Hz)
-0.011231
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

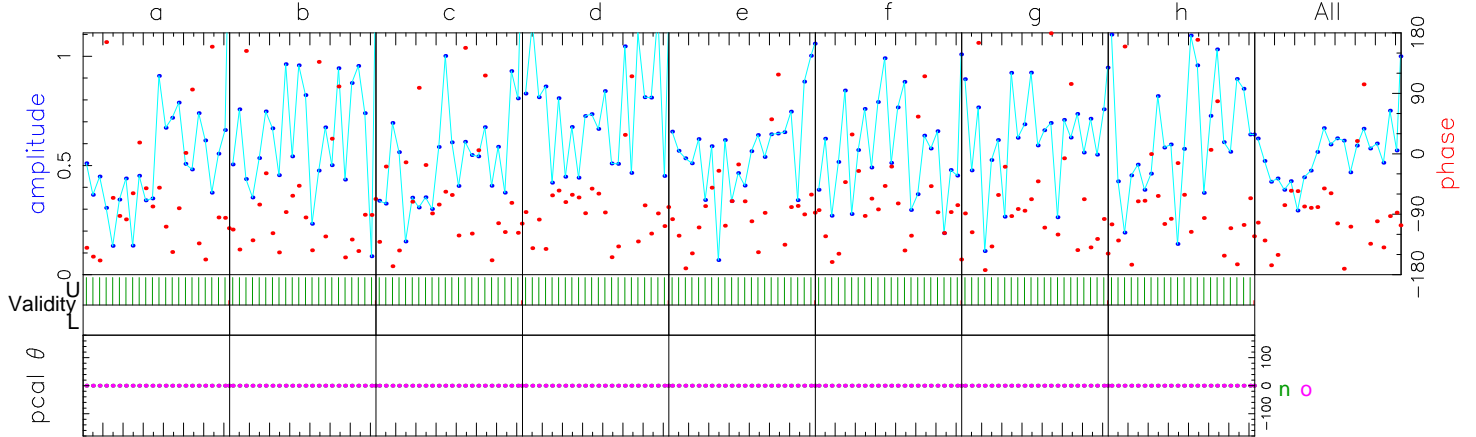


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120502
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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

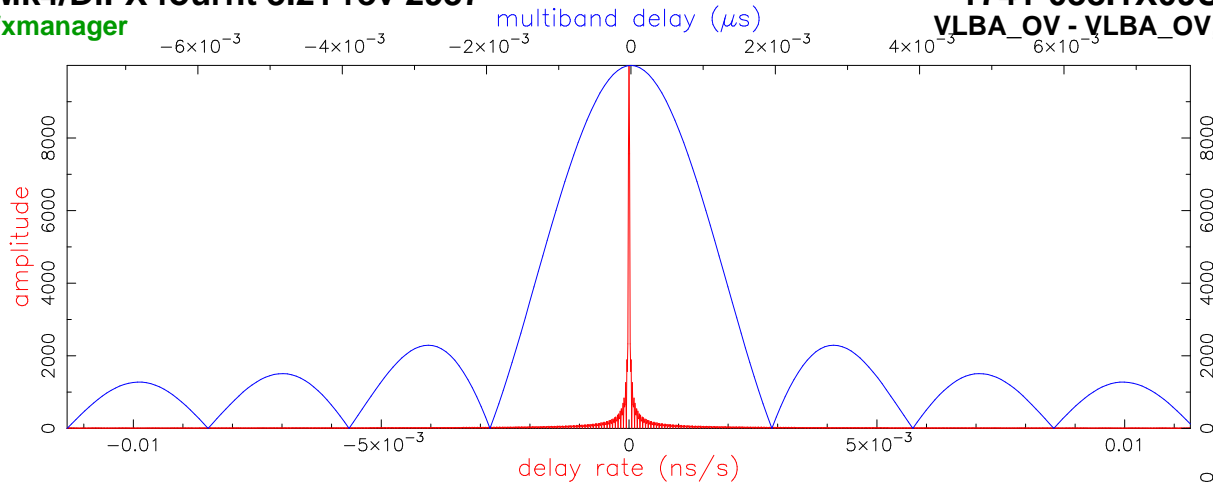


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-107.3	-109.9	-100.5	-92.7	-95.6	-79.7	-102.8	-105.1	Phase	-98.7
	0.3	0.4	0.3	0.5	0.4	0.4	0.4	0.3	Ampl.	0.4
	256.0	256.6	255.7	257.0	256.7	256.7	256.1	256.5	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

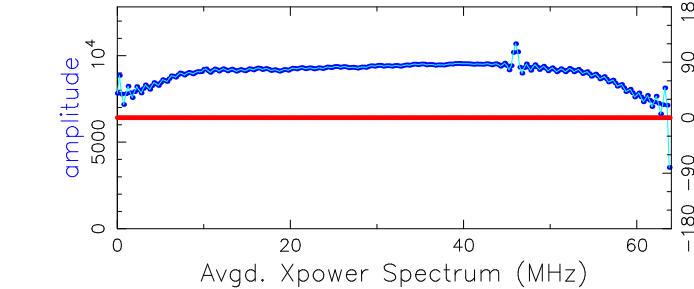
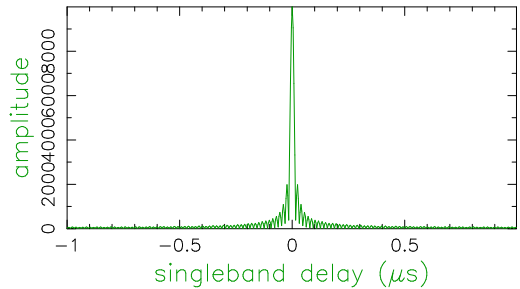
Group delay (usec)(sbd)	-5.34421165760E+03	Apriori delay (usec)	-5.34421018692E+03	Resid mbdelay (usec)	-1.47068E-03	+/-	5.2E-05
Sband delay (usec)	-5.34421207142E+03	Apriori clock (usec)	1.7316246E+00	Resid sbdelay (usec)	-1.88450E-03	+/-	4.2E-04
Phase delay (usec)	-5.34421019010E+03	Apriori clockrate (us/s)	-6.0000019E-08	Resid phdelay (usec)	-3.18125E-06	+/-	1.8E-07
Delay rate (us/s)	-4.04216189631E-01	Apriori rate (us/s)	-4.04216059252E-01	Resid rate (us/s)	-1.30380E-07	+/-	7.4E-10
Total phase (deg)	-279.2	Apriori accel (us/s/s)	2.79648308299E-05	Resid phase (deg)	-98.7	+/-	5.5

ph/seg (deg)	54.0	Theor.	13.3	Amplitude	0.369 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.9	Search (2048X32)	0.354	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.5	Inc. seg. avg.	0.528	Inc. frq. avg.	0.363	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	20.0	Inc. frq. avg.	0.363			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

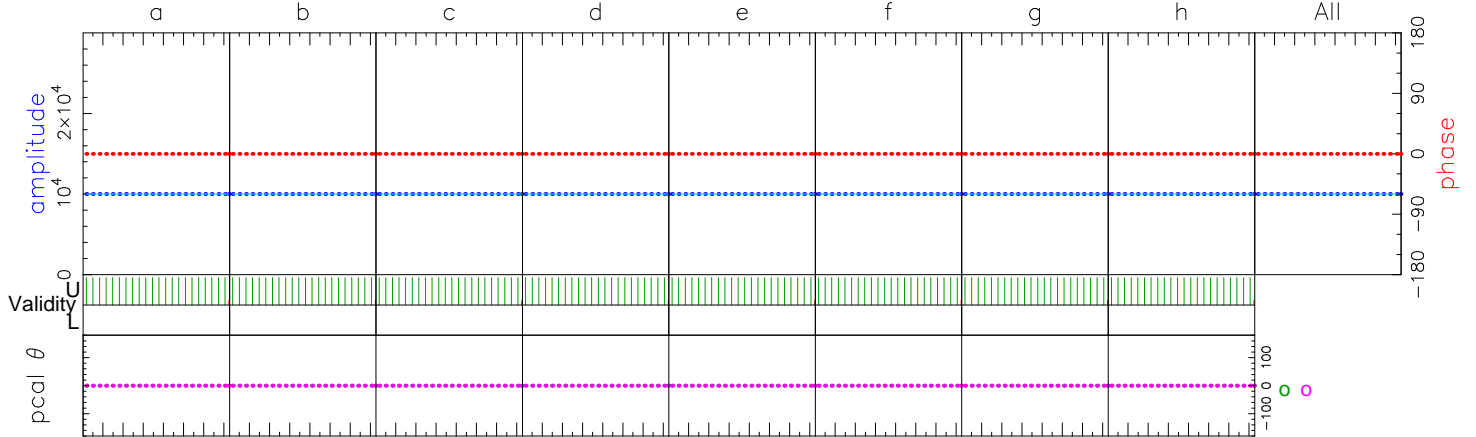
n: az 236.2 el 27.0 pa 38.8 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 2363.723 390.364 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/no..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/no.W.90.1X09UZ



Fringe quality 9
SNR 560292.1
Int time 419.792
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120506
2021:252:122852
RA & Dec (J2000) 17h43m58.856136s --3°50'04.616734"



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		
o	0	0	0	0	0	0	0	0	Ampl.	10000.0
o	0	0	0	0	0	0	0	0	Sbd box	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									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		+/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 2.7E-14
Total phase (deg)			0.0							+/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 210.3 el 44.4 pa 24.5 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/oo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/oo.W.107.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

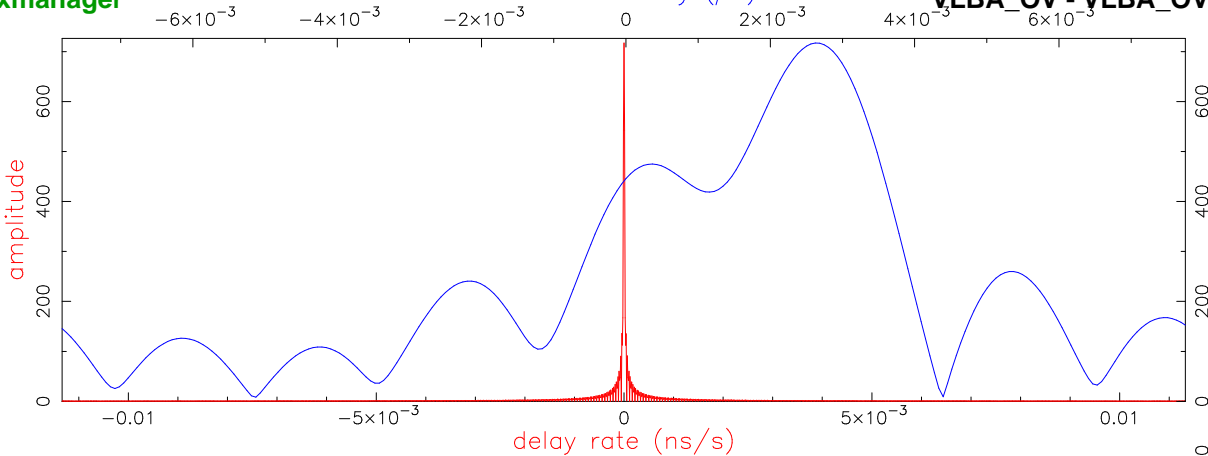
fxmanager

1741-038.1X09UZ, No0068, oo

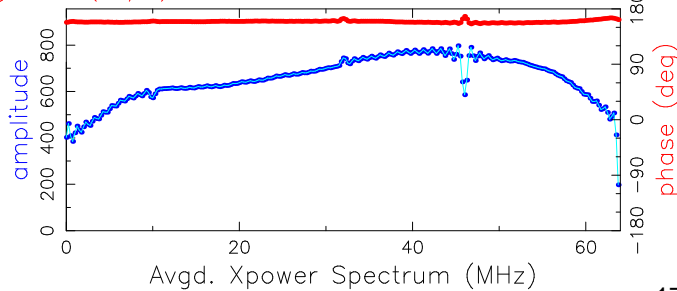
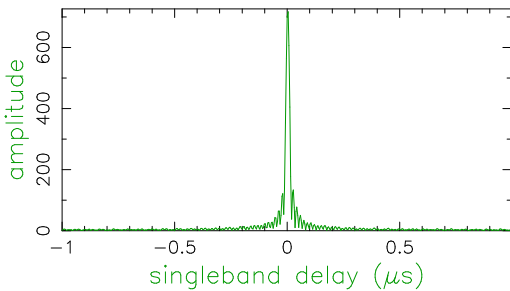
VLBA_OV - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 5

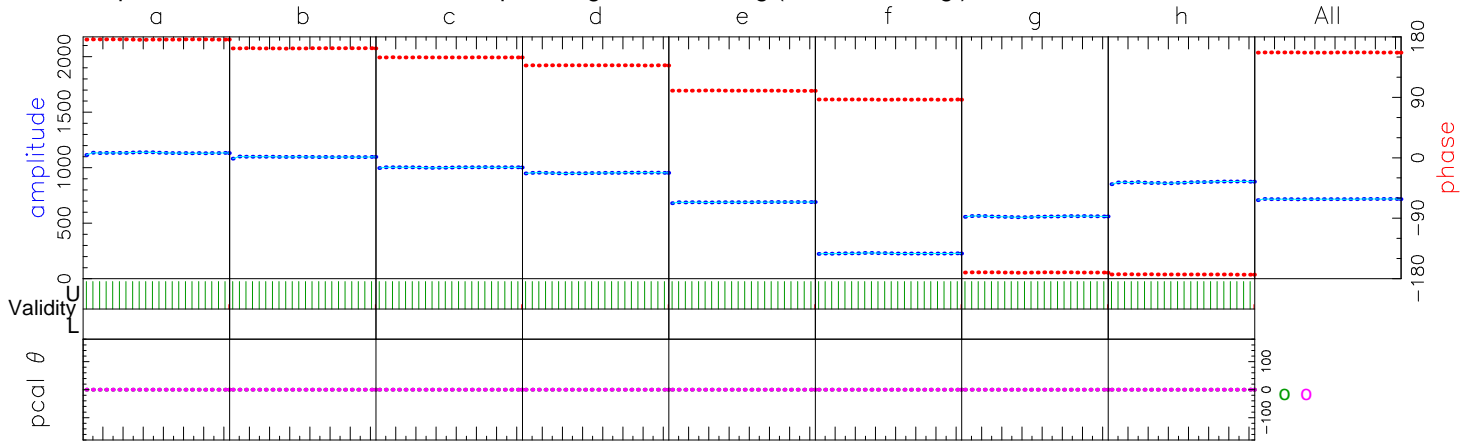


SNR 40702.5
 Int time 419.792
 Amp 726.451
 Phase 156.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002436
 MBD 0.002613
 Fringe rate (Hz)
 -0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120509
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

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
	176.0	162.9	149.4	137.5	99.9	86.6	-170.7	-173.6	Phase	156.6
	1133.2	1096.9	1002.9	953.2	689.2	228.3	560.7	868.3	Ampl.	816.6
	257.5	257.2	257.5	257.4	257.3	257.7	257.5	257.5	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	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)	2.612875000000E-03		Apriori delay (usec)		0.000000000000E+00		Resid mbdelay (usec)		2.61288E-03	+/- 2.7E-08
Sband delay (usec)	2.435750000000E-03		Apriori clock (usec)		0.000000000000E+00		Resid sbdelay (usec)		2.43575E-03	+/- 2.1E-07
Phase delay (usec)	5.05062674564E-06		Apriori clockrate (us/s)		0.000000000000E+00		Resid phdelay (usec)		5.05063E-06	+/- 9.1E-11
Delay rate (us/s)	-2.83423047834E-11		Apriori rate (us/s)		0.000000000000E+00		Resid rate (us/s)		-2.83423E-11	+/- 3.7E-13
Total phase (deg)	156.6		Apriori accel (us/s/s)		0.000000000000E+00		Resid phase (deg)		156.6	+/- 0.0

RMS Theor. Amplitude 726.451 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X32) 704.549 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 42.6 0.0 Inc. seg. avg. 717.046 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 41.5 0.0 Inc. frq. avg. 816.611 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 210.3 el 44.4 pa 24.5 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/oo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/oo.W.124.1X09UZ

Mk4/DiFX fourfit 3.21 rev 2937

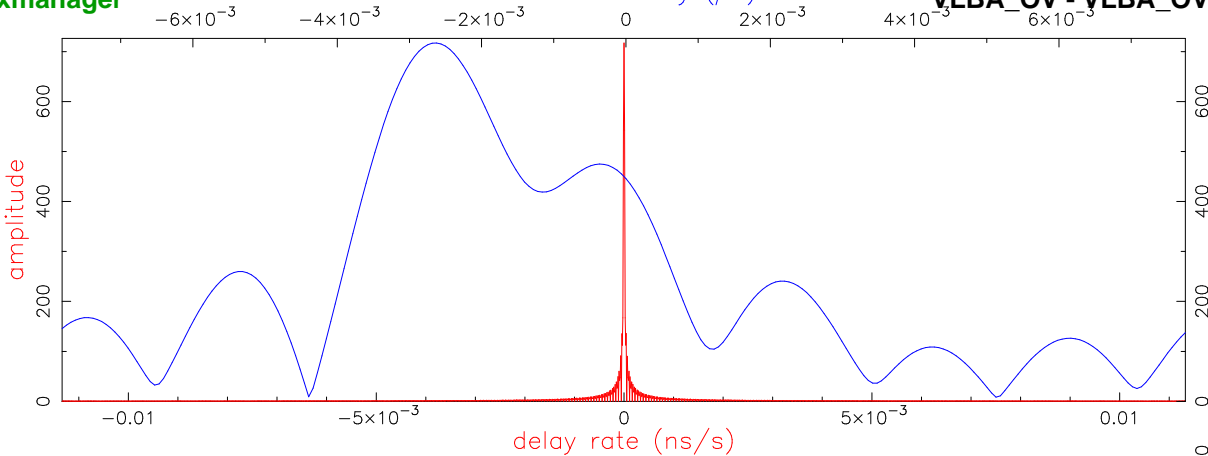
fxmanager

1741-038.1X09UZ, No0068, oo

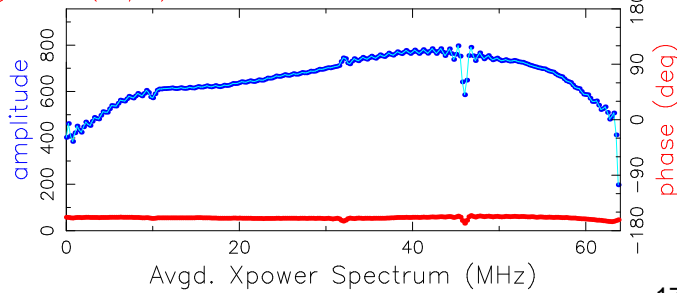
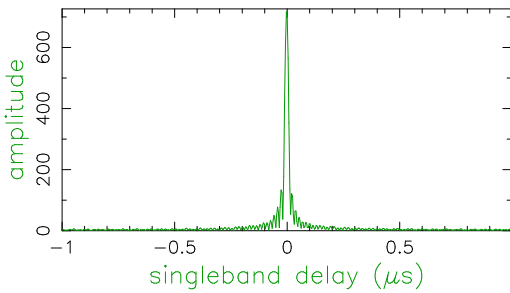
VLBA_OV - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 5

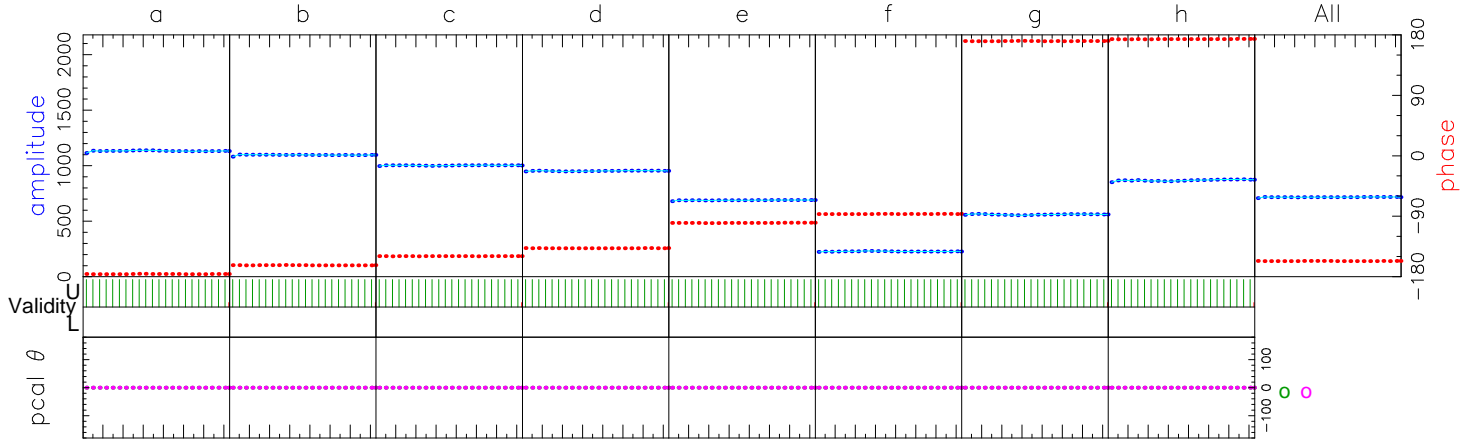


SNR 40702.5
 Int time 419.792
 Amp 726.451
 Phase -156.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002436
 MBD -0.002613
 Fringe rate (Hz)
 0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 124501.00
 Stop 125200.84
 FRT 124831.00
 Corr/FF/build
 2021:303:035626
 2021:303:120512
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

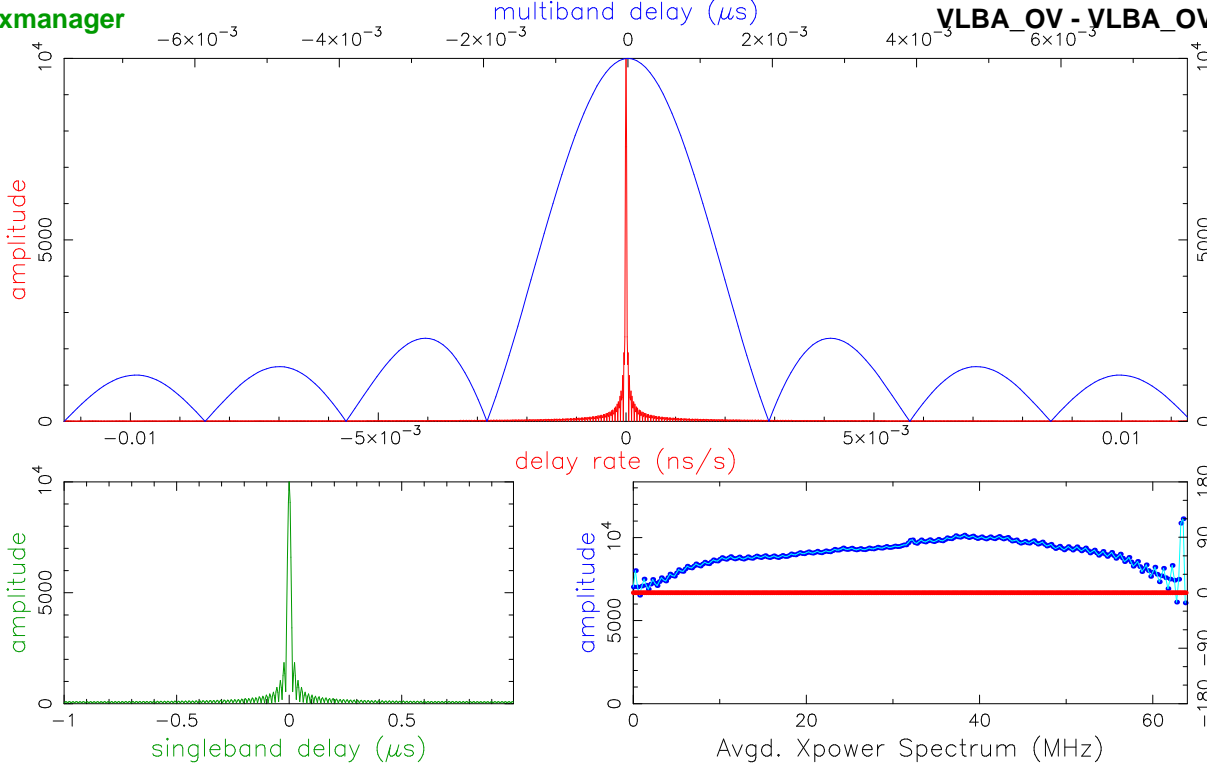
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.0	-162.9	-149.4	-137.5	-99.9	-86.6	170.7	173.6	Phase	-156.6
	1133.2	1096.9	1002.9	953.2	689.2	228.3	560.7	868.3	Ampl.	816.6
	256.5	256.8	256.5	256.6	256.7	256.3	256.5	256.5	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.61287500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.61288E-03	+/- 2.7E-08
Sband delay (usec)	-2.43575000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.43575E-03	+/- 2.1E-07
Phase delay (usec)	-5.05062674572E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.05063E-06	+/- 9.1E-11
Delay rate (us/s)	2.83423047834E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		2.83423E-11	+/- 3.7E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-156.6	+/- 0.0

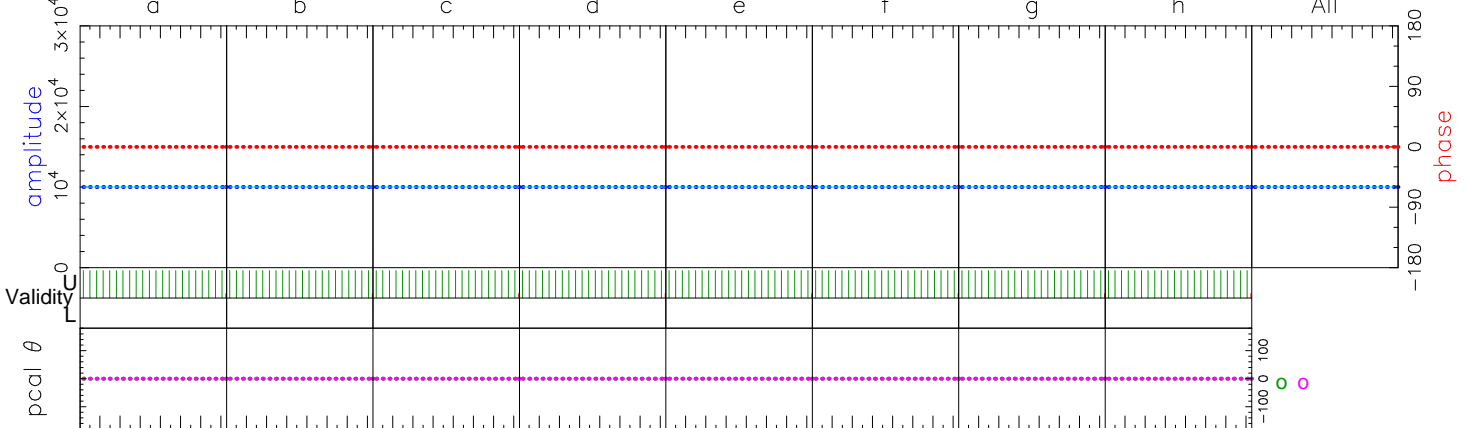
ph/seg (deg) 0.1 0.0 Amplitude 726.451 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.3 0.0 Search (2048X32) 704.549 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.5 0.0 Inc. seg. avg. 717.046 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 o: az 210.3 el 44.4 pa 24.5 o: az 210.3 el 44.4 pa 24.5 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
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/oo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/oo.W.141.1X09UZ



Fringe quality 9
SNR 560292.1
Int time 419.792
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
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120503
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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



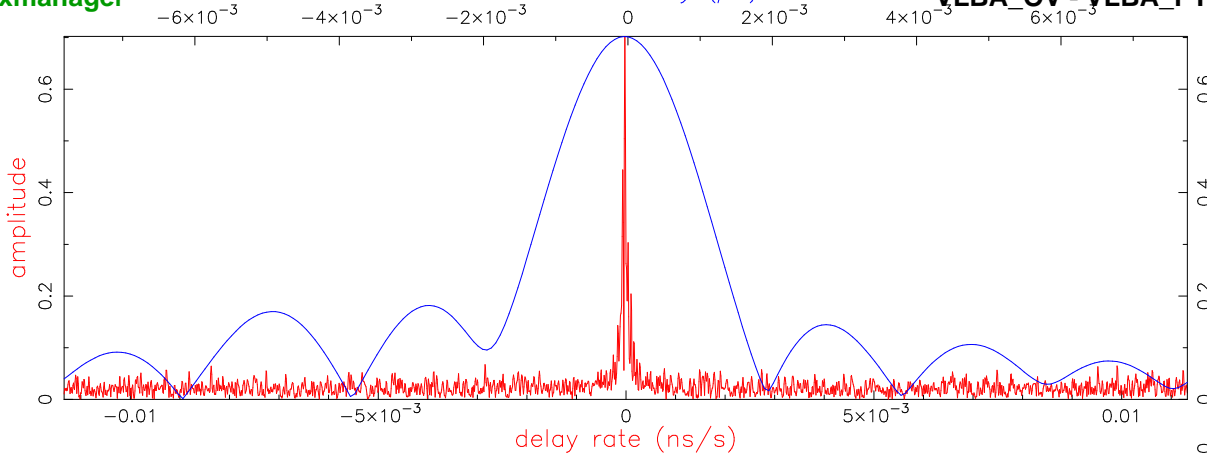
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.6E-12
Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 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

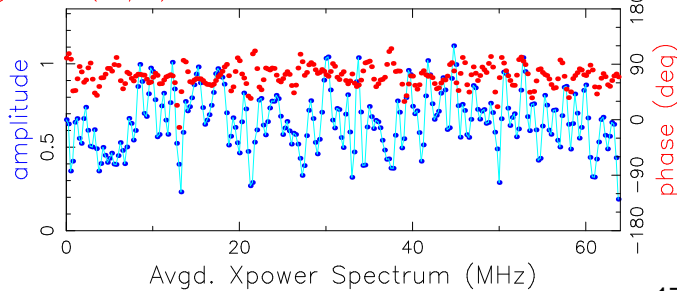
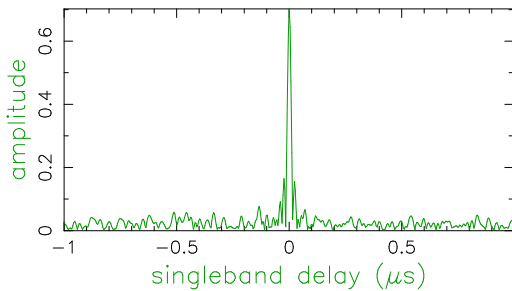
o: az 210.3 el 44.4 pa 24.5 o: az 210.3 el 44.4 pa 24.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/oo..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/oo.W.94.1X09UZ

multiband delay (μ s)



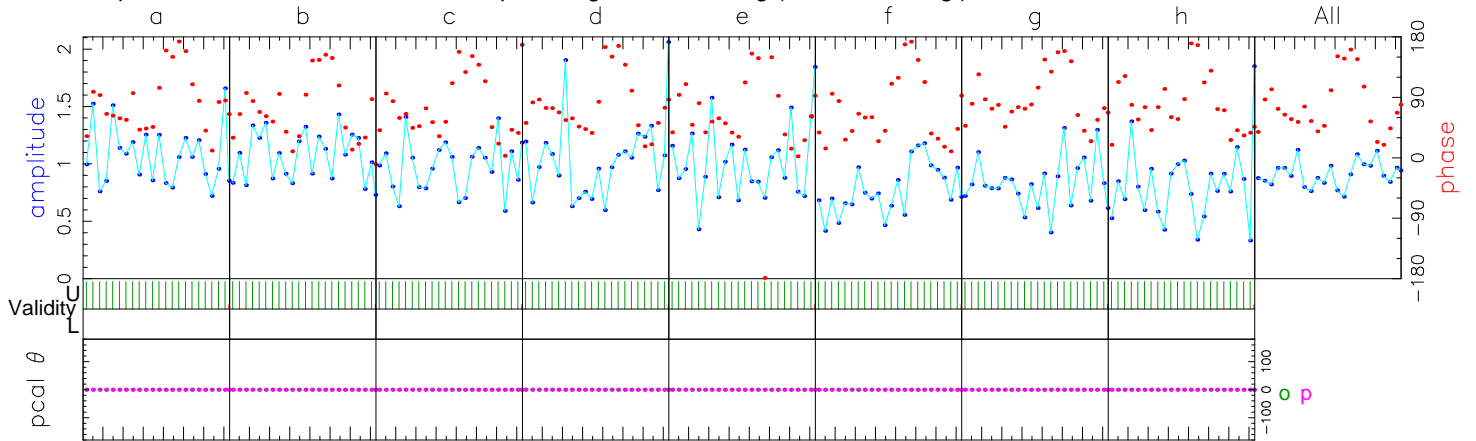
Fringe quality 8

SNR 39.4
Int time 419.792
Amp 0.702
Phase 74.1
PFD 0.0e+00
Delays (us)
SBD 0.000259
MBD -0.000039
Fringe rate (Hz)
-0.002268
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Yr:day 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120506
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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



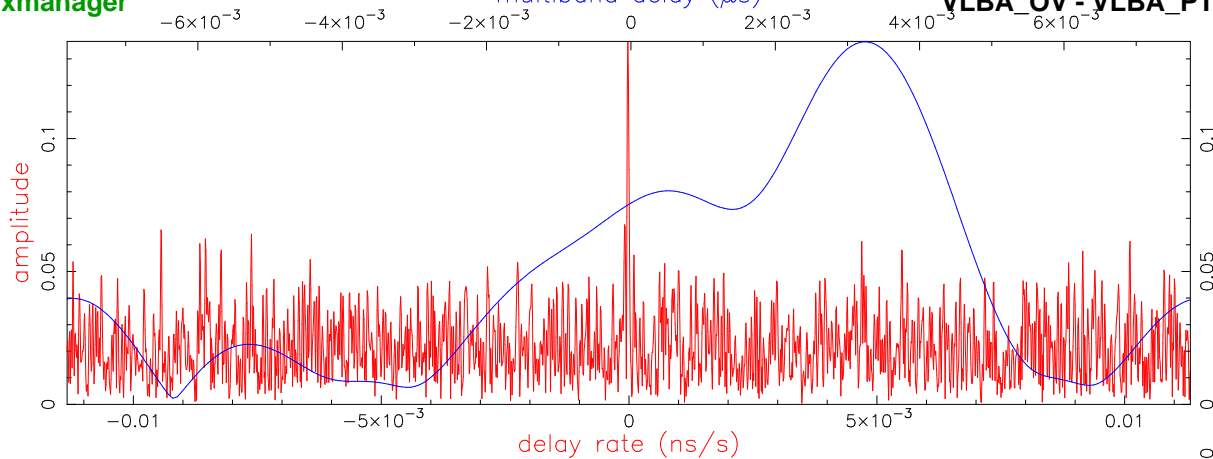
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	82.6	72.7	69.8	71.6	66.5	67.9	86.2	73.8	Phase	74.1
	0.8	0.8	0.7	0.8	0.7	0.5	0.7	0.6	Ampl.	0.7
	256.7	257.2	257.3	257.0	256.9	257.4	257.2	256.7	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.81775849631E+02		Apriori delay (usec)		7.81775888775E+02		Resid mbdelay (usec)		-3.91442E-05	+/- 2.8E-05
Sband delay (usec)	7.81776148025E+02		Apriori clock (usec)		-1.7970009E+00		Resid sbdelay (usec)		2.59250E-04	+/- 2.2E-04
Phase delay (usec)	7.81775891164E+02		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		2.38899E-06	+/- 9.4E-08
Delay rate (us/s)	2.18909041371E-01		Apriori rate (us/s)		2.18909067698E-01		Resid rate (us/s)		-2.63272E-08	+/- 3.9E-10
Total phase (deg)	95.4		Apriori accel (us/s/s)		-4.47962194994E-06		Resid phase (deg)		74.1	+/- 2.9

	RMS	Theor.	Amplitude	0.702 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	41.4	7.0	Search (2048X32)	0.673	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	33.5	12.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	7.5	4.1	Inc. seg. avg.	0.905	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	13.5	7.2	Inc. frq. avg.	0.705	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

o: az 210.3 el 44.4 pa 24.5 p: az 224.1 el 41.8 pa 35.9 u,v (fr/asec) -1262.336 390.332 simultaneous interpolator

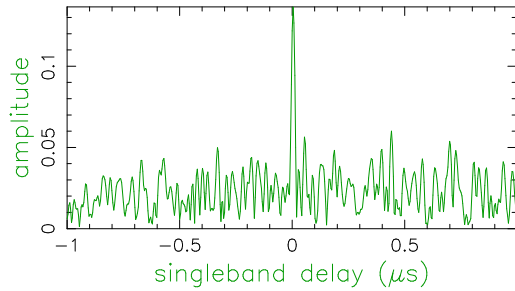
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/op..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/op.W.109.1X09UZ

multiband delay (μ s)

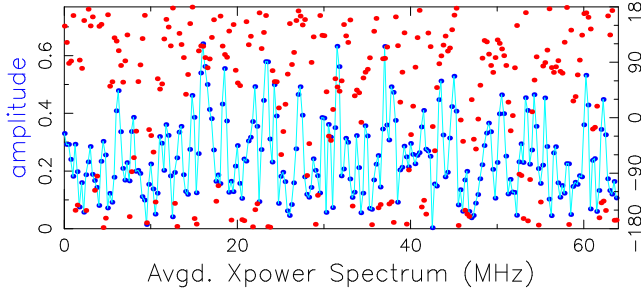


Fringe quality 9

SNR 7.7
Int time 419.792
Amp 0.137
Phase 143.2
PFD 6.5e-06
Delays (us)
SBD 0.004331
MBD 0.003253
Fringe rate (Hz)
-0.002141
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

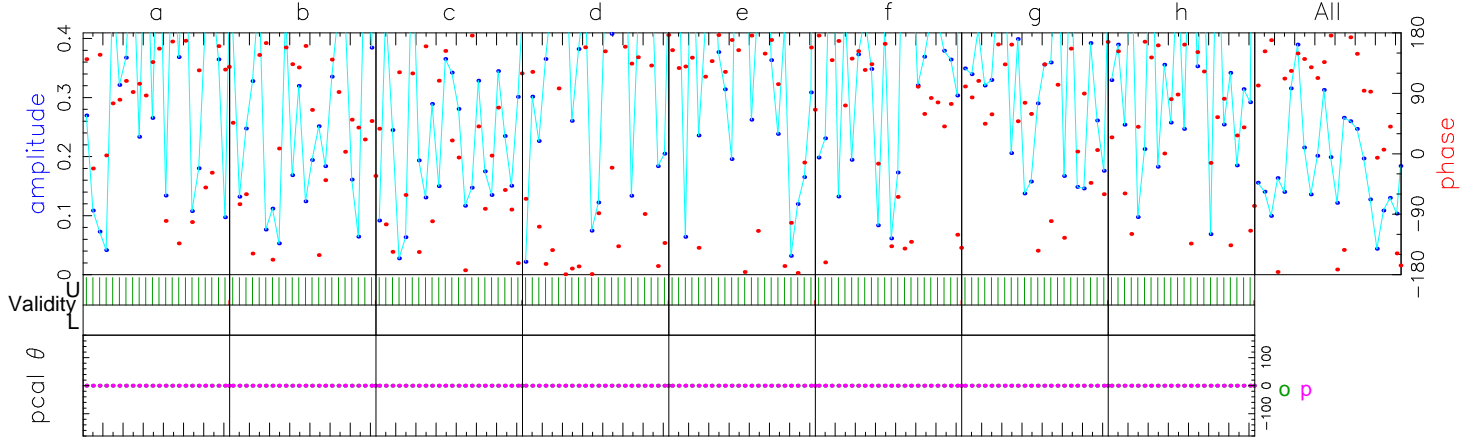


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120509
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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

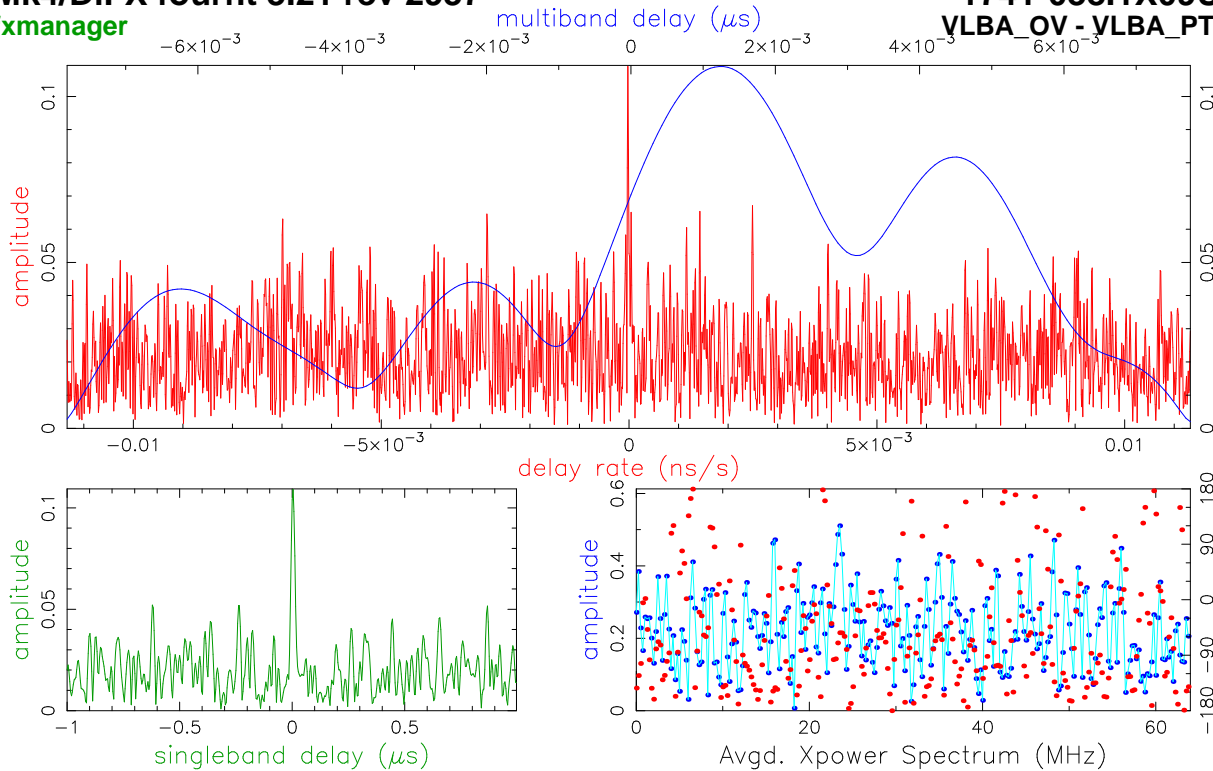


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		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

Group delay (usec)(sbd)	7.81779141694E+02	Apriori delay (usec)	7.81775888775E+02	Resid mbdelay (usec)	3.25292E-03	+/-	1.4E-04
Sband delay (usec)	7.81780219525E+02	Apriori clock (usec)	-1.7970009E+00	Resid sbdelay (usec)	4.33075E-03	+/-	1.1E-03
Phase delay (usec)	7.81775893393E+02	Apriori clockrate (us/s)	4.7999999E-07	Resid phdelay (usec)	4.61758E-06	+/-	4.8E-07
Delay rate (us/s)	2.18909042847E-01	Apriori rate (us/s)	2.18909067698E-01	Resid rate (us/s)	-2.48512E-08	+/-	2.0E-09
Total phase (deg)	164.5	Apriori accel (us/s/s)	-4.47962194994E-06	Resid phase (deg)	143.2	+/-	15.0

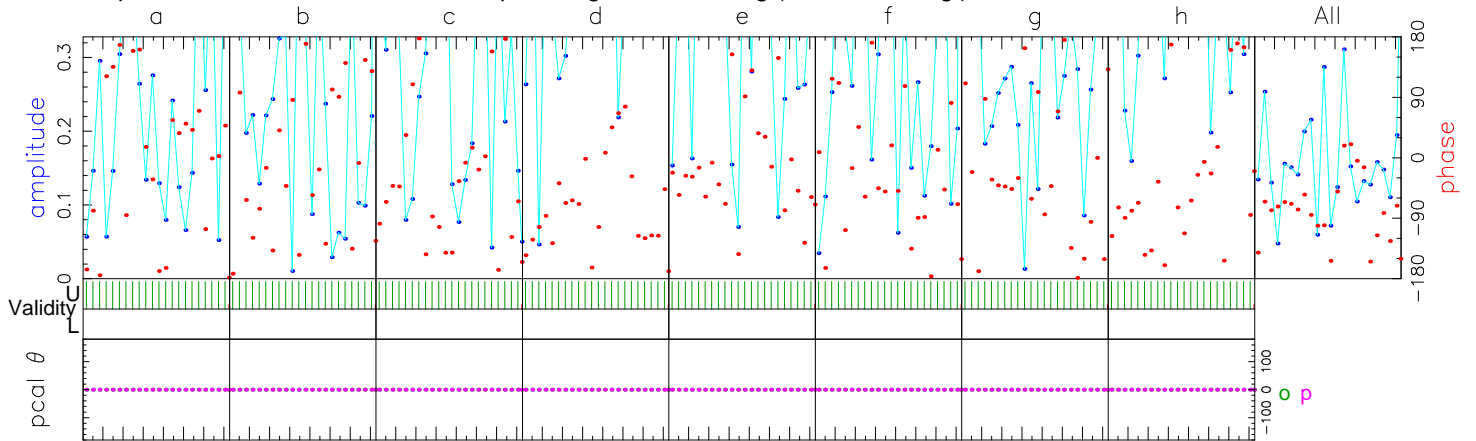
ph/seg (deg)	59.3	Theor.	35.9	Amplitude	0.137 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	70.1		62.7	Search (2048X32)	0.134	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	34.6		21.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	62.6		37.0	Inc. seg. avg.	0.155	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.141	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

o: az 210.3 el 44.4 pa 24.5 p: az 224.1 el 41.8 pa 35.9 u,v (fr/asec) -1262.336 390.332 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/op..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/op.W.123.1X09UZ



Fringe quality 0
SNR 6.1
Int time 419.792
Amp 0.109
Phase -72.5
PFD 2.1e-01
Delays (us)
SBD 0.003149
MBD 0.001251
Fringe rate (Hz)
-0.002065
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120512
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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

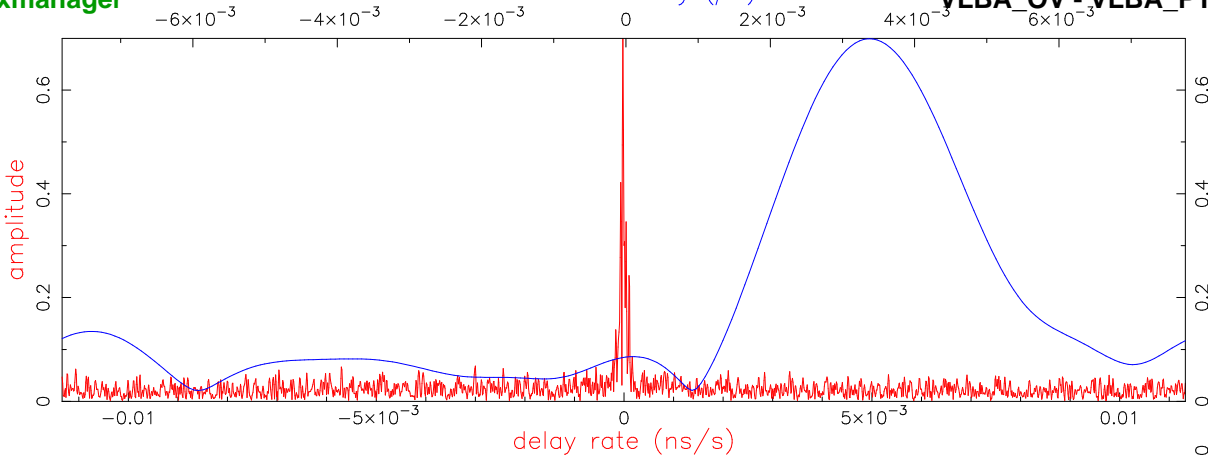


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
90.3	-129.4	-86.5	-82.1	-21.6	-28.0	-72.4	-98.6	-98.6	Phase	-72.5
0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
227.5	49.7	70.2	258.4	258.2	32.8	411.5	258.2	258.2	Sbd box	257.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	7.81777140256E+02		Apriori delay (usec)		7.81775888775E+02		Resid mbdelay (usec)		1.25148E-03	+/- 1.8E-04
Sband delay (usec)	7.81779038025E+02		Apriori clock (usec)		-1.7970009E+00		Resid sbdelay (usec)		3.14925E-03	+/- 1.4E-03
Phase delay (usec)	7.81775886439E+02		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-2.33669E-06	+/- 6.0E-07
Delay rate (us/s)	2.18909043729E-01		Apriori rate (us/s)		2.18909067698E-01		Resid rate (us/s)		-2.39691E-08	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.47962194994E-06		Resid phase (deg)		-72.5	+/- 18.7

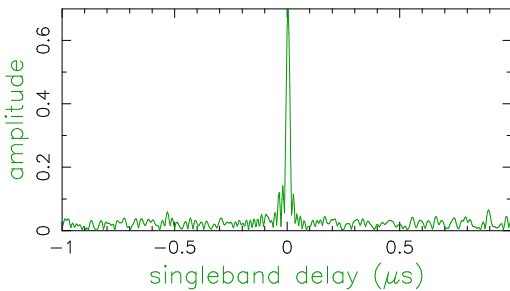
ph/seg (deg) 48.0 44.8 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 77.3 78.3 Interp. 0.007 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 76.7 26.4 Inc. seg. avg. 0.120 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 72.4 46.2 Inc. frq. avg. 0.124 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 210.3 el 44.4 pa 24.5 p: az 224.1 el 41.8 pa 35.9 u,v (fr/asec) -1262.336 390.332 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/op..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/op.W.139.1X09UZ

multiband delay (μ s)

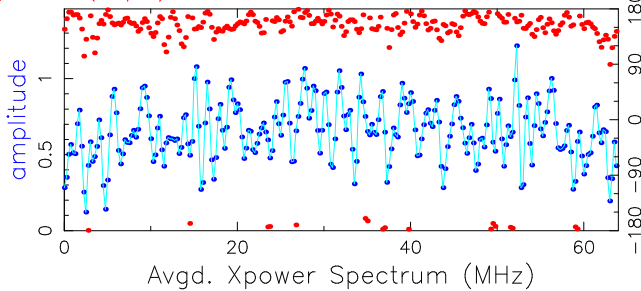
Fringe quality 6



SNR 39.2
Int time 419.792
Amp 0.700
Phase 159.3
PFD 0.0e+00
Delays (us)
SBD 0.003521
MBD 0.003366
Fringe rate (Hz)
-0.002244
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

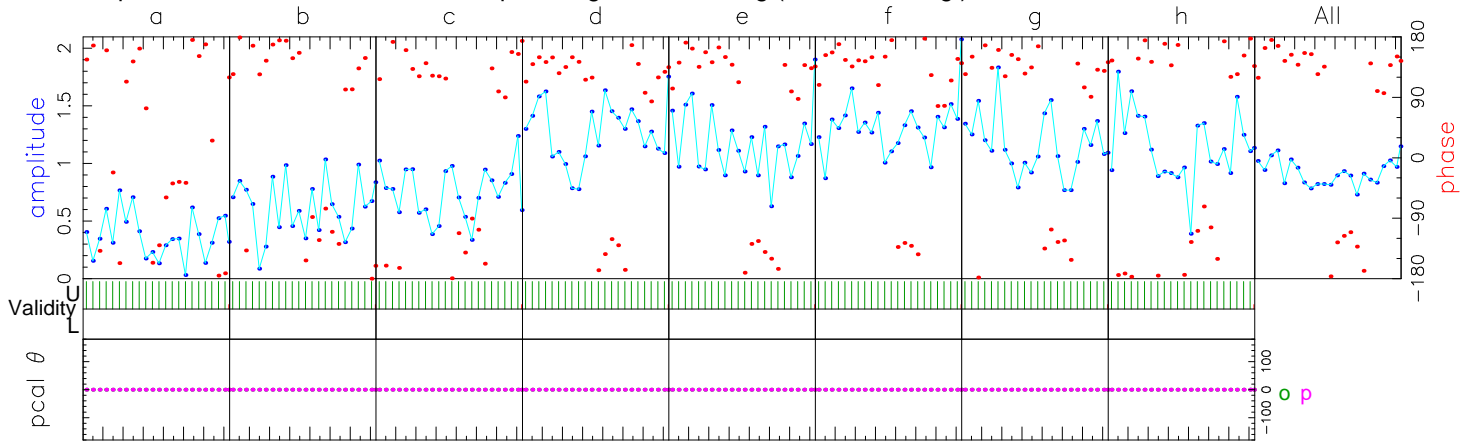


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 124501.00
Stop 125200.84
FRT 124831.00
Corr/FF/build
2021:303:035626
2021:303:120503
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"

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
	174.3	-177.9	157.2	149.0	154.0	150.5	156.5	176.7	Phase	159.3
	0.2	0.4	0.5	1.0	0.9	1.0	0.9	0.9	Ampl.	0.7
	258.5	257.8	257.2	257.9	258.1	257.7	258.0	258.5	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	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)	7.81779254912E+02		Apriori delay (usec)		7.81775888775E+02		Resid mbdelay (usec)		3.36614E-03	+/- 2.8E-05
Sband delay (usec)	7.81779410275E+02		Apriori clock (usec)		-1.7970009E+00		Resid sbdelay (usec)		3.52150E-03	+/- 2.2E-04
Phase delay (usec)	7.81775893914E+02		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		5.13846E-06	+/- 9.4E-08
Delay rate (us/s)	2.18909041648E-01		Apriori rate (us/s)		2.18909067698E-01		Resid rate (us/s)		-2.60501E-08	+/- 3.9E-10
Total phase (deg)	180.6		Apriori accel (us/s/s)		-4.47962194994E-06		Resid phase (deg)		159.3	+/- 2.9

ph/seg (deg) RMS Theor. Amplitude 0.700 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 42.6 7.0 Search (2048X32) 0.673 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 34.0 12.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 14.5 4.1 Inc. seg. avg. 0.908 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 39.1 7.2 Inc. frq. avg. 0.711 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 210.3 el 44.4 pa 24.5 p: az 224.1 el 41.8 pa 35.9 u,v (fr/asec) -1262.336 390.332 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0068/op..1X09UZ Output file: /Exps/c211c/v1/1234/No0068/op.W.96.1X09UZ