

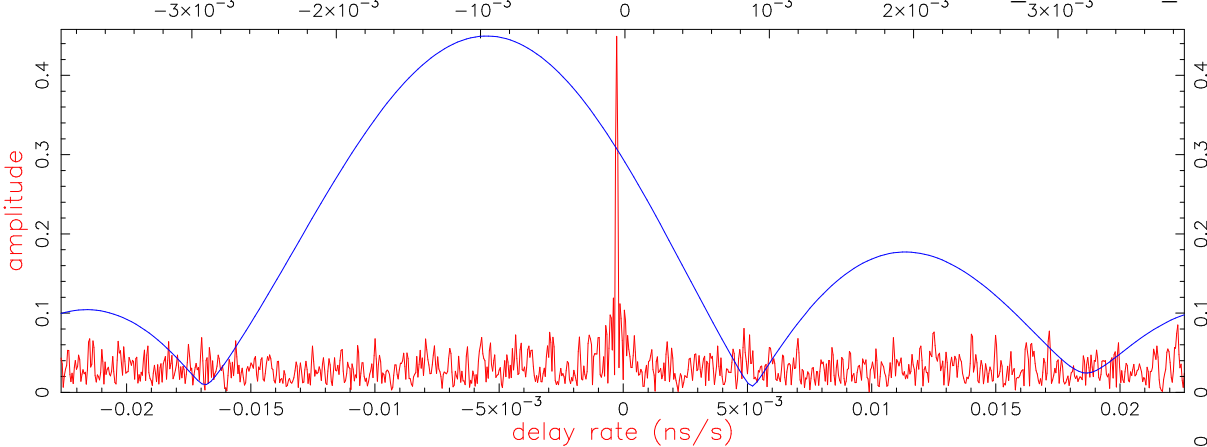
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bf

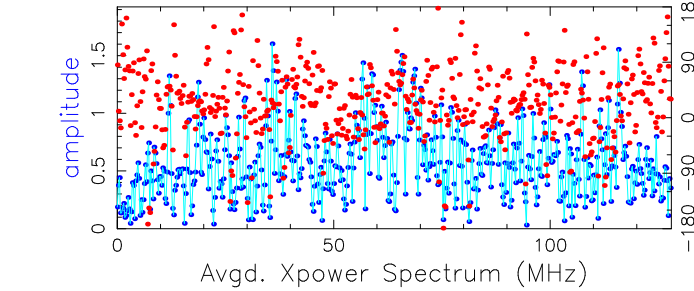
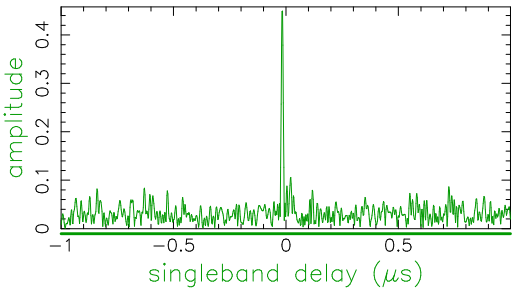
VLBA_BR - VLBA_FD, fgroup Q, pol LR

multiband delay (μ s)



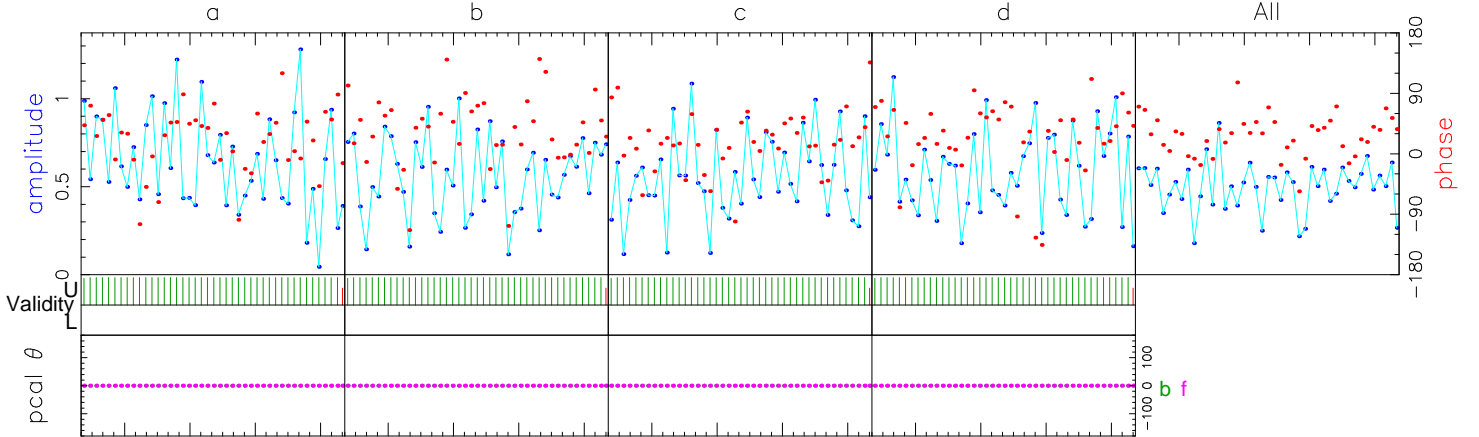
Fringe quality 9

SNR 19.4
 Int time 239.798
 Amp 0.458
 Phase -172.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.016571
 MBD -0.001008
 Fringe rate (Hz)
 -0.011499
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102421
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
24.4	38.9	21.8	37.4	Phase	30.2
0.5	0.4	0.4	0.4	Ampl.	0.5
504.9	504.8	504.0	504.2	Sbd box	504.5
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	ManI PC	
b 1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
f Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-4.41316464136E+03	Apriori delay (usec)	-4.41314800866E+03	Resid mbdelay (usec)	-1.00770E-03	+/- 5.7E-05
Sband delay (usec)	-4.41316457978E+03	Apriori clock (usec)	4.6037312E+00	Resid sbdelay (usec)	-1.65711E-02	+/- 2.2E-04
Phase delay (usec)	-4.41314800671E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	1.94567E-06	+/- 3.8E-07
Delay rate (us/s)	2.54157488364E-01	Apriori rate (us/s)	2.54157754920E-01	Resid rate (us/s)	-2.66557E-07	+/- 2.7E-09
Total phase (deg)	-205.9	Apriori accel (us/s/s)	2.59886575792E-05	Resid phase (deg)	-172.3	+/- 5.9

ph/seg (deg)	RMS 30.0	Theor. 19.4	Amplitude Search (1024X16)	0.458 +/- 0.024	0.446	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	30.8	33.8	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	10.7	5.9	Inc. seg. avg.	0.475	0.475	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	7.8	10.3	Inc. frq. avg.	0.451	0.451	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 150.6 el 43.7 pa -19.0 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) -719.722 1134.489 simultaneous interpolator

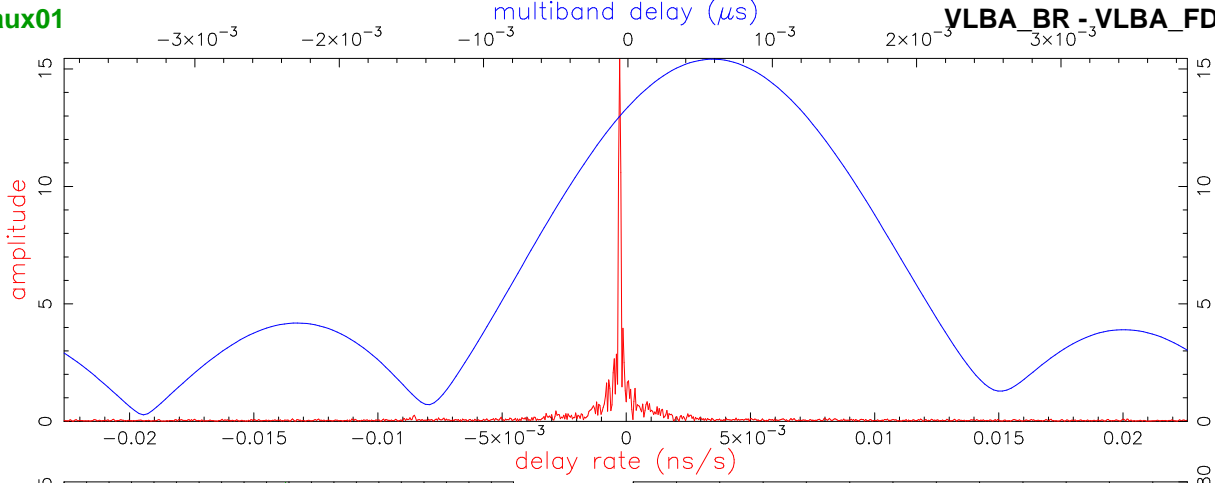
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bf..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bf.Q.16.3N2DRC

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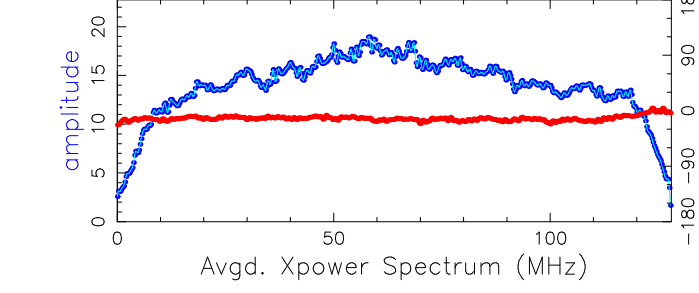
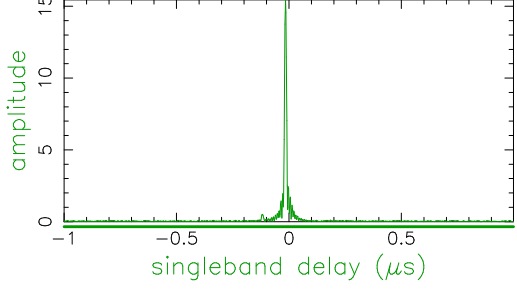
aux01

3C120.3N2DRC, No0552, bf

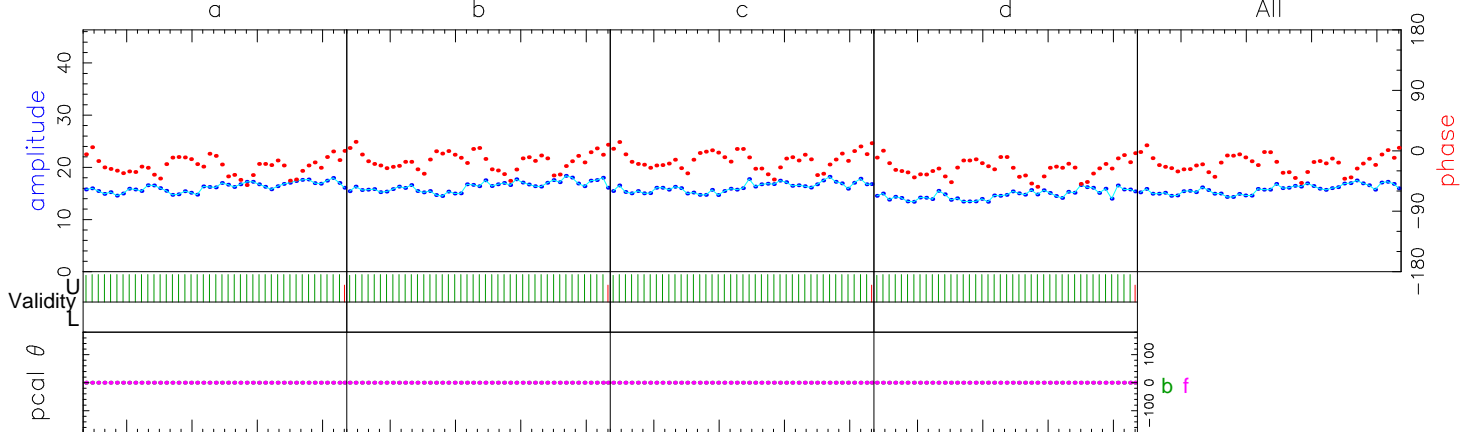
VLBA_BR - VLBA_FD, fgroup Q, pol LL



Fringe quality 8
 SNR 654.3
 Int time 239.798
 Amp 15.451
 Phase -221.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.015296
 MBD 0.000606
 Fringe rate (Hz)
 -0.011563
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102417
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-22.7	-14.7	-13.7	-26.4	Phase	-19.2
15.8	16.0	15.8	14.4	Ampl.	15.5
505.4	505.3	504.9	504.8	Sbd box	505.2
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
f Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	-4.41316302730E+03	Apriori delay (usec)	-4.41314800866E+03	Resid mbdelay (usec)	6.06360E-04 +/- 1.7E-06
Sband delay (usec)	-4.41316330491E+03	Apriori clock (usec)	4.6037312E+00	Resid sbdelay (usec)	-1.52962E-02 +/- 6.6E-06
Phase delay (usec)	-4.41314800989E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	-1.23706E-06 +/- 1.1E-08
Delay rate (us/s)	2.54157486886E-01	Apriori rate (us/s)	2.54157754920E-01	Resid rate (us/s)	-2.68034E-07 +/- 8.1E-11
Total phase (deg)	-255.4	Apriori accel (us/s/s)	2.59886575792E-05	Resid phase (deg)	-221.7 +/- 0.2

ph/seg (deg) 12.9 0.6 Search (1024X16) 15.206 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 6.0 1.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.6 0.2 Inc. seg. avg. 15.814 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 4.2 0.3 Inc. frq. avg. 15.481 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 b: az 150.6 el 43.7 pa -19.0 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) -719.722 1134.489 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bf..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bf.Q.2.3N2DRC simultaneous interpolator

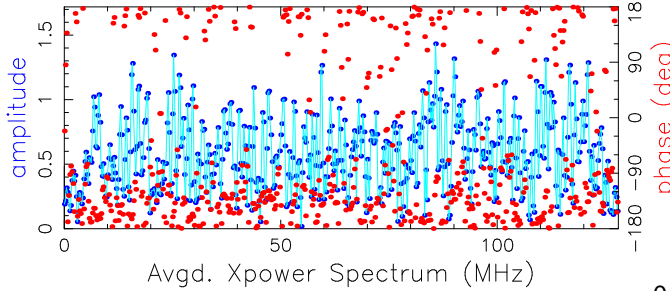
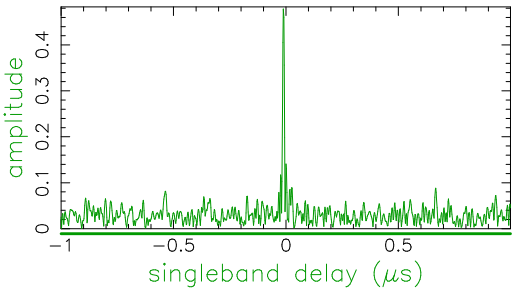
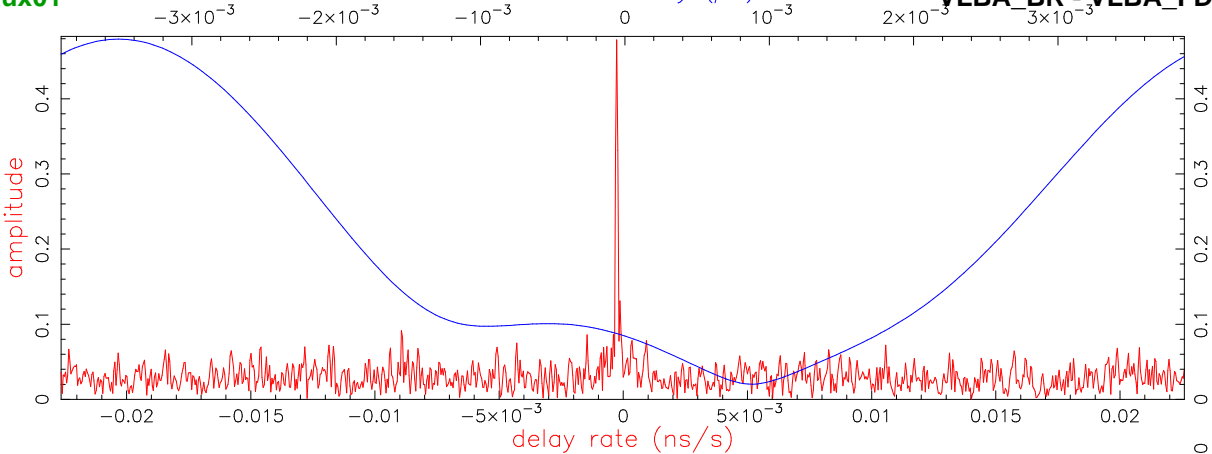
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bf

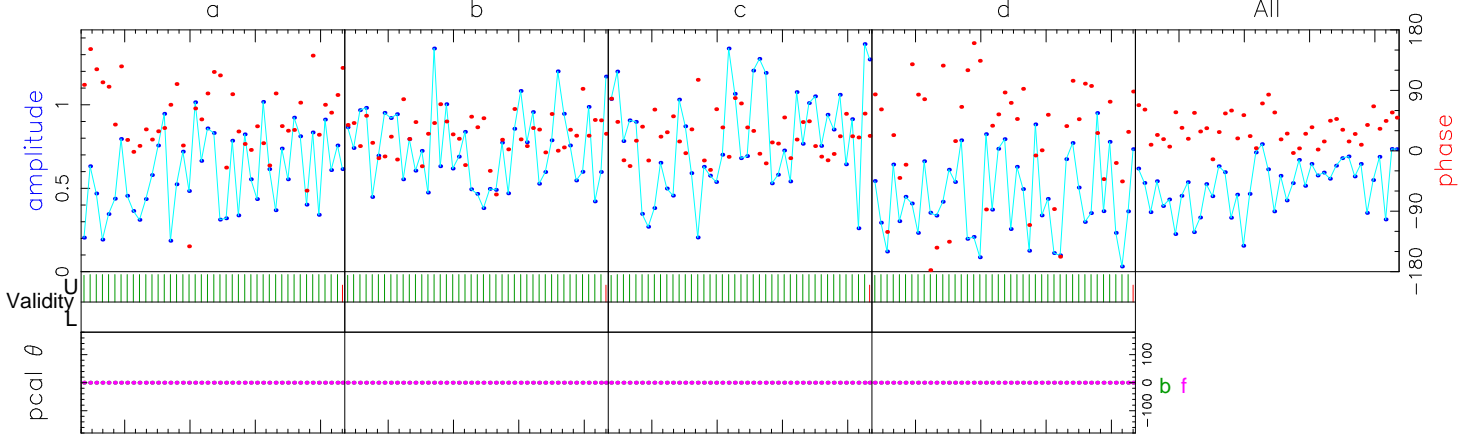
VLBA_BR - VLBA_FD, fgroup Q, pol RL

multiband delay (μ s)



Fringe quality 6
 Error code G
 SNR 20.5
 Int time 239.798
 Amp 0.483
 Phase -248.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.011118
 MBD -0.003428
 Fringe rate (Hz)
 -0.011557
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102423
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000	APs used	
f	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

Group delay (usec) (SBD)	-4.41315924899E+03	Apriori delay (usec)	-4.41314800866E+03	Resid mbdelay (usec)	-3.42783E-03	+/-	5.4E-05
Sband delay (usec)	-4.41315912703E+03	Apriori clock (usec)	4.6037312E+00	Resid sbdelay (usec)	-1.11184E-02	+/-	2.1E-04
Phase delay (usec)	-4.41314800657E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	2.08431E-06	+/-	3.6E-07
Delay rate (us/s)	2.54157487014E-01	Apriori rate (us/s)	2.54157754920E-01	Resid rate (us/s)	-2.67907E-07	+/-	2.6E-09
Total phase (deg)	-282.5	Apriori accel (us/s/s)	2.59886575792E-05	Resid phase (deg)	-248.9	+/-	5.6

	RMS	Theor.	Amplitude	0.483 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	22.6	18.4	Search (1024X16)	0.476	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	31.4	32.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	24.9	5.6	Inc. seg. avg.	0.494	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	39.4	9.8	Inc. frq. avg.	0.494	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

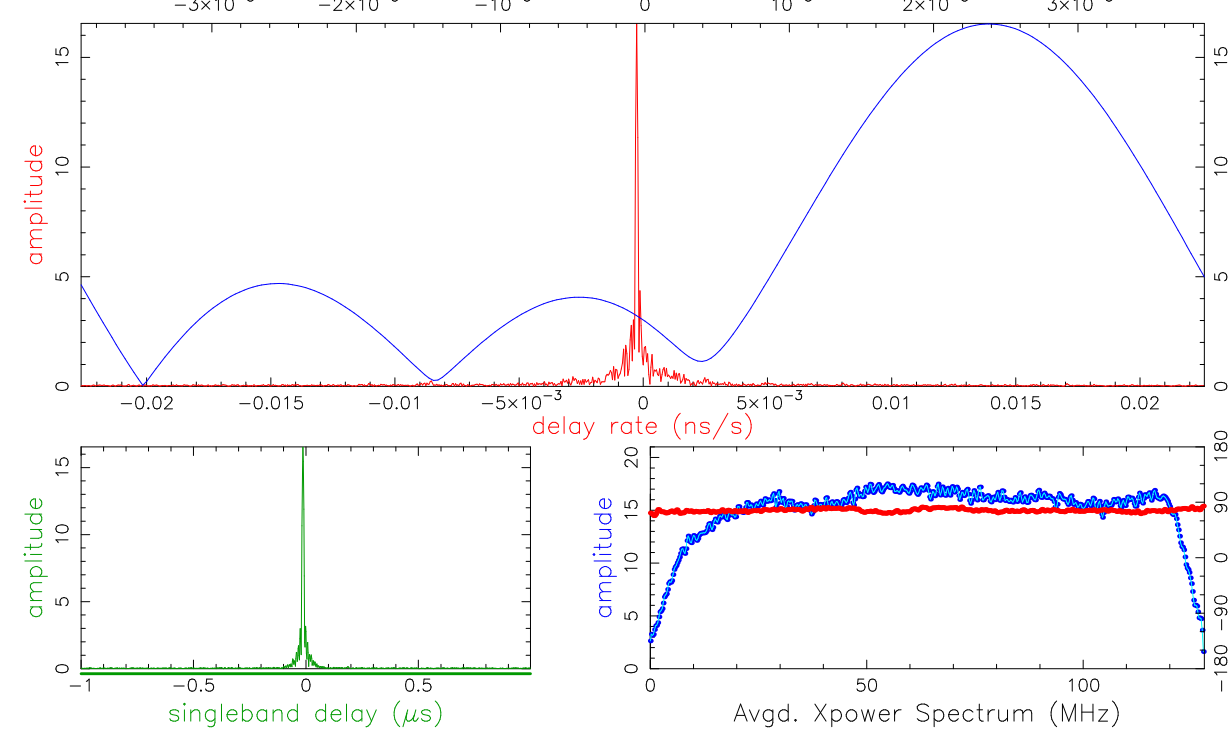
b: az 150.6 el 43.7 pa -19.0 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) -719.722 1134.489 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bf..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bf.Q.25.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bf

VLBA_BR - VLBA_FD, fgroup Q, pol RR

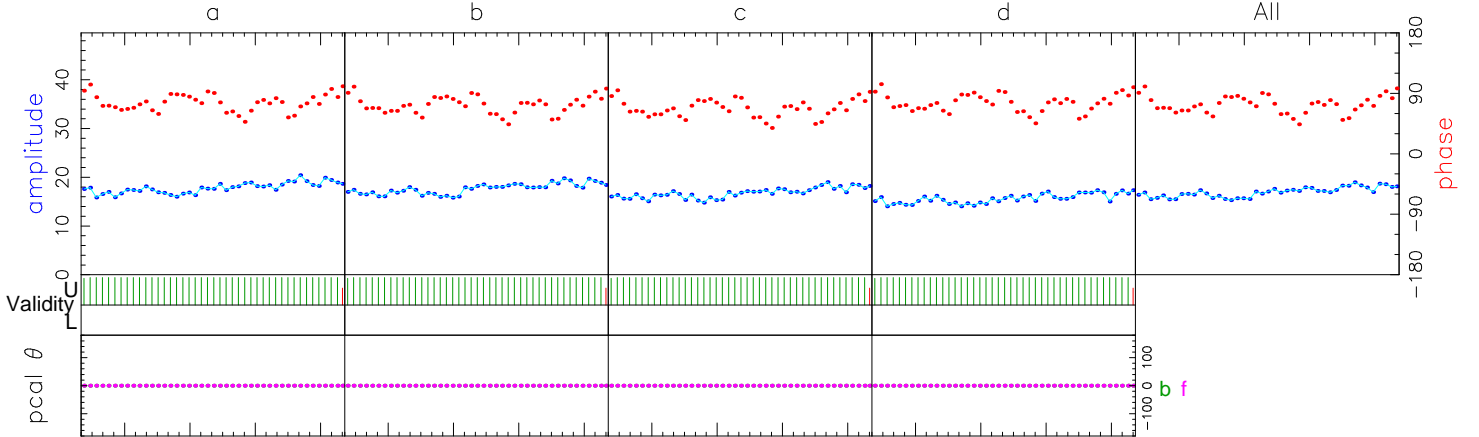


Fringe quality 8

SNR 700.7
 Int time 239.798
 Amp 16.547
 Phase -129.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.013404
 MBD 0.002398
 Fringe rate (Hz)
 -0.011537
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102419
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



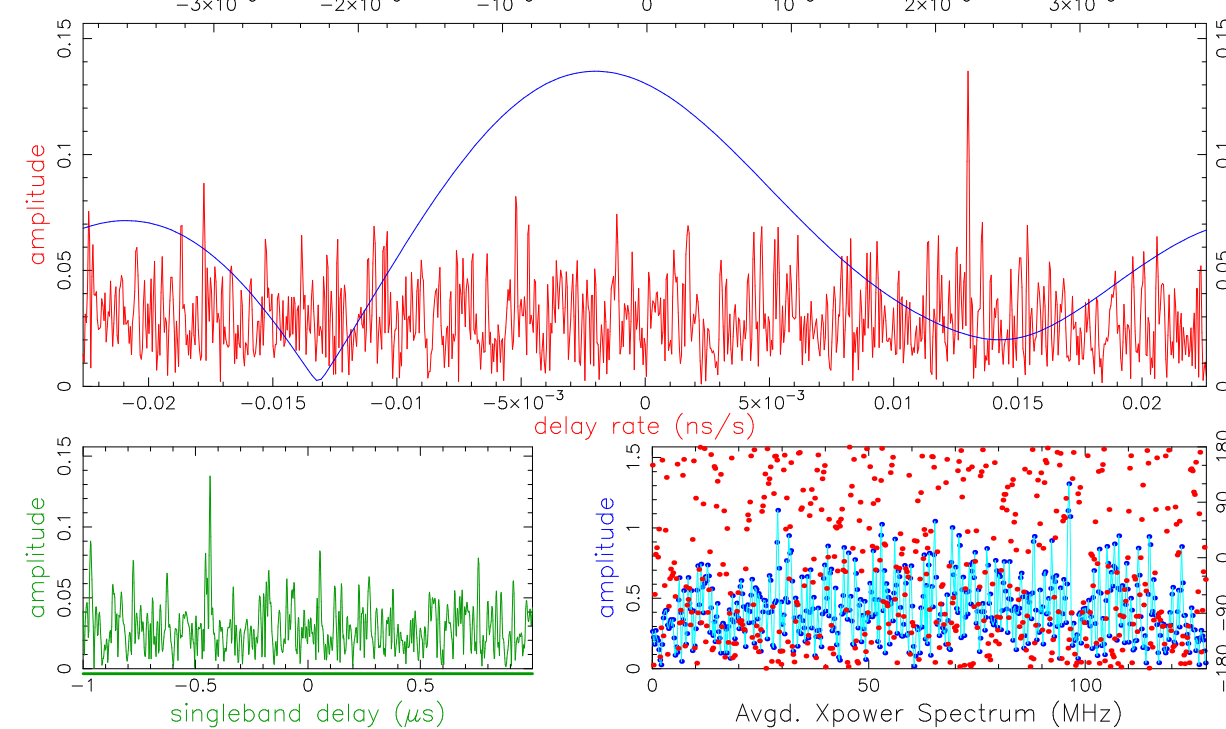
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000	APs used	
f	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
f	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	-4.41316123539E+03				Resid mbdelay (usec)	2.39827E-03 +/- 1.6E-06
Sband delay (usec)	-4.41316141316E+03				Resid sbdelay (usec)	-1.34045E-02 +/- 6.1E-06
Phase delay (usec)	-4.41314800396E+03				Resid phdelay (usec)	4.69396E-06 +/- 1.1E-08
Delay rate (us/s)	2.54157487495E-01				Resid rate (us/s)	-2.67426E-07 +/- 7.6E-11
Total phase (deg)		-163.3			Resid phase (deg)	-129.6 +/- 0.2
					Apriori delay (usec)	-4.41314800866E+03
					Apriori clock (usec)	4.6037312E+00
					Apriori clockrate (us/s)	5.2622099E-07
					Apriori rate (us/s)	2.54157754920E-01
					Apriori accel (us/s/s)	2.59886575792E-05
ph/seg (deg)	12.8	0.5	Search (1024X16)	16.408	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	6.5	0.9	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	4.9	0.2	Inc. seg. avg.	16.940	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	5.2	0.3	Inc. frq. avg.	16.549	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
					Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
b: az 150.6 el 43.7 pa -19.0	f: az 168.1 el 64.3 pa -9.7	u,v (fr/asec) -719.722 1134.489	simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552/bf..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552/bf.Q.8.3N2DRC				

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fc

VLBA_FD - VLBA_SC, fgroup Q, pol RL

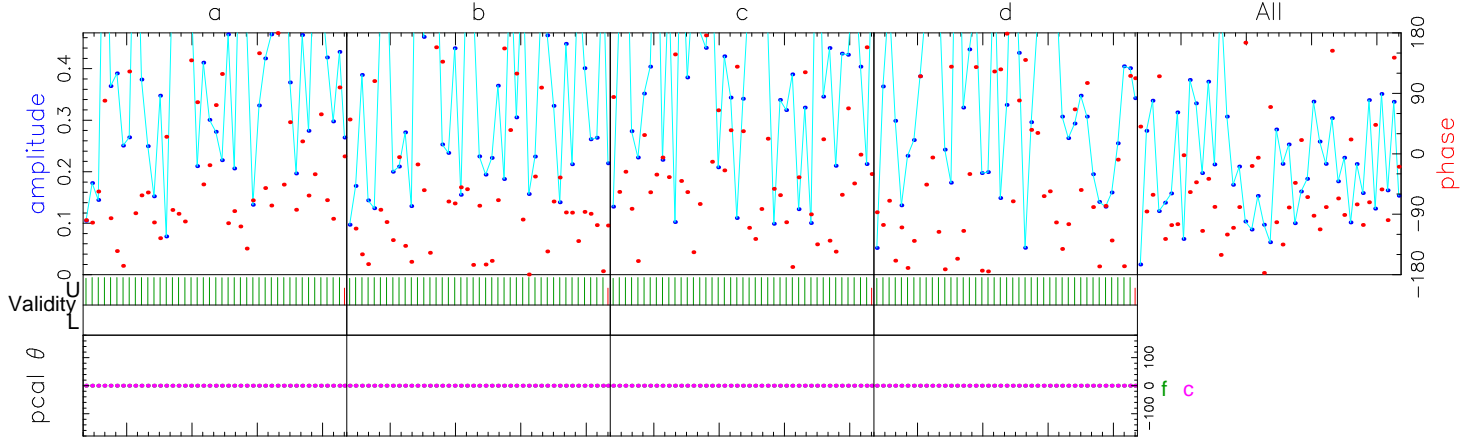


Fringe quality 0

SNR 5.8
 Int time 239.765
 Amp 0.157
 Phase -357.1
 PFD 6.5e-01
 Delays (us)
 SBD -0.435396
 MBD -0.000351
 Fringe rate (Hz)
 0.563292
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102438
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-82.4	-109.3	-55.5	-116.5		-87.1
	0.2	0.2	0.2	0.1	Phase	0.2
	289.2	288.9	290.4	812.8	Ampl.	290.1
U/L	469/0	469/0	469/0	469/0	Sbd box	
f	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	PC freqs	
f:c	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	Manl PC	
c	1000	1000	1000	1000	PC amp	
f	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	2.08200176041E+03	Apriori delay (usec)	2.08243961133E+03	Resid mbdelay (usec)	-3.50918E-04	+/- 1.9E-04
Group delay (usec) (SBD)	2.08200421583E+03	Apriori clock (usec)	-3.6380825E+00	Resid sbdelay (usec)	-4.35396E-01	+/- 7.5E-04
Sband delay (usec)	2.08243960572E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-5.60528E-06	+/- 1.3E-06
Phase delay (usec)	9.45003388701E-01	Apriori rate (us/s)	9.44990331398E-01	Resid rate (us/s)	1.30573E-05	+/- 9.2E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-8.92180463412E-06	Resid phase (deg)	-357.1	+/- 19.9
Total phase (deg)	-57.3					

	RMS	Theor.	Amplitude	0.157 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.6	65.2	Search (1024X16)	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	99.3	113.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	34.5	19.9	Inc. seg. avg.	0.152	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	28.7	34.7	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 168.1 el 64.3 pa -9.7		c: az 253.9 el 54.4 pa 66.9		u, v (fr/asec) -2729.350 867.007		simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fc.Q.115.3N2DRC

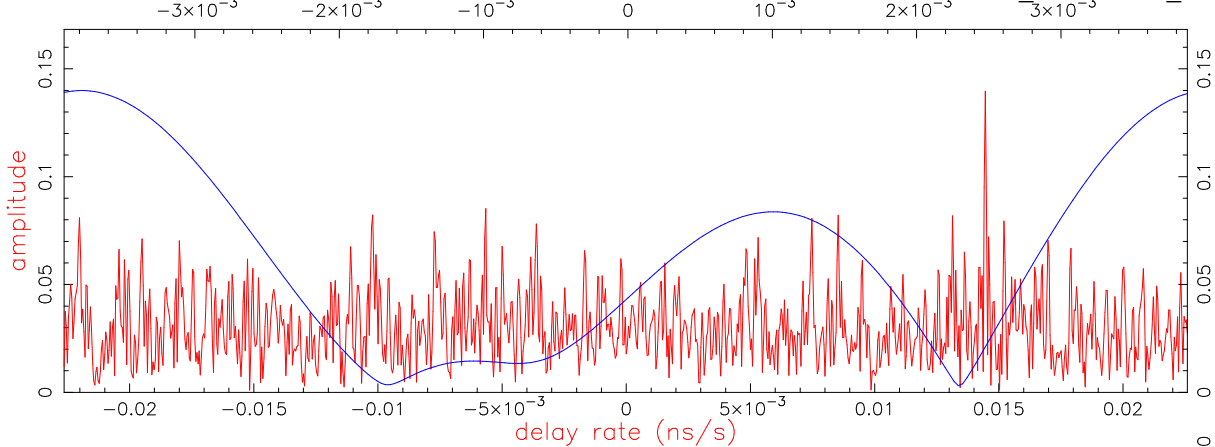
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fc

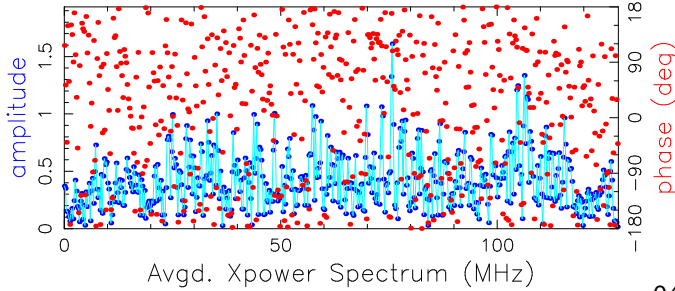
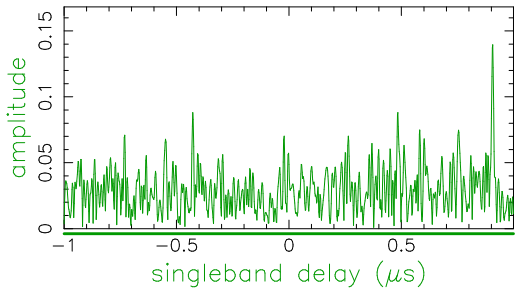
VLBA_FD - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)



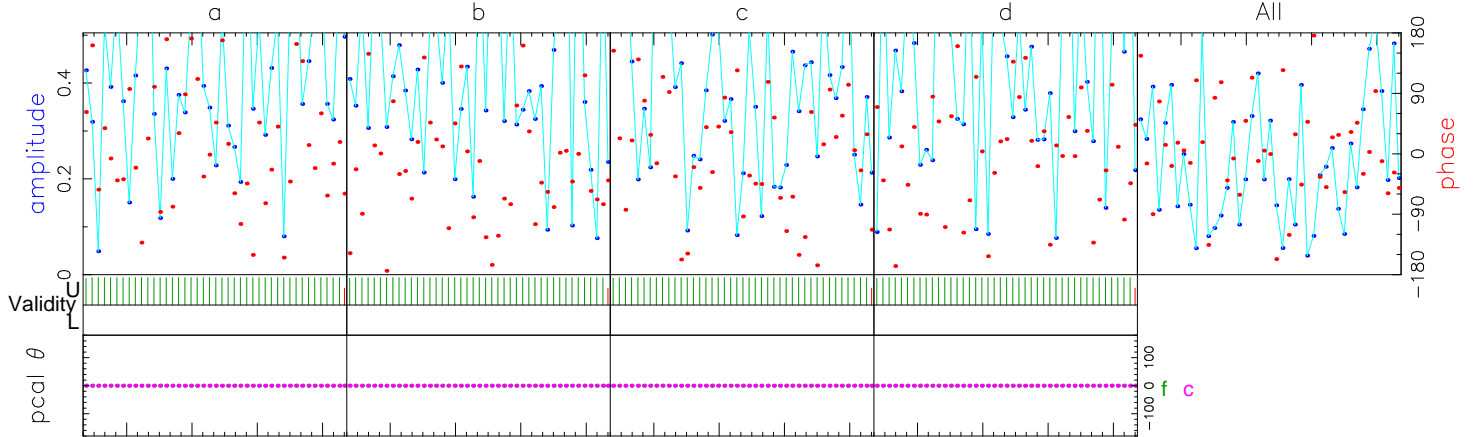
Fringe quality 0

SNR 6.0
Int time 239.765
Amp 0.168
Phase 302.5
PFD 2.6e-01
Delays (us)
SBD 0.905502
MBD 0.003953
Fringe rate (Hz) 0.627557
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102428
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
c	1000	1000	1000	1000		
f:c	0:0	0:0	0:0	0:0		
f:c	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
c	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL		
c	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	2.08334200173E+03	Apriori delay (usec)	2.08243961133E+03	Resid mbdelay (usec)	3.95291E-03	+/-	1.9E-04
Sband delay (usec)	2.08334511383E+03	Apriori clock (usec)	-3.6380825E+00	Resid sbdelay (usec)	9.05502E-01	+/-	7.2E-04
Phase delay (usec)	2.08243961125E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-8.22544E-08	+/-	1.2E-06
Delay rate (us/s)	9.45004878389E-01	Apriori rate (us/s)	9.44990331398E-01	Resid rate (us/s)	1.45470E-05	+/-	8.9E-09
Total phase (deg)	242.2	Apriori accel (us/s/s)	-8.92180463412E-06	Resid phase (deg)	302.5	+/-	19.2

ph/seg (deg)	RMS	Theor.	Amplitude	0.168 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	72.5	62.9	Search (1024X16)	0.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	118.5	109.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	30.4	19.2	Inc. seg. avg.	0.179	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
	17.9	33.5	Inc. frq. avg.	0.169	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -2729.350 867.007 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fc.Q.46.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

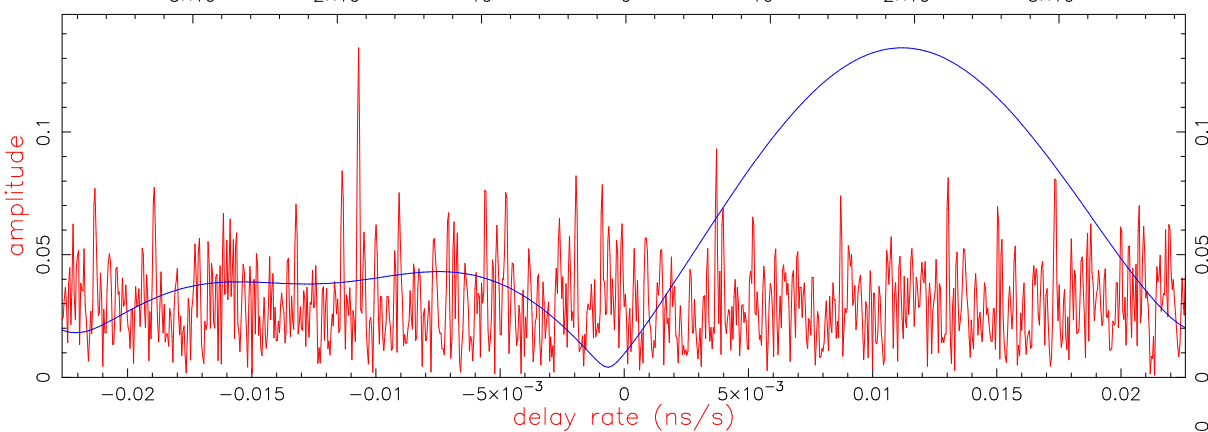
aux01

3C120.3N2DRC, No0552, fc

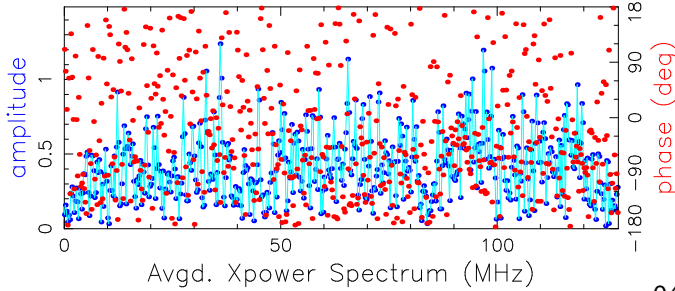
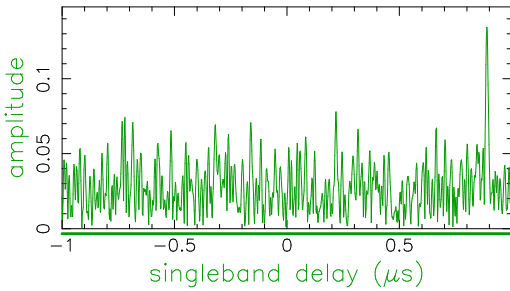
VLBA_FD - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 0

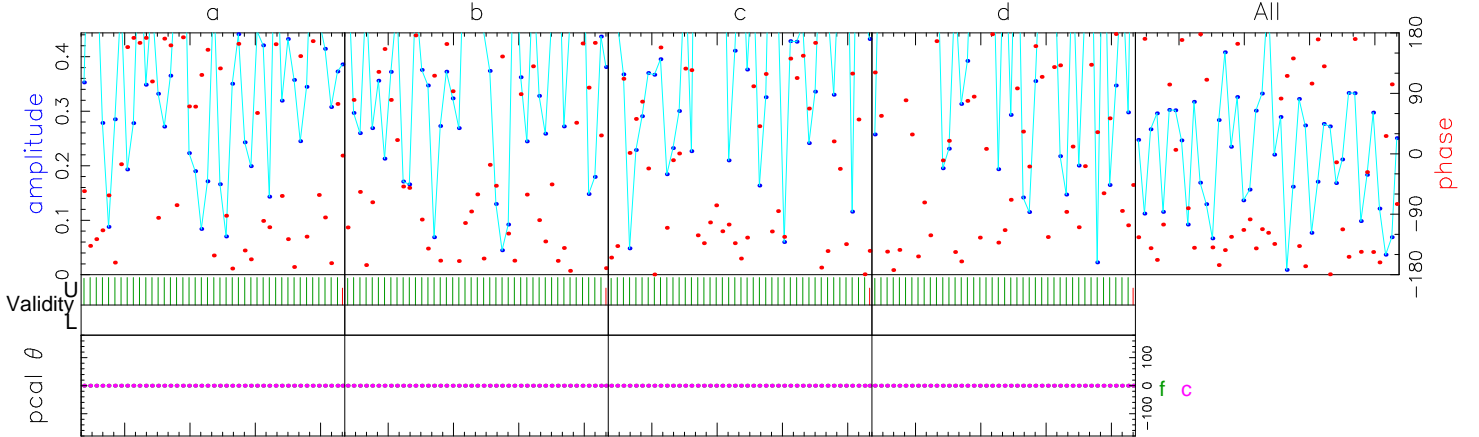


SNR 5.7
 Int time 239.765
 Amp 0.148
 Phase 228.8
 PFD 7.8e-01
 Delays (us)
 SBD 0.889104
 MBD 0.001917
 Fringe rate (Hz)
 -0.463898
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102431
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-159.2	-142.3	-151.6	-163.4	Phase	-153.7
0.2	0.1	0.2	0.1	Ampl.	0.1
967.8	218.2	968.6	624.1	Sbd box	968.2
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	PC freqs	
f:c 0:0	0:0	0:0	0:0	PC phase	
f:c 0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	2.08333215376E+03	Apriori delay (usec)	2.08243961133E+03	Resid mbdelay (usec)	1.91744E-03	+/-	2.0E-04
Sband delay (usec)	2.08332871583E+03	Apriori clock (usec)	-3.6380825E+00	Resid sbdelay (usec)	8.89104E-01	+/-	7.6E-04
Phase delay (usec)	2.08243960143E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-9.89807E-06	+/-	1.3E-06
Delay rate (us/s)	9.44979578079E-01	Apriori rate (us/s)	9.44990331398E-01	Resid rate (us/s)	-1.07533E-05	+/-	9.3E-09
Total phase (deg)	168.5	Apriori accel (us/s/s)	-8.92180463412E-06	Resid phase (deg)	228.8	+/-	20.1

ph/seg (deg)	68.8	Theor.	65.9	Amplitude	0.148 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	102.4	Search (1024X16)	0.129	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	11.4	Inc. seg. avg.	0.146	Inc. frq. avg.	0.140	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	30.4	Inc. frq. avg.	0.140			Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 168.1 el 64.3 pa -9.7 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -2729.350 867.007 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fc.Q.57.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

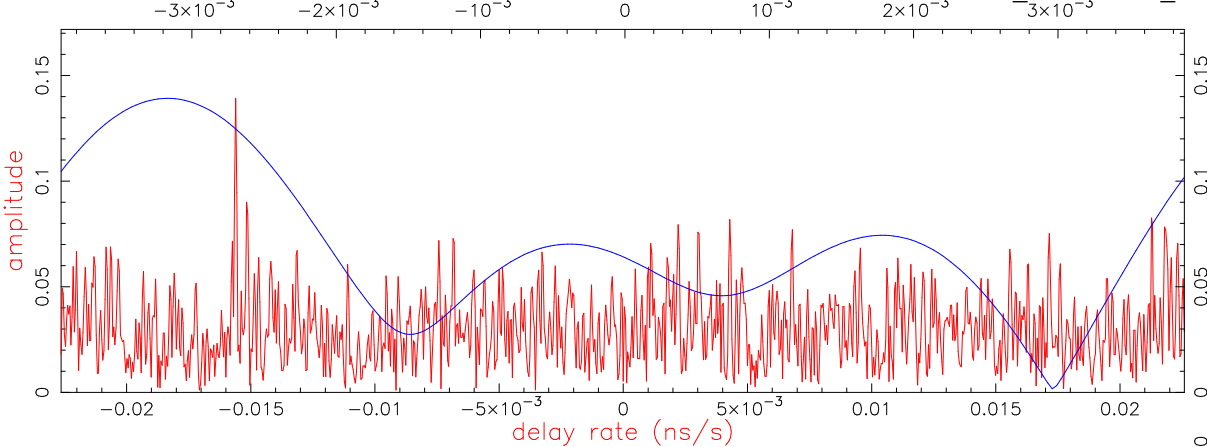
aux01

3C120.3N2DRC, No0552, fc

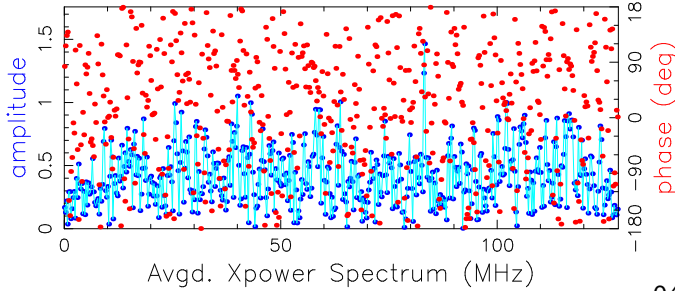
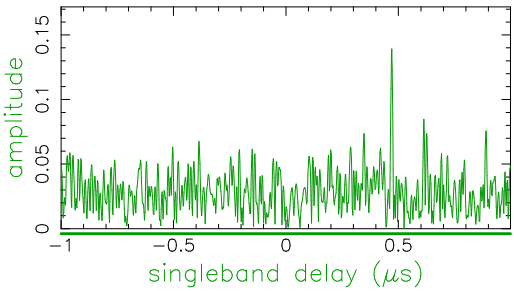
VLBA_FD - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

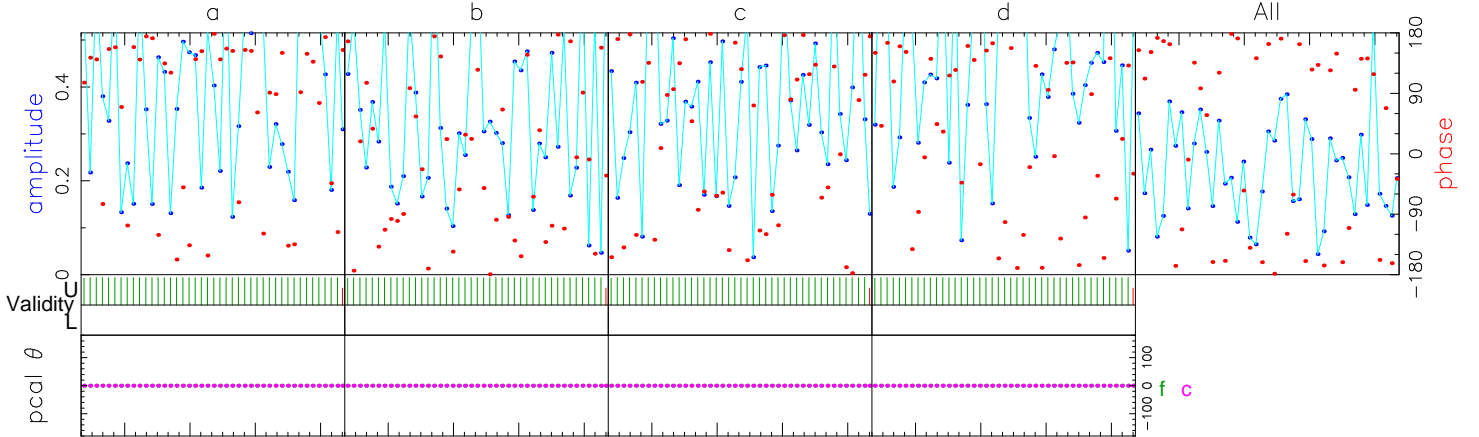


SNR 5.9
 Int time 239.765
 Amp 0.172
 Phase 40.2
 PFD 3.4e-01
 Delays (us)
 SBD 0.470254
 MBD -0.003183
 Fringe rate (Hz)
 -0.677665
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102433
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
156.8	-169.4	171.2	155.4	Phase	163.9
0.3	0.1	0.2	0.2	Ampl.	0.2
753.8	713.3	828.7	630.3	Sbd box	753.8
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	PC freqs	
f:c 0:0	0:0	0:0	0:0	PC phase	
f:c 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000		
f Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	2.08291299100E+03	Apriori delay (usec)	2.08243961133E+03	Resid mbdelay (usec)	-3.18283E-03	+/-	1.9E-04
Sband delay (usec)	2.08290986533E+03	Apriori clock (usec)	-3.6380825E+00	Resid sbdelay (usec)	4.70254E-01	+/-	7.3E-04
Phase delay (usec)	2.08243962188E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	1.05565E-05	+/-	1.2E-06
Delay rate (us/s)	9.44974622890E-01	Apriori rate (us/s)	9.44990331398E-01	Resid rate (us/s)	-1.57085E-05	+/-	9.0E-09
Total phase (deg)	340.0	Apriori accel (us/s/s)	-8.92180463412E-06	Resid phase (deg)	40.2	+/-	19.4

ph/seg (deg)	RMS 61.6	Theor. 63.5	Amplitude Search (1024X16)	0.172 +/- 0.029	0.131	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	97.6	110.8	Interp.	0.000	0.131	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	21.1	19.4	Inc. seg. avg.	0.173	0.165	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	43.0	33.8	Inc. frq. avg.	0.165	0.165	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 168.1 el 64.3 pa -9.7	c: az 253.9 el 54.4 pa 66.9	u, v (fr/asec)	-2729.350	867.007				simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fc.Q.80.3N2DRC

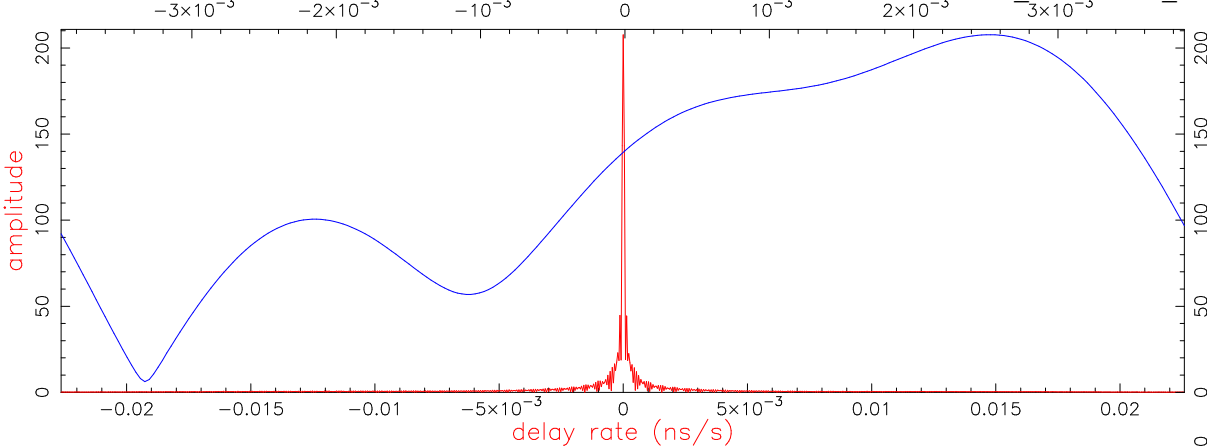
Mk4/DiFX fourfit 3.25 rev 0

aux01

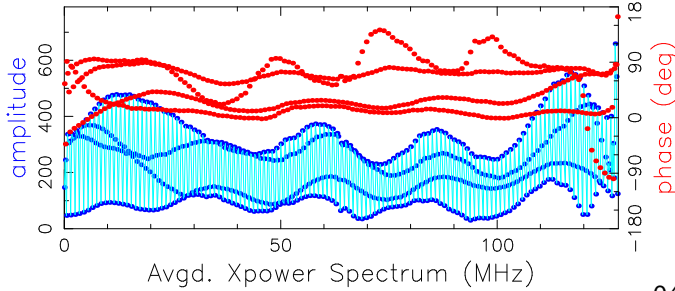
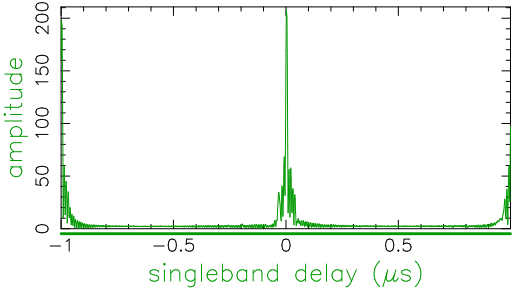
3C120.3N2DRC, No0552, ff

VLBA_FD - VLBA_FD, fgroup Q, pol RL

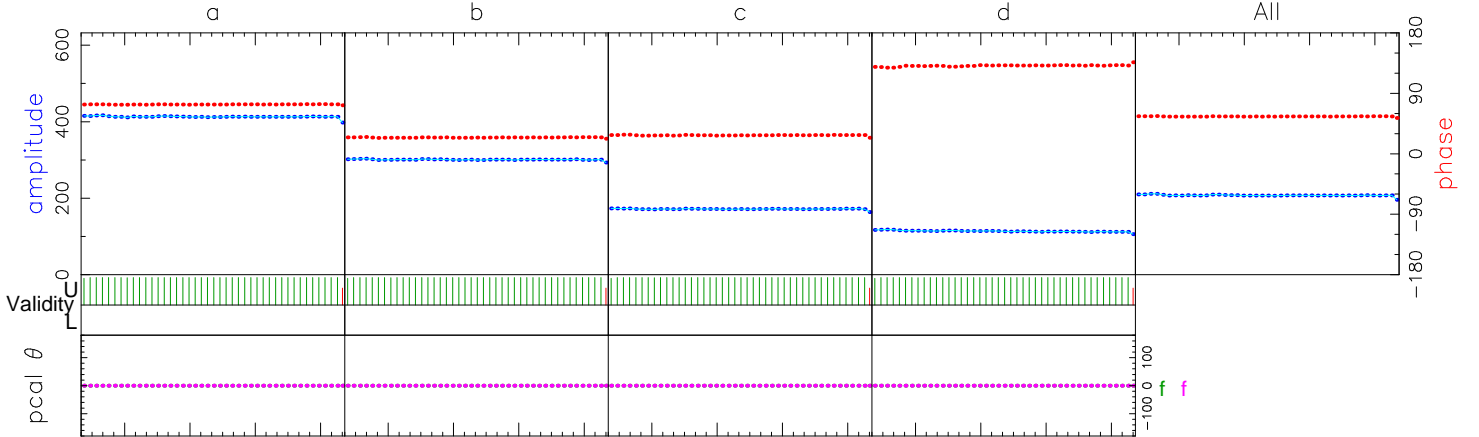
multiband delay (μ s)



Fringe quality 5
 Error code G
 SNR 8926.4
 Int time 239.787
 Amp 210.799
 Phase 55.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.002664
 MBD 0.002500
 Fringe rate (Hz)
 -0.000008
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102437
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	73.4	24.2	27.6	131.0	Phase	55.5
	413.1	300.9	171.9	113.9	Ampl.	249.9
	514.3	514.2	2.2	1.6	Sbd box	514.4
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	2.50037500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.50038E-03	+/- 1.2E-07
Group delay (usec) (SBD)	2.50037500000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.66375E-03	+/- 4.8E-07
Sband delay (usec)	2.66375000000E-03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.57506E-06	+/- 8.3E-10
Phase delay (usec)	3.57506427815E-06	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.75437E-10	+/- 6.0E-12
Delay rate (us/s)	-1.75437158450E-10	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	55.5	+/- 0.0
Total phase (deg)	55.5					

	RMS	Theor.	Amplitude	210.799 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.3	0.0	Search (1024X16)	207.338	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	1.7	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	62.3	0.0	Inc. seg. avg.	207.669	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	58.1	0.0	Inc. frq. avg.	249.934	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

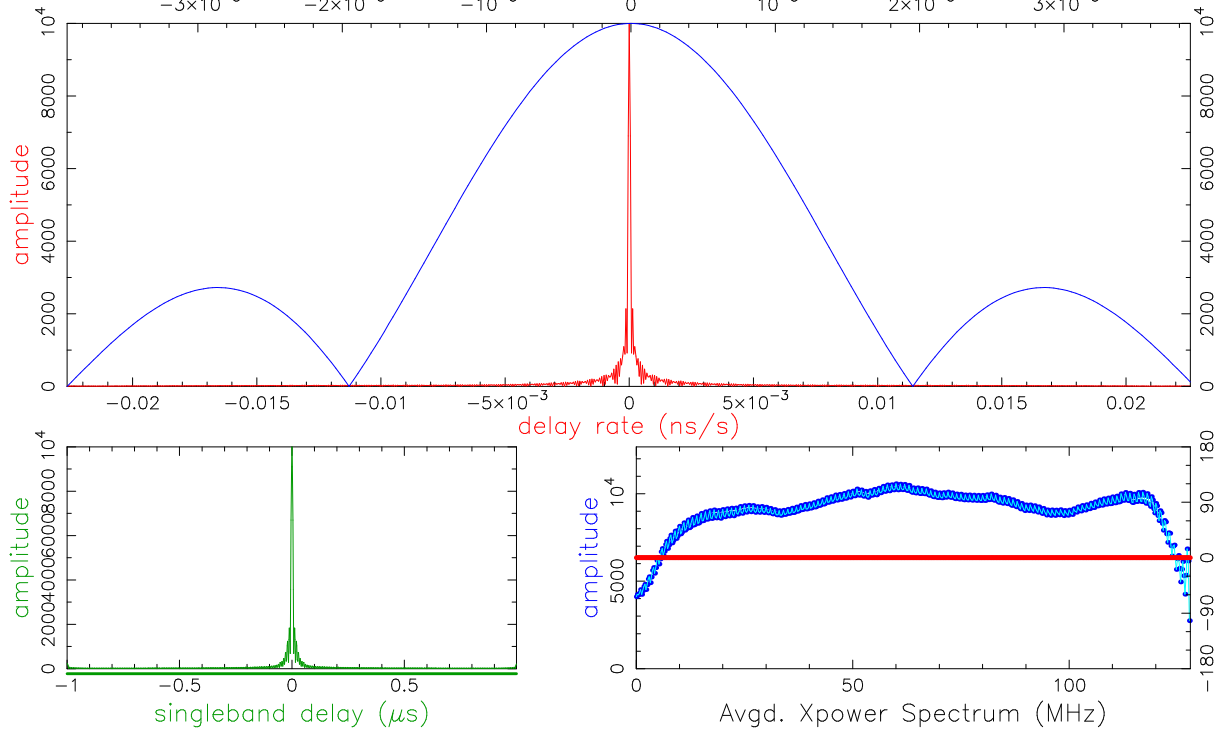
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ff..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ff.Q.108.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, ff

VLBA_FD - VLBA_FD, fgroup Q, pol LL

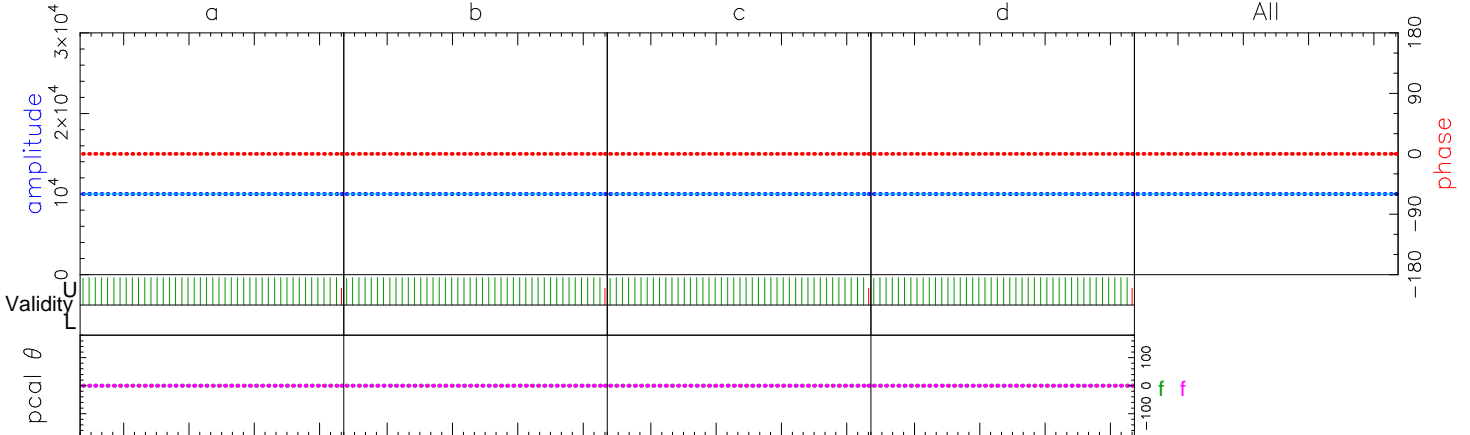


Fringe quality 9

SNR 423464.4
 Int time 239.794
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102427
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0		
f:f	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
f	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL		
f	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.6E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.00000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.0E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.00000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.7E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

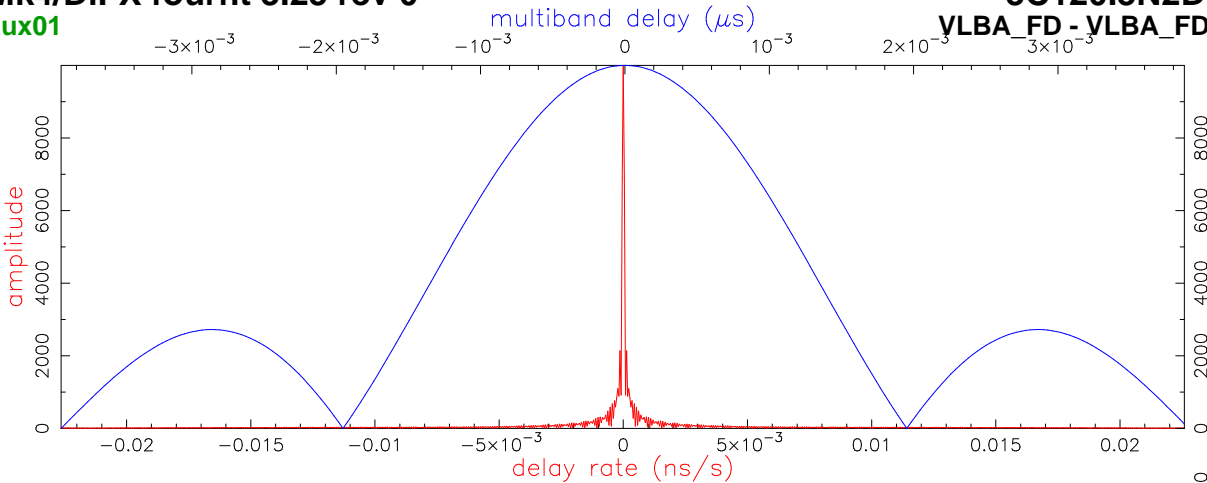
ph/seg (deg) 0.0 0.0 Search (1024X16) 10000.000 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 f: az 168.1 el 64.3 pa -9.7 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ff..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ff.Q.35.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

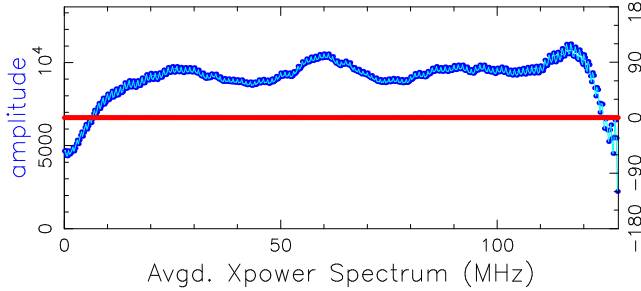
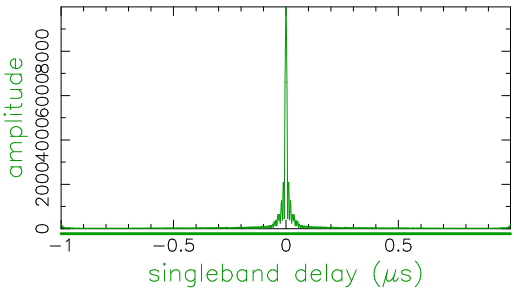
3C120.3N2DRC, No0552, ff

VLBA_FD - VLBA_FD, fgroup Q, pol RR



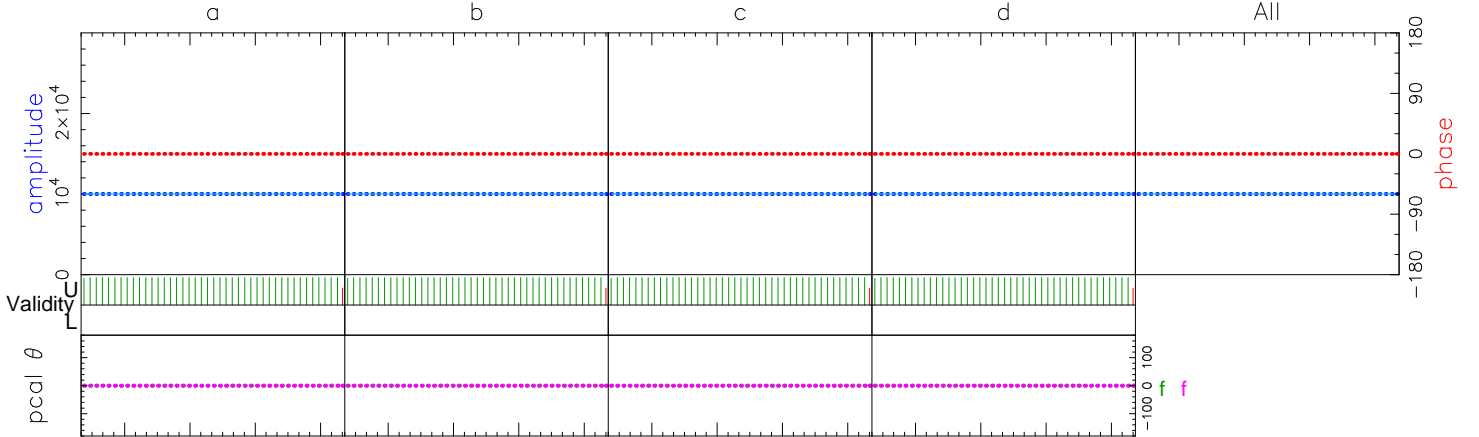
Fringe quality 9

SNR 423464.4
 Int time 239.794
 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)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102432
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0		
f:f	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
f	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR		
f	Q00UR	Q01UR	Q02UR	Q03UR		

	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.000000E+00	+/- 2.6E-09
Group delay (usec) (SBD)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.000000E+00	+/- 2.6E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.000000E+00	+/- 1.0E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.000000E+00	+/- 1.7E-11
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.000000E+00	+/- 1.3E-13
Total phase (deg)	0.0	0.0	0.0	0.0	0.0	+/- 0.0

	RMS	Theor.	Amplitude	9999.999 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.0	0.0	Search (1024X16)	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) -0.004 0.004
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 f: az 168.1 el 64.3 pa -9.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

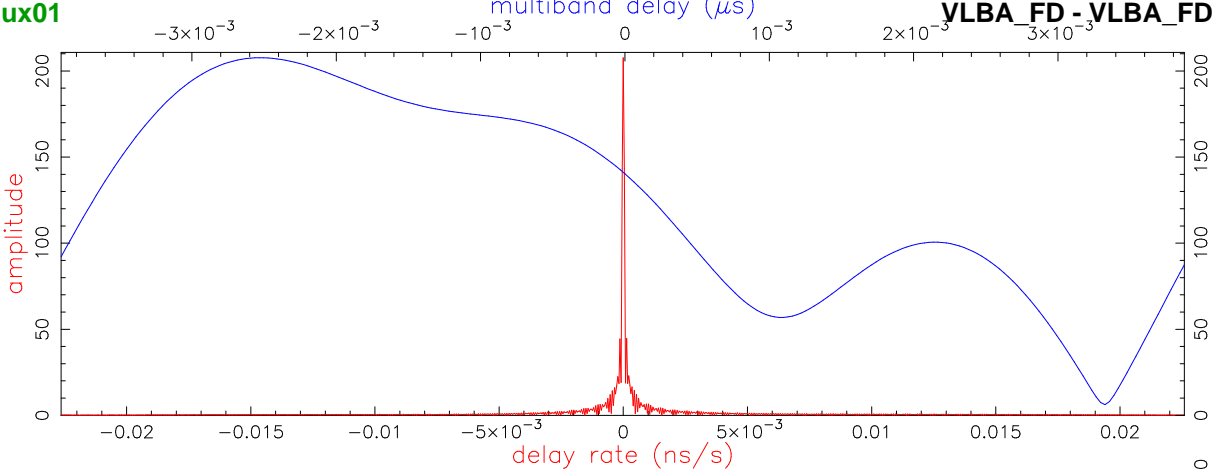
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ff..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ff.Q.67.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

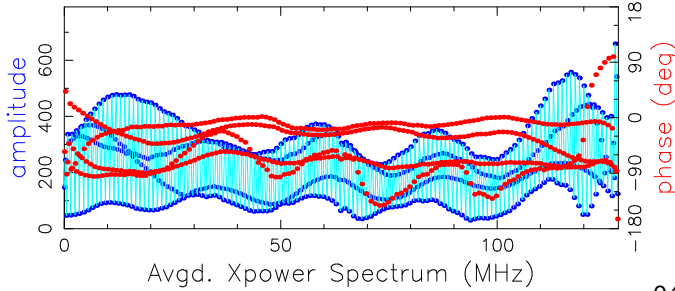
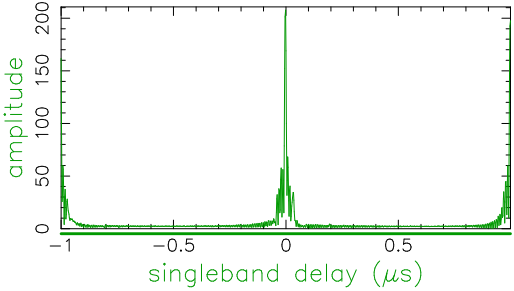
aux01

3C120.3N2DRC, No0552, ff

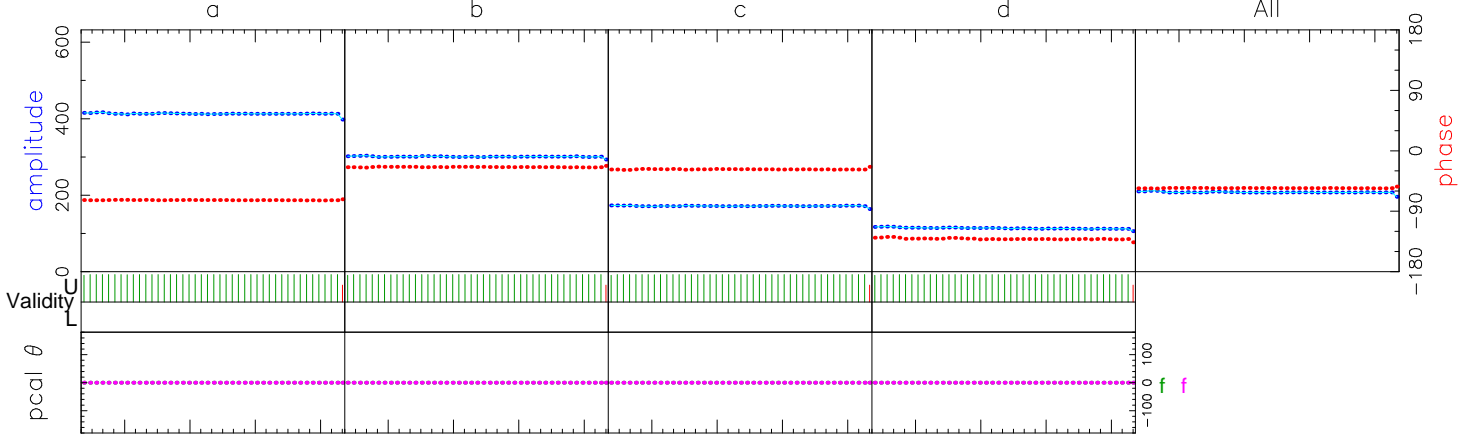
VLBA_FD - VLBA_FD, fgroup Q, pol LR



Fringe quality 5
 Error code G
 SNR 8926.4
 Int time 239.787
 Amp 210.799
 Phase -55.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.002664
 MBD -0.002500
 Fringe rate (Hz)
 0.000008
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102434
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-73.4	-24.2	-27.6	-131.0	Phase	-55.5
413.1	300.9	171.9	113.9	Ampl.	249.9
511.7	511.8	1023.6	1023.6	Sbd box	511.6
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	PC freqs	
f:f 0:0	0:0	0:0	0:0	PC phase	
f:f 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000		
f Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
f Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-2.50037500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.50038E-03	+/-	1.2E-07
Sband delay (usec)	-2.66375000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.66375E-03	+/-	4.8E-07
Phase delay (usec)	-3.57506427795E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.57506E-06	+/-	8.3E-10
Delay rate (us/s)	1.75437158450E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.75437E-10	+/-	6.0E-12
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-55.5	+/-	0.0

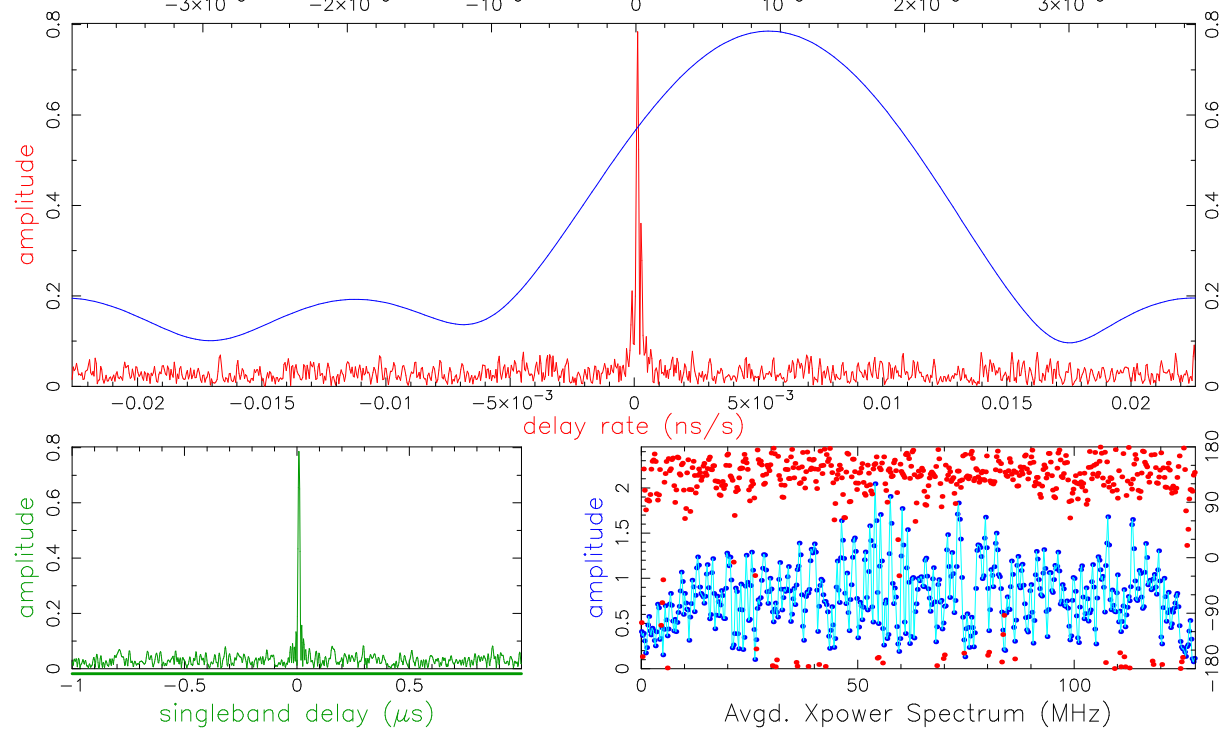
ph/seg (deg)	0.3	Theor.	0.0	Amplitude	210.799 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	1.7		0.0	Search (1024X16)	207.338	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	62.3		0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	58.1		0.0	Inc. seg. avg.	207.669	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
				Inc. frq. avg.	249.934	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
f: az 168.1 el 64.3 pa -9.7		f: az 168.1 el 64.3 pa -9.7		u,v (fr/asec)	0.000 0.000		ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/ff..3N2DRC					simultaneous interpolator
							Output file: /Exps/c241c/v2/7mm/3001/No0552/ff.Q.91.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fk

VLBA_FD - VLBA_KP, fgroup Q, pol LR

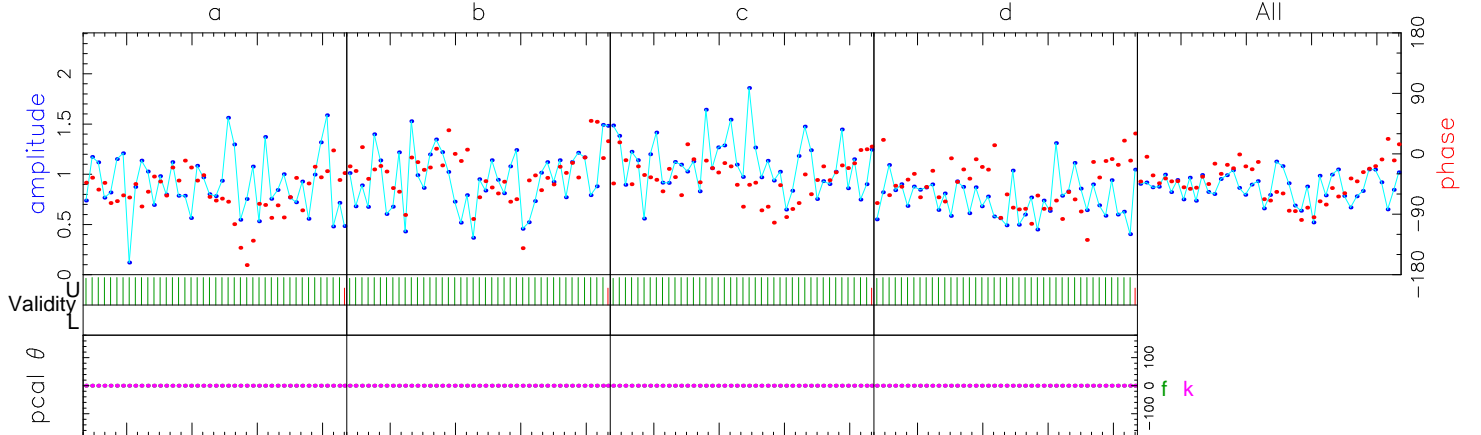


Fringe quality 7

SNR 34.0
 Int time 239.798
 Amp 0.803
 Phase 241.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.008768
 MBD 0.000858
 Fringe rate (Hz) 0.006620
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102436
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



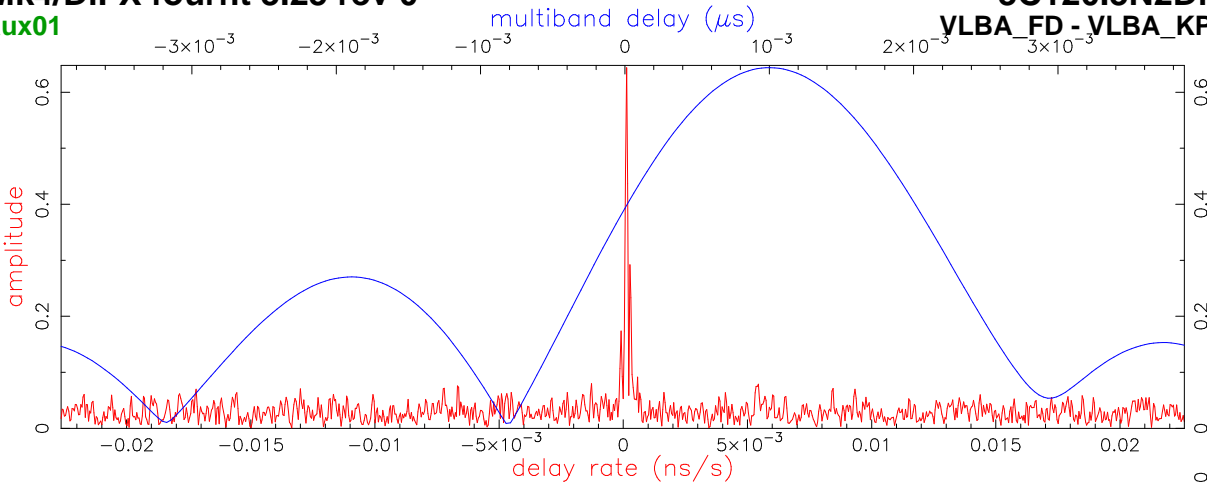
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-57.7	-24.7	-34.4	-47.2	Phase	-40.0
	0.8	0.8	1.0	0.6	Ampl.	0.8
	517.6	517.7	517.0	517.6	Sbd box	517.5
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	5.52048256932E+02		Apriori delay (usec)	5.52039586362E+02	Resid mbdelay (usec)	8.58070E-04 +/- 3.3E-05
Sband delay (usec)	5.52048354612E+02		Apriori clock (usec)	-1.0007095E-01	Resid sbdelay (usec)	8.76825E-03 +/- 1.3E-04
Phase delay (usec)	5.52039583784E+02		Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-2.57825E-06 +/- 2.2E-07
Delay rate (us/s)	-1.72315883333E-01		Apriori rate (us/s)	-1.72316036795E-01	Resid rate (us/s)	1.53462E-07 +/- 1.6E-09
Total phase (deg)		153.2	Apriori accel (us/s/s)	-3.14546432878E-06	Resid phase (deg)	241.2 +/- 3.4
	RMS	Theor.	Amplitude	0.803 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	27.6	11.1	Search (1024X16)	0.724	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	18.9	19.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	17.8	3.4	Inc. seg. avg.	0.857	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	15.9	5.9	Inc. frq. avg.	0.802	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 168.1 el 64.3 pa -9.7			k: az 153.1 el 60.9 pa -22.3			u,v (fr/asec) 494.818 -98.393
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC			Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.101.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

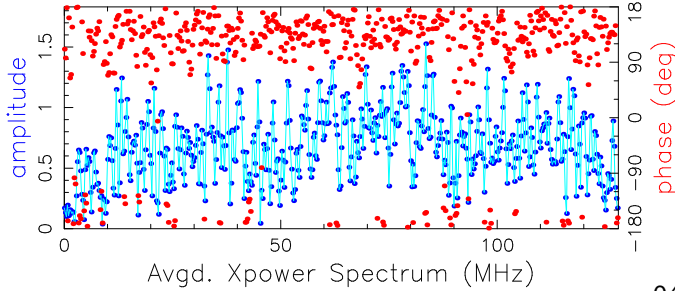
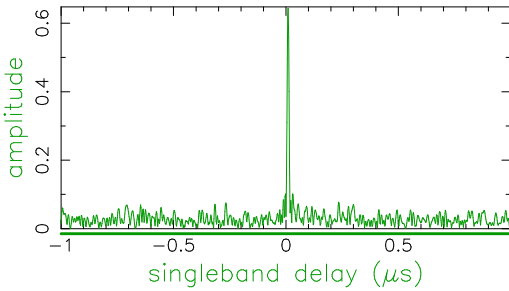
3C120.3N2DRC, No0552, fk

VLBA_FD - VLBA_KP, fgroup Q, pol RL



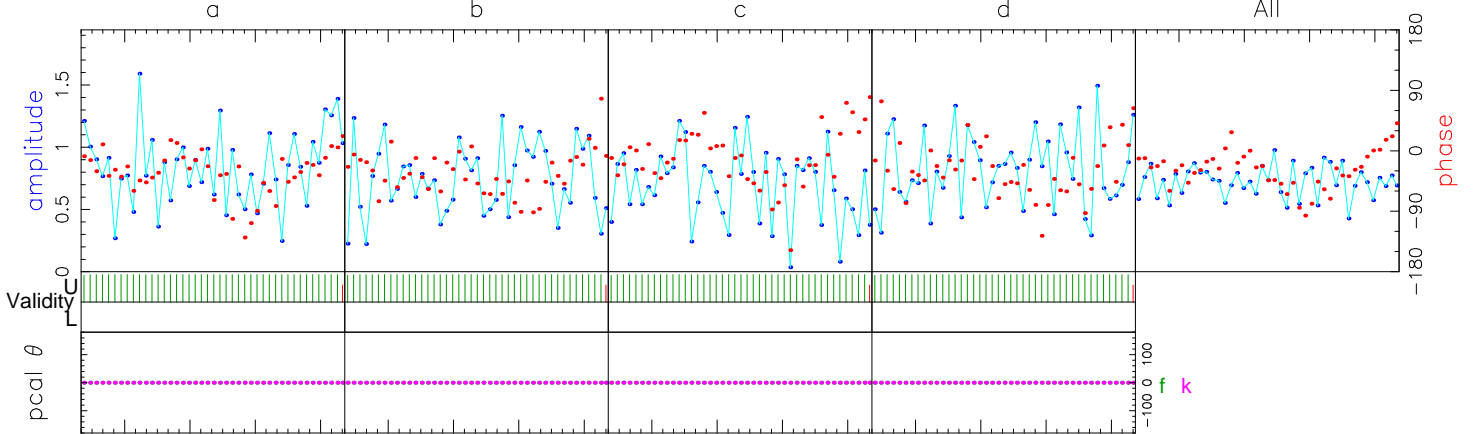
Fringe quality 8

SNR 27.4
 Int time 239.798
 Amp 0.648
 Phase 253.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.009218
 MBD 0.000969
 Fringe rate (Hz) 0.006507
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102438
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



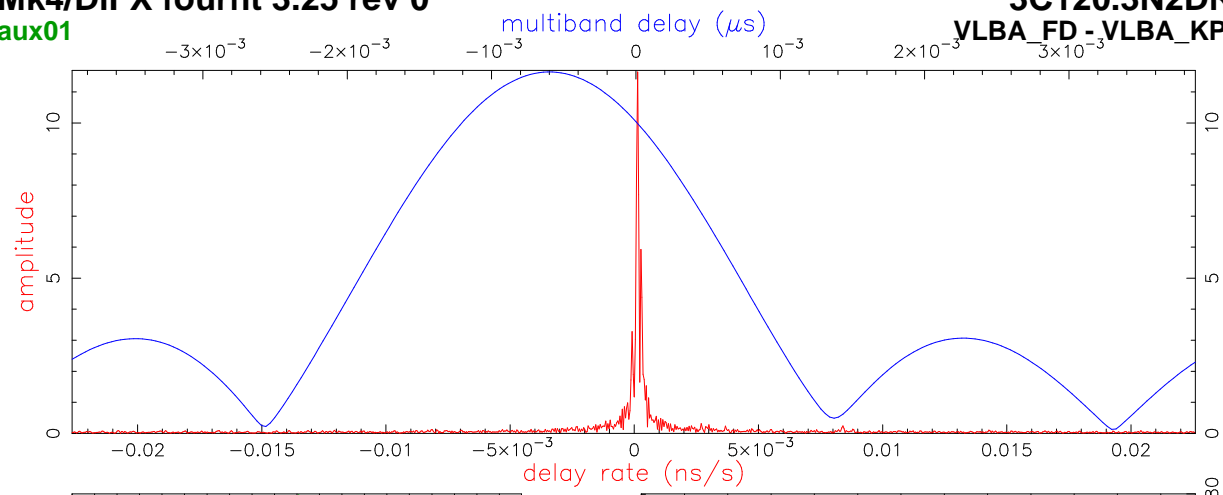
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-29.6	-36.5	-11.2	-32.5	Phase	-28.0
0.7	0.6	0.6	0.7	Ampl.	0.7
517.6	517.8	517.9	517.4	Sbd box	517.7
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	PC freqs	
f:k 0:0	0:0	0:0	0:0	PC phase	
f:k 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	5.52048368307E+02	Apriori delay (usec)	5.52039586362E+02	Resid mbdelay (usec)	9.69445E-04	+/-	4.1E-05
Sband delay (usec)	5.52048804112E+02	Apriori clock (usec)	-1.0007095E-01	Resid sbdelay (usec)	9.21775E-03	+/-	1.6E-04
Phase delay (usec)	5.52039584559E+02	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-1.80238E-06	+/-	2.7E-07
Delay rate (us/s)	-1.72315885956E-01	Apriori rate (us/s)	-1.72316036795E-01	Resid rate (us/s)	1.50839E-07	+/-	1.9E-09
Total phase (deg)	165.3	Apriori accel (us/s/s)	-3.14546432878E-06	Resid phase (deg)	253.3	+/-	4.2

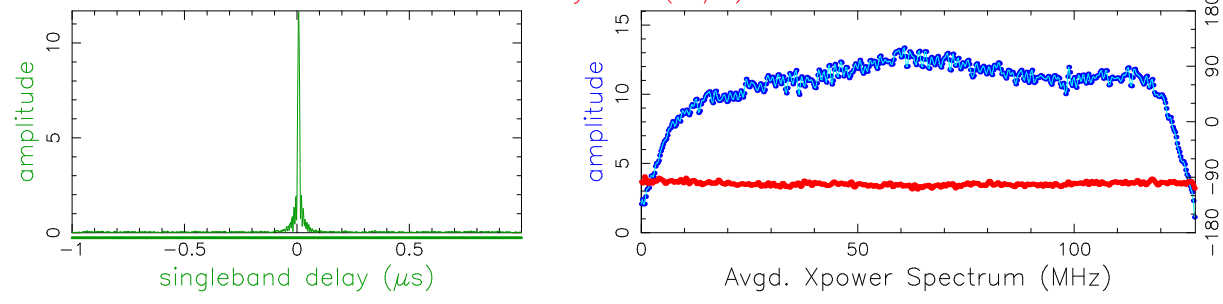
ph/seg (deg)	28.1	Theor.	13.7	Amplitude	0.648 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	22.5	Search (1024X16)	0.606	Search	0.606	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	13.7	Inc. seg. avg.	0.704	Inc. seg. avg.	0.704	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	8.4	Inc. frq. avg.	0.650	Inc. frq. avg.	0.650	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) 494.818 -98.393 simultaneous interpolator

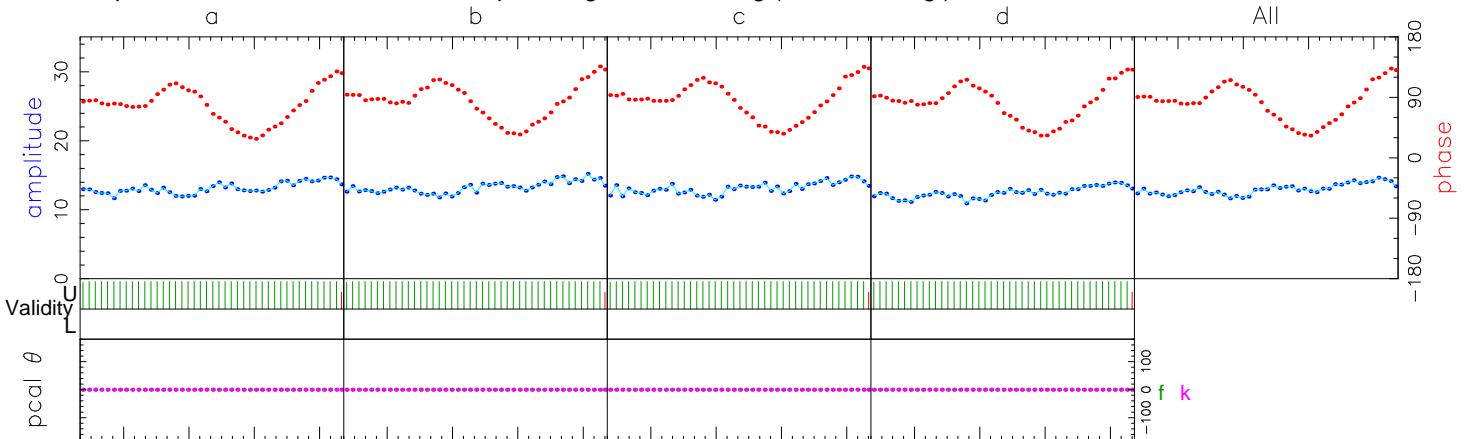
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.120.3N2DRC



Fringe quality 7
SNR 495.2
Int time 239.798
Amp 11.694
Phase 3.9
PFD 0.0e+00
Delays (us)
SBD 0.007362
MBD -0.000626
Fringe rate (Hz) 0.006602
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512
Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102427
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000	APs used	1000
k	1000	1000	1000	1000	PC freqs	1000
f:k	0:0	0:0	0:0	0:0	PC phase	0:0
f:k	0:0	0:0	0:0	0:0	ManI PC	0:0
f	1000	1000	1000	1000	PC amp	1000
k	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	5.52046773026E+02	Apriori delay (usec)	5.52039586362E+02	Resid mbdelay (usec)	-6.25836E-04	+/- 2.2E-06
Group delay (usec) (SBD)	5.52046773026E+02	Apriori clock (usec)	-1.0007095E-01	Resid sbdelay (usec)	7.36225E-03	+/- 8.7E-06
Sband delay (usec)	5.52046948612E+02	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	5.32272E-06	+/- 1.5E-08
Phase delay (usec)	5.52039591685E+02	Apriori rate (us/s)	-1.72316036795E-01	Resid rate (us/s)	1.53026E-07	+/- 1.1E-10
Delay rate (us/s)	-1.72315883769E-01	Apriori accel (us/s/s)	-3.14546432878E-06	Resid phase (deg)	3.9	+/- 0.2
Total phase (deg)	275.9					

ph/seg (deg) 26.4 0.8
amp/seg (%) 12.8 1.3
ph/frq (deg) 3.9 0.2
amp/frq (%) 2.6 0.4

f: az 168.1 el 64.3 pa -9.7
k: az 153.1 el 60.9 pa -22.3
u,v (fr/asec) 494.818 -98.393

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.41.3N2DRC

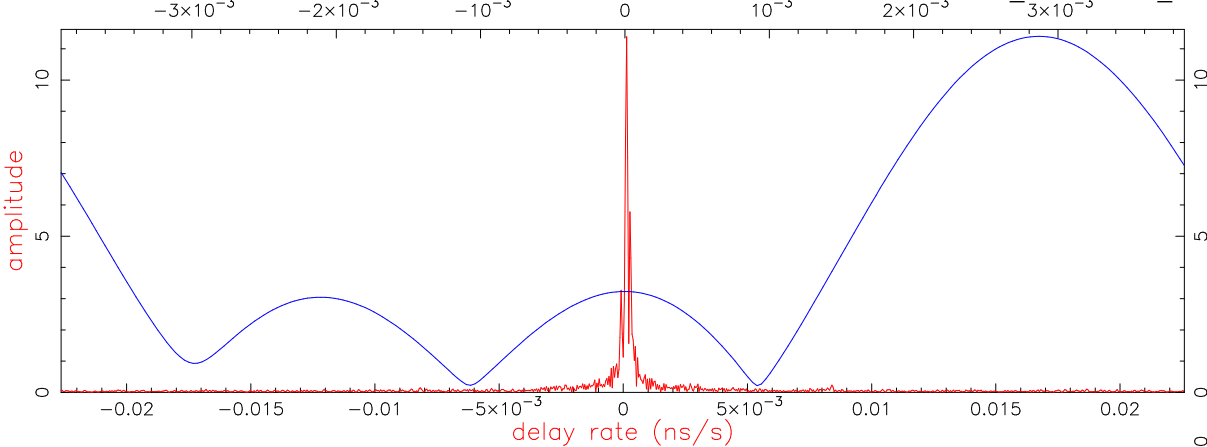
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fk

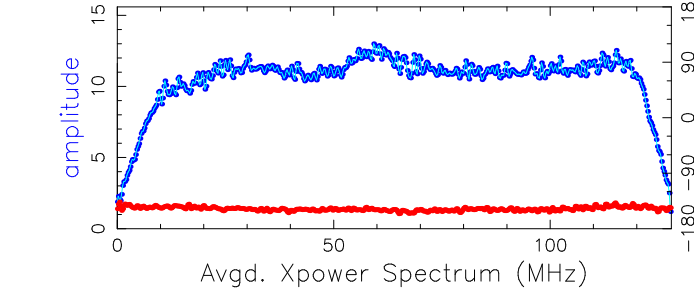
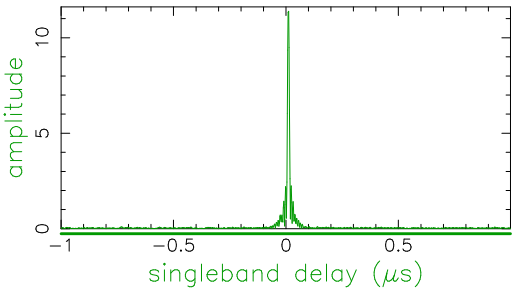
VLBA_FD - VLBA_KP, fgroup Q, pol RR

multiband delay (μ s)



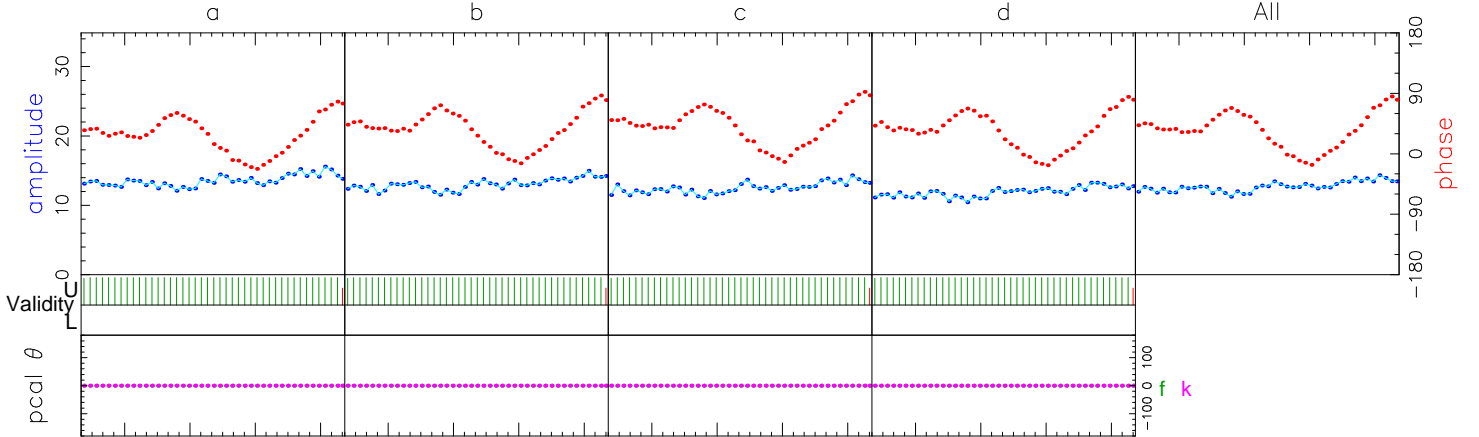
Fringe quality 7

SNR 492.1
 Int time 239.798
 Amp 11.621
 Phase 316.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.010788
 MBD 0.002815
 Fringe rate (Hz)
 0.006579
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102432
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000	APs used	1000
k	1000	1000	1000	1000	PC freqs	1000
f:k	0:0	0:0	0:0	0:0	PC phase	0:0
f:k	0:0	0:0	0:0	0:0	Manl PC	0:0
f	1000	1000	1000	1000	PC amp	1000
k	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	5.52050213776E+02	Apriori delay (usec)	5.52039586362E+02	Resid mbdelay (usec)	2.81491E-03	+/- 2.3E-06
Sband delay (usec)	5.52050374237E+02	Apriori clock (usec)	-1.0007095E-01	Resid sbdelay (usec)	1.07879E-02	+/- 8.8E-06
Phase delay (usec)	5.52039588630E+02	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	2.26783E-06	+/- 1.5E-08
Delay rate (us/s)	-1.72315884295E-01	Apriori rate (us/s)	-1.72316036795E-01	Resid rate (us/s)	1.52500E-07	+/- 1.1E-10
Total phase (deg)	228.5	Apriori accel (us/s/s)	-3.14546432878E-06	Resid phase (deg)	316.5	+/- 0.2

ph/seg (deg)	RMS 26.5	Theor. 0.8	Amplitude 11.621 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	11.2	1.3	Search (1024X16) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	6.9	0.2	Inc. seg. avg. 12.712	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	5.0	0.4	Inc. frq. avg. 11.430	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
				Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
					ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) 494.818 -98.393 simultaneous interpolator

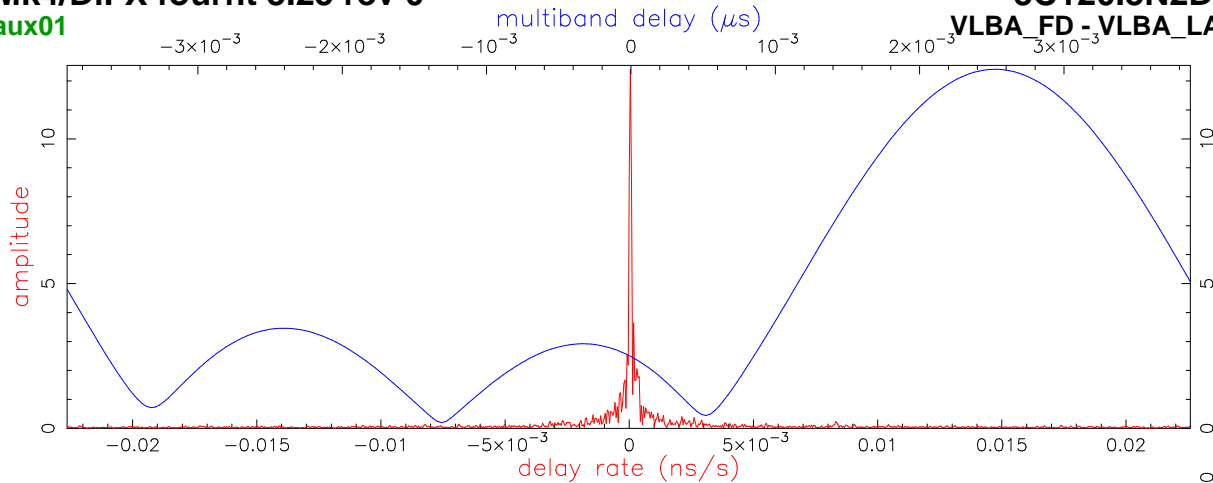
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.70.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

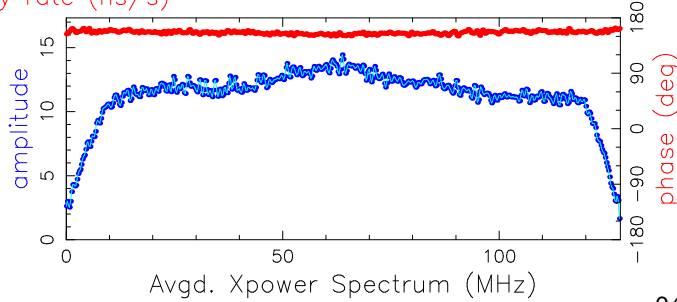
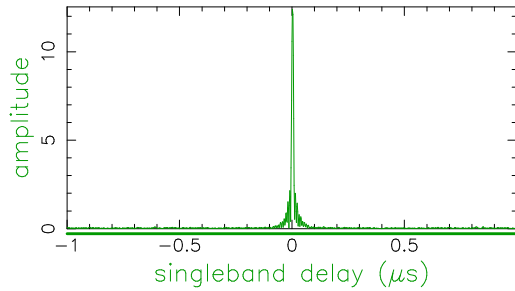
3C120.3N2DRC, No0552, fl

VLBA_FD - VLBA_LA, fgroup Q, pol LL



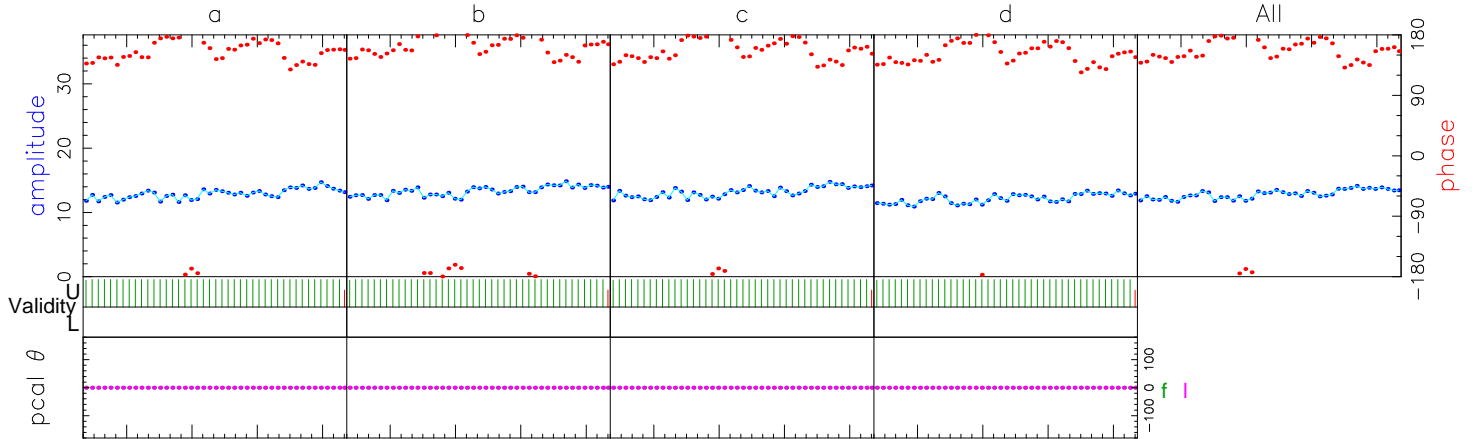
Fringe quality 8

SNR 531.0
 Int time 239.798
 Amp 12.539
 Phase 158.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.002662
 MBD 0.002567
 Fringe rate (Hz)
 0.001662
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102427
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec

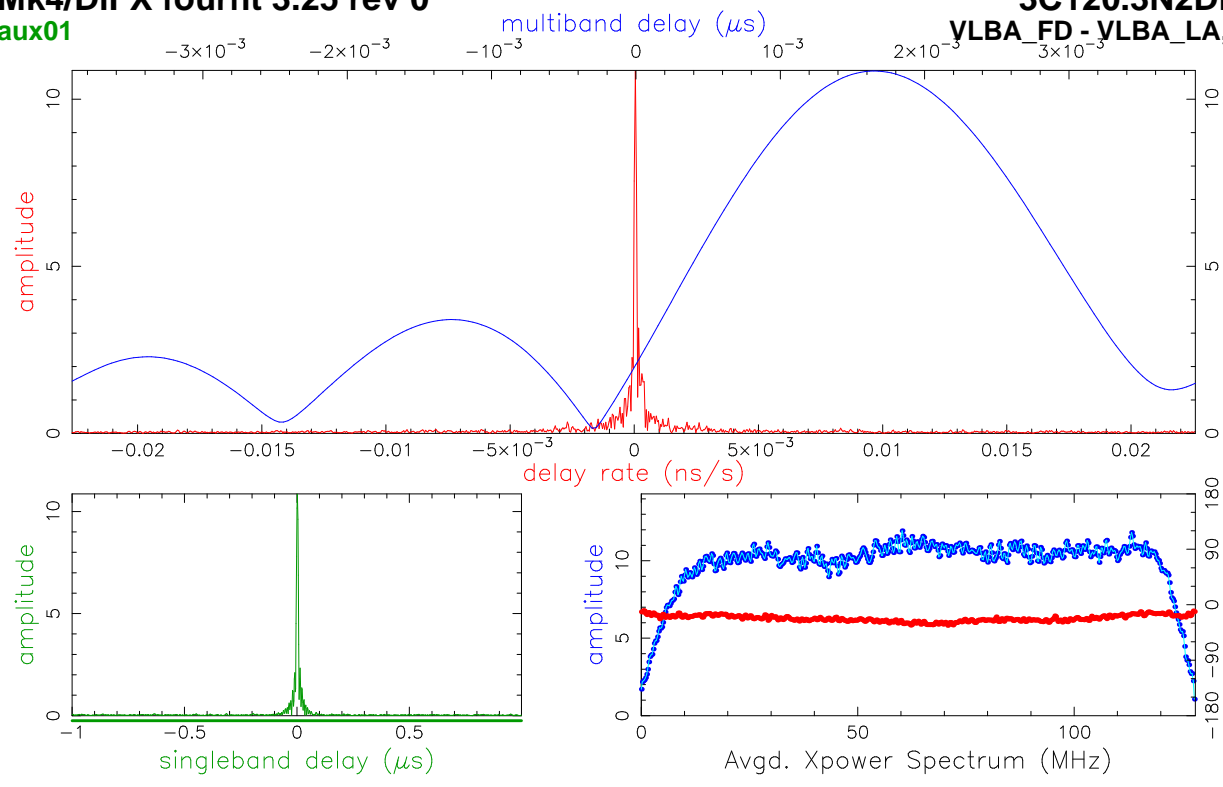


	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000	APs used	1000
l	1000	1000	1000	1000	PC freqs	1000
f:l	0:0	0:0	0:0	0:0	PC phase	0:0
f:l	0:0	0:0	0:0	0:0	Manl PC	0:0
f	1000	1000	1000	1000	PC amp	1000
l	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	9.56870372498E+02	Apriori delay (usec)	9.56867805579E+02	Resid mbdelay (usec)	2.56692E-03	+/-	2.1E-06
Sband delay (usec)	9.56870467704E+02	Apriori clock (usec)	8.3780518E+00	Resid sbdelay (usec)	2.66213E-03	+/-	8.1E-06
Phase delay (usec)	9.56867815759E+02	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	1.01800E-05	+/-	1.4E-08
Delay rate (us/s)	-4.45023261130E-02	Apriori rate (us/s)	-4.45023646497E-02	Resid rate (us/s)	3.85368E-08	+/-	1.0E-10
Total phase (deg)	205.9	Apriori accel (us/s/s)	-5.84073848301E-06	Resid phase (deg)	158.1	+/-	0.2

ph/seg (deg)	15.5	RMS	15.5	Theor.	0.7	Amplitude	12.539 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	6.0	Search (1024X16)	12.292	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	6.7	Inc. seg. avg.	12.850	Inc. frq. avg.	12.436	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
amp/frq (%)	3.6	Inc. frq. avg.	12.436			Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		dr window (ns/s)	-0.023	0.023	
f: az 168.1 el 64.3 pa -9.7		l: az 165.6 el 58.9 pa -11.3		u,v (fr/asec)	125.617 -353.075	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.37.3N2DRC simultaneous interpolator

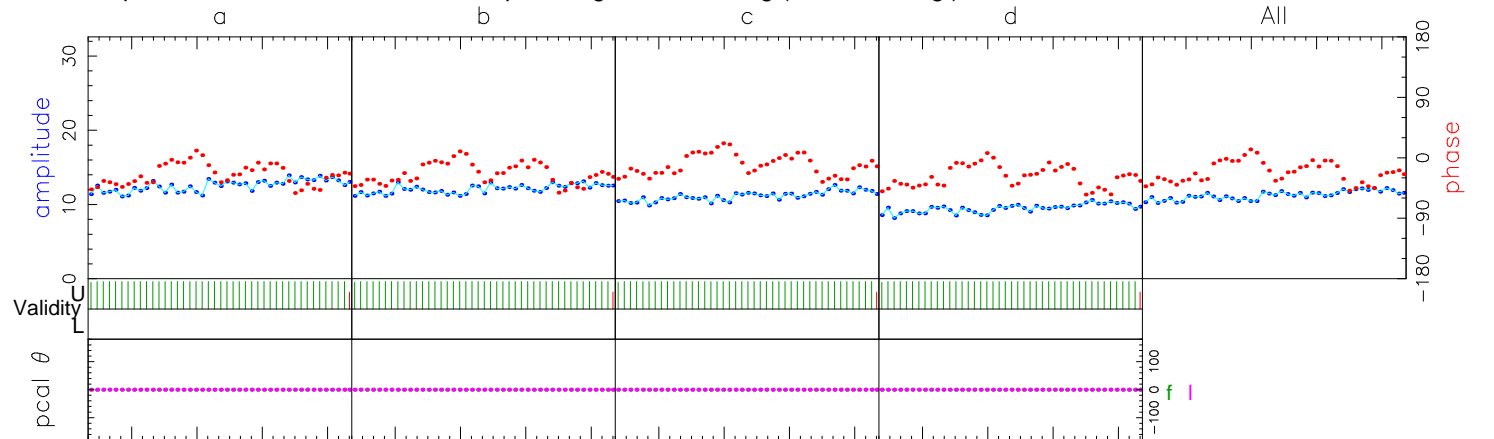


Fringe quality 8

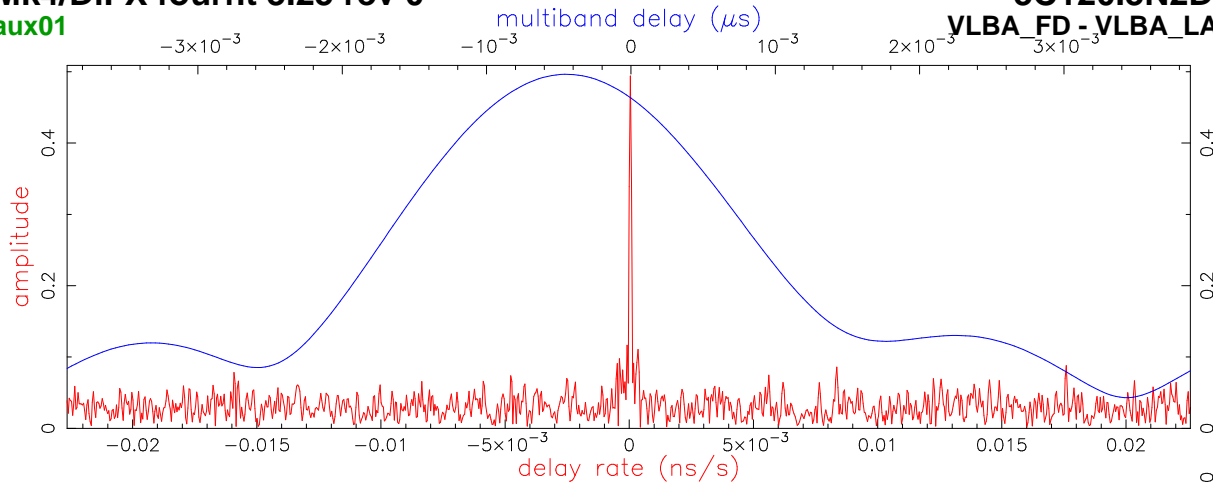
SNR 460.1
Int time 239.798
Amp 10.865
Phase -21.9
PFD 0.0e+00
Delays (us)
SBD 0.001668
MBD 0.001634
Fringe rate (Hz) 0.001640
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102429
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



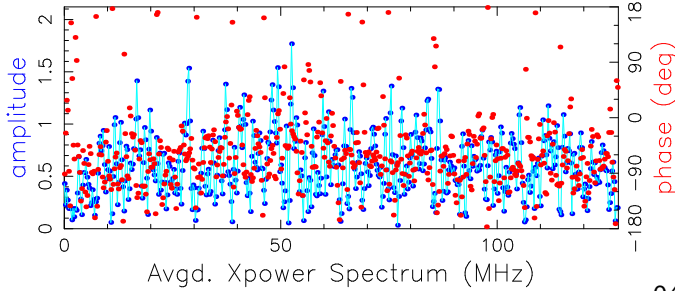
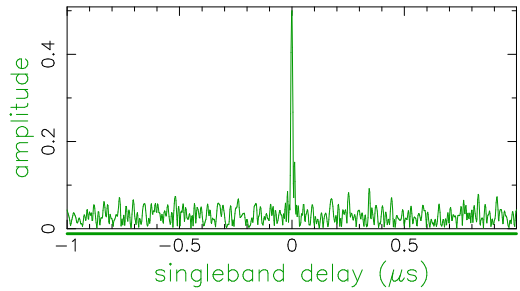
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
l	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
l	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR		
l	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	9.56869439154E+02	9.56869473829E+02	9.56867805579E+02	9.56867805579E+02	1.63358E-03	+/- 2.4E-06
Sband delay (usec)	9.56869473829E+02	9.56867804169E+02	8.3780518E+07	8.3780518E+07	1.66825E-03	+/- 9.4E-06
Phase delay (usec)	9.56867804169E+02	-4.45023266336E-02	2.8422100E-07	2.8422100E-07	-1.40933E-06	+/- 1.6E-08
Delay rate (us/s)	-4.45023266336E-02		-4.45023646497E-02	-4.45023646497E-02	3.80161E-08	+/- 1.2E-10
Total phase (deg)		25.9	-5.84073848301E-06	-5.84073848301E-06	-21.9	+/- 0.2
Apriori delay (usec)			10.621	10.621		
Apriori clock (usec)			10.621	10.621		
Apriori clockrate (us/s)			11.250	11.250		
Apriori rate (us/s)			10.917	10.917		
Apriori accel (us/s/s)						
PCal mode: MANUAL, MANUAL						
PCal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
PC period (AP's) 5, 5						
sb window (us)					-1.000	1.000
SampCntNorm: enabled					-0.004	0.004
mb window (us)					-0.023	0.023
dr window (ns/s)					0.00	0.00
ion window (TEC)					0.00	0.00
simultaneous interpolator						
f: az 168.1 el 64.3 pa -9.7		l: az 165.6 el 58.9 pa -11.3		u,v (fr/asec) 125.617 -353.075		
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.53.3N2DRC		



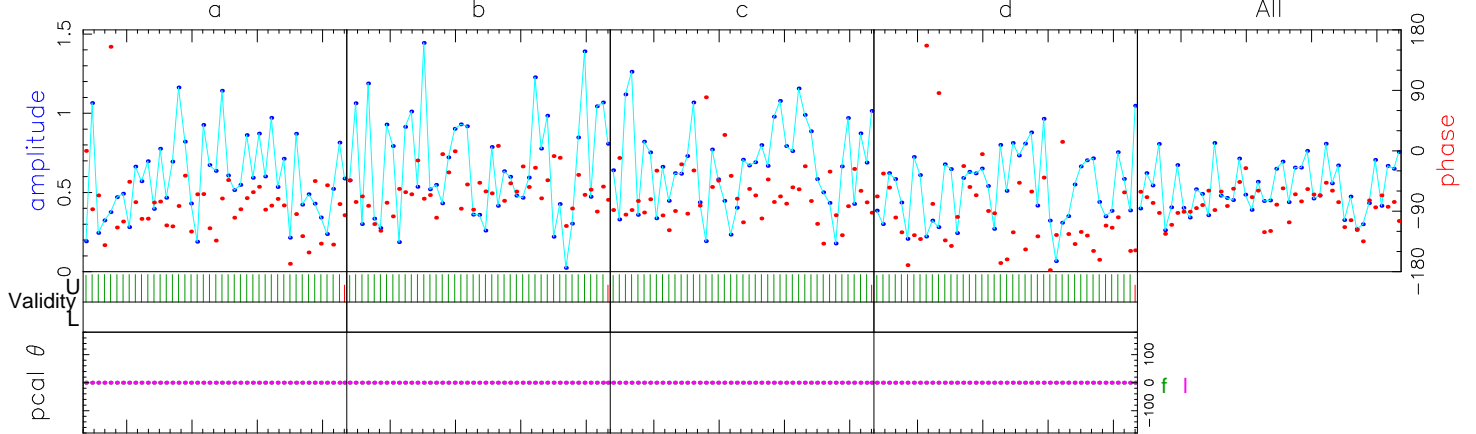
Fringe quality 7

SNR 21.5
Int time 239.798
Amp 0.509
Phase -77.7
PFD 0.0e+00
Delays (us)
SBD -0.000845
MBD -0.000333
Fringe rate (Hz) 0.001750
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102431
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-87.4	-59.2	-71.1	-106.3	Phase	-77.7
	0.5	0.6	0.6	0.4	Ampl.	0.5
	513.2	512.3	512.3	512.7	Sbd box	512.6
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	9.56867472779E+02	Apriori delay (usec)	9.56867805579E+02	Resid mbdelay (usec)	-3.32800E-04	+/-	5.2E-05
Sband delay (usec)	9.56866960704E+02	Apriori clock (usec)	8.3780518E+00	Resid sbdelay (usec)	-8.44875E-04	+/-	2.0E-04
Phase delay (usec)	9.56867800575E+02	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-5.00376E-06	+/-	3.4E-07
Delay rate (us/s)	-4.45023240728E-02	Apriori rate (us/s)	-4.45023646497E-02	Resid rate (us/s)	4.05769E-08	+/-	2.5E-09
Total phase (deg)	-30.0	Apriori accel (us/s/s)	-5.84073848301E-06	Resid phase (deg)	-77.7	+/-	5.3

ph/seg (deg)	RMS 23.8	Theor. 17.4	Amplitude Search (1024X16)	0.509 +/- 0.024	0.495	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	30.1	30.4	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	25.5	5.3	Inc. seg. avg.	0.508	0.508	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	18.8	9.3	Inc. frq. avg.	0.514	0.514	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

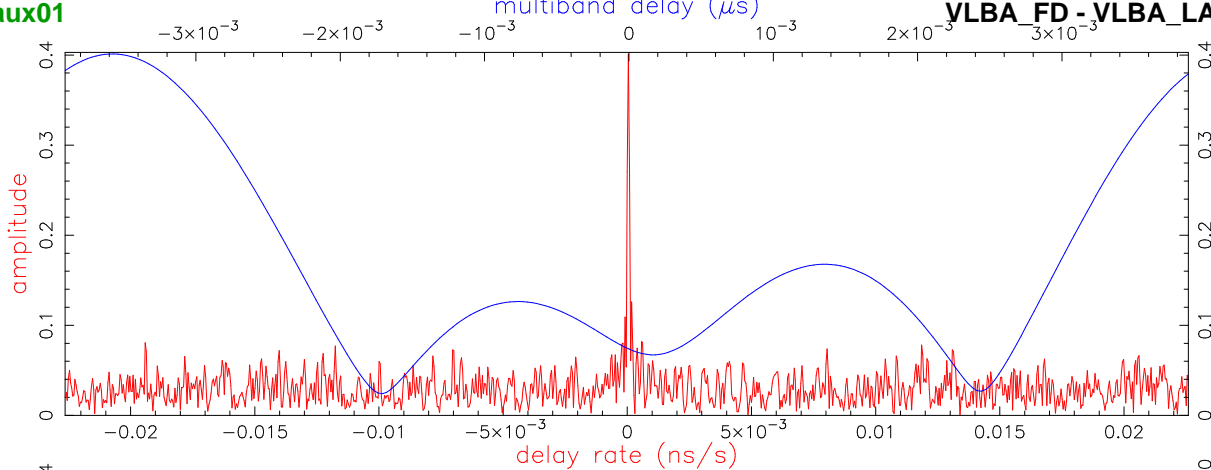
f: az 168.1 el 64.3 pa -9.7 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) 125.617 -353.075 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.59.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

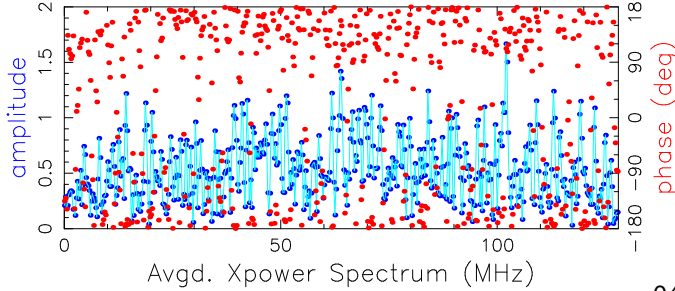
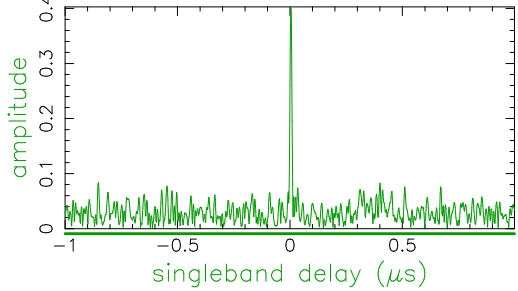
3C120.3N2DRC, No0552, fl

VLBA_FD - VLBA_LA, fgroup Q, pol RL



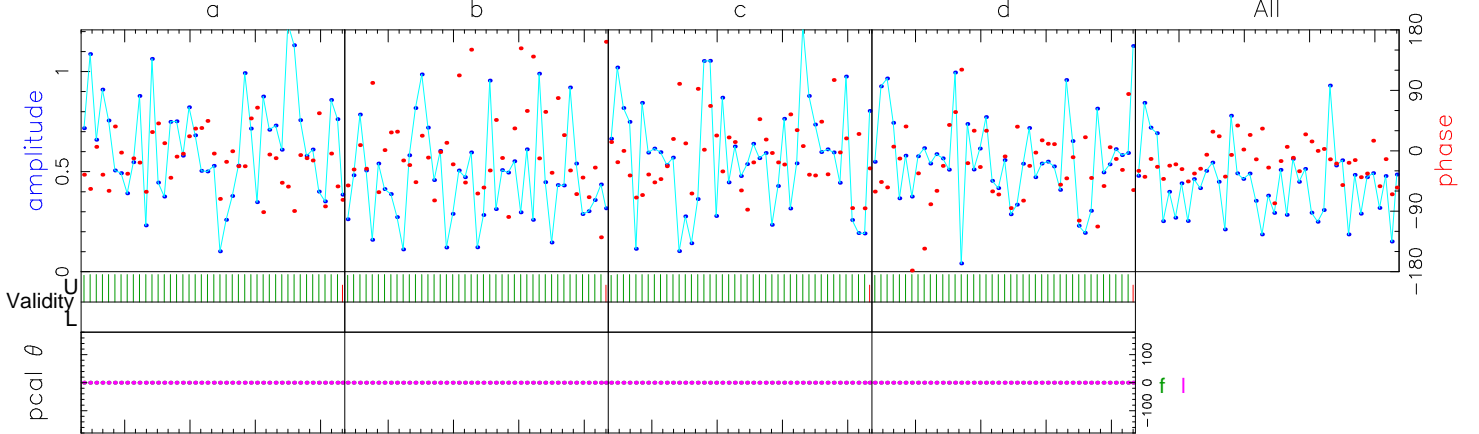
Fringe quality 9

SNR 17.1
 Int time 239.798
 Amp 0.403
 Phase 266.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.004368
 MBD -0.003559
 Fringe rate (Hz)
 0.001724
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102433
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-17.0	-11.7	-6.8	-23.4	Phase	-14.8
0.5	0.3	0.4	0.4	Ampl.	0.4
515.0	515.5	515.6	514.6	Sbd box	515.2
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
f:l 0:0	0:0	0:0	0:0	PC phase	
f:l 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	9.56872058873E+02	Apriori delay (usec)	9.56867805579E+02	Resid mbdelay (usec)	-3.55921E-03	+/-	6.5E-05
Sband delay (usec)	9.56872173954E+02	Apriori clock (usec)	8.3780518E+00	Resid sbdelay (usec)	4.36838E-03	+/-	2.5E-04
Phase delay (usec)	9.56867804625E+02	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-9.53418E-07	+/-	4.3E-07
Delay rate (us/s)	-4.45023246925E-02	Apriori rate (us/s)	-4.45023646497E-02	Resid rate (us/s)	3.99572E-08	+/-	3.1E-09
Total phase (deg)	314.2	Apriori accel (us/s/s)	-5.84073848301E-06	Resid phase (deg)	266.4	+/-	6.7

ph/seg (deg)	RMS 26.5	Theor. 22.0	Amplitude Search (1024X16)	0.403 +/- 0.024	0.395	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	43.9	38.4	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	8.7	6.7	Inc. seg. avg.	0.410		Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	20.8	11.7	Inc. frq. avg.	0.401		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 168.1 el 64.3 pa -9.7 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) 125.617 -353.075 simultaneous interpolator

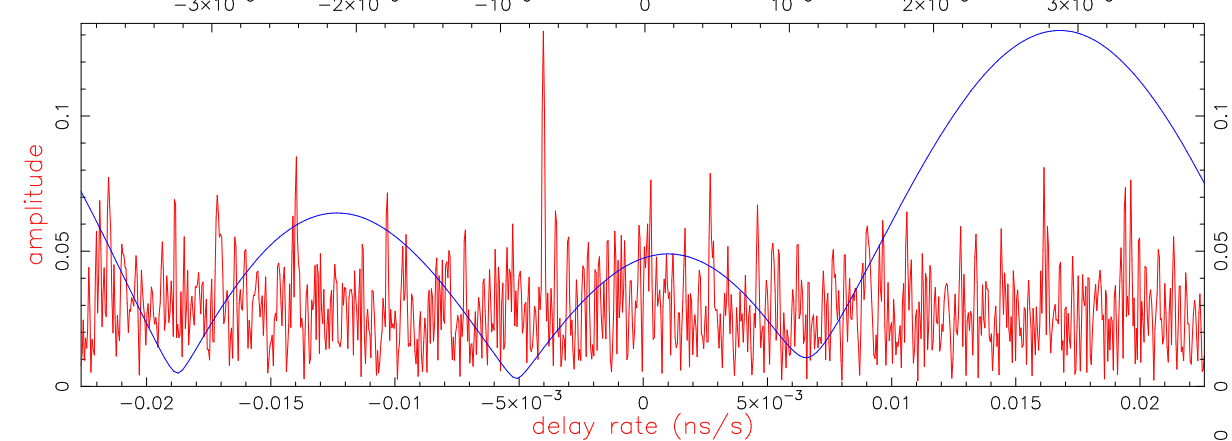
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.82.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

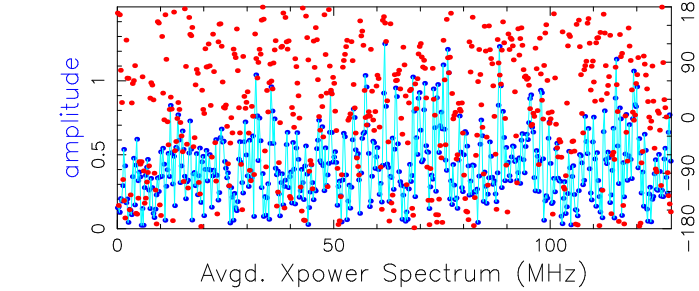
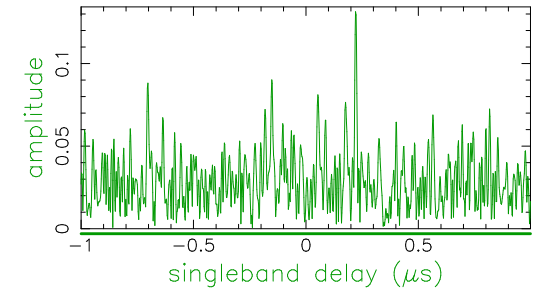
3C120.3N2DRC, No0552, fm

VLBA_FD - VLBA_MK, fgroup Q, pol RL



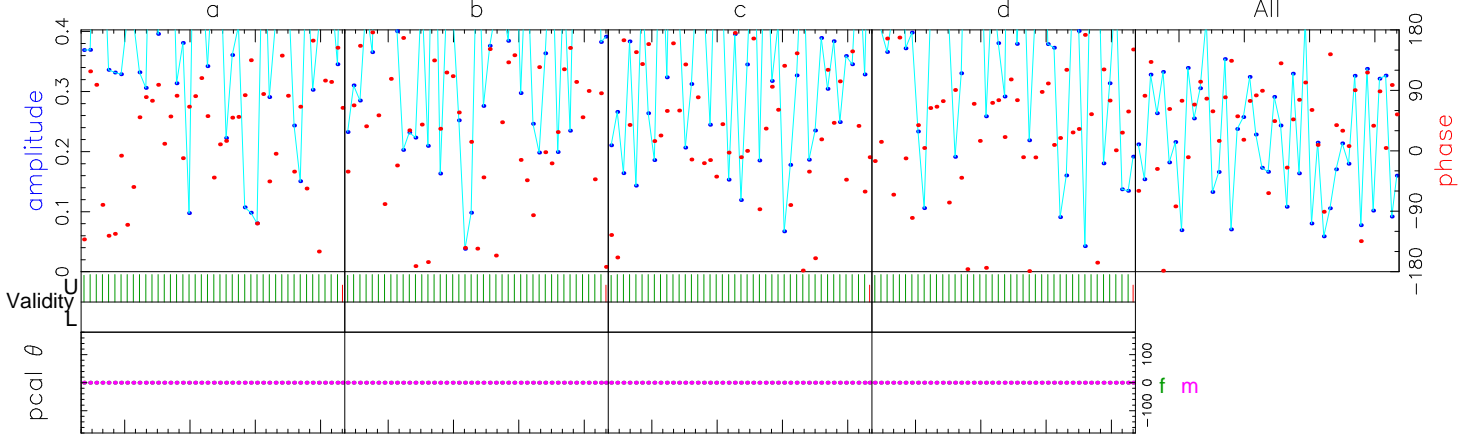
Fringe quality 0

SNR 5.6
 Int time 239.798
 Amp 0.134
 Phase 18.7
 PFD 9.1e-01
 Delays (us)
 SBD 0.221431
 MBD 0.002939
 Fringe rate (Hz)
 -0.173634
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102436
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	61.8	80.3	60.5	56.9	Phase	63.7
	0.2	0.1	0.1	0.2	Ampl.	0.1
	466.5	114.6	437.3	626.9	Sbd box	626.4
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	7.32373820154E+03	Apriori delay (usec)	7.32351651278E+03	Resid mbdelay (usec)	2.93876E-03	+/-	2.0E-04
Group delay (usec) (SBD)	7.32373794416E+03	Apriori clock (usec)	-4.8149300E-01	Resid sbdelay (usec)	2.21431E-01	+/-	7.7E-04
Sband delay (usec)	7.32351651688E+03	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	4.10302E-06	+/-	1.3E-06
Phase delay (usec)	-1.10350465038E+00	Apriori rate (us/s)	-1.10350062550E+00	Resid rate (us/s)	-4.02489E-06	+/-	9.5E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-3.71348397515E-05	Resid phase (deg)	18.7	+/-	20.4
Total phase (deg)	148.8						

	RMS	Theor.	Amplitude	0.134 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	66.1	66.9	Search (1024X16)	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	101.0	116.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	13.0	20.4	Inc. seg. avg.	0.134	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	21.4	35.6	Inc. frq. avg.	0.127	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

f: az 168.1 el 64.3 pa -9.7 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3156.319 616.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.105.3N2DRC

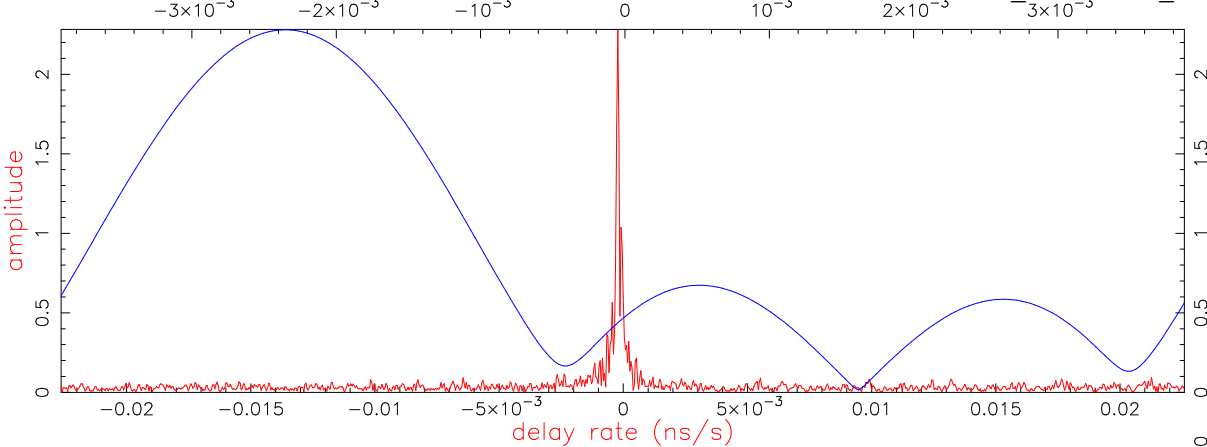
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fm

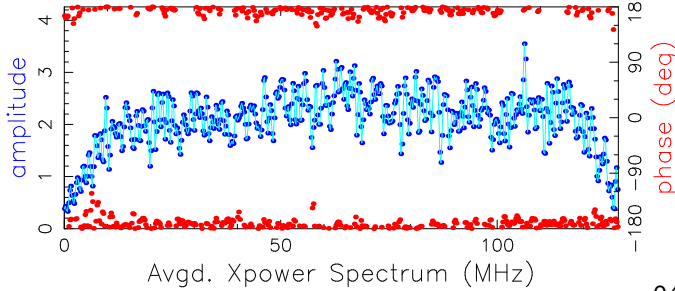
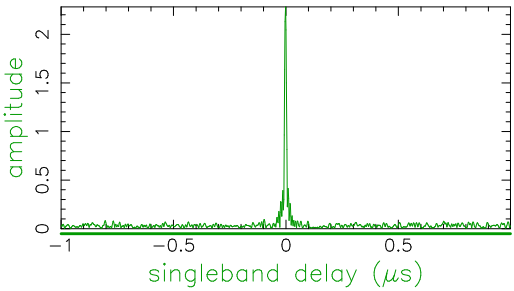
VLBA_FD - VLBA_MK, fgroup Q, pol LL

multiband delay (μ s)



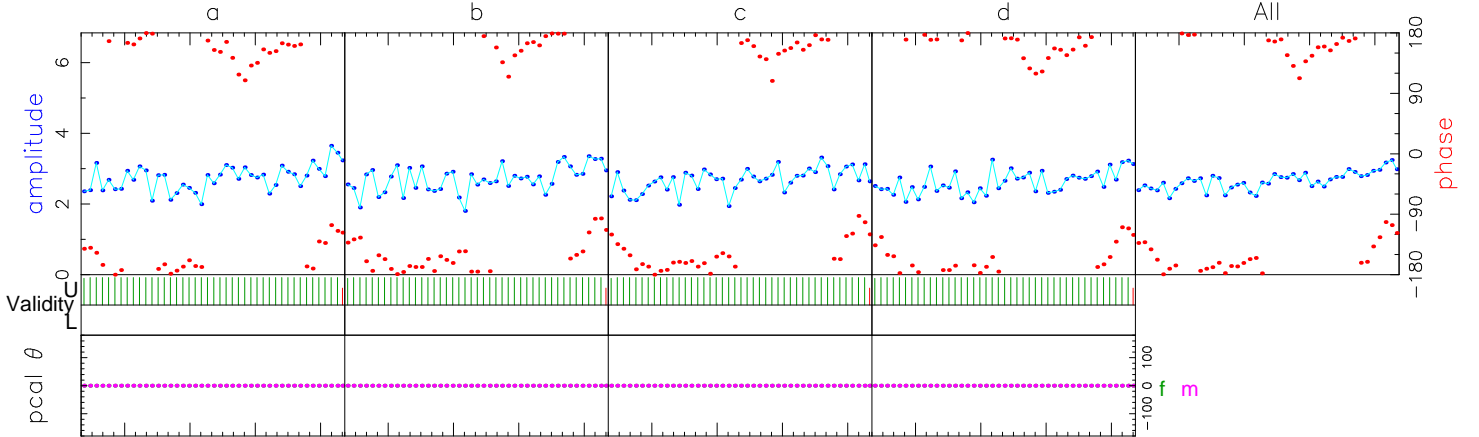
Fringe quality 7

SNR 96.6
 Int time 239.798
 Amp 2.282
 Phase -173.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002172
 MBD -0.002364
 Fringe rate (Hz)
 -0.009424
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102428
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
m	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
m	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL		
m	Q00UL	Q01UL	Q02UL	Q03UL		

	7.32351414878E+03	Apriori delay (usec)	7.32351651278E+03	Resid mbdelay (usec)	-2.36400E-03	+/- 1.2E-05
Group delay (usec) (SBD)	7.32351414878E+03	Apriori clock (usec)	-4.8149300E-01	Resid sbdelay (usec)	-2.17250E-03	+/- 4.5E-05
Sband delay (usec)	7.32351434028E+03	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-1.11964E-05	+/- 7.6E-08
Phase delay (usec)	7.32351650159E+03	Apriori rate (us/s)	-1.10350062550E+00	Resid rate (us/s)	-2.18448E-07	+/- 5.5E-10
Delay rate (us/s)	-1.10350084395E+00	Apriori accel (us/s/s)	-3.71348397515E-05	Resid phase (deg)	-173.9	+/- 1.2
Total phase (deg)	-43.8					

	RMS	Theor.	Amplitude	2.282 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	30.9	3.9	Search (1024X16)	2.255	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	19.7	6.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	7.8	1.2	Inc. seg. avg.	2.655	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	1.5	2.1	Inc. frq. avg.	2.290	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3156.319 616.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.43.3N2DRC

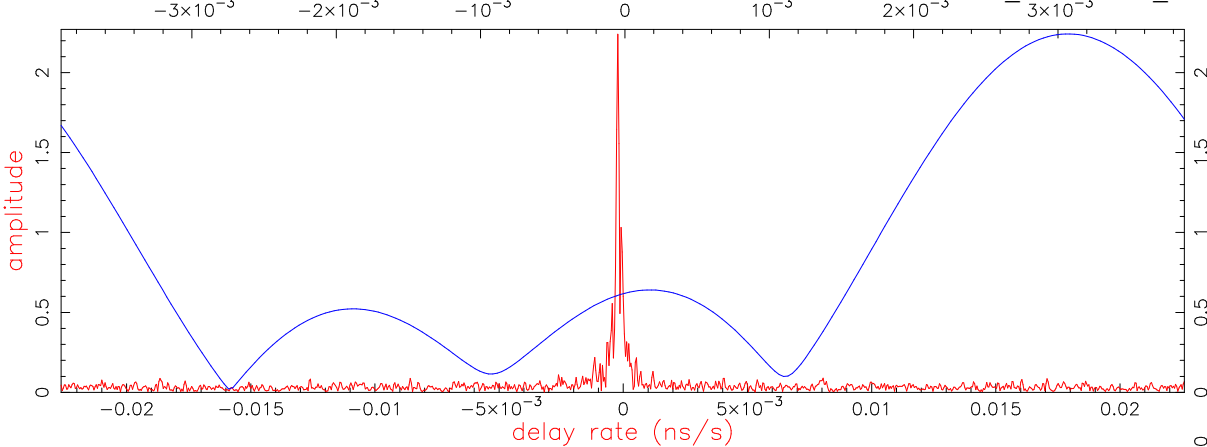
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fm

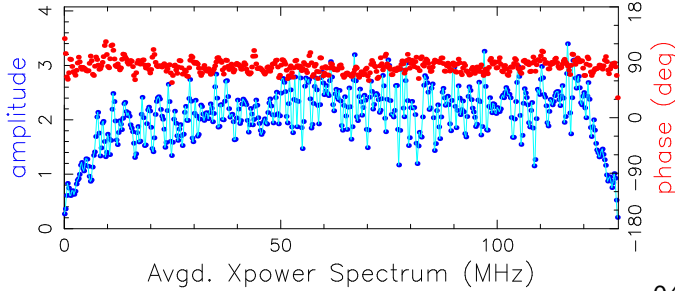
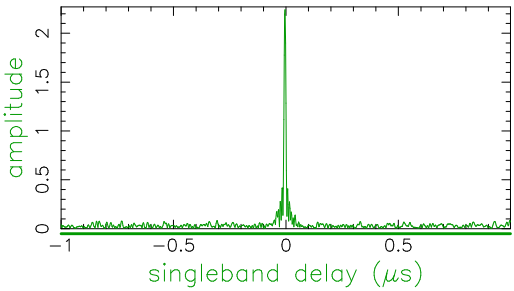
VLBA_FD - VLBA_MK, fgroup Q, pol RR

multiband delay (μ s)

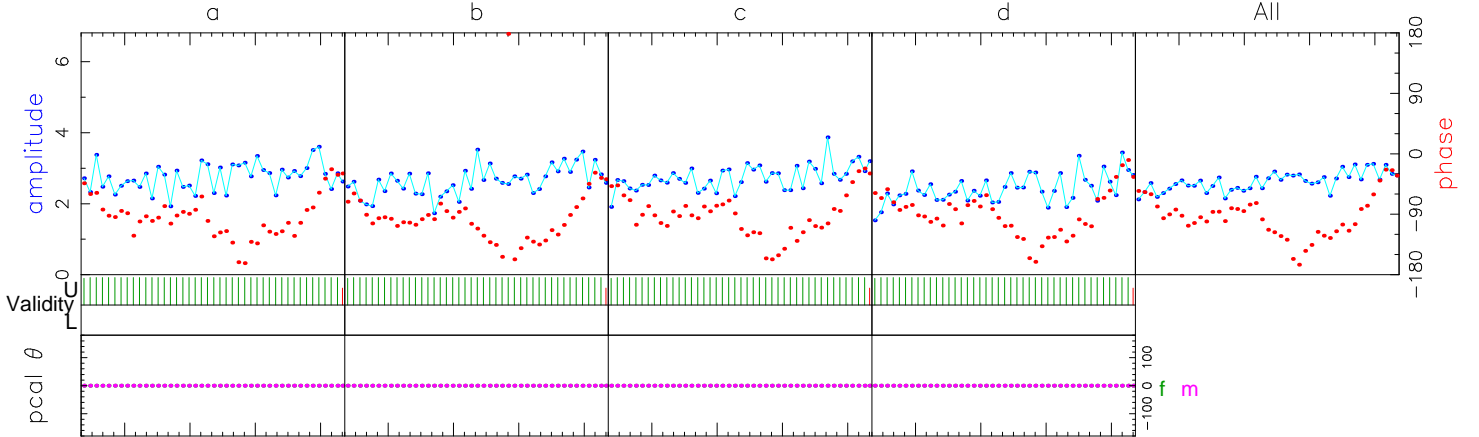


Fringe quality 7

SNR 96.1
 Int time 239.798
 Amp 2.270
 Phase -15.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.004662
 MBD 0.003022
 Fringe rate (Hz)
 -0.009496
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102432
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-94.4	-100.3	-91.8	-89.7	Phase	-94.2
	2.4	2.3	2.3	2.0	Ampl.	2.2
	510.7	510.6	510.7	510.4	Sbd box	510.6
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	7.32351172278E+03	Apriori delay (usec)	7.32351651278E+03	Resid mbdelay (usec)	3.02250E-03	+/- 1.2E-05
Group delay (usec) (SBD)	7.32351172278E+03	Apriori clock (usec)	-4.8149300E-01	Resid sbdelay (usec)	-4.66200E-03	+/- 4.5E-05
Sband delay (usec)	7.32351185078E+03	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-6.06323E-06	+/- 7.7E-08
Phase delay (usec)	7.32351650672E+03	Apriori rate (us/s)	-1.10350062550E+00	Resid rate (us/s)	-2.20126E-07	+/- 5.5E-10
Delay rate (us/s)	-1.10350084562E+00	Apriori accel (us/s/s)	-3.71348397515E-05	Resid phase (deg)	-15.4	+/- 1.2
Total phase (deg)	-245.3					

	RMS	Theor.	Amplitude	2.270 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	31.4	3.9	Search (1024X16)	2.208	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	19.2	6.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	5.6	1.2	Inc. seg. avg.	2.615	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	6.1	2.1	Inc. frq. avg.	2.245	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3156.319 616.935 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.68.3N2DRC

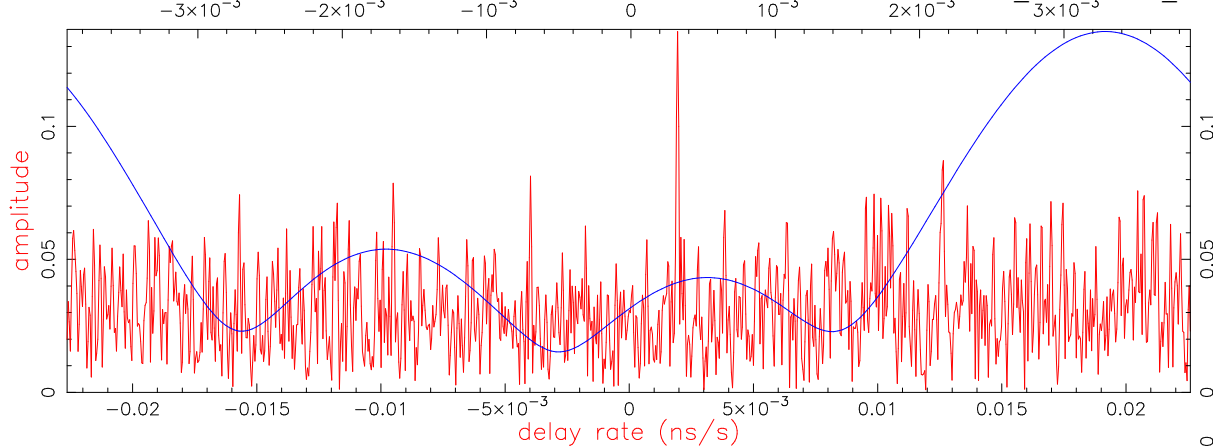
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fm

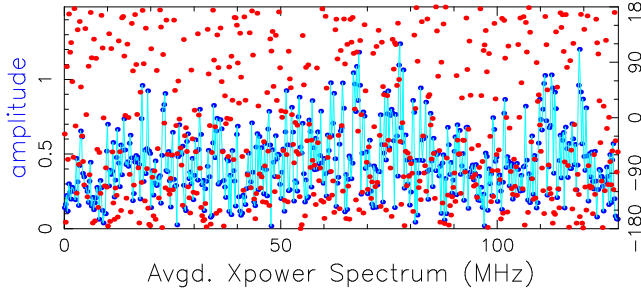
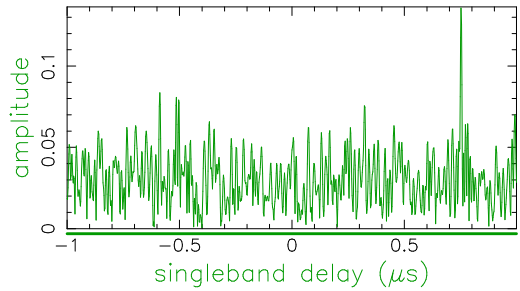
VLBA_FD - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)



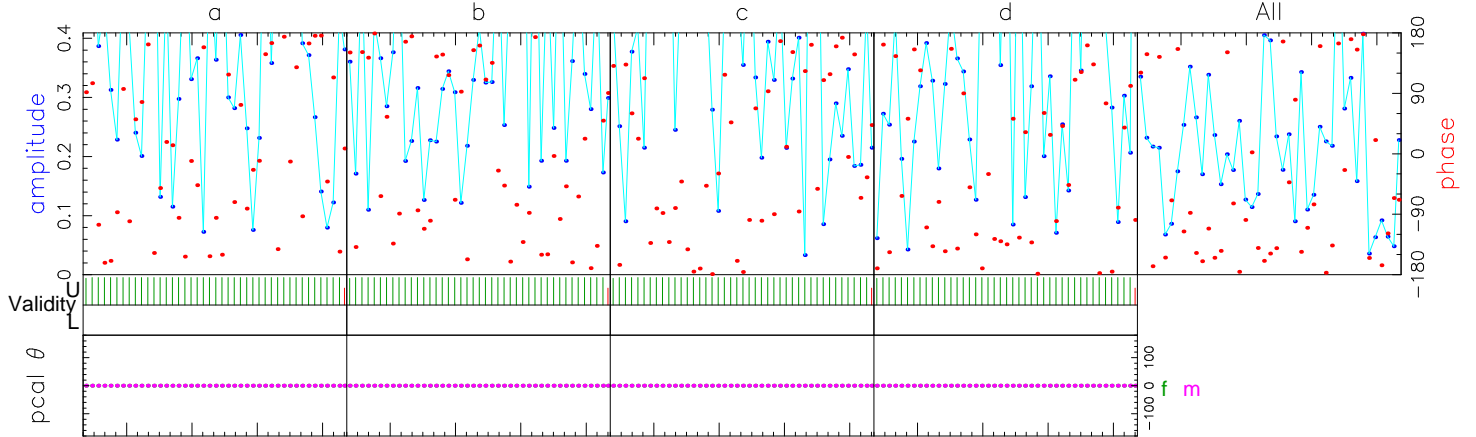
Fringe quality 0

SNR 5.8
 Int time 239.798
 Amp 0.136
 Phase 202.7
 PFD 6.5e-01
 Delays (us)
 SBD 0.752261
 MBD 0.003302
 Fringe rate (Hz)
 0.083619
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102434
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-171.2	-143.7	-141.2	-170.3	Phase	-157.3
	0.1	0.2	0.1	0.2	Ampl.	0.1
	676.1	898.8	276.5	898.3	Sbd box	898.2
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	7.32426981445E+03	Apriori delay (usec)	7.32351651278E+03	Resid mbdelay (usec)	3.30167E-03	+/- 1.9E-04
Group delay (usec) (SBD)	7.32426877328E+03	Apriori clock (usec)	-4.8149300E-01	Resid sbdelay (usec)	7.52261E-01	+/- 7.5E-04
Sband delay (usec)	7.32351650265E+03	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	-1.01285E-05	+/- 1.3E-06
Phase delay (usec)	-1.10349868717E+00	Apriori rate (us/s)	-1.10350062550E+00	Resid rate (us/s)	1.93833E-06	+/- 9.2E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-3.71348397515E-05	Resid phase (deg)	202.7	+/- 19.9
Total phase (deg)	332.8					

	RMS	Theor.	Amplitude	0.136 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.4	65.2	Search (1024X16)	0.132	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	105.7	113.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	20.1	19.9	Inc. seg. avg.	0.131	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	13.4	34.7	Inc. frq. avg.	0.132	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3156.319 616.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.87.3N2DRC

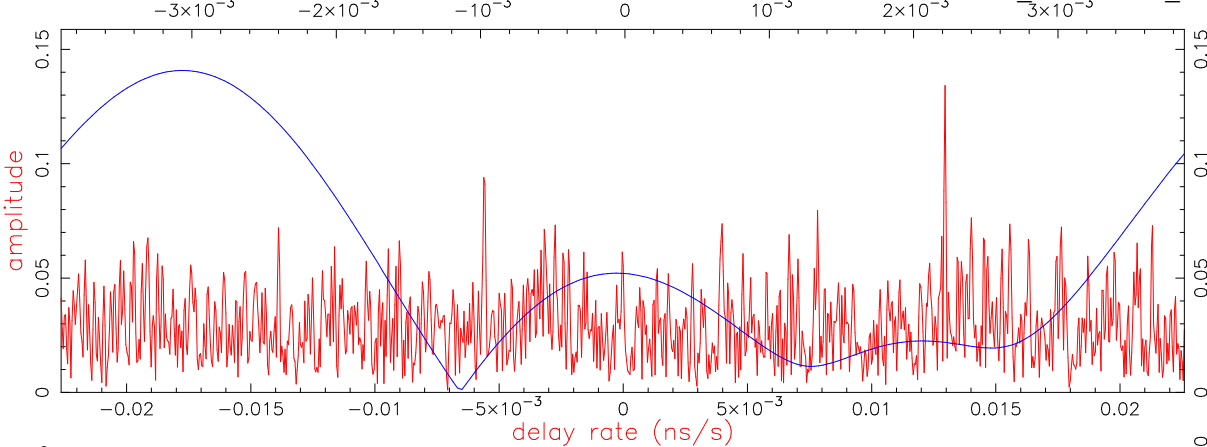
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fn

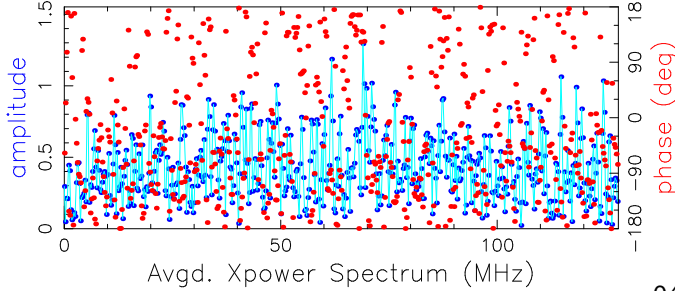
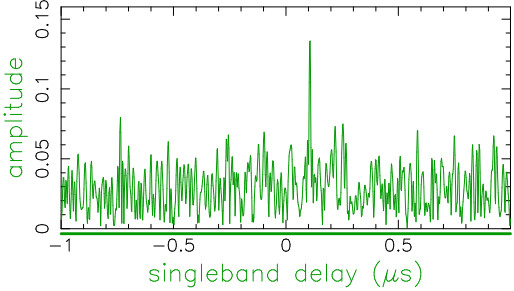
VLBA_FD - VLBA_NL, fgroup Q, pol LL

multiband delay (μ s)



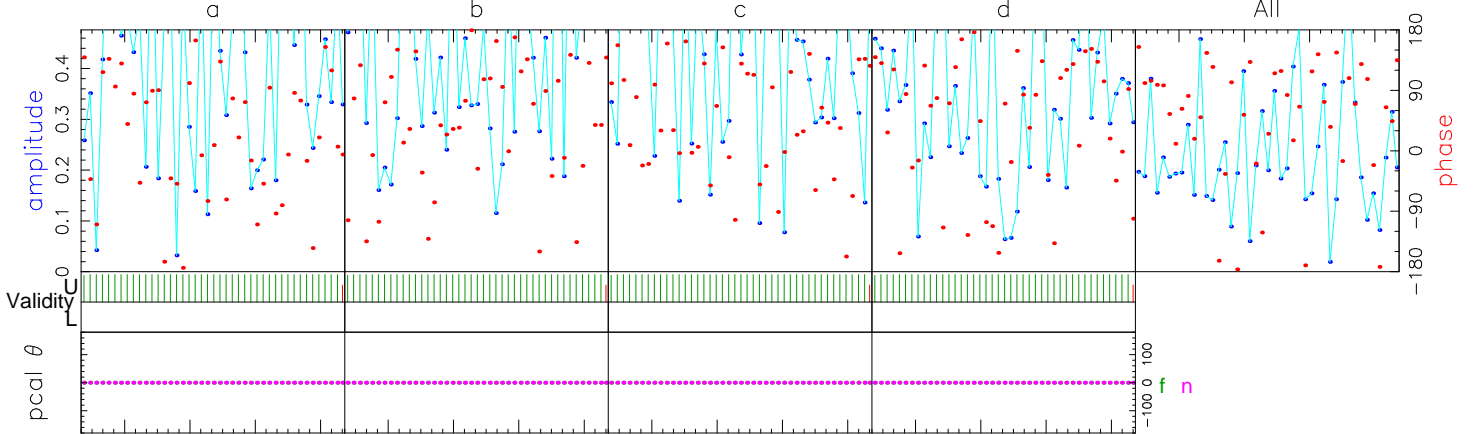
Fringe quality 0

SNR 5.8
 Int time 239.787
 Amp 0.159
 Phase 136.9
 PFD 4.7e-01
 Delays (us)
 SBD 0.106479
 MBD 0.004395
 Fringe rate (Hz) 0.562114
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102427
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
n	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
n	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL		
n	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	2.21755366379E+03	Apriori delay (usec)	2.21744770675E+03	Resid mbdelay (usec)	4.39453E-03	+/-	1.9E-04
Sband delay (usec)	2.21755418550E+03	Apriori clock (usec)	3.2651520E-01	Resid sbdelay (usec)	1.06479E-01	+/-	7.4E-04
Phase delay (usec)	2.21744771195E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	5.19090E-06	+/-	1.3E-06
Delay rate (us/s)	2.61726130988E-01	Apriori rate (us/s)	2.61713100981E-01	Resid rate (us/s)	1.30300E-05	+/-	9.1E-09
Total phase (deg)	161.8	Apriori accel (us/s/s)	-1.34514945171E-05	Resid phase (deg)	136.9	+/-	19.6

ph/seg (deg)	RMS	Theor.	Amplitude	0.159 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.5	64.3	Search (1024X16)	0.131	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.0	19.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	12.7	34.2	Inc. seg. avg.	0.166	Data rate(MSamp/s):	256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	0.157	Data rate(Mb/s):	2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 168.1 el 64.3 pa -9.7 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -760.061 -741.725 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fn.Q.38.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

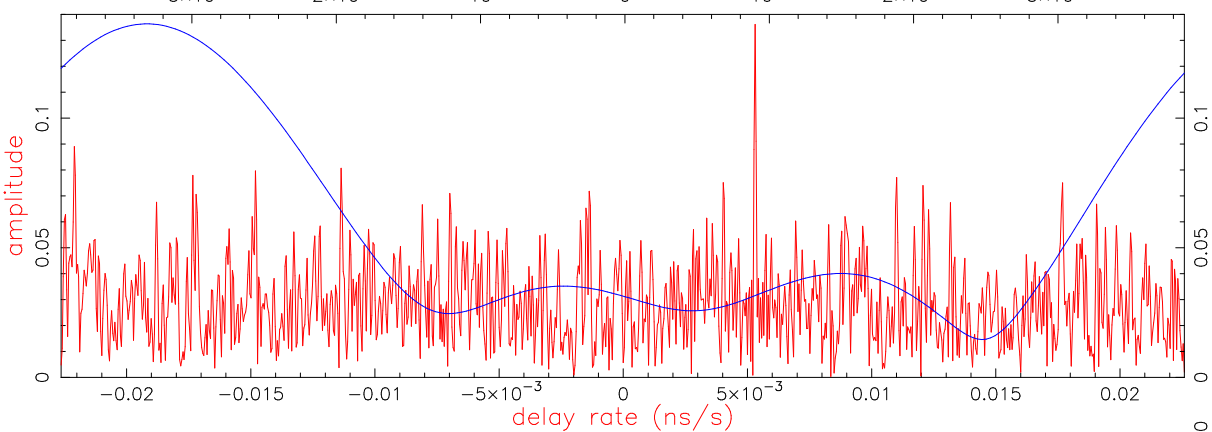
aux01

3C120.3N2DRC, No0552, fn

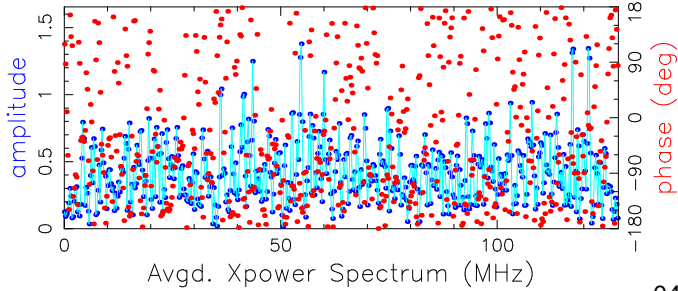
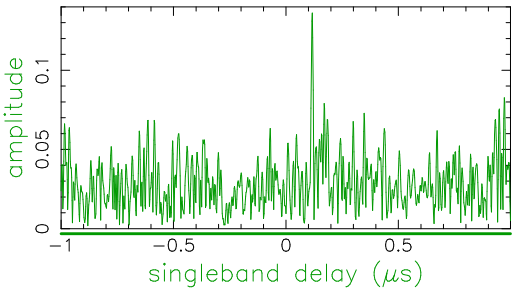
VLBA_FD - VLBA_NL, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 0

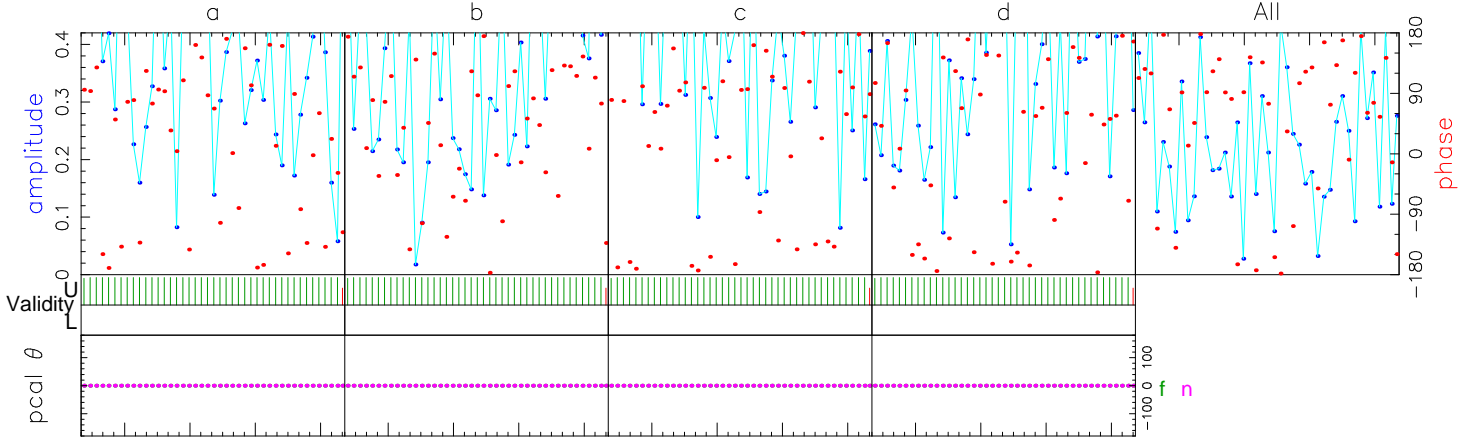


SNR 5.8
 Int time 239.787
 Amp 0.140
 Phase 25.9
 PFD 5.8e-01
 Delays (us)
 SBD 0.116701
 MBD -0.003376
 Fringe rate (Hz)
 0.230867
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102429
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
136.4	104.5	128.0	141.2	Phase	127.1
0.1	0.1	0.2	0.1	Ampl.	0.1
837.5	18.9	572.5	699.2	Sbd box	572.8
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	2.21756151829E+03	Apriori delay (usec)	2.21744770675E+03	Resid mbdelay (usec)	-3.37596E-03	+/-	1.9E-04
Sband delay (usec)	2.21756440775E+03	Apriori clock (usec)	3.2651520E-01	Resid sbdelay (usec)	1.16701E-01	+/-	7.4E-04
Phase delay (usec)	2.21744771494E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	8.18537E-06	+/-	1.3E-06
Delay rate (us/s)	2.61718452565E-01	Apriori rate (us/s)	2.61713100981E-01	Resid rate (us/s)	5.35158E-06	+/-	9.2E-09
Total phase (deg)	50.8	Apriori accel (us/s/s)	-1.34514945171E-05	Resid phase (deg)	25.9	+/-	19.8

ph/seg (deg)	RMS 68.6	Theor. 64.9	Amplitude Search (1024X16)	0.140 +/- 0.024	0.134	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	109.1	113.2	Interp.	0.000	0.134	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	20.0	19.8	Inc. seg. avg.	0.143	0.135	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	18.3	34.5	Inc. frq. avg.	0.135	0.135	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 168.1 el 64.3 pa -9.7 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -760.061 -741.725 simultaneous interpolator

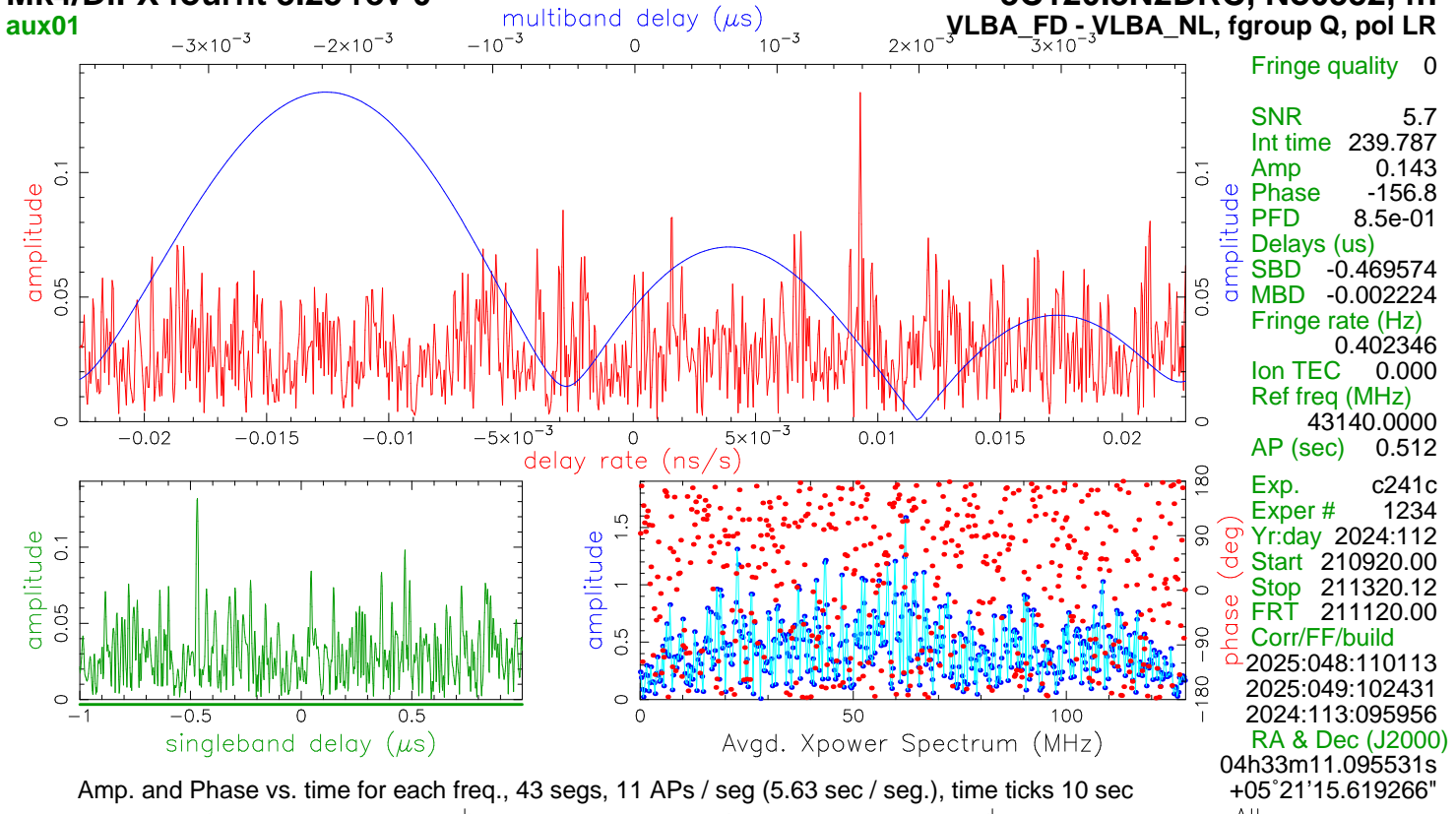
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fn.Q.55.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

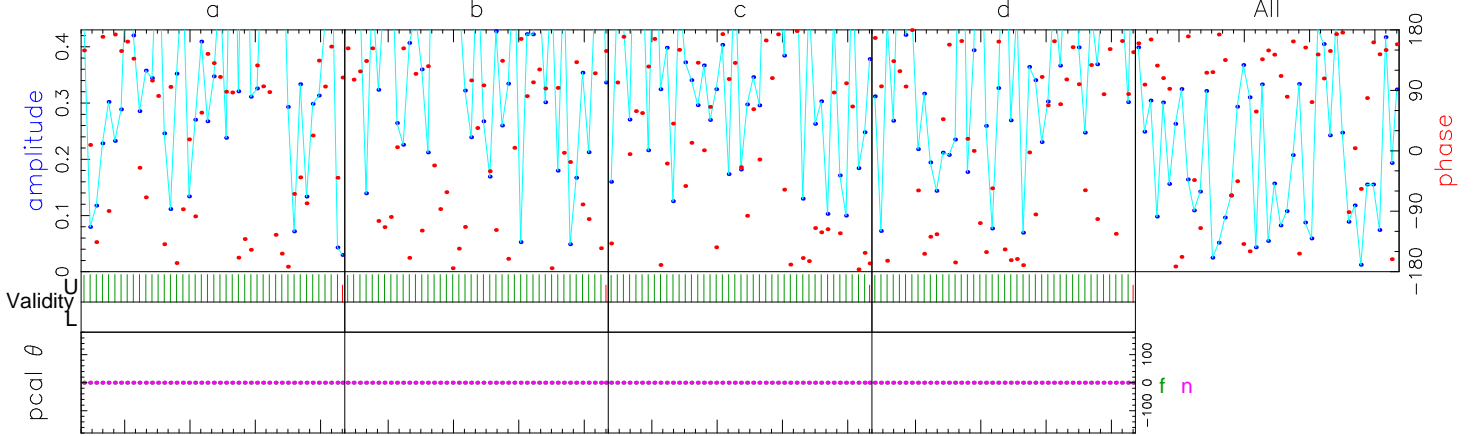
aux01

3C120.3N2DRC, No0552, fn

VLBA_FD - VLBA_NL, fgroup Q, pol LR



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
n	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
n	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL		
n	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	2.21697673243E+03	2.21697813288E+03	2.21744770675E+03	2.21744770675E+03	-2.22432E-03	+/- 2.0E-04
Sband delay (usec)			3.2651520E-01	3.2651520E-01	-4.69574E-01	+/- 7.6E-04
Phase delay (usec)			-2.4704002E-07	-2.4704002E-07	1.01883E-05	+/- 1.3E-06
Delay rate (us/s)		2.61722427490E-01	2.61713100981E-01	2.61713100981E-01	9.32651E-06	+/- 9.4E-09
Total phase (deg)		-131.8	-1.34514945171E-05	-1.34514945171E-05	-156.8	+/- 20.3
ph/seg (deg)	RMS 68.3	Theor. 66.4	Amplitude 0.143 +/- 0.025	0.129	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	108.2	115.9	Search (1024X16)	0.129	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.1	20.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	24.3	35.3	Inc. seg. avg.	0.132	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
f: az 168.1 el 64.3 pa -9.7		n: az 192.0 el 53.1 pa 9.3	u, v (fr/asec) -760.061 -741.725		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/fn..3N2DRC				simultaneous interpolator
						Output file: /Exps/c241c/v2/7mm/3001/No0552/fn.Q.60.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

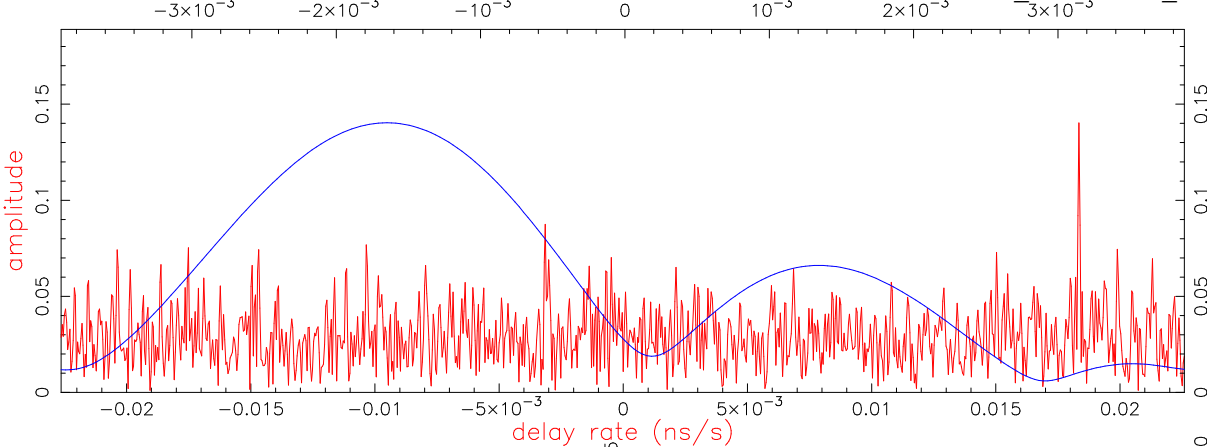
aux01

3C120.3N2DRC, No0552, fn

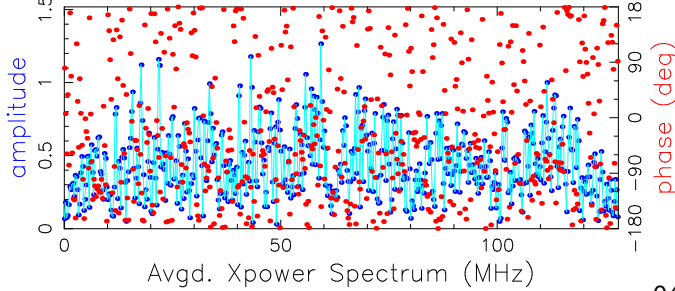
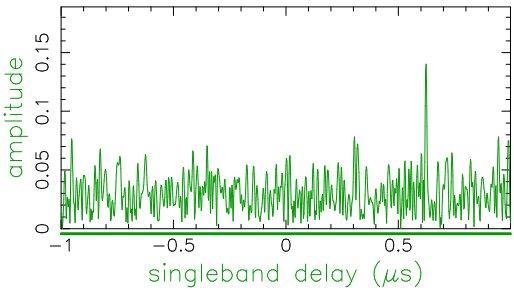
VLBA_FD - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

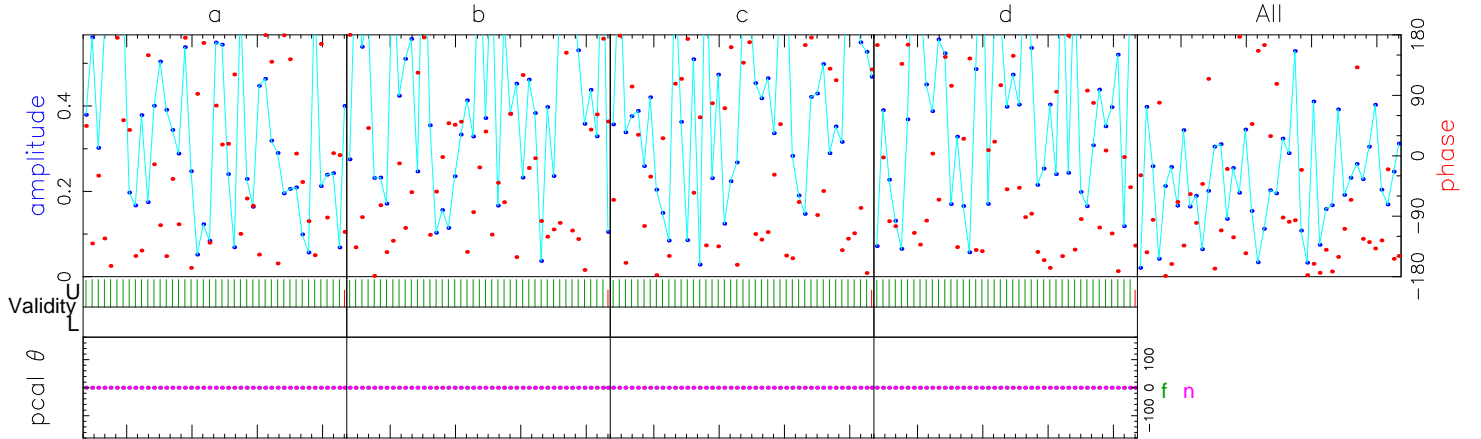


SNR 6.0
 Int time 239.787
 Amp 0.189
 Phase 48.4
 PFD 2.4e-01
 Delays (us)
 SBD 0.622442
 MBD -0.001696
 Fringe rate (Hz)
 0.795346
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102434
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-143.1	-111.6	-150.1	-122.6	Phase	-131.6
0.1	0.2	0.2	0.2	Ampl.	0.2
403.7	175.2	831.2	833.1	Sbd box	831.7
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	2.21807101076E+03	Apriori delay (usec)	2.21744770675E+03	Resid mbdelay (usec)	-1.69599E-03	+/-	1.9E-04
Sband delay (usec)	2.21807014875E+03	Apriori clock (usec)	3.2651520E-01	Resid sbdelay (usec)	6.22442E-01	+/-	7.2E-04
Phase delay (usec)	2.21744769828E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	-8.47234E-06	+/-	1.2E-06
Delay rate (us/s)	2.61731537384E-01	Apriori rate (us/s)	2.61713100981E-01	Resid rate (us/s)	1.84364E-05	+/-	8.9E-09
Total phase (deg)	73.4	Apriori accel (us/s/s)	-1.34514945171E-05	Resid phase (deg)	48.4	+/-	19.1

ph/seg (deg)	RMS 71.6	Theor. 62.7	Amplitude Search (1024X16)	0.189 +/- 0.032	0.139	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	98.6	109.5	Interp.	0.000	0.139	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	21.9	19.1	Inc. seg. avg.	0.186	0.184	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	17.7	33.4	Inc. frq. avg.	0.184	0.184	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 168.1 el 64.3 pa -9.7 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -760.061 -741.725 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fn.Q.85.3N2DRC

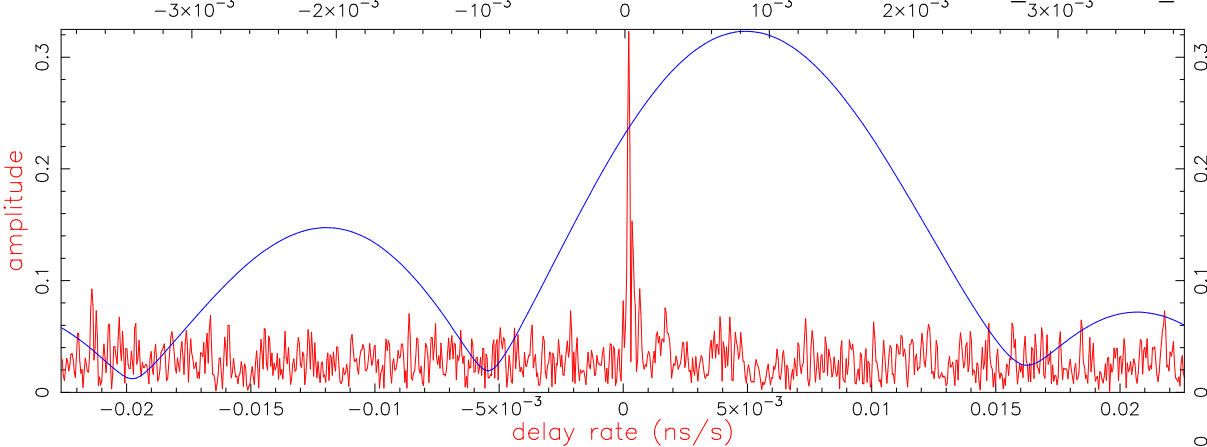
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fo

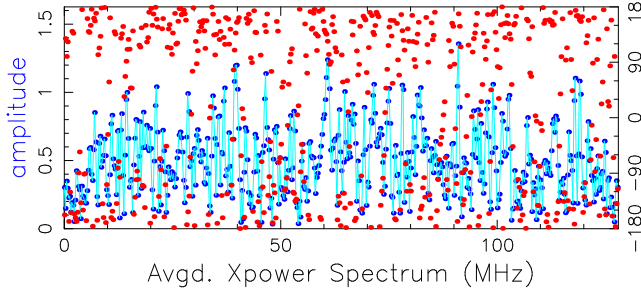
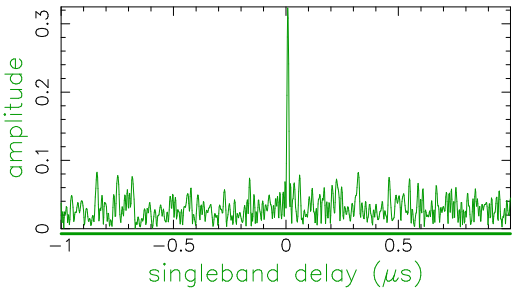
VLBA_FD - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)



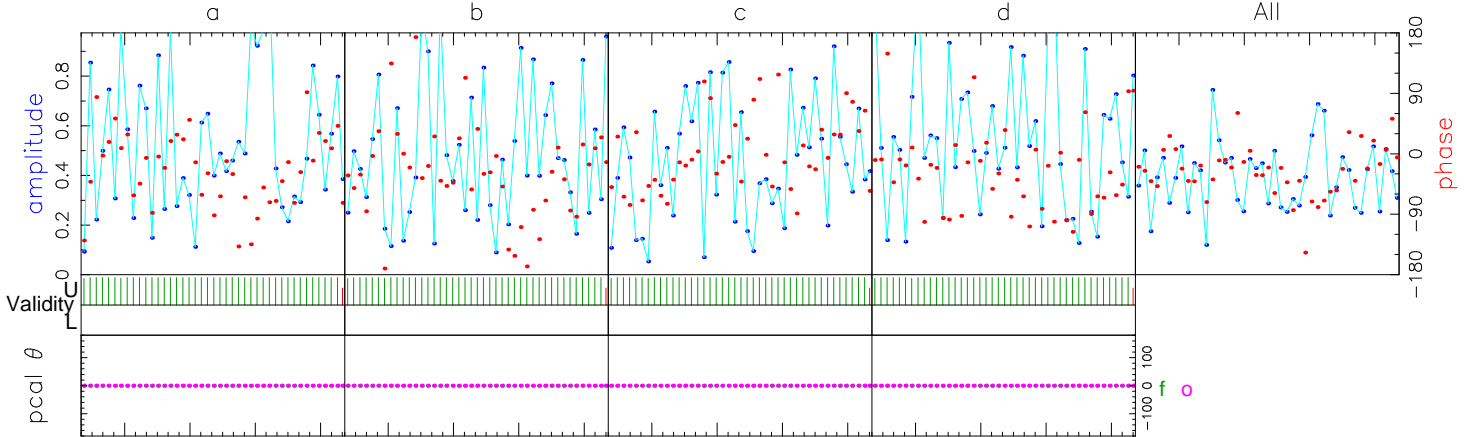
Fringe quality 9

SNR 13.8
 Int time 239.612
 Amp 0.325
 Phase 255.8
 PFD 1.4e-34
 Delays (us)
 SBD 0.008297
 MBD 0.000866
 Fringe rate (Hz) 0.008799
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build 2025:048:110113
 2025:049:102437
 2024:113:095956
 RA & Dec (J2000) 04h33m11.095531s +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
o	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0		
f:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
o	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR		
o	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	1.97504359711E+03	Apriori delay (usec)	1.97503491813E+03	Resid mbdelay (usec)	8.66471E-04	+/-	8.1E-05
Sband delay (usec)	1.97504321513E+03	Apriori clock (usec)	-2.5027399E+01	Resid sbdelay (usec)	8.29700E-03	+/-	3.1E-04
Phase delay (usec)	1.97503491649E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	-1.64163E-06	+/-	5.4E-07
Delay rate (us/s)	-2.93701185945E-01	Apriori rate (us/s)	-2.93701389905E-01	Resid rate (us/s)	2.039960E-07	+/-	3.9E-09
Total phase (deg)	28.4	Apriori accel (us/s/s)	-1.16488230282E-05	Resid phase (deg)	255.8	+/-	8.3

ph/seg (deg)	38.1	Theor.	27.3	Amplitude	0.325 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	47.1	Search (1024X16)	0.303	Search	0.303	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.5	Interp.	0.000	Inc. seg. avg.	0.357	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.7	Inc. frq. avg.	0.327	Inc. frq. avg.	0.327	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023

f: az 168.1 el 64.3 pa -9.7 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 840.418 -464.074 simultaneous interpolator

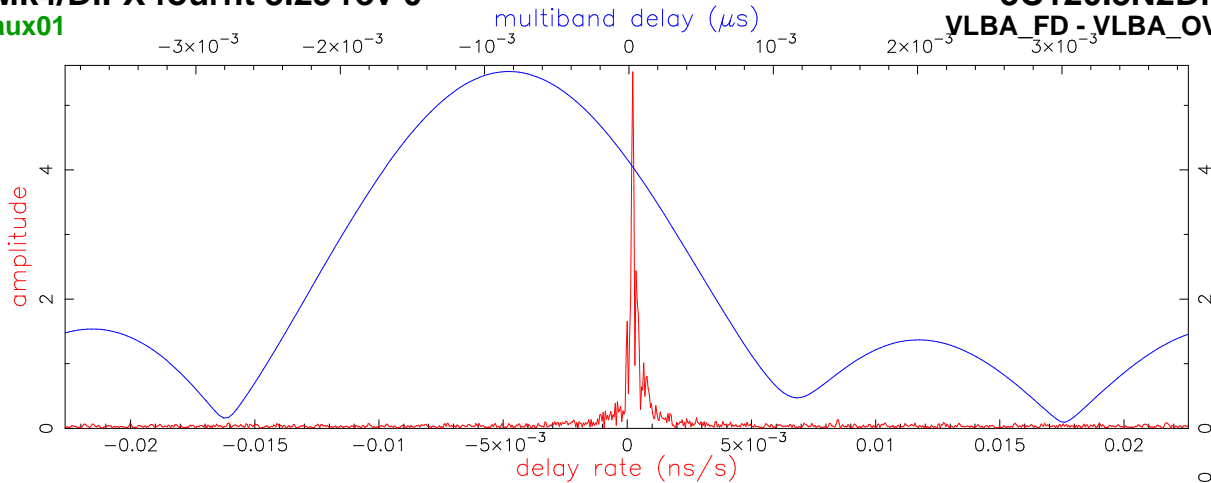
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.111.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

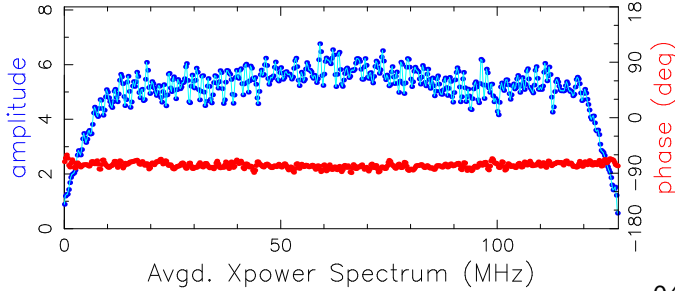
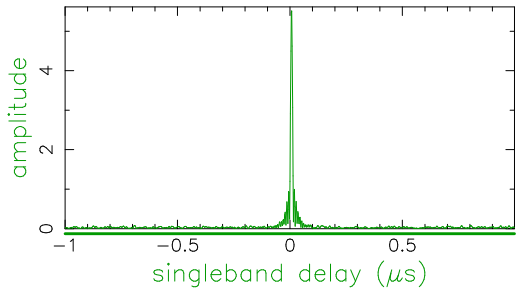
3C120.3N2DRC, No0552, fo

VLBA_FD - VLBA_OV, fgroup Q, pol LL



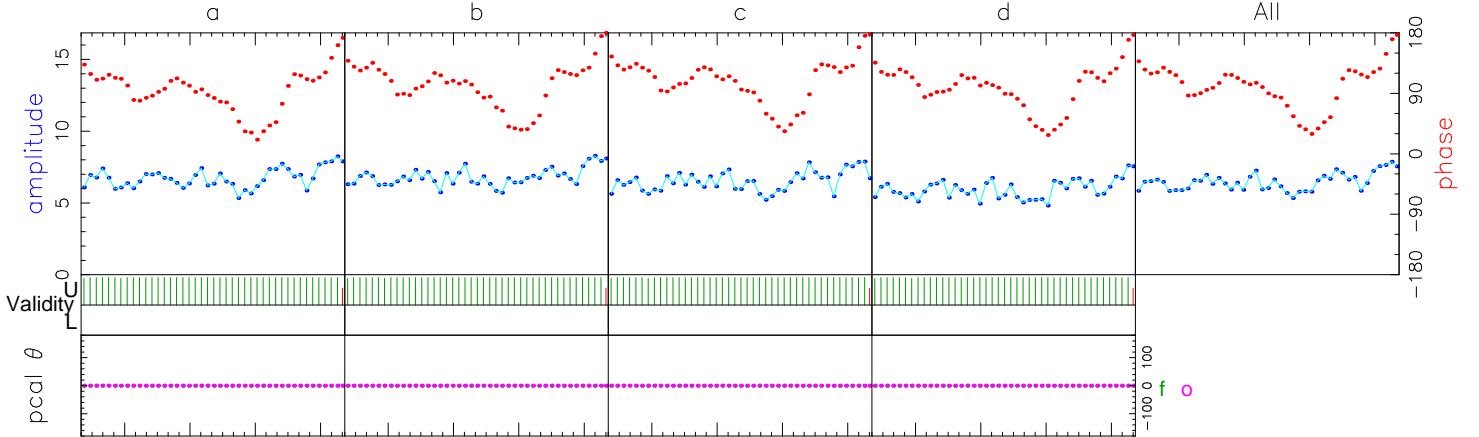
Fringe quality 7

SNR 237.8
 Int time 239.612
 Amp 5.617
 Phase 23.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.006931
 MBD -0.000886
 Fringe rate (Hz)
 0.009146
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102428
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
95.1	104.1	110.2	100.7	Phase	102.5
5.8	5.8	5.6	5.1	Ampl.	5.5
516.7	516.6	516.4	516.3	Sbd box	516.5
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
f:0 0:0	0:0	0:0	0:0	PC phase	
f:0 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
f Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.97504184489E+03	Apriori delay (usec)	1.97503491813E+03	Resid mbdelay (usec)	-8.85748E-04	+/-	4.7E-06
Sband delay (usec)	1.97504184926E+03	Apriori clock (usec)	-2.5027399E-01	Resid sbdelay (usec)	6.93113E-03	+/-	1.8E-05
Phase delay (usec)	1.97503492473E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	6.59940E-06	+/-	3.1E-08
Delay rate (us/s)	-2.93701177897E-01	Apriori rate (us/s)	-2.93701389905E-01	Resid rate (us/s)	2.12007E-07	+/-	2.2E-10
Total phase (deg)	156.3	Apriori accel (us/s/s)	-1.16488230282E-05	Resid phase (deg)	23.7	+/-	0.5

ph/seg (deg)	32.4	1.6	Search (1024X16)	5.387	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	18.6	2.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	7.7	0.5	Inc. seg. avg.	6.473	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	5.1	0.8	Inc. frq. avg.	5.542	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512 t_cohere infinite	dr window (ns/s)	-0.023 0.023
f: az 168.1 el 64.3 pa -9.7	o: az 146.1 el 53.5 pa -26.2	u, v (fr/asec)	840.418 -464.074	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

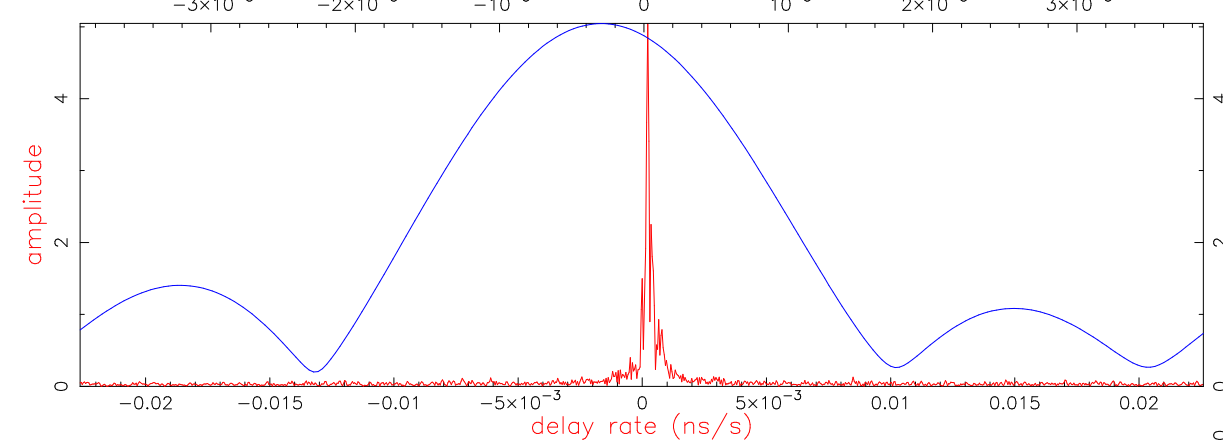
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.42.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

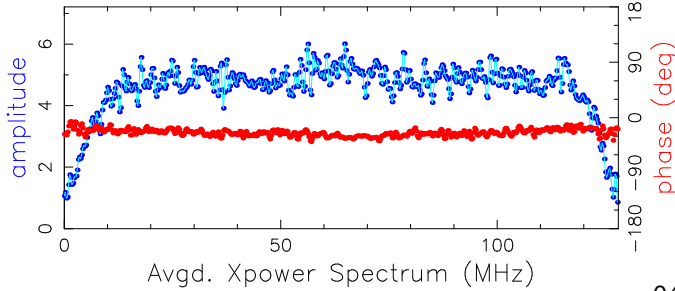
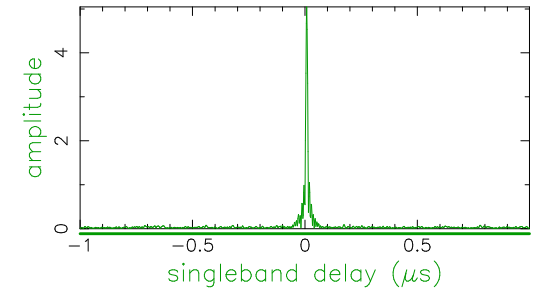
3C120.3N2DRC, No0552, fo

VLBA_FD - VLBA_OV, fgroup Q, pol RR



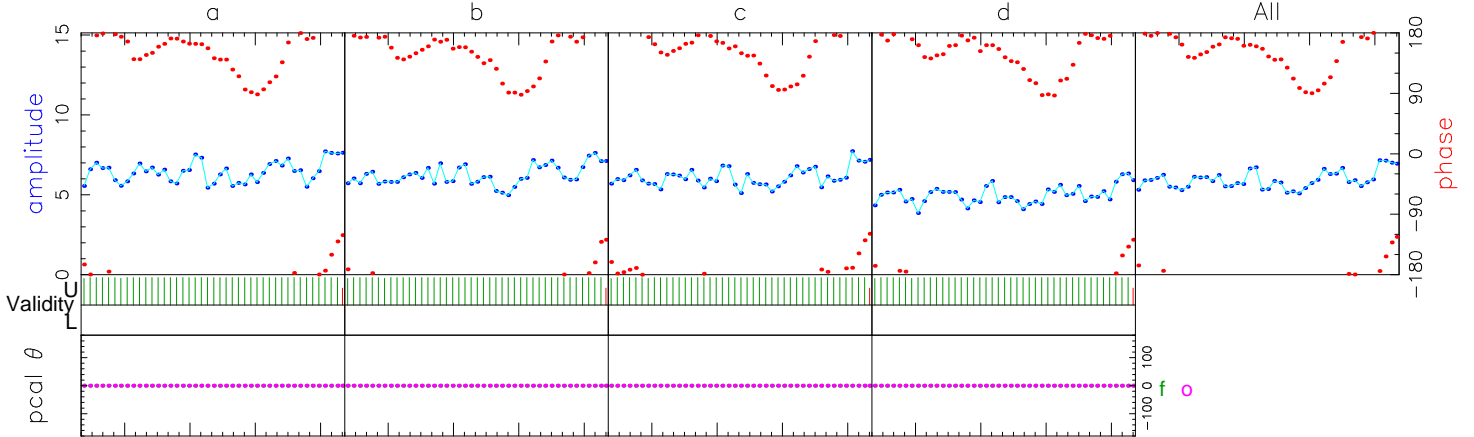
Fringe quality 6

SNR 213.6
 Int time 239.612
 Amp 5.047
 Phase 80.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.007659
 MBD -0.000304
 Fringe rate (Hz)
 0.009112
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102433
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
158.9	156.1	163.2	157.4	Phase	159.0
5.5	5.3	5.2	4.2	Ampl.	5.0
517.4	516.7	517.2	516.1	Sbd box	516.9
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
f:0 0:0	0:0	0:0	0:0	PC phase	
f:0 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.97504242654E+03	Apriori delay (usec)	1.97503491813E+03	Resid mbdelay (usec)	-3.04091E-04	+/- 5.2E-06
Sband delay (usec)	1.97504257701E+03	Apriori clock (usec)	-2.5027399E+01	Resid sbdelay (usec)	7.65888E-03	+/- 2.0E-05
Phase delay (usec)	1.97503492837E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	1.02351E-05	+/- 3.5E-08
Delay rate (us/s)	-2.93701178681E-01	Apriori rate (us/s)	-2.93701389905E-01	Resid rate (us/s)	2.11224E-07	+/- 2.5E-10
Total phase (deg)	212.8	Apriori accel (us/s/s)	-1.16488230282E-05	Resid phase (deg)	80.2	+/- 0.5

ph/seg (deg)	RMS 32.5	Theor. 1.8	Amplitude Search (1024X16)	5.047 +/- 0.024	4.883	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	20.6	3.1	Interp.	0.000	5.934	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	3.8	0.5	Inc. seg. avg.	5.934	5.050	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	9.5	0.9	Inc. frq. avg.	5.050		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 168.1 el 64.3 pa -9.7 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 840.418 -464.074 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.74.3N2DRC

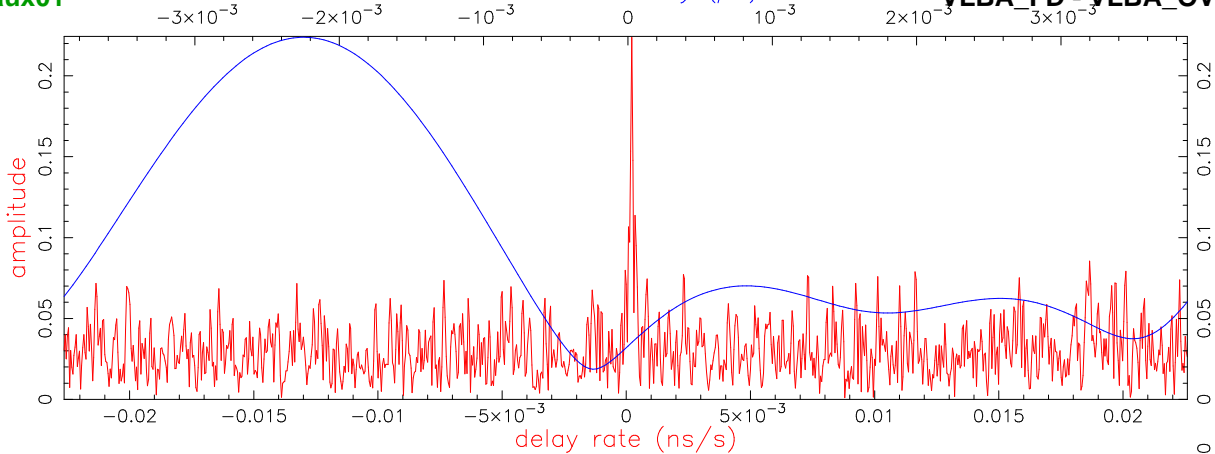
Mk4/DiFX fourfit 3.25 rev 0

aux01

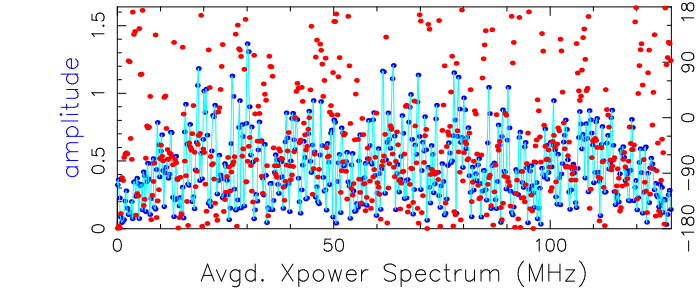
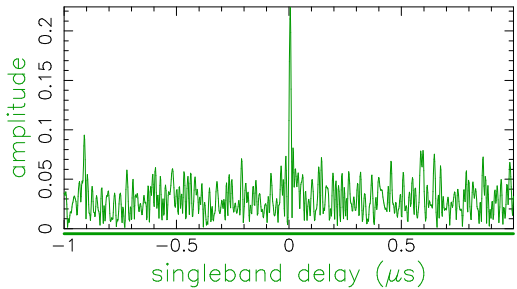
3C120.3N2DRC, No0552, fo

VLBA_FD - VLBA_OV, fgroup Q, pol LR

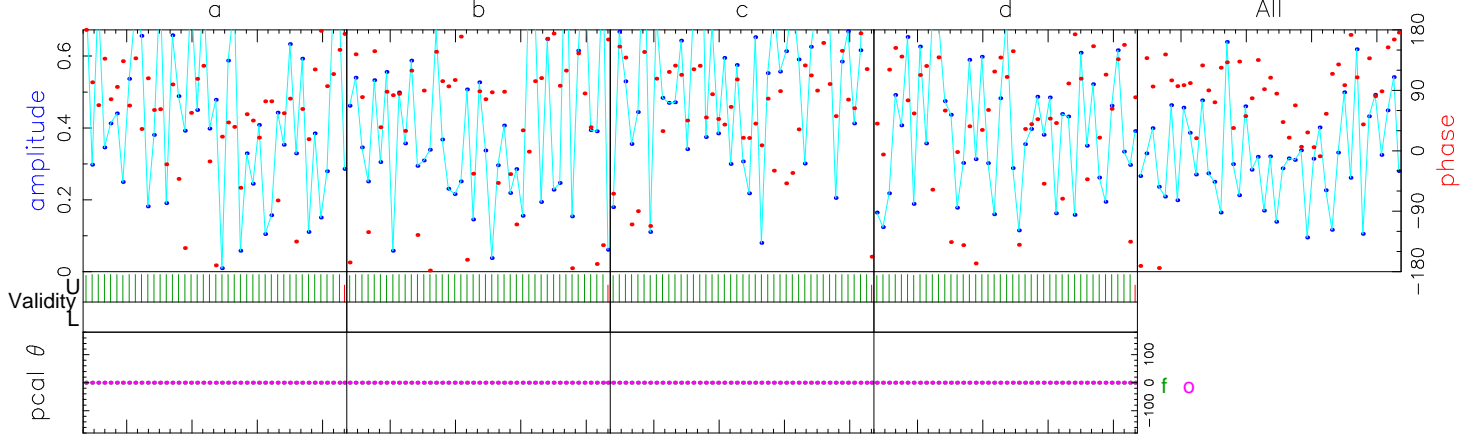
multiband delay (μ s)



Fringe quality 9
 SNR 9.5
 Int time 239.612
 Amp 0.224
 Phase 21.6
 PFD 4.3e-13
 Delays (us)
 SBD 0.005502
 MBD -0.002285
 Fringe rate (Hz) 0.009360
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102435
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0	APs used	1000
f	1000	1000	1000	1000	PC freqs	1000
o	1000	1000	1000	1000	PC freqs	1000
f:0	0:0	0:0	0:0	0:0	PC phase	0:0
f:0	0:0	0:0	0:0	0:0	Manl PC	0:0
f	1000	1000	1000	1000	PC amp	1000
o	1000	1000	1000	1000	Chan ids	1000
f	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	Q00UL
o	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	Q00UR
					Tracks	Q01UR

	1.97504044517E+03	Apriori delay (usec)	1.97503491813E+03	Resid mbdelay (usec)	-2.28547E-03	+/- 1.2E-04
Group delay (usec) (SBD)	1.97504041976E+03	Apriori clock (usec)	-2.5027399E+01	Resid sbdelay (usec)	5.50163E-03	+/- 4.5E-04
Sband delay (usec)	1.97503492459E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	6.45869E-06	+/- 7.8E-07
Phase delay (usec)	-2.93701172934E-01	Apriori rate (us/s)	-2.93701389905E-01	Resid rate (us/s)	2.16970E-07	+/- 5.6E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-1.16488230282E-05	Resid phase (deg)	21.6	+/- 12.1
Total phase (deg)	154.2					

	RMS	Theor.	Amplitude	0.224 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.5	39.6	Search (1024X16)	0.220	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	73.5	69.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	18.4	12.1	Inc. seg. avg.	0.263	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	22.3	21.1	Inc. frq. avg.	0.224	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 840.418 -464.074 simultaneous interpolator

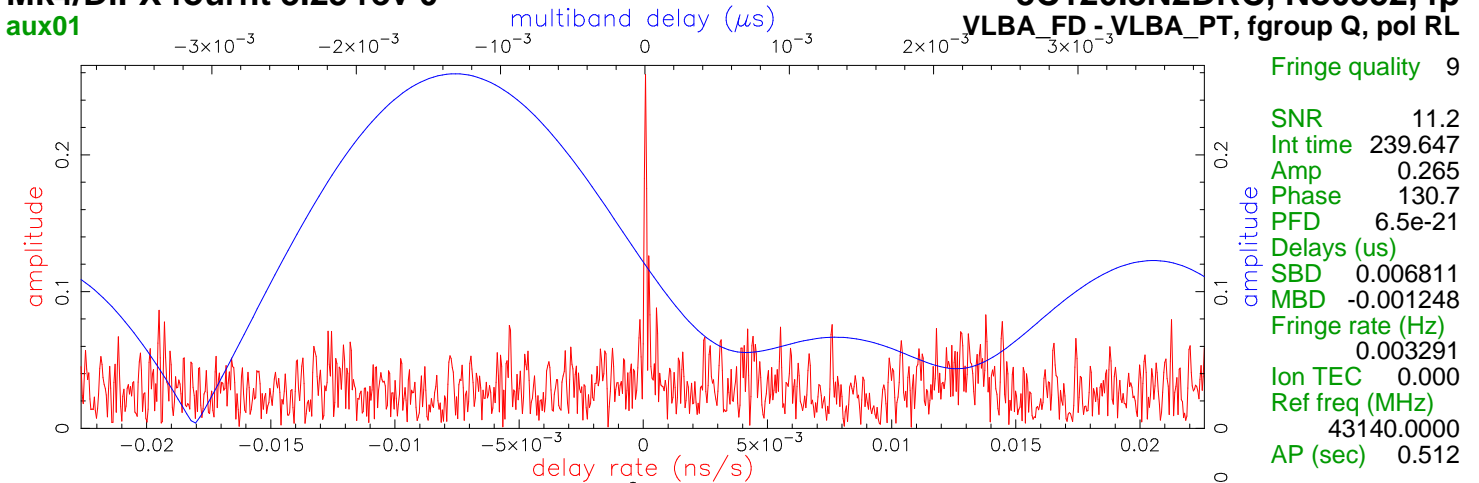
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.99.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

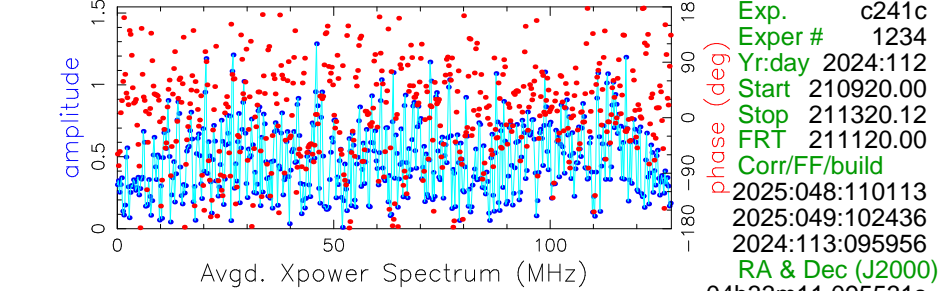
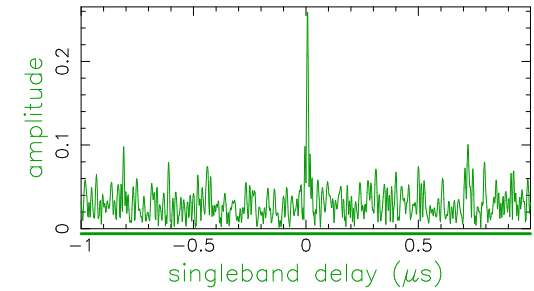
3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RL



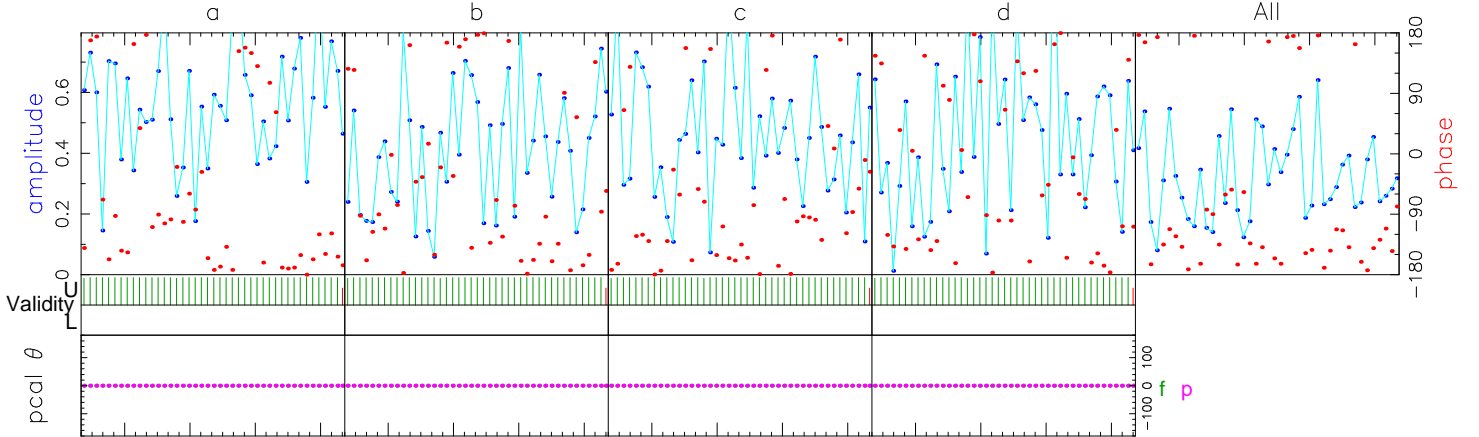
Fringe quality 9

SNR 11.2
 Int time 239.647
 Amp 0.265
 Phase 130.7
 PFD 6.5e-21
 Delays (us)
 SBD 0.006811
 MBD -0.001248
 Fringe rate (Hz)
 0.003291
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102436
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-151.8	-148.2	-134.2	-173.9	Phase	-150.5
0.4	0.2	0.3	0.2	Ampl.	0.3
517.4	516.2	516.0	516.2	Sbd box	516.5
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
f:p 0:0	0:0	0:0	0:0	PC phase	
f:p 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	7.49050589517E+02	Apriori delay (usec)	7.49044025491E+02	Resid mbdelay (usec)	-1.24847E-03	+/-	9.9E-05
Sband delay (usec)	7.49050836116E+02	Apriori clock (usec)	-5.6673489E+00	Resid sbdelay (usec)	6.81063E-03	+/-	3.8E-04
Phase delay (usec)	7.49044015799E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-9.69229E-06	+/-	6.6E-07
Delay rate (us/s)	-8.85450848094E-02	Apriori rate (us/s)	-8.85451610963E-02	Resid rate (us/s)	7.62869E-08	+/-	4.7E-09
Total phase (deg)	224.2	Apriori accel (us/s/s)	-4.58695806463E-06	Resid phase (deg)	130.7	+/-	10.2

ph/seg (deg)	RMS 38.8	Theor. 33.4	Amplitude	0.265 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	56.4	58.4	Search (1024X16)	0.250	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	20.2	10.2	Inc. seg. avg.	0.275	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	26.1	17.8	Inc. frq. avg.	0.262	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023		
					Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 168.1 el 64.3 pa -9.7 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 253.003 -255.431 simultaneous interpolator

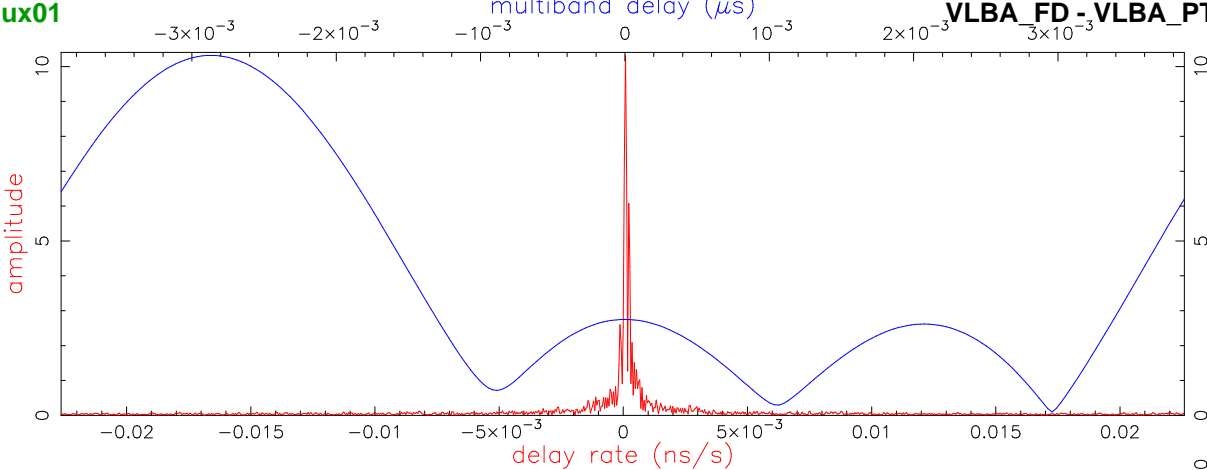
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.107.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

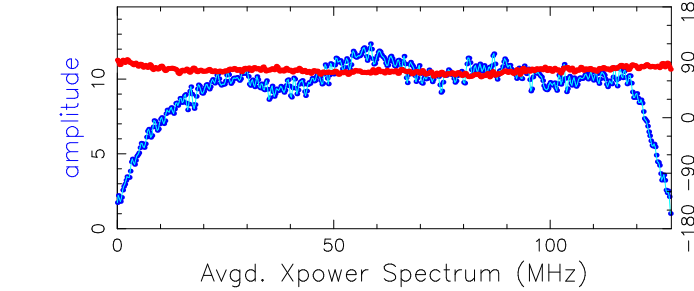
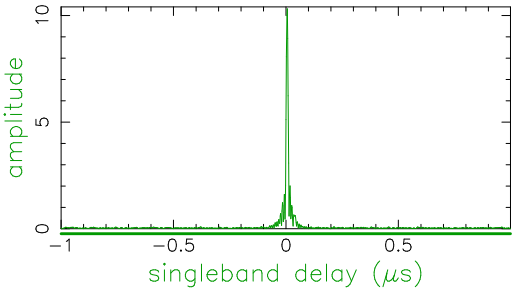
3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol LL



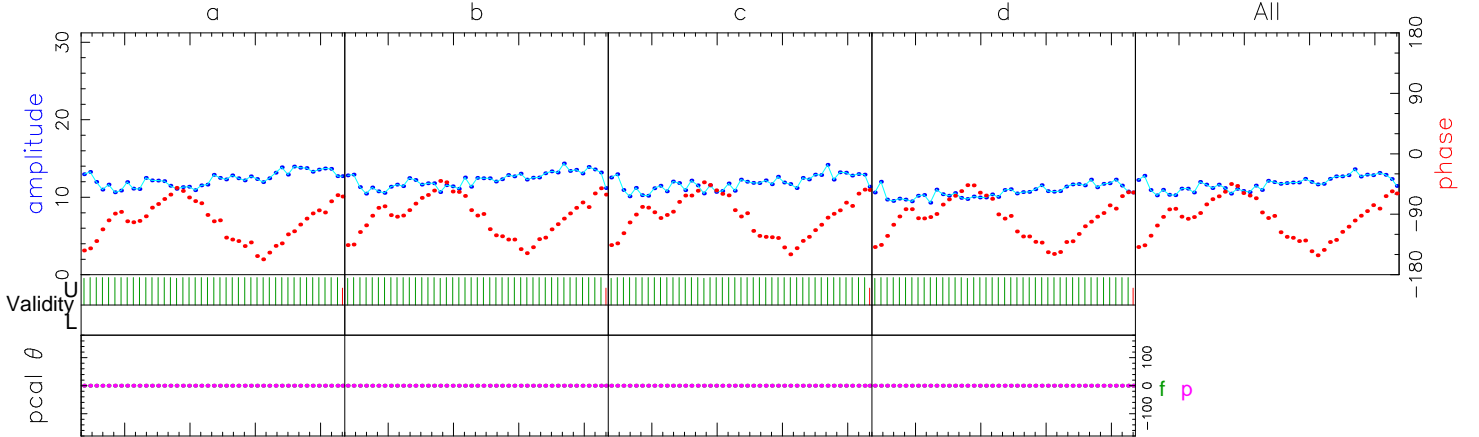
Fringe quality 7

SNR 440.5
 Int time 239.647
 Amp 10.406
 Phase 184.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.005235
 MBD -0.002905
 Fringe rate (Hz)
 0.003328
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102428
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-102.2	-93.4	-93.1	-97.0	Phase	-96.4
10.8	10.7	10.4	9.4	Ampl.	10.3
516.2	515.6	515.4	515.5	Sbd box	515.7
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
f:p 0:0	0:0	0:0	0:0	PC phase	
fp 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
f Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	7.49048933111E+02	Apriori delay (usec)	7.49044025491E+02	Resid mbdelay (usec)	-2.90488E-03	+/- 2.5E-06
Sband delay (usec)	7.49049260741E+02	Apriori clock (usec)	-5.6673489E+00	Resid sbdelay (usec)	5.23525E-03	+/- 9.8E-06
Phase delay (usec)	7.49044019281E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-6.20992E-06	+/- 1.7E-08
Delay rate (us/s)	-8.85450839606E-02	Apriori rate (us/s)	-8.85451610963E-02	Resid rate (us/s)	7.71358E-08	+/- 1.2E-10
Total phase (deg)	278.3	Apriori accel (us/s/s)	-4.58695806463E-06	Resid phase (deg)	184.8	+/- 0.3

ph/seg (deg)	RMS 29.0	Theor. 0.9	Amplitude 10.406 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	15.4	1.5	Search (1024X16) 10.046	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	5.2	0.3	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	5.6	0.5	Inc. seg. avg. 11.756	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	mb window (us) -0.004 0.004
			Inc. frq. avg. 10.336	Data rate(Mb/s): 2048	dr window (ns/s) -0.023 0.023
				nlags: 512	t_cohere infinite
					ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 253.003 -255.431 simultaneous interpolator

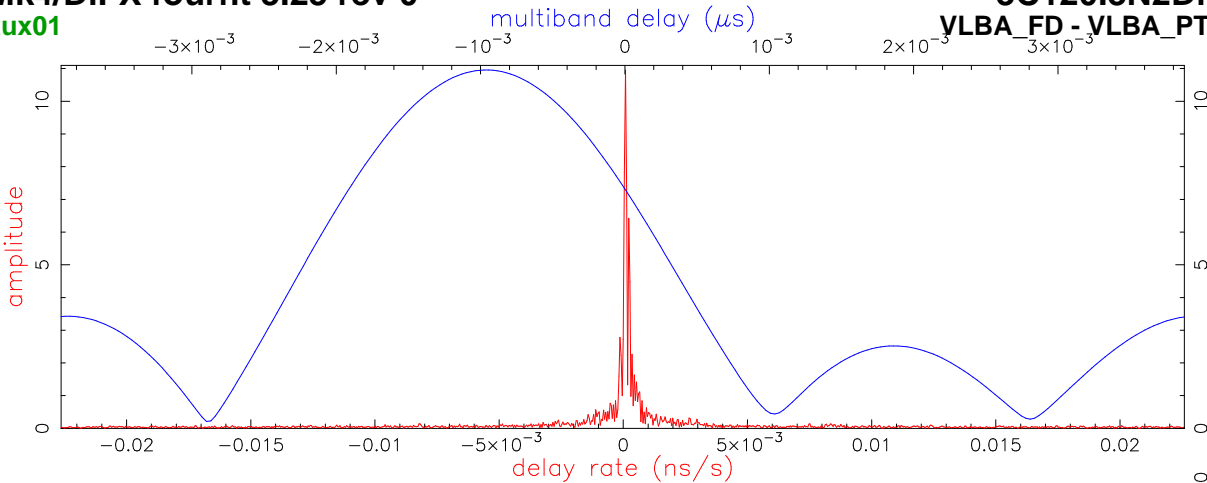
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.44.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

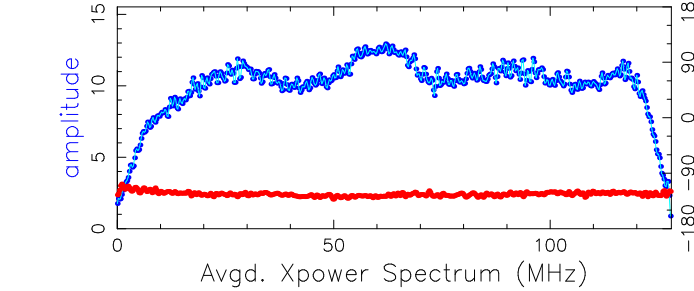
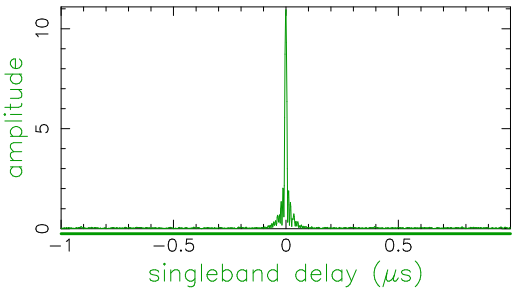
3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RR



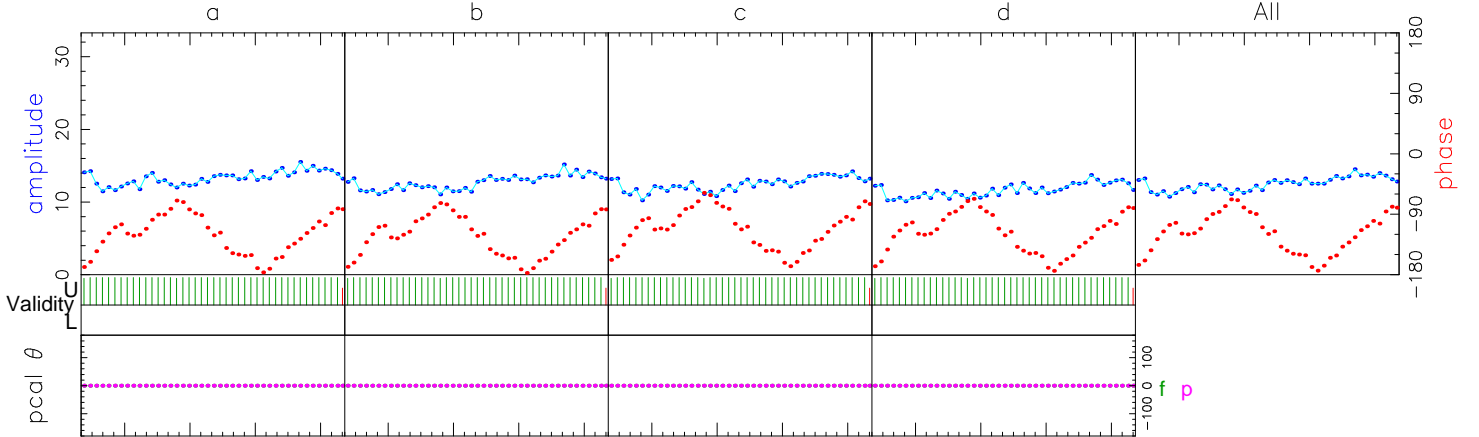
Fringe quality 7

SNR 469.8
 Int time 239.647
 Amp 11.097
 Phase -119.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000760
 MBD -0.000999
 Fringe rate (Hz)
 0.003320
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102431
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000		
p	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
p	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

	7.49043026173E+02	Apriori delay (usec)	7.49044025491E+02	Resid mbdelay (usec)	-9.99318E-04	+/- 2.4E-06
Group delay (usec) (SBD)	7.49043026173E+02	Apriori clock (usec)	-5.6673489E+00	Resid sbdelay (usec)	-7.60125E-04	+/- 9.2E-06
Sband delay (usec)	7.49043265366E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-7.66835E-06	+/- 1.6E-08
Phase delay (usec)	7.49044017823E+02	Apriori rate (us/s)	-8.85451610963E-02	Resid rate (us/s)	7.69547E-08	+/- 1.1E-10
Delay rate (us/s)	-8.85450841417E-02	Apriori accel (us/s/s)	-4.58695806463E-06	Resid phase (deg)	-119.1	+/- 0.2
Total phase (deg)	-25.6					

	RMS	Theor.	Amplitude	11.097 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	29.2	0.8	Search (1024X16)	10.669	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	15.1	1.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	5.8	0.2	Inc. seg. avg.	12.500	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.0	0.4	Inc. frq. avg.	10.978	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 168.1 el 64.3 pa -9.7 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 253.003 -255.431 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.61.3N2DRC

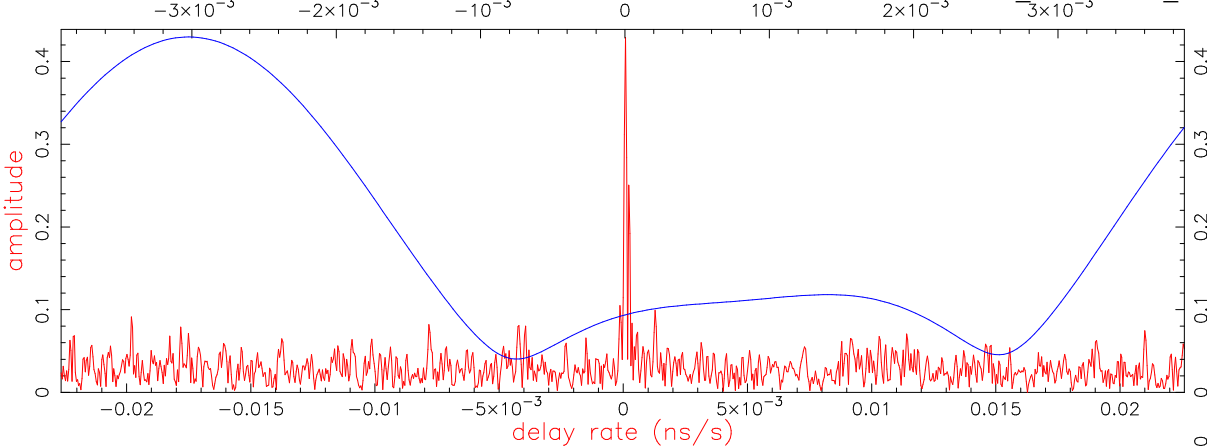
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fp

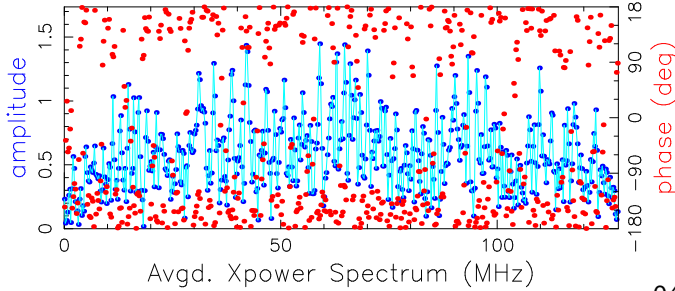
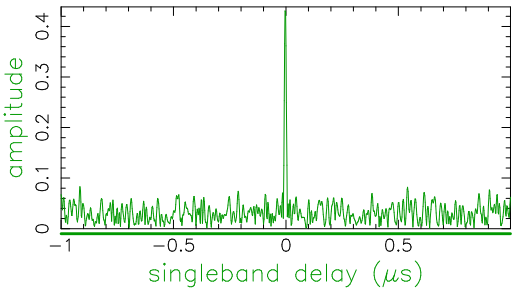
VLBA_FD - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



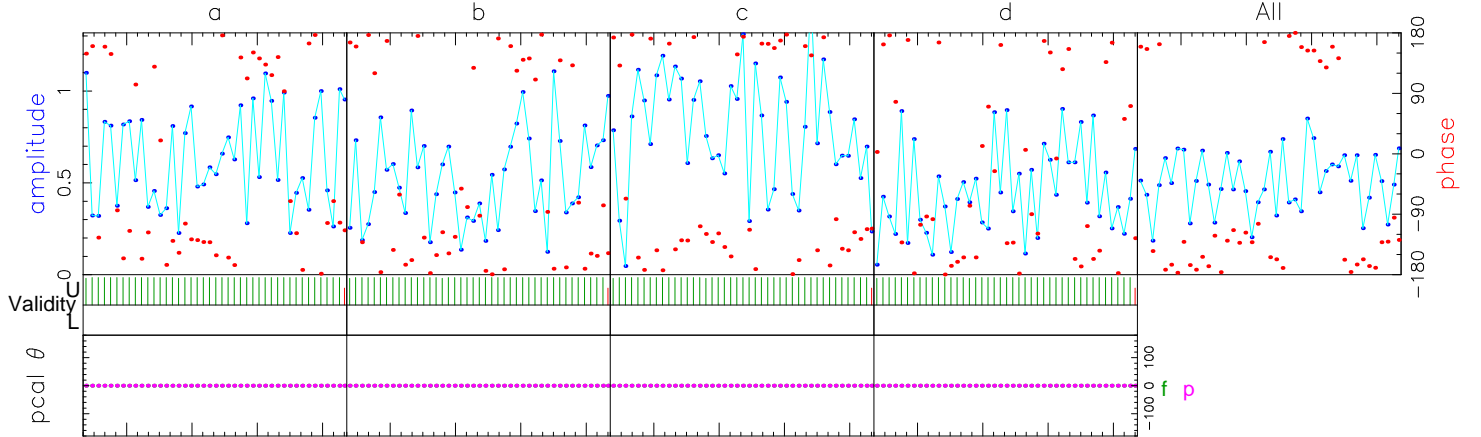
Fringe quality 9

SNR 18.6
 Int time 239.647
 Amp 0.439
 Phase -167.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.002982
 MBD -0.003087
 Fringe rate (Hz) 0.003305
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102434
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

Amp. and Phase vs. time for each freq., 43 segs, 11 APs / seg (5.63 sec / seg.), time ticks 10 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-171.8	-170.7	-163.8	-165.7	Phase	-167.5
	0.4	0.4	0.7	0.3	Ampl.	0.4
	511.5	511.2	511.4	512.1	Sbd box	511.5
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	7.49040938142E+02	Apriori delay (usec)	7.49044025491E+02	Resid mbdelay (usec)	-3.08735E-03	+/- 6.0E-05
Group delay (usec) (SBD)	7.49041043116E+02	Apriori clock (usec)	-5.6673489E+00	Resid sbdelay (usec)	-2.98237E-03	+/- 2.3E-04
Sband delay (usec)	7.49044014705E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-1.07863E-05	+/- 4.0E-07
Phase delay (usec)	-8.85450844784E-02	Apriori rate (us/s)	-8.85451610963E-02	Resid rate (us/s)	7.66179E-08	+/- 2.9E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-4.58695806463E-06	Resid phase (deg)	-167.5	+/- 6.2
Total phase (deg)	-74.0					

	RMS	Theor.	Amplitude	0.439 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	33.1	20.2	Search (1024X16)	0.417	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	38.7	35.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.8	6.2	Inc. seg. avg.	0.477	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	34.7	10.8	Inc. frq. avg.	0.428	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 168.1 el 64.3 pa -9.7		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) 253.003 -255.431		simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//fp.Q.84.3N2DRC