

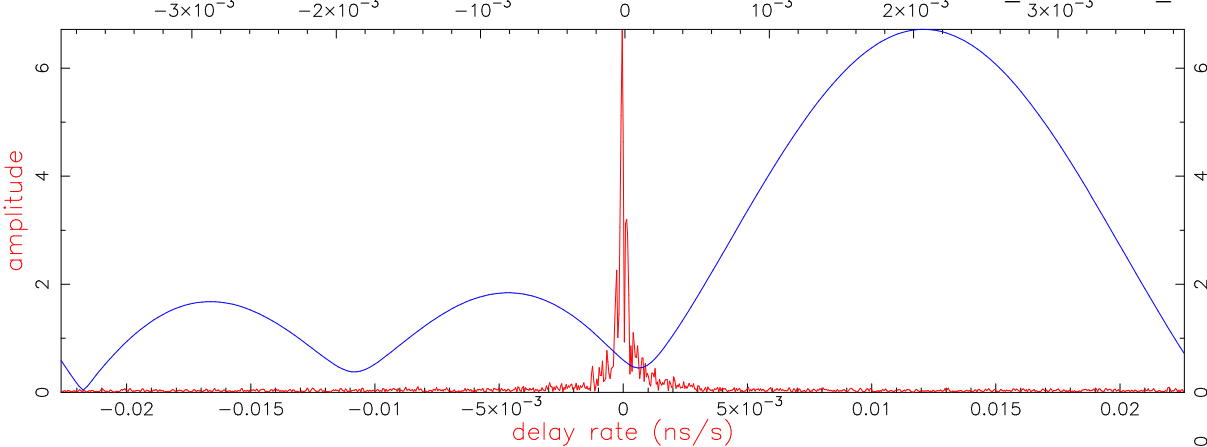
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bo

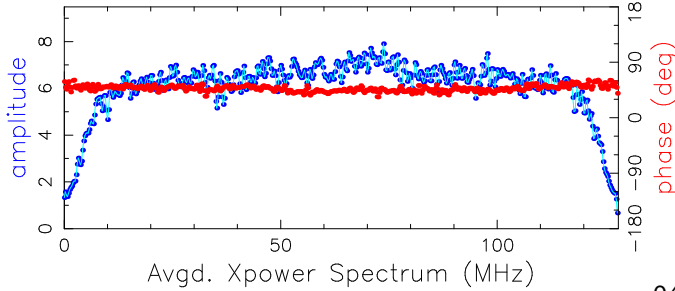
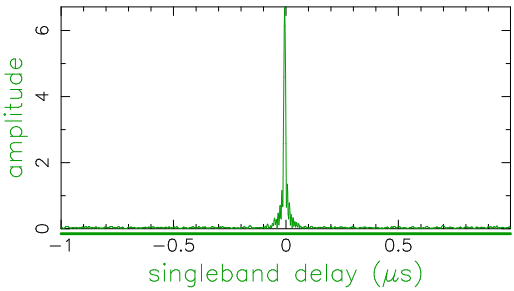
VLBA_BR - VLBA_OV, fgroup Q, pol RR

multiband delay (μ s)



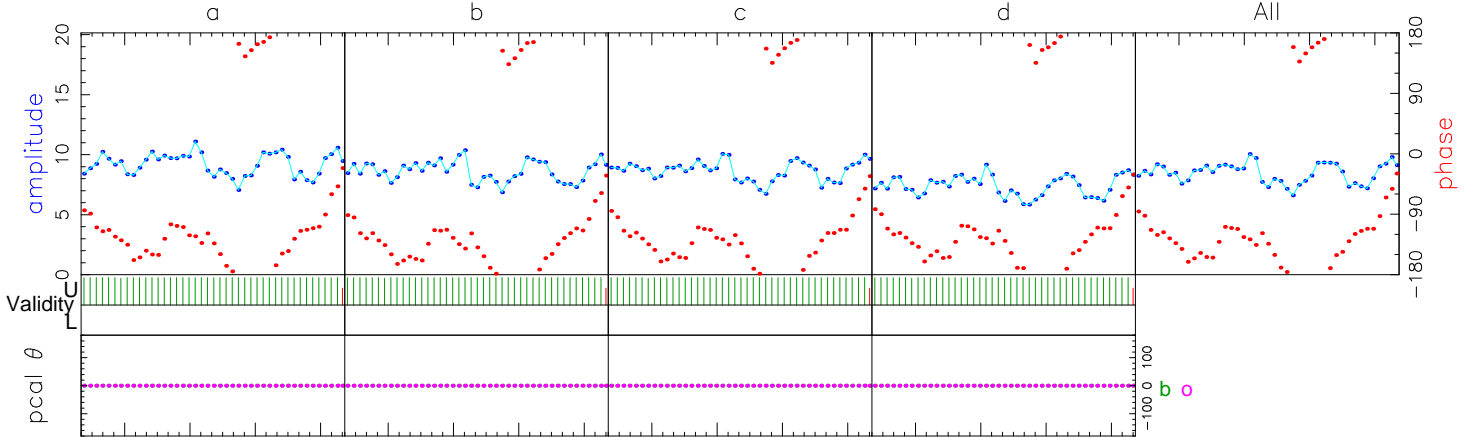
Fringe quality 6

SNR 284.4
 Int time 239.796
 Amp 6.717
 Phase -56.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.005835
 MBD 0.002070
 Fringe rate (Hz)
 -0.002534
 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
 2025:049:102420
 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
-132.2	-138.9	-135.8	-132.9	Phase	-135.0
7.3	6.8	6.8	5.9	Ampl.	6.7
510.1	509.9	510.3	509.7	Sbd box	510.0
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
b:0 0:0	0:0	0:0	0:0	PC phase	
b:0 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
b Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-2.43811883269E+03	Apriori delay (usec)	-2.43811309052E+03	Resid mbdelay (usec)	2.07033E-03	+/- 3.9E-06
Sband delay (usec)	-2.43811892527E+03	Apriori clock (usec)	-2.0423668E+01	Resid sbdelay (usec)	-5.83475E-03	+/- 1.5E-05
Phase delay (usec)	-2.43811309921E+03	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	-8.69028E-06	+/- 2.6E-08
Delay rate (us/s)	-3.95436937187E-02	Apriori rate (us/s)	-3.95436349841E-02	Resid rate (us/s)	-5.87347E-08	+/- 1.9E-10
Total phase (deg)	-317.3	Apriori accel (us/s/s)	1.43398345510E-05	Resid phase (deg)	-56.2	+/- 0.4

ph/seg (deg)	RMS 39.1	Theor. 1.3	Amplitude 6.717 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	28.7	2.3	Search (1024X16) 6.442	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	3.7	0.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	7.9	0.7	Inc. seg. avg. 8.463	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
			Inc. frq. avg. 6.724	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 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 120.696 670.415 simultaneous interpolator

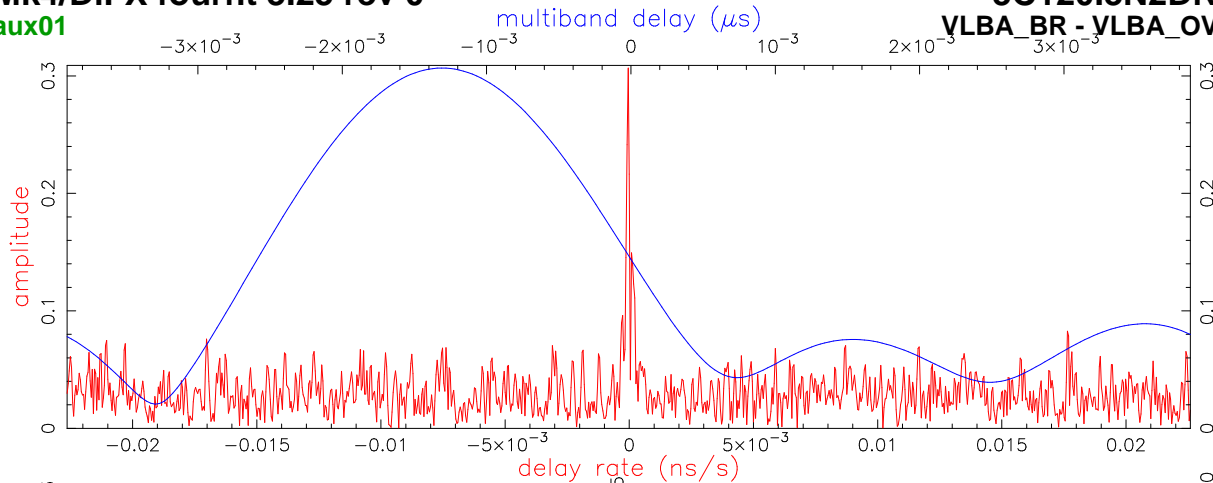
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bo.Q.11.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

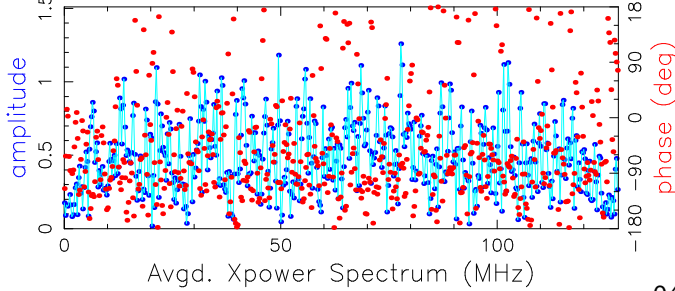
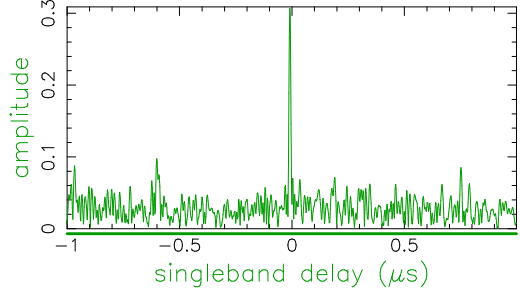
3C120.3N2DRC, No0552, bo

VLBA_BR - VLBA_OV, fgroup Q, pol LR



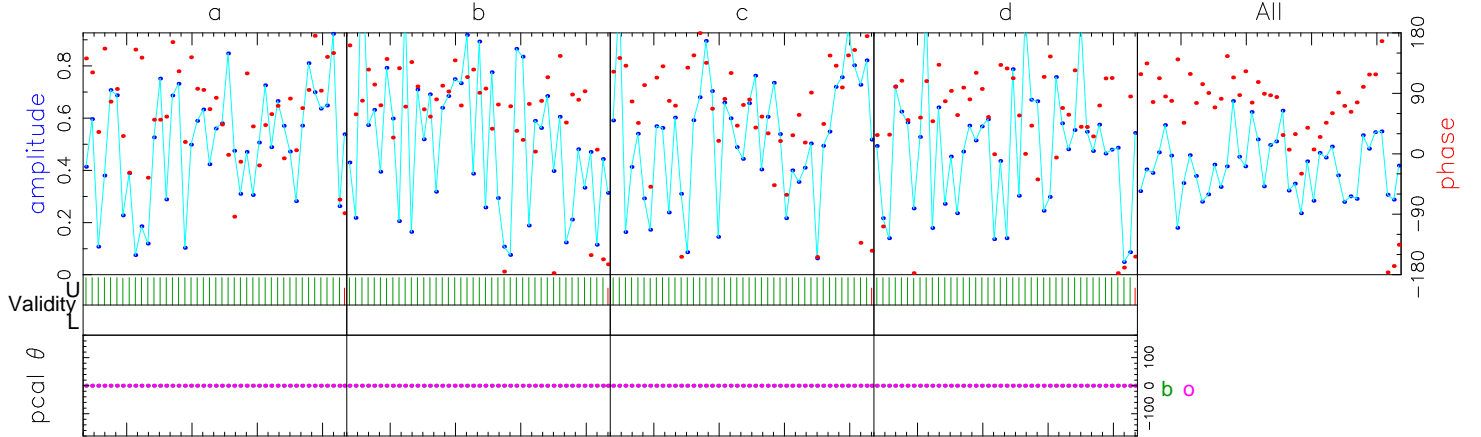
Fringe quality 9

SNR 13.1
 Int time 239.796
 Amp 0.309
 Phase -192.9
 PFD 1.1e-30
 Delays (us)
 SBD -0.009197
 MBD -0.001293
 Fringe rate (Hz)
 -0.002639
 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
 2025:049:102422
 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		
o	1000	1000	1000	1000		
b:o	0:0	0:0	0:0	0:0		
b:o	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000		
o	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-2.43812219597E+03	Apriori delay (usec)	-2.43811309052E+03	Resid mbdelay (usec)	-1.29295E-03	+/-	8.5E-05
Sband delay (usec)	-2.43812228765E+03	Apriori clock (usec)	-2.0423668E+01	Resid sbdelay (usec)	-9.19713E-03	+/-	3.3E-04
Phase delay (usec)	-2.43811308484E+03	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	5.68610E-06	+/-	5.6E-07
Delay rate (us/s)	-3.95436961664E-02	Apriori rate (us/s)	-3.95436349841E-02	Resid rate (us/s)	-6.11823E-08	+/-	4.1E-09
Total phase (deg)		Apriori accel (us/s/s)	1.43398345510E-05	Resid phase (deg)	-192.9	+/-	8.8

ph/seg (deg)	48.4	Theor.	28.7	Amplitude	0.309 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	49.5		50.1	Search (1024X16)	0.290	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	14.0		8.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	12.6		15.3	Inc. seg. avg.	0.368	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.307	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 150.6 el 43.7 pa -19.0 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 120.696 670.415 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bo.Q.20.3N2DRC

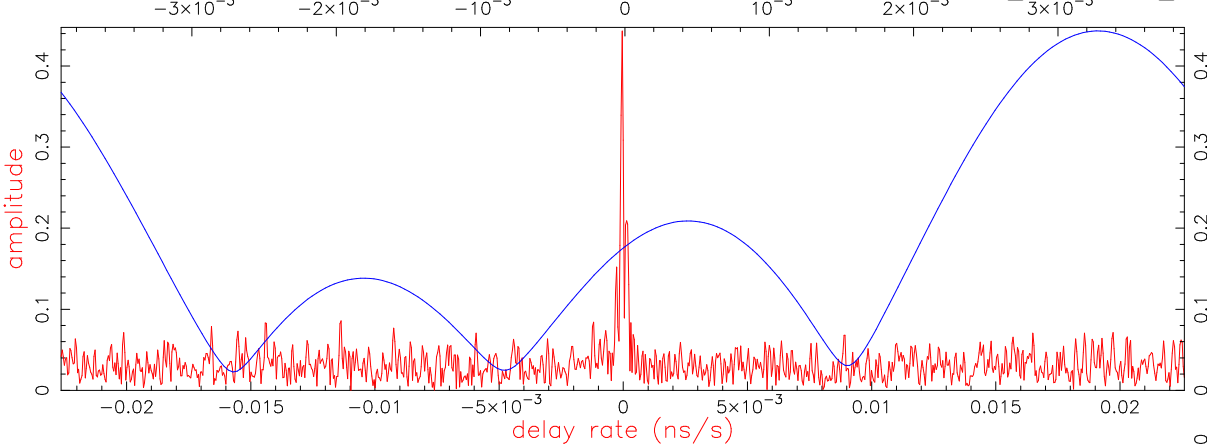
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bo

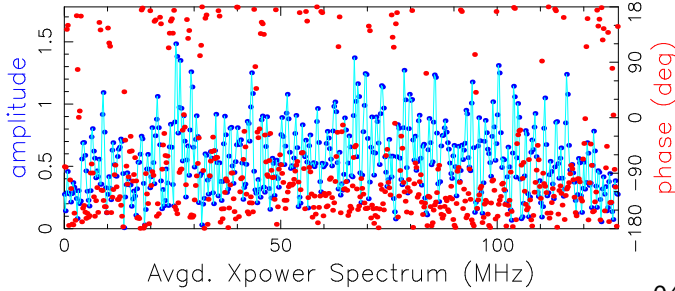
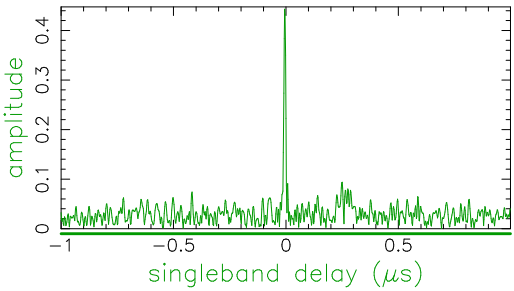
VLBA_BR - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)



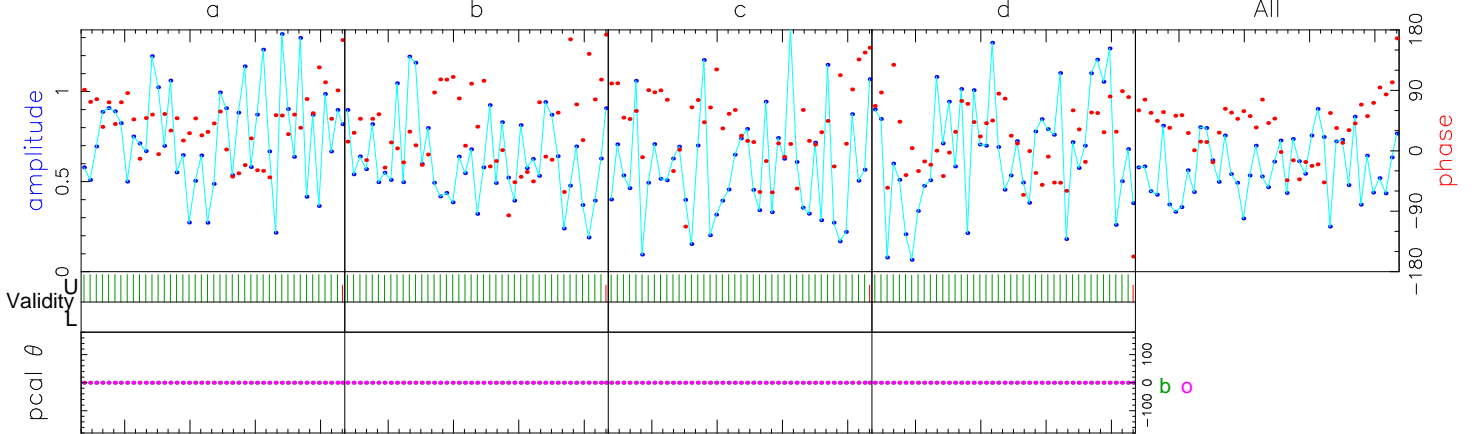
Fringe quality 9

SNR 19.0
 Int time 239.796
 Amp 0.448
 Phase -249.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.005180
 MBD 0.003310
 Fringe rate (Hz)
 -0.002681
 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
 2025:049:102425
 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
36.9	20.8	41.7	27.1	Phase	31.9
0.6	0.4	0.4	0.5	Ampl.	0.4
510.1	510.7	510.9	509.8	Sbd box	510.3
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
b:o 0:0	0:0	0:0	0:0	PC phase	
b:o 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
b Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-2.43811759338E+03	Apriori delay (usec)	-2.43811309052E+03	Resid mbdelay (usec)	3.30964E-03	+/-	5.9E-05
Sband delay (usec)	-2.43811827090E+03	Apriori clock (usec)	-2.0423668E+01	Resid sbdelay (usec)	-5.18038E-03	+/-	2.3E-04
Phase delay (usec)	-2.43811308847E+03	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	2.05350E-06	+/-	3.9E-07
Delay rate (us/s)	-3.95436971228E-02	Apriori rate (us/s)	-3.95436349841E-02	Resid rate (us/s)	-6.21387E-08	+/-	2.8E-09
Total phase (deg)	-150.4	Apriori accel (us/s/s)	1.43398345510E-05	Resid phase (deg)	-249.4	+/-	6.0

ph/seg (deg)	RMS 40.6	Theor. 19.8	Amplitude Search (1024X16)	0.448 +/- 0.024	0.414	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	46.3	34.6	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)	11.6	6.0	Inc. seg. avg.	0.545	0.545	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBbps	16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	18.5	10.6	Inc. frq. avg.	0.445	0.445	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 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 120.696 670.415 simultaneous interpolator

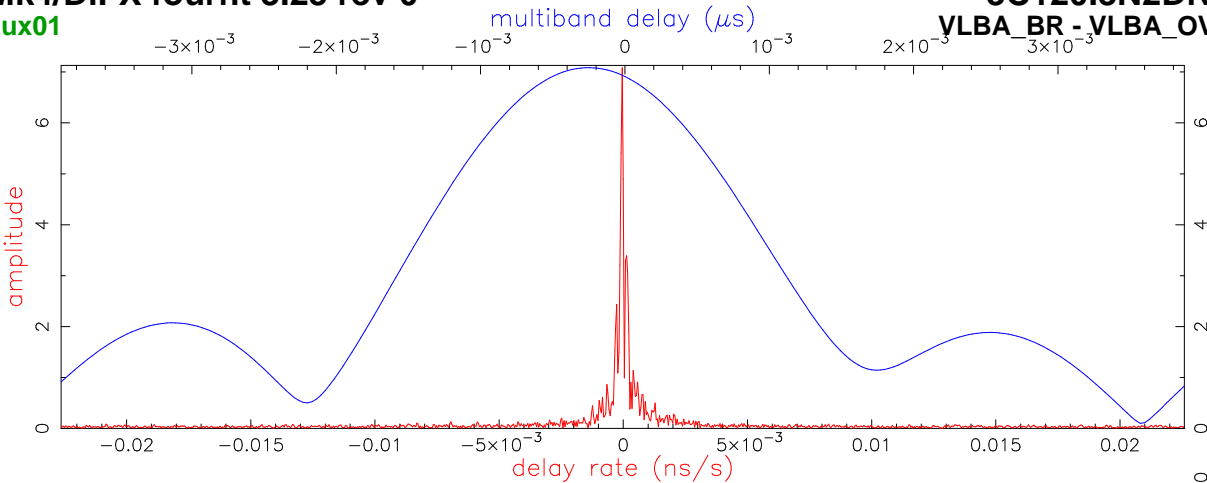
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bo.Q.28.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

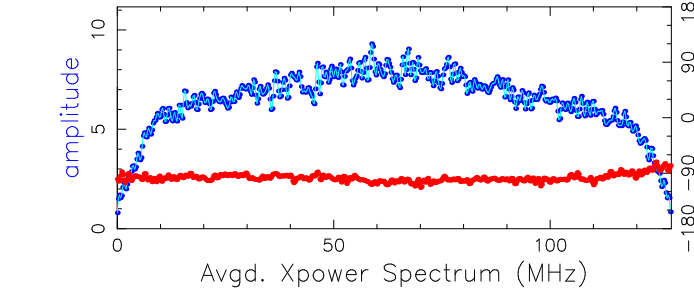
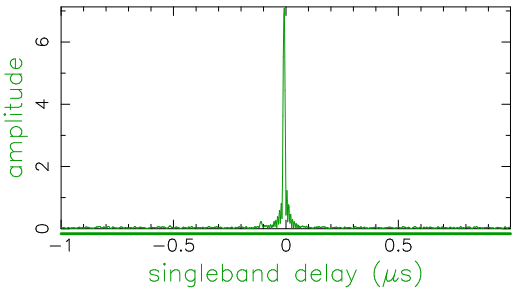
3C120.3N2DRC, No0552, bo

VLBA_BR - VLBA_OV, fgroup Q, pol LL



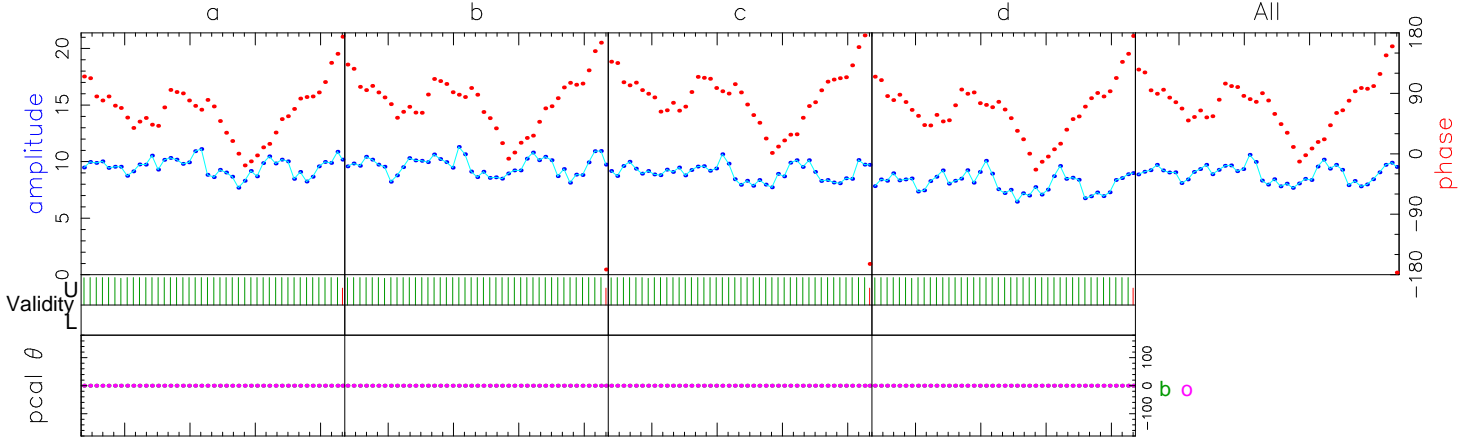
Fringe quality 5

SNR 301.9
 Int time 239.796
 Amp 7.130
 Phase -205.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.008360
 MBD -0.000281
 Fringe rate (Hz)
 -0.002557
 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
65.5	81.7	87.7	66.5	Phase	75.5
7.6	7.6	7.1	6.4	Ampl.	7.2
509.2	509.0	508.4	508.1	Sbd box	508.7
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
b:o 0:0	0:0	0:0	0:0	PC phase	
b:o 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-2.43812118375E+03	Apriori delay (usec)	-2.43811309052E+03	Resid mbdelay (usec)	-2.80732E-04	+/-	3.7E-06
Sband delay (usec)	-2.43812145027E+03	Apriori clock (usec)	-2.0423668E+01	Resid sbdelay (usec)	-8.35975E-03	+/-	1.4E-05
Phase delay (usec)	-2.43811308566E+03	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	4.86267E-06	+/-	2.4E-08
Delay rate (us/s)	-3.95436942649E-02	Apriori rate (us/s)	-3.95436349841E-02	Resid rate (us/s)	-5.92808E-08	+/-	1.8E-10
Total phase (deg)	-106.8	Apriori accel (us/s/s)	1.43398345510E-05	Resid phase (deg)	-205.7	+/-	0.4

ph/seg (deg)	RMS 39.5	Theor. 1.2	Amplitude 7.130 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	27.6	2.2	Search (1024X16) 6.663	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	13.6	0.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	6.9	0.7	Inc. seg. avg. 8.959	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 7.184	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 150.6 el 43.7 pa -19.0 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 120.696 670.415 simultaneous interpolator

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

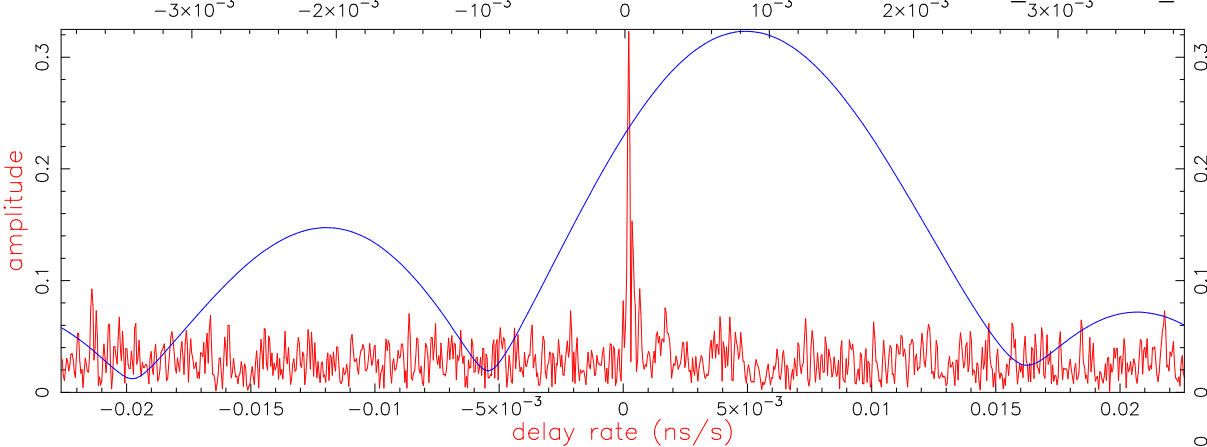
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fo

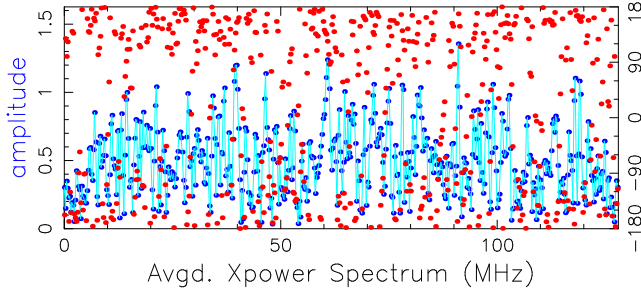
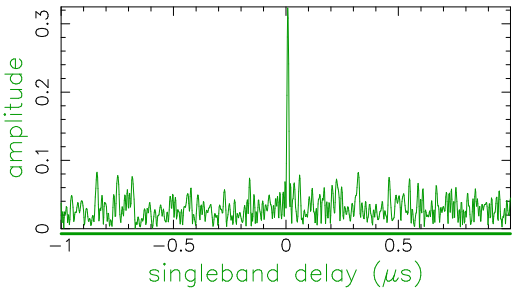
VLBA_FD - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)



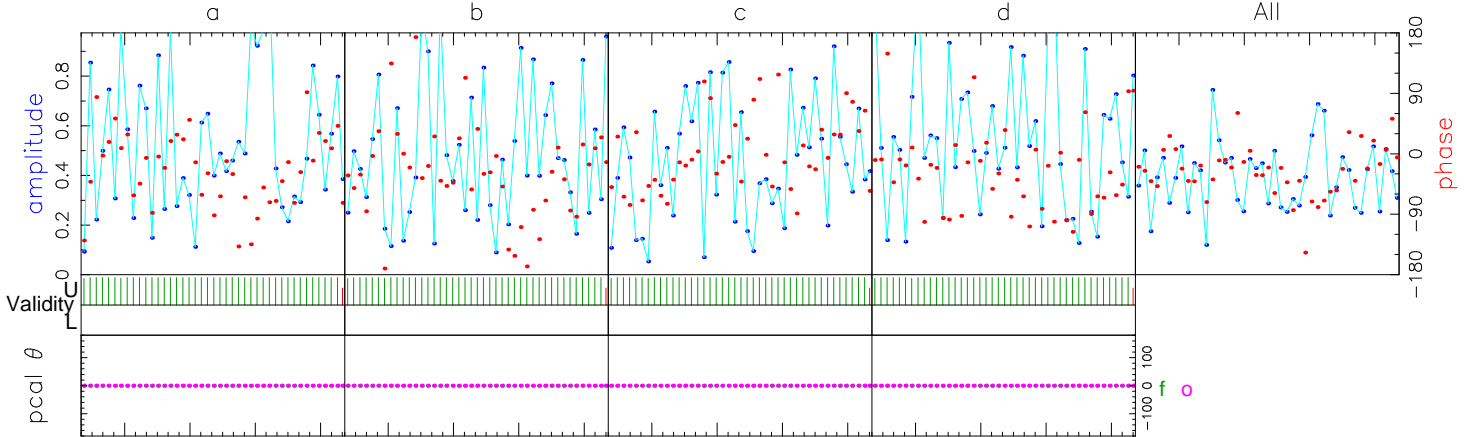
Fringe quality 9

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	sb window (us)	-1.000	1.000
amp/seg (%)	47.1		47.7	Search (1024X16)	0.303	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	17.5		8.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	6.7		14.5	Inc. seg. avg.	0.357	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.327	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

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

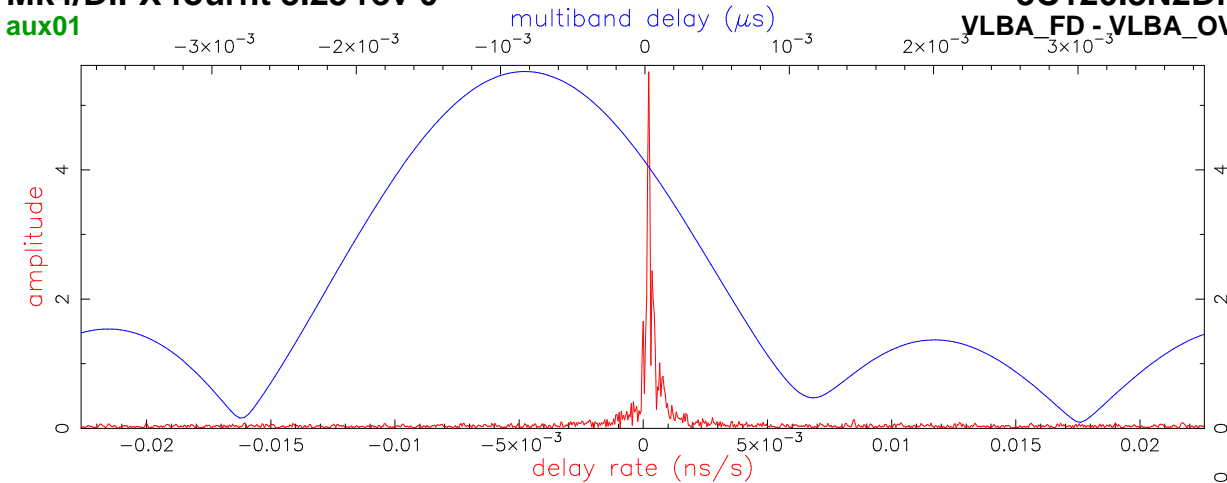
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.111.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

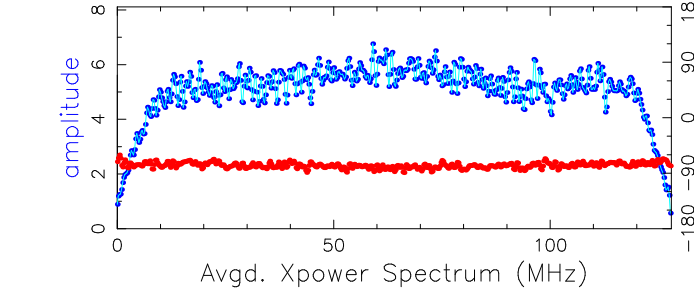
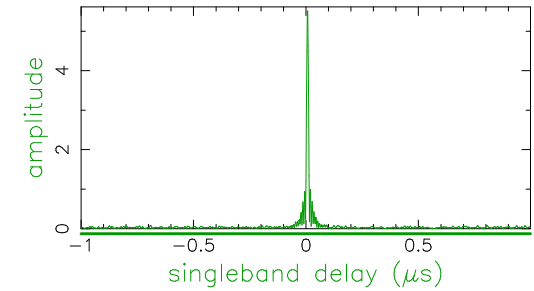
3C120.3N2DRC, No0552, fo

VLBA_FD - VLBA_OV, fgroup Q, pol LL



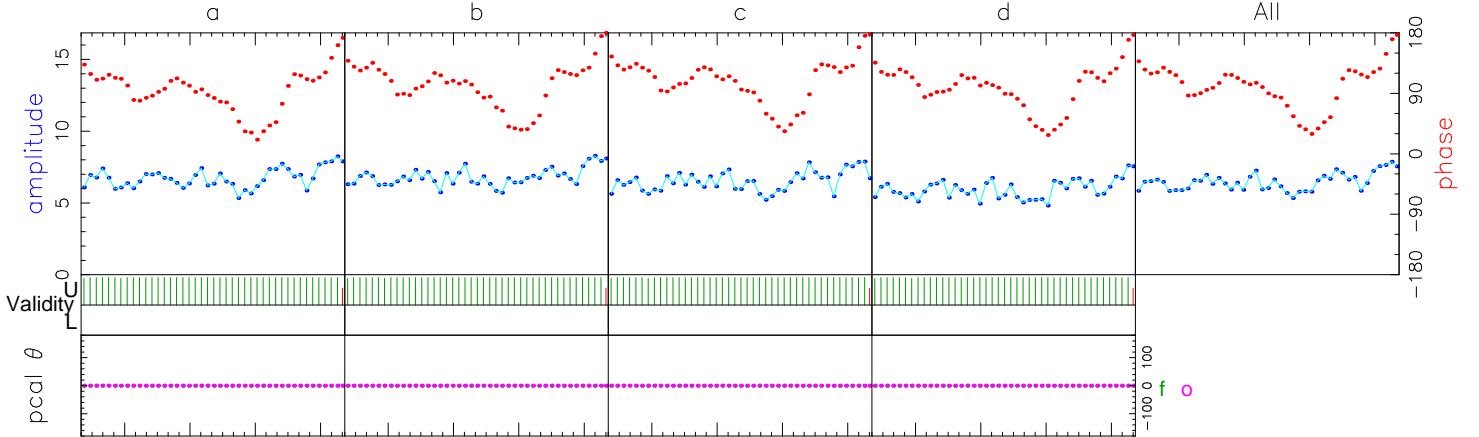
Fringe quality 7

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
U/L	469/0	469/0	469/0	469/0		
f	1000	1000	1000	1000	APs used	
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	

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

	RMS	Theor.	Amplitude	5.617 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	32.4	1.6	Search (1024X16)	5.387	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	18.6	2.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	7.7	0.5	Inc. seg. avg.	6.473	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.1	0.8	Inc. frq. avg.	5.542	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

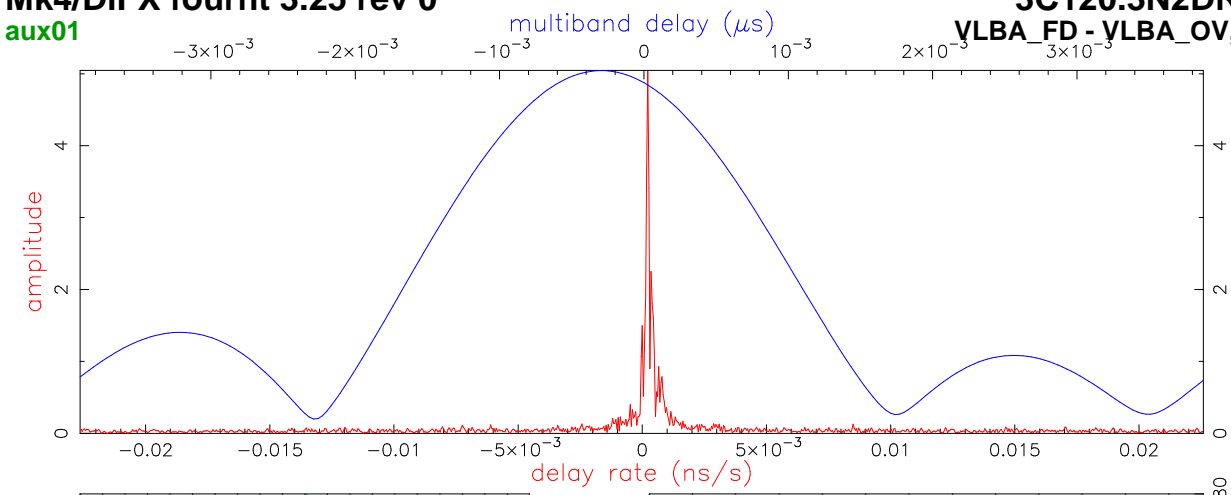
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fo.Q.42.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

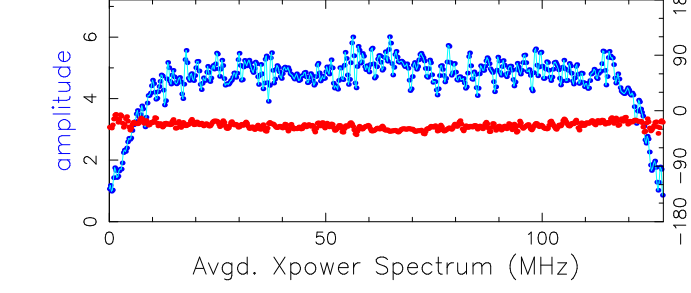
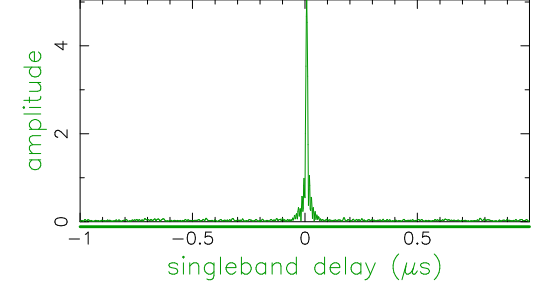
3C120.3N2DRC, No0552, fo

VLBA_FD - VLBA_OV, fgroup Q, pol RR



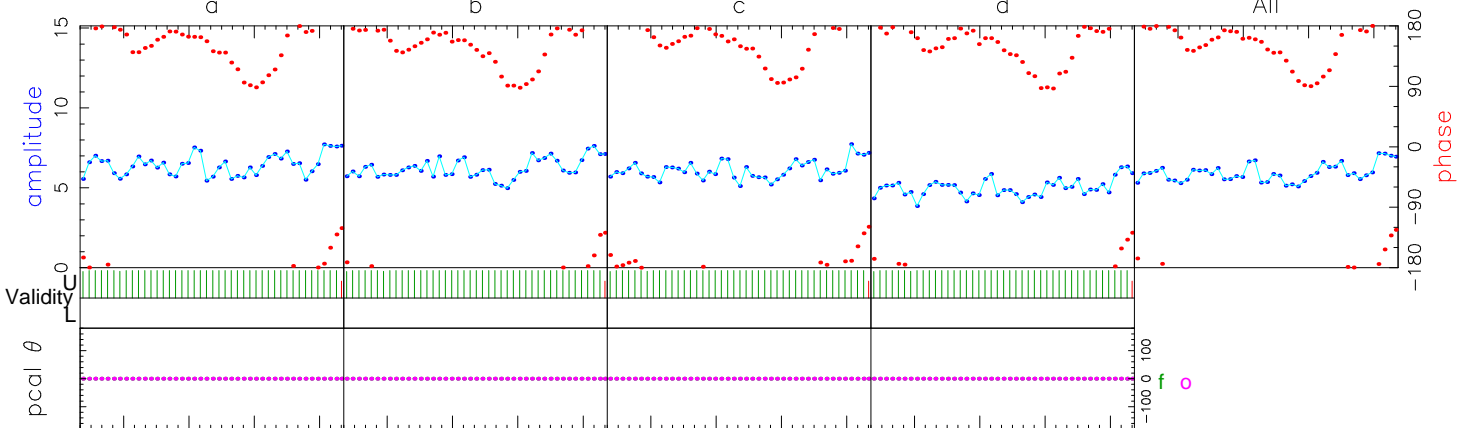
Fringe quality 6

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:o 0:0	0:0	0:0	0:0	PC phase	
f:o 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 5.047 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	20.6	3.1	Search (1024X16) 4.883	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	3.8	0.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.5	0.9	Inc. seg. avg. 5.934	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	mb window (us) -0.004 0.004
			Inc. frq. avg. 5.050	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
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			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.74.3N2DRC			simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

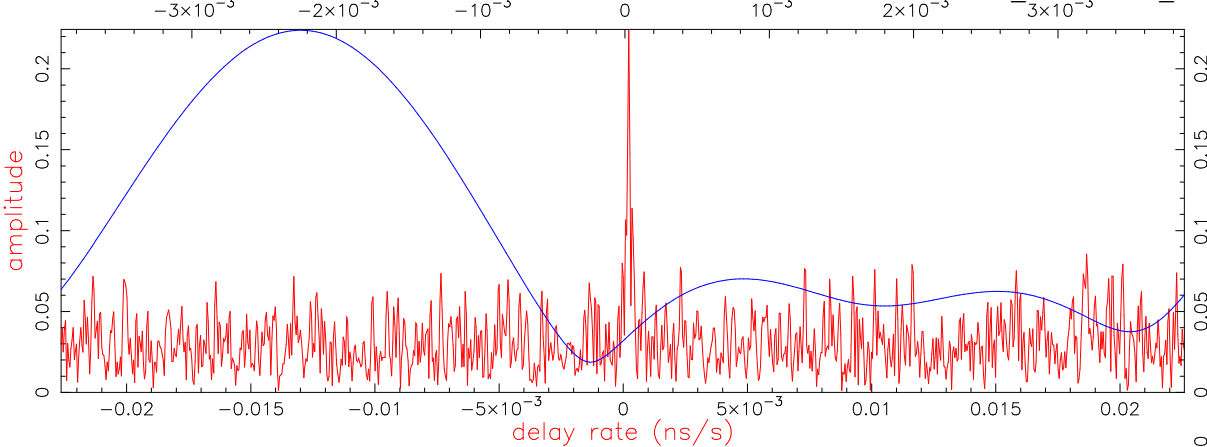
aux01

3C120.3N2DRC, No0552, fo

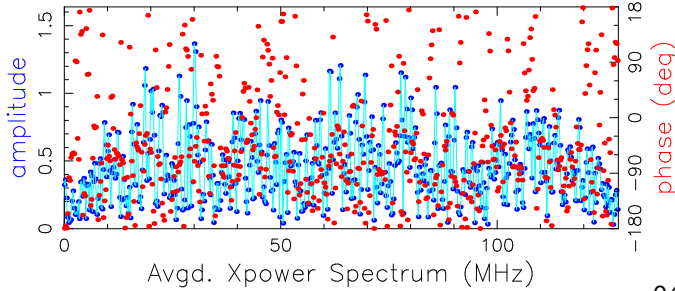
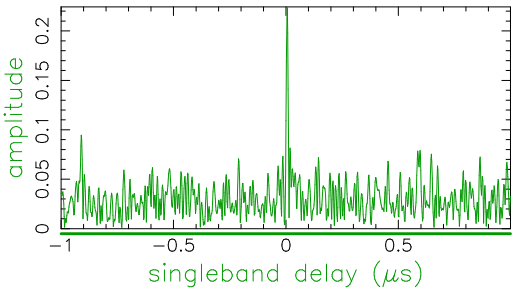
VLBA_FD - VLBA_OV, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 9

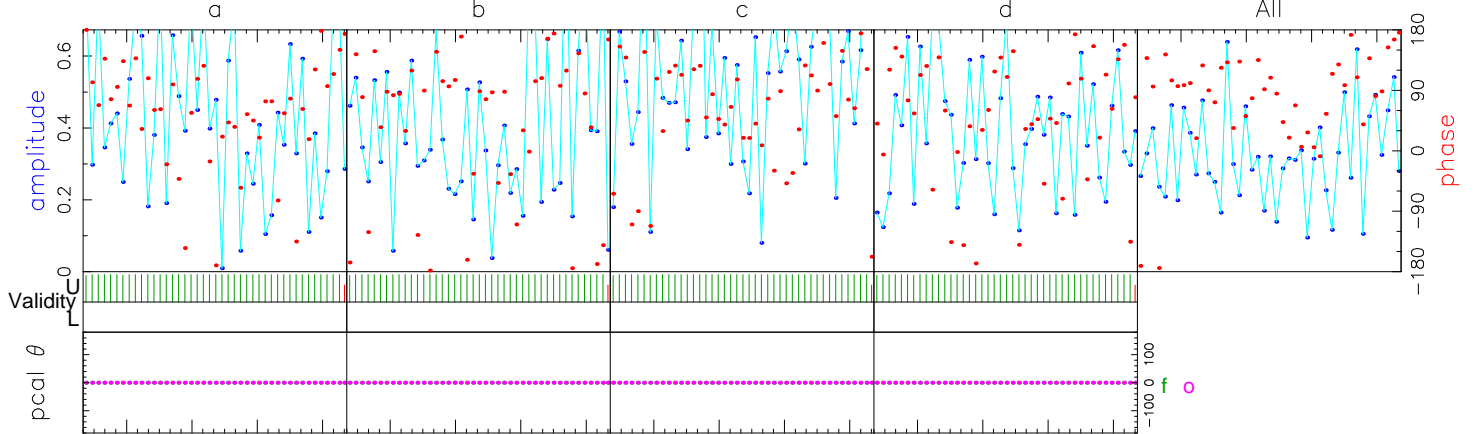


SNR 9.5
 Int time 239.612
 Amp 0.224
 Phase 21.6
 PFD 4.3e-13
 Delays (us)
 SBD 0.005502
 MBD -0.002285
 Fringe rate (Hz)
 0.009360
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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		
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	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

	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

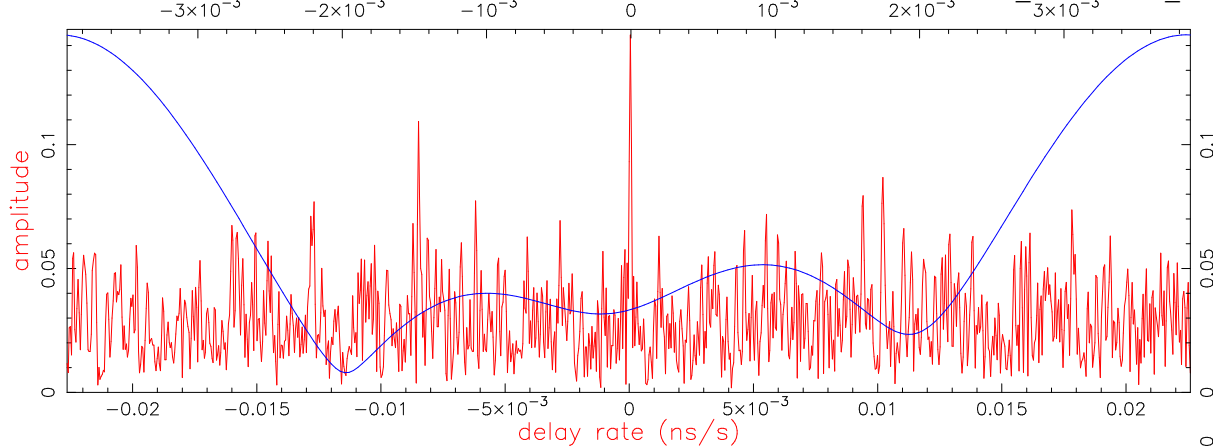
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, ko

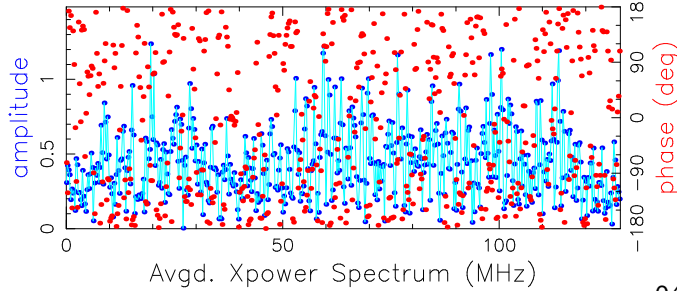
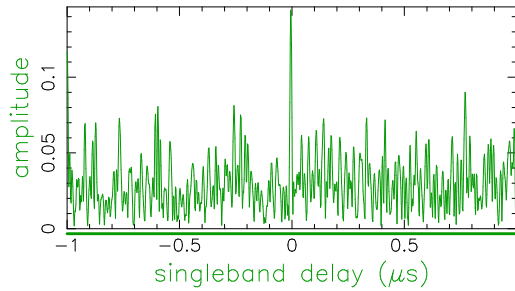
VLBA_KP - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)



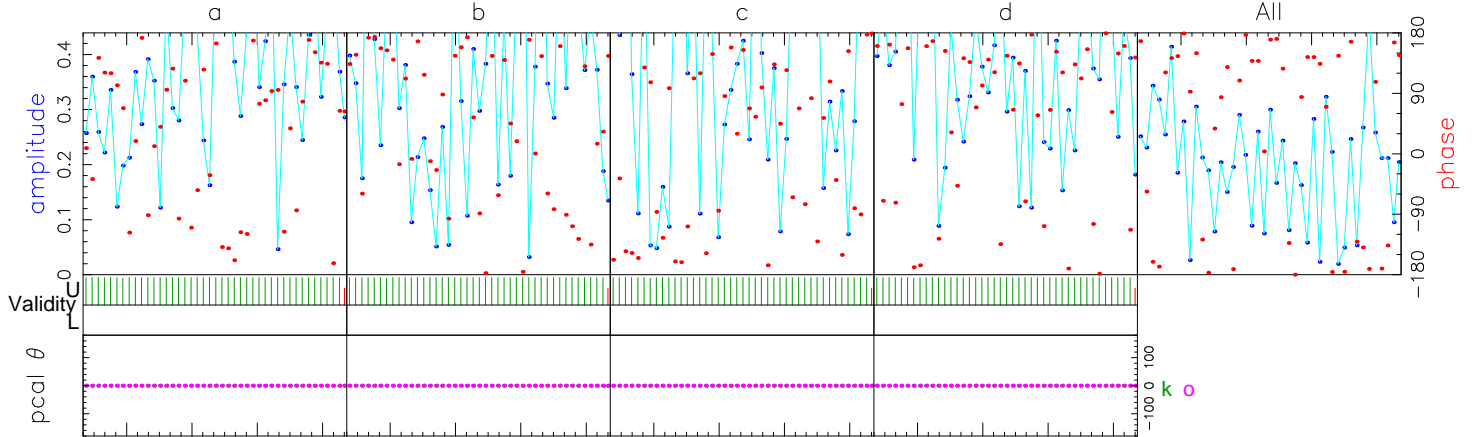
Fringe quality 0

SNR 6.2
 Int time 239.795
 Amp 0.146
 Phase 161.6
 PFD 7.1e-02
 Delays (us)
 SBD -0.005040
 MBD -0.003931
 Fringe rate (Hz)
 0.001524
 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
	156.8	161.7	-179.8	151.0	Phase	161.6
	0.1	0.2	0.1	0.2	Ampl.	0.1
	623.8	510.6	684.3	509.8	Sbd box	510.4
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	1.42299140038E+03	Apriori delay (usec)	1.42299533177E+03	Resid mbdelay (usec)	-3.93139E-03	+/- 1.8E-04
Group delay (usec) (SBD)	1.42299029227E+03	Apriori clock (usec)	-2.4927328E+01	Resid sbdelay (usec)	-5.03950E-03	+/- 6.9E-04
Sband delay (usec)	1.42299534218E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	1.04044E-05	+/- 1.2E-06
Phase delay (usec)	-1.21385317776E-01	Apriori rate (us/s)	-1.21385353110E-01	Resid rate (us/s)	3.53336E-08	+/- 8.6E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-8.50335869937E-06	Resid phase (deg)	161.6	+/- 18.5
Total phase (deg)	22.2					

	RMS	Theor.	Amplitude	0.146 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.7	60.6	Search (1024X16)	0.142	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	81.6	105.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	15.5	18.5	Inc. seg. avg.	0.130	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	20.8	32.2	Inc. frq. avg.	0.140	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 153.1 el 60.9 pa -22.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator

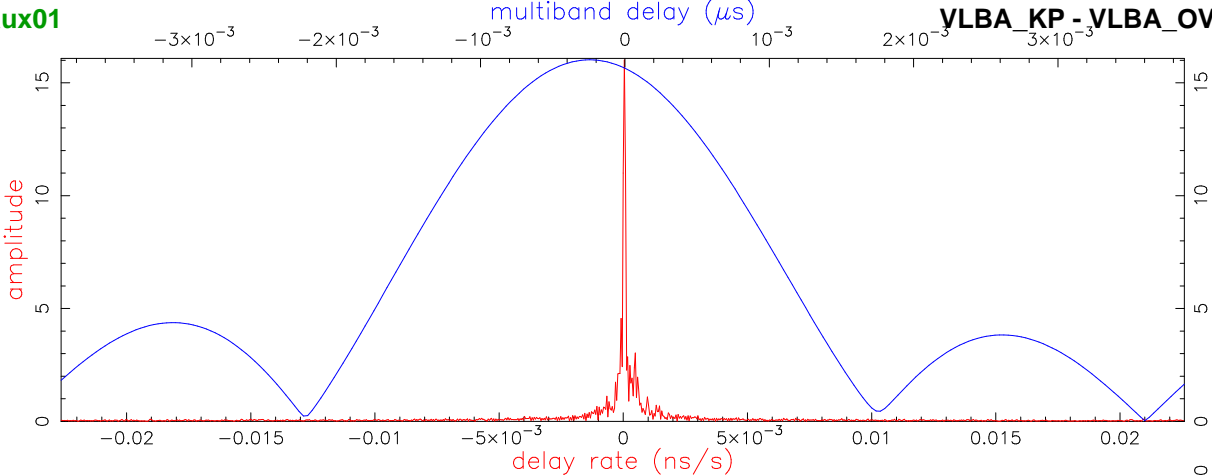
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.116.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, ko

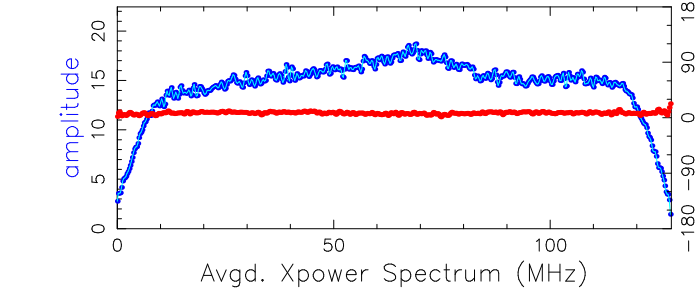
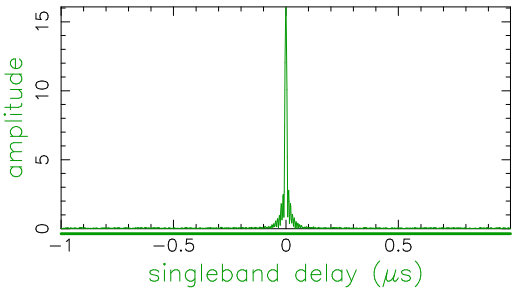
VLBA_KP - VLBA_OV, fgroup Q, pol LL



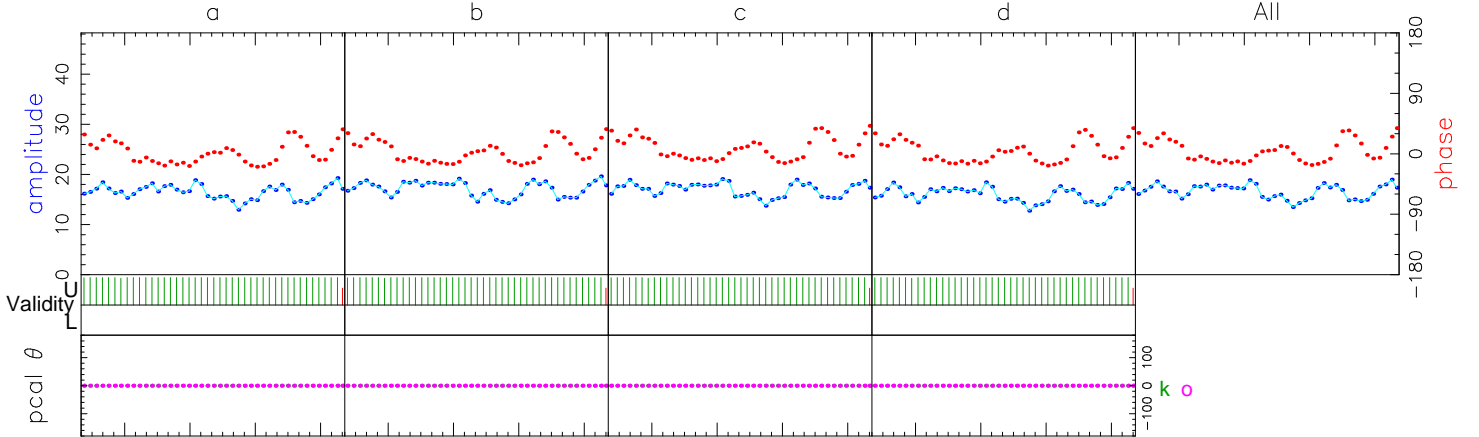
Fringe quality 8

SNR 681.1
 Int time 239.795
 Amp 16.084
 Phase 3.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.000430
 MBD -0.000268
 Fringe rate (Hz) 0.002498
 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		
k	1000	1000	1000	1000	APs used	1000
o	1000	1000	1000	1000	PC freqs	1000
k:o	0:0	0:0	0:0	0:0	PC phase	0:0
k:o	0:0	0:0	0:0	0:0	Manl PC	0:0
k	1000	1000	1000	1000	PC amp	1000
o	1000	1000	1000	1000		1000
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	1.42299506419E+03	Apriori delay (usec)	1.42299533177E+03	Resid mbdelay (usec)	-2.67581E-04	+/- 1.6E-06
Group delay (usec) (SBD)	1.42299490152E+03	Apriori clock (usec)	-2.4927328E+01	Resid sbdelay (usec)	-4.30250E-04	+/- 6.3E-06
Sband delay (usec)	1.42299533202E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	2.49316E-07	+/- 1.1E-08
Phase delay (usec)	-1.21385295207E-01	Apriori rate (us/s)	-1.21385353110E-01	Resid rate (us/s)	5.79028E-08	+/- 7.8E-11
Delay rate (us/s)		Apriori accel (us/s/s)	-8.50335869937E-06	Resid phase (deg)	3.9	+/- 0.2
Total phase (deg)	224.4					

	RMS	Theor.	Amplitude	16.084 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	15.9	0.6	Search (1024X16)	15.134	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	9.2	1.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.5	0.2	Inc. seg. avg.	16.650	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.7	0.3	Inc. frq. avg.	16.032	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 153.1 el 60.9 pa -22.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator

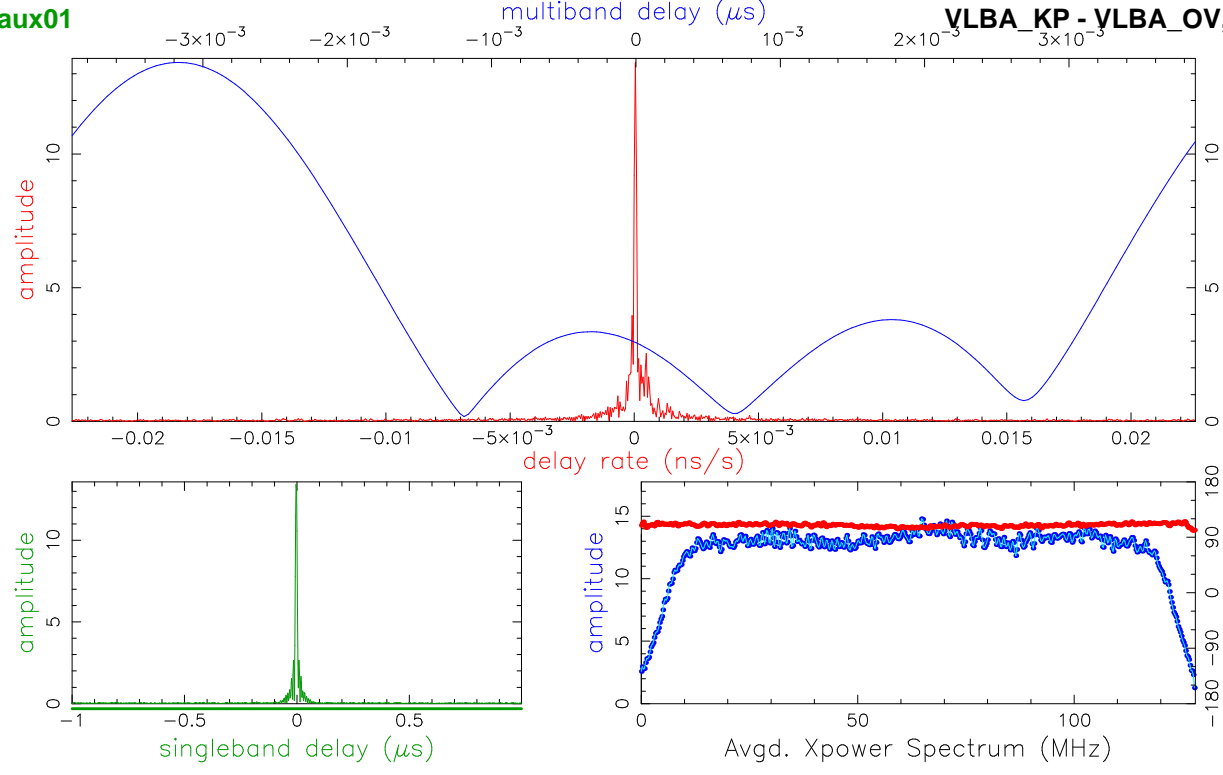
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.45.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, ko

VLBA_KP - VLBA_OV, fgroup Q, pol RR

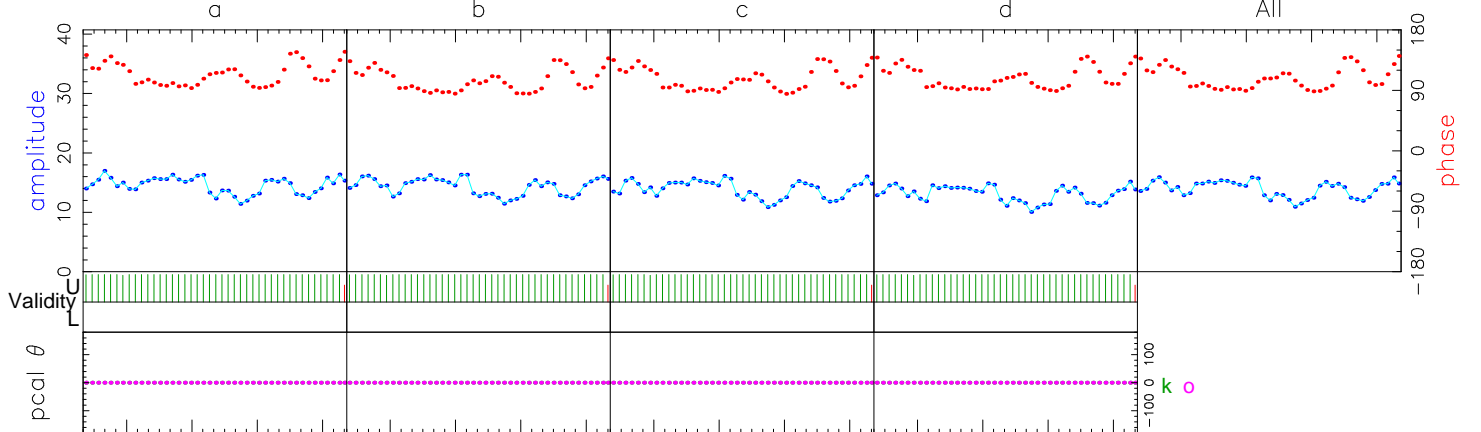


Fringe quality 8

SNR 574.9
 Int time 239.795
 Amp 13.576
 Phase 108.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.003199
 MBD -0.003138
 Fringe rate (Hz)
 0.002492
 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		
k	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

	1.42299219344E+03	Apriori delay (usec)	1.42299533177E+03	Resid mbdelay (usec)	-3.13833E-03	+/- 1.9E-06
Group delay (usec) (SBD)	1.42299213315E+03	Apriori clock (usec)	-2.4927328E+01	Resid sbdelay (usec)	-3.19863E-03	+/- 7.5E-06
Sband delay (usec)	1.42299533874E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	6.96714E-06	+/- 1.3E-08
Phase delay (usec)	-1.21385295348E-01	Apriori rate (us/s)	-1.21385353110E-01	Resid rate (us/s)	5.77613E-08	+/- 9.3E-11
Delay rate (us/s)		Apriori accel (us/s/s)	-8.50335869937E-06	Resid phase (deg)	108.2	+/- 0.2
Total phase (deg)	328.8					

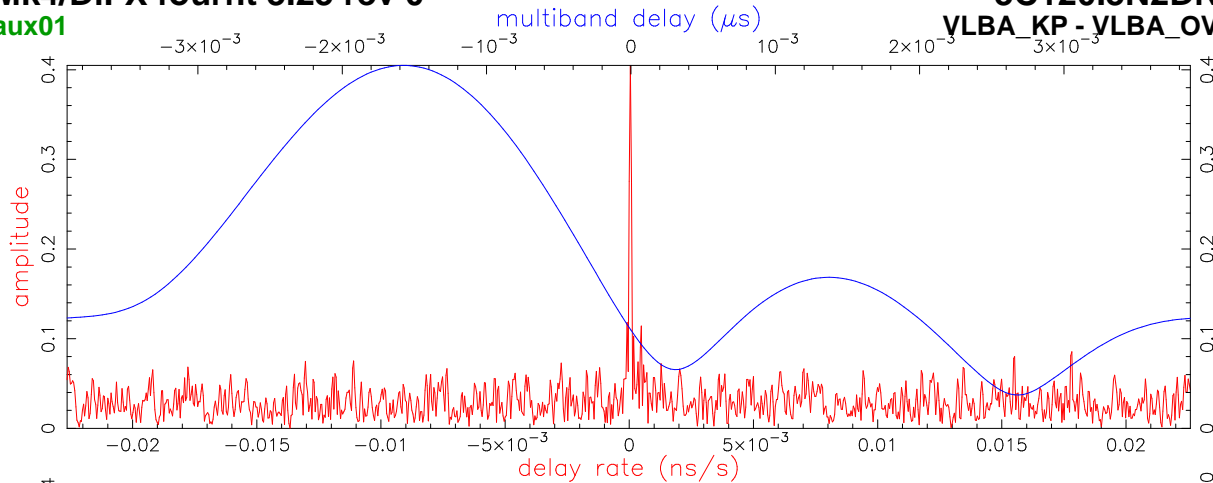
ph/seg (deg) 15.9 0.7 Search (1024X16) 12.676 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.2 1.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.9 0.2 Inc. seg. avg. 13.956 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 4.1 0.3 Inc. frq. avg. 13.445 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 k: az 153.1 el 60.9 pa -22.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.65.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

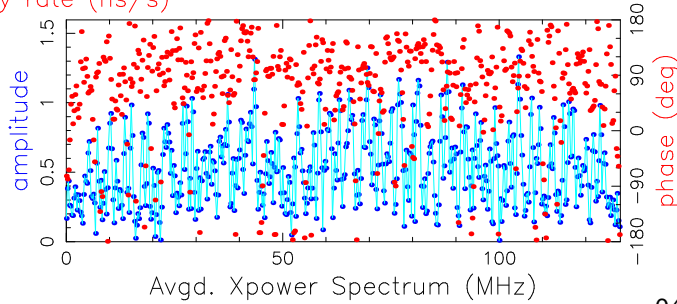
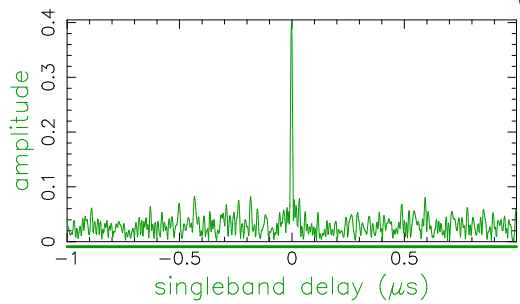
3C120.3N2DRC, No0552, ko

VLBA_KP - VLBA_OV, fgroup Q, pol LR



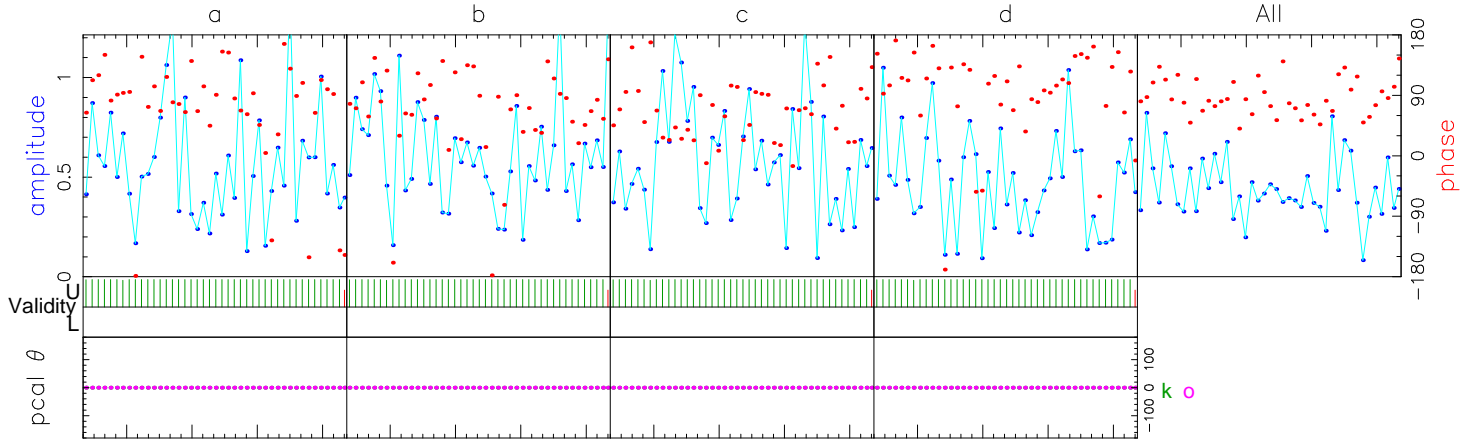
Fringe quality 8

SNR 17.1
 Int time 239.795
 Amp 0.405
 Phase 87.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.002049
 MBD -0.001580
 Fringe rate (Hz)
 0.002616
 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		
k	1000	1000	1000	1000		
o	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000		
o	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.42299375182E+03	Apriori delay (usec)	1.42299533177E+03	Resid mbdelay (usec)	-1.57996E-03	+/-	6.5E-05
Sband delay (usec)	1.42299328265E+03	Apriori clock (usec)	-2.4927328E+01	Resid sbdelay (usec)	-2.04913E-03	+/-	2.5E-04
Phase delay (usec)	1.42299533738E+03	Apriori clockrate (us/s)	-3.2906598E-07	Resid phdelay (usec)	5.60256E-06	+/-	4.3E-07
Delay rate (us/s)	-1.21385292473E-01	Apriori rate (us/s)	-1.21385353110E-01	Resid rate (us/s)	6.06362E-08	+/-	3.1E-09
Total phase (deg)	307.6	Apriori accel (us/s/s)	-8.50335869937E-06	Resid phase (deg)	87.0	+/-	6.7

ph/seg (deg)	26.2	Theor.	21.9	Amplitude	0.405 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	39.5		38.3	Search (1024X16)	0.383	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	30.8		6.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	12.8		11.7	Inc. seg. avg.	0.417	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.432	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

k: az 153.1 el 60.9 pa -22.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator

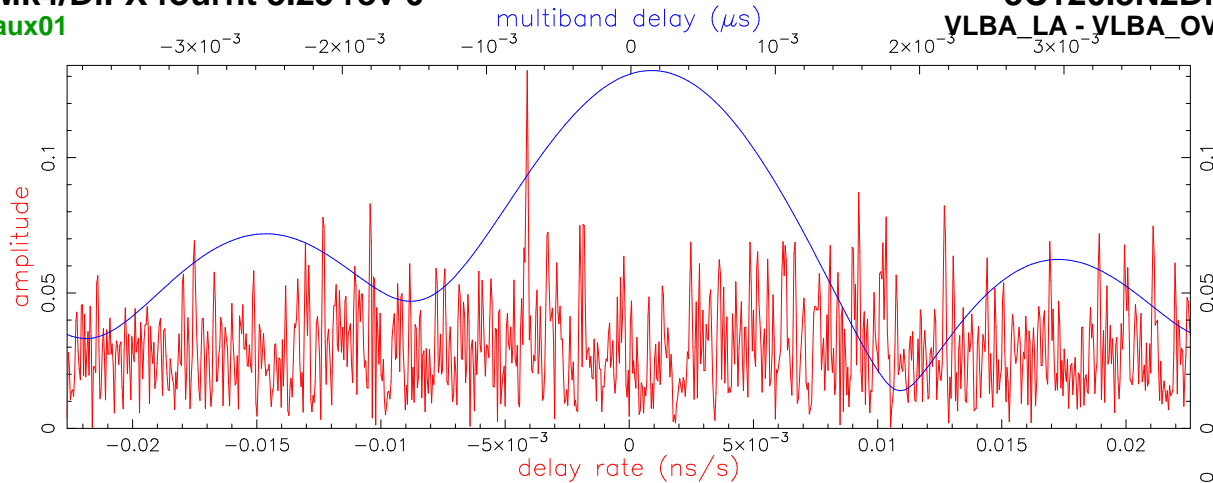
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.96.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

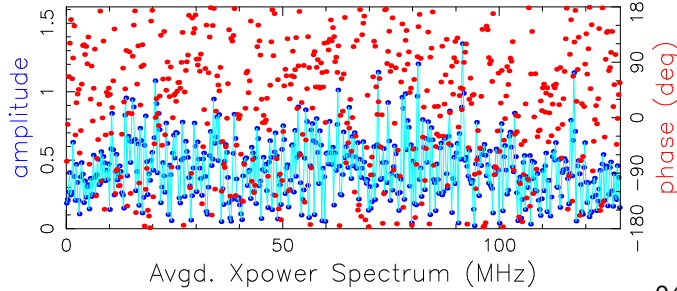
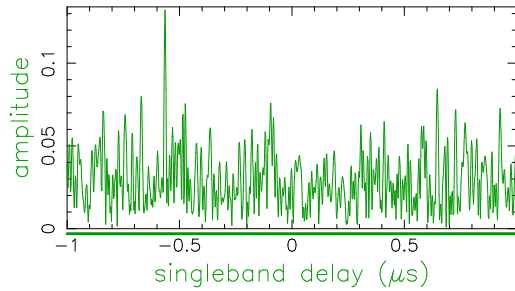
3C120.3N2DRC, No0552, lo

VLBA_LA - VLBA_OV, fgroup Q, pol LR



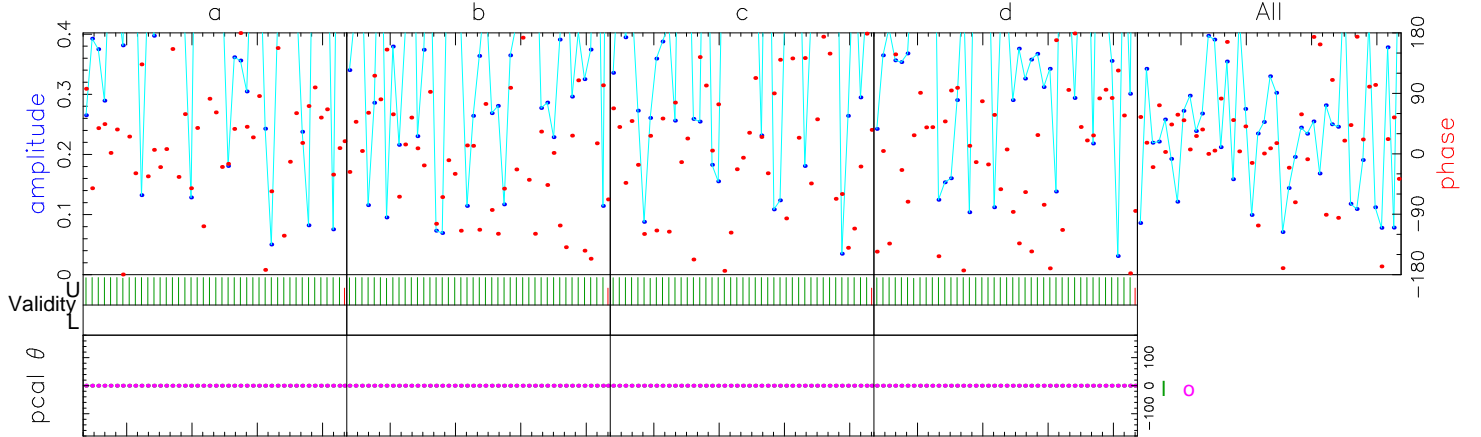
Fringe quality 0

SNR 5.6
 Int time 239.795
 Amp 0.134
 Phase -67.8
 PFD 9.3e-01
 Delays (us)
 SBD -0.564539
 MBD 0.000137
 Fringe rate (Hz)
 -0.178868
 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
U/L	469/0	469/0	469/0	469/0		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.01760474949E+03	Apriori delay (usec)	1.01816711256E+03	Resid mbdelay (usec)	1.36935E-04	+/-	2.0E-04
Sband delay (usec)	1.01760257331E+03	Apriori clock (usec)	-3.3405449E-01	Resid sbdelay (usec)	-5.64539E-01	+/-	7.7E-04
Phase delay (usec)	1.01816711399E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	1.42979E-06	+/-	1.3E-06
Delay rate (us/s)	-2.49203171466E-01	Apriori rate (us/s)	-2.49199025255E-01	Resid rate (us/s)	-4.14621E-06	+/-	9.5E-09
Total phase (deg)	-343.0	Apriori accel (us/s/s)	-5.80808454515E-06	Resid phase (deg)	-67.8	+/-	20.5

ph/seg (deg)	RMS 75.1	Theor. 67.1	Amplitude Search (1024X16)	0.134 +/- 0.024	0.129	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	119.3	117.1	Interp.	0.000	0.129	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	19.7	20.5	Inc. seg. avg.	0.147	0.129	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	46.1	35.7	Inc. frq. avg.	0.129	0.129	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

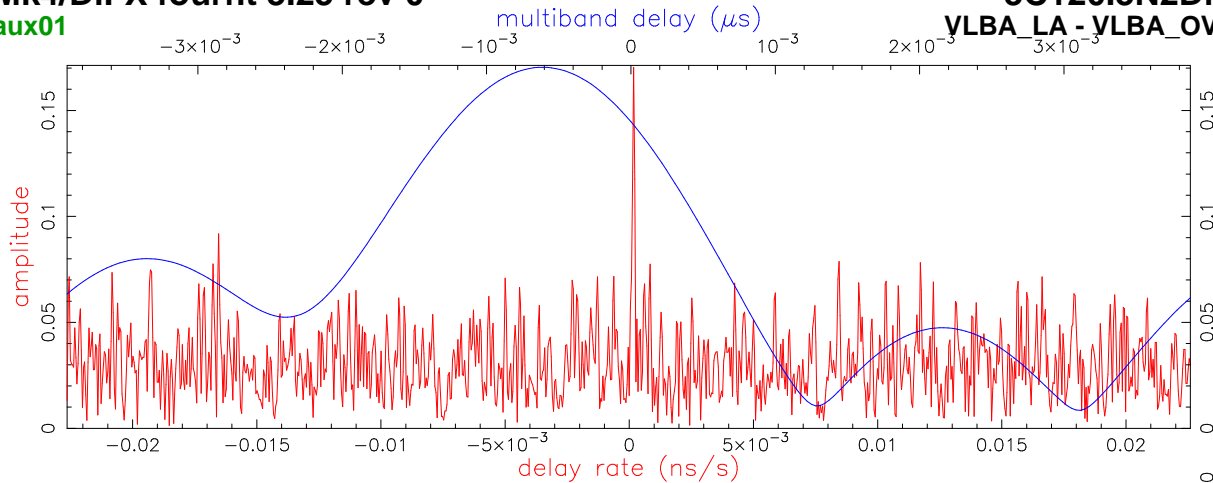
l: az 165.6 el 58.9 pa -11.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 714.801 -110.999 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.114.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

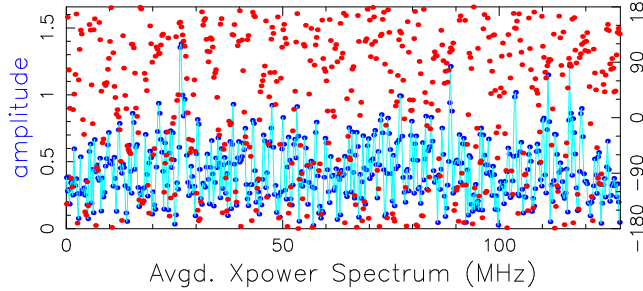
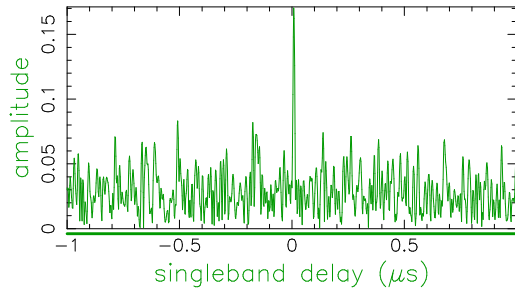
3C120.3N2DRC, No0552, lo

VLBA_LA - VLBA_OV, fgroup Q, pol RL



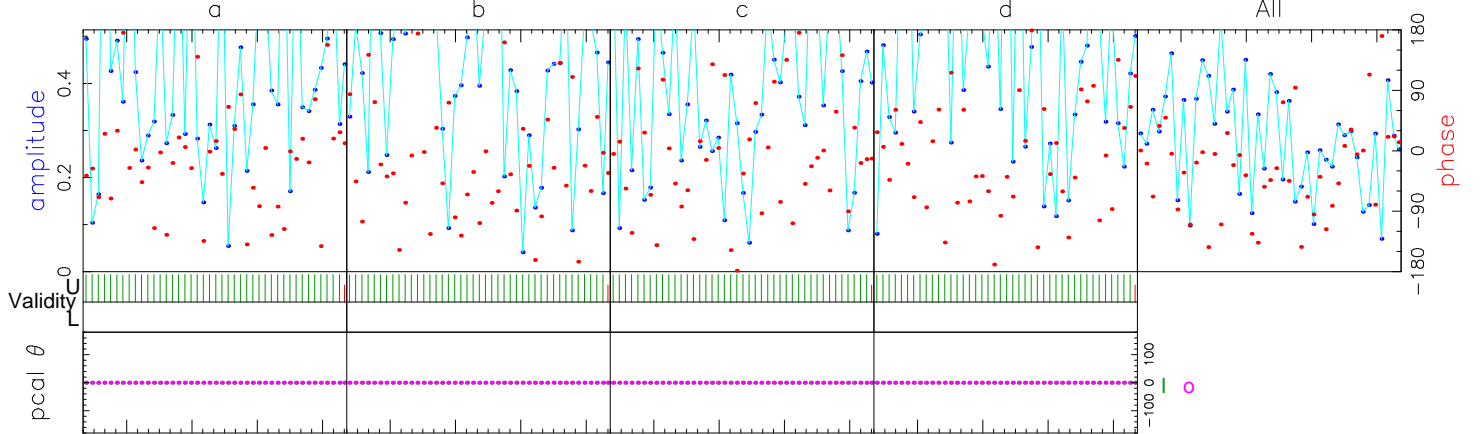
Fringe quality 9

SNR 7.3
 Int time 239.795
 Amp 0.171
 Phase 252.8
 PFD 6.4e-05
 Delays (us)
 SBD 0.008281
 MBD -0.000590
 Fringe rate (Hz)
 0.007209
 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
 2025:049:102442
 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		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
o	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.01817433530E+03	Apriori delay (usec)	1.01816711256E+03	Resid mbdelay (usec)	-5.89761E-04	+/-	1.5E-04
Sband delay (usec)	1.01817539381E+03	Apriori clock (usec)	-3.3405449E-01	Resid sbdelay (usec)	8.28125E-03	+/-	5.9E-04
Phase delay (usec)	1.01816711073E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-1.83080E-06	+/-	1.0E-06
Delay rate (us/s)	-2.49198858148E-01	Apriori rate (us/s)	-2.49199025255E-01	Resid rate (us/s)	1.67107E-07	+/-	7.3E-09
Total phase (deg)	337.7	Apriori accel (us/s/s)	-5.80808454515E-06	Resid phase (deg)	252.8	+/-	15.8

ph/seg (deg)	66.1	Theor.	51.8	Amplitude	0.171 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	93.1	Search (1024X16)	0.167	Search	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	14.8	Inc. seg. avg.	0.203	Inc. seg. avg.	0.203	Bits/sample: 2x2	mb window (us)	-0.004 0.004
amp/frq (%)	28.8	Inc. frq. avg.	0.167	Inc. frq. avg.	0.167	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

l: az 165.6 el 58.9 pa -11.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 714.801 -110.999 simultaneous interpolator

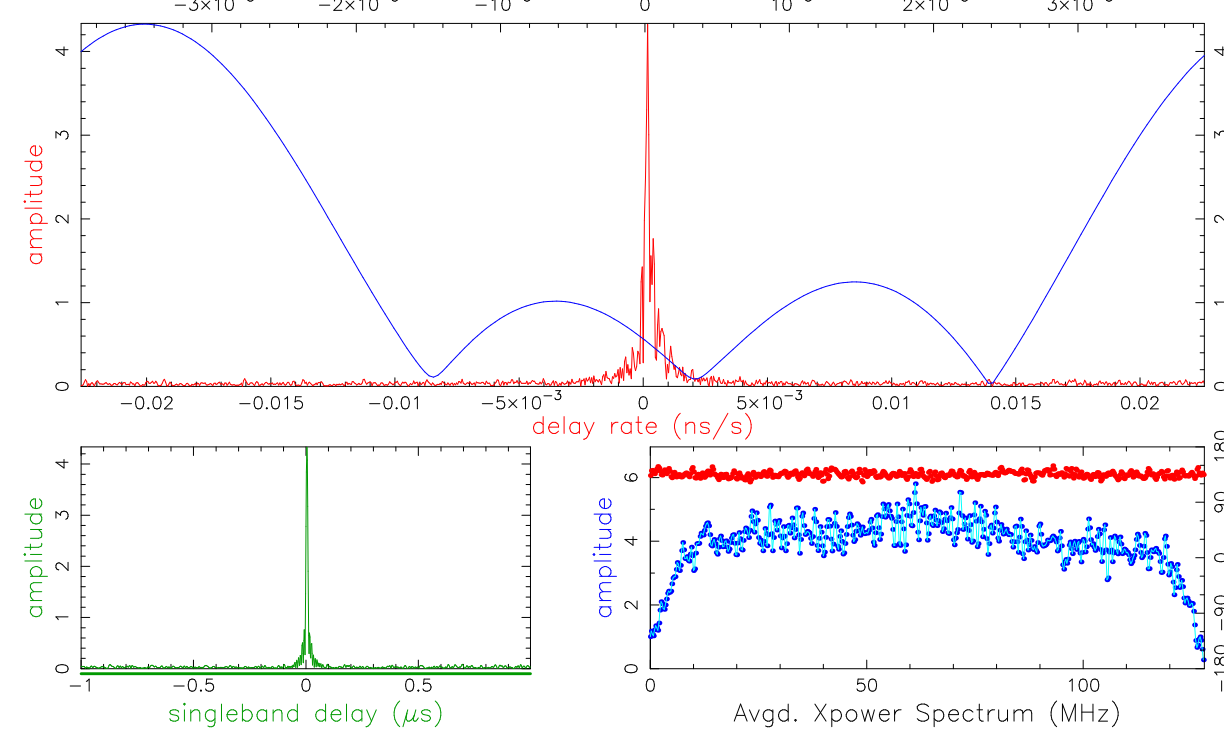
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.132.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lo

VLBA_LA - VLBA_OV, fgroup Q, pol LL

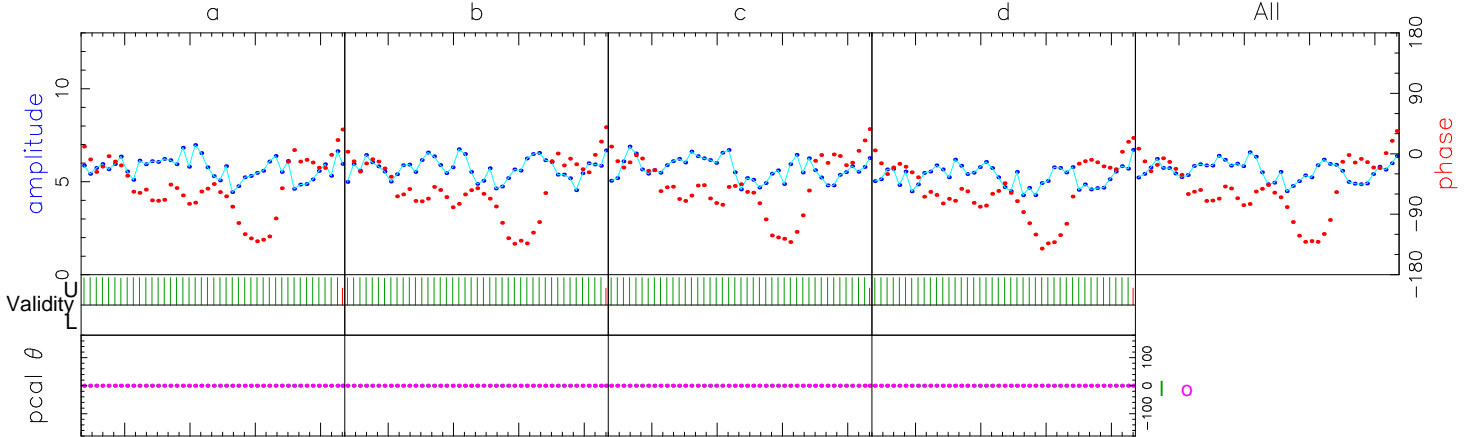


Fringe quality 6

SNR 183.6
 Int time 239.795
 Amp 4.336
 Phase 232.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.004221
 MBD -0.003449
 Fringe rate (Hz) 0.007425
 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



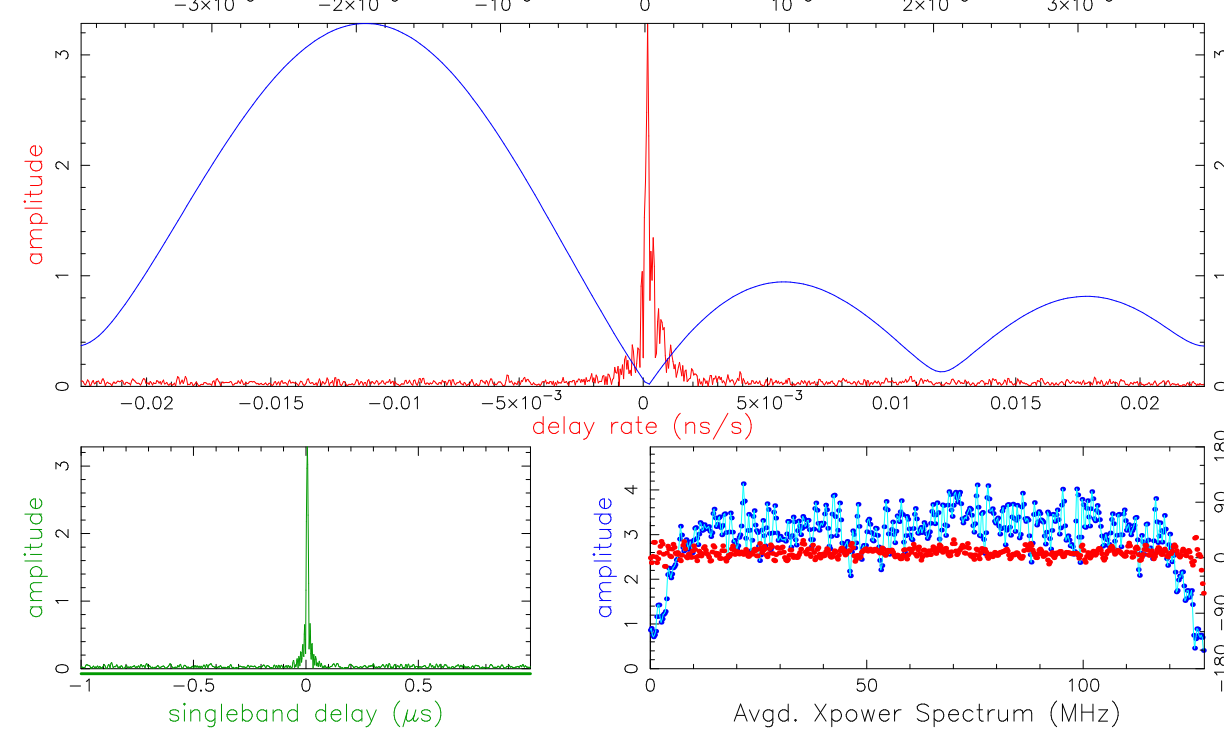
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-47.1	-49.9	-44.8	-51.6	Phase	-48.3
4.4	4.4	4.4	4.1	Ampl.	4.3
515.0	515.4	515.2	515.1	Sbd box	515.2
U/L 469/0	469/0	469/0	469/0	APs used	
l 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
l:o 0:0	0:0	0:0	0:0	PC phase	
l:o 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	1.01817147620E+03	Apriori delay (usec)	1.01816711256E+03	Resid mbdelay (usec)	-3.44885E-03 +/- 6.1E-06
Sband delay (usec)	1.01817133343E+03	Apriori clock (usec)	-3.3405449E-01	Resid sbdelay (usec)	4.22087E-03 +/- 2.3E-05
Phase delay (usec)	1.01816710945E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-3.11036E-06 +/- 4.0E-08
Delay rate (us/s)	-2.49198853151E-01	Apriori rate (us/s)	-2.49199025255E-01	Resid rate (us/s)	1.72104E-07 +/- 2.9E-10
Total phase (deg)	317.8	Apriori accel (us/s/s)	-5.80808454515E-06	Resid phase (deg)	232.9 +/- 0.6
RMS	Theor.	Amplitude	4.336 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
40.9	2.0	Search (1024X16)	4.289	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
31.3	3.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
3.7	0.6	Inc. seg. avg.	5.597	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
3.3	1.1	Inc. frq. avg.	4.330	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
l: az 165.6 el 58.9 pa -11.3	o: az 146.1 el 53.5 pa -26.2	u, v (fr/asec) 714.801 -110.999			simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.75.3N2DRC			

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lo

VLBA_LA - VLBA_OV, fgroup Q, pol RR

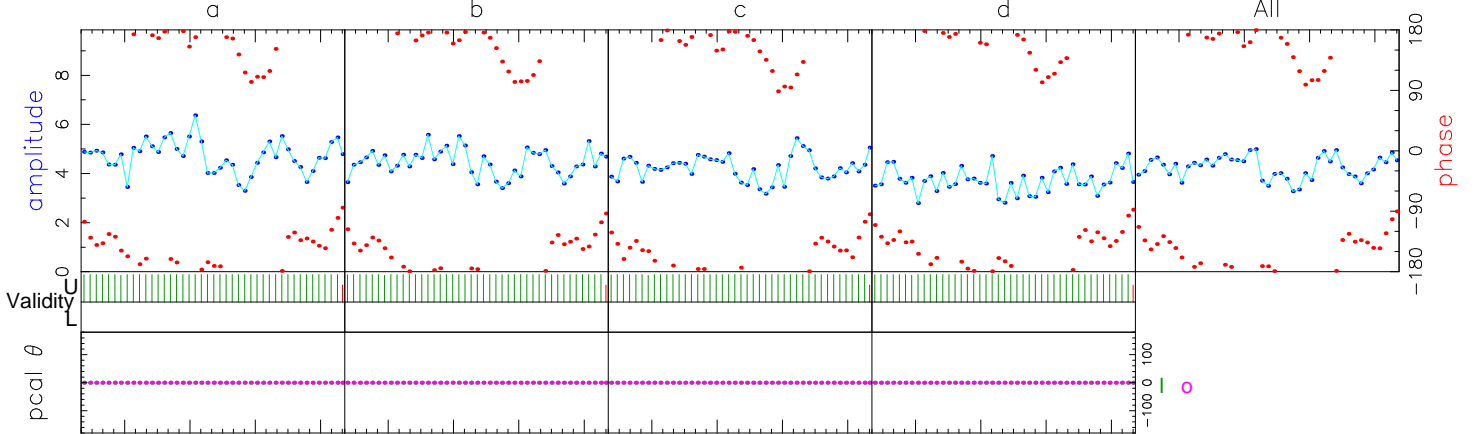


Fringe quality 6

SNR 139.1
 Int time 239.795
 Amp 3.285
 Phase 111.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.005961
 MBD -0.001930
 Fringe rate (Hz) 0.007435
 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		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
o	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.01817299523E+03	Apriori delay (usec)	1.01816711256E+03	Resid mbdelay (usec)	-1.92982E-03	+/-	8.0E-06
Sband delay (usec)	1.01817307331E+03	Apriori clock (usec)	-3.3405449E-01	Resid sbdelay (usec)	5.96075E-03	+/-	3.1E-05
Phase delay (usec)	1.01816710160E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	-1.09516E-05	+/-	5.3E-08
Delay rate (us/s)	-2.49198852899E-01	Apriori rate (us/s)	-2.49199025255E-01	Resid rate (us/s)	1.72356E-07	+/-	3.8E-10
Total phase (deg)	196.0	Apriori accel (us/s/s)	-5.80808454515E-06	Resid phase (deg)	111.2	+/-	0.8

ph/seg (deg)	41.3	2.7	Search (1024X16)	3.261	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	32.7	4.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	7.0	0.8	Inc. seg. avg.	4.256	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	9.2	1.4	Inc. frq. avg.	3.295	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
l: az 165.6 el 58.9 pa -11.3		o: az 146.1 el 53.5 pa -26.2		u,v (fr/asec)	714.801 -110.999		simultaneous interpolator	

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.92.3N2DRC

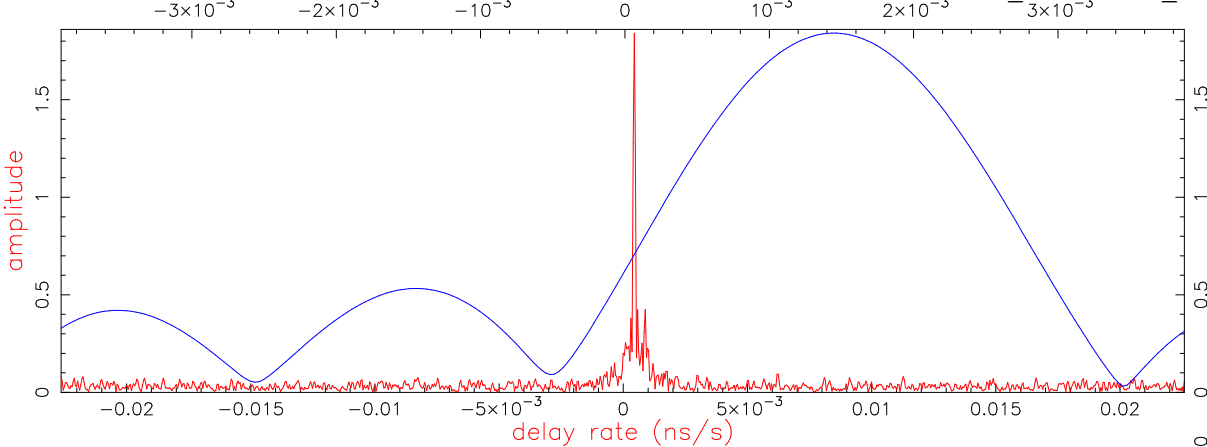
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mo

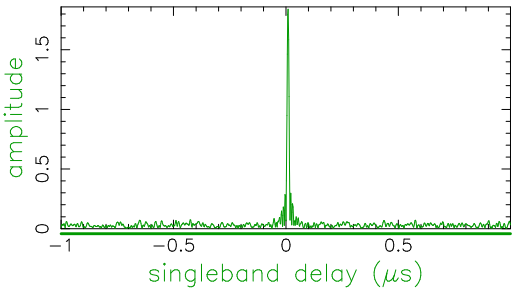
VLBA_MK - VLBA_OV, fgroup Q, pol LL

multiband delay (μ s)

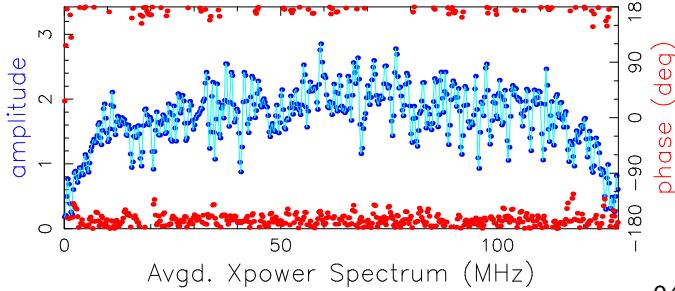


Fringe quality 8

SNR 78.8
 Int time 239.796
 Amp 1.860
 Phase 288.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.009072
 MBD 0.001412
 Fringe rate (Hz) 0.018471
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



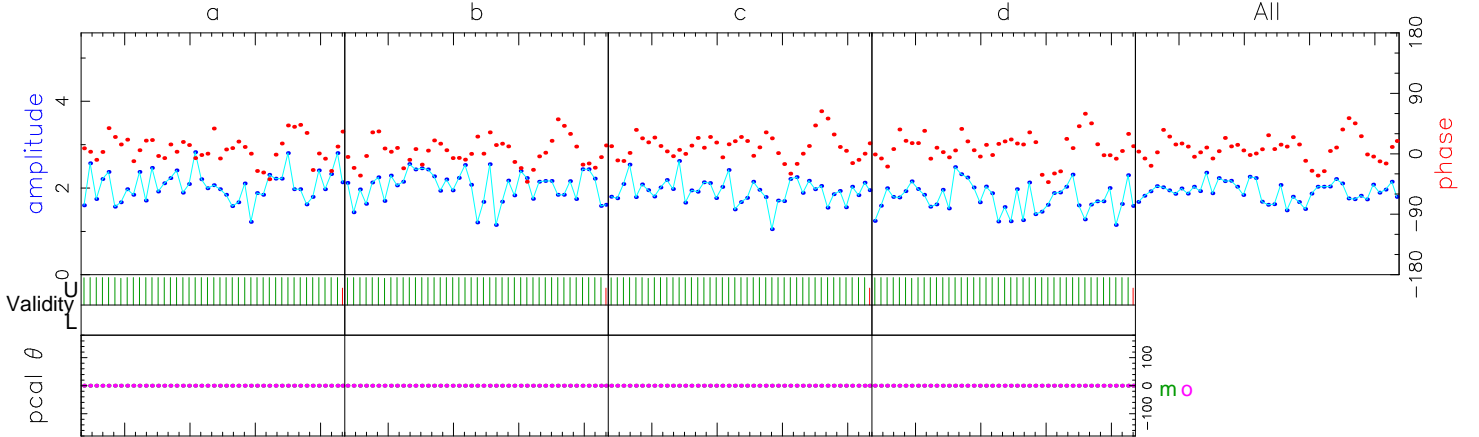
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241c
 Yr:day 1234
 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
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m:o	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-5.34847236999E+03	Apriori delay (usec)	-5.34848159465E+03	Resid mbdelay (usec)	1.41216E-03	+/- 1.4E-05
Sband delay (usec)	-5.34847252290E+03	Apriori clock (usec)	-2.4545906E+01	Resid sbdelay (usec)	9.07175E-03	+/- 5.5E-05
Phase delay (usec)	-5.34848159419E+03	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	4.54713E-07	+/- 9.4E-08
Delay rate (us/s)	8.09799663760E-01	Apriori rate (us/s)	8.09799235594E-01	Resid rate (us/s)	4.28166E-07	+/- 6.8E-10
Total phase (deg)	-69.2	Apriori accel (us/s/s)	2.54860167233E-05	Resid phase (deg)	288.3	+/- 1.5

ph/seg (deg)	17.9	Theor.	4.8	Amplitude	1.860 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	11.6		8.3	Search (1024X16)	1.761	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	4.7		1.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.0		2.5	Inc. seg. avg.	1.925	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
m: az 96.6 el 33.2 pa -69.8		o: az 146.1 el 53.5 pa -26.2		Inc. frq. avg.	1.843	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
							ion window (TEC) 0.00 0.00

m: az 96.6 el 33.2 pa -69.8 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) -2315.901 -1081.009 simultaneous interpolator

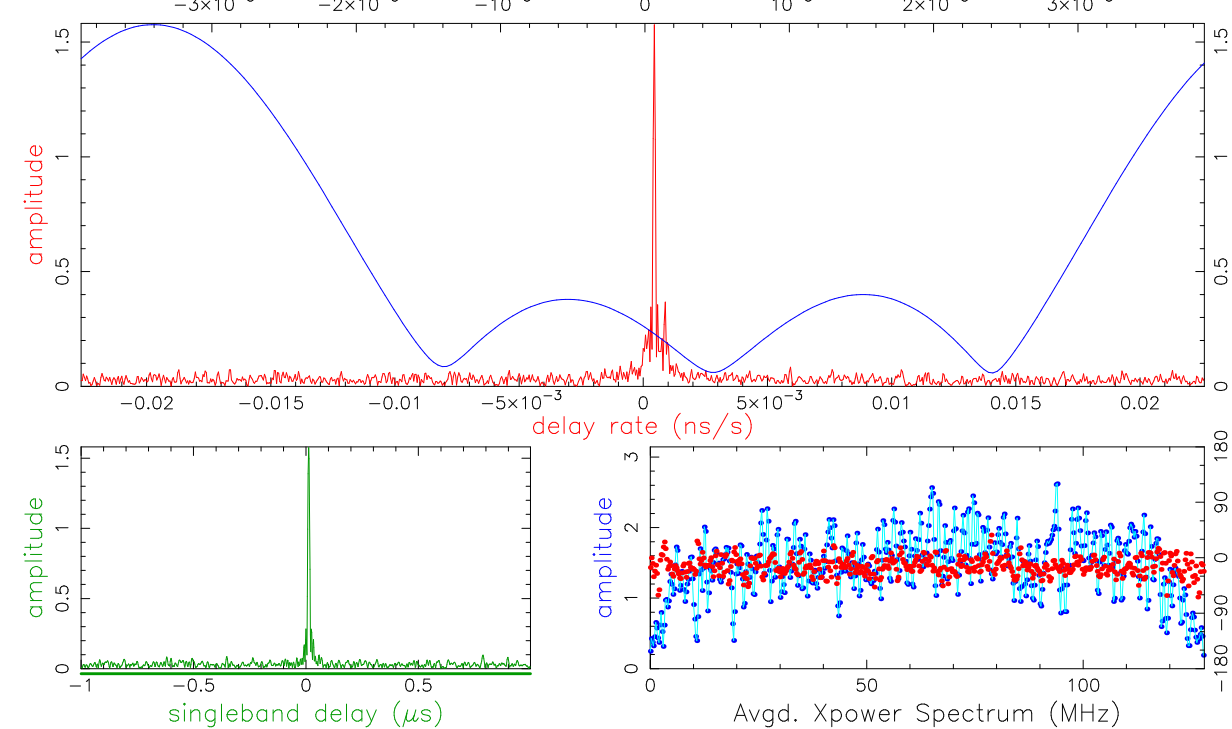
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mo.Q.102.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mo

VLBA_MK - VLBA_OV, fgroup Q, pol RR

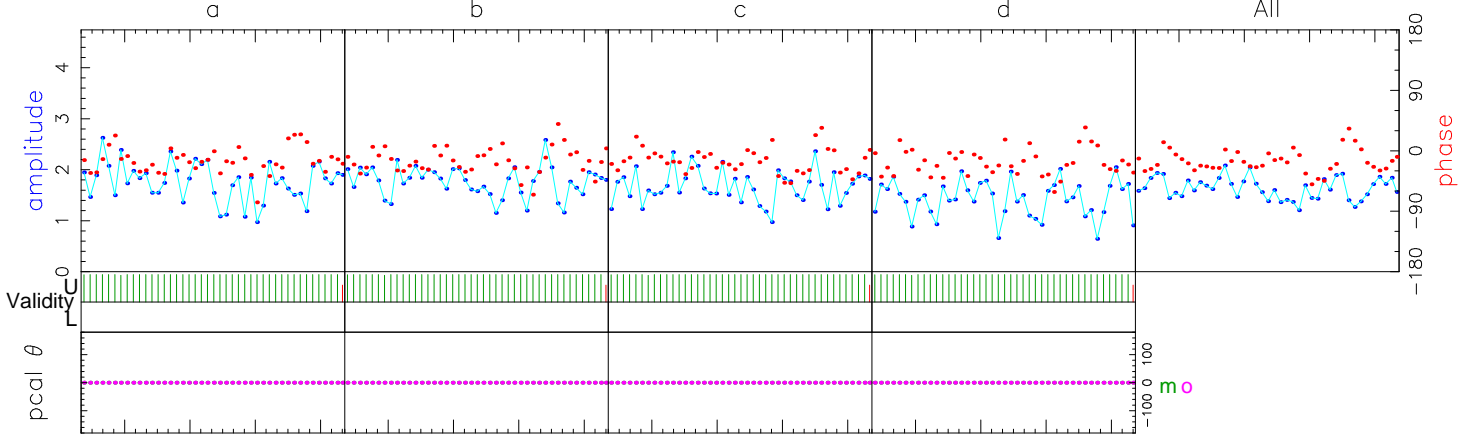


Fringe quality 8

SNR 67.0
 Int time 239.796
 Amp 1.582
 Phase 186.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.012118
 MBD -0.003385
 Fringe rate (Hz) 0.018490
 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



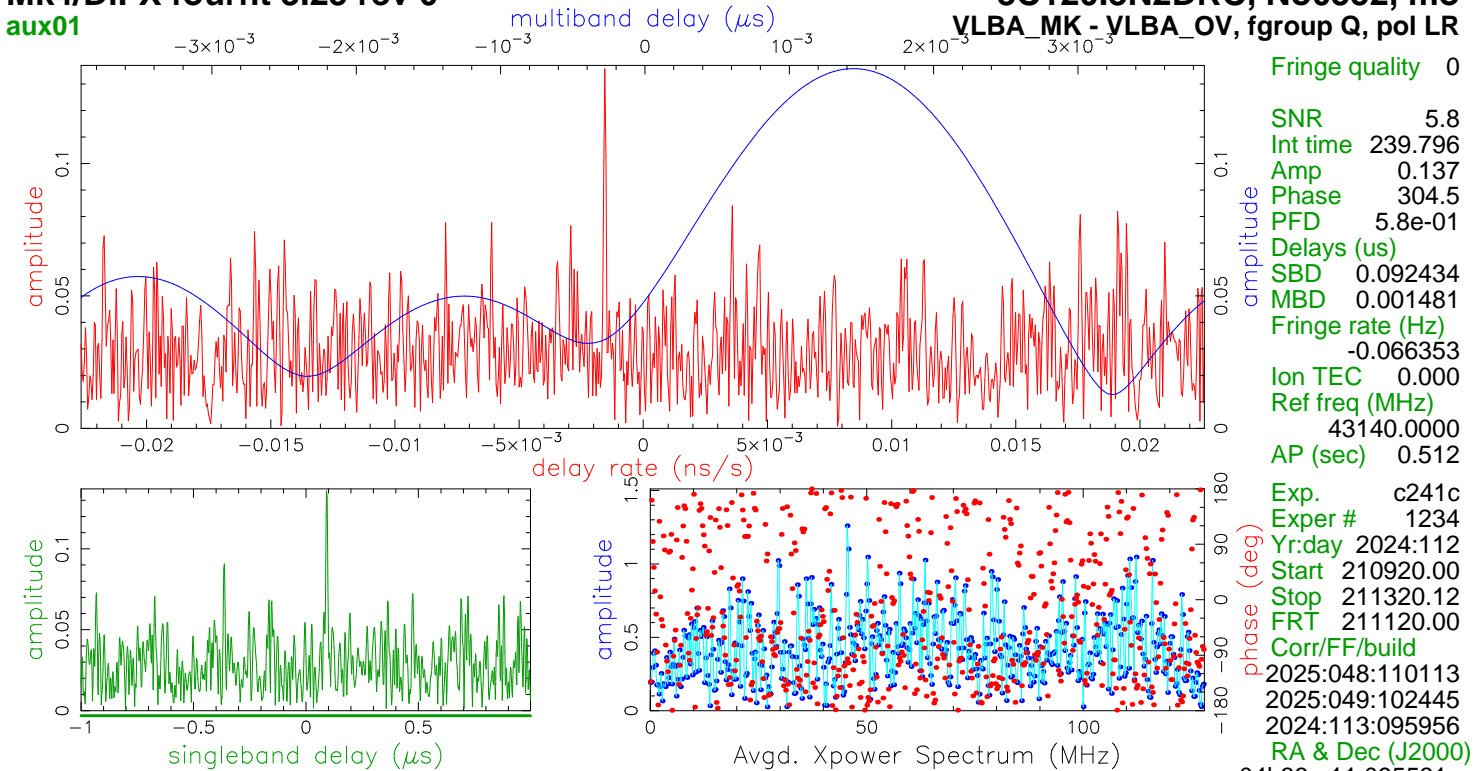
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	-5.34846935449E+03		Apriori delay (usec)	-5.34848159465E+03	Resid mbdelay (usec)	-3.38484E-03 +/- 1.7E-05
Sband delay (usec)	-5.34846947665E+03		Apriori clock (usec)	-2.4545906E+01	Resid sbdelay (usec)	1.21180E-02 +/- 6.4E-05
Phase delay (usec)	-5.34848159567E+03		Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	-1.02501E-06 +/- 1.1E-07
Delay rate (us/s)	8.09799664201E-01		Apriori rate (us/s)	8.09799235594E-01	Resid rate (us/s)	4.28607E-07 +/- 7.9E-10
Total phase (deg)		189.1	Apriori accel (us/s/s)	2.54860167233E-05	Resid phase (deg)	186.6 +/- 1.7
	RMS	Theor.	Amplitude	1.582 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	16.6	5.6	Search (1024X16)	1.511	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	13.8	9.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	2.2	1.7	Inc. seg. avg.	1.633	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	8.6	3.0	Inc. frq. avg.	1.576	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
m: az 96.6 el 33.2 pa -69.8		o: az 146.1 el 53.5 pa -26.2		u,v (fr/asec) -2315.901 -1081.009		simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/mo..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/mo.Q.119.3N2DRC		

Mk4/DiFX fourfit 3.25 rev 0

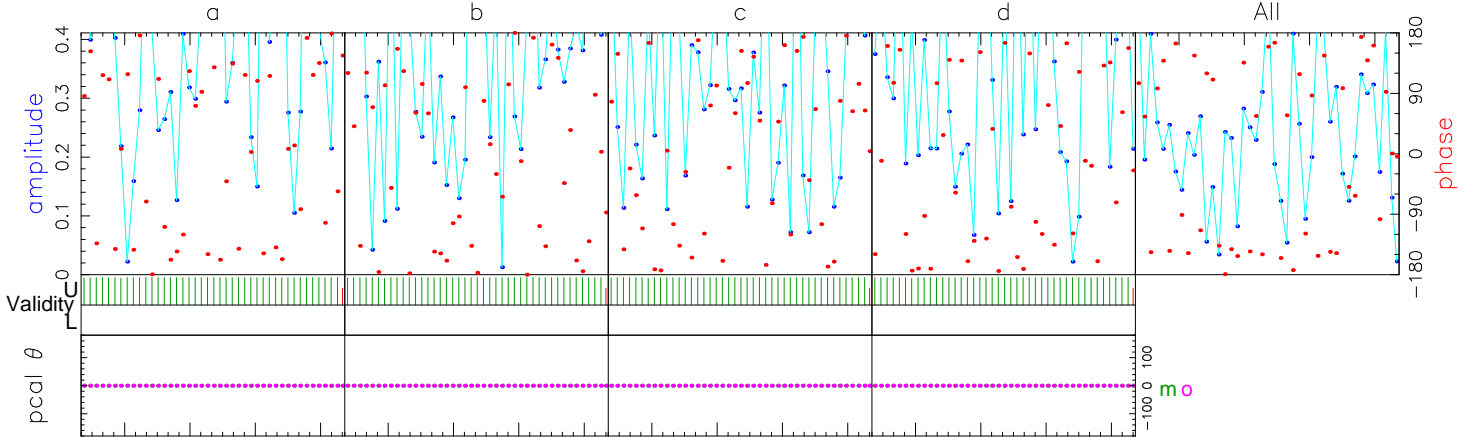
aux01

3C120.3N2DRC, No0552, mo

VLBA_MK - VLBA_OV, 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



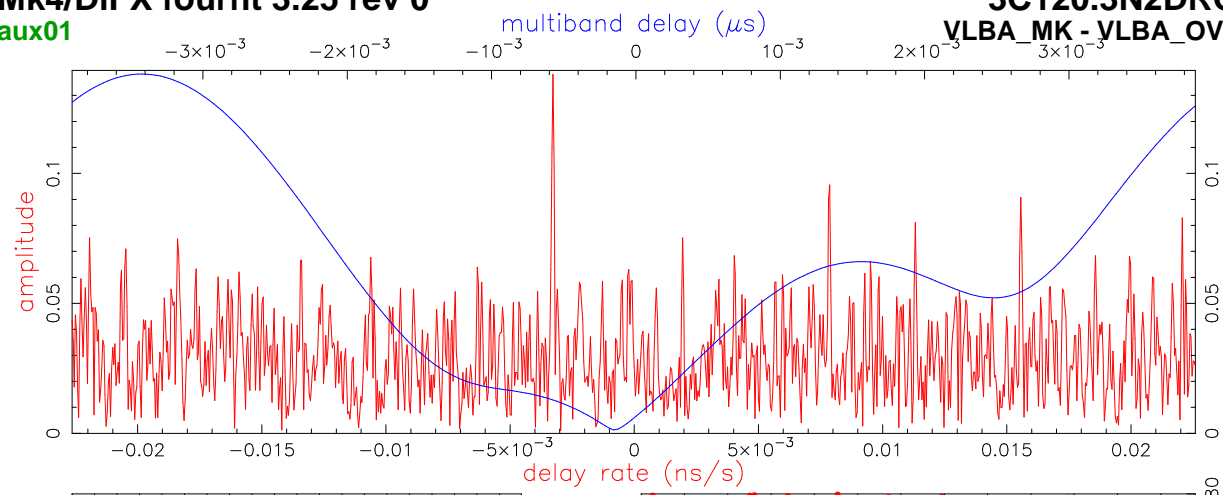
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m:o	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks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

Group delay (usec) (SBD)	-5.34838636385E+03	Apriori delay (usec)	-5.34848159465E+03	Resid mbdelay (usec)	1.48080E-03	+/-	1.9E-04
Sband delay (usec)	-5.34838916052E+03	Apriori clock (usec)	-2.4545906E+01	Resid sbdelay (usec)	9.24341E-02	+/-	7.4E-04
Phase delay (usec)	-5.34848158373E+03	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	1.09126E-05	+/-	1.3E-06
Delay rate (us/s)	8.09797697505E-01	Apriori rate (us/s)	8.09799235594E-01	Resid rate (us/s)	-1.53809E-06	+/-	9.2E-09
Total phase (deg)		Apriori accel (us/s/s)	2.54860167233E-05	Resid phase (deg)	304.5	+/-	19.8

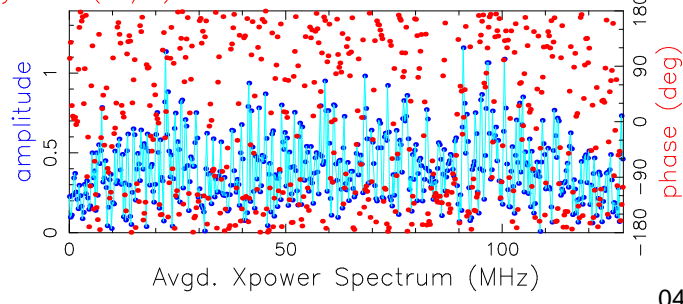
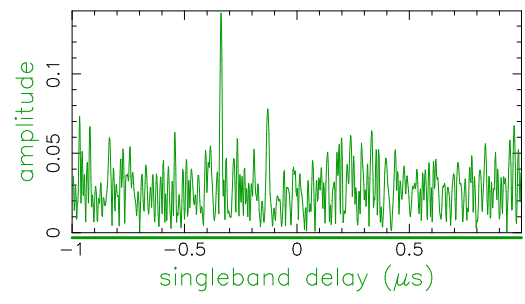
ph/seg (deg)	RMS 71.1	Theor. 64.9	Amplitude Search (1024X16)	0.137 +/- 0.024	0.130	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	113.8	113.2	Interp.	0.000	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	11.2	19.8	Inc. seg. avg.	0.146	0.130	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004	
amp/frq (%)	29.7	34.5	Inc. frq. avg.	0.129	0.129	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

m: az 96.6 el 33.2 pa -69.8 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) -2315.901 -1081.009 simultaneous interpolator

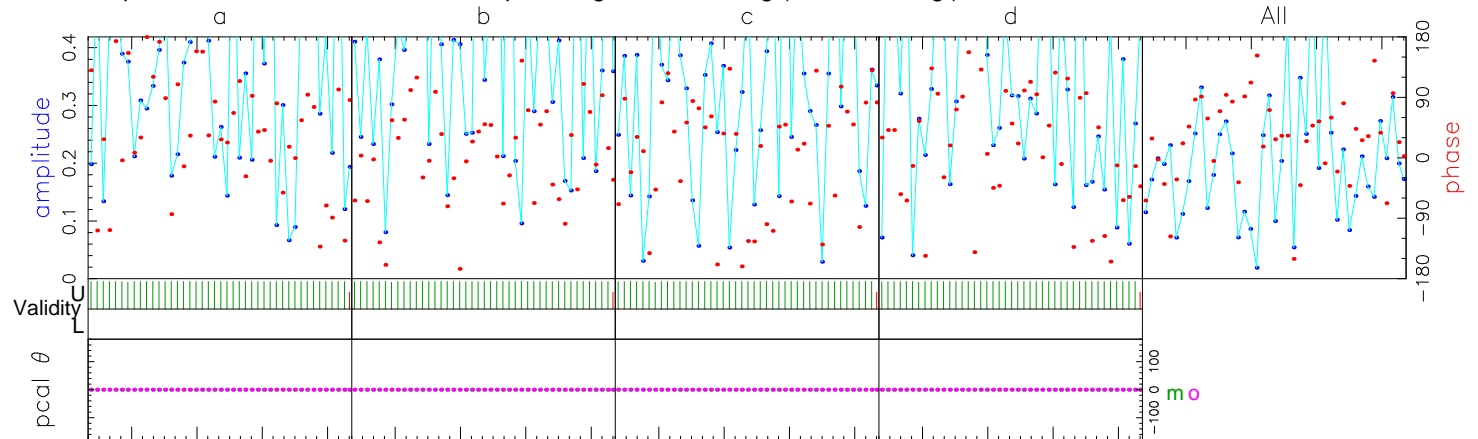
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//mo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//mo.Q.142.3N2DRC



Fringe quality 0
SNR 5.9
Int time 239.796
Amp 0.140
Phase -177.1
PFD 4.4e-01
Delays (us)
SBD -0.337533
MBD -0.003382
Fringe rate (Hz)
-0.140938
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
2025:049:102447
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



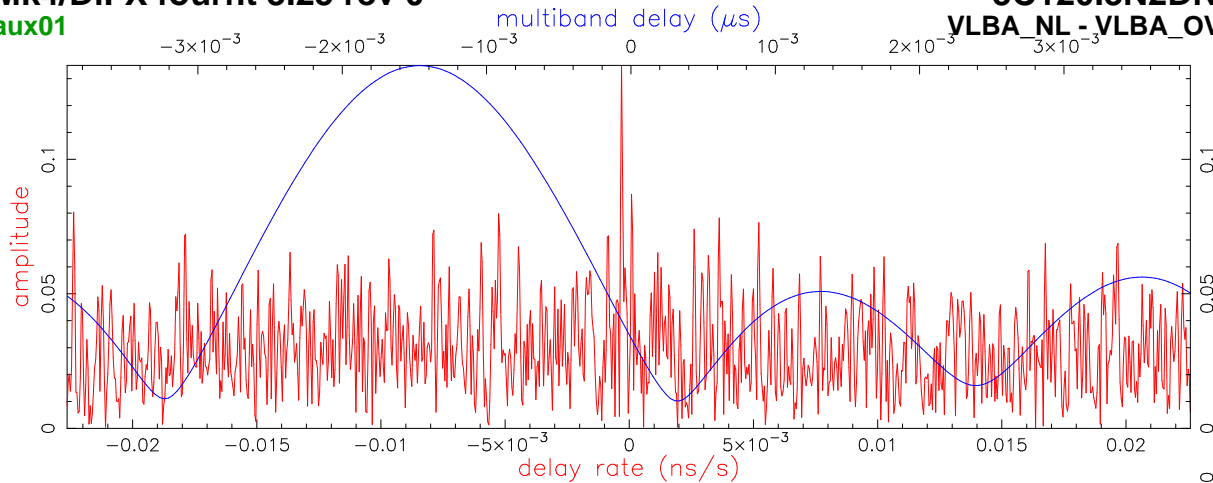
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
66.2	16.1	28.2	52.0	Phase	36.7
0.1	0.2	0.1	0.1	Ampl.	0.1
234.7	339.2	555.1	995.4	Sbd box	340.2
U/L 469/0	469/0	469/0	469/0	APs used	
m 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
m: 0:0	0:0	0:0	0:0	PC phase	
m: 0:0	0:0	0:0	0:0	Manl PC	
m 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
m Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	-5.34882091405E+03	Apriori delay (usec)	-5.34848159465E+03	Resid mbdelay (usec)	-3.38190E-03 +/- 1.9E-04
Sband delay (usec)	-5.34881912740E+03	Apriori clock (usec)	-2.4545906E+01	Resid sbdelay (usec)	-3.37533E-01 +/- 7.3E-04
Phase delay (usec)	-5.34848159229E+03	Apriori clockrate (us/s)	-4.9577204E-07	Resid phdelay (usec)	2.36004E-06 +/- 1.3E-06
Delay rate (us/s)	8.09795968612E-01	Apriori rate (us/s)	8.09799235594E-01	Resid rate (us/s)	-3.26698E-06 +/- 9.1E-09
Total phase (deg)	-174.6	Apriori accel (us/s/s)	2.54860167233E-05	Resid phase (deg)	-177.1 +/- 19.5
RMS	Theor.	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
62.6	64.1	Search (1024X16)	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
97.4	111.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
28.3	19.5	Inc. seg. avg.	0.129	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
32.9	34.1	Inc. frq. avg.	0.140	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
m: az 96.6 el 33.2 pa -69.8	o: az 146.1 el 53.5 pa -26.2	u, v (fr/asec)	-2315.901 -1081.009		simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552//mo..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552//mo.Q.155.3N2DRC			

Mk4/DiFX fourfit 3.25 rev 0

aux01

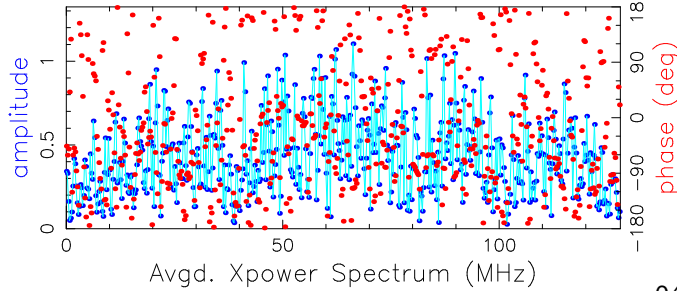
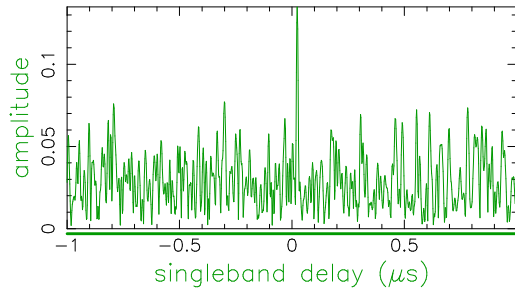
3C120.3N2DRC, No0552, no

VLBA_NL - VLBA_OV, fgroup Q, pol LL



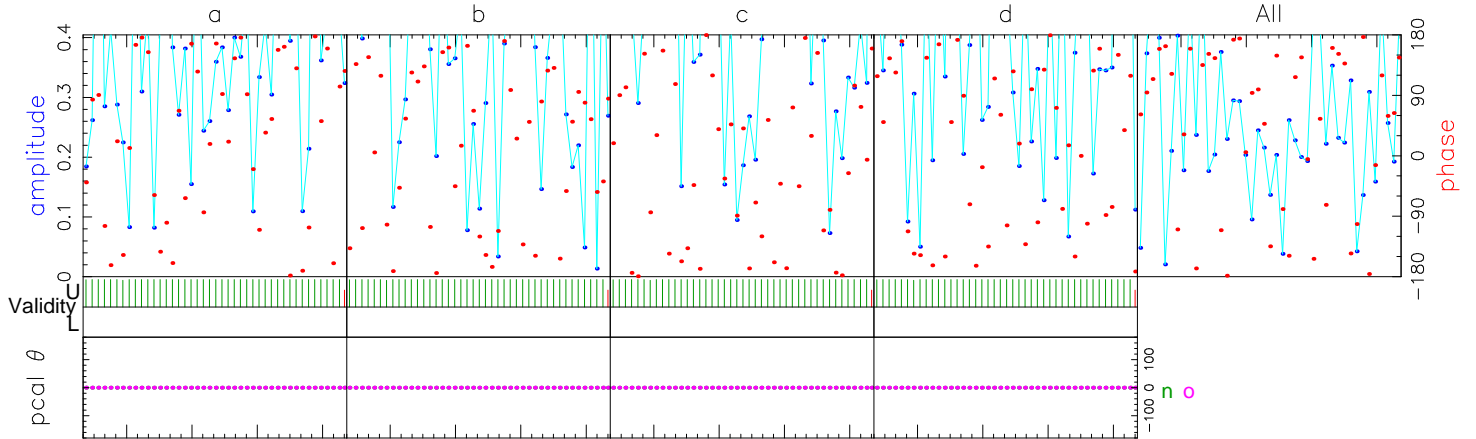
Fringe quality 0

SNR 5.7
 Int time 239.785
 Amp 0.135
 Phase 272.1
 PFD 7.5e-01
 Delays (us)
 SBD 0.023263
 MBD -0.001476
 Fringe rate (Hz)
 -0.013658
 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
 2025:049:102439
 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		
n	1000	1000	1000	1000		
o	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000		
o	1000	1000	1000	1000		
n	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-2.42390827335E+02	Apriori delay (usec)	-2.42412788619E+02	Resid mbdelay (usec)	-1.47622E-03	+/-	1.9E-04
Sband delay (usec)	-2.42389525869E+02	Apriori clock (usec)	-2.5353914E+01	Resid sbdelay (usec)	2.32628E-02	+/-	7.5E-04
Phase delay (usec)	-2.42412779067E+02	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	9.55212E-06	+/-	1.3E-06
Delay rate (us/s)	-5.55414807476E-01	Apriori rate (us/s)	-5.55414490886E-01	Resid rate (us/s)	-3.16591E-07	+/-	9.3E-09
Total phase (deg)	19.7	Apriori accel (us/s/s)	1.80267148895E-06	Resid phase (deg)	272.1	+/-	20.1

	RMS	Theor.	Amplitude	0.135 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	73.8	65.8	Search (1024X16)	0.132	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	134.4	114.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	12.3	20.1	Inc. seg. avg.	0.157	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	18.8	35.0	Inc. frq. avg.	0.128	Data rate(Mb/s): 2048				

n: az 192.0 el 53.1 pa 9.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 1600.479 277.651 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/./no..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/./no.Q.123.3N2DRC

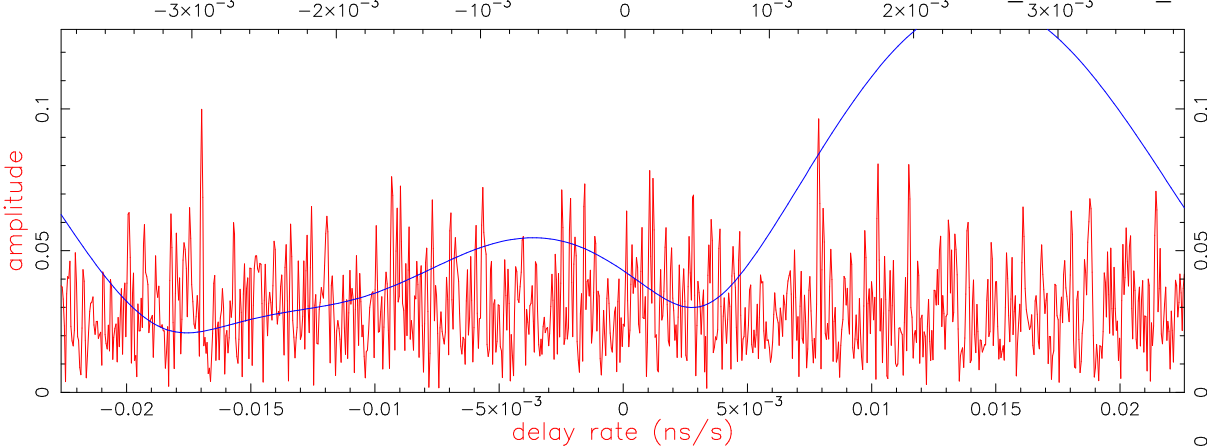
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, no

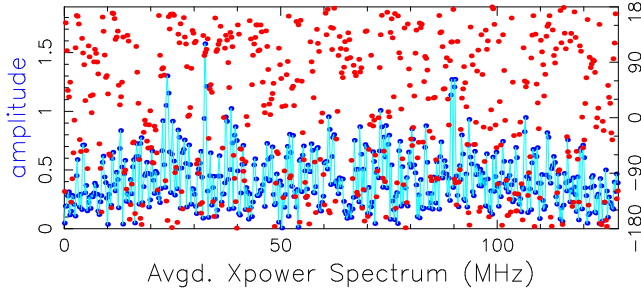
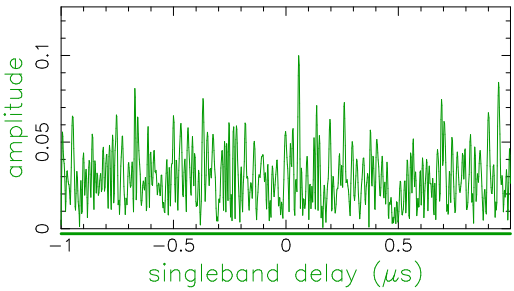
VLBA_NL - VLBA_OV, fgroup Q, pol RR

multiband delay (μ s)



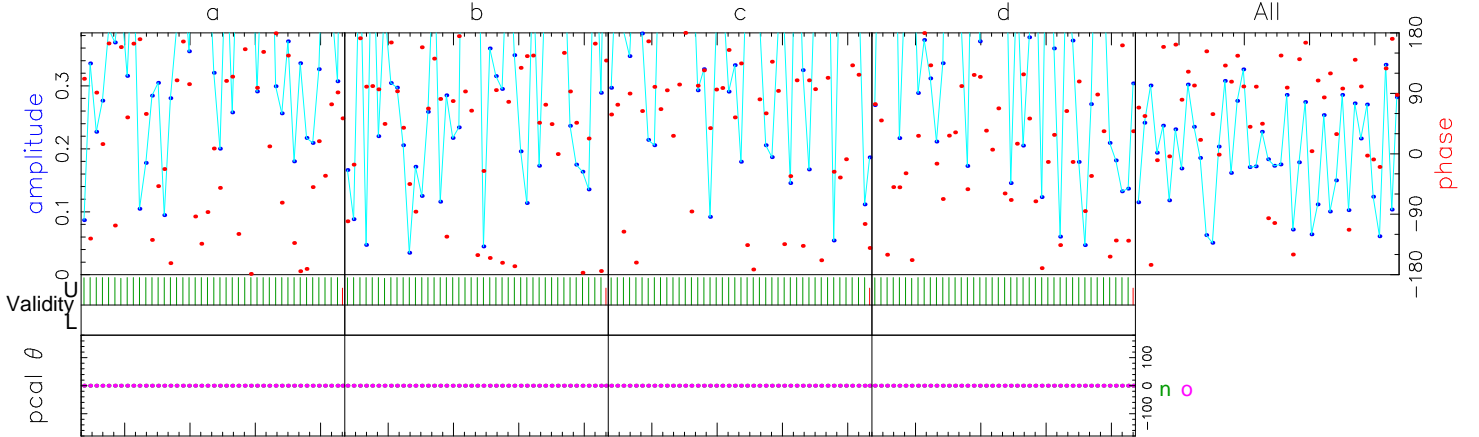
Fringe quality 0

SNR 4.2
 Int time 239.785
 Amp 0.128
 Phase 194.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.057025
 MBD -0.004395
 Fringe rate (Hz)
 -0.735966
 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
 2025:049:102446
 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		
n	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	PC phase	
n	1000	1000	1000	1000	ManI PC	
o	1000	1000	1000	1000	PC amp	
n	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-2.42354683151E+02	Apriori delay (usec)	-2.42412788619E+02	Resid mbdelay (usec)	-4.39453E-03	+/- 2.6E-04
Sband delay (usec)	-2.42355763619E+02	Apriori clock (usec)	-2.5353914E+01	Resid sbdelay (usec)	5.70250E-02	+/- 1.0E-03
Phase delay (usec)	-2.42412781865E+02	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	6.75437E-06	+/- 1.7E-06
Delay rate (us/s)	-5.55431550828E-01	Apriori rate (us/s)	-5.55414490886E-01	Resid rate (us/s)	-1.70599E-05	+/- 1.3E-08
Total phase (deg)	302.5	Apriori accel (us/s/s)	1.80267148895E-06	Resid phase (deg)	194.9	+/- 27.0

ph/seg (deg)	RMS 72.9	Theor. 88.5	Amplitude Search (1024X16)	0.128 +/- 0.030	0.135	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.9	154.5	Interp.	0.000	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	72.4	27.0	Inc. seg. avg.	0.113	0.167	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	57.6	47.1	Inc. frq. avg.	0.167		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

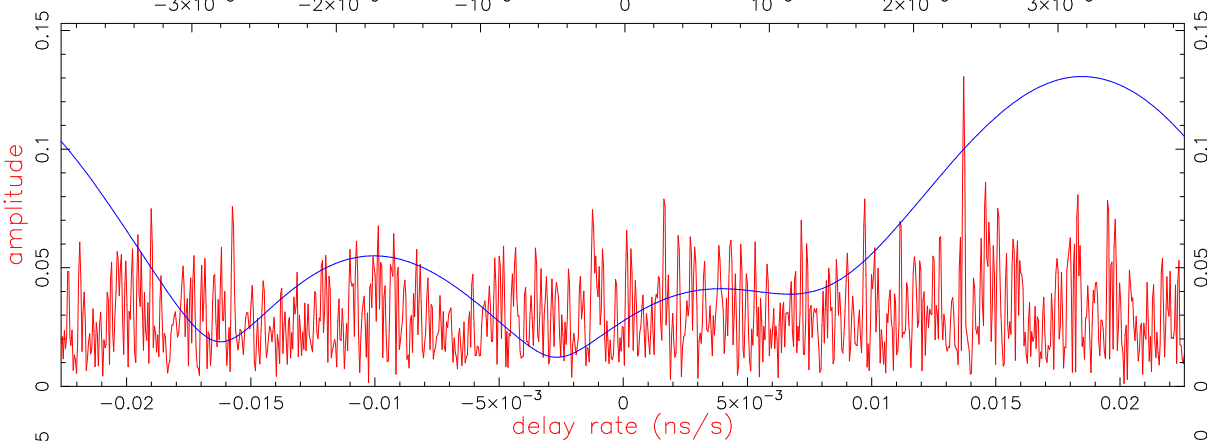
n: az 192.0 el 53.1 pa 9.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 1600.479 277.651 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/..no.Q.145.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

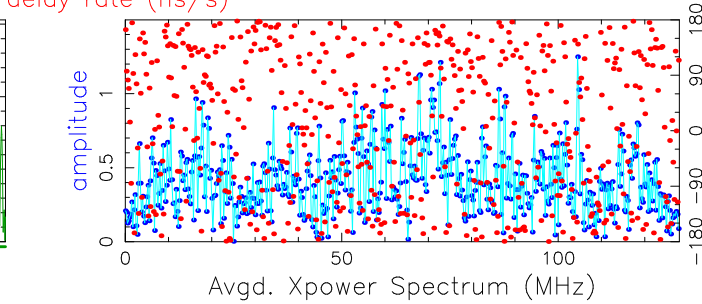
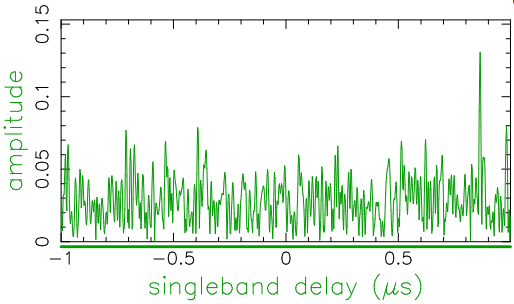
3C120.3N2DRC, No0552, no VLBA_NL - VLBA_OV, fgroup Q, pol LR

multiband delay (μ s)



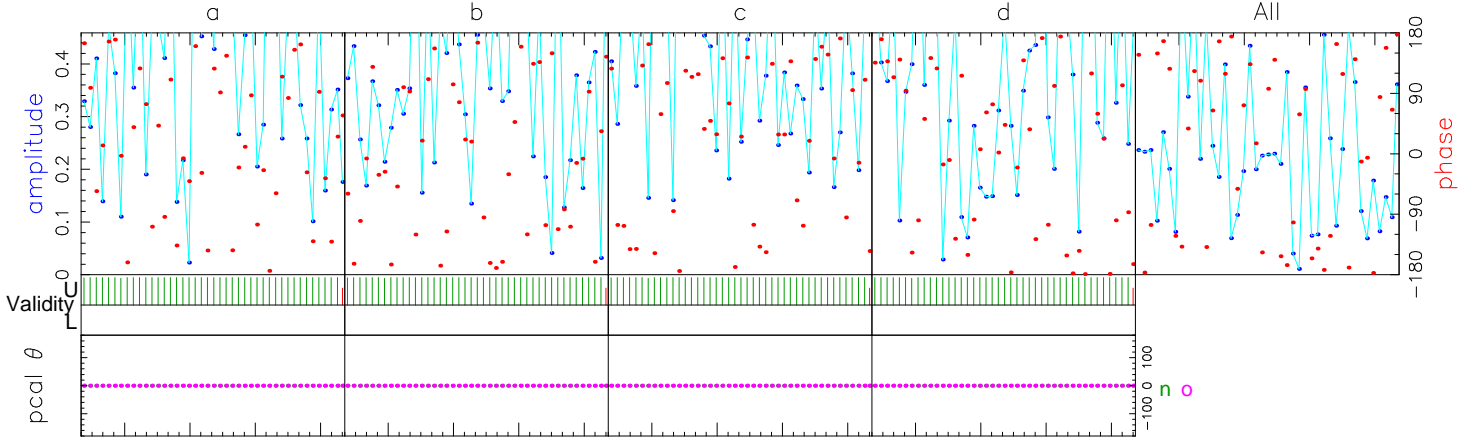
Fringe quality 0

SNR 5.5
 Int time 239.785
 Amp 0.153
 Phase 136.9
 PFD 9.8e-01
 Delays (us)
 SBD 0.863102
 MBD 0.003146
 Fringe rate (Hz)
 0.595060
 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
 2025:049:102448
 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

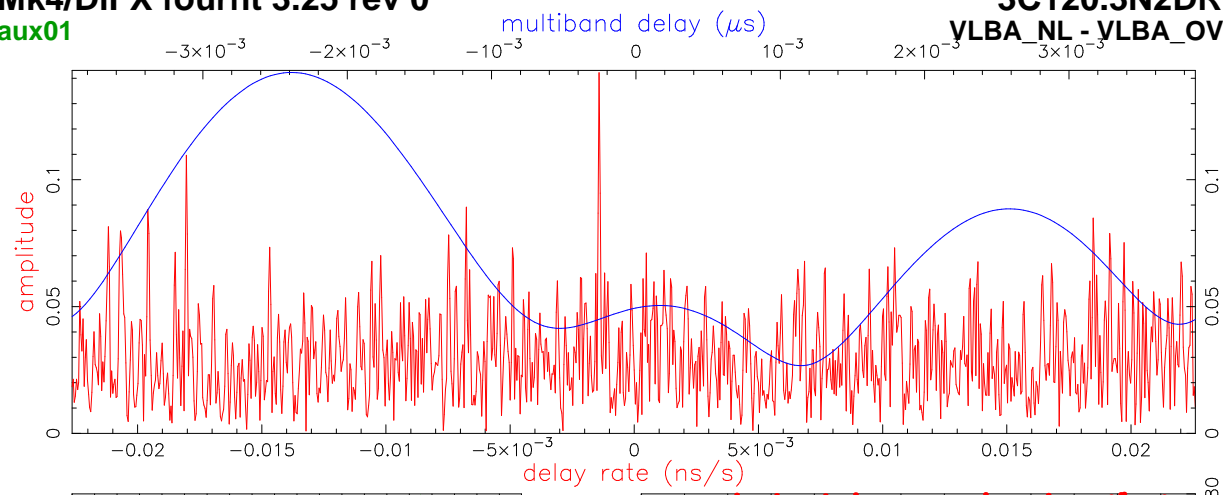


	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
n	1000	1000	1000	1000		
o	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000		
o	1000	1000	1000	1000		
n	Q00UL	Q01UL	Q02UL	Q03UL		
o	Q00UR	Q01UR	Q02UR	Q03UR		

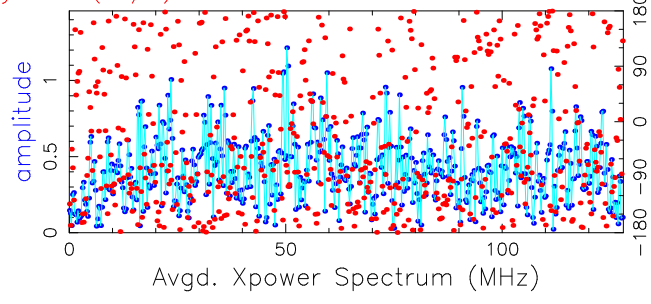
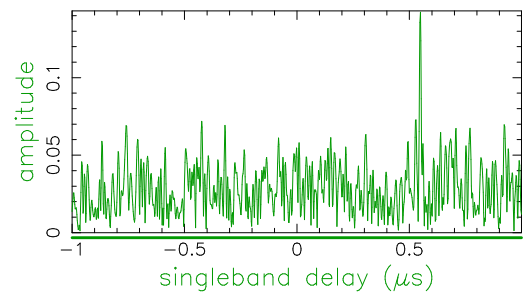
Group delay (usec) (SBD)	-2.41550268066E+02	Apriori delay (usec)	-2.42412788619E+02	Resid mbdelay (usec)	3.14555E-03	+/-	2.0E-04
Sband delay (usec)	-2.41549686494E+02	Apriori clock (usec)	-2.5353914E+01	Resid sbdelay (usec)	8.63102E-01	+/-	7.8E-04
Phase delay (usec)	-2.42412778358E+02	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	1.02613E-05	+/-	1.3E-06
Delay rate (us/s)	-5.55400697196E-01	Apriori rate (us/s)	-5.55414490886E-01	Resid rate (us/s)	1.37937E-05	+/-	9.6E-09
Total phase (deg)	244.5	Apriori accel (us/s/s)	1.80267148895E-06	Resid phase (deg)	136.9	+/-	20.7

ph/seg (deg)	RMS 73.0	Theor. 67.9	Amplitude Search (1024X16)	0.128	PCal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	137.1	118.5	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	23.3	20.7	Inc. seg. avg.	0.163	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	28.6	36.1	Inc. frq. avg.	0.148	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512 t_cohere infinite	dr window (ns/s) -0.023 0.023

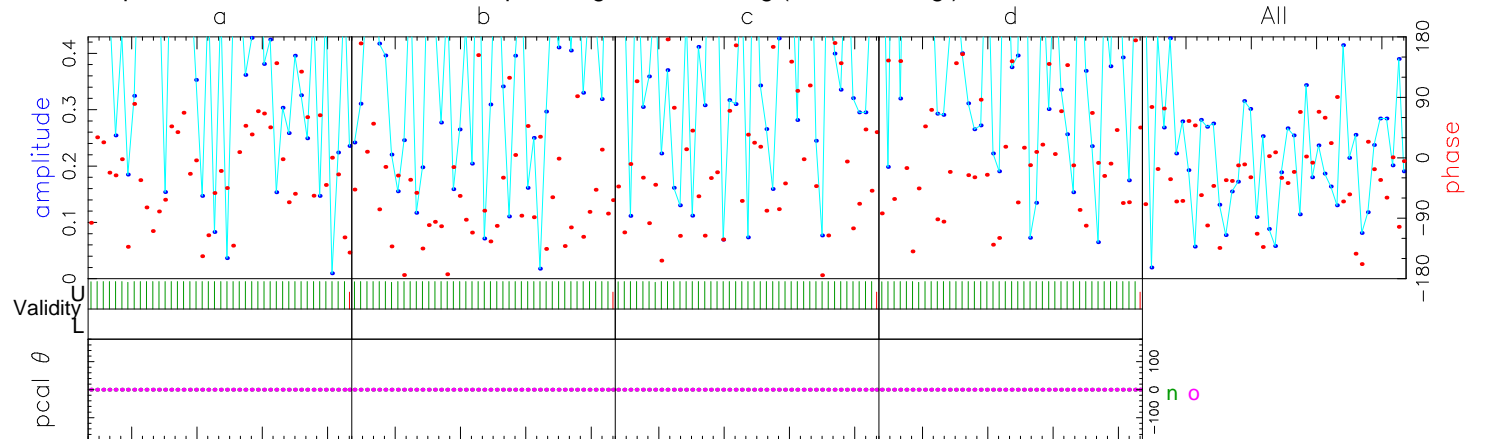
n: az 192.0 el 53.1 pa 9.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 1600.479 277.651 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/./no..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/./no.Q.160.3N2DRC



Fringe quality 0
SNR 6.1
Int time 239.785
Amp 0.143
Phase 134.1
PFD 1.7e-01
Delays (us)
SBD 0.548366
MBD -0.002433
Fringe rate (Hz)
-0.061397
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
2025:049:102450
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
	-10.6	-79.1	-34.4	-14.9	Phase	-34.7
	0.2	0.2	0.1	0.2	Ampl.	0.2
	794.5	794.0	792.5	354.2	Sbd box	793.8
U/L	469/0	469/0	469/0	469/0	APs used	
n	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
n	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-2.41860534223E+02	Apriori delay (usec)	-2.42412788619E+02	Resid mbdelay (usec)	-2.43310E-03	+/-	1.8E-04
Sband delay (usec)	-2.41864422494E+02	Apriori clock (usec)	-2.5353914E+01	Resid sbdelay (usec)	5.48366E-01	+/-	7.1E-04
Phase delay (usec)	-2.42412790853E+02	Apriori clockrate (us/s)	-1.8401209E-07	Resid phdelay (usec)	-2.23362E-06	+/-	1.2E-06
Delay rate (us/s)	-5.55415914086E-01	Apriori rate (us/s)	-5.55414490886E-01	Resid rate (us/s)	-1.42320E-06	+/-	8.8E-09
Total phase (deg)	241.7	Apriori accel (us/s/s)	1.80267148895E-06	Resid phase (deg)	134.1	+/-	18.9

ph/seg (deg) 62.6 62.1 Search (1024X16) 0.136 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 96.2 108.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.4 18.9 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%) 20.0 33.1 Inc. frq. avg. 0.153 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
n: az 192.0 el 53.1 pa 9.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 1600.479 277.651 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/./no..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/./no.Q.173.3N2DRC

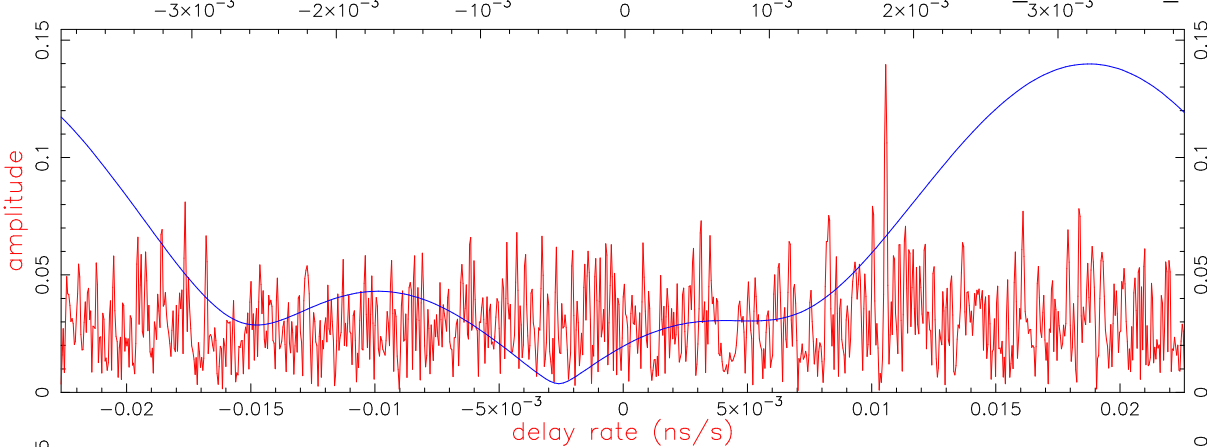
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, oc

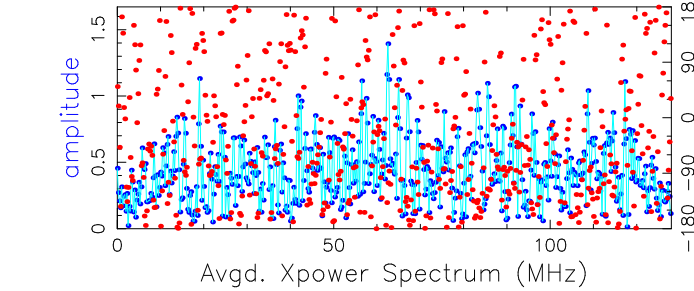
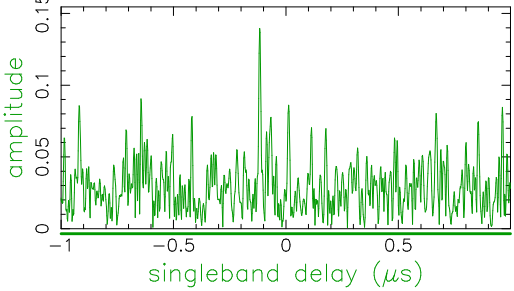
VLBA_OV - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)



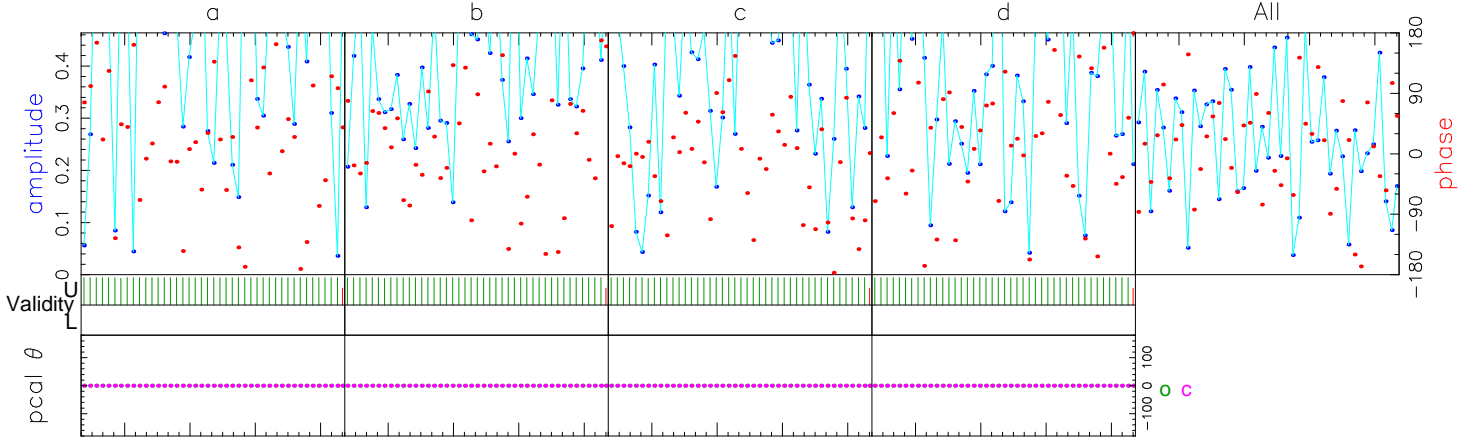
Fringe quality 0

SNR 6.0
 Int time 239.763
 Amp 0.155
 Phase -248.1
 PFD 2.6e-01
 Delays (us)
 SBD -0.116488
 MBD 0.003289
 Fringe rate (Hz)
 0.458029
 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
 2025:049:102443
 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
	31.2	4.1	-10.0	27.7	Phase	10.6
	0.1	0.2	0.2	0.1	Ampl.	0.2
	400.4	454.9	951.2	519.7	Sbd box	453.4
U/L	469/0	469/0	469/0	469/0	APs used	
o	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
o:c	0:0	0:0	0:0	0:0	PC phase	
o:c	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.07290794623E+02	Apriori delay (usec)	1.07404693193E+02	Resid mbdelay (usec)	3.28893E-03	+/-	1.9E-04
Sband delay (usec)	1.07288205068E+02	Apriori clock (usec)	2.1389317E+01	Resid sbdelay (usec)	-1.16488E-01	+/-	7.2E-04
Phase delay (usec)	1.07404693878E+02	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	6.85603E-07	+/-	1.2E-06
Delay rate (us/s)	1.23870233856E+00	Apriori rate (us/s)	1.23869172130E+00	Resid rate (us/s)	1.06173E-05	+/-	8.9E-09
Total phase (deg)	-80.9	Apriori accel (us/s/s)	2.72701839404E-06	Resid phase (deg)	-248.1	+/-	19.2

ph/seg (deg)	RMS 72.5	Theor. 62.9	Amplitude Search (1024X16)	0.155 +/- 0.026	0.137	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	115.6	109.9	Interp.	0.000	0.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	24.3	19.2	Inc. seg. avg.	0.177	0.137	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	16.4	33.5	Inc. frq. avg.	0.152	0.137	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.1 el 53.5 pa -26.2 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3569.768 1331.081 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oc.Q.134.3N2DRC

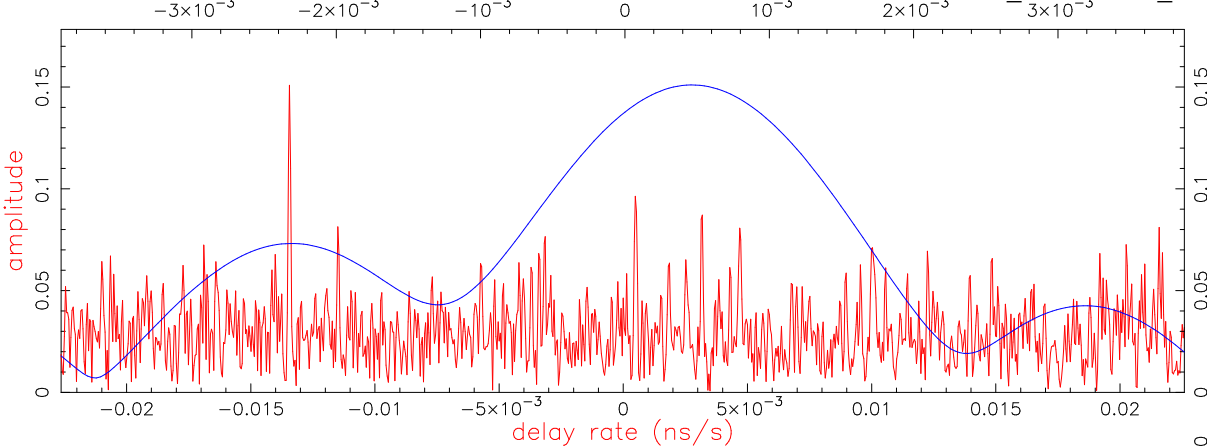
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, oc

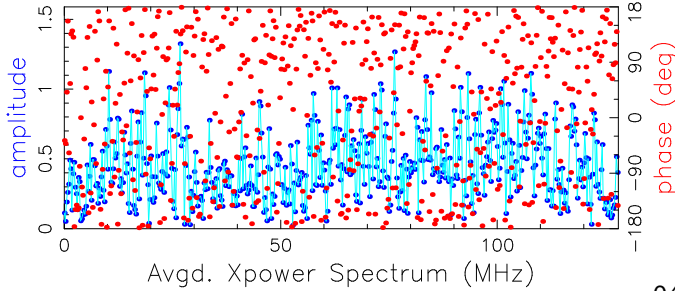
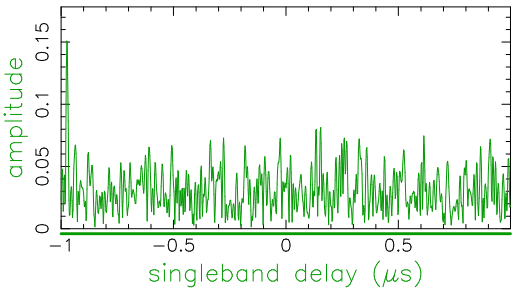
VLBA_OV - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)



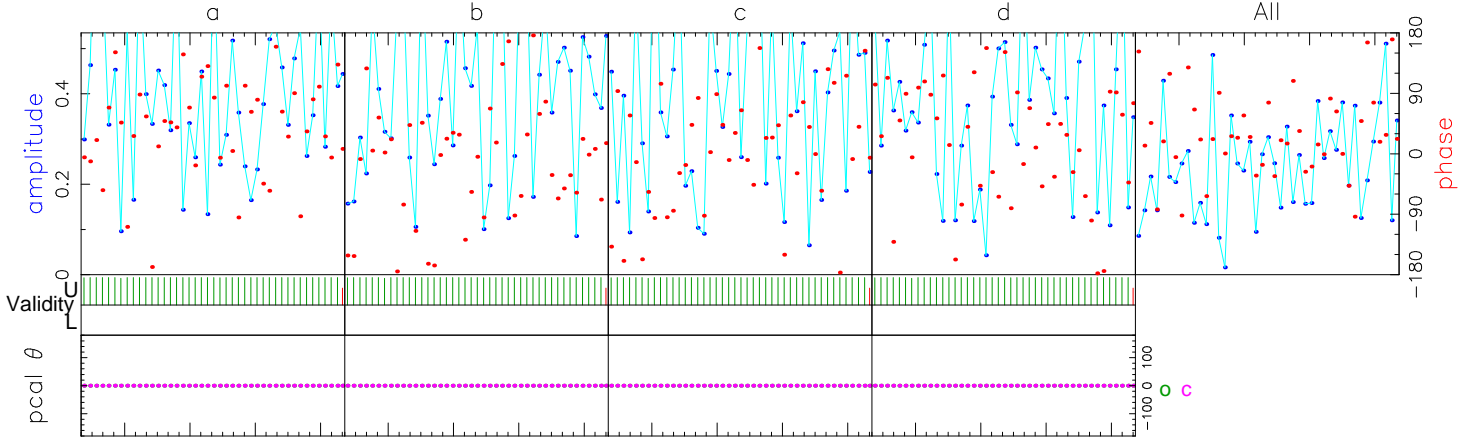
Fringe quality 0

SNR 6.5
 Int time 239.763
 Amp 0.178
 Phase -212.1
 PFD 1.2e-02
 Delays (us)
 SBD -0.973773
 MBD 0.000521
 Fringe rate (Hz)
 -0.582919
 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
 2025:049:102446
 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		
o	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	PC freqs	
o:c	0:0	0:0	0:0	0:0	PC phase	
o:c	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
o	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

Group delay (usec) (SBD)	1.06428651436E+02	Apriori delay (usec)	1.07404693193E+02	Resid mbdelay (usec)	5.20744E-04	+/-	1.7E-04
Sband delay (usec)	1.06430920318E+02	Apriori clock (usec)	2.1389317E+01	Resid sbdelay (usec)	-9.73773E-01	+/-	6.6E-04
Phase delay (usec)	1.07404694750E+02	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	1.55702E-06	+/-	1.1E-06
Delay rate (us/s)	1.23867820904E+00	Apriori rate (us/s)	1.23869172130E+00	Resid rate (us/s)	-1.35123E-05	+/-	8.2E-09
Total phase (deg)	-44.9	Apriori accel (us/s/s)	2.72701839404E-06	Resid phase (deg)	-212.1	+/-	17.7

	RMS	Theor.	Amplitude	0.178 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.2	57.9	Search (1024X16)	0.141	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	92.2	101.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	24.4	17.7	Inc. seg. avg.	0.185	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	16.5	30.8	Inc. frq. avg.	0.176	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

o: az 146.1 el 53.5 pa -26.2 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3569.768 1331.081 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oc.Q.149.3N2DRC

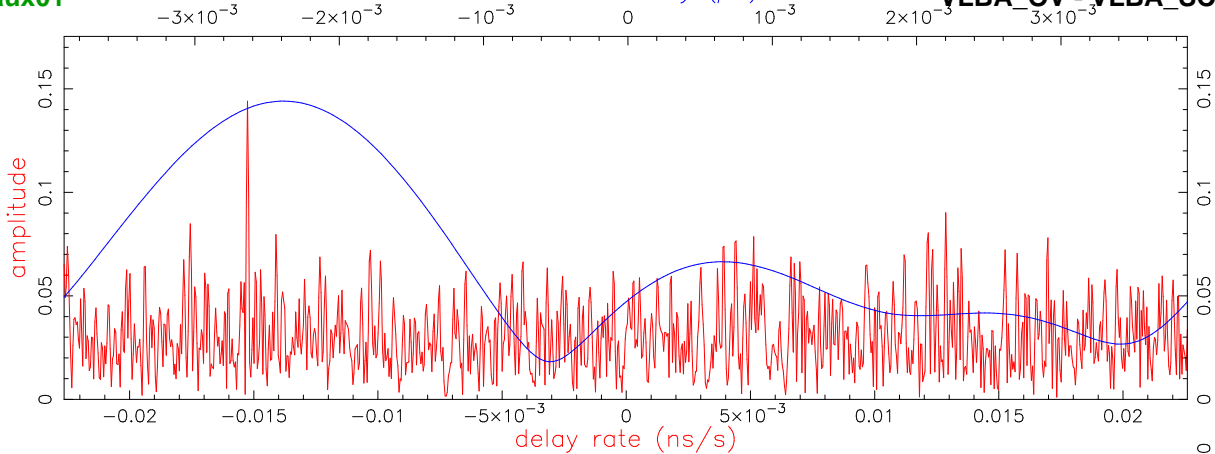
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, oc

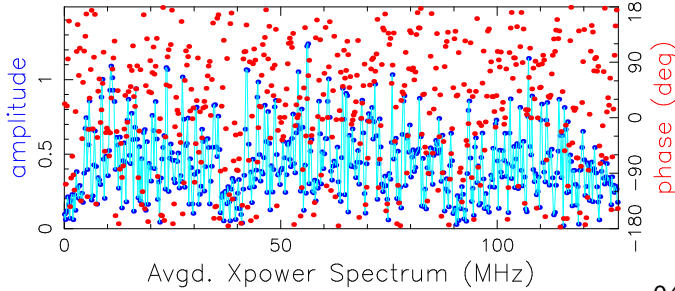
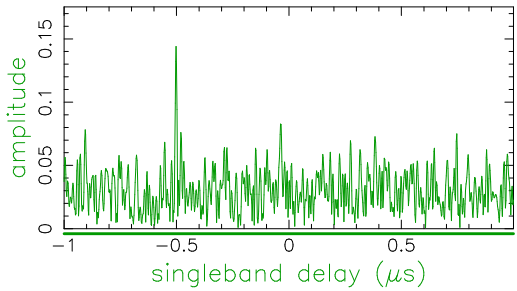
VLBA_OV - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)



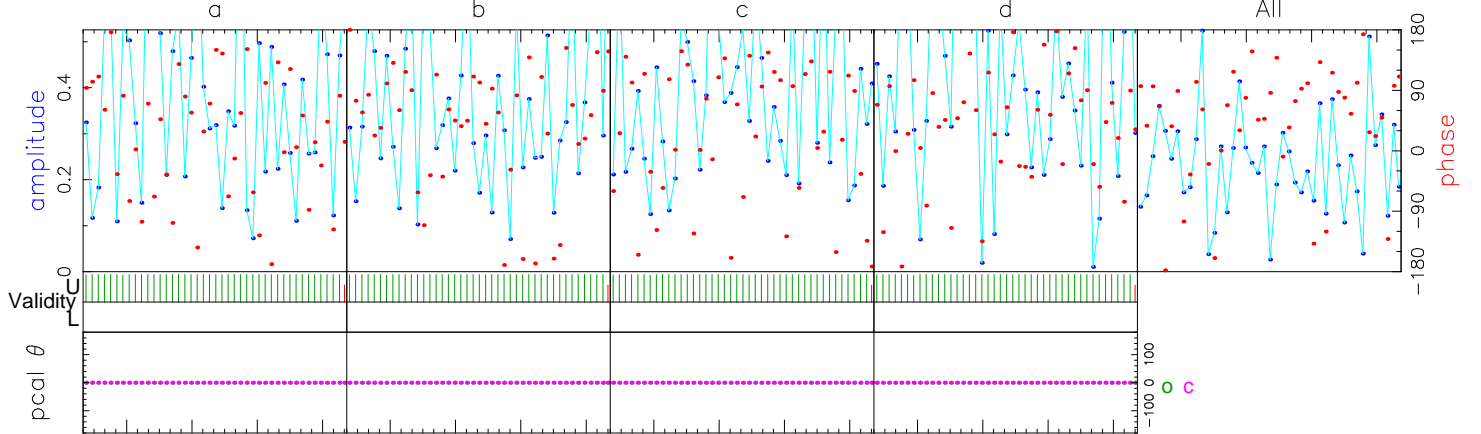
Fringe quality 0

SNR 6.1
 Int time 239.763
 Amp 0.175
 Phase -286.9
 PFD 1.3e-01
 Delays (us)
 SBD -0.502023
 MBD -0.002395
 Fringe rate (Hz)
 -0.661568
 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
 2025:049:102448
 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		
o	1000	1000	1000	1000		
c	1000	1000	1000	1000		
o:c	0:0	0:0	0:0	0:0		
o:c	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000		
c	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL		
c	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec) (SBD)	1.06902298560E+02	Apriori delay (usec)	1.07404693193E+02	Resid mbdelay (usec)	-2.39463E-03	+/-	1.8E-04
Sband delay (usec)	1.06902670568E+02	Apriori clock (usec)	2.1389317E+01	Resid sbdelay (usec)	-5.02023E-01	+/-	7.1E-04
Phase delay (usec)	1.07404697897E+02	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	4.70441E-06	+/-	1.2E-06
Delay rate (us/s)	1.23867638593E+00	Apriori rate (us/s)	1.23869172130E+00	Resid rate (us/s)	-1.53354E-05	+/-	8.7E-09
Total phase (deg)	-119.8	Apriori accel (us/s/s)	2.72701839404E-06	Resid phase (deg)	-286.9	+/-	18.8

ph/seg (deg)	RMS 70.7	Theor. 61.6	Amplitude Search (1024X16)	0.175 +/- 0.029	0.141	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	99.6	107.5	Interp.	0.000	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	21.8	18.8	Inc. seg. avg.	0.181	0.171	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	32.2	32.8	Inc. frq. avg.	0.171		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.1 el 53.5 pa -26.2 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3569.768 1331.081 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oc.Q.162.3N2DRC

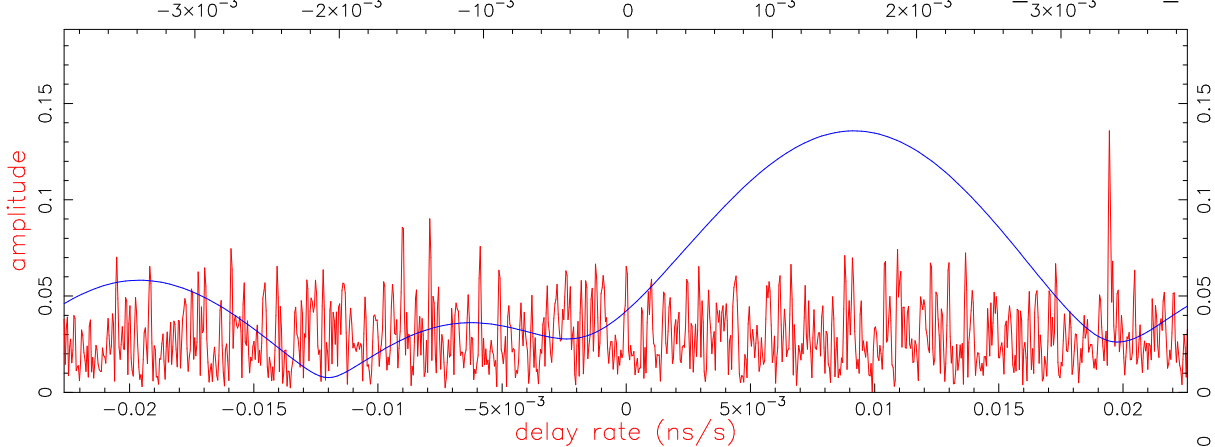
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, oc

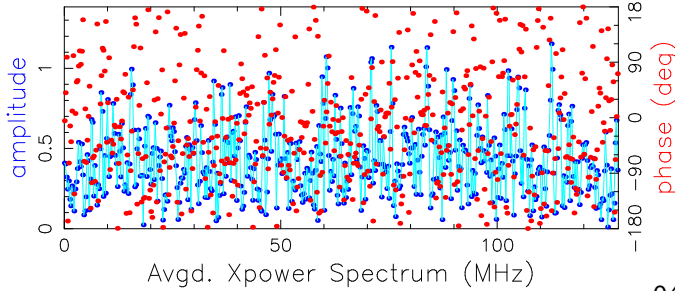
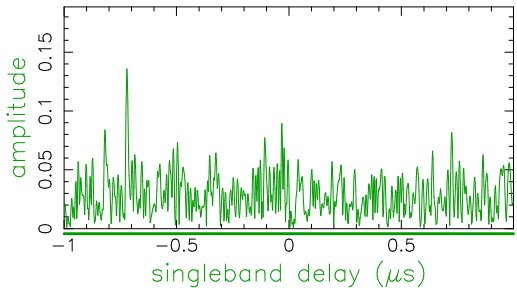
VLBA_OV - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)



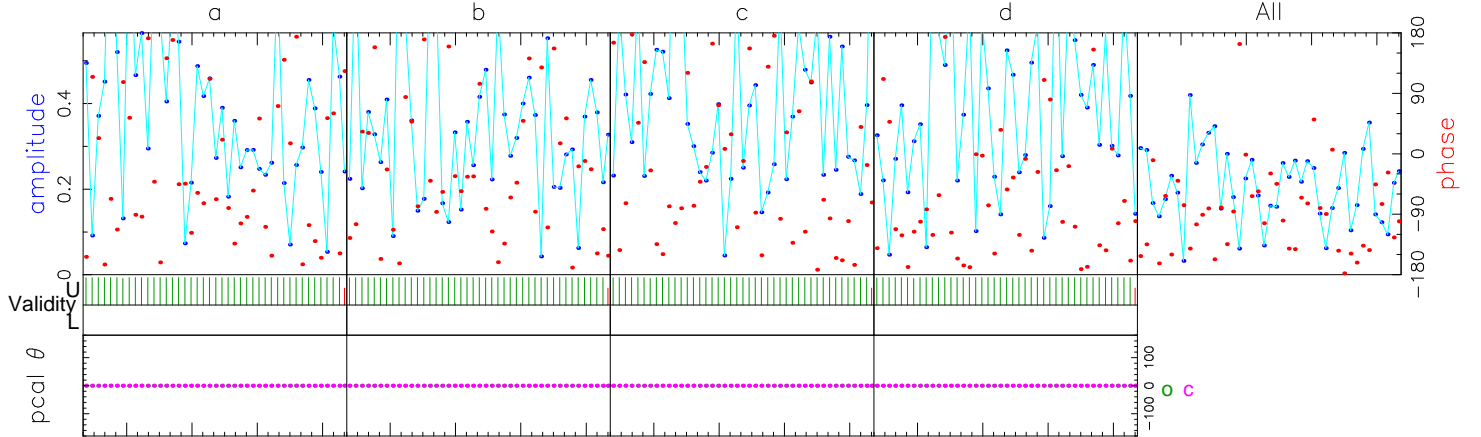
Fringe quality 0

SNR 5.8
 Int time 239.764
 Amp 0.188
 Phase -61.6
 PFD 6.7e-01
 Delays (us)
 SBD -0.720574
 MBD 0.001565
 Fringe rate (Hz)
 0.842839
 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
 2025:049:102450
 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
-112.4	-91.0	-114.7	-104.9	Phase	-106.6
0.1	0.1	0.2	0.3	Ampl.	0.2
112.5	345.2	249.1	144.3	Sbd box	144.1
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	PC freqs	
o:c 0:0	0:0	0:0	0:0	PC phase	
o:c 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000		
o Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.06687507841E+02	Apriori delay (usec)	1.07404693193E+02	Resid mbdelay (usec)	1.56465E-03	+/- 1.9E-04
Sband delay (usec)	1.06684118818E+02	Apriori clock (usec)	2.1389317E+01	Resid sbdelay (usec)	-7.20574E-01	+/- 7.5E-04
Phase delay (usec)	1.07404686332E+02	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	-6.86116E-06	+/- 1.3E-06
Delay rate (us/s)	1.23871125859E+00	Apriori rate (us/s)	1.23869172130E+00	Resid rate (us/s)	1.95373E-05	+/- 9.3E-09
Total phase (deg)	-254.4	Apriori accel (us/s/s)	2.72701839404E-06	Resid phase (deg)	-61.6	+/- 19.9

ph/seg (deg)	RMS 55.9	Theor. 65.3	Amplitude Search (1024X16)	0.188 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.5	114.0	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)	13.2	19.9	Inc. seg. avg.	0.176	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	28.7	34.8	Inc. frq. avg.	0.180	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.1 el 53.5 pa -26.2 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3569.768 1331.081 simultaneous interpolator

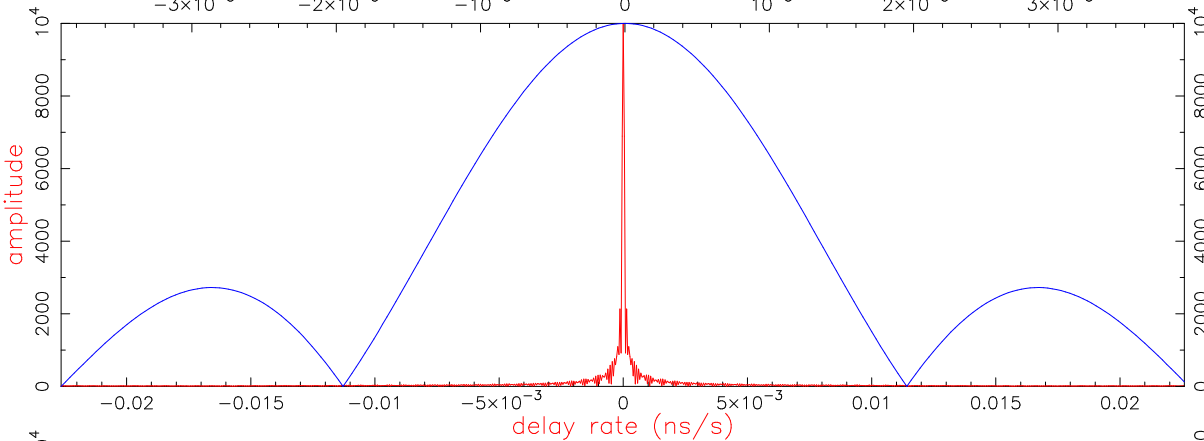
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oc.Q.172.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

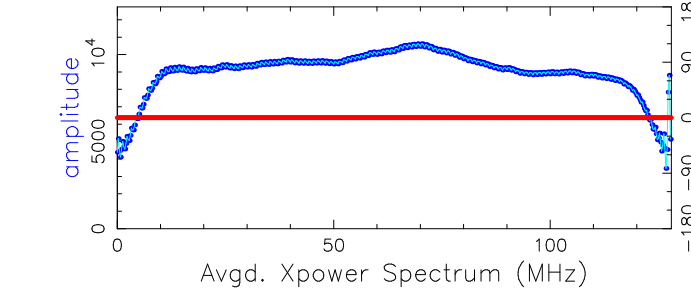
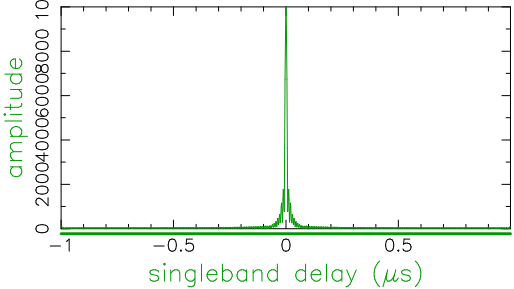
aux01

3C120.3N2DRC, No0552, oo

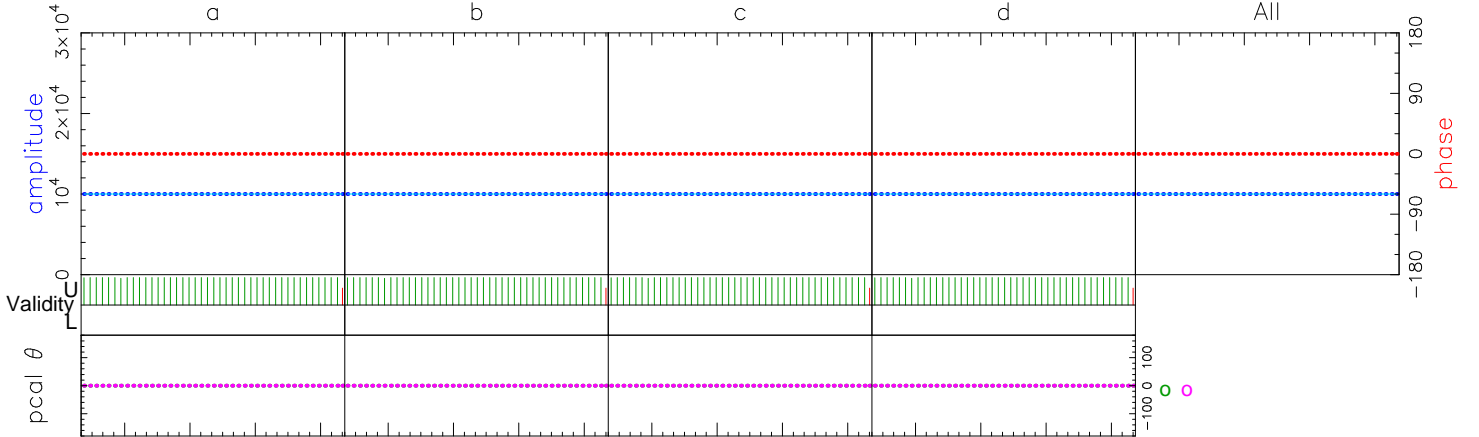
VLBA_OV - VLBA_OV, fgroup Q, pol LL



Fringe quality 9
 SNR 423466.2
 Int time 239.796
 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
 2025:049:102445
 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
0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
513.0	513.0	513.0	513.0	Sbd box	513.0
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
o:0 0:0	0:0	0:0	0:0	PC phase	
o:0 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
o Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 2.6E-09
Sband delay (usec)	0.00000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/- 1.0E-08
Phase delay (usec)	0.00000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/- 1.7E-11
Delay rate (us/s)	0.00000000000E+00	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	0.00000E+00	+/- 1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	0.0	+/- 0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	Search (1024X16)	10000.000	Interp.	0.000	Search (1024X16)	10000.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Inc. seg. avg.	10000.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023		
o: az 146.1 el 53.5 pa -26.2	o: az 146.1 el 53.5 pa -26.2	u,v (fr/asec)	0.000 0.000	simultaneous interpolator				Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

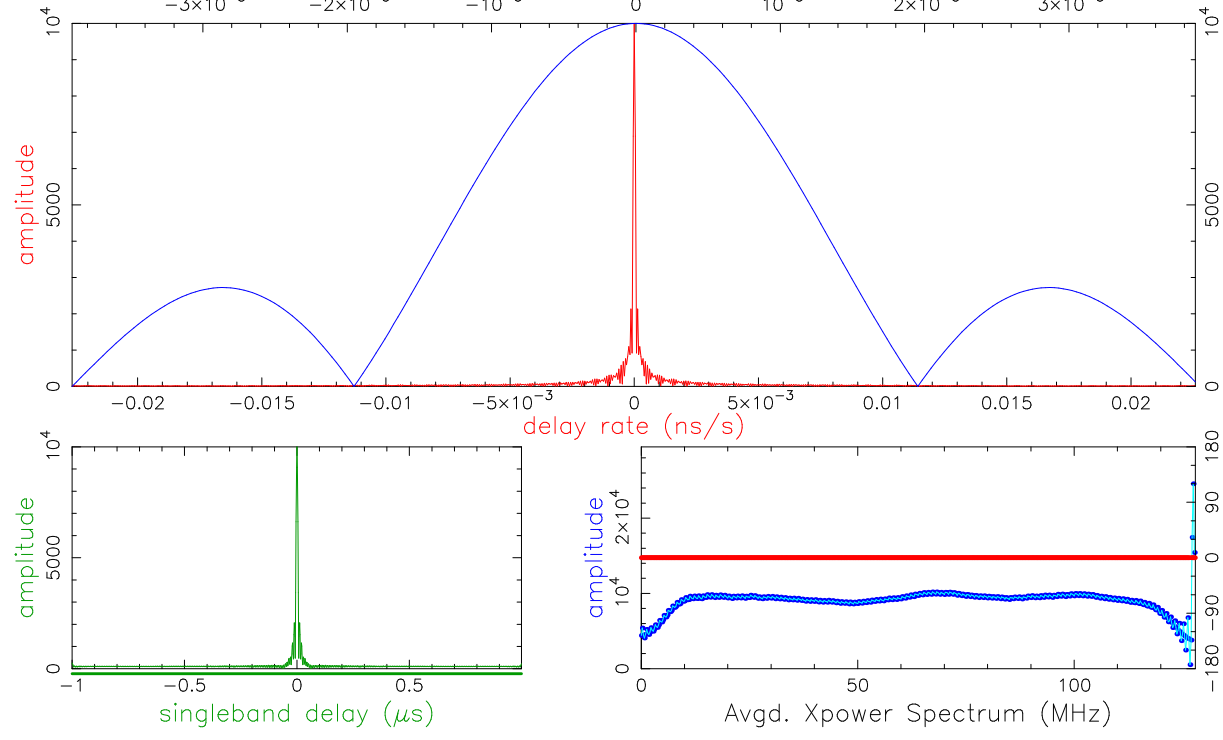
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oo.Q.141.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, oo

VLBA_OV - VLBA_OV, fgroup Q, pol RR

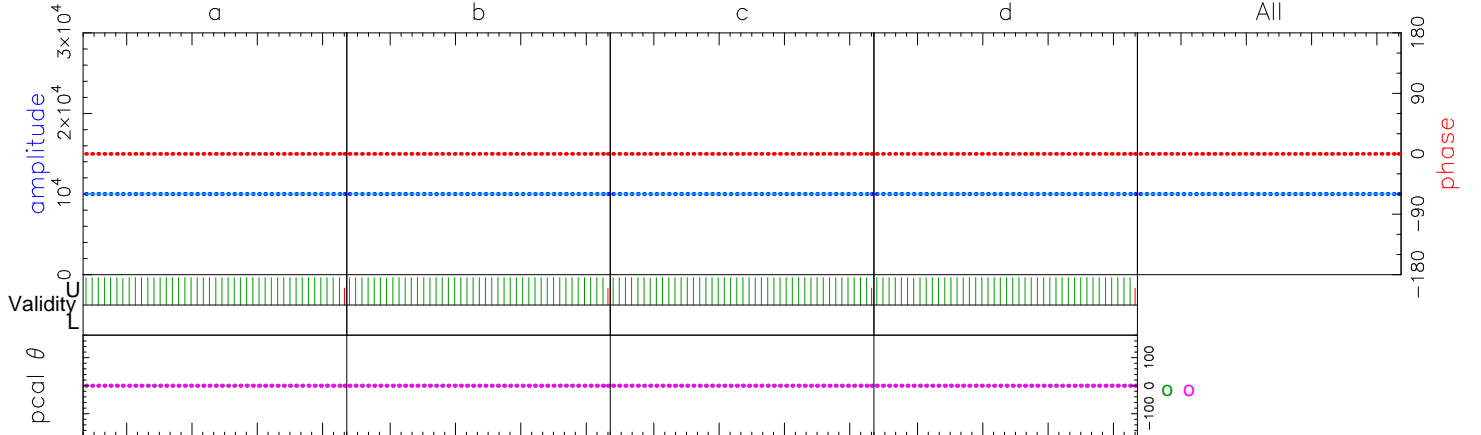


Fringe quality 9

SNR 423466.2
 Int time 239.796
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 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
 2025:049:102447
 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



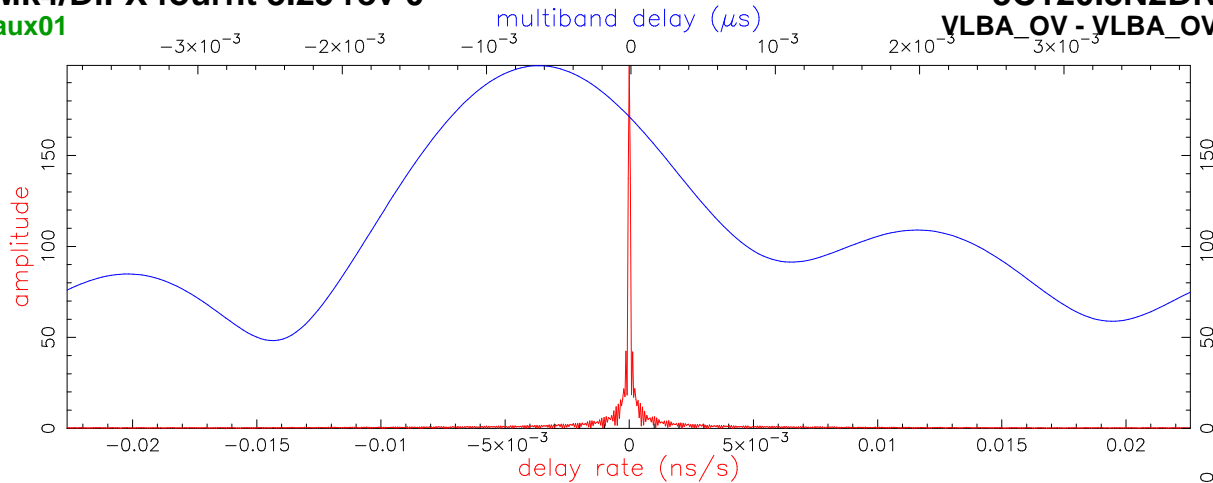
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
o	1000	1000	1000	1000	APs used	
o:0	0:0	0:0	0:0	0:0	PC freqs	
o:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	Manl PC	
o	1000	1000	1000	1000	PC amp	
o	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
Group delay (usec) (SBD)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 2.6E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.0E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 1.7E-11
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 1.3E-13
Total phase (deg)	0.0	0.0	0.0	0.0	Resid phase (deg)	0.0 +/- 0.0
RMS	0.0	0.0	0.0	0.0	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
Theor.	0.0	0.0	0.0	0.0	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
Amplitude	10000.001 +/- 0.024	10000.001	10000.001	10000.001	Bits/sample: 2x2	mb window (us) -0.004 0.004
Search (1024X16)	10000.001	10000.001	10000.001	10000.001	SampCntNorm: enabled	dr window (ns/s) -0.023 0.023
Interp.	0.000	0.000	0.000	0.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	ion window (TEC) 0.00 0.00
Inc. seg. avg.	10000.000	10000.000	10000.000	10000.000	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
Inc. frq. avg.	10000.001	10000.001	10000.001	10000.001		
Apriori delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Apriori clock (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Apriori clockrate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Apriori rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Apriori accel (us/s/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
o: az 146.1 el 53.5 pa -26.2	o: az 146.1 el 53.5 pa -26.2	u,v (fr/asec) 0.000 0.000				simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552/oo..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552/oo.Q.153.3N2DRC				

Mk4/DiFX fourfit 3.25 rev 0

aux01

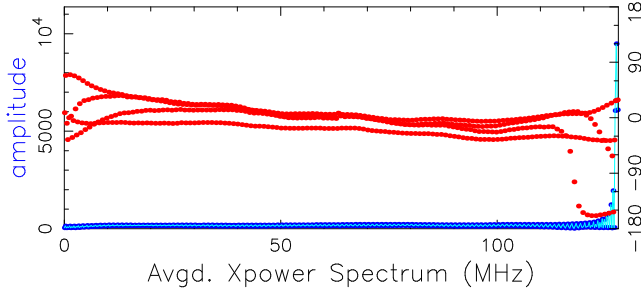
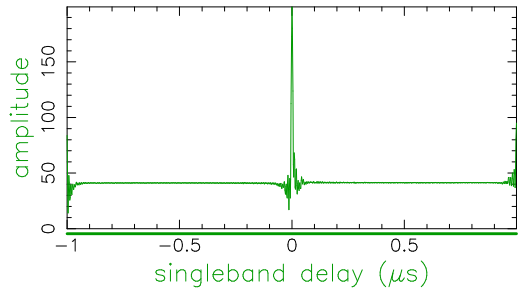
3C120.3N2DRC, No0552, oo

VLBA_OV - VLBA_OV, fgroup Q, pol LR



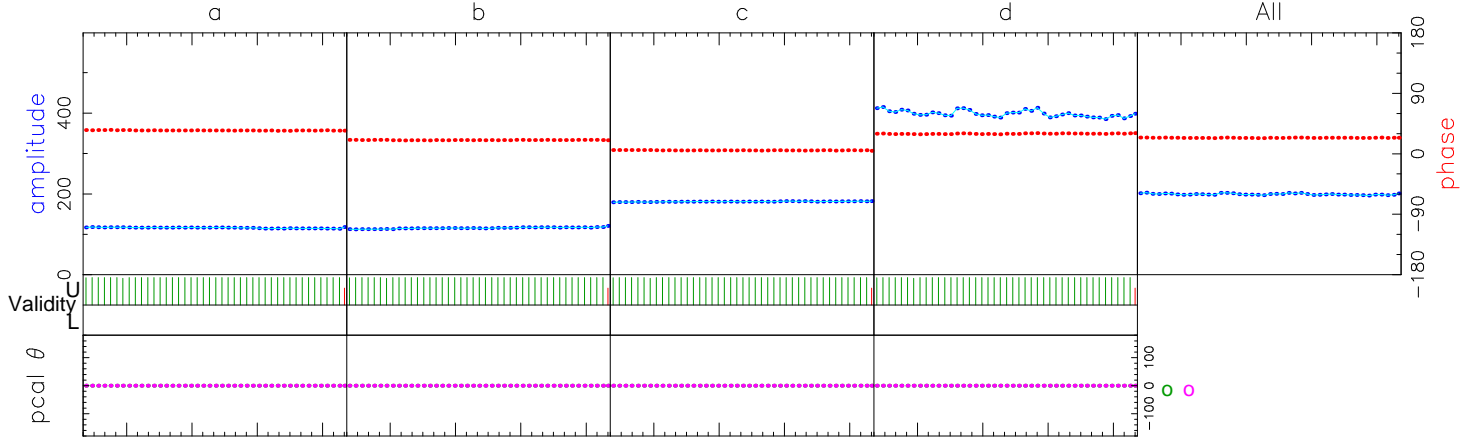
Fringe quality 6

SNR 8450.1
 Int time 239.796
 Amp 199.546
 Phase 23.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000167
 MBD -0.000645
 Fringe rate (Hz)
 -0.000006
 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
 2025:049:102449
 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
34.8	20.4	5.2	29.8	Phase	23.8
116.2	115.7	181.0	398.7	Ampl.	202.9
513.4	512.2	512.5	513.3	Sbd box	513.1
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
o: 0:0	0:0	0:0	0:0	PC phase	
o: 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
o Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD) -6.4525000000E-04 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) -6.45250E-04 +/- 1.3E-07
 Sband delay (usec) 1.6687500000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.66875E-04 +/- 5.1E-07
 Phase delay (usec) 1.52948815844E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.52949E-06 +/- 8.7E-10
 Delay rate (us/s) -1.47140842571E-10 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) -1.47141E-10 +/- 6.3E-12
 Total phase (deg) 23.8 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 23.8 +/- 0.0

RMS Theor. Amplitude 199.546 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X16) 197.617 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.9 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 ph/frq (deg) 16.0 0.0 Inc. seg. avg. 199.375 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 58.2 0.0 Inc. frq. avg. 202.879 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 146.1 el 53.5 pa -26.2 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

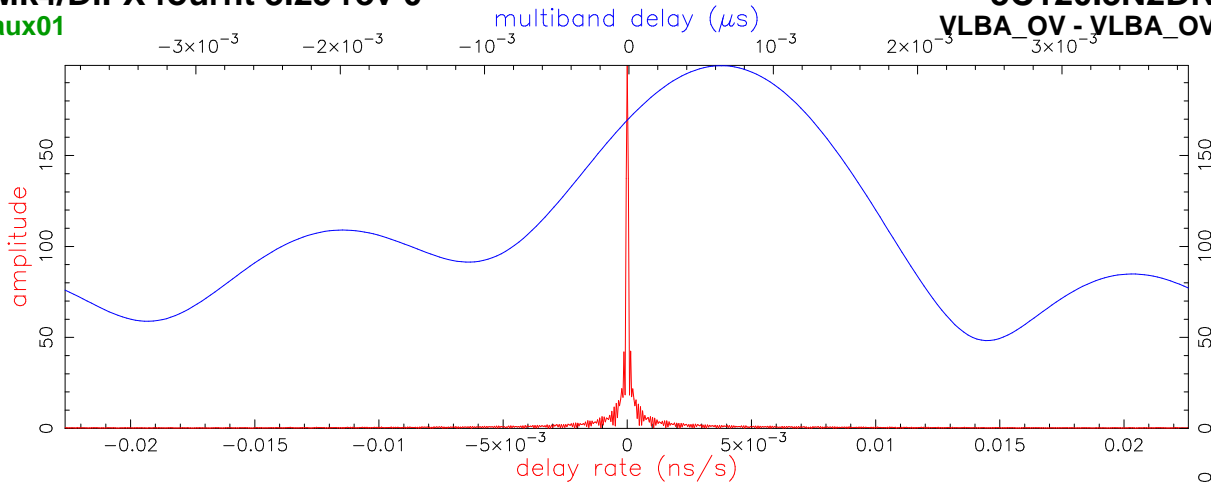
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/oo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oo.Q.166.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

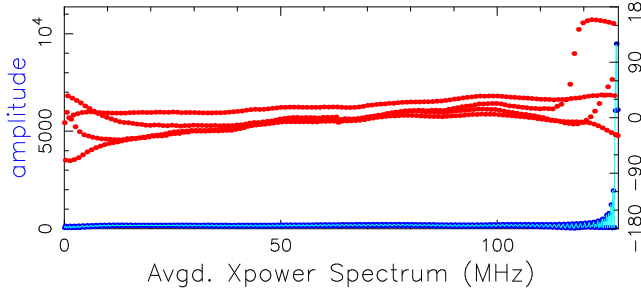
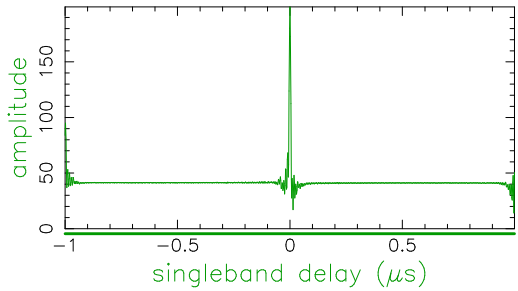
3C120.3N2DRC, No0552, oo

VLBA_OV - VLBA_OV, fgroup Q, pol RL



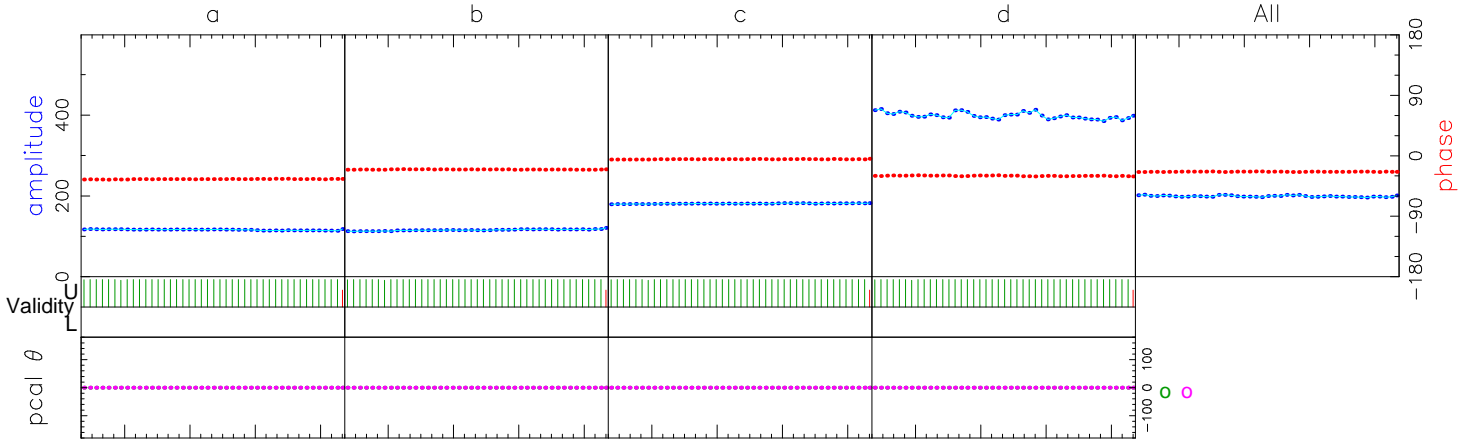
Fringe quality 6

SNR 8450.1
 Int time 239.796
 Amp 199.546
 Phase -23.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000167
 MBD 0.000645
 Fringe rate (Hz)
 0.000006
 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
 2025:049:102451
 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
-34.8	-20.4	-5.2	-29.8	Phase	-23.8
116.2	115.7	181.0	398.7	Ampl.	202.9
512.6	513.8	513.5	512.7	Sbd box	512.9
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
o: 0:0	0:0	0:0	0:0	PC phase	
o: 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
o Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD) 6.45250000000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 6.45250E-04 +/- 1.3E-07
 Sband delay (usec) -1.66875000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.66875E-04 +/- 5.1E-07
 Phase delay (usec) -1.52948815873E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.52949E-06 +/- 8.7E-10
 Delay rate (us/s) 1.47140842571E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.47141E-10 +/- 6.3E-12
 Total phase (deg) -23.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -23.8 +/- 0.0

ph/seg (deg) 0.2 0.0 Amplitude 199.546 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.9 0.1 Search (1024X16) 197.617 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 58.2 0.0 Inc. seg. avg. 199.375 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 o: az 146.1 el 53.5 pa -26.2 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 0.000 0.000 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/oo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/oo.Q.176.3N2DRC simultaneous interpolator

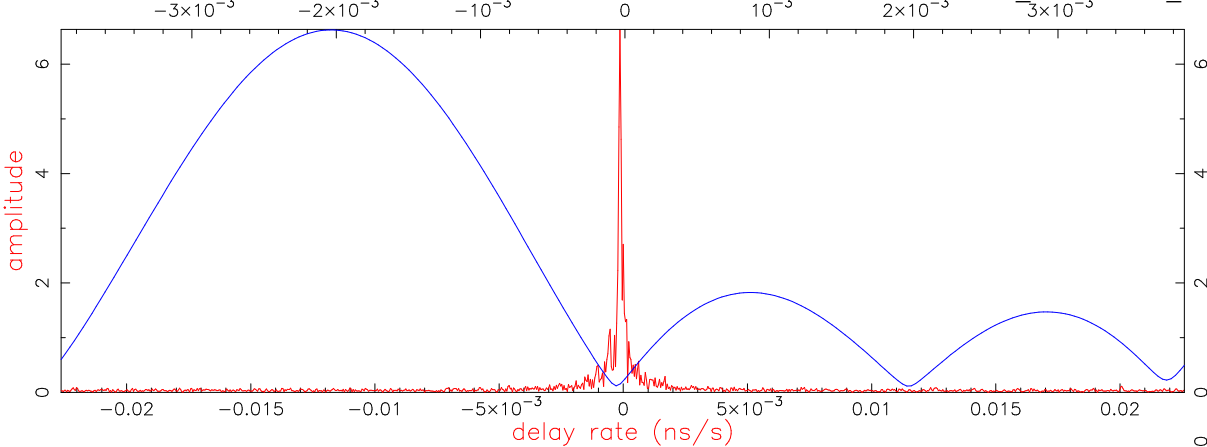
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, op

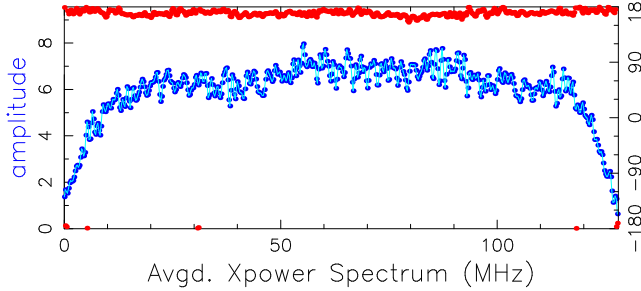
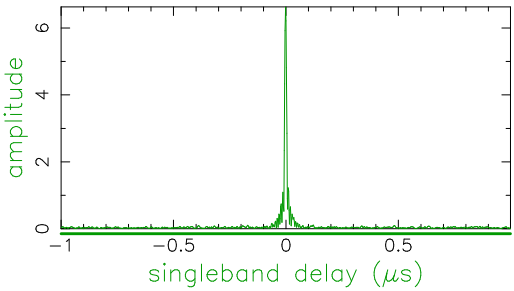
VLBA_OV - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)



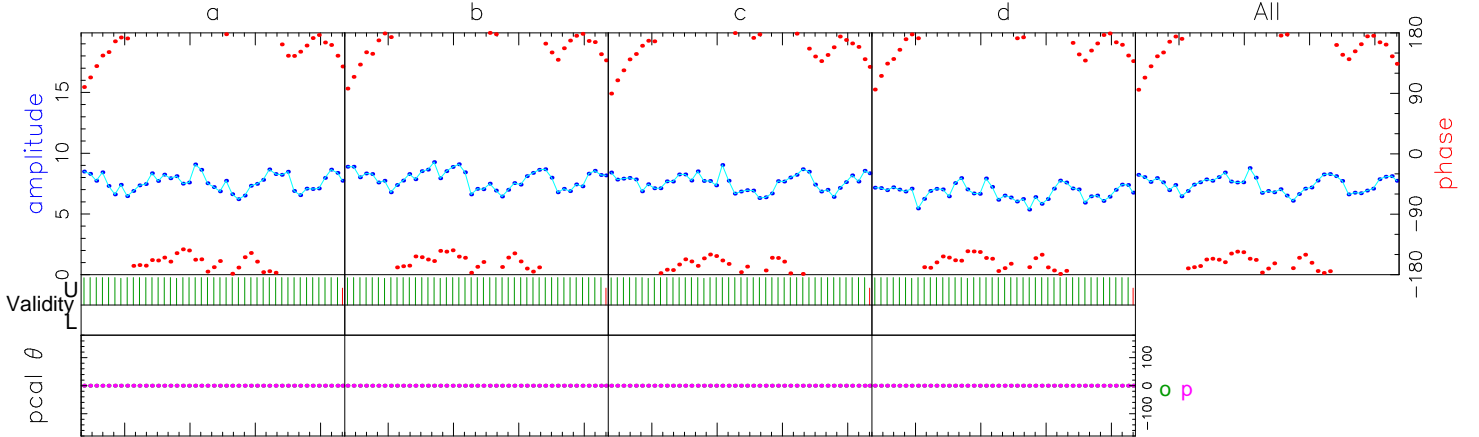
Fringe quality 7

SNR 280.9
 Int time 239.644
 Amp 6.636
 Phase 177.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001692
 MBD -0.002021
 Fringe rate (Hz)
 -0.005837
 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
 2025:049:102445
 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		
o	1000	1000	1000	1000		
p	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000		
p	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-1.22599291368E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-2.02104E-03	+/-	4.0E-06
Sband delay (usec)	-1.22599258464E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-1.69200E-03	+/-	1.5E-05
Phase delay (usec)	-1.22599088122E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	1.14189E-05	+/-	2.6E-08
Delay rate (us/s)	2.05156093512E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35296E-07	+/-	1.9E-10
Total phase (deg)	138.2	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	177.3	+/-	0.4

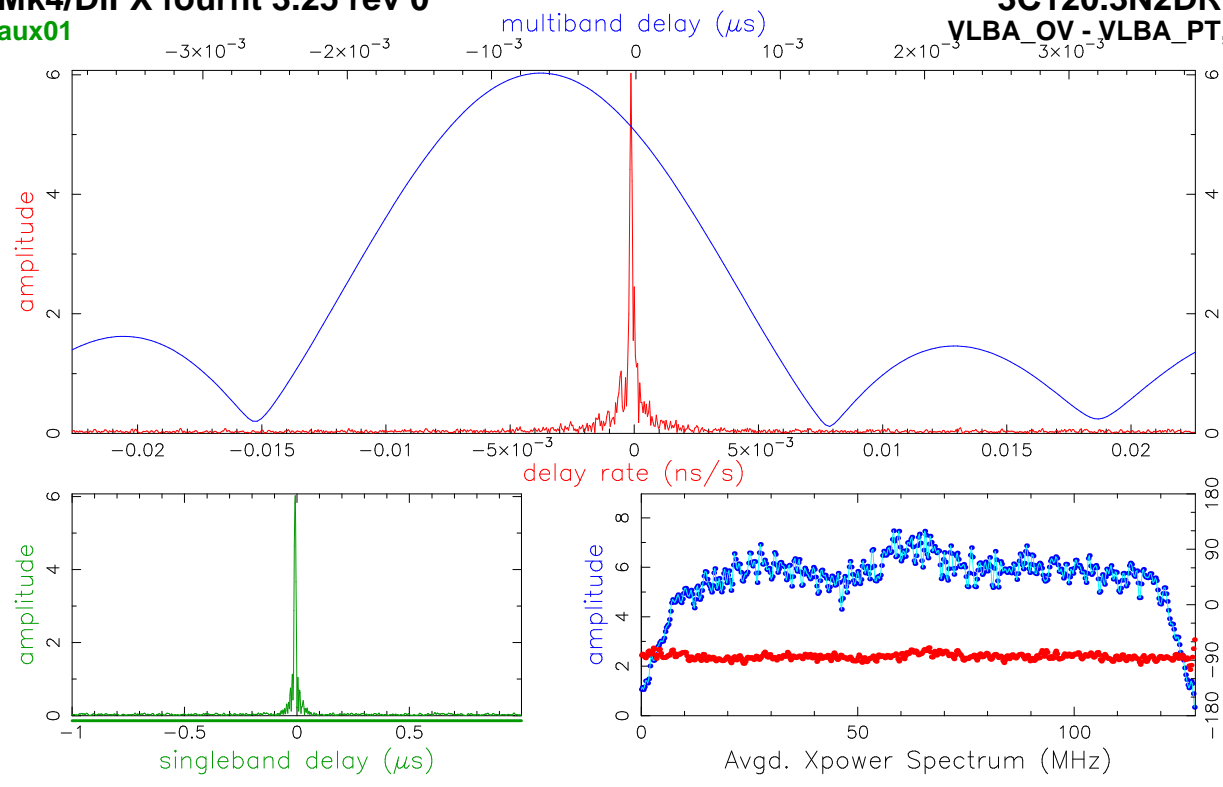
ph/seg (deg)	27.5	1.3	Search (1024X16)	6.588	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	15.5	2.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	3.4	0.4	Inc. seg. avg.	7.456	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004	0.004
amp/frq (%)	5.4	0.7	Inc. frq. avg.	6.631	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512	dr window (ns/s)	-0.023	0.023
					Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.1 el 53.5 pa -26.2 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -587.416 208.643 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.139.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0
aux01

3C120.3N2DRC, No0552, op
VLBA_OV - VLBA_PT, fgroup Q, pol RR

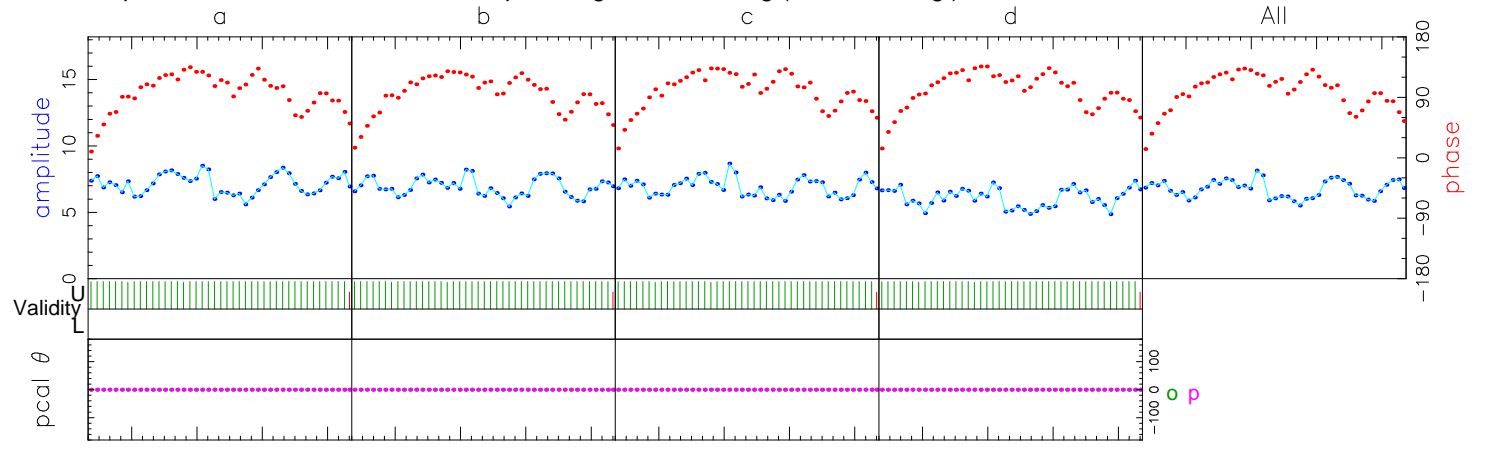


Fringe quality 7

SNR 257.1
Int time 239.644
Amp 6.073
Phase -183.0
PFD 0.0e+00
Delays (us)
SBD -0.008393
MBD -0.000687
Fringe rate (Hz)
-0.005831
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
2025:049:102447
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
97.5	95.7	99.9	100.2	Phase	98.3
6.3	6.2	6.2	5.4	Ampl.	6.0
508.4	508.8	508.6	509.2	Sbd box	508.7
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
o:p 0:0	0:0	0:0	0:0	PC phase	
o:p 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
o Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	-1.22599939253E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-6.87383E-04 +/- 4.3E-06
Sband delay (usec)	-1.22599928602E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-8.39338E-03 +/- 1.7E-05
Phase delay (usec)	-1.22599088632E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	6.32691E-06 +/- 2.9E-08
Delay rate (us/s)	2.05156093642E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35166E-07 +/- 2.1E-10
Total phase (deg)	-222.1	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	-183.0 +/- 0.4
RMS	Theor.	Amplitude	6.073 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
27.4	1.5	Search (1024X16)	5.946	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
15.6	2.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
2.6	0.4	Inc. seg. avg.	6.763	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
6.1	0.8	Inc. frq. avg.	6.029	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
o: az 146.1 el 53.5 pa -26.2		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) -587.416 208.643	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.152.3N2DRC	

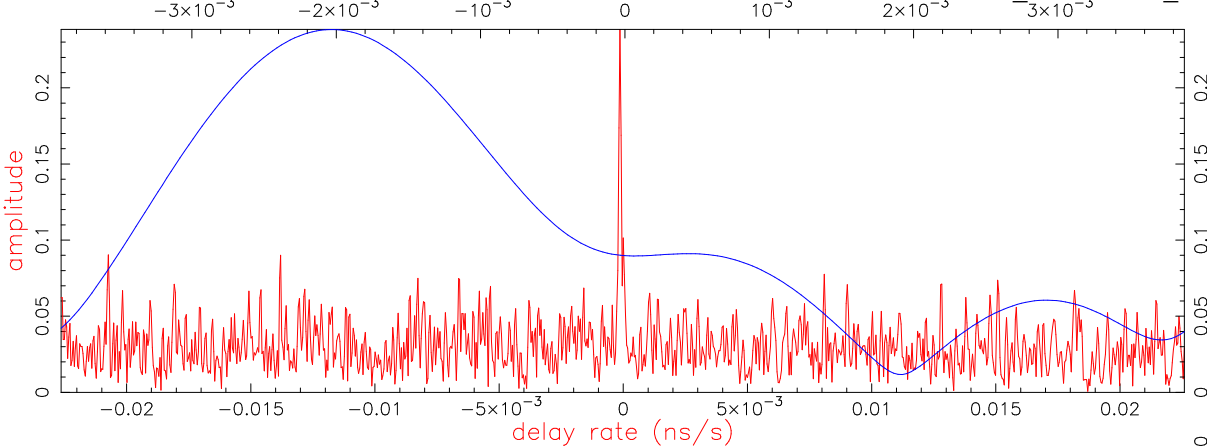
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, op

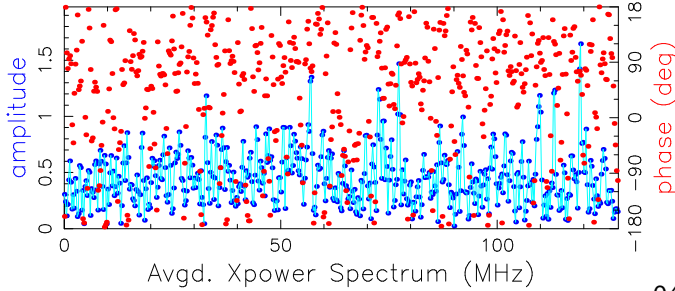
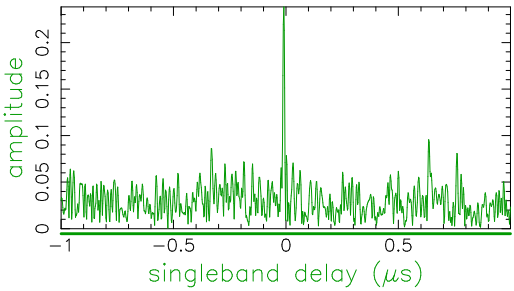
VLBA_OV - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



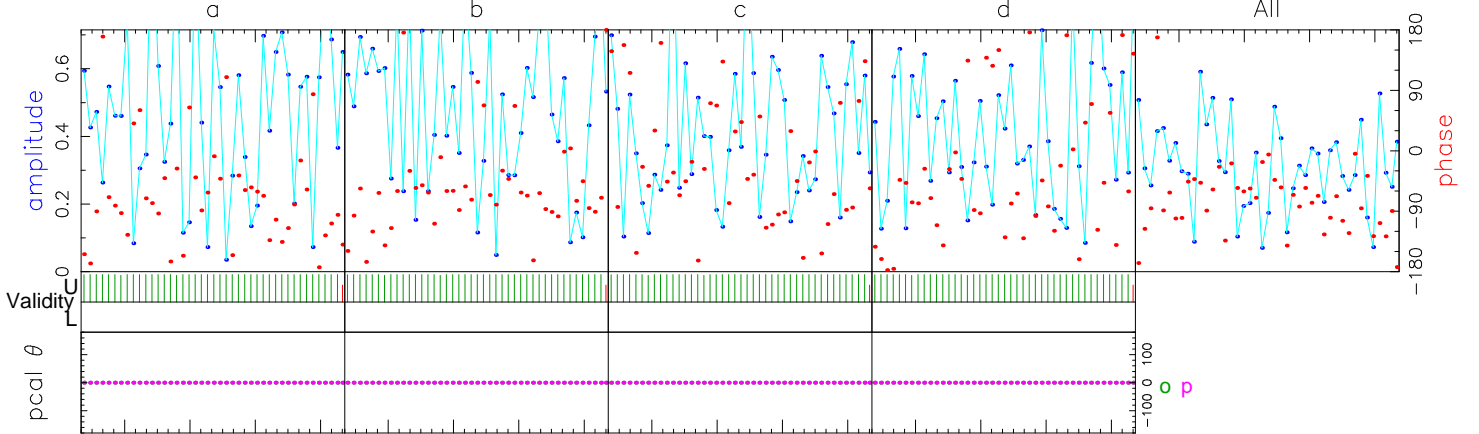
Fringe quality 9

SNR 10.1
 Int time 239.644
 Amp 0.238
 Phase -1.1
 PFD 1.3e-15
 Delays (us)
 SBD -0.009900
 MBD -0.002043
 Fringe rate (Hz)
 -0.005780
 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
 2025:049:102449
 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



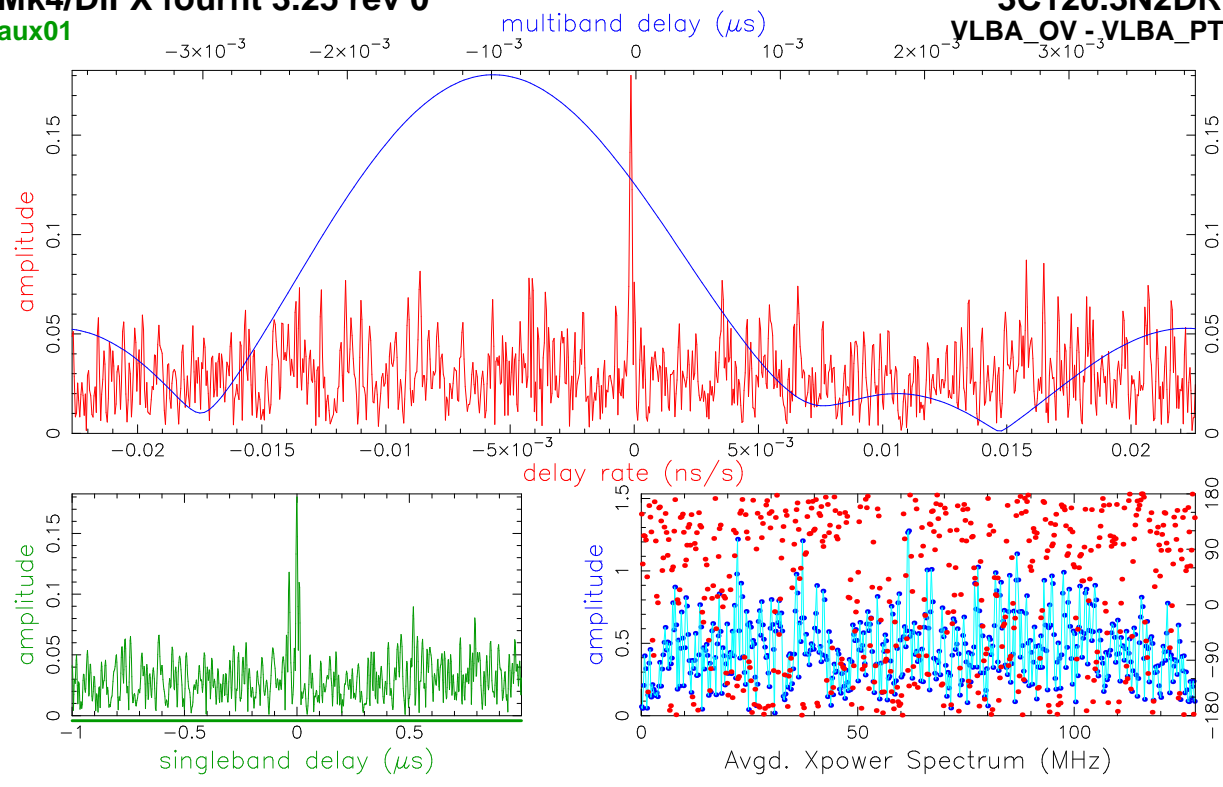
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-87.3	-73.7	-64.5	-93.0	Phase	-79.8
	0.3	0.3	0.1	0.2	Ampl.	0.2
	508.2	507.8	344.4	508.2	Sbd box	507.9
U/L	469/0	469/0	469/0	469/0	APs used	
o	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-1.22600074825E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-2.04310E-03	+/-	1.1E-04
Sband delay (usec)	-1.22600079227E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-9.89962E-03	+/-	4.3E-04
Phase delay (usec)	-1.22599089778E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	-5.13899E-06	+/-	7.3E-07
Delay rate (us/s)	2.05156094825E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.33983E-07	+/-	5.3E-09
Total phase (deg)	-40.2	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	-1.1	+/-	11.4

ph/seg (deg)	RMS 42.6	Theor. 37.2	Amplitude Search (1024X16)	0.238 +/- 0.024	0.237	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.5	65.0	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)	15.9	11.4	Inc. seg. avg.	0.259	0.259	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	37.6	19.8	Inc. frq. avg.	0.237	0.237	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.1 el 53.5 pa -26.2 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -587.416 208.643 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.165.3N2DRC

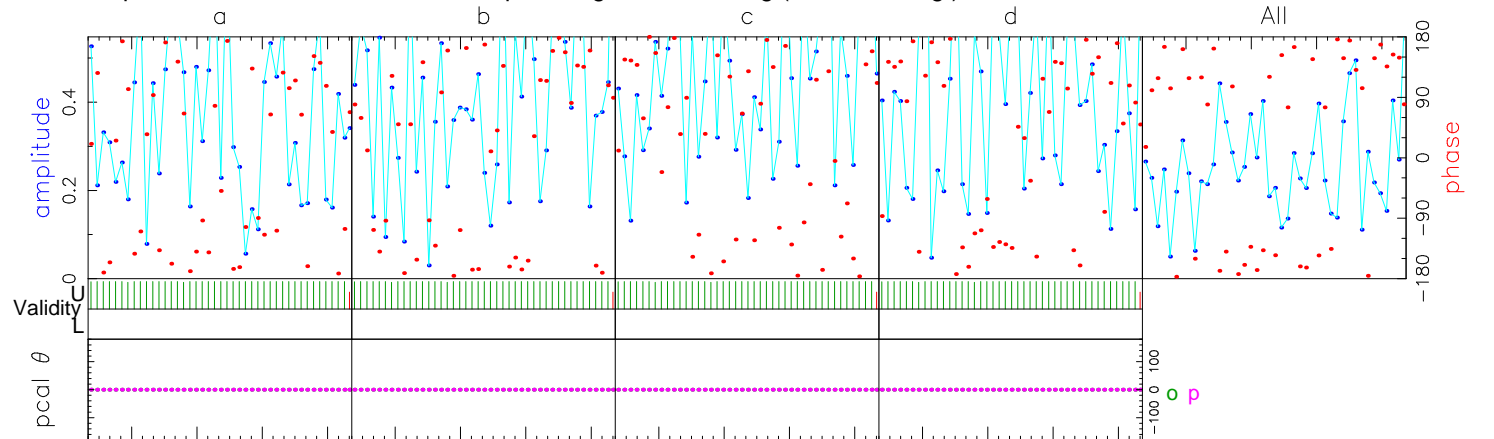


Fringe quality 9

SNR 7.7
Int time 239.644
Amp 0.183
Phase 162.3
PFD 1.8e-06
Delays (us)
SBD -0.000682
MBD -0.001057
Fringe rate (Hz)
-0.005840
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
2025:049:102451
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
	167.9	147.2	168.2	169.2	Phase	162.3
	0.2	0.2	0.2	0.2	Ampl.	0.2
	541.3	512.0	512.5	514.4	Sbd box	512.7
U/L	469/0	469/0	469/0	469/0	APs used	
o	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
o	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	-1.22599194928E+03		Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-1.05663E-03 +/- 1.4E-04
Sband delay (usec)	-1.22599157439E+03		Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-6.81750E-04 +/- 5.6E-04
Phase delay (usec)	-1.22599088219E+03		Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	1.04529E-05 +/- 9.5E-07
Delay rate (us/s)	2.05156093436E-01		Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35372E-07 +/- 6.9E-09
Total phase (deg)		123.2	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	162.3 +/- 14.8
	RMS	Theor.	Amplitude	0.183 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.0	48.6	Search (1024X16)	0.179	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.0	84.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	13.0	14.8	Inc. seg. avg.	0.188	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	13.3	25.9	Inc. frq. avg.	0.177	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
o: az 146.1 el 53.5 pa -26.2		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) -587.416 208.643		simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.175.3N2DRC		