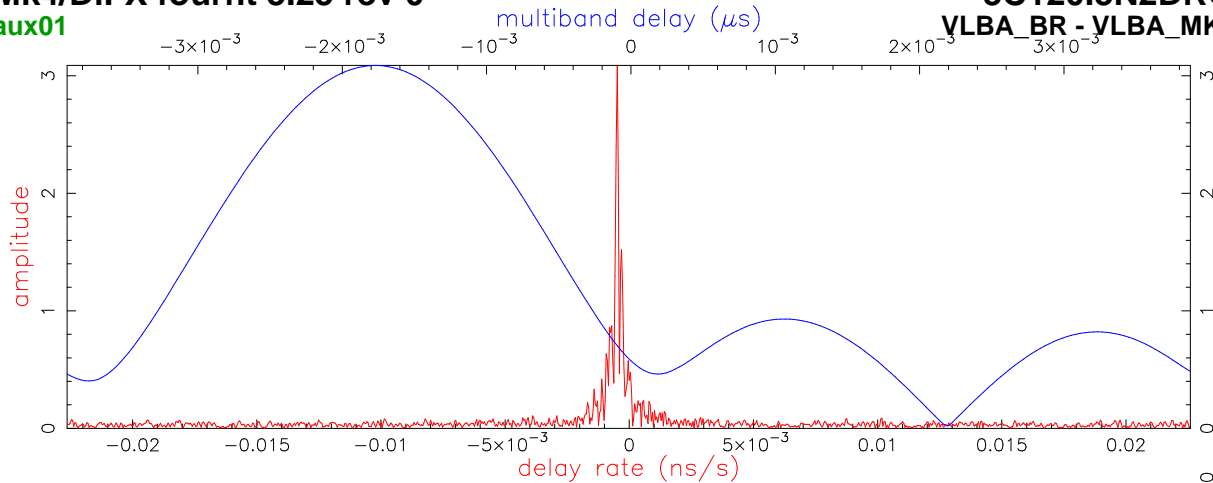


Mk4/DiFX fourfit 3.25 rev 0

aux01

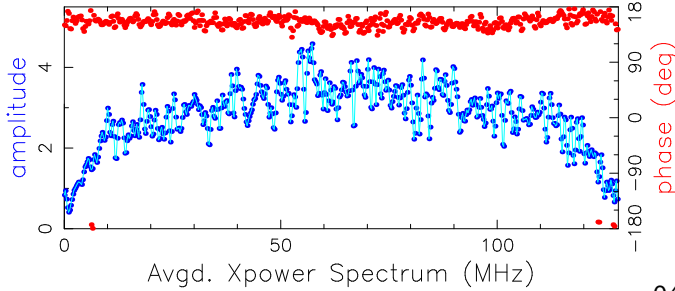
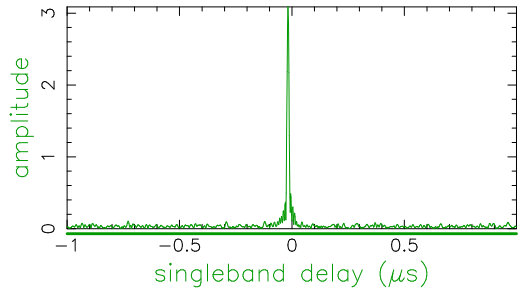
3C120.3N2DRC, No0552, bm

VLBA_BR - VLBA_MK, fgroup Q, pol LL



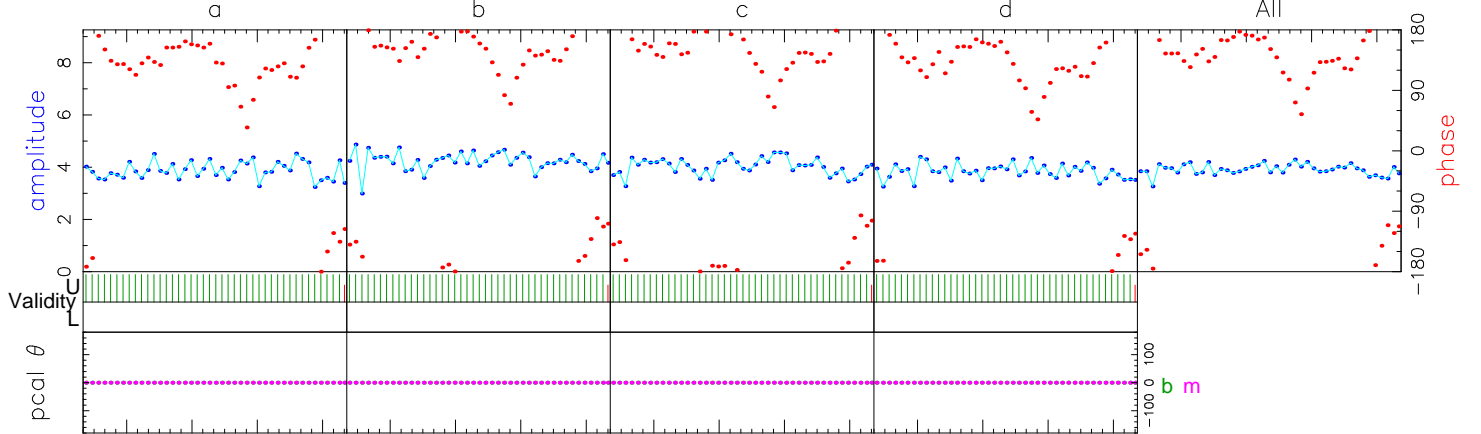
Fringe quality 5

SNR 130.8
 Int time 239.985
 Amp 3.088
 Phase -51.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.017572
 MBD -0.001770
 Fringe rate (Hz)
 -0.021150
 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
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	Manl PC	
m	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	2.91035110876E+03	Apriori delay (usec)	2.91036850412E+03	Resid mbdelay (usec)	-1.77036E-03	+/- 8.5E-06
Group delay (usec) (SBD)	2.91035093162E+03	Apriori clock (usec)	4.1222382E+00	Resid sbdelay (usec)	-1.75725E-02	+/- 3.3E-05
Sband delay (usec)	2.91036851387E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	9.74801E-06	+/- 5.6E-08
Phase delay (usec)	-8.49343360834E-01	Apriori rate (us/s)	-8.49342870578E-01	Resid rate (us/s)	-4.90256E-07	+/- 4.1E-10
Delay rate (us/s)		Apriori accel (us/s/s)	-1.11461821723E-05	Resid phase (deg)	-51.1	+/- 0.9
Total phase (deg)	-314.7					

	RMS	Theor.	Amplitude	3.088 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	40.2	2.9	Search (1024X16)	2.988	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	27.7	5.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	15.7	0.9	Inc. seg. avg.	3.915	Data rate(Mb/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	4.4	1.5	Inc. frq. avg.	3.147	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2436.597 1751.424 simultaneous interpolator

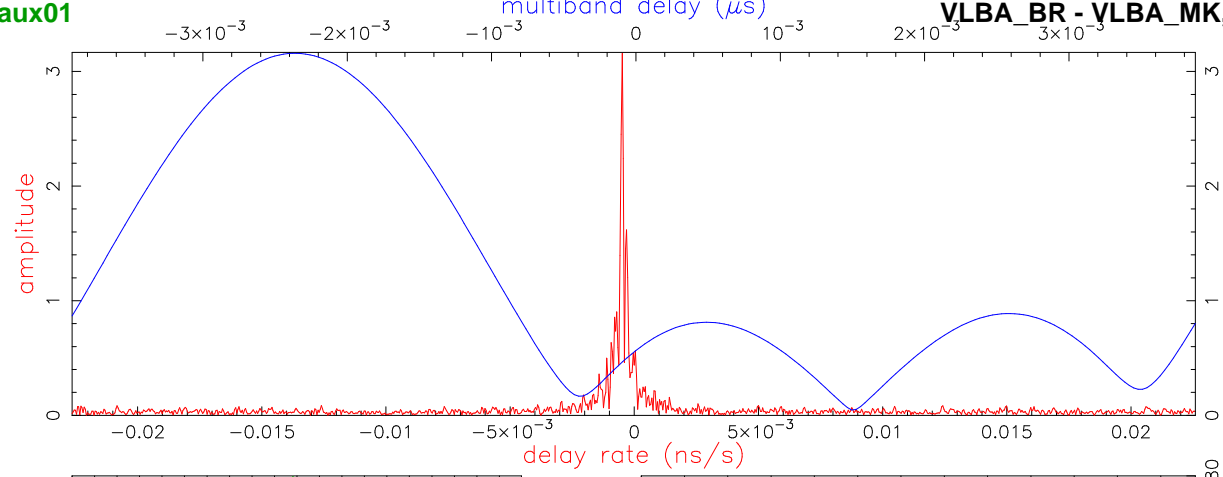
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bm.Q.10.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bm

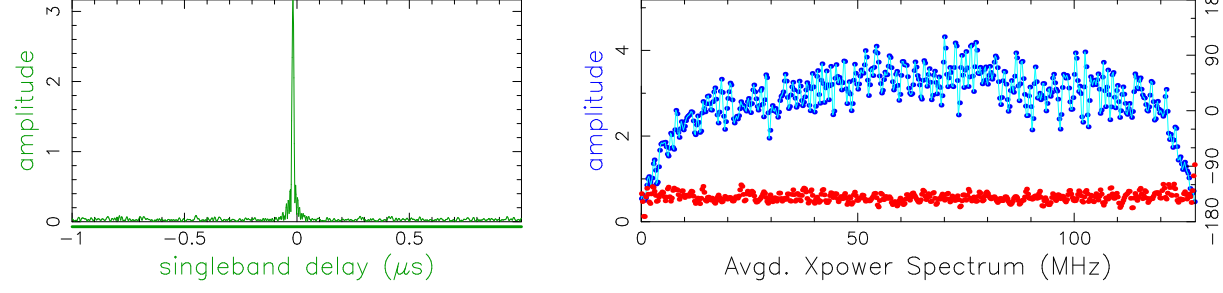
VLBA_BR - VLBA_MK, fgroup Q, pol RR



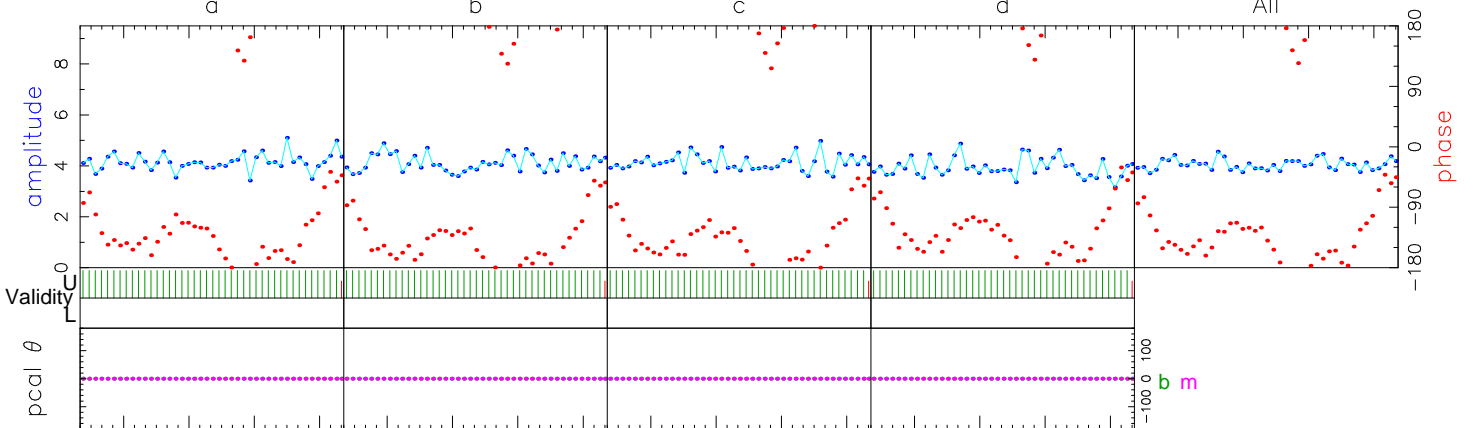
Fringe quality 6

SNR 134.1
 Int time 239.985
 Amp 3.166
 Phase -341.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.017907
 MBD -0.002381
 Fringe rate (Hz)
 -0.021131
 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
	-134.4	-145.3	-141.6	-132.6	Phase	-138.5
	3.2	3.2	3.2	3.0	Ampl.	3.2
	503.6	503.8	503.9	504.0	Sbd box	503.8
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	2.91035049807E+03	Apriori delay (usec)	2.91036850412E+03	Resid mbdelay (usec)	-2.38105E-03	+/- 8.3E-06
Group delay (usec) (SBD)	2.91035059762E+03	Apriori clock (usec)	4.1222382E+00	Resid sbdelay (usec)	-1.79065E-02	+/- 3.2E-05
Sband delay (usec)	2.91036849520E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	-8.92065E-06	+/- 5.5E-08
Phase delay (usec)	-8.49343360398E-01	Apriori rate (us/s)	-8.49342870578E-01	Resid rate (us/s)	-4.89821E-07	+/- 4.0E-10
Delay rate (us/s)		Apriori accel (us/s/s)	-1.11461821723E-05	Resid phase (deg)	-341.0	+/- 0.9
Total phase (deg)	-244.6					

	RMS	Theor.	Amplitude	3.166 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	40.8	2.8	Search (1024X16)	3.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	29.0	4.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	7.3	0.9	Inc. seg. avg.	4.055	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.4	1.5	Inc. frq. avg.	3.171	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2436.597 1751.424 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bm.Q.18.3N2DRC

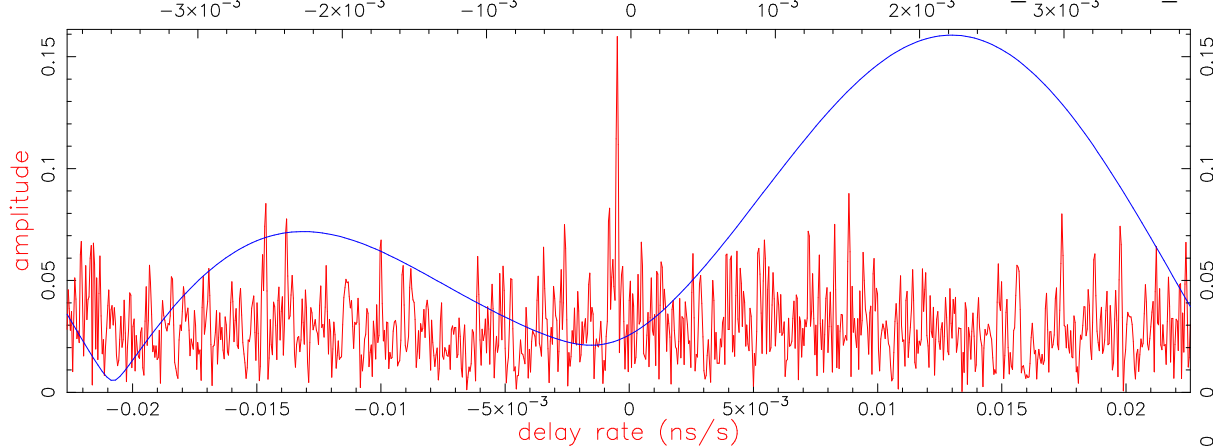
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bm

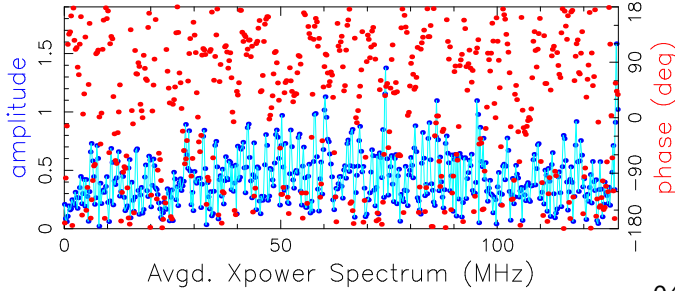
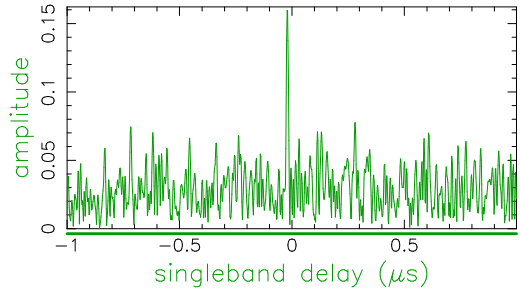
VLBA_BR - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)



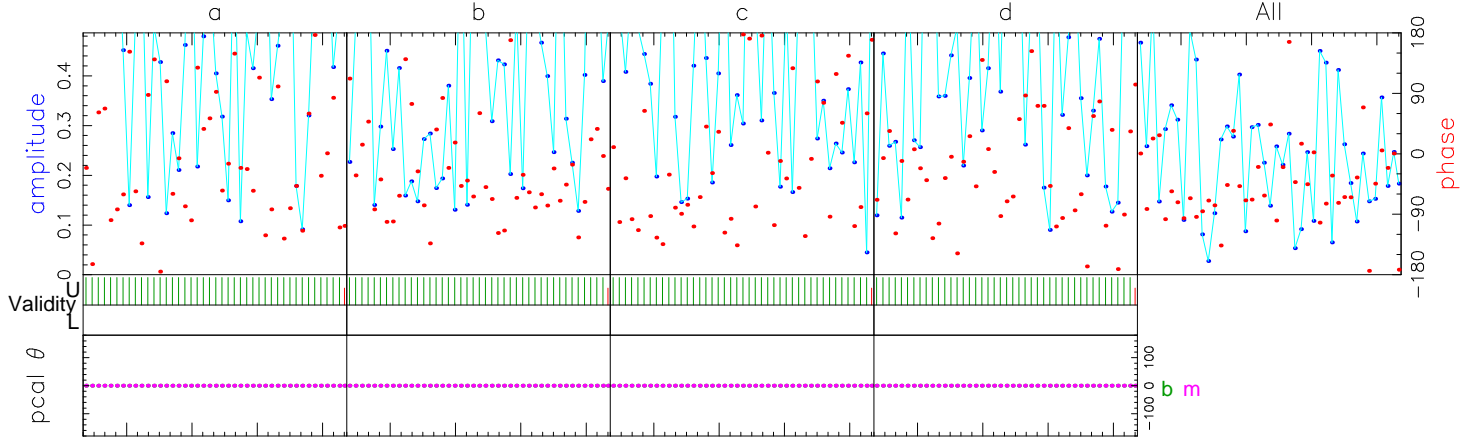
Fringe quality 0

SNR 6.9
 Int time 239.985
 Amp 0.162
 Phase -175.2
 PFD 9.5e-04
 Delays (us)
 SBD -0.020559
 MBD 0.002114
 Fringe rate (Hz)
 -0.021722
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102423
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



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

Group delay (usec) (SBD)	2.91034718054E+03	Apriori delay (usec)	2.91036850412E+03	Resid mbdelay (usec)	2.11392E-03	+/- 1.6E-04
Sband delay (usec)	2.91034794500E+03	Apriori clock (usec)	4.1222382E+00	Resid sbdelay (usec)	-2.05591E-02	+/- 6.3E-04
Phase delay (usec)	2.91036850081E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	-3.31347E-06	+/- 1.1E-06
Delay rate (us/s)	-8.49343374094E-01	Apriori rate (us/s)	-8.49342870578E-01	Resid rate (us/s)	-5.03516E-07	+/- 7.7E-09
Total phase (deg)	-78.8	Apriori accel (us/s/s)	-1.11461821723E-05	Resid phase (deg)	-175.2	+/- 16.7

ph/seg (deg)	55.3	Theor.	54.7	Amplitude	0.162 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	96.2		95.5	Search (1024X16)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	27.4		16.7	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.004 0.004
amp/frq (%)	33.2		29.1	Inc. seg. avg.	0.170	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
				Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00

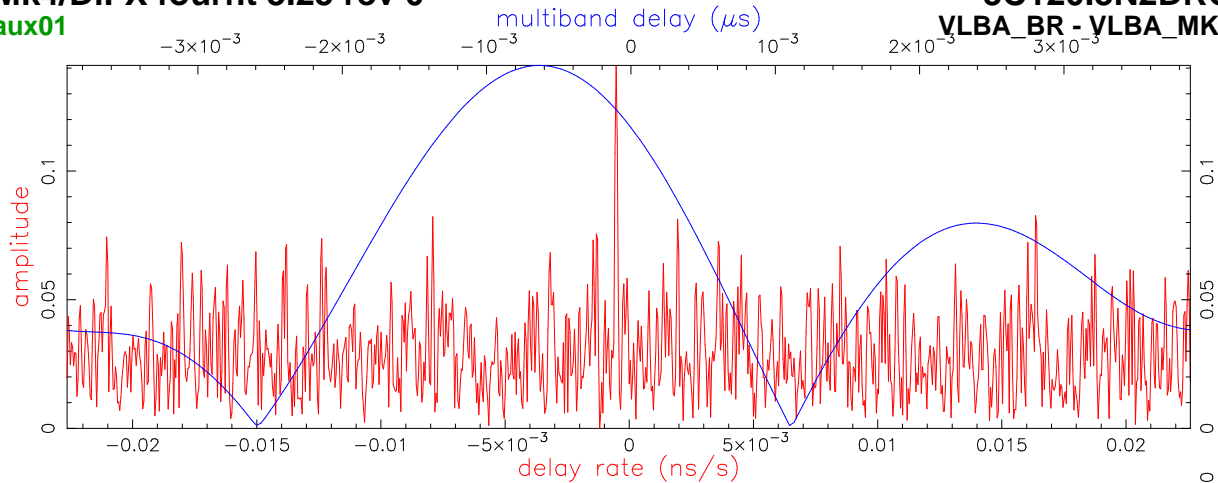
b: az 150.6 el 43.7 pa -19.0 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2436.597 1751.424 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bm.Q.27.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

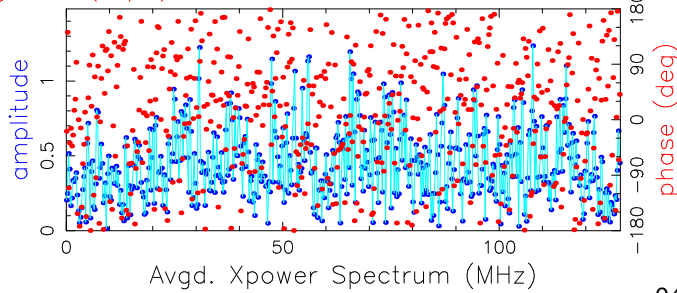
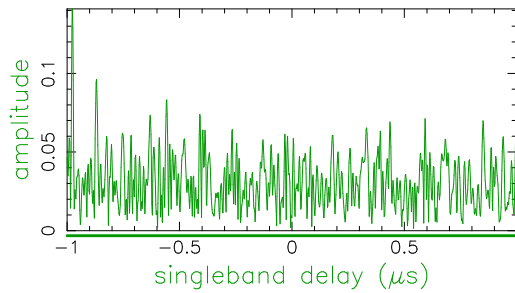
3C120.3N2DRC, No0552, bm

VLBA_BR - VLBA_MK, fgroup Q, pol RL



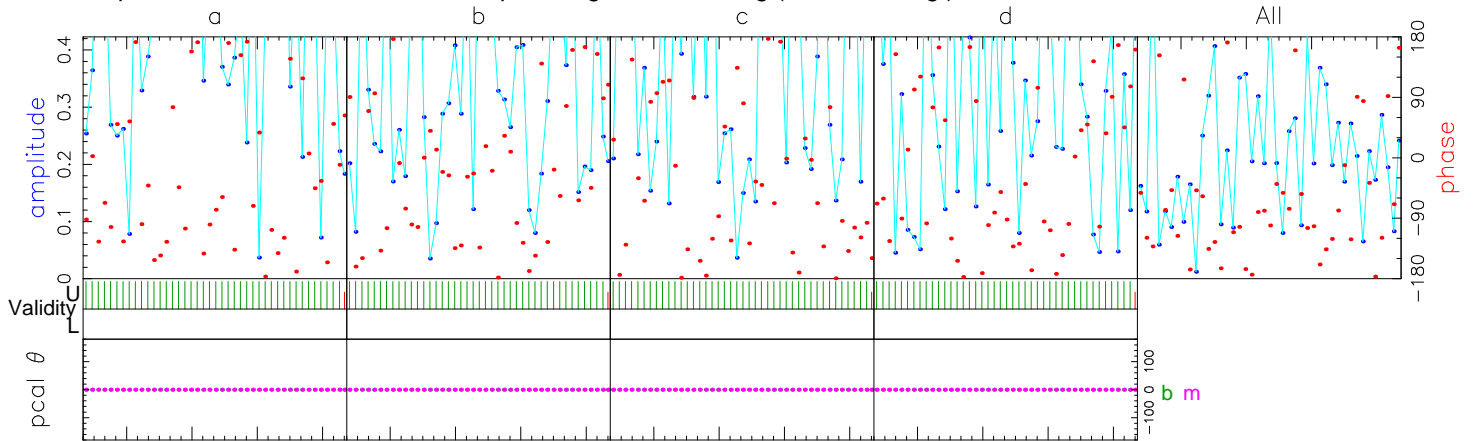
Fringe quality 0

SNR 6.0
 Int time 239.985
 Amp 0.141
 Phase -354.5
 PFD 2.6e-01
 Delays (us)
 SBD -0.976528
 MBD -0.000633
 Fringe rate (Hz)
 -0.022126
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-121.9	-88.7	-134.1	-109.5	Phase	-118.3
	0.2	0.1	0.2	0.1	Ampl.	0.1
	504.6	1023.6	12.6	165.9	Sbd box	13.0
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	2.90939130856E+03	Apriori delay (usec)	2.91036850412E+03	Resid mbdelay (usec)	-6.33062E-04	+/-	1.9E-04
Sband delay (usec)	2.90939197662E+03	Apriori clock (usec)	4.1222382E+00	Resid sbdelay (usec)	-9.76528E-01	+/-	7.2E-04
Phase delay (usec)	2.91036849651E+03	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	-7.61657E-06	+/-	1.2E-06
Delay rate (us/s)	-8.49343383460E-01	Apriori rate (us/s)	-8.49342870578E-01	Resid rate (us/s)	-5.12882E-07	+/-	8.9E-09
Total phase (deg)	-258.1	Apriori accel (us/s/s)	-1.11461821723E-05	Resid phase (deg)	-354.5	+/-	19.2

ph/seg (deg)	RMS 66.3	Theor. 62.9	Amplitude Search (1024X16)	0.141 +/- 0.024	0.134	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	104.4	109.8	Interp.	0.000	0.139	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	24.7	19.2	Inc. seg. avg.	0.139	0.138	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	31.7	33.5	Inc. frq. avg.	0.138		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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2436.597 1751.424 simultaneous interpolator

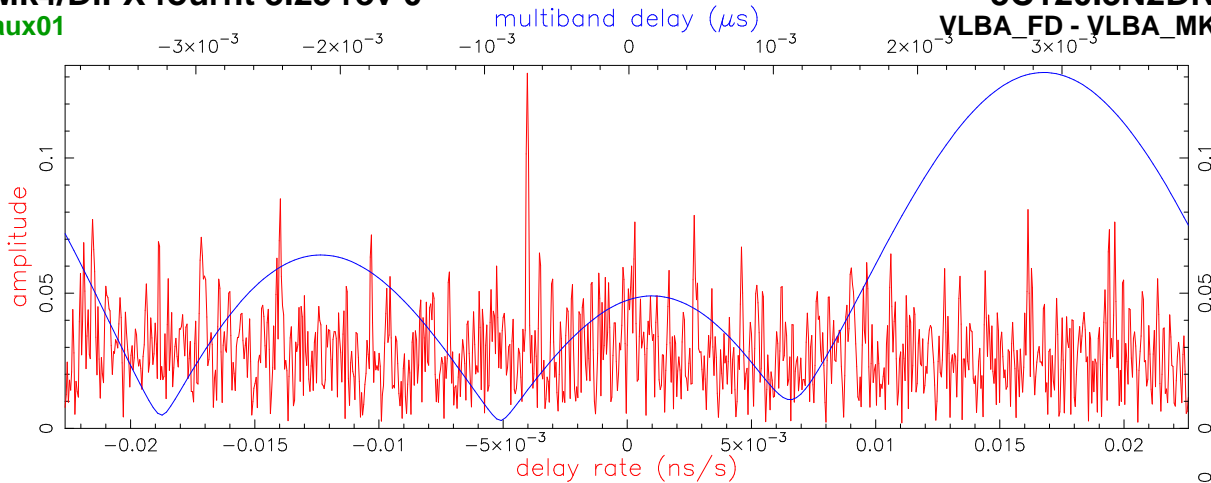
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bm.Q.33.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

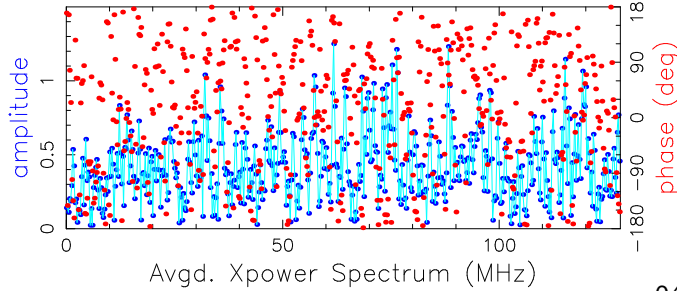
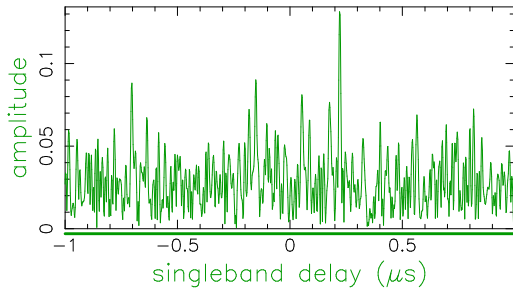
3C120.3N2DRC, No0552, fm

VLBA_FD - VLBA_MK, fgroup Q, pol RL



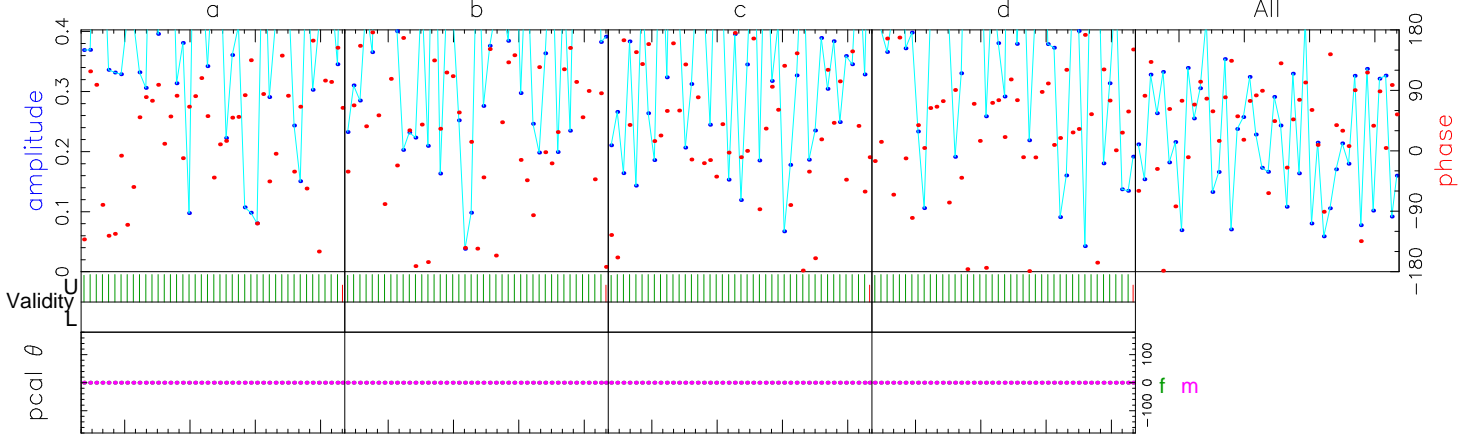
Fringe quality 0

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



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

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



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

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

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

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

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

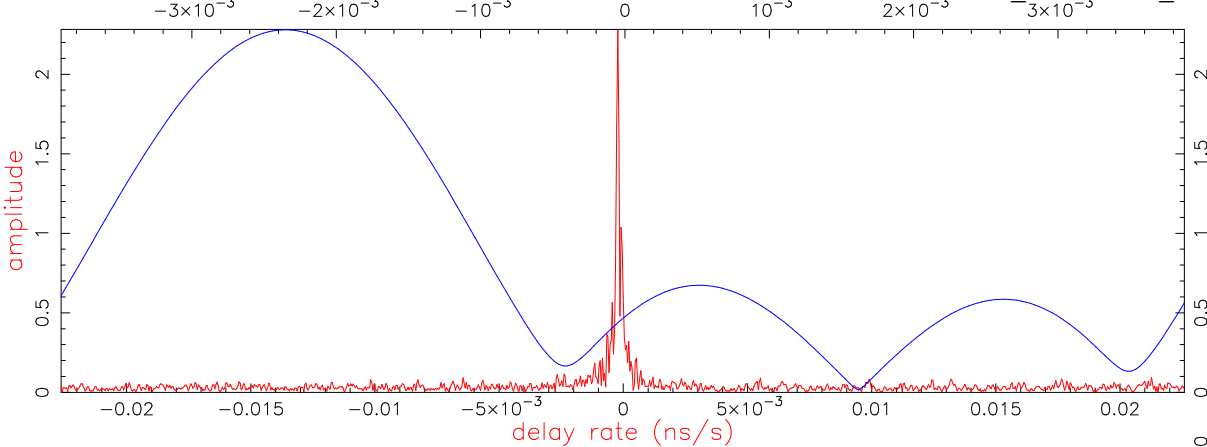
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fm

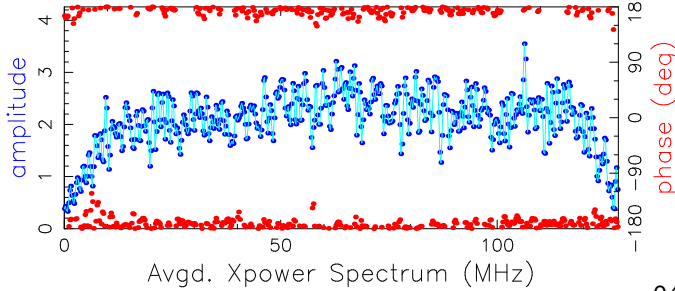
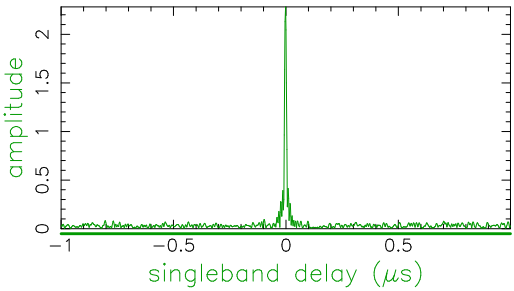
VLBA_FD - VLBA_MK, fgroup Q, pol LL

multiband delay (μ s)



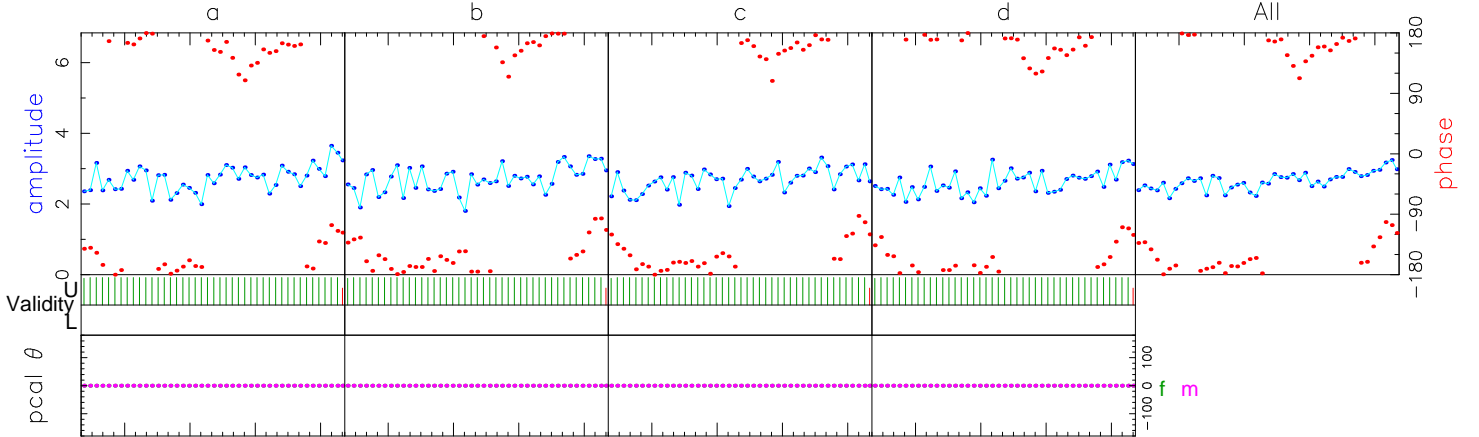
Fringe quality 7

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



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	179.4	-166.9	-170.5	-177.6	Phase	-173.9
	2.3	2.3	2.3	2.2	Ampl.	2.3
	512.2	511.8	511.7	511.9	Sbd box	511.9
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

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

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

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

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

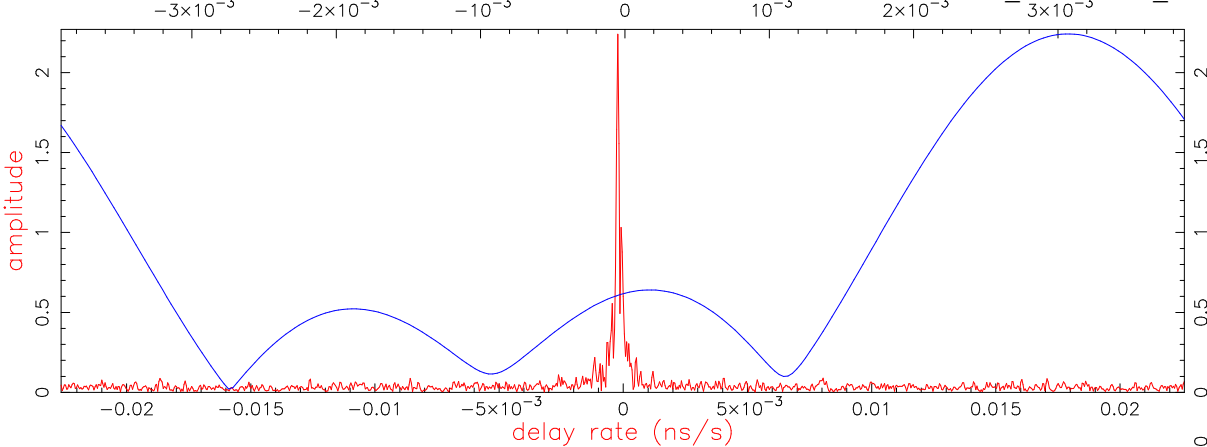
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fm

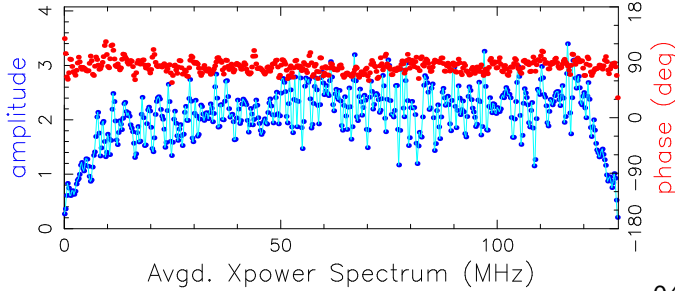
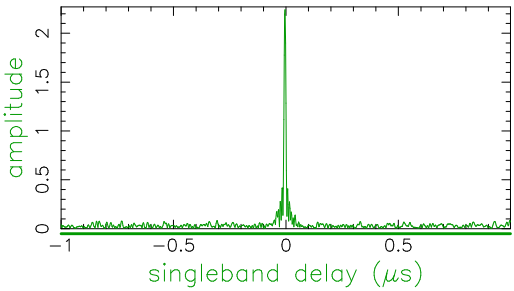
VLBA_FD - VLBA_MK, fgroup Q, pol RR

multiband delay (μ s)



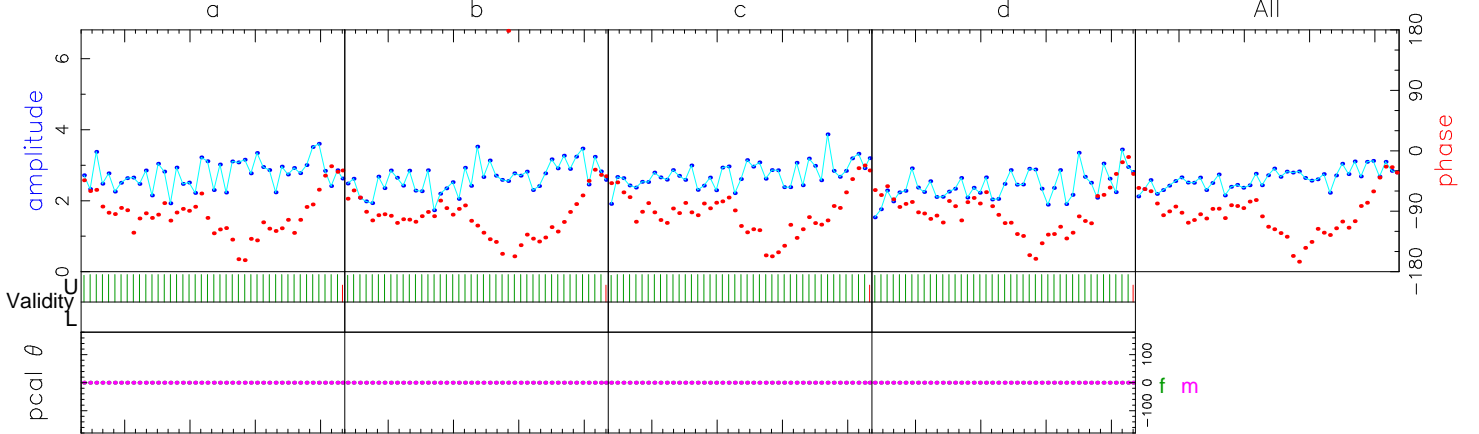
Fringe quality 7

SNR 96.1
 Int time 239.798
 Amp 2.270
 Phase -15.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.004662
 MBD 0.003022
 Fringe rate (Hz)
 -0.009496
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

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

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

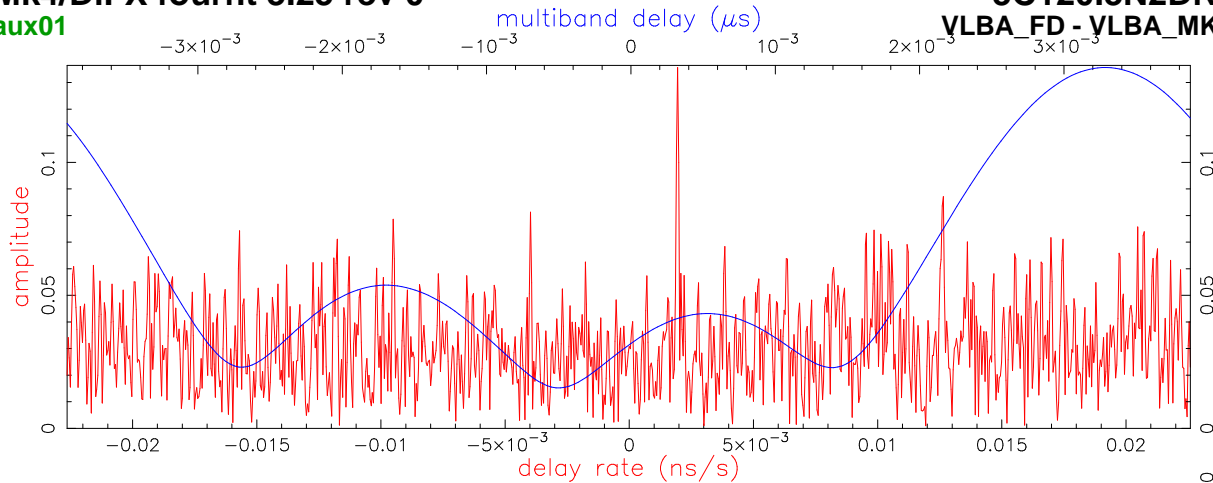
f: az 168.1 el 64.3 pa -9.7 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3156.319 616.935 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.68.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

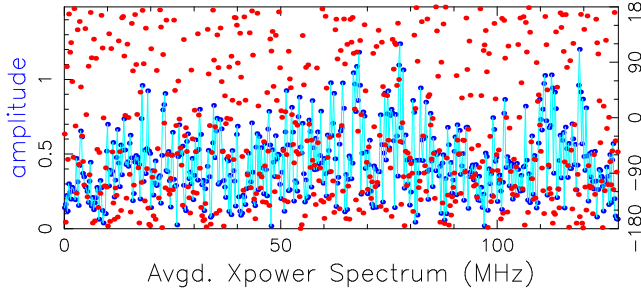
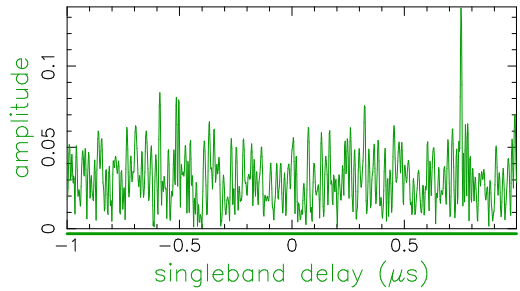
3C120.3N2DRC, No0552, fm

VLBA_FD - VLBA_MK, fgroup Q, pol LR



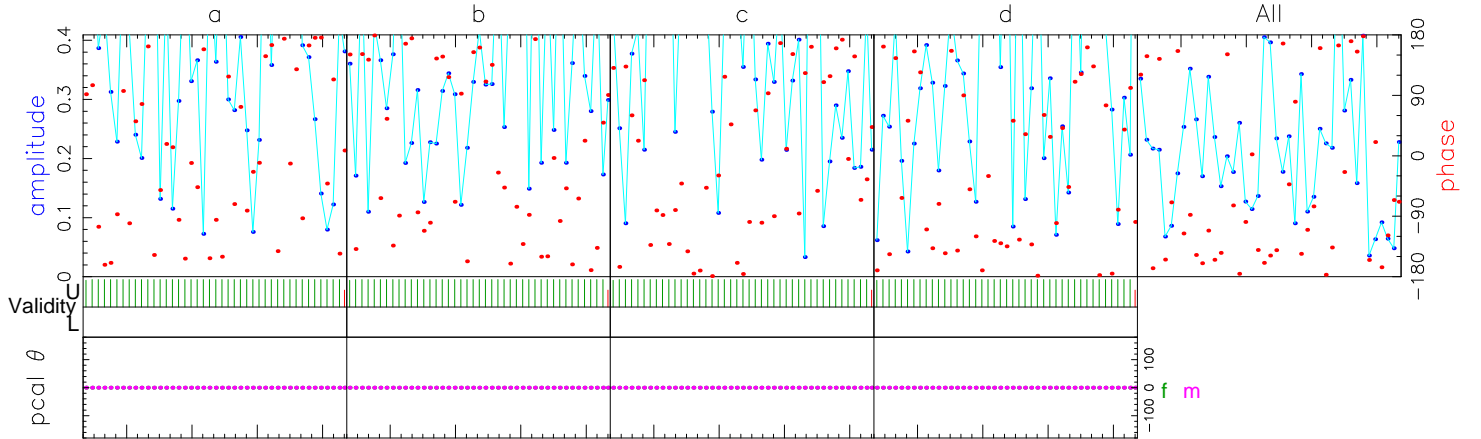
Fringe quality 0

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



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

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



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

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

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

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

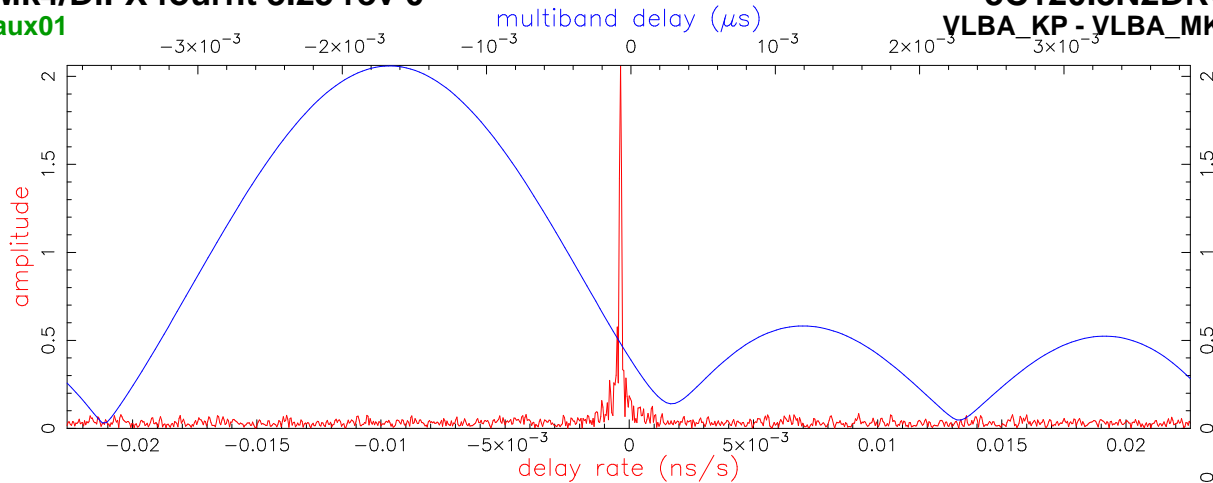
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fm..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fm.Q.87.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

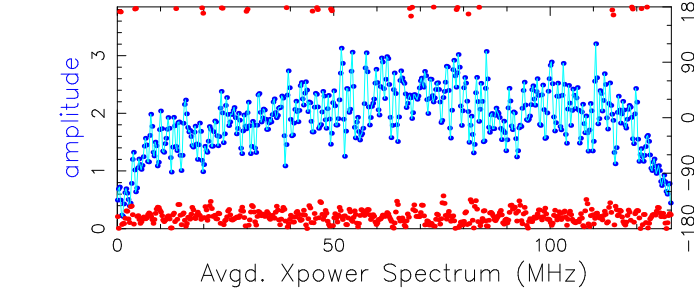
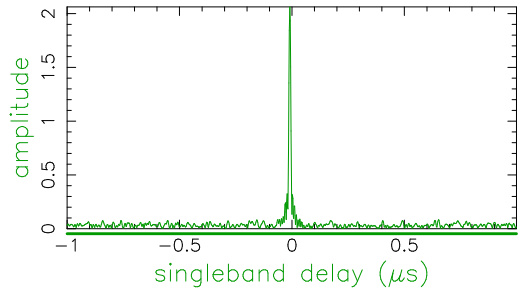
3C120.3N2DRC, No0552, km

VLBA_KP - VLBA_MK, fgroup Q, pol LL



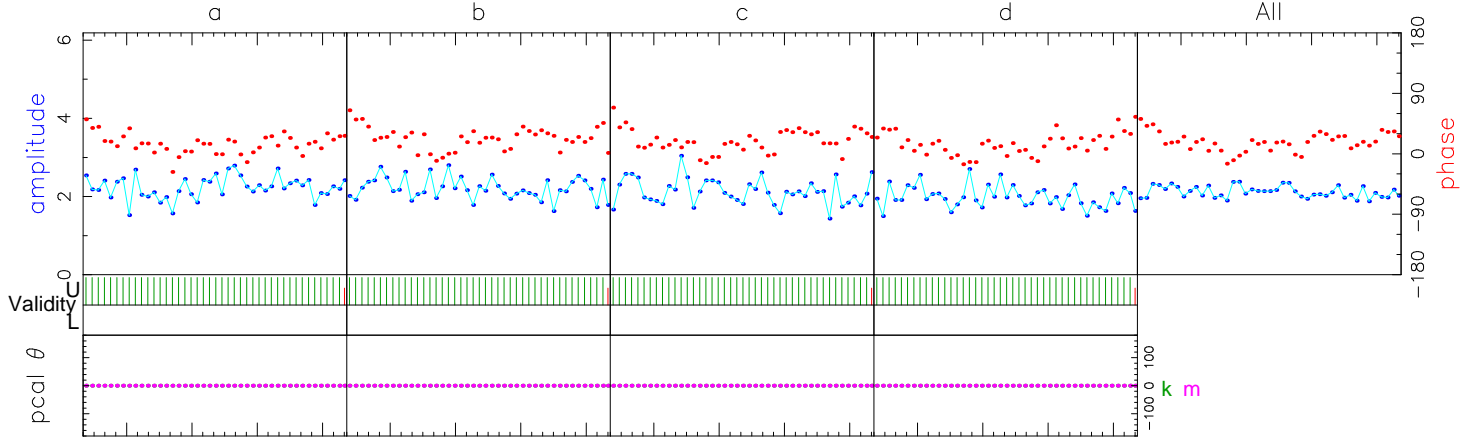
Fringe quality 8

SNR 87.4
 Int time 239.981
 Amp 2.063
 Phase -263.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.009504
 MBD -0.001661
 Fringe rate (Hz)
 -0.015972
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
14.9	22.6	19.0	14.0	Phase	17.7
2.2	2.1	2.0	1.9	Ampl.	2.1
508.2	508.2	508.1	508.0	Sbd box	508.1
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
m 1000	1000	1000	1000	PC freqs	
k:m 0:0	0:0	0:0	0:0	PC phase	
k:m 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000		
k Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	6.77146745266E+03	Apriori delay (usec)	6.77147692642E+03	Resid mbdelay (usec)	-1.66126E-03	+/-	1.3E-05
Sband delay (usec)	6.77146742204E+03	Apriori clock (usec)	-3.8142204E-01	Resid sbdelay (usec)	-9.50438E-03	+/-	4.9E-05
Phase delay (usec)	6.77147692756E+03	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	1.13813E-06	+/-	8.4E-08
Delay rate (us/s)	-9.31184958949E-01	Apriori rate (us/s)	-9.31184588703E-01	Resid rate (us/s)	-3.70246E-07	+/-	6.1E-10
Total phase (deg)	-45.5	Apriori accel (us/s/s)	-3.39893754227E-05	Resid phase (deg)	-263.6	+/-	1.3

ph/seg (deg)	13.9	Theor.	4.3	Amplitude	2.063 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	7.5		4.3	Search (1024X16)	1.931	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	4.9		1.3	Inc. seg. avg.	2.115	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	4.6		2.3	Inc. frq. avg.	2.063	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

k: az 153.1 el 60.9 pa -22.3 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2661.500 715.329 simultaneous interpolator

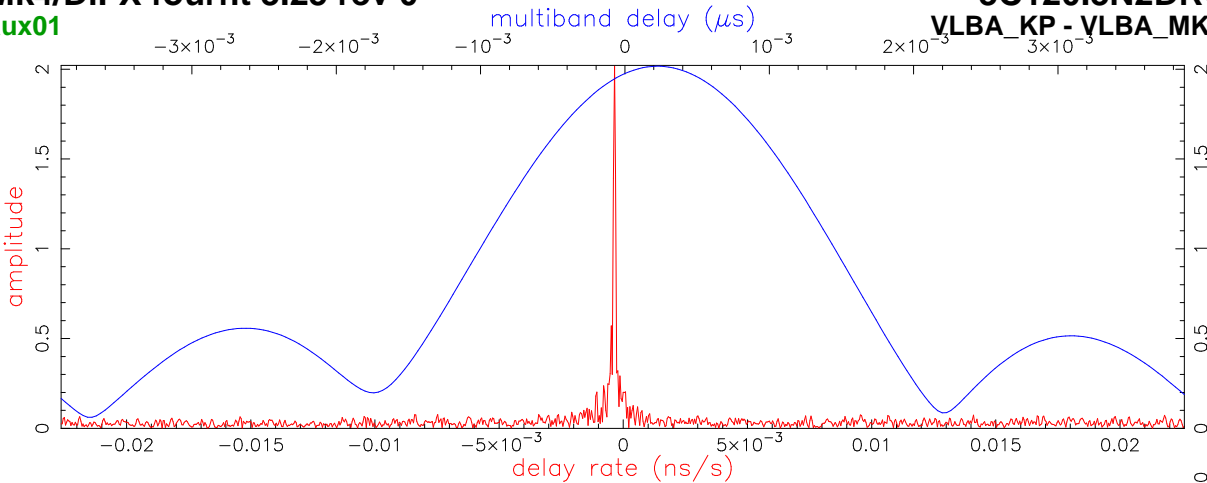
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/km..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/km.Q.40.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

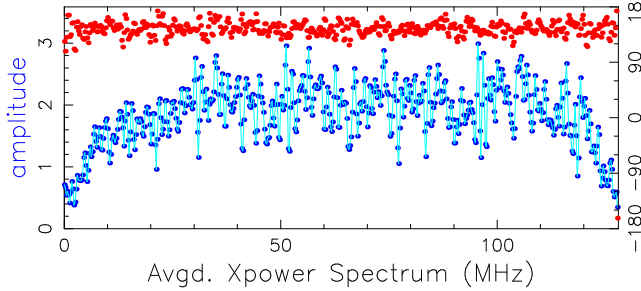
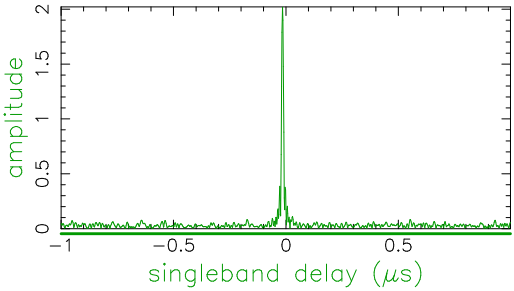
3C120.3N2DRC, No0552, km

VLBA_KP - VLBA_MK, fgroup Q, pol RR



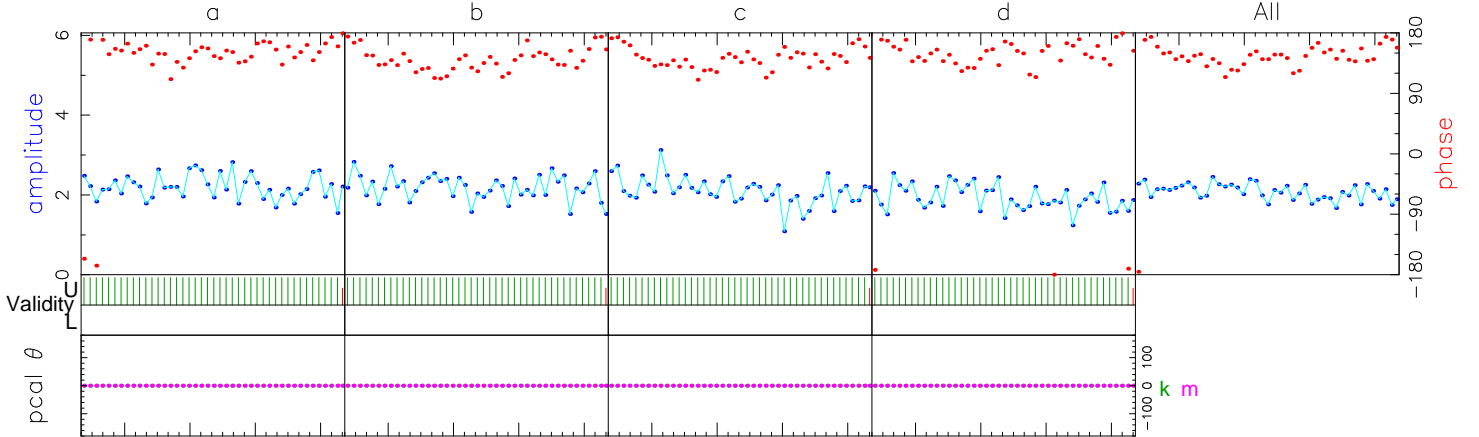
Fringe quality 8

SNR 85.6
 Int time 239.981
 Amp 2.021
 Phase -55.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.015303
 MBD 0.000245
 Fringe rate (Hz)
 -0.015978
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

	6.77146154619E+03	Apriori delay (usec)	6.77147692642E+03	Resid mbdelay (usec)	2.44771E-04	+/- 1.3E-05
Group delay (usec) (SBD)	6.77146154619E+03	Apriori clock (usec)	-3.8142204E-01	Resid sbdelay (usec)	-1.53026E-02	+/- 5.0E-05
Sband delay (usec)	6.77146162379E+03	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	9.43642E-06	+/- 8.6E-08
Phase delay (usec)	6.77147693586E+03	Apriori rate (us/s)	-9.31184588703E-01	Resid rate (us/s)	-3.70385E-07	+/- 6.2E-10
Delay rate (us/s)	-9.31184959088E-01	Apriori accel (us/s/s)	-3.39893754227E-05	Resid phase (deg)	-55.9	+/- 1.3
Total phase (deg)	-197.9					

	RMS	Theor.	Amplitude	2.021 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	15.0	4.4	Search (1024X16)	1.876	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	10.1	7.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	8.0	1.3	Inc. seg. avg.	2.082	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.4	2.3	Inc. frq. avg.	2.027	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2661.500 715.329 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/km..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/km.Q.56.3N2DRC

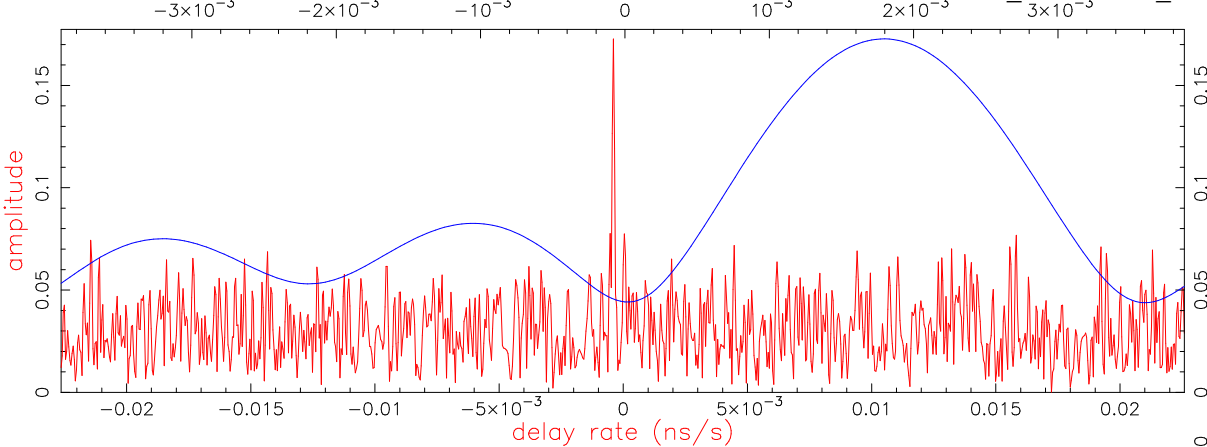
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, km

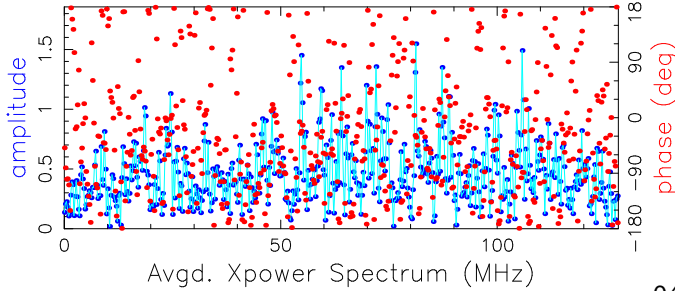
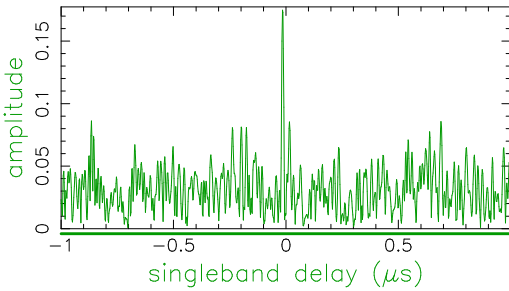
VLBA_KP - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)



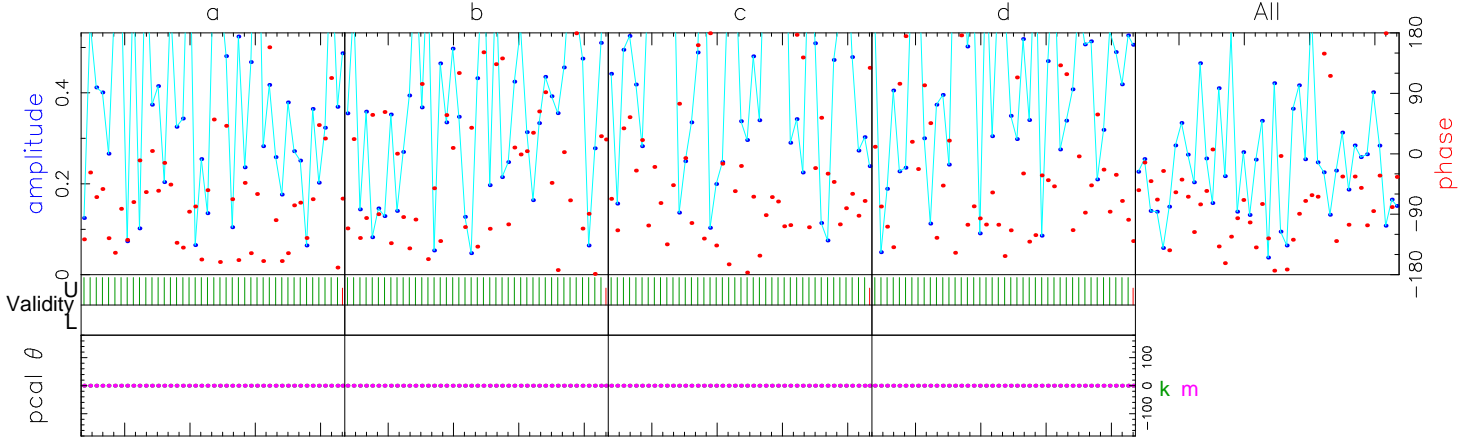
Fringe quality 9

SNR 7.5
 Int time 239.981
 Amp 0.177
 Phase -286.8
 PFD 9.2e-06
 Delays (us)
 SBD -0.014790
 MBD 0.001770
 Fringe rate (Hz)
 -0.016542
 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
	-85.5	-98.4	-81.8	-83.8	Phase	-84.3
	0.2	0.0	0.3	0.2	Ampl.	0.2
	254.5	864.3	505.6	505.3	Sbd box	505.4
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	6.77146307102E+03	Apriori delay (usec)	6.77147692642E+03	Resid mbdelay (usec)	1.76960E-03	+/-	1.5E-04
Sband delay (usec)	6.77146213629E+03	Apriori clock (usec)	-3.8142204E-01	Resid sbdelay (usec)	-1.47901E-02	+/-	5.7E-04
Phase delay (usec)	6.77147692099E+03	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-5.42622E-06	+/-	9.8E-07
Delay rate (us/s)	-9.31184972150E-01	Apriori rate (us/s)	-9.31184588703E-01	Resid rate (us/s)	-3.83446E-07	+/-	7.1E-09
Total phase (deg)	-68.7	Apriori accel (us/s/s)	-3.39893754227E-05	Resid phase (deg)	-286.8	+/-	15.3

ph/seg (deg)	RMS 56.2	Theor. 50.0	Amplitude Search (1024X16)	0.177 +/- 0.024	0.169	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.6	87.3	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	10.2	15.3	Inc. seg. avg.	0.181	0.181	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	48.1	26.6	Inc. frq. avg.	0.167	0.167	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2661.500 715.329 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/km..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/km.Q.72.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

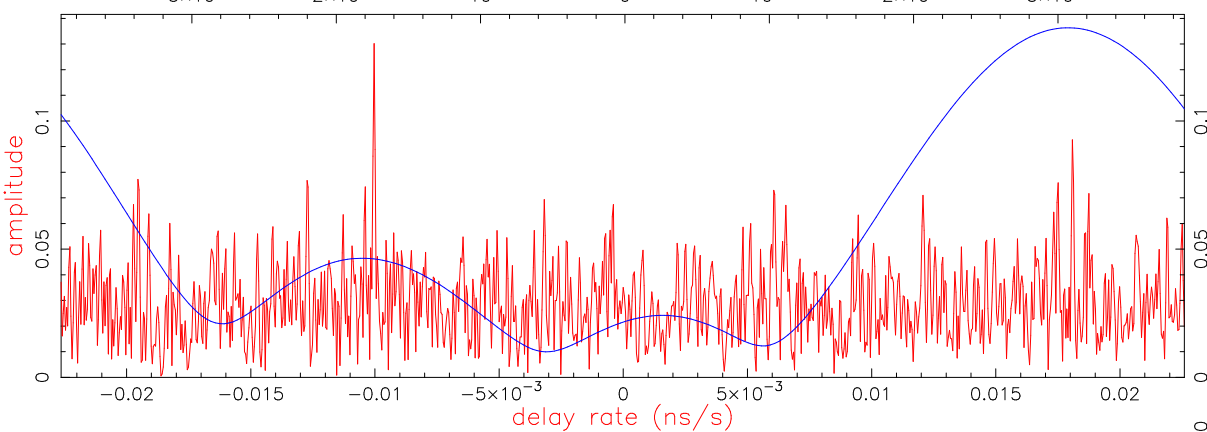
aux01

3C120.3N2DRC, No0552, km

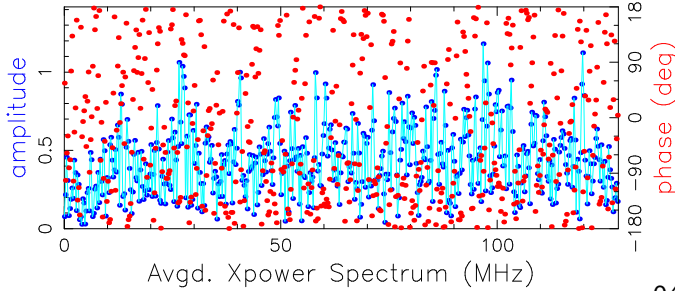
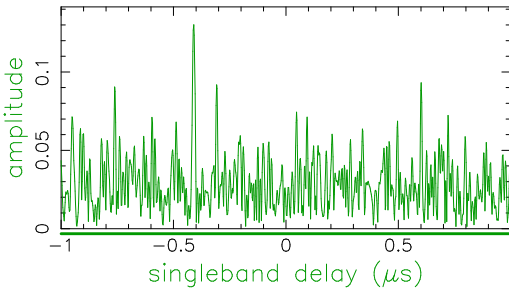
VLBA_KP - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

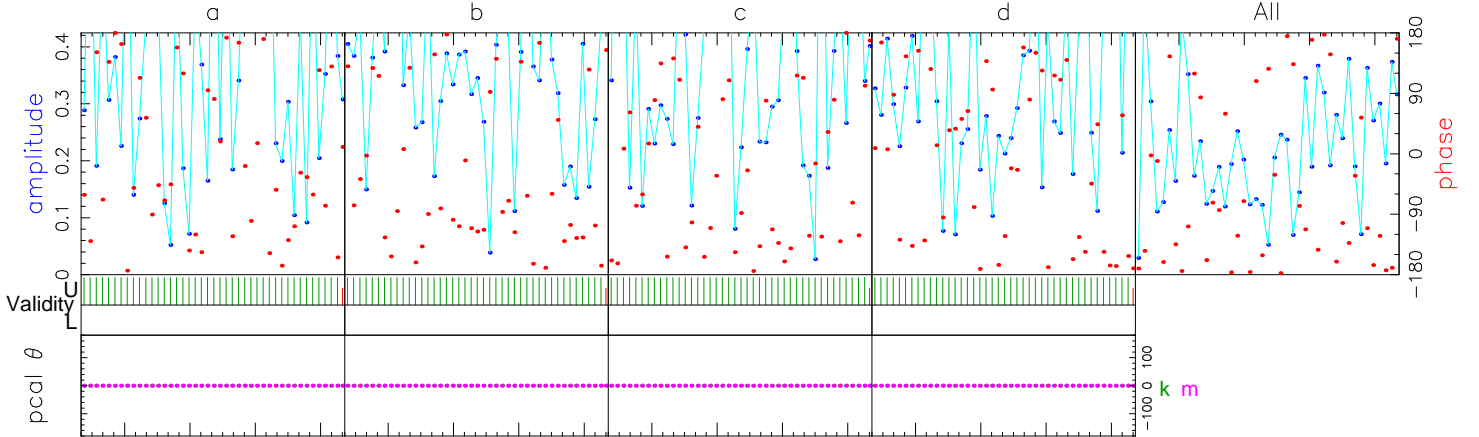


SNR 5.5
 Int time 239.981
 Amp 0.142
 Phase -13.8
 PFD 9.8e-01
 Delays (us)
 SBD -0.410492
 MBD -0.004395
 Fringe rate (Hz)
 -0.435363
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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
	-138.4	-128.3	-152.7	179.2	Phase	-148.8
	0.1	0.2	0.1	0.1	Ampl.	0.1
	66.5	882.1	625.6	822.1	Sbd box	302.8
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	6.77106628189E+03	Apriori delay (usec)	6.77147692642E+03	Resid mbdelay (usec)	-4.39453E-03	+/- 2.0E-04
Group delay (usec) (SBD)	6.77106643442E+03	Apriori clock (usec)	-3.8142204E-01	Resid sbdelay (usec)	-4.10492E-01	+/- 7.8E-04
Sband delay (usec)	6.77147691684E+03	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-9.57823E-06	+/- 1.3E-06
Phase delay (usec)	-9.31194680562E-01	Apriori rate (us/s)	-9.31184588703E-01	Resid rate (us/s)	-1.00919E-05	+/- 9.6E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-3.39893754227E-05	Resid phase (deg)	-13.8	+/- 20.8
Total phase (deg)	-155.7					

	RMS	Theor.	Amplitude	0.142 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	70.6	68.1	Search (1024X16)	0.132	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	109.6	118.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	28.0	20.8	Inc. seg. avg.	0.143	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	16.2	36.2	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

k: az 153.1 el 60.9 pa -22.3 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 2661.500 715.329 simultaneous interpolator

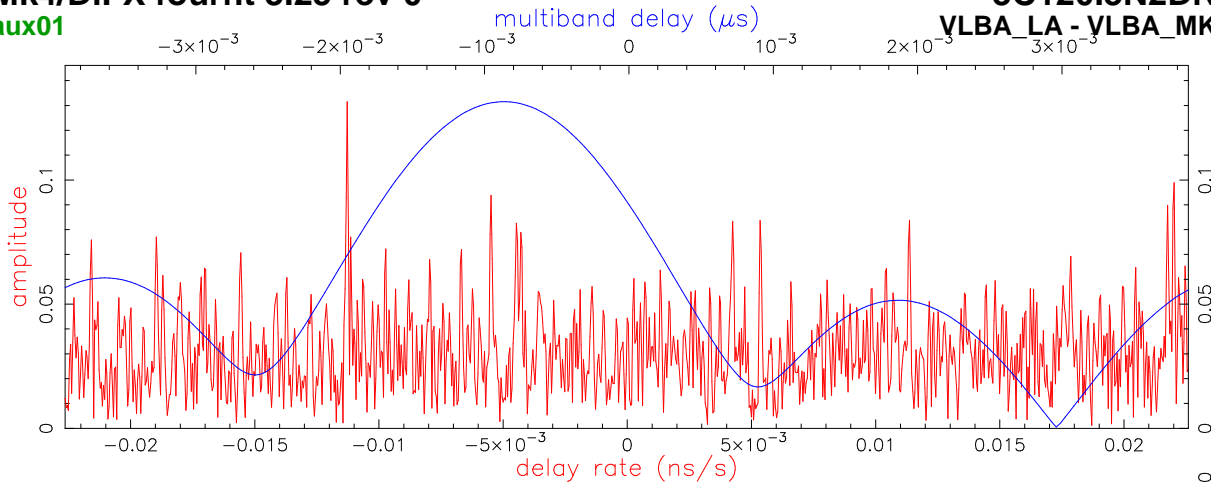
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/km..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/km.Q.93.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

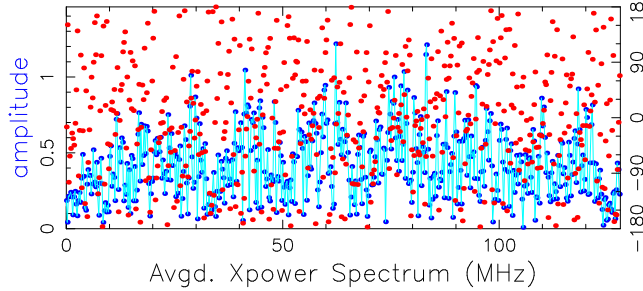
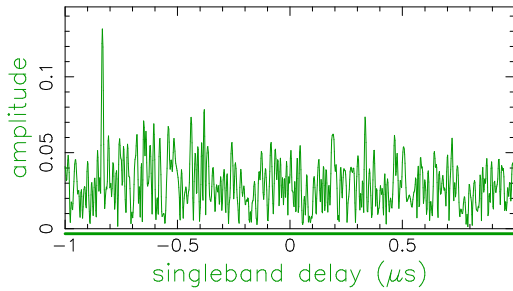
3C120.3N2DRC, No0552, Im

VLBA_LA - VLBA_MK, fgroup Q, pol LR



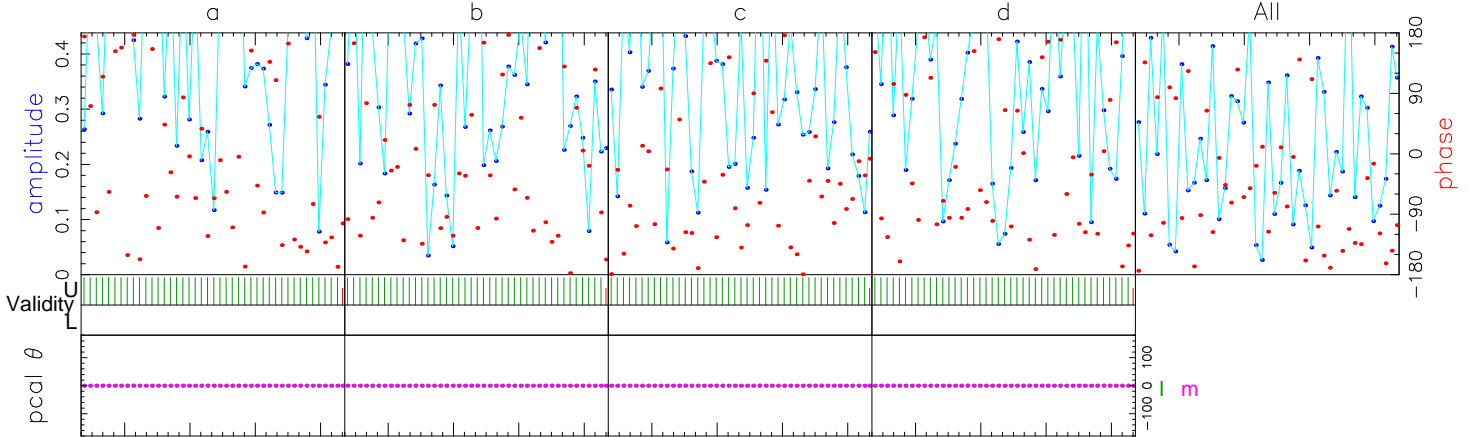
Fringe quality 0

SNR 5.6
 Int time 239.982
 Amp 0.146
 Phase -323.9
 PFD 9.5e-01
 Delays (us)
 SBD -0.834107
 MBD -0.000877
 Fringe rate (Hz)
 -0.488181
 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		
m	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
m	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL		
m	Q00UR	Q01UR	Q02UR	Q03UR		
Validity	[Green bars]					
pcd theta	[Purple line]					

	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
Group delay (usec) (SBD)	6.36581189222E+03	6.36581460045E+03	6.3666487020E+03	6.3666487020E+03	-8.77482E-04	+/- 2.0E-04
Sband delay (usec)	6.36581460045E+03	6.36581460045E+03	6.3666487020E+03	6.3666487020E+03	-8.34107E-01	+/- 7.7E-04
Phase delay (usec)	6.36664870011E+03	6.36664870011E+03	6.36664870011E+03	6.36664870011E+03	-7.09092E-06	+/- 1.3E-06
Delay rate (us/s)	-1.05900957704E+00	-1.05900957704E+00	-1.05899826085E+00	-1.05899826085E+00	-1.13162E-05	+/- 9.5E-09
Total phase (deg)		-241.5			-323.9	+/- 20.6

	RMS	Theor.	Amplitude	0.146 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	83.7	67.4	Search (1024X16)	0.128	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	134.5	117.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	19.0	20.6	Inc. seg. avg.	0.155	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	17.7	35.9	Inc. frq. avg.	0.141	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3030.701 970.010 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.118.3N2DRC

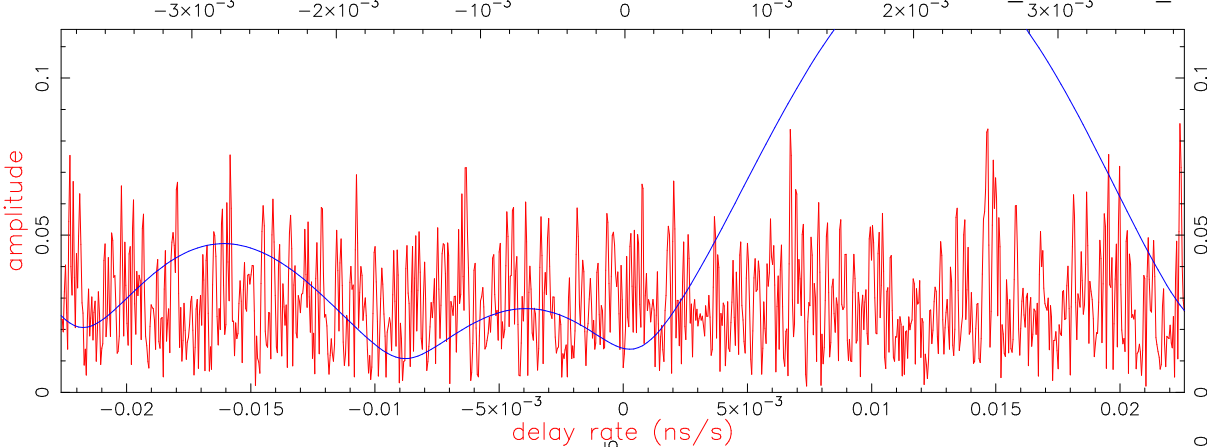
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

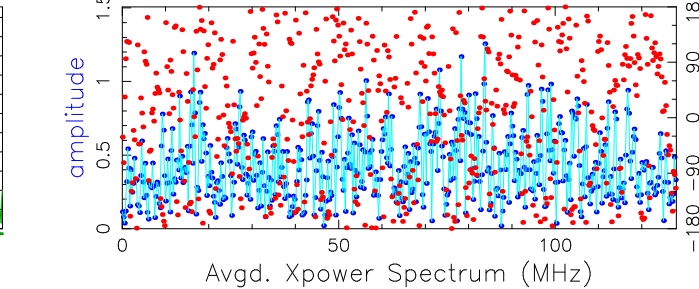
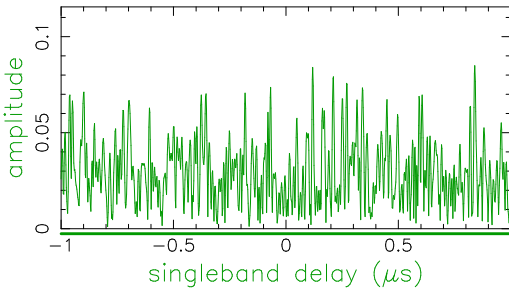
VLBA_LA - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)



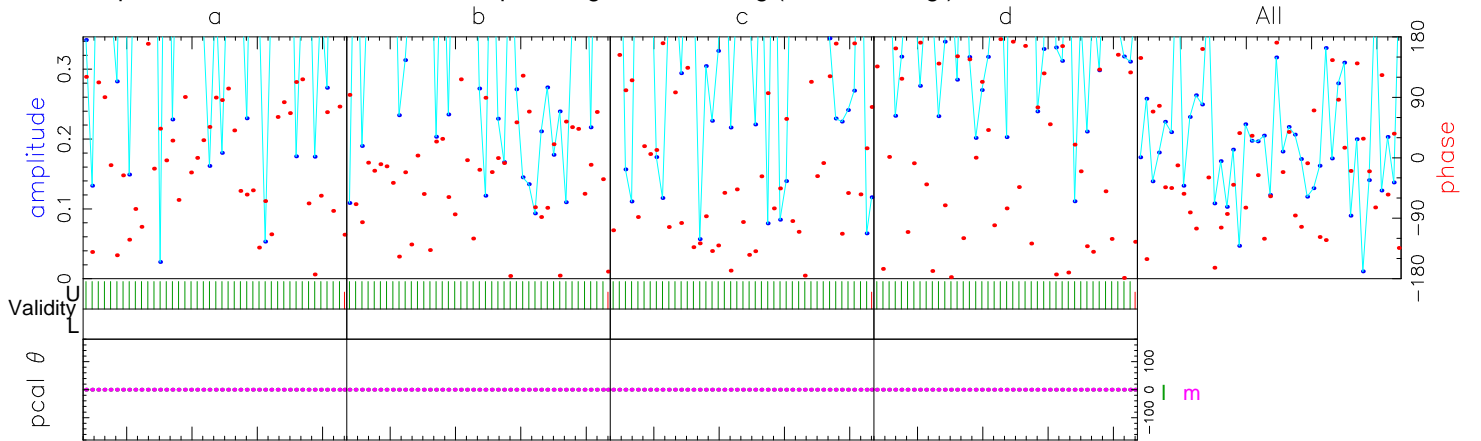
Fringe quality 0

SNR 3.2
 Int time 239.982
 Amp 0.115
 Phase 64.2
 PFD 1.0e+00
 Delays (us)
 SBD 0.269531
 MBD -0.004395
 Fringe rate (Hz)
 -0.948602
 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
 2025:049:102441
 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		
m	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
m	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
m	Q00UL	Q01UL	Q02UL	Q03UL		

	6.36691775017E+03	Apriori delay (usec)	6.36664870720E+03	Resid mbdelay (usec)	-4.39453E-03	+/- 3.5E-04
Group delay (usec) (SBD)	6.36691775017E+03	Apriori clock (usec)	-8.8595448E+00	Resid sbdelay (usec)	2.69531E-01	+/- 1.3E-03
Sband delay (usec)	6.36691823845E+03	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-3.83723E-06	+/- 2.3E-06
Phase delay (usec)	6.36664870337E+03	Apriori rate (us/s)	-1.05899826085E+00	Resid rate (us/s)	-2.19889E-05	+/- 1.7E-08
Delay rate (us/s)	-1.05902024978E+00	Apriori accel (us/s/s)	-3.12941012685E-05	Resid phase (deg)	64.2	+/- 35.8
Total phase (deg)	146.5					

	RMS	Theor.	Amplitude	0.115 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	86.3	117.3	Search (1024X16)	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	213.3	204.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	95.5	35.8	Inc. seg. avg.	0.101	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	88.8	62.4	Inc. frq. avg.	0.179	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3030.701 970.010 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.129.3N2DRC

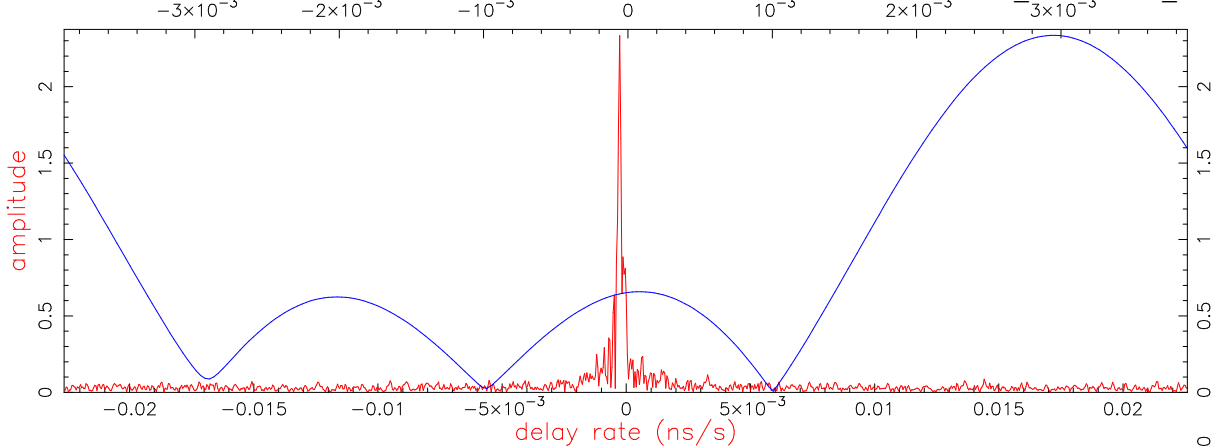
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

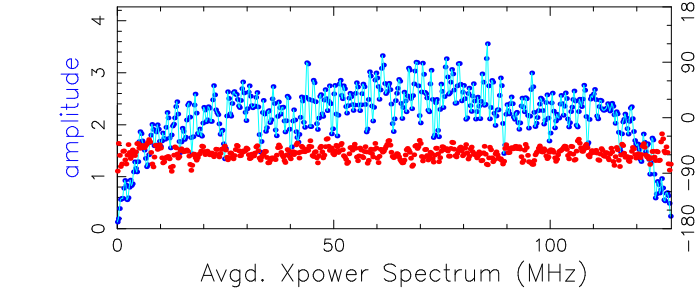
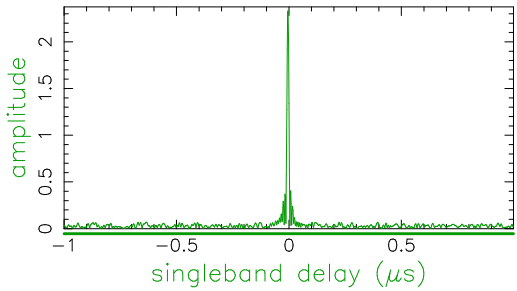
VLBA_LA - VLBA_MK, fgroup Q, pol LL

multiband delay (μ s)



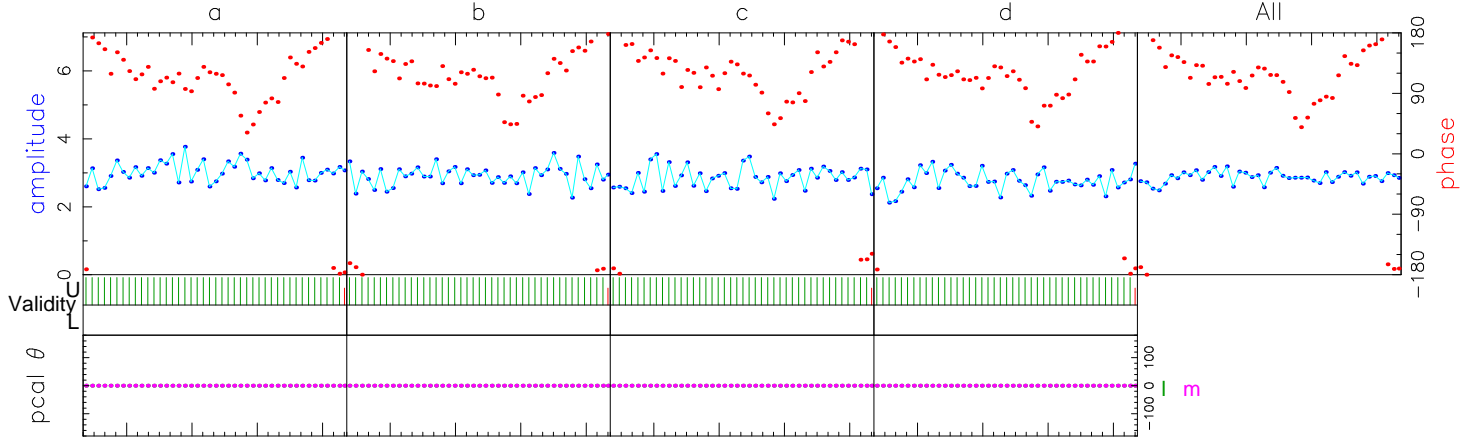
Fringe quality 6

SNR 100.6
 Int time 239.982
 Amp 2.375
 Phase -155.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.004789
 MBD 0.002904
 Fringe rate (Hz)
 -0.011105
 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		
l	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	6.36664379828E+03	6.36664870720E+03	6.36664870720E+03	6.36664870720E+03	2.90358E-03	+/- 1.1E-05
Group delay (usec) (SBD)	6.36664379828E+03	6.36664870720E+03	6.36664870720E+03	6.36664870720E+03	2.90358E-03	+/- 1.1E-05
Sband delay (usec)	6.36664391820E+03	-8.8595448E-07	-8.8595448E-07	-8.8595448E-07	-4.78900E-03	+/- 4.3E-05
Phase delay (usec)	6.36664871527E+03	-2.1950107E-07	-2.1950107E-07	-2.1950107E-07	8.06910E-06	+/- 7.3E-08
Delay rate (us/s)	-1.05899851827E+00	-1.05899826085E+00	-1.05899826085E+00	-1.05899826085E+00	-2.57420E-07	+/- 5.3E-10
Total phase (deg)	-73.6	-3.12941012685E-05	-3.12941012685E-05	-3.12941012685E-05	-155.9	+/- 1.1

	RMS	Theor.	Amplitude	2.375 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	37.1	3.7	Search (1024X16)	2.300	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	22.2	6.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.0	1.1	Inc. seg. avg.	2.870	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	3.1	2.0	Inc. frq. avg.	2.336	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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3030.701 970.010 simultaneous interpolator

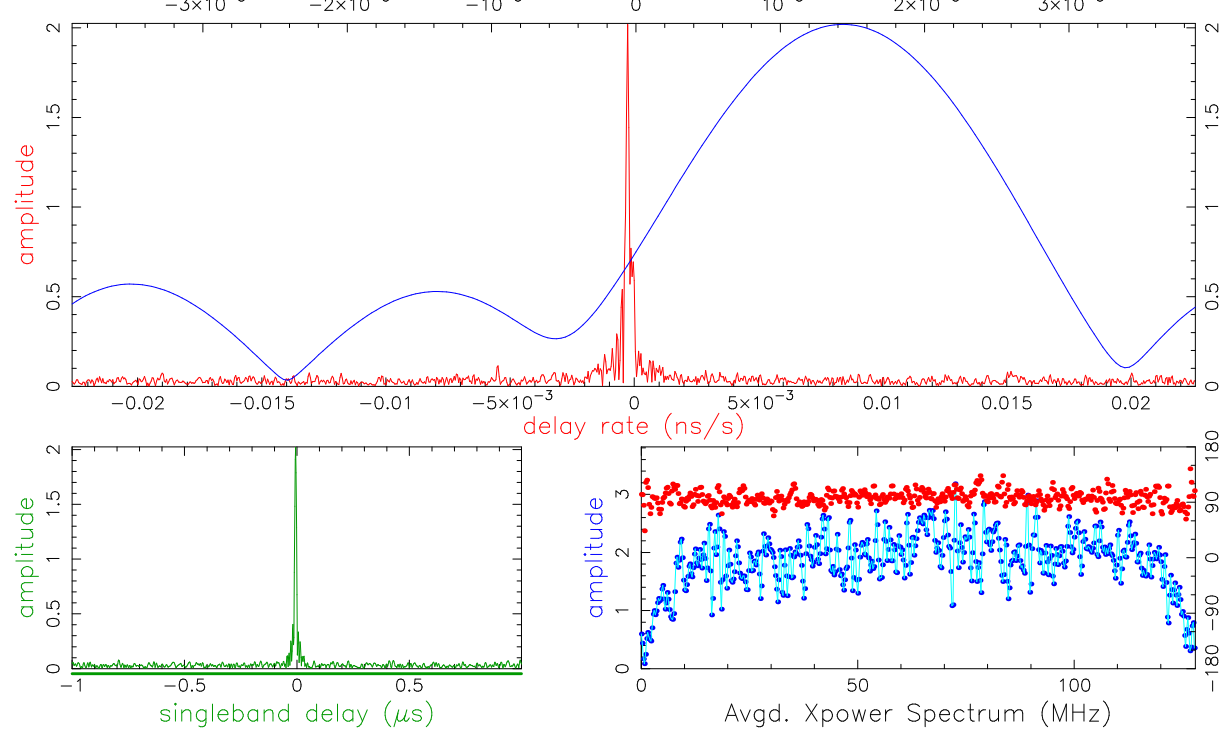
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.71.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

VLBA_LA - VLBA_MK, fgroup Q, pol RR

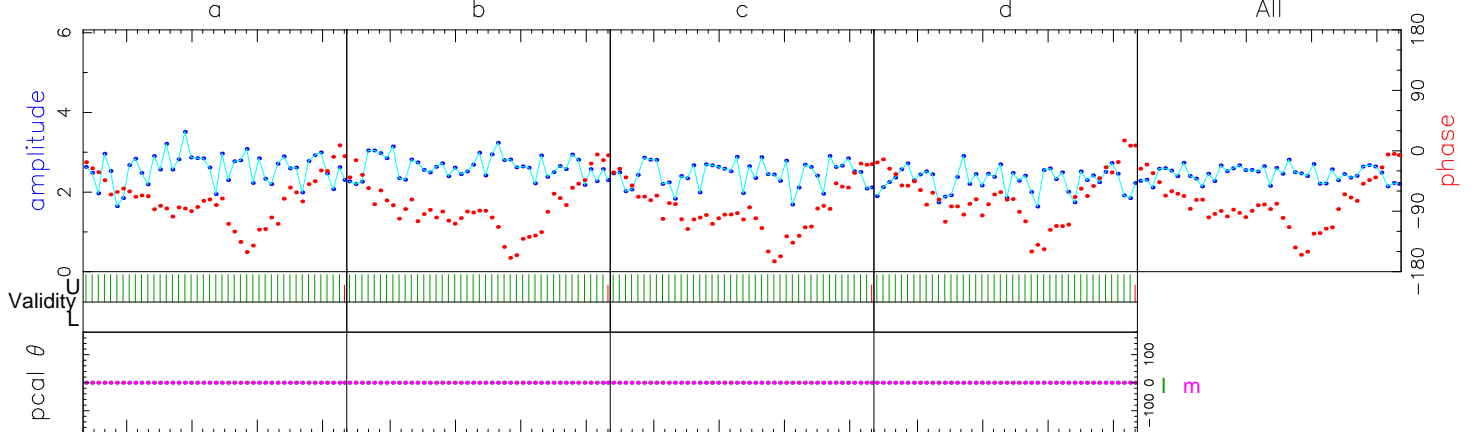


Fringe quality 6

SNR 85.8
 Int time 239.982
 Amp 2.024
 Phase -359.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.006209
 MBD 0.001410
 Fringe rate (Hz)
 -0.011201
 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
-73.2	-84.2	-86.4	-67.9	Phase	-78.2
2.1	2.1	2.0	1.8	Ampl.	2.0
509.4	509.8	509.8	510.4	Sbd box	509.8
U/L 469/0	469/0	469/0	469/0	APs used	
l 1000	1000	1000	1000	PC freqs	
m 1000	1000	1000	1000	PC freqs	
l:m 0:0	0:0	0:0	0:0	PC phase	
l:m 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000		
l Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	6.36664230516E+03	Apriori delay (usec)	6.36664870720E+03	Resid mbdelay (usec)	1.41045E-03 +/- 1.3E-05
Sband delay (usec)	6.36664249833E+03	Apriori clock (usec)	-8.8595448E+00	Resid sbdelay (usec)	-6.20888E-03 +/- 5.0E-05
Phase delay (usec)	6.36664870217E+03	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-5.03391E-06 +/- 8.6E-08
Delay rate (us/s)	-1.05899852050E+00	Apriori rate (us/s)	-1.05899826085E+00	Resid rate (us/s)	-2.59647E-07 +/- 6.2E-10
Total phase (deg)	-277.1	Apriori accel (us/s/s)	-3.12941012685E-05	Resid phase (deg)	-359.4 +/- 1.3
RMS	Theor.	Amplitude	2.024 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
36.4	4.4	Search (1024X16)	2.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
23.2	7.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
10.8	1.3	Inc. seg. avg.	2.451	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
6.3	2.3	Inc. frq. avg.	2.036	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	m: az 96.6 el 33.2 pa -69.8	u, v (fr/asec)	3030.701 970.010		simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.98.3N2DRC			

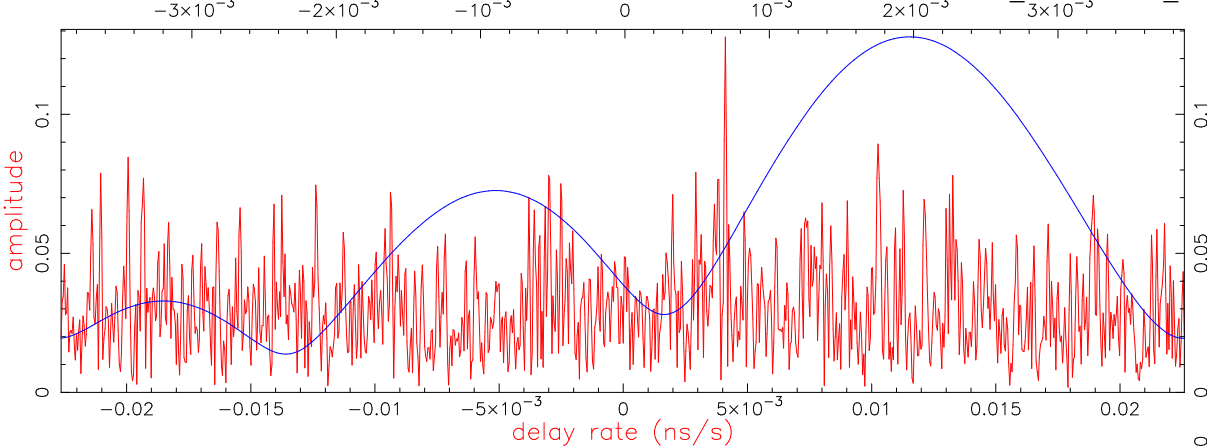
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mc

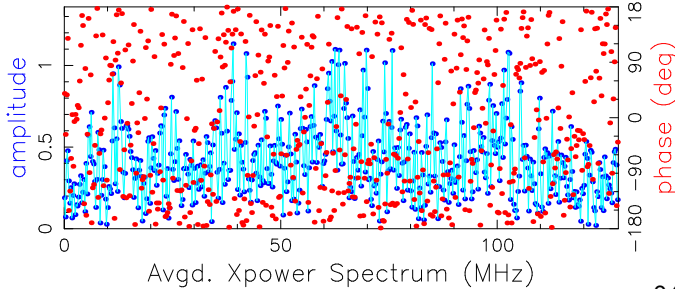
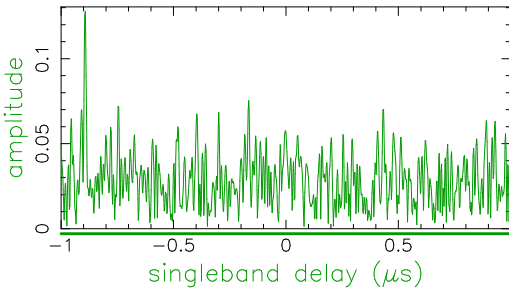
VLBA_MK - VLBA_SC, fgroup Q, pol LL

multiband delay (μs)



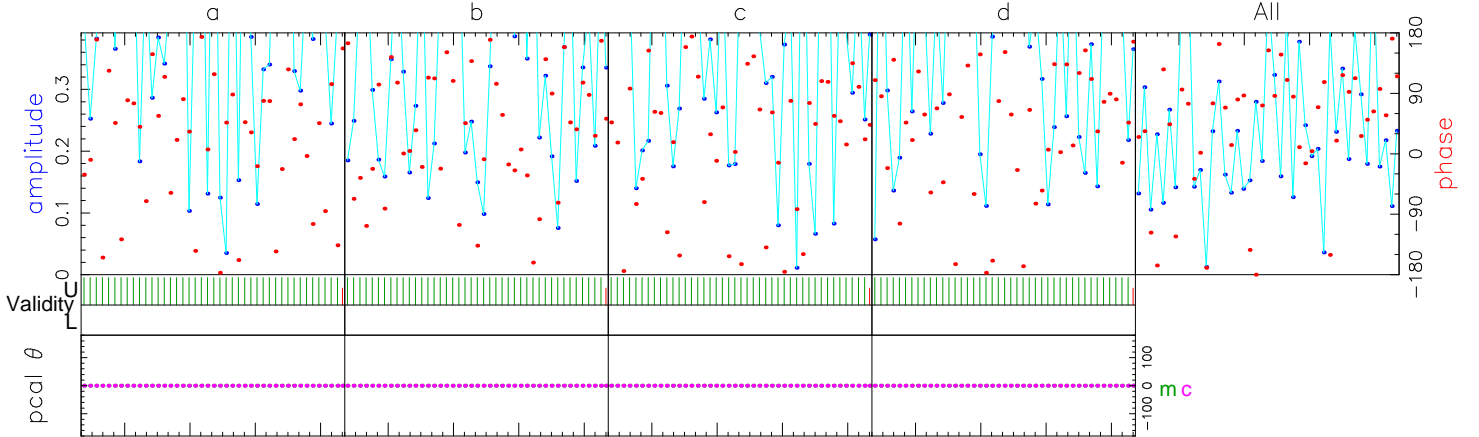
Fringe quality 0

SNR 5.5
 Int time 239.950
 Amp 0.131
 Phase -218.8
 PFD 1.0e+00
 Delays (us)
 SBD -0.893263
 MBD 0.002017
 Fringe rate (Hz)
 0.177465
 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
	91.5	56.7	101.1	75.4	Phase	85.0
	0.1	0.1	0.2	0.2	Ampl.	0.1
	559.9	976.7	1006.2	563.3	Sbd box	55.6
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
m:c	0:0	0:0	0:0	0:0	PC phase	
m:c	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	-5.24197332212E+03	Apriori delay (usec)	-5.24107690145E+03	Resid mbdelay (usec)	2.01683E-03	+/- 2.0E-04
Group delay (usec) (SBD)	-5.24197016458E+03	Apriori clock (usec)	-3.1565895E+00	Resid sbdelay (usec)	-8.93263E-01	+/- 7.9E-04
Sband delay (usec)	-5.24107689598E+03	Apriori clockrate (us/s)	3.7877004E-07	Resid phdelay (usec)	5.47017E-06	+/- 1.4E-06
Phase delay (usec)	2.04849507059E+00	Apriori rate (us/s)	2.04849095690E+00	Resid rate (us/s)	4.11370E-06	+/- 9.8E-09
Delay rate (us/s)		Apriori accel (us/s/s)	2.82130351173E-05	Resid phase (deg)	-218.8	+/- 21.0
Total phase (deg)	-49.1					

	RMS	Theor.	Amplitude	0.131 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	70.0	68.9	Search (1024X16)	0.126	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	128.7	120.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	24.5	21.0	Inc. seg. avg.	0.141	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	30.9	36.7	Inc. frq. avg.	0.126	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

m: az 96.6 el 33.2 pa -69.8 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -5885.669 250.072 simultaneous interpolator

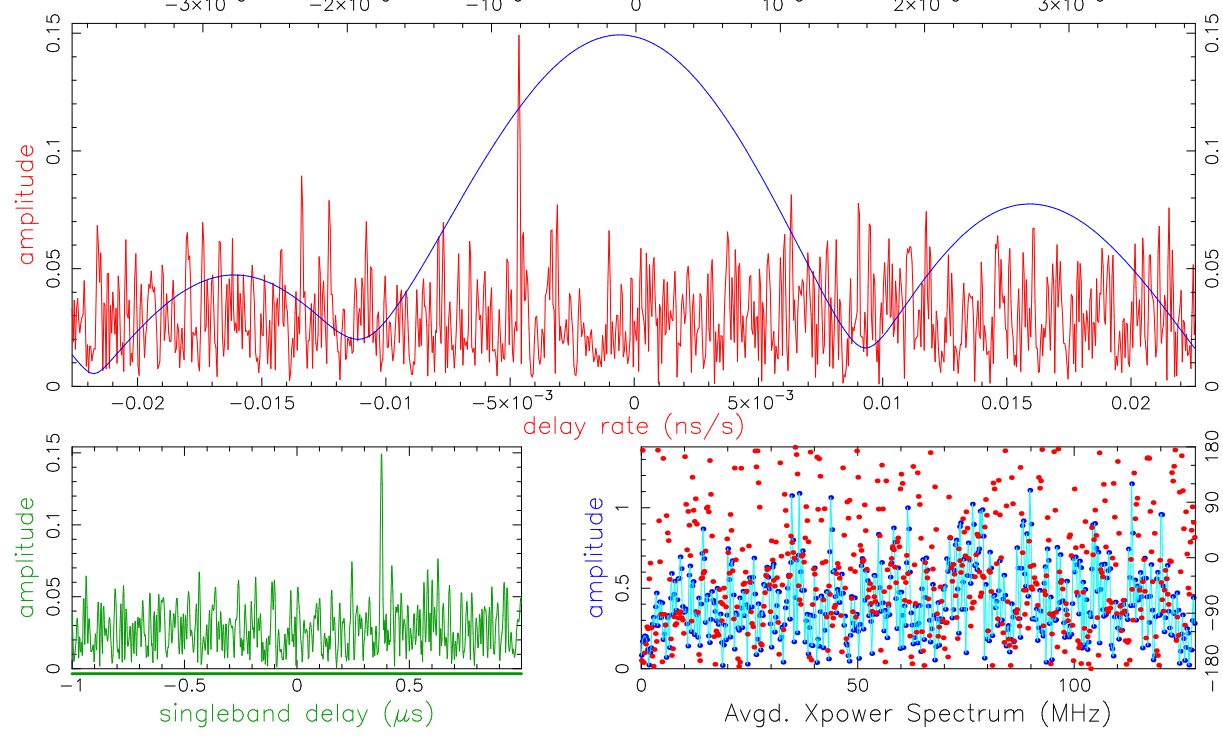
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mc.Q.146.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mc

VLBA_MK - VLBA_SC, fgroup Q, pol RR

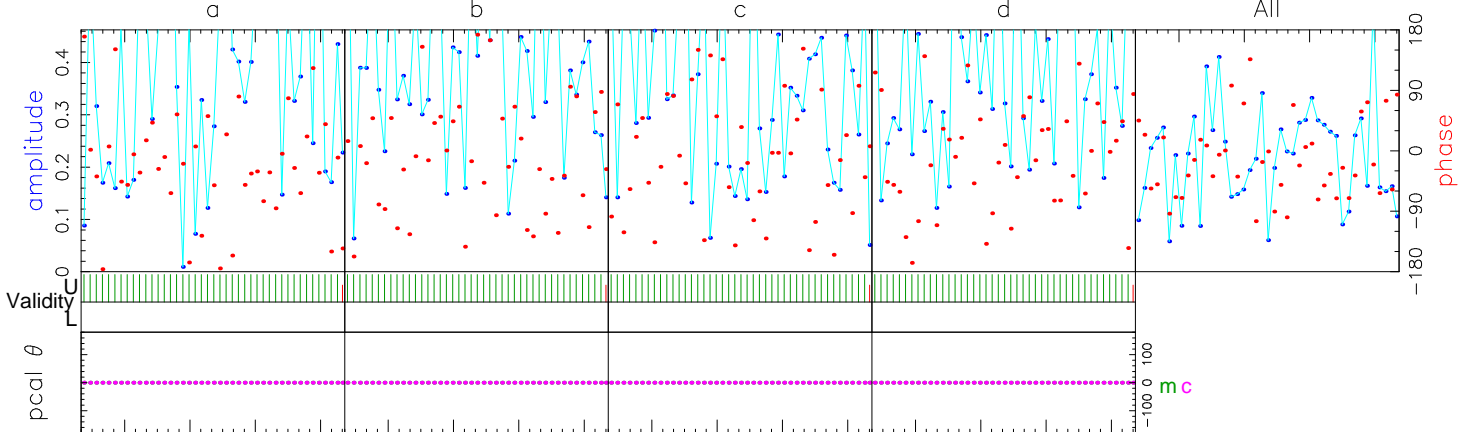


Fringe quality 0

SNR 6.4
 Int time 239.950
 Amp 0.154
 Phase 158.8
 PFD 1.9e-02
 Delays (us)
 SBD 0.376060
 MBD -0.000157
 Fringe rate (Hz)
 -0.202043
 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		
m	1000	1000	1000	1000		
c	1000	1000	1000	1000		
m:c	0:0	0:0	0:0	0:0		
m:c	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
c	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
c	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	-5.24070205858E+03	-5.24070084183E+03	-5.24107690145E+03	-5.24107690145E+03	-5.24107690145E+03	-5.24107690145E+03
Sband delay (usec)	-5.24070084183E+03	-5.24070084183E+03	-3.1565895E+07	-3.1565895E+07	-3.1565895E+07	-3.1565895E+07
Phase delay (usec)	-5.24107690282E+03	-5.24107690282E+03	3.7877004E-07	3.7877004E-07	3.7877004E-07	3.7877004E-07
Delay rate (us/s)	2.04848627347E+00	2.04848627347E+00	2.04849095690E+00	2.04849095690E+00	2.04849095690E+00	2.04849095690E+00
Total phase (deg)		328.4	2.82130351173E-05	2.82130351173E-05	2.82130351173E-05	2.82130351173E-05
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
pcal mode: MANUAL, MANUAL						
PC period (AP's) 5, 5						
PCal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
SampCntNorm: enabled						
Data rate(MSamp/s): 256 MBbps 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
nlags: 512 t_cohere infinite						
sb window (us)	-1.000	1.000				
mb window (us)	-0.004	0.004				
dr window (ns/s)	-0.023	0.023				
ion window (TEC)	0.00	0.00				
m: az 96.6 el 33.2 pa -69.8						
c: az 253.9 el 54.4 pa 66.9						
u,v (fr/asec) -5885.669 250.072						
Control file: cf_1234_gmva						
Input file: /Exps/c241c/v2/7mm/3001/No0552/mc..3N2DRC						
Output file: /Exps/c241c/v2/7mm/3001/No0552/mc.Q.161.3N2DRC						

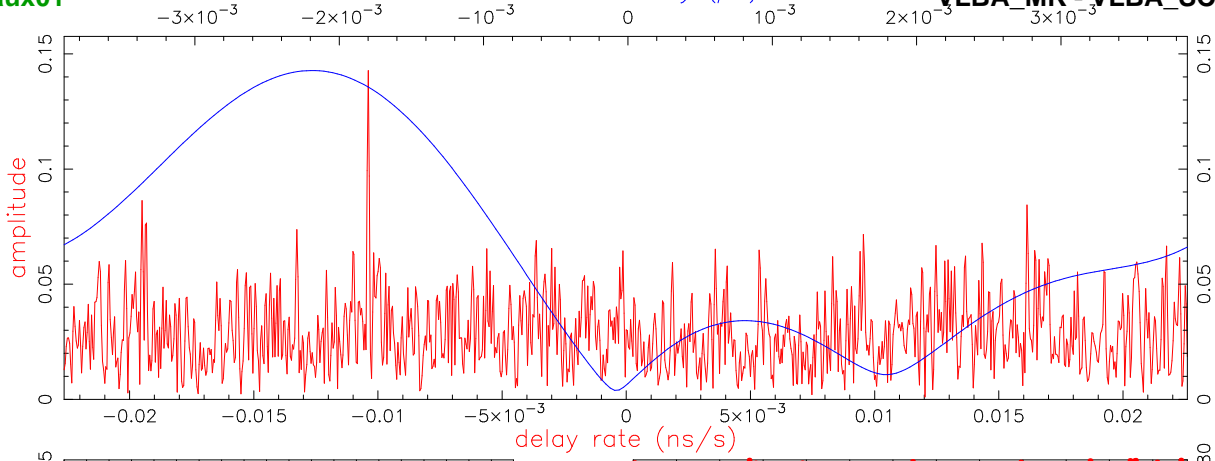
Mk4/DiFX fourfit 3.25 rev 0

aux01

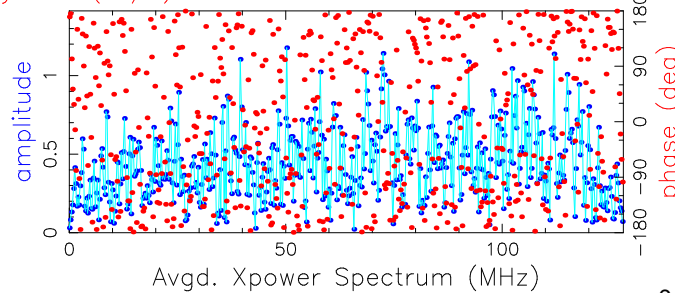
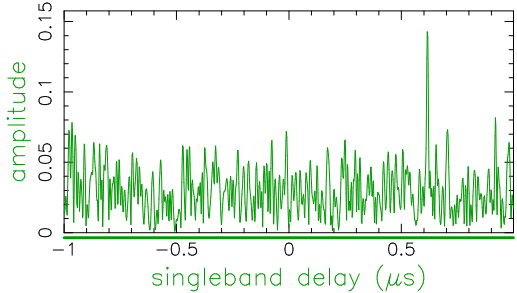
3C120.3N2DRC, No0552, mc

VLBA_MK - VLBA_SC, fgroup Q, pol LR

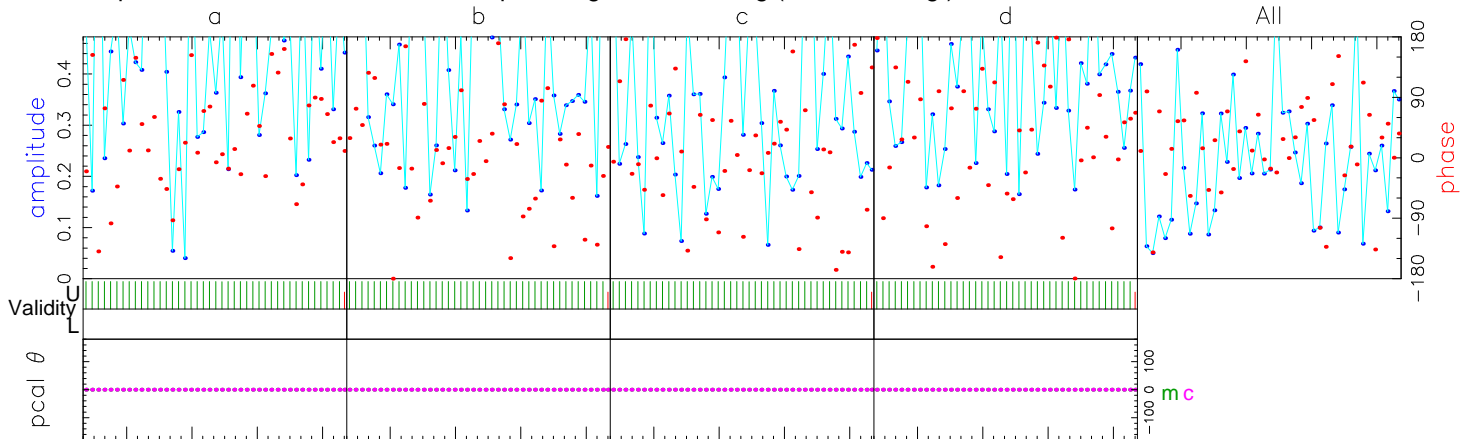
multiband delay (μ s)



Fringe quality 0
 SNR 6.1
 Int time 239.950
 Amp 0.158
 Phase 281.7
 PFD 1.2e-01
 Delays (us)
 SBD 0.615905
 MBD -0.002160
 Fringe rate (Hz)
 -0.450040
 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
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
c	1000	1000	1000	1000		
m:c	0:0	0:0	0:0	0:0		
m:c	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
c	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL		
c	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec) (SBD)	-5.24046187399E+03	Apriori delay (usec)	-5.24107690145E+03	Resid mbdelay (usec)	-2.16003E-03	+/-	1.8E-04
Sband delay (usec)	-5.24046099683E+03	Apriori clock (usec)	-3.1565895E+00	Resid sbdelay (usec)	6.15905E-01	+/-	7.1E-04
Phase delay (usec)	-5.24107689998E+03	Apriori clockrate (us/s)	3.7877004E-07	Resid phdelay (usec)	1.47584E-06	+/-	1.2E-06
Delay rate (us/s)	2.04848052481E+00	Apriori rate (us/s)	2.04849095690E+00	Resid rate (us/s)	-1.04321E-05	+/-	8.7E-09
Total phase (deg)	91.3	Apriori accel (us/s/s)	2.82130351173E-05	Resid phase (deg)	281.7	+/-	18.8

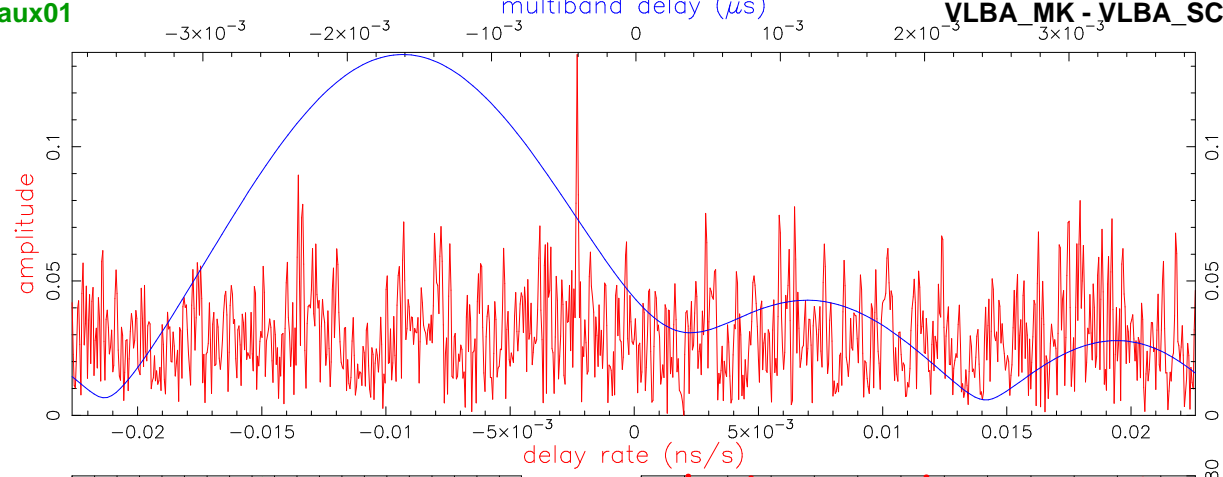
ph/seg (deg) 68.4 61.5 Search (1024X16) 0.141 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 107.9 107.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.2 18.8 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 34.6 32.7 Inc. frq. avg. 0.154 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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -5885.669 250.072 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/mc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mc.Q.171.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mc

VLBA_MK - VLBA_SC, fgroup Q, pol RL



Fringe quality 0

SNR 5.7

Int time 239.950

Amp 0.135

Phase -177.8

PFD 7.7e-01

Delays (us)

SBD -0.153995

MBD -0.001590

Fringe rate (Hz)

-0.099137

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

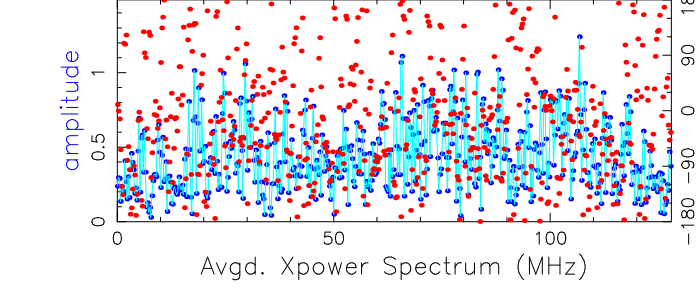
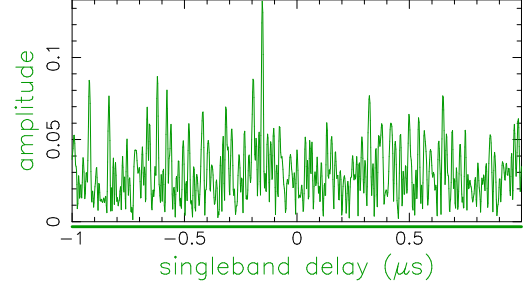
2025:049:102452

2024:113:095956

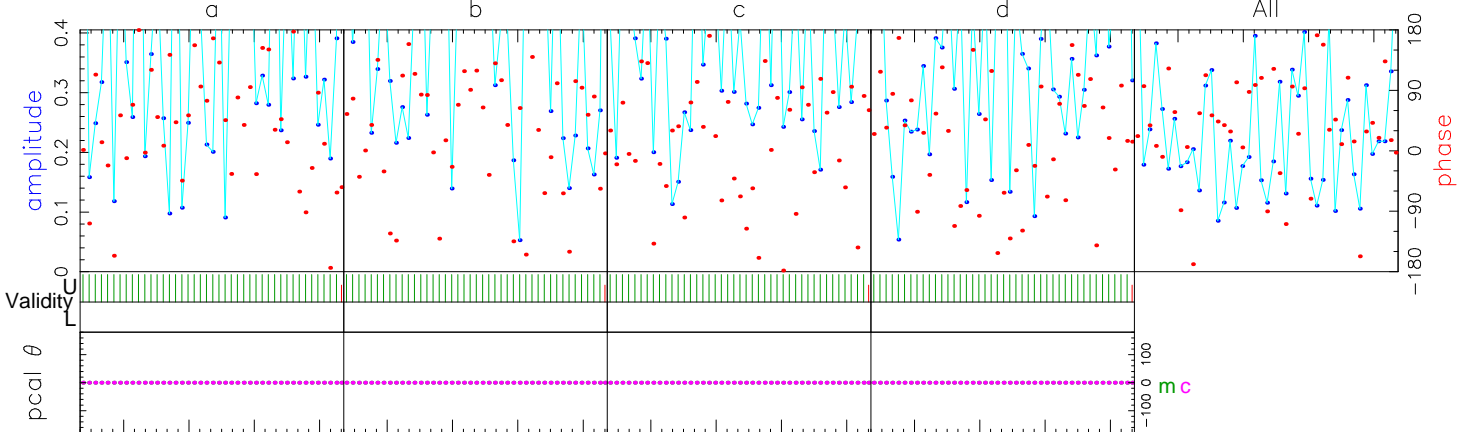
RA & Dec (J2000)

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
	37.6	61.0	52.1	33.9	Phase	47.2
	0.2	0.2	0.1	0.1	Ampl.	0.1
	809.2	39.1	171.7	196.9	Sbd box	434.2
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
m:c	0:0	0:0	0:0	0:0	PC phase	
m:c	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-5.24123474163E+03	Apriori delay (usec)	-5.24107690145E+03	Resid mbdelay (usec)	-1.59018E-03	+/-	2.0E-04
Sband delay (usec)	-5.24123089683E+03	Apriori clock (usec)	-3.1565895E+00	Resid sbdelay (usec)	-1.53995E-01	+/-	7.6E-04
Phase delay (usec)	-5.24107689841E+03	Apriori clockrate (us/s)	3.7877004E-07	Resid phdelay (usec)	3.03988E-06	+/-	1.3E-06
Delay rate (us/s)	2.0484865886E+00	Apriori rate (us/s)	2.04849095690E+00	Resid rate (us/s)	-2.29803E-06	+/-	9.3E-09
Total phase (deg)	-8.1	Apriori accel (us/s/s)	2.82130351173E-05	Resid phase (deg)	-177.8	+/-	20.1

ph/seg (deg) 71.2 65.9 Search (1024X16) 0.132 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 113.2 115.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 15.6 20.1 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004

amp/frq (%) 15.9 35.1 Inc. frq. avg. 0.129 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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -5885.669 250.072 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

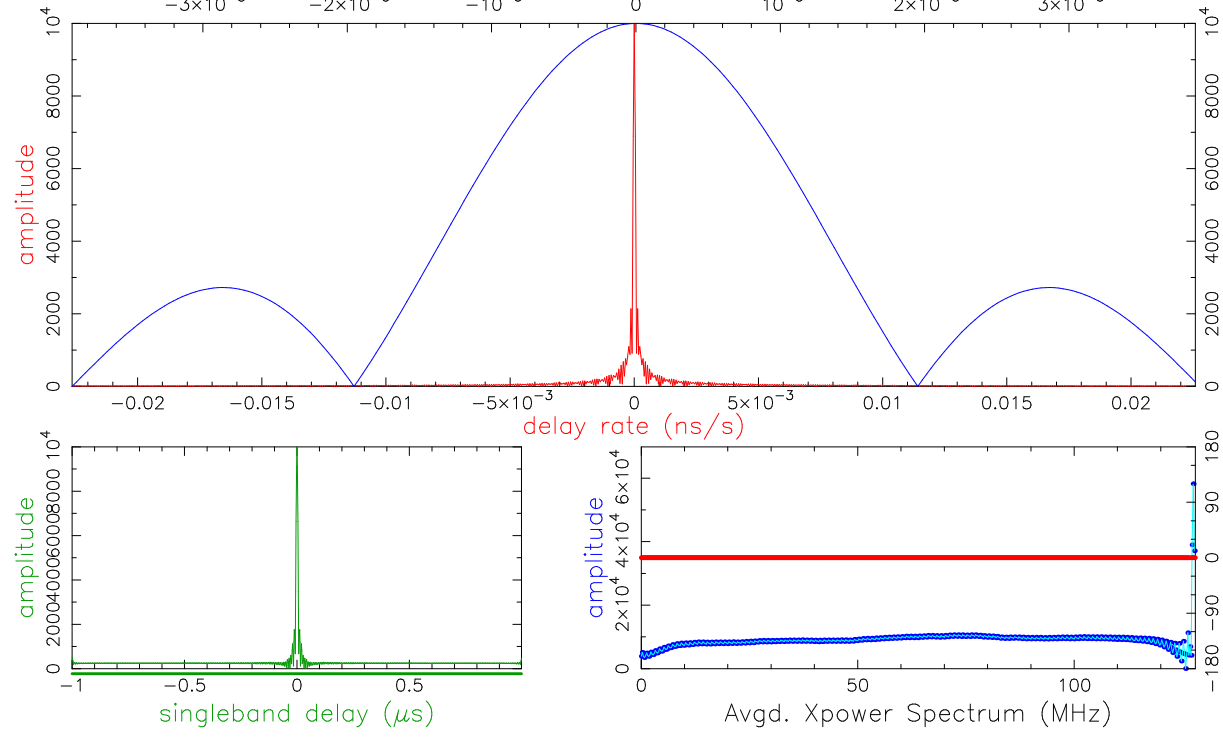
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mc.Q.180.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mm

VLBA_MK - VLBA_MK, fgroup Q, pol RR

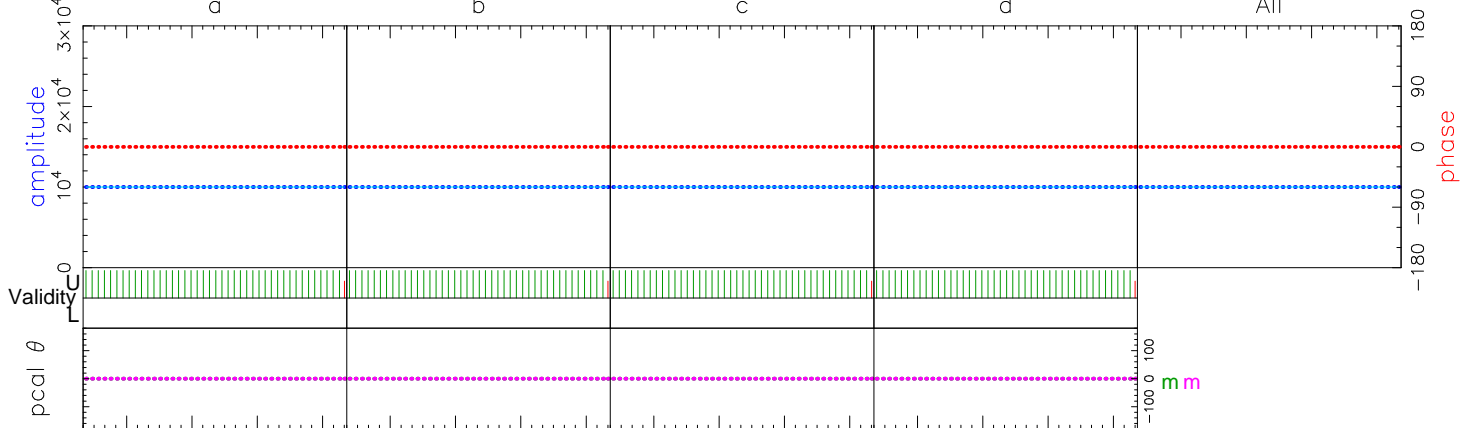


Fringe quality 9

SNR 423635.8
 Int time 239.988
 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
 2025:049:102436
 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



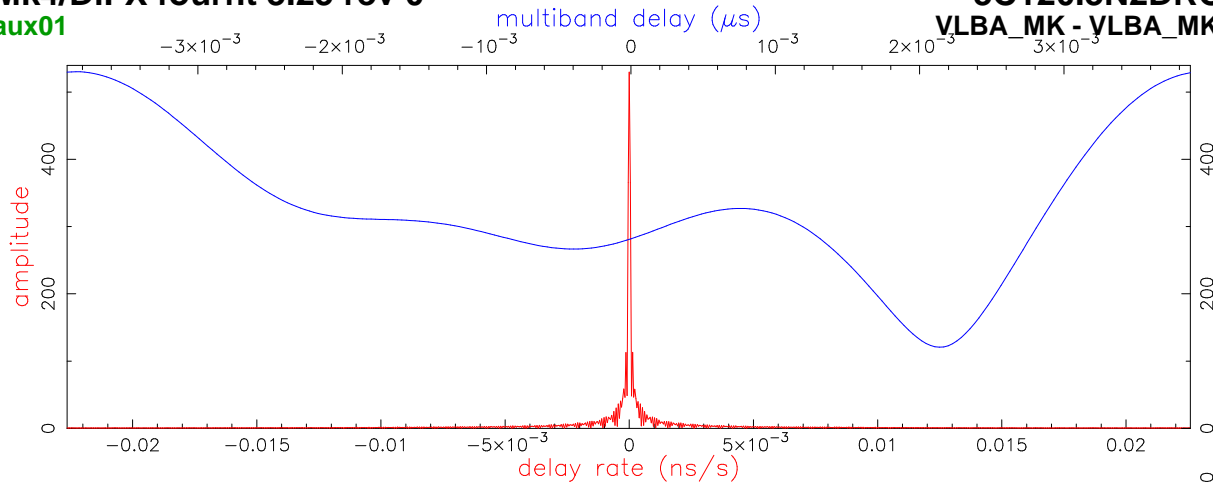
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
m:m	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
m	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
m	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 2.6E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.0E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.7E-11
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.3E-13
Total phase (deg)		0.0			0.0	+/- 0.0
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
PCal mode: MANUAL, MANUAL						
PCal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
PC period (AP's) 5, 5						
sb window (us) -1.000 1.000						
SampCntNorm: enabled						
mb window (us) -0.004 0.004						
dr window (ns/s) -0.023 0.023						
ion window (TEC) 0.00 0.00						
simultaneous interpolator						
m: az 96.6 el 33.2 pa -69.8		m: az 96.6 el 33.2 pa -69.8		u,v (fr/asec) 0.000 0.000		
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/mm...3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/mm.Q.103.3N2DRC		

Mk4/DiFX fourfit 3.25 rev 0

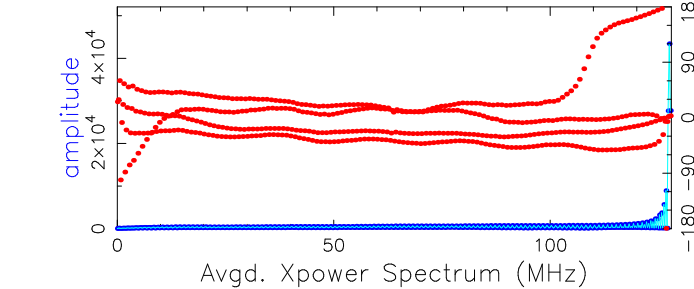
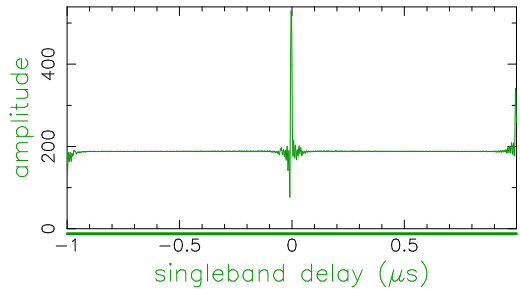
aux01

3C120.3N2DRC, No0552, mm

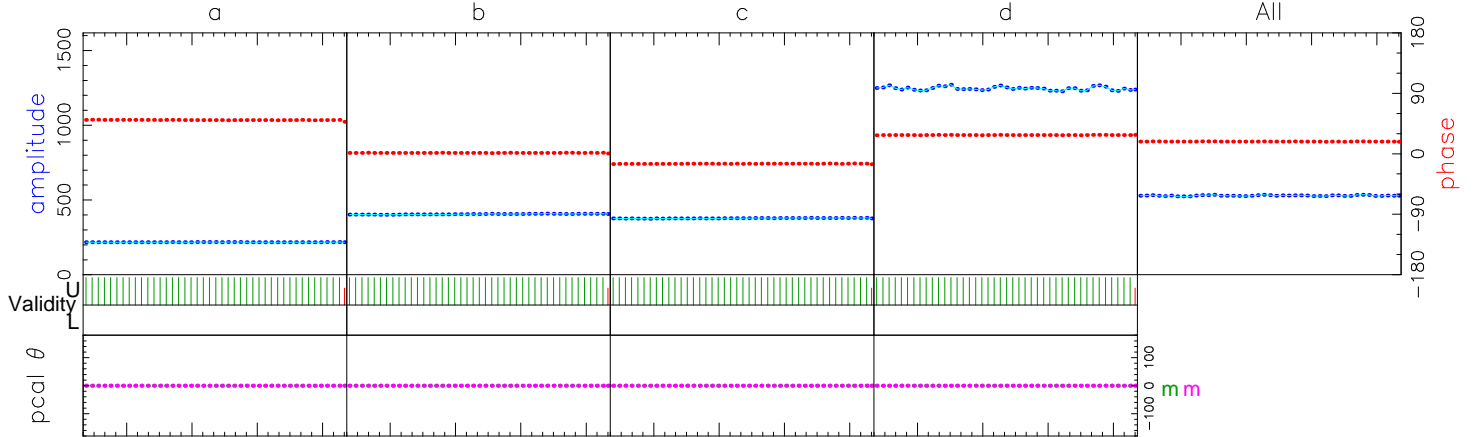
VLBA_MK - VLBA_MK, fgroup Q, pol LR



Fringe quality 5
 Error code G
 SNR 22858.5
 Int time 239.988
 Amp 539.580
 Phase 18.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.003130
 MBD -0.003896
 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
 2025:049:102438
 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	APs used	
m	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	PC phase	
m	1000	1000	1000	1000	ManI PC	
m	1000	1000	1000	1000	PC amp	
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

Group delay (usec) (SBD)	-3.89637500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.89637E-03	+/-	4.9E-08
Sband delay (usec)	-3.13012500000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.13013E-03	+/-	1.9E-07
Phase delay (usec)	1.17320909460E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.17321E-06	+/-	3.2E-10
Delay rate (us/s)	-1.35822316219E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.35822E-10	+/-	2.3E-12
Total phase (deg)	18.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	18.2	+/-	0.0

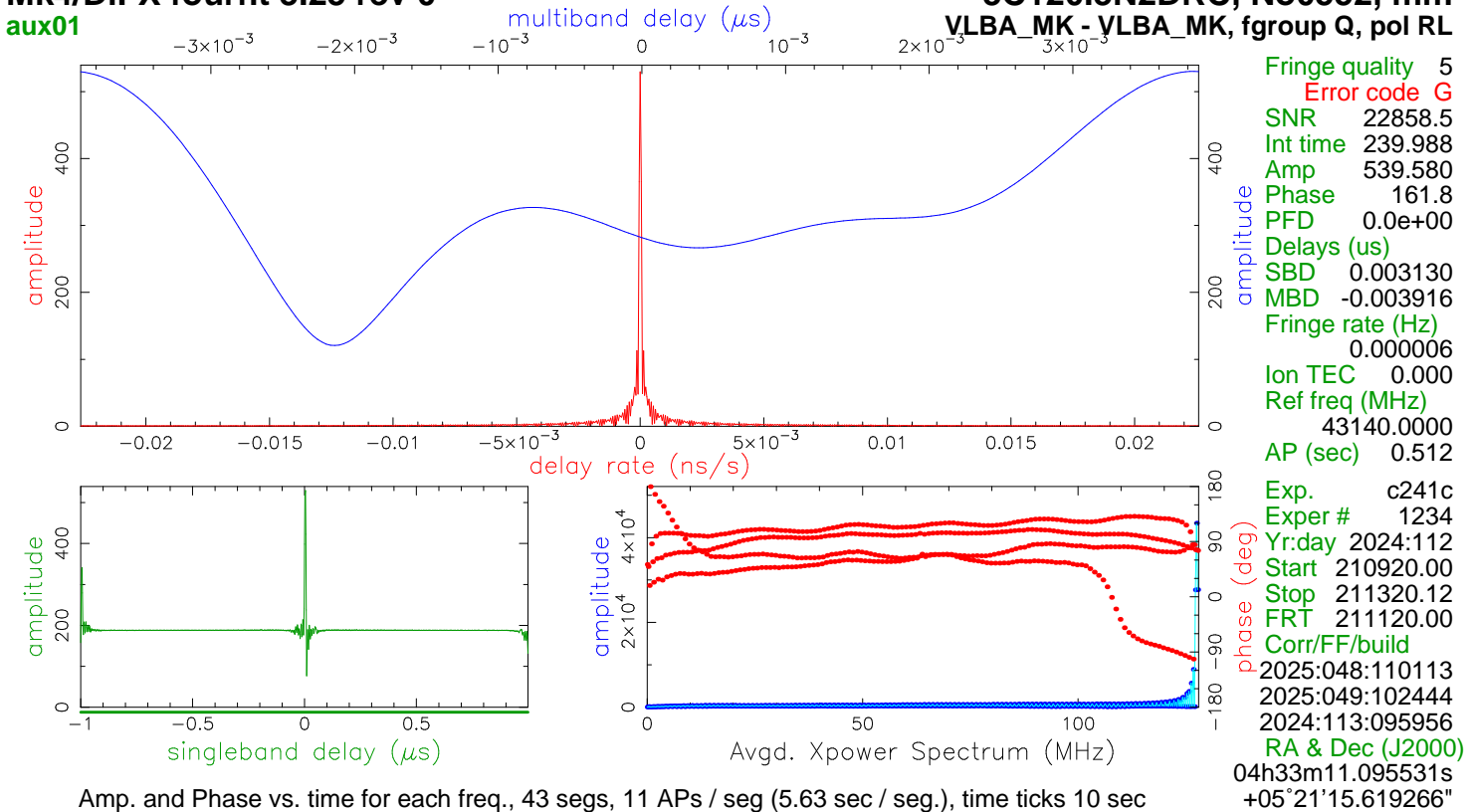
ph/seg (deg) 0.1 0.0 Search (1024X16) 529.470 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.9 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.3 0.0 Inc. seg. avg. 529.682 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 74.5 0.0 Inc. frq. avg. 562.061 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 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 0.000 0.000 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mm...3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mm.Q.121.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

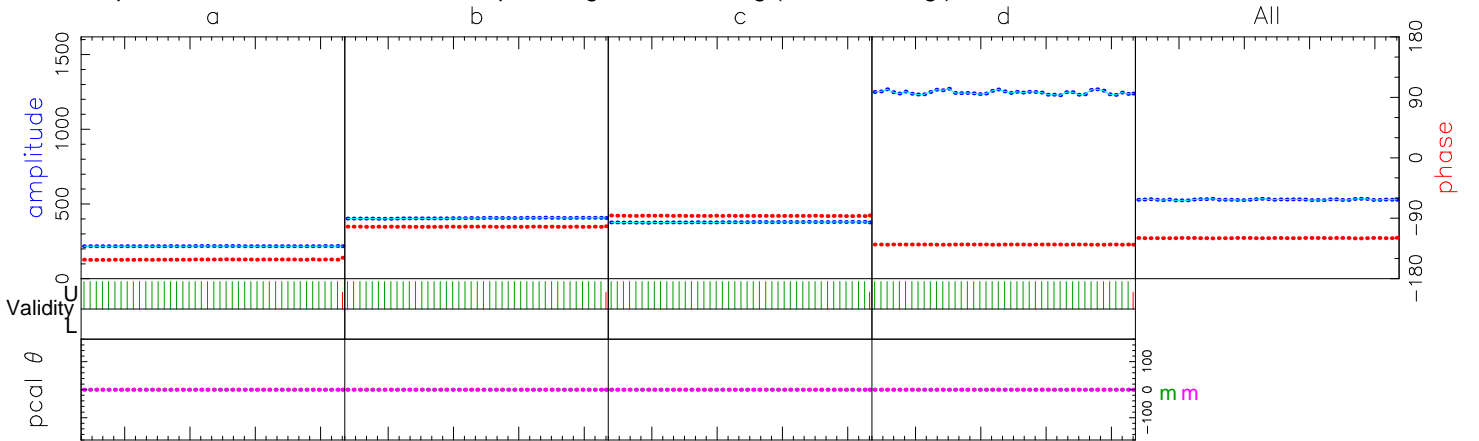
aux01

3C120.3N2DRC, No0552, mm

VLBA_MK - VLBA_MK, fgroup Q, pol RL



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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-151.4	-102.6	-86.4	-129.1	Phase	-119.5
	218.0	405.5	378.3	1246.5	Ampl.	562.1
	3.6	515.2	515.3	514.6	Sbd box	514.6
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	3.89637500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.91612E-03	+/-	4.9E-08
Sband delay (usec)	3.13012500000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.13013E-03	+/-	1.9E-07
Phase delay (usec)	-7.69268058290E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-7.69268E-06	+/-	3.2E-10
Delay rate (us/s)	1.35822316219E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.35822E-10	+/-	2.3E-12
Total phase (deg)	161.8	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	161.8	+/-	0.0

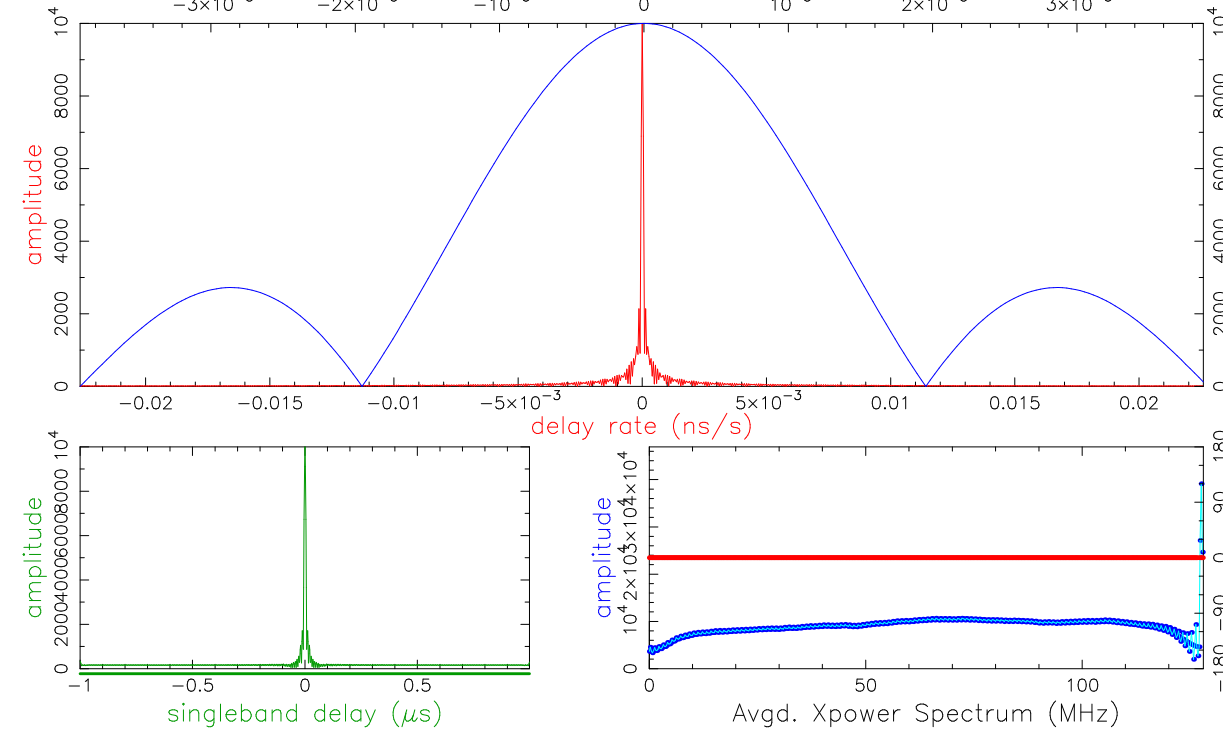
ph/seg (deg)	0.1	Theor.	Amplitude	539.580 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	1.9	0.0	Search (1024X16)	529.470	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	35.3	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	74.5	0.0	Inc. seg. avg.	529.682	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			Inc. frq. avg.	562.061	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva								simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mm

VLBA_MK - VLBA_MK, fgroup Q, pol LL

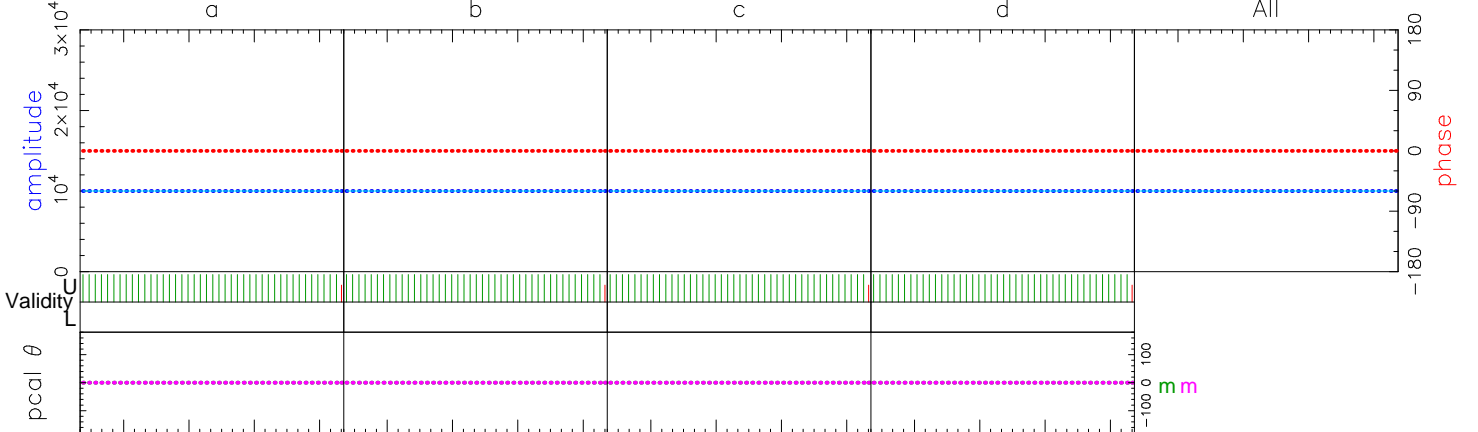


Fringe quality 9

SNR 423635.8
 Int time 239.988
 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
 2025:049:102433
 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



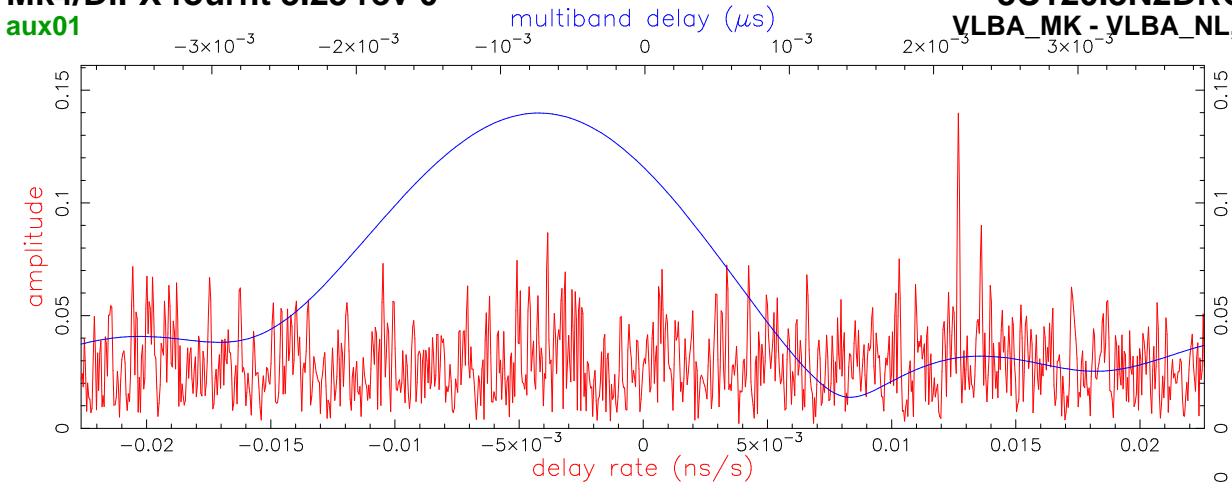
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0	APs used	10000.0
m	1000	1000	1000	1000	PC freqs	513.0
m:m	0:0	0:0	0:0	0:0	PC phase	
m	1000	1000	1000	1000	ManI PC	
m	1000	1000	1000	1000	PC amp	
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/- 2.6E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.00000000E+00	Resid sbdelay (usec)	0.000000E+00	+/- 1.0E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.00000000E+00	Resid phdelay (usec)	0.000000E+00	+/- 1.7E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/- 1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/- 0.0
ph/seg (deg)	0.0	Amplitude	10000.000 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	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	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	0.0	Inc. seg. avg.	10000.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
m: az 96.6 el 33.2 pa -69.8	m: az 96.6 el 33.2 pa -69.8	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/mm...3N2DRC					simultaneous interpolator
						Output file: /Exps/c241c/v2/7mm/3001/No0552/mm.Q.81.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

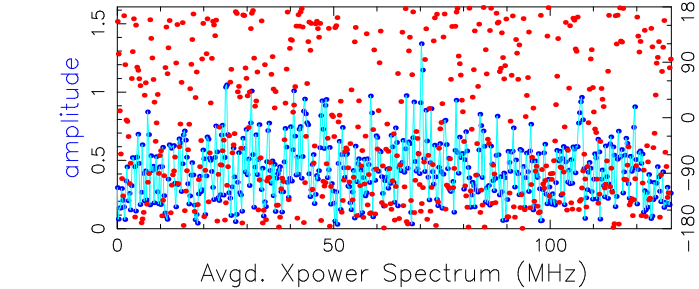
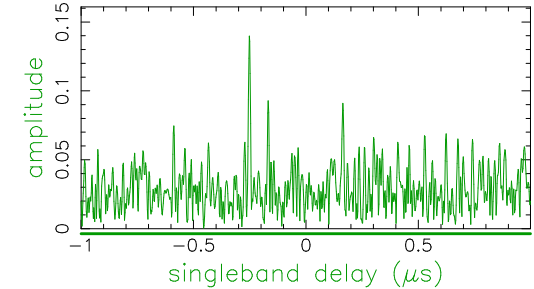
aux01

3C120.3N2DRC, No0552, mn

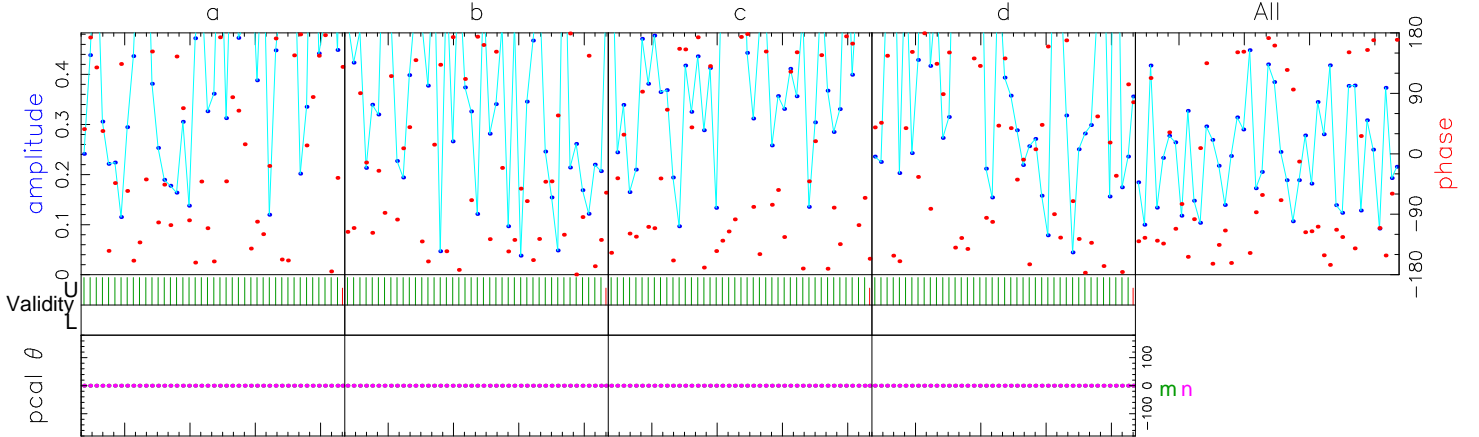
VLBA_MK - VLBA_NL, fgroup Q, pol RR



Fringe quality 0
 SNR 6.0
 Int time 239.972
 Amp 0.161
 Phase -156.4
 PFD 2.7e-01
 Delays (us)
 SBD -0.251333
 MBD -0.000693
 Fringe rate (Hz) 0.549823
 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
	-172.0	-133.0	-153.9	-173.3	Phase	-156.4
	0.1	0.2	0.2	0.1	Ampl.	0.2
	375.5	274.7	383.9	50.7	Sbd box	384.3
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	ManI PC	
m	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-5.10631949916E+03	Apriori delay (usec)	-5.10606880603E+03	Resid mbdelay (usec)	-6.93134E-04	+/-	1.9E-04
Sband delay (usec)	-5.10632013928E+03	Apriori clock (usec)	8.0800819E-01	Resid sbdelay (usec)	-2.51333E-01	+/-	7.2E-04
Phase delay (usec)	-5.10606881610E+03	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	-1.00718E-05	+/-	1.2E-06
Delay rate (us/s)	1.36522647158E+00	Apriori rate (us/s)	1.36521372648E+00	Resid rate (us/s)	1.27451E-05	+/-	8.9E-09
Total phase (deg)		Apriori accel (us/s/s)	2.36833452344E-05	Resid phase (deg)	-156.4	+/-	19.2

ph/seg (deg)	RMS 71.0	Theor. 63.0	Amplitude Search (1024X16)	0.161 +/- 0.027	0.134	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.0	63.0	Interp.	0.000	0.134	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	102.9	109.9	Inc. seg. avg.	0.174	0.134	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	23.2	19.2	Inc. frq. avg.	0.157	0.157	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
	25.1	33.5								

m: az 96.6 el 33.2 pa -69.8 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -3916.380 -1358.660 simultaneous interpolator

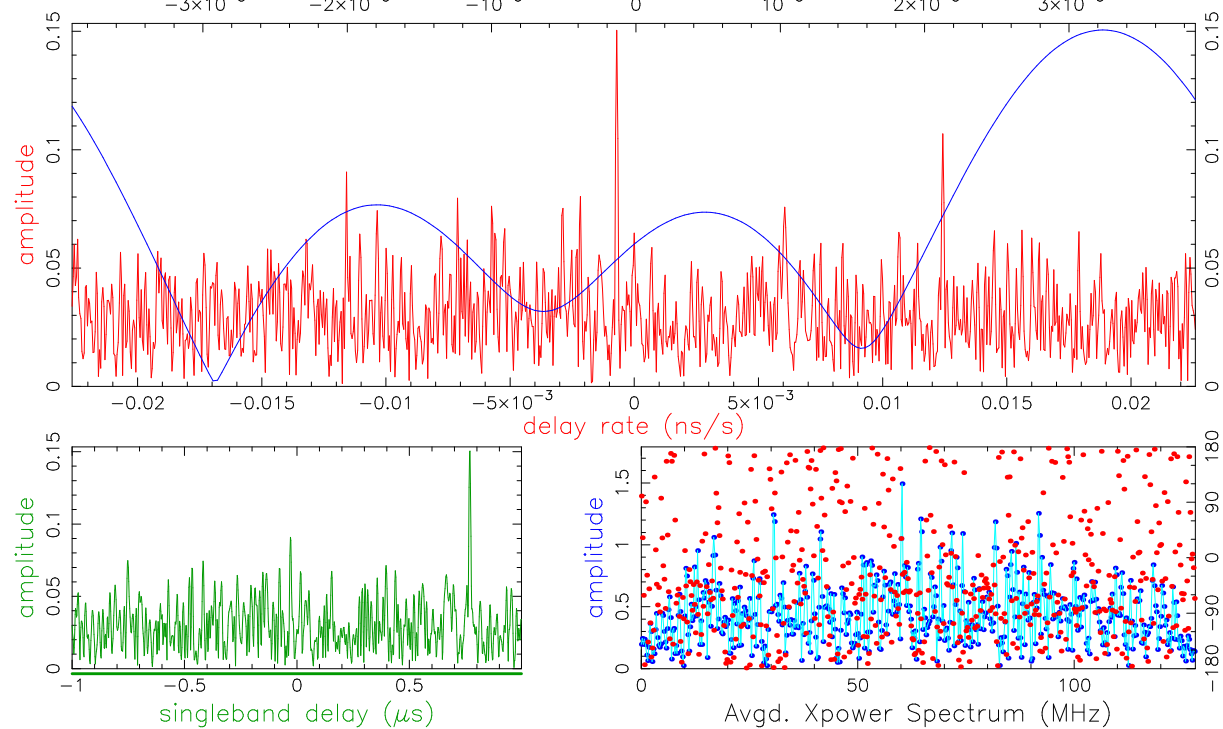
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mn.Q.109.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mn

VLBA_MK - VLBA_NL, fgroup Q, pol LR

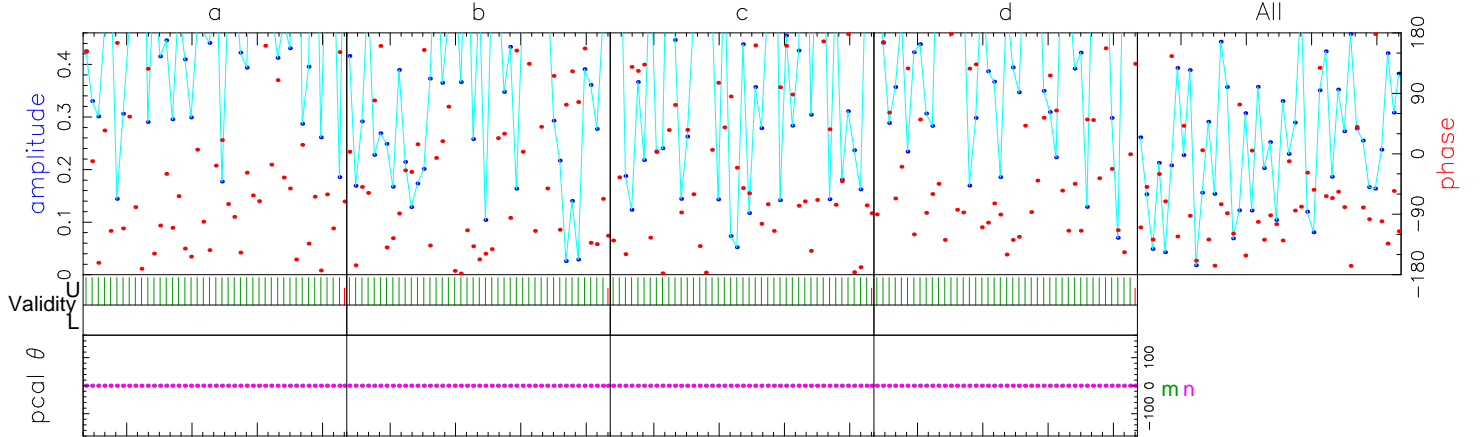


Fringe quality 0

SNR 6.5
 Int time 239.972
 Amp 0.153
 Phase 107.9
 PFD 1.2e-02
 Delays (us)
 SBD 0.768586
 MBD 0.003187
 Fringe rate (Hz)
 -0.030982
 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
	-94.6	-104.4	-98.3	-86.8	Phase	-94.6
	0.2	0.1	0.1	0.2	Ampl.	0.1
	907.5	273.9	61.3	905.5	Sbd box	906.5
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	-5.10529999433E+03		Apriori delay (usec)	-5.10606880603E+03	Resid mbdelay (usec)	3.18670E-03 +/- 1.7E-04
Sband delay (usec)	-5.10530022015E+03		Apriori clock (usec)	8.0800819E-01	Resid sbdelay (usec)	7.68586E-01 +/- 6.6E-04
Phase delay (usec)	-5.10606881212E+03		Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	-6.09368E-06 +/- 1.1E-06
Delay rate (us/s)	1.36521300831E+00		Apriori rate (us/s)	1.36521372648E+00	Resid rate (us/s)	-7.18169E-07 +/- 8.2E-09
Total phase (deg)		2.7	Apriori accel (us/s/s)	2.36833452344E-05	Resid phase (deg)	107.9 +/- 17.6
RMS	64.5	57.9	Amplitude	0.153 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	101.7	101.0	Search (1024X16)	0.145	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	101.7	101.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	9.2	17.6	Inc. seg. avg.	0.165	Data rate(MSamp/s): 256 MBps 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	36.4	30.8	Inc. frq. avg.	0.144	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		n: az 192.0 el 53.1 pa 9.3		u,v (fr/asec) -3916.380 -1358.660		simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/mn..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/mn.Q.125.3N2DRC		

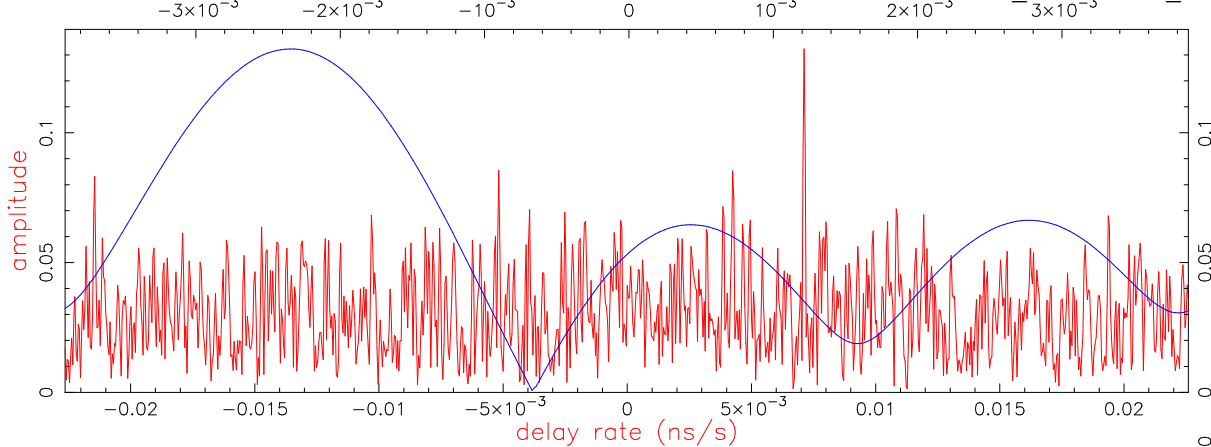
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mn

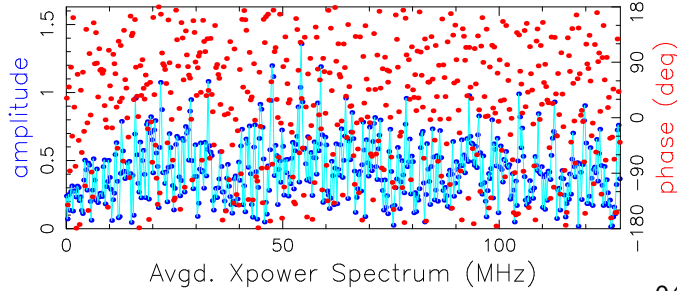
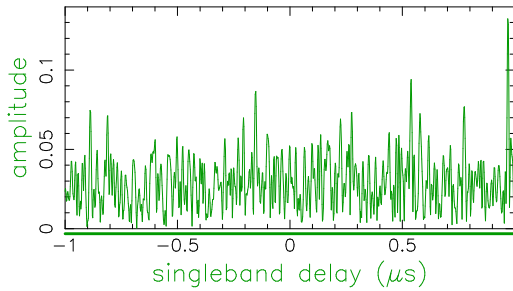
VLBA_MK - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)



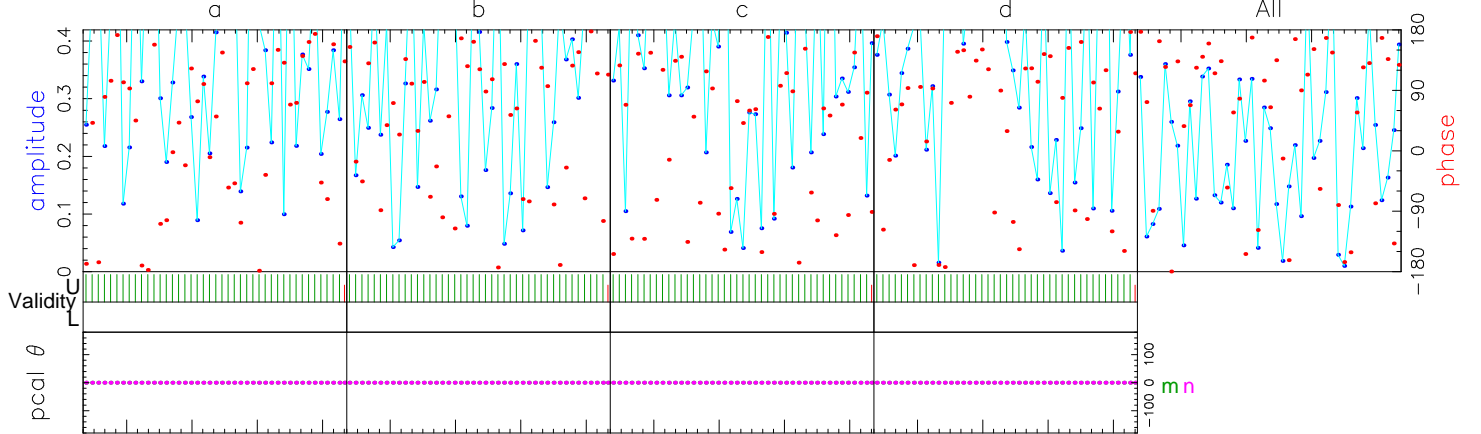
Fringe quality 0

SNR 5.7
 Int time 239.972
 Amp 0.140
 Phase 94.3
 PFD 8.0e-01
 Delays (us)
 SBD 0.969474
 MBD -0.002332
 Fringe rate (Hz)
 0.309128
 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		
m	1000	1000	1000	1000		
n	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
n	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
n	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-5.10510238764E+03	Apriori delay (usec)	-5.10606880603E+03	Resid mbdelay (usec)	-2.33161E-03	+/-	2.0E-04
Sband delay (usec)	-5.10509933240E+03	Apriori clock (usec)	8.0800819E-01	Resid sbdelay (usec)	9.69474E-01	+/-	7.6E-04
Phase delay (usec)	-5.10606879706E+03	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	8.97115E-06	+/-	1.3E-06
Delay rate (us/s)	1.36522089216E+00	Apriori rate (us/s)	1.36521372648E+00	Resid rate (us/s)	7.16568E-06	+/-	9.4E-09
Total phase (deg)	349.2	Apriori accel (us/s/s)	2.36833452344E-05	Resid phase (deg)	94.3	+/-	20.2

ph/seg (deg)	RMS	Theor.	Amplitude	0.140 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	72.5	66.1	Search (1024X16)	0.126	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	114.8	115.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	17.4	20.2	Inc. seg. avg.	0.135	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
	33.4	35.2	Inc. frq. avg.	0.132	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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -3916.380 -1358.660 simultaneous interpolator

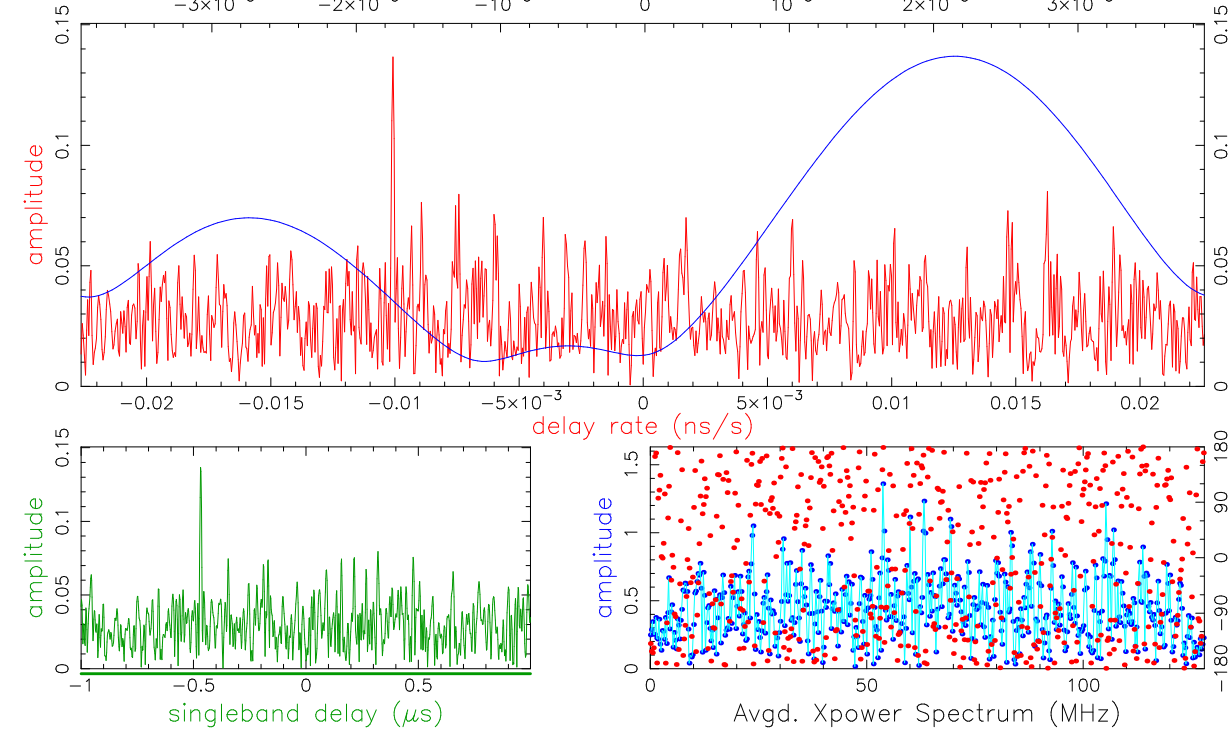
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mn.Q.131.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mn

VLBA_MK - VLBA_NL, fgroup Q, pol LL

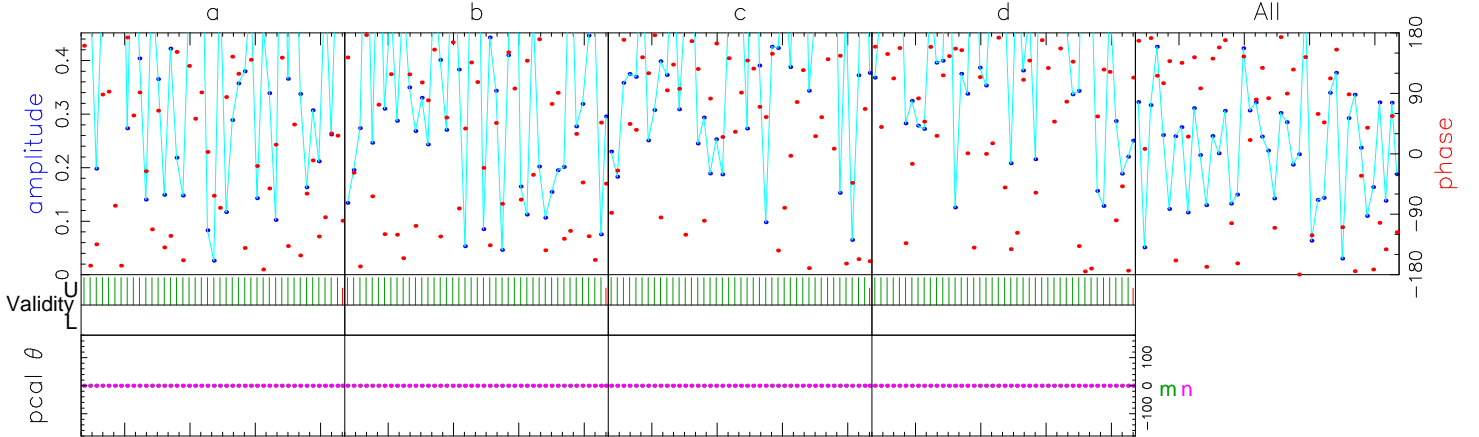


Fringe quality 0

SNR 5.9
 Int time 239.972
 Amp 0.151
 Phase -175.9
 PFD 4.4e-01
 Delays (us)
 SBD -0.467997
 MBD 0.002221
 Fringe rate (Hz)
 -0.438067
 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
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
n	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
n	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL		
n	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-5.10653533520E+03	Apriori delay (usec)	-5.10606880603E+03	Resid mbdelay (usec)	2.22082E-03	+/- 1.9E-04
Sband delay (usec)	-5.10653680315E+03	Apriori clock (usec)	8.0800819E-01	Resid sbdelay (usec)	-4.67997E-01	+/- 7.3E-04
Phase delay (usec)	-5.10606879707E+03	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	8.95480E-06	+/- 1.3E-06
Delay rate (us/s)	1.36520357195E+00	Apriori rate (us/s)	1.36521372648E+00	Resid rate (us/s)	-1.01545E-05	+/- 9.1E-09
Total phase (deg)	-281.1	Apriori accel (us/s/s)	2.36833452344E-05	Resid phase (deg)	-175.9	+/- 19.5

ph/seg (deg)	RMS 71.5	Theor. 64.1	Amplitude Search (1024X16)	0.151 +/- 0.026	0.132	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	71.5	64.1	Interp.	0.000	0.132	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	106.4	111.8	Inc. seg. avg.	0.161	0.147	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	23.8	19.5	Inc. frq. avg.	0.147	0.147	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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -3916.380 -1358.660 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mn.Q.79.3N2DRC

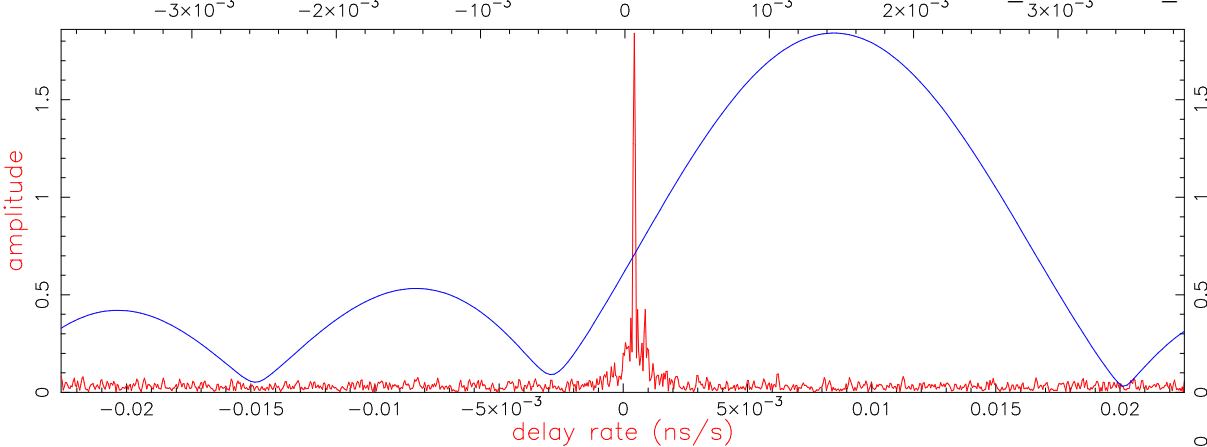
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mo

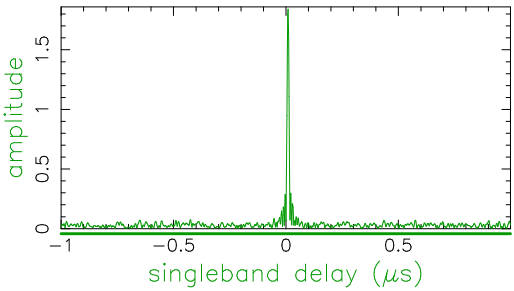
VLBA_MK - VLBA_OV, fgroup Q, pol LL

multiband delay (μ s)

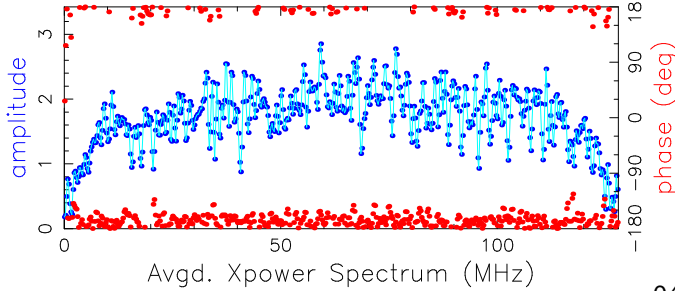


Fringe quality 8

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



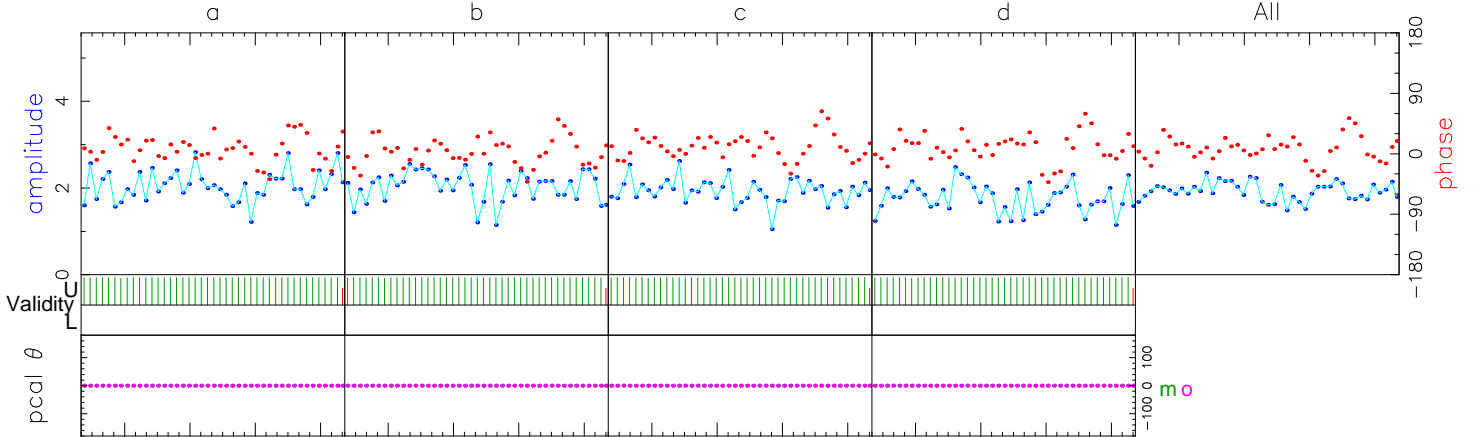
singleband delay (μ s)



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		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

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	mb window (us)	-0.004 0.004
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	
				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

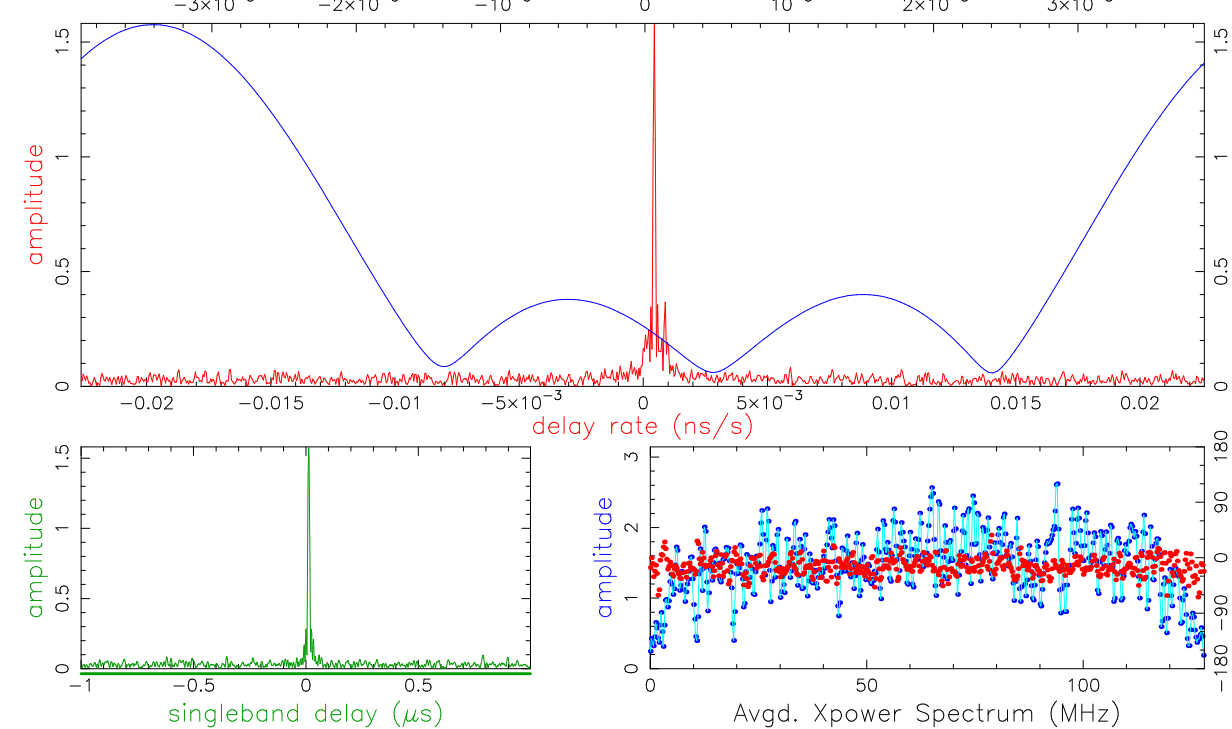
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/mo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/mo.Q.102.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mo

VLBA_MK - VLBA_OV, fgroup Q, pol RR

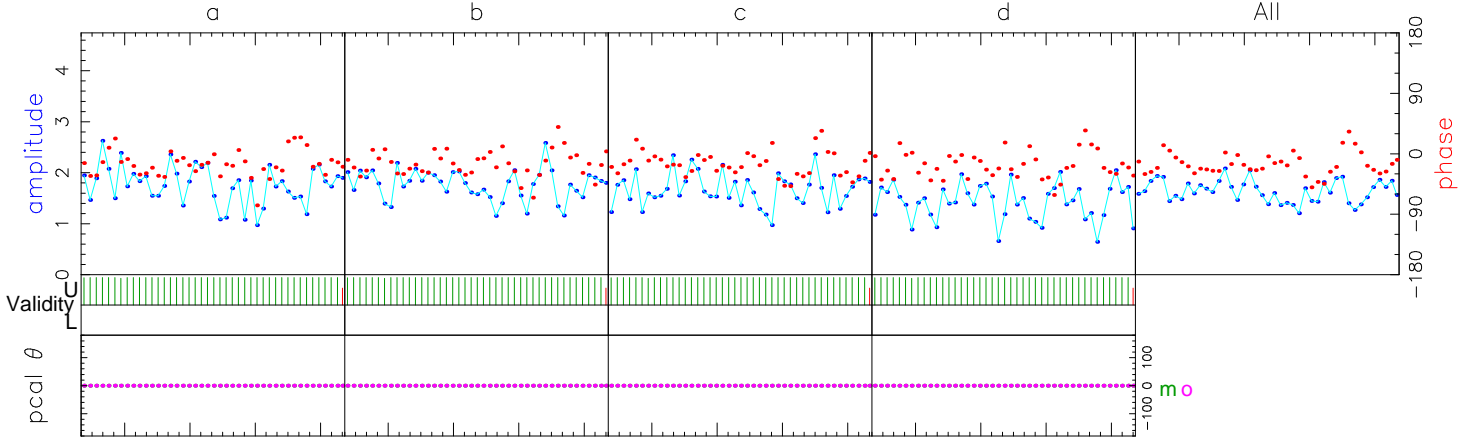


Fringe quality 8

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



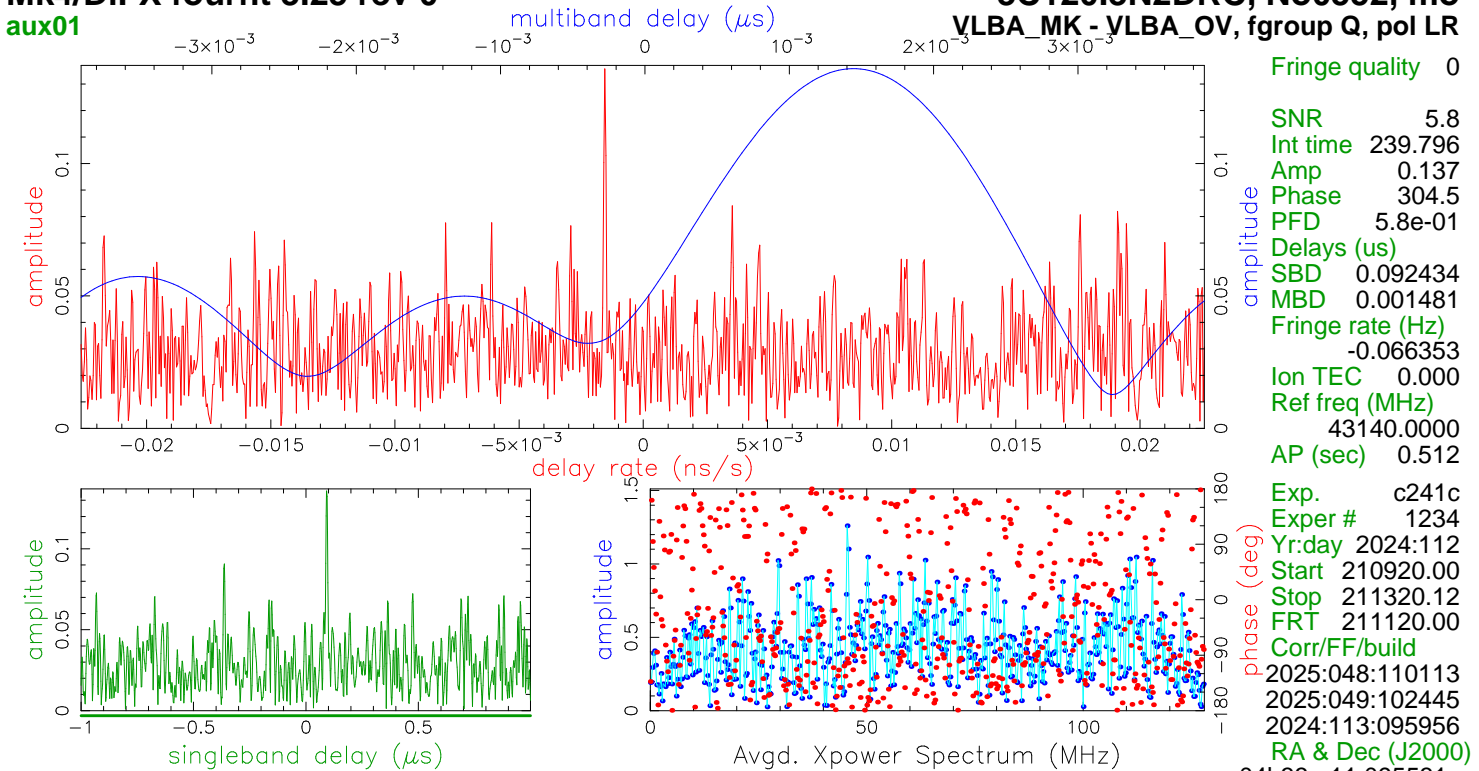
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m:o	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
o	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	-5.34846935449E+03					
Sband delay (usec)	-5.34846947665E+03					
Phase delay (usec)	-5.34848159567E+03					
Delay rate (us/s)	8.09799664201E-01					
Total phase (deg)		189.1				
Apriori delay (usec)			-5.34848159465E+03		-3.38484E-03	+/- 1.7E-05
Apriori clock (usec)			-2.4545906E+01		1.21180E-02	+/- 6.4E-05
Apriori clockrate (us/s)			-4.9577204E-07		-1.02501E-06	+/- 1.1E-07
Apriori rate (us/s)			8.09799235594E-01		4.28607E-07	+/- 7.9E-10
Apriori accel (us/s/s)			2.54860167233E-05		186.6	+/- 1.7
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
Pcal mode: MANUAL, MANUAL						
Pcal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
nlags: 512 t_cohere infinite						
PC period (AP's) 5, 5						
sb window (us)					-1.000	1.000
mb window (us)					-0.004	0.004
dr window (ns/s)					-0.023	0.023
ion window (TEC)					0.00	0.00
simultaneous interpolator						

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mo

VLBA_MK - VLBA_OV, fgroup Q, pol LR

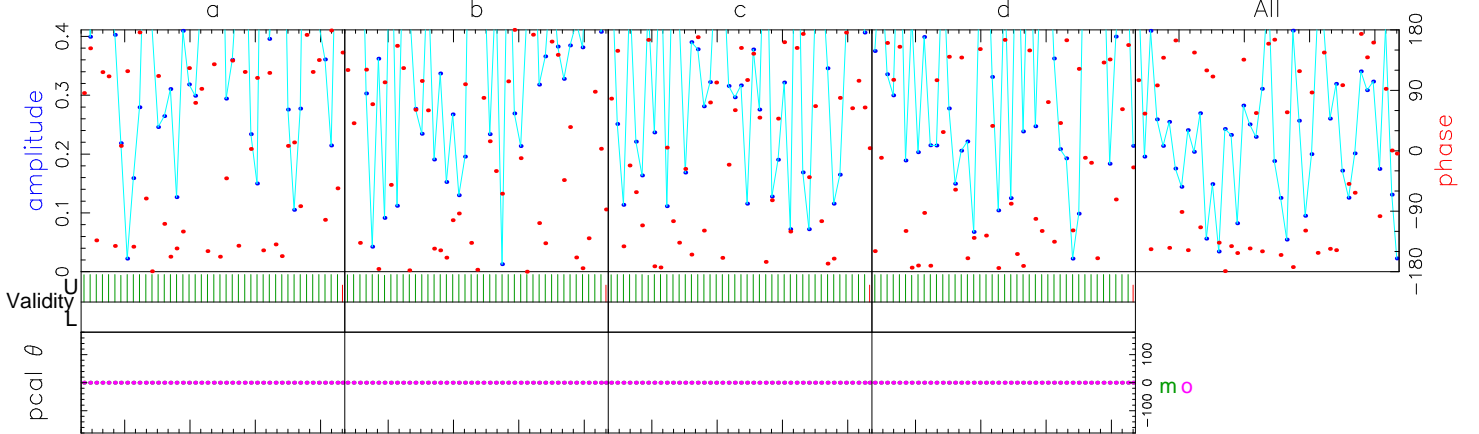


Fringe quality 0

SNR 5.8
 Int time 239.796
 Amp 0.137
 Phase 304.5
 PFD 5.8e-01
 Delays (us)
 SBD 0.092434
 MBD 0.001481
 Fringe rate (Hz)
 -0.066353
 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



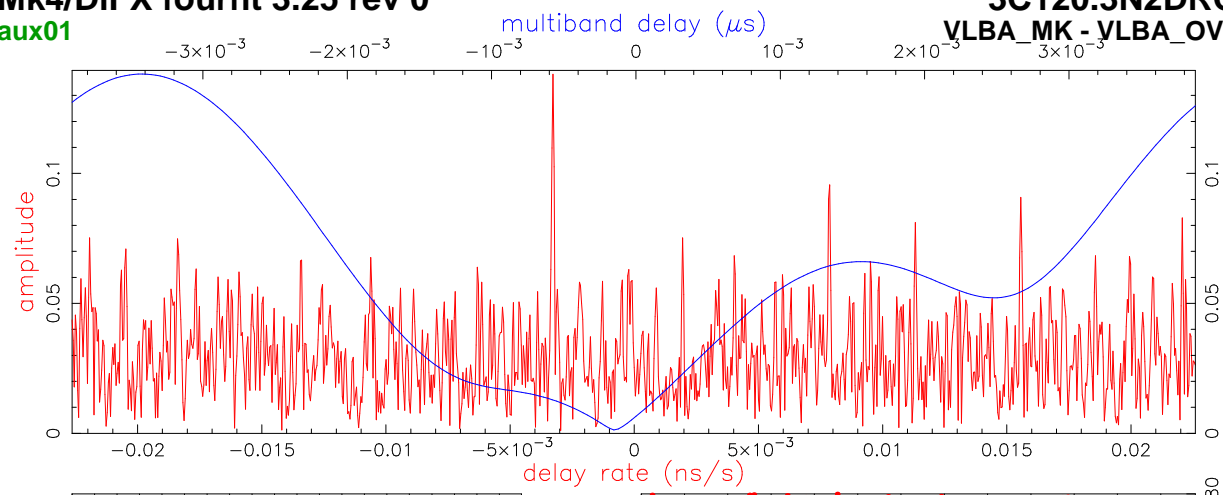
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	175.1	165.9	156.5	175.6	Phase	169.5
	0.2	0.1	0.1	0.1	Ampl.	0.1
	560.4	726.7	429.1	692.4	Sbd box	560.3
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	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)	307.0	Apriori accel (us/s/s)	2.54860167233E-05	Resid phase (deg)	304.5	+/-	19.8

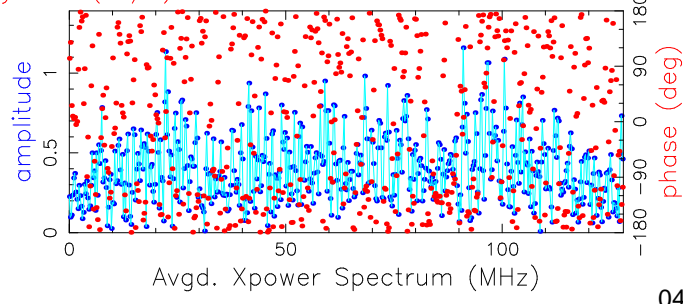
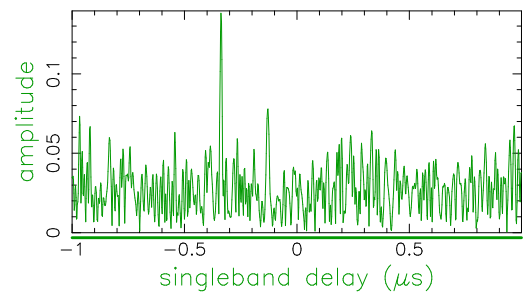
	RMS	Theor.	Amplitude	0.137 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	71.1	64.9	Search (1024X16)	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000
amp/seg (%)	113.8	113.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
ph/frq (deg)	11.2	19.8	Inc. seg. avg.	0.146	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	29.7	34.5	Inc. frq. avg.	0.129	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

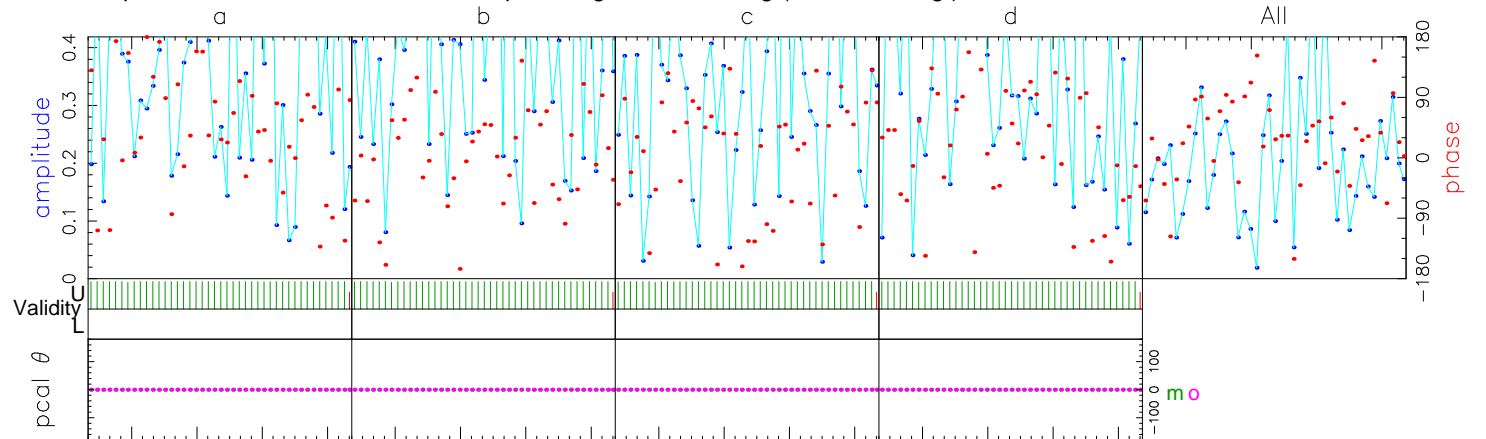
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//mo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//mo.Q.142.3N2DRC



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



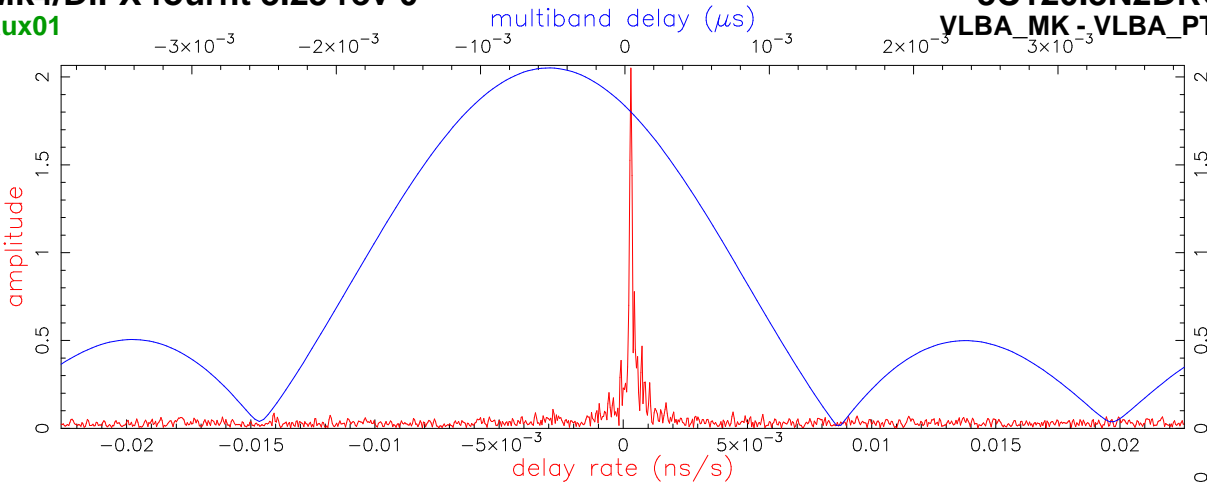
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m:o	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
o	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
o	Q00UL	Q01UL	Q02UL	Q03UL		
Group delay (usec) (SBD)	-5.34882091405E+03		-5.3488159465E+03		-3.38190E-03	+/- 1.9E-04
Sband delay (usec)	-5.34881912740E+03		-2.4545906E+01		-3.37533E-01	+/- 7.3E-04
Phase delay (usec)	-5.34848159229E+03		-4.9577204E-07		2.36004E-06	+/- 1.3E-06
Delay rate (us/s)	8.09795968612E-01		8.09799235594E-01		-3.26698E-06	+/- 9.1E-09
Total phase (deg)		-174.6	2.54860167233E-05		-177.1	+/- 19.5
Apriori delay (usec)			0.135			
Apriori clock (usec)			0.135			
Apriori clockrate (us/s)			0.135			
Apriori rate (us/s)			0.135			
Apriori accel (us/s/s)			0.140			
Resid mbdelay (usec)			0.135			
Resid sbdelay (usec)			0.135			
Resid phdelay (usec)			0.135			
Resid rate (us/s)			0.135			
Resid phase (deg)			0.135			
Pcal mode: MANUAL, MANUAL						
Pcal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
nlags: 512 t_cohere infinite						
sb window (us)	-1.000	1.000				
mb window (us)	-0.004	0.004				
dr window (ns/s)	-0.023	0.023				
ion window (TEC)	0.00	0.00				
simultaneous interpolator						
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		
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

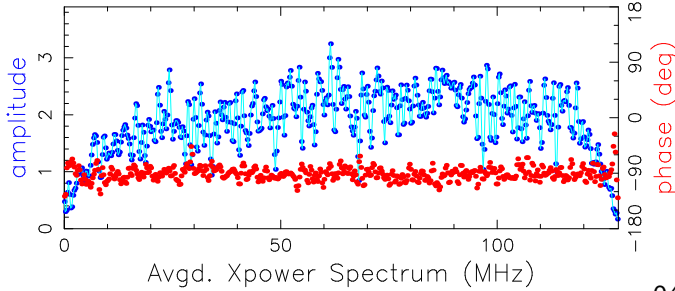
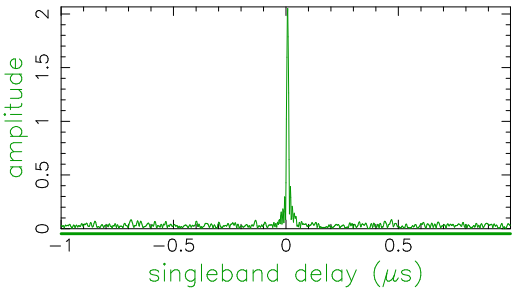
3C120.3N2DRC, No0552, mp

VLBA_MK - VLBA_PT, fgroup Q, pol LL



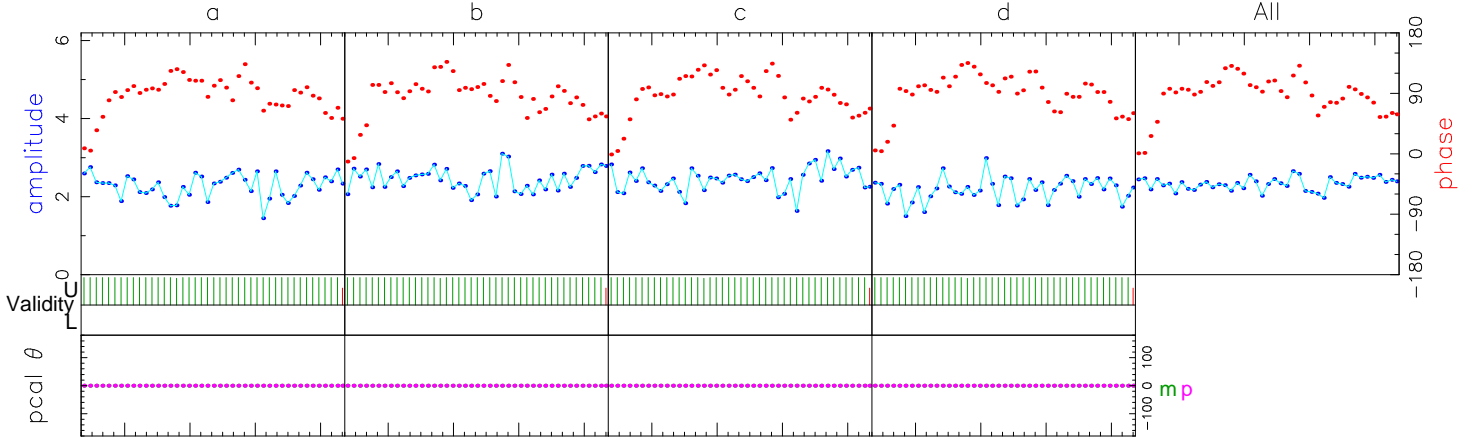
Fringe quality 7

SNR 87.5
 Int time 239.831
 Amp 2.066
 Phase 9.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.007244
 MBD -0.000553
 Fringe rate (Hz)
 0.012632
 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
 2025:049:102440
 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		
p	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UL	Q01UL	Q02UL	Q03UL		

	42912.00	43040.00	43168.00	43296.00	Resid mbdelay (usec)	-5.53347E-04	+/- 1.3E-05
Group delay (usec) (SBD)	-6.57446522814E+03						
Sband delay (usec)	-6.57446524354E+03						
Phase delay (usec)	-6.57447248163E+03						
Delay rate (us/s)	1.01495575722E+00						
Total phase (deg)		332.5					

	42912.00	43040.00	43168.00	43296.00	Resid sbdelay (usec) <th>7.24375E-03</th> <th>+/- 4.9E-05</th>	7.24375E-03	+/- 4.9E-05
Apriori delay (usec)							
Apriori clock (usec)							
Apriori clockrate (us/s)							
Apriori rate (us/s)							
Apriori accel (us/s/s)							

m: az 96.6 el 33.2 pa -69.8 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -2903.316 -872.366 simultaneous interpolator

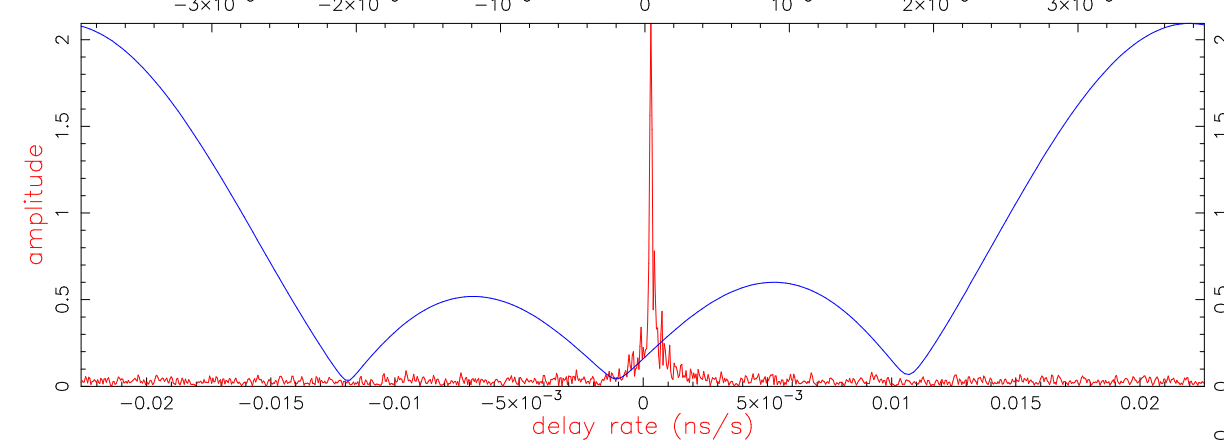
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//mp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//mp.Q.127.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mp

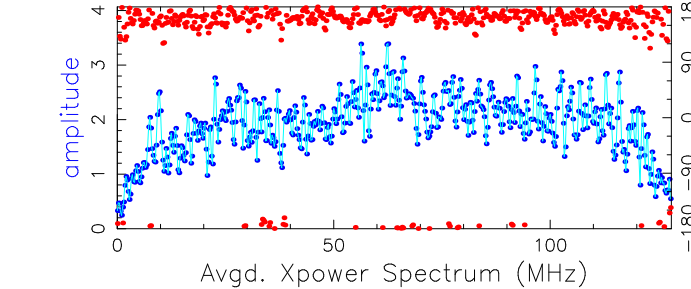
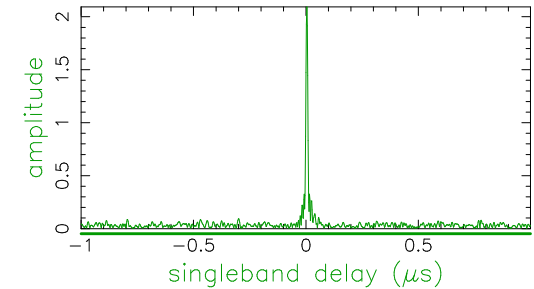
VLBA_MK - VLBA_PT, fgroup Q, pol RR



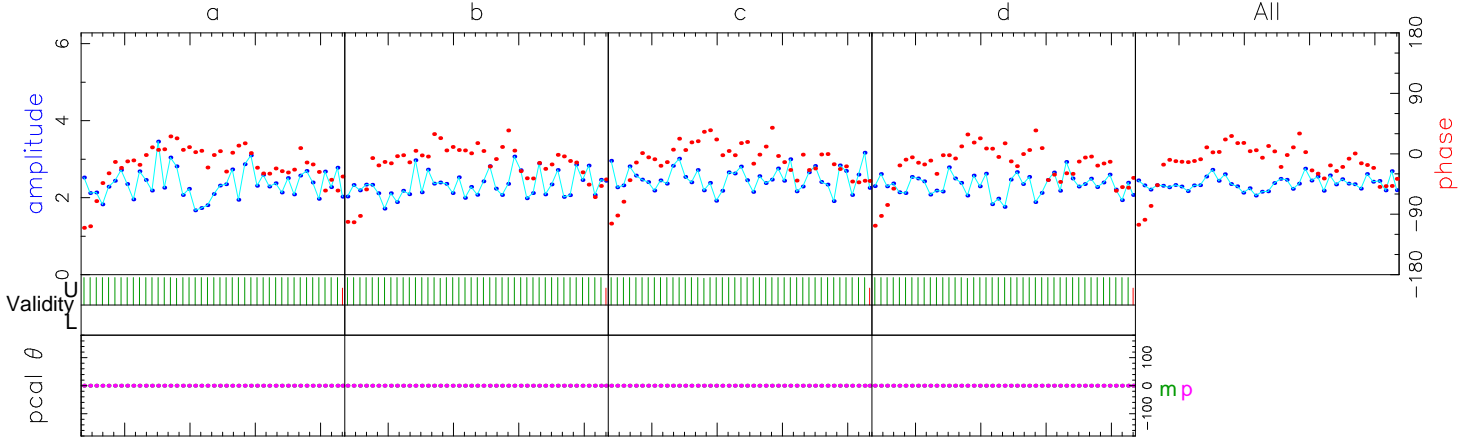
Fringe quality 7

SNR 88.7
 Int time 239.831
 Amp 2.094
 Phase 267.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.003863
 MBD -0.004042
 Fringe rate (Hz) 0.012732
 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		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	-6.57446871711E+03					
Sband delay (usec)	-6.57446862442E+03					
Phase delay (usec)	-6.57447248818E+03					
Delay rate (us/s)	1.01495575953E+00					
Total phase (deg)		230.8				
Apriori delay (usec)			-6.57447248729E+03			
Apriori clock (usec)			-5.1858559E+00			
Apriori clockrate (us/s)			-3.9319698E-07			
Apriori rate (us/s)			1.01495546440E+00			
Apriori accel (us/s/s)			3.25478816868E-05			
Resid mbdelay (usec)				-4.04232E-03		+/- 1.3E-05
Resid sbdelay (usec)				3.86288E-03		+/- 4.9E-05
Resid phdelay (usec)				-8.88786E-07		+/- 8.3E-08
Resid rate (us/s)				2.95125E-07		+/- 6.0E-10
Resid phase (deg)				267.4		+/- 1.3
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5			
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000			
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.004 0.004			
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	p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) -2903.316 -872.366		simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552//mp..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//mp.Q.140.3N2DRC			

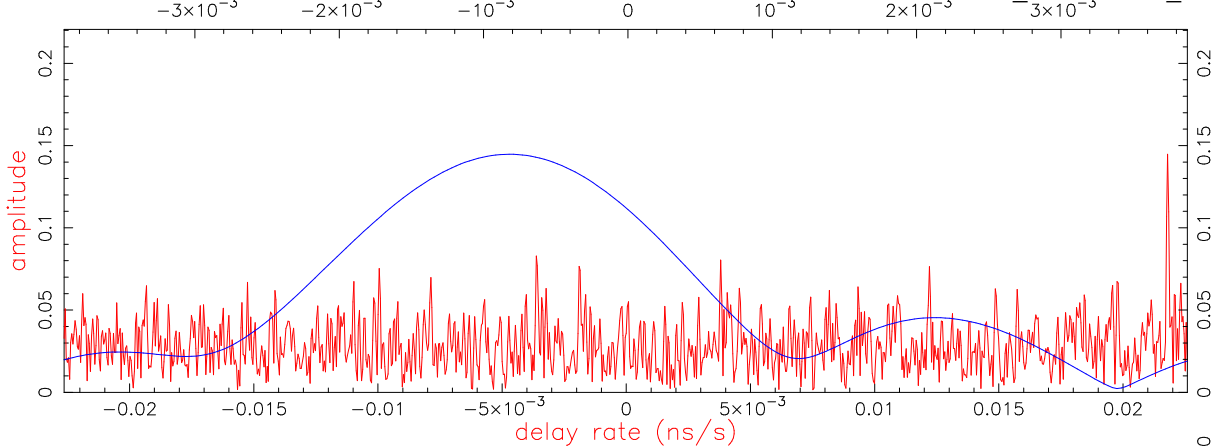
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mp

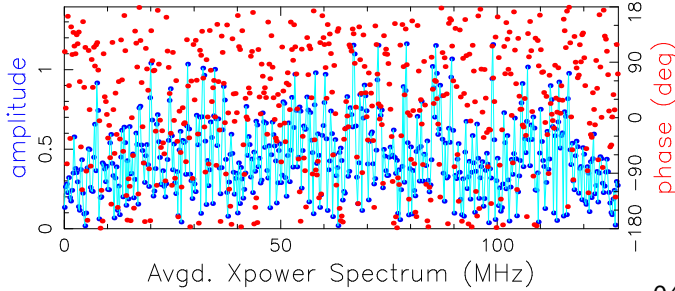
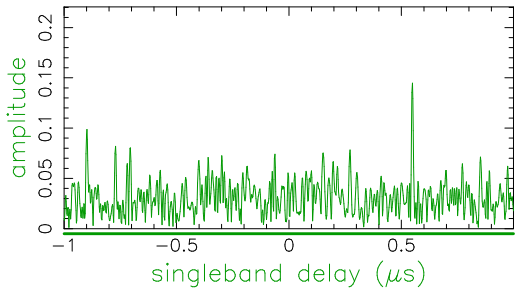
VLBA_MK - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



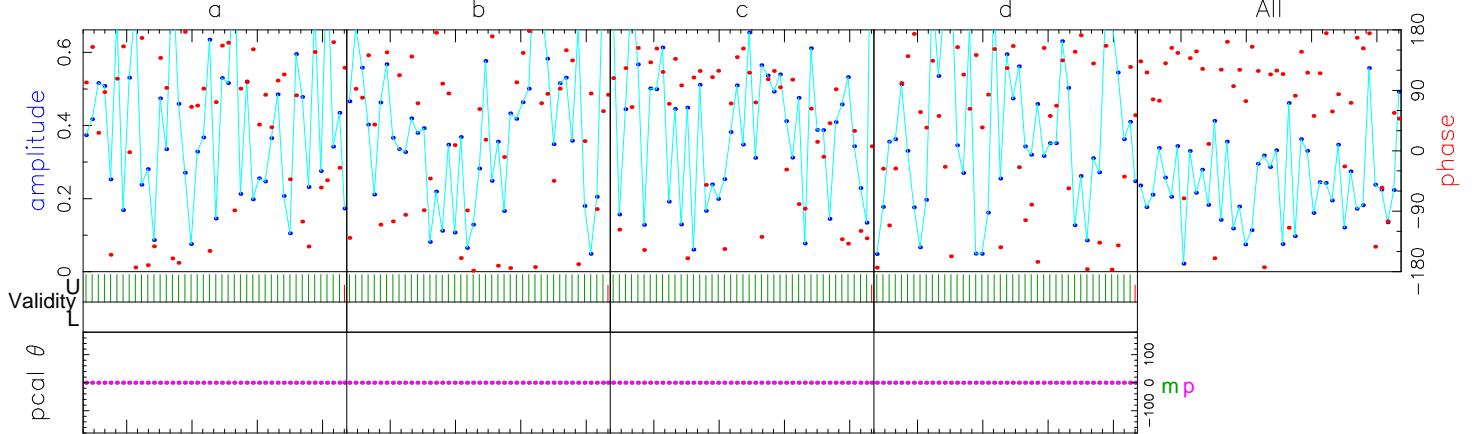
Fringe quality 0

SNR 6.1
 Int time 239.831
 Amp 0.221
 Phase 18.7
 PFD 1.0e-01
 Delays (us)
 SBD 0.548547
 MBD -0.000825
 Fringe rate (Hz)
 0.944740
 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	APs used	131.2
m	1000	1000	1000	1000	PC freqs	0.2
p	1000	1000	1000	1000	PC freqs	0.2
m:p	0:0	0:0	0:0	0:0	PC phase	793.9
m:p	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

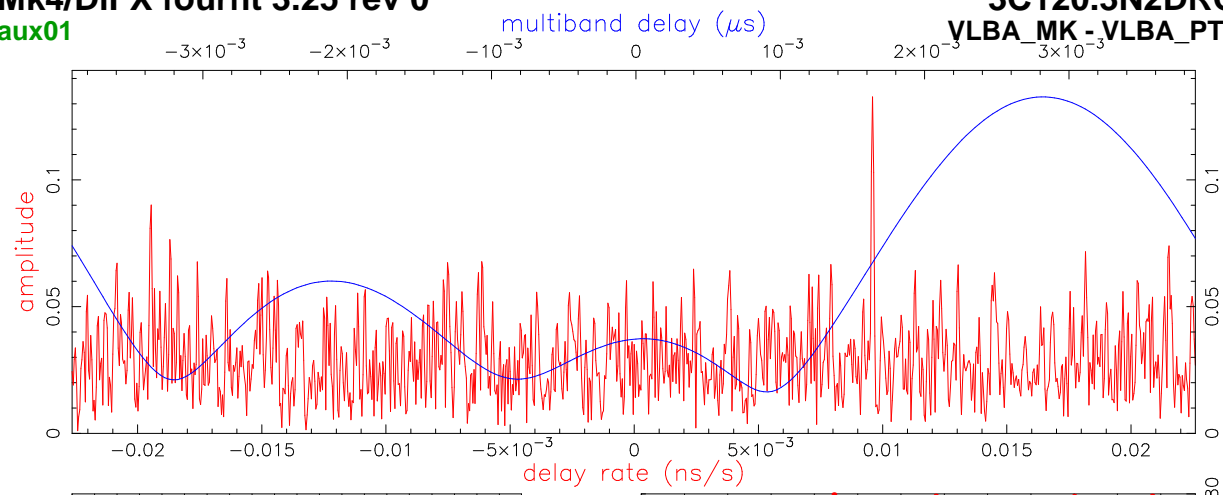
Group delay (usec) (SBD)	-6.57392643739E+03	Apriori delay (usec)	-6.57447248729E+03	Resid mbdelay (usec)	-8.25101E-04	+/- 1.8E-04
Sband delay (usec)	-6.57392394067E+03	Apriori clock (usec)	-5.1858559E+00	Resid sbdelay (usec)	5.48547E-01	+/- 7.0E-04
Phase delay (usec)	-6.57447247884E+03	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	8.45108E-06	+/- 1.2E-06
Delay rate (us/s)	1.01497736379E+00	Apriori rate (us/s)	1.01495546440E+00	Resid rate (us/s)	2.18994E-05	+/- 8.7E-09
Total phase (deg)	342.1	Apriori accel (us/s/s)	3.25478816868E-05	Resid phase (deg)	18.7	+/- 18.7

ph/seg (deg)	66.4	Theor.	61.2	Amplitude	0.221 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	103.0	Search (1024X16)	0.139	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	18.2	Inc. seg. avg.	0.236	Inc. frq. avg.	0.215	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	12.9	Inc. frq. avg.	0.215			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		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec)	-2903.316 -872.366	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552//mp..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//mp.Q.154.3N2DRC			ion window (TEC) 0.00 0.00

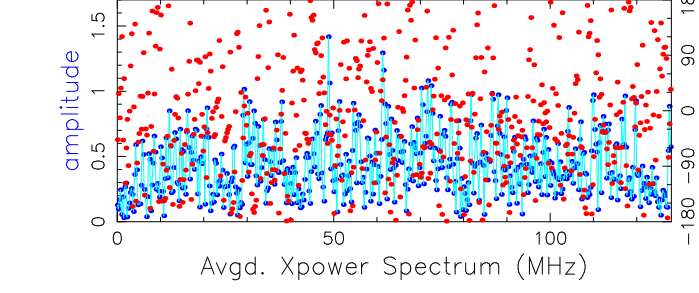
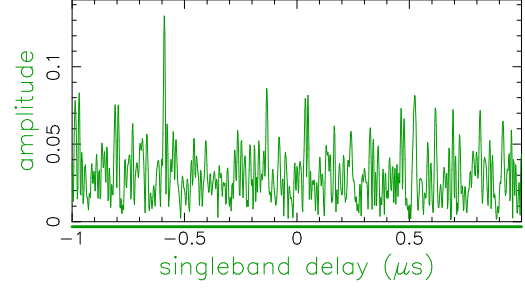
simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0
aux01

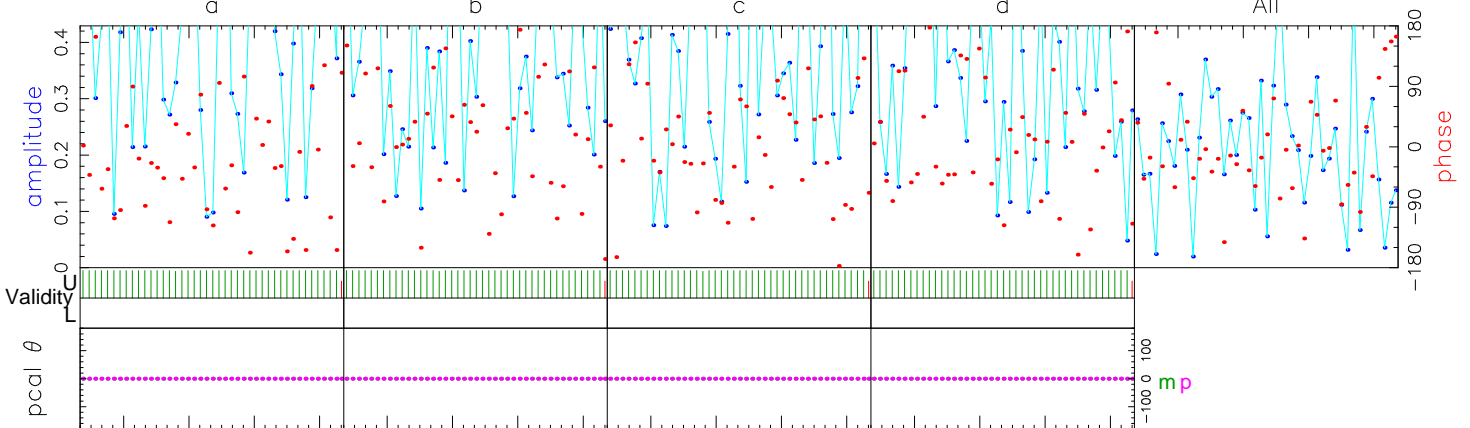
3C120.3N2DRC, No0552, mp
VLBA_MK - VLBA_PT, fgroup Q, pol RL



Fringe quality 0
SNR 5.6
Int time 239.831
Amp 0.143
Phase -143.8
PFD 9.0e-01
Delays (us)
SBD -0.589740
MBD 0.002826
Fringe rate (Hz)
0.415437
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
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-6.57506341174E+03	Apriori delay (usec)	-6.57447248729E+03	Resid mbdelay (usec)	2.82555E-03	+/- 2.0E-04
Sband delay (usec)	-6.57506222717E+03	Apriori clock (usec)	-5.1858559E+00	Resid sbdelay (usec)	-5.89740E-01	+/- 7.7E-04
Phase delay (usec)	-6.57447248785E+03	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-5.63750E-07	+/- 1.3E-06
Delay rate (us/s)	1.01496509436E+00	Apriori rate (us/s)	1.01495546440E+00	Resid rate (us/s)	9.62996E-06	+/- 9.5E-09
Total phase (deg)	-180.4	Apriori accel (us/s/s)	3.25478816868E-05	Resid phase (deg)	-143.8	+/- 20.4

ph/seg (deg) 73.0 66.8 Search (1024X16) 0.129 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 106.8 116.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 22.7 20.4 Inc. seg. avg. 0.139 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%) 12.9 35.6 Inc. frq. avg. 0.140 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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -2903.316 -872.366 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//mp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//mp.Q.168.3N2DRC